



# Full wwPDB/EMDatabank EM Map/Model Validation Report ⓘ

Mar 2, 2017 – 01:08 pm GMT

PDB ID : 5WQ9  
EMDB ID: : EMD-6677  
Title : CryoEM structure of type II secretion system secretin GspD G453A mutant  
in *Vibrio cholerae*  
Authors : Yan, Z.; Yin, M.; Li, X.  
Deposited on : 2016-11-23  
Resolution : 4.22 Å(reported)

This is a Full wwPDB/EMDatabank EM Map/Model Validation Report  
for a publicly released PDB/EMDB entry.

We welcome your comments at [validation@mail.wwpdb.org](mailto:validation@mail.wwpdb.org)  
A user guide is available at  
<http://wwpdb.org/validation/2016/EMValidationReportHelp>  
with specific help available everywhere you see the ⓘ symbol.

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MolProbity : 4.02b-467  
Percentile statistics : 20161228.v01 (using entries in the PDB archive December 28th 2016)  
Ideal geometry (proteins) : Engh & Huber (2001)  
Ideal geometry (DNA, RNA) : Parkinson et. al. (1996)  
Validation Pipeline (wwPDB-VP) : recalc29047

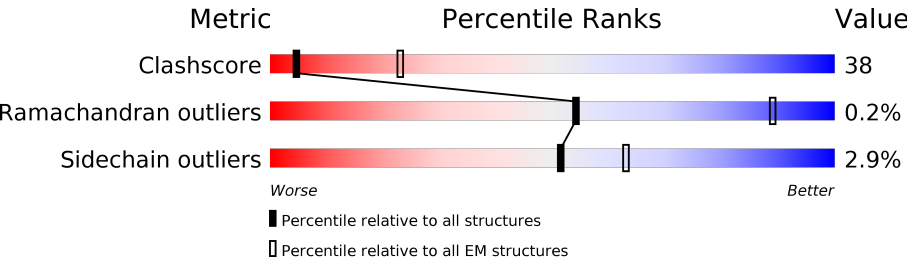


# 1 Overall quality at a glance i

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

The reported resolution of this entry is 4.22 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	125131	1336
Ramachandran outliers	121729	1120
Sidechain outliers	121581	1026

The table below summarises the geometric issues observed across the polymeric chains. The red, orange, yellow and green segments on the bar indicate the fraction of residues that contain outliers for  $\geq 3$ , 2, 1 and 0 types of geometric quality criteria. A grey segment represents the fraction of residues that are not modelled. The numeric value for each fraction is indicated below the corresponding segment, with a dot representing fractions  $\leq 5\%$

Mol	Chain	Length	Quality of chain
1	A	650	41% 33% 24%
1	B	650	40% 33% 24%
1	C	650	40% 33% 24%
1	D	650	41% 33% 24%
1	E	650	41% 33% 24%
1	F	650	41% 33% 24%
1	G	650	40% 33% 24%
1	H	650	40% 33% 24%
1	I	650	41% 33% 24%

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Mol	Chain	Length	Quality of chain
1	J	650	<div><div></div><div>41%33%24%</div></div>
1	K	650	<div><div></div><div>41%33%24%</div></div>
1	L	650	<div><div></div><div>40%33%24%</div></div>
1	M	650	<div><div></div><div>40%33%24%</div></div>
1	N	650	<div><div></div><div>40%33%24%</div></div>
1	O	650	<div><div></div><div>41%33%24%</div></div>



## 2 Entry composition

There is only 1 type of molecule in this entry. The entry contains 56340 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 Type II secretion system protein D.

Mol	Chain	Residues	Atoms					AltConf	Trace
1	A	493	Total	C	N	O	S	0	0
			3756	2347	656	740	13		
1	B	493	Total	C	N	O	S	0	0
			3756	2347	656	740	13		
1	C	493	Total	C	N	O	S	0	0
			3756	2347	656	740	13		
1	D	493	Total	C	N	O	S	0	0
			3756	2347	656	740	13		
1	E	493	Total	C	N	O	S	0	0
			3756	2347	656	740	13		
1	F	493	Total	C	N	O	S	0	0
			3756	2347	656	740	13		
1	G	493	Total	C	N	O	S	0	0
			3756	2347	656	740	13		
1	H	493	Total	C	N	O	S	0	0
			3756	2347	656	740	13		
1	I	493	Total	C	N	O	S	0	0
			3756	2347	656	740	13		
1	J	493	Total	C	N	O	S	0	0
			3756	2347	656	740	13		
1	K	493	Total	C	N	O	S	0	0
			3756	2347	656	740	13		
1	L	493	Total	C	N	O	S	0	0
			3756	2347	656	740	13		
1	M	493	Total	C	N	O	S	0	0
			3756	2347	656	740	13		
1	N	493	Total	C	N	O	S	0	0
			3756	2347	656	740	13		
1	O	493	Total	C	N	O	S	0	0
			3756	2347	656	740	13		

There are 15 discrepancies between the modelled and reference sequences:



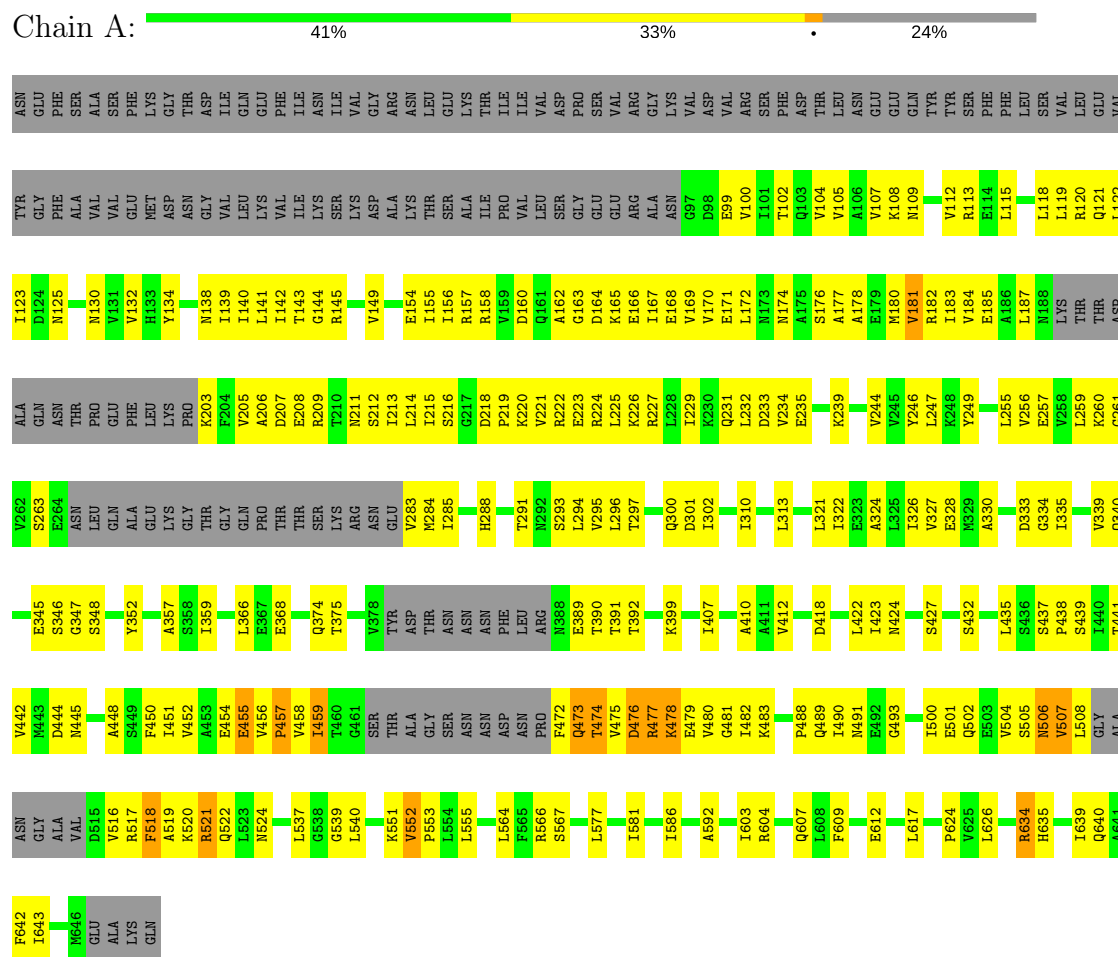
Chain	Residue	Modelled	Actual	Comment	Reference
A	453	ALA	GLY	engineered mutation	UNP P45779
B	453	ALA	GLY	engineered mutation	UNP P45779
C	453	ALA	GLY	engineered mutation	UNP P45779
D	453	ALA	GLY	engineered mutation	UNP P45779
E	453	ALA	GLY	engineered mutation	UNP P45779
F	453	ALA	GLY	engineered mutation	UNP P45779
G	453	ALA	GLY	engineered mutation	UNP P45779
H	453	ALA	GLY	engineered mutation	UNP P45779
I	453	ALA	GLY	engineered mutation	UNP P45779
J	453	ALA	GLY	engineered mutation	UNP P45779
K	453	ALA	GLY	engineered mutation	UNP P45779
L	453	ALA	GLY	engineered mutation	UNP P45779
M	453	ALA	GLY	engineered mutation	UNP P45779
N	453	ALA	GLY	engineered mutation	UNP P45779
O	453	ALA	GLY	engineered mutation	UNP P45779



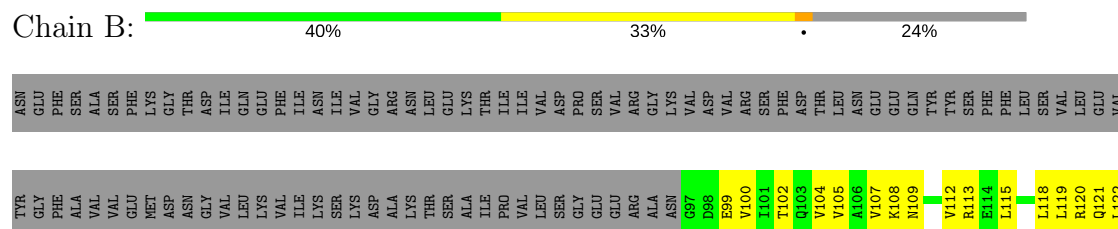
### 3 Residue-property plots

These plots are drawn for all protein, RNA and DNA chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry. 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. 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.

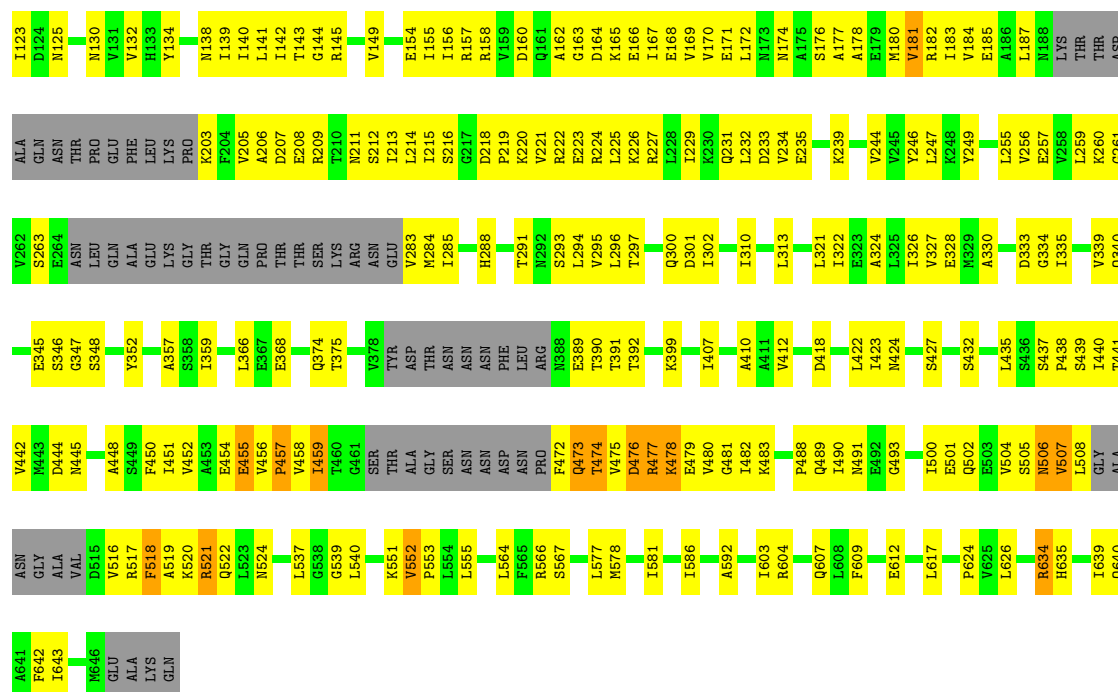
- Molecule 1: Type II secretion system protein D



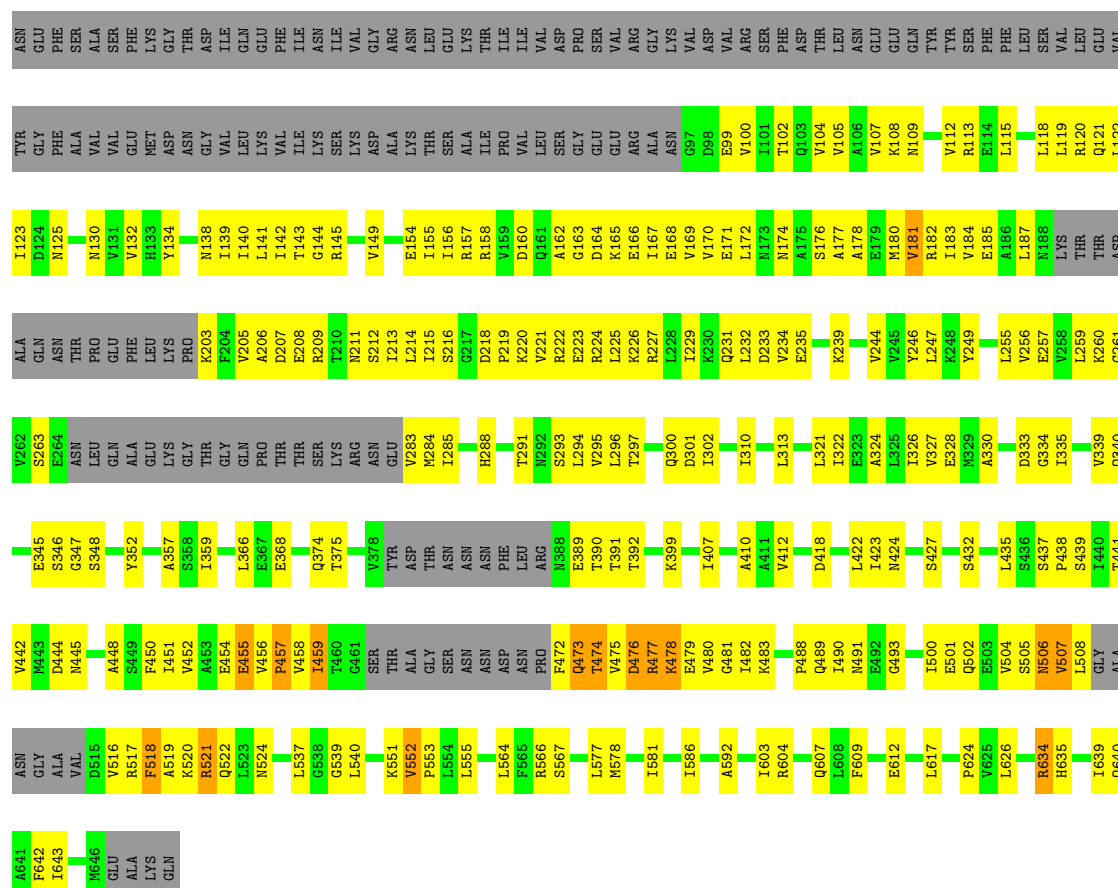
- Molecule 1: Type II secretion system protein D







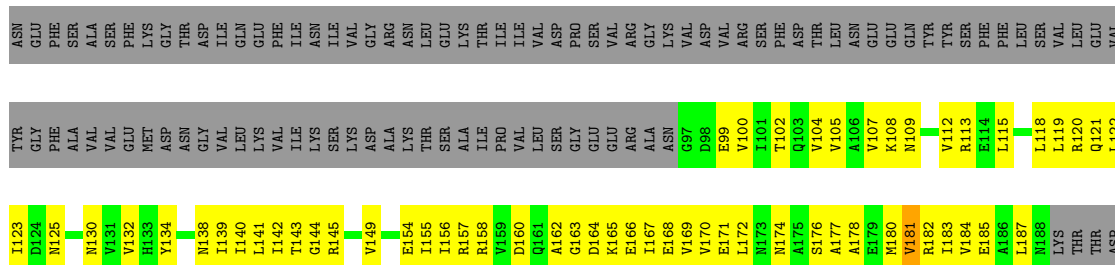
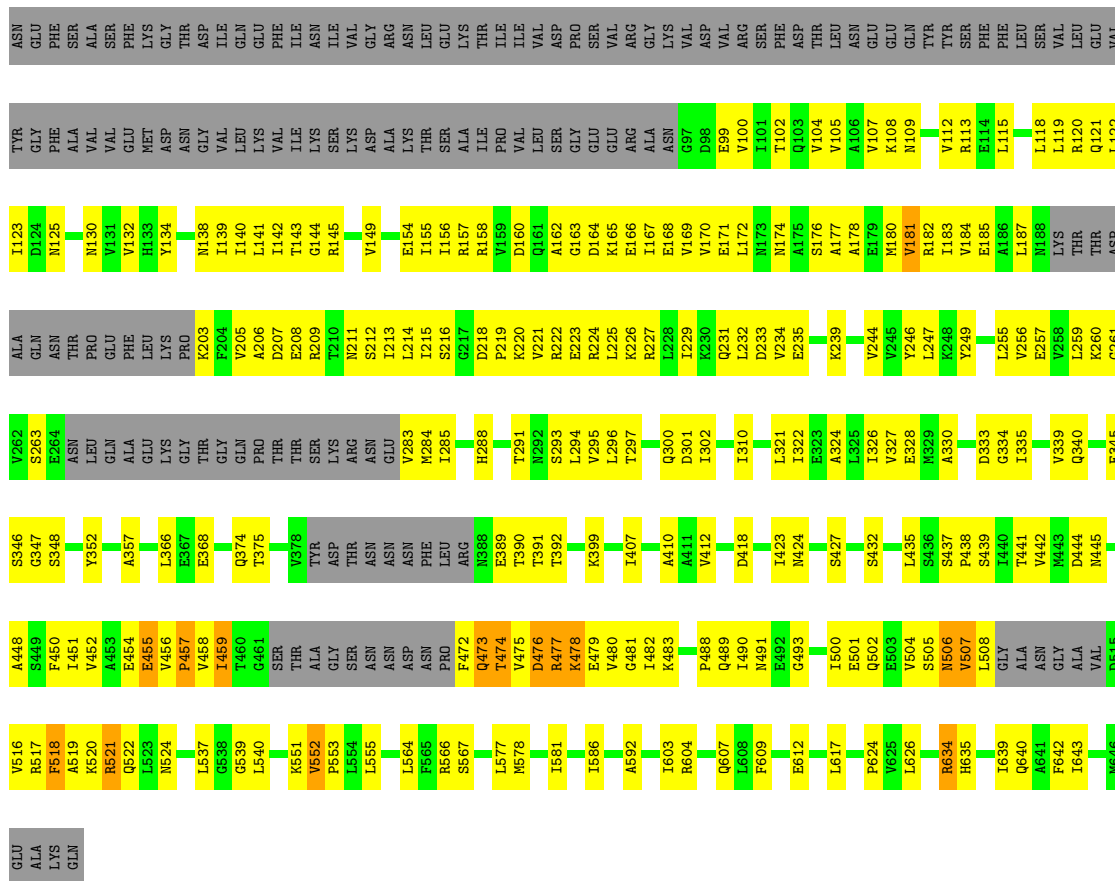
# Molecule 1: Type II secretion system protein D









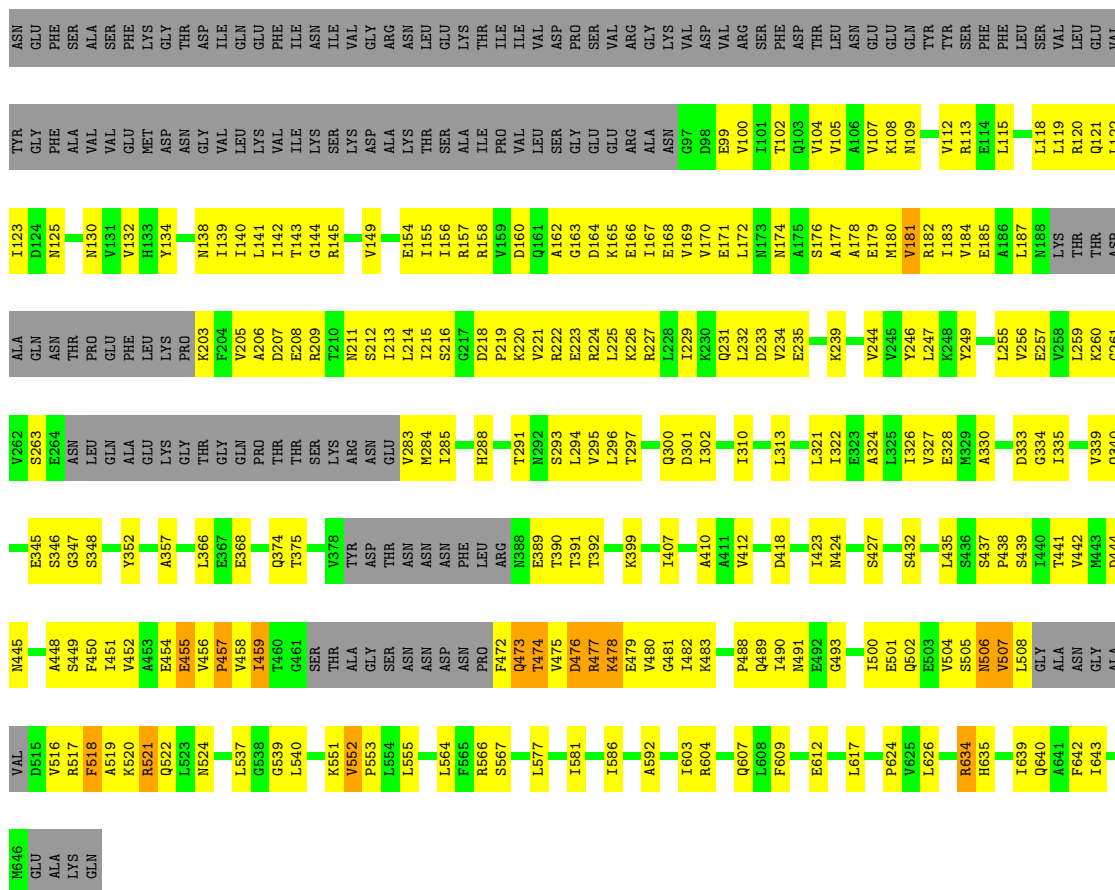
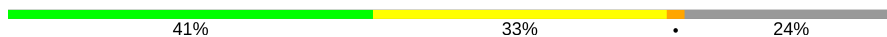




- Molecule 1: Type II secretion system protein D

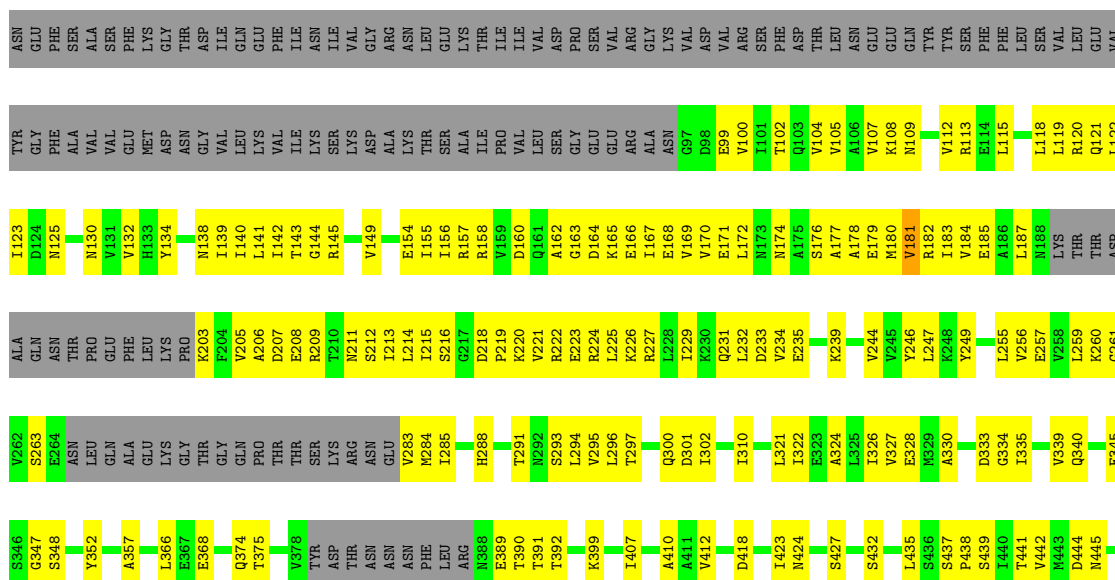


Chain I:



- Molecule 1: Type II secretion system protein D

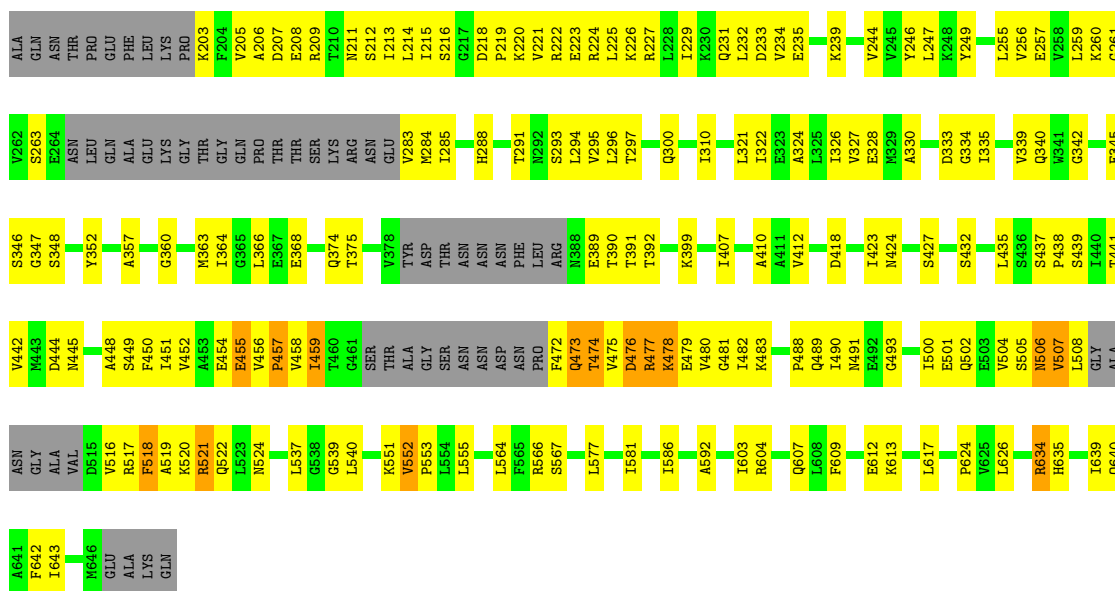
## Chain J:





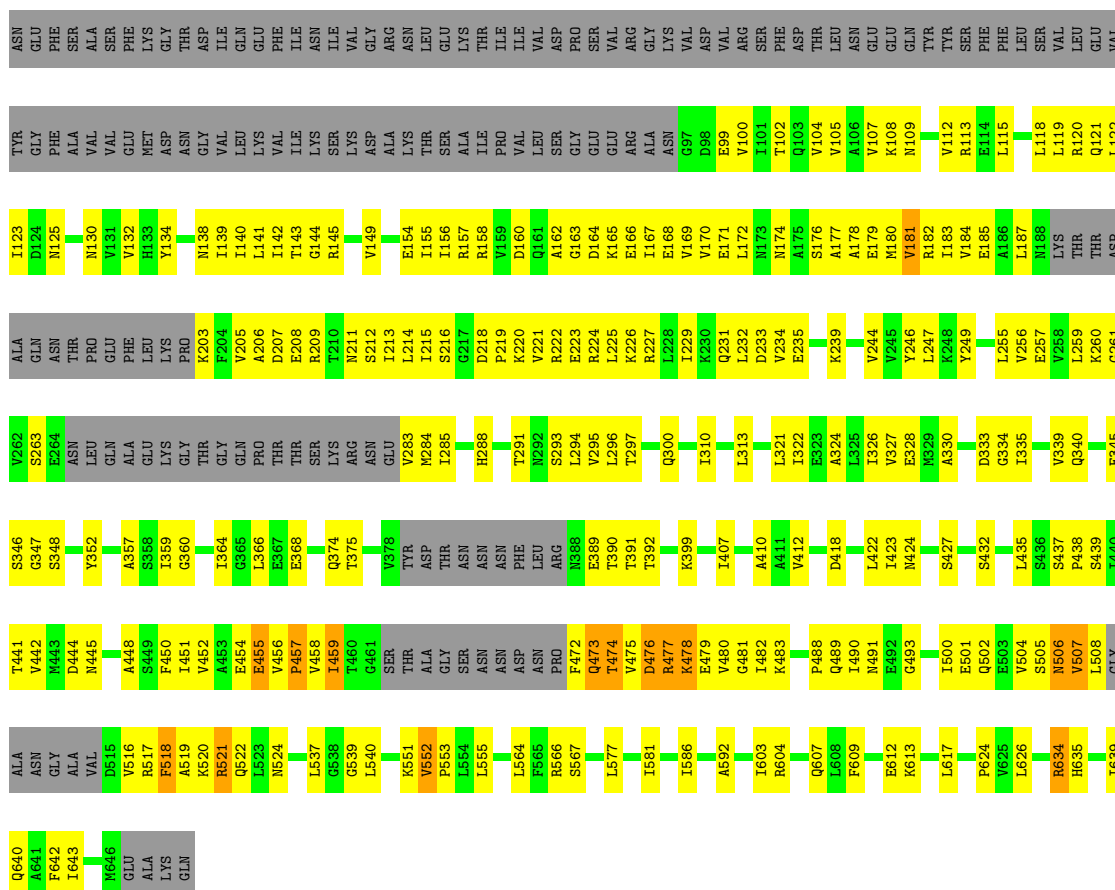






- Molecule 1: Type II secretion system protein D

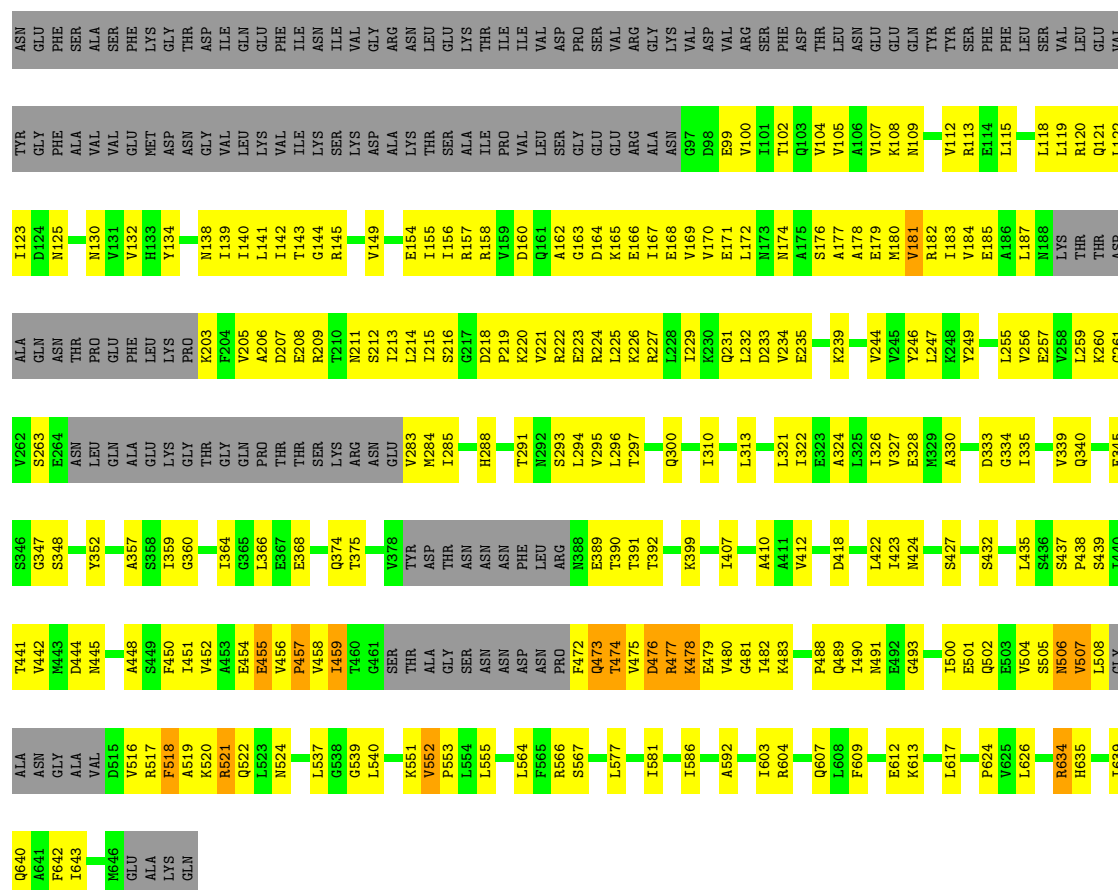
Chain M:



- Molecule 1: Type II secretion system protein D

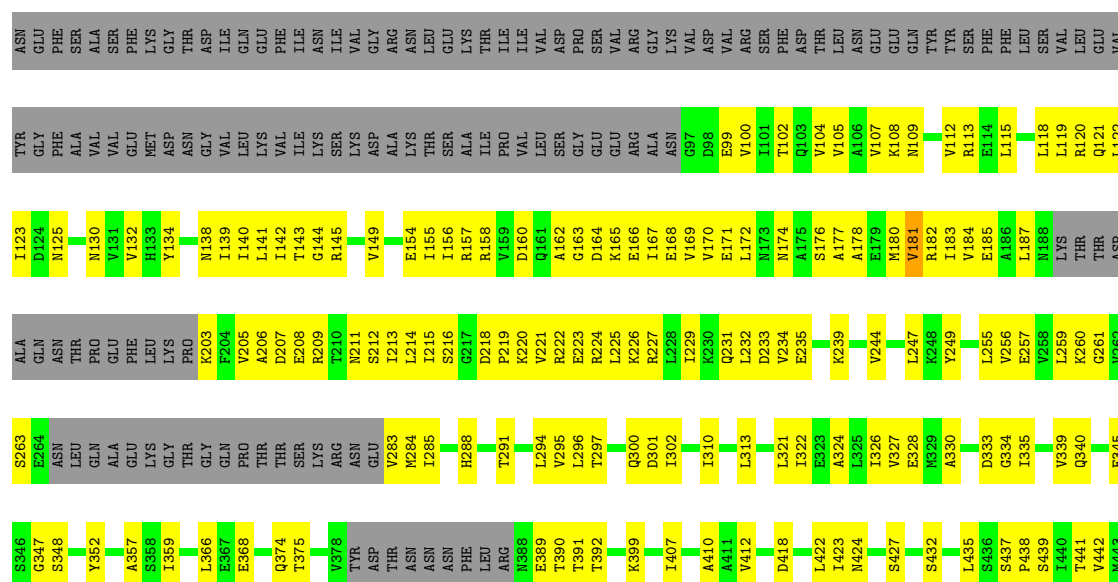


Chain N:  40% 33% . 24%

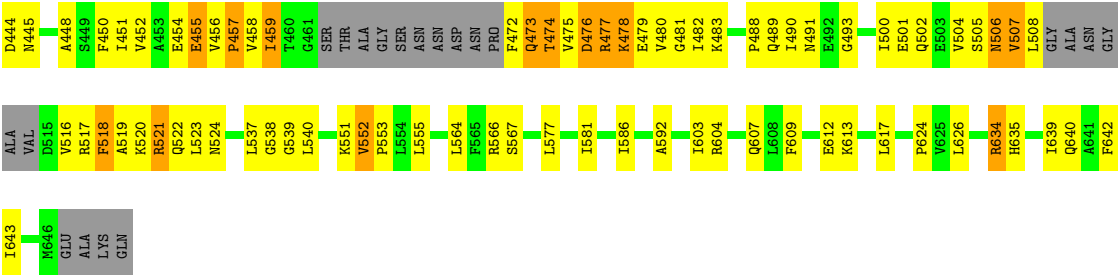


- Molecule 1: Type II secretion system protein D

Chain 0:  41% 33% 1% 24%









## 4 Experimental information

Property	Value	Source
Reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, Not provided	Depositor
Number of particles used	26955	Depositor
Resolution determination method	FSC 0.143 CUT-OFF	Depositor
CTF correction method	Not provided	Depositor
Microscope	FEI TITAN KRIOS	Depositor
Voltage (kV)	300	Depositor
Electron dose ( $e^-/\text{\AA}^2$ )	Not provided	Depositor
Minimum defocus (nm)	Not provided	Depositor
Maximum defocus (nm)	Not provided	Depositor
Magnification	Not provided	Depositor
Image detector	Not provided	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  > 2$	RMSZ	# $ Z  > 2$
1	A	0.41	1/3786 (0.0%)	0.64	4/5117 (0.1%)
1	B	0.41	1/3786 (0.0%)	0.64	4/5117 (0.1%)
1	C	0.41	1/3786 (0.0%)	0.64	4/5117 (0.1%)
1	D	0.41	1/3786 (0.0%)	0.64	4/5117 (0.1%)
1	E	0.41	1/3786 (0.0%)	0.64	4/5117 (0.1%)
1	F	0.41	1/3786 (0.0%)	0.64	4/5117 (0.1%)
1	G	0.41	1/3786 (0.0%)	0.64	4/5117 (0.1%)
1	H	0.41	1/3786 (0.0%)	0.64	4/5117 (0.1%)
1	I	0.41	1/3786 (0.0%)	0.64	4/5117 (0.1%)
1	J	0.41	1/3786 (0.0%)	0.64	4/5117 (0.1%)
1	K	0.41	1/3786 (0.0%)	0.64	4/5117 (0.1%)
1	L	0.41	1/3786 (0.0%)	0.64	4/5117 (0.1%)
1	M	0.41	1/3786 (0.0%)	0.64	4/5117 (0.1%)
1	N	0.41	1/3786 (0.0%)	0.64	4/5117 (0.1%)
1	O	0.41	1/3786 (0.0%)	0.64	4/5117 (0.1%)
All	All	0.41	15/56790 (0.0%)	0.64	60/76755 (0.1%)

All (15) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	M	457	PRO	N-CD	5.24	1.55	1.47
1	E	457	PRO	N-CD	5.23	1.55	1.47
1	J	457	PRO	N-CD	5.23	1.55	1.47
1	C	457	PRO	N-CD	5.21	1.55	1.47
1	B	457	PRO	N-CD	5.21	1.55	1.47
1	L	457	PRO	N-CD	5.21	1.55	1.47
1	A	457	PRO	N-CD	5.21	1.55	1.47
1	G	457	PRO	N-CD	5.21	1.55	1.47
1	H	457	PRO	N-CD	5.21	1.55	1.47
1	F	457	PRO	N-CD	5.20	1.55	1.47
1	O	457	PRO	N-CD	5.20	1.55	1.47
1	K	457	PRO	N-CD	5.20	1.55	1.47
1	D	457	PRO	N-CD	5.19	1.55	1.47

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	457	PRO	N-CD	5.19	1.55	1.47
1	I	457	PRO	N-CD	5.19	1.55	1.47

All (60) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	B	507	VAL	CB-CA-C	-10.70	91.07	111.40
1	E	507	VAL	CB-CA-C	-10.70	91.07	111.40
1	C	507	VAL	CB-CA-C	-10.70	91.07	111.40
1	I	507	VAL	CB-CA-C	-10.70	91.08	111.40
1	M	507	VAL	CB-CA-C	-10.70	91.08	111.40
1	G	507	VAL	CB-CA-C	-10.69	91.08	111.40
1	A	507	VAL	CB-CA-C	-10.69	91.09	111.40
1	O	507	VAL	CB-CA-C	-10.69	91.09	111.40
1	H	507	VAL	CB-CA-C	-10.69	91.09	111.40
1	L	507	VAL	CB-CA-C	-10.69	91.09	111.40
1	K	507	VAL	CB-CA-C	-10.69	91.09	111.40
1	F	507	VAL	CB-CA-C	-10.68	91.10	111.40
1	J	507	VAL	CB-CA-C	-10.68	91.10	111.40
1	D	507	VAL	CB-CA-C	-10.68	91.11	111.40
1	N	507	VAL	CB-CA-C	-10.68	91.11	111.40
1	I	552	VAL	C-N-CD	-6.92	105.38	120.60
1	D	552	VAL	C-N-CD	-6.92	105.39	120.60
1	N	552	VAL	C-N-CD	-6.91	105.40	120.60
1	C	552	VAL	C-N-CD	-6.90	105.41	120.60
1	F	552	VAL	C-N-CD	-6.90	105.42	120.60
1	J	552	VAL	C-N-CD	-6.90	105.41	120.60
1	K	552	VAL	C-N-CD	-6.90	105.42	120.60
1	A	552	VAL	C-N-CD	-6.90	105.42	120.60
1	O	552	VAL	C-N-CD	-6.90	105.42	120.60
1	M	552	VAL	C-N-CD	-6.90	105.43	120.60
1	B	552	VAL	C-N-CD	-6.89	105.43	120.60
1	G	552	VAL	C-N-CD	-6.89	105.43	120.60
1	E	552	VAL	C-N-CD	-6.89	105.44	120.60
1	H	552	VAL	C-N-CD	-6.88	105.46	120.60
1	L	552	VAL	C-N-CD	-6.88	105.46	120.60
1	D	634	ARG	N-CA-C	5.34	125.43	111.00
1	B	634	ARG	N-CA-C	5.34	125.43	111.00
1	C	634	ARG	N-CA-C	5.33	125.40	111.00
1	E	634	ARG	N-CA-C	5.33	125.40	111.00
1	F	634	ARG	N-CA-C	5.33	125.40	111.00
1	K	634	ARG	N-CA-C	5.33	125.39	111.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	J	634	ARG	N-CA-C	5.33	125.38	111.00
1	M	634	ARG	N-CA-C	5.33	125.38	111.00
1	A	634	ARG	N-CA-C	5.32	125.38	111.00
1	H	634	ARG	N-CA-C	5.32	125.37	111.00
1	O	634	ARG	N-CA-C	5.32	125.37	111.00
1	G	634	ARG	N-CA-C	5.32	125.37	111.00
1	N	634	ARG	N-CA-C	5.32	125.37	111.00
1	L	634	ARG	N-CA-C	5.32	125.36	111.00
1	I	634	ARG	N-CA-C	5.31	125.35	111.00
1	D	552	VAL	C-N-CA	5.25	144.05	122.00
1	F	552	VAL	C-N-CA	5.25	144.04	122.00
1	E	552	VAL	C-N-CA	5.25	144.04	122.00
1	I	552	VAL	C-N-CA	5.25	144.03	122.00
1	J	552	VAL	C-N-CA	5.25	144.03	122.00
1	B	552	VAL	C-N-CA	5.24	144.02	122.00
1	K	552	VAL	C-N-CA	5.24	144.03	122.00
1	N	552	VAL	C-N-CA	5.24	144.03	122.00
1	A	552	VAL	C-N-CA	5.24	144.02	122.00
1	C	552	VAL	C-N-CA	5.24	144.02	122.00
1	G	552	VAL	C-N-CA	5.24	144.01	122.00
1	O	552	VAL	C-N-CA	5.24	143.99	122.00
1	H	552	VAL	C-N-CA	5.23	143.98	122.00
1	L	552	VAL	C-N-CA	5.23	143.98	122.00
1	M	552	VAL	C-N-CA	5.23	143.98	122.00

There are no chirality outliers.

There are no planarity outliers.

## 5.2 Too-close contacts [i](#)

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

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	A	3756	0	3858	323	0
1	B	3756	0	3858	327	0
1	C	3756	0	3858	320	0
1	D	3756	0	3858	317	0
1	E	3756	0	3858	319	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	F	3756	0	3858	319	0
1	G	3756	0	3858	318	0
1	H	3756	0	3858	319	0
1	I	3756	0	3858	318	0
1	J	3756	0	3858	324	0
1	K	3756	0	3858	322	0
1	L	3756	0	3858	320	0
1	M	3756	0	3858	317	0
1	N	3756	0	3858	321	0
1	O	3756	0	3858	324	0
All	All	56340	0	57870	4309	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 38.

All (4309) 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:G:481:GLY:H	1:G:505:SER:CB	1.22	1.53
1:I:481:GLY:H	1:I:505:SER:CB	1.22	1.53
1:L:481:GLY:H	1:L:505:SER:CB	1.22	1.52
1:N:481:GLY:H	1:N:505:SER:CB	1.22	1.52
1:K:481:GLY:H	1:K:505:SER:CB	1.22	1.52
1:D:481:GLY:H	1:D:505:SER:CB	1.22	1.52
1:E:481:GLY:H	1:E:505:SER:CB	1.22	1.51
1:B:481:GLY:H	1:B:505:SER:CB	1.22	1.51
1:F:481:GLY:H	1:F:505:SER:CB	1.22	1.51
1:J:481:GLY:H	1:J:505:SER:CB	1.22	1.50
1:A:481:GLY:H	1:A:505:SER:CB	1.22	1.50
1:M:481:GLY:H	1:M:505:SER:CB	1.22	1.49
1:O:481:GLY:H	1:O:505:SER:CB	1.22	1.49
1:H:481:GLY:H	1:H:505:SER:CB	1.22	1.48
1:C:481:GLY:H	1:C:505:SER:CB	1.22	1.47
1:H:480:VAL:CB	1:H:505:SER:OG	1.65	1.45
1:D:480:VAL:CB	1:D:505:SER:OG	1.65	1.45
1:N:480:VAL:CB	1:N:505:SER:OG	1.65	1.45
1:O:480:VAL:CB	1:O:505:SER:OG	1.65	1.45
1:I:480:VAL:CB	1:I:505:SER:OG	1.65	1.45
1:C:480:VAL:CB	1:C:505:SER:OG	1.65	1.44
1:G:480:VAL:CB	1:G:505:SER:OG	1.65	1.44
1:M:480:VAL:CB	1:M:505:SER:OG	1.65	1.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:480:VAL:CB	1:A:505:SER:OG	1.65	1.43
1:L:480:VAL:CB	1:L:505:SER:OG	1.65	1.43
1:E:480:VAL:CB	1:E:505:SER:OG	1.65	1.43
1:K:481:GLY:N	1:K:505:SER:HB3	1.12	1.43
1:J:481:GLY:N	1:J:505:SER:HB3	1.12	1.43
1:B:480:VAL:CB	1:B:505:SER:OG	1.65	1.42
1:J:480:VAL:CB	1:J:505:SER:OG	1.65	1.42
1:K:480:VAL:CB	1:K:505:SER:OG	1.65	1.42
1:L:481:GLY:N	1:L:505:SER:HB3	1.12	1.42
1:I:481:GLY:N	1:I:505:SER:HB3	1.12	1.42
1:F:480:VAL:CB	1:F:505:SER:OG	1.65	1.42
1:M:481:GLY:N	1:M:505:SER:HB3	1.12	1.40
1:H:481:GLY:N	1:H:505:SER:HB3	1.12	1.40
1:D:481:GLY:N	1:D:505:SER:HB3	1.12	1.39
1:C:481:GLY:N	1:C:505:SER:HB3	1.12	1.39
1:E:481:GLY:N	1:E:505:SER:HB3	1.12	1.39
1:F:481:GLY:N	1:F:505:SER:HB3	1.12	1.38
1:B:481:GLY:N	1:B:505:SER:HB3	1.12	1.38
1:N:481:GLY:N	1:N:505:SER:HB3	1.12	1.37
1:G:481:GLY:N	1:G:505:SER:HB3	1.12	1.37
1:O:481:GLY:N	1:O:505:SER:HB3	1.12	1.37
1:A:481:GLY:N	1:A:505:SER:HB3	1.12	1.37
1:C:480:VAL:CA	1:C:505:SER:OG	1.74	1.36
1:B:480:VAL:CA	1:B:505:SER:OG	1.74	1.35
1:D:480:VAL:CA	1:D:505:SER:OG	1.74	1.35
1:G:480:VAL:CA	1:G:505:SER:OG	1.74	1.35
1:M:480:VAL:CA	1:M:505:SER:OG	1.74	1.35
1:F:480:VAL:CA	1:F:505:SER:OG	1.74	1.34
1:J:480:VAL:CA	1:J:505:SER:OG	1.74	1.34
1:I:480:VAL:CA	1:I:505:SER:OG	1.74	1.34
1:L:480:VAL:CA	1:L:505:SER:OG	1.74	1.34
1:H:480:VAL:CA	1:H:505:SER:OG	1.74	1.34
1:N:480:VAL:CA	1:N:505:SER:OG	1.74	1.34
1:A:480:VAL:CA	1:A:505:SER:OG	1.74	1.33
1:E:480:VAL:CA	1:E:505:SER:OG	1.74	1.33
1:K:480:VAL:CA	1:K:505:SER:OG	1.74	1.33
1:O:480:VAL:CA	1:O:505:SER:OG	1.74	1.32
1:G:480:VAL:HB	1:G:505:SER:OG	1.15	1.31
1:H:480:VAL:HB	1:H:505:SER:OG	1.15	1.31
1:I:480:VAL:HB	1:I:505:SER:OG	1.15	1.31
1:F:480:VAL:HB	1:F:505:SER:OG	1.15	1.30

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:480:VAL:HB	1:E:505:SER:OG	1.15	1.29
1:J:459:ILE:HG23	1:J:474:THR:O	1.31	1.28
1:D:459:ILE:HG23	1:D:474:THR:O	1.31	1.27
1:D:480:VAL:HB	1:D:505:SER:OG	1.15	1.27
1:B:459:ILE:HG23	1:B:474:THR:O	1.31	1.26
1:I:459:ILE:HG23	1:I:474:THR:O	1.31	1.26
1:M:480:VAL:HB	1:M:505:SER:OG	1.15	1.26
1:B:481:GLY:N	1:B:505:SER:CB	1.88	1.25
1:M:459:ILE:HG23	1:M:474:THR:O	1.31	1.25
1:N:480:VAL:HB	1:N:505:SER:OG	1.15	1.25
1:A:459:ILE:HG23	1:A:474:THR:O	1.31	1.25
1:K:459:ILE:HG23	1:K:474:THR:O	1.31	1.25
1:O:481:GLY:N	1:O:505:SER:CB	1.88	1.25
1:C:481:GLY:N	1:C:505:SER:CB	1.88	1.24
1:L:459:ILE:HG23	1:L:474:THR:O	1.31	1.24
1:O:480:VAL:HB	1:O:505:SER:OG	1.15	1.24
1:F:459:ILE:HG23	1:F:474:THR:O	1.31	1.24
1:C:480:VAL:HB	1:C:505:SER:OG	1.15	1.24
1:G:459:ILE:HG23	1:G:474:THR:O	1.31	1.24
1:C:459:ILE:HG23	1:C:474:THR:O	1.31	1.24
1:N:459:ILE:HG23	1:N:474:THR:O	1.31	1.24
1:A:481:GLY:N	1:A:505:SER:CB	1.88	1.23
1:O:459:ILE:HG23	1:O:474:THR:O	1.31	1.23
1:D:481:GLY:N	1:D:505:SER:CB	1.88	1.22
1:H:459:ILE:HG23	1:H:474:THR:O	1.31	1.22
1:N:481:GLY:N	1:N:505:SER:CB	1.88	1.22
1:A:234:VAL:O	1:B:209:ARG:NH1	1.72	1.22
1:B:234:VAL:O	1:C:209:ARG:NH1	1.72	1.22
1:M:234:VAL:O	1:N:209:ARG:NH1	1.72	1.21
1:E:481:GLY:N	1:E:505:SER:CB	1.88	1.21
1:E:459:ILE:HG23	1:E:474:THR:O	1.31	1.21
1:I:234:VAL:O	1:J:209:ARG:NH1	1.72	1.21
1:N:234:VAL:O	1:O:209:ARG:NH1	1.72	1.21
1:B:480:VAL:HB	1:B:505:SER:OG	1.15	1.21
1:F:234:VAL:O	1:G:209:ARG:NH1	1.72	1.20
1:H:234:VAL:O	1:I:209:ARG:NH1	1.72	1.20
1:M:481:GLY:N	1:M:505:SER:CB	1.88	1.20
1:J:234:VAL:O	1:K:209:ARG:NH1	1.72	1.20
1:L:480:VAL:HB	1:L:505:SER:OG	1.15	1.20
1:C:234:VAL:O	1:D:209:ARG:NH1	1.72	1.20
1:E:234:VAL:O	1:F:209:ARG:NH1	1.72	1.20

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:L:234:VAL:O	1:M:209:ARG:NH1	1.72	1.20
1:A:209:ARG:NH1	1:O:234:VAL:O	1.72	1.20
1:G:234:VAL:O	1:H:209:ARG:NH1	1.72	1.19
1:A:480:VAL:HB	1:A:505:SER:OG	1.15	1.19
1:D:234:VAL:O	1:E:209:ARG:NH1	1.72	1.19
1:L:481:GLY:N	1:L:505:SER:CB	1.88	1.18
1:K:480:VAL:HB	1:K:505:SER:OG	1.15	1.18
1:F:481:GLY:N	1:F:505:SER:CB	1.88	1.17
1:E:459:ILE:HG21	1:E:473:GLN:HB2	1.27	1.17
1:K:234:VAL:O	1:L:209:ARG:NH1	1.72	1.17
1:G:481:GLY:N	1:G:505:SER:CB	1.88	1.17
1:G:459:ILE:HG21	1:G:473:GLN:HB2	1.27	1.17
1:J:480:VAL:HB	1:J:505:SER:OG	1.15	1.16
1:J:481:GLY:N	1:J:505:SER:CB	1.88	1.15
1:H:481:GLY:N	1:H:505:SER:CB	1.88	1.15
1:K:481:GLY:N	1:K:505:SER:CB	1.88	1.15
1:B:459:ILE:HG21	1:B:473:GLN:HB2	1.27	1.14
1:C:459:ILE:HG21	1:C:473:GLN:HB2	1.27	1.14
1:I:481:GLY:N	1:I:505:SER:CB	1.88	1.14
1:I:459:ILE:HG21	1:I:473:GLN:HB2	1.27	1.14
1:H:459:ILE:HG21	1:H:473:GLN:HB2	1.27	1.13
1:J:167:ILE:HA	1:J:215:ILE:O	1.49	1.12
1:J:459:ILE:HG21	1:J:473:GLN:HB2	1.27	1.12
1:O:459:ILE:HG21	1:O:473:GLN:HB2	1.27	1.12
1:D:459:ILE:HG21	1:D:473:GLN:HB2	1.27	1.12
1:I:167:ILE:HA	1:I:215:ILE:O	1.49	1.12
1:K:167:ILE:HA	1:K:215:ILE:O	1.49	1.12
1:D:167:ILE:HA	1:D:215:ILE:O	1.49	1.12
1:C:167:ILE:HA	1:C:215:ILE:O	1.49	1.11
1:A:459:ILE:HG21	1:A:473:GLN:HB2	1.27	1.11
1:E:167:ILE:HA	1:E:215:ILE:O	1.49	1.11
1:K:459:ILE:HG21	1:K:473:GLN:HB2	1.27	1.10
1:H:167:ILE:HA	1:H:215:ILE:O	1.49	1.10
1:B:167:ILE:HA	1:B:215:ILE:O	1.49	1.10
1:L:167:ILE:HA	1:L:215:ILE:O	1.49	1.10
1:M:459:ILE:HG21	1:M:473:GLN:HB2	1.27	1.10
1:L:459:ILE:HG21	1:L:473:GLN:HB2	1.27	1.10
1:A:167:ILE:HA	1:A:215:ILE:O	1.49	1.09
1:N:459:ILE:HG21	1:N:473:GLN:HB2	1.27	1.09
1:F:167:ILE:HA	1:F:215:ILE:O	1.49	1.09
1:F:459:ILE:HG21	1:F:473:GLN:HB2	1.27	1.09

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:612:GLU:HG3	1:I:642:PHE:CE2	1.88	1.09
1:K:612:GLU:HG3	1:L:642:PHE:CE2	1.88	1.09
1:M:612:GLU:HG3	1:N:642:PHE:CE2	1.88	1.09
1:G:507:VAL:O	1:G:507:VAL:HG13	1.53	1.09
1:L:612:GLU:HG3	1:M:642:PHE:CE2	1.88	1.09
1:I:612:GLU:HG3	1:J:642:PHE:CE2	1.88	1.08
1:O:167:ILE:HA	1:O:215:ILE:O	1.49	1.08
1:N:167:ILE:HA	1:N:215:ILE:O	1.49	1.08
1:G:167:ILE:HA	1:G:215:ILE:O	1.49	1.08
1:J:612:GLU:HG3	1:K:642:PHE:CE2	1.88	1.08
1:M:167:ILE:HA	1:M:215:ILE:O	1.49	1.08
1:A:642:PHE:CE2	1:O:612:GLU:HG3	1.88	1.08
1:F:507:VAL:HG13	1:F:507:VAL:O	1.53	1.08
1:M:507:VAL:O	1:M:507:VAL:HG13	1.53	1.08
1:D:612:GLU:HG3	1:E:642:PHE:CE2	1.88	1.08
1:C:612:GLU:HG3	1:D:642:PHE:CE2	1.88	1.08
1:G:612:GLU:HG3	1:H:642:PHE:CE2	1.88	1.08
1:L:507:VAL:HG13	1:L:507:VAL:O	1.53	1.08
1:F:612:GLU:HG3	1:G:642:PHE:CE2	1.88	1.08
1:N:612:GLU:HG3	1:O:642:PHE:CE2	1.88	1.08
1:A:612:GLU:HG3	1:B:642:PHE:CE2	1.88	1.07
1:A:458:VAL:O	1:A:476:ASP:N	1.87	1.07
1:B:507:VAL:O	1:B:507:VAL:HG13	1.53	1.07
1:C:458:VAL:O	1:C:476:ASP:N	1.87	1.07
1:D:458:VAL:O	1:D:476:ASP:N	1.87	1.07
1:H:507:VAL:HG13	1:H:507:VAL:O	1.53	1.07
1:D:479:GLU:OE1	1:D:479:GLU:N	1.88	1.07
1:F:479:GLU:N	1:F:479:GLU:OE1	1.88	1.07
1:E:612:GLU:HG3	1:F:642:PHE:CE2	1.88	1.07
1:J:458:VAL:O	1:J:476:ASP:N	1.87	1.07
1:B:612:GLU:HG3	1:C:642:PHE:CE2	1.88	1.07
1:I:458:VAL:O	1:I:476:ASP:N	1.87	1.07
1:B:479:GLU:OE1	1:B:479:GLU:N	1.88	1.06
1:F:458:VAL:O	1:F:476:ASP:N	1.87	1.06
1:K:459:ILE:CG2	1:K:474:THR:O	2.03	1.06
1:M:459:ILE:CG2	1:M:474:THR:O	2.03	1.06
1:H:459:ILE:CG2	1:H:474:THR:O	2.03	1.06
1:N:507:VAL:HG13	1:N:507:VAL:O	1.53	1.06
1:B:458:VAL:O	1:B:476:ASP:N	1.87	1.06
1:C:507:VAL:HG13	1:C:507:VAL:O	1.53	1.06
1:K:507:VAL:O	1:K:507:VAL:HG13	1.53	1.06

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:507:VAL:HG13	1:A:507:VAL:O	1.53	1.06
1:F:459:ILE:CG2	1:F:474:THR:O	2.03	1.06
1:I:459:ILE:CG2	1:I:474:THR:O	2.03	1.06
1:N:458:VAL:O	1:N:476:ASP:N	1.87	1.06
1:G:459:ILE:CG2	1:G:474:THR:O	2.03	1.06
1:H:479:GLU:N	1:H:479:GLU:OE1	1.88	1.06
1:J:459:ILE:CG2	1:J:474:THR:O	2.03	1.06
1:A:235:GLU:OE1	1:A:235:GLU:N	1.89	1.06
1:M:458:VAL:O	1:M:476:ASP:N	1.87	1.06
1:E:235:GLU:OE1	1:E:235:GLU:N	1.89	1.06
1:E:459:ILE:CG2	1:E:474:THR:O	2.03	1.06
1:L:459:ILE:CG2	1:L:474:THR:O	2.03	1.06
1:O:459:ILE:CG2	1:O:474:THR:O	2.03	1.06
1:I:479:GLU:N	1:I:479:GLU:OE1	1.88	1.06
1:N:459:ILE:CG2	1:N:474:THR:O	2.03	1.06
1:A:459:ILE:CG2	1:A:474:THR:O	2.03	1.06
1:B:235:GLU:N	1:B:235:GLU:OE1	1.89	1.06
1:C:459:ILE:CG2	1:C:474:THR:O	2.03	1.06
1:G:479:GLU:OE1	1:G:479:GLU:N	1.88	1.05
1:K:458:VAL:O	1:K:476:ASP:N	1.87	1.05
1:L:458:VAL:O	1:L:476:ASP:N	1.87	1.05
1:M:235:GLU:OE1	1:M:235:GLU:N	1.89	1.05
1:E:458:VAL:O	1:E:476:ASP:N	1.87	1.05
1:E:479:GLU:OE1	1:E:479:GLU:N	1.88	1.05
1:L:235:GLU:N	1:L:235:GLU:OE1	1.89	1.05
1:F:235:GLU:OE1	1:F:235:GLU:N	1.89	1.05
1:D:235:GLU:N	1:D:235:GLU:OE1	1.89	1.05
1:D:459:ILE:CG2	1:D:474:THR:O	2.03	1.05
1:H:458:VAL:O	1:H:476:ASP:N	1.87	1.05
1:O:235:GLU:OE1	1:O:235:GLU:N	1.89	1.05
1:M:479:GLU:OE1	1:M:479:GLU:N	1.88	1.05
1:E:507:VAL:O	1:E:507:VAL:HG13	1.53	1.05
1:K:479:GLU:OE1	1:K:479:GLU:N	1.88	1.05
1:N:479:GLU:N	1:N:479:GLU:OE1	1.88	1.05
1:O:458:VAL:O	1:O:476:ASP:N	1.87	1.05
1:G:458:VAL:O	1:G:476:ASP:N	1.87	1.04
1:N:235:GLU:N	1:N:235:GLU:OE1	1.89	1.04
1:B:459:ILE:CG2	1:B:474:THR:O	2.03	1.04
1:I:235:GLU:N	1:I:235:GLU:OE1	1.89	1.04
1:A:479:GLU:N	1:A:479:GLU:OE1	1.88	1.04
1:C:235:GLU:N	1:C:235:GLU:OE1	1.89	1.04

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:479:GLU:OE1	1:C:479:GLU:N	1.88	1.04
1:H:235:GLU:OE1	1:H:235:GLU:N	1.89	1.04
1:J:479:GLU:OE1	1:J:479:GLU:N	1.88	1.04
1:O:479:GLU:OE1	1:O:479:GLU:N	1.88	1.04
1:I:507:VAL:HG13	1:I:507:VAL:O	1.53	1.04
1:J:507:VAL:O	1:J:507:VAL:HG13	1.53	1.04
1:D:507:VAL:HG13	1:D:507:VAL:O	1.53	1.04
1:J:235:GLU:OE1	1:J:235:GLU:N	1.89	1.04
1:K:235:GLU:N	1:K:235:GLU:OE1	1.89	1.03
1:L:479:GLU:OE1	1:L:479:GLU:N	1.88	1.03
1:O:507:VAL:O	1:O:507:VAL:HG13	1.53	1.03
1:G:235:GLU:OE1	1:G:235:GLU:N	1.89	1.03
1:O:324:ALA:O	1:O:437:SER:HB2	1.60	1.01
1:A:324:ALA:O	1:A:437:SER:HB2	1.60	1.01
1:K:324:ALA:O	1:K:437:SER:HB2	1.60	1.01
1:N:324:ALA:O	1:N:437:SER:HB2	1.60	1.01
1:B:324:ALA:O	1:B:437:SER:HB2	1.60	1.01
1:G:324:ALA:O	1:G:437:SER:HB2	1.60	1.01
1:L:105:VAL:O	1:L:140:ILE:HB	1.61	1.01
1:H:105:VAL:O	1:H:140:ILE:HB	1.61	1.01
1:J:324:ALA:O	1:J:437:SER:HB2	1.60	1.01
1:M:324:ALA:O	1:M:437:SER:HB2	1.60	1.01
1:I:105:VAL:O	1:I:140:ILE:HB	1.61	1.01
1:C:324:ALA:O	1:C:437:SER:HB2	1.60	1.00
1:F:105:VAL:O	1:F:140:ILE:HB	1.61	1.00
1:M:105:VAL:O	1:M:140:ILE:HB	1.61	1.00
1:E:105:VAL:O	1:E:140:ILE:HB	1.61	1.00
1:F:324:ALA:O	1:F:437:SER:HB2	1.60	1.00
1:D:612:GLU:HG3	1:E:642:PHE:HE2	1.23	1.00
1:G:105:VAL:O	1:G:140:ILE:HB	1.61	1.00
1:L:324:ALA:O	1:L:437:SER:HB2	1.60	1.00
1:N:105:VAL:O	1:N:140:ILE:HB	1.61	1.00
1:D:105:VAL:O	1:D:140:ILE:HB	1.61	1.00
1:F:612:GLU:HG3	1:G:642:PHE:HE2	1.22	1.00
1:K:105:VAL:O	1:K:140:ILE:HB	1.61	1.00
1:D:324:ALA:O	1:D:437:SER:HB2	1.60	0.99
1:O:105:VAL:O	1:O:140:ILE:HB	1.61	0.99
1:E:612:GLU:HG3	1:F:642:PHE:HE2	1.22	0.99
1:C:105:VAL:O	1:C:140:ILE:HB	1.61	0.99
1:H:324:ALA:O	1:H:437:SER:HB2	1.60	0.99
1:A:105:VAL:O	1:A:140:ILE:HB	1.61	0.99

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:105:VAL:O	1:B:140:ILE:HB	1.61	0.99
1:I:324:ALA:O	1:I:437:SER:HB2	1.60	0.98
1:J:105:VAL:O	1:J:140:ILE:HB	1.61	0.98
1:I:612:GLU:HG3	1:J:642:PHE:HE2	1.22	0.98
1:I:456:VAL:HG23	1:I:457:PRO:HD2	1.46	0.98
1:J:456:VAL:HG23	1:J:457:PRO:HD2	1.46	0.98
1:E:324:ALA:O	1:E:437:SER:HB2	1.60	0.98
1:K:456:VAL:HG23	1:K:457:PRO:HD2	1.46	0.98
1:H:456:VAL:HG23	1:H:457:PRO:HD2	1.46	0.98
1:L:456:VAL:HG23	1:L:457:PRO:HD2	1.46	0.98
1:O:456:VAL:HG23	1:O:457:PRO:HD2	1.46	0.98
1:B:612:GLU:HG3	1:C:642:PHE:HE2	1.22	0.97
1:M:456:VAL:HG23	1:M:457:PRO:HD2	1.46	0.97
1:N:456:VAL:HG23	1:N:457:PRO:HD2	1.46	0.97
1:A:456:VAL:HG23	1:A:457:PRO:HD2	1.46	0.97
1:G:456:VAL:HG23	1:G:457:PRO:HD2	1.46	0.97
1:G:612:GLU:HG3	1:H:642:PHE:HE2	1.23	0.97
1:B:456:VAL:HG23	1:B:457:PRO:HD2	1.46	0.97
1:L:612:GLU:HG3	1:M:642:PHE:HE2	1.22	0.96
1:C:456:VAL:HG23	1:C:457:PRO:HD2	1.46	0.96
1:F:456:VAL:HG23	1:F:457:PRO:HD2	1.46	0.96
1:D:456:VAL:HG23	1:D:457:PRO:HD2	1.46	0.96
1:N:612:GLU:HG3	1:O:642:PHE:HE2	1.22	0.96
1:A:480:VAL:C	1:A:505:SER:OG	2.05	0.96
1:E:456:VAL:HG23	1:E:457:PRO:HD2	1.46	0.95
1:O:480:VAL:C	1:O:505:SER:OG	2.05	0.95
1:B:480:VAL:C	1:B:505:SER:OG	2.05	0.95
1:E:480:VAL:C	1:E:505:SER:OG	2.05	0.95
1:D:480:VAL:C	1:D:505:SER:OG	2.05	0.95
1:F:480:VAL:C	1:F:505:SER:OG	2.05	0.95
1:K:612:GLU:HG3	1:L:642:PHE:HE2	1.22	0.94
1:N:480:VAL:C	1:N:505:SER:OG	2.05	0.94
1:C:480:VAL:C	1:C:505:SER:OG	2.05	0.94
1:L:480:VAL:C	1:L:505:SER:OG	2.05	0.94
1:H:480:VAL:C	1:H:505:SER:OG	2.05	0.94
1:K:480:VAL:C	1:K:505:SER:OG	2.05	0.94
1:G:480:VAL:C	1:G:505:SER:OG	2.05	0.94
1:J:612:GLU:HG3	1:K:642:PHE:HE2	1.22	0.94
1:M:480:VAL:C	1:M:505:SER:OG	2.05	0.94
1:J:480:VAL:C	1:J:505:SER:OG	2.05	0.93
1:M:612:GLU:HG3	1:N:642:PHE:HE2	1.23	0.93

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:I:480:VAL:C	1:I:505:SER:OG	2.05	0.93
1:J:609:PHE:CG	1:K:639:ILE:CD1	2.52	0.93
1:A:612:GLU:HG3	1:B:642:PHE:HE2	1.23	0.93
1:H:609:PHE:CG	1:I:639:ILE:CD1	2.52	0.93
1:L:609:PHE:CG	1:M:639:ILE:CD1	2.52	0.93
1:N:218:ASP:HB2	1:N:221:VAL:H	1.34	0.93
1:A:642:PHE:HE2	1:O:612:GLU:HG3	1.23	0.93
1:C:609:PHE:CD2	1:D:639:ILE:HD11	2.04	0.93
1:H:612:GLU:HG3	1:I:642:PHE:HE2	1.23	0.93
1:O:218:ASP:HB2	1:O:221:VAL:H	1.34	0.93
1:M:218:ASP:HB2	1:M:221:VAL:H	1.34	0.93
1:A:218:ASP:HB2	1:A:221:VAL:H	1.34	0.93
1:C:609:PHE:CG	1:D:639:ILE:CD1	2.52	0.93
1:K:609:PHE:CG	1:L:639:ILE:CD1	2.52	0.93
1:A:609:PHE:CD2	1:B:639:ILE:HD11	2.04	0.92
1:A:609:PHE:CG	1:B:639:ILE:CD1	2.52	0.92
1:F:609:PHE:CD2	1:G:639:ILE:HD11	2.04	0.92
1:L:218:ASP:HB2	1:L:221:VAL:H	1.34	0.92
1:K:609:PHE:CD2	1:L:639:ILE:HD11	2.04	0.92
1:M:609:PHE:CG	1:N:639:ILE:CD1	2.52	0.92
1:B:609:PHE:CG	1:C:639:ILE:CD1	2.52	0.92
1:J:609:PHE:CD2	1:K:639:ILE:HD11	2.04	0.92
1:I:609:PHE:CG	1:J:639:ILE:CD1	2.52	0.92
1:D:609:PHE:CD2	1:E:639:ILE:HD11	2.04	0.92
1:D:609:PHE:CG	1:E:639:ILE:CD1	2.52	0.92
1:E:609:PHE:CG	1:F:639:ILE:CD1	2.52	0.92
1:A:639:ILE:HD11	1:O:609:PHE:CD2	2.04	0.92
1:C:612:GLU:HG3	1:D:642:PHE:HE2	1.23	0.92
1:N:609:PHE:CG	1:O:639:ILE:CD1	2.52	0.92
1:A:639:ILE:CD1	1:O:609:PHE:CG	2.52	0.92
1:B:218:ASP:HB2	1:B:221:VAL:H	1.34	0.92
1:B:609:PHE:CD2	1:C:639:ILE:HD11	2.04	0.92
1:F:609:PHE:CG	1:G:639:ILE:CD1	2.52	0.92
1:E:609:PHE:CD2	1:F:639:ILE:HD11	2.04	0.92
1:N:506:ASN:HD22	1:N:507:VAL:N	1.68	0.92
1:K:218:ASP:HB2	1:K:221:VAL:H	1.34	0.92
1:K:506:ASN:HD22	1:K:507:VAL:N	1.68	0.92
1:D:218:ASP:HB2	1:D:221:VAL:H	1.34	0.92
1:I:609:PHE:CD2	1:J:639:ILE:HD11	2.04	0.92
1:G:218:ASP:HB2	1:G:221:VAL:H	1.34	0.92
1:B:506:ASN:HD22	1:B:507:VAL:N	1.68	0.91

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:218:ASP:HB2	1:F:221:VAL:H	1.34	0.91
1:N:458:VAL:O	1:N:475:VAL:HA	1.70	0.91
1:O:458:VAL:O	1:O:475:VAL:HA	1.70	0.91
1:D:458:VAL:O	1:D:475:VAL:HA	1.70	0.91
1:H:506:ASN:HD22	1:H:507:VAL:N	1.68	0.91
1:I:458:VAL:O	1:I:475:VAL:HA	1.70	0.91
1:I:506:ASN:HD22	1:I:507:VAL:N	1.68	0.91
1:L:506:ASN:HD22	1:L:507:VAL:N	1.68	0.91
1:I:218:ASP:HB2	1:I:221:VAL:H	1.34	0.91
1:M:609:PHE:CD2	1:N:639:ILE:HD11	2.04	0.91
1:O:506:ASN:HD22	1:O:507:VAL:N	1.68	0.91
1:G:609:PHE:CG	1:H:639:ILE:CD1	2.52	0.91
1:H:218:ASP:HB2	1:H:221:VAL:H	1.34	0.91
1:H:458:VAL:O	1:H:475:VAL:HA	1.70	0.91
1:G:609:PHE:CD2	1:H:639:ILE:HD11	2.04	0.91
1:H:609:PHE:CD2	1:I:639:ILE:HD11	2.04	0.91
1:J:458:VAL:O	1:J:475:VAL:HA	1.70	0.91
1:L:609:PHE:CD2	1:M:639:ILE:HD11	2.04	0.91
1:B:458:VAL:O	1:B:475:VAL:HA	1.70	0.91
1:E:218:ASP:HB2	1:E:221:VAL:H	1.34	0.91
1:E:506:ASN:HD22	1:E:507:VAL:N	1.68	0.91
1:G:458:VAL:O	1:G:475:VAL:HA	1.70	0.91
1:C:218:ASP:HB2	1:C:221:VAL:H	1.34	0.91
1:C:506:ASN:HD22	1:C:507:VAL:N	1.68	0.91
1:N:455:GLU:N	1:N:455:GLU:OE1	2.04	0.91
1:E:455:GLU:OE1	1:E:455:GLU:N	2.04	0.90
1:E:458:VAL:O	1:E:475:VAL:HA	1.70	0.90
1:F:506:ASN:HD22	1:F:507:VAL:N	1.68	0.90
1:J:218:ASP:HB2	1:J:221:VAL:H	1.34	0.90
1:M:458:VAL:O	1:M:475:VAL:HA	1.70	0.90
1:O:455:GLU:N	1:O:455:GLU:OE1	2.04	0.90
1:A:506:ASN:HD22	1:A:507:VAL:N	1.68	0.90
1:F:455:GLU:OE1	1:F:455:GLU:N	2.04	0.90
1:M:506:ASN:HD22	1:M:507:VAL:N	1.68	0.90
1:N:609:PHE:CD2	1:O:639:ILE:HD11	2.04	0.90
1:A:458:VAL:O	1:A:475:VAL:HA	1.70	0.90
1:D:455:GLU:OE1	1:D:455:GLU:N	2.04	0.90
1:F:458:VAL:O	1:F:475:VAL:HA	1.70	0.90
1:I:455:GLU:OE1	1:I:455:GLU:N	2.04	0.90
1:M:455:GLU:OE1	1:M:455:GLU:N	2.04	0.90
1:J:455:GLU:OE1	1:J:455:GLU:N	2.04	0.90

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:458:VAL:O	1:K:475:VAL:HA	1.70	0.90
1:J:506:ASN:HD22	1:J:507:VAL:N	1.68	0.90
1:C:455:GLU:N	1:C:455:GLU:OE1	2.04	0.90
1:H:455:GLU:OE1	1:H:455:GLU:N	2.04	0.90
1:A:205:VAL:HB	1:A:214:LEU:HB2	1.54	0.90
1:A:455:GLU:N	1:A:455:GLU:OE1	2.04	0.90
1:B:205:VAL:HB	1:B:214:LEU:HB2	1.54	0.90
1:D:506:ASN:HD22	1:D:507:VAL:N	1.68	0.89
1:G:506:ASN:HD22	1:G:507:VAL:N	1.68	0.89
1:K:455:GLU:N	1:K:455:GLU:OE1	2.04	0.89
1:C:205:VAL:HB	1:C:214:LEU:HB2	1.54	0.89
1:C:458:VAL:O	1:C:475:VAL:HA	1.70	0.89
1:O:205:VAL:HB	1:O:214:LEU:HB2	1.54	0.89
1:G:455:GLU:OE1	1:G:455:GLU:N	2.04	0.89
1:L:458:VAL:O	1:L:475:VAL:HA	1.70	0.89
1:L:455:GLU:OE1	1:L:455:GLU:N	2.04	0.89
1:N:205:VAL:HB	1:N:214:LEU:HB2	1.54	0.89
1:A:328:GLU:OE1	1:A:521:ARG:NH1	2.06	0.89
1:B:455:GLU:N	1:B:455:GLU:OE1	2.04	0.89
1:L:328:GLU:OE1	1:L:521:ARG:NH1	2.06	0.89
1:D:205:VAL:HB	1:D:214:LEU:HB2	1.54	0.88
1:D:328:GLU:OE1	1:D:521:ARG:NH1	2.06	0.88
1:O:328:GLU:OE1	1:O:521:ARG:NH1	2.06	0.88
1:B:169:VAL:HG22	1:B:214:LEU:HD22	1.56	0.88
1:I:205:VAL:HB	1:I:214:LEU:HB2	1.54	0.88
1:M:328:GLU:OE1	1:M:521:ARG:NH1	2.06	0.88
1:H:205:VAL:HB	1:H:214:LEU:HB2	1.54	0.88
1:J:480:VAL:HA	1:J:505:SER:OG	1.74	0.88
1:M:205:VAL:HB	1:M:214:LEU:HB2	1.54	0.88
1:N:480:VAL:HA	1:N:505:SER:OG	1.73	0.88
1:E:328:GLU:OE1	1:E:521:ARG:NH1	2.06	0.88
1:K:328:GLU:OE1	1:K:521:ARG:NH1	2.06	0.88
1:D:169:VAL:HG22	1:D:214:LEU:HD22	1.56	0.88
1:O:480:VAL:HA	1:O:505:SER:OG	1.74	0.88
1:B:328:GLU:OE1	1:B:521:ARG:NH1	2.06	0.88
1:H:328:GLU:OE1	1:H:521:ARG:NH1	2.06	0.88
1:J:205:VAL:HB	1:J:214:LEU:HB2	1.54	0.88
1:K:122:LEU:HD23	1:K:125:ASN:HD22	1.39	0.88
1:O:169:VAL:HG22	1:O:214:LEU:HD22	1.56	0.88
1:C:169:VAL:HG22	1:C:214:LEU:HD22	1.56	0.88
1:C:328:GLU:OE1	1:C:521:ARG:NH1	2.06	0.88

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:169:VAL:HG22	1:E:214:LEU:HD22	1.56	0.88
1:G:205:VAL:HB	1:G:214:LEU:HB2	1.54	0.88
1:I:328:GLU:OE1	1:I:521:ARG:NH1	2.06	0.88
1:L:122:LEU:HD23	1:L:125:ASN:HD22	1.39	0.88
1:A:169:VAL:HG22	1:A:214:LEU:HD22	1.56	0.88
1:E:480:VAL:HA	1:E:505:SER:OG	1.74	0.88
1:K:480:VAL:HA	1:K:505:SER:OG	1.74	0.88
1:L:205:VAL:HB	1:L:214:LEU:HB2	1.54	0.88
1:D:480:VAL:HA	1:D:505:SER:OG	1.74	0.87
1:E:205:VAL:HB	1:E:214:LEU:HB2	1.54	0.87
1:C:480:VAL:HA	1:C:505:SER:OG	1.73	0.87
1:F:480:VAL:HA	1:F:505:SER:OG	1.74	0.87
1:I:480:VAL:HA	1:I:505:SER:OG	1.74	0.87
1:N:169:VAL:HG22	1:N:214:LEU:HD22	1.56	0.87
1:N:328:GLU:OE1	1:N:521:ARG:NH1	2.06	0.87
1:C:122:LEU:HD23	1:C:125:ASN:HD22	1.39	0.87
1:J:122:LEU:HD23	1:J:125:ASN:HD22	1.39	0.87
1:K:205:VAL:HB	1:K:214:LEU:HB2	1.54	0.87
1:F:122:LEU:HD23	1:F:125:ASN:HD22	1.39	0.87
1:G:328:GLU:OE1	1:G:521:ARG:NH1	2.06	0.87
1:E:122:LEU:HD23	1:E:125:ASN:HD22	1.39	0.87
1:J:328:GLU:OE1	1:J:521:ARG:NH1	2.06	0.87
1:D:122:LEU:HD23	1:D:125:ASN:HD22	1.39	0.87
1:F:328:GLU:OE1	1:F:521:ARG:NH1	2.06	0.87
1:G:480:VAL:HA	1:G:505:SER:OG	1.74	0.87
1:M:480:VAL:HA	1:M:505:SER:OG	1.74	0.87
1:A:480:VAL:HA	1:A:505:SER:OG	1.74	0.87
1:F:169:VAL:HG22	1:F:214:LEU:HD22	1.56	0.87
1:F:205:VAL:HB	1:F:214:LEU:HB2	1.54	0.87
1:G:122:LEU:HD23	1:G:125:ASN:HD22	1.39	0.87
1:G:169:VAL:HG22	1:G:214:LEU:HD22	1.56	0.87
1:M:122:LEU:HD23	1:M:125:ASN:HD22	1.39	0.86
1:B:122:LEU:HD23	1:B:125:ASN:HD22	1.39	0.86
1:B:480:VAL:HA	1:B:505:SER:OG	1.74	0.86
1:M:169:VAL:HG22	1:M:214:LEU:HD22	1.56	0.86
1:A:122:LEU:HD23	1:A:125:ASN:HD22	1.39	0.86
1:H:169:VAL:HG22	1:H:214:LEU:HD22	1.56	0.86
1:L:169:VAL:HG22	1:L:214:LEU:HD22	1.56	0.86
1:L:480:VAL:HA	1:L:505:SER:OG	1.74	0.86
1:B:473:GLN:OE1	1:B:473:GLN:N	2.09	0.86
1:I:122:LEU:HD23	1:I:125:ASN:HD22	1.39	0.86

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:473:GLN:N	1:K:473:GLN:OE1	2.09	0.86
1:A:473:GLN:OE1	1:A:473:GLN:N	2.09	0.85
1:H:122:LEU:HD23	1:H:125:ASN:HD22	1.39	0.85
1:J:169:VAL:HG22	1:J:214:LEU:HD22	1.56	0.85
1:K:169:VAL:HG22	1:K:214:LEU:HD22	1.56	0.85
1:H:480:VAL:HA	1:H:505:SER:OG	1.74	0.85
1:L:473:GLN:N	1:L:473:GLN:OE1	2.09	0.85
1:O:122:LEU:HD23	1:O:125:ASN:HD22	1.39	0.85
1:J:473:GLN:N	1:J:473:GLN:OE1	2.09	0.85
1:C:473:GLN:OE1	1:C:473:GLN:N	2.09	0.85
1:F:473:GLN:OE1	1:F:473:GLN:N	2.09	0.85
1:N:122:LEU:HD23	1:N:125:ASN:HD22	1.39	0.85
1:O:473:GLN:N	1:O:473:GLN:OE1	2.09	0.85
1:H:480:VAL:CA	1:H:505:SER:CB	2.55	0.85
1:N:480:VAL:CA	1:N:505:SER:CB	2.55	0.85
1:A:480:VAL:CA	1:A:505:SER:CB	2.55	0.85
1:I:169:VAL:HG22	1:I:214:LEU:HD22	1.56	0.85
1:K:480:VAL:CA	1:K:505:SER:CB	2.55	0.85
1:M:480:VAL:CA	1:M:505:SER:CB	2.55	0.85
1:G:473:GLN:N	1:G:473:GLN:OE1	2.09	0.85
1:J:480:VAL:CA	1:J:505:SER:CB	2.55	0.85
1:M:473:GLN:OE1	1:M:473:GLN:N	2.09	0.84
1:F:480:VAL:CA	1:F:505:SER:CB	2.55	0.84
1:I:480:VAL:CA	1:I:505:SER:CB	2.55	0.84
1:N:473:GLN:N	1:N:473:GLN:OE1	2.09	0.84
1:C:480:VAL:CA	1:C:505:SER:CB	2.55	0.84
1:H:473:GLN:N	1:H:473:GLN:OE1	2.09	0.84
1:O:480:VAL:CA	1:O:505:SER:CB	2.55	0.84
1:D:473:GLN:N	1:D:473:GLN:OE1	2.09	0.84
1:L:480:VAL:CA	1:L:505:SER:CB	2.55	0.84
1:B:480:VAL:CA	1:B:505:SER:CB	2.55	0.84
1:D:480:VAL:CA	1:D:505:SER:CB	2.55	0.84
1:E:480:VAL:CA	1:E:505:SER:CB	2.55	0.84
1:G:480:VAL:CA	1:G:505:SER:CB	2.55	0.84
1:B:203:LYS:N	1:B:216:SER:O	2.11	0.83
1:H:203:LYS:N	1:H:216:SER:O	2.11	0.83
1:J:203:LYS:N	1:J:216:SER:O	2.11	0.83
1:K:203:LYS:N	1:K:216:SER:O	2.11	0.83
1:L:203:LYS:N	1:L:216:SER:O	2.11	0.83
1:O:203:LYS:N	1:O:216:SER:O	2.11	0.83
1:I:203:LYS:N	1:I:216:SER:O	2.11	0.83

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:I:473:GLN:N	1:I:473:GLN:OE1	2.09	0.83
1:L:168:GLU:O	1:L:214:LEU:HA	1.79	0.83
1:C:203:LYS:N	1:C:216:SER:O	2.11	0.83
1:G:168:GLU:O	1:G:214:LEU:HA	1.79	0.83
1:G:203:LYS:N	1:G:216:SER:O	2.11	0.83
1:D:203:LYS:N	1:D:216:SER:O	2.11	0.82
1:I:168:GLU:O	1:I:214:LEU:HA	1.79	0.82
1:J:168:GLU:O	1:J:214:LEU:HA	1.79	0.82
1:E:203:LYS:N	1:E:216:SER:O	2.11	0.82
1:E:473:GLN:N	1:E:473:GLN:OE1	2.09	0.82
1:O:168:GLU:O	1:O:214:LEU:HA	1.79	0.82
1:F:168:GLU:O	1:F:214:LEU:HA	1.79	0.82
1:M:168:GLU:O	1:M:214:LEU:HA	1.79	0.82
1:M:203:LYS:N	1:M:216:SER:O	2.11	0.82
1:N:203:LYS:N	1:N:216:SER:O	2.11	0.82
1:H:480:VAL:HA	1:H:505:SER:CB	2.10	0.82
1:A:504:VAL:CG1	1:A:521:ARG:HG2	2.10	0.82
1:D:168:GLU:O	1:D:214:LEU:HA	1.79	0.82
1:D:507:VAL:CG1	1:D:507:VAL:O	2.28	0.82
1:F:203:LYS:N	1:F:216:SER:O	2.11	0.81
1:G:480:VAL:HA	1:G:505:SER:CB	2.10	0.81
1:M:504:VAL:CG1	1:M:521:ARG:HG2	2.10	0.81
1:O:480:VAL:HA	1:O:505:SER:CB	2.10	0.81
1:A:203:LYS:N	1:A:216:SER:O	2.11	0.81
1:A:480:VAL:HA	1:A:505:SER:CB	2.10	0.81
1:C:168:GLU:O	1:C:214:LEU:HA	1.79	0.81
1:E:168:GLU:O	1:E:214:LEU:HA	1.79	0.81
1:I:480:VAL:HA	1:I:505:SER:CB	2.10	0.81
1:J:480:VAL:HA	1:J:505:SER:CB	2.10	0.81
1:C:480:VAL:HA	1:C:505:SER:CB	2.10	0.81
1:D:480:VAL:HA	1:D:505:SER:CB	2.10	0.81
1:D:504:VAL:CG1	1:D:521:ARG:HG2	2.10	0.81
1:E:480:VAL:HA	1:E:505:SER:CB	2.10	0.81
1:E:504:VAL:CG1	1:E:521:ARG:HG2	2.10	0.81
1:G:504:VAL:CG1	1:G:521:ARG:HG2	2.10	0.81
1:H:504:VAL:CG1	1:H:521:ARG:HG2	2.10	0.81
1:I:504:VAL:CG1	1:I:521:ARG:HG2	2.10	0.81
1:J:504:VAL:CG1	1:J:521:ARG:HG2	2.10	0.81
1:K:168:GLU:O	1:K:214:LEU:HA	1.79	0.81
1:L:504:VAL:CG1	1:L:521:ARG:HG2	2.10	0.81
1:N:504:VAL:CG1	1:N:521:ARG:HG2	2.10	0.81

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:480:VAL:HA	1:B:505:SER:CB	2.10	0.81
1:D:459:ILE:HA	1:D:474:THR:O	1.81	0.81
1:F:504:VAL:CG1	1:F:521:ARG:HG2	2.10	0.81
1:K:504:VAL:CG1	1:K:521:ARG:HG2	2.10	0.81
1:N:168:GLU:O	1:N:214:LEU:HA	1.79	0.81
1:A:168:GLU:O	1:A:214:LEU:HA	1.79	0.81
1:E:507:VAL:O	1:E:507:VAL:CG1	2.28	0.81
1:F:480:VAL:HA	1:F:505:SER:CB	2.10	0.81
1:K:172:LEU:HD11	1:K:213:ILE:HG13	1.63	0.81
1:B:504:VAL:CG1	1:B:521:ARG:HG2	2.10	0.81
1:M:172:LEU:HD11	1:M:213:ILE:HG13	1.63	0.81
1:C:459:ILE:HA	1:C:474:THR:O	1.81	0.81
1:H:168:GLU:O	1:H:214:LEU:HA	1.79	0.81
1:O:504:VAL:CG1	1:O:521:ARG:HG2	2.10	0.81
1:E:459:ILE:HA	1:E:474:THR:O	1.81	0.81
1:K:480:VAL:HA	1:K:505:SER:CB	2.10	0.81
1:L:480:VAL:HA	1:L:505:SER:CB	2.10	0.81
1:C:640:GLN:O	1:C:643:ILE:HG22	1.81	0.81
1:D:640:GLN:O	1:D:643:ILE:HG22	1.81	0.81
1:N:480:VAL:HA	1:N:505:SER:CB	2.10	0.81
1:M:480:VAL:HA	1:M:505:SER:CB	2.10	0.81
1:F:459:ILE:HA	1:F:474:THR:O	1.81	0.80
1:N:640:GLN:O	1:N:643:ILE:HG22	1.81	0.80
1:I:172:LEU:HD11	1:I:213:ILE:HG13	1.63	0.80
1:L:640:GLN:O	1:L:643:ILE:HG22	1.81	0.80
1:O:172:LEU:HD11	1:O:213:ILE:HG13	1.63	0.80
1:B:168:GLU:O	1:B:214:LEU:HA	1.79	0.80
1:B:459:ILE:HA	1:B:474:THR:O	1.81	0.80
1:M:481:GLY:CA	1:M:505:SER:HB3	2.11	0.80
1:N:481:GLY:CA	1:N:505:SER:HB3	2.11	0.80
1:N:507:VAL:CG1	1:N:507:VAL:O	2.28	0.80
1:F:507:VAL:CG1	1:F:507:VAL:O	2.28	0.80
1:J:459:ILE:HA	1:J:474:THR:O	1.81	0.80
1:L:481:GLY:CA	1:L:505:SER:HB3	2.11	0.80
1:B:640:GLN:O	1:B:643:ILE:HG22	1.81	0.80
1:C:504:VAL:CG1	1:C:521:ARG:HG2	2.10	0.80
1:G:459:ILE:HA	1:G:474:THR:O	1.81	0.80
1:H:481:GLY:CA	1:H:505:SER:HB3	2.11	0.80
1:I:459:ILE:HA	1:I:474:THR:O	1.81	0.80
1:I:481:GLY:CA	1:I:505:SER:HB3	2.11	0.80
1:K:640:GLN:O	1:K:643:ILE:HG22	1.81	0.80

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:O:481:GLY:CA	1:O:505:SER:HB3	2.11	0.80
1:D:481:GLY:CA	1:D:505:SER:HB3	2.11	0.80
1:H:640:GLN:O	1:H:643:ILE:HG22	1.81	0.80
1:J:640:GLN:O	1:J:643:ILE:HG22	1.81	0.80
1:E:481:GLY:CA	1:E:505:SER:HB3	2.11	0.80
1:E:640:GLN:O	1:E:643:ILE:HG22	1.81	0.80
1:H:459:ILE:HA	1:H:474:THR:O	1.81	0.80
1:I:640:GLN:O	1:I:643:ILE:HG22	1.81	0.80
1:J:480:VAL:C	1:J:505:SER:CB	2.50	0.80
1:K:368:GLU:HG3	1:K:399:LYS:HD2	1.64	0.80
1:K:459:ILE:HA	1:K:474:THR:O	1.81	0.80
1:K:481:GLY:CA	1:K:505:SER:HB3	2.11	0.80
1:L:480:VAL:C	1:L:505:SER:CB	2.50	0.80
1:F:481:GLY:CA	1:F:505:SER:HB3	2.11	0.80
1:I:480:VAL:C	1:I:505:SER:CB	2.50	0.80
1:J:481:GLY:CA	1:J:505:SER:HB3	2.11	0.80
1:L:459:ILE:HA	1:L:474:THR:O	1.81	0.80
1:A:481:GLY:CA	1:A:505:SER:HB3	2.11	0.80
1:A:640:GLN:O	1:A:643:ILE:HG22	1.81	0.80
1:M:459:ILE:HA	1:M:474:THR:O	1.81	0.80
1:A:172:LEU:HD11	1:A:213:ILE:HG13	1.63	0.80
1:G:480:VAL:C	1:G:505:SER:CB	2.50	0.80
1:G:640:GLN:O	1:G:643:ILE:HG22	1.81	0.80
1:M:640:GLN:O	1:M:643:ILE:HG22	1.81	0.80
1:N:459:ILE:HA	1:N:474:THR:O	1.81	0.80
1:O:507:VAL:CG1	1:O:507:VAL:O	2.28	0.80
1:A:459:ILE:HA	1:A:474:THR:O	1.81	0.79
1:G:481:GLY:CA	1:G:505:SER:HB3	2.11	0.79
1:C:480:VAL:C	1:C:505:SER:CB	2.50	0.79
1:O:459:ILE:HA	1:O:474:THR:O	1.81	0.79
1:B:481:GLY:CA	1:B:505:SER:HB3	2.11	0.79
1:H:172:LEU:HD11	1:H:213:ILE:HG13	1.63	0.79
1:J:507:VAL:O	1:J:507:VAL:CG1	2.28	0.79
1:L:459:ILE:CG2	1:L:473:GLN:HB2	2.12	0.79
1:C:172:LEU:HD11	1:C:213:ILE:HG13	1.63	0.79
1:J:368:GLU:HG3	1:J:399:LYS:HD2	1.64	0.79
1:L:368:GLU:HG3	1:L:399:LYS:HD2	1.64	0.79
1:M:480:VAL:C	1:M:505:SER:CB	2.50	0.79
1:N:172:LEU:HD11	1:N:213:ILE:HG13	1.63	0.79
1:B:480:VAL:C	1:B:505:SER:CB	2.50	0.79
1:F:172:LEU:HD11	1:F:213:ILE:HG13	1.63	0.79

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:O:640:GLN:O	1:O:643:ILE:HG22	1.81	0.79
1:H:368:GLU:HG3	1:H:399:LYS:HD2	1.64	0.79
1:L:172:LEU:HD11	1:L:213:ILE:HG13	1.63	0.79
1:N:368:GLU:HG3	1:N:399:LYS:HD2	1.64	0.79
1:B:368:GLU:HG3	1:B:399:LYS:HD2	1.64	0.79
1:C:481:GLY:CA	1:C:505:SER:HB3	2.11	0.79
1:H:480:VAL:C	1:H:505:SER:CB	2.50	0.79
1:J:172:LEU:HD11	1:J:213:ILE:HG13	1.63	0.79
1:O:480:VAL:C	1:O:505:SER:CB	2.50	0.79
1:A:507:VAL:CG1	1:A:507:VAL:O	2.28	0.79
1:E:368:GLU:HG3	1:E:399:LYS:HD2	1.64	0.79
1:E:480:VAL:C	1:E:505:SER:CB	2.50	0.79
1:F:640:GLN:O	1:F:643:ILE:HG22	1.81	0.79
1:G:507:VAL:CG1	1:G:507:VAL:O	2.28	0.78
1:K:459:ILE:CG2	1:K:473:GLN:HB2	2.12	0.78
1:A:480:VAL:C	1:A:505:SER:CB	2.50	0.78
1:C:368:GLU:HG3	1:C:399:LYS:HD2	1.64	0.78
1:D:368:GLU:HG3	1:D:399:LYS:HD2	1.64	0.78
1:A:624:PRO:HB2	1:O:435:LEU:HD13	1.65	0.78
1:G:368:GLU:HG3	1:G:399:LYS:HD2	1.64	0.78
1:O:368:GLU:HG3	1:O:399:LYS:HD2	1.64	0.78
1:O:459:ILE:CG2	1:O:473:GLN:HB2	2.12	0.78
1:K:480:VAL:C	1:K:505:SER:CB	2.50	0.78
1:D:480:VAL:C	1:D:505:SER:CB	2.50	0.78
1:E:172:LEU:HD11	1:E:213:ILE:HG13	1.63	0.78
1:F:480:VAL:C	1:F:505:SER:CB	2.50	0.78
1:F:552:VAL:HG21	1:F:555:LEU:HB2	1.66	0.78
1:H:435:LEU:HD13	1:I:624:PRO:HB2	1.65	0.78
1:M:368:GLU:HG3	1:M:399:LYS:HD2	1.64	0.78
1:B:435:LEU:HD13	1:C:624:PRO:HB2	1.65	0.78
1:I:368:GLU:HG3	1:I:399:LYS:HD2	1.64	0.78
1:D:172:LEU:HD11	1:D:213:ILE:HG13	1.63	0.78
1:G:172:LEU:HD11	1:G:213:ILE:HG13	1.63	0.78
1:I:435:LEU:HD13	1:J:624:PRO:HB2	1.65	0.78
1:D:552:VAL:HG21	1:D:555:LEU:HB2	1.66	0.78
1:G:552:VAL:HG21	1:G:555:LEU:HB2	1.66	0.78
1:M:435:LEU:HD13	1:N:624:PRO:HB2	1.65	0.78
1:B:172:LEU:HD11	1:B:213:ILE:HG13	1.63	0.78
1:C:552:VAL:HG21	1:C:555:LEU:HB2	1.66	0.78
1:F:435:LEU:HD13	1:G:624:PRO:HB2	1.65	0.78
1:K:507:VAL:O	1:K:507:VAL:CG1	2.28	0.78

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:139:ILE:HG22	1:D:140:ILE:H	1.50	0.77
1:G:435:LEU:HD13	1:H:624:PRO:HB2	1.65	0.77
1:I:139:ILE:HG22	1:I:140:ILE:H	1.49	0.77
1:C:435:LEU:HD13	1:D:624:PRO:HB2	1.65	0.77
1:H:459:ILE:CG2	1:H:473:GLN:HB2	2.12	0.77
1:B:459:ILE:CG2	1:B:473:GLN:HB2	2.12	0.77
1:B:507:VAL:O	1:B:507:VAL:CG1	2.28	0.77
1:C:459:ILE:CG2	1:C:473:GLN:HB2	2.12	0.77
1:E:504:VAL:HG13	1:E:521:ARG:HD3	1.67	0.77
1:E:552:VAL:HG21	1:E:555:LEU:HB2	1.66	0.77
1:C:504:VAL:HG13	1:C:521:ARG:HD3	1.67	0.77
1:H:139:ILE:HG22	1:H:140:ILE:H	1.50	0.77
1:L:504:VAL:HG13	1:L:521:ARG:HD3	1.67	0.77
1:N:480:VAL:C	1:N:505:SER:CB	2.50	0.77
1:N:504:VAL:HG13	1:N:521:ARG:HD3	1.67	0.77
1:O:504:VAL:HG13	1:O:521:ARG:HD3	1.67	0.77
1:A:368:GLU:HG3	1:A:399:LYS:HD2	1.64	0.77
1:B:504:VAL:HG13	1:B:521:ARG:HD3	1.67	0.77
1:D:504:VAL:HG13	1:D:521:ARG:HD3	1.67	0.77
1:F:368:GLU:HG3	1:F:399:LYS:HD2	1.64	0.77
1:H:552:VAL:HG21	1:H:555:LEU:HB2	1.66	0.77
1:J:459:ILE:CG2	1:J:473:GLN:HB2	2.12	0.77
1:M:504:VAL:HG13	1:M:521:ARG:HD3	1.67	0.77
1:B:139:ILE:HG22	1:B:140:ILE:H	1.49	0.77
1:A:435:LEU:HD13	1:B:624:PRO:HB2	1.65	0.77
1:I:459:ILE:CG2	1:I:473:GLN:HB2	2.12	0.77
1:N:139:ILE:HG22	1:N:140:ILE:H	1.49	0.77
1:G:459:ILE:CG2	1:G:473:GLN:HB2	2.12	0.77
1:I:552:VAL:HG21	1:I:555:LEU:HB2	1.66	0.77
1:J:139:ILE:HG22	1:J:140:ILE:H	1.49	0.77
1:M:139:ILE:HG22	1:M:140:ILE:H	1.49	0.77
1:A:139:ILE:HG22	1:A:140:ILE:H	1.49	0.77
1:A:459:ILE:CG2	1:A:473:GLN:HB2	2.12	0.77
1:D:459:ILE:CG2	1:D:473:GLN:HB2	2.12	0.77
1:F:139:ILE:HG22	1:F:140:ILE:H	1.50	0.77
1:F:504:VAL:HG13	1:F:521:ARG:HD3	1.67	0.77
1:E:435:LEU:HD13	1:F:624:PRO:HB2	1.65	0.77
1:K:504:VAL:HG13	1:K:521:ARG:HD3	1.67	0.77
1:J:435:LEU:HD13	1:K:624:PRO:HB2	1.65	0.77
1:N:552:VAL:HG21	1:N:555:LEU:HB2	1.66	0.77
1:N:435:LEU:HD13	1:O:624:PRO:HB2	1.65	0.77

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:504:VAL:HG13	1:A:521:ARG:HD3	1.67	0.77
1:H:504:VAL:HG13	1:H:521:ARG:HD3	1.67	0.77
1:K:435:LEU:HD13	1:L:624:PRO:HB2	1.65	0.77
1:M:130:ASN:HA	1:M:143:THR:O	1.85	0.77
1:L:435:LEU:HD13	1:M:624:PRO:HB2	1.65	0.77
1:O:139:ILE:HG22	1:O:140:ILE:H	1.49	0.77
1:B:552:VAL:HG21	1:B:555:LEU:HB2	1.66	0.76
1:I:504:VAL:HG13	1:I:521:ARG:HD3	1.67	0.76
1:N:130:ASN:HA	1:N:143:THR:O	1.85	0.76
1:G:139:ILE:HG22	1:G:140:ILE:H	1.50	0.76
1:G:504:VAL:HG13	1:G:521:ARG:HD3	1.67	0.76
1:D:130:ASN:HA	1:D:143:THR:O	1.85	0.76
1:L:552:VAL:HG21	1:L:555:LEU:HB2	1.66	0.76
1:E:130:ASN:HA	1:E:143:THR:O	1.85	0.76
1:K:130:ASN:HA	1:K:143:THR:O	1.85	0.76
1:K:552:VAL:HG21	1:K:555:LEU:HB2	1.66	0.76
1:A:552:VAL:HG21	1:A:555:LEU:HB2	1.66	0.76
1:D:435:LEU:HD13	1:E:624:PRO:HB2	1.65	0.76
1:J:130:ASN:HA	1:J:143:THR:O	1.85	0.76
1:J:552:VAL:HG21	1:J:555:LEU:HB2	1.66	0.76
1:M:552:VAL:HG21	1:M:555:LEU:HB2	1.65	0.76
1:H:507:VAL:O	1:H:507:VAL:CG1	2.28	0.76
1:J:504:VAL:HG13	1:J:521:ARG:HD3	1.67	0.76
1:O:130:ASN:HA	1:O:143:THR:O	1.85	0.76
1:F:130:ASN:HA	1:F:143:THR:O	1.85	0.76
1:L:139:ILE:HG22	1:L:140:ILE:H	1.50	0.76
1:L:130:ASN:HA	1:L:143:THR:O	1.85	0.76
1:C:130:ASN:HA	1:C:143:THR:O	1.85	0.76
1:O:507:VAL:HA	1:O:518:PHE:HB3	1.67	0.76
1:A:507:VAL:HA	1:A:518:PHE:HB3	1.67	0.76
1:C:507:VAL:CG1	1:C:507:VAL:O	2.28	0.76
1:F:459:ILE:CG2	1:F:473:GLN:HB2	2.12	0.76
1:K:507:VAL:HA	1:K:518:PHE:HB3	1.67	0.76
1:O:552:VAL:HG21	1:O:555:LEU:HB2	1.66	0.76
1:C:139:ILE:HG22	1:C:140:ILE:H	1.49	0.75
1:E:459:ILE:CG2	1:E:473:GLN:HB2	2.12	0.75
1:I:130:ASN:HA	1:I:143:THR:O	1.85	0.75
1:K:139:ILE:HG22	1:K:140:ILE:H	1.50	0.75
1:L:507:VAL:CG1	1:L:507:VAL:O	2.28	0.75
1:A:130:ASN:HA	1:A:143:THR:O	1.85	0.75
1:G:130:ASN:HA	1:G:143:THR:O	1.85	0.75

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:J:507:VAL:HA	1:J:518:PHE:HB3	1.67	0.75
1:E:507:VAL:HA	1:E:518:PHE:HB3	1.67	0.75
1:L:507:VAL:HA	1:L:518:PHE:HB3	1.67	0.75
1:B:130:ASN:HA	1:B:143:THR:O	1.85	0.75
1:F:507:VAL:HA	1:F:518:PHE:HB3	1.67	0.75
1:N:507:VAL:HA	1:N:518:PHE:HB3	1.67	0.75
1:B:507:VAL:HA	1:B:518:PHE:HB3	1.67	0.75
1:G:507:VAL:HA	1:G:518:PHE:HB3	1.67	0.75
1:E:221:VAL:O	1:E:225:LEU:HB2	1.87	0.75
1:E:139:ILE:HG22	1:E:140:ILE:H	1.49	0.75
1:H:507:VAL:HA	1:H:518:PHE:HB3	1.67	0.75
1:L:221:VAL:O	1:L:225:LEU:HB2	1.87	0.75
1:F:410:ALA:O	1:F:424:ASN:HA	1.87	0.74
1:I:507:VAL:HA	1:I:518:PHE:HB3	1.67	0.74
1:J:221:VAL:O	1:J:225:LEU:HB2	1.87	0.74
1:D:507:VAL:HA	1:D:518:PHE:HB3	1.67	0.74
1:E:410:ALA:O	1:E:424:ASN:HA	1.87	0.74
1:H:130:ASN:HA	1:H:143:THR:O	1.85	0.74
1:I:221:VAL:O	1:I:225:LEU:HB2	1.87	0.74
1:K:221:VAL:O	1:K:225:LEU:HB2	1.87	0.74
1:K:410:ALA:O	1:K:424:ASN:HA	1.87	0.74
1:A:221:VAL:O	1:A:225:LEU:HB2	1.87	0.74
1:C:507:VAL:HA	1:C:518:PHE:HB3	1.67	0.74
1:D:221:VAL:O	1:D:225:LEU:HB2	1.87	0.74
1:D:410:ALA:O	1:D:424:ASN:HA	1.87	0.74
1:F:221:VAL:O	1:F:225:LEU:HB2	1.87	0.74
1:M:221:VAL:O	1:M:225:LEU:HB2	1.87	0.74
1:G:410:ALA:O	1:G:424:ASN:HA	1.88	0.74
1:H:221:VAL:O	1:H:225:LEU:HB2	1.87	0.74
1:M:507:VAL:HA	1:M:518:PHE:HB3	1.67	0.74
1:N:459:ILE:CG2	1:N:473:GLN:HB2	2.12	0.74
1:I:221:VAL:HG13	1:I:225:LEU:HD12	1.69	0.74
1:H:410:ALA:O	1:H:424:ASN:HA	1.88	0.74
1:O:410:ALA:O	1:O:424:ASN:HA	1.87	0.74
1:C:410:ALA:O	1:C:424:ASN:HA	1.88	0.74
1:H:221:VAL:HG13	1:H:225:LEU:HD12	1.69	0.74
1:J:221:VAL:HG13	1:J:225:LEU:HD12	1.69	0.74
1:L:410:ALA:O	1:L:424:ASN:HA	1.87	0.74
1:N:410:ALA:O	1:N:424:ASN:HA	1.87	0.74
1:B:410:ALA:O	1:B:424:ASN:HA	1.87	0.74
1:K:221:VAL:HG13	1:K:225:LEU:HD12	1.69	0.74

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:L:221:VAL:HG13	1:L:225:LEU:HD12	1.69	0.74
1:F:456:VAL:CG2	1:F:457:PRO:HD2	2.18	0.74
1:G:221:VAL:O	1:G:225:LEU:HB2	1.87	0.74
1:O:221:VAL:O	1:O:225:LEU:HB2	1.87	0.74
1:B:221:VAL:O	1:B:225:LEU:HB2	1.87	0.74
1:E:456:VAL:CG2	1:E:457:PRO:HD2	2.18	0.74
1:I:410:ALA:O	1:I:424:ASN:HA	1.88	0.74
1:N:456:VAL:CG2	1:N:457:PRO:HD2	2.18	0.74
1:O:456:VAL:CG2	1:O:457:PRO:HD2	2.18	0.74
1:A:410:ALA:O	1:A:424:ASN:HA	1.87	0.73
1:D:219:PRO:HA	1:D:222:ARG:HB2	1.70	0.73
1:E:219:PRO:HA	1:E:222:ARG:HB2	1.70	0.73
1:E:221:VAL:HG13	1:E:225:LEU:HD12	1.69	0.73
1:G:221:VAL:HG13	1:G:225:LEU:HD12	1.69	0.73
1:M:221:VAL:HG13	1:M:225:LEU:HD12	1.69	0.73
1:D:221:VAL:HG13	1:D:225:LEU:HD12	1.69	0.73
1:J:410:ALA:O	1:J:424:ASN:HA	1.87	0.73
1:O:221:VAL:HG13	1:O:225:LEU:HD12	1.69	0.73
1:D:456:VAL:CG2	1:D:457:PRO:HD2	2.18	0.73
1:G:456:VAL:CG2	1:G:457:PRO:HD2	2.18	0.73
1:F:219:PRO:HA	1:F:222:ARG:HB2	1.70	0.73
1:A:456:VAL:CG2	1:A:457:PRO:HD2	2.18	0.73
1:A:221:VAL:HG13	1:A:225:LEU:HD12	1.69	0.73
1:K:219:PRO:HA	1:K:222:ARG:HB2	1.70	0.73
1:M:410:ALA:O	1:M:424:ASN:HA	1.87	0.73
1:M:507:VAL:O	1:M:507:VAL:CG1	2.28	0.73
1:F:221:VAL:HG13	1:F:225:LEU:HD12	1.69	0.73
1:J:219:PRO:HA	1:J:222:ARG:HB2	1.70	0.73
1:N:221:VAL:O	1:N:225:LEU:HB2	1.87	0.73
1:N:221:VAL:HG13	1:N:225:LEU:HD12	1.69	0.73
1:C:219:PRO:HA	1:C:222:ARG:HB2	1.70	0.73
1:C:221:VAL:O	1:C:225:LEU:HB2	1.87	0.73
1:C:456:VAL:CG2	1:C:457:PRO:HD2	2.18	0.73
1:G:219:PRO:HA	1:G:222:ARG:HB2	1.70	0.73
1:H:456:VAL:CG2	1:H:457:PRO:HD2	2.18	0.73
1:C:221:VAL:HG13	1:C:225:LEU:HD12	1.69	0.73
1:I:507:VAL:CG1	1:I:507:VAL:O	2.28	0.73
1:M:459:ILE:CG2	1:M:473:GLN:HB2	2.12	0.73
1:O:219:PRO:HA	1:O:222:ARG:HB2	1.70	0.72
1:B:456:VAL:CG2	1:B:457:PRO:HD2	2.18	0.72
1:C:438:PRO:HG3	1:C:482:ILE:HG21	1.72	0.72

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:221:VAL:HG13	1:B:225:LEU:HD12	1.69	0.72
1:I:219:PRO:HA	1:I:222:ARG:HB2	1.70	0.72
1:D:438:PRO:HG3	1:D:482:ILE:HG21	1.72	0.72
1:I:456:VAL:CG2	1:I:457:PRO:HD2	2.18	0.72
1:I:438:PRO:HG3	1:I:482:ILE:HG21	1.72	0.72
1:J:438:PRO:HG3	1:J:482:ILE:HG21	1.72	0.72
1:L:219:PRO:HA	1:L:222:ARG:HB2	1.70	0.72
1:L:438:PRO:HG3	1:L:482:ILE:HG21	1.72	0.72
1:M:438:PRO:HG3	1:M:482:ILE:HG21	1.72	0.72
1:A:219:PRO:HA	1:A:222:ARG:HB2	1.70	0.72
1:B:438:PRO:HG3	1:B:482:ILE:HG21	1.72	0.72
1:H:438:PRO:HG3	1:H:482:ILE:HG21	1.72	0.72
1:N:219:PRO:HA	1:N:222:ARG:HB2	1.70	0.72
1:O:438:PRO:HG3	1:O:482:ILE:HG21	1.72	0.72
1:E:438:PRO:HG3	1:E:482:ILE:HG21	1.72	0.72
1:G:438:PRO:HG3	1:G:482:ILE:HG21	1.72	0.72
1:H:219:PRO:HA	1:H:222:ARG:HB2	1.71	0.72
1:M:458:VAL:HG23	1:M:476:ASP:O	1.90	0.72
1:N:458:VAL:HG23	1:N:476:ASP:O	1.90	0.72
1:A:438:PRO:HG3	1:A:482:ILE:HG21	1.72	0.72
1:F:438:PRO:HG3	1:F:482:ILE:HG21	1.72	0.72
1:K:438:PRO:HG3	1:K:482:ILE:HG21	1.72	0.72
1:O:458:VAL:HG23	1:O:476:ASP:O	1.90	0.71
1:E:609:PHE:CD1	1:F:639:ILE:HD13	2.25	0.71
1:H:458:VAL:HG23	1:H:476:ASP:O	1.90	0.71
1:H:609:PHE:CD1	1:I:639:ILE:HD13	2.26	0.71
1:L:609:PHE:CD1	1:M:639:ILE:HD13	2.26	0.71
1:G:458:VAL:HG23	1:G:476:ASP:O	1.90	0.71
1:J:458:VAL:HG23	1:J:476:ASP:O	1.90	0.71
1:N:438:PRO:HG3	1:N:482:ILE:HG21	1.72	0.71
1:B:207:ASP:O	1:B:211:ASN:N	2.24	0.71
1:B:219:PRO:HA	1:B:222:ARG:HB2	1.70	0.71
1:I:458:VAL:HG23	1:I:476:ASP:O	1.90	0.71
1:A:639:ILE:HD13	1:O:609:PHE:CD1	2.25	0.71
1:I:609:PHE:CD1	1:J:639:ILE:HD13	2.26	0.71
1:K:609:PHE:CD1	1:L:639:ILE:HD13	2.26	0.71
1:M:207:ASP:O	1:M:211:ASN:N	2.24	0.71
1:M:609:PHE:CD1	1:N:639:ILE:HD13	2.26	0.71
1:F:609:PHE:CD1	1:G:639:ILE:HD13	2.26	0.71
1:G:609:PHE:CD1	1:H:639:ILE:HD13	2.26	0.71
1:I:207:ASP:O	1:I:211:ASN:N	2.24	0.71

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:J:456:VAL:CG2	1:J:457:PRO:HD2	2.18	0.71
1:L:458:VAL:HG23	1:L:476:ASP:O	1.90	0.71
1:A:458:VAL:HG23	1:A:476:ASP:O	1.90	0.71
1:B:609:PHE:CD1	1:C:639:ILE:HD13	2.25	0.71
1:K:458:VAL:HG23	1:K:476:ASP:O	1.90	0.71
1:N:609:PHE:CD1	1:O:639:ILE:HD13	2.26	0.71
1:F:458:VAL:HG23	1:F:476:ASP:O	1.90	0.71
1:C:609:PHE:CD1	1:D:639:ILE:HD13	2.26	0.71
1:F:207:ASP:O	1:F:211:ASN:N	2.24	0.71
1:G:207:ASP:O	1:G:211:ASN:N	2.24	0.71
1:K:481:GLY:N	1:K:505:SER:OG	2.23	0.71
1:N:207:ASP:O	1:N:211:ASN:N	2.24	0.71
1:A:207:ASP:O	1:A:211:ASN:N	2.24	0.71
1:C:207:ASP:O	1:C:211:ASN:N	2.24	0.70
1:E:458:VAL:HG23	1:E:476:ASP:O	1.90	0.70
1:K:207:ASP:O	1:K:211:ASN:N	2.24	0.70
1:L:207:ASP:O	1:L:211:ASN:N	2.24	0.70
1:L:456:VAL:CG2	1:L:457:PRO:HD2	2.18	0.70
1:D:207:ASP:O	1:D:211:ASN:N	2.24	0.70
1:C:609:PHE:CD2	1:D:639:ILE:CD1	2.75	0.70
1:K:456:VAL:CG2	1:K:457:PRO:HD2	2.18	0.70
1:J:609:PHE:CD1	1:K:639:ILE:HD13	2.25	0.70
1:L:481:GLY:N	1:L:505:SER:OG	2.23	0.70
1:E:458:VAL:O	1:E:475:VAL:CA	2.39	0.70
1:H:207:ASP:O	1:H:211:ASN:N	2.24	0.70
1:M:456:VAL:CG2	1:M:457:PRO:HD2	2.18	0.70
1:A:609:PHE:CD1	1:B:639:ILE:HD13	2.26	0.70
1:D:458:VAL:HG23	1:D:476:ASP:O	1.90	0.70
1:M:219:PRO:HA	1:M:222:ARG:HB2	1.71	0.70
1:B:458:VAL:HG23	1:B:476:ASP:O	1.90	0.70
1:E:207:ASP:O	1:E:211:ASN:N	2.24	0.70
1:D:609:PHE:CD1	1:E:639:ILE:HD13	2.26	0.70
1:B:609:PHE:CD2	1:C:639:ILE:CD1	2.75	0.70
1:D:458:VAL:O	1:D:475:VAL:CA	2.39	0.70
1:F:458:VAL:O	1:F:475:VAL:CA	2.40	0.70
1:C:458:VAL:HG23	1:C:476:ASP:O	1.90	0.70
1:M:328:GLU:CD	1:M:521:ARG:NH1	2.45	0.70
1:N:328:GLU:CD	1:N:521:ARG:NH1	2.45	0.70
1:O:207:ASP:O	1:O:211:ASN:N	2.24	0.70
1:L:328:GLU:CD	1:L:521:ARG:NH1	2.45	0.70
1:J:207:ASP:O	1:J:211:ASN:N	2.24	0.70

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:458:VAL:O	1:A:475:VAL:CA	2.39	0.69
1:I:609:PHE:CD2	1:J:639:ILE:CD1	2.75	0.69
1:K:328:GLU:CD	1:K:521:ARG:NH1	2.45	0.69
1:L:458:VAL:O	1:L:475:VAL:CA	2.40	0.69
1:M:458:VAL:O	1:M:475:VAL:CA	2.40	0.69
1:O:328:GLU:CD	1:O:521:ARG:NH1	2.45	0.69
1:M:481:GLY:N	1:M:505:SER:OG	2.23	0.69
1:N:458:VAL:O	1:N:475:VAL:CA	2.39	0.69
1:O:458:VAL:O	1:O:475:VAL:CA	2.39	0.69
1:F:328:GLU:CD	1:F:521:ARG:NH1	2.45	0.69
1:G:328:GLU:CD	1:G:521:ARG:NH1	2.45	0.69
1:M:609:PHE:CD2	1:N:639:ILE:CD1	2.75	0.69
1:A:328:GLU:CD	1:A:521:ARG:NH1	2.45	0.69
1:B:458:VAL:O	1:B:475:VAL:CA	2.39	0.69
1:C:458:VAL:O	1:C:475:VAL:CA	2.40	0.69
1:G:458:VAL:O	1:G:475:VAL:CA	2.40	0.69
1:K:458:VAL:O	1:K:475:VAL:CA	2.40	0.69
1:J:328:GLU:CD	1:J:521:ARG:NH1	2.45	0.69
1:B:328:GLU:CD	1:B:521:ARG:NH1	2.45	0.69
1:J:458:VAL:O	1:J:475:VAL:CA	2.39	0.69
1:I:328:GLU:CD	1:I:521:ARG:NH1	2.45	0.69
1:C:328:GLU:CD	1:C:521:ARG:NH1	2.45	0.68
1:N:481:GLY:N	1:N:505:SER:OG	2.23	0.68
1:D:328:GLU:CD	1:D:521:ARG:NH1	2.45	0.68
1:E:328:GLU:CD	1:E:521:ARG:NH1	2.45	0.68
1:H:328:GLU:CD	1:H:521:ARG:NH1	2.45	0.68
1:I:458:VAL:O	1:I:475:VAL:CA	2.40	0.68
1:H:458:VAL:O	1:H:475:VAL:CA	2.40	0.68
1:I:375:THR:HG23	1:I:390:THR:HG22	1.77	0.67
1:J:375:THR:HG23	1:J:390:THR:HG22	1.77	0.67
1:H:375:THR:HG23	1:H:390:THR:HG22	1.77	0.67
1:G:375:THR:HG23	1:G:390:THR:HG22	1.77	0.67
1:K:375:THR:HG23	1:K:390:THR:HG22	1.77	0.67
1:C:500:ILE:HD13	1:C:537:LEU:HD21	1.76	0.67
1:D:500:ILE:HD13	1:D:537:LEU:HD21	1.77	0.67
1:J:609:PHE:CD1	1:K:639:ILE:CD1	2.78	0.67
1:B:609:PHE:CD1	1:C:639:ILE:CD1	2.78	0.67
1:J:500:ILE:HD13	1:J:537:LEU:HD21	1.76	0.67
1:K:500:ILE:HD13	1:K:537:LEU:HD21	1.76	0.67
1:K:609:PHE:CD1	1:L:639:ILE:CD1	2.78	0.67
1:E:500:ILE:HD13	1:E:537:LEU:HD21	1.76	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:609:PHE:CD1	1:G:639:ILE:CD1	2.78	0.67
1:I:500:ILE:HD13	1:I:537:LEU:HD21	1.77	0.66
1:K:321:LEU:HD13	1:K:441:THR:OG1	1.96	0.66
1:G:609:PHE:CD1	1:H:639:ILE:CD1	2.78	0.66
1:I:609:PHE:CD1	1:J:639:ILE:CD1	2.78	0.66
1:B:375:THR:HG23	1:B:390:THR:HG22	1.77	0.66
1:B:481:GLY:N	1:B:505:SER:OG	2.23	0.66
1:J:321:LEU:HD13	1:J:441:THR:OG1	1.96	0.66
1:A:639:ILE:CD1	1:O:609:PHE:CD1	2.78	0.66
1:A:609:PHE:CD1	1:B:639:ILE:CD1	2.78	0.66
1:C:375:THR:HG23	1:C:390:THR:HG22	1.77	0.66
1:F:375:THR:HG23	1:F:390:THR:HG22	1.77	0.66
1:E:609:PHE:CD1	1:F:639:ILE:CD1	2.78	0.66
1:L:178:ALA:N	1:L:208:GLU:OE2	2.28	0.66
1:L:321:LEU:HD13	1:L:441:THR:OG1	1.96	0.66
1:L:500:ILE:HD13	1:L:537:LEU:HD21	1.76	0.66
1:N:609:PHE:CD1	1:O:639:ILE:CD1	2.78	0.66
1:A:375:THR:HG23	1:A:390:THR:HG22	1.77	0.66
1:B:500:ILE:HD13	1:B:537:LEU:HD21	1.77	0.66
1:C:609:PHE:CD1	1:D:639:ILE:CD1	2.78	0.66
1:D:609:PHE:CD2	1:E:639:ILE:CD1	2.75	0.66
1:J:178:ALA:N	1:J:208:GLU:OE2	2.28	0.66
1:L:375:THR:HG23	1:L:390:THR:HG22	1.77	0.66
1:L:609:PHE:CD1	1:M:639:ILE:CD1	2.78	0.66
1:O:140:ILE:HD13	1:O:156:ILE:HG23	1.78	0.66
1:N:609:PHE:CD2	1:O:639:ILE:CD1	2.75	0.66
1:H:500:ILE:HD13	1:H:537:LEU:HD21	1.76	0.66
1:L:140:ILE:HD13	1:L:156:ILE:HG23	1.78	0.66
1:M:140:ILE:HD13	1:M:156:ILE:HG23	1.78	0.66
1:M:327:VAL:HG11	1:N:603:ILE:HG21	1.78	0.66
1:M:500:ILE:HD13	1:M:537:LEU:HD21	1.77	0.66
1:N:327:VAL:HG11	1:O:603:ILE:HG21	1.78	0.66
1:A:172:LEU:O	1:A:211:ASN:ND2	2.29	0.66
1:A:321:LEU:HD13	1:A:441:THR:OG1	1.96	0.66
1:B:442:VAL:HG21	1:B:488:PRO:HG3	1.78	0.66
1:D:375:THR:HG23	1:D:390:THR:HG22	1.77	0.66
1:F:500:ILE:HD13	1:F:537:LEU:HD21	1.77	0.66
1:G:458:VAL:HG21	1:G:478:LYS:HG2	1.78	0.66
1:H:609:PHE:CD2	1:I:639:ILE:CD1	2.75	0.66
1:M:321:LEU:HD13	1:M:441:THR:OG1	1.96	0.66
1:N:140:ILE:HD13	1:N:156:ILE:HG23	1.78	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:N:500:ILE:HD13	1:N:537:LEU:HD21	1.76	0.66
1:A:603:ILE:HG21	1:O:327:VAL:HG11	1.78	0.66
1:B:321:LEU:HD13	1:B:441:THR:OG1	1.96	0.66
1:C:172:LEU:O	1:C:211:ASN:ND2	2.29	0.66
1:H:458:VAL:HG21	1:H:478:LYS:HG2	1.78	0.66
1:I:321:LEU:HD13	1:I:441:THR:OG1	1.96	0.66
1:O:172:LEU:O	1:O:211:ASN:ND2	2.29	0.66
1:O:375:THR:HG23	1:O:390:THR:HG22	1.77	0.66
1:A:518:PHE:O	1:B:455:GLU:OE1	2.14	0.66
1:D:172:LEU:O	1:D:211:ASN:ND2	2.29	0.66
1:I:518:PHE:O	1:J:455:GLU:OE1	2.14	0.66
1:H:609:PHE:CD1	1:I:639:ILE:CD1	2.78	0.66
1:L:172:LEU:O	1:L:211:ASN:ND2	2.29	0.66
1:M:518:PHE:O	1:N:455:GLU:OE1	2.14	0.66
1:N:172:LEU:O	1:N:211:ASN:ND2	2.29	0.66
1:C:321:LEU:HD13	1:C:441:THR:OG1	1.96	0.66
1:B:518:PHE:O	1:C:455:GLU:OE1	2.14	0.66
1:H:348:SER:HB2	1:I:412:VAL:HA	1.78	0.66
1:J:348:SER:HB2	1:K:412:VAL:HA	1.78	0.66
1:K:172:LEU:O	1:K:211:ASN:ND2	2.29	0.66
1:L:327:VAL:HG11	1:M:603:ILE:HG21	1.78	0.66
1:L:518:PHE:O	1:M:455:GLU:OE1	2.14	0.66
1:B:140:ILE:HD13	1:B:156:ILE:HG23	1.78	0.65
1:B:172:LEU:O	1:B:211:ASN:ND2	2.29	0.65
1:D:458:VAL:HG21	1:D:478:LYS:HG2	1.78	0.65
1:E:458:VAL:HG21	1:E:478:LYS:HG2	1.78	0.65
1:E:518:PHE:O	1:F:455:GLU:OE1	2.14	0.65
1:D:609:PHE:CD1	1:E:639:ILE:CD1	2.78	0.65
1:F:458:VAL:HG21	1:F:478:LYS:HG2	1.78	0.65
1:J:140:ILE:HD13	1:J:156:ILE:HG23	1.78	0.65
1:K:140:ILE:HD13	1:K:156:ILE:HG23	1.78	0.65
1:O:321:LEU:HD13	1:O:441:THR:OG1	1.96	0.65
1:C:178:ALA:N	1:C:208:GLU:OE2	2.28	0.65
1:D:321:LEU:HD13	1:D:441:THR:OG1	1.96	0.65
1:D:442:VAL:HG21	1:D:488:PRO:HG3	1.78	0.65
1:E:321:LEU:HD13	1:E:441:THR:OG1	1.96	0.65
1:D:518:PHE:O	1:E:455:GLU:OE1	2.14	0.65
1:G:172:LEU:O	1:G:211:ASN:ND2	2.29	0.65
1:A:140:ILE:HD13	1:A:156:ILE:HG23	1.78	0.65
1:E:375:THR:HG23	1:E:390:THR:HG22	1.77	0.65
1:F:172:LEU:O	1:F:211:ASN:ND2	2.29	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:322:ILE:O	1:G:439:SER:HA	1.97	0.65
1:J:518:PHE:O	1:K:455:GLU:OE1	2.14	0.65
1:M:172:LEU:O	1:M:211:ASN:ND2	2.29	0.65
1:L:348:SER:HB2	1:M:412:VAL:HA	1.78	0.65
1:N:375:THR:HG23	1:N:390:THR:HG22	1.77	0.65
1:O:442:VAL:HG21	1:O:488:PRO:HG3	1.78	0.65
1:C:458:VAL:HG21	1:C:478:LYS:HG2	1.78	0.65
1:D:322:ILE:O	1:D:439:SER:HA	1.97	0.65
1:G:609:PHE:CD2	1:H:639:ILE:CD1	2.75	0.65
1:H:327:VAL:HG11	1:I:603:ILE:HG21	1.78	0.65
1:M:609:PHE:CD1	1:N:639:ILE:CD1	2.78	0.65
1:O:500:ILE:HD13	1:O:537:LEU:HD21	1.76	0.65
1:A:327:VAL:HG11	1:B:603:ILE:HG21	1.78	0.65
1:A:481:GLY:N	1:A:505:SER:OG	2.23	0.65
1:A:500:ILE:HD13	1:A:537:LEU:HD21	1.77	0.65
1:A:328:GLU:CD	1:A:521:ARG:HH11	2.00	0.65
1:C:140:ILE:HD13	1:C:156:ILE:HG23	1.78	0.65
1:F:321:LEU:HD13	1:F:441:THR:OG1	1.96	0.65
1:F:518:PHE:O	1:G:455:GLU:OE1	2.14	0.65
1:G:500:ILE:HD13	1:G:537:LEU:HD21	1.77	0.65
1:H:518:PHE:O	1:I:455:GLU:OE1	2.14	0.65
1:I:140:ILE:HD13	1:I:156:ILE:HG23	1.78	0.65
1:I:458:VAL:HG21	1:I:478:LYS:HG2	1.78	0.65
1:J:458:VAL:HG21	1:J:478:LYS:HG2	1.78	0.65
1:C:322:ILE:O	1:C:439:SER:HA	1.97	0.65
1:D:178:ALA:N	1:D:208:GLU:OE2	2.28	0.65
1:E:442:VAL:HG21	1:E:488:PRO:HG3	1.78	0.65
1:G:327:VAL:HG11	1:H:603:ILE:HG21	1.78	0.65
1:H:321:LEU:HD13	1:H:441:THR:OG1	1.96	0.65
1:I:328:GLU:CD	1:I:521:ARG:HH11	2.00	0.65
1:J:442:VAL:HG21	1:J:488:PRO:HG3	1.78	0.65
1:O:322:ILE:O	1:O:439:SER:HA	1.97	0.65
1:A:609:PHE:CD2	1:B:639:ILE:CD1	2.75	0.65
1:C:328:GLU:CD	1:C:521:ARG:HH11	2.00	0.65
1:F:348:SER:HB2	1:G:412:VAL:HA	1.78	0.65
1:H:172:LEU:O	1:H:211:ASN:ND2	2.29	0.65
1:H:322:ILE:O	1:H:439:SER:HA	1.97	0.65
1:K:348:SER:HB2	1:L:412:VAL:HA	1.78	0.65
1:K:328:GLU:CD	1:K:521:ARG:HH11	2.00	0.65
1:A:639:ILE:CD1	1:O:609:PHE:CD2	2.75	0.65
1:A:455:GLU:OE1	1:O:518:PHE:O	2.14	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:442:VAL:HG21	1:C:488:PRO:HG3	1.78	0.65
1:F:328:GLU:CD	1:F:521:ARG:HH11	2.00	0.65
1:I:327:VAL:HG11	1:J:603:ILE:HG21	1.78	0.65
1:I:348:SER:HB2	1:J:412:VAL:HA	1.78	0.65
1:K:442:VAL:HG21	1:K:488:PRO:HG3	1.78	0.65
1:K:327:VAL:HG11	1:L:603:ILE:HG21	1.78	0.65
1:N:321:LEU:HD13	1:N:441:THR:OG1	1.96	0.65
1:N:518:PHE:O	1:O:455:GLU:OE1	2.14	0.65
1:N:328:GLU:CD	1:N:521:ARG:HH11	2.00	0.65
1:F:609:PHE:CD2	1:G:639:ILE:CD1	2.75	0.65
1:M:375:THR:HG23	1:M:390:THR:HG22	1.77	0.65
1:N:348:SER:HB2	1:O:412:VAL:HA	1.78	0.65
1:A:178:ALA:N	1:A:208:GLU:OE2	2.28	0.65
1:B:178:ALA:N	1:B:208:GLU:OE2	2.28	0.65
1:C:518:PHE:O	1:D:455:GLU:OE1	2.14	0.65
1:D:328:GLU:CD	1:D:521:ARG:HH11	2.00	0.65
1:F:327:VAL:HG11	1:G:603:ILE:HG21	1.78	0.65
1:H:442:VAL:HG21	1:H:488:PRO:HG3	1.78	0.65
1:I:442:VAL:HG21	1:I:488:PRO:HG3	1.78	0.65
1:J:172:LEU:O	1:J:211:ASN:ND2	2.29	0.65
1:K:458:VAL:HG21	1:K:478:LYS:HG2	1.78	0.65
1:K:518:PHE:O	1:L:455:GLU:OE1	2.14	0.65
1:N:322:ILE:O	1:N:439:SER:HA	1.97	0.65
1:A:322:ILE:O	1:A:439:SER:HA	1.97	0.64
1:F:322:ILE:O	1:F:439:SER:HA	1.97	0.64
1:I:172:LEU:O	1:I:211:ASN:ND2	2.29	0.64
1:L:328:GLU:CD	1:L:521:ARG:HH11	2.00	0.64
1:N:442:VAL:HG21	1:N:488:PRO:HG3	1.78	0.64
1:O:178:ALA:N	1:O:208:GLU:OE2	2.28	0.64
1:A:442:VAL:HG21	1:A:488:PRO:HG3	1.78	0.64
1:G:328:GLU:CD	1:G:521:ARG:HH11	2.00	0.64
1:G:348:SER:HB2	1:H:412:VAL:HA	1.78	0.64
1:A:521:ARG:H	1:A:521:ARG:HD3	1.63	0.64
1:E:172:LEU:O	1:E:211:ASN:ND2	2.29	0.64
1:E:327:VAL:HG11	1:F:603:ILE:HG21	1.78	0.64
1:F:178:ALA:N	1:F:208:GLU:OE2	2.28	0.64
1:G:321:LEU:HD13	1:G:441:THR:OG1	1.96	0.64
1:J:327:VAL:HG11	1:K:603:ILE:HG21	1.78	0.64
1:M:348:SER:HB2	1:N:412:VAL:HA	1.78	0.64
1:O:458:VAL:HG21	1:O:478:LYS:HG2	1.78	0.64
1:O:521:ARG:H	1:O:521:ARG:HD3	1.63	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:458:VAL:HG21	1:B:478:LYS:HG2	1.78	0.64
1:D:327:VAL:HG11	1:E:603:ILE:HG21	1.78	0.64
1:E:322:ILE:O	1:E:439:SER:HA	1.97	0.64
1:E:521:ARG:H	1:E:521:ARG:HD3	1.63	0.64
1:G:442:VAL:HG21	1:G:488:PRO:HG3	1.78	0.64
1:H:140:ILE:HD13	1:H:156:ILE:HG23	1.78	0.64
1:N:521:ARG:HD3	1:N:521:ARG:H	1.63	0.64
1:A:458:VAL:HG21	1:A:478:LYS:HG2	1.78	0.64
1:D:140:ILE:HD13	1:D:156:ILE:HG23	1.78	0.64
1:D:521:ARG:HD3	1:D:521:ARG:H	1.63	0.64
1:F:140:ILE:HD13	1:F:156:ILE:HG23	1.78	0.64
1:F:442:VAL:HG21	1:F:488:PRO:HG3	1.78	0.64
1:G:140:ILE:HD13	1:G:156:ILE:HG23	1.78	0.64
1:L:540:LEU:HD22	1:M:452:VAL:HG21	1.80	0.64
1:M:458:VAL:HG21	1:M:478:LYS:HG2	1.78	0.64
1:E:140:ILE:HD13	1:E:156:ILE:HG23	1.78	0.64
1:E:178:ALA:N	1:E:208:GLU:OE2	2.28	0.64
1:G:176:SER:OG	1:G:208:GLU:OE2	2.16	0.64
1:I:322:ILE:O	1:I:439:SER:HA	1.97	0.64
1:M:322:ILE:O	1:M:439:SER:HA	1.97	0.64
1:M:442:VAL:HG21	1:M:488:PRO:HG3	1.78	0.64
1:M:521:ARG:HD3	1:M:521:ARG:H	1.63	0.64
1:B:327:VAL:HG11	1:C:603:ILE:HG21	1.78	0.64
1:A:348:SER:HB2	1:B:412:VAL:HA	1.78	0.64
1:B:521:ARG:H	1:B:521:ARG:HD3	1.63	0.64
1:B:328:GLU:CD	1:B:521:ARG:HH11	2.00	0.64
1:J:328:GLU:CD	1:J:521:ARG:HH11	2.00	0.64
1:L:442:VAL:HG21	1:L:488:PRO:HG3	1.78	0.64
1:M:540:LEU:HD22	1:N:452:VAL:HG21	1.80	0.64
1:C:327:VAL:HG11	1:D:603:ILE:HG21	1.78	0.64
1:E:348:SER:HB2	1:F:412:VAL:HA	1.78	0.64
1:K:322:ILE:O	1:K:439:SER:HA	1.97	0.64
1:A:176:SER:OG	1:A:208:GLU:OE2	2.16	0.64
1:B:348:SER:HB2	1:C:412:VAL:HA	1.78	0.64
1:G:540:LEU:HD22	1:H:452:VAL:HG21	1.80	0.64
1:G:518:PHE:O	1:H:455:GLU:OE1	2.14	0.64
1:K:540:LEU:HD22	1:L:452:VAL:HG21	1.80	0.64
1:L:458:VAL:HG21	1:L:478:LYS:HG2	1.78	0.64
1:L:521:ARG:H	1:L:521:ARG:HD3	1.63	0.64
1:B:322:ILE:O	1:B:439:SER:HA	1.97	0.64
1:C:348:SER:HB2	1:D:412:VAL:HA	1.78	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:348:SER:HB2	1:E:412:VAL:HA	1.78	0.64
1:G:178:ALA:N	1:G:208:GLU:OE2	2.28	0.64
1:M:504:VAL:HG11	1:M:521:ARG:HG2	1.80	0.64
1:N:178:ALA:N	1:N:208:GLU:OE2	2.28	0.64
1:D:504:VAL:HG11	1:D:521:ARG:HG2	1.80	0.63
1:G:521:ARG:H	1:G:521:ARG:HD3	1.63	0.63
1:I:521:ARG:HD3	1:I:521:ARG:H	1.63	0.63
1:L:504:VAL:HG11	1:L:521:ARG:HG2	1.81	0.63
1:A:412:VAL:HA	1:O:348:SER:HB2	1.78	0.63
1:A:639:ILE:HD12	1:O:609:PHE:CG	2.34	0.63
1:B:176:SER:OG	1:B:208:GLU:OE2	2.16	0.63
1:E:504:VAL:HG11	1:E:521:ARG:HG2	1.80	0.63
1:G:507:VAL:HA	1:G:518:PHE:CB	2.28	0.63
1:H:540:LEU:HD22	1:I:452:VAL:HG21	1.80	0.63
1:J:521:ARG:HD3	1:J:521:ARG:H	1.63	0.63
1:K:504:VAL:HG11	1:K:521:ARG:HG2	1.81	0.63
1:N:458:VAL:HG21	1:N:478:LYS:HG2	1.78	0.63
1:C:521:ARG:H	1:C:521:ARG:HD3	1.63	0.63
1:F:521:ARG:H	1:F:521:ARG:HD3	1.63	0.63
1:F:609:PHE:CG	1:G:639:ILE:HD12	2.34	0.63
1:E:609:PHE:CG	1:F:639:ILE:HD12	2.34	0.63
1:H:176:SER:OG	1:H:208:GLU:OE2	2.16	0.63
1:H:521:ARG:H	1:H:521:ARG:HD3	1.63	0.63
1:I:257:GLU:HA	1:I:257:GLU:OE1	1.99	0.63
1:J:322:ILE:O	1:J:439:SER:HA	1.97	0.63
1:L:322:ILE:O	1:L:439:SER:HA	1.97	0.63
1:O:176:SER:OG	1:O:208:GLU:OE2	2.16	0.63
1:O:481:GLY:N	1:O:505:SER:OG	2.23	0.63
1:A:609:PHE:CG	1:B:639:ILE:HD12	2.34	0.63
1:C:504:VAL:HG11	1:C:521:ARG:HG2	1.80	0.63
1:E:507:VAL:HA	1:E:518:PHE:CB	2.28	0.63
1:F:257:GLU:HA	1:F:257:GLU:OE1	1.99	0.63
1:K:521:ARG:HD3	1:K:521:ARG:H	1.63	0.63
1:M:507:VAL:HA	1:M:518:PHE:CB	2.28	0.63
1:N:540:LEU:HD22	1:O:452:VAL:HG21	1.80	0.63
1:N:609:PHE:CG	1:O:639:ILE:HD12	2.34	0.63
1:A:519:ALA:HB2	1:B:454:GLU:HG3	1.81	0.63
1:F:540:LEU:HD22	1:G:452:VAL:HG21	1.80	0.63
1:B:519:ALA:HB2	1:C:454:GLU:HG3	1.81	0.63
1:E:257:GLU:HA	1:E:257:GLU:OE1	1.99	0.63
1:H:244:VAL:HG22	1:H:295:VAL:HG22	1.81	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:J:504:VAL:HG11	1:J:521:ARG:HG2	1.80	0.63
1:J:540:LEU:HD22	1:K:452:VAL:HG21	1.80	0.63
1:M:178:ALA:N	1:M:208:GLU:OE2	2.28	0.63
1:O:507:VAL:HA	1:O:518:PHE:CB	2.28	0.63
1:C:519:ALA:HB2	1:D:454:GLU:HG3	1.81	0.63
1:F:504:VAL:HG11	1:F:521:ARG:HG2	1.80	0.63
1:G:244:VAL:HG22	1:G:295:VAL:HG22	1.81	0.63
1:I:507:VAL:HA	1:I:518:PHE:CB	2.28	0.63
1:K:326:ILE:HD11	1:K:502:GLN:HE21	1.64	0.63
1:A:454:GLU:HG3	1:O:519:ALA:HB2	1.81	0.63
1:C:176:SER:OG	1:C:208:GLU:OE2	2.16	0.63
1:E:164:ASP:O	1:E:218:ASP:HA	1.99	0.63
1:E:326:ILE:HD11	1:E:502:GLN:HE21	1.64	0.63
1:E:328:GLU:CD	1:E:521:ARG:HH11	2.00	0.63
1:D:609:PHE:CG	1:E:639:ILE:HD12	2.34	0.63
1:G:164:ASP:O	1:G:218:ASP:HA	1.99	0.63
1:J:257:GLU:OE1	1:J:257:GLU:HA	1.99	0.63
1:K:178:ALA:N	1:K:208:GLU:OE2	2.28	0.63
1:N:504:VAL:HG11	1:N:521:ARG:HG2	1.80	0.63
1:O:326:ILE:HD11	1:O:502:GLN:HE21	1.64	0.63
1:O:458:VAL:CG2	1:O:476:ASP:O	2.47	0.63
1:O:328:GLU:CD	1:O:521:ARG:HH11	2.00	0.63
1:A:458:VAL:CG2	1:A:476:ASP:O	2.47	0.63
1:A:326:ILE:HD11	1:A:502:GLN:HE21	1.64	0.63
1:A:507:VAL:HA	1:A:518:PHE:CB	2.28	0.63
1:B:164:ASP:O	1:B:218:ASP:HA	1.99	0.63
1:B:260:LYS:O	1:B:263:SER:OG	2.17	0.63
1:E:540:LEU:HD22	1:F:452:VAL:HG21	1.80	0.63
1:I:540:LEU:HD22	1:J:452:VAL:HG21	1.80	0.63
1:J:458:VAL:CG2	1:J:476:ASP:O	2.47	0.63
1:L:326:ILE:HD11	1:L:502:GLN:HE21	1.64	0.63
1:C:507:VAL:HA	1:C:518:PHE:CB	2.28	0.62
1:D:326:ILE:HD11	1:D:502:GLN:HE21	1.64	0.62
1:D:519:ALA:HB2	1:E:454:GLU:HG3	1.81	0.62
1:F:244:VAL:HG22	1:F:295:VAL:HG22	1.81	0.62
1:H:178:ALA:N	1:H:208:GLU:OE2	2.28	0.62
1:I:244:VAL:HG22	1:I:295:VAL:HG22	1.81	0.62
1:I:458:VAL:CG2	1:I:476:ASP:O	2.47	0.62
1:K:164:ASP:O	1:K:218:ASP:HA	1.99	0.62
1:O:164:ASP:O	1:O:218:ASP:HA	1.99	0.62
1:C:540:LEU:HD22	1:D:452:VAL:HG21	1.80	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:609:PHE:CG	1:C:639:ILE:HD12	2.33	0.62
1:E:458:VAL:CG2	1:E:476:ASP:O	2.47	0.62
1:I:164:ASP:O	1:I:218:ASP:HA	1.99	0.62
1:J:326:ILE:HD11	1:J:502:GLN:HE21	1.64	0.62
1:K:176:SER:OG	1:K:208:GLU:OE2	2.16	0.62
1:N:489:GLN:NE2	1:O:249:TYR:O	2.32	0.62
1:B:257:GLU:OE1	1:B:257:GLU:HA	1.99	0.62
1:C:260:LYS:O	1:C:263:SER:OG	2.17	0.62
1:H:507:VAL:HA	1:H:518:PHE:CB	2.28	0.62
1:I:489:GLN:NE2	1:J:249:TYR:O	2.32	0.62
1:L:507:VAL:HA	1:L:518:PHE:CB	2.28	0.62
1:N:164:ASP:O	1:N:218:ASP:HA	1.99	0.62
1:N:458:VAL:CG2	1:N:476:ASP:O	2.47	0.62
1:B:504:VAL:HG11	1:B:521:ARG:HG2	1.81	0.62
1:C:164:ASP:O	1:C:218:ASP:HA	1.99	0.62
1:D:458:VAL:CG2	1:D:476:ASP:O	2.47	0.62
1:E:244:VAL:HG22	1:E:295:VAL:HG22	1.81	0.62
1:F:458:VAL:CG2	1:F:476:ASP:O	2.47	0.62
1:F:507:VAL:HA	1:F:518:PHE:CB	2.28	0.62
1:F:489:GLN:NE2	1:G:249:TYR:O	2.32	0.62
1:G:489:GLN:NE2	1:H:249:TYR:O	2.33	0.62
1:I:504:VAL:HG11	1:I:521:ARG:HG2	1.80	0.62
1:K:244:VAL:HG22	1:K:295:VAL:HG22	1.81	0.62
1:K:458:VAL:CG2	1:K:476:ASP:O	2.47	0.62
1:K:489:GLN:NE2	1:L:249:TYR:O	2.32	0.62
1:L:489:GLN:NE2	1:M:249:TYR:O	2.32	0.62
1:M:519:ALA:HB2	1:N:454:GLU:HG3	1.81	0.62
1:N:519:ALA:HB2	1:O:454:GLU:HG3	1.81	0.62
1:A:489:GLN:NE2	1:B:249:TYR:O	2.32	0.62
1:D:244:VAL:HG22	1:D:295:VAL:HG22	1.81	0.62
1:E:489:GLN:NE2	1:F:249:TYR:O	2.32	0.62
1:G:504:VAL:HG11	1:G:521:ARG:HG2	1.80	0.62
1:H:257:GLU:HA	1:H:257:GLU:OE1	1.99	0.62
1:H:458:VAL:CG2	1:H:476:ASP:O	2.47	0.62
1:H:328:GLU:CD	1:H:521:ARG:HH11	2.00	0.62
1:I:178:ALA:N	1:I:208:GLU:OE2	2.28	0.62
1:J:244:VAL:HG22	1:J:295:VAL:HG22	1.81	0.62
1:K:507:VAL:HA	1:K:518:PHE:CB	2.28	0.62
1:L:176:SER:OG	1:L:208:GLU:OE2	2.16	0.62
1:L:459:ILE:HG23	1:L:474:THR:C	2.16	0.62
1:A:452:VAL:HG21	1:O:540:LEU:HD22	1.80	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:540:LEU:HD22	1:C:452:VAL:HG21	1.80	0.62
1:C:489:GLN:NE2	1:D:249:TYR:O	2.32	0.62
1:E:539:GLY:HA2	1:E:577:LEU:O	2.00	0.62
1:G:257:GLU:OE1	1:G:257:GLU:HA	1.99	0.62
1:J:459:ILE:HG23	1:J:474:THR:C	2.16	0.62
1:L:164:ASP:O	1:L:218:ASP:HA	1.99	0.62
1:M:176:SER:OG	1:M:208:GLU:OE2	2.16	0.62
1:M:257:GLU:OE1	1:M:257:GLU:HA	1.99	0.62
1:B:458:VAL:CG2	1:B:476:ASP:O	2.47	0.62
1:C:257:GLU:OE1	1:C:257:GLU:HA	1.99	0.62
1:D:260:LYS:O	1:D:263:SER:OG	2.17	0.62
1:D:489:GLN:NE2	1:E:249:TYR:O	2.32	0.62
1:F:326:ILE:HD11	1:F:502:GLN:HE21	1.64	0.62
1:I:539:GLY:HA2	1:I:577:LEU:O	2.00	0.62
1:J:507:VAL:HA	1:J:518:PHE:CB	2.28	0.62
1:L:458:VAL:CG2	1:L:476:ASP:O	2.47	0.62
1:M:164:ASP:O	1:M:218:ASP:HA	1.99	0.62
1:L:519:ALA:HB2	1:M:454:GLU:HG3	1.81	0.62
1:M:489:GLN:NE2	1:N:249:TYR:O	2.32	0.62
1:A:244:VAL:HG22	1:A:295:VAL:HG22	1.81	0.62
1:A:540:LEU:HD22	1:B:452:VAL:HG21	1.80	0.62
1:B:539:GLY:HA2	1:B:577:LEU:O	2.00	0.62
1:C:326:ILE:HD11	1:C:502:GLN:HE21	1.64	0.62
1:C:458:VAL:CG2	1:C:476:ASP:O	2.47	0.62
1:C:539:GLY:HA2	1:C:577:LEU:O	2.00	0.62
1:D:164:ASP:O	1:D:218:ASP:HA	1.99	0.62
1:D:257:GLU:OE1	1:D:257:GLU:HA	1.99	0.62
1:C:609:PHE:CG	1:D:639:ILE:HD12	2.34	0.62
1:D:540:LEU:HD22	1:E:452:VAL:HG21	1.80	0.62
1:E:519:ALA:HB2	1:F:454:GLU:HG3	1.81	0.62
1:F:539:GLY:HA2	1:F:577:LEU:O	2.00	0.62
1:I:176:SER:OG	1:I:208:GLU:OE2	2.16	0.62
1:I:459:ILE:HG23	1:I:474:THR:C	2.16	0.62
1:J:539:GLY:HA2	1:J:577:LEU:O	2.00	0.62
1:N:244:VAL:HG22	1:N:295:VAL:HG22	1.81	0.62
1:C:226:LYS:HA	1:C:229:ILE:HD12	1.82	0.62
1:D:507:VAL:HA	1:D:518:PHE:CB	2.28	0.62
1:H:489:GLN:NE2	1:I:249:TYR:O	2.32	0.62
1:I:326:ILE:HD11	1:I:502:GLN:HE21	1.64	0.62
1:K:459:ILE:HG23	1:K:474:THR:C	2.16	0.62
1:M:328:GLU:CD	1:M:521:ARG:HH11	2.00	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:N:507:VAL:HA	1:N:518:PHE:CB	2.28	0.62
1:A:164:ASP:O	1:A:218:ASP:HA	1.99	0.62
1:A:257:GLU:HA	1:A:257:GLU:OE1	1.99	0.62
1:B:489:GLN:NE2	1:C:249:TYR:O	2.32	0.62
1:D:176:SER:OG	1:D:208:GLU:OE2	2.16	0.62
1:D:539:GLY:HA2	1:D:577:LEU:O	2.00	0.62
1:E:481:GLY:O	1:E:505:SER:N	2.33	0.62
1:F:481:GLY:O	1:F:505:SER:N	2.33	0.62
1:G:458:VAL:CG2	1:G:476:ASP:O	2.47	0.62
1:G:481:GLY:O	1:G:505:SER:N	2.33	0.62
1:L:257:GLU:HA	1:L:257:GLU:OE1	1.99	0.62
1:M:458:VAL:CG2	1:M:476:ASP:O	2.47	0.62
1:A:249:TYR:O	1:O:489:GLN:NE2	2.32	0.62
1:O:504:VAL:HG11	1:O:521:ARG:HG2	1.80	0.62
1:B:506:ASN:O	1:B:518:PHE:HB2	2.00	0.61
1:B:507:VAL:HA	1:B:518:PHE:CB	2.28	0.61
1:D:481:GLY:O	1:D:505:SER:N	2.33	0.61
1:E:260:LYS:O	1:E:263:SER:OG	2.17	0.61
1:G:522:GLN:HG2	1:H:451:ILE:CG2	2.30	0.61
1:G:519:ALA:HB2	1:H:454:GLU:HG3	1.81	0.61
1:H:519:ALA:HB2	1:I:454:GLU:HG3	1.81	0.61
1:J:176:SER:OG	1:J:208:GLU:OE2	2.16	0.61
1:K:257:GLU:OE1	1:K:257:GLU:HA	1.99	0.61
1:J:609:PHE:CG	1:K:639:ILE:HD12	2.34	0.61
1:M:522:GLN:HG2	1:N:451:ILE:CG2	2.30	0.61
1:N:176:SER:OG	1:N:208:GLU:OE2	2.16	0.61
1:N:326:ILE:HD11	1:N:502:GLN:HE21	1.64	0.61
1:A:504:VAL:HG11	1:A:521:ARG:HG2	1.80	0.61
1:A:506:ASN:O	1:A:518:PHE:HB2	2.00	0.61
1:A:539:GLY:HA2	1:A:577:LEU:O	2.00	0.61
1:D:226:LYS:HA	1:D:229:ILE:HD12	1.82	0.61
1:H:164:ASP:O	1:H:218:ASP:HA	1.99	0.61
1:H:481:GLY:O	1:H:505:SER:N	2.33	0.61
1:H:539:GLY:HA2	1:H:577:LEU:O	2.00	0.61
1:I:226:LYS:HA	1:I:229:ILE:HD12	1.82	0.61
1:J:226:LYS:HA	1:J:229:ILE:HD12	1.82	0.61
1:J:522:GLN:HG2	1:K:451:ILE:CG2	2.30	0.61
1:L:244:VAL:HG22	1:L:295:VAL:HG22	1.81	0.61
1:K:519:ALA:HB2	1:L:454:GLU:HG3	1.81	0.61
1:A:451:ILE:CG2	1:O:522:GLN:HG2	2.30	0.61
1:A:522:GLN:HG2	1:B:451:ILE:CG2	2.30	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:326:ILE:HD11	1:B:502:GLN:HE21	1.64	0.61
1:B:604:ARG:NH2	1:B:626:LEU:O	2.34	0.61
1:C:244:VAL:HG22	1:C:295:VAL:HG22	1.81	0.61
1:C:481:GLY:O	1:C:505:SER:N	2.33	0.61
1:C:506:ASN:O	1:C:518:PHE:HB2	2.01	0.61
1:D:604:ARG:NH2	1:D:626:LEU:O	2.34	0.61
1:H:506:ASN:O	1:H:518:PHE:HB2	2.01	0.61
1:I:519:ALA:HB2	1:J:454:GLU:HG3	1.81	0.61
1:I:609:PHE:CG	1:J:639:ILE:HD12	2.34	0.61
1:K:539:GLY:HA2	1:K:577:LEU:O	2.00	0.61
1:M:326:ILE:HD11	1:M:502:GLN:HE21	1.64	0.61
1:B:481:GLY:O	1:B:505:SER:N	2.33	0.61
1:B:522:GLN:HG2	1:C:451:ILE:CG2	2.30	0.61
1:D:506:ASN:O	1:D:518:PHE:HB2	2.01	0.61
1:F:519:ALA:HB2	1:G:454:GLU:HG3	1.81	0.61
1:I:481:GLY:O	1:I:505:SER:N	2.33	0.61
1:I:604:ARG:NH2	1:I:626:LEU:O	2.34	0.61
1:J:489:GLN:NE2	1:K:249:TYR:O	2.32	0.61
1:J:604:ARG:NH2	1:J:626:LEU:O	2.34	0.61
1:K:506:ASN:O	1:K:518:PHE:HB2	2.00	0.61
1:O:506:ASN:O	1:O:518:PHE:HB2	2.01	0.61
1:A:481:GLY:O	1:A:505:SER:N	2.33	0.61
1:B:477:ARG:HH11	1:B:477:ARG:CG	2.14	0.61
1:E:226:LYS:HA	1:E:229:ILE:HD12	1.82	0.61
1:F:452:VAL:O	1:F:481:GLY:HA3	2.01	0.61
1:F:604:ARG:NH2	1:F:626:LEU:O	2.34	0.61
1:H:504:VAL:HG11	1:H:521:ARG:HG2	1.80	0.61
1:J:477:ARG:HH11	1:J:477:ARG:CG	2.14	0.61
1:J:481:GLY:O	1:J:505:SER:N	2.33	0.61
1:K:226:LYS:HA	1:K:229:ILE:HD12	1.83	0.61
1:J:519:ALA:HB2	1:K:454:GLU:HG3	1.81	0.61
1:K:481:GLY:O	1:K:505:SER:N	2.33	0.61
1:N:184:VAL:HG13	1:N:187:LEU:HD12	1.82	0.61
1:N:257:GLU:OE1	1:N:257:GLU:HA	1.99	0.61
1:O:184:VAL:HG13	1:O:187:LEU:HD12	1.82	0.61
1:N:522:GLN:HG2	1:O:451:ILE:CG2	2.30	0.61
1:B:226:LYS:HA	1:B:229:ILE:HD12	1.83	0.61
1:C:452:VAL:O	1:C:481:GLY:HA3	2.01	0.61
1:F:164:ASP:O	1:F:218:ASP:HA	1.99	0.61
1:F:260:LYS:O	1:F:263:SER:OG	2.17	0.61
1:H:477:ARG:HH11	1:H:477:ARG:CG	2.14	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:N:481:GLY:O	1:N:505:SER:N	2.33	0.61
1:N:506:ASN:O	1:N:518:PHE:HB2	2.01	0.61
1:O:481:GLY:O	1:O:505:SER:N	2.33	0.61
1:O:539:GLY:HA2	1:O:577:LEU:O	2.00	0.61
1:E:604:ARG:NH2	1:E:626:LEU:O	2.34	0.61
1:G:506:ASN:O	1:G:518:PHE:HB2	2.01	0.61
1:H:452:VAL:O	1:H:481:GLY:HA3	2.01	0.61
1:H:522:GLN:HG2	1:I:451:ILE:CG2	2.31	0.61
1:H:604:ARG:NH2	1:H:626:LEU:O	2.34	0.61
1:I:452:VAL:O	1:I:481:GLY:HA3	2.01	0.61
1:J:164:ASP:O	1:J:218:ASP:HA	1.99	0.61
1:K:452:VAL:O	1:K:481:GLY:HA3	2.01	0.61
1:L:477:ARG:HH11	1:L:477:ARG:CG	2.14	0.61
1:L:452:VAL:O	1:L:481:GLY:HA3	2.01	0.61
1:L:481:GLY:O	1:L:505:SER:N	2.33	0.61
1:L:506:ASN:O	1:L:518:PHE:HB2	2.01	0.61
1:L:539:GLY:HA2	1:L:577:LEU:O	2.00	0.61
1:A:508:LEU:HD12	1:A:508:LEU:N	2.16	0.61
1:C:604:ARG:NH2	1:C:626:LEU:O	2.34	0.61
1:E:506:ASN:O	1:E:518:PHE:HB2	2.00	0.61
1:E:522:GLN:HG2	1:F:451:ILE:CG2	2.30	0.61
1:G:452:VAL:O	1:G:481:GLY:HA3	2.01	0.61
1:H:226:LYS:HA	1:H:229:ILE:HD12	1.82	0.61
1:H:326:ILE:HD11	1:H:502:GLN:HE21	1.64	0.61
1:L:226:LYS:HA	1:L:229:ILE:HD12	1.82	0.61
1:L:508:LEU:N	1:L:508:LEU:HD12	2.16	0.61
1:L:522:GLN:HG2	1:M:451:ILE:CG2	2.30	0.61
1:M:184:VAL:HG13	1:M:187:LEU:HD12	1.82	0.61
1:M:506:ASN:O	1:M:518:PHE:HB2	2.00	0.61
1:N:477:ARG:CG	1:N:477:ARG:HH11	2.14	0.61
1:A:184:VAL:HG13	1:A:187:LEU:HD12	1.82	0.61
1:A:604:ARG:NH2	1:A:626:LEU:O	2.34	0.61
1:B:477:ARG:HH11	1:B:477:ARG:HG2	1.66	0.61
1:C:477:ARG:HH11	1:C:477:ARG:HG2	1.66	0.61
1:C:522:GLN:HG2	1:D:451:ILE:CG2	2.31	0.61
1:E:184:VAL:HG13	1:E:187:LEU:HD12	1.82	0.61
1:E:477:ARG:HH11	1:E:477:ARG:CG	2.14	0.61
1:G:326:ILE:HD11	1:G:502:GLN:HE21	1.64	0.61
1:G:539:GLY:HA2	1:G:577:LEU:O	2.00	0.61
1:K:508:LEU:HD12	1:K:508:LEU:N	2.16	0.61
1:K:522:GLN:HG2	1:L:451:ILE:CG2	2.30	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:M:481:GLY:O	1:M:505:SER:N	2.33	0.61
1:L:609:PHE:CG	1:M:639:ILE:HD12	2.34	0.61
1:N:452:VAL:O	1:N:481:GLY:HA3	2.01	0.61
1:O:452:VAL:O	1:O:481:GLY:HA3	2.01	0.61
1:B:244:VAL:HG22	1:B:295:VAL:HG22	1.81	0.61
1:C:504:VAL:HG13	1:C:521:ARG:CD	2.31	0.61
1:D:477:ARG:HG2	1:D:477:ARG:HH11	1.66	0.61
1:D:522:GLN:HG2	1:E:451:ILE:CG2	2.30	0.61
1:F:184:VAL:HG13	1:F:187:LEU:HD12	1.82	0.61
1:F:508:LEU:HD12	1:F:508:LEU:N	2.16	0.61
1:G:604:ARG:NH2	1:G:626:LEU:O	2.34	0.61
1:I:184:VAL:HG13	1:I:187:LEU:HD12	1.82	0.61
1:J:184:VAL:HG13	1:J:187:LEU:HD12	1.82	0.61
1:J:452:VAL:O	1:J:481:GLY:HA3	2.01	0.61
1:K:480:VAL:HA	1:K:505:SER:HB2	1.83	0.61
1:M:244:VAL:HG22	1:M:295:VAL:HG22	1.81	0.61
1:M:508:LEU:HD12	1:M:508:LEU:N	2.16	0.61
1:M:604:ARG:NH2	1:M:626:LEU:O	2.34	0.61
1:N:604:ARG:NH2	1:N:626:LEU:O	2.34	0.61
1:O:458:VAL:HB	1:O:476:ASP:O	2.01	0.61
1:O:604:ARG:NH2	1:O:626:LEU:O	2.34	0.61
1:A:477:ARG:HH11	1:A:477:ARG:HG2	1.66	0.60
1:D:458:VAL:HB	1:D:476:ASP:O	2.01	0.60
1:F:477:ARG:HH11	1:F:477:ARG:CG	2.14	0.60
1:F:506:ASN:O	1:F:518:PHE:HB2	2.01	0.60
1:I:508:LEU:N	1:I:508:LEU:HD12	2.16	0.60
1:J:508:LEU:N	1:J:508:LEU:HD12	2.16	0.60
1:K:604:ARG:NH2	1:K:626:LEU:O	2.34	0.60
1:M:226:LYS:HA	1:M:229:ILE:HD12	1.82	0.60
1:M:459:ILE:HG23	1:M:474:THR:C	2.16	0.60
1:M:477:ARG:HH11	1:M:477:ARG:CG	2.14	0.60
1:N:539:GLY:HA2	1:N:577:LEU:O	2.00	0.60
1:O:477:ARG:HH11	1:O:477:ARG:CG	2.14	0.60
1:A:226:LYS:HA	1:A:229:ILE:HD12	1.82	0.60
1:D:184:VAL:HG13	1:D:187:LEU:HD12	1.82	0.60
1:D:452:VAL:O	1:D:481:GLY:HA3	2.01	0.60
1:E:176:SER:OG	1:E:208:GLU:OE2	2.16	0.60
1:G:260:LYS:O	1:G:263:SER:OG	2.17	0.60
1:G:459:ILE:HG23	1:G:474:THR:C	2.16	0.60
1:H:184:VAL:HG13	1:H:187:LEU:HD12	1.82	0.60
1:H:480:VAL:HA	1:H:505:SER:HB2	1.83	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:I:506:ASN:O	1:I:518:PHE:HB2	2.00	0.60
1:J:506:ASN:O	1:J:518:PHE:HB2	2.01	0.60
1:L:480:VAL:HA	1:L:505:SER:HB2	1.83	0.60
1:M:539:GLY:HA2	1:M:577:LEU:O	2.00	0.60
1:N:459:ILE:HG23	1:N:474:THR:C	2.16	0.60
1:N:480:VAL:HA	1:N:505:SER:HB2	1.83	0.60
1:B:142:ILE:HD11	1:B:156:ILE:HD12	1.84	0.60
1:C:184:VAL:HG13	1:C:187:LEU:HD12	1.82	0.60
1:C:477:ARG:CG	1:C:477:ARG:HH11	2.14	0.60
1:D:142:ILE:HD11	1:D:156:ILE:HD12	1.84	0.60
1:D:508:LEU:N	1:D:508:LEU:HD12	2.16	0.60
1:E:458:VAL:HB	1:E:476:ASP:O	2.01	0.60
1:E:452:VAL:O	1:E:481:GLY:HA3	2.01	0.60
1:F:438:PRO:HG3	1:F:482:ILE:CG2	2.32	0.60
1:G:184:VAL:HG13	1:G:187:LEU:HD12	1.82	0.60
1:F:522:GLN:HG2	1:G:451:ILE:CG2	2.31	0.60
1:G:477:ARG:CG	1:G:477:ARG:HH11	2.14	0.60
1:G:508:LEU:N	1:G:508:LEU:HD12	2.16	0.60
1:N:458:VAL:HB	1:N:476:ASP:O	2.01	0.60
1:N:508:LEU:N	1:N:508:LEU:HD12	2.16	0.60
1:O:477:ARG:HG2	1:O:477:ARG:HH11	1.66	0.60
1:O:480:VAL:HA	1:O:505:SER:HB2	1.83	0.60
1:O:504:VAL:HG13	1:O:521:ARG:CD	2.31	0.60
1:A:458:VAL:HB	1:A:476:ASP:O	2.01	0.60
1:A:477:ARG:HH11	1:A:477:ARG:CG	2.14	0.60
1:C:508:LEU:N	1:C:508:LEU:HD12	2.16	0.60
1:D:477:ARG:CG	1:D:477:ARG:HH11	2.14	0.60
1:F:226:LYS:HA	1:F:229:ILE:HD12	1.83	0.60
1:F:504:VAL:HG13	1:F:521:ARG:CD	2.31	0.60
1:H:459:ILE:HG23	1:H:474:THR:C	2.16	0.60
1:I:522:GLN:HG2	1:J:451:ILE:CG2	2.31	0.60
1:K:184:VAL:HG13	1:K:187:LEU:HD12	1.82	0.60
1:A:142:ILE:HD11	1:A:156:ILE:HD12	1.84	0.60
1:B:452:VAL:O	1:B:481:GLY:HA3	2.01	0.60
1:E:477:ARG:HG2	1:E:477:ARG:HH11	1.66	0.60
1:F:154:GLU:O	1:F:158:ARG:HB2	2.02	0.60
1:I:260:LYS:O	1:I:263:SER:OG	2.17	0.60
1:I:438:PRO:HG3	1:I:482:ILE:CG2	2.32	0.60
1:I:477:ARG:HG2	1:I:477:ARG:HH11	1.66	0.60
1:J:477:ARG:HH11	1:J:477:ARG:HG2	1.66	0.60
1:L:166:GLU:HB2	1:L:222:ARG:HH21	1.67	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:L:604:ARG:NH2	1:L:626:LEU:O	2.34	0.60
1:O:166:GLU:HB2	1:O:222:ARG:HH21	1.67	0.60
1:O:257:GLU:HA	1:O:257:GLU:OE1	1.99	0.60
1:B:504:VAL:HG13	1:B:521:ARG:CD	2.31	0.60
1:E:154:GLU:O	1:E:158:ARG:HB2	2.02	0.60
1:F:481:GLY:N	1:F:505:SER:OG	2.23	0.60
1:G:154:GLU:O	1:G:158:ARG:HB2	2.02	0.60
1:H:438:PRO:HG3	1:H:482:ILE:CG2	2.32	0.60
1:L:184:VAL:HG13	1:L:187:LEU:HD12	1.82	0.60
1:M:506:ASN:C	1:M:506:ASN:HD22	2.04	0.60
1:N:226:LYS:HA	1:N:229:ILE:HD12	1.82	0.60
1:N:504:VAL:HG13	1:N:521:ARG:CD	2.31	0.60
1:B:184:VAL:HG13	1:B:187:LEU:HD12	1.82	0.60
1:C:142:ILE:HD11	1:C:156:ILE:HD12	1.84	0.60
1:H:260:LYS:O	1:H:263:SER:OG	2.17	0.60
1:K:477:ARG:HH11	1:K:477:ARG:CG	2.14	0.60
1:N:477:ARG:HG2	1:N:477:ARG:HH11	1.66	0.60
1:N:506:ASN:C	1:N:506:ASN:HD22	2.04	0.60
1:O:244:VAL:HG22	1:O:295:VAL:HG22	1.81	0.60
1:C:154:GLU:O	1:C:158:ARG:HB2	2.02	0.60
1:C:438:PRO:HG3	1:C:482:ILE:CG2	2.32	0.60
1:E:142:ILE:HD11	1:E:156:ILE:HD12	1.84	0.60
1:F:142:ILE:HD11	1:F:156:ILE:HD12	1.84	0.60
1:G:226:LYS:HA	1:G:229:ILE:HD12	1.82	0.60
1:H:154:GLU:O	1:H:158:ARG:HB2	2.02	0.60
1:I:477:ARG:CG	1:I:477:ARG:HH11	2.14	0.60
1:I:480:VAL:HA	1:I:505:SER:HB2	1.83	0.60
1:J:260:LYS:O	1:J:263:SER:OG	2.17	0.60
1:K:609:PHE:CG	1:L:639:ILE:HD12	2.34	0.60
1:O:142:ILE:HD11	1:O:156:ILE:HD12	1.84	0.60
1:A:452:VAL:O	1:A:481:GLY:HA3	2.01	0.60
1:A:506:ASN:C	1:A:506:ASN:HD22	2.04	0.60
1:B:508:LEU:N	1:B:508:LEU:HD12	2.16	0.60
1:C:458:VAL:HB	1:C:476:ASP:O	2.01	0.60
1:G:142:ILE:HD11	1:G:156:ILE:HD12	1.84	0.60
1:H:508:LEU:HD12	1:H:508:LEU:N	2.16	0.60
1:I:104:VAL:HG22	1:I:141:LEU:HD23	1.84	0.60
1:M:458:VAL:HB	1:M:476:ASP:O	2.01	0.60
1:M:609:PHE:CG	1:N:639:ILE:HD12	2.34	0.60
1:O:508:LEU:N	1:O:508:LEU:HD12	2.16	0.60
1:B:480:VAL:HA	1:B:505:SER:HB2	1.83	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:154:GLU:O	1:D:158:ARG:HB2	2.02	0.60
1:D:438:PRO:HG3	1:D:482:ILE:CG2	2.32	0.60
1:G:104:VAL:HG22	1:G:141:LEU:HD23	1.84	0.60
1:I:121:GLN:O	1:I:125:ASN:N	2.33	0.60
1:L:504:VAL:HG13	1:L:521:ARG:CD	2.31	0.60
1:N:142:ILE:HD11	1:N:156:ILE:HD12	1.84	0.60
1:O:459:ILE:HG23	1:O:474:THR:C	2.16	0.60
1:B:166:GLU:HB2	1:B:222:ARG:HH21	1.67	0.59
1:E:504:VAL:HG13	1:E:521:ARG:CD	2.31	0.59
1:F:458:VAL:HB	1:F:476:ASP:O	2.01	0.59
1:G:438:PRO:HG3	1:G:482:ILE:CG2	2.32	0.59
1:H:477:ARG:HH11	1:H:477:ARG:HG2	1.66	0.59
1:H:490:ILE:HG22	1:H:491:ASN:O	2.03	0.59
1:G:609:PHE:CG	1:H:639:ILE:HD12	2.34	0.59
1:I:166:GLU:HB2	1:I:222:ARG:HH21	1.67	0.59
1:J:166:GLU:HB2	1:J:222:ARG:HH21	1.67	0.59
1:K:506:ASN:C	1:K:506:ASN:HD22	2.04	0.59
1:O:226:LYS:HA	1:O:229:ILE:HD12	1.82	0.59
1:C:166:GLU:HB2	1:C:222:ARG:HH21	1.67	0.59
1:E:438:PRO:HG3	1:E:482:ILE:CG2	2.32	0.59
1:E:480:VAL:HA	1:E:505:SER:HB2	1.83	0.59
1:J:480:VAL:HA	1:J:505:SER:HB2	1.83	0.59
1:K:477:ARG:HG2	1:K:477:ARG:HH11	1.66	0.59
1:L:490:ILE:HG22	1:L:491:ASN:O	2.02	0.59
1:N:490:ILE:HG22	1:N:491:ASN:O	2.03	0.59
1:A:490:ILE:HG22	1:A:491:ASN:O	2.03	0.59
1:B:438:PRO:HG3	1:B:482:ILE:CG2	2.31	0.59
1:C:480:VAL:HA	1:C:505:SER:HB2	1.83	0.59
1:F:490:ILE:HG22	1:F:491:ASN:O	2.03	0.59
1:I:154:GLU:O	1:I:158:ARG:HB2	2.02	0.59
1:I:504:VAL:HG13	1:I:521:ARG:CD	2.31	0.59
1:J:490:ILE:HG22	1:J:491:ASN:O	2.02	0.59
1:K:260:LYS:O	1:K:263:SER:OG	2.17	0.59
1:K:438:PRO:HG3	1:K:482:ILE:CG2	2.32	0.59
1:K:458:VAL:HB	1:K:476:ASP:O	2.01	0.59
1:M:458:VAL:CB	1:M:476:ASP:O	2.51	0.59
1:M:452:VAL:O	1:M:481:GLY:HA3	2.01	0.59
1:N:166:GLU:HB2	1:N:222:ARG:HH21	1.67	0.59
1:N:438:PRO:HG3	1:N:482:ILE:CG2	2.32	0.59
1:N:458:VAL:CB	1:N:476:ASP:O	2.51	0.59
1:O:104:VAL:HG22	1:O:141:LEU:HD23	1.84	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:177:ALA:HB3	1:A:208:GLU:CG	2.33	0.59
1:B:458:VAL:HB	1:B:476:ASP:O	2.01	0.59
1:E:166:GLU:HB2	1:E:222:ARG:HH21	1.67	0.59
1:F:166:GLU:HB2	1:F:222:ARG:HH21	1.67	0.59
1:F:459:ILE:HG23	1:F:474:THR:C	2.16	0.59
1:H:459:ILE:HD12	1:H:459:ILE:H	1.67	0.59
1:J:104:VAL:HG22	1:J:141:LEU:HD23	1.84	0.59
1:J:177:ALA:HB3	1:J:208:GLU:CG	2.33	0.59
1:J:458:VAL:HB	1:J:476:ASP:O	2.01	0.59
1:K:104:VAL:HG22	1:K:141:LEU:HD23	1.84	0.59
1:L:438:PRO:HG3	1:L:482:ILE:CG2	2.32	0.59
1:O:177:ALA:HB3	1:O:208:GLU:CG	2.33	0.59
1:O:458:VAL:CB	1:O:476:ASP:O	2.51	0.59
1:A:104:VAL:HG22	1:A:141:LEU:HD23	1.84	0.59
1:B:154:GLU:O	1:B:158:ARG:HB2	2.02	0.59
1:B:458:VAL:CB	1:B:476:ASP:O	2.51	0.59
1:F:477:ARG:HG2	1:F:477:ARG:HH11	1.66	0.59
1:G:166:GLU:HB2	1:G:222:ARG:HH21	1.67	0.59
1:G:458:VAL:HB	1:G:476:ASP:O	2.01	0.59
1:H:104:VAL:HG22	1:H:141:LEU:HD23	1.84	0.59
1:K:177:ALA:HB3	1:K:208:GLU:CG	2.33	0.59
1:L:260:LYS:O	1:L:263:SER:OG	2.17	0.59
1:L:458:VAL:CB	1:L:476:ASP:O	2.51	0.59
1:L:458:VAL:HB	1:L:476:ASP:O	2.01	0.59
1:M:177:ALA:HB3	1:M:208:GLU:CG	2.33	0.59
1:M:166:GLU:HB2	1:M:222:ARG:HH21	1.67	0.59
1:A:458:VAL:CB	1:A:476:ASP:O	2.51	0.59
1:B:104:VAL:HG22	1:B:141:LEU:HD23	1.84	0.59
1:B:490:ILE:HG22	1:B:491:ASN:O	2.02	0.59
1:C:104:VAL:HG22	1:C:141:LEU:HD23	1.84	0.59
1:C:490:ILE:HG22	1:C:491:ASN:O	2.03	0.59
1:H:166:GLU:HB2	1:H:222:ARG:HH21	1.67	0.59
1:I:177:ALA:HB3	1:I:208:GLU:CG	2.33	0.59
1:I:458:VAL:HB	1:I:476:ASP:O	2.01	0.59
1:J:459:ILE:HD12	1:J:459:ILE:H	1.67	0.59
1:K:458:VAL:CB	1:K:476:ASP:O	2.51	0.59
1:K:504:VAL:HG13	1:K:521:ARG:CD	2.31	0.59
1:K:609:PHE:CD2	1:L:639:ILE:CD1	2.75	0.59
1:M:142:ILE:HD11	1:M:156:ILE:HD12	1.84	0.59
1:M:477:ARG:HG2	1:M:477:ARG:HH11	1.66	0.59
1:A:438:PRO:HG3	1:A:482:ILE:CG2	2.32	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:506:ASN:HD22	1:B:506:ASN:C	2.04	0.59
1:E:459:ILE:HD12	1:E:459:ILE:H	1.67	0.59
1:F:224:ARG:O	1:F:227:ARG:HB2	2.03	0.59
1:F:459:ILE:HD12	1:F:459:ILE:H	1.68	0.59
1:G:458:VAL:CB	1:G:476:ASP:O	2.51	0.59
1:G:480:VAL:HA	1:G:505:SER:HB2	1.83	0.59
1:H:121:GLN:O	1:H:125:ASN:N	2.33	0.59
1:H:142:ILE:HD11	1:H:156:ILE:HD12	1.84	0.59
1:H:458:VAL:CB	1:H:476:ASP:O	2.51	0.59
1:I:458:VAL:CB	1:I:476:ASP:O	2.51	0.59
1:H:609:PHE:CG	1:I:639:ILE:HD12	2.34	0.59
1:K:118:LEU:O	1:K:121:GLN:HB3	2.03	0.59
1:M:260:LYS:O	1:M:263:SER:OG	2.17	0.59
1:N:104:VAL:HG22	1:N:141:LEU:HD23	1.84	0.59
1:O:154:GLU:O	1:O:158:ARG:HB2	2.02	0.59
1:B:177:ALA:HB3	1:B:208:GLU:CG	2.33	0.59
1:C:459:ILE:HD12	1:C:459:ILE:H	1.68	0.59
1:C:506:ASN:HD22	1:C:507:VAL:H	1.50	0.59
1:D:166:GLU:HB2	1:D:222:ARG:HH21	1.67	0.59
1:D:458:VAL:CB	1:D:476:ASP:O	2.51	0.59
1:D:490:ILE:HG22	1:D:491:ASN:O	2.03	0.59
1:F:118:LEU:O	1:F:121:GLN:HB3	2.03	0.59
1:F:176:SER:OG	1:F:208:GLU:OE2	2.16	0.59
1:F:480:VAL:HA	1:F:505:SER:HB2	1.83	0.59
1:J:154:GLU:O	1:J:158:ARG:HB2	2.02	0.59
1:J:458:VAL:CB	1:J:476:ASP:O	2.51	0.59
1:K:166:GLU:HB2	1:K:222:ARG:HH21	1.67	0.59
1:N:177:ALA:HB3	1:N:208:GLU:CG	2.33	0.59
1:C:458:VAL:CB	1:C:476:ASP:O	2.51	0.59
1:E:118:LEU:O	1:E:121:GLN:HB3	2.03	0.59
1:E:104:VAL:HG22	1:E:141:LEU:HD23	1.84	0.59
1:E:224:ARG:O	1:E:227:ARG:HB2	2.03	0.59
1:E:458:VAL:CB	1:E:476:ASP:O	2.51	0.59
1:F:458:VAL:CB	1:F:476:ASP:O	2.51	0.59
1:H:444:ASP:OD1	1:H:445:ASN:N	2.36	0.59
1:H:504:VAL:HG13	1:H:521:ARG:CD	2.31	0.59
1:J:118:LEU:O	1:J:121:GLN:HB3	2.03	0.59
1:J:438:PRO:HG3	1:J:482:ILE:CG2	2.32	0.59
1:L:118:LEU:O	1:L:121:GLN:HB3	2.03	0.59
1:M:480:VAL:HA	1:M:505:SER:HB2	1.83	0.59
1:N:154:GLU:O	1:N:158:ARG:HB2	2.02	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:O:438:PRO:HG3	1:O:482:ILE:CG2	2.32	0.59
1:O:506:ASN:C	1:O:506:ASN:HD22	2.04	0.59
1:A:166:GLU:HB2	1:A:222:ARG:HH21	1.67	0.59
1:A:504:VAL:HG13	1:A:521:ARG:CD	2.31	0.59
1:E:508:LEU:HD12	1:E:508:LEU:N	2.16	0.59
1:F:104:VAL:HG22	1:F:141:LEU:HD23	1.84	0.59
1:G:118:LEU:O	1:G:121:GLN:HB3	2.03	0.59
1:G:444:ASP:OD1	1:G:445:ASN:N	2.36	0.59
1:H:177:ALA:HB3	1:H:208:GLU:CG	2.33	0.59
1:H:458:VAL:HB	1:H:476:ASP:O	2.01	0.59
1:I:142:ILE:HD11	1:I:156:ILE:HD12	1.84	0.59
1:I:444:ASP:OD1	1:I:445:ASN:N	2.36	0.59
1:J:142:ILE:HD11	1:J:156:ILE:HD12	1.84	0.59
1:J:444:ASP:OD1	1:J:445:ASN:N	2.36	0.59
1:J:506:ASN:HD22	1:J:506:ASN:C	2.04	0.59
1:K:154:GLU:O	1:K:158:ARG:HB2	2.02	0.59
1:L:177:ALA:HB3	1:L:208:GLU:CG	2.33	0.59
1:L:506:ASN:C	1:L:506:ASN:HD22	2.04	0.59
1:M:154:GLU:O	1:M:158:ARG:HB2	2.02	0.59
1:D:104:VAL:HG22	1:D:141:LEU:HD23	1.83	0.58
1:G:459:ILE:H	1:G:459:ILE:HD12	1.68	0.58
1:L:154:GLU:O	1:L:158:ARG:HB2	2.02	0.58
1:N:459:ILE:H	1:N:459:ILE:HD12	1.67	0.58
1:A:154:GLU:O	1:A:158:ARG:HB2	2.02	0.58
1:C:444:ASP:OD1	1:C:445:ASN:N	2.36	0.58
1:D:444:ASP:OD1	1:D:445:ASN:N	2.36	0.58
1:F:177:ALA:HB3	1:F:208:GLU:CG	2.33	0.58
1:F:444:ASP:OD1	1:F:445:ASN:N	2.36	0.58
1:F:506:ASN:HD22	1:F:507:VAL:H	1.50	0.58
1:G:177:ALA:HB3	1:G:208:GLU:CG	2.33	0.58
1:J:504:VAL:HG13	1:J:521:ARG:CD	2.31	0.58
1:K:142:ILE:HD11	1:K:156:ILE:HD12	1.84	0.58
1:L:142:ILE:HD11	1:L:156:ILE:HD12	1.84	0.58
1:N:206:ALA:HA	1:N:212:SER:O	2.04	0.58
1:A:480:VAL:HA	1:A:505:SER:HB2	1.83	0.58
1:D:118:LEU:O	1:D:121:GLN:HB3	2.03	0.58
1:E:444:ASP:OD1	1:E:445:ASN:N	2.36	0.58
1:E:490:ILE:HG22	1:E:491:ASN:O	2.02	0.58
1:G:206:ALA:HA	1:G:212:SER:O	2.04	0.58
1:G:504:VAL:HG13	1:G:521:ARG:CD	2.31	0.58
1:J:224:ARG:O	1:J:227:ARG:HB2	2.03	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:444:ASP:OD1	1:K:445:ASN:N	2.36	0.58
1:M:104:VAL:HG22	1:M:141:LEU:HD23	1.84	0.58
1:N:164:ASP:O	1:N:219:PRO:HD2	2.04	0.58
1:A:206:ALA:HA	1:A:212:SER:O	2.04	0.58
1:D:506:ASN:HD22	1:D:506:ASN:C	2.04	0.58
1:E:164:ASP:O	1:E:219:PRO:HD2	2.04	0.58
1:G:224:ARG:O	1:G:227:ARG:HB2	2.03	0.58
1:G:477:ARG:HH11	1:G:477:ARG:HG2	1.66	0.58
1:I:224:ARG:O	1:I:227:ARG:HB2	2.03	0.58
1:I:490:ILE:HG22	1:I:491:ASN:O	2.02	0.58
1:K:490:ILE:HG22	1:K:491:ASN:O	2.03	0.58
1:L:104:VAL:HG22	1:L:141:LEU:HD23	1.84	0.58
1:M:118:LEU:O	1:M:121:GLN:HB3	2.03	0.58
1:M:504:VAL:HG13	1:M:521:ARG:CD	2.31	0.58
1:N:260:LYS:O	1:N:263:SER:OG	2.17	0.58
1:A:118:LEU:O	1:A:121:GLN:HB3	2.03	0.58
1:B:206:ALA:HA	1:B:212:SER:O	2.04	0.58
1:C:177:ALA:HB3	1:C:208:GLU:CG	2.33	0.58
1:D:206:ALA:HA	1:D:212:SER:O	2.03	0.58
1:E:107:VAL:HG22	1:E:160:ASP:HB2	1.86	0.58
1:G:490:ILE:HG22	1:G:491:ASN:O	2.03	0.58
1:H:206:ALA:HA	1:H:212:SER:O	2.04	0.58
1:H:224:ARG:O	1:H:227:ARG:HB2	2.03	0.58
1:L:477:ARG:HG2	1:L:477:ARG:HH11	1.66	0.58
1:N:224:ARG:O	1:N:227:ARG:HB2	2.03	0.58
1:O:224:ARG:O	1:O:227:ARG:HB2	2.03	0.58
1:B:444:ASP:OD1	1:B:445:ASN:N	2.36	0.58
1:D:164:ASP:O	1:D:219:PRO:HD2	2.04	0.58
1:F:164:ASP:O	1:F:219:PRO:HD2	2.04	0.58
1:F:206:ALA:HA	1:F:212:SER:O	2.03	0.58
1:H:118:LEU:O	1:H:121:GLN:HB3	2.03	0.58
1:H:506:ASN:C	1:H:506:ASN:HD22	2.04	0.58
1:I:118:LEU:O	1:I:121:GLN:HB3	2.03	0.58
1:I:506:ASN:C	1:I:506:ASN:HD22	2.04	0.58
1:J:107:VAL:HG22	1:J:160:ASP:HB2	1.86	0.58
1:L:107:VAL:HG22	1:L:160:ASP:HB2	1.86	0.58
1:L:444:ASP:OD1	1:L:445:ASN:N	2.36	0.58
1:M:164:ASP:O	1:M:219:PRO:HD2	2.04	0.58
1:A:459:ILE:HG23	1:A:474:THR:C	2.16	0.58
1:C:132:VAL:HG12	1:C:134:TYR:CE1	2.39	0.58
1:C:256:VAL:O	1:C:260:LYS:HG2	2.04	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:459:ILE:HD12	1:D:459:ILE:H	1.67	0.58
1:E:177:ALA:HB3	1:E:208:GLU:CG	2.33	0.58
1:E:481:GLY:N	1:E:505:SER:OG	2.23	0.58
1:G:107:VAL:HG22	1:G:160:ASP:HB2	1.86	0.58
1:G:121:GLN:O	1:G:125:ASN:N	2.33	0.58
1:M:107:VAL:HG22	1:M:160:ASP:HB2	1.86	0.58
1:M:224:ARG:O	1:M:227:ARG:HB2	2.03	0.58
1:M:438:PRO:HG3	1:M:482:ILE:CG2	2.32	0.58
1:M:444:ASP:OD1	1:M:445:ASN:N	2.36	0.58
1:M:459:ILE:H	1:M:459:ILE:HD12	1.68	0.58
1:M:490:ILE:HG22	1:M:491:ASN:O	2.03	0.58
1:N:444:ASP:OD1	1:N:445:ASN:N	2.36	0.58
1:O:105:VAL:HG11	1:O:157:ARG:HE	1.69	0.58
1:O:164:ASP:O	1:O:219:PRO:HD2	2.04	0.58
1:O:490:ILE:HG22	1:O:491:ASN:O	2.02	0.58
1:B:118:LEU:O	1:B:121:GLN:HB3	2.03	0.58
1:D:132:VAL:HG12	1:D:134:TYR:CE1	2.39	0.58
1:D:256:VAL:O	1:D:260:LYS:HG2	2.04	0.58
1:E:256:VAL:O	1:E:260:LYS:HG2	2.04	0.58
1:F:107:VAL:HG22	1:F:160:ASP:HB2	1.86	0.58
1:G:164:ASP:O	1:G:219:PRO:HD2	2.04	0.58
1:H:256:VAL:O	1:H:260:LYS:HG2	2.04	0.58
1:K:206:ALA:HA	1:K:212:SER:O	2.04	0.58
1:A:224:ARG:O	1:A:227:ARG:HB2	2.03	0.58
1:A:459:ILE:HD12	1:A:459:ILE:H	1.67	0.58
1:D:107:VAL:HG22	1:D:160:ASP:HB2	1.86	0.58
1:D:224:ARG:O	1:D:227:ARG:HB2	2.03	0.58
1:D:504:VAL:HG13	1:D:521:ARG:CD	2.31	0.58
1:H:107:VAL:HG22	1:H:160:ASP:HB2	1.86	0.58
1:I:132:VAL:HG12	1:I:134:TYR:CE1	2.39	0.58
1:I:107:VAL:HG22	1:I:160:ASP:HB2	1.86	0.58
1:K:107:VAL:HG22	1:K:160:ASP:HB2	1.86	0.58
1:K:224:ARG:O	1:K:227:ARG:HB2	2.03	0.58
1:L:164:ASP:O	1:L:219:PRO:HD2	2.04	0.58
1:M:105:VAL:HG11	1:M:157:ARG:HE	1.69	0.58
1:O:118:LEU:O	1:O:121:GLN:HB3	2.03	0.58
1:O:132:VAL:HG12	1:O:134:TYR:CE1	2.39	0.58
1:A:181:VAL:O	1:A:185:GLU:HG3	2.04	0.58
1:A:444:ASP:OD1	1:A:445:ASN:N	2.36	0.58
1:B:105:VAL:HG11	1:B:157:ARG:HE	1.69	0.58
1:B:224:ARG:O	1:B:227:ARG:HB2	2.03	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:256:VAL:O	1:B:260:LYS:HG2	2.04	0.58
1:C:224:ARG:O	1:C:227:ARG:HB2	2.03	0.58
1:C:459:ILE:HG23	1:C:474:THR:C	2.16	0.58
1:D:459:ILE:HG23	1:D:474:THR:C	2.16	0.58
1:H:164:ASP:O	1:H:219:PRO:HD2	2.04	0.58
1:I:459:ILE:HD12	1:I:459:ILE:H	1.67	0.58
1:L:459:ILE:HD12	1:L:459:ILE:H	1.67	0.58
1:M:206:ALA:HA	1:M:212:SER:O	2.04	0.58
1:O:444:ASP:OD1	1:O:445:ASN:N	2.36	0.58
1:O:459:ILE:H	1:O:459:ILE:HD12	1.67	0.58
1:A:107:VAL:HG22	1:A:160:ASP:HB2	1.86	0.57
1:B:107:VAL:HG22	1:B:160:ASP:HB2	1.86	0.57
1:B:459:ILE:HD12	1:B:459:ILE:H	1.67	0.57
1:C:107:VAL:HG22	1:C:160:ASP:HB2	1.86	0.57
1:C:164:ASP:O	1:C:219:PRO:HD2	2.04	0.57
1:D:177:ALA:HB3	1:D:208:GLU:CG	2.33	0.57
1:D:480:VAL:HA	1:D:505:SER:HB2	1.83	0.57
1:F:506:ASN:HD22	1:F:506:ASN:C	2.04	0.57
1:I:206:ALA:HA	1:I:212:SER:O	2.04	0.57
1:I:256:VAL:O	1:I:260:LYS:HG2	2.04	0.57
1:L:224:ARG:O	1:L:227:ARG:HB2	2.03	0.57
1:O:181:VAL:O	1:O:185:GLU:HG3	2.04	0.57
1:A:256:VAL:O	1:A:260:LYS:HG2	2.04	0.57
1:B:132:VAL:HG12	1:B:134:TYR:CE1	2.39	0.57
1:B:181:VAL:O	1:B:185:GLU:HG3	2.04	0.57
1:B:459:ILE:HG23	1:B:474:THR:C	2.16	0.57
1:C:118:LEU:O	1:C:121:GLN:HB3	2.03	0.57
1:K:132:VAL:HG12	1:K:134:TYR:CE1	2.39	0.57
1:L:132:VAL:HG12	1:L:134:TYR:CE1	2.39	0.57
1:L:256:VAL:O	1:L:260:LYS:HG2	2.04	0.57
1:N:107:VAL:HG22	1:N:160:ASP:HB2	1.86	0.57
1:C:105:VAL:HG11	1:C:157:ARG:HE	1.69	0.57
1:E:105:VAL:HG11	1:E:157:ARG:HE	1.69	0.57
1:E:459:ILE:HG23	1:E:474:THR:C	2.16	0.57
1:F:256:VAL:O	1:F:260:LYS:HG2	2.04	0.57
1:H:507:VAL:CA	1:H:518:PHE:HB3	2.35	0.57
1:I:164:ASP:O	1:I:219:PRO:HD2	2.04	0.57
1:K:256:VAL:O	1:K:260:LYS:HG2	2.04	0.57
1:L:506:ASN:HD22	1:L:507:VAL:H	1.51	0.57
1:N:181:VAL:O	1:N:185:GLU:HG3	2.04	0.57
1:O:107:VAL:HG22	1:O:160:ASP:HB2	1.86	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:O:260:LYS:O	1:O:263:SER:OG	2.17	0.57
1:A:164:ASP:O	1:A:219:PRO:HD2	2.04	0.57
1:E:206:ALA:HA	1:E:212:SER:O	2.04	0.57
1:E:507:VAL:CA	1:E:518:PHE:HB3	2.35	0.57
1:I:181:VAL:O	1:I:185:GLU:HG3	2.04	0.57
1:J:164:ASP:O	1:J:219:PRO:HD2	2.04	0.57
1:M:256:VAL:O	1:M:260:LYS:HG2	2.04	0.57
1:N:118:LEU:O	1:N:121:GLN:HB3	2.03	0.57
1:N:132:VAL:HG12	1:N:134:TYR:CE1	2.39	0.57
1:N:256:VAL:O	1:N:260:LYS:HG2	2.04	0.57
1:O:256:VAL:O	1:O:260:LYS:HG2	2.04	0.57
1:A:132:VAL:HG12	1:A:134:TYR:CE1	2.39	0.57
1:A:105:VAL:HG11	1:A:157:ARG:HE	1.69	0.57
1:B:112:VAL:HG21	1:B:140:ILE:HD11	1.87	0.57
1:C:206:ALA:HA	1:C:212:SER:O	2.03	0.57
1:G:181:VAL:O	1:G:185:GLU:HG3	2.04	0.57
1:H:181:VAL:O	1:H:185:GLU:HG3	2.04	0.57
1:J:105:VAL:HG11	1:J:157:ARG:HE	1.69	0.57
1:K:164:ASP:O	1:K:219:PRO:HD2	2.04	0.57
1:K:459:ILE:HD12	1:K:459:ILE:H	1.68	0.57
1:L:206:ALA:HA	1:L:212:SER:O	2.04	0.57
1:C:112:VAL:HG21	1:C:140:ILE:HD11	1.87	0.57
1:F:181:VAL:O	1:F:185:GLU:HG3	2.04	0.57
1:G:132:VAL:HG12	1:G:134:TYR:CE1	2.39	0.57
1:J:181:VAL:O	1:J:185:GLU:HG3	2.04	0.57
1:K:181:VAL:O	1:K:185:GLU:HG3	2.04	0.57
1:A:112:VAL:HG21	1:A:140:ILE:HD11	1.87	0.57
1:D:112:VAL:HG21	1:D:140:ILE:HD11	1.87	0.57
1:F:132:VAL:HG12	1:F:134:TYR:CE1	2.39	0.57
1:G:105:VAL:HG11	1:G:157:ARG:HE	1.69	0.57
1:H:132:VAL:HG12	1:H:134:TYR:CE1	2.39	0.57
1:J:206:ALA:HA	1:J:212:SER:O	2.04	0.57
1:J:256:VAL:O	1:J:260:LYS:HG2	2.04	0.57
1:L:105:VAL:HG11	1:L:157:ARG:HE	1.69	0.57
1:O:206:ALA:HA	1:O:212:SER:O	2.04	0.57
1:D:507:VAL:CA	1:D:518:PHE:HB3	2.35	0.57
1:E:181:VAL:O	1:E:185:GLU:HG3	2.04	0.57
1:E:259:LEU:HD11	1:E:310:ILE:HG13	1.87	0.57
1:G:256:VAL:O	1:G:260:LYS:HG2	2.04	0.57
1:H:259:LEU:HD11	1:H:310:ILE:HG13	1.86	0.57
1:J:132:VAL:HG12	1:J:134:TYR:CE1	2.39	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:105:VAL:HG11	1:K:157:ARG:HE	1.69	0.57
1:M:181:VAL:O	1:M:185:GLU:HG3	2.04	0.57
1:N:105:VAL:HG11	1:N:157:ARG:HE	1.69	0.57
1:O:112:VAL:HG21	1:O:140:ILE:HD11	1.87	0.57
1:C:456:VAL:CG2	1:C:457:PRO:CD	2.83	0.57
1:G:259:LEU:HD11	1:G:310:ILE:HG13	1.87	0.57
1:G:507:VAL:CA	1:G:518:PHE:HB3	2.35	0.57
1:I:506:ASN:HD22	1:I:507:VAL:H	1.50	0.57
1:L:181:VAL:O	1:L:185:GLU:HG3	2.04	0.57
1:M:112:VAL:HG21	1:M:140:ILE:HD11	1.87	0.57
1:N:112:VAL:HG21	1:N:140:ILE:HD11	1.87	0.57
1:B:164:ASP:O	1:B:219:PRO:HD2	2.04	0.57
1:C:181:VAL:O	1:C:185:GLU:HG3	2.04	0.57
1:D:105:VAL:HG11	1:D:157:ARG:HE	1.69	0.57
1:G:506:ASN:C	1:G:506:ASN:HD22	2.04	0.57
1:H:105:VAL:HG11	1:H:157:ARG:HE	1.69	0.57
1:I:172:LEU:HG	1:I:212:SER:HA	1.87	0.57
1:J:172:LEU:HG	1:J:212:SER:HA	1.87	0.57
1:K:507:VAL:CA	1:K:518:PHE:HB3	2.35	0.57
1:L:112:VAL:HG21	1:L:140:ILE:HD11	1.87	0.57
1:A:121:GLN:O	1:A:125:ASN:N	2.33	0.56
1:B:507:VAL:CA	1:B:518:PHE:HB3	2.35	0.56
1:D:259:LEU:HD11	1:D:310:ILE:HG13	1.87	0.56
1:D:456:VAL:CG2	1:D:457:PRO:CD	2.83	0.56
1:E:112:VAL:HG21	1:E:140:ILE:HD11	1.87	0.56
1:E:132:VAL:HG12	1:E:134:TYR:CE1	2.39	0.56
1:F:259:LEU:HD11	1:F:310:ILE:HG13	1.87	0.56
1:G:456:VAL:CG2	1:G:457:PRO:CD	2.83	0.56
1:I:259:LEU:HD11	1:I:310:ILE:HG13	1.87	0.56
1:J:180:MET:HE2	1:J:213:ILE:HD11	1.85	0.56
1:K:172:LEU:HG	1:K:212:SER:HA	1.87	0.56
1:L:172:LEU:HG	1:L:212:SER:HA	1.87	0.56
1:M:121:GLN:O	1:M:125:ASN:N	2.33	0.56
1:D:506:ASN:HD22	1:D:507:VAL:H	1.51	0.56
1:F:121:GLN:O	1:F:125:ASN:N	2.33	0.56
1:O:456:VAL:CG2	1:O:457:PRO:CD	2.83	0.56
1:B:121:GLN:O	1:B:125:ASN:N	2.33	0.56
1:C:506:ASN:C	1:C:506:ASN:HD22	2.04	0.56
1:E:506:ASN:C	1:E:506:ASN:HD22	2.04	0.56
1:F:456:VAL:CG2	1:F:457:PRO:CD	2.83	0.56
1:H:172:LEU:HG	1:H:212:SER:HA	1.87	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:M:172:LEU:HG	1:M:212:SER:HA	1.87	0.56
1:N:172:LEU:HG	1:N:212:SER:HA	1.87	0.56
1:A:504:VAL:CG1	1:A:521:ARG:CG	2.83	0.56
1:C:259:LEU:HD11	1:C:310:ILE:HG13	1.87	0.56
1:D:181:VAL:O	1:D:185:GLU:HG3	2.04	0.56
1:F:481:GLY:H	1:F:505:SER:HB3	0.42	0.56
1:K:112:VAL:HG21	1:K:140:ILE:HD11	1.87	0.56
1:K:330:ALA:HB3	1:K:432:SER:HB3	1.88	0.56
1:L:330:ALA:HB3	1:L:432:SER:HB3	1.88	0.56
1:A:260:LYS:O	1:A:263:SER:OG	2.17	0.56
1:D:504:VAL:CG1	1:D:521:ARG:CG	2.83	0.56
1:F:112:VAL:HG21	1:F:140:ILE:HD11	1.87	0.56
1:J:259:LEU:HD11	1:J:310:ILE:HG13	1.87	0.56
1:J:507:VAL:CA	1:J:518:PHE:HB3	2.35	0.56
1:M:132:VAL:HG12	1:M:134:TYR:CE1	2.39	0.56
1:M:259:LEU:HD11	1:M:310:ILE:HG13	1.87	0.56
1:O:172:LEU:HG	1:O:212:SER:HA	1.87	0.56
1:A:456:VAL:CG2	1:A:457:PRO:CD	2.83	0.56
1:B:456:VAL:CG2	1:B:457:PRO:CD	2.83	0.56
1:J:112:VAL:HG21	1:J:140:ILE:HD11	1.87	0.56
1:N:259:LEU:HD11	1:N:310:ILE:HG13	1.87	0.56
1:N:507:VAL:CA	1:N:518:PHE:HB3	2.35	0.56
1:O:259:LEU:HD11	1:O:310:ILE:HG13	1.87	0.56
1:A:172:LEU:HG	1:A:212:SER:HA	1.87	0.56
1:A:259:LEU:HD11	1:A:310:ILE:HG13	1.87	0.56
1:A:507:VAL:CA	1:A:518:PHE:HB3	2.35	0.56
1:C:330:ALA:HB3	1:C:432:SER:HB3	1.88	0.56
1:C:504:VAL:CG1	1:C:521:ARG:CG	2.83	0.56
1:D:215:ILE:HD11	1:D:225:LEU:HD13	1.88	0.56
1:D:330:ALA:HB3	1:D:432:SER:HB3	1.88	0.56
1:E:215:ILE:HD11	1:E:225:LEU:HD13	1.88	0.56
1:F:105:VAL:HG11	1:F:157:ARG:HE	1.69	0.56
1:H:456:VAL:CG2	1:H:457:PRO:CD	2.83	0.56
1:I:207:ASP:OD1	1:I:209:ARG:N	2.33	0.56
1:J:330:ALA:HB3	1:J:432:SER:HB3	1.88	0.56
1:O:121:GLN:O	1:O:125:ASN:N	2.33	0.56
1:A:506:ASN:HD22	1:A:507:VAL:H	1.50	0.56
1:D:481:GLY:N	1:D:505:SER:OG	2.23	0.56
1:J:207:ASP:OD1	1:J:209:ARG:N	2.33	0.56
1:L:259:LEU:HD11	1:L:310:ILE:HG13	1.87	0.56
1:M:330:ALA:HB3	1:M:432:SER:HB3	1.88	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:N:456:VAL:CG2	1:N:457:PRO:CD	2.83	0.56
1:C:215:ILE:HD11	1:C:225:LEU:HD13	1.88	0.56
1:D:521:ARG:N	1:D:521:ARG:HD3	2.21	0.56
1:E:330:ALA:HB3	1:E:432:SER:HB3	1.88	0.56
1:E:456:VAL:CG2	1:E:457:PRO:CD	2.83	0.56
1:F:215:ILE:HD11	1:F:225:LEU:HD13	1.88	0.56
1:F:521:ARG:N	1:F:521:ARG:HD3	2.21	0.56
1:G:172:LEU:HG	1:G:212:SER:HA	1.87	0.56
1:G:506:ASN:HD22	1:G:507:VAL:H	1.50	0.56
1:O:504:VAL:CG1	1:O:521:ARG:CG	2.83	0.56
1:O:506:ASN:HD22	1:O:507:VAL:H	1.50	0.56
1:H:521:ARG:HD3	1:H:521:ARG:N	2.21	0.56
1:J:521:ARG:HD3	1:J:521:ARG:N	2.21	0.56
1:L:521:ARG:N	1:L:521:ARG:HD3	2.21	0.56
1:B:172:LEU:HG	1:B:212:SER:HA	1.87	0.56
1:B:259:LEU:HD11	1:B:310:ILE:HG13	1.87	0.56
1:B:330:ALA:HB3	1:B:432:SER:HB3	1.88	0.56
1:B:504:VAL:CG1	1:B:521:ARG:CG	2.83	0.56
1:B:521:ARG:N	1:B:521:ARG:HD3	2.21	0.56
1:C:207:ASP:O	1:C:211:ASN:CA	2.55	0.56
1:C:481:GLY:H	1:C:505:SER:HB3	0.42	0.56
1:G:112:VAL:HG21	1:G:140:ILE:HD11	1.87	0.56
1:I:112:VAL:HG21	1:I:140:ILE:HD11	1.87	0.56
1:I:330:ALA:HB3	1:I:432:SER:HB3	1.88	0.56
1:C:121:GLN:O	1:C:125:ASN:N	2.33	0.55
1:G:215:ILE:HD11	1:G:225:LEU:HD13	1.88	0.55
1:J:207:ASP:O	1:J:211:ASN:CA	2.54	0.55
1:K:207:ASP:OD1	1:K:209:ARG:N	2.33	0.55
1:K:259:LEU:HD11	1:K:310:ILE:HG13	1.87	0.55
1:L:207:ASP:O	1:L:211:ASN:CA	2.54	0.55
1:L:507:VAL:CA	1:L:518:PHE:HB3	2.35	0.55
1:C:172:LEU:HG	1:C:212:SER:HA	1.87	0.55
1:B:609:PHE:CE2	1:C:639:ILE:HD11	2.42	0.55
1:E:207:ASP:O	1:E:211:ASN:CA	2.54	0.55
1:E:177:ALA:HB3	1:E:208:GLU:HG2	1.89	0.55
1:I:504:VAL:CG1	1:I:521:ARG:CG	2.83	0.55
1:J:456:VAL:CG2	1:J:457:PRO:CD	2.83	0.55
1:K:456:VAL:CG2	1:K:457:PRO:CD	2.83	0.55
1:L:481:GLY:H	1:L:505:SER:HB3	0.41	0.55
1:M:207:ASP:O	1:M:211:ASN:CA	2.54	0.55
1:M:507:VAL:CA	1:M:518:PHE:HB3	2.35	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:N:207:ASP:O	1:N:211:ASN:CA	2.54	0.55
1:N:521:ARG:HD3	1:N:521:ARG:N	2.21	0.55
1:B:215:ILE:HD11	1:B:225:LEU:HD13	1.88	0.55
1:E:521:ARG:N	1:E:521:ARG:HD3	2.21	0.55
1:F:609:PHE:CE2	1:G:639:ILE:HD11	2.42	0.55
1:H:112:VAL:HG21	1:H:140:ILE:HD11	1.87	0.55
1:I:105:VAL:HG11	1:I:157:ARG:HE	1.69	0.55
1:I:481:GLY:N	1:I:505:SER:OG	2.23	0.55
1:K:207:ASP:O	1:K:211:ASN:CA	2.55	0.55
1:K:521:ARG:N	1:K:521:ARG:HD3	2.21	0.55
1:O:207:ASP:O	1:O:211:ASN:CA	2.55	0.55
1:A:207:ASP:O	1:A:211:ASN:CA	2.54	0.55
1:A:521:ARG:N	1:A:521:ARG:HD3	2.21	0.55
1:C:507:VAL:CA	1:C:518:PHE:HB3	2.35	0.55
1:C:609:PHE:CE2	1:D:639:ILE:HD11	2.42	0.55
1:D:121:GLN:O	1:D:125:ASN:N	2.33	0.55
1:F:172:LEU:HG	1:F:212:SER:HA	1.87	0.55
1:F:507:VAL:CA	1:F:518:PHE:HB3	2.35	0.55
1:G:207:ASP:O	1:G:211:ASN:CA	2.54	0.55
1:H:207:ASP:O	1:H:211:ASN:CA	2.54	0.55
1:E:121:GLN:O	1:E:125:ASN:N	2.33	0.55
1:E:609:PHE:CE2	1:F:639:ILE:HD11	2.42	0.55
1:F:330:ALA:HB3	1:F:432:SER:HB3	1.88	0.55
1:H:330:ALA:HB3	1:H:432:SER:HB3	1.88	0.55
1:I:456:VAL:CG2	1:I:457:PRO:CD	2.83	0.55
1:I:521:ARG:N	1:I:521:ARG:HD3	2.21	0.55
1:L:456:VAL:CG2	1:L:457:PRO:CD	2.83	0.55
1:N:330:ALA:HB3	1:N:432:SER:HB3	1.88	0.55
1:A:330:ALA:HB3	1:A:432:SER:HB3	1.88	0.55
1:B:207:ASP:O	1:B:211:ASN:CA	2.54	0.55
1:C:521:ARG:N	1:C:521:ARG:HD3	2.21	0.55
1:D:172:LEU:HG	1:D:212:SER:HA	1.87	0.55
1:E:207:ASP:OD1	1:E:209:ARG:N	2.33	0.55
1:E:504:VAL:CG1	1:E:521:ARG:CG	2.83	0.55
1:G:521:ARG:HD3	1:G:521:ARG:N	2.21	0.55
1:H:215:ILE:HD11	1:H:225:LEU:HD13	1.88	0.55
1:I:207:ASP:O	1:I:211:ASN:CA	2.55	0.55
1:I:215:ILE:HD11	1:I:225:LEU:HD13	1.88	0.55
1:I:481:GLY:H	1:I:505:SER:HB3	0.42	0.55
1:A:215:ILE:HD11	1:A:225:LEU:HD13	1.88	0.55
1:D:177:ALA:HB3	1:D:208:GLU:HG2	1.89	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:172:LEU:HG	1:E:212:SER:HA	1.87	0.55
1:M:504:VAL:CG1	1:M:521:ARG:CG	2.83	0.55
1:A:609:PHE:CE2	1:B:639:ILE:HD11	2.42	0.55
1:H:177:ALA:HB3	1:H:208:GLU:HG2	1.89	0.55
1:M:456:VAL:CG2	1:M:457:PRO:CD	2.83	0.55
1:O:481:GLY:H	1:O:505:SER:HB3	0.42	0.55
1:O:521:ARG:N	1:O:521:ARG:HD3	2.21	0.55
1:C:207:ASP:OD1	1:C:209:ARG:N	2.33	0.55
1:F:207:ASP:O	1:F:211:ASN:CA	2.55	0.55
1:F:504:VAL:CG1	1:F:521:ARG:CG	2.83	0.55
1:G:330:ALA:HB3	1:G:432:SER:HB3	1.88	0.55
1:J:506:ASN:HD22	1:J:507:VAL:H	1.51	0.55
1:M:506:ASN:HD22	1:M:507:VAL:H	1.50	0.55
1:F:177:ALA:HB3	1:F:208:GLU:HG2	1.89	0.55
1:J:215:ILE:HD11	1:J:225:LEU:HD13	1.88	0.55
1:M:215:ILE:HD11	1:M:225:LEU:HD13	1.88	0.55
1:N:504:VAL:CG1	1:N:521:ARG:CG	2.83	0.55
1:O:215:ILE:HD11	1:O:225:LEU:HD13	1.88	0.55
1:O:507:VAL:CA	1:O:518:PHE:HB3	2.35	0.55
1:A:177:ALA:HB3	1:A:208:GLU:HG2	1.89	0.54
1:B:177:ALA:HB3	1:B:208:GLU:HG2	1.89	0.54
1:D:207:ASP:O	1:D:211:ASN:CA	2.54	0.54
1:F:183:ILE:HD12	1:F:232:LEU:HD13	1.89	0.54
1:N:121:GLN:O	1:N:125:ASN:N	2.33	0.54
1:G:183:ILE:HD12	1:G:232:LEU:HD13	1.89	0.54
1:G:504:VAL:CG1	1:G:521:ARG:CG	2.83	0.54
1:I:177:ALA:HB3	1:I:208:GLU:HG2	1.89	0.54
1:L:121:GLN:O	1:L:125:ASN:N	2.33	0.54
1:N:215:ILE:HD11	1:N:225:LEU:HD13	1.88	0.54
1:A:504:VAL:CG1	1:A:521:ARG:CD	2.86	0.54
1:A:639:ILE:HD11	1:O:609:PHE:CE2	2.42	0.54
1:B:504:VAL:CG1	1:B:521:ARG:CD	2.86	0.54
1:D:259:LEU:HD11	1:D:310:ILE:CG1	2.38	0.54
1:E:259:LEU:HD11	1:E:310:ILE:CG1	2.38	0.54
1:H:183:ILE:HD12	1:H:232:LEU:HD13	1.89	0.54
1:O:183:ILE:HD12	1:O:232:LEU:HD13	1.89	0.54
1:C:259:LEU:HD11	1:C:310:ILE:CG1	2.38	0.54
1:G:177:ALA:HB3	1:G:208:GLU:HG2	1.89	0.54
1:I:507:VAL:CA	1:I:518:PHE:HB3	2.35	0.54
1:K:215:ILE:HD11	1:K:225:LEU:HD13	1.88	0.54
1:L:215:ILE:HD11	1:L:225:LEU:HD13	1.88	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:183:ILE:HD12	1:A:232:LEU:HD13	1.89	0.54
1:E:183:ILE:HD12	1:E:232:LEU:HD13	1.89	0.54
1:D:609:PHE:CE2	1:E:639:ILE:HD11	2.42	0.54
1:G:132:VAL:HA	1:G:141:LEU:O	2.08	0.54
1:H:132:VAL:HA	1:H:141:LEU:O	2.08	0.54
1:K:259:LEU:HD11	1:K:310:ILE:CG1	2.38	0.54
1:L:259:LEU:HD11	1:L:310:ILE:CG1	2.38	0.54
1:O:330:ALA:HB3	1:O:432:SER:HB3	1.88	0.54
1:C:504:VAL:CG1	1:C:521:ARG:CD	2.86	0.54
1:I:504:VAL:CG1	1:I:521:ARG:CD	2.86	0.54
1:K:481:GLY:H	1:K:505:SER:HB3	0.42	0.54
1:N:132:VAL:HA	1:N:141:LEU:O	2.08	0.54
1:F:132:VAL:HA	1:F:141:LEU:O	2.08	0.54
1:F:259:LEU:HD11	1:F:310:ILE:CG1	2.38	0.54
1:H:259:LEU:HD11	1:H:310:ILE:CG1	2.38	0.54
1:I:132:VAL:HA	1:I:141:LEU:O	2.08	0.54
1:M:132:VAL:HA	1:M:141:LEU:O	2.08	0.54
1:M:259:LEU:HD11	1:M:310:ILE:CG1	2.38	0.54
1:M:521:ARG:N	1:M:521:ARG:HD3	2.21	0.54
1:N:183:ILE:HD12	1:N:232:LEU:HD13	1.89	0.54
1:N:259:LEU:HD11	1:N:310:ILE:CG1	2.38	0.54
1:O:259:LEU:HD11	1:O:310:ILE:CG1	2.38	0.54
1:C:132:VAL:HA	1:C:141:LEU:O	2.08	0.54
1:J:259:LEU:HD11	1:J:310:ILE:CG1	2.38	0.54
1:J:459:ILE:CA	1:J:474:THR:O	2.55	0.54
1:L:504:VAL:CG1	1:L:521:ARG:CG	2.83	0.54
1:L:609:PHE:CE2	1:M:639:ILE:HD11	2.42	0.54
1:N:481:GLY:H	1:N:505:SER:HB3	0.42	0.54
1:O:504:VAL:CG1	1:O:521:ARG:CD	2.86	0.54
1:B:183:ILE:HD12	1:B:232:LEU:HD13	1.89	0.54
1:B:259:LEU:HD11	1:B:310:ILE:CG1	2.38	0.54
1:D:183:ILE:HD12	1:D:232:LEU:HD13	1.89	0.54
1:J:609:PHE:CE2	1:K:639:ILE:HD11	2.42	0.54
1:O:177:ALA:HB3	1:O:208:GLU:HG2	1.89	0.54
1:F:207:ASP:OD1	1:F:209:ARG:N	2.33	0.54
1:G:259:LEU:HD11	1:G:310:ILE:CG1	2.38	0.54
1:J:177:ALA:HB3	1:J:208:GLU:HG2	1.89	0.54
1:L:177:ALA:HB3	1:L:208:GLU:HG2	1.89	0.54
1:B:132:VAL:HA	1:B:141:LEU:O	2.08	0.53
1:C:177:ALA:HB3	1:C:208:GLU:HG2	1.89	0.53
1:I:183:ILE:HD12	1:I:232:LEU:HD13	1.89	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:J:504:VAL:CG1	1:J:521:ARG:CD	2.86	0.53
1:J:504:VAL:CG1	1:J:521:ARG:CG	2.83	0.53
1:M:183:ILE:HD12	1:M:232:LEU:HD13	1.89	0.53
1:N:177:ALA:HB3	1:N:208:GLU:HG2	1.89	0.53
1:C:481:GLY:N	1:C:505:SER:OG	2.23	0.53
1:G:504:VAL:CG1	1:G:521:ARG:CD	2.86	0.53
1:H:481:GLY:H	1:H:505:SER:HB3	0.42	0.53
1:H:609:PHE:CE2	1:I:639:ILE:HD11	2.42	0.53
1:K:177:ALA:HB3	1:K:208:GLU:HG2	1.89	0.53
1:B:508:LEU:N	1:B:508:LEU:CD1	2.72	0.53
1:E:508:LEU:CD1	1:E:508:LEU:N	2.72	0.53
1:H:504:VAL:CG1	1:H:521:ARG:CD	2.86	0.53
1:I:259:LEU:HD11	1:I:310:ILE:CG1	2.38	0.53
1:J:132:VAL:HA	1:J:141:LEU:O	2.08	0.53
1:M:504:VAL:CG1	1:M:521:ARG:CD	2.86	0.53
1:N:180:MET:HE2	1:N:213:ILE:HD11	1.89	0.53
1:O:132:VAL:HA	1:O:141:LEU:O	2.08	0.53
1:C:183:ILE:HD12	1:C:232:LEU:HD13	1.89	0.53
1:D:504:VAL:CG1	1:D:521:ARG:CD	2.86	0.53
1:F:504:VAL:CG1	1:F:521:ARG:CD	2.86	0.53
1:L:132:VAL:HA	1:L:141:LEU:O	2.08	0.53
1:L:504:VAL:CG1	1:L:521:ARG:CD	2.86	0.53
1:C:508:LEU:N	1:C:508:LEU:CD1	2.72	0.53
1:D:132:VAL:HA	1:D:141:LEU:O	2.08	0.53
1:K:504:VAL:CG1	1:K:521:ARG:CD	2.86	0.53
1:M:177:ALA:HB3	1:M:208:GLU:HG2	1.89	0.53
1:M:459:ILE:CA	1:M:474:THR:O	2.55	0.53
1:B:481:GLY:H	1:B:505:SER:HB3	0.42	0.53
1:C:155:ILE:HG12	1:C:158:ARG:NH2	2.24	0.53
1:D:142:ILE:HG22	1:D:149:VAL:HG22	1.91	0.53
1:E:504:VAL:CG1	1:E:521:ARG:CD	2.86	0.53
1:G:508:LEU:CD1	1:G:508:LEU:N	2.72	0.53
1:J:155:ILE:HG12	1:J:158:ARG:NH2	2.24	0.53
1:L:142:ILE:HG22	1:L:149:VAL:HG22	1.91	0.53
1:N:504:VAL:CG1	1:N:521:ARG:CD	2.86	0.53
1:O:508:LEU:N	1:O:508:LEU:CD1	2.72	0.53
1:A:259:LEU:HD11	1:A:310:ILE:CG1	2.38	0.53
1:A:508:LEU:N	1:A:508:LEU:CD1	2.72	0.53
1:C:174:ASN:HB2	1:C:233:ASP:O	2.09	0.53
1:E:132:VAL:HA	1:E:141:LEU:O	2.08	0.53
1:E:142:ILE:HG22	1:E:149:VAL:HG22	1.91	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:504:VAL:CG1	1:H:521:ARG:CG	2.83	0.53
1:I:609:PHE:CE2	1:J:639:ILE:HD11	2.42	0.53
1:B:142:ILE:HG22	1:B:149:VAL:HG22	1.91	0.53
1:F:155:ILE:HG12	1:F:158:ARG:NH2	2.24	0.53
1:G:174:ASN:HB2	1:G:233:ASP:O	2.09	0.53
1:H:142:ILE:HG22	1:H:149:VAL:HG22	1.91	0.53
1:I:142:ILE:HG22	1:I:149:VAL:HG22	1.91	0.53
1:I:155:ILE:HG12	1:I:158:ARG:NH2	2.24	0.53
1:J:183:ILE:HD12	1:J:232:LEU:HD13	1.89	0.53
1:K:142:ILE:HG22	1:K:149:VAL:HG22	1.91	0.53
1:K:155:ILE:HG12	1:K:158:ARG:NH2	2.24	0.53
1:L:609:PHE:CD2	1:M:639:ILE:CD1	2.75	0.53
1:D:174:ASN:HB2	1:D:233:ASP:O	2.09	0.53
1:G:345:GLU:OE2	1:G:418:ASP:OD2	2.27	0.53
1:H:174:ASN:HB2	1:H:233:ASP:O	2.09	0.53
1:I:459:ILE:CA	1:I:474:THR:O	2.55	0.53
1:K:183:ILE:HD12	1:K:232:LEU:HD13	1.89	0.53
1:K:609:PHE:CE2	1:L:639:ILE:HD11	2.42	0.53
1:N:609:PHE:CE2	1:O:639:ILE:HD11	2.42	0.53
1:D:508:LEU:N	1:D:508:LEU:CD1	2.72	0.53
1:E:155:ILE:HG12	1:E:158:ARG:NH2	2.24	0.53
1:F:142:ILE:HG22	1:F:149:VAL:HG22	1.91	0.53
1:F:345:GLU:OE2	1:F:418:ASP:OD2	2.27	0.53
1:H:155:ILE:HG12	1:H:158:ARG:NH2	2.24	0.53
1:H:345:GLU:OE2	1:H:418:ASP:OD2	2.27	0.53
1:K:132:VAL:HA	1:K:141:LEU:O	2.08	0.53
1:K:504:VAL:CG1	1:K:521:ARG:CG	2.83	0.53
1:L:155:ILE:HG12	1:L:158:ARG:NH2	2.24	0.53
1:M:142:ILE:HG22	1:M:149:VAL:HG22	1.91	0.53
1:N:142:ILE:HG22	1:N:149:VAL:HG22	1.91	0.53
1:E:481:GLY:H	1:E:505:SER:HB3	0.42	0.52
1:G:142:ILE:HG22	1:G:149:VAL:HG22	1.91	0.52
1:H:223:GLU:O	1:H:227:ARG:HG3	2.10	0.52
1:G:609:PHE:CE2	1:H:639:ILE:HD11	2.42	0.52
1:J:142:ILE:HG22	1:J:149:VAL:HG22	1.91	0.52
1:N:174:ASN:HB2	1:N:233:ASP:O	2.09	0.52
1:O:142:ILE:HG22	1:O:149:VAL:HG22	1.91	0.52
1:A:132:VAL:HA	1:A:141:LEU:O	2.08	0.52
1:A:142:ILE:HG22	1:A:149:VAL:HG22	1.91	0.52
1:A:626:LEU:HD23	1:O:435:LEU:HD21	1.91	0.52
1:C:142:ILE:HG22	1:C:149:VAL:HG22	1.91	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:345:GLU:OE2	1:E:418:ASP:OD2	2.27	0.52
1:G:108:LYS:HA	1:G:138:ASN:HD21	1.75	0.52
1:I:223:GLU:O	1:I:227:ARG:HG3	2.09	0.52
1:K:174:ASN:HB2	1:K:233:ASP:O	2.09	0.52
1:L:183:ILE:HD12	1:L:232:LEU:HD13	1.89	0.52
1:M:174:ASN:HB2	1:M:233:ASP:O	2.09	0.52
1:A:223:GLU:O	1:A:227:ARG:HG3	2.10	0.52
1:B:174:ASN:HB2	1:B:233:ASP:O	2.09	0.52
1:D:155:ILE:HG12	1:D:158:ARG:NH2	2.24	0.52
1:G:155:ILE:HG12	1:G:158:ARG:NH2	2.24	0.52
1:H:163:GLY:O	1:H:165:LYS:HG3	2.10	0.52
1:I:345:GLU:OE2	1:I:418:ASP:OD2	2.27	0.52
1:L:180:MET:HE2	1:L:213:ILE:HD11	1.90	0.52
1:M:508:LEU:N	1:M:508:LEU:CD1	2.72	0.52
1:N:223:GLU:O	1:N:227:ARG:HG3	2.10	0.52
1:O:174:ASN:HB2	1:O:233:ASP:O	2.09	0.52
1:A:104:VAL:HA	1:A:140:ILE:O	2.10	0.52
1:A:155:ILE:HG12	1:A:158:ARG:NH2	2.24	0.52
1:A:109:ASN:ND2	1:A:160:ASP:O	2.43	0.52
1:A:163:GLY:O	1:A:165:LYS:HG3	2.10	0.52
1:A:174:ASN:HB2	1:A:233:ASP:O	2.09	0.52
1:A:435:LEU:HD21	1:B:626:LEU:HD23	1.91	0.52
1:A:459:ILE:CA	1:A:474:THR:O	2.55	0.52
1:B:109:ASN:ND2	1:B:160:ASP:O	2.43	0.52
1:C:104:VAL:HA	1:C:140:ILE:O	2.10	0.52
1:D:108:LYS:HA	1:D:138:ASN:HD21	1.75	0.52
1:D:207:ASP:OD1	1:D:209:ARG:N	2.33	0.52
1:F:508:LEU:N	1:F:508:LEU:CD1	2.72	0.52
1:H:105:VAL:O	1:H:140:ILE:CB	2.49	0.52
1:I:435:LEU:HD21	1:J:626:LEU:HD23	1.91	0.52
1:I:508:LEU:N	1:I:508:LEU:CD1	2.72	0.52
1:J:345:GLU:OE2	1:J:418:ASP:OD2	2.27	0.52
1:J:521:ARG:CD	1:J:521:ARG:N	2.73	0.52
1:L:174:ASN:HB2	1:L:233:ASP:O	2.09	0.52
1:M:140:ILE:HD13	1:M:156:ILE:CG2	2.40	0.52
1:M:155:ILE:HG12	1:M:158:ARG:NH2	2.24	0.52
1:M:481:GLY:H	1:M:505:SER:HB3	0.41	0.52
1:N:435:LEU:HD21	1:O:626:LEU:HD23	1.91	0.52
1:O:207:ASP:OD1	1:O:209:ARG:N	2.33	0.52
1:A:140:ILE:HD13	1:A:156:ILE:CG2	2.40	0.52
1:B:104:VAL:HA	1:B:140:ILE:O	2.10	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:223:GLU:O	1:B:227:ARG:HG3	2.10	0.52
1:C:109:ASN:ND2	1:C:160:ASP:O	2.43	0.52
1:D:104:VAL:HA	1:D:140:ILE:O	2.10	0.52
1:E:506:ASN:HD22	1:E:507:VAL:H	1.51	0.52
1:G:223:GLU:O	1:G:227:ARG:HG3	2.10	0.52
1:G:640:GLN:NE2	1:G:643:ILE:CG2	2.73	0.52
1:H:109:ASN:ND2	1:H:160:ASP:O	2.43	0.52
1:I:109:ASN:ND2	1:I:160:ASP:O	2.43	0.52
1:J:109:ASN:ND2	1:J:160:ASP:O	2.43	0.52
1:J:163:GLY:O	1:J:165:LYS:HG3	2.10	0.52
1:K:108:LYS:HA	1:K:138:ASN:HD21	1.75	0.52
1:K:121:GLN:O	1:K:125:ASN:N	2.33	0.52
1:K:109:ASN:ND2	1:K:160:ASP:O	2.43	0.52
1:J:435:LEU:HD21	1:K:626:LEU:HD23	1.91	0.52
1:M:223:GLU:O	1:M:227:ARG:HG3	2.10	0.52
1:N:104:VAL:HA	1:N:140:ILE:O	2.10	0.52
1:N:122:LEU:HD23	1:N:125:ASN:ND2	2.19	0.52
1:N:508:LEU:N	1:N:508:LEU:CD1	2.72	0.52
1:O:163:GLY:O	1:O:165:LYS:HG3	2.10	0.52
1:O:223:GLU:O	1:O:227:ARG:HG3	2.10	0.52
1:B:163:GLY:O	1:B:165:LYS:HG3	2.10	0.52
1:C:221:VAL:HG22	1:C:224:ARG:HH21	1.75	0.52
1:C:223:GLU:O	1:C:227:ARG:HG3	2.10	0.52
1:D:223:GLU:O	1:D:227:ARG:HG3	2.10	0.52
1:D:521:ARG:CD	1:D:521:ARG:N	2.73	0.52
1:E:163:GLY:O	1:E:165:LYS:HG3	2.10	0.52
1:E:521:ARG:CD	1:E:521:ARG:N	2.73	0.52
1:F:174:ASN:HB2	1:F:233:ASP:O	2.09	0.52
1:G:109:ASN:ND2	1:G:160:ASP:O	2.43	0.52
1:G:207:ASP:OD1	1:G:209:ARG:N	2.33	0.52
1:H:108:LYS:HA	1:H:138:ASN:HD21	1.75	0.52
1:I:521:ARG:N	1:I:521:ARG:CD	2.73	0.52
1:I:640:GLN:NE2	1:I:643:ILE:CG2	2.73	0.52
1:J:108:LYS:HA	1:J:138:ASN:HD21	1.75	0.52
1:J:174:ASN:HB2	1:J:233:ASP:O	2.09	0.52
1:J:481:GLY:H	1:J:505:SER:HB3	0.42	0.52
1:K:345:GLU:OE2	1:K:418:ASP:OD2	2.27	0.52
1:K:521:ARG:N	1:K:521:ARG:CD	2.73	0.52
1:L:508:LEU:N	1:L:508:LEU:CD1	2.72	0.52
1:N:155:ILE:HG12	1:N:158:ARG:NH2	2.24	0.52
1:O:104:VAL:HA	1:O:140:ILE:O	2.10	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:477:ARG:CG	1:A:477:ARG:NH1	2.73	0.52
1:A:640:GLN:NE2	1:A:643:ILE:CG2	2.73	0.52
1:B:506:ASN:HD22	1:B:507:VAL:H	1.51	0.52
1:B:640:GLN:NE2	1:B:643:ILE:CG2	2.73	0.52
1:D:345:GLU:OE2	1:D:418:ASP:OD2	2.27	0.52
1:F:163:GLY:O	1:F:165:LYS:HG3	2.10	0.52
1:G:122:LEU:HD23	1:G:125:ASN:ND2	2.19	0.52
1:K:508:LEU:CD1	1:K:508:LEU:N	2.72	0.52
1:K:640:GLN:NE2	1:K:643:ILE:CG2	2.73	0.52
1:M:224:ARG:HA	1:M:227:ARG:HD2	1.92	0.52
1:N:640:GLN:NE2	1:N:643:ILE:CG2	2.73	0.52
1:O:109:ASN:ND2	1:O:160:ASP:O	2.43	0.52
1:D:109:ASN:ND2	1:D:160:ASP:O	2.43	0.52
1:D:640:GLN:NE2	1:D:643:ILE:CG2	2.73	0.52
1:F:223:GLU:O	1:F:227:ARG:HG3	2.10	0.52
1:F:640:GLN:NE2	1:F:643:ILE:CG2	2.73	0.52
1:G:163:GLY:O	1:G:165:LYS:HG3	2.10	0.52
1:J:508:LEU:N	1:J:508:LEU:CD1	2.72	0.52
1:K:163:GLY:O	1:K:165:LYS:HG3	2.10	0.52
1:L:109:ASN:ND2	1:L:160:ASP:O	2.43	0.52
1:L:163:GLY:O	1:L:165:LYS:HG3	2.10	0.52
1:N:224:ARG:HA	1:N:227:ARG:HD2	1.92	0.52
1:O:221:VAL:HG22	1:O:224:ARG:HH21	1.75	0.52
1:A:481:GLY:H	1:A:505:SER:HB3	0.42	0.52
1:B:140:ILE:HD13	1:B:156:ILE:CG2	2.40	0.52
1:C:345:GLU:OE2	1:C:418:ASP:OD2	2.27	0.52
1:C:521:ARG:N	1:C:521:ARG:CD	2.73	0.52
1:E:104:VAL:HA	1:E:140:ILE:O	2.10	0.52
1:E:640:GLN:NE2	1:E:643:ILE:CG2	2.73	0.52
1:F:104:VAL:HA	1:F:140:ILE:O	2.10	0.52
1:F:109:ASN:ND2	1:F:160:ASP:O	2.43	0.52
1:H:508:LEU:CD1	1:H:508:LEU:N	2.72	0.52
1:H:640:GLN:NE2	1:H:643:ILE:CG2	2.73	0.52
1:I:174:ASN:HB2	1:I:233:ASP:O	2.09	0.52
1:J:140:ILE:HD13	1:J:156:ILE:CG2	2.40	0.52
1:J:223:GLU:O	1:J:227:ARG:HG3	2.10	0.52
1:K:435:LEU:HD21	1:L:626:LEU:HD23	1.91	0.52
1:L:140:ILE:HD13	1:L:156:ILE:CG2	2.40	0.52
1:L:224:ARG:HA	1:L:227:ARG:HD2	1.92	0.52
1:L:345:GLU:OE2	1:L:418:ASP:OD2	2.27	0.52
1:M:435:LEU:HD21	1:N:626:LEU:HD23	1.91	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:M:640:GLN:NE2	1:M:643:ILE:CG2	2.73	0.52
1:D:140:ILE:HD13	1:D:156:ILE:CG2	2.40	0.52
1:D:163:GLY:O	1:D:165:LYS:HG3	2.10	0.52
1:E:122:LEU:HD23	1:E:125:ASN:ND2	2.19	0.52
1:E:174:ASN:HB2	1:E:233:ASP:O	2.09	0.52
1:E:456:VAL:HG22	1:E:457:PRO:N	2.25	0.52
1:F:221:VAL:HG22	1:F:224:ARG:HH21	1.75	0.52
1:F:521:ARG:N	1:F:521:ARG:CD	2.73	0.52
1:H:521:ARG:N	1:H:521:ARG:CD	2.73	0.52
1:L:521:ARG:N	1:L:521:ARG:CD	2.73	0.52
1:O:224:ARG:HA	1:O:227:ARG:HD2	1.92	0.52
1:B:155:ILE:HG12	1:B:158:ARG:NH2	2.24	0.51
1:E:223:GLU:O	1:E:227:ARG:HG3	2.09	0.51
1:J:640:GLN:NE2	1:J:643:ILE:CG2	2.73	0.51
1:L:223:GLU:O	1:L:227:ARG:HG3	2.10	0.51
1:O:155:ILE:HG12	1:O:158:ARG:NH2	2.24	0.51
1:B:221:VAL:HG22	1:B:224:ARG:HH21	1.75	0.51
1:B:345:GLU:OE2	1:B:418:ASP:OD2	2.27	0.51
1:B:456:VAL:HG22	1:B:457:PRO:N	2.26	0.51
1:C:163:GLY:O	1:C:165:LYS:HG3	2.10	0.51
1:D:224:ARG:HA	1:D:227:ARG:HD2	1.92	0.51
1:E:108:LYS:HA	1:E:138:ASN:HD21	1.75	0.51
1:G:521:ARG:CD	1:G:521:ARG:N	2.73	0.51
1:H:435:LEU:HD21	1:I:626:LEU:HD23	1.91	0.51
1:K:456:VAL:HG22	1:K:457:PRO:N	2.26	0.51
1:M:104:VAL:HA	1:M:140:ILE:O	2.10	0.51
1:M:109:ASN:ND2	1:M:160:ASP:O	2.43	0.51
1:M:521:ARG:N	1:M:521:ARG:CD	2.73	0.51
1:N:109:ASN:ND2	1:N:160:ASP:O	2.43	0.51
1:N:345:GLU:OE2	1:N:418:ASP:OD2	2.27	0.51
1:C:640:GLN:NE2	1:C:643:ILE:CG2	2.73	0.51
1:D:459:ILE:CA	1:D:474:THR:O	2.55	0.51
1:E:221:VAL:HG22	1:E:224:ARG:HH21	1.75	0.51
1:E:224:ARG:HA	1:E:227:ARG:HD2	1.92	0.51
1:G:104:VAL:HA	1:G:140:ILE:O	2.10	0.51
1:I:163:GLY:O	1:I:165:LYS:HG3	2.10	0.51
1:J:224:ARG:HA	1:J:227:ARG:HD2	1.92	0.51
1:K:224:ARG:HA	1:K:227:ARG:HD2	1.92	0.51
1:L:640:GLN:NE2	1:L:643:ILE:CG2	2.73	0.51
1:N:521:ARG:N	1:N:521:ARG:CD	2.73	0.51
1:O:108:LYS:HA	1:O:138:ASN:HD21	1.75	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:O:140:ILE:HD13	1:O:156:ILE:CG2	2.40	0.51
1:O:345:GLU:OE2	1:O:418:ASP:OD2	2.27	0.51
1:A:456:VAL:HG22	1:A:457:PRO:N	2.26	0.51
1:B:108:LYS:HA	1:B:138:ASN:HD21	1.75	0.51
1:B:435:LEU:HD21	1:C:626:LEU:HD23	1.91	0.51
1:D:477:ARG:CG	1:D:477:ARG:NH1	2.73	0.51
1:E:109:ASN:ND2	1:E:160:ASP:O	2.43	0.51
1:G:140:ILE:HD13	1:G:156:ILE:CG2	2.40	0.51
1:G:481:GLY:H	1:G:505:SER:HB3	0.42	0.51
1:I:105:VAL:O	1:I:140:ILE:CB	2.49	0.51
1:J:456:VAL:HG22	1:J:457:PRO:N	2.26	0.51
1:K:223:GLU:O	1:K:227:ARG:HG3	2.10	0.51
1:N:108:LYS:HA	1:N:138:ASN:HD21	1.75	0.51
1:N:163:GLY:O	1:N:165:LYS:HG3	2.10	0.51
1:M:609:PHE:CE2	1:N:639:ILE:HD11	2.42	0.51
1:O:521:ARG:CD	1:O:521:ARG:N	2.73	0.51
1:O:640:GLN:NE2	1:O:643:ILE:CG2	2.73	0.51
1:A:108:LYS:HA	1:A:138:ASN:HD21	1.75	0.51
1:A:224:ARG:HA	1:A:227:ARG:HD2	1.92	0.51
1:A:345:GLU:OE2	1:A:418:ASP:OD2	2.27	0.51
1:B:521:ARG:CD	1:B:521:ARG:N	2.73	0.51
1:D:456:VAL:HG22	1:D:457:PRO:N	2.26	0.51
1:E:140:ILE:HD13	1:E:156:ILE:CG2	2.40	0.51
1:H:506:ASN:HD22	1:H:507:VAL:H	1.50	0.51
1:I:140:ILE:HD13	1:I:156:ILE:CG2	2.40	0.51
1:I:224:ARG:HA	1:I:227:ARG:HD2	1.92	0.51
1:J:121:GLN:O	1:J:125:ASN:N	2.33	0.51
1:L:459:ILE:CA	1:L:474:THR:O	2.55	0.51
1:M:108:LYS:HA	1:M:138:ASN:HD21	1.75	0.51
1:M:163:GLY:O	1:M:165:LYS:HG3	2.10	0.51
1:M:345:GLU:OE2	1:M:418:ASP:OD2	2.27	0.51
1:A:221:VAL:HG22	1:A:224:ARG:HH21	1.75	0.51
1:A:521:ARG:N	1:A:521:ARG:CD	2.73	0.51
1:H:481:GLY:N	1:H:505:SER:OG	2.23	0.51
1:L:108:LYS:HA	1:L:138:ASN:HD21	1.74	0.51
1:N:333:ASP:OD1	1:N:334:GLY:N	2.44	0.51
1:O:477:ARG:NH1	1:O:477:ARG:CG	2.73	0.51
1:C:224:ARG:HA	1:C:227:ARG:HD2	1.92	0.51
1:D:481:GLY:H	1:D:505:SER:HB3	0.42	0.51
1:E:435:LEU:HD21	1:F:626:LEU:HD23	1.91	0.51
1:F:108:LYS:HA	1:F:138:ASN:HD21	1.75	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:224:ARG:HA	1:F:227:ARG:HD2	1.92	0.51
1:J:104:VAL:HA	1:J:140:ILE:O	2.10	0.51
1:K:104:VAL:HA	1:K:140:ILE:O	2.10	0.51
1:L:221:VAL:HG22	1:L:224:ARG:HH21	1.75	0.51
1:L:435:LEU:HD21	1:M:626:LEU:HD23	1.91	0.51
1:N:221:VAL:HG22	1:N:224:ARG:HH21	1.75	0.51
1:C:140:ILE:HD13	1:C:156:ILE:CG2	2.40	0.51
1:C:459:ILE:CA	1:C:474:THR:O	2.55	0.51
1:K:478:LYS:HD2	1:K:518:PHE:CZ	2.46	0.51
1:M:478:LYS:HD2	1:M:518:PHE:CZ	2.46	0.51
1:D:221:VAL:HG22	1:D:224:ARG:HH21	1.75	0.51
1:D:435:LEU:HD21	1:E:626:LEU:HD23	1.91	0.51
1:H:456:VAL:HG22	1:H:457:PRO:N	2.26	0.51
1:H:459:ILE:CA	1:H:474:THR:O	2.55	0.51
1:I:221:VAL:HG22	1:I:224:ARG:HH21	1.75	0.51
1:K:506:ASN:HD22	1:K:507:VAL:H	1.50	0.51
1:L:104:VAL:HA	1:L:140:ILE:O	2.10	0.51
1:A:207:ASP:OD1	1:A:209:ARG:N	2.33	0.51
1:B:477:ARG:NH1	1:B:477:ARG:CG	2.73	0.51
1:C:108:LYS:HA	1:C:138:ASN:HD21	1.75	0.51
1:E:459:ILE:CA	1:E:474:THR:O	2.56	0.51
1:F:456:VAL:HG22	1:F:457:PRO:N	2.26	0.51
1:H:224:ARG:HA	1:H:227:ARG:HD2	1.92	0.51
1:L:333:ASP:OD1	1:L:334:GLY:N	2.44	0.51
1:M:333:ASP:OD1	1:M:334:GLY:N	2.44	0.51
1:N:506:ASN:HD22	1:N:507:VAL:H	1.50	0.51
1:O:333:ASP:OD1	1:O:334:GLY:N	2.44	0.51
1:C:477:ARG:CG	1:C:477:ARG:NH1	2.73	0.50
1:D:478:LYS:HD2	1:D:518:PHE:CZ	2.46	0.50
1:E:333:ASP:OD1	1:E:334:GLY:N	2.44	0.50
1:F:140:ILE:HD13	1:F:156:ILE:CG2	2.40	0.50
1:H:221:VAL:HG22	1:H:224:ARG:HH21	1.75	0.50
1:I:235:GLU:H	1:I:235:GLU:CD	2.11	0.50
1:I:456:VAL:HG22	1:I:457:PRO:N	2.26	0.50
1:J:105:VAL:O	1:J:140:ILE:CB	2.49	0.50
1:O:122:LEU:HD23	1:O:125:ASN:ND2	2.19	0.50
1:B:224:ARG:HA	1:B:227:ARG:HD2	1.92	0.50
1:C:435:LEU:HD21	1:D:626:LEU:HD23	1.91	0.50
1:C:478:LYS:HD2	1:C:518:PHE:CZ	2.46	0.50
1:F:177:ALA:HB1	1:F:206:ALA:HB1	1.94	0.50
1:F:435:LEU:HD21	1:G:626:LEU:HD23	1.91	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:321:LEU:CD1	1:F:441:THR:OG1	2.60	0.50
1:J:122:LEU:HD23	1:J:125:ASN:ND2	2.19	0.50
1:J:221:VAL:HG22	1:J:224:ARG:HH21	1.75	0.50
1:J:478:LYS:HD2	1:J:518:PHE:CZ	2.46	0.50
1:K:333:ASP:OD1	1:K:334:GLY:N	2.44	0.50
1:M:456:VAL:HG22	1:M:457:PRO:N	2.26	0.50
1:A:177:ALA:HB1	1:A:206:ALA:HB1	1.94	0.50
1:C:456:VAL:HG22	1:C:457:PRO:N	2.26	0.50
1:G:177:ALA:HB1	1:G:206:ALA:HB1	1.94	0.50
1:F:519:ALA:CB	1:G:454:GLU:HG3	2.41	0.50
1:G:519:ALA:CB	1:H:454:GLU:HG3	2.41	0.50
1:H:333:ASP:OD1	1:H:334:GLY:N	2.44	0.50
1:I:108:LYS:HA	1:I:138:ASN:HD21	1.75	0.50
1:I:180:MET:SD	1:I:183:ILE:HD11	2.51	0.50
1:J:333:ASP:OD1	1:J:334:GLY:N	2.44	0.50
1:L:177:ALA:HB1	1:L:206:ALA:HB1	1.94	0.50
1:L:478:LYS:HD2	1:L:518:PHE:CZ	2.46	0.50
1:M:177:ALA:HB1	1:M:206:ALA:HB1	1.94	0.50
1:M:221:VAL:HG22	1:M:224:ARG:HH21	1.75	0.50
1:E:321:LEU:CD1	1:E:441:THR:OG1	2.60	0.50
1:E:459:ILE:N	1:E:459:ILE:HD12	2.27	0.50
1:F:333:ASP:OD1	1:F:334:GLY:N	2.44	0.50
1:E:519:ALA:CB	1:F:454:GLU:HG3	2.41	0.50
1:G:224:ARG:HA	1:G:227:ARG:HD2	1.92	0.50
1:G:321:LEU:CD1	1:G:441:THR:OG1	2.60	0.50
1:G:456:VAL:HG22	1:G:457:PRO:N	2.26	0.50
1:H:478:LYS:HD2	1:H:518:PHE:CZ	2.46	0.50
1:I:104:VAL:HA	1:I:140:ILE:O	2.10	0.50
1:J:180:MET:SD	1:J:183:ILE:HD11	2.51	0.50
1:N:177:ALA:HB1	1:N:206:ALA:HB1	1.94	0.50
1:N:456:VAL:HG22	1:N:457:PRO:N	2.26	0.50
1:O:177:ALA:HB1	1:O:206:ALA:HB1	1.94	0.50
1:A:519:ALA:CB	1:B:454:GLU:HG3	2.41	0.50
1:B:333:ASP:OD1	1:B:334:GLY:N	2.44	0.50
1:C:122:LEU:HD23	1:C:125:ASN:ND2	2.19	0.50
1:C:205:VAL:HG12	1:C:206:ALA:N	2.27	0.50
1:D:459:ILE:HD12	1:D:459:ILE:N	2.27	0.50
1:F:459:ILE:N	1:F:459:ILE:HD12	2.27	0.50
1:G:333:ASP:OD1	1:G:334:GLY:N	2.44	0.50
1:G:552:VAL:HG23	1:G:553:PRO:C	2.32	0.50
1:H:104:VAL:HA	1:H:140:ILE:O	2.10	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:180:MET:SD	1:H:183:ILE:HD11	2.51	0.50
1:H:207:ASP:OD1	1:H:209:ARG:N	2.33	0.50
1:H:552:VAL:HG23	1:H:553:PRO:C	2.32	0.50
1:G:435:LEU:HD21	1:H:626:LEU:HD23	1.91	0.50
1:I:177:ALA:HB1	1:I:206:ALA:HB1	1.94	0.50
1:K:177:ALA:HB1	1:K:206:ALA:HB1	1.94	0.50
1:K:221:VAL:HG22	1:K:224:ARG:HH21	1.75	0.50
1:M:552:VAL:HG23	1:M:553:PRO:C	2.32	0.50
1:N:180:MET:SD	1:N:183:ILE:HD11	2.51	0.50
1:N:478:LYS:HD2	1:N:518:PHE:CZ	2.46	0.50
1:A:454:GLU:HG3	1:O:519:ALA:CB	2.41	0.50
1:C:333:ASP:OD1	1:C:334:GLY:N	2.44	0.50
1:C:458:VAL:O	1:C:475:VAL:C	2.49	0.50
1:D:177:ALA:HB1	1:D:206:ALA:HB1	1.94	0.50
1:D:321:LEU:CD1	1:D:441:THR:OG1	2.60	0.50
1:E:180:MET:SD	1:E:183:ILE:HD11	2.51	0.50
1:F:102:THR:OG1	1:F:142:ILE:O	2.25	0.50
1:F:180:MET:SD	1:F:183:ILE:HD11	2.51	0.50
1:G:478:LYS:HD2	1:G:518:PHE:CZ	2.46	0.50
1:H:177:ALA:HB1	1:H:206:ALA:HB1	1.94	0.50
1:H:519:ALA:CB	1:I:454:GLU:HG3	2.41	0.50
1:J:177:ALA:HB1	1:J:206:ALA:HB1	1.94	0.50
1:K:140:ILE:HD13	1:K:156:ILE:CG2	2.40	0.50
1:K:180:MET:SD	1:K:183:ILE:HD11	2.51	0.50
1:K:552:VAL:HG23	1:K:553:PRO:C	2.32	0.50
1:L:552:VAL:HG23	1:L:553:PRO:C	2.32	0.50
1:O:180:MET:SD	1:O:183:ILE:HD11	2.51	0.50
1:O:459:ILE:CA	1:O:474:THR:O	2.55	0.50
1:A:333:ASP:OD1	1:A:334:GLY:N	2.44	0.50
1:B:205:VAL:HG12	1:B:206:ALA:N	2.27	0.50
1:B:177:ALA:HB1	1:B:206:ALA:HB1	1.94	0.50
1:C:180:MET:SD	1:C:183:ILE:HD11	2.51	0.50
1:D:180:MET:SD	1:D:183:ILE:HD11	2.51	0.50
1:D:205:VAL:HG12	1:D:206:ALA:N	2.27	0.50
1:E:177:ALA:HB1	1:E:206:ALA:HB1	1.94	0.50
1:F:478:LYS:HD2	1:F:518:PHE:CZ	2.46	0.50
1:F:552:VAL:HG23	1:F:553:PRO:C	2.32	0.50
1:G:180:MET:SD	1:G:183:ILE:HD11	2.51	0.50
1:G:221:VAL:HG22	1:G:224:ARG:HH21	1.75	0.50
1:H:140:ILE:HD13	1:H:156:ILE:CG2	2.40	0.50
1:H:321:LEU:CD1	1:H:441:THR:OG1	2.60	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:105:VAL:O	1:K:140:ILE:CB	2.49	0.50
1:K:519:ALA:CB	1:L:454:GLU:HG3	2.41	0.50
1:M:180:MET:SD	1:M:183:ILE:HD11	2.51	0.50
1:M:205:VAL:HG12	1:M:206:ALA:N	2.27	0.50
1:N:519:ALA:CB	1:O:454:GLU:HG3	2.41	0.50
1:A:180:MET:SD	1:A:183:ILE:HD11	2.51	0.50
1:A:205:VAL:HG12	1:A:206:ALA:N	2.27	0.50
1:C:177:ALA:HB1	1:C:206:ALA:HB1	1.94	0.50
1:B:519:ALA:CB	1:C:454:GLU:HG3	2.41	0.50
1:E:478:LYS:HD2	1:E:518:PHE:CZ	2.46	0.50
1:F:477:ARG:N	1:F:477:ARG:HD2	2.27	0.50
1:G:459:ILE:CA	1:G:474:THR:O	2.55	0.50
1:K:477:ARG:N	1:K:477:ARG:HD2	2.27	0.50
1:L:459:ILE:N	1:L:459:ILE:HD12	2.27	0.50
1:L:519:ALA:CB	1:M:454:GLU:HG3	2.41	0.50
1:K:435:LEU:HD11	1:L:607:GLN:HE22	1.77	0.50
1:N:552:VAL:HG23	1:N:553:PRO:C	2.32	0.50
1:A:478:LYS:HD2	1:A:518:PHE:CZ	2.46	0.50
1:B:180:MET:SD	1:B:183:ILE:HD11	2.51	0.50
1:B:218:ASP:N	1:B:221:VAL:HB	2.27	0.50
1:C:218:ASP:N	1:C:221:VAL:HB	2.27	0.50
1:D:333:ASP:OD1	1:D:334:GLY:N	2.44	0.50
1:E:205:VAL:HG12	1:E:206:ALA:N	2.27	0.50
1:F:459:ILE:CA	1:F:474:THR:O	2.55	0.50
1:I:478:LYS:HD2	1:I:518:PHE:CZ	2.46	0.50
1:I:519:ALA:CB	1:J:454:GLU:HG3	2.41	0.50
1:J:205:VAL:HG12	1:J:206:ALA:N	2.27	0.50
1:J:552:VAL:HG23	1:J:553:PRO:C	2.32	0.50
1:K:205:VAL:HG12	1:K:206:ALA:N	2.27	0.50
1:J:519:ALA:CB	1:K:454:GLU:HG3	2.41	0.50
1:K:458:VAL:O	1:K:475:VAL:C	2.49	0.50
1:L:180:MET:SD	1:L:183:ILE:HD11	2.51	0.50
1:M:459:ILE:HD12	1:M:459:ILE:N	2.27	0.50
1:O:456:VAL:HG22	1:O:457:PRO:N	2.26	0.50
1:O:552:VAL:HG23	1:O:553:PRO:C	2.32	0.50
1:F:442:VAL:HG12	1:F:448:ALA:HB2	1.94	0.49
1:G:218:ASP:N	1:G:221:VAL:HB	2.27	0.49
1:H:205:VAL:HG12	1:H:206:ALA:N	2.27	0.49
1:H:218:ASP:N	1:H:221:VAL:HB	2.27	0.49
1:I:552:VAL:HG23	1:I:553:PRO:C	2.32	0.49
1:L:435:LEU:HD11	1:M:607:GLN:HE22	1.77	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:L:456:VAL:HG22	1:L:457:PRO:N	2.26	0.49
1:N:459:ILE:N	1:N:459:ILE:HD12	2.27	0.49
1:O:321:LEU:CD1	1:O:441:THR:OG1	2.60	0.49
1:A:218:ASP:N	1:A:221:VAL:HB	2.27	0.49
1:A:506:ASN:O	1:A:519:ALA:N	2.46	0.49
1:C:321:LEU:CD1	1:C:441:THR:OG1	2.60	0.49
1:C:506:ASN:O	1:C:519:ALA:N	2.46	0.49
1:D:477:ARG:N	1:D:477:ARG:HD2	2.27	0.49
1:G:442:VAL:HG12	1:G:448:ALA:HB2	1.94	0.49
1:G:459:ILE:N	1:G:459:ILE:HD12	2.27	0.49
1:H:235:GLU:CD	1:H:235:GLU:H	2.12	0.49
1:I:218:ASP:N	1:I:221:VAL:HB	2.27	0.49
1:J:435:LEU:HD11	1:K:607:GLN:HE22	1.77	0.49
1:K:459:ILE:N	1:K:459:ILE:HD12	2.27	0.49
1:M:477:ARG:N	1:M:477:ARG:HD2	2.27	0.49
1:N:140:ILE:HD13	1:N:156:ILE:CG2	2.40	0.49
1:N:442:VAL:HG12	1:N:448:ALA:HB2	1.94	0.49
1:N:477:ARG:CG	1:N:477:ARG:NH1	2.73	0.49
1:O:506:ASN:O	1:O:519:ALA:N	2.46	0.49
1:O:478:LYS:HD2	1:O:518:PHE:CZ	2.46	0.49
1:C:459:ILE:HD12	1:C:459:ILE:N	2.27	0.49
1:D:218:ASP:N	1:D:221:VAL:HB	2.27	0.49
1:D:506:ASN:O	1:D:519:ALA:N	2.45	0.49
1:E:105:VAL:O	1:E:140:ILE:CB	2.49	0.49
1:E:218:ASP:N	1:E:221:VAL:HB	2.27	0.49
1:E:442:VAL:HG12	1:E:448:ALA:HB2	1.94	0.49
1:E:552:VAL:HG23	1:E:553:PRO:C	2.32	0.49
1:H:477:ARG:HD2	1:H:477:ARG:N	2.27	0.49
1:I:205:VAL:HG12	1:I:206:ALA:N	2.27	0.49
1:I:435:LEU:HD11	1:J:607:GLN:HE22	1.77	0.49
1:I:321:LEU:CD1	1:I:441:THR:OG1	2.60	0.49
1:I:477:ARG:N	1:I:477:ARG:HD2	2.27	0.49
1:N:506:ASN:O	1:N:519:ALA:N	2.45	0.49
1:O:442:VAL:HG12	1:O:448:ALA:HB2	1.94	0.49
1:O:459:ILE:N	1:O:459:ILE:HD12	2.27	0.49
1:A:442:VAL:HG12	1:A:448:ALA:HB2	1.94	0.49
1:B:459:ILE:CA	1:B:474:THR:O	2.55	0.49
1:D:552:VAL:HG23	1:D:553:PRO:C	2.32	0.49
1:F:205:VAL:HG12	1:F:206:ALA:N	2.27	0.49
1:F:472:PHE:CD1	1:F:472:PHE:C	2.86	0.49
1:I:167:ILE:CA	1:I:215:ILE:O	2.42	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:I:333:ASP:OD1	1:I:334:GLY:N	2.44	0.49
1:J:218:ASP:N	1:J:221:VAL:HB	2.27	0.49
1:J:459:ILE:HD12	1:J:459:ILE:N	2.27	0.49
1:K:122:LEU:HD23	1:K:125:ASN:ND2	2.19	0.49
1:L:218:ASP:N	1:L:221:VAL:HB	2.27	0.49
1:L:458:VAL:O	1:L:475:VAL:C	2.49	0.49
1:N:205:VAL:HG12	1:N:206:ALA:N	2.27	0.49
1:N:218:ASP:N	1:N:221:VAL:HB	2.27	0.49
1:O:205:VAL:HG12	1:O:206:ALA:N	2.27	0.49
1:B:552:VAL:HG23	1:B:553:PRO:C	2.32	0.49
1:F:218:ASP:N	1:F:221:VAL:HB	2.27	0.49
1:L:205:VAL:HG12	1:L:206:ALA:N	2.27	0.49
1:L:321:LEU:CD1	1:L:441:THR:OG1	2.60	0.49
1:N:321:LEU:CD1	1:N:441:THR:OG1	2.60	0.49
1:M:519:ALA:CB	1:N:454:GLU:HG3	2.41	0.49
1:B:478:LYS:HD2	1:B:518:PHE:CZ	2.46	0.49
1:B:586:ILE:HG21	1:B:592:ALA:HB2	1.95	0.49
1:C:472:PHE:C	1:C:472:PHE:CD1	2.86	0.49
1:C:519:ALA:CB	1:D:454:GLU:HG3	2.41	0.49
1:G:177:ALA:N	1:G:211:ASN:OD1	2.41	0.49
1:H:122:LEU:HD23	1:H:125:ASN:ND2	2.19	0.49
1:H:442:VAL:HG12	1:H:448:ALA:HB2	1.94	0.49
1:J:321:LEU:CD1	1:J:441:THR:OG1	2.60	0.49
1:J:458:VAL:O	1:J:475:VAL:C	2.49	0.49
1:L:177:ALA:N	1:L:211:ASN:OD1	2.41	0.49
1:L:442:VAL:HG12	1:L:448:ALA:HB2	1.94	0.49
1:M:177:ALA:N	1:M:211:ASN:OD1	2.41	0.49
1:M:321:LEU:CD1	1:M:441:THR:OG1	2.60	0.49
1:M:442:VAL:HG12	1:M:448:ALA:HB2	1.95	0.49
1:B:477:ARG:HD2	1:B:477:ARG:N	2.27	0.49
1:H:435:LEU:HD11	1:I:607:GLN:HE22	1.77	0.49
1:L:105:VAL:O	1:L:140:ILE:CB	2.49	0.49
1:O:218:ASP:N	1:O:221:VAL:HB	2.27	0.49
1:B:321:LEU:CD1	1:B:441:THR:OG1	2.60	0.49
1:C:586:ILE:HG21	1:C:592:ALA:HB2	1.95	0.49
1:I:459:ILE:HD12	1:I:459:ILE:N	2.27	0.49
1:K:177:ALA:O	1:K:180:MET:N	2.46	0.49
1:K:321:LEU:CD1	1:K:441:THR:OG1	2.60	0.49
1:M:177:ALA:O	1:M:180:MET:N	2.46	0.49
1:M:435:LEU:HD11	1:N:607:GLN:HE22	1.77	0.49
1:O:472:PHE:CD1	1:O:472:PHE:C	2.86	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:O:477:ARG:N	1:O:477:ARG:HD2	2.27	0.49
1:A:586:ILE:HG21	1:A:592:ALA:HB2	1.95	0.49
1:B:442:VAL:HG12	1:B:448:ALA:HB2	1.94	0.49
1:B:506:ASN:O	1:B:519:ALA:N	2.45	0.49
1:D:442:VAL:HG12	1:D:448:ALA:HB2	1.94	0.49
1:E:506:ASN:O	1:E:519:ALA:N	2.45	0.49
1:K:442:VAL:HG12	1:K:448:ALA:HB2	1.94	0.49
1:K:374:GLN:HG3	1:L:392:THR:O	2.13	0.49
1:A:459:ILE:HD12	1:A:459:ILE:N	2.27	0.49
1:G:205:VAL:HG12	1:G:206:ALA:N	2.27	0.49
1:G:374:GLN:HG3	1:H:392:THR:O	2.13	0.49
1:G:477:ARG:N	1:G:477:ARG:HD2	2.27	0.49
1:H:477:ARG:CG	1:H:477:ARG:NH1	2.73	0.49
1:I:177:ALA:O	1:I:180:MET:N	2.46	0.49
1:H:374:GLN:HG3	1:I:392:THR:O	2.13	0.49
1:I:506:ASN:O	1:I:519:ALA:N	2.46	0.49
1:K:218:ASP:N	1:K:221:VAL:HB	2.27	0.49
1:L:374:GLN:HG3	1:M:392:THR:O	2.13	0.49
1:L:477:ARG:HD2	1:L:477:ARG:N	2.27	0.49
1:O:177:ALA:O	1:O:180:MET:N	2.46	0.49
1:A:552:VAL:HG23	1:A:553:PRO:C	2.32	0.48
1:C:552:VAL:HG23	1:C:553:PRO:C	2.32	0.48
1:E:472:PHE:C	1:E:472:PHE:CD1	2.86	0.48
1:G:506:ASN:O	1:G:519:ALA:N	2.46	0.48
1:K:177:ALA:N	1:K:211:ASN:OD1	2.41	0.48
1:K:459:ILE:CA	1:K:474:THR:O	2.55	0.48
1:K:506:ASN:O	1:K:519:ALA:N	2.46	0.48
1:L:177:ALA:O	1:L:180:MET:N	2.46	0.48
1:M:218:ASP:N	1:M:221:VAL:HB	2.27	0.48
1:N:374:GLN:HG3	1:O:392:THR:O	2.13	0.48
1:N:374:GLN:O	1:N:391:THR:HG22	2.13	0.48
1:M:374:GLN:HG3	1:N:392:THR:O	2.13	0.48
1:B:472:PHE:C	1:B:472:PHE:CD1	2.86	0.48
1:D:458:VAL:O	1:D:475:VAL:C	2.49	0.48
1:F:113:ARG:HD2	1:F:134:TYR:HD2	1.79	0.48
1:F:374:GLN:O	1:F:391:THR:HG22	2.14	0.48
1:G:479:GLU:CD	1:G:479:GLU:H	2.07	0.48
1:H:458:VAL:O	1:H:475:VAL:C	2.49	0.48
1:I:442:VAL:HG12	1:I:448:ALA:HB2	1.94	0.48
1:L:506:ASN:O	1:L:519:ALA:N	2.45	0.48
1:M:113:ARG:HD2	1:M:134:TYR:HD2	1.79	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:N:177:ALA:O	1:N:180:MET:N	2.46	0.48
1:N:177:ALA:N	1:N:211:ASN:OD1	2.41	0.48
1:B:207:ASP:OD1	1:B:209:ARG:N	2.33	0.48
1:C:374:GLN:O	1:C:391:THR:HG22	2.13	0.48
1:D:435:LEU:HD11	1:E:607:GLN:HE22	1.77	0.48
1:F:506:ASN:O	1:F:519:ALA:N	2.45	0.48
1:H:459:ILE:N	1:H:459:ILE:HD12	2.27	0.48
1:J:374:GLN:HG3	1:K:392:THR:O	2.13	0.48
1:M:472:PHE:C	1:M:472:PHE:CD1	2.86	0.48
1:A:321:LEU:CD1	1:A:441:THR:OG1	2.60	0.48
1:C:113:ARG:HD2	1:C:134:TYR:HD2	1.79	0.48
1:D:586:ILE:HG21	1:D:592:ALA:HB2	1.95	0.48
1:G:113:ARG:HD2	1:G:134:TYR:HD2	1.79	0.48
1:H:113:ARG:HD2	1:H:134:TYR:HD2	1.79	0.48
1:I:458:VAL:O	1:I:475:VAL:C	2.49	0.48
1:J:177:ALA:O	1:J:180:MET:N	2.46	0.48
1:J:442:VAL:HG12	1:J:448:ALA:HB2	1.94	0.48
1:J:477:ARG:HD2	1:J:477:ARG:N	2.27	0.48
1:L:113:ARG:HD2	1:L:134:TYR:HD2	1.79	0.48
1:M:506:ASN:O	1:M:519:ALA:N	2.46	0.48
1:N:477:ARG:HD2	1:N:477:ARG:N	2.27	0.48
1:O:586:ILE:HG21	1:O:592:ALA:HB2	1.95	0.48
1:A:392:THR:O	1:O:374:GLN:HG3	2.13	0.48
1:A:435:LEU:HD11	1:B:607:GLN:HE22	1.77	0.48
1:A:472:PHE:C	1:A:472:PHE:CD1	2.86	0.48
1:D:519:ALA:CB	1:E:454:GLU:HG3	2.41	0.48
1:H:177:ALA:O	1:H:180:MET:N	2.46	0.48
1:I:374:GLN:HG3	1:J:392:THR:O	2.13	0.48
1:K:504:VAL:HG12	1:K:521:ARG:HG2	1.94	0.48
1:O:113:ARG:HD2	1:O:134:TYR:HD2	1.79	0.48
1:O:180:MET:HE2	1:O:213:ILE:HD11	1.94	0.48
1:O:374:GLN:O	1:O:391:THR:HG22	2.14	0.48
1:B:374:GLN:O	1:B:391:THR:HG22	2.14	0.48
1:C:435:LEU:HD11	1:D:607:GLN:HE22	1.77	0.48
1:E:374:GLN:O	1:E:391:THR:HG22	2.13	0.48
1:E:477:ARG:N	1:E:477:ARG:HD2	2.27	0.48
1:G:119:LEU:HD12	1:G:134:TYR:OH	2.14	0.48
1:G:235:GLU:H	1:G:235:GLU:CD	2.11	0.48
1:G:477:ARG:CG	1:G:477:ARG:NH1	2.73	0.48
1:H:119:LEU:HD12	1:H:134:TYR:OH	2.14	0.48
1:H:506:ASN:O	1:H:519:ALA:N	2.45	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:I:374:GLN:O	1:I:391:THR:HG22	2.14	0.48
1:K:374:GLN:O	1:K:391:THR:HG22	2.14	0.48
1:M:458:VAL:O	1:M:475:VAL:C	2.49	0.48
1:M:477:ARG:NH1	1:M:477:ARG:CG	2.73	0.48
1:A:113:ARG:HD2	1:A:134:TYR:HD2	1.79	0.48
1:A:177:ALA:O	1:A:180:MET:N	2.46	0.48
1:F:235:GLU:CD	1:F:235:GLU:H	2.11	0.48
1:F:479:GLU:H	1:F:479:GLU:CD	2.07	0.48
1:G:177:ALA:O	1:G:180:MET:N	2.46	0.48
1:H:374:GLN:O	1:H:391:THR:HG22	2.13	0.48
1:J:113:ARG:HD2	1:J:134:TYR:HD2	1.79	0.48
1:J:506:ASN:O	1:J:519:ALA:N	2.46	0.48
1:K:113:ARG:HD2	1:K:134:TYR:HD2	1.79	0.48
1:L:374:GLN:O	1:L:391:THR:HG22	2.14	0.48
1:A:225:LEU:HD23	1:A:225:LEU:HA	1.74	0.48
1:A:247:LEU:HD11	1:A:294:LEU:HD23	1.96	0.48
1:B:177:ALA:O	1:B:180:MET:N	2.46	0.48
1:C:442:VAL:HG12	1:C:448:ALA:HB2	1.94	0.48
1:E:113:ARG:HD2	1:E:134:TYR:HD2	1.79	0.48
1:F:119:LEU:HD12	1:F:134:TYR:OH	2.14	0.48
1:G:458:VAL:O	1:G:475:VAL:C	2.49	0.48
1:L:122:LEU:HD23	1:L:125:ASN:ND2	2.19	0.48
1:J:335:ILE:HG22	1:L:617:LEU:HD13	1.96	0.48
1:M:586:ILE:HG21	1:M:592:ALA:HB2	1.95	0.48
1:K:335:ILE:HG22	1:M:617:LEU:HD13	1.96	0.48
1:N:108:LYS:HA	1:N:138:ASN:ND2	2.29	0.48
1:N:458:VAL:O	1:N:475:VAL:C	2.49	0.48
1:N:435:LEU:HD11	1:O:607:GLN:HE22	1.77	0.48
1:A:108:LYS:HA	1:A:138:ASN:ND2	2.29	0.48
1:A:261:GLY:HA3	1:B:284:MET:HG2	1.96	0.48
1:A:374:GLN:HG3	1:B:392:THR:O	2.13	0.48
1:B:435:LEU:HD11	1:C:607:GLN:HE22	1.77	0.48
1:B:459:ILE:HD12	1:B:459:ILE:N	2.27	0.48
1:C:247:LEU:HD11	1:C:294:LEU:HD23	1.96	0.48
1:E:435:LEU:HD11	1:F:607:GLN:HE22	1.77	0.48
1:H:108:LYS:HA	1:H:138:ASN:ND2	2.29	0.48
1:I:108:LYS:HA	1:I:138:ASN:ND2	2.29	0.48
1:I:119:LEU:HD12	1:I:134:TYR:OH	2.14	0.48
1:I:247:LEU:HD11	1:I:294:LEU:HD23	1.96	0.48
1:I:335:ILE:HG22	1:K:617:LEU:HD13	1.96	0.48
1:J:108:LYS:HA	1:J:138:ASN:ND2	2.29	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:J:472:PHE:CD1	1:J:472:PHE:C	2.86	0.48
1:K:247:LEU:HD11	1:K:294:LEU:HD23	1.96	0.48
1:L:586:ILE:HG21	1:L:592:ALA:HB2	1.95	0.48
1:M:180:MET:HE2	1:M:213:ILE:HD11	1.95	0.48
1:N:247:LEU:HD11	1:N:294:LEU:HD23	1.96	0.48
1:O:108:LYS:HA	1:O:138:ASN:ND2	2.29	0.48
1:B:108:LYS:HA	1:B:138:ASN:ND2	2.29	0.48
1:B:226:LYS:HA	1:B:229:ILE:HB	1.96	0.48
1:B:374:GLN:HG3	1:C:392:THR:O	2.13	0.48
1:D:113:ARG:HD2	1:D:134:TYR:HD2	1.78	0.48
1:D:374:GLN:HG3	1:E:392:THR:O	2.13	0.48
1:E:255:LEU:HA	1:E:255:LEU:HD23	1.73	0.48
1:F:283:VAL:HA	1:F:297:THR:O	2.14	0.48
1:G:108:LYS:HA	1:G:138:ASN:ND2	2.29	0.48
1:G:261:GLY:HA3	1:H:284:MET:HG2	1.96	0.48
1:G:335:ILE:HG22	1:I:617:LEU:HD13	1.96	0.48
1:F:435:LEU:HD11	1:G:607:GLN:HE22	1.77	0.48
1:I:472:PHE:C	1:I:472:PHE:CD1	2.86	0.48
1:J:478:LYS:HD2	1:J:518:PHE:HZ	1.79	0.48
1:H:335:ILE:HG22	1:J:617:LEU:HD13	1.96	0.48
1:K:586:ILE:HG21	1:K:592:ALA:HB2	1.95	0.48
1:L:119:LEU:HD12	1:L:134:TYR:OH	2.14	0.48
1:L:335:ILE:HG22	1:N:617:LEU:HD13	1.96	0.48
1:L:478:LYS:HD2	1:L:518:PHE:HZ	1.79	0.48
1:N:235:GLU:H	1:N:235:GLU:CD	2.11	0.48
1:A:284:MET:HG2	1:O:261:GLY:HA3	1.96	0.48
1:C:177:ALA:O	1:C:180:MET:N	2.46	0.47
1:D:226:LYS:HA	1:D:229:ILE:HB	1.96	0.47
1:C:374:GLN:HG3	1:D:392:THR:O	2.13	0.47
1:D:472:PHE:C	1:D:472:PHE:CD1	2.86	0.47
1:E:235:GLU:H	1:E:235:GLU:CD	2.11	0.47
1:E:374:GLN:HG3	1:F:392:THR:O	2.13	0.47
1:G:283:VAL:HA	1:G:297:THR:O	2.14	0.47
1:H:261:GLY:HA3	1:I:284:MET:HG2	1.96	0.47
1:M:119:LEU:HD12	1:M:134:TYR:OH	2.14	0.47
1:M:235:GLU:CD	1:M:235:GLU:H	2.11	0.47
1:M:374:GLN:O	1:M:391:THR:HG22	2.13	0.47
1:O:458:VAL:O	1:O:475:VAL:C	2.49	0.47
1:O:328:GLU:HG2	1:O:577:LEU:HG	1.96	0.47
1:B:261:GLY:HA3	1:C:284:MET:HG2	1.96	0.47
1:C:477:ARG:N	1:C:477:ARG:HD2	2.27	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:177:ALA:O	1:D:180:MET:N	2.46	0.47
1:E:283:VAL:HA	1:E:297:THR:O	2.14	0.47
1:C:335:ILE:HG22	1:E:617:LEU:HD13	1.95	0.47
1:F:122:LEU:HD23	1:F:125:ASN:ND2	2.19	0.47
1:F:261:GLY:HA3	1:G:284:MET:HG2	1.96	0.47
1:F:374:GLN:HG3	1:G:392:THR:O	2.13	0.47
1:G:374:GLN:O	1:G:391:THR:HG22	2.14	0.47
1:H:586:ILE:HG21	1:H:592:ALA:HB2	1.95	0.47
1:I:261:GLY:HA3	1:J:284:MET:HG2	1.96	0.47
1:I:239:LYS:HE3	1:I:300:GLN:HB2	1.97	0.47
1:I:586:ILE:HG21	1:I:592:ALA:HB2	1.95	0.47
1:J:177:ALA:N	1:J:211:ASN:OD1	2.41	0.47
1:M:207:ASP:OD1	1:M:209:ARG:N	2.33	0.47
1:M:457:PRO:HA	1:M:477:ARG:HE	1.79	0.47
1:N:113:ARG:HD2	1:N:134:TYR:HD2	1.79	0.47
1:N:283:VAL:HA	1:N:297:THR:O	2.14	0.47
1:N:457:PRO:HA	1:N:477:ARG:HE	1.80	0.47
1:A:607:GLN:HE22	1:O:435:LEU:HD11	1.77	0.47
1:A:477:ARG:N	1:A:477:ARG:HD2	2.27	0.47
1:A:328:GLU:HG2	1:A:577:LEU:HG	1.96	0.47
1:D:374:GLN:O	1:D:391:THR:HG22	2.13	0.47
1:E:119:LEU:HD12	1:E:134:TYR:OH	2.14	0.47
1:E:247:LEU:HD11	1:E:294:LEU:HD23	1.96	0.47
1:G:435:LEU:HD11	1:H:607:GLN:HE22	1.77	0.47
1:F:335:ILE:HG22	1:H:617:LEU:HD13	1.96	0.47
1:J:119:LEU:HD12	1:J:134:TYR:OH	2.14	0.47
1:J:239:LYS:HE3	1:J:300:GLN:HB2	1.97	0.47
1:J:374:GLN:O	1:J:391:THR:HG22	2.14	0.47
1:J:586:ILE:HG21	1:J:592:ALA:HB2	1.95	0.47
1:K:108:LYS:HA	1:K:138:ASN:ND2	2.29	0.47
1:K:477:ARG:CG	1:K:477:ARG:NH1	2.73	0.47
1:K:634:ARG:HG3	1:K:635:HIS:O	2.15	0.47
1:M:167:ILE:CA	1:M:215:ILE:O	2.42	0.47
1:M:247:LEU:HD11	1:M:294:LEU:HD23	1.96	0.47
1:M:283:VAL:HA	1:M:297:THR:O	2.14	0.47
1:C:283:VAL:HA	1:C:297:THR:O	2.14	0.47
1:C:457:PRO:HA	1:C:477:ARG:HE	1.80	0.47
1:D:457:PRO:HA	1:D:477:ARG:HE	1.80	0.47
1:D:507:VAL:HG22	1:D:508:LEU:N	2.29	0.47
1:B:335:ILE:HG22	1:D:617:LEU:HD13	1.96	0.47
1:E:177:ALA:O	1:E:180:MET:N	2.46	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:586:ILE:HG21	1:E:592:ALA:HB2	1.95	0.47
1:F:108:LYS:HA	1:F:138:ASN:ND2	2.29	0.47
1:F:226:LYS:HA	1:F:229:ILE:HB	1.96	0.47
1:F:239:LYS:HE3	1:F:300:GLN:HB2	1.97	0.47
1:F:457:PRO:HA	1:F:477:ARG:HE	1.80	0.47
1:F:507:VAL:HG22	1:F:508:LEU:N	2.29	0.47
1:G:247:LEU:HD11	1:G:294:LEU:HD23	1.96	0.47
1:G:239:LYS:HE3	1:G:300:GLN:HB2	1.97	0.47
1:G:457:PRO:HA	1:G:477:ARG:HE	1.79	0.47
1:I:113:ARG:HD2	1:I:134:TYR:HD2	1.78	0.47
1:J:167:ILE:CA	1:J:215:ILE:O	2.42	0.47
1:L:108:LYS:HA	1:L:138:ASN:ND2	2.29	0.47
1:L:457:PRO:HA	1:L:477:ARG:HE	1.80	0.47
1:N:261:GLY:HA3	1:O:284:MET:HG2	1.96	0.47
1:O:235:GLU:H	1:O:235:GLU:CD	2.11	0.47
1:A:120:ARG:HG2	1:A:123:ILE:HD12	1.96	0.47
1:A:122:LEU:HD23	1:A:125:ASN:ND2	2.19	0.47
1:A:226:LYS:HA	1:A:229:ILE:HB	1.96	0.47
1:A:457:PRO:HA	1:A:477:ARG:HE	1.79	0.47
1:B:119:LEU:HD12	1:B:134:TYR:OH	2.14	0.47
1:C:108:LYS:HA	1:C:138:ASN:ND2	2.29	0.47
1:D:235:GLU:CD	1:D:235:GLU:H	2.12	0.47
1:D:283:VAL:HA	1:D:297:THR:O	2.14	0.47
1:D:335:ILE:HG22	1:F:617:LEU:HD13	1.95	0.47
1:D:634:ARG:HG3	1:D:635:HIS:O	2.15	0.47
1:F:177:ALA:N	1:F:211:ASN:OD1	2.41	0.47
1:G:158:ARG:O	1:G:162:ALA:HB2	2.15	0.47
1:G:586:ILE:HG21	1:G:592:ALA:HB2	1.95	0.47
1:H:283:VAL:HA	1:H:297:THR:O	2.14	0.47
1:I:328:GLU:HG2	1:I:577:LEU:HG	1.96	0.47
1:J:261:GLY:HA3	1:K:284:MET:HG2	1.96	0.47
1:L:235:GLU:H	1:L:235:GLU:CD	2.11	0.47
1:L:239:LYS:HE3	1:L:300:GLN:HB2	1.97	0.47
1:L:472:PHE:CD1	1:L:472:PHE:C	2.86	0.47
1:L:634:ARG:HG3	1:L:635:HIS:O	2.15	0.47
1:M:239:LYS:HE3	1:M:300:GLN:HB2	1.97	0.47
1:N:119:LEU:HD12	1:N:134:TYR:OH	2.14	0.47
1:N:158:ARG:O	1:N:162:ALA:HB2	2.15	0.47
1:N:459:ILE:CA	1:N:474:THR:O	2.55	0.47
1:N:586:ILE:HG21	1:N:592:ALA:HB2	1.95	0.47
1:O:283:VAL:HA	1:O:297:THR:O	2.14	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:O:457:PRO:HA	1:O:477:ARG:HE	1.80	0.47
1:M:335:ILE:HG22	1:O:617:LEU:HD13	1.96	0.47
1:A:235:GLU:CD	1:A:235:GLU:H	2.11	0.47
1:A:374:GLN:O	1:A:391:THR:HG22	2.14	0.47
1:B:120:ARG:HG2	1:B:123:ILE:HD12	1.96	0.47
1:B:507:VAL:HG22	1:B:508:LEU:N	2.29	0.47
1:C:226:LYS:HA	1:C:229:ILE:HB	1.96	0.47
1:C:235:GLU:CD	1:C:235:GLU:H	2.11	0.47
1:C:261:GLY:HA3	1:D:284:MET:HG2	1.96	0.47
1:E:479:GLU:H	1:E:479:GLU:CD	2.07	0.47
1:F:477:ARG:NH1	1:F:477:ARG:CG	2.73	0.47
1:F:634:ARG:HG3	1:F:635:HIS:O	2.15	0.47
1:H:158:ARG:O	1:H:162:ALA:HB2	2.15	0.47
1:H:239:LYS:HE3	1:H:300:GLN:HB2	1.97	0.47
1:J:504:VAL:HG12	1:J:521:ARG:HG2	1.94	0.47
1:J:634:ARG:HG3	1:J:635:HIS:O	2.15	0.47
1:K:119:LEU:HD12	1:K:134:TYR:OH	2.14	0.47
1:K:239:LYS:HE3	1:K:300:GLN:HB2	1.97	0.47
1:L:247:LEU:HD11	1:L:294:LEU:HD23	1.96	0.47
1:N:226:LYS:HA	1:N:229:ILE:HB	1.96	0.47
1:N:328:GLU:HG2	1:N:577:LEU:HG	1.96	0.47
1:O:158:ARG:O	1:O:162:ALA:HB2	2.15	0.47
1:A:105:VAL:O	1:A:140:ILE:CB	2.49	0.47
1:A:119:LEU:HD12	1:A:134:TYR:OH	2.14	0.47
1:A:335:ILE:HG22	1:C:617:LEU:HD13	1.96	0.47
1:B:113:ARG:HD2	1:B:134:TYR:HD2	1.79	0.47
1:D:478:LYS:HD2	1:D:518:PHE:HZ	1.79	0.47
1:E:108:LYS:HA	1:E:138:ASN:ND2	2.29	0.47
1:E:478:LYS:HD2	1:E:518:PHE:HZ	1.79	0.47
1:F:177:ALA:O	1:F:180:MET:N	2.46	0.47
1:G:478:LYS:HD2	1:G:518:PHE:HZ	1.79	0.47
1:E:335:ILE:HG22	1:G:617:LEU:HD13	1.95	0.47
1:I:283:VAL:HA	1:I:297:THR:O	2.14	0.47
1:I:457:PRO:HA	1:I:477:ARG:HE	1.80	0.47
1:J:120:ARG:HG2	1:J:123:ILE:HD12	1.96	0.47
1:K:457:PRO:HA	1:K:477:ARG:HE	1.80	0.47
1:M:108:LYS:HA	1:M:138:ASN:ND2	2.29	0.47
1:N:207:ASP:OD1	1:N:209:ARG:N	2.33	0.47
1:O:120:ARG:HG2	1:O:123:ILE:HD12	1.96	0.47
1:B:617:LEU:HD13	1:O:335:ILE:HG22	1.96	0.47
1:O:478:LYS:HD2	1:O:518:PHE:HZ	1.79	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:105:VAL:O	1:B:140:ILE:CB	2.49	0.47
1:B:235:GLU:CD	1:B:235:GLU:H	2.11	0.47
1:B:283:VAL:HA	1:B:297:THR:O	2.14	0.47
1:B:478:LYS:HD2	1:B:518:PHE:HZ	1.79	0.47
1:B:634:ARG:HG3	1:B:635:HIS:O	2.15	0.47
1:C:119:LEU:HD12	1:C:134:TYR:OH	2.14	0.47
1:J:226:LYS:HA	1:J:229:ILE:HB	1.96	0.47
1:J:457:PRO:HA	1:J:477:ARG:HE	1.79	0.47
1:K:120:ARG:HG2	1:K:123:ILE:HD12	1.96	0.47
1:K:261:GLY:HA3	1:L:284:MET:HG2	1.96	0.47
1:L:207:ASP:OD1	1:L:209:ARG:N	2.33	0.47
1:L:283:VAL:HA	1:L:297:THR:O	2.14	0.47
1:A:617:LEU:HD13	1:N:335:ILE:HG22	1.95	0.47
1:O:167:ILE:CA	1:O:215:ILE:O	2.42	0.47
1:A:634:ARG:HG3	1:A:635:HIS:O	2.15	0.47
1:B:457:PRO:HA	1:B:477:ARG:HE	1.79	0.47
1:B:328:GLU:HG2	1:B:577:LEU:HG	1.96	0.47
1:C:120:ARG:HG2	1:C:123:ILE:HD12	1.96	0.47
1:C:180:MET:HE2	1:C:213:ILE:HD11	1.97	0.47
1:D:180:MET:HE2	1:D:213:ILE:HD11	1.97	0.47
1:E:239:LYS:HE3	1:E:300:GLN:HB2	1.97	0.47
1:E:261:GLY:HA3	1:F:284:MET:HG2	1.96	0.47
1:F:586:ILE:HG21	1:F:592:ALA:HB2	1.95	0.47
1:H:472:PHE:CD1	1:H:472:PHE:C	2.86	0.47
1:H:328:GLU:HG2	1:H:577:LEU:HG	1.96	0.47
1:I:120:ARG:HG2	1:I:123:ILE:HD12	1.96	0.47
1:I:478:LYS:HD2	1:I:518:PHE:HZ	1.79	0.47
1:K:328:GLU:HG2	1:K:577:LEU:HG	1.96	0.47
1:M:158:ARG:O	1:M:162:ALA:HB2	2.15	0.47
1:N:478:LYS:HD2	1:N:518:PHE:HZ	1.79	0.47
1:A:478:LYS:HD2	1:A:518:PHE:HZ	1.79	0.47
1:B:182:ARG:HA	1:B:185:GLU:CD	2.36	0.47
1:B:450:PHE:O	1:B:483:LYS:HA	2.15	0.47
1:B:504:VAL:HG12	1:B:521:ARG:HG2	1.94	0.47
1:C:158:ARG:O	1:C:162:ALA:HB2	2.15	0.47
1:D:119:LEU:HD12	1:D:134:TYR:OH	2.14	0.47
1:E:328:GLU:HG2	1:E:577:LEU:HG	1.96	0.47
1:G:481:GLY:N	1:G:505:SER:OG	2.23	0.47
1:I:438:PRO:HB3	1:I:450:PHE:CE2	2.50	0.47
1:J:438:PRO:HB3	1:J:450:PHE:CE2	2.50	0.47
1:J:328:GLU:HG2	1:J:577:LEU:HG	1.96	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:283:VAL:HA	1:K:297:THR:O	2.14	0.47
1:K:438:PRO:HB3	1:K:450:PHE:CE2	2.50	0.47
1:K:476:ASP:OD1	1:K:476:ASP:N	2.48	0.47
1:L:158:ARG:O	1:L:162:ALA:HB2	2.15	0.47
1:M:122:LEU:HD23	1:M:125:ASN:ND2	2.19	0.47
1:N:239:LYS:HE3	1:N:300:GLN:HB2	1.97	0.47
1:O:119:LEU:HD12	1:O:134:TYR:OH	2.14	0.47
1:A:102:THR:OG1	1:A:142:ILE:O	2.25	0.47
1:A:182:ARG:HA	1:A:185:GLU:CD	2.36	0.47
1:B:247:LEU:HD11	1:B:294:LEU:HD23	1.96	0.47
1:C:634:ARG:HG3	1:C:635:HIS:O	2.15	0.47
1:D:108:LYS:HA	1:D:138:ASN:ND2	2.29	0.47
1:D:158:ARG:O	1:D:162:ALA:HB2	2.15	0.47
1:D:247:LEU:HD11	1:D:294:LEU:HD23	1.96	0.47
1:D:328:GLU:HG2	1:D:577:LEU:HG	1.96	0.47
1:E:458:VAL:O	1:E:475:VAL:C	2.49	0.47
1:F:450:PHE:O	1:F:483:LYS:HA	2.15	0.47
1:G:328:GLU:HG2	1:G:577:LEU:HG	1.96	0.47
1:H:207:ASP:O	1:H:211:ASN:HA	2.16	0.47
1:I:226:LYS:HA	1:I:229:ILE:HB	1.96	0.47
1:J:283:VAL:HA	1:J:297:THR:O	2.14	0.47
1:J:450:PHE:O	1:J:483:LYS:HA	2.15	0.47
1:K:158:ARG:O	1:K:162:ALA:HB2	2.15	0.47
1:K:450:PHE:O	1:K:483:LYS:HA	2.15	0.47
1:L:261:GLY:HA3	1:M:284:MET:HG2	1.96	0.47
1:M:261:GLY:HA3	1:N:284:MET:HG2	1.96	0.47
1:M:506:ASN:O	1:M:518:PHE:CB	2.63	0.47
1:O:105:VAL:O	1:O:140:ILE:CB	2.49	0.47
1:O:226:LYS:HA	1:O:229:ILE:HB	1.96	0.47
1:O:247:LEU:HD11	1:O:294:LEU:HD23	1.96	0.47
1:O:450:PHE:O	1:O:483:LYS:HA	2.15	0.47
1:O:634:ARG:HG3	1:O:635:HIS:O	2.15	0.47
1:A:458:VAL:O	1:A:475:VAL:C	2.49	0.46
1:C:182:ARG:HA	1:C:185:GLU:CD	2.36	0.46
1:D:177:ALA:N	1:D:211:ASN:OD1	2.41	0.46
1:D:476:ASP:OD1	1:D:476:ASP:N	2.48	0.46
1:D:450:PHE:O	1:D:483:LYS:HA	2.15	0.46
1:F:105:VAL:O	1:F:140:ILE:CB	2.49	0.46
1:F:158:ARG:O	1:F:162:ALA:HB2	2.15	0.46
1:G:450:PHE:O	1:G:483:LYS:HA	2.15	0.46
1:H:120:ARG:HG2	1:H:123:ILE:HD12	1.96	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:438:PRO:HB3	1:H:450:PHE:CE2	2.50	0.46
1:I:158:ARG:O	1:I:162:ALA:HB2	2.15	0.46
1:J:247:LEU:HD11	1:J:294:LEU:HD23	1.96	0.46
1:L:438:PRO:HB3	1:L:450:PHE:CE2	2.50	0.46
1:L:506:ASN:O	1:L:518:PHE:CB	2.63	0.46
1:N:102:THR:OG1	1:N:142:ILE:O	2.25	0.46
1:A:283:VAL:HA	1:A:297:THR:O	2.14	0.46
1:C:239:LYS:HE3	1:C:300:GLN:HB2	1.97	0.46
1:D:239:LYS:HE3	1:D:300:GLN:HB2	1.97	0.46
1:F:458:VAL:O	1:F:475:VAL:C	2.49	0.46
1:G:207:ASP:O	1:G:211:ASN:HA	2.16	0.46
1:H:182:ARG:HA	1:H:185:GLU:CD	2.36	0.46
1:J:476:ASP:N	1:J:476:ASP:OD1	2.48	0.46
1:L:120:ARG:HG2	1:L:123:ILE:HD12	1.96	0.46
1:L:477:ARG:CG	1:L:477:ARG:NH1	2.73	0.46
1:L:328:GLU:HG2	1:L:577:LEU:HG	1.96	0.46
1:M:634:ARG:HG3	1:M:635:HIS:O	2.15	0.46
1:N:120:ARG:HG2	1:N:123:ILE:HD12	1.96	0.46
1:O:507:VAL:HG22	1:O:508:LEU:N	2.29	0.46
1:A:158:ARG:O	1:A:162:ALA:HB2	2.15	0.46
1:A:227:ARG:O	1:A:231:GLN:HG3	2.16	0.46
1:A:239:LYS:HE3	1:A:300:GLN:HB2	1.97	0.46
1:D:120:ARG:HG2	1:D:123:ILE:HD12	1.96	0.46
1:D:261:GLY:HA3	1:E:284:MET:HG2	1.96	0.46
1:D:438:PRO:HB3	1:D:450:PHE:CE2	2.50	0.46
1:F:328:GLU:HG2	1:F:577:LEU:HG	1.96	0.46
1:G:438:PRO:HB3	1:G:450:PHE:CE2	2.50	0.46
1:H:634:ARG:HG3	1:H:635:HIS:O	2.15	0.46
1:I:207:ASP:O	1:I:211:ASN:HA	2.16	0.46
1:I:634:ARG:HG3	1:I:635:HIS:O	2.15	0.46
1:J:158:ARG:O	1:J:162:ALA:HB2	2.15	0.46
1:N:450:PHE:O	1:N:483:LYS:HA	2.15	0.46
1:O:239:LYS:HE3	1:O:300:GLN:HB2	1.97	0.46
1:B:180:MET:HE2	1:B:213:ILE:HD11	1.97	0.46
1:C:340:GLN:HE21	1:C:352:TYR:HB2	1.81	0.46
1:C:476:ASP:OD1	1:C:476:ASP:N	2.48	0.46
1:D:340:GLN:HE21	1:D:352:TYR:HB2	1.81	0.46
1:E:227:ARG:O	1:E:231:GLN:HG3	2.16	0.46
1:G:182:ARG:HA	1:G:185:GLU:CD	2.36	0.46
1:H:457:PRO:HA	1:H:477:ARG:HE	1.80	0.46
1:I:182:ARG:HA	1:I:185:GLU:CD	2.36	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:I:203:LYS:N	1:I:216:SER:HG	2.14	0.46
1:I:476:ASP:OD1	1:I:476:ASP:N	2.48	0.46
1:K:225:LEU:HA	1:K:225:LEU:HD23	1.74	0.46
1:M:438:PRO:HB3	1:M:450:PHE:CE2	2.50	0.46
1:M:328:GLU:HG2	1:M:577:LEU:HG	1.96	0.46
1:N:203:LYS:N	1:N:216:SER:HG	2.14	0.46
1:O:182:ARG:HA	1:O:185:GLU:CD	2.36	0.46
1:A:506:ASN:O	1:A:518:PHE:CB	2.63	0.46
1:B:340:GLN:HE21	1:B:352:TYR:HB2	1.81	0.46
1:B:476:ASP:N	1:B:476:ASP:OD1	2.48	0.46
1:B:506:ASN:O	1:B:518:PHE:CB	2.63	0.46
1:C:105:VAL:O	1:C:140:ILE:CB	2.49	0.46
1:C:438:PRO:HB3	1:C:450:PHE:CE2	2.50	0.46
1:C:504:VAL:HG12	1:C:521:ARG:HG2	1.94	0.46
1:D:207:ASP:O	1:D:211:ASN:HA	2.16	0.46
1:E:205:VAL:HG12	1:E:206:ALA:H	1.81	0.46
1:E:340:GLN:HE21	1:E:352:TYR:HB2	1.81	0.46
1:E:457:PRO:HA	1:E:477:ARG:HE	1.79	0.46
1:E:476:ASP:OD1	1:E:476:ASP:N	2.48	0.46
1:E:634:ARG:HG3	1:E:635:HIS:O	2.15	0.46
1:F:227:ARG:O	1:F:231:GLN:HG3	2.16	0.46
1:F:247:LEU:HD11	1:F:294:LEU:HD23	1.96	0.46
1:H:247:LEU:HD11	1:H:294:LEU:HD23	1.96	0.46
1:H:476:ASP:N	1:H:476:ASP:OD1	2.48	0.46
1:H:478:LYS:HD2	1:H:518:PHE:HZ	1.79	0.46
1:J:207:ASP:O	1:J:211:ASN:HA	2.16	0.46
1:J:340:GLN:HE21	1:J:352:TYR:HB2	1.81	0.46
1:K:226:LYS:HA	1:K:229:ILE:HB	1.96	0.46
1:K:501:GLU:HG2	1:K:524:ASN:HB2	1.98	0.46
1:L:203:LYS:N	1:L:216:SER:HG	2.14	0.46
1:L:507:VAL:HG22	1:L:508:LEU:N	2.29	0.46
1:L:501:GLU:HG2	1:L:524:ASN:HB2	1.98	0.46
1:M:205:VAL:HG12	1:M:206:ALA:H	1.81	0.46
1:O:177:ALA:N	1:O:211:ASN:OD1	2.41	0.46
1:A:340:GLN:HE21	1:A:352:TYR:HB2	1.81	0.46
1:C:177:ALA:N	1:C:211:ASN:OD1	2.41	0.46
1:C:328:GLU:HG2	1:C:577:LEU:HG	1.96	0.46
1:D:140:ILE:HG21	1:D:156:ILE:HD13	1.98	0.46
1:D:203:LYS:N	1:D:216:SER:HG	2.14	0.46
1:D:255:LEU:HA	1:D:255:LEU:HD23	1.73	0.46
1:E:140:ILE:HG21	1:E:156:ILE:HD13	1.98	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:226:LYS:HA	1:E:229:ILE:HB	1.96	0.46
1:F:207:ASP:O	1:F:211:ASN:HA	2.16	0.46
1:F:504:VAL:HG12	1:F:521:ARG:O	2.16	0.46
1:G:227:ARG:O	1:G:231:GLN:HG3	2.16	0.46
1:G:634:ARG:HG3	1:G:635:HIS:O	2.15	0.46
1:H:227:ARG:O	1:H:231:GLN:HG3	2.16	0.46
1:J:140:ILE:HG21	1:J:156:ILE:HD13	1.98	0.46
1:J:205:VAL:HG12	1:J:206:ALA:H	1.81	0.46
1:J:501:GLU:HG2	1:J:524:ASN:HB2	1.98	0.46
1:K:203:LYS:N	1:K:216:SER:HG	2.14	0.46
1:K:235:GLU:H	1:K:235:GLU:CD	2.11	0.46
1:K:340:GLN:HE21	1:K:352:TYR:HB2	1.81	0.46
1:K:478:LYS:HD2	1:K:518:PHE:HZ	1.79	0.46
1:L:182:ARG:HA	1:L:185:GLU:CD	2.36	0.46
1:L:476:ASP:OD1	1:L:476:ASP:N	2.48	0.46
1:M:226:LYS:HA	1:M:229:ILE:HB	1.96	0.46
1:M:450:PHE:O	1:M:483:LYS:HA	2.15	0.46
1:N:438:PRO:HB3	1:N:450:PHE:CE2	2.50	0.46
1:N:506:ASN:O	1:N:518:PHE:CB	2.63	0.46
1:N:634:ARG:HG3	1:N:635:HIS:O	2.15	0.46
1:B:227:ARG:O	1:B:231:GLN:HG3	2.16	0.46
1:C:140:ILE:HG21	1:C:156:ILE:HD13	1.98	0.46
1:D:182:ARG:HA	1:D:185:GLU:CD	2.36	0.46
1:E:182:ARG:HA	1:E:185:GLU:CD	2.36	0.46
1:E:450:PHE:O	1:E:483:LYS:HA	2.15	0.46
1:F:182:ARG:HA	1:F:185:GLU:CD	2.36	0.46
1:F:438:PRO:HB3	1:F:450:PHE:CE2	2.50	0.46
1:G:476:ASP:OD1	1:G:476:ASP:N	2.48	0.46
1:I:122:LEU:HD23	1:I:125:ASN:ND2	2.19	0.46
1:J:182:ARG:HA	1:J:185:GLU:CD	2.36	0.46
1:J:339:VAL:HG22	1:J:423:ILE:HG12	1.98	0.46
1:J:507:VAL:HG22	1:J:508:LEU:N	2.30	0.46
1:K:506:ASN:O	1:K:518:PHE:CB	2.63	0.46
1:L:226:LYS:HA	1:L:229:ILE:HB	1.96	0.46
1:L:504:VAL:HG12	1:L:521:ARG:O	2.16	0.46
1:M:120:ARG:HG2	1:M:123:ILE:HD12	1.96	0.46
1:M:203:LYS:N	1:M:216:SER:HG	2.14	0.46
1:M:501:GLU:HG2	1:M:524:ASN:HB2	1.98	0.46
1:N:472:PHE:C	1:N:472:PHE:CD1	2.86	0.46
1:N:476:ASP:N	1:N:476:ASP:OD1	2.48	0.46
1:N:322:ILE:HG23	1:N:581:ILE:HD11	1.98	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:450:PHE:O	1:A:483:LYS:HA	2.15	0.46
1:A:476:ASP:N	1:A:476:ASP:OD1	2.48	0.46
1:A:504:VAL:HG12	1:A:521:ARG:O	2.16	0.46
1:B:158:ARG:O	1:B:162:ALA:HB2	2.15	0.46
1:D:227:ARG:O	1:D:231:GLN:HG3	2.16	0.46
1:E:120:ARG:HG2	1:E:123:ILE:HD12	1.96	0.46
1:E:207:ASP:O	1:E:211:ASN:HA	2.16	0.46
1:F:140:ILE:HG21	1:F:156:ILE:HD13	1.98	0.46
1:F:171:GLU:HA	1:F:212:SER:OG	2.16	0.46
1:F:203:LYS:N	1:F:216:SER:HG	2.14	0.46
1:G:339:VAL:HG22	1:G:423:ILE:HG12	1.98	0.46
1:H:205:VAL:HG12	1:H:206:ALA:H	1.81	0.46
1:H:450:PHE:O	1:H:483:LYS:HA	2.15	0.46
1:H:504:VAL:HG12	1:H:521:ARG:O	2.16	0.46
1:H:501:GLU:HG2	1:H:524:ASN:HB2	1.98	0.46
1:I:140:ILE:HG21	1:I:156:ILE:HD13	1.98	0.46
1:I:450:PHE:O	1:I:483:LYS:HA	2.15	0.46
1:I:501:GLU:HG2	1:I:524:ASN:HB2	1.98	0.46
1:J:504:VAL:HG12	1:J:521:ARG:O	2.16	0.46
1:L:339:VAL:HG22	1:L:423:ILE:HG12	1.98	0.46
1:M:227:ARG:O	1:M:231:GLN:HG3	2.16	0.46
1:M:476:ASP:OD1	1:M:476:ASP:N	2.48	0.46
1:N:182:ARG:HA	1:N:185:GLU:CD	2.36	0.46
1:N:504:VAL:HG12	1:N:521:ARG:O	2.16	0.46
1:O:205:VAL:HG12	1:O:206:ALA:H	1.81	0.46
1:O:215:ILE:HA	1:O:215:ILE:HD12	1.82	0.46
1:O:340:GLN:HE21	1:O:352:TYR:HB2	1.81	0.46
1:A:322:ILE:HG23	1:A:581:ILE:HD11	1.98	0.46
1:B:239:LYS:HE3	1:B:300:GLN:HB2	1.97	0.46
1:D:157:ARG:HA	1:D:160:ASP:HB3	1.98	0.46
1:D:171:GLU:HA	1:D:212:SER:OG	2.16	0.46
1:D:479:GLU:CD	1:D:479:GLU:H	2.07	0.46
1:E:158:ARG:O	1:E:162:ALA:HB2	2.15	0.46
1:E:171:GLU:HA	1:E:212:SER:OG	2.16	0.46
1:E:322:ILE:HG23	1:E:581:ILE:HD11	1.98	0.46
1:E:504:VAL:HG12	1:E:521:ARG:HG2	1.94	0.46
1:F:340:GLN:HE21	1:F:352:TYR:HB2	1.81	0.46
1:F:476:ASP:N	1:F:476:ASP:OD1	2.48	0.46
1:G:140:ILE:HG21	1:G:156:ILE:HD13	1.98	0.46
1:G:203:LYS:N	1:G:216:SER:HG	2.14	0.46
1:G:226:LYS:HA	1:G:229:ILE:HB	1.96	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:501:GLU:HG2	1:G:524:ASN:HB2	1.98	0.46
1:H:339:VAL:HG22	1:H:423:ILE:HG12	1.98	0.46
1:I:227:ARG:O	1:I:231:GLN:HG3	2.16	0.46
1:I:339:VAL:HG22	1:I:423:ILE:HG12	1.98	0.46
1:I:340:GLN:HE21	1:I:352:TYR:HB2	1.81	0.46
1:K:205:VAL:HG12	1:K:206:ALA:H	1.81	0.46
1:L:450:PHE:O	1:L:483:LYS:HA	2.15	0.46
1:M:322:ILE:HG23	1:M:581:ILE:HD11	1.98	0.46
1:O:227:ARG:O	1:O:231:GLN:HG3	2.16	0.46
1:O:322:ILE:HG23	1:O:581:ILE:HD11	1.98	0.46
1:B:157:ARG:HA	1:B:160:ASP:HB3	1.99	0.46
1:B:322:ILE:HG23	1:B:581:ILE:HD11	1.98	0.46
1:C:450:PHE:O	1:C:483:LYS:HA	2.15	0.46
1:C:506:ASN:O	1:C:518:PHE:CB	2.63	0.46
1:C:478:LYS:HD2	1:C:518:PHE:HZ	1.79	0.46
1:D:504:VAL:HG12	1:D:521:ARG:O	2.16	0.46
1:E:438:PRO:HB3	1:E:450:PHE:CE2	2.50	0.46
1:F:120:ARG:HG2	1:F:123:ILE:HD12	1.96	0.46
1:G:171:GLU:HA	1:G:212:SER:OG	2.16	0.46
1:H:140:ILE:HG21	1:H:156:ILE:HD13	1.98	0.46
1:I:177:ALA:N	1:I:211:ASN:OD1	2.41	0.46
1:I:504:VAL:HG12	1:I:521:ARG:HG2	1.94	0.46
1:L:205:VAL:HG12	1:L:206:ALA:H	1.81	0.46
1:L:340:GLN:HE21	1:L:352:TYR:HB2	1.81	0.46
1:M:182:ARG:HA	1:M:185:GLU:CD	2.36	0.46
1:M:339:VAL:HG22	1:M:423:ILE:HG12	1.98	0.46
1:M:478:LYS:HD2	1:M:518:PHE:HZ	1.79	0.46
1:O:476:ASP:OD1	1:O:476:ASP:N	2.48	0.46
1:A:140:ILE:HG21	1:A:156:ILE:HD13	1.98	0.45
1:A:504:VAL:HG12	1:A:521:ARG:HG2	1.94	0.45
1:B:140:ILE:HG21	1:B:156:ILE:HD13	1.98	0.45
1:B:205:VAL:HG12	1:B:206:ALA:H	1.81	0.45
1:B:167:ILE:CA	1:B:215:ILE:O	2.42	0.45
1:B:203:LYS:N	1:B:216:SER:HG	2.14	0.45
1:C:171:GLU:HA	1:C:212:SER:OG	2.16	0.45
1:F:322:ILE:HG23	1:F:581:ILE:HD11	1.98	0.45
1:G:120:ARG:HG2	1:G:123:ILE:HD12	1.96	0.45
1:H:171:GLU:HA	1:H:212:SER:OG	2.16	0.45
1:H:226:LYS:HA	1:H:229:ILE:HB	1.96	0.45
1:I:171:GLU:HA	1:I:212:SER:OG	2.16	0.45
1:I:506:ASN:O	1:I:518:PHE:CB	2.63	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:J:203:LYS:N	1:J:216:SER:HG	2.14	0.45
1:J:227:ARG:O	1:J:231:GLN:HG3	2.16	0.45
1:K:140:ILE:HG21	1:K:156:ILE:HD13	1.98	0.45
1:K:207:ASP:O	1:K:211:ASN:HA	2.16	0.45
1:K:339:VAL:HG22	1:K:423:ILE:HG12	1.98	0.45
1:L:227:ARG:O	1:L:231:GLN:HG3	2.16	0.45
1:N:105:VAL:O	1:N:140:ILE:CB	2.49	0.45
1:O:157:ARG:HA	1:O:160:ASP:HB3	1.98	0.45
1:O:203:LYS:N	1:O:216:SER:HG	2.14	0.45
1:O:438:PRO:HB3	1:O:450:PHE:CE2	2.50	0.45
1:O:506:ASN:O	1:O:518:PHE:CB	2.63	0.45
1:A:207:ASP:O	1:A:211:ASN:HA	2.16	0.45
1:A:177:ALA:N	1:A:211:ASN:OD1	2.41	0.45
1:A:180:MET:HE2	1:A:213:ILE:HD11	1.97	0.45
1:B:225:LEU:HA	1:B:225:LEU:HD23	1.74	0.45
1:B:504:VAL:HG12	1:B:521:ARG:O	2.16	0.45
1:C:227:ARG:O	1:C:231:GLN:HG3	2.16	0.45
1:C:522:GLN:H	1:D:451:ILE:HG23	1.82	0.45
1:C:322:ILE:HG23	1:C:581:ILE:HD11	1.98	0.45
1:D:322:ILE:HG23	1:D:581:ILE:HD11	1.98	0.45
1:F:339:VAL:HG22	1:F:423:ILE:HG12	1.98	0.45
1:H:340:GLN:HE21	1:H:352:TYR:HB2	1.81	0.45
1:H:506:ASN:O	1:H:518:PHE:CB	2.63	0.45
1:K:227:ARG:O	1:K:231:GLN:HG3	2.16	0.45
1:K:472:PHE:C	1:K:472:PHE:CD1	2.86	0.45
1:L:207:ASP:O	1:L:211:ASN:HA	2.16	0.45
1:N:501:GLU:HG2	1:N:524:ASN:HB2	1.98	0.45
1:O:140:ILE:HG21	1:O:156:ILE:HD13	1.98	0.45
1:O:207:ASP:O	1:O:211:ASN:HA	2.16	0.45
1:A:203:LYS:N	1:A:216:SER:HG	2.14	0.45
1:A:218:ASP:O	1:A:222:ARG:N	2.50	0.45
1:A:451:ILE:HG23	1:O:522:GLN:H	1.82	0.45
1:B:207:ASP:O	1:B:211:ASN:HA	2.16	0.45
1:B:218:ASP:O	1:B:222:ARG:N	2.50	0.45
1:C:491:ASN:ND2	1:D:249:TYR:OH	2.50	0.45
1:D:122:LEU:HD23	1:D:125:ASN:ND2	2.19	0.45
1:D:504:VAL:HG12	1:D:521:ARG:HG2	1.94	0.45
1:E:477:ARG:NH1	1:E:477:ARG:CG	2.73	0.45
1:G:322:ILE:HG23	1:G:581:ILE:HD11	1.98	0.45
1:H:203:LYS:N	1:H:216:SER:HG	2.14	0.45
1:I:218:ASP:O	1:I:222:ARG:N	2.50	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:504:VAL:HG12	1:K:521:ARG:O	2.16	0.45
1:L:218:ASP:O	1:L:222:ARG:N	2.50	0.45
1:L:322:ILE:HG23	1:L:581:ILE:HD11	1.98	0.45
1:M:218:ASP:O	1:M:222:ARG:N	2.50	0.45
1:M:340:GLN:HE21	1:M:352:TYR:HB2	1.81	0.45
1:M:507:VAL:HG22	1:M:508:LEU:N	2.29	0.45
1:N:207:ASP:O	1:N:211:ASN:HA	2.16	0.45
1:N:227:ARG:O	1:N:231:GLN:HG3	2.16	0.45
1:N:340:GLN:HE21	1:N:352:TYR:HB2	1.81	0.45
1:B:171:GLU:HA	1:B:212:SER:OG	2.16	0.45
1:B:438:PRO:HB3	1:B:450:PHE:CE2	2.50	0.45
1:C:504:VAL:HG12	1:C:521:ARG:O	2.16	0.45
1:D:205:VAL:HG12	1:D:206:ALA:H	1.81	0.45
1:D:219:PRO:HA	1:D:222:ARG:CB	2.45	0.45
1:E:339:VAL:HG22	1:E:423:ILE:HG12	1.98	0.45
1:F:157:ARG:HA	1:F:160:ASP:HB3	1.98	0.45
1:F:501:GLU:HG2	1:F:524:ASN:HB2	1.98	0.45
1:H:218:ASP:O	1:H:222:ARG:N	2.50	0.45
1:I:491:ASN:ND2	1:J:249:TYR:OH	2.50	0.45
1:K:182:ARG:HA	1:K:185:GLU:CD	2.36	0.45
1:L:140:ILE:HG21	1:L:156:ILE:HD13	1.98	0.45
1:M:140:ILE:HG21	1:M:156:ILE:HD13	1.98	0.45
1:M:207:ASP:O	1:M:211:ASN:HA	2.16	0.45
1:O:504:VAL:HG12	1:O:521:ARG:O	2.16	0.45
1:A:438:PRO:HB3	1:A:450:PHE:CE2	2.50	0.45
1:A:504:VAL:HG11	1:A:521:ARG:CG	2.47	0.45
1:B:177:ALA:N	1:B:211:ASN:OD1	2.41	0.45
1:F:478:LYS:HD2	1:F:518:PHE:HZ	1.79	0.45
1:G:220:LYS:O	1:G:224:ARG:HG2	2.17	0.45
1:G:340:GLN:HE21	1:G:352:TYR:HB2	1.81	0.45
1:H:322:ILE:HG23	1:H:581:ILE:HD11	1.98	0.45
1:J:506:ASN:O	1:J:518:PHE:CB	2.63	0.45
1:J:491:ASN:ND2	1:K:249:TYR:OH	2.50	0.45
1:L:522:GLN:H	1:M:451:ILE:HG23	1.82	0.45
1:A:220:LYS:O	1:A:224:ARG:HG2	2.17	0.45
1:A:522:GLN:H	1:B:451:ILE:HG23	1.82	0.45
1:B:504:VAL:HG11	1:B:521:ARG:CG	2.47	0.45
1:C:167:ILE:CA	1:C:215:ILE:O	2.42	0.45
1:B:491:ASN:ND2	1:C:249:TYR:OH	2.50	0.45
1:C:504:VAL:HG11	1:C:521:ARG:CG	2.47	0.45
1:D:220:LYS:O	1:D:224:ARG:HG2	2.17	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:339:VAL:HG22	1:D:423:ILE:HG12	1.98	0.45
1:D:491:ASN:ND2	1:E:249:TYR:OH	2.50	0.45
1:E:504:VAL:HG12	1:E:521:ARG:O	2.16	0.45
1:F:220:LYS:O	1:F:224:ARG:HG2	2.17	0.45
1:G:157:ARG:HA	1:G:160:ASP:HB3	1.98	0.45
1:G:472:PHE:CD1	1:G:472:PHE:C	2.86	0.45
1:G:506:ASN:O	1:G:518:PHE:CB	2.63	0.45
1:I:504:VAL:HG12	1:I:521:ARG:O	2.16	0.45
1:J:171:GLU:HA	1:J:212:SER:OG	2.16	0.45
1:K:322:ILE:HG23	1:K:581:ILE:HD11	1.98	0.45
1:M:504:VAL:HG12	1:M:521:ARG:O	2.16	0.45
1:M:522:GLN:H	1:N:451:ILE:HG23	1.82	0.45
1:N:339:VAL:HG22	1:N:423:ILE:HG12	1.98	0.45
1:N:507:VAL:HG22	1:N:508:LEU:N	2.29	0.45
1:O:504:VAL:HG11	1:O:521:ARG:CG	2.47	0.45
1:A:456:VAL:CG2	1:A:457:PRO:N	2.80	0.45
1:A:347:GLY:H	1:B:366:LEU:HD21	1.82	0.45
1:C:218:ASP:O	1:C:222:ARG:N	2.50	0.45
1:C:347:GLY:H	1:D:366:LEU:HD21	1.82	0.45
1:D:522:GLN:H	1:E:451:ILE:HG23	1.82	0.45
1:E:609:PHE:CB	1:F:639:ILE:HD12	2.47	0.45
1:F:180:MET:HE2	1:F:213:ILE:HD11	1.98	0.45
1:F:205:VAL:HG12	1:F:206:ALA:H	1.81	0.45
1:F:347:GLY:H	1:G:366:LEU:HD21	1.82	0.45
1:G:504:VAL:HG12	1:G:521:ARG:O	2.16	0.45
1:H:220:LYS:O	1:H:224:ARG:HG2	2.17	0.45
1:H:347:GLY:H	1:I:366:LEU:HD21	1.82	0.45
1:H:456:VAL:CG2	1:H:457:PRO:N	2.80	0.45
1:H:507:VAL:HG22	1:H:508:LEU:N	2.29	0.45
1:I:347:GLY:H	1:J:366:LEU:HD21	1.82	0.45
1:L:102:THR:OG1	1:L:142:ILE:O	2.25	0.45
1:N:609:PHE:CB	1:O:639:ILE:HD12	2.47	0.45
1:O:481:GLY:O	1:O:505:SER:HB3	2.17	0.45
1:A:205:VAL:HG12	1:A:206:ALA:H	1.81	0.45
1:A:366:LEU:HD21	1:O:347:GLY:H	1.82	0.45
1:B:458:VAL:O	1:B:475:VAL:C	2.49	0.45
1:C:205:VAL:HG12	1:C:206:ALA:H	1.81	0.45
1:C:207:ASP:O	1:C:211:ASN:HA	2.16	0.45
1:C:203:LYS:N	1:C:216:SER:HG	2.14	0.45
1:D:105:VAL:O	1:D:140:ILE:CB	2.49	0.45
1:E:220:LYS:O	1:E:224:ARG:HG2	2.17	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:218:ASP:O	1:G:222:ARG:N	2.50	0.45
1:H:255:LEU:HA	1:H:255:LEU:HD23	1.73	0.45
1:I:220:LYS:O	1:I:224:ARG:HG2	2.17	0.45
1:I:255:LEU:HD23	1:I:255:LEU:HA	1.73	0.45
1:I:322:ILE:HG23	1:I:581:ILE:HD11	1.98	0.45
1:J:218:ASP:O	1:J:222:ARG:N	2.50	0.45
1:J:322:ILE:HG23	1:J:581:ILE:HD11	1.98	0.45
1:L:220:LYS:O	1:L:224:ARG:HG2	2.17	0.45
1:M:220:LYS:O	1:M:224:ARG:HG2	2.17	0.45
1:N:140:ILE:HG21	1:N:156:ILE:HD13	1.98	0.45
1:B:347:GLY:H	1:C:366:LEU:HD21	1.82	0.45
1:B:609:PHE:CB	1:C:639:ILE:HD12	2.47	0.45
1:C:219:PRO:HA	1:C:222:ARG:CB	2.45	0.45
1:C:339:VAL:HG22	1:C:423:ILE:HG12	1.98	0.45
1:D:501:GLU:HG2	1:D:524:ASN:HB2	1.98	0.45
1:E:157:ARG:HA	1:E:160:ASP:HB3	1.98	0.45
1:E:456:VAL:CG2	1:E:457:PRO:N	2.80	0.45
1:E:501:GLU:HG2	1:E:524:ASN:HB2	1.98	0.45
1:F:491:ASN:ND2	1:G:249:TYR:OH	2.50	0.45
1:F:522:GLN:H	1:G:451:ILE:HG23	1.82	0.45
1:G:507:VAL:HG22	1:G:508:LEU:N	2.29	0.45
1:G:491:ASN:ND2	1:H:249:TYR:OH	2.50	0.45
1:J:220:LYS:O	1:J:224:ARG:HG2	2.17	0.45
1:J:255:LEU:HA	1:J:255:LEU:HD23	1.73	0.45
1:K:220:LYS:O	1:K:224:ARG:HG2	2.17	0.45
1:L:157:ARG:HA	1:L:160:ASP:HB3	1.98	0.45
1:N:218:ASP:O	1:N:222:ARG:N	2.50	0.45
1:N:220:LYS:O	1:N:224:ARG:HG2	2.17	0.45
1:M:491:ASN:ND2	1:N:249:TYR:OH	2.50	0.45
1:N:491:ASN:ND2	1:O:249:TYR:OH	2.50	0.45
1:N:504:VAL:HG11	1:N:521:ARG:CG	2.47	0.45
1:A:639:ILE:HD12	1:O:609:PHE:CB	2.47	0.45
1:B:339:VAL:HG22	1:B:423:ILE:HG12	1.98	0.45
1:B:456:VAL:CG2	1:B:457:PRO:N	2.80	0.45
1:D:456:VAL:CG2	1:D:457:PRO:N	2.80	0.45
1:D:506:ASN:O	1:D:518:PHE:CB	2.63	0.45
1:E:177:ALA:N	1:E:211:ASN:OD1	2.41	0.45
1:E:203:LYS:N	1:E:216:SER:HG	2.14	0.45
1:F:506:ASN:O	1:F:518:PHE:CB	2.63	0.45
1:J:522:GLN:H	1:K:451:ILE:HG23	1.82	0.45
1:K:218:ASP:O	1:K:222:ARG:N	2.50	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:M:171:GLU:HA	1:M:212:SER:OG	2.16	0.45
1:L:491:ASN:ND2	1:M:249:TYR:OH	2.50	0.45
1:N:205:VAL:HG12	1:N:206:ALA:H	1.81	0.45
1:N:481:GLY:O	1:N:505:SER:HB3	2.17	0.45
1:O:218:ASP:O	1:O:222:ARG:N	2.50	0.45
1:O:352:TYR:CD2	1:O:567:SER:HB2	2.52	0.45
1:A:339:VAL:HG22	1:A:423:ILE:HG12	1.98	0.44
1:A:352:TYR:CD2	1:A:567:SER:HB2	2.52	0.44
1:A:491:ASN:ND2	1:B:249:TYR:OH	2.50	0.44
1:A:481:GLY:O	1:A:505:SER:HB3	2.17	0.44
1:C:157:ARG:HA	1:C:160:ASP:HB3	1.98	0.44
1:C:501:GLU:HG2	1:C:524:ASN:HB2	1.98	0.44
1:D:167:ILE:CA	1:D:215:ILE:O	2.42	0.44
1:E:347:GLY:H	1:F:366:LEU:HD21	1.82	0.44
1:F:504:VAL:HG12	1:F:521:ARG:HG2	1.94	0.44
1:G:347:GLY:H	1:H:366:LEU:HD21	1.82	0.44
1:G:456:VAL:CG2	1:G:457:PRO:N	2.80	0.44
1:I:157:ARG:HA	1:I:160:ASP:HB3	1.99	0.44
1:I:507:VAL:HG22	1:I:508:LEU:N	2.29	0.44
1:J:347:GLY:H	1:K:366:LEU:HD21	1.82	0.44
1:I:522:GLN:H	1:J:451:ILE:HG23	1.82	0.44
1:M:389:GLU:OE2	1:M:391:THR:HB	2.18	0.44
1:M:504:VAL:HG11	1:M:521:ARG:CG	2.47	0.44
1:N:504:VAL:HG12	1:N:521:ARG:HG2	1.94	0.44
1:O:504:VAL:HG12	1:O:521:ARG:HG2	1.94	0.44
1:O:501:GLU:HG2	1:O:524:ASN:HB2	1.98	0.44
1:A:171:GLU:HA	1:A:212:SER:OG	2.16	0.44
1:A:249:TYR:OH	1:O:491:ASN:ND2	2.50	0.44
1:B:220:LYS:O	1:B:224:ARG:HG2	2.17	0.44
1:E:522:GLN:H	1:F:451:ILE:HG23	1.82	0.44
1:F:215:ILE:HA	1:F:215:ILE:HD12	1.82	0.44
1:I:219:PRO:HA	1:I:222:ARG:CB	2.45	0.44
1:I:456:VAL:CG2	1:I:457:PRO:N	2.80	0.44
1:J:481:GLY:O	1:J:505:SER:HB3	2.17	0.44
1:K:481:GLY:O	1:K:505:SER:HB3	2.17	0.44
1:K:507:VAL:HG22	1:K:508:LEU:N	2.30	0.44
1:K:522:GLN:H	1:L:451:ILE:HG23	1.82	0.44
1:L:352:TYR:CD2	1:L:567:SER:HB2	2.53	0.44
1:N:215:ILE:HA	1:N:215:ILE:HD12	1.82	0.44
1:O:220:LYS:O	1:O:224:ARG:HG2	2.17	0.44
1:O:339:VAL:HG22	1:O:423:ILE:HG12	1.98	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:N:347:GLY:H	1:O:366:LEU:HD21	1.82	0.44
1:C:389:GLU:OE2	1:C:391:THR:HB	2.18	0.44
1:E:491:ASN:ND2	1:F:249:TYR:OH	2.50	0.44
1:E:507:VAL:HG22	1:E:508:LEU:N	2.30	0.44
1:F:218:ASP:O	1:F:222:ARG:N	2.50	0.44
1:F:389:GLU:OE2	1:F:391:THR:HB	2.17	0.44
1:G:205:VAL:HG12	1:G:206:ALA:H	1.81	0.44
1:G:522:GLN:H	1:H:451:ILE:HG23	1.82	0.44
1:H:609:PHE:CB	1:I:639:ILE:HD12	2.47	0.44
1:I:205:VAL:HG12	1:I:206:ALA:H	1.81	0.44
1:J:225:LEU:HA	1:J:225:LEU:HD23	1.74	0.44
1:J:235:GLU:CD	1:J:235:GLU:H	2.11	0.44
1:I:609:PHE:CE1	1:J:639:ILE:HD13	2.52	0.44
1:K:167:ILE:CA	1:K:215:ILE:O	2.42	0.44
1:K:352:TYR:CD2	1:K:567:SER:HB2	2.52	0.44
1:K:491:ASN:ND2	1:L:249:TYR:OH	2.50	0.44
1:L:389:GLU:OE2	1:L:391:THR:HB	2.17	0.44
1:L:456:VAL:CG2	1:L:457:PRO:N	2.80	0.44
1:L:491:ASN:O	1:L:493:GLY:N	2.51	0.44
1:M:456:VAL:CG2	1:M:457:PRO:N	2.80	0.44
1:N:157:ARG:HA	1:N:160:ASP:HB3	1.98	0.44
1:N:352:TYR:CD2	1:N:567:SER:HB2	2.52	0.44
1:N:389:GLU:OE2	1:N:391:THR:HB	2.18	0.44
1:O:456:VAL:CG2	1:O:457:PRO:N	2.80	0.44
1:A:427:SER:HB2	1:O:553:PRO:HB3	2.00	0.44
1:A:501:GLU:HG2	1:A:524:ASN:HB2	1.98	0.44
1:B:522:GLN:H	1:C:451:ILE:HG23	1.82	0.44
1:C:255:LEU:HD23	1:C:255:LEU:HA	1.73	0.44
1:D:218:ASP:O	1:D:222:ARG:N	2.50	0.44
1:F:553:PRO:HB3	1:G:427:SER:HB2	2.00	0.44
1:F:609:PHE:CB	1:G:639:ILE:HD12	2.47	0.44
1:G:255:LEU:HD23	1:G:255:LEU:HA	1.73	0.44
1:H:491:ASN:ND2	1:I:249:TYR:OH	2.50	0.44
1:H:553:PRO:HB3	1:I:427:SER:HB2	2.00	0.44
1:I:218:ASP:O	1:I:222:ARG:HG3	2.18	0.44
1:I:481:GLY:O	1:I:505:SER:HB3	2.17	0.44
1:H:609:PHE:CE1	1:I:639:ILE:HD13	2.52	0.44
1:J:609:PHE:CE1	1:K:639:ILE:HD13	2.52	0.44
1:M:609:PHE:CB	1:N:639:ILE:HD12	2.47	0.44
1:N:171:GLU:HA	1:N:212:SER:OG	2.16	0.44
1:N:218:ASP:O	1:N:222:ARG:HG3	2.18	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:219:PRO:HA	1:B:222:ARG:CB	2.45	0.44
1:B:389:GLU:OE2	1:B:391:THR:HB	2.18	0.44
1:C:220:LYS:O	1:C:224:ARG:HG2	2.17	0.44
1:D:389:GLU:OE2	1:D:391:THR:HB	2.18	0.44
1:F:218:ASP:O	1:F:222:ARG:HG3	2.18	0.44
1:F:352:TYR:CD2	1:F:567:SER:HB2	2.52	0.44
1:G:218:ASP:O	1:G:222:ARG:HG3	2.18	0.44
1:G:609:PHE:CB	1:H:639:ILE:HD12	2.47	0.44
1:I:389:GLU:OE2	1:I:391:THR:HB	2.17	0.44
1:I:609:PHE:CB	1:J:639:ILE:HD12	2.47	0.44
1:J:139:ILE:HG22	1:J:140:ILE:N	2.27	0.44
1:K:180:MET:HE3	1:K:180:MET:HB3	1.88	0.44
1:K:491:ASN:O	1:K:493:GLY:N	2.51	0.44
1:L:219:PRO:HA	1:L:222:ARG:CB	2.45	0.44
1:L:609:PHE:CB	1:M:639:ILE:HD12	2.47	0.44
1:M:157:ARG:HA	1:M:160:ASP:HB3	1.98	0.44
1:M:553:PRO:HB3	1:N:427:SER:HB2	2.00	0.44
1:A:177:ALA:HB3	1:A:208:GLU:HG3	2.00	0.44
1:A:167:ILE:CA	1:A:215:ILE:O	2.42	0.44
1:B:218:ASP:O	1:B:222:ARG:HG3	2.18	0.44
1:B:553:PRO:HB3	1:C:427:SER:HB2	2.00	0.44
1:C:479:GLU:H	1:C:479:GLU:CD	2.07	0.44
1:C:609:PHE:CB	1:D:639:ILE:HD12	2.47	0.44
1:D:347:GLY:H	1:E:366:LEU:HD21	1.82	0.44
1:E:506:ASN:O	1:E:518:PHE:CB	2.63	0.44
1:G:389:GLU:OE2	1:G:391:THR:HB	2.18	0.44
1:H:389:GLU:OE2	1:H:391:THR:HB	2.18	0.44
1:I:491:ASN:O	1:I:493:GLY:N	2.51	0.44
1:I:518:PHE:HD1	1:I:518:PHE:O	2.01	0.44
1:J:491:ASN:O	1:J:493:GLY:N	2.51	0.44
1:K:218:ASP:O	1:K:222:ARG:HG3	2.18	0.44
1:J:553:PRO:HB3	1:K:427:SER:HB2	2.00	0.44
1:K:456:VAL:CG2	1:K:457:PRO:N	2.80	0.44
1:L:218:ASP:O	1:L:222:ARG:HG3	2.18	0.44
1:M:352:TYR:CD2	1:M:567:SER:HB2	2.52	0.44
1:M:491:ASN:O	1:M:493:GLY:N	2.51	0.44
1:M:518:PHE:HD1	1:M:518:PHE:O	2.01	0.44
1:N:225:LEU:HD23	1:N:225:LEU:HA	1.74	0.44
1:O:518:PHE:HD1	1:O:518:PHE:O	2.01	0.44
1:A:157:ARG:HA	1:A:160:ASP:HB3	1.98	0.44
1:A:218:ASP:O	1:A:222:ARG:HG3	2.18	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:609:PHE:CB	1:B:639:ILE:HD12	2.47	0.44
1:B:285:ILE:HD12	1:B:296:LEU:CD2	2.48	0.44
1:B:501:GLU:HG2	1:B:524:ASN:HB2	1.98	0.44
1:B:609:PHE:CE1	1:C:639:ILE:HD13	2.52	0.44
1:C:507:VAL:HG22	1:C:508:LEU:N	2.29	0.44
1:D:218:ASP:O	1:D:222:ARG:HG3	2.18	0.44
1:D:609:PHE:CB	1:E:639:ILE:HD12	2.47	0.44
1:C:609:PHE:CE1	1:D:639:ILE:HD13	2.52	0.44
1:E:167:ILE:CA	1:E:215:ILE:O	2.42	0.44
1:D:553:PRO:HB3	1:E:427:SER:HB2	2.00	0.44
1:G:105:VAL:O	1:G:140:ILE:CB	2.49	0.44
1:G:518:PHE:HD1	1:G:518:PHE:O	2.01	0.44
1:K:553:PRO:HB3	1:L:427:SER:HB2	2.00	0.44
1:L:177:ALA:HB3	1:L:208:GLU:HG3	2.00	0.44
1:M:105:VAL:O	1:M:140:ILE:CB	2.49	0.44
1:N:522:GLN:H	1:O:451:ILE:HG23	1.82	0.44
1:O:171:GLU:HA	1:O:212:SER:OG	2.16	0.44
1:O:479:GLU:H	1:O:479:GLU:CD	2.07	0.44
1:A:100:VAL:HG13	1:A:144:GLY:HA2	2.00	0.44
1:B:491:ASN:O	1:B:493:GLY:N	2.51	0.44
1:B:481:GLY:O	1:B:505:SER:HB3	2.17	0.44
1:A:609:PHE:CE1	1:B:639:ILE:HD13	2.52	0.44
1:C:518:PHE:O	1:C:518:PHE:HD1	2.01	0.44
1:E:218:ASP:O	1:E:222:ARG:HG3	2.18	0.44
1:E:285:ILE:HD12	1:E:296:LEU:CD2	2.48	0.44
1:F:456:VAL:CG2	1:F:457:PRO:N	2.80	0.44
1:G:139:ILE:HG22	1:G:140:ILE:N	2.27	0.44
1:H:352:TYR:CD2	1:H:567:SER:HB2	2.53	0.44
1:H:491:ASN:O	1:H:493:GLY:N	2.51	0.44
1:J:157:ARG:HA	1:J:160:ASP:HB3	1.99	0.44
1:L:171:GLU:HA	1:L:212:SER:OG	2.16	0.44
1:L:285:ILE:HD12	1:L:296:LEU:CD2	2.48	0.44
1:L:504:VAL:HG11	1:L:521:ARG:CG	2.47	0.44
1:M:347:GLY:H	1:N:366:LEU:HD21	1.82	0.44
1:M:481:GLY:O	1:M:505:SER:HB3	2.17	0.44
1:O:285:ILE:HD12	1:O:296:LEU:CD2	2.48	0.44
1:A:518:PHE:O	1:A:518:PHE:HD1	2.01	0.44
1:B:100:VAL:HG13	1:B:144:GLY:HA2	2.00	0.44
1:B:352:TYR:CD2	1:B:567:SER:HB2	2.52	0.44
1:C:218:ASP:O	1:C:222:ARG:HG3	2.18	0.44
1:D:285:ILE:HD12	1:D:296:LEU:CD2	2.48	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:491:ASN:O	1:D:493:GLY:N	2.51	0.44
1:D:518:PHE:O	1:D:518:PHE:HD1	2.01	0.44
1:E:105:VAL:CG1	1:E:157:ARG:HE	2.31	0.44
1:E:218:ASP:O	1:E:222:ARG:N	2.50	0.44
1:E:389:GLU:OE2	1:E:391:THR:HB	2.18	0.44
1:E:491:ASN:O	1:E:493:GLY:N	2.51	0.44
1:F:285:ILE:HD12	1:F:296:LEU:CD2	2.48	0.44
1:F:491:ASN:O	1:F:493:GLY:N	2.51	0.44
1:F:518:PHE:O	1:F:518:PHE:HD1	2.01	0.44
1:G:491:ASN:O	1:G:493:GLY:N	2.51	0.44
1:H:481:GLY:O	1:H:505:SER:HB3	2.17	0.44
1:I:352:TYR:CD2	1:I:567:SER:HB2	2.52	0.44
1:J:518:PHE:HD1	1:J:518:PHE:O	2.01	0.44
1:L:481:GLY:O	1:L:505:SER:HB3	2.17	0.44
1:K:609:PHE:CB	1:L:639:ILE:HD12	2.47	0.44
1:M:177:ALA:HB3	1:M:208:GLU:HG3	2.00	0.44
1:M:218:ASP:O	1:M:222:ARG:HG3	2.18	0.44
1:O:100:VAL:HG13	1:O:144:GLY:HA2	2.00	0.44
1:O:177:ALA:HB3	1:O:208:GLU:HG3	2.00	0.44
1:O:389:GLU:OE2	1:O:391:THR:HB	2.17	0.44
1:A:639:ILE:HD13	1:O:609:PHE:CE1	2.52	0.43
1:A:553:PRO:HB3	1:B:427:SER:HB2	2.00	0.43
1:C:100:VAL:HG13	1:C:144:GLY:HA2	2.00	0.43
1:C:285:ILE:HD12	1:C:296:LEU:CD2	2.48	0.43
1:C:456:VAL:CG2	1:C:457:PRO:N	2.80	0.43
1:C:491:ASN:O	1:C:493:GLY:N	2.51	0.43
1:E:100:VAL:HG13	1:E:144:GLY:HA2	2.00	0.43
1:G:609:PHE:CE1	1:H:639:ILE:HD13	2.52	0.43
1:H:105:VAL:CG1	1:H:157:ARG:HE	2.32	0.43
1:H:522:GLN:H	1:I:451:ILE:HG23	1.82	0.43
1:H:643:ILE:HA	1:H:643:ILE:HD12	1.86	0.43
1:J:389:GLU:OE2	1:J:391:THR:HB	2.17	0.43
1:J:609:PHE:CB	1:K:639:ILE:HD12	2.47	0.43
1:K:389:GLU:OE2	1:K:391:THR:HB	2.17	0.43
1:L:225:LEU:HA	1:L:225:LEU:HD23	1.74	0.43
1:K:347:GLY:H	1:L:366:LEU:HD21	1.82	0.43
1:L:518:PHE:HD1	1:L:518:PHE:O	2.01	0.43
1:K:609:PHE:CE1	1:L:639:ILE:HD13	2.52	0.43
1:N:285:ILE:HD12	1:N:296:LEU:CD2	2.48	0.43
1:N:456:VAL:CG2	1:N:457:PRO:N	2.80	0.43
1:N:491:ASN:O	1:N:493:GLY:N	2.51	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:491:ASN:O	1:A:493:GLY:N	2.51	0.43
1:C:553:PRO:HB3	1:D:427:SER:HB2	2.00	0.43
1:D:177:ALA:HB3	1:D:208:GLU:HG3	2.00	0.43
1:E:481:GLY:O	1:E:505:SER:HB3	2.17	0.43
1:F:100:VAL:HG13	1:F:144:GLY:HA2	2.00	0.43
1:G:100:VAL:HG13	1:G:144:GLY:HA2	2.00	0.43
1:H:218:ASP:O	1:H:222:ARG:HG3	2.18	0.43
1:I:553:PRO:HB3	1:J:427:SER:HB2	2.00	0.43
1:J:477:ARG:CG	1:J:477:ARG:NH1	2.73	0.43
1:K:171:GLU:HA	1:K:212:SER:OG	2.16	0.43
1:A:219:PRO:HA	1:A:222:ARG:CB	2.45	0.43
1:A:255:LEU:HA	1:A:255:LEU:HD23	1.73	0.43
1:A:389:GLU:OE2	1:A:391:THR:HB	2.18	0.43
1:B:255:LEU:HA	1:B:255:LEU:HD23	1.73	0.43
1:B:518:PHE:HD1	1:B:518:PHE:O	2.01	0.43
1:C:352:TYR:CD2	1:C:567:SER:HB2	2.52	0.43
1:G:285:ILE:HD12	1:G:296:LEU:CD2	2.48	0.43
1:G:481:GLY:O	1:G:505:SER:HB3	2.17	0.43
1:I:177:ALA:HB3	1:I:208:GLU:HG3	2.00	0.43
1:J:177:ALA:HB3	1:J:208:GLU:HG3	2.00	0.43
1:J:456:VAL:CG2	1:J:457:PRO:N	2.80	0.43
1:K:105:VAL:CG1	1:K:157:ARG:HE	2.32	0.43
1:K:285:ILE:HD12	1:K:296:LEU:CD2	2.48	0.43
1:N:167:ILE:CA	1:N:215:ILE:O	2.42	0.43
1:N:518:PHE:HD1	1:N:518:PHE:O	2.01	0.43
1:O:218:ASP:O	1:O:222:ARG:HG3	2.18	0.43
1:D:100:VAL:HG13	1:D:144:GLY:HA2	2.00	0.43
1:D:352:TYR:CD2	1:D:567:SER:HB2	2.52	0.43
1:E:352:TYR:CD2	1:E:567:SER:HB2	2.52	0.43
1:H:518:PHE:HD1	1:H:518:PHE:O	2.01	0.43
1:N:139:ILE:HG22	1:N:140:ILE:N	2.27	0.43
1:B:516:VAL:O	1:B:516:VAL:HG23	2.19	0.43
1:F:255:LEU:HD23	1:F:255:LEU:HA	1.73	0.43
1:G:352:TYR:CD2	1:G:567:SER:HB2	2.52	0.43
1:H:177:ALA:N	1:H:211:ASN:OD1	2.41	0.43
1:G:553:PRO:HB3	1:H:427:SER:HB2	2.00	0.43
1:J:219:PRO:HA	1:J:222:ARG:CB	2.45	0.43
1:J:285:ILE:HD12	1:J:296:LEU:CD2	2.48	0.43
1:K:157:ARG:HA	1:K:160:ASP:HB3	1.98	0.43
1:K:504:VAL:HG11	1:K:521:ARG:CG	2.47	0.43
1:N:100:VAL:HG13	1:N:144:GLY:HA2	2.00	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:507:VAL:HG22	1:A:508:LEU:N	2.30	0.43
1:B:435:LEU:CD2	1:C:626:LEU:HD23	2.49	0.43
1:C:177:ALA:HB3	1:C:208:GLU:HG3	2.00	0.43
1:C:225:LEU:HA	1:C:225:LEU:HD23	1.74	0.43
1:E:102:THR:HA	1:E:143:THR:HA	2.01	0.43
1:E:518:PHE:HD1	1:E:518:PHE:O	2.01	0.43
1:E:553:PRO:HB3	1:F:427:SER:HB2	2.00	0.43
1:D:435:LEU:CD2	1:E:626:LEU:HD23	2.49	0.43
1:F:167:ILE:CA	1:F:215:ILE:O	2.42	0.43
1:G:105:VAL:CG1	1:G:157:ARG:HE	2.32	0.43
1:H:102:THR:HA	1:H:143:THR:HA	2.01	0.43
1:H:157:ARG:HA	1:H:160:ASP:HB3	1.99	0.43
1:I:225:LEU:HD23	1:I:225:LEU:HA	1.74	0.43
1:J:102:THR:HA	1:J:143:THR:HA	2.01	0.43
1:J:218:ASP:O	1:J:222:ARG:HG3	2.18	0.43
1:J:352:TYR:CD2	1:J:567:SER:HB2	2.53	0.43
1:N:609:PHE:CE1	1:O:639:ILE:HD13	2.52	0.43
1:H:100:VAL:HG13	1:H:144:GLY:HA2	2.00	0.43
1:H:504:VAL:HG12	1:H:521:ARG:HG2	1.94	0.43
1:I:285:ILE:HD12	1:I:296:LEU:CD2	2.48	0.43
1:I:357:ALA:HB3	1:I:407:ILE:HD11	2.01	0.43
1:K:102:THR:HA	1:K:143:THR:HA	2.01	0.43
1:K:458:VAL:CG2	1:K:478:LYS:HG2	2.48	0.43
1:M:102:THR:HA	1:M:143:THR:HA	2.01	0.43
1:M:100:VAL:HG13	1:M:144:GLY:HA2	2.00	0.43
1:L:553:PRO:HB3	1:M:427:SER:HB2	2.00	0.43
1:M:435:LEU:CD2	1:N:626:LEU:HD23	2.49	0.43
1:M:504:VAL:HG12	1:M:521:ARG:HG2	1.94	0.43
1:B:177:ALA:HB3	1:B:208:GLU:HG3	2.00	0.43
1:D:102:THR:HA	1:D:143:THR:HA	2.01	0.43
1:D:609:PHE:CE1	1:E:639:ILE:HD13	2.52	0.43
1:G:102:THR:HA	1:G:143:THR:HA	2.01	0.43
1:G:435:LEU:CD2	1:H:626:LEU:HD23	2.49	0.43
1:H:285:ILE:HD12	1:H:296:LEU:CD2	2.48	0.43
1:H:357:ALA:HB3	1:H:407:ILE:HD11	2.01	0.43
1:I:102:THR:HA	1:I:143:THR:HA	2.01	0.43
1:I:105:VAL:CG1	1:I:157:ARG:HE	2.31	0.43
1:I:180:MET:HE3	1:I:180:MET:HB3	1.87	0.43
1:N:435:LEU:CD2	1:O:626:LEU:HD23	2.49	0.43
1:N:553:PRO:HB3	1:O:427:SER:HB2	2.00	0.43
1:N:521:ARG:HA	1:O:451:ILE:O	2.19	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:O:491:ASN:O	1:O:493:GLY:N	2.51	0.43
1:A:458:VAL:CG2	1:A:478:LYS:HG2	2.48	0.43
1:B:458:VAL:CG2	1:B:478:LYS:HG2	2.48	0.43
1:C:481:GLY:O	1:C:505:SER:HB3	2.17	0.43
1:C:516:VAL:O	1:C:516:VAL:HG23	2.19	0.43
1:E:215:ILE:HD12	1:E:215:ILE:HA	1.82	0.43
1:D:521:ARG:HA	1:E:451:ILE:O	2.19	0.43
1:F:102:THR:HA	1:F:143:THR:HA	2.01	0.43
1:F:435:LEU:CD2	1:G:626:LEU:HD23	2.49	0.43
1:F:481:GLY:O	1:F:505:SER:HB3	2.17	0.43
1:G:357:ALA:HB3	1:G:407:ILE:HD11	2.01	0.43
1:H:166:GLU:HB3	1:H:167:ILE:H	1.67	0.43
1:I:100:VAL:HG13	1:I:144:GLY:HA2	2.00	0.43
1:J:225:LEU:O	1:J:229:ILE:HG13	2.19	0.43
1:I:435:LEU:CD2	1:J:626:LEU:HD23	2.49	0.43
1:K:166:GLU:HB3	1:K:167:ILE:H	1.67	0.43
1:K:225:LEU:O	1:K:229:ILE:HG13	2.19	0.43
1:J:521:ARG:HA	1:K:451:ILE:O	2.19	0.43
1:M:285:ILE:HD12	1:M:296:LEU:CD2	2.48	0.43
1:L:435:LEU:CD2	1:M:626:LEU:HD23	2.49	0.43
1:N:102:THR:HA	1:N:143:THR:HA	2.01	0.43
1:N:479:GLU:H	1:N:479:GLU:CD	2.07	0.43
1:N:516:VAL:HG23	1:N:516:VAL:O	2.19	0.43
1:O:219:PRO:HA	1:O:222:ARG:CB	2.45	0.43
1:A:516:VAL:HG23	1:A:516:VAL:O	2.19	0.43
1:A:626:LEU:HD23	1:O:435:LEU:CD2	2.49	0.43
1:C:521:ARG:HA	1:D:451:ILE:O	2.19	0.43
1:E:609:PHE:CE1	1:F:639:ILE:HD13	2.52	0.43
1:F:105:VAL:CG1	1:F:157:ARG:HE	2.32	0.43
1:G:115:LEU:HB3	1:G:119:LEU:HG	2.01	0.43
1:H:521:ARG:HA	1:I:451:ILE:O	2.19	0.43
1:J:301:ASP:OD1	1:J:302:ILE:N	2.52	0.43
1:J:504:VAL:HG11	1:J:521:ARG:CG	2.47	0.43
1:K:435:LEU:CD2	1:L:626:LEU:HD23	2.49	0.43
1:L:102:THR:HA	1:L:143:THR:HA	2.01	0.43
1:L:115:LEU:HB3	1:L:119:LEU:HG	2.01	0.43
1:M:115:LEU:HB3	1:M:119:LEU:HG	2.01	0.43
1:M:166:GLU:HB3	1:M:167:ILE:H	1.67	0.43
1:O:102:THR:HA	1:O:143:THR:HA	2.01	0.43
1:A:451:ILE:O	1:O:521:ARG:HA	2.19	0.43
1:C:105:VAL:CG1	1:C:157:ARG:HE	2.32	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:516:VAL:O	1:E:516:VAL:HG23	2.19	0.42
1:G:504:VAL:HG12	1:G:521:ARG:HG2	1.94	0.42
1:H:115:LEU:HB3	1:H:119:LEU:HG	2.01	0.42
1:K:115:LEU:HB3	1:K:119:LEU:HG	2.01	0.42
1:K:219:PRO:HA	1:K:222:ARG:CB	2.45	0.42
1:K:99:GLU:O	1:K:145:ARG:HA	2.19	0.42
1:L:225:LEU:O	1:L:229:ILE:HG13	2.19	0.42
1:L:551:LYS:HB3	1:L:566:ARG:HG2	2.01	0.42
1:M:215:ILE:HA	1:M:215:ILE:HD12	1.82	0.42
1:L:521:ARG:HA	1:M:451:ILE:O	2.19	0.42
1:M:551:LYS:HB3	1:M:566:ARG:HG2	2.01	0.42
1:O:301:ASP:OD1	1:O:302:ILE:N	2.52	0.42
1:A:435:LEU:CD2	1:B:626:LEU:HD23	2.49	0.42
1:C:102:THR:HA	1:C:143:THR:HA	2.01	0.42
1:C:458:VAL:CG2	1:C:478:LYS:HG2	2.48	0.42
1:D:357:ALA:HB3	1:D:407:ILE:HD11	2.01	0.42
1:D:481:GLY:O	1:D:505:SER:HB3	2.17	0.42
1:E:180:MET:HE2	1:E:213:ILE:HD11	2.01	0.42
1:E:225:LEU:HA	1:E:225:LEU:HD23	1.74	0.42
1:E:357:ALA:HB3	1:E:407:ILE:HD11	2.01	0.42
1:F:115:LEU:HB3	1:F:119:LEU:HG	2.01	0.42
1:F:177:ALA:HB3	1:F:208:GLU:HG3	2.00	0.42
1:F:219:PRO:HA	1:F:222:ARG:CB	2.45	0.42
1:F:225:LEU:HD23	1:F:225:LEU:HA	1.74	0.42
1:F:357:ALA:HB3	1:F:407:ILE:HD11	2.01	0.42
1:F:609:PHE:CE1	1:G:639:ILE:HD13	2.52	0.42
1:H:539:GLY:CA	1:H:577:LEU:O	2.68	0.42
1:I:170:VAL:HG11	1:I:229:ILE:HG21	2.01	0.42
1:J:357:ALA:HB3	1:J:407:ILE:HD11	2.01	0.42
1:J:609:PHE:CD2	1:K:639:ILE:CD1	2.75	0.42
1:K:177:ALA:HB3	1:K:208:GLU:HG3	2.00	0.42
1:L:105:VAL:CG1	1:L:157:ARG:HE	2.31	0.42
1:L:99:GLU:O	1:L:145:ARG:HA	2.19	0.42
1:M:170:VAL:HG11	1:M:229:ILE:HG21	2.01	0.42
1:L:347:GLY:H	1:M:366:LEU:HD21	1.82	0.42
1:L:609:PHE:CE1	1:M:639:ILE:HD13	2.52	0.42
1:N:170:VAL:HG11	1:N:229:ILE:HG21	2.01	0.42
1:N:551:LYS:HB3	1:N:566:ARG:HG2	2.01	0.42
1:M:609:PHE:CE1	1:N:639:ILE:HD13	2.53	0.42
1:O:170:VAL:HG11	1:O:229:ILE:HG21	2.01	0.42
1:O:643:ILE:HD12	1:O:643:ILE:HA	1.86	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:102:THR:HA	1:A:143:THR:HA	2.01	0.42
1:A:285:ILE:HD12	1:A:296:LEU:CD2	2.48	0.42
1:A:551:LYS:HB3	1:A:566:ARG:HG2	2.01	0.42
1:B:225:LEU:O	1:B:229:ILE:HG13	2.19	0.42
1:B:551:LYS:HB3	1:B:566:ARG:HG2	2.01	0.42
1:C:181:VAL:HG12	1:C:185:GLU:OE2	2.20	0.42
1:E:170:VAL:HG11	1:E:229:ILE:HG21	2.01	0.42
1:E:435:LEU:CD2	1:F:626:LEU:HD23	2.49	0.42
1:G:521:ARG:HA	1:H:451:ILE:O	2.19	0.42
1:G:99:GLU:O	1:G:145:ARG:HA	2.19	0.42
1:I:115:LEU:HB3	1:I:119:LEU:HG	2.01	0.42
1:J:115:LEU:HB3	1:J:119:LEU:HG	2.01	0.42
1:L:100:VAL:HG13	1:L:144:GLY:HA2	2.00	0.42
1:M:516:VAL:HG23	1:M:516:VAL:O	2.19	0.42
1:N:115:LEU:HB3	1:N:119:LEU:HG	2.01	0.42
1:N:177:ALA:HB3	1:N:208:GLU:HG3	2.00	0.42
1:O:181:VAL:HG12	1:O:185:GLU:OE2	2.20	0.42
1:A:181:VAL:HG12	1:A:185:GLU:OE2	2.20	0.42
1:A:225:LEU:O	1:A:229:ILE:HG13	2.19	0.42
1:C:551:LYS:HB3	1:C:566:ARG:HG2	2.01	0.42
1:D:170:VAL:HG11	1:D:229:ILE:HG21	2.01	0.42
1:F:170:VAL:HG11	1:F:229:ILE:HG21	2.01	0.42
1:F:516:VAL:O	1:F:516:VAL:HG23	2.19	0.42
1:G:454:GLU:N	1:G:454:GLU:CD	2.73	0.42
1:H:435:LEU:CD2	1:I:626:LEU:HD23	2.49	0.42
1:J:100:VAL:HG13	1:J:144:GLY:HA2	2.00	0.42
1:J:170:VAL:HG11	1:J:229:ILE:HG21	2.01	0.42
1:J:435:LEU:CD2	1:K:626:LEU:HD23	2.49	0.42
1:J:458:VAL:CG2	1:J:478:LYS:HG2	2.48	0.42
1:K:247:LEU:CD1	1:K:255:LEU:HD12	2.50	0.42
1:K:551:LYS:HB3	1:K:566:ARG:HG2	2.01	0.42
1:M:225:LEU:O	1:M:229:ILE:HG13	2.19	0.42
1:N:181:VAL:HG12	1:N:185:GLU:OE2	2.20	0.42
1:N:219:PRO:HA	1:N:222:ARG:CB	2.45	0.42
1:O:458:VAL:CG2	1:O:478:LYS:HG2	2.48	0.42
1:O:551:LYS:HB3	1:O:566:ARG:HG2	2.01	0.42
1:B:122:LEU:HD23	1:B:125:ASN:ND2	2.19	0.42
1:B:102:THR:HA	1:B:143:THR:HA	2.01	0.42
1:B:181:VAL:HG12	1:B:185:GLU:OE2	2.20	0.42
1:B:454:GLU:CD	1:B:454:GLU:N	2.73	0.42
1:C:170:VAL:HG11	1:C:229:ILE:HG21	2.01	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:357:ALA:HB3	1:C:407:ILE:HD11	2.01	0.42
1:E:539:GLY:CA	1:E:577:LEU:O	2.68	0.42
1:F:454:GLU:CD	1:F:454:GLU:N	2.73	0.42
1:H:170:VAL:HG11	1:H:229:ILE:HG21	2.01	0.42
1:H:99:GLU:O	1:H:145:ARG:HA	2.19	0.42
1:I:225:LEU:O	1:I:229:ILE:HG13	2.19	0.42
1:I:504:VAL:HG11	1:I:521:ARG:CG	2.47	0.42
1:I:521:ARG:HA	1:J:451:ILE:O	2.19	0.42
1:K:100:VAL:HG13	1:K:144:GLY:HA2	2.00	0.42
1:M:181:VAL:HG12	1:M:185:GLU:OE2	2.20	0.42
1:M:521:ARG:HA	1:N:451:ILE:O	2.19	0.42
1:O:105:VAL:CG1	1:O:157:ARG:HE	2.31	0.42
1:A:454:GLU:CD	1:A:454:GLU:N	2.73	0.42
1:B:170:VAL:HG11	1:B:229:ILE:HG21	2.01	0.42
1:C:207:ASP:OD2	1:C:209:ARG:HB3	2.20	0.42
1:D:352:TYR:OH	1:D:565:PHE:O	2.33	0.42
1:C:435:LEU:CD2	1:D:626:LEU:HD23	2.49	0.42
1:E:225:LEU:O	1:E:229:ILE:HG13	2.19	0.42
1:E:521:ARG:HA	1:F:451:ILE:O	2.19	0.42
1:F:521:ARG:HA	1:G:451:ILE:O	2.19	0.42
1:H:247:LEU:CD1	1:H:255:LEU:HD12	2.50	0.42
1:H:454:GLU:CD	1:H:454:GLU:N	2.73	0.42
1:K:518:PHE:O	1:K:518:PHE:HD1	2.01	0.42
1:M:219:PRO:HA	1:M:222:ARG:CB	2.45	0.42
1:N:207:ASP:OD2	1:N:209:ARG:HB3	2.20	0.42
1:N:357:ALA:HB3	1:N:407:ILE:HD11	2.01	0.42
1:O:225:LEU:HA	1:O:225:LEU:HD23	1.74	0.42
1:A:170:VAL:HG11	1:A:229:ILE:HG21	2.01	0.42
1:A:521:ARG:HA	1:B:451:ILE:O	2.19	0.42
1:C:247:LEU:CD1	1:C:255:LEU:HD12	2.50	0.42
1:E:339:VAL:HB	1:E:564:LEU:O	2.20	0.42
1:F:225:LEU:O	1:F:229:ILE:HG13	2.19	0.42
1:J:99:GLU:O	1:J:145:ARG:HA	2.19	0.42
1:K:357:ALA:HB3	1:K:407:ILE:HD11	2.01	0.42
1:L:170:VAL:HG11	1:L:229:ILE:HG21	2.01	0.42
1:O:115:LEU:HB3	1:O:119:LEU:HG	2.01	0.42
1:A:115:LEU:HB3	1:A:119:LEU:HG	2.01	0.42
1:A:642:PHE:CE2	1:O:612:GLU:CG	2.81	0.42
1:B:207:ASP:OD2	1:B:209:ARG:HB3	2.20	0.42
1:C:454:GLU:CD	1:C:454:GLU:N	2.73	0.42
1:D:115:LEU:HB3	1:D:119:LEU:HG	2.01	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:225:LEU:O	1:D:229:ILE:HG13	2.19	0.42
1:D:458:VAL:CG2	1:D:478:LYS:HG2	2.48	0.42
1:E:115:LEU:HB3	1:E:119:LEU:HG	2.01	0.42
1:E:247:LEU:CD1	1:E:255:LEU:HD12	2.50	0.42
1:F:99:GLU:O	1:F:145:ARG:HA	2.19	0.42
1:G:170:VAL:HG11	1:G:229:ILE:HG21	2.01	0.42
1:H:225:LEU:HA	1:H:225:LEU:HD23	1.74	0.42
1:H:504:VAL:HG11	1:H:521:ARG:CG	2.47	0.42
1:I:539:GLY:CA	1:I:577:LEU:O	2.68	0.42
1:J:247:LEU:CD1	1:J:255:LEU:HD12	2.50	0.42
1:J:481:GLY:N	1:J:505:SER:OG	2.23	0.42
1:J:516:VAL:O	1:J:516:VAL:HG23	2.19	0.42
1:J:551:LYS:HB3	1:J:566:ARG:HG2	2.01	0.42
1:L:181:VAL:HG12	1:L:185:GLU:OE2	2.20	0.42
1:M:479:GLU:H	1:M:479:GLU:CD	2.07	0.42
1:O:207:ASP:OD2	1:O:209:ARG:HB3	2.20	0.42
1:O:357:ALA:HB3	1:O:407:ILE:HD11	2.01	0.42
1:O:454:GLU:N	1:O:454:GLU:CD	2.73	0.42
1:B:247:LEU:CD1	1:B:255:LEU:HD12	2.50	0.42
1:B:301:ASP:OD1	1:B:302:ILE:N	2.52	0.42
1:B:479:GLU:H	1:B:479:GLU:CD	2.07	0.42
1:C:301:ASP:OD1	1:C:302:ILE:N	2.52	0.42
1:D:551:LYS:HB3	1:D:566:ARG:HG2	2.01	0.42
1:E:454:GLU:N	1:E:454:GLU:CD	2.73	0.42
1:G:225:LEU:O	1:G:229:ILE:HG13	2.19	0.42
1:G:301:ASP:OD1	1:G:302:ILE:N	2.52	0.42
1:G:504:VAL:HG11	1:G:521:ARG:CG	2.47	0.42
1:H:219:PRO:HA	1:H:222:ARG:CB	2.45	0.42
1:H:301:ASP:OD1	1:H:302:ILE:N	2.52	0.42
1:I:247:LEU:CD1	1:I:255:LEU:HD12	2.50	0.42
1:I:516:VAL:O	1:I:516:VAL:HG23	2.19	0.42
1:K:170:VAL:HG11	1:K:229:ILE:HG21	2.01	0.42
1:L:247:LEU:CD1	1:L:255:LEU:HD12	2.50	0.42
1:L:339:VAL:HB	1:L:564:LEU:O	2.20	0.42
1:M:339:VAL:HB	1:M:564:LEU:O	2.20	0.42
1:M:539:GLY:CA	1:M:577:LEU:O	2.68	0.42
1:N:247:LEU:CD1	1:N:255:LEU:HD12	2.50	0.42
1:O:516:VAL:HG23	1:O:516:VAL:O	2.19	0.42
1:A:142:ILE:CG2	1:A:149:VAL:HG22	2.50	0.42
1:A:301:ASP:OD1	1:A:302:ILE:N	2.52	0.42
1:B:123:ILE:HG23	1:B:130:ASN:HB2	2.02	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:115:LEU:HB3	1:C:119:LEU:HG	2.01	0.42
1:B:521:ARG:HA	1:C:451:ILE:O	2.19	0.42
1:D:181:VAL:HG12	1:D:185:GLU:OE2	2.20	0.42
1:D:454:GLU:CD	1:D:454:GLU:N	2.73	0.42
1:F:181:VAL:HG12	1:F:185:GLU:OE2	2.20	0.42
1:F:301:ASP:OD1	1:F:302:ILE:N	2.52	0.42
1:F:339:VAL:HB	1:F:564:LEU:O	2.20	0.42
1:F:506:ASN:ND2	1:F:506:ASN:C	2.73	0.42
1:G:167:ILE:CA	1:G:215:ILE:O	2.42	0.42
1:G:247:LEU:CD1	1:G:255:LEU:HD12	2.50	0.42
1:G:339:VAL:HB	1:G:564:LEU:O	2.20	0.42
1:H:207:ASP:OD2	1:H:209:ARG:HB3	2.20	0.42
1:I:207:ASP:OD2	1:I:209:ARG:HB3	2.20	0.42
1:I:301:ASP:OD1	1:I:302:ILE:N	2.52	0.42
1:L:504:VAL:HG12	1:L:521:ARG:HG2	1.94	0.42
1:M:99:GLU:O	1:M:145:ARG:HA	2.20	0.42
1:M:357:ALA:HB3	1:M:407:ILE:HD11	2.01	0.42
1:M:454:GLU:CD	1:M:454:GLU:N	2.73	0.42
1:N:225:LEU:O	1:N:229:ILE:HG13	2.19	0.42
1:N:454:GLU:CD	1:N:454:GLU:N	2.73	0.42
1:O:225:LEU:O	1:O:229:ILE:HG13	2.19	0.42
1:A:339:VAL:HB	1:A:564:LEU:O	2.20	0.41
1:B:139:ILE:HG22	1:B:140:ILE:N	2.27	0.41
1:B:357:ALA:HB3	1:B:407:ILE:HD11	2.01	0.41
1:C:123:ILE:HG23	1:C:130:ASN:HB2	2.02	0.41
1:C:225:LEU:O	1:C:229:ILE:HG13	2.19	0.41
1:D:215:ILE:HA	1:D:215:ILE:HD12	1.82	0.41
1:D:301:ASP:OD1	1:D:302:ILE:N	2.52	0.41
1:H:339:VAL:HB	1:H:564:LEU:O	2.20	0.41
1:J:643:ILE:HD12	1:J:643:ILE:HA	1.86	0.41
1:K:181:VAL:HG12	1:K:185:GLU:OE2	2.20	0.41
1:K:246:TYR:HD1	1:K:293:SER:HB3	1.85	0.41
1:K:454:GLU:N	1:K:454:GLU:CD	2.73	0.41
1:K:521:ARG:HA	1:L:451:ILE:O	2.19	0.41
1:L:454:GLU:N	1:L:454:GLU:CD	2.73	0.41
1:A:247:LEU:CD1	1:A:255:LEU:HD12	2.50	0.41
1:C:139:ILE:HG22	1:C:140:ILE:N	2.27	0.41
1:C:288:HIS:HD2	1:C:291:THR:HB	1.86	0.41
1:D:166:GLU:HB3	1:D:167:ILE:H	1.67	0.41
1:D:516:VAL:HG23	1:D:516:VAL:O	2.19	0.41
1:D:339:VAL:HB	1:D:564:LEU:O	2.20	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:640:GLN:NE2	1:D:643:ILE:HG21	2.35	0.41
1:E:181:VAL:HG12	1:E:185:GLU:OE2	2.20	0.41
1:E:246:TYR:HD1	1:E:293:SER:HB3	1.85	0.41
1:E:301:ASP:OD1	1:E:302:ILE:N	2.52	0.41
1:F:504:VAL:HG11	1:F:521:ARG:CG	2.47	0.41
1:G:207:ASP:OD2	1:G:209:ARG:HB3	2.20	0.41
1:H:516:VAL:O	1:H:516:VAL:HG23	2.19	0.41
1:I:339:VAL:HB	1:I:564:LEU:O	2.20	0.41
1:I:454:GLU:CD	1:I:454:GLU:N	2.73	0.41
1:L:139:ILE:C	1:L:140:ILE:HG13	2.41	0.41
1:M:140:ILE:HG21	1:M:156:ILE:HG21	2.02	0.41
1:M:288:HIS:HD2	1:M:291:THR:HB	1.86	0.41
1:N:113:ARG:HD2	1:N:134:TYR:CD2	2.55	0.41
1:N:140:ILE:HG21	1:N:156:ILE:HG21	2.02	0.41
1:N:288:HIS:HD2	1:N:291:THR:HB	1.85	0.41
1:O:247:LEU:CD1	1:O:255:LEU:HD12	2.50	0.41
1:A:246:TYR:HD1	1:A:293:SER:HB3	1.86	0.41
1:A:256:VAL:HG23	1:A:285:ILE:HG22	2.03	0.41
1:A:357:ALA:HB3	1:A:407:ILE:HD11	2.01	0.41
1:A:99:GLU:O	1:A:145:ARG:HA	2.19	0.41
1:B:115:LEU:HB3	1:B:119:LEU:HG	2.01	0.41
1:B:440:ILE:HA	1:B:440:ILE:HD12	1.91	0.41
1:C:142:ILE:CG2	1:C:149:VAL:HG22	2.50	0.41
1:D:246:TYR:HD1	1:D:293:SER:HB3	1.86	0.41
1:D:247:LEU:CD1	1:D:255:LEU:HD12	2.50	0.41
1:E:140:ILE:HG21	1:E:156:ILE:HG21	2.02	0.41
1:E:458:VAL:CG2	1:E:478:LYS:HG2	2.48	0.41
1:E:352:TYR:OH	1:E:565:PHE:O	2.33	0.41
1:E:551:LYS:HB3	1:E:566:ARG:HG2	2.01	0.41
1:F:246:TYR:HD1	1:F:293:SER:HB3	1.85	0.41
1:G:516:VAL:O	1:G:516:VAL:HG23	2.19	0.41
1:H:288:HIS:HD2	1:H:291:THR:HB	1.86	0.41
1:I:551:LYS:HB3	1:I:566:ARG:HG2	2.01	0.41
1:I:643:ILE:HD12	1:I:643:ILE:HA	1.86	0.41
1:I:99:GLU:O	1:I:145:ARG:HA	2.19	0.41
1:J:207:ASP:OD2	1:J:209:ARG:HB3	2.20	0.41
1:J:339:VAL:HB	1:J:564:LEU:O	2.20	0.41
1:K:139:ILE:HG22	1:K:140:ILE:N	2.27	0.41
1:L:357:ALA:HB3	1:L:407:ILE:HD11	2.01	0.41
1:M:113:ARG:HD2	1:M:134:TYR:CD2	2.55	0.41
1:M:139:ILE:C	1:M:140:ILE:HG13	2.41	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:M:178:ALA:O	1:M:181:VAL:HB	2.21	0.41
1:N:142:ILE:CG2	1:N:149:VAL:HG22	2.50	0.41
1:O:140:ILE:HG21	1:O:156:ILE:HG21	2.02	0.41
1:O:99:GLU:O	1:O:145:ARG:HA	2.19	0.41
1:A:123:ILE:HG23	1:A:130:ASN:HB2	2.02	0.41
1:B:178:ALA:O	1:B:181:VAL:HB	2.21	0.41
1:B:313:LEU:HD11	1:C:295:VAL:HG21	2.03	0.41
1:B:643:ILE:HD12	1:B:643:ILE:HA	1.86	0.41
1:E:178:ALA:O	1:E:181:VAL:HB	2.21	0.41
1:F:640:GLN:NE2	1:F:643:ILE:HG21	2.35	0.41
1:G:181:VAL:HG12	1:G:185:GLU:OE2	2.20	0.41
1:G:577:LEU:O	1:G:578:MET:HE2	2.21	0.41
1:I:123:ILE:HG23	1:I:130:ASN:HB2	2.02	0.41
1:I:458:VAL:CG2	1:I:478:LYS:HG2	2.48	0.41
1:J:139:ILE:C	1:J:140:ILE:HG13	2.41	0.41
1:J:246:TYR:HD1	1:J:293:SER:HB3	1.86	0.41
1:J:454:GLU:CD	1:J:454:GLU:N	2.73	0.41
1:K:123:ILE:HG23	1:K:130:ASN:HB2	2.02	0.41
1:K:139:ILE:C	1:K:140:ILE:HG13	2.41	0.41
1:K:339:VAL:HB	1:K:564:LEU:O	2.20	0.41
1:L:178:ALA:O	1:L:181:VAL:HB	2.21	0.41
1:L:479:GLU:CD	1:L:479:GLU:H	2.07	0.41
1:M:142:ILE:CG2	1:M:149:VAL:HG22	2.50	0.41
1:M:247:LEU:CD1	1:M:255:LEU:HD12	2.50	0.41
1:N:256:VAL:HG23	1:N:285:ILE:HG22	2.03	0.41
1:N:458:VAL:CG2	1:N:478:LYS:HG2	2.48	0.41
1:N:539:GLY:CA	1:N:577:LEU:O	2.68	0.41
1:O:113:ARG:HD2	1:O:134:TYR:CD2	2.55	0.41
1:A:178:ALA:O	1:A:181:VAL:HB	2.21	0.41
1:A:215:ILE:HA	1:A:215:ILE:HD12	1.82	0.41
1:B:99:GLU:O	1:B:145:ARG:HA	2.19	0.41
1:B:339:VAL:HB	1:B:564:LEU:O	2.20	0.41
1:B:640:GLN:NE2	1:B:643:ILE:HG21	2.35	0.41
1:C:577:LEU:O	1:C:578:MET:HE2	2.20	0.41
1:D:140:ILE:HG21	1:D:156:ILE:HG21	2.02	0.41
1:C:313:LEU:HD11	1:D:295:VAL:HG21	2.03	0.41
1:E:207:ASP:OD2	1:E:209:ARG:HB3	2.20	0.41
1:E:504:VAL:HG11	1:E:521:ARG:CG	2.47	0.41
1:F:140:ILE:HG21	1:F:156:ILE:HG21	2.02	0.41
1:F:178:ALA:O	1:F:181:VAL:HB	2.21	0.41
1:F:539:GLY:CA	1:F:577:LEU:O	2.68	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:345:GLU:HG3	1:G:346:SER:H	1.86	0.41
1:H:345:GLU:HG3	1:H:346:SER:H	1.86	0.41
1:J:577:LEU:O	1:J:578:MET:HE2	2.20	0.41
1:K:178:ALA:O	1:K:181:VAL:HB	2.21	0.41
1:K:288:HIS:HD2	1:K:291:THR:HB	1.86	0.41
1:L:123:ILE:HG23	1:L:130:ASN:HB2	2.02	0.41
1:L:140:ILE:HG21	1:L:156:ILE:HG21	2.02	0.41
1:L:207:ASP:OD2	1:L:209:ARG:HB3	2.20	0.41
1:L:256:VAL:HG23	1:L:285:ILE:HG22	2.03	0.41
1:L:288:HIS:HD2	1:L:291:THR:HB	1.86	0.41
1:M:246:TYR:HD1	1:M:293:SER:HB3	1.86	0.41
1:N:178:ALA:O	1:N:181:VAL:HB	2.21	0.41
1:N:246:TYR:HD1	1:N:293:SER:HB3	1.85	0.41
1:N:99:GLU:O	1:N:145:ARG:HA	2.19	0.41
1:O:288:HIS:HD2	1:O:291:THR:HB	1.86	0.41
1:O:339:VAL:HB	1:O:564:LEU:O	2.20	0.41
1:A:166:GLU:HB3	1:A:167:ILE:H	1.67	0.41
1:B:132:VAL:HG22	1:B:142:ILE:HG23	2.03	0.41
1:A:313:LEU:HD11	1:B:295:VAL:HG21	2.03	0.41
1:C:339:VAL:HB	1:C:564:LEU:O	2.20	0.41
1:C:99:GLU:O	1:C:145:ARG:HA	2.20	0.41
1:D:207:ASP:OD2	1:D:209:ARG:HB3	2.20	0.41
1:D:225:LEU:HA	1:D:225:LEU:HD23	1.74	0.41
1:E:99:GLU:O	1:E:145:ARG:HA	2.19	0.41
1:E:288:HIS:HD2	1:E:291:THR:HB	1.86	0.41
1:F:288:HIS:HD2	1:F:291:THR:HB	1.86	0.41
1:F:458:VAL:CG2	1:F:478:LYS:HG2	2.48	0.41
1:F:577:LEU:O	1:F:578:MET:HE2	2.21	0.41
1:G:256:VAL:HG13	1:G:257:GLU:N	2.36	0.41
1:H:246:TYR:HD1	1:H:293:SER:HB3	1.85	0.41
1:I:246:TYR:HD1	1:I:293:SER:HB3	1.86	0.41
1:J:123:ILE:HG23	1:J:130:ASN:HB2	2.02	0.41
1:J:178:ALA:O	1:J:181:VAL:HB	2.21	0.41
1:J:181:VAL:HG12	1:J:185:GLU:OE2	2.20	0.41
1:L:516:VAL:O	1:L:516:VAL:HG23	2.19	0.41
1:M:207:ASP:OD2	1:M:209:ARG:HB3	2.20	0.41
1:O:139:ILE:C	1:O:140:ILE:HG13	2.41	0.41
1:A:113:ARG:HD2	1:A:134:TYR:CD2	2.55	0.41
1:A:132:VAL:HG22	1:A:142:ILE:HG23	2.03	0.41
1:A:207:ASP:OD2	1:A:209:ARG:HB3	2.20	0.41
1:A:288:HIS:HD2	1:A:291:THR:HB	1.86	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:256:VAL:HG13	1:B:257:GLU:N	2.36	0.41
1:B:345:GLU:HG3	1:B:346:SER:H	1.86	0.41
1:C:215:ILE:HA	1:C:215:ILE:HD12	1.82	0.41
1:C:256:VAL:HG23	1:C:285:ILE:HG22	2.03	0.41
1:C:640:GLN:NE2	1:C:643:ILE:HG21	2.35	0.41
1:D:123:ILE:HG23	1:D:130:ASN:HB2	2.02	0.41
1:D:256:VAL:HG13	1:D:257:GLU:N	2.36	0.41
1:E:142:ILE:CG2	1:E:149:VAL:HG22	2.50	0.41
1:F:207:ASP:OD2	1:F:209:ARG:HB3	2.20	0.41
1:F:551:LYS:HB3	1:F:566:ARG:HG2	2.01	0.41
1:H:225:LEU:O	1:H:229:ILE:HG13	2.19	0.41
1:H:577:LEU:O	1:H:578:MET:HE2	2.21	0.41
1:K:207:ASP:OD2	1:K:209:ARG:HB3	2.20	0.41
1:K:516:VAL:HG23	1:K:516:VAL:O	2.19	0.41
1:K:613:LYS:HG3	1:K:613:LYS:O	2.21	0.41
1:L:215:ILE:HA	1:L:215:ILE:HD12	1.82	0.41
1:N:139:ILE:C	1:N:140:ILE:HG13	2.41	0.41
1:N:313:LEU:HD11	1:O:295:VAL:HG21	2.03	0.41
1:A:139:ILE:HG22	1:A:140:ILE:N	2.27	0.41
1:A:345:GLU:HG3	1:A:346:SER:H	1.86	0.41
1:B:246:TYR:HD1	1:B:293:SER:HB3	1.85	0.41
1:B:577:LEU:O	1:B:578:MET:HE2	2.21	0.41
1:C:140:ILE:HG21	1:C:156:ILE:HG21	2.02	0.41
1:C:132:VAL:HG22	1:C:142:ILE:HG23	2.03	0.41
1:C:155:ILE:O	1:C:158:ARG:HB3	2.21	0.41
1:C:246:TYR:HD1	1:C:293:SER:HB3	1.86	0.41
1:D:504:VAL:HG11	1:D:521:ARG:CG	2.47	0.41
1:E:177:ALA:HB3	1:E:208:GLU:HG3	2.00	0.41
1:E:506:ASN:C	1:E:506:ASN:ND2	2.73	0.41
1:F:113:ARG:HD2	1:F:134:TYR:CD2	2.55	0.41
1:F:345:GLU:HG3	1:F:346:SER:H	1.86	0.41
1:G:215:ILE:HA	1:G:215:ILE:HD12	1.82	0.41
1:G:225:LEU:HA	1:G:225:LEU:HD23	1.74	0.41
1:G:551:LYS:HB3	1:G:566:ARG:HG2	2.01	0.41
1:H:142:ILE:CG2	1:H:149:VAL:HG22	2.50	0.41
1:H:256:VAL:HG13	1:H:257:GLU:N	2.36	0.41
1:I:345:GLU:HG3	1:I:346:SER:H	1.86	0.41
1:J:613:LYS:HG3	1:J:613:LYS:O	2.21	0.41
1:K:215:ILE:HD12	1:K:215:ILE:HA	1.82	0.41
1:K:459:ILE:HG13	1:K:475:VAL:HG12	2.03	0.41
1:K:643:ILE:HD12	1:K:643:ILE:HA	1.86	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:L:179:GLU:O	1:L:183:ILE:HG23	2.21	0.41
1:L:342:GLY:HA3	1:L:363:MET:HE1	2.03	0.41
1:N:105:VAL:CG1	1:N:157:ARG:HE	2.32	0.41
1:O:166:GLU:HB3	1:O:167:ILE:H	1.67	0.41
1:O:178:ALA:O	1:O:181:VAL:HB	2.21	0.41
1:A:295:VAL:HG21	1:O:313:LEU:HD11	2.03	0.41
1:F:256:VAL:HG13	1:F:257:GLU:N	2.36	0.41
1:F:552:VAL:HG22	1:F:552:VAL:H	1.59	0.41
1:G:155:ILE:O	1:G:158:ARG:HB3	2.21	0.41
1:G:180:MET:HE2	1:G:213:ILE:HD11	2.01	0.41
1:H:551:LYS:HB3	1:H:566:ARG:HG2	2.02	0.41
1:I:178:ALA:O	1:I:181:VAL:HB	2.21	0.41
1:I:181:VAL:HG12	1:I:185:GLU:OE2	2.20	0.41
1:I:256:VAL:HG13	1:I:257:GLU:N	2.36	0.41
1:I:288:HIS:HD2	1:I:291:THR:HB	1.86	0.41
1:H:524:ASN:OD1	1:I:449:SER:HB2	2.21	0.41
1:I:524:ASN:OD1	1:J:449:SER:HB2	2.21	0.41
1:J:142:ILE:CG2	1:J:149:VAL:HG22	2.50	0.41
1:J:288:HIS:HD2	1:J:291:THR:HB	1.86	0.41
1:J:459:ILE:HG13	1:J:475:VAL:HG12	2.03	0.41
1:K:440:ILE:HA	1:K:440:ILE:HD12	1.91	0.41
1:K:479:GLU:CD	1:K:479:GLU:H	2.07	0.41
1:L:142:ILE:CG2	1:L:149:VAL:HG22	2.50	0.41
1:L:506:ASN:C	1:L:506:ASN:ND2	2.73	0.41
1:M:313:LEU:HD11	1:N:295:VAL:HG21	2.03	0.41
1:N:339:VAL:HB	1:N:564:LEU:O	2.20	0.41
1:O:359:ILE:HD13	1:O:422:LEU:HB2	2.03	0.41
1:A:140:ILE:HG21	1:A:156:ILE:HG21	2.02	0.41
1:C:178:ALA:O	1:C:181:VAL:HB	2.21	0.41
1:E:139:ILE:HG22	1:E:140:ILE:N	2.27	0.41
1:E:640:GLN:NE2	1:E:643:ILE:HG21	2.35	0.41
1:F:247:LEU:CD1	1:F:255:LEU:HD12	2.50	0.41
1:G:140:ILE:HG21	1:G:156:ILE:HG21	2.02	0.41
1:H:123:ILE:HG23	1:H:130:ASN:HB2	2.02	0.41
1:H:113:ARG:HD2	1:H:134:TYR:CD2	2.55	0.41
1:J:102:THR:OG1	1:J:142:ILE:O	2.25	0.41
1:J:105:VAL:CG1	1:J:157:ARG:HE	2.32	0.41
1:J:524:ASN:OD1	1:K:449:SER:HB2	2.21	0.41
1:J:539:GLY:CA	1:J:577:LEU:O	2.68	0.41
1:K:140:ILE:HG21	1:K:156:ILE:HG21	2.02	0.41
1:K:179:GLU:O	1:K:183:ILE:HG23	2.21	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:640:GLN:NE2	1:K:643:ILE:HG21	2.35	0.41
1:L:246:TYR:HD1	1:L:293:SER:HB3	1.86	0.41
1:L:459:ILE:HG13	1:L:475:VAL:HG12	2.03	0.41
1:L:613:LYS:HG3	1:L:613:LYS:O	2.21	0.41
1:L:640:GLN:NE2	1:L:643:ILE:HG21	2.36	0.41
1:M:123:ILE:HG23	1:M:130:ASN:HB2	2.02	0.41
1:M:179:GLU:O	1:M:183:ILE:HG23	2.21	0.41
1:M:613:LYS:HG3	1:M:613:LYS:O	2.21	0.41
1:M:640:GLN:NE2	1:M:643:ILE:HG21	2.36	0.41
1:N:643:ILE:HD12	1:N:643:ILE:HA	1.86	0.41
1:O:123:ILE:HG23	1:O:130:ASN:HB2	2.02	0.41
1:O:539:GLY:CA	1:O:577:LEU:O	2.68	0.41
1:A:359:ILE:HD13	1:A:422:LEU:HB2	2.04	0.41
1:B:139:ILE:C	1:B:140:ILE:HG13	2.41	0.41
1:B:215:ILE:HD12	1:B:215:ILE:HA	1.82	0.41
1:B:359:ILE:HD13	1:B:422:LEU:HB2	2.03	0.41
1:D:139:ILE:HG22	1:D:140:ILE:N	2.27	0.41
1:D:139:ILE:C	1:D:140:ILE:HG13	2.41	0.41
1:D:105:VAL:CG1	1:D:157:ARG:HE	2.31	0.41
1:D:313:LEU:HD11	1:E:295:VAL:HG21	2.03	0.41
1:F:123:ILE:HG23	1:F:130:ASN:HB2	2.02	0.41
1:G:640:GLN:NE2	1:G:643:ILE:HG21	2.35	0.41
1:H:139:ILE:C	1:H:140:ILE:HG13	2.41	0.41
1:H:181:VAL:HG12	1:H:185:GLU:OE2	2.20	0.41
1:G:524:ASN:OD1	1:H:449:SER:HB2	2.21	0.41
1:I:139:ILE:C	1:I:140:ILE:HG13	2.41	0.41
1:J:155:ILE:O	1:J:158:ARG:HB3	2.21	0.41
1:L:345:GLU:HG3	1:L:346:SER:H	1.86	0.41
1:N:640:GLN:NE2	1:N:643:ILE:HG21	2.35	0.41
1:B:113:ARG:HD2	1:B:134:TYR:CD2	2.55	0.40
1:B:288:HIS:HD2	1:B:291:THR:HB	1.86	0.40
1:C:139:ILE:C	1:C:140:ILE:HG13	2.41	0.40
1:C:345:GLU:HG3	1:C:346:SER:H	1.86	0.40
1:D:132:VAL:HG22	1:D:142:ILE:HG23	2.03	0.40
1:D:155:ILE:O	1:D:158:ARG:HB3	2.21	0.40
1:D:178:ALA:O	1:D:181:VAL:HB	2.21	0.40
1:D:99:GLU:O	1:D:145:ARG:HA	2.19	0.40
1:E:139:ILE:C	1:E:140:ILE:HG13	2.41	0.40
1:E:313:LEU:HD11	1:F:295:VAL:HG21	2.03	0.40
1:E:577:LEU:O	1:E:578:MET:HE2	2.21	0.40
1:E:643:ILE:HD12	1:E:643:ILE:HA	1.86	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:113:ARG:HD2	1:G:134:TYR:CD2	2.55	0.40
1:G:123:ILE:HG23	1:G:130:ASN:HB2	2.02	0.40
1:G:285:ILE:HD12	1:G:296:LEU:HD23	2.03	0.40
1:G:613:LYS:O	1:G:613:LYS:HG3	2.21	0.40
1:H:132:VAL:HG22	1:H:142:ILE:HG23	2.03	0.40
1:I:459:ILE:HG13	1:I:475:VAL:HG12	2.03	0.40
1:J:479:GLU:CD	1:J:479:GLU:H	2.07	0.40
1:K:155:ILE:O	1:K:158:ARG:HB3	2.21	0.40
1:N:613:LYS:HG3	1:N:613:LYS:O	2.21	0.40
1:O:506:ASN:C	1:O:506:ASN:ND2	2.73	0.40
1:A:139:ILE:C	1:A:140:ILE:HG13	2.41	0.40
1:A:522:GLN:HG2	1:B:451:ILE:HG21	2.04	0.40
1:B:140:ILE:HG21	1:B:156:ILE:HG21	2.02	0.40
1:E:552:VAL:HG22	1:E:552:VAL:H	1.59	0.40
1:F:155:ILE:O	1:F:158:ARG:HB3	2.21	0.40
1:G:177:ALA:HB3	1:G:208:GLU:HG3	2.00	0.40
1:G:178:ALA:O	1:G:181:VAL:HB	2.21	0.40
1:G:246:TYR:HD1	1:G:293:SER:HB3	1.86	0.40
1:H:640:GLN:NE2	1:H:643:ILE:HG21	2.35	0.40
1:I:132:VAL:HG22	1:I:142:ILE:HG23	2.03	0.40
1:I:155:ILE:O	1:I:158:ARG:HB3	2.21	0.40
1:I:285:ILE:HD12	1:I:296:LEU:HD23	2.04	0.40
1:J:113:ARG:HD2	1:J:134:TYR:CD2	2.55	0.40
1:J:179:GLU:O	1:J:183:ILE:HG23	2.21	0.40
1:K:142:ILE:CG2	1:K:149:VAL:HG22	2.50	0.40
1:M:345:GLU:HG3	1:M:346:SER:H	1.86	0.40
1:M:359:ILE:HD13	1:M:422:LEU:HB2	2.03	0.40
1:N:179:GLU:O	1:N:183:ILE:HG23	2.21	0.40
1:N:359:ILE:HD13	1:N:422:LEU:HB2	2.04	0.40
1:O:132:VAL:HG22	1:O:142:ILE:HG23	2.03	0.40
1:O:142:ILE:CG2	1:O:149:VAL:HG22	2.50	0.40
1:A:451:ILE:HG21	1:O:522:GLN:HG2	2.04	0.40
1:A:105:VAL:CG1	1:A:157:ARG:HE	2.32	0.40
1:A:155:ILE:O	1:A:158:ARG:HB3	2.21	0.40
1:B:142:ILE:CG2	1:B:149:VAL:HG22	2.50	0.40
1:B:105:VAL:CG1	1:B:157:ARG:HE	2.31	0.40
1:B:256:VAL:HG23	1:B:285:ILE:HG22	2.03	0.40
1:A:612:GLU:CG	1:B:642:PHE:CE2	2.81	0.40
1:C:359:ILE:HD13	1:C:422:LEU:HB2	2.03	0.40
1:E:166:GLU:HB3	1:E:167:ILE:H	1.67	0.40
1:E:256:VAL:HG23	1:E:285:ILE:HG22	2.03	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:345:GLU:HG3	1:E:346:SER:H	1.86	0.40
1:G:132:VAL:HG22	1:G:142:ILE:HG23	2.03	0.40
1:G:142:ILE:CG2	1:G:149:VAL:HG22	2.50	0.40
1:G:288:HIS:HD2	1:G:291:THR:HB	1.86	0.40
1:F:524:ASN:OD1	1:G:449:SER:HB2	2.21	0.40
1:H:155:ILE:O	1:H:158:ARG:HB3	2.21	0.40
1:H:179:GLU:O	1:H:183:ILE:HG23	2.21	0.40
1:H:458:VAL:CG2	1:H:478:LYS:HG2	2.48	0.40
1:I:113:ARG:HD2	1:I:134:TYR:CD2	2.55	0.40
1:I:479:GLU:CD	1:I:479:GLU:H	2.07	0.40
1:J:256:VAL:HG23	1:J:285:ILE:HG22	2.03	0.40
1:J:256:VAL:HG13	1:J:257:GLU:N	2.36	0.40
1:I:313:LEU:HD11	1:J:295:VAL:HG21	2.03	0.40
1:K:113:ARG:HD2	1:K:134:TYR:CD2	2.55	0.40
1:L:360:GLY:O	1:L:364:ILE:HG12	2.22	0.40
1:K:524:ASN:OD1	1:L:449:SER:HB2	2.21	0.40
1:L:524:ASN:N	1:L:524:ASN:OD1	2.55	0.40
1:M:360:GLY:O	1:M:364:ILE:HG12	2.22	0.40
1:M:459:ILE:HG13	1:M:475:VAL:HG12	2.03	0.40
1:M:552:VAL:HG22	1:M:552:VAL:H	1.59	0.40
1:O:155:ILE:O	1:O:158:ARG:HB3	2.21	0.40
1:O:256:VAL:HG13	1:O:257:GLU:N	2.36	0.40
1:O:524:ASN:N	1:O:524:ASN:OD1	2.55	0.40
1:B:155:ILE:O	1:B:158:ARG:HB3	2.21	0.40
1:B:539:GLY:CA	1:B:577:LEU:O	2.68	0.40
1:D:288:HIS:HD2	1:D:291:THR:HB	1.86	0.40
1:E:256:VAL:HG13	1:E:257:GLU:N	2.36	0.40
1:F:139:ILE:C	1:F:140:ILE:HG13	2.41	0.40
1:H:459:ILE:HG13	1:H:475:VAL:HG12	2.03	0.40
1:H:613:LYS:O	1:H:613:LYS:HG3	2.21	0.40
1:J:285:ILE:HD12	1:J:296:LEU:HD23	2.03	0.40
1:K:256:VAL:HG13	1:K:257:GLU:N	2.36	0.40
1:L:155:ILE:O	1:L:158:ARG:HB3	2.21	0.40
1:L:167:ILE:CA	1:L:215:ILE:O	2.42	0.40
1:M:105:VAL:CG1	1:M:157:ARG:HE	2.32	0.40
1:N:123:ILE:HG23	1:N:130:ASN:HB2	2.02	0.40
1:N:155:ILE:O	1:N:158:ARG:HB3	2.21	0.40
1:N:506:ASN:ND2	1:N:506:ASN:C	2.73	0.40
1:O:256:VAL:HG23	1:O:285:ILE:HG22	2.03	0.40
1:O:613:LYS:O	1:O:613:LYS:HG3	2.21	0.40
1:O:640:GLN:NE2	1:O:643:ILE:HG21	2.35	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:539:GLY:CA	1:A:577:LEU:O	2.68	0.40
1:B:459:ILE:HG13	1:B:475:VAL:HG12	2.03	0.40
1:B:522:GLN:HG2	1:C:451:ILE:HG21	2.04	0.40
1:C:459:ILE:HG13	1:C:475:VAL:HG12	2.03	0.40
1:D:459:ILE:HG13	1:D:475:VAL:HG12	2.03	0.40
1:F:285:ILE:HD12	1:F:296:LEU:HD23	2.04	0.40
1:G:360:GLY:O	1:G:364:ILE:HG12	2.22	0.40
1:H:178:ALA:O	1:H:181:VAL:HB	2.21	0.40
1:H:285:ILE:HD12	1:H:296:LEU:HD23	2.04	0.40
1:H:479:GLU:H	1:H:479:GLU:CD	2.07	0.40
1:I:140:ILE:HG21	1:I:156:ILE:HG21	2.02	0.40
1:I:179:GLU:O	1:I:183:ILE:HG23	2.21	0.40
1:J:140:ILE:HG21	1:J:156:ILE:HG21	2.02	0.40
1:J:640:GLN:NE2	1:J:643:ILE:HG21	2.35	0.40
1:K:119:LEU:HD13	1:K:132:VAL:HG11	2.04	0.40
1:K:132:VAL:HG22	1:K:142:ILE:HG23	2.03	0.40
1:K:506:ASN:C	1:K:506:ASN:ND2	2.73	0.40
1:L:119:LEU:HD13	1:L:132:VAL:HG11	2.04	0.40
1:L:256:VAL:HG13	1:L:257:GLU:N	2.36	0.40
1:M:155:ILE:O	1:M:158:ARG:HB3	2.21	0.40
1:N:360:GLY:O	1:N:364:ILE:HG12	2.22	0.40
1:O:523:LEU:HD22	1:O:538:GLY:HA3	2.04	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	481/650 (74%)	459 (95%)	21 (4%)	1 (0%)	51	85
1	B	481/650 (74%)	459 (95%)	21 (4%)	1 (0%)	51	85
1	C	481/650 (74%)	459 (95%)	21 (4%)	1 (0%)	51	85

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
1	D	481/650 (74%)	459 (95%)	21 (4%)	1 (0%)	51	85
1	E	481/650 (74%)	459 (95%)	21 (4%)	1 (0%)	51	85
1	F	481/650 (74%)	459 (95%)	21 (4%)	1 (0%)	51	85
1	G	481/650 (74%)	458 (95%)	22 (5%)	1 (0%)	51	85
1	H	481/650 (74%)	459 (95%)	21 (4%)	1 (0%)	51	85
1	I	481/650 (74%)	459 (95%)	21 (4%)	1 (0%)	51	85
1	J	481/650 (74%)	459 (95%)	21 (4%)	1 (0%)	51	85
1	K	481/650 (74%)	459 (95%)	21 (4%)	1 (0%)	51	85
1	L	481/650 (74%)	459 (95%)	21 (4%)	1 (0%)	51	85
1	M	481/650 (74%)	459 (95%)	21 (4%)	1 (0%)	51	85
1	N	481/650 (74%)	459 (95%)	21 (4%)	1 (0%)	51	85
1	O	481/650 (74%)	459 (95%)	21 (4%)	1 (0%)	51	85
All	All	7215/9750 (74%)	6884 (95%)	316 (4%)	15 (0%)	54	85

All (15) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	A	181	VAL
1	B	181	VAL
1	C	181	VAL
1	E	181	VAL
1	F	181	VAL
1	G	181	VAL
1	H	181	VAL
1	I	181	VAL
1	J	181	VAL
1	K	181	VAL
1	L	181	VAL
1	M	181	VAL
1	N	181	VAL
1	O	181	VAL
1	D	181	VAL

### 5.3.2 Protein sidechains ⓘ

In the following table, the Percentiles column shows the percent sidechain outliers of the chain as a percentile score with respect to all 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	415/550 (76%)	403 (97%)	12 (3%)	48	74
1	B	415/550 (76%)	403 (97%)	12 (3%)	48	74
1	C	415/550 (76%)	403 (97%)	12 (3%)	48	74
1	D	415/550 (76%)	403 (97%)	12 (3%)	48	74
1	E	415/550 (76%)	403 (97%)	12 (3%)	48	74
1	F	415/550 (76%)	403 (97%)	12 (3%)	48	74
1	G	415/550 (76%)	403 (97%)	12 (3%)	48	74
1	H	415/550 (76%)	403 (97%)	12 (3%)	48	74
1	I	415/550 (76%)	403 (97%)	12 (3%)	48	74
1	J	415/550 (76%)	403 (97%)	12 (3%)	48	74
1	K	415/550 (76%)	403 (97%)	12 (3%)	48	74
1	L	415/550 (76%)	403 (97%)	12 (3%)	48	74
1	M	415/550 (76%)	403 (97%)	12 (3%)	48	74
1	N	415/550 (76%)	403 (97%)	12 (3%)	48	74
1	O	415/550 (76%)	403 (97%)	12 (3%)	48	74
All	All	6225/8250 (76%)	6045 (97%)	180 (3%)	51	74

All (180) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	A	455	GLU
1	A	459	ILE
1	A	473	GLN
1	A	474	THR
1	A	476	ASP
1	A	477	ARG
1	A	478	LYS
1	A	506	ASN
1	A	517	ARG
1	A	518	PHE
1	A	520	LYS
1	A	521	ARG
1	B	455	GLU
1	B	459	ILE
1	B	473	GLN

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Mol	Chain	Res	Type
1	B	474	THR
1	B	476	ASP
1	B	477	ARG
1	B	478	LYS
1	B	506	ASN
1	B	517	ARG
1	B	518	PHE
1	B	520	LYS
1	B	521	ARG
1	C	455	GLU
1	C	459	ILE
1	C	473	GLN
1	C	474	THR
1	C	476	ASP
1	C	477	ARG
1	C	478	LYS
1	C	506	ASN
1	C	517	ARG
1	C	518	PHE
1	C	520	LYS
1	C	521	ARG
1	D	455	GLU
1	D	459	ILE
1	D	473	GLN
1	D	474	THR
1	D	476	ASP
1	D	477	ARG
1	D	478	LYS
1	D	506	ASN
1	D	517	ARG
1	D	518	PHE
1	D	520	LYS
1	D	521	ARG
1	E	455	GLU
1	E	459	ILE
1	E	473	GLN
1	E	474	THR
1	E	476	ASP
1	E	477	ARG
1	E	478	LYS
1	E	506	ASN
1	E	517	ARG

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Mol	Chain	Res	Type
1	E	518	PHE
1	E	520	LYS
1	E	521	ARG
1	F	455	GLU
1	F	459	ILE
1	F	473	GLN
1	F	474	THR
1	F	476	ASP
1	F	477	ARG
1	F	478	LYS
1	F	506	ASN
1	F	517	ARG
1	F	518	PHE
1	F	520	LYS
1	F	521	ARG
1	G	455	GLU
1	G	459	ILE
1	G	473	GLN
1	G	474	THR
1	G	476	ASP
1	G	477	ARG
1	G	478	LYS
1	G	506	ASN
1	G	517	ARG
1	G	518	PHE
1	G	520	LYS
1	G	521	ARG
1	H	455	GLU
1	H	459	ILE
1	H	473	GLN
1	H	474	THR
1	H	476	ASP
1	H	477	ARG
1	H	478	LYS
1	H	506	ASN
1	H	517	ARG
1	H	518	PHE
1	H	520	LYS
1	H	521	ARG
1	I	455	GLU
1	I	459	ILE
1	I	473	GLN

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Mol	Chain	Res	Type
1	I	474	THR
1	I	476	ASP
1	I	477	ARG
1	I	478	LYS
1	I	506	ASN
1	I	517	ARG
1	I	518	PHE
1	I	520	LYS
1	I	521	ARG
1	J	455	GLU
1	J	459	ILE
1	J	473	GLN
1	J	474	THR
1	J	476	ASP
1	J	477	ARG
1	J	478	LYS
1	J	506	ASN
1	J	517	ARG
1	J	518	PHE
1	J	520	LYS
1	J	521	ARG
1	K	455	GLU
1	K	459	ILE
1	K	473	GLN
1	K	474	THR
1	K	476	ASP
1	K	477	ARG
1	K	478	LYS
1	K	506	ASN
1	K	517	ARG
1	K	518	PHE
1	K	520	LYS
1	K	521	ARG
1	L	455	GLU
1	L	459	ILE
1	L	473	GLN
1	L	474	THR
1	L	476	ASP
1	L	477	ARG
1	L	478	LYS
1	L	506	ASN
1	L	517	ARG

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Mol	Chain	Res	Type
1	L	518	PHE
1	L	520	LYS
1	L	521	ARG
1	M	455	GLU
1	M	459	ILE
1	M	473	GLN
1	M	474	THR
1	M	476	ASP
1	M	477	ARG
1	M	478	LYS
1	M	506	ASN
1	M	517	ARG
1	M	518	PHE
1	M	520	LYS
1	M	521	ARG
1	N	455	GLU
1	N	459	ILE
1	N	473	GLN
1	N	474	THR
1	N	476	ASP
1	N	477	ARG
1	N	478	LYS
1	N	506	ASN
1	N	517	ARG
1	N	518	PHE
1	N	520	LYS
1	N	521	ARG
1	O	455	GLU
1	O	459	ILE
1	O	473	GLN
1	O	474	THR
1	O	476	ASP
1	O	477	ARG
1	O	478	LYS
1	O	506	ASN
1	O	517	ARG
1	O	518	PHE
1	O	520	LYS
1	O	521	ARG

Some sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (165) such sidechains are listed below:



Mol	Chain	Res	Type
1	A	125	ASN
1	A	138	ASN
1	A	288	HIS
1	A	300	GLN
1	A	340	GLN
1	A	354	ASN
1	A	424	ASN
1	A	428	ASN
1	A	502	GLN
1	A	506	ASN
1	A	640	GLN
1	B	125	ASN
1	B	138	ASN
1	B	288	HIS
1	B	300	GLN
1	B	340	GLN
1	B	354	ASN
1	B	424	ASN
1	B	428	ASN
1	B	502	GLN
1	B	506	ASN
1	B	640	GLN
1	C	125	ASN
1	C	138	ASN
1	C	288	HIS
1	C	300	GLN
1	C	340	GLN
1	C	354	ASN
1	C	424	ASN
1	C	428	ASN
1	C	502	GLN
1	C	506	ASN
1	C	640	GLN
1	D	125	ASN
1	D	138	ASN
1	D	288	HIS
1	D	300	GLN
1	D	340	GLN
1	D	354	ASN
1	D	424	ASN
1	D	428	ASN
1	D	502	GLN
1	D	506	ASN

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Mol	Chain	Res	Type
1	D	640	GLN
1	E	125	ASN
1	E	138	ASN
1	E	288	HIS
1	E	300	GLN
1	E	340	GLN
1	E	354	ASN
1	E	424	ASN
1	E	428	ASN
1	E	502	GLN
1	E	506	ASN
1	E	640	GLN
1	F	125	ASN
1	F	138	ASN
1	F	288	HIS
1	F	300	GLN
1	F	340	GLN
1	F	354	ASN
1	F	424	ASN
1	F	428	ASN
1	F	502	GLN
1	F	506	ASN
1	F	640	GLN
1	G	125	ASN
1	G	138	ASN
1	G	288	HIS
1	G	300	GLN
1	G	340	GLN
1	G	354	ASN
1	G	424	ASN
1	G	428	ASN
1	G	502	GLN
1	G	506	ASN
1	G	640	GLN
1	H	125	ASN
1	H	138	ASN
1	H	288	HIS
1	H	300	GLN
1	H	340	GLN
1	H	354	ASN
1	H	424	ASN
1	H	428	ASN

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Mol	Chain	Res	Type
1	H	502	GLN
1	H	506	ASN
1	H	640	GLN
1	I	125	ASN
1	I	138	ASN
1	I	288	HIS
1	I	300	GLN
1	I	340	GLN
1	I	354	ASN
1	I	424	ASN
1	I	428	ASN
1	I	502	GLN
1	I	506	ASN
1	I	640	GLN
1	J	125	ASN
1	J	138	ASN
1	J	288	HIS
1	J	300	GLN
1	J	340	GLN
1	J	354	ASN
1	J	424	ASN
1	J	428	ASN
1	J	502	GLN
1	J	506	ASN
1	J	640	GLN
1	K	125	ASN
1	K	138	ASN
1	K	288	HIS
1	K	300	GLN
1	K	340	GLN
1	K	354	ASN
1	K	424	ASN
1	K	428	ASN
1	K	502	GLN
1	K	506	ASN
1	K	640	GLN
1	L	125	ASN
1	L	138	ASN
1	L	288	HIS
1	L	300	GLN
1	L	340	GLN
1	L	354	ASN

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Mol	Chain	Res	Type
1	L	424	ASN
1	L	428	ASN
1	L	502	GLN
1	L	506	ASN
1	L	640	GLN
1	M	125	ASN
1	M	138	ASN
1	M	288	HIS
1	M	300	GLN
1	M	340	GLN
1	M	354	ASN
1	M	424	ASN
1	M	428	ASN
1	M	502	GLN
1	M	506	ASN
1	M	640	GLN
1	N	125	ASN
1	N	138	ASN
1	N	288	HIS
1	N	300	GLN
1	N	340	GLN
1	N	354	ASN
1	N	424	ASN
1	N	428	ASN
1	N	502	GLN
1	N	506	ASN
1	N	640	GLN
1	O	125	ASN
1	O	138	ASN
1	O	288	HIS
1	O	300	GLN
1	O	340	GLN
1	O	354	ASN
1	O	424	ASN
1	O	428	ASN
1	O	502	GLN
1	O	506	ASN
1	O	640	GLN

### 5.3.3 RNA ⓘ

There are no RNA molecules in this entry.



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

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

## 5.5 Carbohydrates [i](#)

There are no carbohydrates in this entry.

## 5.6 Ligand geometry [i](#)

There are no ligands in this entry.

## 5.7 Other polymers [i](#)

There are no such residues in this entry.

## 5.8 Polymer linkage issues [i](#)

There are no chain breaks in this entry.