



## Full wwPDB EM Validation Report ⓘ

Mar 20, 2026 – 06:16 AM UTC

PDB ID : 9DRL / pdb\_00009drl  
EMDB ID : EMD-47128  
Title : Cryo-EM structure of the T33-549 tetrahedral cage  
Authors : Redler, R.; Coudray, N.; Lubner, J.; Wang, S.; Baker, D.; Ekiert, D.C.; Bhabha, G.  
Deposited on : 2024-09-25  
Resolution : 6.10 Å(reported)  
Based on initial model : .

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

We welcome your comments at [validation@mail.wwpdb.org](mailto:validation@mail.wwpdb.org)

A user guide is available at

<https://www.wwpdb.org/validation/2017/EMValidationReportHelp>  
with specific help available everywhere you see the ⓘ symbol.

The types of validation reports are described at

<http://www.wwpdb.org/validation/2017/FAQs#types>.

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

EMDB validation analysis : 0.0.1.dev132  
MolProbity : 4-5-2 with Phenix2.0  
Percentile statistics : 20250101.v01 (using entries in the PDB archive January 1st 2025)  
EM percentile statistics : 202505.v01 (Using data in the EMDB archive up until May 2025)  
MapQ : 1.9.13  
Ideal geometry (proteins) : Engh & Huber (2001)  
Ideal geometry (DNA, RNA) : Parkinson et al. (1996)  
Validation Pipeline (wwPDB-VP) : 2.49



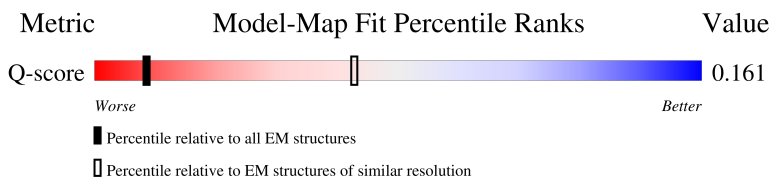
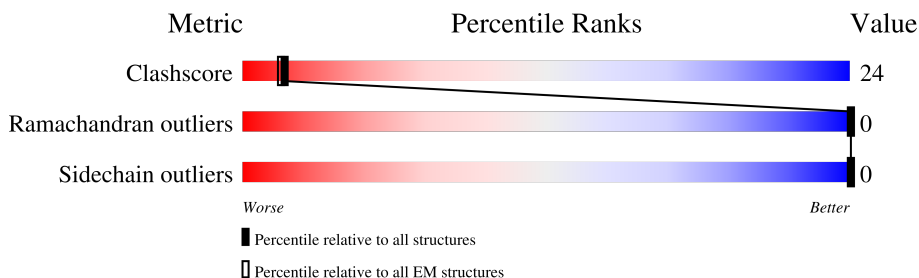
# 1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

*ELECTRON MICROSCOPY*

The reported resolution of this entry is 6.10 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)	Similar EM resolution (#Entries, resolution range(Å))
Clashscore	229148	23984	-
Ramachandran outliers	224038	23583	-
Sidechain outliers	223484	23102	-
Q-score	-	25397	531 ( 5.60 - 6.60 )





















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

Mol	Chain	Length	Quality of chain
1	A	511	
1	C	511	
1	E	511	
1	G	511	

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Mol	Chain	Length	Quality of chain
1	I	511	
1	K	511	
1	M	511	
1	O	511	
1	Q	511	
1	S	511	
1	U	511	
1	W	511	
2	B	400	
2	D	400	
2	F	400	
2	H	400	
2	J	400	
2	L	400	
2	N	400	
2	P	400	
2	R	400	
2	T	400	
2	V	400	
2	X	400	



## 2 Entry composition [i](#)

There are 2 unique types of molecules in this entry. The entry contains 165888 atoms, of which 84972 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 T33-549\_B.

Mol	Chain	Residues	Atoms						AltConf	Trace
1	A	486	Total 7698	C 2324	H 3940	N 677	O 749	S 8	0	0
1	C	486	Total 7698	C 2324	H 3940	N 677	O 749	S 8	0	0
1	E	486	Total 7698	C 2324	H 3940	N 677	O 749	S 8	0	0
1	G	486	Total 7698	C 2324	H 3940	N 677	O 749	S 8	0	0
1	I	486	Total 7698	C 2324	H 3940	N 677	O 749	S 8	0	0
1	K	486	Total 7698	C 2324	H 3940	N 677	O 749	S 8	0	0
1	M	486	Total 7698	C 2324	H 3940	N 677	O 749	S 8	0	0
1	O	486	Total 7698	C 2324	H 3940	N 677	O 749	S 8	0	0
1	Q	486	Total 7698	C 2324	H 3940	N 677	O 749	S 8	0	0
1	S	486	Total 7698	C 2324	H 3940	N 677	O 749	S 8	0	0
1	U	486	Total 7698	C 2324	H 3940	N 677	O 749	S 8	0	0
1	W	486	Total 7698	C 2324	H 3940	N 677	O 749	S 8	0	0

- Molecule 2 is a protein called T33-549\_A.

Mol	Chain	Residues	Atoms						AltConf	Trace
2	B	398	Total 6126	C 1854	H 3141	N 539	O 590	S 2	0	0
2	D	398	Total 6126	C 1854	H 3141	N 539	O 590	S 2	0	0
2	F	398	Total 6126	C 1854	H 3141	N 539	O 590	S 2	0	0

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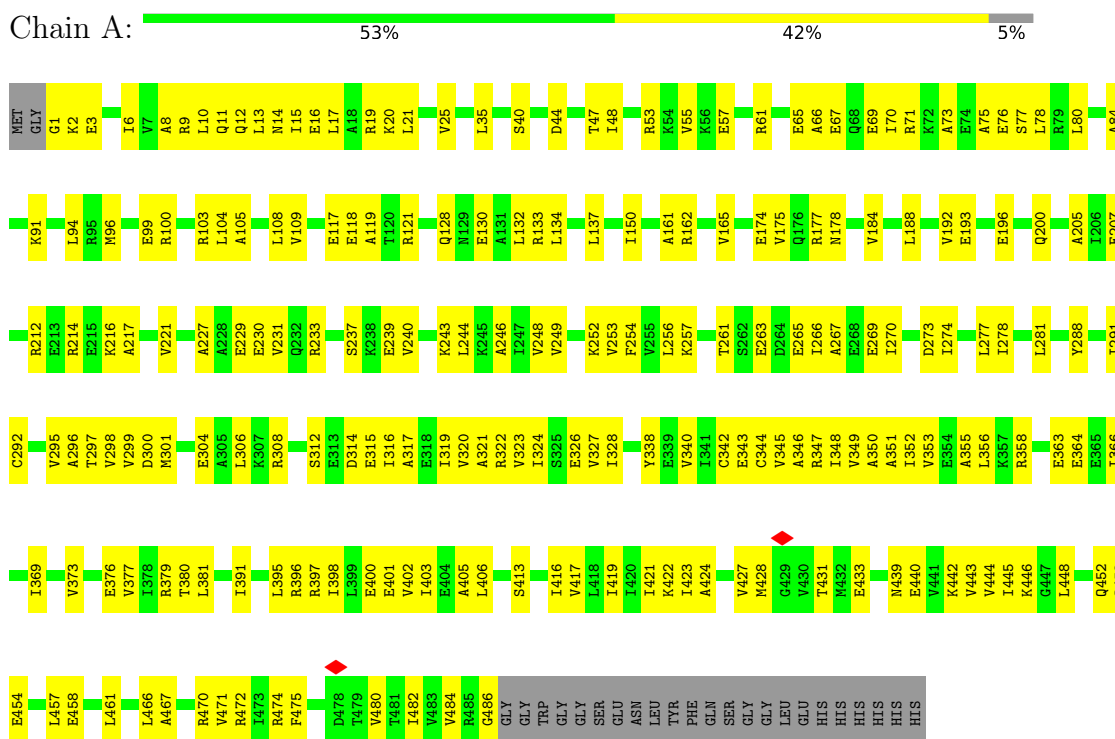
Mol	Chain	Residues	Atoms						AltConf	Trace
2	H	398	Total 6126	C 1854	H 3141	N 539	O 590	S 2	0	0
2	J	398	Total 6126	C 1854	H 3141	N 539	O 590	S 2	0	0
2	L	398	Total 6126	C 1854	H 3141	N 539	O 590	S 2	0	0
2	N	398	Total 6126	C 1854	H 3141	N 539	O 590	S 2	0	0
2	P	398	Total 6126	C 1854	H 3141	N 539	O 590	S 2	0	0
2	R	398	Total 6126	C 1854	H 3141	N 539	O 590	S 2	0	0
2	T	398	Total 6126	C 1854	H 3141	N 539	O 590	S 2	0	0
2	V	398	Total 6126	C 1854	H 3141	N 539	O 590	S 2	0	0
2	X	398	Total 6126	C 1854	H 3141	N 539	O 590	S 2	0	0



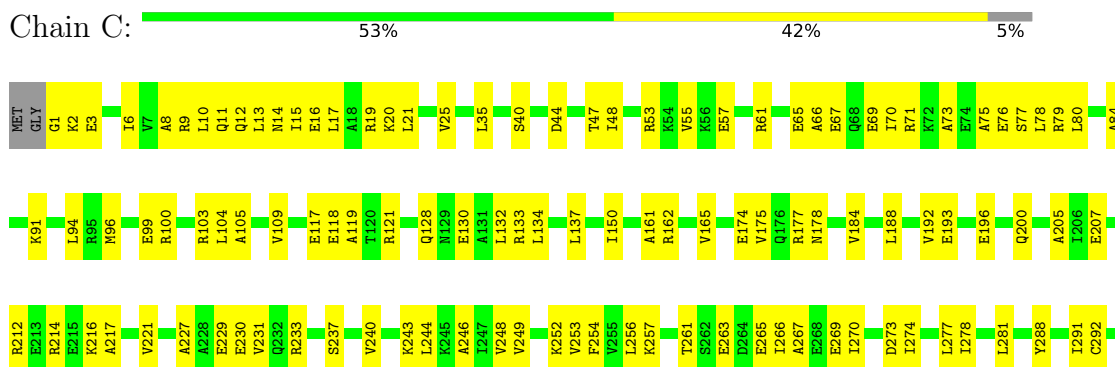
### 3 Residue-property plots

These plots are drawn for all protein, RNA, DNA and oligosaccharide chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and atom inclusion in map density. Residues are color-coded according to the number of geometric quality criteria for which they contain at least one outlier: green = 0, yellow = 1, orange = 2 and red = 3 or more. A red diamond above a residue indicates a poor fit to the EM map for this residue (all-atom inclusion < 40%). Stretches of 2 or more consecutive residues without any outlier are shown as a green connector. Residues present in the sample, but not in the model, are shown in grey.

#### • Molecule 1: T33-549\_B



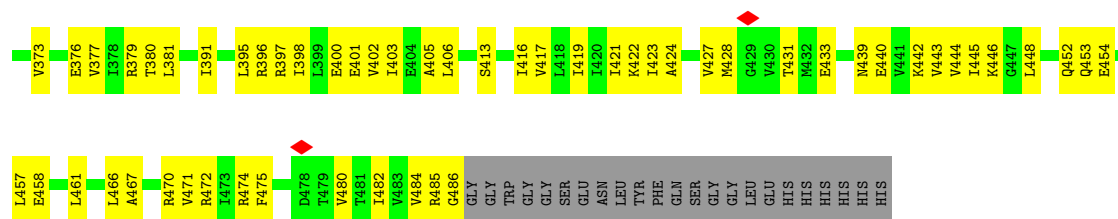
#### • Molecule 1: T33-549\_B





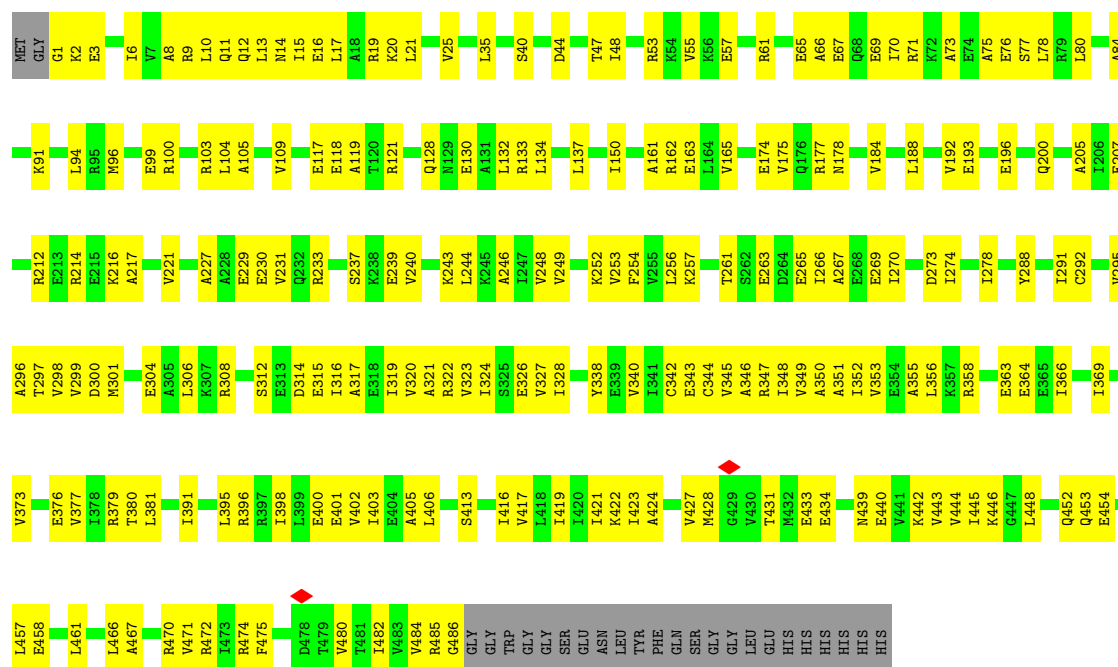






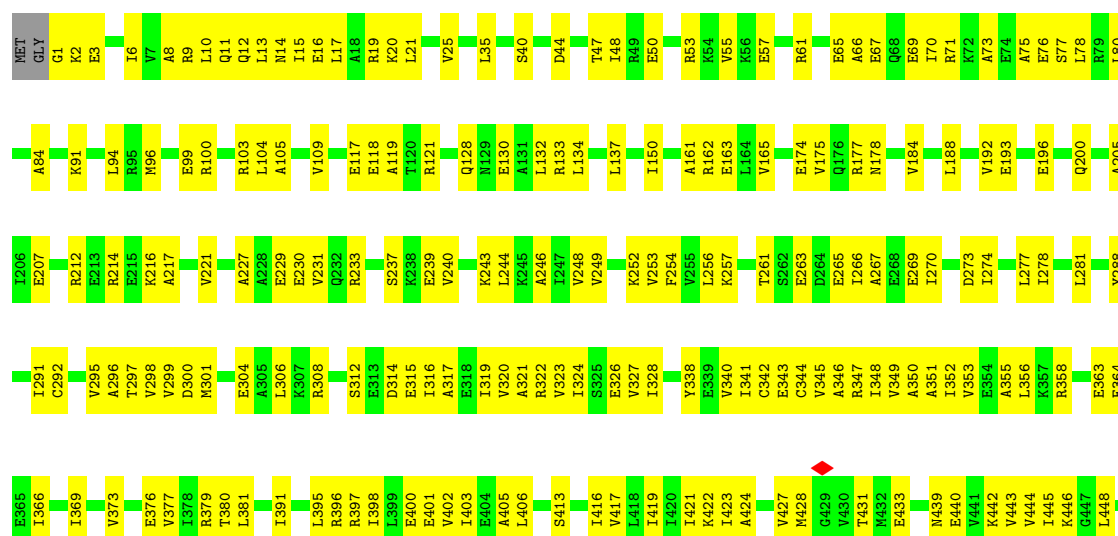
• Molecule 1: T33-549\_B

Chain I: 54% 41% 5%

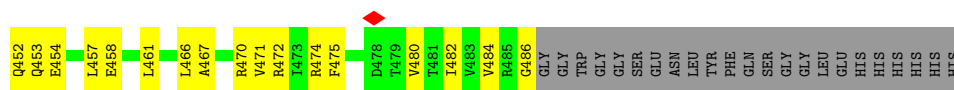


• Molecule 1: T33-549\_B

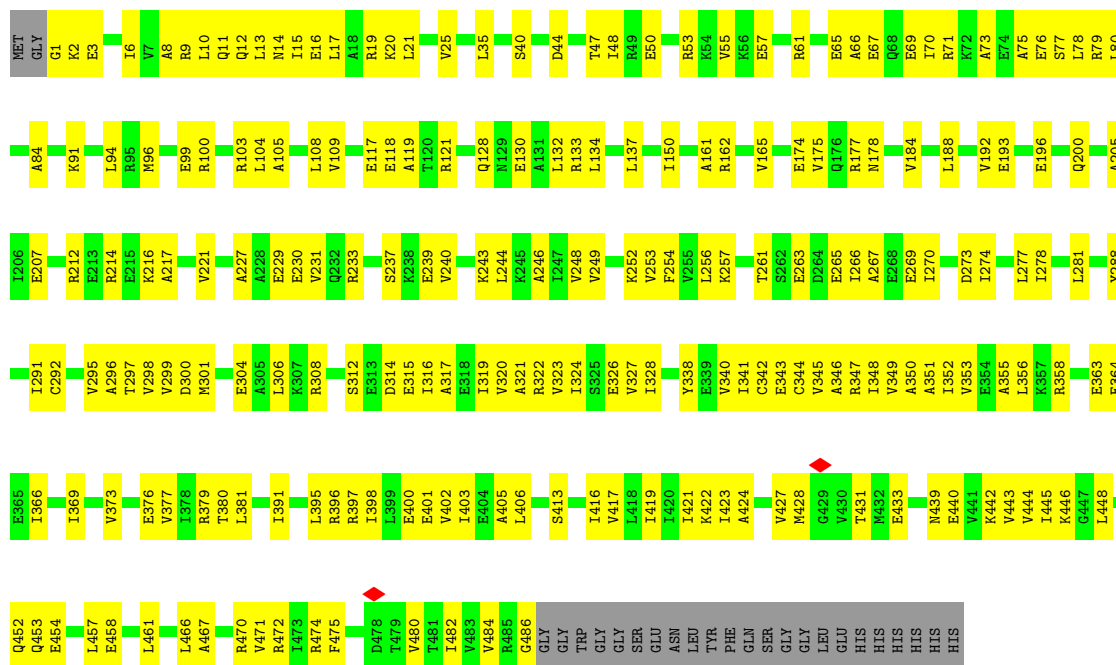
Chain K: 53% 42% 5%



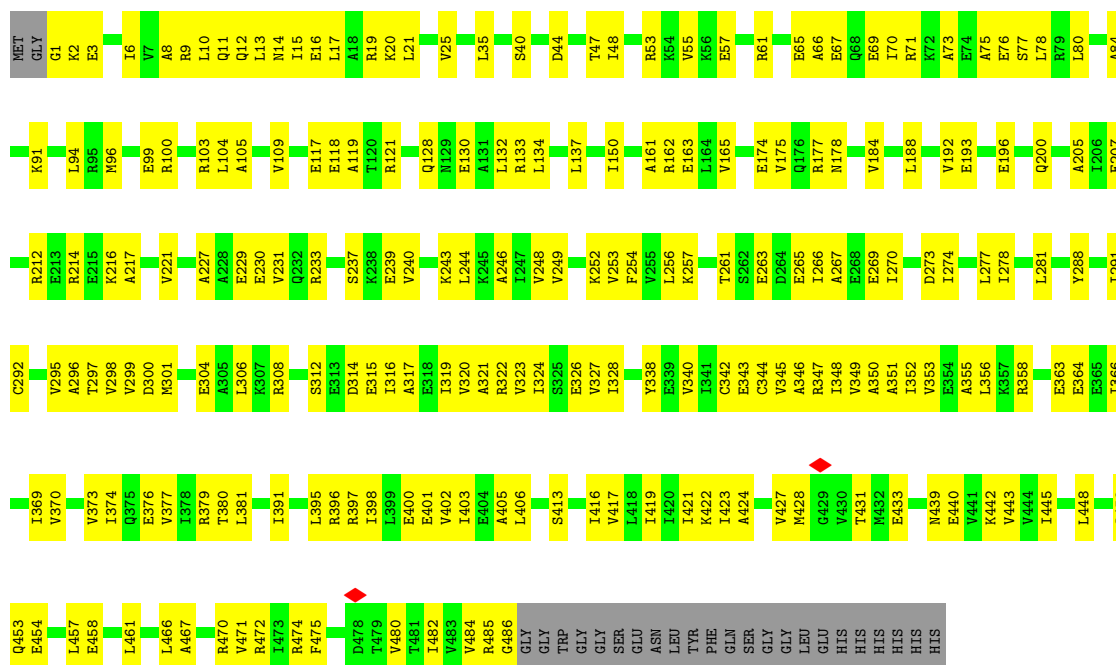




• Molecule 1: T33-549\_B



• Molecule 1: T33-549\_B



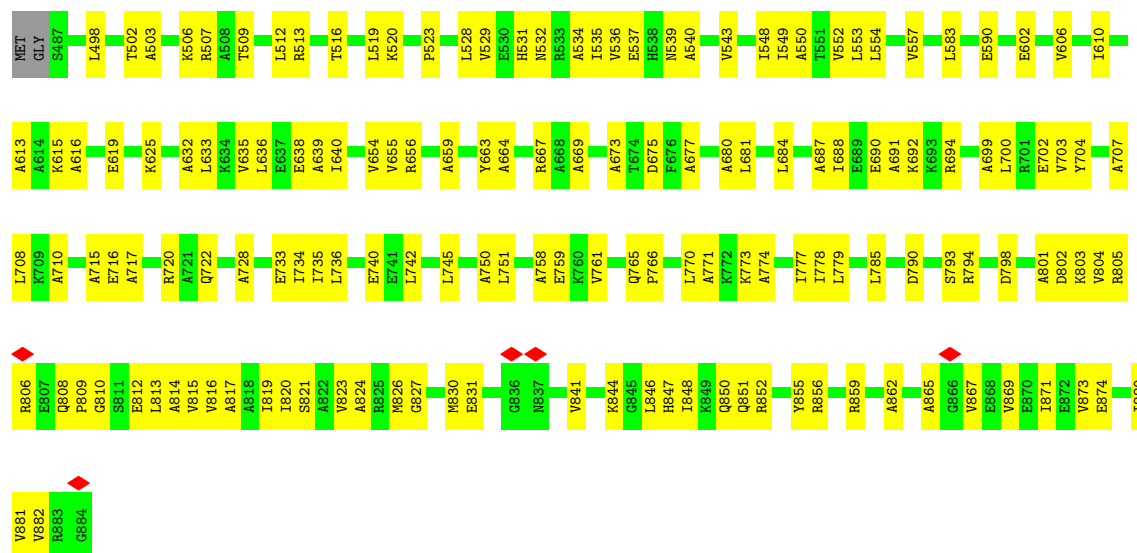




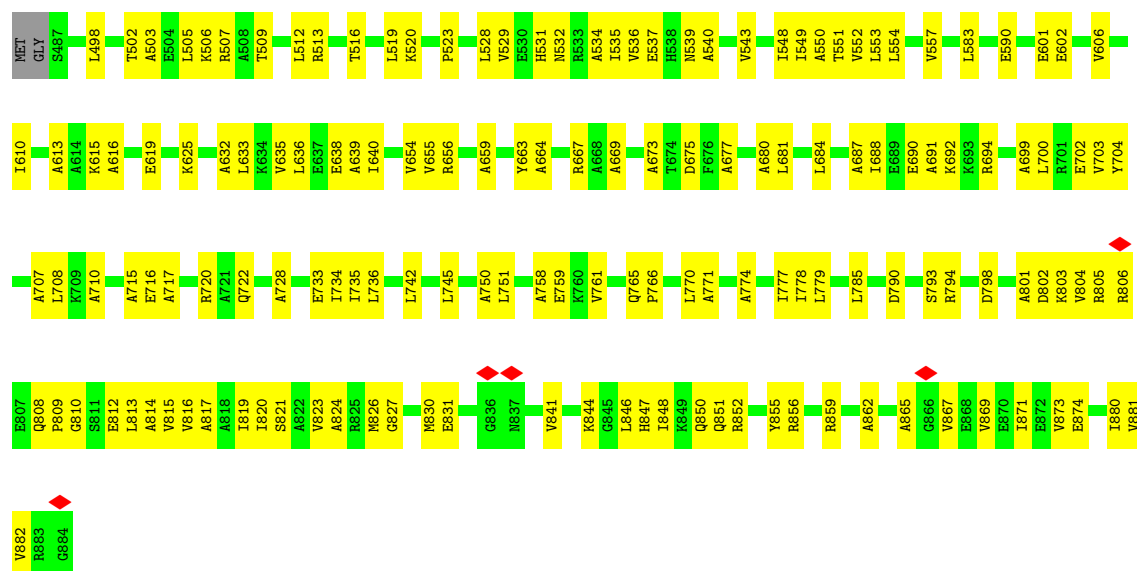




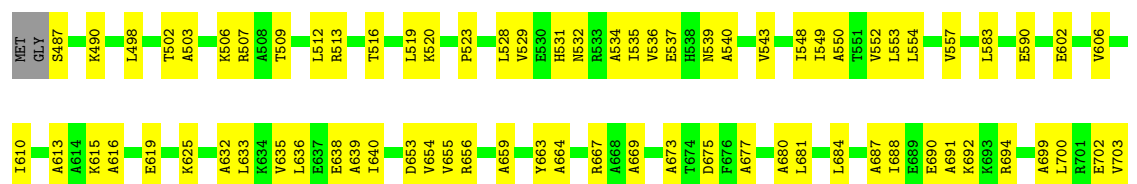




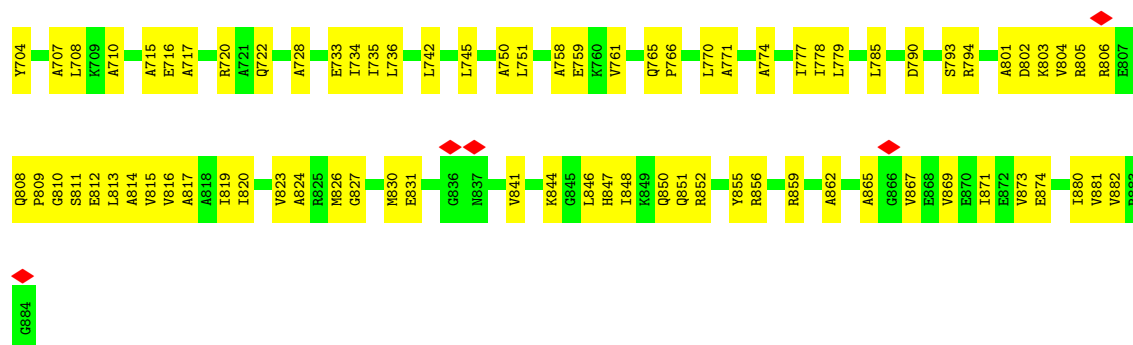
### • Molecule 2: T33-549\_A



### • Molecule 2: T33-549\_A

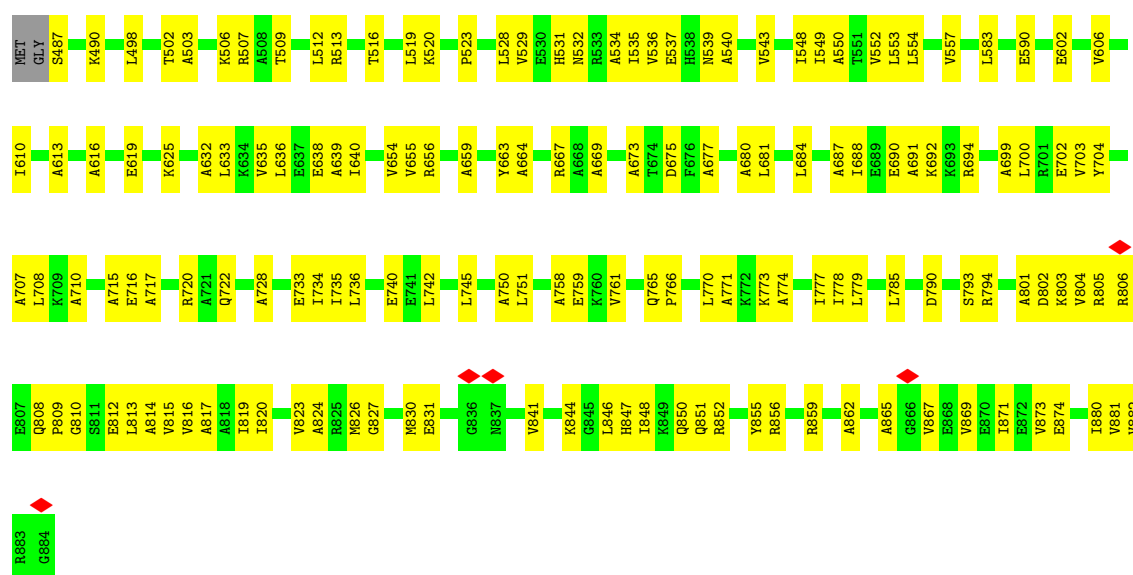






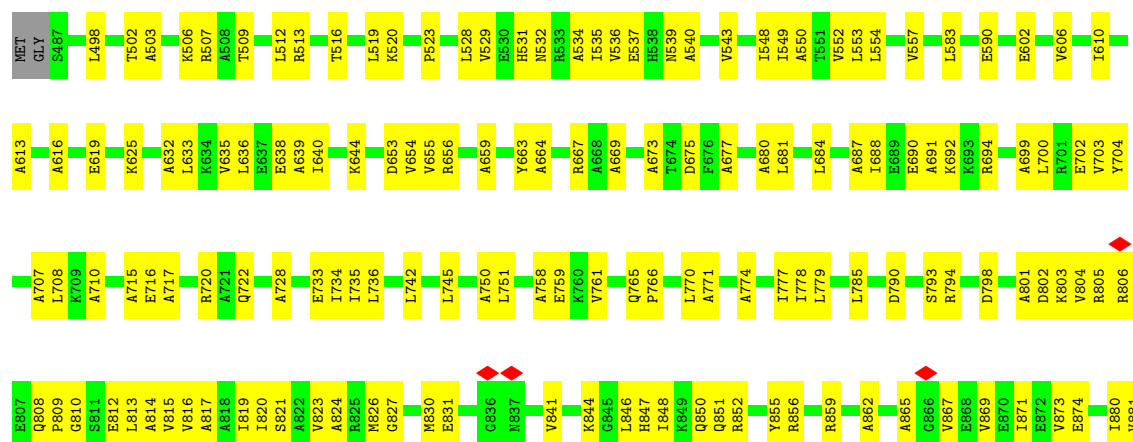
• Molecule 2: T33-549\_A

Chain H: 62% 38%



• Molecule 2: T33-549\_A

Chain J: 62% 38%



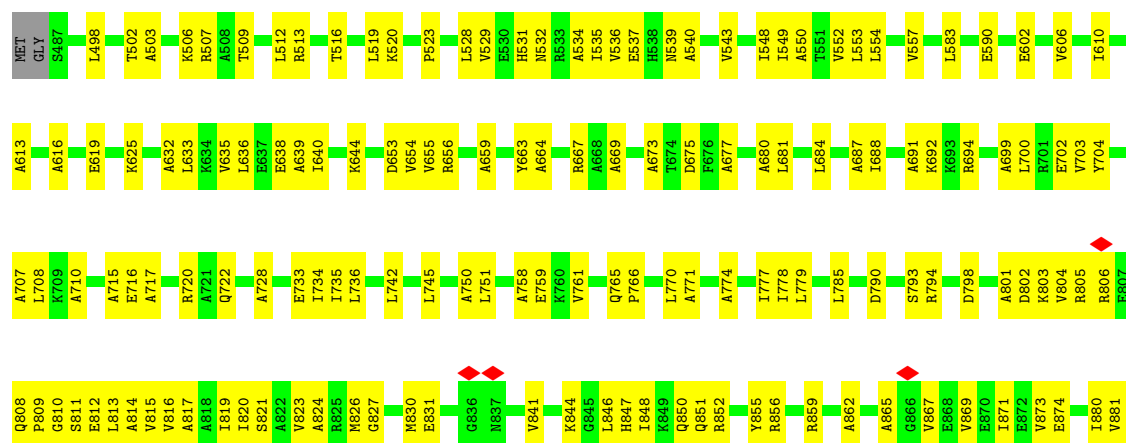




## • Molecule 2: T33-549\_A

Chain L: 

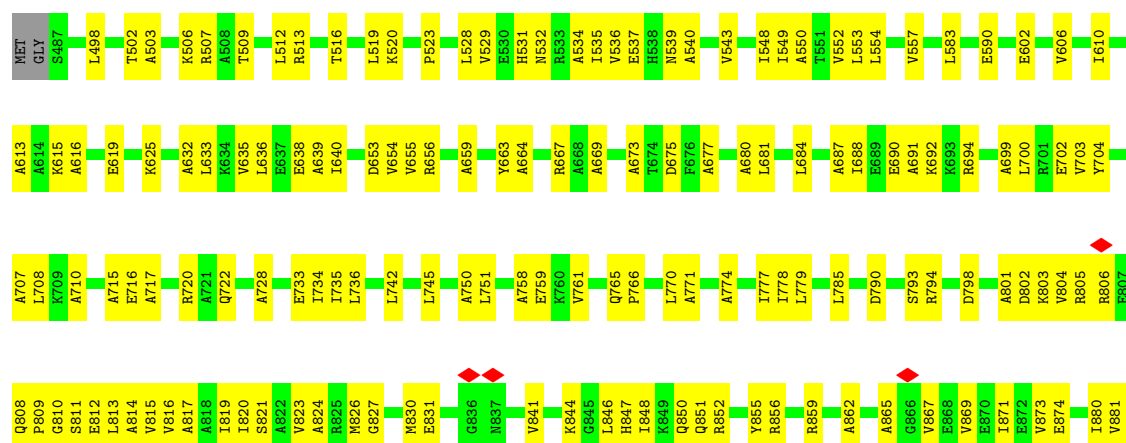
62% 38%



## • Molecule 2: T33-549\_A

Chain N: 

62% 38%

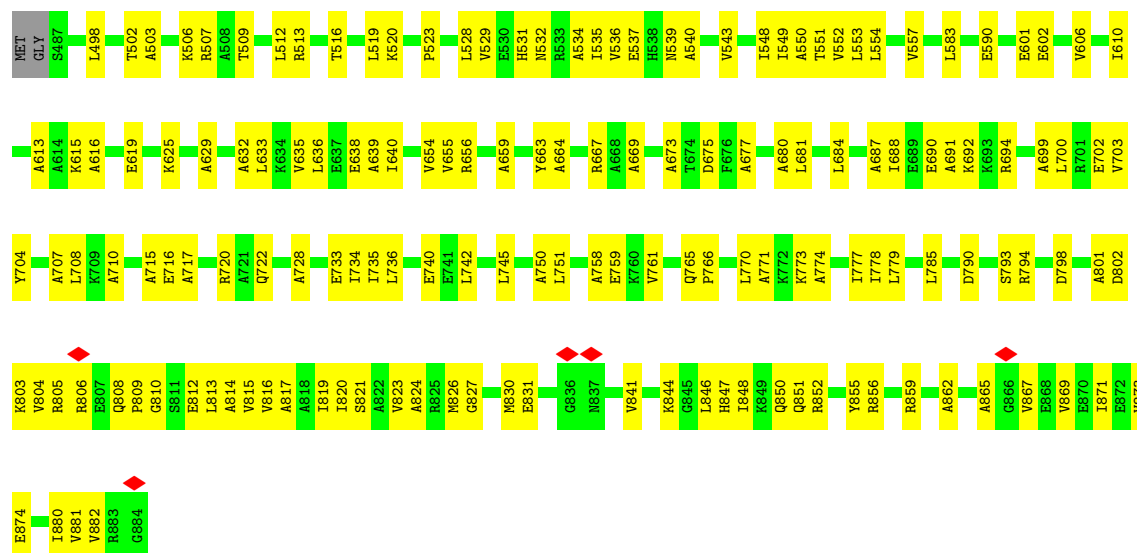


## • Molecule 2: T33-549\_A

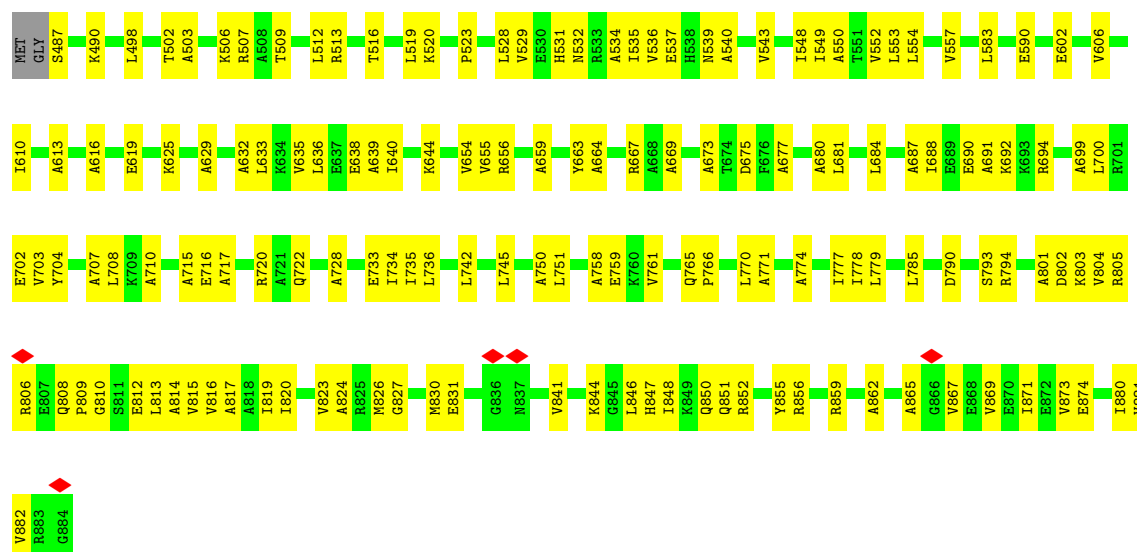
Chain P: 

61% 39%

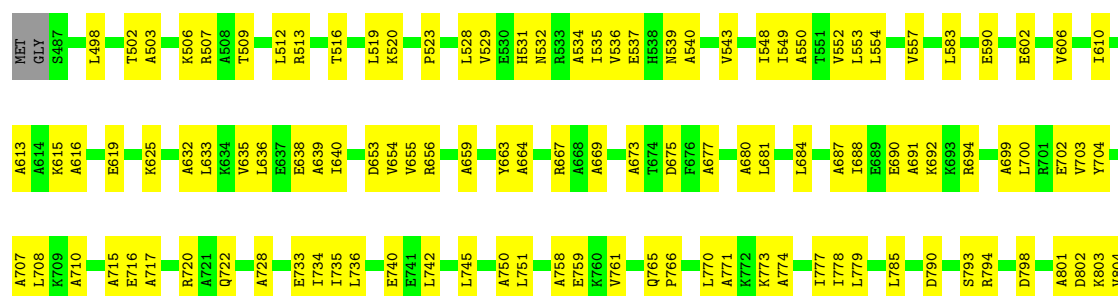




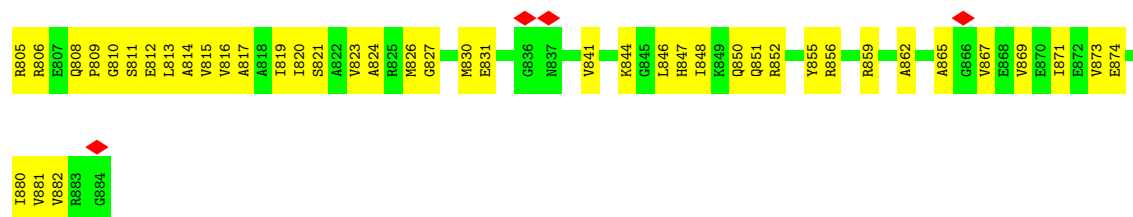
### • Molecule 2: T33-549\_A



### • Molecule 2: T33-549\_A

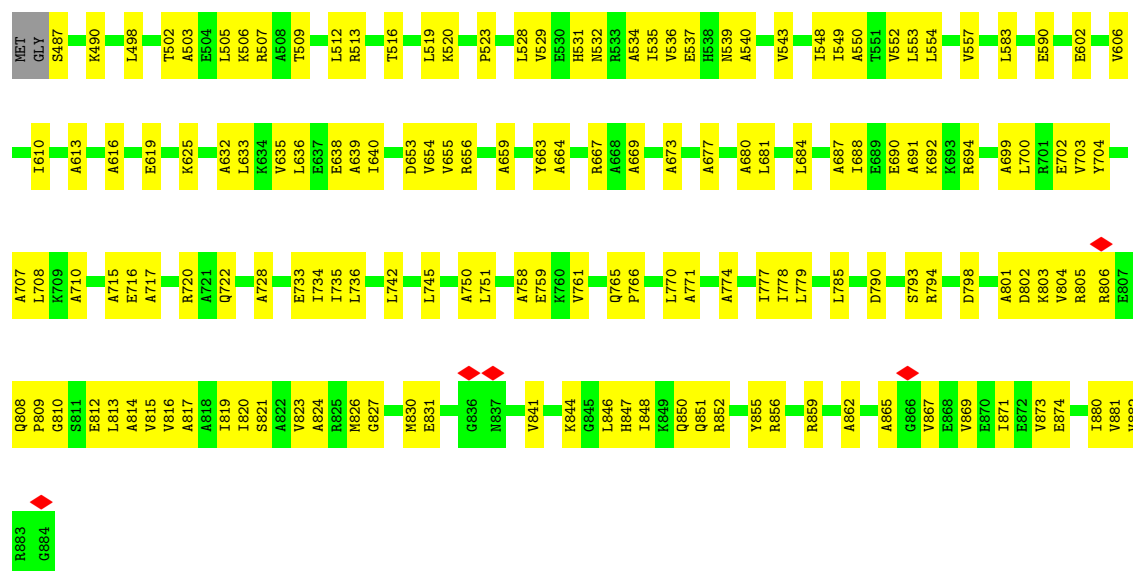






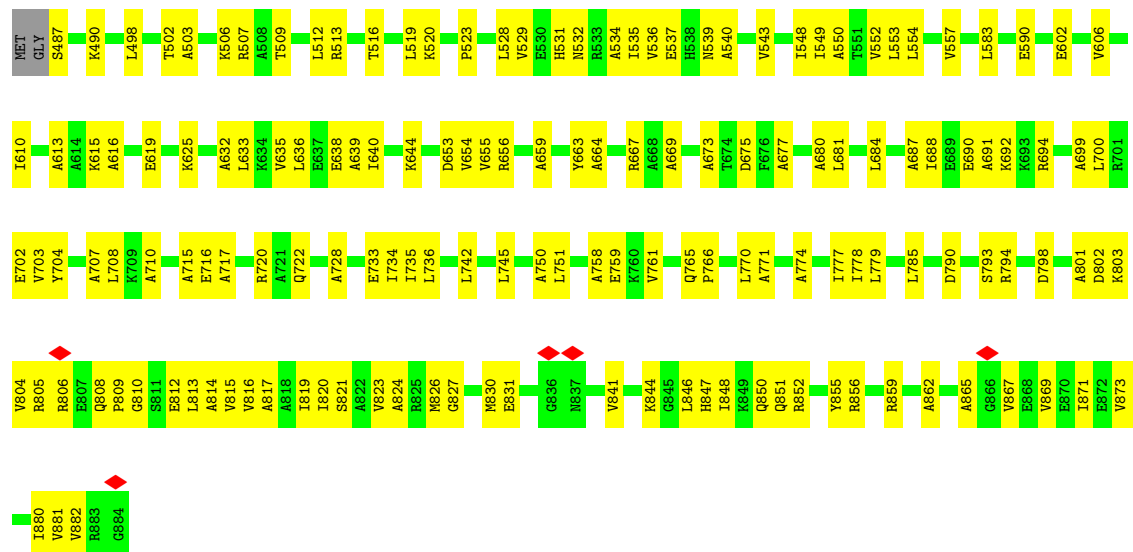
• Molecule 2: T33-549\_A

Chain V: 62% 38%



• Molecule 2: T33-549\_A

Chain X: 61% 38%





## 4 Experimental information

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, T	Depositor
Number of particles used	662340	Depositor
Resolution determination method	FSC 0.143 CUT-OFF	Depositor
CTF correction method	PHASE FLIPPING AND AMPLITUDE CORRECTION	Depositor
Microscope	FEI TITAN KRIOS	Depositor
Voltage (kV)	300	Depositor
Electron dose ( $e^-/\text{\AA}^2$ )	58.80	Depositor
Minimum defocus (nm)	600	Depositor
Maximum defocus (nm)	2200	Depositor
Magnification	105000	Depositor
Image detector	GATAN K3 (6k x 4k)	Depositor
Maximum map value	0.287	Depositor
Minimum map value	-0.127	Depositor
Average map value	-0.000	Depositor
Map value standard deviation	0.010	Depositor
Recommended contour level	0.035	Depositor
Map size (Å)	494.39996, 494.39996, 494.39996	wwPDB
Map dimensions	400, 400, 400	wwPDB
Map angles (°)	90.0, 90.0, 90.0	wwPDB
Pixel spacing (Å)	1.236, 1.236, 1.236	Depositor



## 5 Model quality

### 5.1 Standard geometry

The Z score for a bond length (or angle) is the number of standard deviations the observed value is removed from the expected value. A bond length (or angle) with  $|Z| > 5$  is considered an outlier worth inspection. RMSZ is the root-mean-square of all Z scores of the bond lengths (or angles).

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z  >5	RMSZ	# Z  >5
1	A	0.41	0/3769	0.52	0/5074
1	C	0.41	0/3769	0.52	0/5074
1	E	0.41	0/3769	0.52	0/5074
1	G	0.41	0/3769	0.52	0/5074
1	I	0.41	0/3769	0.52	0/5074
1	K	0.41	0/3769	0.52	0/5074
1	M	0.41	0/3769	0.52	0/5074
1	O	0.41	0/3769	0.52	0/5074
1	Q	0.41	0/3769	0.52	0/5074
1	S	0.41	0/3769	0.52	0/5074
1	U	0.41	0/3769	0.52	0/5074
1	W	0.41	0/3769	0.52	0/5074
2	B	0.32	0/3001	0.46	0/4042
2	D	0.32	0/3001	0.46	0/4042
2	F	0.32	0/3001	0.45	0/4042
2	H	0.32	0/3001	0.46	0/4042
2	J	0.32	0/3001	0.46	0/4042
2	L	0.32	0/3001	0.46	0/4042
2	N	0.32	0/3001	0.46	0/4042
2	P	0.32	0/3001	0.46	0/4042
2	R	0.32	0/3001	0.46	0/4042
2	T	0.32	0/3001	0.46	0/4042
2	V	0.32	0/3001	0.46	0/4042
2	X	0.32	0/3001	0.46	0/4042
All	All	0.37	0/81240	0.49	0/109392

There are no bond length outliers.

There are no bond angle outliers.

There are no chirality outliers.

There are no planarity outliers.



## 5.2 Too-close contacts ⓘ

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

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	A	3758	3940	3940	207	0
1	C	3758	3940	3940	207	0
1	E	3758	3940	3940	204	0
1	G	3758	3940	3940	208	0
1	I	3758	3940	3940	205	0
1	K	3758	3940	3940	210	0
1	M	3758	3940	3940	211	0
1	O	3758	3940	3940	206	0
1	Q	3758	3940	3940	207	0
1	S	3758	3940	3940	210	0
1	U	3758	3940	3940	209	0
1	W	3758	3940	3940	205	0
2	B	2985	3141	3140	153	0
2	D	2985	3141	3140	154	0
2	F	2985	3141	3140	151	0
2	H	2985	3141	3140	152	0
2	J	2985	3141	3140	152	0
2	L	2985	3141	3140	151	0
2	N	2985	3141	3140	152	0
2	P	2985	3141	3140	153	0
2	R	2985	3141	3140	148	0
2	T	2985	3141	3140	152	0
2	V	2985	3141	3140	153	0
2	X	2985	3141	3140	155	0
All	All	80916	84972	84960	4013	0

The all-atom clashscore is defined as the number of clashes found per 1000 atoms (including hydrogen atoms). The all-atom clashscore for this structure is 24.

All (4013) 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:O:300:ASP:OD1	1:O:358:ARG:NH2	1.78	1.16
1:W:300:ASP:OD1	1:W:358:ARG:NH2	1.78	1.16
1:A:300:ASP:OD1	1:A:358:ARG:NH2	1.78	1.16

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:300:ASP:OD1	1:G:358:ARG:NH2	1.78	1.16
1:I:300:ASP:OD1	1:I:358:ARG:NH2	1.78	1.16
1:C:300:ASP:OD1	1:C:358:ARG:NH2	1.78	1.16
1:M:300:ASP:OD1	1:M:358:ARG:NH2	1.78	1.16
1:E:300:ASP:OD1	1:E:358:ARG:NH2	1.78	1.16
1:K:300:ASP:OD1	1:K:358:ARG:NH2	1.78	1.15
1:S:300:ASP:OD1	1:S:358:ARG:NH2	1.78	1.15
1:U:300:ASP:OD1	1:U:358:ARG:NH2	1.78	1.15
1:Q:300:ASP:OD1	1:Q:358:ARG:NH2	1.78	1.14
2:T:513:ARG:NH2	2:X:536:VAL:O	1.96	0.99
2:B:536:VAL:O	2:D:513:ARG:NH2	1.96	0.98
1:K:231:VAL:HG23	1:K:240:VAL:HG12	1.45	0.98
1:A:231:VAL:HG23	1:A:240:VAL:HG12	1.45	0.98
2:R:513:ARG:NH2	2:T:536:VAL:O	1.96	0.98
1:M:231:VAL:HG23	1:M:240:VAL:HG12	1.45	0.98
2:N:513:ARG:NH2	2:V:536:VAL:O	1.96	0.98
2:J:536:VAL:O	2:L:513:ARG:NH2	1.96	0.98
2:B:513:ARG:NH2	2:F:536:VAL:O	1.96	0.98
2:H:513:ARG:NH2	2:N:536:VAL:O	1.96	0.97
2:H:536:VAL:O	2:V:513:ARG:NH2	1.96	0.97
2:L:536:VAL:O	2:P:513:ARG:NH2	1.96	0.97
2:J:513:ARG:NH2	2:P:536:VAL:O	1.96	0.97
2:D:536:VAL:O	2:F:513:ARG:NH2	1.96	0.97
2:R:536:VAL:O	2:X:513:ARG:NH2	1.96	0.97
1:G:231:VAL:HG23	1:G:240:VAL:HG12	1.45	0.97
1:I:231:VAL:HG23	1:I:240:VAL:HG12	1.45	0.96
1:Q:231:VAL:HG23	1:Q:240:VAL:HG12	1.45	0.96
1:S:231:VAL:HG23	1:S:240:VAL:HG12	1.45	0.96
1:W:231:VAL:HG23	1:W:240:VAL:HG12	1.45	0.96
1:E:231:VAL:HG23	1:E:240:VAL:HG12	1.45	0.96
1:C:231:VAL:HG23	1:C:240:VAL:HG12	1.45	0.96
1:U:231:VAL:HG23	1:U:240:VAL:HG12	1.45	0.95
1:O:231:VAL:HG23	1:O:240:VAL:HG12	1.45	0.94
1:I:312:SER:OG	1:I:314:ASP:OD1	1.86	0.94
1:Q:312:SER:OG	1:Q:314:ASP:OD1	1.86	0.94
1:W:312:SER:OG	1:W:314:ASP:OD1	1.86	0.94
1:A:312:SER:OG	1:A:314:ASP:OD1	1.86	0.93
1:G:312:SER:OG	1:G:314:ASP:OD1	1.86	0.93
1:U:312:SER:OG	1:U:314:ASP:OD1	1.86	0.93
1:K:312:SER:OG	1:K:314:ASP:OD1	1.86	0.93
1:E:312:SER:OG	1:E:314:ASP:OD1	1.86	0.92

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:O:312:SER:OG	1:O:314:ASP:OD1	1.86	0.92
1:C:312:SER:OG	1:C:314:ASP:OD1	1.86	0.91
1:S:312:SER:OG	1:S:314:ASP:OD1	1.86	0.91
1:M:312:SER:OG	1:M:314:ASP:OD1	1.86	0.90
1:M:10:LEU:O	1:M:14:ASN:ND2	2.05	0.90
1:U:230:GLU:OE1	1:U:243:LYS:NZ	2.05	0.90
1:A:10:LEU:O	1:A:14:ASN:ND2	2.05	0.90
1:W:10:LEU:O	1:W:14:ASN:ND2	2.05	0.90
1:E:230:GLU:OE1	1:E:243:LYS:NZ	2.05	0.89
1:K:230:GLU:OE1	1:K:243:LYS:NZ	2.05	0.89
1:O:10:LEU:O	1:O:14:ASN:ND2	2.05	0.89
1:A:230:GLU:OE1	1:A:243:LYS:NZ	2.05	0.89
1:M:230:GLU:OE1	1:M:243:LYS:NZ	2.05	0.89
1:S:230:GLU:OE1	1:S:243:LYS:NZ	2.05	0.89
1:C:10:LEU:O	1:C:14:ASN:ND2	2.05	0.89
1:K:10:LEU:O	1:K:14:ASN:ND2	2.05	0.89
1:O:230:GLU:OE1	1:O:243:LYS:NZ	2.05	0.89
1:C:230:GLU:OE1	1:C:243:LYS:NZ	2.05	0.89
1:I:10:LEU:O	1:I:14:ASN:ND2	2.05	0.89
1:G:230:GLU:OE1	1:G:243:LYS:NZ	2.05	0.89
1:I:230:GLU:OE1	1:I:243:LYS:NZ	2.05	0.89
1:U:10:LEU:O	1:U:14:ASN:ND2	2.05	0.89
1:E:10:LEU:O	1:E:14:ASN:ND2	2.05	0.88
1:Q:10:LEU:O	1:Q:14:ASN:ND2	2.05	0.88
1:S:10:LEU:O	1:S:14:ASN:ND2	2.05	0.88
1:G:10:LEU:O	1:G:14:ASN:ND2	2.05	0.88
1:W:230:GLU:OE1	1:W:243:LYS:NZ	2.05	0.88
1:Q:230:GLU:OE1	1:Q:243:LYS:NZ	2.05	0.88
1:Q:440:GLU:OE2	1:Q:442:LYS:NZ	2.07	0.87
1:G:440:GLU:OE2	1:G:442:LYS:NZ	2.07	0.87
1:A:440:GLU:OE2	1:A:442:LYS:NZ	2.07	0.87
1:E:440:GLU:OE2	1:E:442:LYS:NZ	2.07	0.87
1:U:440:GLU:OE2	1:U:442:LYS:NZ	2.07	0.87
1:M:440:GLU:OE2	1:M:442:LYS:NZ	2.07	0.86
1:S:3:GLU:OE2	1:S:91:LYS:NZ	2.09	0.86
1:C:3:GLU:OE2	1:C:91:LYS:NZ	2.08	0.86
1:O:440:GLU:OE2	1:O:442:LYS:NZ	2.07	0.86
1:I:3:GLU:OE2	1:I:91:LYS:NZ	2.09	0.86
1:M:3:GLU:OE2	1:M:91:LYS:NZ	2.09	0.86
1:O:3:GLU:OE2	1:O:91:LYS:NZ	2.09	0.86
1:S:440:GLU:OE2	1:S:442:LYS:NZ	2.07	0.86

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:440:GLU:OE2	1:K:442:LYS:NZ	2.07	0.86
1:U:3:GLU:OE2	1:U:91:LYS:NZ	2.09	0.86
1:W:440:GLU:OE2	1:W:442:LYS:NZ	2.07	0.86
1:A:3:GLU:OE2	1:A:91:LYS:NZ	2.09	0.85
1:C:440:GLU:OE2	1:C:442:LYS:NZ	2.07	0.85
1:Q:3:GLU:OE2	1:Q:91:LYS:NZ	2.09	0.85
1:E:3:GLU:OE2	1:E:91:LYS:NZ	2.09	0.85
1:K:3:GLU:OE2	1:K:91:LYS:NZ	2.08	0.85
1:I:440:GLU:OE2	1:I:442:LYS:NZ	2.07	0.85
1:W:3:GLU:OE2	1:W:91:LYS:NZ	2.08	0.85
1:I:175:VAL:HG21	1:I:188:LEU:HD11	1.59	0.85
1:G:3:GLU:OE2	1:G:91:LYS:NZ	2.09	0.84
1:A:175:VAL:HG21	1:A:188:LEU:HD11	1.59	0.84
1:K:175:VAL:HG21	1:K:188:LEU:HD11	1.59	0.83
1:S:175:VAL:HG21	1:S:188:LEU:HD11	1.59	0.83
1:E:175:VAL:HG21	1:E:188:LEU:HD11	1.59	0.83
1:G:175:VAL:HG21	1:G:188:LEU:HD11	1.59	0.83
1:W:175:VAL:HG21	1:W:188:LEU:HD11	1.59	0.83
1:Q:175:VAL:HG21	1:Q:188:LEU:HD11	1.59	0.83
1:M:175:VAL:HG21	1:M:188:LEU:HD11	1.59	0.82
1:C:175:VAL:HG21	1:C:188:LEU:HD11	1.59	0.82
1:U:175:VAL:HG21	1:U:188:LEU:HD11	1.59	0.82
1:O:175:VAL:HG21	1:O:188:LEU:HD11	1.59	0.82
1:I:350:ALA:HB1	1:I:405:ALA:HB2	1.63	0.80
1:K:350:ALA:HB1	1:K:405:ALA:HB2	1.63	0.80
1:M:350:ALA:HB1	1:M:405:ALA:HB2	1.63	0.80
1:Q:350:ALA:HB1	1:Q:405:ALA:HB2	1.63	0.80
1:E:350:ALA:HB1	1:E:405:ALA:HB2	1.63	0.79
1:W:350:ALA:HB1	1:W:405:ALA:HB2	1.63	0.79
1:W:406:LEU:HD13	1:W:416:ILE:HG23	1.65	0.79
1:S:350:ALA:HB1	1:S:405:ALA:HB2	1.63	0.79
1:A:350:ALA:HB1	1:A:405:ALA:HB2	1.63	0.79
1:G:350:ALA:HB1	1:G:405:ALA:HB2	1.63	0.79
1:E:406:LEU:HD13	1:E:416:ILE:HG23	1.65	0.79
1:K:406:LEU:HD13	1:K:416:ILE:HG23	1.65	0.79
1:U:406:LEU:HD13	1:U:416:ILE:HG23	1.65	0.79
1:U:350:ALA:HB1	1:U:405:ALA:HB2	1.63	0.78
1:M:406:LEU:HD13	1:M:416:ILE:HG23	1.65	0.78
2:R:540:ALA:HB2	2:X:513:ARG:NH2	1.98	0.78
2:T:513:ARG:NH2	2:X:540:ALA:HB2	1.99	0.78
1:C:350:ALA:HB1	1:C:405:ALA:HB2	1.63	0.78

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:S:406:LEU:HD13	1:S:416:ILE:HG23	1.65	0.78
2:J:540:ALA:HB2	2:L:513:ARG:NH2	1.98	0.78
1:Q:406:LEU:HD13	1:Q:416:ILE:HG23	1.65	0.78
2:B:540:ALA:HB2	2:D:513:ARG:NH2	1.98	0.78
2:H:513:ARG:NH2	2:N:540:ALA:HB2	1.99	0.78
2:R:513:ARG:NH2	2:T:540:ALA:HB2	1.98	0.78
2:B:513:ARG:NH2	2:F:540:ALA:HB2	1.98	0.78
2:N:513:ARG:NH2	2:V:540:ALA:HB2	1.99	0.78
1:O:350:ALA:HB1	1:O:405:ALA:HB2	1.63	0.78
1:C:406:LEU:HD13	1:C:416:ILE:HG23	1.65	0.77
1:G:406:LEU:HD13	1:G:416:ILE:HG23	1.65	0.77
2:L:540:ALA:HB2	2:P:513:ARG:NH2	1.99	0.77
1:O:406:LEU:HD13	1:O:416:ILE:HG23	1.65	0.77
2:H:540:ALA:HB2	2:V:513:ARG:NH2	1.98	0.77
2:P:831:GLU:OE2	2:P:844:LYS:NZ	2.18	0.77
2:T:802:ASP:OD2	2:T:806:ARG:NH1	2.18	0.77
2:D:540:ALA:HB2	2:F:513:ARG:NH2	1.98	0.77
2:F:831:GLU:OE2	2:F:844:LYS:NZ	2.18	0.77
1:I:406:LEU:HD13	1:I:416:ILE:HG23	1.65	0.77
2:N:831:GLU:OE2	2:N:844:LYS:NZ	2.18	0.77
2:T:831:GLU:OE2	2:T:844:LYS:NZ	2.18	0.77
1:A:406:LEU:HD13	1:A:416:ILE:HG23	1.65	0.77
2:J:831:GLU:OE2	2:J:844:LYS:NZ	2.18	0.77
2:J:802:ASP:OD2	2:J:806:ARG:NH1	2.18	0.77
2:F:802:ASP:OD2	2:F:806:ARG:NH1	2.18	0.77
2:L:831:GLU:OE2	2:L:844:LYS:NZ	2.18	0.77
1:Q:216:LYS:NZ	1:Q:308:ARG:O	2.17	0.77
2:F:694:ARG:NH2	2:F:702:GLU:OE1	2.19	0.76
2:H:802:ASP:OD2	2:H:806:ARG:NH1	2.18	0.76
2:J:513:ARG:NH2	2:P:540:ALA:HB2	1.99	0.76
2:J:694:ARG:NH2	2:J:702:GLU:OE1	2.19	0.76
2:P:694:ARG:NH2	2:P:702:GLU:OE1	2.19	0.76
2:R:694:ARG:NH2	2:R:702:GLU:OE1	2.19	0.76
2:V:694:ARG:NH2	2:V:702:GLU:OE1	2.19	0.76
2:X:694:ARG:NH2	2:X:702:GLU:OE1	2.19	0.76
2:X:802:ASP:OD2	2:X:806:ARG:NH1	2.18	0.76
2:D:802:ASP:OD2	2:D:806:ARG:NH1	2.18	0.76
2:R:831:GLU:OE2	2:R:844:LYS:NZ	2.18	0.76
2:B:694:ARG:NH2	2:B:702:GLU:OE1	2.19	0.76
2:L:802:ASP:OD2	2:L:806:ARG:NH1	2.18	0.76
1:G:216:LYS:NZ	1:G:308:ARG:O	2.17	0.76

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:831:GLU:OE2	2:H:844:LYS:NZ	2.18	0.76
2:N:802:ASP:OD2	2:N:806:ARG:NH1	2.18	0.76
1:O:216:LYS:NZ	1:O:308:ARG:O	2.18	0.76
2:D:831:GLU:OE2	2:D:844:LYS:NZ	2.18	0.76
1:S:457:LEU:HD23	2:T:852:ARG:HA	1.68	0.76
2:V:802:ASP:OD2	2:V:806:ARG:NH1	2.18	0.76
2:V:831:GLU:OE2	2:V:844:LYS:NZ	2.18	0.76
2:P:802:ASP:OD2	2:P:806:ARG:NH1	2.18	0.76
2:B:802:ASP:OD2	2:B:806:ARG:NH1	2.18	0.75
2:H:694:ARG:NH2	2:H:702:GLU:OE1	2.19	0.75
2:T:694:ARG:NH2	2:T:702:GLU:OE1	2.19	0.75
1:E:457:LEU:HD23	2:F:852:ARG:HA	1.68	0.75
1:Q:457:LEU:HD23	2:R:852:ARG:HA	1.68	0.75
2:X:831:GLU:OE2	2:X:844:LYS:NZ	2.18	0.75
2:B:831:GLU:OE2	2:B:844:LYS:NZ	2.18	0.75
1:U:457:LEU:HD23	2:V:852:ARG:HA	1.68	0.75
2:L:694:ARG:NH2	2:L:702:GLU:OE1	2.19	0.75
2:N:694:ARG:NH2	2:N:702:GLU:OE1	2.19	0.75
1:W:216:LYS:NZ	1:W:308:ARG:O	2.17	0.75
2:D:694:ARG:NH2	2:D:702:GLU:OE1	2.19	0.75
2:R:802:ASP:OD2	2:R:806:ARG:NH1	2.18	0.75
1:A:216:LYS:NZ	1:A:308:ARG:O	2.17	0.74
1:W:457:LEU:HD23	2:X:852:ARG:HA	1.68	0.74
1:M:457:LEU:HD23	2:N:852:ARG:HA	1.68	0.74
1:O:457:LEU:HD23	2:P:852:ARG:HA	1.68	0.74
1:K:457:LEU:HD23	2:L:852:ARG:HA	1.68	0.74
2:N:801:ALA:O	2:N:804:VAL:N	2.21	0.74
1:I:457:LEU:HD23	2:J:852:ARG:HA	1.68	0.74
2:V:801:ALA:O	2:V:804:VAL:N	2.21	0.74
1:C:457:LEU:HD23	2:D:852:ARG:HA	1.68	0.73
1:G:457:LEU:HD23	2:H:852:ARG:HA	1.68	0.73
1:S:216:LYS:NZ	1:S:308:ARG:O	2.17	0.73
2:D:801:ALA:O	2:D:804:VAL:N	2.21	0.73
2:R:801:ALA:O	2:R:804:VAL:N	2.21	0.73
2:X:801:ALA:O	2:X:804:VAL:N	2.21	0.73
2:F:801:ALA:O	2:F:804:VAL:N	2.21	0.73
2:B:801:ALA:O	2:B:804:VAL:N	2.21	0.73
1:A:457:LEU:HD23	2:B:852:ARG:HA	1.68	0.73
1:E:216:LYS:NZ	1:E:308:ARG:O	2.17	0.73
2:H:801:ALA:O	2:H:804:VAL:N	2.21	0.72
2:L:801:ALA:O	2:L:804:VAL:N	2.21	0.72

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:J:801:ALA:O	2:J:804:VAL:N	2.21	0.72
2:P:801:ALA:O	2:P:804:VAL:N	2.21	0.72
1:K:216:LYS:NZ	1:K:308:ARG:O	2.17	0.72
2:T:801:ALA:O	2:T:804:VAL:N	2.21	0.72
1:I:216:LYS:NZ	1:I:308:ARG:O	2.18	0.71
1:S:297:THR:HG22	1:S:301:MET:HE1	1.73	0.71
1:A:454:GLU:OE2	2:B:856:ARG:NH1	2.24	0.71
1:M:297:THR:HG22	1:M:301:MET:HE1	1.73	0.71
1:C:246:ALA:HB1	1:C:298:VAL:HG13	1.73	0.70
1:C:297:THR:HG22	1:C:301:MET:HE1	1.73	0.70
2:H:638:GLU:OE1	2:H:692:LYS:NZ	2.24	0.70
1:I:454:GLU:OE2	2:J:856:ARG:NH1	2.24	0.70
1:M:216:LYS:NZ	1:M:308:ARG:O	2.17	0.70
1:A:297:THR:HG22	1:A:301:MET:HE1	1.73	0.70
1:O:297:THR:HG22	1:O:301:MET:HE1	1.73	0.70
1:S:346:ALA:HB1	1:S:401:GLU:HB2	1.74	0.70
1:U:216:LYS:NZ	1:U:308:ARG:O	2.17	0.70
1:E:246:ALA:HB1	1:E:298:VAL:HG13	1.73	0.70
1:O:246:ALA:HB1	1:O:298:VAL:HG13	1.73	0.70
1:W:246:ALA:HB1	1:W:298:VAL:HG13	1.73	0.70
1:W:454:GLU:OE2	2:X:856:ARG:NH1	2.24	0.70
1:E:454:GLU:OE2	2:F:856:ARG:NH1	2.24	0.70
1:K:297:THR:HG22	1:K:301:MET:HE1	1.73	0.70
1:G:297:THR:HG22	1:G:301:MET:HE1	1.73	0.70
1:K:246:ALA:HB1	1:K:298:VAL:HG13	1.73	0.70
1:M:246:ALA:HB1	1:M:298:VAL:HG13	1.73	0.70
1:I:297:THR:HG22	1:I:301:MET:HE1	1.73	0.70
2:J:638:GLU:OE1	2:J:692:LYS:NZ	2.24	0.70
1:Q:346:ALA:HB1	1:Q:401:GLU:HB2	1.74	0.70
1:U:246:ALA:HB1	1:U:298:VAL:HG13	1.73	0.70
1:C:216:LYS:NZ	1:C:308:ARG:O	2.17	0.70
1:A:246:ALA:HB1	1:A:298:VAL:HG13	1.73	0.69
2:F:638:GLU:OE1	2:F:692:LYS:NZ	2.24	0.69
2:P:638:GLU:OE1	2:P:692:LYS:NZ	2.24	0.69
1:Q:297:THR:HG22	1:Q:301:MET:HE1	1.73	0.69
1:O:454:GLU:OE2	2:P:856:ARG:NH1	2.24	0.69
1:E:297:THR:HG22	1:E:301:MET:HE1	1.73	0.69
1:M:346:ALA:HB1	1:M:401:GLU:HB2	1.74	0.69
1:W:297:THR:HG22	1:W:301:MET:HE1	1.73	0.69
1:A:346:ALA:HB1	1:A:401:GLU:HB2	1.74	0.69
2:R:638:GLU:OE1	2:R:692:LYS:NZ	2.24	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:V:638:GLU:OE1	2:V:692:LYS:NZ	2.24	0.69
1:K:346:ALA:HB1	1:K:401:GLU:HB2	1.74	0.69
1:U:297:THR:HG22	1:U:301:MET:HE1	1.73	0.69
1:U:454:GLU:OE2	2:V:856:ARG:NH1	2.24	0.69
2:X:638:GLU:OE1	2:X:692:LYS:NZ	2.24	0.69
2:B:638:GLU:OE1	2:B:692:LYS:NZ	2.24	0.69
1:C:346:ALA:HB1	1:C:401:GLU:HB2	1.74	0.69
1:U:346:ALA:HB1	1:U:401:GLU:HB2	1.74	0.69
1:I:246:ALA:HB1	1:I:298:VAL:HG13	1.73	0.69
1:Q:246:ALA:HB1	1:Q:298:VAL:HG13	1.73	0.69
1:Q:454:GLU:OE2	2:R:856:ARG:NH1	2.24	0.69
1:W:346:ALA:HB1	1:W:401:GLU:HB2	1.74	0.69
2:D:638:GLU:OE1	2:D:692:LYS:NZ	2.24	0.69
1:G:246:ALA:HB1	1:G:298:VAL:HG13	1.73	0.69
1:I:346:ALA:HB1	1:I:401:GLU:HB2	1.74	0.69
1:Q:470:ARG:NH2	2:R:874:GLU:OE1	2.26	0.68
1:K:454:GLU:OE2	2:L:856:ARG:NH1	2.24	0.68
1:U:421:ILE:O	1:U:424:ALA:N	2.27	0.68
1:E:346:ALA:HB1	1:E:401:GLU:HB2	1.74	0.68
1:A:240:VAL:HG13	1:A:243:LYS:HE2	1.76	0.68
1:E:421:ILE:O	1:E:424:ALA:N	2.27	0.68
1:G:346:ALA:HB1	1:G:401:GLU:HB2	1.74	0.68
1:O:346:ALA:HB1	1:O:401:GLU:HB2	1.74	0.68
1:W:470:ARG:NH2	2:X:874:GLU:OE1	2.27	0.68
1:E:470:ARG:NH2	2:F:874:GLU:OE1	2.26	0.68
1:S:421:ILE:O	1:S:424:ALA:N	2.27	0.68
1:G:421:ILE:O	1:G:424:ALA:N	2.27	0.68
1:I:240:VAL:HG13	1:I:243:LYS:HE2	1.76	0.68
1:Q:421:ILE:O	1:Q:424:ALA:N	2.27	0.68
1:A:231:VAL:HG23	1:A:240:VAL:CG1	2.23	0.68
2:N:638:GLU:OE1	2:N:692:LYS:NZ	2.24	0.68
1:U:470:ARG:NH2	2:V:874:GLU:OE1	2.26	0.68
1:C:470:ARG:NH2	2:D:874:GLU:OE1	2.26	0.68
1:M:421:ILE:O	1:M:424:ALA:N	2.27	0.68
1:O:470:ARG:NH2	2:P:874:GLU:OE1	2.26	0.68
1:S:246:ALA:HB1	1:S:298:VAL:HG13	1.73	0.68
1:E:53:ARG:NH1	1:E:57:GLU:OE2	2.28	0.67
1:Q:231:VAL:HG23	1:Q:240:VAL:CG1	2.23	0.67
1:S:454:GLU:OE2	2:T:856:ARG:NH1	2.24	0.67
1:G:53:ARG:NH1	1:G:57:GLU:OE2	2.28	0.67
1:G:454:GLU:OE2	2:H:856:ARG:NH1	2.24	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:I:421:ILE:O	1:I:424:ALA:N	2.27	0.67
1:M:470:ARG:NH2	2:N:874:GLU:OE1	2.26	0.67
1:I:53:ARG:NH1	1:I:57:GLU:OE2	2.28	0.67
1:K:421:ILE:O	1:K:424:ALA:N	2.27	0.67
2:L:638:GLU:OE1	2:L:692:LYS:NZ	2.24	0.67
2:L:794:ARG:NE	2:L:824:ALA:O	2.23	0.67
1:S:470:ARG:NH2	2:T:874:GLU:OE1	2.26	0.67
1:A:53:ARG:NH1	1:A:57:GLU:OE2	2.28	0.67
1:A:470:ARG:NH2	2:B:874:GLU:OE1	2.27	0.67
1:G:470:ARG:NH2	2:H:874:GLU:OE1	2.26	0.67
1:K:231:VAL:HG23	1:K:240:VAL:CG1	2.23	0.67
1:K:470:ARG:NH2	2:L:874:GLU:OE1	2.26	0.67
1:W:421:ILE:O	1:W:424:ALA:N	2.27	0.67
1:C:421:ILE:O	1:C:424:ALA:N	2.27	0.67
1:I:470:ARG:NH2	2:J:874:GLU:OE1	2.26	0.67
1:Q:240:VAL:HG13	1:Q:243:LYS:HE2	1.76	0.67
1:C:53:ARG:NH1	1:C:57:GLU:OE2	2.28	0.67
1:E:240:VAL:HG13	1:E:243:LYS:HE2	1.76	0.67
1:G:231:VAL:HG23	1:G:240:VAL:CG1	2.23	0.67
1:K:53:ARG:NH1	1:K:57:GLU:OE2	2.28	0.67
1:K:240:VAL:HG13	1:K:243:LYS:HE2	1.76	0.67
1:O:53:ARG:NH1	1:O:57:GLU:OE2	2.27	0.67
1:W:53:ARG:NH1	1:W:57:GLU:OE2	2.28	0.67
1:A:421:ILE:O	1:A:424:ALA:N	2.27	0.67
1:O:421:ILE:O	1:O:424:ALA:N	2.27	0.67
1:S:240:VAL:HG13	1:S:243:LYS:HE2	1.76	0.67
1:U:240:VAL:HG13	1:U:243:LYS:HE2	1.76	0.67
1:G:240:VAL:HG13	1:G:243:LYS:HE2	1.76	0.67
2:T:638:GLU:OE1	2:T:692:LYS:NZ	2.24	0.67
1:C:454:GLU:OE2	2:D:856:ARG:NH1	2.24	0.67
1:M:53:ARG:NH1	1:M:57:GLU:OE2	2.28	0.66
1:M:454:GLU:OE2	2:N:856:ARG:NH1	2.24	0.66
1:W:240:VAL:HG13	1:W:243:LYS:HE2	1.76	0.66
2:H:794:ARG:NE	2:H:824:ALA:O	2.23	0.66
2:N:794:ARG:NE	2:N:824:ALA:O	2.23	0.66
2:V:498:LEU:HD11	2:V:552:VAL:HG21	1.78	0.66
2:B:794:ARG:NE	2:B:824:ALA:O	2.23	0.66
1:Q:53:ARG:NH1	1:Q:57:GLU:OE2	2.28	0.66
1:S:53:ARG:NH1	1:S:57:GLU:OE2	2.28	0.66
2:D:794:ARG:NE	2:D:824:ALA:O	2.23	0.66
2:R:654:VAL:HG21	2:R:700:LEU:HB3	1.78	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:U:316:ILE:O	1:U:320:VAL:HG22	1.96	0.66
2:F:498:LEU:HD11	2:F:552:VAL:HG21	1.78	0.66
1:M:240:VAL:HG13	1:M:243:LYS:HE2	1.76	0.66
1:O:133:ARG:O	1:O:137:LEU:HG	1.96	0.66
1:U:53:ARG:NH1	1:U:57:GLU:OE2	2.28	0.66
1:C:133:ARG:O	1:C:137:LEU:HG	1.96	0.66
1:C:240:VAL:HG13	1:C:243:LYS:HE2	1.76	0.66
1:E:316:ILE:O	1:E:320:VAL:HG22	1.96	0.66
2:L:498:LEU:HD11	2:L:552:VAL:HG21	1.78	0.66
1:M:231:VAL:HG23	1:M:240:VAL:CG1	2.23	0.66
1:O:240:VAL:HG13	1:O:243:LYS:HE2	1.76	0.66
1:S:316:ILE:O	1:S:320:VAL:HG22	1.96	0.66
2:T:498:LEU:HD11	2:T:552:VAL:HG21	1.78	0.66
2:H:654:VAL:HG21	2:H:700:LEU:HB3	1.78	0.65
1:W:133:ARG:O	1:W:137:LEU:HG	1.96	0.65
2:J:654:VAL:HG21	2:J:700:LEU:HB3	1.78	0.65
2:J:498:LEU:HD11	2:J:552:VAL:HG21	1.78	0.65
1:K:316:ILE:O	1:K:320:VAL:HG22	1.96	0.65
1:S:133:ARG:O	1:S:137:LEU:HG	1.96	0.65
1:W:316:ILE:O	1:W:320:VAL:HG22	1.96	0.65
1:C:316:ILE:O	1:C:320:VAL:HG22	1.96	0.65
2:X:498:LEU:HD11	2:X:552:VAL:HG21	1.78	0.65
2:B:654:VAL:HG21	2:B:700:LEU:HB3	1.78	0.65
2:D:654:VAL:HG21	2:D:700:LEU:HB3	1.78	0.65
2:F:794:ARG:NE	2:F:824:ALA:O	2.23	0.65
2:R:794:ARG:NE	2:R:824:ALA:O	2.23	0.65
1:U:133:ARG:O	1:U:137:LEU:HG	1.96	0.65
1:G:253:VAL:HG13	1:G:266:ILE:CG2	2.27	0.65
1:K:133:ARG:O	1:K:137:LEU:HG	1.96	0.65
1:M:253:VAL:HG13	1:M:266:ILE:CG2	2.27	0.65
2:B:498:LEU:HD11	2:B:552:VAL:HG21	1.78	0.65
2:N:498:LEU:HD11	2:N:552:VAL:HG21	1.78	0.65
1:U:205:ALA:HB1	1:U:214:ARG:HG2	1.79	0.65
2:V:654:VAL:HG21	2:V:700:LEU:HB3	1.79	0.65
1:A:205:ALA:HB1	1:A:214:ARG:HG2	1.79	0.65
1:E:253:VAL:HG13	1:E:266:ILE:CG2	2.27	0.65
1:G:133:ARG:O	1:G:137:LEU:HG	1.96	0.65
2:H:498:LEU:HD11	2:H:552:VAL:HG21	1.78	0.65
2:N:654:VAL:HG21	2:N:700:LEU:HB3	1.78	0.65
1:O:253:VAL:HG13	1:O:266:ILE:CG2	2.27	0.65
1:W:231:VAL:HG23	1:W:240:VAL:CG1	2.23	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:253:VAL:HG13	1:C:266:ILE:CG2	2.27	0.65
1:I:316:ILE:O	1:I:320:VAL:HG22	1.96	0.65
1:M:205:ALA:HB1	1:M:214:ARG:HG2	1.79	0.65
2:P:498:LEU:HD11	2:P:552:VAL:HG21	1.78	0.65
1:Q:316:ILE:O	1:Q:320:VAL:HG22	1.96	0.65
1:U:253:VAL:HG13	1:U:266:ILE:CG2	2.27	0.65
1:W:253:VAL:HG13	1:W:266:ILE:CG2	2.27	0.65
1:A:253:VAL:HG13	1:A:266:ILE:CG2	2.27	0.64
1:A:316:ILE:O	1:A:320:VAL:HG22	1.96	0.64
1:C:231:VAL:HG23	1:C:240:VAL:CG1	2.23	0.64
1:I:253:VAL:HG13	1:I:266:ILE:CG2	2.27	0.64
2:L:759:GLU:OE2	2:L:803:LYS:NZ	2.23	0.64
1:S:231:VAL:HG23	1:S:240:VAL:CG1	2.23	0.64
1:E:205:ALA:HB1	1:E:214:ARG:HG2	1.79	0.64
1:K:253:VAL:HG13	1:K:266:ILE:CG2	2.27	0.64
1:Q:253:VAL:HG13	1:Q:266:ILE:CG2	2.27	0.64
1:M:133:ARG:O	1:M:137:LEU:HG	1.96	0.64
1:M:316:ILE:O	1:M:320:VAL:HG22	1.96	0.64
1:A:133:ARG:O	1:A:137:LEU:HG	1.96	0.64
2:F:654:VAL:HG21	2:F:700:LEU:HB3	1.78	0.64
1:I:133:ARG:O	1:I:137:LEU:HG	1.96	0.64
1:K:205:ALA:HB1	1:K:214:ARG:HG2	1.79	0.64
1:O:205:ALA:HB1	1:O:214:ARG:HG2	1.79	0.64
2:D:498:LEU:HD11	2:D:552:VAL:HG21	1.78	0.64
1:E:133:ARG:O	1:E:137:LEU:HG	1.96	0.64
1:Q:133:ARG:O	1:Q:137:LEU:HG	1.97	0.64
2:V:794:ARG:NE	2:V:824:ALA:O	2.23	0.64
1:O:253:VAL:HG13	1:O:266:ILE:HG23	1.80	0.64
1:S:253:VAL:HG13	1:S:266:ILE:CG2	2.27	0.64
2:T:654:VAL:HG21	2:T:700:LEU:HB3	1.78	0.64
2:T:794:ARG:NE	2:T:824:ALA:O	2.23	0.64
1:U:253:VAL:HG13	1:U:266:ILE:HG23	1.80	0.64
2:X:654:VAL:HG21	2:X:700:LEU:HB3	1.78	0.64
1:G:316:ILE:O	1:G:320:VAL:HG22	1.96	0.64
2:P:654:VAL:HG21	2:P:700:LEU:HB3	1.78	0.64
1:Q:205:ALA:HB1	1:Q:214:ARG:HG2	1.79	0.64
1:U:231:VAL:HG23	1:U:240:VAL:CG1	2.23	0.64
1:S:253:VAL:HG13	1:S:266:ILE:HG23	1.80	0.64
1:W:1:GLY:N	1:W:3:GLU:OE1	2.26	0.64
2:R:759:GLU:OE2	2:R:803:LYS:NZ	2.23	0.64
1:S:205:ALA:HB1	1:S:214:ARG:HG2	1.79	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:I:350:ALA:CB	1:I:405:ALA:HB2	2.29	0.63
2:R:498:LEU:HD11	2:R:552:VAL:HG21	1.78	0.63
1:W:205:ALA:HB1	1:W:214:ARG:HG2	1.79	0.63
1:E:253:VAL:HG13	1:E:266:ILE:HG23	1.80	0.63
2:F:691:ALA:HB2	2:F:703:VAL:HG21	1.81	0.63
2:L:654:VAL:HG21	2:L:700:LEU:HB3	1.78	0.63
1:S:350:ALA:CB	1:S:405:ALA:HB2	2.29	0.63
1:G:205:ALA:HB1	1:G:214:ARG:HG2	1.79	0.63
1:G:237:SER:OG	1:G:240:VAL:HG23	1.99	0.63
1:G:350:ALA:CB	1:G:405:ALA:HB2	2.29	0.63
2:J:691:ALA:HB2	2:J:703:VAL:HG21	1.81	0.63
2:J:794:ARG:NE	2:J:824:ALA:O	2.23	0.63
1:Q:253:VAL:HG13	1:Q:266:ILE:HG23	1.80	0.63
1:K:350:ALA:CB	1:K:405:ALA:HB2	2.29	0.63
2:L:509:THR:O	2:L:513:ARG:HG3	1.99	0.63
2:R:509:THR:O	2:R:513:ARG:HG3	1.99	0.63
2:R:691:ALA:HB2	2:R:703:VAL:HG21	1.81	0.63
1:U:350:ALA:CB	1:U:405:ALA:HB2	2.29	0.63
1:C:205:ALA:HB1	1:C:214:ARG:HG2	1.79	0.63
1:I:205:ALA:HB1	1:I:214:ARG:HG2	1.79	0.63
2:P:583:LEU:HB2	2:P:633:LEU:HD13	1.81	0.63
1:A:16:GLU:OE1	1:A:19:ARG:NE	2.32	0.63
1:C:350:ALA:CB	1:C:405:ALA:HB2	2.29	0.63
1:I:237:SER:OG	1:I:240:VAL:HG23	1.99	0.63
1:M:356:LEU:HD13	1:M:366:ILE:HG12	1.81	0.63
1:O:316:ILE:O	1:O:320:VAL:HG22	1.96	0.63
1:S:356:LEU:HD13	1:S:366:ILE:HG12	1.81	0.63
2:V:509:THR:O	2:V:513:ARG:HG3	1.99	0.63
1:W:9:ARG:NE	1:W:9:ARG:HA	2.14	0.63
1:A:237:SER:OG	1:A:240:VAL:HG23	1.99	0.63
1:C:270:ILE:HG22	1:C:274:ILE:HD12	1.81	0.63
1:C:356:LEU:HD13	1:C:366:ILE:HG12	1.81	0.63
2:D:509:THR:O	2:D:513:ARG:HG3	1.99	0.63
1:E:16:GLU:OE1	1:E:19:ARG:NE	2.32	0.63
1:G:253:VAL:HG13	1:G:266:ILE:HG23	1.80	0.63
1:K:16:GLU:OE1	1:K:19:ARG:NE	2.32	0.63
1:K:237:SER:OG	1:K:240:VAL:HG23	1.99	0.63
1:W:350:ALA:CB	1:W:405:ALA:HB2	2.29	0.63
1:I:356:LEU:HD13	1:I:366:ILE:HG12	1.81	0.63
1:K:9:ARG:HA	1:K:9:ARG:NE	2.14	0.63
1:M:9:ARG:HA	1:M:9:ARG:NE	2.14	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:M:16:GLU:OE1	1:M:19:ARG:NE	2.32	0.63
1:M:253:VAL:HG13	1:M:266:ILE:HG23	1.80	0.63
1:S:9:ARG:HA	1:S:9:ARG:NE	2.14	0.63
1:U:356:LEU:HD13	1:U:366:ILE:HG12	1.81	0.63
2:B:691:ALA:HB2	2:B:703:VAL:HG21	1.81	0.62
1:G:356:LEU:HD13	1:G:366:ILE:HG12	1.81	0.62
2:J:509:THR:O	2:J:513:ARG:HG3	1.99	0.62
1:Q:9:ARG:NE	1:Q:9:ARG:HA	2.14	0.62
1:Q:16:GLU:OE1	1:Q:19:ARG:NE	2.32	0.62
1:U:237:SER:OG	1:U:240:VAL:HG23	1.99	0.62
1:W:237:SER:OG	1:W:240:VAL:HG23	1.99	0.62
1:A:270:ILE:HG22	1:A:274:ILE:HD12	1.81	0.62
1:G:16:GLU:OE1	1:G:19:ARG:NE	2.32	0.62
1:O:356:LEU:HD13	1:O:366:ILE:HG12	1.81	0.62
2:X:583:LEU:HB2	2:X:633:LEU:HD13	1.81	0.62
1:A:9:ARG:NE	1:A:9:ARG:HA	2.14	0.62
2:D:691:ALA:HB2	2:D:703:VAL:HG21	1.81	0.62
1:E:237:SER:OG	1:E:240:VAL:HG23	1.99	0.62
2:F:583:LEU:HB2	2:F:633:LEU:HD13	1.81	0.62
2:P:691:ALA:HB2	2:P:703:VAL:HG21	1.81	0.62
2:V:691:ALA:HB2	2:V:703:VAL:HG21	1.81	0.62
1:W:356:LEU:HD13	1:W:366:ILE:HG12	1.81	0.62
2:B:509:THR:O	2:B:513:ARG:HG3	1.99	0.62
1:C:16:GLU:OE1	1:C:19:ARG:NE	2.32	0.62
1:C:237:SER:OG	1:C:240:VAL:HG23	1.99	0.62
1:E:9:ARG:HA	1:E:9:ARG:NE	2.14	0.62
1:E:270:ILE:HG22	1:E:274:ILE:HD12	1.81	0.62
1:I:16:GLU:OE1	1:I:19:ARG:NE	2.32	0.62
1:I:270:ILE:HG22	1:I:274:ILE:HD12	1.81	0.62
1:O:237:SER:OG	1:O:240:VAL:HG23	1.99	0.62
2:X:509:THR:O	2:X:513:ARG:HG3	1.99	0.62
2:B:583:LEU:HB2	2:B:633:LEU:HD13	1.81	0.62
1:G:270:ILE:HG22	1:G:274:ILE:HD12	1.81	0.62
2:H:583:LEU:HB2	2:H:633:LEU:HD13	1.81	0.62
1:M:270:ILE:HG22	1:M:274:ILE:HD12	1.81	0.62
1:O:270:ILE:HG22	1:O:274:ILE:HD12	1.81	0.62
1:S:270:ILE:HG22	1:S:274:ILE:HD12	1.81	0.62
1:W:16:GLU:OE1	1:W:19:ARG:NE	2.32	0.62
2:X:691:ALA:HB2	2:X:703:VAL:HG21	1.81	0.62
1:A:253:VAL:HG13	1:A:266:ILE:HG23	1.80	0.62
1:C:253:VAL:HG13	1:C:266:ILE:HG23	1.80	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:I:9:ARG:NE	1:I:9:ARG:HA	2.14	0.62
1:I:231:VAL:HG23	1:I:240:VAL:CG1	2.23	0.62
1:S:16:GLU:OE1	1:S:19:ARG:NE	2.32	0.62
1:G:9:ARG:NE	1:G:9:ARG:HA	2.14	0.62
1:M:237:SER:OG	1:M:240:VAL:HG23	1.99	0.62
1:O:9:ARG:NE	1:O:9:ARG:HA	2.14	0.62
2:P:794:ARG:NE	2:P:824:ALA:O	2.23	0.62
1:Q:350:ALA:CB	1:Q:405:ALA:HB2	2.29	0.62
2:T:691:ALA:HB2	2:T:703:VAL:HG21	1.81	0.62
1:E:231:VAL:HG23	1:E:240:VAL:CG1	2.23	0.62
1:E:356:LEU:HD13	1:E:366:ILE:HG12	1.81	0.62
1:K:253:VAL:HG13	1:K:266:ILE:HG23	1.80	0.62
2:P:509:THR:O	2:P:513:ARG:HG3	1.99	0.62
1:S:237:SER:OG	1:S:240:VAL:HG23	1.99	0.62
2:V:583:LEU:HB2	2:V:633:LEU:HD13	1.81	0.62
1:A:356:LEU:HD13	1:A:366:ILE:HG12	1.81	0.62
1:C:9:ARG:NE	1:C:9:ARG:HA	2.14	0.62
2:F:509:THR:O	2:F:513:ARG:HG3	1.99	0.62
1:U:9:ARG:HA	1:U:9:ARG:NE	2.14	0.62
1:M:350:ALA:CB	1:M:405:ALA:HB2	2.29	0.62
1:Q:356:LEU:HD13	1:Q:366:ILE:HG12	1.81	0.62
2:T:583:LEU:HB2	2:T:633:LEU:HD13	1.81	0.62
2:H:509:THR:O	2:H:513:ARG:HG3	1.99	0.61
1:I:253:VAL:HG13	1:I:266:ILE:HG23	1.80	0.61
1:O:16:GLU:OE1	1:O:19:ARG:NE	2.32	0.61
1:O:231:VAL:HG23	1:O:240:VAL:CG1	2.23	0.61
1:Q:237:SER:OG	1:Q:240:VAL:HG23	1.99	0.61
2:T:509:THR:O	2:T:513:ARG:HG3	1.99	0.61
1:U:16:GLU:OE1	1:U:19:ARG:NE	2.32	0.61
2:J:583:LEU:HB2	2:J:633:LEU:HD13	1.81	0.61
2:L:583:LEU:HB2	2:L:633:LEU:HD13	1.81	0.61
2:N:691:ALA:HB2	2:N:703:VAL:HG21	1.81	0.61
2:R:583:LEU:HB2	2:R:633:LEU:HD13	1.81	0.61
1:U:270:ILE:HG22	1:U:274:ILE:HD12	1.81	0.61
1:W:253:VAL:HG13	1:W:266:ILE:HG23	1.80	0.61
1:W:270:ILE:HG22	1:W:274:ILE:HD12	1.81	0.61
1:A:350:ALA:CB	1:A:405:ALA:HB2	2.29	0.61
1:E:1:GLY:N	1:E:3:GLU:OE1	2.26	0.61
1:E:350:ALA:CB	1:E:405:ALA:HB2	2.29	0.61
1:K:1:GLY:N	1:K:3:GLU:OE1	2.26	0.61
2:L:691:ALA:HB2	2:L:703:VAL:HG21	1.81	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:691:ALA:HB2	2:H:703:VAL:HG21	1.81	0.61
1:K:270:ILE:HG22	1:K:274:ILE:HD12	1.81	0.61
2:N:509:THR:O	2:N:513:ARG:HG3	1.99	0.61
1:C:231:VAL:HG21	1:C:244:LEU:CD1	2.31	0.61
1:G:231:VAL:HG21	1:G:244:LEU:CD1	2.31	0.61
1:K:231:VAL:HG21	1:K:244:LEU:CD1	2.31	0.61
1:K:267:ALA:HB1	1:K:322:ARG:HB3	1.83	0.61
2:N:583:LEU:HB2	2:N:633:LEU:HD13	1.81	0.61
1:E:231:VAL:HG21	1:E:244:LEU:CD1	2.31	0.61
1:O:229:GLU:OE2	1:O:233:ARG:NE	2.34	0.61
2:D:583:LEU:HB2	2:D:633:LEU:HD13	1.81	0.60
1:I:267:ALA:HB1	1:I:322:ARG:HB3	1.83	0.60
1:K:356:LEU:HD13	1:K:366:ILE:HG12	1.81	0.60
1:M:231:VAL:HG21	1:M:244:LEU:CD1	2.31	0.60
1:Q:267:ALA:HB1	1:Q:322:ARG:HB3	1.83	0.60
1:Q:270:ILE:HG22	1:Q:274:ILE:HD12	1.81	0.60
1:U:267:ALA:HB1	1:U:322:ARG:HB3	1.83	0.60
1:W:256:LEU:HD22	1:W:261:THR:HG21	1.83	0.60
1:O:350:ALA:CB	1:O:405:ALA:HB2	2.29	0.60
2:F:802:ASP:OD1	2:F:805:ARG:NH2	2.35	0.60
1:S:256:LEU:HD22	1:S:261:THR:HG21	1.84	0.60
1:U:229:GLU:OE2	1:U:233:ARG:NE	2.34	0.60
1:W:229:GLU:OE2	1:W:233:ARG:NE	2.34	0.60
1:W:267:ALA:HB1	1:W:322:ARG:HB3	1.83	0.60
1:A:267:ALA:HB1	1:A:322:ARG:HB3	1.83	0.60
2:L:802:ASP:OD1	2:L:805:ARG:NH2	2.35	0.60
2:X:802:ASP:OD1	2:X:805:ARG:NH2	2.35	0.60
1:A:256:LEU:HD22	1:A:261:THR:HG21	1.84	0.60
1:G:267:ALA:HB1	1:G:322:ARG:HB3	1.84	0.60
1:I:231:VAL:HG21	1:I:244:LEU:CD1	2.31	0.60
1:Q:231:VAL:HG21	1:Q:244:LEU:CD1	2.31	0.60
1:E:256:LEU:HD22	1:E:261:THR:HG21	1.84	0.60
2:H:802:ASP:OD1	2:H:805:ARG:NH2	2.35	0.60
2:J:802:ASP:OD1	2:J:805:ARG:NH2	2.35	0.60
1:K:229:GLU:OE2	1:K:233:ARG:NE	2.34	0.60
1:M:1:GLY:N	1:M:3:GLU:OE1	2.26	0.60
1:O:231:VAL:HG21	1:O:244:LEU:CD1	2.31	0.60
1:W:16:GLU:O	1:W:19:ARG:HG3	2.02	0.60
2:D:802:ASP:OD1	2:D:805:ARG:NH2	2.35	0.60
1:I:296:ALA:HB1	1:I:351:ALA:CB	2.32	0.60
1:M:16:GLU:O	1:M:19:ARG:HG3	2.02	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:W:406:LEU:CD1	1:W:416:ILE:HG23	2.32	0.60
1:A:296:ALA:HB1	1:A:351:ALA:CB	2.32	0.60
1:I:256:LEU:HD22	1:I:261:THR:HG21	1.84	0.60
1:M:267:ALA:HB1	1:M:322:ARG:HB3	1.83	0.60
2:N:802:ASP:OD1	2:N:805:ARG:NH2	2.35	0.60
1:O:16:GLU:O	1:O:19:ARG:HG3	2.02	0.60
1:S:231:VAL:HG21	1:S:244:LEU:CD1	2.31	0.60
1:U:16:GLU:O	1:U:19:ARG:HG3	2.02	0.60
1:A:231:VAL:HG21	1:A:244:LEU:CD1	2.31	0.60
1:I:229:GLU:OE2	1:I:233:ARG:NE	2.34	0.60
1:K:256:LEU:HD22	1:K:261:THR:HG21	1.84	0.60
1:K:296:ALA:HB1	1:K:351:ALA:CB	2.32	0.60
1:S:267:ALA:HB1	1:S:322:ARG:HB3	1.83	0.60
1:U:267:ALA:HB2	1:U:319:ILE:HA	1.84	0.60
1:G:256:LEU:HD22	1:G:261:THR:HG21	1.84	0.60
2:P:802:ASP:OD1	2:P:805:ARG:NH2	2.35	0.60
1:Q:16:GLU:O	1:Q:19:ARG:HG3	2.02	0.60
2:R:802:ASP:OD1	2:R:805:ARG:NH2	2.35	0.60
2:T:802:ASP:OD1	2:T:805:ARG:NH2	2.35	0.60
2:V:802:ASP:OD1	2:V:805:ARG:NH2	2.35	0.60
1:C:267:ALA:HB1	1:C:322:ARG:HB3	1.83	0.59
1:C:406:LEU:CD1	1:C:416:ILE:HG23	2.32	0.59
1:E:267:ALA:HB2	1:E:319:ILE:HA	1.84	0.59
1:U:296:ALA:HB1	1:U:351:ALA:CB	2.32	0.59
1:W:231:VAL:HG21	1:W:244:LEU:CD1	2.31	0.59
1:E:16:GLU:O	1:E:19:ARG:HG3	2.02	0.59
1:I:16:GLU:O	1:I:19:ARG:HG3	2.02	0.59
1:O:231:VAL:HG21	1:O:244:LEU:HD11	1.84	0.59
1:E:267:ALA:HB1	1:E:322:ARG:HB3	1.83	0.59
1:G:296:ALA:HB1	1:G:351:ALA:CB	2.32	0.59
1:K:406:LEU:CD1	1:K:416:ILE:HG23	2.32	0.59
1:O:256:LEU:HD22	1:O:261:THR:HG21	1.84	0.59
1:S:296:ALA:HB1	1:S:351:ALA:CB	2.32	0.59
1:U:231:VAL:HG21	1:U:244:LEU:CD1	2.31	0.59
1:I:231:VAL:HG21	1:I:244:LEU:HD11	1.84	0.59
1:O:267:ALA:HB2	1:O:319:ILE:HA	1.84	0.59
1:Q:256:LEU:HD22	1:Q:261:THR:HG21	1.84	0.59
1:Q:406:LEU:CD1	1:Q:416:ILE:HG23	2.32	0.59
1:S:231:VAL:HG21	1:S:244:LEU:HD11	1.85	0.59
1:S:406:LEU:CD1	1:S:416:ILE:HG23	2.32	0.59
1:W:231:VAL:HG21	1:W:244:LEU:HD11	1.84	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1:GLY:N	1:A:3:GLU:OE1	2.26	0.59
2:B:802:ASP:OD1	2:B:805:ARG:NH2	2.35	0.59
1:G:231:VAL:HG21	1:G:244:LEU:HD11	1.84	0.59
1:K:99:GLU:OE1	1:K:99:GLU:N	2.33	0.59
1:M:296:ALA:HB1	1:M:351:ALA:CB	2.32	0.59
1:Q:296:ALA:HB1	1:Q:351:ALA:CB	2.32	0.59
1:S:16:GLU:O	1:S:19:ARG:HG3	2.02	0.59
1:W:296:ALA:HB1	1:W:351:ALA:CB	2.32	0.59
1:C:99:GLU:OE1	1:C:99:GLU:N	2.33	0.59
1:E:296:ALA:HB1	1:E:351:ALA:CB	2.32	0.59
1:O:267:ALA:HB1	1:O:322:ARG:HB3	1.83	0.59
1:O:406:LEU:CD1	1:O:416:ILE:HG23	2.32	0.59
1:Q:229:GLU:OE2	1:Q:233:ARG:NE	2.34	0.59
1:U:231:VAL:HG21	1:U:244:LEU:HD11	1.84	0.59
1:W:267:ALA:HB2	1:W:319:ILE:HA	1.84	0.59
1:A:267:ALA:HB2	1:A:319:ILE:HA	1.84	0.59
1:C:296:ALA:HB1	1:C:351:ALA:CB	2.32	0.59
1:E:231:VAL:HG21	1:E:244:LEU:HD11	1.84	0.59
2:H:794:ARG:O	2:H:824:ALA:HB1	2.03	0.59
2:L:794:ARG:O	2:L:824:ALA:HB1	2.03	0.59
2:T:794:ARG:O	2:T:824:ALA:HB1	2.03	0.59
1:U:256:LEU:HD22	1:U:261:THR:HG21	1.84	0.59
1:A:474:ARG:HA	2:B:871:ILE:O	2.03	0.59
1:C:16:GLU:O	1:C:19:ARG:HG3	2.02	0.59
1:K:16:GLU:O	1:K:19:ARG:HG3	2.02	0.59
1:M:229:GLU:OE2	1:M:233:ARG:NE	2.34	0.59
1:M:231:VAL:HG21	1:M:244:LEU:HD11	1.84	0.59
1:Q:231:VAL:HG21	1:Q:244:LEU:HD11	1.84	0.59
1:S:474:ARG:HA	2:T:871:ILE:O	2.03	0.59
1:A:99:GLU:OE1	1:A:99:GLU:N	2.33	0.59
1:G:406:LEU:CD1	1:G:416:ILE:HG23	2.32	0.59
1:K:231:VAL:HG21	1:K:244:LEU:HD11	1.84	0.59
1:M:256:LEU:HD22	1:M:261:THR:HG21	1.84	0.59
2:X:794:ARG:O	2:X:824:ALA:HB1	2.03	0.59
1:K:267:ALA:HB2	1:K:319:ILE:HA	1.84	0.59
2:F:794:ARG:O	2:F:824:ALA:HB1	2.03	0.58
1:O:296:ALA:HB1	1:O:351:ALA:CB	2.32	0.58
1:O:474:ARG:HA	2:P:871:ILE:O	2.03	0.58
2:R:794:ARG:O	2:R:824:ALA:HB1	2.03	0.58
2:V:794:ARG:O	2:V:824:ALA:HB1	2.03	0.58
1:E:474:ARG:HA	2:F:871:ILE:O	2.03	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:M:406:LEU:CD1	1:M:416:ILE:HG23	2.32	0.58
1:A:231:VAL:HG21	1:A:244:LEU:HD11	1.84	0.58
1:C:474:ARG:HA	2:D:871:ILE:O	2.03	0.58
1:Q:267:ALA:HB2	1:Q:319:ILE:HA	1.84	0.58
1:S:267:ALA:HB2	1:S:319:ILE:HA	1.84	0.58
2:V:759:GLU:OE2	2:V:803:LYS:NZ	2.23	0.58
1:W:323:VAL:O	1:W:327:VAL:HG23	2.04	0.58
1:W:474:ARG:HA	2:X:871:ILE:O	2.03	0.58
1:A:16:GLU:O	1:A:19:ARG:HG3	2.02	0.58
1:I:267:ALA:HB2	1:I:319:ILE:HA	1.84	0.58
1:I:474:ARG:HA	2:J:871:ILE:O	2.03	0.58
1:C:256:LEU:HD22	1:C:261:THR:HG21	1.84	0.58
1:C:267:ALA:HB2	1:C:319:ILE:HA	1.84	0.58
2:J:590:GLU:HB3	2:J:640:ILE:HG21	1.86	0.58
1:K:296:ALA:HB1	1:K:351:ALA:HB3	1.86	0.58
2:L:625:LYS:HG2	2:L:669:ALA:HB1	1.86	0.58
2:N:590:GLU:HB3	2:N:640:ILE:HG21	1.86	0.58
2:N:625:LYS:HG2	2:N:669:ALA:HB1	1.86	0.58
1:O:323:VAL:O	1:O:327:VAL:HG23	2.04	0.58
2:P:625:LYS:HG2	2:P:669:ALA:HB1	1.86	0.58
1:S:323:VAL:O	1:S:327:VAL:HG23	2.04	0.58
1:C:229:GLU:OE2	1:C:233:ARG:NE	2.34	0.58
1:G:16:GLU:O	1:G:19:ARG:HG3	2.02	0.58
1:G:323:VAL:O	1:G:327:VAL:HG23	2.04	0.58
1:Q:474:ARG:HA	2:R:871:ILE:O	2.03	0.58
2:X:794:ARG:NE	2:X:824:ALA:O	2.23	0.58
2:B:625:LYS:HG2	2:B:669:ALA:HB1	1.86	0.58
1:C:323:VAL:O	1:C:327:VAL:HG23	2.04	0.58
2:D:794:ARG:O	2:D:824:ALA:HB1	2.03	0.58
1:E:240:VAL:HG13	1:E:243:LYS:CE	2.34	0.58
2:N:794:ARG:O	2:N:824:ALA:HB1	2.03	0.58
2:P:794:ARG:O	2:P:824:ALA:HB1	2.03	0.58
2:R:625:LYS:HG2	2:R:669:ALA:HB1	1.86	0.58
1:U:323:VAL:O	1:U:327:VAL:HG23	2.04	0.58
1:U:474:ARG:HA	2:V:871:ILE:O	2.03	0.58
1:A:240:VAL:HG13	1:A:243:LYS:CE	2.34	0.58
1:C:231:VAL:HG21	1:C:244:LEU:HD11	1.84	0.58
1:G:296:ALA:HB1	1:G:351:ALA:HB3	1.86	0.58
1:I:288:TYR:HA	1:I:291:ILE:HD12	1.86	0.58
1:K:240:VAL:HG13	1:K:243:LYS:CE	2.34	0.58
1:K:288:TYR:HA	1:K:291:ILE:HD12	1.86	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:M:267:ALA:HB2	1:M:319:ILE:HA	1.84	0.58
1:M:474:ARG:HA	2:N:871:ILE:O	2.03	0.58
2:T:625:LYS:HG2	2:T:669:ALA:HB1	1.86	0.58
1:U:288:TYR:HA	1:U:291:ILE:HD12	1.86	0.58
1:A:323:VAL:O	1:A:327:VAL:HG23	2.04	0.58
1:I:240:VAL:HG13	1:I:243:LYS:CE	2.34	0.58
2:L:536:VAL:HG13	2:P:513:ARG:HG2	1.86	0.58
1:O:44:ASP:OD2	1:O:47:THR:N	2.36	0.58
2:T:590:GLU:HB3	2:T:640:ILE:HG21	1.86	0.58
2:V:590:GLU:HB3	2:V:640:ILE:HG21	1.86	0.58
2:D:590:GLU:HB3	2:D:640:ILE:HG21	1.86	0.58
1:E:44:ASP:OD2	1:E:47:THR:N	2.36	0.58
2:F:590:GLU:HB3	2:F:640:ILE:HG21	1.86	0.58
2:L:722:GLN:O	2:L:728:ALA:HB2	2.04	0.58
1:M:296:ALA:HB1	1:M:351:ALA:HB3	1.86	0.58
2:R:590:GLU:HB3	2:R:640:ILE:HG21	1.86	0.58
2:V:625:LYS:HG2	2:V:669:ALA:HB1	1.86	0.58
1:C:35:LEU:HD22	1:C:55:VAL:HG11	1.86	0.57
1:C:288:TYR:HA	1:C:291:ILE:HD12	1.86	0.57
2:D:536:VAL:HG13	2:F:513:ARG:HG2	1.86	0.57
2:F:625:LYS:HG2	2:F:669:ALA:HB1	1.86	0.57
1:G:474:ARG:HA	2:H:871:ILE:O	2.03	0.57
2:H:722:GLN:O	2:H:728:ALA:HB2	2.04	0.57
1:I:323:VAL:O	1:I:327:VAL:HG23	2.04	0.57
1:I:406:LEU:CD1	1:I:416:ILE:HG23	2.32	0.57
2:J:794:ARG:O	2:J:824:ALA:HB1	2.03	0.57
1:M:323:VAL:O	1:M:327:VAL:HG23	2.04	0.57
1:O:35:LEU:HD22	1:O:55:VAL:HG11	1.86	0.57
1:Q:296:ALA:HB1	1:Q:351:ALA:HB3	1.86	0.57
2:T:722:GLN:O	2:T:728:ALA:HB2	2.04	0.57
1:U:406:LEU:CD1	1:U:416:ILE:HG23	2.32	0.57
2:X:625:LYS:HG2	2:X:669:ALA:HB1	1.86	0.57
1:A:296:ALA:HB1	1:A:351:ALA:HB3	1.86	0.57
1:I:44:ASP:OD2	1:I:47:THR:N	2.36	0.57
1:U:240:VAL:HG13	1:U:243:LYS:CE	2.34	0.57
2:B:590:GLU:HB3	2:B:640:ILE:HG21	1.86	0.57
2:B:722:GLN:O	2:B:728:ALA:HB2	2.04	0.57
2:B:794:ARG:O	2:B:824:ALA:HB1	2.03	0.57
1:E:35:LEU:HD22	1:E:55:VAL:HG11	1.86	0.57
1:E:296:ALA:HB1	1:E:351:ALA:HB3	1.86	0.57
1:G:267:ALA:HB2	1:G:319:ILE:HA	1.84	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:J:625:LYS:HG2	2:J:669:ALA:HB1	1.86	0.57
1:Q:297:THR:O	1:Q:300:ASP:HB3	2.05	0.57
1:C:296:ALA:HB1	1:C:351:ALA:HB3	1.86	0.57
1:E:297:THR:O	1:E:300:ASP:HB3	2.05	0.57
1:K:35:LEU:HD22	1:K:55:VAL:HG11	1.87	0.57
1:O:314:ASP:OD1	1:O:315:GLU:N	2.38	0.57
1:U:297:THR:O	1:U:300:ASP:HB3	2.05	0.57
1:A:35:LEU:HD22	1:A:55:VAL:HG11	1.86	0.57
1:I:296:ALA:HB1	1:I:351:ALA:HB3	1.86	0.57
2:N:722:GLN:O	2:N:728:ALA:HB2	2.04	0.57
1:O:240:VAL:HG13	1:O:243:LYS:CE	2.34	0.57
1:U:35:LEU:HD22	1:U:55:VAL:HG11	1.86	0.57
2:X:590:GLU:HB3	2:X:640:ILE:HG21	1.86	0.57
1:A:297:THR:O	1:A:300:ASP:HB3	2.05	0.57
1:K:297:THR:O	1:K:300:ASP:HB3	2.05	0.57
1:M:288:TYR:HA	1:M:291:ILE:HD12	1.86	0.57
2:P:722:GLN:O	2:P:728:ALA:HB2	2.04	0.57
1:S:240:VAL:HG13	1:S:243:LYS:CE	2.34	0.57
1:S:288:TYR:HA	1:S:291:ILE:HD12	1.86	0.57
1:S:297:THR:O	1:S:300:ASP:HB3	2.05	0.57
1:C:240:VAL:HG13	1:C:243:LYS:CE	2.34	0.57
1:C:297:THR:O	1:C:300:ASP:HB3	2.05	0.57
1:E:406:LEU:CD1	1:E:416:ILE:HG23	2.32	0.57
1:M:35:LEU:HD22	1:M:55:VAL:HG11	1.86	0.57
1:M:44:ASP:OD2	1:M:47:THR:N	2.36	0.57
2:P:590:GLU:HB3	2:P:640:ILE:HG21	1.86	0.57
2:R:722:GLN:O	2:R:728:ALA:HB2	2.04	0.57
1:C:161:ALA:O	1:C:165:VAL:HG23	2.05	0.57
2:D:722:GLN:O	2:D:728:ALA:HB2	2.04	0.57
1:E:314:ASP:OD1	1:E:315:GLU:N	2.38	0.57
1:G:104:LEU:HD13	1:G:165:VAL:CG1	2.35	0.57
1:G:314:ASP:OD1	1:G:315:GLU:N	2.38	0.57
1:K:474:ARG:HA	2:L:871:ILE:O	2.03	0.57
1:Q:35:LEU:HD22	1:Q:55:VAL:HG11	1.86	0.57
1:S:99:GLU:OE1	1:S:99:GLU:N	2.33	0.57
1:U:104:LEU:HD13	1:U:165:VAL:CG1	2.35	0.57
1:W:11:GLN:O	1:W:15:ILE:HG12	2.05	0.57
1:W:296:ALA:HB1	1:W:351:ALA:HB3	1.86	0.57
1:W:297:THR:O	1:W:300:ASP:HB3	2.05	0.57
1:W:314:ASP:OD1	1:W:315:GLU:N	2.38	0.57
1:A:314:ASP:OD1	1:A:315:GLU:N	2.38	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:704:TYR:CE2	2:B:745:LEU:HD11	2.40	0.57
1:G:240:VAL:HG13	1:G:243:LYS:CE	2.34	0.57
2:H:536:VAL:HG13	2:V:513:ARG:HG2	1.86	0.57
1:I:35:LEU:HD22	1:I:55:VAL:HG11	1.86	0.57
1:I:161:ALA:O	1:I:165:VAL:HG23	2.05	0.57
1:K:323:VAL:O	1:K:327:VAL:HG23	2.04	0.57
1:M:297:THR:O	1:M:300:ASP:HB3	2.05	0.57
2:N:704:TYR:CE2	2:N:745:LEU:HD11	2.40	0.57
1:O:288:TYR:HA	1:O:291:ILE:HD12	1.86	0.57
1:Q:1:GLY:N	1:Q:3:GLU:OE1	2.26	0.57
1:Q:11:GLN:O	1:Q:15:ILE:HG12	2.05	0.57
2:T:513:ARG:HG2	2:X:536:VAL:HG13	1.86	0.57
1:W:240:VAL:HG13	1:W:243:LYS:CE	2.34	0.57
2:X:704:TYR:CE2	2:X:745:LEU:HD11	2.40	0.57
2:X:722:GLN:O	2:X:728:ALA:HB2	2.04	0.57
1:A:288:TYR:HA	1:A:291:ILE:HD12	1.86	0.57
2:F:722:GLN:O	2:F:728:ALA:HB2	2.04	0.57
1:I:128:GLN:O	1:I:132:LEU:HG	2.05	0.57
2:J:513:ARG:HG2	2:P:536:VAL:HG13	1.86	0.57
2:J:704:TYR:CE2	2:J:745:LEU:HD11	2.40	0.57
1:M:240:VAL:HG13	1:M:243:LYS:CE	2.34	0.57
1:Q:323:VAL:O	1:Q:327:VAL:HG23	2.04	0.57
2:R:704:TYR:CE2	2:R:745:LEU:HD11	2.40	0.57
1:S:104:LEU:HD13	1:S:165:VAL:CG1	2.35	0.57
1:U:161:ALA:O	1:U:165:VAL:HG23	2.05	0.57
1:A:11:GLN:O	1:A:15:ILE:HG12	2.05	0.56
2:B:513:ARG:HG2	2:F:536:VAL:HG13	1.86	0.56
2:D:625:LYS:HG2	2:D:669:ALA:HB1	1.86	0.56
1:E:323:VAL:O	1:E:327:VAL:HG23	2.04	0.56
1:G:229:GLU:OE2	1:G:233:ARG:NE	2.34	0.56
1:G:297:THR:O	1:G:300:ASP:HB3	2.05	0.56
2:N:513:ARG:HG2	2:V:536:VAL:HG13	1.86	0.56
1:S:35:LEU:HD22	1:S:55:VAL:HG11	1.86	0.56
1:W:161:ALA:O	1:W:165:VAL:HG23	2.05	0.56
2:B:759:GLU:OE2	2:B:803:LYS:NZ	2.23	0.56
1:C:128:GLN:O	1:C:132:LEU:HG	2.05	0.56
1:E:104:LEU:HD13	1:E:165:VAL:CG1	2.35	0.56
1:G:288:TYR:HA	1:G:291:ILE:HD12	1.86	0.56
2:H:625:LYS:HG2	2:H:669:ALA:HB1	1.86	0.56
1:M:104:LEU:HD13	1:M:165:VAL:CG1	2.35	0.56
1:O:1:GLY:N	1:O:3:GLU:OE1	2.26	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:Q:256:LEU:HD13	1:Q:266:ILE:HA	1.88	0.56
1:Q:314:ASP:OD1	1:Q:315:GLU:N	2.38	0.56
1:A:128:GLN:O	1:A:132:LEU:HG	2.05	0.56
1:C:104:LEU:HD13	1:C:165:VAL:CG1	2.35	0.56
1:G:256:LEU:HD13	1:G:266:ILE:HA	1.87	0.56
2:H:513:ARG:HG2	2:N:536:VAL:HG13	1.86	0.56
2:H:590:GLU:HB3	2:H:640:ILE:HG21	1.86	0.56
1:I:11:GLN:O	1:I:15:ILE:HG12	2.05	0.56
1:I:256:LEU:HD13	1:I:266:ILE:HA	1.87	0.56
1:I:297:THR:O	1:I:300:ASP:HB3	2.05	0.56
1:I:314:ASP:OD1	1:I:315:GLU:N	2.38	0.56
2:J:722:GLN:O	2:J:728:ALA:HB2	2.04	0.56
1:K:11:GLN:O	1:K:15:ILE:HG12	2.05	0.56
1:K:161:ALA:O	1:K:165:VAL:HG23	2.05	0.56
1:M:128:GLN:O	1:M:132:LEU:HG	2.05	0.56
1:O:104:LEU:HD13	1:O:165:VAL:CG1	2.35	0.56
1:O:296:ALA:HB1	1:O:351:ALA:HB3	1.86	0.56
1:Q:161:ALA:O	1:Q:165:VAL:HG23	2.05	0.56
1:Q:240:VAL:HG13	1:Q:243:LYS:CE	2.34	0.56
1:S:11:GLN:O	1:S:15:ILE:HG12	2.05	0.56
1:S:229:GLU:OE2	1:S:233:ARG:NE	2.34	0.56
2:T:704:TYR:CE2	2:T:745:LEU:HD11	2.40	0.56
1:W:256:LEU:HD13	1:W:266:ILE:HA	1.87	0.56
2:X:759:GLU:OE2	2:X:803:LYS:NZ	2.23	0.56
1:A:406:LEU:CD1	1:A:416:ILE:HG23	2.32	0.56
1:C:314:ASP:OD1	1:C:315:GLU:N	2.38	0.56
1:G:128:GLN:O	1:G:132:LEU:HG	2.05	0.56
2:L:704:TYR:CE2	2:L:745:LEU:HD11	2.40	0.56
1:O:128:GLN:O	1:O:132:LEU:HG	2.05	0.56
1:O:161:ALA:O	1:O:165:VAL:HG23	2.05	0.56
1:Q:104:LEU:HD13	1:Q:165:VAL:CG1	2.35	0.56
1:S:296:ALA:HB1	1:S:351:ALA:HB3	1.86	0.56
2:V:722:GLN:O	2:V:728:ALA:HB2	2.04	0.56
1:W:35:LEU:HD22	1:W:55:VAL:HG11	1.86	0.56
1:W:128:GLN:O	1:W:132:LEU:HG	2.06	0.56
1:W:288:TYR:HA	1:W:291:ILE:HD12	1.86	0.56
1:C:256:LEU:HD13	1:C:266:ILE:HA	1.88	0.56
1:G:44:ASP:OD2	1:G:47:THR:N	2.36	0.56
1:M:11:GLN:O	1:M:15:ILE:HG12	2.05	0.56
1:M:314:ASP:OD1	1:M:315:GLU:N	2.38	0.56
2:P:704:TYR:CE2	2:P:745:LEU:HD11	2.40	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:R:513:ARG:HG2	2:T:536:VAL:HG13	1.86	0.56
2:R:536:VAL:HG13	2:X:513:ARG:HG2	1.86	0.56
1:U:44:ASP:OD2	1:U:47:THR:N	2.36	0.56
1:A:104:LEU:HD13	1:A:165:VAL:CG1	2.35	0.56
1:A:161:ALA:O	1:A:165:VAL:HG23	2.05	0.56
2:B:536:VAL:HG13	2:D:513:ARG:HG2	1.86	0.56
1:E:288:TYR:HA	1:E:291:ILE:HD12	1.86	0.56
1:K:44:ASP:OD2	1:K:47:THR:N	2.36	0.56
1:S:161:ALA:O	1:S:165:VAL:HG23	2.05	0.56
1:U:256:LEU:HD13	1:U:266:ILE:HA	1.88	0.56
1:U:296:ALA:HB1	1:U:351:ALA:HB3	1.86	0.56
1:W:99:GLU:OE1	1:W:99:GLU:N	2.33	0.56
1:W:104:LEU:HD13	1:W:165:VAL:CG1	2.35	0.56
1:C:2:LYS:O	1:C:6:ILE:HG12	2.06	0.56
1:E:11:GLN:O	1:E:15:ILE:HG12	2.05	0.56
1:G:161:ALA:O	1:G:165:VAL:HG23	2.05	0.56
1:G:253:VAL:O	1:G:256:LEU:N	2.39	0.56
1:K:2:LYS:O	1:K:6:ILE:HG12	2.06	0.56
1:O:2:LYS:O	1:O:6:ILE:HG12	2.06	0.56
1:C:253:VAL:O	1:C:256:LEU:N	2.39	0.56
1:E:253:VAL:O	1:E:256:LEU:N	2.39	0.56
1:K:314:ASP:OD1	1:K:315:GLU:N	2.38	0.56
1:Q:253:VAL:O	1:Q:256:LEU:N	2.39	0.56
1:S:256:LEU:HD13	1:S:266:ILE:HA	1.88	0.56
1:U:11:GLN:O	1:U:15:ILE:HG12	2.05	0.56
1:U:99:GLU:OE1	1:U:99:GLU:N	2.33	0.56
2:H:704:TYR:CE2	2:H:745:LEU:HD11	2.40	0.56
1:K:104:LEU:HD13	1:K:165:VAL:CG1	2.35	0.56
1:K:256:LEU:HD13	1:K:266:ILE:HA	1.88	0.56
1:M:256:LEU:HD13	1:M:266:ILE:HA	1.88	0.56
1:O:297:THR:O	1:O:300:ASP:HB3	2.05	0.56
1:U:314:ASP:OD1	1:U:315:GLU:N	2.38	0.56
2:F:704:TYR:CE2	2:F:745:LEU:HD11	2.40	0.56
2:L:590:GLU:HB3	2:L:640:ILE:HG21	1.86	0.56
1:O:253:VAL:O	1:O:256:LEU:N	2.39	0.56
1:O:433:GLU:O	1:O:443:VAL:HA	2.06	0.56
1:Q:44:ASP:OD2	1:Q:47:THR:N	2.36	0.56
1:Q:128:GLN:O	1:Q:132:LEU:HG	2.05	0.56
1:Q:288:TYR:HA	1:Q:291:ILE:HD12	1.86	0.56
1:S:314:ASP:OD1	1:S:315:GLU:N	2.38	0.56
1:U:128:GLN:O	1:U:132:LEU:HG	2.05	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:253:VAL:O	1:A:256:LEU:N	2.39	0.55
1:A:433:GLU:O	1:A:443:VAL:HA	2.07	0.55
1:C:11:GLN:O	1:C:15:ILE:HG12	2.05	0.55
2:D:704:TYR:CE2	2:D:745:LEU:HD11	2.40	0.55
2:H:708:LEU:HD13	2:H:742:LEU:CD2	2.36	0.55
1:K:128:GLN:O	1:K:132:LEU:HG	2.05	0.55
1:S:1:GLY:N	1:S:3:GLU:OE1	2.26	0.55
2:V:704:TYR:CE2	2:V:745:LEU:HD11	2.40	0.55
1:W:253:VAL:O	1:W:256:LEU:N	2.39	0.55
1:A:246:ALA:HB2	1:A:298:VAL:HG22	1.89	0.55
2:F:673:ALA:HB1	2:F:717:ALA:HB1	1.89	0.55
1:G:35:LEU:HD22	1:G:55:VAL:HG11	1.86	0.55
2:J:536:VAL:HG13	2:L:513:ARG:HG2	1.86	0.55
2:J:708:LEU:HD13	2:J:742:LEU:CD2	2.36	0.55
1:M:161:ALA:O	1:M:165:VAL:HG23	2.05	0.55
1:S:2:LYS:O	1:S:6:ILE:HG12	2.06	0.55
1:S:128:GLN:O	1:S:132:LEU:HG	2.06	0.55
1:S:253:VAL:O	1:S:256:LEU:N	2.39	0.55
2:T:673:ALA:HB1	2:T:717:ALA:HB1	1.88	0.55
1:U:2:LYS:O	1:U:6:ILE:HG12	2.06	0.55
1:U:253:VAL:O	1:U:256:LEU:N	2.39	0.55
2:X:761:VAL:HG11	2:X:774:ALA:HB2	1.89	0.55
2:D:673:ALA:HB1	2:D:717:ALA:HB1	1.88	0.55
2:D:684:LEU:HD21	2:D:707:ALA:HA	1.89	0.55
1:E:161:ALA:O	1:E:165:VAL:HG23	2.05	0.55
1:E:256:LEU:HD13	1:E:266:ILE:HA	1.88	0.55
2:J:513:ARG:NH2	2:P:540:ALA:CB	2.69	0.55
1:K:253:VAL:O	1:K:256:LEU:N	2.39	0.55
2:X:708:LEU:HD13	2:X:742:LEU:CD2	2.36	0.55
1:G:246:ALA:HB2	1:G:298:VAL:HG22	1.88	0.55
1:I:104:LEU:HD13	1:I:165:VAL:CG1	2.35	0.55
2:J:673:ALA:HB1	2:J:717:ALA:HB1	1.89	0.55
1:K:433:GLU:O	1:K:443:VAL:HA	2.07	0.55
2:L:616:ALA:HB2	2:L:663:TYR:CE1	2.42	0.55
2:L:708:LEU:HD13	2:L:742:LEU:CD2	2.36	0.55
1:M:99:GLU:OE1	1:M:99:GLU:N	2.33	0.55
1:M:433:GLU:O	1:M:443:VAL:HA	2.07	0.55
2:V:616:ALA:HB2	2:V:663:TYR:CE1	2.42	0.55
2:B:708:LEU:HD13	2:B:742:LEU:CD2	2.37	0.55
1:E:433:GLU:O	1:E:443:VAL:HA	2.06	0.55
1:G:11:GLN:O	1:G:15:ILE:HG12	2.05	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:673:ALA:HB1	2:H:717:ALA:HB1	1.89	0.55
2:P:708:LEU:HD13	2:P:742:LEU:CD2	2.37	0.55
2:P:759:GLU:OE2	2:P:803:LYS:NZ	2.23	0.55
2:R:708:LEU:HD13	2:R:742:LEU:CD2	2.36	0.55
2:R:761:VAL:HG11	2:R:774:ALA:HB2	1.89	0.55
2:T:616:ALA:HB2	2:T:663:TYR:CE1	2.42	0.55
2:V:684:LEU:HD21	2:V:707:ALA:HA	1.89	0.55
1:A:472:ARG:HA	2:B:873:VAL:O	2.07	0.55
2:D:616:ALA:HB2	2:D:663:TYR:CE1	2.42	0.55
2:J:616:ALA:HB2	2:J:663:TYR:CE1	2.42	0.55
2:L:761:VAL:HG11	2:L:774:ALA:HB2	1.88	0.55
1:O:11:GLN:O	1:O:15:ILE:HG12	2.05	0.55
1:O:256:LEU:HD13	1:O:266:ILE:HA	1.88	0.55
2:R:673:ALA:HB1	2:R:717:ALA:HB1	1.89	0.55
2:T:761:VAL:HG11	2:T:774:ALA:HB2	1.89	0.55
1:U:433:GLU:O	1:U:443:VAL:HA	2.06	0.55
2:V:761:VAL:HG11	2:V:774:ALA:HB2	1.89	0.55
2:B:761:VAL:HG11	2:B:774:ALA:HB2	1.89	0.55
1:C:472:ARG:HA	2:D:873:VAL:O	2.07	0.55
1:E:472:ARG:HA	2:F:873:VAL:O	2.07	0.55
2:F:759:GLU:OE2	2:F:803:LYS:NZ	2.23	0.55
2:H:513:ARG:NH2	2:N:540:ALA:CB	2.69	0.55
2:H:540:ALA:CB	2:V:513:ARG:NH2	2.69	0.55
2:N:761:VAL:HG11	2:N:774:ALA:HB2	1.89	0.55
2:P:673:ALA:HB1	2:P:717:ALA:HB1	1.89	0.55
1:Q:373:VAL:O	1:Q:377:VAL:HG23	2.07	0.55
1:Q:433:GLU:O	1:Q:443:VAL:HA	2.06	0.55
2:X:684:LEU:HD21	2:X:707:ALA:HA	1.89	0.55
1:A:256:LEU:HD13	1:A:266:ILE:HA	1.88	0.55
2:B:684:LEU:HD21	2:B:707:ALA:HA	1.89	0.55
2:D:708:LEU:HD13	2:D:742:LEU:CD2	2.36	0.55
1:E:128:GLN:O	1:E:132:LEU:HG	2.05	0.55
1:E:230:GLU:HB2	1:E:240:VAL:HG11	1.89	0.55
1:E:364:GLU:OE2	1:E:422:LYS:NZ	2.40	0.55
2:H:616:ALA:HB2	2:H:663:TYR:CE1	2.42	0.55
1:I:433:GLU:O	1:I:443:VAL:HA	2.07	0.55
1:I:472:ARG:HA	2:J:873:VAL:O	2.07	0.55
1:M:2:LYS:O	1:M:6:ILE:HG12	2.06	0.55
1:O:364:GLU:OE2	1:O:422:LYS:NZ	2.40	0.55
1:Q:2:LYS:O	1:Q:6:ILE:HG12	2.06	0.55
1:Q:246:ALA:HB2	1:Q:298:VAL:HG22	1.88	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:S:433:GLU:O	1:S:443:VAL:HA	2.07	0.55
1:S:472:ARG:HA	2:T:873:VAL:O	2.07	0.55
2:V:673:ALA:HB1	2:V:717:ALA:HB1	1.89	0.55
1:W:246:ALA:HB2	1:W:298:VAL:HG22	1.88	0.55
1:A:118:GLU:OE2	1:A:121:ARG:NH1	2.40	0.55
2:B:540:ALA:CB	2:D:513:ARG:NH2	2.69	0.55
1:E:2:LYS:O	1:E:6:ILE:HG12	2.06	0.55
1:I:2:LYS:O	1:I:6:ILE:HG12	2.06	0.55
1:K:472:ARG:HA	2:L:873:VAL:O	2.07	0.55
1:W:2:LYS:O	1:W:6:ILE:HG12	2.06	0.55
2:X:616:ALA:HB2	2:X:663:TYR:CE1	2.42	0.55
1:A:2:LYS:O	1:A:6:ILE:HG12	2.06	0.55
1:A:364:GLU:OE2	1:A:422:LYS:NZ	2.40	0.55
1:G:2:LYS:O	1:G:6:ILE:HG12	2.06	0.55
1:M:253:VAL:O	1:M:256:LEU:N	2.39	0.55
1:O:99:GLU:OE1	1:O:99:GLU:N	2.33	0.55
1:O:118:GLU:OE2	1:O:121:ARG:NH1	2.40	0.55
2:P:616:ALA:HB2	2:P:663:TYR:CE1	2.42	0.55
2:R:616:ALA:HB2	2:R:663:TYR:CE1	2.42	0.55
1:W:118:GLU:OE2	1:W:121:ARG:NH1	2.40	0.55
1:W:472:ARG:HA	2:X:873:VAL:O	2.07	0.55
1:C:246:ALA:HB2	1:C:298:VAL:HG22	1.89	0.54
1:C:364:GLU:OE2	1:C:422:LYS:NZ	2.40	0.54
1:C:433:GLU:O	1:C:443:VAL:HA	2.07	0.54
2:D:536:VAL:HG12	2:F:513:ARG:NH1	2.23	0.54
1:E:246:ALA:HB2	1:E:298:VAL:HG22	1.89	0.54
2:F:616:ALA:HB2	2:F:663:TYR:CE1	2.42	0.54
1:G:373:VAL:O	1:G:377:VAL:HG23	2.07	0.54
1:G:472:ARG:HA	2:H:873:VAL:O	2.07	0.54
1:I:253:VAL:O	1:I:256:LEU:N	2.39	0.54
1:I:364:GLU:OE2	1:I:422:LYS:NZ	2.40	0.54
2:J:761:VAL:HG11	2:J:774:ALA:HB2	1.89	0.54
1:M:373:VAL:O	1:M:377:VAL:HG23	2.07	0.54
1:U:230:GLU:HB2	1:U:240:VAL:HG11	1.89	0.54
1:U:472:ARG:HA	2:V:873:VAL:O	2.07	0.54
2:V:708:LEU:HD13	2:V:742:LEU:CD2	2.37	0.54
1:W:364:GLU:OE2	1:W:422:LYS:NZ	2.40	0.54
1:A:230:GLU:HB2	1:A:240:VAL:HG11	1.89	0.54
2:B:513:ARG:NH1	2:F:536:VAL:HG12	2.23	0.54
1:C:373:VAL:O	1:C:377:VAL:HG23	2.07	0.54
2:D:502:THR:O	2:D:506:LYS:HG3	2.08	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:F:708:LEU:HD13	2:F:742:LEU:CD2	2.37	0.54
2:H:761:VAL:HG11	2:H:774:ALA:HB2	1.89	0.54
2:L:673:ALA:HB1	2:L:717:ALA:HB1	1.88	0.54
1:M:118:GLU:OE2	1:M:121:ARG:NH1	2.40	0.54
1:M:246:ALA:HB2	1:M:298:VAL:HG22	1.88	0.54
2:N:708:LEU:HD13	2:N:742:LEU:CD2	2.36	0.54
1:O:256:LEU:HB3	1:O:261:THR:HB	1.90	0.54
1:U:373:VAL:O	1:U:377:VAL:HG23	2.07	0.54
1:C:1:GLY:N	1:C:3:GLU:OE1	2.26	0.54
1:K:118:GLU:OE2	1:K:121:ARG:NH1	2.40	0.54
2:L:540:ALA:CB	2:P:513:ARG:NH2	2.69	0.54
1:M:230:GLU:HB2	1:M:240:VAL:HG11	1.89	0.54
1:M:472:ARG:HA	2:N:873:VAL:O	2.07	0.54
2:N:513:ARG:NH2	2:V:540:ALA:CB	2.69	0.54
1:Q:230:GLU:HB2	1:Q:240:VAL:HG11	1.89	0.54
2:R:502:THR:O	2:R:506:LYS:HG3	2.08	0.54
1:S:373:VAL:O	1:S:377:VAL:HG23	2.07	0.54
1:W:44:ASP:OD2	1:W:47:THR:N	2.36	0.54
1:W:433:GLU:O	1:W:443:VAL:HA	2.07	0.54
2:X:673:ALA:HB1	2:X:717:ALA:HB1	1.89	0.54
1:E:118:GLU:OE2	1:E:121:ARG:NH1	2.40	0.54
1:G:433:GLU:O	1:G:443:VAL:HA	2.07	0.54
2:J:513:ARG:NH1	2:P:536:VAL:HG12	2.23	0.54
2:L:684:LEU:HD21	2:L:707:ALA:HA	1.89	0.54
2:N:616:ALA:HB2	2:N:663:TYR:CE1	2.42	0.54
2:N:684:LEU:HD21	2:N:707:ALA:HA	1.89	0.54
2:P:502:THR:O	2:P:506:LYS:HG3	2.08	0.54
2:P:761:VAL:HG11	2:P:774:ALA:HB2	1.89	0.54
1:S:246:ALA:HB2	1:S:298:VAL:HG22	1.88	0.54
1:U:118:GLU:OE2	1:U:121:ARG:NH1	2.40	0.54
2:F:613:ALA:HB2	2:F:659:ALA:O	2.08	0.54
1:G:364:GLU:OE2	1:G:422:LYS:NZ	2.40	0.54
1:I:373:VAL:O	1:I:377:VAL:HG23	2.07	0.54
2:J:536:VAL:HG12	2:L:513:ARG:NH1	2.23	0.54
2:L:502:THR:O	2:L:506:LYS:HG3	2.08	0.54
2:N:502:THR:O	2:N:506:LYS:HG3	2.08	0.54
2:N:673:ALA:HB1	2:N:717:ALA:HB1	1.88	0.54
1:Q:257:LYS:NZ	1:Q:315:GLU:OE2	2.32	0.54
2:T:613:ALA:HB2	2:T:659:ALA:O	2.08	0.54
2:T:708:LEU:HD13	2:T:742:LEU:CD2	2.37	0.54
1:U:246:ALA:HB2	1:U:298:VAL:HG22	1.88	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:V:502:THR:O	2:V:506:LYS:HG3	2.08	0.54
2:F:761:VAL:HG11	2:F:774:ALA:HB2	1.89	0.54
1:G:1:GLY:N	1:G:3:GLU:OE1	2.26	0.54
2:H:513:ARG:NH1	2:N:536:VAL:HG12	2.23	0.54
2:H:867:VAL:HG11	2:H:882:VAL:CG1	2.38	0.54
1:I:230:GLU:HB2	1:I:240:VAL:HG11	1.89	0.54
1:O:230:GLU:HB2	1:O:240:VAL:HG11	1.89	0.54
1:O:353:VAL:HG11	1:O:406:LEU:HG	1.90	0.54
2:R:513:ARG:NH2	2:T:540:ALA:CB	2.70	0.54
1:S:256:LEU:HB3	1:S:261:THR:HB	1.90	0.54
2:X:613:ALA:HB2	2:X:659:ALA:O	2.08	0.54
1:A:65:GLU:O	1:A:69:GLU:HG2	2.08	0.54
2:B:616:ALA:HB2	2:B:663:TYR:CE1	2.42	0.54
2:F:867:VAL:HG11	2:F:882:VAL:CG1	2.38	0.54
2:H:613:ALA:HB2	2:H:659:ALA:O	2.08	0.54
2:L:613:ALA:HB2	2:L:659:ALA:O	2.08	0.54
1:M:364:GLU:OE2	1:M:422:LYS:NZ	2.40	0.54
1:O:246:ALA:HB2	1:O:298:VAL:HG22	1.88	0.54
1:O:373:VAL:O	1:O:377:VAL:HG23	2.07	0.54
2:P:867:VAL:HG11	2:P:882:VAL:CG1	2.38	0.54
1:Q:99:GLU:OE1	1:Q:99:GLU:N	2.33	0.54
2:R:513:ARG:NH1	2:T:536:VAL:HG12	2.23	0.54
2:T:513:ARG:NH2	2:X:540:ALA:CB	2.70	0.54
1:U:364:GLU:OE2	1:U:422:LYS:NZ	2.40	0.54
1:C:217:ALA:O	1:C:221:VAL:HG23	2.08	0.54
1:E:65:GLU:O	1:E:69:GLU:HG2	2.08	0.54
1:G:353:VAL:HG11	1:G:406:LEU:HG	1.90	0.54
1:I:246:ALA:HB2	1:I:298:VAL:HG22	1.88	0.54
2:J:502:THR:O	2:J:506:LYS:HG3	2.08	0.54
2:J:684:LEU:HD21	2:J:707:ALA:HA	1.89	0.54
1:K:230:GLU:HB2	1:K:240:VAL:HG11	1.89	0.54
2:L:867:VAL:HG11	2:L:882:VAL:CG1	2.38	0.54
1:M:217:ALA:O	1:M:221:VAL:HG23	2.08	0.54
1:Q:472:ARG:HA	2:R:873:VAL:O	2.07	0.54
1:S:44:ASP:OD2	1:S:47:THR:N	2.36	0.54
1:S:118:GLU:OE2	1:S:121:ARG:NH1	2.40	0.54
1:S:353:VAL:HG11	1:S:406:LEU:HG	1.90	0.54
1:W:256:LEU:HB3	1:W:261:THR:HB	1.90	0.54
1:A:229:GLU:OE2	1:A:233:ARG:NE	2.34	0.54
2:B:613:ALA:HB2	2:B:659:ALA:O	2.08	0.54
1:C:118:GLU:OE2	1:C:121:ARG:NH1	2.40	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:353:VAL:HG11	1:C:406:LEU:HG	1.90	0.54
2:D:761:VAL:HG11	2:D:774:ALA:HB2	1.89	0.54
1:G:99:GLU:OE1	1:G:99:GLU:N	2.33	0.54
1:K:373:VAL:O	1:K:377:VAL:HG23	2.07	0.54
1:M:353:VAL:HG11	1:M:406:LEU:HG	1.90	0.54
1:O:472:ARG:HA	2:P:873:VAL:O	2.07	0.54
1:Q:217:ALA:O	1:Q:221:VAL:HG23	2.08	0.54
1:Q:364:GLU:OE2	1:Q:422:LYS:NZ	2.40	0.54
2:R:536:VAL:HG12	2:X:513:ARG:NH1	2.23	0.54
1:S:230:GLU:HB2	1:S:240:VAL:HG11	1.89	0.54
2:V:613:ALA:HB2	2:V:659:ALA:O	2.08	0.54
2:B:867:VAL:HG11	2:B:882:VAL:CG1	2.38	0.54
1:C:230:GLU:HB2	1:C:240:VAL:HG11	1.89	0.54
1:E:256:LEU:HB3	1:E:261:THR:HB	1.90	0.54
1:I:118:GLU:OE2	1:I:121:ARG:NH1	2.41	0.54
2:J:867:VAL:HG11	2:J:882:VAL:CG1	2.38	0.54
2:N:613:ALA:HB2	2:N:659:ALA:O	2.08	0.54
1:O:217:ALA:O	1:O:221:VAL:HG23	2.08	0.54
2:T:867:VAL:HG11	2:T:882:VAL:CG1	2.38	0.54
1:U:217:ALA:O	1:U:221:VAL:HG23	2.09	0.54
1:G:118:GLU:OE2	1:G:121:ARG:NH1	2.40	0.53
1:I:217:ALA:O	1:I:221:VAL:HG23	2.08	0.53
1:K:364:GLU:OE2	1:K:422:LYS:NZ	2.40	0.53
1:M:256:LEU:HB3	1:M:261:THR:HB	1.90	0.53
2:R:684:LEU:HD21	2:R:707:ALA:HA	1.89	0.53
1:S:364:GLU:OE2	1:S:422:LYS:NZ	2.40	0.53
1:A:373:VAL:O	1:A:377:VAL:HG23	2.07	0.53
2:H:502:THR:O	2:H:506:LYS:HG3	2.08	0.53
2:N:513:ARG:NH1	2:V:536:VAL:HG12	2.23	0.53
2:P:684:LEU:HD21	2:P:707:ALA:HA	1.89	0.53
1:Q:246:ALA:CB	1:Q:298:VAL:HG13	2.39	0.53
2:T:684:LEU:HD21	2:T:707:ALA:HA	1.89	0.53
1:W:217:ALA:O	1:W:221:VAL:HG23	2.08	0.53
1:A:217:ALA:O	1:A:221:VAL:HG23	2.08	0.53
1:A:353:VAL:HG11	1:A:406:LEU:HG	1.90	0.53
2:B:536:VAL:HG12	2:D:513:ARG:NH1	2.23	0.53
1:E:99:GLU:OE1	1:E:99:GLU:N	2.33	0.53
1:E:229:GLU:OE2	1:E:233:ARG:NE	2.34	0.53
1:E:373:VAL:O	1:E:377:VAL:HG23	2.07	0.53
2:F:736:LEU:HD21	2:F:774:ALA:HB2	1.91	0.53
1:G:246:ALA:CB	1:G:298:VAL:HG13	2.38	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:536:VAL:HG12	2:V:513:ARG:NH1	2.23	0.53
1:I:256:LEU:HB3	1:I:261:THR:HB	1.90	0.53
1:K:65:GLU:O	1:K:69:GLU:HG2	2.08	0.53
1:K:246:ALA:HB2	1:K:298:VAL:HG22	1.88	0.53
2:T:513:ARG:NH1	2:X:536:VAL:HG12	2.23	0.53
2:T:736:LEU:HD21	2:T:774:ALA:HB2	1.91	0.53
1:W:353:VAL:HG11	1:W:406:LEU:HG	1.90	0.53
1:C:256:LEU:HB3	1:C:261:THR:HB	1.90	0.53
2:D:613:ALA:HB2	2:D:659:ALA:O	2.08	0.53
1:G:65:GLU:O	1:G:69:GLU:HG2	2.08	0.53
1:G:256:LEU:HB3	1:G:261:THR:HB	1.90	0.53
2:H:487:SER:HG	2:H:490:LYS:H	1.54	0.53
1:I:1:GLY:N	1:I:3:GLU:OE1	2.26	0.53
2:P:613:ALA:HB2	2:P:659:ALA:O	2.08	0.53
2:P:736:LEU:HD21	2:P:774:ALA:HB2	1.91	0.53
1:Q:118:GLU:OE2	1:Q:121:ARG:NH1	2.40	0.53
1:S:439:ASN:O	1:S:486:GLY:N	2.33	0.53
1:W:230:GLU:HB2	1:W:240:VAL:HG11	1.89	0.53
2:B:673:ALA:HB1	2:B:717:ALA:HB1	1.89	0.53
1:I:353:VAL:HG11	1:I:406:LEU:HG	1.90	0.53
2:J:613:ALA:HB2	2:J:659:ALA:O	2.08	0.53
2:L:536:VAL:HG12	2:P:513:ARG:NH1	2.23	0.53
2:R:487:SER:HG	2:R:490:LYS:H	1.54	0.53
2:R:867:VAL:HG11	2:R:882:VAL:CG1	2.38	0.53
1:U:65:GLU:O	1:U:69:GLU:HG2	2.08	0.53
2:X:502:THR:O	2:X:506:LYS:HG3	2.08	0.53
2:F:502:THR:O	2:F:506:LYS:HG3	2.08	0.53
2:F:684:LEU:HD21	2:F:707:ALA:HA	1.89	0.53
2:H:684:LEU:HD21	2:H:707:ALA:HA	1.89	0.53
2:N:736:LEU:HD21	2:N:774:ALA:HB2	1.91	0.53
1:O:65:GLU:O	1:O:69:GLU:HG2	2.08	0.53
1:U:246:ALA:CB	1:U:298:VAL:HG13	2.39	0.53
1:A:246:ALA:CB	1:A:298:VAL:HG13	2.39	0.53
2:D:867:VAL:HG11	2:D:882:VAL:CG1	2.38	0.53
1:G:48:ILE:HG21	1:I:40:SER:OG	2.09	0.53
1:G:217:ALA:O	1:G:221:VAL:HG23	2.08	0.53
1:G:230:GLU:HB2	1:G:240:VAL:HG11	1.89	0.53
1:O:48:ILE:HG21	1:U:40:SER:OG	2.09	0.53
1:S:217:ALA:O	1:S:221:VAL:HG23	2.08	0.53
1:A:256:LEU:HB3	1:A:261:THR:HB	1.90	0.53
1:C:65:GLU:O	1:C:69:GLU:HG2	2.08	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:F:487:SER:HG	2:F:490:LYS:H	1.55	0.53
1:K:252:LYS:O	1:K:256:LEU:HG	2.09	0.53
1:K:256:LEU:HB3	1:K:261:THR:HB	1.90	0.53
2:L:826:MET:HE1	2:L:850:GLN:CD	2.34	0.53
1:M:94:LEU:HD21	1:Q:207:GLU:CG	2.39	0.53
1:O:40:SER:OG	1:W:48:ILE:HG21	2.09	0.53
1:Q:65:GLU:O	1:Q:69:GLU:HG2	2.08	0.53
1:A:207:GLU:CG	1:G:94:LEU:HD21	2.39	0.53
1:C:48:ILE:HG21	1:Q:40:SER:OG	2.09	0.53
1:C:246:ALA:CB	1:C:298:VAL:HG13	2.39	0.53
1:E:246:ALA:CB	1:E:298:VAL:HG13	2.39	0.53
1:I:65:GLU:O	1:I:69:GLU:HG2	2.08	0.53
1:K:217:ALA:O	1:K:221:VAL:HG23	2.08	0.53
2:L:619:GLU:OE1	2:L:667:ARG:NH1	2.42	0.53
1:M:65:GLU:O	1:M:69:GLU:HG2	2.08	0.53
1:M:345:VAL:O	1:M:349:VAL:HG23	2.09	0.53
2:N:619:GLU:OE1	2:N:667:ARG:NH1	2.42	0.53
1:Q:252:LYS:O	1:Q:256:LEU:HG	2.09	0.53
1:W:403:ILE:HD12	1:W:466:LEU:HD13	1.91	0.53
2:X:619:GLU:OE1	2:X:667:ARG:NH1	2.42	0.53
1:A:252:LYS:O	1:A:256:LEU:HG	2.09	0.53
2:D:619:GLU:OE1	2:D:667:ARG:NH1	2.42	0.53
1:E:353:VAL:HG11	1:E:406:LEU:HG	1.90	0.53
1:E:403:ILE:HD12	1:E:466:LEU:HD13	1.91	0.53
2:F:619:GLU:OE1	2:F:667:ARG:NH1	2.42	0.53
1:O:345:VAL:O	1:O:349:VAL:HG23	2.09	0.53
2:P:619:GLU:OE1	2:P:667:ARG:NH1	2.42	0.53
1:W:65:GLU:O	1:W:69:GLU:HG2	2.08	0.53
1:E:48:ILE:HG21	1:K:40:SER:OG	2.09	0.52
1:E:207:GLU:CG	1:K:94:LEU:HD21	2.39	0.52
2:H:759:GLU:OE2	2:H:803:LYS:NZ	2.23	0.52
2:H:826:MET:HE1	2:H:850:GLN:CD	2.35	0.52
1:I:246:ALA:CB	1:I:298:VAL:HG13	2.39	0.52
1:K:403:ILE:HD12	1:K:466:LEU:HD13	1.92	0.52
1:Q:256:LEU:HB3	1:Q:261:THR:HB	1.90	0.52
1:S:345:VAL:O	1:S:349:VAL:HG23	2.09	0.52
2:T:502:THR:O	2:T:506:LYS:HG3	2.08	0.52
1:U:345:VAL:O	1:U:349:VAL:HG23	2.10	0.52
2:V:619:GLU:OE1	2:V:667:ARG:NH1	2.42	0.52
2:B:502:THR:O	2:B:506:LYS:HG3	2.08	0.52
1:C:44:ASP:OD2	1:C:47:THR:N	2.36	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:826:MET:HE1	2:D:850:GLN:CD	2.34	0.52
2:L:736:LEU:HD21	2:L:774:ALA:HB2	1.91	0.52
2:N:826:MET:HE1	2:N:850:GLN:CD	2.34	0.52
1:Q:353:VAL:HG11	1:Q:406:LEU:HG	1.90	0.52
1:U:256:LEU:HB3	1:U:261:THR:HB	1.90	0.52
2:V:867:VAL:HG11	2:V:882:VAL:CG1	2.38	0.52
1:W:373:VAL:O	1:W:377:VAL:HG23	2.07	0.52
2:X:794:ARG:C	2:X:824:ALA:HB1	2.35	0.52
1:A:48:ILE:HG21	1:G:40:SER:OG	2.09	0.52
1:C:40:SER:OG	1:M:48:ILE:HG21	2.09	0.52
1:C:403:ILE:HD12	1:C:466:LEU:HD13	1.91	0.52
1:G:403:ILE:HD12	1:G:466:LEU:HD13	1.91	0.52
2:H:736:LEU:HD21	2:H:774:ALA:HB2	1.91	0.52
1:K:345:VAL:O	1:K:349:VAL:HG23	2.10	0.52
2:R:540:ALA:CB	2:X:513:ARG:NH2	2.69	0.52
2:R:613:ALA:HB2	2:R:659:ALA:O	2.08	0.52
2:T:759:GLU:OE2	2:T:803:LYS:NZ	2.23	0.52
1:U:252:LYS:O	1:U:256:LEU:HG	2.09	0.52
2:V:736:LEU:HD21	2:V:774:ALA:HB2	1.91	0.52
1:A:40:SER:OG	1:I:48:ILE:HG21	2.09	0.52
2:B:855:TYR:OH	2:B:859:ARG:NH1	2.43	0.52
1:E:217:ALA:O	1:E:221:VAL:HG23	2.08	0.52
1:G:207:GLU:CG	1:I:94:LEU:HD21	2.39	0.52
1:G:345:VAL:O	1:G:349:VAL:HG23	2.10	0.52
1:I:403:ILE:HD12	1:I:466:LEU:HD13	1.92	0.52
2:J:826:MET:HE1	2:J:850:GLN:CD	2.34	0.52
1:M:252:LYS:O	1:M:256:LEU:HG	2.09	0.52
1:M:403:ILE:HD12	1:M:466:LEU:HD13	1.91	0.52
2:P:808:GLN:HG3	2:P:813:LEU:HD12	1.92	0.52
2:T:826:MET:HE1	2:T:850:GLN:CD	2.35	0.52
1:U:403:ILE:HD12	1:U:466:LEU:HD13	1.91	0.52
2:X:826:MET:HE1	2:X:850:GLN:CD	2.34	0.52
2:B:794:ARG:C	2:B:824:ALA:HB1	2.35	0.52
2:B:826:MET:HE1	2:B:850:GLN:CD	2.34	0.52
1:C:252:LYS:O	1:C:256:LEU:HG	2.09	0.52
1:G:252:LYS:O	1:G:256:LEU:HG	2.09	0.52
2:H:847:HIS:N	2:H:850:GLN:OE1	2.30	0.52
2:J:794:ARG:C	2:J:824:ALA:HB1	2.35	0.52
1:K:48:ILE:HG21	1:S:40:SER:OG	2.09	0.52
2:L:855:TYR:OH	2:L:859:ARG:NH1	2.43	0.52
1:M:40:SER:OG	1:Q:48:ILE:HG21	2.09	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:N:867:VAL:HG11	2:N:882:VAL:CG1	2.38	0.52
1:O:252:LYS:O	1:O:256:LEU:HG	2.09	0.52
2:R:619:GLU:OE1	2:R:667:ARG:NH1	2.42	0.52
1:S:65:GLU:O	1:S:69:GLU:HG2	2.08	0.52
2:T:794:ARG:C	2:T:824:ALA:HB1	2.35	0.52
1:U:48:ILE:HG21	1:W:40:SER:OG	2.09	0.52
1:W:252:LYS:O	1:W:256:LEU:HG	2.10	0.52
2:X:855:TYR:OH	2:X:859:ARG:NH1	2.43	0.52
1:A:44:ASP:OD2	1:A:47:THR:N	2.36	0.52
2:B:619:GLU:OE1	2:B:667:ARG:NH1	2.42	0.52
1:C:94:LEU:HD21	1:M:207:GLU:CG	2.39	0.52
1:C:207:GLU:CG	1:Q:94:LEU:HD21	2.39	0.52
2:D:855:TYR:OH	2:D:859:ARG:NH1	2.43	0.52
1:E:21:LEU:O	1:E:25:VAL:HG23	2.10	0.52
1:E:40:SER:OG	1:S:48:ILE:HG21	2.09	0.52
2:F:855:TYR:OH	2:F:859:ARG:NH1	2.43	0.52
2:J:619:GLU:OE1	2:J:667:ARG:NH1	2.42	0.52
2:P:826:MET:HE1	2:P:850:GLN:CD	2.34	0.52
2:R:855:TYR:OH	2:R:859:ARG:NH1	2.43	0.52
2:T:855:TYR:OH	2:T:859:ARG:NH1	2.43	0.52
1:U:207:GLU:CG	1:W:94:LEU:HD21	2.39	0.52
1:W:21:LEU:O	1:W:25:VAL:HG23	2.10	0.52
2:D:736:LEU:HD21	2:D:774:ALA:HB2	1.91	0.52
2:L:790:ASP:OD2	2:L:793:SER:N	2.38	0.52
2:L:794:ARG:C	2:L:824:ALA:HB1	2.35	0.52
1:O:21:LEU:O	1:O:25:VAL:HG23	2.10	0.52
1:O:94:LEU:HD21	1:W:207:GLU:CG	2.39	0.52
1:Q:21:LEU:O	1:Q:25:VAL:HG23	2.10	0.52
1:Q:345:VAL:O	1:Q:349:VAL:HG23	2.09	0.52
2:R:520:LYS:HA	2:T:529:VAL:HG13	1.92	0.52
1:U:353:VAL:HG11	1:U:406:LEU:HG	1.90	0.52
2:X:808:GLN:HG3	2:X:813:LEU:HD12	1.91	0.52
2:B:736:LEU:HD21	2:B:774:ALA:HB2	1.91	0.52
2:F:819:ILE:HG21	2:F:841:VAL:HG11	1.92	0.52
2:H:619:GLU:OE1	2:H:667:ARG:NH1	2.42	0.52
1:I:99:GLU:OE1	1:I:99:GLU:N	2.33	0.52
2:L:801:ALA:HB1	2:L:817:ALA:O	2.10	0.52
2:L:847:HIS:N	2:L:850:GLN:OE1	2.30	0.52
1:S:21:LEU:O	1:S:25:VAL:HG23	2.10	0.52
1:S:403:ILE:HD12	1:S:466:LEU:HD13	1.91	0.52
2:B:808:GLN:HG3	2:B:813:LEU:HD12	1.92	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:322:ARG:NH2	1:C:326:GLU:OE1	2.40	0.52
2:D:540:ALA:CB	2:F:513:ARG:NH2	2.69	0.52
1:E:17:LEU:HD11	1:E:70:ILE:HG12	1.92	0.52
2:F:826:MET:HE1	2:F:850:GLN:CD	2.34	0.52
2:H:794:ARG:C	2:H:824:ALA:HB1	2.35	0.52
2:H:801:ALA:HB1	2:H:817:ALA:O	2.10	0.52
1:I:345:VAL:O	1:I:349:VAL:HG23	2.09	0.52
2:J:540:ALA:CB	2:L:513:ARG:NH2	2.69	0.52
2:J:736:LEU:HD21	2:J:774:ALA:HB2	1.91	0.52
1:K:207:GLU:CG	1:S:94:LEU:HD21	2.39	0.52
1:K:353:VAL:HG11	1:K:406:LEU:HG	1.90	0.52
1:O:403:ILE:HD12	1:O:466:LEU:HD13	1.91	0.52
2:P:794:ARG:C	2:P:824:ALA:HB1	2.35	0.52
2:R:801:ALA:HB1	2:R:817:ALA:O	2.10	0.52
1:S:246:ALA:CB	1:S:298:VAL:HG13	2.39	0.52
2:T:694:ARG:O	2:T:699:ALA:HB3	2.10	0.52
2:V:794:ARG:C	2:V:824:ALA:HB1	2.35	0.52
2:V:808:GLN:HG3	2:V:813:LEU:HD12	1.92	0.52
1:W:345:VAL:O	1:W:349:VAL:HG23	2.09	0.52
2:X:867:VAL:HG11	2:X:882:VAL:CG1	2.38	0.52
1:A:21:LEU:O	1:A:25:VAL:HG23	2.10	0.52
1:A:94:LEU:HD21	1:I:207:GLU:CG	2.39	0.52
1:A:196:GLU:O	1:A:200:GLN:HG2	2.10	0.52
2:B:801:ALA:HB1	2:B:817:ALA:O	2.10	0.52
2:D:808:GLN:HG3	2:D:813:LEU:HD12	1.92	0.52
1:E:94:LEU:HD21	1:S:207:GLU:CG	2.39	0.52
2:F:794:ARG:C	2:F:824:ALA:HB1	2.35	0.52
1:I:21:LEU:O	1:I:25:VAL:HG23	2.10	0.52
1:K:439:ASN:O	1:K:486:GLY:N	2.33	0.52
2:L:529:VAL:HG13	2:P:520:LYS:HA	1.92	0.52
1:M:257:LYS:NZ	1:M:315:GLU:OE2	2.32	0.52
1:O:257:LYS:NZ	1:O:315:GLU:OE2	2.32	0.52
2:P:855:TYR:OH	2:P:859:ARG:NH1	2.43	0.52
1:Q:100:ARG:O	1:Q:103:ARG:HG3	2.10	0.52
2:R:794:ARG:C	2:R:824:ALA:HB1	2.35	0.52
1:S:252:LYS:O	1:S:256:LEU:HG	2.09	0.52
1:U:21:LEU:O	1:U:25:VAL:HG23	2.10	0.52
2:V:869:VAL:CG1	2:V:880:ILE:HG23	2.40	0.52
1:C:196:GLU:O	1:C:200:GLN:HG2	2.10	0.51
2:D:529:VAL:HG13	2:F:520:LYS:HA	1.92	0.51
2:D:869:VAL:CG1	2:D:880:ILE:HG23	2.41	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:F:808:GLN:HG3	2:F:813:LEU:HD12	1.91	0.51
1:K:100:ARG:O	1:K:103:ARG:HG3	2.10	0.51
1:Q:403:ILE:HD12	1:Q:466:LEU:HD13	1.91	0.51
2:R:819:ILE:HG21	2:R:841:VAL:HG11	1.92	0.51
2:R:826:MET:HE1	2:R:850:GLN:CD	2.35	0.51
1:S:196:GLU:O	1:S:200:GLN:HG2	2.10	0.51
2:T:520:LYS:HA	2:X:529:VAL:HG13	1.92	0.51
1:U:321:ALA:HA	1:U:324:ILE:HG22	1.93	0.51
2:V:819:ILE:HG21	2:V:841:VAL:HG11	1.92	0.51
1:C:345:VAL:O	1:C:349:VAL:HG23	2.10	0.51
1:E:345:VAL:O	1:E:349:VAL:HG23	2.10	0.51
2:H:520:LYS:HA	2:N:529:VAL:HG13	1.92	0.51
1:M:100:ARG:O	1:M:103:ARG:HG3	2.10	0.51
1:O:346:ALA:HB1	1:O:401:GLU:CB	2.41	0.51
2:T:808:GLN:HG3	2:T:813:LEU:HD12	1.92	0.51
2:V:716:GLU:HG2	2:V:720:ARG:HE	1.76	0.51
2:V:801:ALA:HB1	2:V:817:ALA:O	2.10	0.51
2:V:826:MET:HE1	2:V:850:GLN:CD	2.34	0.51
2:V:855:TYR:OH	2:V:859:ARG:NH1	2.43	0.51
1:A:338:TYR:O	1:A:342:CYS:SG	2.69	0.51
2:B:869:VAL:CG1	2:B:880:ILE:HG23	2.41	0.51
1:E:252:LYS:O	1:E:256:LEU:HG	2.09	0.51
1:I:252:LYS:O	1:I:256:LEU:HG	2.10	0.51
1:I:321:ALA:HA	1:I:324:ILE:HG22	1.93	0.51
1:I:338:TYR:O	1:I:342:CYS:SG	2.69	0.51
2:J:801:ALA:HB1	2:J:817:ALA:O	2.10	0.51
2:J:855:TYR:OH	2:J:859:ARG:NH1	2.43	0.51
1:K:246:ALA:CB	1:K:298:VAL:HG13	2.39	0.51
1:K:306:LEU:HD13	1:K:316:ILE:HG12	1.92	0.51
2:L:536:VAL:HG12	2:P:513:ARG:CZ	2.41	0.51
1:M:246:ALA:CB	1:M:298:VAL:HG13	2.39	0.51
1:S:338:TYR:O	1:S:342:CYS:SG	2.69	0.51
1:W:338:TYR:O	1:W:342:CYS:SG	2.69	0.51
2:X:736:LEU:HD21	2:X:774:ALA:HB2	1.91	0.51
1:A:306:LEU:HD13	1:A:316:ILE:HG12	1.92	0.51
2:B:704:TYR:CZ	2:B:708:LEU:HD11	2.46	0.51
2:D:716:GLU:HG2	2:D:720:ARG:HE	1.76	0.51
1:E:196:GLU:O	1:E:200:GLN:HG2	2.10	0.51
2:F:869:VAL:CG1	2:F:880:ILE:HG23	2.41	0.51
2:H:513:ARG:CZ	2:N:536:VAL:HG12	2.41	0.51
2:H:529:VAL:HG13	2:V:520:LYS:HA	1.92	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:I:196:GLU:O	1:I:200:GLN:HG2	2.10	0.51
2:J:819:ILE:HG21	2:J:841:VAL:HG11	1.92	0.51
2:J:869:VAL:CG1	2:J:880:ILE:HG23	2.40	0.51
1:K:196:GLU:O	1:K:200:GLN:HG2	2.10	0.51
2:L:808:GLN:HG3	2:L:813:LEU:HD12	1.92	0.51
1:M:21:LEU:O	1:M:25:VAL:HG23	2.10	0.51
2:N:855:TYR:OH	2:N:859:ARG:NH1	2.43	0.51
1:O:207:GLU:CG	1:U:94:LEU:HD21	2.39	0.51
2:R:704:TYR:CZ	2:R:708:LEU:HD11	2.46	0.51
2:R:716:GLU:HG2	2:R:720:ARG:HE	1.76	0.51
2:R:790:ASP:OD2	2:R:793:SER:N	2.39	0.51
2:R:869:VAL:CG1	2:R:880:ILE:HG23	2.40	0.51
1:S:413:SER:HB3	1:S:467:ALA:HB1	1.93	0.51
2:T:619:GLU:OE1	2:T:667:ARG:NH1	2.42	0.51
2:T:704:TYR:CZ	2:T:708:LEU:HD11	2.46	0.51
2:T:733:GLU:HG2	2:T:770:LEU:HD21	1.93	0.51
1:U:338:TYR:O	1:U:342:CYS:SG	2.69	0.51
2:V:790:ASP:OD2	2:V:793:SER:N	2.38	0.51
1:W:306:LEU:HD13	1:W:316:ILE:HG12	1.92	0.51
2:X:869:VAL:CG1	2:X:880:ILE:HG23	2.40	0.51
1:A:100:ARG:O	1:A:103:ARG:HG3	2.10	0.51
2:B:536:VAL:HG12	2:D:513:ARG:CZ	2.41	0.51
1:C:100:ARG:O	1:C:103:ARG:HG3	2.10	0.51
2:D:819:ILE:HG21	2:D:841:VAL:HG11	1.92	0.51
2:D:847:HIS:N	2:D:850:GLN:OE1	2.30	0.51
2:F:733:GLU:HG2	2:F:770:LEU:HD21	1.93	0.51
1:G:196:GLU:O	1:G:200:GLN:HG2	2.10	0.51
1:G:346:ALA:HB1	1:G:401:GLU:CB	2.41	0.51
2:H:553:LEU:O	2:H:557:VAL:HG23	2.11	0.51
1:I:17:LEU:HD11	1:I:70:ILE:HG12	1.92	0.51
2:J:808:GLN:HG3	2:J:813:LEU:HD12	1.91	0.51
1:M:338:TYR:O	1:M:342:CYS:SG	2.69	0.51
2:N:528:LEU:O	2:N:532:ASN:OD1	2.29	0.51
2:P:716:GLU:HG2	2:P:720:ARG:HE	1.75	0.51
2:R:513:ARG:CZ	2:T:536:VAL:HG12	2.41	0.51
2:R:694:ARG:O	2:R:699:ALA:HB3	2.10	0.51
2:T:716:GLU:HG2	2:T:720:ARG:HE	1.76	0.51
2:V:704:TYR:CZ	2:V:708:LEU:HD11	2.46	0.51
1:A:346:ALA:HB1	1:A:401:GLU:CB	2.41	0.51
1:A:403:ILE:HD12	1:A:466:LEU:HD13	1.91	0.51
2:B:716:GLU:HG2	2:B:720:ARG:HE	1.76	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:321:ALA:HA	1:C:324:ILE:HG22	1.93	0.51
2:D:687:ALA:HB1	2:D:703:VAL:HG13	1.93	0.51
1:E:321:ALA:HA	1:E:324:ILE:HG22	1.93	0.51
1:G:338:TYR:O	1:G:342:CYS:SG	2.69	0.51
1:G:413:SER:HB3	1:G:467:ALA:HB1	1.93	0.51
2:H:808:GLN:HG3	2:H:813:LEU:HD12	1.92	0.51
2:H:855:TYR:OH	2:H:859:ARG:NH1	2.43	0.51
1:K:346:ALA:HB1	1:K:401:GLU:CB	2.41	0.51
2:L:528:LEU:O	2:L:532:ASN:OD1	2.29	0.51
2:L:869:VAL:CG1	2:L:880:ILE:HG23	2.40	0.51
2:N:704:TYR:CZ	2:N:708:LEU:HD11	2.46	0.51
2:P:869:VAL:CG1	2:P:880:ILE:HG23	2.41	0.51
2:R:536:VAL:HG12	2:X:513:ARG:CZ	2.41	0.51
2:T:801:ALA:HB1	2:T:817:ALA:O	2.10	0.51
2:T:819:ILE:HG21	2:T:841:VAL:HG11	1.92	0.51
2:V:733:GLU:HG2	2:V:770:LEU:HD21	1.93	0.51
1:A:345:VAL:O	1:A:349:VAL:HG23	2.09	0.51
2:B:528:LEU:O	2:B:532:ASN:OD1	2.29	0.51
2:B:694:ARG:O	2:B:699:ALA:HB3	2.11	0.51
2:D:553:LEU:O	2:D:557:VAL:HG23	2.11	0.51
2:F:528:LEU:O	2:F:532:ASN:OD1	2.29	0.51
2:F:694:ARG:O	2:F:699:ALA:HB3	2.10	0.51
2:H:704:TYR:CZ	2:H:708:LEU:HD11	2.46	0.51
2:J:513:ARG:CZ	2:P:536:VAL:HG12	2.41	0.51
2:J:553:LEU:O	2:J:557:VAL:HG23	2.11	0.51
2:J:694:ARG:O	2:J:699:ALA:HB3	2.10	0.51
2:J:704:TYR:CZ	2:J:708:LEU:HD11	2.46	0.51
2:J:716:GLU:HG2	2:J:720:ARG:HE	1.76	0.51
2:L:716:GLU:HG2	2:L:720:ARG:HE	1.76	0.51
1:Q:338:TYR:O	1:Q:342:CYS:SG	2.69	0.51
1:S:321:ALA:HA	1:S:324:ILE:HG22	1.93	0.51
2:T:528:LEU:O	2:T:532:ASN:OD1	2.29	0.51
2:V:528:LEU:O	2:V:532:ASN:OD1	2.29	0.51
1:W:100:ARG:O	1:W:103:ARG:HG3	2.10	0.51
1:C:338:TYR:O	1:C:342:CYS:SG	2.69	0.51
1:C:413:SER:HB3	1:C:467:ALA:HB1	1.93	0.51
2:D:794:ARG:C	2:D:824:ALA:HB1	2.35	0.51
1:E:338:TYR:O	1:E:342:CYS:SG	2.69	0.51
2:F:801:ALA:HB1	2:F:817:ALA:O	2.10	0.51
2:H:687:ALA:HB1	2:H:703:VAL:HG13	1.93	0.51
1:I:306:LEU:HD13	1:I:316:ILE:HG12	1.92	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:L:553:LEU:O	2:L:557:VAL:HG23	2.11	0.51
2:N:513:ARG:CZ	2:V:536:VAL:HG12	2.41	0.51
2:N:733:GLU:HG2	2:N:770:LEU:HD21	1.93	0.51
2:N:794:ARG:C	2:N:824:ALA:HB1	2.35	0.51
2:N:869:VAL:CG1	2:N:880:ILE:HG23	2.41	0.51
2:P:733:GLU:HG2	2:P:770:LEU:HD21	1.93	0.51
2:R:528:LEU:O	2:R:532:ASN:OD1	2.29	0.51
2:R:736:LEU:HD21	2:R:774:ALA:HB2	1.91	0.51
2:R:808:GLN:HG3	2:R:813:LEU:HD12	1.92	0.51
1:S:17:LEU:HD11	1:S:70:ILE:HG12	1.92	0.51
2:T:687:ALA:HB1	2:T:703:VAL:HG13	1.93	0.51
1:U:17:LEU:HD11	1:U:70:ILE:HG12	1.92	0.51
1:W:246:ALA:CB	1:W:298:VAL:HG13	2.39	0.51
2:X:716:GLU:HG2	2:X:720:ARG:HE	1.76	0.51
1:A:17:LEU:HD11	1:A:70:ILE:HG12	1.92	0.51
2:B:498:LEU:HD21	2:B:548:ILE:HB	1.93	0.51
1:C:17:LEU:HD11	1:C:70:ILE:HG12	1.92	0.51
2:D:528:LEU:O	2:D:532:ASN:OD1	2.29	0.51
2:D:694:ARG:O	2:D:699:ALA:HB3	2.10	0.51
2:D:801:ALA:HB1	2:D:817:ALA:O	2.10	0.51
1:E:100:ARG:O	1:E:103:ARG:HG3	2.10	0.51
1:E:322:ARG:NH2	1:E:326:GLU:OE1	2.40	0.51
1:G:21:LEU:O	1:G:25:VAL:HG23	2.10	0.51
1:G:100:ARG:O	1:G:103:ARG:HG3	2.10	0.51
1:K:21:LEU:O	1:K:25:VAL:HG23	2.10	0.51
1:K:338:TYR:O	1:K:342:CYS:SG	2.69	0.51
1:M:413:SER:HB3	1:M:467:ALA:HB1	1.93	0.51
2:P:694:ARG:O	2:P:699:ALA:HB3	2.10	0.51
2:P:819:ILE:HG21	2:P:841:VAL:HG11	1.92	0.51
1:Q:321:ALA:HA	1:Q:324:ILE:HG22	1.93	0.51
1:U:1:GLY:N	1:U:3:GLU:OE1	2.26	0.51
2:X:553:LEU:O	2:X:557:VAL:HG23	2.11	0.51
1:A:227:ALA:HB1	1:A:244:LEU:CD2	2.41	0.51
2:B:513:ARG:NH2	2:F:540:ALA:CB	2.69	0.51
1:C:21:LEU:O	1:C:25:VAL:HG23	2.10	0.51
2:J:520:LYS:HA	2:P:529:VAL:HG13	1.92	0.51
2:J:528:LEU:O	2:J:532:ASN:OD1	2.29	0.51
2:L:694:ARG:O	2:L:699:ALA:HB3	2.11	0.51
2:L:704:TYR:CZ	2:L:708:LEU:HD11	2.46	0.51
2:N:716:GLU:HG2	2:N:720:ARG:HE	1.76	0.51
2:P:704:TYR:CZ	2:P:708:LEU:HD11	2.46	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:S:100:ARG:O	1:S:103:ARG:HG3	2.10	0.51
2:T:513:ARG:CZ	2:X:536:VAL:HG12	2.41	0.51
1:U:100:ARG:O	1:U:103:ARG:HG3	2.10	0.51
1:U:196:GLU:O	1:U:200:GLN:HG2	2.10	0.51
1:A:413:SER:HB3	1:A:467:ALA:HB1	1.93	0.50
2:B:529:VAL:HG13	2:D:520:LYS:HA	1.92	0.50
2:B:553:LEU:O	2:B:557:VAL:HG23	2.11	0.50
2:B:819:ILE:HG21	2:B:841:VAL:HG11	1.92	0.50
2:H:819:ILE:HG21	2:H:841:VAL:HG11	1.92	0.50
1:I:61:ARG:NH1	1:I:65:GLU:OE2	2.44	0.50
1:I:413:SER:HB3	1:I:467:ALA:HB1	1.93	0.50
1:K:321:ALA:HA	1:K:324:ILE:HG22	1.93	0.50
2:L:687:ALA:HB1	2:L:703:VAL:HG13	1.93	0.50
2:N:759:GLU:OE2	2:N:803:LYS:NZ	2.24	0.50
2:N:790:ASP:OD2	2:N:793:SER:N	2.39	0.50
2:N:808:GLN:HG3	2:N:813:LEU:HD12	1.92	0.50
1:O:196:GLU:O	1:O:200:GLN:HG2	2.10	0.50
2:V:553:LEU:O	2:V:557:VAL:HG23	2.11	0.50
1:W:227:ALA:HB1	1:W:244:LEU:CD2	2.41	0.50
1:W:346:ALA:HB1	1:W:401:GLU:CB	2.41	0.50
2:F:553:LEU:O	2:F:557:VAL:HG23	2.11	0.50
2:H:536:VAL:HG12	2:V:513:ARG:CZ	2.41	0.50
1:I:100:ARG:O	1:I:103:ARG:HG3	2.10	0.50
2:L:498:LEU:HD21	2:L:548:ILE:HB	1.93	0.50
1:M:17:LEU:HD11	1:M:70:ILE:HG12	1.92	0.50
1:M:196:GLU:O	1:M:200:GLN:HG2	2.10	0.50
2:N:553:LEU:O	2:N:557:VAL:HG23	2.11	0.50
2:N:819:ILE:HG21	2:N:841:VAL:HG11	1.92	0.50
1:O:100:ARG:O	1:O:103:ARG:HG3	2.10	0.50
2:P:528:LEU:O	2:P:532:ASN:OD1	2.29	0.50
2:P:687:ALA:HB1	2:P:703:VAL:HG13	1.93	0.50
1:Q:196:GLU:O	1:Q:200:GLN:HG2	2.10	0.50
1:S:346:ALA:HB1	1:S:401:GLU:CB	2.41	0.50
2:V:694:ARG:O	2:V:699:ALA:HB3	2.10	0.50
1:W:321:ALA:HA	1:W:324:ILE:HG22	1.93	0.50
1:W:322:ARG:NH2	1:W:326:GLU:OE1	2.40	0.50
2:X:687:ALA:HB1	2:X:703:VAL:HG13	1.93	0.50
2:X:694:ARG:O	2:X:699:ALA:HB3	2.11	0.50
2:X:819:ILE:HG21	2:X:841:VAL:HG11	1.92	0.50
1:A:472:ARG:HG2	2:B:874:GLU:HB3	1.94	0.50
1:C:249:VAL:HG22	1:C:273:ASP:HB3	1.94	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:346:ALA:HB1	1:C:401:GLU:CB	2.41	0.50
2:D:704:TYR:HE2	2:D:745:LEU:HD11	1.77	0.50
1:I:227:ALA:HB1	1:I:244:LEU:CD2	2.42	0.50
2:J:498:LEU:HD21	2:J:548:ILE:HB	1.93	0.50
2:J:529:VAL:HG13	2:L:520:LYS:HA	1.92	0.50
1:O:17:LEU:HD11	1:O:70:ILE:HG12	1.92	0.50
1:O:246:ALA:CB	1:O:298:VAL:HG13	2.39	0.50
1:Q:472:ARG:HG2	2:R:874:GLU:HB3	1.94	0.50
2:R:529:VAL:HG13	2:X:520:LYS:HA	1.92	0.50
2:R:733:GLU:HG2	2:R:770:LEU:HD21	1.93	0.50
1:S:306:LEU:HD13	1:S:316:ILE:HG12	1.92	0.50
1:U:306:LEU:HD13	1:U:316:ILE:HG12	1.92	0.50
2:X:801:ALA:HB1	2:X:817:ALA:O	2.10	0.50
1:A:321:ALA:HA	1:A:324:ILE:HG22	1.93	0.50
2:B:513:ARG:CZ	2:F:536:VAL:HG12	2.41	0.50
1:C:306:LEU:HD13	1:C:316:ILE:HG12	1.92	0.50
1:C:472:ARG:HG2	2:D:874:GLU:HB3	1.94	0.50
2:D:704:TYR:CZ	2:D:708:LEU:HD11	2.46	0.50
2:D:805:ARG:NH1	2:D:817:ALA:O	2.45	0.50
1:E:413:SER:HB3	1:E:467:ALA:HB1	1.93	0.50
2:F:704:TYR:CZ	2:F:708:LEU:HD11	2.46	0.50
1:G:391:ILE:O	1:G:395:LEU:HG	2.12	0.50
2:H:532:ASN:HD22	2:V:531:HIS:CG	2.30	0.50
2:H:694:ARG:O	2:H:699:ALA:HB3	2.10	0.50
2:H:869:VAL:CG1	2:H:880:ILE:HG23	2.40	0.50
2:J:536:VAL:HG12	2:L:513:ARG:CZ	2.41	0.50
2:J:733:GLU:HG2	2:J:770:LEU:HD21	1.93	0.50
1:K:413:SER:HB3	1:K:467:ALA:HB1	1.93	0.50
1:M:321:ALA:HA	1:M:324:ILE:HG22	1.93	0.50
2:N:694:ARG:O	2:N:699:ALA:HB3	2.11	0.50
1:O:338:TYR:O	1:O:342:CYS:SG	2.69	0.50
1:O:472:ARG:HG2	2:P:874:GLU:HB3	1.94	0.50
1:S:227:ALA:HB1	1:S:244:LEU:CD2	2.41	0.50
2:T:553:LEU:O	2:T:557:VAL:HG23	2.11	0.50
1:U:227:ALA:HB1	1:U:244:LEU:CD2	2.41	0.50
1:U:257:LYS:NZ	1:U:315:GLU:OE2	2.32	0.50
2:X:498:LEU:HD21	2:X:548:ILE:HB	1.94	0.50
2:X:528:LEU:O	2:X:532:ASN:OD1	2.29	0.50
2:X:733:GLU:HG2	2:X:770:LEU:HD21	1.93	0.50
1:A:35:LEU:HB2	1:A:55:VAL:HG21	1.94	0.50
2:D:507:ARG:HD2	2:D:507:ARG:C	2.37	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:536:VAL:HG12	2:F:513:ARG:CZ	2.41	0.50
2:H:805:ARG:NH1	2:H:817:ALA:O	2.45	0.50
1:K:227:ALA:HB1	1:K:244:LEU:CD2	2.41	0.50
1:K:322:ARG:NH2	1:K:326:GLU:OE1	2.40	0.50
2:L:819:ILE:HG21	2:L:841:VAL:HG11	1.92	0.50
1:M:227:ALA:HB1	1:M:244:LEU:HD23	1.94	0.50
2:N:805:ARG:NH1	2:N:817:ALA:O	2.45	0.50
2:P:801:ALA:HB1	2:P:817:ALA:O	2.10	0.50
2:R:687:ALA:HB1	2:R:703:VAL:HG13	1.93	0.50
2:T:498:LEU:HD21	2:T:548:ILE:HB	1.93	0.50
2:T:812:GLU:O	2:T:816:VAL:HG23	2.12	0.50
1:W:17:LEU:HD11	1:W:70:ILE:HG12	1.92	0.50
1:W:35:LEU:HB2	1:W:55:VAL:HG21	1.94	0.50
1:W:196:GLU:O	1:W:200:GLN:HG2	2.10	0.50
2:B:531:HIS:CG	2:F:532:ASN:HD22	2.30	0.50
2:B:704:TYR:HE2	2:B:745:LEU:HD11	1.77	0.50
1:C:391:ILE:O	1:C:395:LEU:HG	2.12	0.50
2:D:812:GLU:O	2:D:816:VAL:HG23	2.12	0.50
1:G:17:LEU:HD11	1:G:70:ILE:HG12	1.92	0.50
1:G:35:LEU:HB2	1:G:55:VAL:HG21	1.94	0.50
1:G:227:ALA:HB1	1:G:244:LEU:CD2	2.41	0.50
1:G:306:LEU:HD13	1:G:316:ILE:HG12	1.92	0.50
1:G:321:ALA:HA	1:G:324:ILE:HG22	1.93	0.50
2:H:716:GLU:HG2	2:H:720:ARG:HE	1.76	0.50
2:H:790:ASP:OD2	2:H:793:SER:N	2.38	0.50
2:N:812:GLU:O	2:N:816:VAL:HG23	2.12	0.50
1:O:306:LEU:HD13	1:O:316:ILE:HG12	1.92	0.50
1:Q:322:ARG:NH2	1:Q:326:GLU:OE1	2.40	0.50
1:S:472:ARG:HG2	2:T:874:GLU:HB3	1.94	0.50
2:X:805:ARG:NH1	2:X:817:ALA:O	2.45	0.50
1:A:421:ILE:O	1:A:422:LYS:C	2.55	0.50
1:E:35:LEU:HB2	1:E:55:VAL:HG21	1.94	0.50
1:E:306:LEU:HD13	1:E:316:ILE:HG12	1.92	0.50
1:E:346:ALA:HB1	1:E:401:GLU:CB	2.41	0.50
2:F:507:ARG:HD2	2:F:507:ARG:C	2.37	0.50
1:K:17:LEU:HD11	1:K:70:ILE:HG12	1.92	0.50
1:K:35:LEU:HB2	1:K:55:VAL:HG21	1.94	0.50
1:K:391:ILE:O	1:K:395:LEU:HG	2.12	0.50
2:N:801:ALA:HB1	2:N:817:ALA:O	2.10	0.50
1:O:35:LEU:HB2	1:O:55:VAL:HG21	1.94	0.50
1:O:227:ALA:HB1	1:O:244:LEU:CD2	2.41	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:Q:17:LEU:HD11	1:Q:70:ILE:HG12	1.92	0.50
2:R:531:HIS:CG	2:T:532:ASN:HD22	2.30	0.50
2:R:812:GLU:O	2:R:816:VAL:HG23	2.12	0.50
2:T:507:ARG:HD2	2:T:507:ARG:C	2.37	0.50
2:T:869:VAL:CG1	2:T:880:ILE:HG23	2.40	0.50
2:V:687:ALA:HB1	2:V:703:VAL:HG13	1.93	0.50
2:V:805:ARG:NH1	2:V:817:ALA:O	2.45	0.50
1:A:391:ILE:O	1:A:395:LEU:HG	2.12	0.50
2:B:520:LYS:HA	2:F:529:VAL:HG13	1.92	0.50
2:B:687:ALA:HB1	2:B:703:VAL:HG13	1.93	0.50
1:G:322:ARG:NH2	1:G:326:GLU:OE1	2.40	0.50
1:I:249:VAL:HG22	1:I:273:ASP:HB3	1.93	0.50
2:J:687:ALA:HB1	2:J:703:VAL:HG13	1.93	0.50
1:K:472:ARG:HG2	2:L:874:GLU:HB3	1.94	0.50
1:M:227:ALA:HB1	1:M:244:LEU:CD2	2.41	0.50
1:M:306:LEU:HD13	1:M:316:ILE:HG12	1.92	0.50
2:R:532:ASN:HD22	2:X:531:HIS:CG	2.30	0.50
2:T:805:ARG:NH1	2:T:817:ALA:O	2.45	0.50
2:X:704:TYR:CZ	2:X:708:LEU:HD11	2.46	0.50
2:X:790:ASP:OD2	2:X:793:SER:N	2.38	0.50
1:E:421:ILE:O	1:E:422:LYS:C	2.55	0.50
2:F:716:GLU:HG2	2:F:720:ARG:HE	1.76	0.50
2:F:867:VAL:HG11	2:F:882:VAL:HG13	1.94	0.50
2:H:531:HIS:CG	2:N:532:ASN:HD22	2.30	0.50
2:H:812:GLU:O	2:H:816:VAL:HG23	2.12	0.50
1:I:472:ARG:HG2	2:J:874:GLU:HB3	1.94	0.50
2:J:805:ARG:NH1	2:J:817:ALA:O	2.45	0.50
2:J:812:GLU:O	2:J:816:VAL:HG23	2.12	0.50
1:M:472:ARG:HG2	2:N:874:GLU:HB3	1.94	0.50
2:N:520:LYS:HA	2:V:529:VAL:HG13	1.92	0.50
1:O:413:SER:HB3	1:O:467:ALA:HB1	1.93	0.50
2:P:847:HIS:N	2:P:850:GLN:OE1	2.30	0.50
1:Q:249:VAL:HG22	1:Q:273:ASP:HB3	1.94	0.50
1:Q:306:LEU:HD13	1:Q:316:ILE:HG12	1.92	0.50
1:Q:391:ILE:O	1:Q:395:LEU:HG	2.12	0.50
1:Q:413:SER:HB3	1:Q:467:ALA:HB1	1.93	0.50
2:R:553:LEU:O	2:R:557:VAL:HG23	2.11	0.50
2:R:805:ARG:NH1	2:R:817:ALA:O	2.45	0.50
1:S:249:VAL:HG22	1:S:273:ASP:HB3	1.94	0.50
1:S:391:ILE:O	1:S:395:LEU:HG	2.12	0.50
2:T:704:TYR:HE2	2:T:745:LEU:HD11	1.77	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:35:LEU:HB2	1:C:55:VAL:HG21	1.94	0.49
2:D:532:ASN:HD22	2:F:531:HIS:CG	2.30	0.49
1:E:227:ALA:HB1	1:E:244:LEU:HD23	1.94	0.49
2:F:687:ALA:O	2:F:703:VAL:HG22	2.12	0.49
1:I:346:ALA:HB1	1:I:401:GLU:CB	2.41	0.49
2:J:507:ARG:HD2	2:J:507:ARG:C	2.37	0.49
1:O:227:ALA:HB1	1:O:244:LEU:HD23	1.94	0.49
2:B:507:ARG:HD2	2:B:507:ARG:C	2.37	0.49
2:B:687:ALA:O	2:B:703:VAL:HG22	2.12	0.49
2:B:812:GLU:O	2:B:816:VAL:HG23	2.12	0.49
1:C:227:ALA:HB1	1:C:244:LEU:CD2	2.41	0.49
1:E:249:VAL:HG22	1:E:273:ASP:HB3	1.94	0.49
2:H:528:LEU:O	2:H:532:ASN:OD1	2.29	0.49
1:K:257:LYS:NZ	1:K:315:GLU:OE2	2.32	0.49
2:L:805:ARG:NH1	2:L:817:ALA:O	2.45	0.49
1:M:391:ILE:O	1:M:395:LEU:HG	2.12	0.49
2:N:507:ARG:HD2	2:N:507:ARG:C	2.37	0.49
2:N:531:HIS:CG	2:V:532:ASN:HD22	2.30	0.49
2:N:847:HIS:N	2:N:850:GLN:OE1	2.30	0.49
1:O:249:VAL:HG22	1:O:273:ASP:HB3	1.94	0.49
1:O:321:ALA:HA	1:O:324:ILE:HG22	1.93	0.49
1:O:391:ILE:O	1:O:395:LEU:HG	2.12	0.49
2:R:507:ARG:HD2	2:R:507:ARG:C	2.37	0.49
1:U:227:ALA:HB1	1:U:244:LEU:HD23	1.94	0.49
2:V:507:ARG:HD2	2:V:507:ARG:C	2.37	0.49
1:W:440:GLU:HA	1:W:484:VAL:O	2.12	0.49
2:X:812:GLU:O	2:X:816:VAL:HG23	2.12	0.49
1:A:212:ARG:CZ	1:A:216:LYS:HE3	2.43	0.49
2:D:733:GLU:HG2	2:D:770:LEU:HD21	1.93	0.49
1:E:391:ILE:O	1:E:395:LEU:HG	2.12	0.49
1:G:445:ILE:HB	1:G:448:LEU:HD11	1.95	0.49
1:I:35:LEU:HB2	1:I:55:VAL:HG21	1.94	0.49
2:J:532:ASN:HD22	2:L:531:HIS:CG	2.30	0.49
2:N:498:LEU:HD21	2:N:548:ILE:HB	1.93	0.49
2:P:553:LEU:O	2:P:557:VAL:HG23	2.11	0.49
1:Q:227:ALA:HB1	1:Q:244:LEU:CD2	2.41	0.49
2:T:531:HIS:CG	2:X:532:ASN:HD22	2.30	0.49
1:U:440:GLU:HA	1:U:484:VAL:O	2.12	0.49
1:A:453:GLN:OE1	2:B:855:TYR:OH	2.30	0.49
2:B:532:ASN:HD22	2:D:531:HIS:CG	2.30	0.49
2:D:498:LEU:HD21	2:D:548:ILE:HB	1.93	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:212:ARG:CZ	1:E:216:LYS:HE3	2.42	0.49
1:I:391:ILE:O	1:I:395:LEU:HG	2.12	0.49
1:K:440:GLU:HA	1:K:484:VAL:O	2.12	0.49
1:M:440:GLU:HA	1:M:484:VAL:O	2.12	0.49
2:P:498:LEU:HD21	2:P:548:ILE:HB	1.93	0.49
2:P:704:TYR:HE2	2:P:745:LEU:HD11	1.77	0.49
2:V:812:GLU:O	2:V:816:VAL:HG23	2.12	0.49
1:W:227:ALA:HB1	1:W:244:LEU:HD23	1.94	0.49
1:W:413:SER:HB3	1:W:467:ALA:HB1	1.93	0.49
1:E:227:ALA:HB1	1:E:244:LEU:CD2	2.41	0.49
2:F:805:ARG:NH1	2:F:817:ALA:O	2.45	0.49
2:F:812:GLU:O	2:F:816:VAL:HG23	2.12	0.49
1:G:212:ARG:CZ	1:G:216:LYS:HE3	2.43	0.49
2:H:507:ARG:HD2	2:H:507:ARG:C	2.37	0.49
2:L:704:TYR:HE2	2:L:745:LEU:HD11	1.77	0.49
2:L:812:GLU:O	2:L:816:VAL:HG23	2.12	0.49
1:M:35:LEU:HB2	1:M:55:VAL:HG21	1.94	0.49
1:M:249:VAL:HG22	1:M:273:ASP:HB3	1.94	0.49
2:P:812:GLU:O	2:P:816:VAL:HG23	2.12	0.49
1:S:212:ARG:CZ	1:S:216:LYS:HE3	2.42	0.49
1:S:227:ALA:HB1	1:S:244:LEU:HD23	1.94	0.49
1:U:472:ARG:HG2	2:V:874:GLU:HB3	1.94	0.49
1:A:227:ALA:HB1	1:A:244:LEU:HD23	1.94	0.49
1:C:440:GLU:HA	1:C:484:VAL:O	2.12	0.49
1:G:472:ARG:HG2	2:H:874:GLU:HB3	1.94	0.49
2:H:733:GLU:HG2	2:H:770:LEU:HD21	1.93	0.49
1:K:249:VAL:HG22	1:K:273:ASP:HB3	1.94	0.49
2:L:687:ALA:O	2:L:703:VAL:HG22	2.13	0.49
1:M:61:ARG:NH1	1:M:65:GLU:OE2	2.43	0.49
1:M:299:VAL:HG11	1:M:352:ILE:HG12	1.95	0.49
2:N:867:VAL:HG11	2:N:882:VAL:HG13	1.94	0.49
1:Q:35:LEU:HB2	1:Q:55:VAL:HG21	1.94	0.49
1:Q:445:ILE:HB	1:Q:448:LEU:HD11	1.95	0.49
2:R:867:VAL:HG11	2:R:882:VAL:HG13	1.94	0.49
1:S:445:ILE:HB	1:S:448:LEU:HD11	1.95	0.49
1:S:453:GLN:OE1	2:T:855:TYR:OH	2.30	0.49
2:T:862:ALA:HB2	2:T:869:VAL:HG21	1.95	0.49
1:U:100:ARG:HE	1:U:162:ARG:HD3	1.78	0.49
1:U:445:ILE:HB	1:U:448:LEU:HD11	1.95	0.49
1:W:391:ILE:O	1:W:395:LEU:HG	2.12	0.49
1:W:472:ARG:HG2	2:X:874:GLU:HB3	1.94	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:779:LEU:HD11	2:B:813:LEU:HD22	1.95	0.49
1:C:439:ASN:O	1:C:486:GLY:N	2.33	0.49
1:E:440:GLU:HA	1:E:484:VAL:O	2.12	0.49
1:E:445:ILE:HB	1:E:448:LEU:HD11	1.95	0.49
2:F:687:ALA:HB1	2:F:703:VAL:HG13	1.93	0.49
1:G:100:ARG:HE	1:G:162:ARG:HD3	1.78	0.49
1:G:249:VAL:HG22	1:G:273:ASP:HB3	1.94	0.49
2:J:531:HIS:CG	2:P:532:ASN:HD22	2.30	0.49
2:J:862:ALA:HB2	2:J:869:VAL:HG21	1.95	0.49
1:M:346:ALA:HB1	1:M:401:GLU:CB	2.40	0.49
1:M:421:ILE:O	1:M:422:LYS:C	2.55	0.49
1:O:440:GLU:HA	1:O:484:VAL:O	2.12	0.49
2:P:867:VAL:HG11	2:P:882:VAL:HG13	1.95	0.49
2:R:687:ALA:O	2:R:703:VAL:HG22	2.13	0.49
2:R:704:TYR:HE2	2:R:745:LEU:HD11	1.77	0.49
1:S:376:GLU:O	1:S:379:ARG:HG2	2.13	0.49
2:T:867:VAL:HG11	2:T:882:VAL:HG13	1.94	0.49
1:U:61:ARG:NH1	1:U:65:GLU:OE2	2.44	0.49
2:V:498:LEU:HD21	2:V:548:ILE:HB	1.94	0.49
2:V:704:TYR:HE2	2:V:745:LEU:HD11	1.77	0.49
2:X:507:ARG:HD2	2:X:507:ARG:C	2.37	0.49
1:A:445:ILE:HB	1:A:448:LEU:HD11	1.95	0.49
2:B:867:VAL:HG11	2:B:882:VAL:HG13	1.95	0.49
1:C:376:GLU:O	1:C:379:ARG:HG2	2.13	0.49
2:D:687:ALA:O	2:D:703:VAL:HG22	2.13	0.49
2:F:498:LEU:HD21	2:F:548:ILE:HB	1.93	0.49
1:I:445:ILE:HB	1:I:448:LEU:HD11	1.95	0.49
2:L:733:GLU:HG2	2:L:770:LEU:HD21	1.93	0.49
2:L:779:LEU:HD11	2:L:813:LEU:HD22	1.95	0.49
1:M:439:ASN:O	1:M:486:GLY:N	2.33	0.49
1:S:35:LEU:HB2	1:S:55:VAL:HG21	1.94	0.49
2:V:677:ALA:O	2:V:681:LEU:HG	2.13	0.49
2:V:779:LEU:HD11	2:V:813:LEU:HD22	1.95	0.49
1:W:445:ILE:HB	1:W:448:LEU:HD11	1.95	0.49
1:A:100:ARG:HE	1:A:162:ARG:HD3	1.78	0.49
2:B:805:ARG:NH1	2:B:817:ALA:O	2.45	0.49
2:D:677:ALA:O	2:D:681:LEU:HG	2.13	0.49
1:E:376:GLU:O	1:E:379:ARG:HG2	2.13	0.49
2:F:779:LEU:HD11	2:F:813:LEU:HD22	1.95	0.49
1:G:431:THR:O	1:G:445:ILE:HG23	2.13	0.49
2:H:677:ALA:O	2:H:681:LEU:HG	2.13	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:779:LEU:HD11	2:H:813:LEU:HD22	1.95	0.49
1:I:212:ARG:CZ	1:I:216:LYS:HE3	2.43	0.49
2:J:867:VAL:HG11	2:J:882:VAL:HG13	1.95	0.49
2:L:507:ARG:HD2	2:L:507:ARG:C	2.37	0.49
2:L:532:ASN:HD22	2:P:531:HIS:CG	2.30	0.49
1:M:376:GLU:O	1:M:379:ARG:HG2	2.13	0.49
1:M:445:ILE:HB	1:M:448:LEU:HD11	1.95	0.49
2:N:687:ALA:HB1	2:N:703:VAL:HG13	1.93	0.49
2:P:687:ALA:O	2:P:703:VAL:HG22	2.12	0.49
2:P:805:ARG:NH1	2:P:817:ALA:O	2.45	0.49
1:Q:212:ARG:CZ	1:Q:216:LYS:HE3	2.42	0.49
2:R:590:GLU:OE1	2:R:644:LYS:NZ	2.37	0.49
2:R:677:ALA:O	2:R:681:LEU:HG	2.13	0.49
1:U:413:SER:HB3	1:U:467:ALA:HB1	1.93	0.49
2:X:687:ALA:O	2:X:703:VAL:HG22	2.13	0.49
1:A:299:VAL:HG11	1:A:352:ILE:HG12	1.95	0.49
1:A:322:ARG:NH2	1:A:326:GLU:OE1	2.40	0.49
2:B:733:GLU:HG2	2:B:770:LEU:HD21	1.93	0.49
2:B:805:ARG:HA	2:B:814:ALA:HA	1.95	0.49
1:C:421:ILE:O	1:C:422:LYS:C	2.55	0.49
2:D:862:ALA:HB2	2:D:869:VAL:HG21	1.95	0.49
1:E:100:ARG:HE	1:E:162:ARG:HD3	1.78	0.49
2:F:704:TYR:HE2	2:F:745:LEU:HD11	1.77	0.49
1:O:376:GLU:O	1:O:379:ARG:HG2	2.13	0.49
1:O:431:THR:O	1:O:445:ILE:HG23	2.13	0.49
2:P:507:ARG:HD2	2:P:507:ARG:C	2.37	0.49
1:Q:227:ALA:HB1	1:Q:244:LEU:HD23	1.94	0.49
1:Q:376:GLU:O	1:Q:379:ARG:HG2	2.13	0.49
1:S:440:GLU:HA	1:S:484:VAL:O	2.12	0.49
2:T:687:ALA:O	2:T:703:VAL:HG22	2.12	0.49
1:W:212:ARG:CZ	1:W:216:LYS:HE3	2.43	0.49
1:W:299:VAL:HG11	1:W:352:ILE:HG12	1.95	0.49
1:A:431:THR:O	1:A:445:ILE:HG23	2.13	0.48
1:C:445:ILE:HB	1:C:448:LEU:HD11	1.95	0.48
2:D:779:LEU:HD11	2:D:813:LEU:HD22	1.95	0.48
1:I:100:ARG:HE	1:I:162:ARG:HD3	1.78	0.48
1:I:227:ALA:HB1	1:I:244:LEU:HD23	1.94	0.48
2:J:704:TYR:HE2	2:J:745:LEU:HD11	1.77	0.48
1:U:35:LEU:HB2	1:U:55:VAL:HG21	1.94	0.48
2:V:867:VAL:HG11	2:V:882:VAL:HG13	1.95	0.48
2:X:512:LEU:HD13	2:X:534:ALA:HB1	1.96	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:472:ARG:HG2	2:F:874:GLU:HB3	1.93	0.48
2:H:498:LEU:HD21	2:H:548:ILE:HB	1.93	0.48
1:I:376:GLU:O	1:I:379:ARG:HG2	2.13	0.48
2:J:779:LEU:HD11	2:J:813:LEU:HD22	1.95	0.48
2:L:862:ALA:HB2	2:L:869:VAL:HG21	1.95	0.48
2:N:862:ALA:HB2	2:N:869:VAL:HG21	1.95	0.48
1:O:212:ARG:CZ	1:O:216:LYS:HE3	2.43	0.48
1:U:249:VAL:HG22	1:U:273:ASP:HB3	1.94	0.48
2:V:805:ARG:HA	2:V:814:ALA:HA	1.95	0.48
1:W:376:GLU:O	1:W:379:ARG:HG2	2.13	0.48
1:C:212:ARG:CZ	1:C:216:LYS:HE3	2.42	0.48
1:C:299:VAL:HG11	1:C:352:ILE:HG12	1.95	0.48
1:C:431:THR:O	1:C:445:ILE:HG23	2.13	0.48
1:E:299:VAL:HG11	1:E:352:ILE:HG12	1.95	0.48
2:F:805:ARG:HA	2:F:814:ALA:HA	1.95	0.48
1:G:227:ALA:HB1	1:G:244:LEU:HD23	1.94	0.48
1:G:440:GLU:HA	1:G:484:VAL:O	2.12	0.48
2:H:862:ALA:HB2	2:H:869:VAL:HG21	1.95	0.48
1:I:440:GLU:HA	1:I:484:VAL:O	2.12	0.48
2:J:677:ALA:O	2:J:681:LEU:HG	2.13	0.48
2:J:759:GLU:OE2	2:J:803:LYS:NZ	2.23	0.48
1:K:100:ARG:HE	1:K:162:ARG:HD3	1.78	0.48
1:K:212:ARG:CZ	1:K:216:LYS:HE3	2.42	0.48
1:M:212:ARG:CZ	1:M:216:LYS:HE3	2.43	0.48
2:N:677:ALA:O	2:N:681:LEU:HG	2.13	0.48
2:N:805:ARG:HA	2:N:814:ALA:HA	1.96	0.48
2:R:498:LEU:HD21	2:R:548:ILE:HB	1.94	0.48
2:T:805:ARG:HA	2:T:814:ALA:HA	1.95	0.48
2:X:677:ALA:O	2:X:681:LEU:HG	2.13	0.48
2:X:704:TYR:HE2	2:X:745:LEU:HD11	1.77	0.48
1:A:252:LYS:NZ	1:A:269:GLU:OE1	2.39	0.48
1:A:440:GLU:HA	1:A:484:VAL:O	2.12	0.48
1:A:458:GLU:HG3	2:B:852:ARG:HB2	1.96	0.48
1:E:439:ASN:O	1:E:486:GLY:N	2.33	0.48
2:H:867:VAL:HG11	2:H:882:VAL:HG13	1.94	0.48
1:I:453:GLN:OE1	2:J:855:TYR:OH	2.30	0.48
1:M:442:LYS:HA	1:M:482:ILE:O	2.14	0.48
1:O:442:LYS:HA	1:O:482:ILE:O	2.14	0.48
2:P:790:ASP:OD2	2:P:793:SER:N	2.38	0.48
1:Q:442:LYS:HA	1:Q:482:ILE:O	2.14	0.48
2:R:805:ARG:HA	2:R:814:ALA:HA	1.95	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:R:862:ALA:HB2	2:R:869:VAL:HG21	1.95	0.48
2:T:742:LEU:HA	2:T:745:LEU:HD12	1.96	0.48
2:T:847:HIS:N	2:T:850:GLN:OE1	2.30	0.48
1:U:299:VAL:HG11	1:U:352:ILE:HG12	1.95	0.48
1:U:376:GLU:O	1:U:379:ARG:HG2	2.13	0.48
1:U:421:ILE:O	1:U:422:LYS:C	2.55	0.48
1:U:431:THR:O	1:U:445:ILE:HG23	2.13	0.48
1:W:263:GLU:HG2	1:W:319:ILE:HG13	1.95	0.48
1:A:376:GLU:O	1:A:379:ARG:HG2	2.13	0.48
1:A:442:LYS:HA	1:A:482:ILE:O	2.14	0.48
1:G:263:GLU:HG2	1:G:319:ILE:HG13	1.96	0.48
2:H:512:LEU:HD13	2:H:534:ALA:HB1	1.96	0.48
2:J:687:ALA:O	2:J:703:VAL:HG22	2.12	0.48
1:K:442:LYS:HA	1:K:482:ILE:O	2.13	0.48
2:L:677:ALA:O	2:L:681:LEU:HG	2.13	0.48
2:N:512:LEU:HD13	2:N:534:ALA:HB1	1.96	0.48
1:Q:61:ARG:NH1	1:Q:65:GLU:OE2	2.44	0.48
1:Q:263:GLU:HG2	1:Q:319:ILE:HG13	1.96	0.48
1:U:212:ARG:CZ	1:U:216:LYS:HE3	2.42	0.48
1:W:249:VAL:HG22	1:W:273:ASP:HB3	1.94	0.48
1:W:431:THR:O	1:W:445:ILE:HG23	2.13	0.48
1:W:458:GLU:HG3	2:X:852:ARG:HB2	1.96	0.48
1:A:249:VAL:HG22	1:A:273:ASP:HB3	1.94	0.48
2:B:677:ALA:O	2:B:681:LEU:HG	2.13	0.48
1:C:442:LYS:HA	1:C:482:ILE:O	2.14	0.48
1:C:458:GLU:HG3	2:D:852:ARG:HB2	1.96	0.48
2:D:867:VAL:HG11	2:D:882:VAL:HG13	1.94	0.48
1:E:431:THR:O	1:E:445:ILE:HG23	2.13	0.48
2:L:805:ARG:HA	2:L:814:ALA:HA	1.95	0.48
2:L:867:VAL:HG11	2:L:882:VAL:HG13	1.94	0.48
2:N:742:LEU:HD22	2:N:750:ALA:HB1	1.96	0.48
2:N:779:LEU:HD11	2:N:813:LEU:HD22	1.95	0.48
1:O:299:VAL:HG11	1:O:352:ILE:HG12	1.95	0.48
2:P:677:ALA:O	2:P:681:LEU:HG	2.13	0.48
1:Q:431:THR:O	1:Q:445:ILE:HG23	2.13	0.48
1:S:100:ARG:HE	1:S:162:ARG:HD3	1.78	0.48
1:S:431:THR:O	1:S:445:ILE:HG23	2.13	0.48
2:T:677:ALA:O	2:T:681:LEU:HG	2.13	0.48
1:U:346:ALA:HB1	1:U:401:GLU:CB	2.41	0.48
1:E:458:GLU:HG3	2:F:852:ARG:HB2	1.96	0.48
2:H:532:ASN:ND2	2:V:519:LEU:HD21	2.29	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:616:ALA:HB2	2:H:663:TYR:CD1	2.49	0.48
2:J:742:LEU:HA	2:J:745:LEU:HD12	1.96	0.48
1:K:321:ALA:O	1:K:324:ILE:HG22	2.14	0.48
1:M:431:THR:O	1:M:445:ILE:HG23	2.13	0.48
2:P:862:ALA:HB2	2:P:869:VAL:HG21	1.95	0.48
1:Q:440:GLU:HA	1:Q:484:VAL:O	2.12	0.48
1:U:321:ALA:O	1:U:324:ILE:HG22	2.14	0.48
1:U:391:ILE:O	1:U:395:LEU:HG	2.12	0.48
1:W:100:ARG:HE	1:W:162:ARG:HD3	1.78	0.48
1:W:421:ILE:O	1:W:422:LYS:C	2.55	0.48
2:B:512:LEU:HD13	2:B:534:ALA:HB1	1.96	0.48
2:B:862:ALA:HB2	2:B:869:VAL:HG21	1.95	0.48
2:D:742:LEU:HD22	2:D:750:ALA:HB1	1.96	0.48
1:E:292:CYS:CB	1:E:344:CYS:HA	2.44	0.48
1:G:249:VAL:O	1:G:253:VAL:HG23	2.14	0.48
1:G:442:LYS:HA	1:G:482:ILE:O	2.13	0.48
2:H:687:ALA:O	2:H:703:VAL:HG22	2.13	0.48
1:K:227:ALA:HB1	1:K:244:LEU:HD23	1.94	0.48
2:L:742:LEU:HA	2:L:745:LEU:HD12	1.95	0.48
1:M:100:ARG:HE	1:M:162:ARG:HD3	1.78	0.48
1:O:322:ARG:NH2	1:O:326:GLU:OE1	2.40	0.48
2:R:519:LEU:HD21	2:T:532:ASN:ND2	2.29	0.48
1:S:299:VAL:HG11	1:S:352:ILE:HG12	1.95	0.48
2:T:512:LEU:HD13	2:T:534:ALA:HB1	1.96	0.48
2:V:687:ALA:O	2:V:703:VAL:HG22	2.12	0.48
2:X:742:LEU:HA	2:X:745:LEU:HD12	1.96	0.48
2:X:867:VAL:HG11	2:X:882:VAL:HG13	1.95	0.48
1:A:461:LEU:HB3	2:B:848:ILE:HG12	1.96	0.48
2:F:677:ALA:O	2:F:681:LEU:HG	2.13	0.48
1:G:299:VAL:HG11	1:G:352:ILE:HG12	1.95	0.48
1:G:421:ILE:O	1:G:422:LYS:C	2.55	0.48
1:K:376:GLU:O	1:K:379:ARG:HG2	2.13	0.48
1:M:292:CYS:CB	1:M:344:CYS:HA	2.44	0.48
2:R:742:LEU:HD22	2:R:750:ALA:HB1	1.96	0.48
1:S:263:GLU:HG2	1:S:319:ILE:HG13	1.96	0.48
1:W:321:ALA:O	1:W:324:ILE:HG22	2.14	0.48
1:W:461:LEU:HB3	2:X:848:ILE:HG12	1.96	0.48
2:X:742:LEU:HD22	2:X:750:ALA:HB1	1.96	0.48
2:X:779:LEU:HD11	2:X:813:LEU:HD22	1.95	0.48
2:X:862:ALA:HB2	2:X:869:VAL:HG21	1.95	0.48
1:A:19:ARG:HD2	1:A:20:LYS:N	2.29	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:227:ALA:HB1	1:C:244:LEU:HD23	1.94	0.48
1:E:321:ALA:O	1:E:324:ILE:HG22	2.14	0.48
2:F:742:LEU:HA	2:F:745:LEU:HD12	1.96	0.48
2:H:742:LEU:HD22	2:H:750:ALA:HB1	1.96	0.48
2:H:805:ARG:HA	2:H:814:ALA:HA	1.95	0.48
2:J:616:ALA:HB2	2:J:663:TYR:CD1	2.49	0.48
2:J:742:LEU:HD22	2:J:750:ALA:HB1	1.96	0.48
1:K:445:ILE:HB	1:K:448:LEU:HD11	1.95	0.48
2:P:616:ALA:HB2	2:P:663:TYR:CD1	2.49	0.48
1:Q:291:ILE:O	1:Q:295:VAL:HG23	2.14	0.48
1:Q:299:VAL:HG11	1:Q:352:ILE:HG12	1.95	0.48
1:Q:346:ALA:HB1	1:Q:401:GLU:CB	2.41	0.48
1:S:321:ALA:O	1:S:324:ILE:HG22	2.14	0.48
1:S:355:ALA:HA	1:S:358:ARG:NH2	2.29	0.48
1:A:256:LEU:O	1:A:261:THR:N	2.47	0.47
1:A:292:CYS:CB	1:A:344:CYS:HA	2.44	0.47
2:B:519:LEU:HD21	2:F:532:ASN:ND2	2.29	0.47
1:C:100:ARG:HE	1:C:162:ARG:HD3	1.78	0.47
1:G:291:ILE:O	1:G:295:VAL:HG23	2.14	0.47
1:M:355:ALA:HA	1:M:358:ARG:NH2	2.29	0.47
2:N:687:ALA:O	2:N:703:VAL:HG22	2.13	0.47
2:N:704:TYR:HE2	2:N:745:LEU:HD11	1.77	0.47
1:O:19:ARG:HD2	1:O:20:LYS:N	2.29	0.47
2:P:805:ARG:HA	2:P:814:ALA:HA	1.95	0.47
1:Q:249:VAL:O	1:Q:253:VAL:HG23	2.14	0.47
1:Q:458:GLU:HG3	2:R:852:ARG:HB2	1.96	0.47
2:R:532:ASN:ND2	2:X:519:LEU:HD21	2.29	0.47
1:S:291:ILE:O	1:S:295:VAL:HG23	2.14	0.47
1:S:292:CYS:CB	1:S:344:CYS:HA	2.44	0.47
1:S:417:VAL:CG2	1:S:467:ALA:HB2	2.44	0.47
1:S:442:LYS:HA	1:S:482:ILE:O	2.14	0.47
2:T:615:LYS:NZ	2:T:619:GLU:OE2	2.42	0.47
1:W:61:ARG:NH1	1:W:65:GLU:OE2	2.44	0.47
1:W:453:GLN:OE1	2:X:855:TYR:OH	2.30	0.47
1:A:321:ALA:O	1:A:324:ILE:HG22	2.14	0.47
1:G:417:VAL:CG2	1:G:467:ALA:HB2	2.44	0.47
2:H:519:LEU:HD21	2:N:532:ASN:ND2	2.29	0.47
2:H:704:TYR:HE2	2:H:745:LEU:HD11	1.77	0.47
1:K:249:VAL:O	1:K:253:VAL:HG23	2.14	0.47
1:O:458:GLU:HG3	2:P:852:ARG:HB2	1.96	0.47
2:P:742:LEU:HD22	2:P:750:ALA:HB1	1.96	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:Q:321:ALA:O	1:Q:324:ILE:HG22	2.14	0.47
2:T:616:ALA:HB2	2:T:663:TYR:CD1	2.49	0.47
2:T:742:LEU:HD22	2:T:750:ALA:HB1	1.96	0.47
1:U:292:CYS:CB	1:U:344:CYS:HA	2.44	0.47
2:V:742:LEU:HD22	2:V:750:ALA:HB1	1.96	0.47
1:C:321:ALA:O	1:C:324:ILE:HG22	2.14	0.47
1:C:355:ALA:HA	1:C:358:ARG:NH2	2.29	0.47
1:C:461:LEU:HB3	2:D:848:ILE:HG12	1.96	0.47
2:D:759:GLU:OE2	2:D:803:LYS:NZ	2.23	0.47
2:F:512:LEU:HD13	2:F:534:ALA:HB1	1.96	0.47
2:F:742:LEU:HD22	2:F:750:ALA:HB1	1.96	0.47
1:I:291:ILE:O	1:I:295:VAL:HG23	2.14	0.47
1:I:417:VAL:CG2	1:I:467:ALA:HB2	2.44	0.47
1:K:263:GLU:HG2	1:K:319:ILE:HG13	1.96	0.47
1:K:292:CYS:CB	1:K:344:CYS:HA	2.44	0.47
1:O:461:LEU:HB3	2:P:848:ILE:HG12	1.96	0.47
1:Q:19:ARG:HD2	1:Q:20:LYS:N	2.29	0.47
2:R:512:LEU:HD13	2:R:534:ALA:HB1	1.95	0.47
2:R:616:ALA:HB2	2:R:663:TYR:CD1	2.49	0.47
2:R:742:LEU:HA	2:R:745:LEU:HD12	1.96	0.47
2:T:519:LEU:HD21	2:X:532:ASN:ND2	2.29	0.47
2:T:790:ASP:OD2	2:T:793:SER:N	2.38	0.47
2:V:512:LEU:HD13	2:V:534:ALA:HB1	1.96	0.47
2:V:862:ALA:HB2	2:V:869:VAL:HG21	1.95	0.47
1:W:249:VAL:O	1:W:253:VAL:HG23	2.14	0.47
1:W:291:ILE:O	1:W:295:VAL:HG23	2.14	0.47
1:W:292:CYS:CB	1:W:344:CYS:HA	2.44	0.47
2:X:805:ARG:HH11	2:X:817:ALA:C	2.23	0.47
2:D:790:ASP:OD2	2:D:793:SER:N	2.38	0.47
1:G:376:GLU:O	1:G:379:ARG:HG2	2.13	0.47
1:G:461:LEU:HB3	2:H:848:ILE:HG12	1.96	0.47
1:I:292:CYS:CB	1:I:344:CYS:HA	2.44	0.47
1:I:299:VAL:HG11	1:I:352:ILE:HG12	1.95	0.47
1:I:442:LYS:HA	1:I:482:ILE:O	2.14	0.47
2:L:512:LEU:HD13	2:L:534:ALA:HB1	1.96	0.47
1:M:19:ARG:HD2	1:M:20:LYS:N	2.30	0.47
1:M:263:GLU:HG2	1:M:319:ILE:HG13	1.95	0.47
1:O:263:GLU:HG2	1:O:319:ILE:HG13	1.96	0.47
2:P:779:LEU:HD11	2:P:813:LEU:HD22	1.95	0.47
2:R:779:LEU:HD11	2:R:813:LEU:HD22	1.95	0.47
1:S:322:ARG:NH2	1:S:326:GLU:OE1	2.40	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:V:805:ARG:HH11	2:V:817:ALA:C	2.23	0.47
2:X:616:ALA:HB2	2:X:663:TYR:CD1	2.49	0.47
1:C:417:VAL:CG2	1:C:467:ALA:HB2	2.44	0.47
2:D:532:ASN:ND2	2:F:519:LEU:HD21	2.29	0.47
1:G:292:CYS:CB	1:G:344:CYS:HA	2.44	0.47
1:G:355:ALA:HA	1:G:358:ARG:NH2	2.29	0.47
1:I:249:VAL:O	1:I:253:VAL:HG23	2.14	0.47
1:I:431:THR:O	1:I:445:ILE:HG23	2.13	0.47
2:J:826:MET:CE	2:J:850:GLN:CD	2.88	0.47
1:K:417:VAL:CG2	1:K:467:ALA:HB2	2.44	0.47
1:K:421:ILE:O	1:K:422:LYS:C	2.55	0.47
1:M:291:ILE:O	1:M:295:VAL:HG23	2.14	0.47
1:M:321:ALA:O	1:M:324:ILE:HG22	2.14	0.47
1:O:100:ARG:HE	1:O:162:ARG:HD3	1.78	0.47
1:Q:292:CYS:CB	1:Q:344:CYS:HA	2.44	0.47
1:S:461:LEU:HB3	2:T:848:ILE:HG12	1.96	0.47
2:T:779:LEU:HD11	2:T:813:LEU:HD22	1.95	0.47
2:V:742:LEU:HA	2:V:745:LEU:HD12	1.96	0.47
1:W:442:LYS:HA	1:W:482:ILE:O	2.14	0.47
1:A:417:VAL:CG2	1:A:467:ALA:HB2	2.44	0.47
2:B:529:VAL:CG2	2:D:523:PRO:HB3	2.45	0.47
2:B:616:ALA:HB2	2:B:663:TYR:CD1	2.49	0.47
2:B:742:LEU:HD22	2:B:750:ALA:HB1	1.96	0.47
2:B:742:LEU:HA	2:B:745:LEU:HD12	1.96	0.47
1:E:445:ILE:HG22	1:E:448:LEU:HG	1.97	0.47
2:F:862:ALA:HB2	2:F:869:VAL:HG21	1.95	0.47
2:H:805:ARG:HH11	2:H:817:ALA:C	2.23	0.47
1:K:291:ILE:O	1:K:295:VAL:HG23	2.14	0.47
1:K:304:GLU:HG2	1:K:308:ARG:HE	1.80	0.47
1:K:431:THR:O	1:K:445:ILE:HG23	2.13	0.47
1:K:461:LEU:HB3	2:L:848:ILE:HG12	1.96	0.47
1:M:249:VAL:O	1:M:253:VAL:HG23	2.14	0.47
1:M:417:VAL:CG2	1:M:467:ALA:HB2	2.44	0.47
1:O:421:ILE:O	1:O:422:LYS:C	2.55	0.47
1:Q:461:LEU:HB3	2:R:848:ILE:HG12	1.96	0.47
1:S:288:TYR:CG	1:S:340:VAL:HG13	2.50	0.47
2:T:653:ASP:OD1	2:T:656:ARG:NH2	2.44	0.47
2:T:664:ALA:HB2	2:T:734:ILE:HG21	1.97	0.47
2:T:826:MET:CE	2:T:850:GLN:CD	2.88	0.47
1:U:417:VAL:CG2	1:U:467:ALA:HB2	2.44	0.47
1:U:442:LYS:HA	1:U:482:ILE:O	2.14	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:V:653:ASP:OD1	2:V:656:ARG:NH2	2.44	0.47
1:W:417:VAL:CG2	1:W:467:ALA:HB2	2.44	0.47
1:A:249:VAL:O	1:A:253:VAL:HG23	2.14	0.47
1:A:253:VAL:HG13	1:A:266:ILE:HG21	1.97	0.47
1:C:19:ARG:HD2	1:C:20:LYS:N	2.29	0.47
1:C:292:CYS:CB	1:C:344:CYS:HA	2.44	0.47
2:D:616:ALA:HB2	2:D:663:TYR:CD1	2.49	0.47
2:D:742:LEU:HA	2:D:745:LEU:HD12	1.96	0.47
1:E:249:VAL:O	1:E:253:VAL:HG23	2.14	0.47
1:E:317:ALA:HA	1:E:369:ILE:HG23	1.97	0.47
1:E:355:ALA:HA	1:E:358:ARG:NH2	2.29	0.47
1:G:288:TYR:CG	1:G:340:VAL:HG13	2.50	0.47
2:H:523:PRO:HB3	2:N:529:VAL:CG2	2.45	0.47
1:I:19:ARG:HD2	1:I:20:LYS:N	2.29	0.47
1:I:263:GLU:HG2	1:I:319:ILE:HG13	1.96	0.47
2:J:519:LEU:HD21	2:P:532:ASN:ND2	2.29	0.47
2:J:790:ASP:OD2	2:J:793:SER:N	2.38	0.47
2:J:805:ARG:HA	2:J:814:ALA:HA	1.95	0.47
2:J:805:ARG:HH11	2:J:817:ALA:C	2.23	0.47
1:K:19:ARG:HD2	1:K:20:LYS:N	2.30	0.47
2:L:529:VAL:CG2	2:P:523:PRO:HB3	2.44	0.47
2:L:532:ASN:ND2	2:P:519:LEU:HD21	2.29	0.47
2:L:606:VAL:HG22	2:L:656:ARG:HB2	1.97	0.47
2:L:616:ALA:HB2	2:L:663:TYR:CD1	2.49	0.47
2:L:826:MET:CE	2:L:850:GLN:CD	2.88	0.47
1:M:461:LEU:HB3	2:N:848:ILE:HG12	1.96	0.47
2:N:606:VAL:HG22	2:N:656:ARG:HB2	1.97	0.47
2:N:616:ALA:HB2	2:N:663:TYR:CD1	2.49	0.47
1:O:321:ALA:O	1:O:324:ILE:HG22	2.14	0.47
1:O:406:LEU:HD13	1:O:416:ILE:CG2	2.42	0.47
1:O:445:ILE:HB	1:O:448:LEU:HD11	1.95	0.47
2:P:606:VAL:HG22	2:P:656:ARG:HB2	1.97	0.47
2:P:664:ALA:HB2	2:P:734:ILE:HG21	1.97	0.47
2:P:742:LEU:HA	2:P:745:LEU:HD12	1.96	0.47
1:Q:100:ARG:HE	1:Q:162:ARG:HD3	1.78	0.47
1:S:253:VAL:HG13	1:S:266:ILE:HG21	1.97	0.47
2:T:523:PRO:HB3	2:X:529:VAL:CG2	2.44	0.47
2:T:606:VAL:HG22	2:T:656:ARG:HB2	1.97	0.47
1:U:19:ARG:HD2	1:U:20:LYS:N	2.29	0.47
1:U:249:VAL:O	1:U:253:VAL:HG23	2.14	0.47
1:U:263:GLU:HG2	1:U:319:ILE:HG13	1.96	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:U:355:ALA:HA	1:U:358:ARG:NH2	2.29	0.47
2:V:664:ALA:HB2	2:V:734:ILE:HG21	1.97	0.47
2:V:826:MET:CE	2:V:850:GLN:CD	2.88	0.47
2:V:847:HIS:N	2:V:850:GLN:OE1	2.30	0.47
1:W:19:ARG:NH1	1:W:20:LYS:HE2	2.30	0.47
1:W:253:VAL:HG13	1:W:266:ILE:HG21	1.97	0.47
1:W:288:TYR:CG	1:W:340:VAL:HG13	2.50	0.47
1:W:304:GLU:HG2	1:W:308:ARG:HE	1.80	0.47
1:W:355:ALA:HA	1:W:358:ARG:NH2	2.29	0.47
2:X:805:ARG:HA	2:X:814:ALA:HA	1.95	0.47
1:A:288:TYR:HB2	1:A:344:CYS:SG	2.55	0.47
2:B:826:MET:CE	2:B:850:GLN:CD	2.88	0.47
1:E:442:LYS:HA	1:E:482:ILE:O	2.14	0.47
2:F:805:ARG:HH11	2:F:817:ALA:C	2.23	0.47
1:G:343:GLU:OE2	1:G:397:ARG:NH2	2.43	0.47
1:I:321:ALA:O	1:I:324:ILE:HG22	2.14	0.47
2:J:532:ASN:ND2	2:L:519:LEU:HD21	2.29	0.47
2:J:801:ALA:HB2	2:J:820:ILE:CG2	2.45	0.47
2:N:519:LEU:HD21	2:V:532:ASN:ND2	2.29	0.47
2:N:805:ARG:HH11	2:N:817:ALA:C	2.23	0.47
2:P:826:MET:CE	2:P:850:GLN:CD	2.88	0.47
1:Q:288:TYR:CG	1:Q:340:VAL:HG13	2.50	0.47
1:Q:355:ALA:HA	1:Q:358:ARG:NH2	2.29	0.47
1:Q:439:ASN:O	1:Q:486:GLY:N	2.33	0.47
2:R:826:MET:CE	2:R:850:GLN:CD	2.88	0.47
1:S:19:ARG:HD2	1:S:20:LYS:N	2.29	0.47
1:S:249:VAL:O	1:S:253:VAL:HG23	2.14	0.47
1:S:288:TYR:HB2	1:S:344:CYS:SG	2.55	0.47
1:S:458:GLU:HG3	2:T:852:ARG:HB2	1.96	0.47
1:U:445:ILE:HG22	1:U:448:LEU:HG	1.97	0.47
1:A:19:ARG:NH1	1:A:20:LYS:HE2	2.30	0.47
1:A:445:ILE:HG22	1:A:448:LEU:HG	1.97	0.47
2:B:664:ALA:HB2	2:B:734:ILE:HG21	1.97	0.47
1:C:249:VAL:O	1:C:253:VAL:HG23	2.14	0.47
1:E:263:GLU:HG2	1:E:319:ILE:HG13	1.96	0.47
2:F:606:VAL:HG22	2:F:656:ARG:HB2	1.97	0.47
2:F:801:ALA:HB2	2:F:820:ILE:CG2	2.45	0.47
1:G:458:GLU:HG3	2:H:852:ARG:HB2	1.96	0.47
2:J:512:LEU:HD13	2:J:534:ALA:HB1	1.96	0.47
2:J:537:GLU:HA	2:L:513:ARG:HH22	1.80	0.47
1:K:458:GLU:HG3	2:L:852:ARG:HB2	1.96	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:M:19:ARG:NH1	1:M:20:LYS:HE2	2.30	0.47
1:M:322:ARG:NH2	1:M:326:GLU:OE1	2.40	0.47
2:N:664:ALA:HB2	2:N:734:ILE:HG21	1.97	0.47
2:N:801:ALA:HB2	2:N:820:ILE:CG2	2.45	0.47
1:O:343:GLU:OE2	1:O:397:ARG:NH2	2.43	0.47
2:P:512:LEU:HD13	2:P:534:ALA:HB1	1.96	0.47
2:P:805:ARG:HH11	2:P:817:ALA:C	2.23	0.47
1:Q:421:ILE:O	1:Q:422:LYS:C	2.55	0.47
1:Q:445:ILE:HG22	1:Q:448:LEU:HG	1.97	0.47
2:R:664:ALA:HB2	2:R:734:ILE:HG21	1.97	0.47
1:S:61:ARG:NH1	1:S:65:GLU:OE2	2.44	0.47
1:W:288:TYR:HB2	1:W:344:CYS:SG	2.55	0.47
2:X:801:ALA:HB2	2:X:820:ILE:CG2	2.45	0.47
1:A:355:ALA:HA	1:A:358:ARG:NH2	2.29	0.47
2:B:847:HIS:N	2:B:850:GLN:OE1	2.30	0.47
1:C:263:GLU:HG2	1:C:319:ILE:HG13	1.96	0.47
2:D:664:ALA:HB2	2:D:734:ILE:HG21	1.97	0.47
2:D:826:MET:CE	2:D:850:GLN:CD	2.88	0.47
1:E:288:TYR:HB2	1:E:344:CYS:SG	2.55	0.47
1:E:406:LEU:HD13	1:E:416:ILE:HG12	1.97	0.47
2:F:616:ALA:HB2	2:F:663:TYR:CD1	2.49	0.47
1:G:304:GLU:HG2	1:G:308:ARG:HE	1.80	0.47
2:H:513:ARG:HH22	2:N:537:GLU:HA	1.80	0.47
2:H:664:ALA:HB2	2:H:734:ILE:HG21	1.97	0.47
1:I:252:LYS:NZ	1:I:269:GLU:OE1	2.39	0.47
1:I:458:GLU:HG3	2:J:852:ARG:HB2	1.96	0.47
1:K:288:TYR:CG	1:K:340:VAL:HG13	2.50	0.47
1:K:299:VAL:HG11	1:K:352:ILE:HG12	1.95	0.47
1:M:458:GLU:HG3	2:N:852:ARG:HB2	1.96	0.47
1:O:417:VAL:CG2	1:O:467:ALA:HB2	2.44	0.47
2:P:779:LEU:HD21	2:P:804:VAL:HG21	1.97	0.47
2:R:606:VAL:HG22	2:R:656:ARG:HB2	1.97	0.47
1:S:19:ARG:NH1	1:S:20:LYS:HE2	2.30	0.47
1:S:406:LEU:HD13	1:S:416:ILE:HG12	1.97	0.47
1:U:406:LEU:HD13	1:U:416:ILE:CG2	2.42	0.47
1:U:461:LEU:HB3	2:V:848:ILE:HG12	1.96	0.47
1:W:445:ILE:HG22	1:W:448:LEU:HG	1.97	0.47
2:X:751:LEU:HD13	2:X:785:LEU:HG	1.97	0.47
2:X:826:MET:CE	2:X:850:GLN:CD	2.88	0.47
1:A:288:TYR:CG	1:A:340:VAL:HG13	2.50	0.46
1:A:291:ILE:O	1:A:295:VAL:HG23	2.14	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:212:ARG:NE	1:C:216:LYS:HE3	2.31	0.46
1:C:288:TYR:HB2	1:C:344:CYS:SG	2.55	0.46
2:D:512:LEU:HD13	2:D:534:ALA:HB1	1.96	0.46
1:E:417:VAL:CG2	1:E:467:ALA:HB2	2.44	0.46
2:F:653:ASP:OD1	2:F:656:ARG:NH2	2.44	0.46
2:F:664:ALA:HB2	2:F:734:ILE:HG21	1.97	0.46
1:G:256:LEU:HB3	1:G:261:THR:CB	2.46	0.46
1:G:406:LEU:HD13	1:G:416:ILE:HG12	1.97	0.46
2:H:826:MET:CE	2:H:850:GLN:CD	2.88	0.46
1:I:304:GLU:HG2	1:I:308:ARG:HE	1.80	0.46
2:J:758:ALA:HB3	2:J:778:ILE:CG1	2.46	0.46
2:L:664:ALA:HB2	2:L:734:ILE:HG21	1.97	0.46
2:L:742:LEU:HD22	2:L:750:ALA:HB1	1.96	0.46
2:L:815:VAL:HG21	2:L:867:VAL:HB	1.97	0.46
1:O:288:TYR:HB2	1:O:344:CYS:SG	2.55	0.46
1:O:291:ILE:O	1:O:295:VAL:HG23	2.14	0.46
1:O:377:VAL:O	1:O:381:LEU:HG	2.15	0.46
1:Q:212:ARG:NE	1:Q:216:LYS:HE3	2.31	0.46
1:Q:406:LEU:HD13	1:Q:416:ILE:HG12	1.97	0.46
1:Q:453:GLN:OE1	2:R:855:TYR:OH	2.30	0.46
2:R:801:ALA:HB2	2:R:820:ILE:CG2	2.45	0.46
1:S:212:ARG:NE	1:S:216:LYS:HE3	2.31	0.46
1:U:291:ILE:O	1:U:295:VAL:HG23	2.14	0.46
1:U:458:GLU:HG3	2:V:852:ARG:HB2	1.96	0.46
2:V:616:ALA:HB2	2:V:663:TYR:CD1	2.49	0.46
2:B:606:VAL:HG22	2:B:656:ARG:HB2	1.97	0.46
1:C:19:ARG:NH1	1:C:20:LYS:HE2	2.30	0.46
1:C:288:TYR:CG	1:C:340:VAL:HG13	2.50	0.46
1:C:304:GLU:HG2	1:C:308:ARG:HE	1.80	0.46
2:D:805:ARG:HA	2:D:814:ALA:HA	1.95	0.46
1:E:61:ARG:NH1	1:E:65:GLU:OE2	2.44	0.46
1:E:212:ARG:NE	1:E:216:LYS:HE3	2.31	0.46
1:E:288:TYR:CG	1:E:340:VAL:HG13	2.50	0.46
1:E:291:ILE:O	1:E:295:VAL:HG23	2.14	0.46
1:K:61:ARG:NH1	1:K:65:GLU:OE2	2.43	0.46
1:M:406:LEU:HD13	1:M:416:ILE:HG12	1.98	0.46
1:M:445:ILE:HG22	1:M:448:LEU:HG	1.97	0.46
2:N:742:LEU:HA	2:N:745:LEU:HD12	1.96	0.46
1:O:61:ARG:NH1	1:O:65:GLU:OE2	2.43	0.46
1:O:249:VAL:O	1:O:253:VAL:HG23	2.14	0.46
1:O:253:VAL:HG13	1:O:266:ILE:HG21	1.97	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:O:288:TYR:CG	1:O:340:VAL:HG13	2.50	0.46
1:O:304:GLU:HG2	1:O:308:ARG:HE	1.80	0.46
2:P:815:VAL:HG21	2:P:867:VAL:HB	1.98	0.46
1:Q:256:LEU:HB3	1:Q:261:THR:CB	2.46	0.46
2:R:523:PRO:HB3	2:T:529:VAL:CG2	2.44	0.46
2:T:801:ALA:HB2	2:T:820:ILE:CG2	2.45	0.46
1:U:256:LEU:O	1:U:261:THR:N	2.47	0.46
1:U:317:ALA:HA	1:U:369:ILE:HG23	1.97	0.46
1:U:406:LEU:HD13	1:U:416:ILE:HG12	1.97	0.46
2:V:779:LEU:HD21	2:V:804:VAL:HG21	1.97	0.46
1:W:256:LEU:O	1:W:261:THR:N	2.47	0.46
2:B:801:ALA:HB2	2:B:820:ILE:CG2	2.45	0.46
2:B:805:ARG:HH11	2:B:817:ALA:C	2.23	0.46
2:D:537:GLU:HA	2:F:513:ARG:HH22	1.81	0.46
2:D:801:ALA:HB2	2:D:820:ILE:CG2	2.45	0.46
1:E:19:ARG:HD2	1:E:20:LYS:N	2.30	0.46
2:H:606:VAL:HG22	2:H:656:ARG:HB2	1.97	0.46
2:H:815:VAL:HG21	2:H:867:VAL:HB	1.98	0.46
1:I:355:ALA:HA	1:I:358:ARG:NH2	2.29	0.46
1:I:461:LEU:HB3	2:J:848:ILE:HG12	1.96	0.46
2:J:664:ALA:HB2	2:J:734:ILE:HG21	1.97	0.46
1:K:10:LEU:C	1:K:14:ASN:ND2	2.74	0.46
1:K:19:ARG:NH1	1:K:20:LYS:HE2	2.30	0.46
1:K:317:ALA:HA	1:K:369:ILE:HG23	1.97	0.46
1:K:355:ALA:HA	1:K:358:ARG:NH2	2.29	0.46
1:K:445:ILE:HG22	1:K:448:LEU:HG	1.97	0.46
2:L:537:GLU:HA	2:P:513:ARG:HH22	1.80	0.46
2:L:751:LEU:HD13	2:L:785:LEU:HG	1.97	0.46
2:L:758:ALA:HB3	2:L:778:ILE:CG1	2.46	0.46
1:M:212:ARG:NE	1:M:216:LYS:HE3	2.31	0.46
1:M:256:LEU:O	1:M:261:THR:N	2.47	0.46
2:N:513:ARG:HH22	2:V:537:GLU:HA	1.80	0.46
1:O:119:ALA:CB	1:O:132:LEU:HD11	2.46	0.46
1:O:317:ALA:HA	1:O:369:ILE:HG23	1.97	0.46
1:O:439:ASN:O	1:O:486:GLY:N	2.33	0.46
2:P:758:ALA:HB3	2:P:778:ILE:CG1	2.46	0.46
1:Q:256:LEU:O	1:Q:261:THR:N	2.47	0.46
2:R:751:LEU:HD13	2:R:785:LEU:HG	1.98	0.46
2:R:758:ALA:HB3	2:R:778:ILE:CG1	2.46	0.46
1:S:317:ALA:HA	1:S:369:ILE:HG23	1.97	0.46
2:T:513:ARG:HH22	2:X:537:GLU:HA	1.81	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:W:19:ARG:HD2	1:W:20:LYS:N	2.29	0.46
2:X:664:ALA:HB2	2:X:734:ILE:HG21	1.97	0.46
2:X:779:LEU:HD21	2:X:804:VAL:HG21	1.98	0.46
1:A:406:LEU:HD13	1:A:416:ILE:HG12	1.98	0.46
1:C:291:ILE:O	1:C:295:VAL:HG23	2.14	0.46
1:C:406:LEU:HD13	1:C:416:ILE:HG12	1.97	0.46
2:D:529:VAL:CG2	2:F:523:PRO:HB3	2.45	0.46
1:E:119:ALA:CB	1:E:132:LEU:HD11	2.46	0.46
2:F:779:LEU:HD21	2:F:804:VAL:HG21	1.97	0.46
2:H:529:VAL:CG2	2:V:523:PRO:HB3	2.45	0.46
2:H:537:GLU:HA	2:V:513:ARG:HH22	1.80	0.46
2:H:801:ALA:HB2	2:H:820:ILE:CG2	2.45	0.46
2:J:513:ARG:HH22	2:P:537:GLU:HA	1.80	0.46
2:J:751:LEU:HD13	2:J:785:LEU:HG	1.98	0.46
2:L:680:ALA:O	2:L:684:LEU:HG	2.16	0.46
1:O:292:CYS:CB	1:O:344:CYS:HA	2.44	0.46
2:P:680:ALA:O	2:P:684:LEU:HG	2.16	0.46
1:Q:19:ARG:NH1	1:Q:20:LYS:HE2	2.30	0.46
2:R:529:VAL:CG2	2:X:523:PRO:HB3	2.44	0.46
2:R:680:ALA:O	2:R:684:LEU:HG	2.16	0.46
2:R:805:ARG:HH11	2:R:817:ALA:C	2.23	0.46
1:S:304:GLU:HG2	1:S:308:ARG:HE	1.80	0.46
2:T:758:ALA:HB3	2:T:778:ILE:CG1	2.46	0.46
1:U:19:ARG:NH1	1:U:20:LYS:HE2	2.30	0.46
1:W:212:ARG:NE	1:W:216:LYS:HE3	2.31	0.46
1:W:422:LYS:NZ	1:W:434:GLU:OE1	2.46	0.46
1:W:439:ASN:O	1:W:486:GLY:N	2.33	0.46
1:A:292:CYS:SG	1:A:347:ARG:HG2	2.56	0.46
1:A:304:GLU:HG2	1:A:308:ARG:HE	1.80	0.46
2:B:523:PRO:HB3	2:F:529:VAL:CG2	2.44	0.46
2:B:815:VAL:HG21	2:B:867:VAL:HB	1.98	0.46
1:C:377:VAL:O	1:C:381:LEU:HG	2.15	0.46
2:D:606:VAL:HG22	2:D:656:ARG:HB2	1.97	0.46
2:D:639:ALA:HB1	2:D:655:VAL:HG13	1.98	0.46
1:E:312:SER:OG	1:E:315:GLU:OE1	2.34	0.46
1:E:461:LEU:HB3	2:F:848:ILE:HG12	1.96	0.46
1:G:19:ARG:NH1	1:G:20:LYS:HE2	2.30	0.46
1:G:19:ARG:HD2	1:G:20:LYS:N	2.30	0.46
1:G:212:ARG:NE	1:G:216:LYS:HE3	2.31	0.46
1:G:288:TYR:HB2	1:G:344:CYS:SG	2.55	0.46
1:G:321:ALA:O	1:G:324:ILE:HG22	2.14	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:742:LEU:HA	2:H:745:LEU:HD12	1.96	0.46
1:I:421:ILE:O	1:I:422:LYS:C	2.55	0.46
1:I:445:ILE:HG22	1:I:448:LEU:HG	1.97	0.46
2:J:847:HIS:N	2:J:850:GLN:OE1	2.30	0.46
1:K:119:ALA:CB	1:K:132:LEU:HD11	2.46	0.46
1:K:253:VAL:HG13	1:K:266:ILE:HG21	1.97	0.46
1:K:377:VAL:O	1:K:381:LEU:HG	2.16	0.46
1:K:453:GLN:OE1	2:L:855:TYR:OH	2.30	0.46
2:L:805:ARG:HH11	2:L:817:ALA:C	2.23	0.46
1:M:304:GLU:HG2	1:M:308:ARG:HE	1.80	0.46
2:N:523:PRO:HB3	2:N:529:VAL:CG2	2.44	0.46
2:N:639:ALA:HB1	2:N:655:VAL:HG13	1.98	0.46
2:N:826:MET:CE	2:N:850:GLN:CD	2.88	0.46
2:P:639:ALA:HB1	2:P:655:VAL:HG13	1.98	0.46
1:Q:377:VAL:O	1:Q:381:LEU:HG	2.16	0.46
1:Q:417:VAL:CG2	1:Q:467:ALA:HB2	2.44	0.46
2:R:779:LEU:HD21	2:R:804:VAL:HG21	1.97	0.46
1:S:421:ILE:O	1:S:422:LYS:C	2.55	0.46
1:U:304:GLU:HG2	1:U:308:ARG:HE	1.80	0.46
2:V:758:ALA:HB3	2:V:778:ILE:CG1	2.46	0.46
1:W:343:GLU:OE2	1:W:397:ARG:NH2	2.43	0.46
2:X:758:ALA:HB3	2:X:778:ILE:CG1	2.46	0.46
1:A:263:GLU:HG2	1:A:319:ILE:HG13	1.96	0.46
1:A:292:CYS:HB3	1:A:344:CYS:HA	1.98	0.46
1:A:377:VAL:O	1:A:381:LEU:HG	2.16	0.46
2:B:532:ASN:ND2	2:D:519:LEU:HD21	2.29	0.46
2:D:805:ARG:HH11	2:D:817:ALA:C	2.23	0.46
2:F:826:MET:CE	2:F:850:GLN:CD	2.88	0.46
1:K:292:CYS:SG	1:K:347:ARG:HG2	2.56	0.46
2:L:639:ALA:HB1	2:L:655:VAL:HG13	1.98	0.46
1:M:288:TYR:HB2	1:M:344:CYS:SG	2.55	0.46
2:N:680:ALA:O	2:N:684:LEU:HG	2.16	0.46
2:N:751:LEU:HD13	2:N:785:LEU:HG	1.97	0.46
1:O:292:CYS:SG	1:O:347:ARG:HG2	2.56	0.46
1:O:355:ALA:HA	1:O:358:ARG:NH2	2.30	0.46
1:S:445:ILE:HG22	1:S:448:LEU:HG	1.97	0.46
1:U:207:GLU:HG2	1:W:94:LEU:HD21	1.98	0.46
1:U:256:LEU:HB3	1:U:261:THR:CB	2.46	0.46
1:U:312:SER:OG	1:U:315:GLU:OE1	2.34	0.46
2:V:680:ALA:O	2:V:684:LEU:HG	2.16	0.46
1:W:292:CYS:HB3	1:W:344:CYS:HA	1.98	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:X:680:ALA:O	2:X:684:LEU:HG	2.16	0.46
1:A:73:ALA:O	1:A:77:SER:OG	2.31	0.46
1:A:312:SER:OG	1:A:315:GLU:OE1	2.34	0.46
1:A:317:ALA:HA	1:A:369:ILE:HG23	1.97	0.46
2:B:513:ARG:HH22	2:F:537:GLU:HA	1.80	0.46
2:B:758:ALA:HB3	2:B:778:ILE:CG1	2.46	0.46
1:E:19:ARG:NH1	1:E:20:LYS:HE2	2.30	0.46
1:E:253:VAL:HG13	1:E:266:ILE:HG21	1.97	0.46
1:E:377:VAL:O	1:E:381:LEU:HG	2.16	0.46
2:F:758:ALA:HB3	2:F:778:ILE:CG1	2.46	0.46
2:F:815:VAL:HG21	2:F:867:VAL:HB	1.98	0.46
1:G:317:ALA:HA	1:G:369:ILE:HG23	1.97	0.46
2:H:639:ALA:HB1	2:H:655:VAL:HG13	1.98	0.46
1:I:19:ARG:NH1	1:I:20:LYS:HE2	2.30	0.46
1:I:292:CYS:SG	1:I:347:ARG:HG2	2.56	0.46
1:I:312:SER:OG	1:I:315:GLU:OE1	2.34	0.46
1:K:288:TYR:HB2	1:K:344:CYS:SG	2.55	0.46
1:K:312:SER:OG	1:K:315:GLU:OE1	2.34	0.46
1:K:406:LEU:HD13	1:K:416:ILE:HG12	1.97	0.46
2:L:801:ALA:HB2	2:L:820:ILE:CG2	2.45	0.46
1:M:119:ALA:CB	1:M:132:LEU:HD11	2.46	0.46
1:M:256:LEU:HB3	1:M:261:THR:CB	2.46	0.46
1:M:292:CYS:HB3	1:M:344:CYS:HA	1.98	0.46
2:N:779:LEU:HD21	2:N:804:VAL:HG21	1.97	0.46
1:O:292:CYS:HB3	1:O:344:CYS:HA	1.98	0.46
1:Q:119:ALA:CB	1:Q:132:LEU:HD11	2.46	0.46
1:Q:288:TYR:HB2	1:Q:344:CYS:SG	2.55	0.46
1:S:292:CYS:HB3	1:S:344:CYS:HA	1.98	0.46
2:T:805:ARG:HH11	2:T:817:ALA:C	2.23	0.46
2:V:606:VAL:HG22	2:V:656:ARG:HB2	1.97	0.46
1:W:119:ALA:CB	1:W:132:LEU:HD11	2.46	0.46
2:X:815:VAL:HG21	2:X:867:VAL:HB	1.98	0.46
1:A:119:ALA:CB	1:A:132:LEU:HD11	2.46	0.46
1:A:212:ARG:NE	1:A:216:LYS:HE3	2.30	0.46
1:A:406:LEU:HD13	1:A:416:ILE:CG2	2.42	0.46
1:C:227:ALA:CB	1:C:243:LYS:HE3	2.46	0.46
1:C:292:CYS:SG	1:C:347:ARG:HG2	2.56	0.46
1:E:292:CYS:SG	1:E:347:ARG:HG2	2.56	0.46
1:E:304:GLU:HG2	1:E:308:ARG:HE	1.80	0.46
2:F:680:ALA:O	2:F:684:LEU:HG	2.16	0.46
1:G:119:ALA:CB	1:G:132:LEU:HD11	2.46	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:453:GLN:OE1	2:H:855:TYR:OH	2.30	0.46
2:H:680:ALA:O	2:H:684:LEU:HG	2.16	0.46
1:I:288:TYR:CG	1:I:340:VAL:HG13	2.50	0.46
1:I:288:TYR:HB2	1:I:344:CYS:SG	2.55	0.46
1:I:317:ALA:HA	1:I:369:ILE:HG23	1.97	0.46
2:J:523:PRO:HB3	2:P:529:VAL:CG2	2.45	0.46
2:J:529:VAL:CG2	2:L:523:PRO:HB3	2.45	0.46
1:M:396:ARG:NH1	1:M:400:GLU:OE2	2.49	0.46
1:O:227:ALA:CB	1:O:243:LYS:HE3	2.46	0.46
1:O:406:LEU:HD13	1:O:416:ILE:HG12	1.97	0.46
1:Q:292:CYS:SG	1:Q:347:ARG:HG2	2.56	0.46
1:Q:304:GLU:HG2	1:Q:308:ARG:HE	1.80	0.46
2:T:639:ALA:HB1	2:T:655:VAL:HG13	1.98	0.46
1:U:288:TYR:HB2	1:U:344:CYS:SG	2.55	0.46
1:U:288:TYR:CG	1:U:340:VAL:HG13	2.50	0.46
1:U:292:CYS:HB3	1:U:344:CYS:HA	1.98	0.46
1:U:377:VAL:O	1:U:381:LEU:HG	2.16	0.46
1:A:256:LEU:HB3	1:A:261:THR:CB	2.46	0.46
2:B:537:GLU:HA	2:D:513:ARG:HH22	1.80	0.46
1:C:256:LEU:O	1:C:261:THR:N	2.47	0.46
2:F:790:ASP:OD2	2:F:793:SER:N	2.39	0.46
1:G:117:GLU:O	1:G:121:ARG:HG2	2.16	0.46
1:G:377:VAL:O	1:G:381:LEU:HG	2.16	0.46
1:I:292:CYS:HB3	1:I:344:CYS:HA	1.98	0.46
2:J:639:ALA:HB1	2:J:655:VAL:HG13	1.98	0.46
1:K:292:CYS:HB3	1:K:344:CYS:HA	1.98	0.46
1:O:94:LEU:HD21	1:W:207:GLU:HG2	1.98	0.46
1:Q:292:CYS:HB3	1:Q:344:CYS:HA	1.98	0.46
1:U:119:ALA:CB	1:U:132:LEU:HD11	2.46	0.46
2:V:815:VAL:HG21	2:V:867:VAL:HB	1.98	0.46
2:X:606:VAL:HG22	2:X:656:ARG:HB2	1.97	0.46
1:C:292:CYS:HB3	1:C:344:CYS:HA	1.98	0.46
2:D:680:ALA:O	2:D:684:LEU:HG	2.16	0.46
1:G:292:CYS:SG	1:G:347:ARG:HG2	2.56	0.46
1:I:6:ILE:HG13	1:I:84:ALA:HB2	1.99	0.46
1:K:212:ARG:NE	1:K:216:LYS:HE3	2.30	0.46
2:L:532:ASN:HA	2:L:535:ILE:HD12	1.99	0.46
2:L:779:LEU:HD21	2:L:804:VAL:HG21	1.97	0.46
1:M:288:TYR:CG	1:M:340:VAL:HG13	2.50	0.46
1:M:292:CYS:SG	1:M:347:ARG:HG2	2.56	0.46
1:M:377:VAL:O	1:M:381:LEU:HG	2.16	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:N:815:VAL:HG21	2:N:867:VAL:HB	1.98	0.46
1:O:256:LEU:HB3	1:O:261:THR:CB	2.45	0.46
1:S:117:GLU:O	1:S:121:ARG:HG2	2.16	0.46
1:S:256:LEU:HB3	1:S:261:THR:CB	2.46	0.46
2:T:680:ALA:O	2:T:684:LEU:HG	2.16	0.46
1:W:256:LEU:HB3	1:W:261:THR:CB	2.46	0.46
2:B:680:ALA:O	2:B:684:LEU:HG	2.16	0.45
2:B:862:ALA:HB1	2:B:867:VAL:O	2.17	0.45
1:C:61:ARG:NH1	1:C:65:GLU:OE2	2.43	0.45
1:E:76:GLU:O	1:E:80:LEU:HG	2.16	0.45
1:E:396:ARG:NH1	1:E:400:GLU:OE2	2.49	0.45
1:M:117:GLU:O	1:M:121:ARG:HG2	2.16	0.45
1:M:227:ALA:CB	1:M:243:LYS:HE3	2.46	0.45
1:M:406:LEU:HD13	1:M:416:ILE:CG2	2.42	0.45
2:R:639:ALA:HB1	2:R:655:VAL:HG13	1.98	0.45
1:S:73:ALA:O	1:S:77:SER:OG	2.31	0.45
1:S:256:LEU:O	1:S:261:THR:N	2.47	0.45
2:T:779:LEU:HD21	2:T:804:VAL:HG21	1.97	0.45
2:T:847:HIS:O	2:T:851:GLN:HG3	2.16	0.45
1:U:212:ARG:NE	1:U:216:LYS:HE3	2.30	0.45
1:U:396:ARG:NH1	1:U:400:GLU:OE2	2.49	0.45
1:W:317:ALA:HA	1:W:369:ILE:HG23	1.97	0.45
1:W:377:VAL:O	1:W:381:LEU:HG	2.15	0.45
1:W:406:LEU:HD13	1:W:416:ILE:HG12	1.97	0.45
1:A:10:LEU:C	1:A:14:ASN:ND2	2.73	0.45
1:A:61:ARG:NH1	1:A:65:GLU:OE2	2.43	0.45
2:B:639:ALA:HB1	2:B:655:VAL:HG13	1.98	0.45
1:C:117:GLU:O	1:C:121:ARG:HG2	2.17	0.45
1:C:207:GLU:HG2	1:Q:94:LEU:HD21	1.98	0.45
1:C:256:LEU:HB3	1:C:261:THR:CB	2.45	0.45
1:C:396:ARG:NH1	1:C:400:GLU:OE2	2.49	0.45
2:D:751:LEU:HD13	2:D:785:LEU:HG	1.97	0.45
1:E:94:LEU:HD21	1:S:207:GLU:HG2	1.98	0.45
2:F:847:HIS:O	2:F:851:GLN:HG3	2.17	0.45
1:G:76:GLU:O	1:G:80:LEU:HG	2.17	0.45
1:G:256:LEU:C	1:G:261:THR:HB	2.41	0.45
2:J:779:LEU:HD21	2:J:804:VAL:HG21	1.97	0.45
1:K:256:LEU:C	1:K:261:THR:HB	2.41	0.45
1:K:396:ARG:NH1	1:K:400:GLU:OE2	2.50	0.45
1:M:256:LEU:C	1:M:261:THR:HB	2.41	0.45
2:N:758:ALA:HB3	2:N:778:ILE:CG1	2.46	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:O:19:ARG:NH1	1:O:20:LYS:HE2	2.30	0.45
1:Q:227:ALA:CB	1:Q:243:LYS:HE3	2.46	0.45
1:Q:317:ALA:HA	1:Q:369:ILE:HG23	1.97	0.45
1:Q:343:GLU:OE2	1:Q:397:ARG:NH2	2.43	0.45
2:R:513:ARG:HH22	2:T:537:GLU:HA	1.81	0.45
2:R:532:ASN:HA	2:R:535:ILE:HD12	1.99	0.45
1:S:396:ARG:NH1	1:S:400:GLU:OE2	2.49	0.45
1:U:117:GLU:O	1:U:121:ARG:HG2	2.17	0.45
1:U:239:GLU:OE1	1:U:239:GLU:N	2.42	0.45
1:U:256:LEU:C	1:U:261:THR:HB	2.41	0.45
1:U:292:CYS:SG	1:U:347:ARG:HG2	2.56	0.45
2:V:751:LEU:HD13	2:V:785:LEU:HG	1.97	0.45
2:X:639:ALA:HB1	2:X:655:VAL:HG13	1.98	0.45
2:X:847:HIS:O	2:X:851:GLN:HG3	2.16	0.45
2:X:847:HIS:N	2:X:850:GLN:OE1	2.30	0.45
1:A:76:GLU:O	1:A:80:LEU:HG	2.16	0.45
1:A:396:ARG:NH1	1:A:400:GLU:OE2	2.50	0.45
1:A:471:VAL:HG22	1:A:484:VAL:HA	1.99	0.45
2:B:610:ILE:HA	2:B:659:ALA:HB1	1.99	0.45
1:C:256:LEU:C	1:C:261:THR:HB	2.41	0.45
1:E:6:ILE:HG13	1:E:84:ALA:HB2	1.98	0.45
1:E:292:CYS:HB3	1:E:344:CYS:HA	1.98	0.45
1:G:292:CYS:HB3	1:G:344:CYS:HA	1.98	0.45
1:G:445:ILE:HG22	1:G:448:LEU:HG	1.97	0.45
1:I:117:GLU:O	1:I:121:ARG:HG2	2.17	0.45
1:I:119:ALA:CB	1:I:132:LEU:HD11	2.46	0.45
1:I:406:LEU:HD13	1:I:416:ILE:HG12	1.97	0.45
2:J:606:VAL:HG22	2:J:656:ARG:HB2	1.97	0.45
2:L:847:HIS:O	2:L:851:GLN:HG3	2.16	0.45
1:M:249:VAL:CG2	1:M:273:ASP:HB3	2.47	0.45
1:M:253:VAL:HG13	1:M:266:ILE:HG21	1.97	0.45
2:P:751:LEU:HD13	2:P:785:LEU:HG	1.98	0.45
1:Q:10:LEU:C	1:Q:14:ASN:ND2	2.74	0.45
1:Q:117:GLU:O	1:Q:121:ARG:HG2	2.17	0.45
1:Q:312:SER:OG	1:Q:315:GLU:OE1	2.34	0.45
1:S:227:ALA:CB	1:S:243:LYS:HE3	2.46	0.45
2:T:815:VAL:HG21	2:T:867:VAL:HB	1.98	0.45
2:V:532:ASN:HA	2:V:535:ILE:HD12	1.98	0.45
1:W:50:GLU:OE1	1:W:53:ARG:NE	2.46	0.45
1:W:396:ARG:NH1	1:W:400:GLU:OE2	2.49	0.45
2:B:751:LEU:HD13	2:B:785:LEU:HG	1.98	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:249:VAL:CG2	1:C:273:ASP:HB3	2.47	0.45
1:C:445:ILE:HG22	1:C:448:LEU:HG	1.97	0.45
2:H:532:ASN:HA	2:H:535:ILE:HD12	1.98	0.45
2:H:847:HIS:O	2:H:851:GLN:HG3	2.16	0.45
1:I:249:VAL:CG2	1:I:273:ASP:HB3	2.47	0.45
1:I:377:VAL:O	1:I:381:LEU:HG	2.15	0.45
1:I:454:GLU:HB3	2:J:852:ARG:NE	2.32	0.45
1:I:471:VAL:HG22	1:I:484:VAL:HA	1.99	0.45
1:K:207:GLU:HG2	1:S:94:LEU:HD21	1.98	0.45
1:M:252:LYS:NZ	1:M:269:GLU:OE1	2.39	0.45
1:O:256:LEU:C	1:O:261:THR:HB	2.41	0.45
1:O:471:VAL:HG22	1:O:484:VAL:HA	1.99	0.45
2:P:801:ALA:HB2	2:P:820:ILE:CG2	2.45	0.45
1:Q:76:GLU:O	1:Q:80:LEU:HG	2.17	0.45
1:S:471:VAL:HG22	1:S:484:VAL:HA	1.99	0.45
2:T:610:ILE:HA	2:T:659:ALA:HB1	1.99	0.45
1:U:439:ASN:O	1:U:486:GLY:N	2.33	0.45
1:W:227:ALA:CB	1:W:243:LYS:HE3	2.46	0.45
2:B:779:LEU:HD21	2:B:804:VAL:HG21	1.97	0.45
2:D:610:ILE:HA	2:D:659:ALA:HB1	1.99	0.45
2:D:815:VAL:HG21	2:D:867:VAL:HB	1.98	0.45
1:E:207:GLU:HG2	1:K:94:LEU:HD21	1.98	0.45
1:G:61:ARG:NH1	1:G:65:GLU:OE2	2.44	0.45
1:I:227:ALA:CB	1:I:243:LYS:HE3	2.46	0.45
1:I:253:VAL:HG13	1:I:266:ILE:HG21	1.97	0.45
1:I:253:VAL:CG2	1:I:270:ILE:CG1	2.95	0.45
1:I:256:LEU:HB3	1:I:261:THR:CB	2.46	0.45
2:J:815:VAL:HG21	2:J:867:VAL:HB	1.97	0.45
2:J:862:ALA:HB1	2:J:867:VAL:O	2.17	0.45
1:K:76:GLU:O	1:K:80:LEU:HG	2.17	0.45
1:K:249:VAL:CG2	1:K:273:ASP:HB3	2.47	0.45
2:L:653:ASP:OD1	2:L:656:ARG:NH2	2.44	0.45
1:M:76:GLU:O	1:M:80:LEU:HG	2.17	0.45
1:M:454:GLU:HB3	2:N:852:ARG:NE	2.32	0.45
2:N:847:HIS:O	2:N:851:GLN:HG3	2.17	0.45
1:O:6:ILE:HG13	1:O:84:ALA:HB2	1.99	0.45
1:O:312:SER:OG	1:O:315:GLU:OE1	2.34	0.45
1:S:119:ALA:CB	1:S:132:LEU:HD11	2.46	0.45
1:S:292:CYS:SG	1:S:347:ARG:HG2	2.56	0.45
1:U:6:ILE:HG13	1:U:84:ALA:HB2	1.98	0.45
1:U:227:ALA:CB	1:U:243:LYS:HE3	2.46	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:X:532:ASN:HA	2:X:535:ILE:HD12	1.98	0.45
1:A:94:LEU:HD21	1:I:207:GLU:HG2	1.98	0.45
1:A:256:LEU:C	1:A:261:THR:HB	2.42	0.45
2:B:847:HIS:O	2:B:851:GLN:HG3	2.16	0.45
1:C:119:ALA:CB	1:C:132:LEU:HD11	2.46	0.45
1:C:317:ALA:HA	1:C:369:ILE:HG23	1.97	0.45
2:D:758:ALA:HB3	2:D:778:ILE:CG1	2.46	0.45
1:G:6:ILE:HG13	1:G:84:ALA:HB2	1.99	0.45
1:G:253:VAL:CG2	1:G:270:ILE:CG1	2.95	0.45
1:G:312:SER:OG	1:G:315:GLU:OE1	2.34	0.45
2:H:779:LEU:HD21	2:H:804:VAL:HG21	1.97	0.45
2:H:808:GLN:N	2:H:809:PRO:HD3	2.32	0.45
1:I:76:GLU:O	1:I:80:LEU:HG	2.17	0.45
2:J:610:ILE:HA	2:J:659:ALA:HB1	1.99	0.45
2:L:862:ALA:HB1	2:L:867:VAL:O	2.17	0.45
1:M:253:VAL:CG2	1:M:270:ILE:CG1	2.95	0.45
1:M:317:ALA:HA	1:M:369:ILE:HG23	1.97	0.45
1:O:212:ARG:NE	1:O:216:LYS:HE3	2.31	0.45
1:O:396:ARG:NH1	1:O:400:GLU:OE2	2.49	0.45
1:S:256:LEU:C	1:S:261:THR:HB	2.41	0.45
1:S:454:GLU:HB3	2:T:852:ARG:NE	2.32	0.45
2:V:610:ILE:HA	2:V:659:ALA:HB1	1.99	0.45
2:V:847:HIS:O	2:V:851:GLN:HG3	2.16	0.45
1:W:249:VAL:CG2	1:W:273:ASP:HB3	2.47	0.45
1:W:406:LEU:HD13	1:W:416:ILE:CG2	2.42	0.45
1:W:454:GLU:HB3	2:X:852:ARG:NE	2.32	0.45
1:W:471:VAL:HG22	1:W:484:VAL:HA	1.99	0.45
1:A:117:GLU:O	1:A:121:ARG:HG2	2.16	0.45
1:A:454:GLU:HB3	2:B:852:ARG:NE	2.32	0.45
1:C:76:GLU:O	1:C:80:LEU:HG	2.17	0.45
2:D:862:ALA:HB1	2:D:867:VAL:O	2.17	0.45
1:E:227:ALA:CB	1:E:243:LYS:HE3	2.46	0.45
1:E:454:GLU:HB3	2:F:852:ARG:NE	2.32	0.45
2:F:639:ALA:HB1	2:F:655:VAL:HG13	1.98	0.45
2:F:862:ALA:HB1	2:F:867:VAL:O	2.17	0.45
2:H:610:ILE:HA	2:H:659:ALA:HB1	1.99	0.45
2:H:758:ALA:HB3	2:H:778:ILE:CG1	2.46	0.45
1:I:212:ARG:NE	1:I:216:LYS:HE3	2.31	0.45
1:K:117:GLU:O	1:K:121:ARG:HG2	2.16	0.45
1:K:471:VAL:HG22	1:K:484:VAL:HA	1.99	0.45
1:M:312:SER:OG	1:M:315:GLU:OE1	2.34	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:N:498:LEU:HD21	2:N:548:ILE:CG2	2.47	0.45
1:O:445:ILE:HG22	1:O:448:LEU:HG	1.97	0.45
2:P:847:HIS:O	2:P:851:GLN:HG3	2.16	0.45
1:Q:396:ARG:NH1	1:Q:400:GLU:OE2	2.49	0.45
2:V:801:ALA:HB2	2:V:820:ILE:CG2	2.45	0.45
2:B:550:ALA:O	2:B:554:LEU:HG	2.17	0.45
2:B:687:ALA:O	2:B:703:VAL:CG2	2.65	0.45
1:C:94:LEU:HD21	1:M:207:GLU:HG2	1.98	0.45
1:C:253:VAL:HG13	1:C:266:ILE:HG21	1.97	0.45
1:C:253:VAL:CG2	1:C:270:ILE:CG1	2.95	0.45
1:C:312:SER:OG	1:C:315:GLU:OE1	2.34	0.45
1:C:454:GLU:HB3	2:D:852:ARG:NE	2.32	0.45
1:C:471:VAL:HG22	1:C:484:VAL:HA	1.99	0.45
1:E:249:VAL:CG2	1:E:273:ASP:HB3	2.47	0.45
1:E:256:LEU:C	1:E:261:THR:HB	2.42	0.45
2:H:498:LEU:HD21	2:H:548:ILE:CG2	2.47	0.45
2:H:751:LEU:HD13	2:H:785:LEU:HG	1.98	0.45
1:K:227:ALA:CB	1:K:243:LYS:HE3	2.46	0.45
1:K:253:VAL:CG2	1:K:270:ILE:HG12	2.47	0.45
2:L:550:ALA:O	2:L:554:LEU:HG	2.17	0.45
2:L:610:ILE:HA	2:L:659:ALA:HB1	1.99	0.45
1:O:253:VAL:CG2	1:O:270:ILE:HG12	2.47	0.45
1:O:454:GLU:HB3	2:P:852:ARG:NE	2.32	0.45
2:P:498:LEU:HD21	2:P:548:ILE:CG2	2.47	0.45
2:P:532:ASN:HA	2:P:535:ILE:HD12	1.98	0.45
1:S:349:VAL:HA	1:S:352:ILE:HD12	1.99	0.45
2:T:751:LEU:HD13	2:T:785:LEU:HG	1.98	0.45
1:U:10:LEU:C	1:U:14:ASN:ND2	2.73	0.45
1:W:117:GLU:O	1:W:121:ARG:HG2	2.17	0.45
1:W:253:VAL:CG2	1:W:270:ILE:HG12	2.47	0.45
1:W:256:LEU:C	1:W:261:THR:HB	2.41	0.45
1:C:6:ILE:HG13	1:C:84:ALA:HB2	1.99	0.45
2:D:779:LEU:HD21	2:D:804:VAL:HG21	1.97	0.45
1:E:253:VAL:CG2	1:E:270:ILE:CG1	2.95	0.45
2:F:498:LEU:HD21	2:F:548:ILE:CG2	2.47	0.45
1:I:349:VAL:HA	1:I:352:ILE:HD12	1.99	0.45
2:J:680:ALA:O	2:J:684:LEU:HG	2.16	0.45
1:K:256:LEU:O	1:K:261:THR:N	2.47	0.45
1:K:349:VAL:HA	1:K:352:ILE:HD12	1.99	0.45
1:K:406:LEU:HD13	1:K:416:ILE:CG2	2.42	0.45
1:M:253:VAL:CG2	1:M:270:ILE:HG12	2.47	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:O:253:VAL:CG2	1:O:270:ILE:CG1	2.95	0.45
2:P:550:ALA:O	2:P:554:LEU:HG	2.17	0.45
1:Q:6:ILE:HG13	1:Q:84:ALA:HB2	1.99	0.45
2:R:537:GLU:HA	2:X:513:ARG:HH22	1.80	0.45
2:R:862:ALA:HB1	2:R:867:VAL:O	2.17	0.45
1:S:6:ILE:HG13	1:S:84:ALA:HB2	1.99	0.45
1:S:377:VAL:O	1:S:381:LEU:HG	2.15	0.45
2:T:808:GLN:N	2:T:809:PRO:HD3	2.32	0.45
2:V:639:ALA:HB1	2:V:655:VAL:HG13	1.98	0.45
2:V:808:GLN:N	2:V:809:PRO:HD3	2.32	0.45
1:W:312:SER:OG	1:W:315:GLU:OE1	2.34	0.45
2:X:687:ALA:O	2:X:703:VAL:CG2	2.65	0.45
2:D:550:ALA:O	2:D:554:LEU:HG	2.17	0.45
2:D:687:ALA:O	2:D:703:VAL:CG2	2.65	0.45
2:D:847:HIS:O	2:D:851:GLN:HG3	2.17	0.45
1:E:253:VAL:CG2	1:E:270:ILE:HG12	2.47	0.45
2:F:687:ALA:O	2:F:703:VAL:CG2	2.65	0.45
1:G:349:VAL:HA	1:G:352:ILE:HD12	1.99	0.45
1:K:454:GLU:HB3	2:L:852:ARG:NE	2.32	0.45
1:M:239:GLU:OE1	1:M:239:GLU:N	2.42	0.45
2:N:610:ILE:HA	2:N:659:ALA:HB1	1.99	0.45
2:N:801:ALA:HB2	2:N:820:ILE:HB	1.99	0.45
1:Q:471:VAL:HG22	1:Q:484:VAL:HA	1.99	0.45
2:R:550:ALA:O	2:R:554:LEU:HG	2.17	0.45
1:S:312:SER:OG	1:S:315:GLU:OE1	2.34	0.45
2:T:550:ALA:O	2:T:554:LEU:HG	2.17	0.45
1:U:423:ILE:O	1:U:427:VAL:HG23	2.17	0.45
1:U:454:GLU:HB3	2:V:852:ARG:NE	2.32	0.45
1:W:6:ILE:HG13	1:W:84:ALA:HB2	1.98	0.45
1:W:292:CYS:SG	1:W:347:ARG:HG2	2.56	0.45
2:B:765:GLN:O	2:B:771:ALA:HB2	2.18	0.44
2:B:808:GLN:N	2:B:809:PRO:HD3	2.32	0.44
1:G:207:GLU:HG2	1:I:94:LEU:HD21	1.99	0.44
1:G:249:VAL:CG2	1:G:273:ASP:HB3	2.47	0.44
1:I:396:ARG:NH1	1:I:400:GLU:OE2	2.49	0.44
2:J:847:HIS:O	2:J:851:GLN:HG3	2.17	0.44
1:K:256:LEU:HB3	1:K:261:THR:CB	2.46	0.44
2:L:808:GLN:N	2:L:809:PRO:HD3	2.32	0.44
2:P:862:ALA:HB1	2:P:867:VAL:O	2.17	0.44
1:Q:249:VAL:CG2	1:Q:273:ASP:HB3	2.47	0.44
1:Q:349:VAL:HA	1:Q:352:ILE:HD12	1.99	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:R:815:VAL:HG21	2:R:867:VAL:HB	1.97	0.44
2:R:847:HIS:O	2:R:851:GLN:HG3	2.16	0.44
2:R:847:HIS:N	2:R:850:GLN:OE1	2.30	0.44
2:T:498:LEU:HD21	2:T:548:ILE:CG2	2.47	0.44
1:U:253:VAL:HG13	1:U:266:ILE:HG21	1.97	0.44
2:V:862:ALA:HB1	2:V:867:VAL:O	2.17	0.44
1:A:13:LEU:CD2	1:A:77:SER:OG	2.65	0.44
1:A:227:ALA:CB	1:A:243:LYS:HE3	2.46	0.44
1:A:439:ASN:O	1:A:486:GLY:N	2.33	0.44
1:E:349:VAL:HA	1:E:352:ILE:HD12	1.99	0.44
2:H:687:ALA:O	2:H:703:VAL:CG2	2.65	0.44
1:I:10:LEU:C	1:I:14:ASN:ND2	2.74	0.44
2:J:498:LEU:HD21	2:J:548:ILE:CG2	2.47	0.44
1:O:117:GLU:O	1:O:121:ARG:HG2	2.17	0.44
1:Q:253:VAL:CG2	1:Q:270:ILE:HG12	2.47	0.44
2:R:687:ALA:O	2:R:703:VAL:CG2	2.65	0.44
1:S:76:GLU:O	1:S:80:LEU:HG	2.16	0.44
1:S:253:VAL:CG2	1:S:270:ILE:HG12	2.47	0.44
1:W:253:VAL:CG2	1:W:270:ILE:CG1	2.95	0.44
1:A:249:VAL:CG2	1:A:273:ASP:HB3	2.47	0.44
2:B:532:ASN:HA	2:B:535:ILE:HD12	1.99	0.44
2:D:498:LEU:HD21	2:D:548:ILE:CG2	2.47	0.44
2:D:532:ASN:HA	2:D:535:ILE:HD12	1.99	0.44
1:E:13:LEU:CD2	1:E:77:SER:OG	2.66	0.44
2:F:550:ALA:O	2:F:554:LEU:HG	2.17	0.44
2:F:808:GLN:N	2:F:809:PRO:HD3	2.32	0.44
1:G:396:ARG:NH1	1:G:400:GLU:OE2	2.49	0.44
1:G:423:ILE:O	1:G:427:VAL:HG23	2.17	0.44
2:H:862:ALA:HB1	2:H:867:VAL:O	2.17	0.44
1:I:256:LEU:C	1:I:261:THR:HB	2.41	0.44
1:I:413:SER:HA	1:I:416:ILE:HD12	2.00	0.44
2:J:532:ASN:HA	2:J:535:ILE:HD12	1.99	0.44
2:L:765:GLN:O	2:L:771:ALA:HB2	2.18	0.44
1:M:118:GLU:HA	1:M:121:ARG:HH11	1.83	0.44
2:N:550:ALA:O	2:N:554:LEU:HG	2.17	0.44
1:O:423:ILE:O	1:O:427:VAL:HG23	2.17	0.44
2:P:704:TYR:HE2	2:P:745:LEU:HD21	1.82	0.44
2:P:808:GLN:N	2:P:809:PRO:HD3	2.32	0.44
1:Q:256:LEU:C	1:Q:261:THR:HB	2.41	0.44
1:S:10:LEU:C	1:S:14:ASN:ND2	2.74	0.44
1:S:253:VAL:CG2	1:S:270:ILE:CG1	2.95	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:S:423:ILE:O	1:S:427:VAL:HG23	2.17	0.44
2:T:532:ASN:HA	2:T:535:ILE:HD12	1.98	0.44
1:U:13:LEU:CD2	1:U:77:SER:OG	2.66	0.44
1:U:253:VAL:CG2	1:U:270:ILE:CG1	2.95	0.44
2:V:704:TYR:HE2	2:V:745:LEU:HD21	1.82	0.44
2:V:765:GLN:O	2:V:771:ALA:HB2	2.18	0.44
2:V:823:VAL:HG11	2:V:830:MET:HG2	2.00	0.44
1:W:10:LEU:C	1:W:14:ASN:ND2	2.73	0.44
1:W:76:GLU:O	1:W:80:LEU:HG	2.17	0.44
2:X:765:GLN:O	2:X:771:ALA:HB2	2.18	0.44
1:A:6:ILE:HG13	1:A:84:ALA:HB2	1.99	0.44
1:A:207:GLU:HG2	1:G:94:LEU:HD21	1.98	0.44
1:A:253:VAL:CG2	1:A:270:ILE:CG1	2.95	0.44
2:B:801:ALA:HB2	2:B:820:ILE:HB	1.99	0.44
2:D:823:VAL:HG11	2:D:830:MET:HG2	2.00	0.44
1:E:117:GLU:O	1:E:121:ARG:HG2	2.17	0.44
2:F:751:LEU:HD13	2:F:785:LEU:HG	1.98	0.44
1:G:256:LEU:O	1:G:261:THR:N	2.47	0.44
1:G:454:GLU:HB3	2:H:852:ARG:NE	2.32	0.44
1:I:13:LEU:CD2	1:I:77:SER:OG	2.66	0.44
1:I:406:LEU:HD13	1:I:416:ILE:CG2	2.42	0.44
2:J:687:ALA:O	2:J:703:VAL:CG2	2.65	0.44
2:J:758:ALA:CB	2:J:778:ILE:HG13	2.48	0.44
1:K:13:LEU:CD2	1:K:77:SER:OG	2.66	0.44
1:K:253:VAL:CG2	1:K:270:ILE:CG1	2.95	0.44
2:L:590:GLU:OE1	2:L:644:LYS:NZ	2.37	0.44
1:M:13:LEU:CD2	1:M:77:SER:OG	2.66	0.44
1:M:94:LEU:HD21	1:Q:207:GLU:HG2	1.98	0.44
1:M:413:SER:HA	1:M:416:ILE:HD12	2.00	0.44
1:M:423:ILE:O	1:M:427:VAL:HG23	2.17	0.44
1:O:10:LEU:C	1:O:14:ASN:ND2	2.73	0.44
1:O:13:LEU:CD2	1:O:77:SER:OG	2.66	0.44
1:O:207:GLU:HG2	1:U:94:LEU:HD21	1.98	0.44
1:O:349:VAL:HA	1:O:352:ILE:HD12	1.99	0.44
2:P:687:ALA:O	2:P:703:VAL:CG2	2.65	0.44
2:P:736:LEU:O	2:P:777:ILE:HD13	2.18	0.44
2:P:823:VAL:HG11	2:P:830:MET:HG2	2.00	0.44
2:X:550:ALA:O	2:X:554:LEU:HG	2.17	0.44
2:X:684:LEU:CD2	2:X:707:ALA:HA	2.48	0.44
1:A:413:SER:HA	1:A:416:ILE:HD12	2.00	0.44
2:B:498:LEU:HD21	2:B:548:ILE:CG2	2.47	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:253:VAL:CG2	1:C:270:ILE:HG12	2.47	0.44
1:C:423:ILE:O	1:C:427:VAL:HG23	2.17	0.44
1:E:423:ILE:O	1:E:427:VAL:HG23	2.17	0.44
2:F:684:LEU:CD2	2:F:707:ALA:HA	2.48	0.44
2:F:801:ALA:HB2	2:F:820:ILE:HB	2.00	0.44
1:G:227:ALA:CB	1:G:243:LYS:HE3	2.46	0.44
2:H:765:GLN:O	2:H:771:ALA:HB2	2.18	0.44
2:J:704:TYR:HE2	2:J:745:LEU:HD21	1.82	0.44
2:J:765:GLN:O	2:J:771:ALA:HB2	2.18	0.44
1:K:118:GLU:HA	1:K:121:ARG:HH11	1.83	0.44
2:N:704:TYR:HE2	2:N:745:LEU:HD21	1.82	0.44
2:N:862:ALA:HB1	2:N:867:VAL:O	2.17	0.44
1:O:76:GLU:O	1:O:80:LEU:HG	2.16	0.44
2:P:539:ASN:O	2:P:543:VAL:HG23	2.18	0.44
2:P:801:ALA:HB2	2:P:820:ILE:HB	2.00	0.44
1:Q:423:ILE:O	1:Q:427:VAL:HG23	2.17	0.44
1:U:76:GLU:O	1:U:80:LEU:HG	2.17	0.44
2:V:550:ALA:O	2:V:554:LEU:HG	2.17	0.44
2:V:801:ALA:HB2	2:V:820:ILE:HB	1.99	0.44
2:X:498:LEU:HD21	2:X:548:ILE:CG2	2.47	0.44
1:A:253:VAL:CG2	1:A:270:ILE:HD11	2.48	0.44
1:A:253:VAL:CG2	1:A:270:ILE:HG12	2.47	0.44
1:A:349:VAL:HA	1:A:352:ILE:HD12	1.99	0.44
2:D:694:ARG:NH1	2:D:699:ALA:HB2	2.33	0.44
2:D:808:GLN:N	2:D:809:PRO:HD3	2.32	0.44
1:E:256:LEU:HB3	1:E:261:THR:CB	2.46	0.44
2:F:736:LEU:O	2:F:777:ILE:HD13	2.18	0.44
1:I:8:ALA:HB3	1:I:9:ARG:HH12	1.83	0.44
1:I:239:GLU:OE1	1:I:239:GLU:N	2.42	0.44
1:I:423:ILE:O	1:I:427:VAL:HG23	2.17	0.44
2:L:687:ALA:O	2:L:703:VAL:CG2	2.65	0.44
2:L:704:TYR:HE2	2:L:745:LEU:HD21	1.82	0.44
1:M:6:ILE:HG13	1:M:84:ALA:HB2	1.98	0.44
1:Q:73:ALA:O	1:Q:77:SER:OG	2.31	0.44
2:R:602:GLU:O	2:R:606:VAL:HG23	2.18	0.44
2:R:694:ARG:NH1	2:R:699:ALA:HB2	2.33	0.44
2:R:704:TYR:HE2	2:R:745:LEU:HD21	1.83	0.44
1:S:249:VAL:CG2	1:S:273:ASP:HB3	2.47	0.44
2:T:687:ALA:O	2:T:703:VAL:CG2	2.65	0.44
2:T:736:LEU:O	2:T:777:ILE:HD13	2.18	0.44
2:T:801:ALA:HB2	2:T:820:ILE:HB	1.99	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:V:498:LEU:HD21	2:V:548:ILE:CG2	2.47	0.44
2:V:694:ARG:NH1	2:V:699:ALA:HB2	2.33	0.44
2:X:758:ALA:CB	2:X:778:ILE:HG13	2.48	0.44
1:A:343:GLU:OE2	1:A:397:ARG:NH2	2.43	0.44
1:C:13:LEU:CD2	1:C:77:SER:OG	2.66	0.44
1:C:118:GLU:HA	1:C:121:ARG:HH11	1.83	0.44
1:C:252:LYS:NZ	1:C:269:GLU:OE1	2.39	0.44
2:D:684:LEU:CD2	2:D:707:ALA:HA	2.48	0.44
2:F:694:ARG:NH1	2:F:699:ALA:HB2	2.33	0.44
2:F:704:TYR:HE2	2:F:745:LEU:HD21	1.83	0.44
1:G:75:ALA:HA	1:G:78:LEU:HD12	2.00	0.44
1:G:413:SER:HA	1:G:416:ILE:HD12	2.00	0.44
2:H:736:LEU:O	2:H:777:ILE:HD13	2.18	0.44
2:L:498:LEU:HD21	2:L:548:ILE:CG2	2.47	0.44
2:L:602:GLU:O	2:L:606:VAL:HG23	2.18	0.44
2:L:694:ARG:NH1	2:L:699:ALA:HB2	2.33	0.44
2:L:801:ALA:HB2	2:L:820:ILE:HB	1.99	0.44
2:N:516:THR:O	2:N:520:LYS:HG3	2.18	0.44
2:N:758:ALA:CB	2:N:778:ILE:HG13	2.48	0.44
1:O:8:ALA:HB3	1:O:9:ARG:HH12	1.83	0.44
1:O:118:GLU:HA	1:O:121:ARG:HH11	1.83	0.44
2:P:602:GLU:O	2:P:606:VAL:HG23	2.18	0.44
2:P:765:GLN:O	2:P:771:ALA:HB2	2.18	0.44
1:Q:118:GLU:HA	1:Q:121:ARG:HH11	1.83	0.44
1:Q:253:VAL:CG2	1:Q:270:ILE:CG1	2.95	0.44
1:Q:454:GLU:HB3	2:R:852:ARG:NE	2.32	0.44
2:R:684:LEU:CD2	2:R:707:ALA:HA	2.48	0.44
1:S:13:LEU:CD2	1:S:77:SER:OG	2.66	0.44
1:S:413:SER:HA	1:S:416:ILE:HD12	2.00	0.44
2:T:516:THR:O	2:T:520:LYS:HG3	2.18	0.44
2:T:765:GLN:O	2:T:771:ALA:HB2	2.18	0.44
2:X:487:SER:HG	2:X:490:LYS:H	1.62	0.44
2:X:808:GLN:N	2:X:809:PRO:HD3	2.32	0.44
2:X:862:ALA:HB1	2:X:867:VAL:O	2.17	0.44
2:B:736:LEU:O	2:B:777:ILE:HD13	2.18	0.44
2:D:869:VAL:HA	2:D:881:VAL:O	2.18	0.44
1:E:205:ALA:HB1	1:E:214:ARG:CG	2.48	0.44
1:E:256:LEU:O	1:E:261:THR:N	2.47	0.44
2:H:758:ALA:CB	2:H:778:ILE:HG13	2.48	0.44
1:I:253:VAL:CG2	1:I:270:ILE:HG12	2.47	0.44
1:I:322:ARG:NH2	1:I:326:GLU:OE1	2.40	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:J:826:MET:HE1	2:J:850:GLN:HB3	2.00	0.44
1:M:349:VAL:HA	1:M:352:ILE:HD12	1.99	0.44
1:O:75:ALA:HA	1:O:78:LEU:HD12	2.00	0.44
2:P:740:GLU:OE1	2:P:773:LYS:NZ	2.50	0.44
2:P:758:ALA:CB	2:P:778:ILE:HG13	2.48	0.44
1:Q:253:VAL:HG13	1:Q:266:ILE:HG21	1.97	0.44
1:Q:253:VAL:CG2	1:Q:270:ILE:HD11	2.48	0.44
2:R:516:THR:O	2:R:520:LYS:HG3	2.18	0.44
2:R:801:ALA:HB2	2:R:820:ILE:HB	1.99	0.44
2:R:808:GLN:N	2:R:809:PRO:HD3	2.32	0.44
1:S:343:GLU:OE2	1:S:397:ARG:NH2	2.43	0.44
2:T:694:ARG:NH1	2:T:699:ALA:HB2	2.33	0.44
1:U:249:VAL:CG2	1:U:273:ASP:HB3	2.47	0.44
1:U:253:VAL:CG2	1:U:270:ILE:HG12	2.47	0.44
2:V:539:ASN:O	2:V:543:VAL:HG23	2.18	0.44
2:X:516:THR:O	2:X:520:LYS:HG3	2.18	0.44
2:X:539:ASN:O	2:X:543:VAL:HG23	2.18	0.44
1:A:8:ALA:HB3	1:A:9:ARG:HH12	1.83	0.44
1:C:349:VAL:HA	1:C:352:ILE:HD12	1.99	0.44
1:C:413:SER:HA	1:C:416:ILE:HD12	2.00	0.44
2:D:765:GLN:O	2:D:771:ALA:HB2	2.18	0.44
1:E:471:VAL:HG22	1:E:484:VAL:HA	1.99	0.44
1:G:13:LEU:CD2	1:G:77:SER:OG	2.66	0.44
1:G:253:VAL:CG2	1:G:270:ILE:HG12	2.47	0.44
1:G:376:GLU:O	1:G:380:THR:OG1	2.26	0.44
1:G:439:ASN:O	1:G:486:GLY:N	2.33	0.44
2:H:539:ASN:O	2:H:543:VAL:HG23	2.18	0.44
1:I:9:ARG:HH11	1:I:9:ARG:HG2	1.83	0.44
1:I:263:GLU:OE2	1:I:319:ILE:N	2.51	0.44
2:J:694:ARG:NH1	2:J:699:ALA:HB2	2.33	0.44
2:J:808:GLN:N	2:J:809:PRO:HD3	2.32	0.44
1:K:6:ILE:HG13	1:K:84:ALA:HB2	1.99	0.44
2:L:516:THR:O	2:L:520:LYS:HG3	2.18	0.44
1:M:253:VAL:CG2	1:M:270:ILE:HD11	2.48	0.44
1:M:471:VAL:HG22	1:M:484:VAL:HA	1.99	0.44
2:N:684:LEU:CD2	2:N:707:ALA:HA	2.48	0.44
2:N:687:ALA:O	2:N:703:VAL:CG2	2.65	0.44
2:P:610:ILE:HA	2:P:659:ALA:HB1	1.99	0.44
2:R:498:LEU:HD21	2:R:548:ILE:CG2	2.47	0.44
2:R:736:LEU:O	2:R:777:ILE:HD13	2.18	0.44
2:T:602:GLU:O	2:T:606:VAL:HG23	2.18	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:T:826:MET:HE1	2:T:850:GLN:HB3	2.00	0.44
1:U:118:GLU:HA	1:U:121:ARG:HH11	1.83	0.44
1:U:349:VAL:HA	1:U:352:ILE:HD12	1.99	0.44
2:V:736:LEU:O	2:V:777:ILE:HD13	2.18	0.44
1:W:118:GLU:HA	1:W:121:ARG:HH11	1.83	0.44
1:W:205:ALA:HB1	1:W:214:ARG:CG	2.48	0.44
2:X:610:ILE:HA	2:X:659:ALA:HB1	1.99	0.44
1:A:118:GLU:HA	1:A:121:ARG:HH11	1.83	0.43
1:A:423:ILE:O	1:A:427:VAL:HG23	2.17	0.43
1:C:205:ALA:HB1	1:C:214:ARG:CG	2.48	0.43
2:D:758:ALA:CB	2:D:778:ILE:HG13	2.48	0.43
1:E:75:ALA:HA	1:E:78:LEU:HD12	2.00	0.43
2:F:765:GLN:O	2:F:771:ALA:HB2	2.18	0.43
2:H:516:THR:O	2:H:520:LYS:HG3	2.18	0.43
1:M:263:GLU:OE2	1:M:319:ILE:N	2.51	0.43
1:O:253:VAL:CG2	1:O:270:ILE:HD11	2.48	0.43
1:Q:424:ALA:O	1:Q:428:MET:CE	2.66	0.43
2:R:610:ILE:HA	2:R:659:ALA:HB1	1.99	0.43
1:U:424:ALA:O	1:U:428:MET:CE	2.66	0.43
1:U:453:GLN:OE1	2:V:855:TYR:OH	2.30	0.43
2:V:687:ALA:O	2:V:703:VAL:CG2	2.65	0.43
1:W:13:LEU:CD2	1:W:77:SER:OG	2.66	0.43
1:W:349:VAL:HA	1:W:352:ILE:HD12	1.99	0.43
2:X:602:GLU:O	2:X:606:VAL:HG23	2.18	0.43
2:X:869:VAL:HA	2:X:881:VAL:O	2.18	0.43
2:B:602:GLU:O	2:B:606:VAL:HG23	2.18	0.43
2:B:704:TYR:HE2	2:B:745:LEU:HD21	1.82	0.43
2:D:736:LEU:HD12	2:D:770:LEU:HD22	2.01	0.43
2:F:532:ASN:HA	2:F:535:ILE:HD12	1.98	0.43
2:F:602:GLU:O	2:F:606:VAL:HG23	2.18	0.43
2:F:615:LYS:NZ	2:F:619:GLU:OE2	2.42	0.43
1:G:118:GLU:HA	1:G:121:ARG:HH11	1.83	0.43
1:G:253:VAL:CG2	1:G:270:ILE:HD11	2.48	0.43
1:G:263:GLU:OE2	1:G:319:ILE:N	2.51	0.43
2:H:602:GLU:O	2:H:606:VAL:HG23	2.18	0.43
2:H:684:LEU:CD2	2:H:707:ALA:HA	2.48	0.43
1:I:265:GLU:O	1:I:269:GLU:HG2	2.19	0.43
1:I:355:ALA:HA	1:I:358:ARG:CZ	2.49	0.43
1:I:424:ALA:O	1:I:428:MET:CE	2.66	0.43
2:J:550:ALA:O	2:J:554:LEU:HG	2.17	0.43
1:K:424:ALA:O	1:K:428:MET:CE	2.66	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:M:343:GLU:OE2	1:M:397:ARG:NH2	2.43	0.43
2:N:532:ASN:HA	2:N:535:ILE:HD12	1.99	0.43
2:N:694:ARG:NH1	2:N:699:ALA:HB2	2.33	0.43
1:S:253:VAL:CG2	1:S:270:ILE:HD11	2.48	0.43
1:S:424:ALA:O	1:S:428:MET:CE	2.66	0.43
2:T:862:ALA:HB1	2:T:867:VAL:O	2.17	0.43
1:U:66:ALA:O	1:U:70:ILE:HG13	2.19	0.43
1:U:355:ALA:HA	1:U:358:ARG:CZ	2.49	0.43
1:W:263:GLU:OE2	1:W:319:ILE:N	2.51	0.43
2:X:736:LEU:O	2:X:777:ILE:HD13	2.18	0.43
2:B:516:THR:O	2:B:520:LYS:HG3	2.18	0.43
2:B:539:ASN:O	2:B:543:VAL:HG23	2.18	0.43
1:C:424:ALA:O	1:C:428:MET:CE	2.66	0.43
2:D:704:TYR:HE2	2:D:745:LEU:HD21	1.82	0.43
1:E:8:ALA:HB3	1:E:9:ARG:HH12	1.83	0.43
1:E:253:VAL:CG2	1:E:270:ILE:HD11	2.48	0.43
2:F:610:ILE:HA	2:F:659:ALA:HB1	1.99	0.43
2:H:704:TYR:HE2	2:H:745:LEU:HD21	1.83	0.43
1:I:67:GLU:HG2	1:I:71:ARG:HE	1.84	0.43
2:J:516:THR:O	2:J:520:LYS:HG3	2.18	0.43
1:M:424:ALA:O	1:M:428:MET:CE	2.66	0.43
2:N:765:GLN:O	2:N:771:ALA:HB2	2.18	0.43
1:O:9:ARG:HG2	1:O:9:ARG:HH11	1.84	0.43
1:O:424:ALA:O	1:O:428:MET:CE	2.66	0.43
2:P:684:LEU:CD2	2:P:707:ALA:HA	2.48	0.43
2:P:736:LEU:HD12	2:P:770:LEU:HD22	2.01	0.43
1:Q:75:ALA:HA	1:Q:78:LEU:HD12	2.00	0.43
2:T:823:VAL:HG11	2:T:830:MET:HG2	2.00	0.43
1:U:413:SER:HA	1:U:416:ILE:HD12	2.00	0.43
2:V:758:ALA:CB	2:V:778:ILE:HG13	2.48	0.43
1:W:8:ALA:HB3	1:W:9:ARG:HH12	1.83	0.43
1:W:423:ILE:O	1:W:427:VAL:HG23	2.17	0.43
2:X:694:ARG:NH1	2:X:699:ALA:HB2	2.33	0.43
2:B:823:VAL:HG11	2:B:830:MET:HG2	2.00	0.43
1:C:9:ARG:HG2	1:C:9:ARG:HH11	1.84	0.43
1:C:343:GLU:OE2	1:C:397:ARG:NH2	2.43	0.43
2:D:602:GLU:O	2:D:606:VAL:HG23	2.18	0.43
2:D:736:LEU:O	2:D:777:ILE:HD13	2.18	0.43
2:D:801:ALA:HB2	2:D:820:ILE:HB	1.99	0.43
2:D:826:MET:HE3	2:D:850:GLN:NE2	2.34	0.43
1:E:317:ALA:HB2	1:E:369:ILE:HA	2.01	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:F:869:VAL:HA	2:F:881:VAL:O	2.18	0.43
2:H:550:ALA:O	2:H:554:LEU:HG	2.17	0.43
2:H:823:VAL:HG11	2:H:830:MET:HG2	2.00	0.43
2:J:736:LEU:O	2:J:777:ILE:HD13	2.18	0.43
2:J:823:VAL:HG11	2:J:830:MET:HG2	2.00	0.43
2:J:826:MET:HE3	2:J:850:GLN:NE2	2.34	0.43
1:K:355:ALA:HA	1:K:358:ARG:CZ	2.49	0.43
1:Q:13:LEU:CD2	1:Q:77:SER:OG	2.66	0.43
1:Q:265:GLU:O	1:Q:269:GLU:HG2	2.19	0.43
2:T:684:LEU:CD2	2:T:707:ALA:HA	2.48	0.43
2:V:516:THR:O	2:V:520:LYS:HG3	2.18	0.43
1:W:265:GLU:O	1:W:269:GLU:HG2	2.19	0.43
2:X:704:TYR:HE2	2:X:745:LEU:HD21	1.83	0.43
1:A:265:GLU:O	1:A:269:GLU:HG2	2.19	0.43
2:B:684:LEU:CD2	2:B:707:ALA:HA	2.48	0.43
2:B:758:ALA:CB	2:B:778:ILE:HG13	2.48	0.43
2:B:790:ASP:OD2	2:B:793:SER:N	2.38	0.43
2:D:539:ASN:O	2:D:543:VAL:HG23	2.18	0.43
1:E:67:GLU:HG2	1:E:71:ARG:HE	1.84	0.43
1:E:118:GLU:HA	1:E:121:ARG:HH11	1.83	0.43
1:E:413:SER:HA	1:E:416:ILE:HD12	2.00	0.43
1:E:424:ALA:O	1:E:428:MET:CE	2.66	0.43
1:E:453:GLN:OE1	2:F:855:TYR:OH	2.30	0.43
2:F:675:ASP:OD1	2:F:675:ASP:N	2.51	0.43
2:F:826:MET:HE3	2:F:850:GLN:NE2	2.34	0.43
1:G:252:LYS:NZ	1:G:269:GLU:OE1	2.39	0.43
2:H:736:LEU:HD12	2:H:770:LEU:HD22	2.01	0.43
2:H:826:MET:HE3	2:H:850:GLN:NE2	2.34	0.43
1:K:8:ALA:HB3	1:K:9:ARG:HH12	1.83	0.43
1:K:263:GLU:OE2	1:K:319:ILE:N	2.51	0.43
1:K:423:ILE:O	1:K:427:VAL:HG23	2.17	0.43
2:L:684:LEU:CD2	2:L:707:ALA:HA	2.48	0.43
1:M:8:ALA:HB3	1:M:9:ARG:HH12	1.83	0.43
1:M:75:ALA:HA	1:M:78:LEU:HD12	2.00	0.43
2:N:675:ASP:N	2:N:675:ASP:OD1	2.52	0.43
2:N:826:MET:HE1	2:N:850:GLN:HB3	2.00	0.43
1:O:355:ALA:HA	1:O:358:ARG:CZ	2.49	0.43
1:Q:317:ALA:HB2	1:Q:369:ILE:HA	2.01	0.43
2:R:823:VAL:HG11	2:R:830:MET:HG2	2.00	0.43
1:U:265:GLU:O	1:U:269:GLU:HG2	2.19	0.43
2:V:826:MET:HE3	2:V:850:GLN:NE2	2.34	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:498:LEU:CD1	2:B:552:VAL:HG21	2.48	0.43
2:B:869:VAL:HA	2:B:881:VAL:O	2.18	0.43
1:C:253:VAL:CG2	1:C:270:ILE:HD11	2.48	0.43
1:E:9:ARG:HG2	1:E:9:ARG:HH11	1.84	0.43
1:E:66:ALA:O	1:E:70:ILE:HG13	2.19	0.43
1:E:134:LEU:HA	1:E:137:LEU:HD12	2.01	0.43
1:E:253:VAL:O	1:E:254:PHE:C	2.62	0.43
2:F:810:GLY:HA2	2:F:865:ALA:HA	2.01	0.43
1:G:9:ARG:HG2	1:G:9:ARG:HH11	1.84	0.43
1:G:66:ALA:O	1:G:70:ILE:HG13	2.19	0.43
1:G:265:GLU:O	1:G:269:GLU:HG2	2.19	0.43
1:I:439:ASN:O	1:I:486:GLY:N	2.33	0.43
2:J:675:ASP:OD1	2:J:675:ASP:N	2.52	0.43
2:J:801:ALA:HB2	2:J:820:ILE:HB	1.99	0.43
2:J:810:GLY:HA2	2:J:865:ALA:HA	2.01	0.43
1:K:16:GLU:HA	1:K:19:ARG:CG	2.49	0.43
2:L:823:VAL:HG11	2:L:830:MET:HG2	2.00	0.43
2:L:869:VAL:HA	2:L:881:VAL:O	2.18	0.43
2:N:539:ASN:O	2:N:543:VAL:HG23	2.18	0.43
1:O:249:VAL:CG2	1:O:273:ASP:HB3	2.47	0.43
1:O:265:GLU:O	1:O:269:GLU:HG2	2.19	0.43
1:Q:355:ALA:HA	1:Q:358:ARG:CZ	2.48	0.43
2:R:826:MET:HE3	2:R:850:GLN:NE2	2.34	0.43
2:T:539:ASN:O	2:T:543:VAL:HG23	2.18	0.43
2:T:758:ALA:CB	2:T:778:ILE:HG13	2.48	0.43
2:T:869:VAL:HA	2:T:881:VAL:O	2.18	0.43
1:U:8:ALA:HB3	1:U:9:ARG:HH12	1.83	0.43
1:U:67:GLU:HG2	1:U:71:ARG:HE	1.84	0.43
1:U:322:ARG:NH2	1:U:326:GLU:OE1	2.40	0.43
1:U:471:VAL:HG22	1:U:484:VAL:HA	1.99	0.43
2:V:810:GLY:HA2	2:V:865:ALA:HA	2.01	0.43
1:W:9:ARG:HG2	1:W:9:ARG:HH11	1.84	0.43
2:X:810:GLY:HA2	2:X:865:ALA:HA	2.01	0.43
1:A:105:ALA:O	1:A:109:VAL:HG23	2.19	0.43
2:B:826:MET:HE1	2:B:850:GLN:HB3	2.00	0.43
1:C:75:ALA:HA	1:C:78:LEU:HD12	2.00	0.43
2:D:810:GLY:HA2	2:D:865:ALA:HA	2.01	0.43
1:G:16:GLU:HA	1:G:19:ARG:CG	2.49	0.43
1:G:50:GLU:OE1	1:G:53:ARG:NE	2.46	0.43
1:G:424:ALA:O	1:G:428:MET:CE	2.66	0.43
2:H:801:ALA:HB2	2:H:820:ILE:HB	1.99	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:I:75:ALA:HA	1:I:78:LEU:HD12	2.00	0.43
1:I:118:GLU:HA	1:I:121:ARG:HH11	1.83	0.43
1:K:252:LYS:NZ	1:K:269:GLU:OE1	2.39	0.43
2:L:539:ASN:O	2:L:543:VAL:HG23	2.18	0.43
2:L:758:ALA:CB	2:L:778:ILE:HG13	2.48	0.43
1:M:66:ALA:O	1:M:70:ILE:HG13	2.19	0.43
2:N:736:LEU:O	2:N:777:ILE:HD13	2.18	0.43
2:N:736:LEU:HD12	2:N:770:LEU:HD22	2.01	0.43
1:O:67:GLU:HG2	1:O:71:ARG:HE	1.84	0.43
2:P:498:LEU:CD1	2:P:552:VAL:HG21	2.48	0.43
2:P:826:MET:HE3	2:P:850:GLN:NE2	2.34	0.43
1:S:8:ALA:HB3	1:S:9:ARG:HH12	1.83	0.43
1:S:263:GLU:OE2	1:S:319:ILE:N	2.51	0.43
2:T:704:TYR:HE2	2:T:745:LEU:HD21	1.83	0.43
1:U:75:ALA:HA	1:U:78:LEU:HD12	2.00	0.43
2:V:736:LEU:HD12	2:V:770:LEU:HD22	2.00	0.43
1:W:253:VAL:CG2	1:W:270:ILE:HD11	2.48	0.43
1:W:317:ALA:HB2	1:W:369:ILE:HA	2.01	0.43
1:A:67:GLU:HG2	1:A:71:ARG:HE	1.84	0.43
2:B:694:ARG:NH1	2:B:699:ALA:HB2	2.33	0.43
1:C:265:GLU:O	1:C:269:GLU:HG2	2.19	0.43
1:C:355:ALA:HA	1:C:358:ARG:CZ	2.49	0.43
2:F:758:ALA:CB	2:F:778:ILE:HG13	2.48	0.43
2:F:823:VAL:HG11	2:F:830:MET:HG2	2.00	0.43
1:G:8:ALA:HB3	1:G:9:ARG:HH12	1.83	0.43
1:G:67:GLU:HG2	1:G:71:ARG:HE	1.84	0.43
1:G:471:VAL:HG22	1:G:484:VAL:HA	1.99	0.43
2:H:708:LEU:HB3	2:H:742:LEU:HD11	2.01	0.43
1:I:253:VAL:CG2	1:I:270:ILE:HD11	2.48	0.43
2:J:684:LEU:CD2	2:J:707:ALA:HA	2.48	0.43
1:K:9:ARG:HG2	1:K:9:ARG:HH11	1.84	0.43
2:L:736:LEU:O	2:L:777:ILE:HD13	2.18	0.43
1:M:355:ALA:HA	1:M:358:ARG:CZ	2.49	0.43
2:N:615:LYS:NZ	2:N:619:GLU:OE2	2.42	0.43
2:N:869:VAL:HA	2:N:881:VAL:O	2.18	0.43
1:O:16:GLU:HA	1:O:19:ARG:CG	2.49	0.43
1:O:263:GLU:OE2	1:O:319:ILE:N	2.51	0.43
1:O:413:SER:HA	1:O:416:ILE:HD12	2.00	0.43
2:P:694:ARG:NH1	2:P:699:ALA:HB2	2.33	0.43
1:Q:9:ARG:HH11	1:Q:9:ARG:HG2	1.84	0.43
1:Q:413:SER:HA	1:Q:416:ILE:HD12	2.00	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:S:134:LEU:HA	1:S:137:LEU:HD12	2.01	0.43
1:S:265:GLU:O	1:S:269:GLU:HG2	2.19	0.43
1:U:9:ARG:HG2	1:U:9:ARG:HH11	1.84	0.43
1:U:253:VAL:CG2	1:U:270:ILE:HD11	2.48	0.43
2:V:602:GLU:O	2:V:606:VAL:HG23	2.18	0.43
2:V:826:MET:HE1	2:V:850:GLN:HB3	2.00	0.43
1:W:424:ALA:O	1:W:428:MET:CE	2.66	0.43
1:A:263:GLU:OE2	1:A:319:ILE:N	2.51	0.43
1:A:428:MET:O	1:A:452:GLN:NE2	2.52	0.43
2:B:708:LEU:HB3	2:B:742:LEU:HD11	2.01	0.43
1:C:134:LEU:HA	1:C:137:LEU:HD12	2.01	0.43
1:C:453:GLN:OE1	2:D:855:TYR:OH	2.30	0.43
1:E:105:ALA:O	1:E:109:VAL:HG23	2.19	0.43
1:E:355:ALA:HA	1:E:358:ARG:CZ	2.49	0.43
2:F:516:THR:O	2:F:520:LYS:HG3	2.18	0.43
2:F:539:ASN:O	2:F:543:VAL:HG23	2.18	0.43
2:F:826:MET:HE1	2:F:850:GLN:HB3	2.00	0.43
1:G:10:LEU:C	1:G:14:ASN:ND2	2.73	0.43
2:H:694:ARG:NH1	2:H:699:ALA:HB2	2.33	0.43
2:H:869:VAL:HA	2:H:881:VAL:O	2.18	0.43
1:I:134:LEU:HA	1:I:137:LEU:HD12	2.01	0.43
2:L:736:LEU:HD12	2:L:770:LEU:HD22	2.01	0.43
1:M:16:GLU:HA	1:M:19:ARG:CG	2.49	0.43
2:N:602:GLU:O	2:N:606:VAL:HG23	2.18	0.43
1:Q:16:GLU:HA	1:Q:19:ARG:CG	2.49	0.43
1:Q:263:GLU:OE2	1:Q:319:ILE:N	2.51	0.43
2:R:758:ALA:CB	2:R:778:ILE:HG13	2.48	0.43
1:U:16:GLU:HA	1:U:19:ARG:CG	2.49	0.43
2:X:801:ALA:HB2	2:X:820:ILE:HB	1.99	0.43
1:A:424:ALA:O	1:A:428:MET:CE	2.66	0.43
1:C:66:ALA:O	1:C:70:ILE:HG13	2.19	0.43
1:C:105:ALA:O	1:C:109:VAL:HG23	2.19	0.43
1:C:253:VAL:O	1:C:254:PHE:C	2.62	0.43
1:C:317:ALA:HB2	1:C:369:ILE:HA	2.01	0.43
1:C:428:MET:O	1:C:452:GLN:NE2	2.52	0.43
2:D:708:LEU:HB3	2:D:742:LEU:HD11	2.01	0.43
1:E:428:MET:O	1:E:452:GLN:NE2	2.52	0.43
1:I:66:ALA:O	1:I:70:ILE:HG13	2.19	0.43
2:J:602:GLU:O	2:J:606:VAL:HG23	2.18	0.43
2:J:653:ASP:OD1	2:J:656:ARG:NH2	2.44	0.43
1:K:67:GLU:HG2	1:K:71:ARG:HE	1.84	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:105:ALA:O	1:K:109:VAL:HG23	2.19	0.43
2:L:826:MET:HE3	2:L:850:GLN:NE2	2.34	0.43
1:M:9:ARG:HG2	1:M:9:ARG:HH11	1.83	0.43
1:M:205:ALA:HB1	1:M:214:ARG:CG	2.48	0.43
1:M:428:MET:O	1:M:452:GLN:NE2	2.52	0.43
1:O:428:MET:O	1:O:452:GLN:NE2	2.52	0.43
2:P:516:THR:O	2:P:520:LYS:HG3	2.18	0.43
1:S:355:ALA:HA	1:S:358:ARG:CZ	2.49	0.43
2:T:708:LEU:HB3	2:T:742:LEU:HD11	2.01	0.43
2:T:810:GLY:HA2	2:T:865:ALA:HA	2.01	0.43
1:U:252:LYS:NZ	1:U:269:GLU:OE1	2.39	0.43
1:W:105:ALA:O	1:W:109:VAL:HG23	2.19	0.43
1:W:403:ILE:HD13	1:W:466:LEU:HB3	2.01	0.43
2:X:823:VAL:HG11	2:X:830:MET:HG2	2.00	0.43
1:A:9:ARG:HG2	1:A:9:ARG:HH11	1.83	0.42
1:A:66:ALA:O	1:A:70:ILE:HG13	2.19	0.42
1:C:8:ALA:HB3	1:C:9:ARG:HH12	1.83	0.42
1:C:256:LEU:HD22	1:C:261:THR:CG2	2.49	0.42
1:G:105:ALA:O	1:G:109:VAL:HG23	2.19	0.42
2:H:810:GLY:HA2	2:H:865:ALA:HA	2.01	0.42
2:H:826:MET:HE1	2:H:850:GLN:HB3	2.00	0.42
1:I:105:ALA:O	1:I:109:VAL:HG23	2.19	0.42
2:J:539:ASN:O	2:J:543:VAL:HG23	2.18	0.42
1:K:66:ALA:O	1:K:70:ILE:HG13	2.19	0.42
1:K:253:VAL:CG2	1:K:270:ILE:HD11	2.48	0.42
1:K:256:LEU:HD22	1:K:261:THR:CG2	2.49	0.42
2:N:808:GLN:N	2:N:809:PRO:HD3	2.32	0.42
1:O:105:ALA:O	1:O:109:VAL:HG23	2.19	0.42
1:O:256:LEU:O	1:O:261:THR:N	2.47	0.42
2:R:539:ASN:O	2:R:543:VAL:HG23	2.18	0.42
2:R:765:GLN:O	2:R:771:ALA:HB2	2.18	0.42
2:R:869:VAL:HA	2:R:881:VAL:O	2.18	0.42
1:S:403:ILE:HD13	1:S:466:LEU:HB3	2.01	0.42
2:T:826:MET:HE3	2:T:850:GLN:NE2	2.34	0.42
1:U:134:LEU:HA	1:U:137:LEU:HD12	2.01	0.42
2:V:487:SER:HG	2:V:490:LYS:H	1.63	0.42
2:V:505:LEU:O	2:V:509:THR:OG1	2.28	0.42
1:W:253:VAL:O	1:W:254:PHE:C	2.62	0.42
1:W:355:ALA:HA	1:W:358:ARG:CZ	2.49	0.42
1:A:134:LEU:HA	1:A:137:LEU:HD12	2.01	0.42
1:A:188:LEU:O	1:A:192:VAL:HG23	2.19	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:826:MET:HE3	2:B:850:GLN:NE2	2.34	0.42
2:J:869:VAL:HA	2:J:881:VAL:O	2.18	0.42
2:L:675:ASP:OD1	2:L:675:ASP:N	2.52	0.42
1:M:348:ILE:O	1:M:352:ILE:HG13	2.20	0.42
2:N:708:LEU:HB3	2:N:742:LEU:HD11	2.01	0.42
2:N:823:VAL:HG11	2:N:830:MET:HG2	2.00	0.42
1:O:317:ALA:HB2	1:O:369:ILE:HA	2.01	0.42
2:P:869:VAL:HA	2:P:881:VAL:O	2.18	0.42
1:Q:8:ALA:HB3	1:Q:9:ARG:HH12	1.83	0.42
2:R:736:LEU:HD12	2:R:770:LEU:HD22	2.00	0.42
1:S:16:GLU:HA	1:S:19:ARG:CG	2.49	0.42
1:S:66:ALA:O	1:S:70:ILE:HG13	2.19	0.42
1:S:75:ALA:HA	1:S:78:LEU:HD12	2.00	0.42
1:S:321:ALA:O	1:S:376:GLU:HG2	2.20	0.42
1:U:263:GLU:OE2	1:U:319:ILE:N	2.51	0.42
1:U:403:ILE:HD13	1:U:466:LEU:HB3	2.01	0.42
2:X:826:MET:HE3	2:X:850:GLN:NE2	2.34	0.42
1:A:328:ILE:HG21	1:A:380:THR:CG2	2.50	0.42
1:A:355:ALA:HA	1:A:358:ARG:CZ	2.49	0.42
1:C:16:GLU:HA	1:C:19:ARG:CG	2.49	0.42
2:D:516:THR:O	2:D:520:LYS:HG3	2.18	0.42
1:G:253:VAL:HG13	1:G:266:ILE:HG21	1.97	0.42
1:G:253:VAL:O	1:G:254:PHE:C	2.62	0.42
1:G:355:ALA:HA	1:G:358:ARG:CZ	2.49	0.42
2:H:740:GLU:OE1	2:H:773:LYS:NZ	2.50	0.42
1:I:328:ILE:HG21	1:I:380:THR:CG2	2.50	0.42
1:K:413:SER:HA	1:K:416:ILE:HD12	2.00	0.42
2:L:810:GLY:HA2	2:L:865:ALA:HA	2.01	0.42
1:M:73:ALA:O	1:M:77:SER:OG	2.31	0.42
1:M:265:GLU:O	1:M:269:GLU:HG2	2.19	0.42
1:O:253:VAL:O	1:O:254:PHE:C	2.62	0.42
1:Q:66:ALA:O	1:Q:70:ILE:HG13	2.19	0.42
1:Q:67:GLU:HG2	1:Q:71:ARG:HE	1.84	0.42
1:Q:105:ALA:O	1:Q:109:VAL:HG23	2.19	0.42
1:S:9:ARG:HG2	1:S:9:ARG:HH11	1.84	0.42
1:S:105:ALA:O	1:S:109:VAL:HG23	2.19	0.42
1:S:118:GLU:HA	1:S:121:ARG:HH11	1.83	0.42
1:S:188:LEU:O	1:S:192:VAL:HG23	2.19	0.42
2:T:675:ASP:OD1	2:T:675:ASP:N	2.52	0.42
2:T:736:LEU:HD12	2:T:770:LEU:HD22	2.00	0.42
2:V:684:LEU:CD2	2:V:707:ALA:HA	2.48	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:V:869:VAL:HA	2:V:881:VAL:O	2.18	0.42
1:W:328:ILE:HG21	1:W:380:THR:CG2	2.50	0.42
1:W:413:SER:HA	1:W:416:ILE:HD12	2.00	0.42
2:X:826:MET:HE1	2:X:850:GLN:HB3	2.00	0.42
1:A:403:ILE:HD13	1:A:466:LEU:HB3	2.01	0.42
1:C:406:LEU:HD13	1:C:416:ILE:CG2	2.42	0.42
2:D:549:ILE:O	2:D:553:LEU:HG	2.20	0.42
1:E:265:GLU:O	1:E:269:GLU:HG2	2.19	0.42
1:E:328:ILE:HG21	1:E:380:THR:CG2	2.50	0.42
2:F:680:ALA:HB1	2:F:710:ALA:HB1	2.02	0.42
2:F:687:ALA:O	2:F:690:GLU:HB3	2.20	0.42
1:G:321:ALA:O	1:G:376:GLU:HG2	2.19	0.42
1:I:16:GLU:HA	1:I:19:ARG:CG	2.49	0.42
1:I:256:LEU:HD22	1:I:261:THR:CG2	2.49	0.42
1:I:317:ALA:HB2	1:I:369:ILE:HA	2.01	0.42
1:I:348:ILE:O	1:I:352:ILE:HG13	2.19	0.42
2:J:715:ALA:HB3	2:J:735:ILE:HG13	2.02	0.42
1:K:317:ALA:HB2	1:K:369:ILE:HA	2.01	0.42
1:M:317:ALA:HB2	1:M:369:ILE:HA	2.01	0.42
2:P:708:LEU:HB3	2:P:742:LEU:HD11	2.01	0.42
1:Q:403:ILE:HD13	1:Q:466:LEU:HB3	2.01	0.42
1:S:253:VAL:O	1:S:254:PHE:C	2.62	0.42
1:S:317:ALA:HB2	1:S:369:ILE:HA	2.01	0.42
1:S:424:ALA:HB1	1:S:428:MET:HE1	2.02	0.42
1:A:16:GLU:HA	1:A:19:ARG:CG	2.49	0.42
2:B:736:LEU:HD12	2:B:770:LEU:HD22	2.00	0.42
1:E:263:GLU:OE2	1:E:319:ILE:N	2.51	0.42
1:E:321:ALA:O	1:E:376:GLU:HG2	2.19	0.42
1:G:134:LEU:HA	1:G:137:LEU:HD12	2.01	0.42
1:G:348:ILE:O	1:G:352:ILE:HG13	2.20	0.42
1:I:403:ILE:HD13	1:I:466:LEU:HB3	2.01	0.42
1:K:75:ALA:HA	1:K:78:LEU:HD12	2.00	0.42
1:K:96:MET:SD	1:K:150:ILE:HG12	2.60	0.42
1:K:348:ILE:O	1:K:352:ILE:HG13	2.20	0.42
1:K:403:ILE:HD13	1:K:466:LEU:HB3	2.01	0.42
1:M:188:LEU:O	1:M:192:VAL:HG23	2.19	0.42
1:M:453:GLN:OE1	2:N:855:TYR:OH	2.30	0.42
1:O:66:ALA:O	1:O:70:ILE:HG13	2.19	0.42
1:O:162:ARG:NH1	1:O:163:GLU:OE2	2.52	0.42
1:O:328:ILE:HG21	1:O:380:THR:CG2	2.50	0.42
2:P:632:ALA:O	2:P:636:LEU:HG	2.20	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:P:826:MET:HE1	2:P:850:GLN:HB3	2.00	0.42
1:Q:12:GLN:O	1:Q:16:GLU:HG2	2.20	0.42
1:Q:188:LEU:O	1:Q:192:VAL:HG23	2.19	0.42
1:Q:321:ALA:O	1:Q:376:GLU:HG2	2.19	0.42
2:R:826:MET:HE1	2:R:850:GLN:HB3	2.00	0.42
1:U:288:TYR:CB	1:U:340:VAL:HG13	2.50	0.42
2:V:632:ALA:O	2:V:636:LEU:HG	2.20	0.42
1:W:75:ALA:HA	1:W:78:LEU:HD12	2.00	0.42
2:B:687:ALA:O	2:B:690:GLU:HB3	2.20	0.42
1:C:188:LEU:O	1:C:192:VAL:HG23	2.19	0.42
1:C:363:GLU:HB3	1:C:419:ILE:CG1	2.50	0.42
2:D:680:ALA:HB1	2:D:710:ALA:HB1	2.02	0.42
2:D:715:ALA:HB3	2:D:735:ILE:HG13	2.02	0.42
2:D:826:MET:HE1	2:D:850:GLN:HB3	2.00	0.42
1:E:288:TYR:CB	1:E:340:VAL:HG13	2.50	0.42
1:E:348:ILE:O	1:E:352:ILE:HG13	2.19	0.42
1:E:363:GLU:HB3	1:E:419:ILE:CG1	2.50	0.42
2:F:715:ALA:HB3	2:F:735:ILE:HG13	2.02	0.42
2:F:736:LEU:HD12	2:F:770:LEU:HD22	2.01	0.42
1:I:253:VAL:O	1:I:254:PHE:C	2.62	0.42
1:I:288:TYR:CB	1:I:340:VAL:HG13	2.50	0.42
2:J:687:ALA:O	2:J:690:GLU:HB3	2.20	0.42
1:K:17:LEU:O	1:K:21:LEU:HG	2.20	0.42
1:K:265:GLU:O	1:K:269:GLU:HG2	2.19	0.42
1:K:328:ILE:HG21	1:K:380:THR:CG2	2.50	0.42
2:L:632:ALA:O	2:L:636:LEU:HG	2.20	0.42
1:M:67:GLU:HG2	1:M:71:ARG:HE	1.84	0.42
1:O:134:LEU:HA	1:O:137:LEU:HD12	2.01	0.42
1:Q:50:GLU:OE1	1:Q:53:ARG:NE	2.46	0.42
1:Q:253:VAL:O	1:Q:254:PHE:C	2.62	0.42
1:Q:288:TYR:CB	1:Q:340:VAL:HG13	2.50	0.42
1:S:328:ILE:HG21	1:S:380:THR:CG2	2.50	0.42
2:T:635:VAL:HG13	2:T:688:ILE:HD12	2.02	0.42
1:U:205:ALA:HB1	1:U:214:ARG:CG	2.48	0.42
1:W:12:GLN:O	1:W:16:GLU:HG2	2.20	0.42
1:W:67:GLU:HG2	1:W:71:ARG:HE	1.84	0.42
1:A:321:ALA:O	1:A:376:GLU:HG2	2.20	0.42
1:C:12:GLN:O	1:C:16:GLU:HG2	2.20	0.42
1:C:174:GLU:O	1:C:178:ASN:ND2	2.53	0.42
1:C:263:GLU:OE2	1:C:319:ILE:N	2.51	0.42
1:C:428:MET:HB3	1:C:452:GLN:NE2	2.35	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:635:VAL:HG13	2:D:688:ILE:HD12	2.02	0.42
2:F:765:GLN:N	2:F:766:PRO:HD3	2.35	0.42
1:G:188:LEU:O	1:G:192:VAL:HG23	2.19	0.42
2:H:549:ILE:O	2:H:553:LEU:HG	2.20	0.42
1:I:17:LEU:O	1:I:21:LEU:HG	2.20	0.42
1:I:428:MET:HB3	1:I:452:GLN:NE2	2.35	0.42
2:J:549:ILE:O	2:J:553:LEU:HG	2.20	0.42
2:J:632:ALA:O	2:J:636:LEU:HG	2.20	0.42
2:L:708:LEU:HB3	2:L:742:LEU:HD11	2.01	0.42
1:M:10:LEU:C	1:M:14:ASN:ND2	2.74	0.42
2:N:826:MET:HE3	2:N:850:GLN:NE2	2.34	0.42
1:O:348:ILE:O	1:O:352:ILE:HG13	2.20	0.42
1:O:403:ILE:HD13	1:O:466:LEU:HB3	2.01	0.42
2:R:765:GLN:N	2:R:766:PRO:HD3	2.35	0.42
1:S:428:MET:HB3	1:S:452:GLN:NE2	2.35	0.42
1:U:105:ALA:O	1:U:109:VAL:HG23	2.19	0.42
2:V:549:ILE:O	2:V:553:LEU:HG	2.20	0.42
2:V:635:VAL:HG13	2:V:688:ILE:HD12	2.02	0.42
1:W:424:ALA:HB1	1:W:428:MET:HE1	2.02	0.42
2:X:498:LEU:CD1	2:X:552:VAL:HG21	2.48	0.42
2:X:632:ALA:O	2:X:636:LEU:HG	2.20	0.42
1:A:257:LYS:CA	1:A:266:ILE:HD11	2.50	0.42
1:A:428:MET:HB3	1:A:452:GLN:NE2	2.35	0.42
2:B:765:GLN:N	2:B:766:PRO:HD3	2.35	0.42
1:C:321:ALA:O	1:C:376:GLU:HG2	2.19	0.42
2:D:675:ASP:OD1	2:D:675:ASP:N	2.52	0.42
1:E:10:LEU:C	1:E:14:ASN:ND2	2.74	0.42
1:E:12:GLN:O	1:E:16:GLU:HG2	2.20	0.42
1:E:96:MET:SD	1:E:150:ILE:HG12	2.60	0.42
2:H:632:ALA:O	2:H:636:LEU:HG	2.20	0.42
1:I:321:ALA:O	1:I:376:GLU:HG2	2.20	0.42
2:J:736:LEU:HD12	2:J:770:LEU:HD22	2.00	0.42
2:J:826:MET:CE	2:J:846:LEU:HD23	2.50	0.42
1:K:188:LEU:O	1:K:192:VAL:HG23	2.19	0.42
1:K:257:LYS:CA	1:K:266:ILE:HD11	2.50	0.42
1:M:174:GLU:O	1:M:178:ASN:ND2	2.53	0.42
2:P:810:GLY:HA2	2:P:865:ALA:HA	2.01	0.42
1:Q:134:LEU:HA	1:Q:137:LEU:HD12	2.01	0.42
2:R:549:ILE:O	2:R:553:LEU:HG	2.20	0.42
2:R:810:GLY:HA2	2:R:865:ALA:HA	2.01	0.42
1:S:12:GLN:O	1:S:16:GLU:HG2	2.20	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:S:96:MET:SD	1:S:150:ILE:HG12	2.60	0.42
1:U:174:GLU:O	1:U:178:ASN:ND2	2.53	0.42
1:W:16:GLU:HA	1:W:19:ARG:CG	2.49	0.42
1:W:66:ALA:O	1:W:70:ILE:HG13	2.19	0.42
1:W:239:GLU:OE1	1:W:239:GLU:N	2.42	0.42
1:W:348:ILE:O	1:W:352:ILE:HG13	2.19	0.42
2:X:549:ILE:O	2:X:553:LEU:HG	2.20	0.42
2:X:736:LEU:HD12	2:X:770:LEU:HD22	2.00	0.42
2:X:826:MET:CE	2:X:846:LEU:HD23	2.50	0.42
1:A:75:ALA:HA	1:A:78:LEU:HD12	2.00	0.42
1:A:96:MET:SD	1:A:150:ILE:HG12	2.60	0.42
1:A:174:GLU:O	1:A:178:ASN:ND2	2.53	0.42
1:A:288:TYR:CB	1:A:340:VAL:HG13	2.50	0.42
1:C:10:LEU:C	1:C:14:ASN:ND2	2.73	0.42
1:C:76:GLU:OE2	1:C:79:ARG:NH2	2.47	0.42
2:D:687:ALA:O	2:D:690:GLU:HB3	2.20	0.42
1:E:16:GLU:HA	1:E:19:ARG:CG	2.49	0.42
1:E:256:LEU:HD22	1:E:261:THR:CG2	2.49	0.42
2:F:635:VAL:HG13	2:F:688:ILE:HD12	2.02	0.42
2:F:715:ALA:CB	2:F:735:ILE:HG13	2.50	0.42
2:F:826:MET:CE	2:F:846:LEU:HD23	2.50	0.42
1:G:328:ILE:HG21	1:G:380:THR:CG2	2.50	0.42
1:G:363:GLU:HB3	1:G:419:ILE:CG1	2.50	0.42
2:H:715:ALA:HB3	2:H:735:ILE:HG13	2.02	0.42
1:I:12:GLN:O	1:I:16:GLU:HG2	2.20	0.42
1:I:424:ALA:HB1	1:I:428:MET:HE1	2.02	0.42
2:J:498:LEU:CD1	2:J:552:VAL:HG21	2.48	0.42
2:J:635:VAL:HG13	2:J:688:ILE:HD12	2.02	0.42
1:K:424:ALA:HB1	1:K:428:MET:HE1	2.02	0.42
2:L:826:MET:HE1	2:L:850:GLN:HB3	2.00	0.42
1:M:253:VAL:O	1:M:254:PHE:C	2.62	0.42
1:M:257:LYS:CA	1:M:266:ILE:HD11	2.50	0.42
1:M:288:TYR:CB	1:M:340:VAL:HG13	2.50	0.42
2:N:798:ASP:HA	2:N:821:SER:HA	2.02	0.42
1:O:257:LYS:CA	1:O:266:ILE:HD11	2.50	0.42
1:O:321:ALA:O	1:O:376:GLU:HG2	2.19	0.42
2:P:549:ILE:O	2:P:553:LEU:HG	2.20	0.42
2:P:615:LYS:NZ	2:P:619:GLU:OE2	2.42	0.42
2:P:675:ASP:N	2:P:675:ASP:OD1	2.51	0.42
2:P:687:ALA:O	2:P:690:GLU:HB3	2.20	0.42
2:R:632:ALA:O	2:R:636:LEU:HG	2.20	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:S:288:TYR:CB	1:S:340:VAL:HG13	2.50	0.42
2:T:680:ALA:HB1	2:T:710:ALA:HB1	2.02	0.42
1:U:12:GLN:O	1:U:16:GLU:HG2	2.20	0.42
1:U:257:LYS:CA	1:U:266:ILE:HD11	2.50	0.42
1:U:328:ILE:HG21	1:U:380:THR:CG2	2.50	0.42
1:U:348:ILE:O	1:U:352:ILE:HG13	2.20	0.42
1:U:363:GLU:HB3	1:U:419:ILE:CG1	2.50	0.42
2:V:680:ALA:HB1	2:V:710:ALA:HB1	2.02	0.42
2:V:687:ALA:O	2:V:690:GLU:HB3	2.20	0.42
1:W:134:LEU:HA	1:W:137:LEU:HD12	2.01	0.42
2:X:635:VAL:HG13	2:X:688:ILE:HD12	2.02	0.42
2:X:680:ALA:HB1	2:X:710:ALA:HB1	2.02	0.42
2:X:687:ALA:O	2:X:690:GLU:HB3	2.20	0.42
1:A:256:LEU:HD22	1:A:261:THR:CG2	2.49	0.42
2:B:810:GLY:HA2	2:B:865:ALA:HA	2.01	0.42
2:B:826:MET:CE	2:B:846:LEU:HD23	2.50	0.42
1:C:257:LYS:CA	1:C:266:ILE:HD11	2.50	0.42
1:C:348:ILE:O	1:C:352:ILE:HG13	2.20	0.42
2:D:615:LYS:NZ	2:D:619:GLU:OE2	2.42	0.42
1:E:252:LYS:NZ	1:E:269:GLU:OE1	2.39	0.42
1:G:184:VAL:O	1:G:188:LEU:HG	2.20	0.42
1:G:428:MET:O	1:G:452:GLN:NE2	2.52	0.42
2:H:680:ALA:HB1	2:H:710:ALA:HB1	2.02	0.42
1:I:184:VAL:O	1:I:188:LEU:HG	2.20	0.42
1:K:73:ALA:O	1:K:77:SER:OG	2.31	0.42
1:K:253:VAL:O	1:K:254:PHE:C	2.62	0.42
1:K:428:MET:O	1:K:452:GLN:NE2	2.52	0.42
1:M:76:GLU:OE2	1:M:79:ARG:NH2	2.47	0.42
1:M:398:ILE:O	1:M:402:VAL:HG23	2.20	0.42
1:M:403:ILE:HD13	1:M:466:LEU:HB3	2.01	0.42
2:N:549:ILE:O	2:N:553:LEU:HG	2.20	0.42
1:O:12:GLN:O	1:O:16:GLU:HG2	2.20	0.42
1:O:96:MET:SD	1:O:150:ILE:HG12	2.60	0.42
2:P:635:VAL:HG13	2:P:688:ILE:HD12	2.02	0.42
1:Q:363:GLU:HB3	1:Q:419:ILE:CG1	2.50	0.42
1:Q:406:LEU:HD13	1:Q:416:ILE:CG2	2.42	0.42
2:R:715:ALA:HB3	2:R:735:ILE:HG13	2.02	0.42
1:S:428:MET:O	1:S:452:GLN:NE2	2.52	0.42
2:T:765:GLN:N	2:T:766:PRO:HD3	2.35	0.42
1:U:317:ALA:HB2	1:U:369:ILE:HA	2.01	0.42
1:U:321:ALA:O	1:U:376:GLU:HG2	2.19	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:V:765:GLN:N	2:V:766:PRO:HD3	2.35	0.42
1:W:428:MET:O	1:W:452:GLN:NE2	2.52	0.42
1:A:253:VAL:O	1:A:254:PHE:C	2.62	0.41
1:A:253:VAL:HG22	1:A:270:ILE:CG1	2.51	0.41
1:A:317:ALA:HB2	1:A:369:ILE:HA	2.01	0.41
1:A:443:VAL:HG12	1:A:445:ILE:HG13	2.02	0.41
2:B:549:ILE:O	2:B:553:LEU:HG	2.20	0.41
2:B:632:ALA:O	2:B:636:LEU:HG	2.20	0.41
1:C:67:GLU:HG2	1:C:71:ARG:HE	1.84	0.41
1:C:443:VAL:HG12	1:C:445:ILE:HG13	2.02	0.41
1:E:188:LEU:O	1:E:192:VAL:HG23	2.19	0.41
1:E:428:MET:HB3	1:E:452:GLN:NE2	2.35	0.41
2:F:708:LEU:HB3	2:F:742:LEU:HD11	2.01	0.41
2:F:847:HIS:N	2:F:850:GLN:OE1	2.30	0.41
1:G:17:LEU:O	1:G:21:LEU:HG	2.20	0.41
1:G:288:TYR:CB	1:G:340:VAL:HG13	2.50	0.41
2:H:826:MET:CE	2:H:846:LEU:HD23	2.50	0.41
1:I:363:GLU:HB3	1:I:419:ILE:CG1	2.50	0.41
1:I:428:MET:O	1:I:452:GLN:NE2	2.52	0.41
2:J:715:ALA:CB	2:J:735:ILE:HG13	2.50	0.41
1:K:174:GLU:O	1:K:178:ASN:ND2	2.53	0.41
1:K:239:GLU:OE1	1:K:239:GLU:N	2.42	0.41
2:L:635:VAL:HG13	2:L:688:ILE:HD12	2.02	0.41
1:M:134:LEU:HA	1:M:137:LEU:HD12	2.01	0.41
1:M:428:MET:HB3	1:M:452:GLN:NE2	2.35	0.41
2:N:687:ALA:O	2:N:690:GLU:HB3	2.20	0.41
2:P:680:ALA:HB1	2:P:710:ALA:HB1	2.02	0.41
1:Q:328:ILE:HG21	1:Q:380:THR:CG2	2.50	0.41
1:Q:428:MET:O	1:Q:452:GLN:NE2	2.52	0.41
2:R:687:ALA:O	2:R:690:GLU:HB3	2.20	0.41
2:T:549:ILE:O	2:T:553:LEU:HG	2.20	0.41
1:U:188:LEU:O	1:U:192:VAL:HG23	2.19	0.41
1:W:184:VAL:O	1:W:188:LEU:HG	2.20	0.41
1:W:188:LEU:O	1:W:192:VAL:HG23	2.19	0.41
1:W:288:TYR:CB	1:W:340:VAL:HG13	2.50	0.41
1:W:428:MET:HB3	1:W:452:GLN:NE2	2.35	0.41
2:X:498:LEU:HG	2:X:548:ILE:HG21	2.02	0.41
2:X:590:GLU:OE1	2:X:644:LYS:NZ	2.37	0.41
1:A:17:LEU:O	1:A:21:LEU:HG	2.20	0.41
2:B:498:LEU:HG	2:B:548:ILE:HG21	2.03	0.41
1:C:96:MET:SD	1:C:150:ILE:HG12	2.60	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:193:GLU:HG2	1:C:248:VAL:HG21	2.02	0.41
1:E:193:GLU:HG2	1:E:248:VAL:HG21	2.02	0.41
1:E:274:ILE:O	1:E:278:ILE:HG13	2.21	0.41
1:E:319:ILE:O	1:E:323:VAL:HG23	2.21	0.41
2:F:503:ALA:HA	2:F:506:LYS:NZ	2.36	0.41
2:F:549:ILE:O	2:F:553:LEU:HG	2.20	0.41
2:F:794:ARG:CZ	2:F:827:GLY:CA	2.99	0.41
1:G:12:GLN:O	1:G:16:GLU:HG2	2.20	0.41
1:G:317:ALA:HB2	1:G:369:ILE:HA	2.01	0.41
1:G:406:LEU:HD13	1:G:416:ILE:CG2	2.42	0.41
1:I:96:MET:SD	1:I:150:ILE:HG12	2.60	0.41
1:I:188:LEU:O	1:I:192:VAL:HG23	2.20	0.41
1:K:12:GLN:O	1:K:16:GLU:HG2	2.20	0.41
1:K:443:VAL:HG12	1:K:445:ILE:HG13	2.02	0.41
2:L:715:ALA:CB	2:L:735:ILE:HG13	2.50	0.41
2:L:715:ALA:HB3	2:L:735:ILE:HG13	2.02	0.41
1:M:321:ALA:O	1:M:376:GLU:HG2	2.19	0.41
1:M:363:GLU:HB3	1:M:419:ILE:CG1	2.50	0.41
2:N:810:GLY:HA2	2:N:865:ALA:HA	2.01	0.41
2:N:826:MET:CE	2:N:846:LEU:HD23	2.50	0.41
1:O:73:ALA:O	1:O:77:SER:OG	2.31	0.41
1:O:288:TYR:CB	1:O:340:VAL:HG13	2.50	0.41
2:P:798:ASP:HA	2:P:821:SER:HA	2.02	0.41
1:Q:17:LEU:O	1:Q:21:LEU:HG	2.20	0.41
1:Q:96:MET:SD	1:Q:150:ILE:HG12	2.60	0.41
1:S:17:LEU:O	1:S:21:LEU:HG	2.20	0.41
1:S:67:GLU:HG2	1:S:71:ARG:HE	1.84	0.41
1:S:257:LYS:CA	1:S:266:ILE:HD11	2.50	0.41
1:S:398:ILE:O	1:S:402:VAL:HG23	2.21	0.41
2:T:503:ALA:HA	2:T:506:LYS:NZ	2.36	0.41
2:T:632:ALA:O	2:T:636:LEU:HG	2.20	0.41
1:U:253:VAL:HG22	1:U:270:ILE:CG1	2.51	0.41
1:W:321:ALA:O	1:W:376:GLU:HG2	2.20	0.41
1:A:424:ALA:HB1	1:A:428:MET:HE1	2.02	0.41
1:C:328:ILE:HG21	1:C:380:THR:CG2	2.50	0.41
2:D:632:ALA:O	2:D:636:LEU:HG	2.20	0.41
1:E:174:GLU:O	1:E:178:ASN:ND2	2.53	0.41
2:F:632:ALA:O	2:F:636:LEU:HG	2.20	0.41
1:G:256:LEU:HD22	1:G:261:THR:CG2	2.49	0.41
1:G:274:ILE:O	1:G:278:ILE:HG13	2.21	0.41
1:G:443:VAL:HG12	1:G:445:ILE:HG13	2.02	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:715:ALA:CB	2:H:735:ILE:HG13	2.50	0.41
2:J:708:LEU:HB3	2:J:742:LEU:HD11	2.01	0.41
1:K:184:VAL:O	1:K:188:LEU:HG	2.20	0.41
1:K:288:TYR:CB	1:K:340:VAL:HG13	2.50	0.41
1:K:292:CYS:SG	1:K:347:ARG:HB3	2.61	0.41
2:L:826:MET:CE	2:L:846:LEU:HD23	2.50	0.41
1:M:12:GLN:O	1:M:16:GLU:HG2	2.20	0.41
1:M:17:LEU:O	1:M:21:LEU:HG	2.20	0.41
1:M:96:MET:SD	1:M:150:ILE:HG12	2.60	0.41
1:M:105:ALA:O	1:M:109:VAL:HG23	2.19	0.41
1:M:292:CYS:SG	1:M:347:ARG:HB3	2.61	0.41
1:O:363:GLU:HB3	1:O:419:ILE:CG1	2.50	0.41
1:O:424:ALA:HB1	1:O:428:MET:HE1	2.02	0.41
1:O:453:GLN:OE1	2:P:855:TYR:OH	2.30	0.41
1:Q:257:LYS:CA	1:Q:266:ILE:HD11	2.50	0.41
1:Q:274:ILE:O	1:Q:278:ILE:HG13	2.21	0.41
2:R:826:MET:CE	2:R:846:LEU:HD23	2.50	0.41
1:S:253:VAL:HG22	1:S:270:ILE:CG1	2.50	0.41
1:S:406:LEU:HD13	1:S:416:ILE:CG2	2.42	0.41
2:T:498:LEU:HG	2:T:548:ILE:HG21	2.02	0.41
2:T:687:ALA:O	2:T:690:GLU:HB3	2.20	0.41
2:T:715:ALA:CB	2:T:735:ILE:HG13	2.50	0.41
2:T:740:GLU:OE1	2:T:773:LYS:NZ	2.50	0.41
2:T:794:ARG:CZ	2:T:827:GLY:CA	2.99	0.41
1:U:96:MET:SD	1:U:150:ILE:HG12	2.60	0.41
1:U:193:GLU:HG2	1:U:248:VAL:HG21	2.02	0.41
1:U:253:VAL:O	1:U:254:PHE:C	2.62	0.41
1:U:428:MET:HB3	1:U:452:GLN:NE2	2.35	0.41
1:U:428:MET:O	1:U:452:GLN:NE2	2.52	0.41
2:V:503:ALA:HA	2:V:506:LYS:NZ	2.36	0.41
2:V:826:MET:CE	2:V:846:LEU:HD23	2.50	0.41
1:W:174:GLU:O	1:W:178:ASN:ND2	2.53	0.41
1:W:193:GLU:HG2	1:W:248:VAL:HG21	2.02	0.41
1:W:443:VAL:HG12	1:W:445:ILE:HG13	2.02	0.41
2:X:805:ARG:HG2	2:X:817:ALA:HB3	2.03	0.41
1:A:205:ALA:HB1	1:A:214:ARG:CG	2.48	0.41
1:A:348:ILE:O	1:A:352:ILE:HG13	2.19	0.41
2:B:675:ASP:OD1	2:B:675:ASP:N	2.52	0.41
2:B:680:ALA:HB1	2:B:710:ALA:HB1	2.02	0.41
2:B:798:ASP:HA	2:B:821:SER:HA	2.02	0.41
1:C:263:GLU:CD	1:C:263:GLU:C	2.89	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:288:TYR:CB	1:C:340:VAL:HG13	2.50	0.41
1:C:319:ILE:O	1:C:323:VAL:HG23	2.21	0.41
1:E:193:GLU:OE2	1:E:248:VAL:HG11	2.21	0.41
1:E:253:VAL:HG22	1:E:270:ILE:CG1	2.50	0.41
1:E:403:ILE:HD13	1:E:466:LEU:HB3	2.01	0.41
1:E:424:ALA:HB1	1:E:428:MET:HE1	2.02	0.41
1:E:443:VAL:HG12	1:E:445:ILE:HG13	2.02	0.41
1:G:403:ILE:HD13	1:G:466:LEU:HB3	2.01	0.41
2:H:503:ALA:HA	2:H:506:LYS:NZ	2.36	0.41
1:K:134:LEU:HA	1:K:137:LEU:HD12	2.01	0.41
1:K:363:GLU:HB3	1:K:419:ILE:CG1	2.50	0.41
2:L:498:LEU:HG	2:L:548:ILE:HG21	2.02	0.41
2:L:549:ILE:O	2:L:553:LEU:HG	2.20	0.41
2:N:715:ALA:CB	2:N:735:ILE:HG13	2.50	0.41
1:O:174:GLU:HA	1:O:177:ARG:HH11	1.86	0.41
1:O:253:VAL:HG22	1:O:270:ILE:CG1	2.50	0.41
1:O:292:CYS:SG	1:O:347:ARG:HB3	2.61	0.41
2:P:715:ALA:HB3	2:P:735:ILE:HG13	2.02	0.41
1:Q:174:GLU:O	1:Q:178:ASN:ND2	2.53	0.41
1:Q:253:VAL:HG22	1:Q:270:ILE:CG1	2.50	0.41
1:Q:443:VAL:HG12	1:Q:445:ILE:HG13	2.02	0.41
1:Q:475:PHE:CD2	1:Q:480:VAL:HG22	2.56	0.41
2:R:675:ASP:OD1	2:R:675:ASP:N	2.52	0.41
1:S:174:GLU:O	1:S:178:ASN:ND2	2.53	0.41
1:U:184:VAL:O	1:U:188:LEU:HG	2.20	0.41
1:W:17:LEU:O	1:W:21:LEU:HG	2.20	0.41
1:W:256:LEU:HD22	1:W:261:THR:CG2	2.49	0.41
1:W:257:LYS:CA	1:W:266:ILE:HD11	2.50	0.41
1:W:292:CYS:SG	1:W:347:ARG:HB3	2.60	0.41
2:X:653:ASP:OD1	2:X:656:ARG:NH2	2.44	0.41
2:X:765:GLN:N	2:X:766:PRO:HD3	2.35	0.41
1:A:263:GLU:C	1:A:263:GLU:CD	2.89	0.41
2:D:715:ALA:CB	2:D:735:ILE:HG13	2.50	0.41
1:G:174:GLU:O	1:G:178:ASN:ND2	2.53	0.41
1:G:253:VAL:HG22	1:G:270:ILE:CG1	2.51	0.41
1:G:292:CYS:SG	1:G:347:ARG:HB3	2.61	0.41
2:H:765:GLN:N	2:H:766:PRO:HD3	2.35	0.41
2:H:794:ARG:CZ	2:H:827:GLY:CA	2.99	0.41
1:I:174:GLU:O	1:I:178:ASN:ND2	2.53	0.41
1:I:319:ILE:O	1:I:323:VAL:HG23	2.21	0.41
1:I:398:ILE:O	1:I:402:VAL:HG23	2.20	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:162:ARG:NH1	1:K:163:GLU:OE2	2.52	0.41
1:K:253:VAL:HG22	1:K:270:ILE:CG1	2.50	0.41
1:K:321:ALA:O	1:K:376:GLU:HG2	2.20	0.41
1:K:428:MET:HB3	1:K:452:GLN:NE2	2.35	0.41
1:M:443:VAL:HG12	1:M:445:ILE:HG13	2.02	0.41
2:N:632:ALA:O	2:N:636:LEU:HG	2.20	0.41
2:N:680:ALA:HB1	2:N:710:ALA:HB1	2.02	0.41
2:N:765:GLN:N	2:N:766:PRO:HD3	2.35	0.41
2:N:794:ARG:CZ	2:N:827:GLY:CA	2.99	0.41
1:O:193:GLU:OE2	1:O:248:VAL:HG11	2.21	0.41
1:O:205:ALA:HB1	1:O:214:ARG:CG	2.48	0.41
1:O:274:ILE:O	1:O:278:ILE:HG13	2.21	0.41
2:P:765:GLN:N	2:P:766:PRO:HD3	2.35	0.41
1:Q:193:GLU:OE2	1:Q:248:VAL:HG11	2.21	0.41
1:Q:348:ILE:O	1:Q:352:ILE:HG13	2.20	0.41
2:R:715:ALA:CB	2:R:735:ILE:HG13	2.50	0.41
1:S:162:ARG:NH1	1:S:163:GLU:OE2	2.52	0.41
1:S:348:ILE:O	1:S:352:ILE:HG13	2.19	0.41
1:U:292:CYS:SG	1:U:347:ARG:HB3	2.61	0.41
2:V:708:LEU:HB3	2:V:742:LEU:HD11	2.01	0.41
2:V:794:ARG:CZ	2:V:827:GLY:CA	2.99	0.41
1:W:96:MET:SD	1:W:150:ILE:HG12	2.60	0.41
2:X:503:ALA:HA	2:X:506:LYS:NZ	2.36	0.41
2:X:675:ASP:OD1	2:X:675:ASP:N	2.52	0.41
2:X:798:ASP:HA	2:X:821:SER:HA	2.02	0.41
1:A:12:GLN:O	1:A:16:GLU:HG2	2.20	0.41
1:A:174:GLU:HA	1:A:177:ARG:HH11	1.86	0.41
1:A:319:ILE:O	1:A:323:VAL:HG23	2.21	0.41
2:B:794:ARG:CZ	2:B:827:GLY:CA	2.99	0.41
1:C:292:CYS:SG	1:C:347:ARG:HB3	2.61	0.41
1:C:398:ILE:O	1:C:402:VAL:HG23	2.20	0.41
2:D:798:ASP:HA	2:D:821:SER:HA	2.02	0.41
1:G:96:MET:SD	1:G:150:ILE:HG12	2.60	0.41
2:H:498:LEU:CD1	2:H:552:VAL:HG21	2.48	0.41
2:H:635:VAL:HG13	2:H:688:ILE:HD12	2.02	0.41
2:H:687:ALA:O	2:H:690:GLU:HB3	2.20	0.41
2:J:498:LEU:HG	2:J:548:ILE:HG21	2.03	0.41
2:J:590:GLU:OE1	2:J:644:LYS:NZ	2.37	0.41
1:M:193:GLU:HG2	1:M:248:VAL:HG21	2.03	0.41
1:M:253:VAL:HG22	1:M:270:ILE:CG1	2.50	0.41
1:M:277:LEU:O	1:M:281:LEU:HG	2.21	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:M:328:ILE:HG21	1:M:380:THR:CG2	2.50	0.41
2:N:654:VAL:HG21	2:N:700:LEU:CB	2.50	0.41
1:O:184:VAL:O	1:O:188:LEU:HG	2.20	0.41
1:O:188:LEU:O	1:O:192:VAL:HG23	2.19	0.41
2:P:551:THR:OG1	2:P:601:GLU:OE2	2.32	0.41
1:Q:130:GLU:OE1	1:Q:133:ARG:HD2	2.21	0.41
1:Q:184:VAL:O	1:Q:188:LEU:HG	2.20	0.41
2:R:635:VAL:HG13	2:R:688:ILE:HD12	2.02	0.41
2:R:708:LEU:HB3	2:R:742:LEU:HD11	2.01	0.41
1:S:292:CYS:SG	1:S:347:ARG:HB3	2.61	0.41
1:U:17:LEU:O	1:U:21:LEU:HG	2.20	0.41
1:U:274:ILE:O	1:U:278:ILE:HG13	2.21	0.41
1:W:174:GLU:HA	1:W:177:ARG:HH11	1.86	0.41
1:W:274:ILE:O	1:W:278:ILE:HG13	2.21	0.41
1:W:363:GLU:HB3	1:W:419:ILE:CG1	2.50	0.41
2:B:635:VAL:HG13	2:B:688:ILE:HD12	2.02	0.41
2:B:805:ARG:HG2	2:B:817:ALA:HB3	2.02	0.41
1:C:184:VAL:O	1:C:188:LEU:HG	2.20	0.41
1:C:424:ALA:HB1	1:C:428:MET:HE1	2.02	0.41
2:D:503:ALA:HA	2:D:506:LYS:NZ	2.36	0.41
2:D:765:GLN:N	2:D:766:PRO:HD3	2.35	0.41
1:G:424:ALA:HB1	1:G:428:MET:HE1	2.02	0.41
1:G:475:PHE:CD2	1:G:480:VAL:HG22	2.56	0.41
1:I:274:ILE:O	1:I:278:ILE:HG13	2.21	0.41
1:K:193:GLU:OE2	1:K:248:VAL:HG11	2.21	0.41
2:L:680:ALA:HB1	2:L:710:ALA:HB1	2.02	0.41
2:L:765:GLN:N	2:L:766:PRO:HD3	2.35	0.41
1:M:184:VAL:O	1:M:188:LEU:HG	2.20	0.41
1:M:274:ILE:O	1:M:278:ILE:HG13	2.21	0.41
1:M:472:ARG:HG2	2:N:874:GLU:CB	2.51	0.41
2:N:805:ARG:HG2	2:N:817:ALA:HB3	2.02	0.41
1:O:398:ILE:O	1:O:402:VAL:HG23	2.20	0.41
2:P:815:VAL:CG2	2:P:865:ALA:HB3	2.51	0.41
2:P:826:MET:CE	2:P:846:LEU:HD23	2.50	0.41
1:Q:193:GLU:HG2	1:Q:248:VAL:HG21	2.02	0.41
1:Q:205:ALA:HB1	1:Q:214:ARG:CG	2.48	0.41
1:Q:428:MET:HB3	1:Q:452:GLN:NE2	2.35	0.41
1:Q:472:ARG:HG2	2:R:874:GLU:CB	2.51	0.41
1:S:130:GLU:OE1	1:S:133:ARG:HD2	2.21	0.41
1:S:193:GLU:HG2	1:S:248:VAL:HG21	2.03	0.41
1:U:193:GLU:OE2	1:U:248:VAL:HG11	2.21	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:U:319:ILE:O	1:U:323:VAL:HG23	2.21	0.41
2:V:815:VAL:CG2	2:V:865:ALA:HB3	2.51	0.41
1:W:398:ILE:O	1:W:402:VAL:HG23	2.20	0.41
1:W:472:ARG:HG2	2:X:874:GLU:CB	2.51	0.41
2:X:715:ALA:HB3	2:X:735:ILE:HG13	2.02	0.41
1:A:363:GLU:HB3	1:A:419:ILE:CG1	2.50	0.41
1:A:398:ILE:O	1:A:402:VAL:HG23	2.20	0.41
2:D:498:LEU:HG	2:D:548:ILE:HG21	2.02	0.41
1:E:17:LEU:O	1:E:21:LEU:HG	2.20	0.41
1:G:174:GLU:HA	1:G:177:ARG:HH11	1.86	0.41
1:G:277:LEU:O	1:G:281:LEU:HG	2.21	0.41
1:I:257:LYS:CA	1:I:266:ILE:HD11	2.50	0.41
1:I:263:GLU:CD	1:I:263:GLU:C	2.89	0.41
2:J:765:GLN:N	2:J:766:PRO:HD3	2.35	0.41
1:K:130:GLU:OE1	1:K:133:ARG:HD2	2.21	0.41
1:K:205:ALA:HB1	1:K:214:ARG:CG	2.48	0.41
1:K:475:PHE:CD2	1:K:480:VAL:HG22	2.56	0.41
2:L:498:LEU:CD1	2:L:552:VAL:HG21	2.48	0.41
2:L:798:ASP:HA	2:L:821:SER:HA	2.02	0.41
2:L:815:VAL:CG2	2:L:865:ALA:HB3	2.51	0.41
1:M:130:GLU:OE1	1:M:133:ARG:HD2	2.21	0.41
1:M:424:ALA:HB1	1:M:428:MET:HE1	2.02	0.41
2:N:653:ASP:OD1	2:N:656:ARG:NH2	2.44	0.41
1:O:174:GLU:O	1:O:178:ASN:ND2	2.53	0.41
1:O:319:ILE:O	1:O:323:VAL:HG23	2.21	0.41
1:Q:424:ALA:HB1	1:Q:428:MET:HE1	2.02	0.41
2:R:774:ALA:O	2:R:778:ILE:HG13	2.21	0.41
2:T:694:ARG:O	2:T:699:ALA:CB	2.69	0.41
2:T:798:ASP:HA	2:T:821:SER:HA	2.02	0.41
1:U:73:ALA:O	1:U:77:SER:OG	2.31	0.41
2:V:715:ALA:CB	2:V:735:ILE:HG13	2.50	0.41
1:W:263:GLU:CD	1:W:263:GLU:C	2.89	0.41
2:X:715:ALA:CB	2:X:735:ILE:HG13	2.50	0.41
1:A:130:GLU:OE1	1:A:133:ARG:HD2	2.21	0.41
1:A:193:GLU:OE2	1:A:248:VAL:HG11	2.21	0.41
1:A:274:ILE:O	1:A:278:ILE:HG13	2.21	0.41
1:A:472:ARG:HG2	2:B:874:GLU:CB	2.51	0.41
2:B:715:ALA:CB	2:B:735:ILE:HG13	2.50	0.41
1:C:193:GLU:OE2	1:C:248:VAL:HG11	2.21	0.41
1:C:253:VAL:HG22	1:C:270:ILE:CG1	2.50	0.41
1:C:274:ILE:O	1:C:278:ILE:HG13	2.21	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:475:PHE:CD2	1:C:480:VAL:HG22	2.56	0.41
2:D:551:THR:OG1	2:D:601:GLU:OE2	2.32	0.41
2:D:774:ALA:O	2:D:778:ILE:HG13	2.21	0.41
2:D:794:ARG:CZ	2:D:827:GLY:CA	2.99	0.41
2:D:805:ARG:HG2	2:D:817:ALA:HB3	2.03	0.41
2:D:869:VAL:HG13	2:D:880:ILE:HG23	2.03	0.41
1:E:162:ARG:NH1	1:E:163:GLU:OE2	2.52	0.41
1:E:174:GLU:HA	1:E:177:ARG:HH11	1.86	0.41
1:E:184:VAL:O	1:E:188:LEU:HG	2.20	0.41
1:E:263:GLU:C	1:E:263:GLU:CD	2.89	0.41
1:E:440:GLU:CB	1:E:485:ARG:HA	2.51	0.41
1:E:444:VAL:O	1:E:446:LYS:NZ	2.54	0.41
1:E:472:ARG:HG2	2:F:874:GLU:CB	2.51	0.41
2:F:801:ALA:C	2:F:817:ALA:HB1	2.46	0.41
1:G:257:LYS:CA	1:G:266:ILE:HD11	2.50	0.41
1:G:263:GLU:C	1:G:263:GLU:CD	2.89	0.41
1:G:319:ILE:O	1:G:323:VAL:HG23	2.20	0.41
1:G:428:MET:HB3	1:G:452:GLN:NE2	2.35	0.41
1:G:472:ARG:HG2	2:H:874:GLU:CB	2.51	0.41
1:I:162:ARG:NH1	1:I:163:GLU:OE2	2.52	0.41
1:I:240:VAL:O	1:I:244:LEU:HG	2.21	0.41
1:I:444:VAL:O	1:I:446:LYS:NZ	2.54	0.41
2:J:503:ALA:HA	2:J:506:LYS:NZ	2.36	0.41
2:J:680:ALA:HB1	2:J:710:ALA:HB1	2.02	0.41
1:K:319:ILE:O	1:K:323:VAL:HG23	2.21	0.41
1:K:343:GLU:OE2	1:K:397:ARG:NH2	2.43	0.41
1:K:444:VAL:O	1:K:446:LYS:NZ	2.54	0.41
1:M:319:ILE:O	1:M:323:VAL:HG23	2.21	0.41
1:M:444:VAL:O	1:M:446:LYS:NZ	2.54	0.41
2:N:635:VAL:HG13	2:N:688:ILE:HD12	2.02	0.41
2:N:715:ALA:HB3	2:N:735:ILE:HG13	2.02	0.41
1:O:277:LEU:O	1:O:281:LEU:HG	2.21	0.41
1:O:475:PHE:CD2	1:O:480:VAL:HG22	2.56	0.41
2:P:498:LEU:HG	2:P:548:ILE:HG21	2.02	0.41
2:P:629:ALA:O	2:P:633:LEU:HG	2.21	0.41
1:Q:174:GLU:HA	1:Q:177:ARG:HH11	1.86	0.41
1:Q:252:LYS:NZ	1:Q:269:GLU:OE1	2.39	0.41
1:Q:292:CYS:SG	1:Q:347:ARG:HB3	2.61	0.41
1:Q:319:ILE:O	1:Q:323:VAL:HG23	2.21	0.41
1:Q:398:ILE:O	1:Q:402:VAL:HG23	2.20	0.41
2:R:680:ALA:HB1	2:R:710:ALA:HB1	2.02	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:R:694:ARG:O	2:R:699:ALA:CB	2.69	0.41
2:R:794:ARG:CZ	2:R:827:GLY:CA	2.99	0.41
2:R:805:ARG:HG2	2:R:817:ALA:HB3	2.03	0.41
2:R:815:VAL:CG2	2:R:865:ALA:HB3	2.51	0.41
1:S:104:LEU:O	1:S:108:LEU:HG	2.21	0.41
1:S:239:GLU:OE1	1:S:239:GLU:N	2.42	0.41
1:S:240:VAL:O	1:S:244:LEU:HG	2.21	0.41
1:S:274:ILE:O	1:S:278:ILE:HG13	2.21	0.41
1:S:288:TYR:HE2	1:S:343:GLU:OE1	2.04	0.41
1:S:440:GLU:CB	1:S:485:ARG:HA	2.51	0.41
2:T:811:SER:OG	2:T:813:LEU:HB2	2.21	0.41
2:T:826:MET:CE	2:T:846:LEU:HD23	2.50	0.41
1:U:130:GLU:OE1	1:U:133:ARG:HD2	2.21	0.41
1:U:240:VAL:O	1:U:244:LEU:HG	2.21	0.41
1:U:256:LEU:HD22	1:U:261:THR:CG2	2.49	0.41
1:U:277:LEU:O	1:U:281:LEU:HG	2.21	0.41
1:U:398:ILE:O	1:U:402:VAL:HG23	2.20	0.41
1:U:424:ALA:HB1	1:U:428:MET:HE1	2.02	0.41
1:U:472:ARG:HG2	2:V:874:GLU:CB	2.51	0.41
2:V:498:LEU:HG	2:V:548:ILE:HG21	2.03	0.41
1:W:104:LEU:O	1:W:108:LEU:HG	2.21	0.41
1:W:253:VAL:HG22	1:W:270:ILE:CG1	2.51	0.41
1:W:319:ILE:O	1:W:323:VAL:HG23	2.21	0.41
2:X:615:LYS:NZ	2:X:619:GLU:OE2	2.42	0.41
1:A:193:GLU:HG2	1:A:248:VAL:HG21	2.02	0.41
1:A:277:LEU:O	1:A:281:LEU:HG	2.21	0.41
2:B:774:ALA:O	2:B:778:ILE:HG13	2.21	0.41
1:C:240:VAL:O	1:C:244:LEU:HG	2.21	0.41
1:C:341:ILE:O	1:C:345:VAL:HG23	2.22	0.41
1:E:343:GLU:OE2	1:E:397:ARG:NH2	2.43	0.41
1:E:398:ILE:O	1:E:402:VAL:HG23	2.20	0.41
2:H:694:ARG:O	2:H:699:ALA:CB	2.69	0.41
2:H:805:ARG:HG2	2:H:817:ALA:HB3	2.03	0.41
1:I:193:GLU:HG2	1:I:248:VAL:HG21	2.02	0.41
1:I:440:GLU:CB	1:I:485:ARG:HA	2.51	0.41
1:I:475:PHE:CD2	1:I:480:VAL:HG22	2.56	0.41
2:J:694:ARG:O	2:J:699:ALA:CB	2.69	0.41
2:J:801:ALA:C	2:J:817:ALA:HB1	2.46	0.41
2:J:805:ARG:NH1	2:J:821:SER:OG	2.47	0.41
1:K:240:VAL:O	1:K:244:LEU:HG	2.21	0.41
1:K:472:ARG:HG2	2:L:874:GLU:CB	2.51	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:M:50:GLU:OE1	1:M:53:ARG:NE	2.46	0.41
1:O:130:GLU:OE1	1:O:133:ARG:HD2	2.21	0.41
1:O:263:GLU:C	1:O:263:GLU:CD	2.89	0.41
1:O:428:MET:HB3	1:O:452:GLN:NE2	2.35	0.41
1:O:440:GLU:CB	1:O:485:ARG:HA	2.51	0.41
2:P:794:ARG:CZ	2:P:827:GLY:CA	2.99	0.41
1:S:205:ALA:HB1	1:S:214:ARG:CG	2.48	0.41
1:S:256:LEU:HD22	1:S:261:THR:CG2	2.49	0.41
2:T:815:VAL:CG2	2:T:865:ALA:HB3	2.51	0.41
1:U:50:GLU:OE1	1:U:53:ARG:NE	2.46	0.41
2:V:869:VAL:HG13	2:V:880:ILE:HG23	2.03	0.41
1:W:130:GLU:OE1	1:W:133:ARG:HD2	2.21	0.41
1:W:277:LEU:O	1:W:281:LEU:HG	2.21	0.41
1:A:184:VAL:O	1:A:188:LEU:HG	2.20	0.40
1:A:240:VAL:O	1:A:244:LEU:HG	2.21	0.40
2:B:740:GLU:OE1	2:B:773:LYS:NZ	2.50	0.40
1:C:444:VAL:O	1:C:446:LYS:NZ	2.54	0.40
2:D:505:LEU:O	2:D:509:THR:OG1	2.28	0.40
1:E:257:LYS:CA	1:E:266:ILE:HD11	2.50	0.40
1:E:288:TYR:HE2	1:E:343:GLU:OE1	2.04	0.40
2:F:801:ALA:O	2:F:802:ASP:C	2.64	0.40
1:G:130:GLU:OE1	1:G:133:ARG:HD2	2.21	0.40
2:H:675:ASP:N	2:H:675:ASP:OD1	2.52	0.40
1:I:73:ALA:O	1:I:77:SER:OG	2.31	0.40
1:I:288:TYR:HE2	1:I:343:GLU:OE1	2.04	0.40
2:J:801:ALA:O	2:J:802:ASP:C	2.64	0.40
1:K:274:ILE:O	1:K:278:ILE:HG13	2.21	0.40
2:L:503:ALA:HA	2:L:506:LYS:NZ	2.36	0.40
1:M:174:GLU:HA	1:M:177:ARG:HH11	1.86	0.40
1:M:475:PHE:CD2	1:M:480:VAL:HG22	2.56	0.40
2:N:498:LEU:HG	2:N:548:ILE:HG21	2.02	0.40
2:N:801:ALA:O	2:N:802:ASP:C	2.64	0.40
1:O:240:VAL:O	1:O:244:LEU:HG	2.21	0.40
2:P:654:VAL:HG21	2:P:700:LEU:CB	2.50	0.40
2:P:869:VAL:HG13	2:P:880:ILE:HG23	2.04	0.40
2:R:629:ALA:O	2:R:633:LEU:HG	2.21	0.40
1:S:263:GLU:CD	1:S:263:GLU:C	2.89	0.40
1:S:472:ARG:HG2	2:T:874:GLU:CB	2.51	0.40
1:S:475:PHE:CD2	1:S:480:VAL:HG22	2.56	0.40
2:T:869:VAL:HG13	2:T:880:ILE:HG23	2.03	0.40
1:U:263:GLU:CD	1:U:263:GLU:C	2.89	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:V:516:THR:OG1	2:V:531:HIS:NE2	2.55	0.40
1:W:240:VAL:O	1:W:244:LEU:HG	2.21	0.40
1:W:440:GLU:CB	1:W:485:ARG:HA	2.51	0.40
1:W:475:PHE:CD2	1:W:480:VAL:HG22	2.56	0.40
2:X:794:ARG:CZ	2:X:827:GLY:CA	2.99	0.40
1:A:292:CYS:SG	1:A:347:ARG:HB3	2.61	0.40
1:A:444:VAL:O	1:A:446:LYS:NZ	2.54	0.40
1:A:475:PHE:CD2	1:A:480:VAL:HG22	2.56	0.40
2:B:503:ALA:HA	2:B:506:LYS:NZ	2.36	0.40
1:C:73:ALA:O	1:C:77:SER:OG	2.31	0.40
1:C:130:GLU:OE1	1:C:133:ARG:HD2	2.21	0.40
1:C:403:ILE:HD13	1:C:466:LEU:HB3	2.01	0.40
2:D:516:THR:OG1	2:D:531:HIS:NE2	2.55	0.40
2:F:774:ALA:O	2:F:778:ILE:HG13	2.21	0.40
1:G:240:VAL:O	1:G:244:LEU:HG	2.21	0.40
1:G:288:TYR:HE2	1:G:343:GLU:OE1	2.04	0.40
1:G:398:ILE:O	1:G:402:VAL:HG23	2.20	0.40
1:G:444:VAL:O	1:G:446:LYS:NZ	2.54	0.40
2:H:801:ALA:C	2:H:817:ALA:HB1	2.46	0.40
2:H:815:VAL:CG2	2:H:865:ALA:HB3	2.51	0.40
1:I:253:VAL:HG22	1:I:270:ILE:CG1	2.50	0.40
1:I:346:ALA:HB1	1:I:401:GLU:CG	2.52	0.40
1:K:270:ILE:HG22	1:K:274:ILE:CD1	2.51	0.40
1:K:346:ALA:HB1	1:K:401:GLU:CG	2.52	0.40
1:K:398:ILE:O	1:K:402:VAL:HG23	2.20	0.40
2:L:774:ALA:O	2:L:778:ILE:HG13	2.21	0.40
2:L:798:ASP:HB2	2:L:824:ALA:HB3	2.03	0.40
1:M:193:GLU:OE2	1:M:248:VAL:HG11	2.21	0.40
1:M:240:VAL:O	1:M:244:LEU:HG	2.21	0.40
2:N:516:THR:OG1	2:N:531:HIS:NE2	2.55	0.40
2:N:811:SER:OG	2:N:813:LEU:HB2	2.21	0.40
2:N:815:VAL:CG2	2:N:865:ALA:HB3	2.51	0.40
1:O:17:LEU:O	1:O:21:LEU:HG	2.20	0.40
1:O:239:GLU:OE1	1:O:239:GLU:N	2.42	0.40
2:P:503:ALA:HA	2:P:506:LYS:NZ	2.36	0.40
1:Q:263:GLU:CD	1:Q:263:GLU:C	2.89	0.40
1:Q:288:TYR:HE2	1:Q:343:GLU:OE1	2.04	0.40
1:S:346:ALA:HB1	1:S:401:GLU:CG	2.52	0.40
1:S:363:GLU:HB3	1:S:419:ILE:CG1	2.50	0.40
1:S:431:THR:O	1:S:445:ILE:HA	2.22	0.40
2:T:774:ALA:O	2:T:778:ILE:HG13	2.21	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:T:801:ALA:C	2:T:817:ALA:HB1	2.46	0.40
2:V:715:ALA:HB3	2:V:735:ILE:HG13	2.02	0.40
2:X:694:ARG:O	2:X:699:ALA:CB	2.69	0.40
2:X:774:ALA:O	2:X:778:ILE:HG13	2.21	0.40
1:A:270:ILE:HG22	1:A:274:ILE:CD1	2.51	0.40
2:B:516:THR:OG1	2:B:531:HIS:NE2	2.55	0.40
2:B:694:ARG:O	2:B:699:ALA:CB	2.69	0.40
2:B:715:ALA:HB3	2:B:735:ILE:HG13	2.02	0.40
1:C:17:LEU:O	1:C:21:LEU:HG	2.20	0.40
1:C:461:LEU:HD12	2:D:848:ILE:HG23	2.04	0.40
2:D:826:MET:CE	2:D:846:LEU:HD23	2.50	0.40
1:E:277:LEU:O	1:E:281:LEU:HG	2.21	0.40
1:E:292:CYS:SG	1:E:347:ARG:HB3	2.61	0.40
1:E:341:ILE:O	1:E:345:VAL:HG23	2.21	0.40
1:G:346:ALA:HB1	1:G:401:GLU:CG	2.52	0.40
2:H:516:THR:OG1	2:H:531:HIS:NE2	2.55	0.40
2:H:774:ALA:O	2:H:778:ILE:HG13	2.21	0.40
1:I:130:GLU:OE1	1:I:133:ARG:HD2	2.21	0.40
1:I:193:GLU:OE2	1:I:248:VAL:HG11	2.21	0.40
1:I:422:LYS:NZ	1:I:434:GLU:OE1	2.46	0.40
1:I:472:ARG:HG2	2:J:874:GLU:CB	2.51	0.40
1:K:174:GLU:HA	1:K:177:ARG:HH11	1.86	0.40
2:L:694:ARG:O	2:L:699:ALA:CB	2.69	0.40
2:L:794:ARG:CZ	2:L:827:GLY:CA	2.99	0.40
2:L:805:ARG:HG2	2:L:817:ALA:HB3	2.03	0.40
1:M:104:LEU:O	1:M:108:LEU:HG	2.21	0.40
1:M:431:THR:O	1:M:445:ILE:HA	2.22	0.40
2:P:805:ARG:HG2	2:P:817:ALA:HB3	2.03	0.40
1:U:174:GLU:HA	1:U:177:ARG:HH11	1.86	0.40
1:U:346:ALA:HB1	1:U:401:GLU:CG	2.52	0.40
1:U:443:VAL:HG12	1:U:445:ILE:HG13	2.02	0.40
2:X:708:LEU:HB3	2:X:742:LEU:HD11	2.01	0.40
1:A:104:LEU:O	1:A:108:LEU:HG	2.21	0.40
1:A:239:GLU:OE1	1:A:239:GLU:N	2.42	0.40
2:B:615:LYS:NZ	2:B:619:GLU:OE2	2.42	0.40
2:D:503:ALA:HA	2:D:506:LYS:HE2	2.04	0.40
2:D:694:ARG:O	2:D:699:ALA:CB	2.69	0.40
2:D:798:ASP:HB2	2:D:824:ALA:HB3	2.04	0.40
1:E:104:LEU:O	1:E:108:LEU:HG	2.21	0.40
2:F:811:SER:OG	2:F:813:LEU:HB2	2.21	0.40
2:F:815:VAL:CG2	2:F:865:ALA:HB3	2.51	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:F:869:VAL:HG13	2:F:880:ILE:HG23	2.04	0.40
1:G:193:GLU:OE2	1:G:248:VAL:HG11	2.21	0.40
1:G:440:GLU:CB	1:G:485:ARG:HA	2.51	0.40
1:G:461:LEU:HD12	2:H:848:ILE:HG23	2.04	0.40
2:H:498:LEU:HG	2:H:548:ILE:HG21	2.02	0.40
1:K:50:GLU:OE1	1:K:53:ARG:NE	2.46	0.40
1:K:277:LEU:O	1:K:281:LEU:HG	2.21	0.40
2:L:516:THR:OG1	2:L:531:HIS:NE2	2.55	0.40
2:L:811:SER:OG	2:L:813:LEU:HB2	2.22	0.40
1:M:341:ILE:O	1:M:345:VAL:HG23	2.22	0.40
1:M:346:ALA:HB1	1:M:401:GLU:CG	2.51	0.40
2:N:503:ALA:HA	2:N:506:LYS:NZ	2.36	0.40
2:N:694:ARG:O	2:N:699:ALA:CB	2.69	0.40
2:N:869:VAL:HG13	2:N:880:ILE:HG23	2.04	0.40
1:O:193:GLU:HG2	1:O:248:VAL:HG21	2.02	0.40
2:P:798:ASP:HB2	2:P:824:ALA:HB3	2.03	0.40
1:Q:5:GLU:O	1:Q:9:ARG:HG2	2.22	0.40
1:Q:104:LEU:O	1:Q:108:LEU:HG	2.21	0.40
1:Q:277:LEU:O	1:Q:281:LEU:HG	2.21	0.40
2:R:503:ALA:HA	2:R:506:LYS:HE2	2.04	0.40
2:R:869:VAL:HG13	2:R:880:ILE:HG23	2.03	0.40
1:S:174:GLU:HA	1:S:177:ARG:HH11	1.86	0.40
2:T:654:VAL:HG21	2:T:700:LEU:CB	2.50	0.40
1:U:431:THR:O	1:U:445:ILE:HA	2.22	0.40
1:U:461:LEU:HD12	2:V:848:ILE:HG23	2.04	0.40
1:U:475:PHE:CD2	1:U:480:VAL:HG22	2.56	0.40
2:V:503:ALA:HA	2:V:506:LYS:HE2	2.04	0.40
2:V:798:ASP:HB2	2:V:824:ALA:HB3	2.03	0.40
2:V:801:ALA:C	2:V:817:ALA:HB1	2.46	0.40
2:X:516:THR:OG1	2:X:531:HIS:NE2	2.54	0.40
2:X:635:VAL:HG13	2:X:688:ILE:CD1	2.52	0.40
2:X:798:ASP:HB2	2:X:824:ALA:HB3	2.03	0.40
2:X:801:ALA:C	2:X:817:ALA:HB1	2.46	0.40
2:B:635:VAL:HG13	2:B:688:ILE:CD1	2.52	0.40
2:B:798:ASP:HB2	2:B:824:ALA:HB3	2.03	0.40
2:B:801:ALA:C	2:B:817:ALA:HB1	2.46	0.40
2:B:815:VAL:CG2	2:B:865:ALA:HB3	2.51	0.40
1:C:174:GLU:HA	1:C:177:ARG:HH11	1.86	0.40
1:C:277:LEU:O	1:C:281:LEU:HG	2.21	0.40
1:C:472:ARG:HG2	2:D:874:GLU:CB	2.51	0.40
2:D:635:VAL:HG13	2:D:688:ILE:CD1	2.52	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:F:498:LEU:HG	2:F:548:ILE:HG21	2.03	0.40
2:F:635:VAL:HG13	2:F:688:ILE:CD1	2.52	0.40
1:G:193:GLU:HG2	1:G:248:VAL:HG21	2.02	0.40
2:H:869:VAL:HG13	2:H:880:ILE:HG23	2.03	0.40
1:I:174:GLU:HA	1:I:177:ARG:HH11	1.86	0.40
1:I:443:VAL:HG12	1:I:445:ILE:HG13	2.02	0.40
2:J:503:ALA:HA	2:J:506:LYS:HE2	2.04	0.40
2:J:516:THR:OG1	2:J:531:HIS:NE2	2.55	0.40
2:J:774:ALA:O	2:J:778:ILE:HG13	2.21	0.40
2:J:794:ARG:CZ	2:J:827:GLY:CA	2.99	0.40
2:J:798:ASP:HA	2:J:821:SER:HA	2.02	0.40
1:K:263:GLU:CD	1:K:263:GLU:C	2.89	0.40
1:K:341:ILE:O	1:K:345:VAL:HG23	2.22	0.40
1:M:263:GLU:CD	1:M:263:GLU:C	2.89	0.40
1:O:350:ALA:HA	1:O:405:ALA:CB	2.52	0.40
1:O:370:VAL:HG12	1:O:374:ILE:CD1	2.52	0.40
1:O:443:VAL:HG12	1:O:445:ILE:HG13	2.02	0.40
2:P:503:ALA:HA	2:P:506:LYS:HE2	2.04	0.40
2:P:516:THR:OG1	2:P:531:HIS:NE2	2.55	0.40
2:P:694:ARG:O	2:P:699:ALA:CB	2.69	0.40
1:Q:444:VAL:O	1:Q:446:LYS:NZ	2.54	0.40
1:S:5:GLU:O	1:S:9:ARG:HG2	2.22	0.40
1:S:184:VAL:O	1:S:188:LEU:HG	2.20	0.40
1:S:193:GLU:OE2	1:S:248:VAL:HG11	2.21	0.40
1:S:319:ILE:O	1:S:323:VAL:HG23	2.21	0.40
1:S:341:ILE:O	1:S:345:VAL:HG23	2.22	0.40
1:S:444:VAL:O	1:S:446:LYS:NZ	2.54	0.40
2:T:635:VAL:HG13	2:T:688:ILE:CD1	2.52	0.40
1:U:444:VAL:O	1:U:446:LYS:NZ	2.54	0.40
2:V:498:LEU:CD1	2:V:552:VAL:HG21	2.48	0.40
2:V:774:ALA:O	2:V:778:ILE:HG13	2.21	0.40
2:V:798:ASP:HA	2:V:821:SER:HA	2.02	0.40
2:X:801:ALA:O	2:X:802:ASP:C	2.64	0.40

There are no symmetry-related clashes.



## 5.3 Torsion angles

### 5.3.1 Protein backbone

In the following table, the Percentiles column shows the percent Ramachandran outliers of the chain as a percentile score with respect to all 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	484/511 (95%)	476 (98%)	8 (2%)	0	100	100
1	C	484/511 (95%)	476 (98%)	8 (2%)	0	100	100
1	E	484/511 (95%)	477 (99%)	7 (1%)	0	100	100
1	G	484/511 (95%)	477 (99%)	7 (1%)	0	100	100
1	I	484/511 (95%)	476 (98%)	8 (2%)	0	100	100
1	K	484/511 (95%)	476 (98%)	8 (2%)	0	100	100
1	M	484/511 (95%)	476 (98%)	8 (2%)	0	100	100
1	O	484/511 (95%)	477 (99%)	7 (1%)	0	100	100
1	Q	484/511 (95%)	476 (98%)	8 (2%)	0	100	100
1	S	484/511 (95%)	476 (98%)	8 (2%)	0	100	100
1	U	484/511 (95%)	477 (99%)	7 (1%)	0	100	100
1	W	484/511 (95%)	477 (99%)	7 (1%)	0	100	100
2	B	396/400 (99%)	386 (98%)	10 (2%)	0	100	100
2	D	396/400 (99%)	386 (98%)	10 (2%)	0	100	100
2	F	396/400 (99%)	386 (98%)	10 (2%)	0	100	100
2	H	396/400 (99%)	385 (97%)	11 (3%)	0	100	100
2	J	396/400 (99%)	385 (97%)	11 (3%)	0	100	100
2	L	396/400 (99%)	386 (98%)	10 (2%)	0	100	100
2	N	396/400 (99%)	385 (97%)	11 (3%)	0	100	100
2	P	396/400 (99%)	385 (97%)	11 (3%)	0	100	100
2	R	396/400 (99%)	386 (98%)	10 (2%)	0	100	100
2	T	396/400 (99%)	386 (98%)	10 (2%)	0	100	100
2	V	396/400 (99%)	385 (97%)	11 (3%)	0	100	100
2	X	396/400 (99%)	386 (98%)	10 (2%)	0	100	100
All	All	10560/10932 (97%)	10344 (98%)	216 (2%)	0	100	100



There are no Ramachandran outliers to report.

### 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	403/421 (96%)	403 (100%)	0	100	100
1	C	403/421 (96%)	403 (100%)	0	100	100
1	E	403/421 (96%)	403 (100%)	0	100	100
1	G	403/421 (96%)	403 (100%)	0	100	100
1	I	403/421 (96%)	403 (100%)	0	100	100
1	K	403/421 (96%)	403 (100%)	0	100	100
1	M	403/421 (96%)	403 (100%)	0	100	100
1	O	403/421 (96%)	403 (100%)	0	100	100
1	Q	403/421 (96%)	403 (100%)	0	100	100
1	S	403/421 (96%)	403 (100%)	0	100	100
1	U	403/421 (96%)	403 (100%)	0	100	100
1	W	403/421 (96%)	403 (100%)	0	100	100
2	B	297/298 (100%)	297 (100%)	0	100	100
2	D	297/298 (100%)	297 (100%)	0	100	100
2	F	297/298 (100%)	297 (100%)	0	100	100
2	H	297/298 (100%)	297 (100%)	0	100	100
2	J	297/298 (100%)	297 (100%)	0	100	100
2	L	297/298 (100%)	297 (100%)	0	100	100
2	N	297/298 (100%)	297 (100%)	0	100	100
2	P	297/298 (100%)	297 (100%)	0	100	100
2	R	297/298 (100%)	297 (100%)	0	100	100
2	T	297/298 (100%)	297 (100%)	0	100	100
2	V	297/298 (100%)	297 (100%)	0	100	100
2	X	297/298 (100%)	297 (100%)	0	100	100

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
All	All	8400/8628 (97%)	8400 (100%)	0	100	100

There are no protein residues with a non-rotameric sidechain to report.

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (53) such sidechains are listed below:

Mol	Chain	Res	Type
1	A	178	ASN
1	A	185	ASN
1	A	439	ASN
2	B	532	ASN
2	B	598	ASN
2	B	646	ASN
1	C	178	ASN
2	D	532	ASN
2	D	598	ASN
2	D	646	ASN
1	E	178	ASN
1	E	439	ASN
2	F	532	ASN
2	F	598	ASN
2	F	646	ASN
2	H	532	ASN
2	H	545	ASN
2	H	598	ASN
2	H	646	ASN
1	I	178	ASN
2	J	532	ASN
2	J	598	ASN
2	J	646	ASN
1	K	178	ASN
1	K	439	ASN
2	L	532	ASN
2	L	598	ASN
2	L	646	ASN
2	N	532	ASN
2	N	598	ASN
2	N	646	ASN
1	O	178	ASN
1	O	439	ASN
2	P	532	ASN
2	P	598	ASN

*Continued on next page...*



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Mol	Chain	Res	Type
2	P	646	ASN
1	Q	185	ASN
2	R	532	ASN
2	R	598	ASN
2	R	646	ASN
1	S	178	ASN
2	T	532	ASN
2	T	598	ASN
2	T	646	ASN
1	U	178	ASN
1	U	439	ASN
2	V	532	ASN
2	V	598	ASN
2	V	646	ASN
1	W	439	ASN
2	X	532	ASN
2	X	598	ASN
2	X	646	ASN

### 5.3.3 RNA [i](#)

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 oligosaccharides 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 ⓘ

There are no chain breaks in this entry.



## 6 Map visualisation [i](#)

This section contains visualisations of the EMDB entry EMD-47128. These allow visual inspection of the internal detail of the map and identification of artifacts.

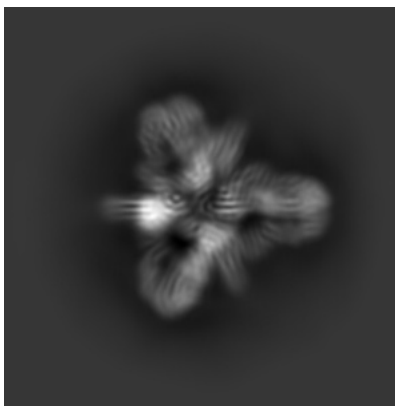
Images derived from a raw map, generated by summing the deposited half-maps, are presented below the corresponding image components of the primary map to allow further visual inspection and comparison with those of the primary map.

### 6.1 Orthogonal projections [i](#)

#### 6.1.1 Primary map



X



Y

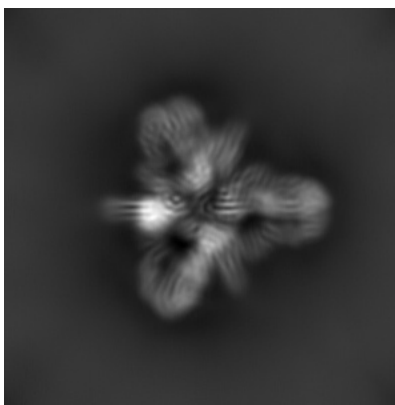


Z

#### 6.1.2 Raw map



X



Y



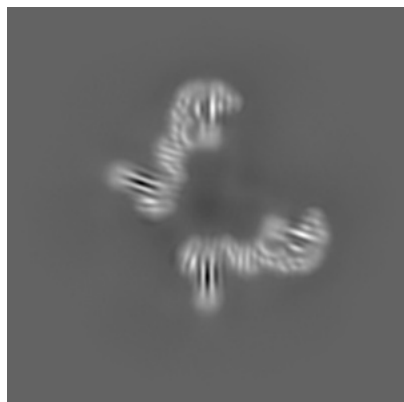
Z

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

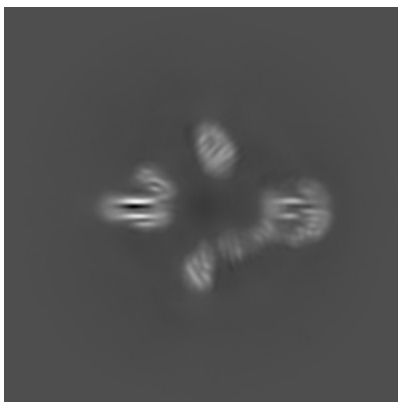


## 6.2 Central slices [i](#)

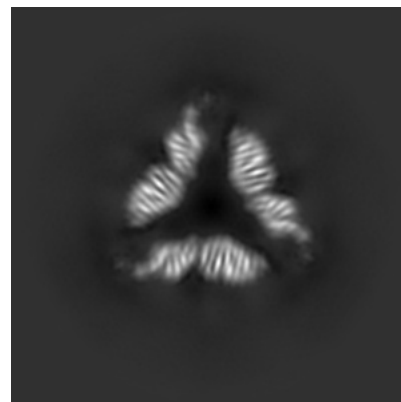
### 6.2.1 Primary map



X Index: 200

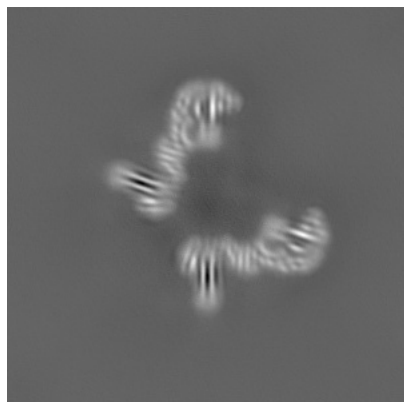


Y Index: 200

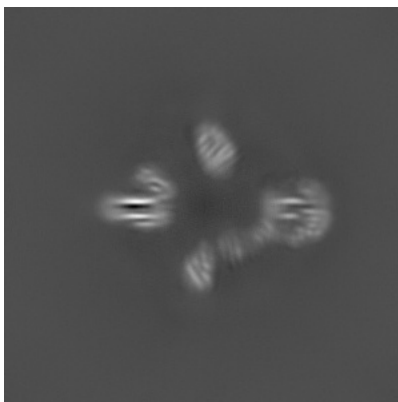


Z Index: 200

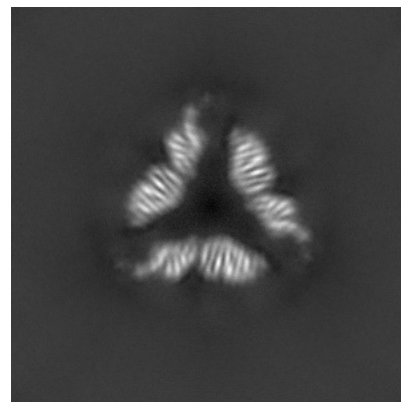
### 6.2.2 Raw map



X Index: 200



Y Index: 200



Z Index: 200

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

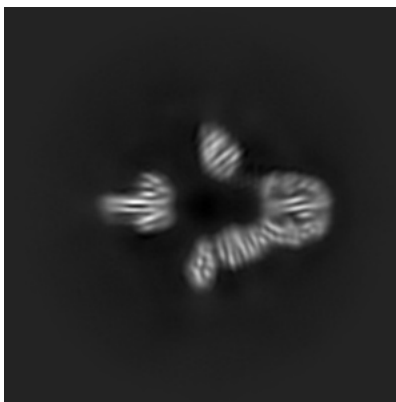


## 6.3 Largest variance slices [i](#)

### 6.3.1 Primary map



X Index: 196

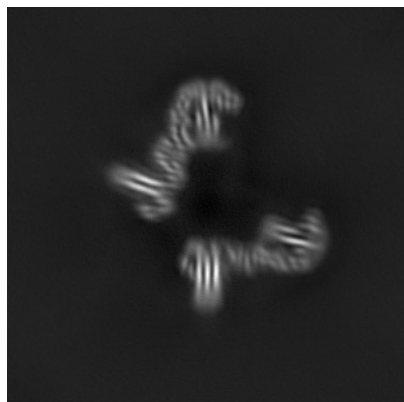


Y Index: 207

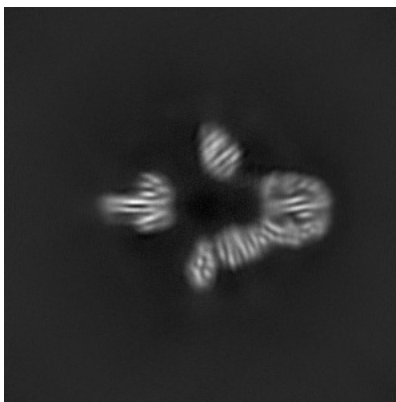


Z Index: 224

### 6.3.2 Raw map



X Index: 204



Y Index: 207



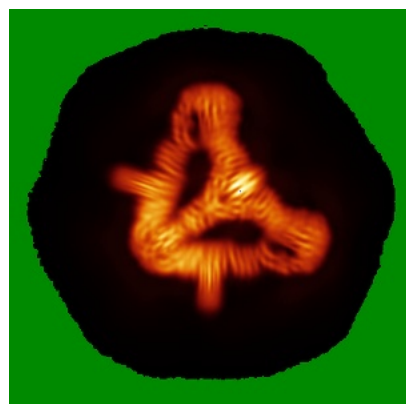
Z Index: 224

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

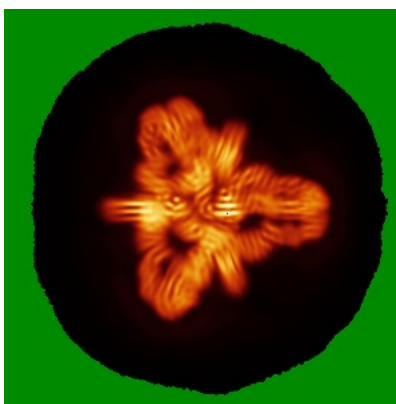


## 6.4 Orthogonal standard-deviation projections (False-color) [i](#)

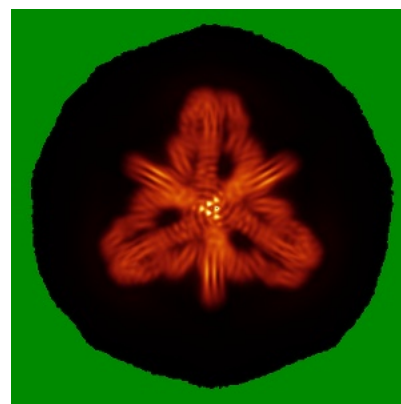
### 6.4.1 Primary map



X

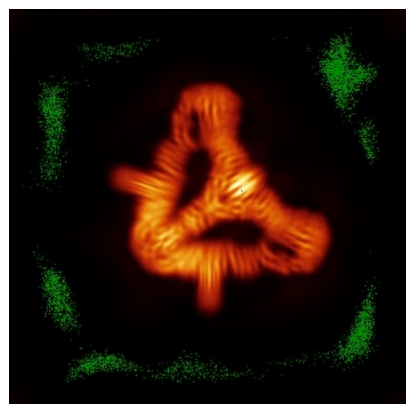


Y

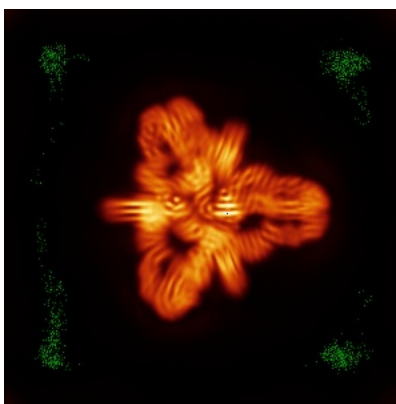


Z

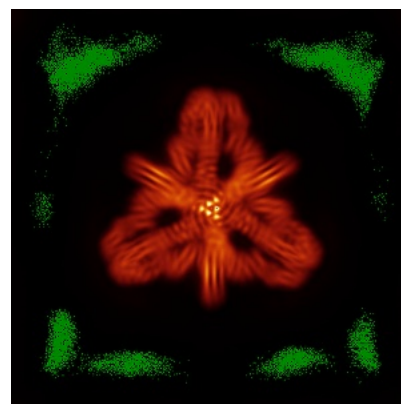
### 6.4.2 Raw map



X



Y



Z

The images above show the map standard deviation projections with false color in three orthogonal directions. Minimum values are shown in green, max in blue, and dark to light orange shades represent small to large values respectively.



## 6.5 Orthogonal surface views [i](#)

### 6.5.1 Primary map



X



Y



Z

The images above show the 3D surface view of the map at the recommended contour level 0.035. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

### 6.5.2 Raw map



X



Y



Z

These images show the 3D surface of the raw map. The raw map's contour level was selected so that its surface encloses the same volume as the primary map does at its recommended contour level.



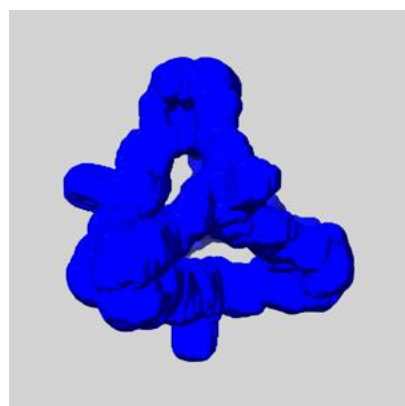
## 6.6 Mask visualisation [i](#)

This section shows the 3D surface view of the primary map at 50% transparency overlaid with the specified mask at 0% transparency

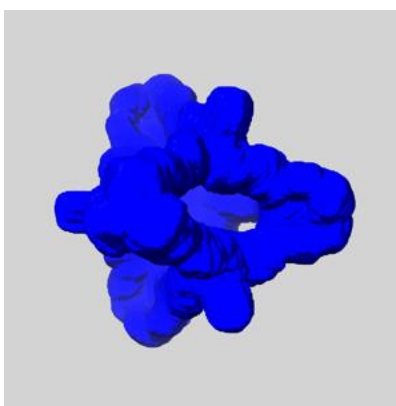
A mask typically either:

- Encompasses the whole structure
- Separates out a domain, a functional unit, a monomer or an area of interest from a larger structure

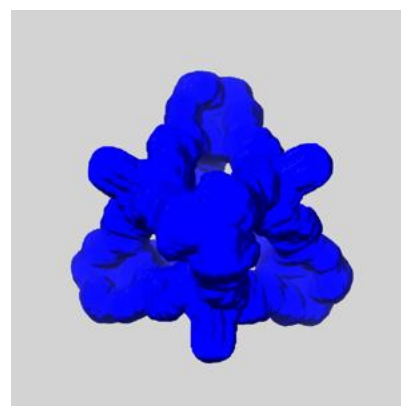
### 6.6.1 emd\_47128\_msk\_1.map [i](#)



X



Y



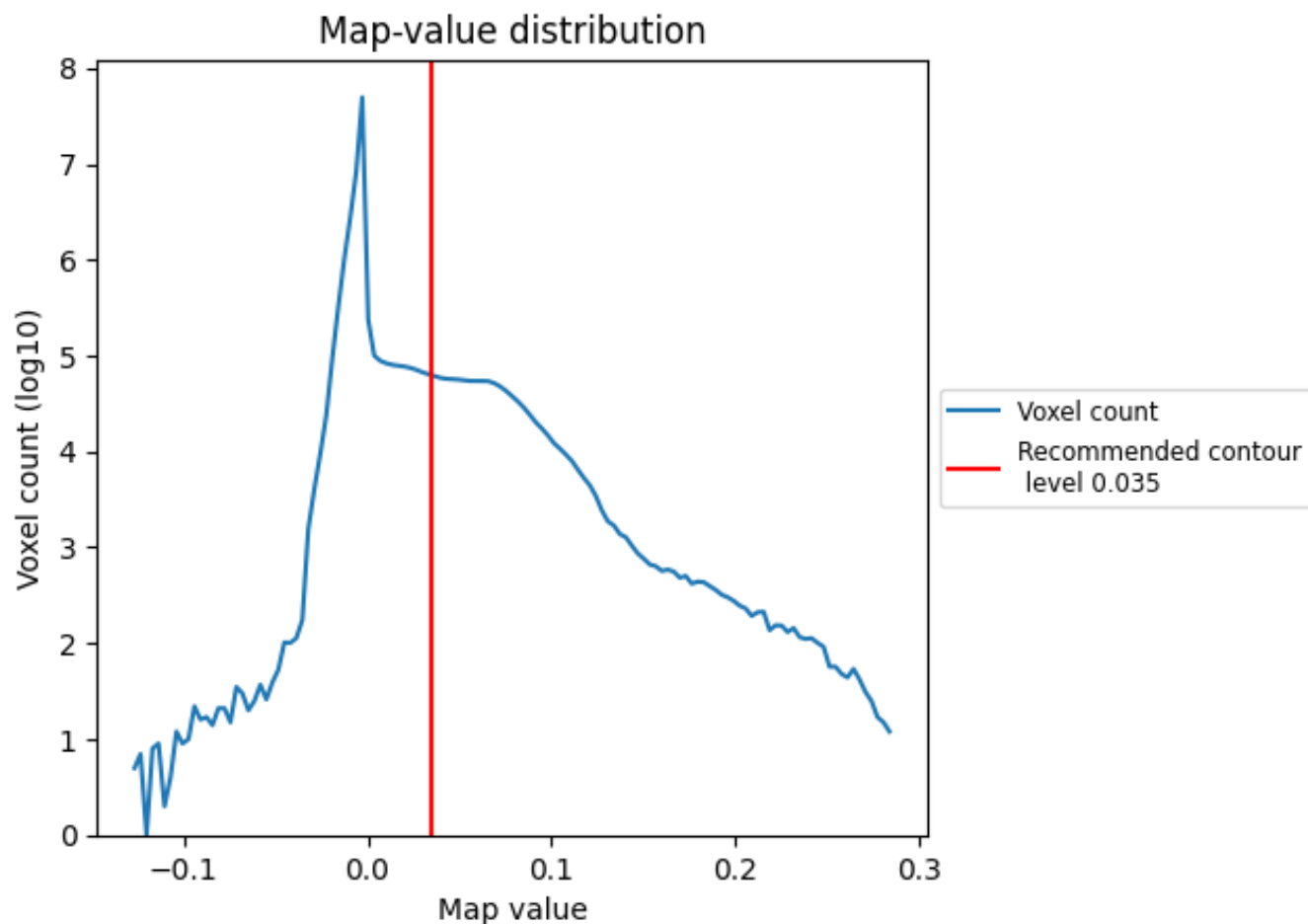
Z



## 7 Map analysis [i](#)

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

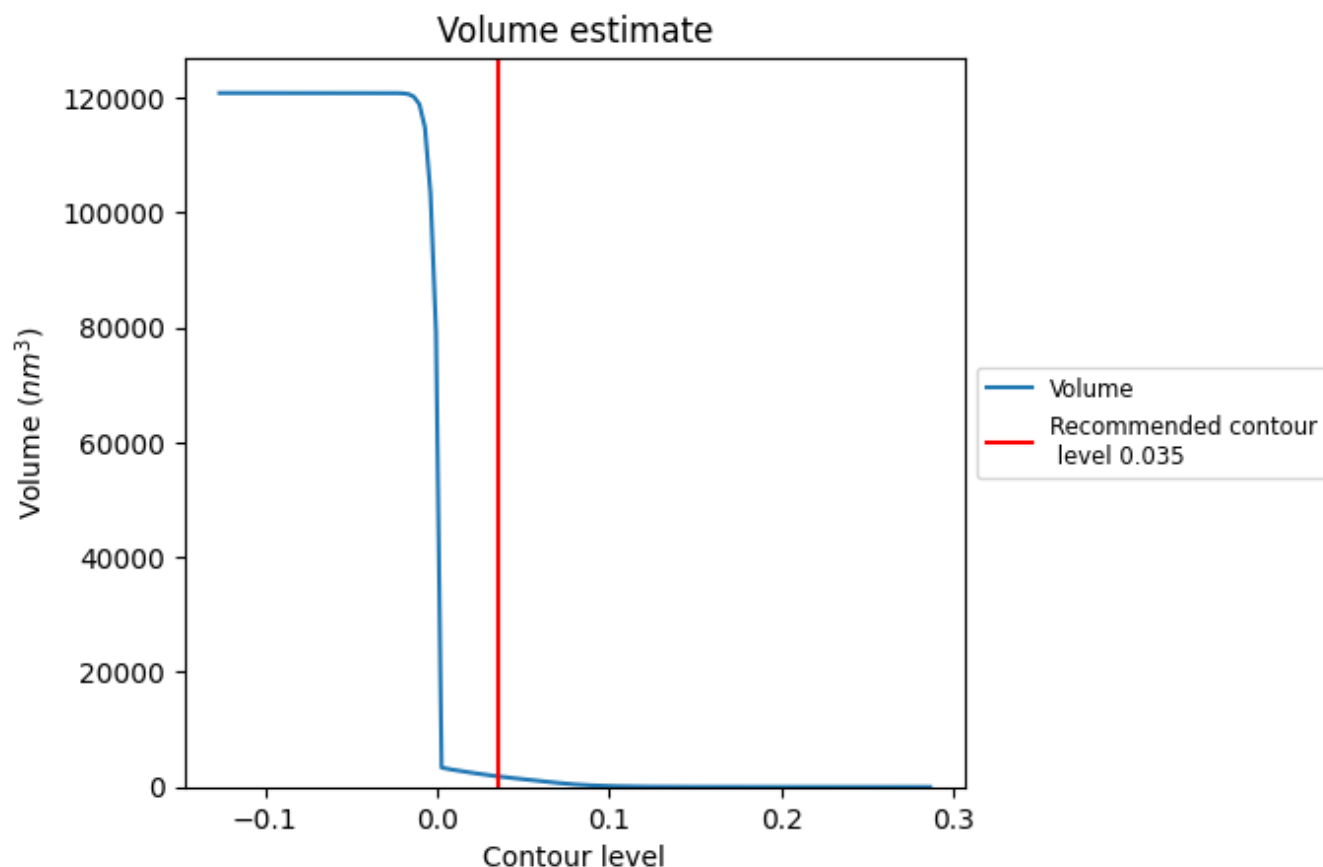
### 7.1 Map-value distribution [i](#)



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



## 7.2 Volume estimate [i](#)

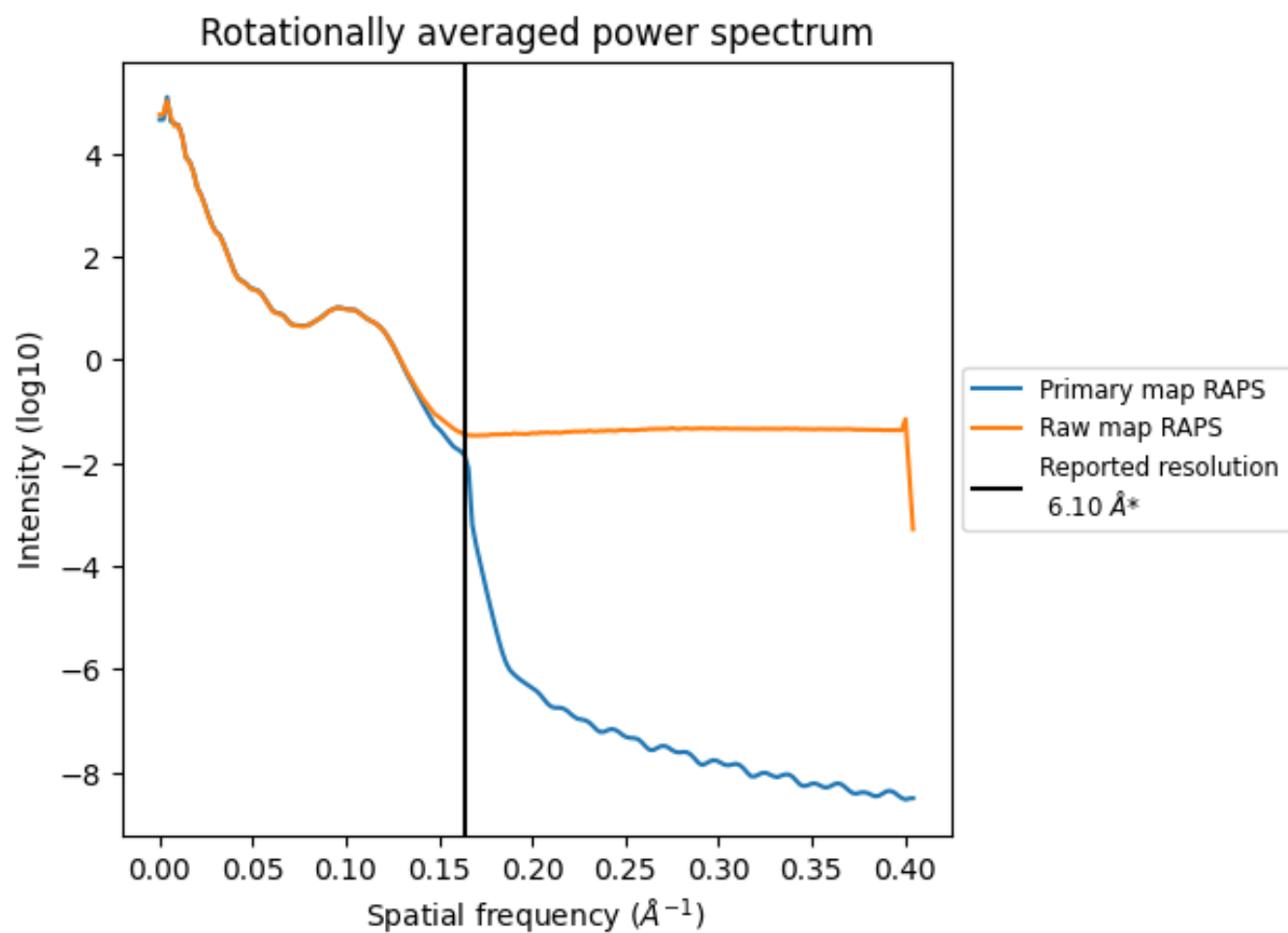


The volume at the recommended contour level is 1861 nm<sup>3</sup>; this corresponds to an approximate mass of 1681 kDa.

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



### 7.3 Rotationally averaged power spectrum ⓘ



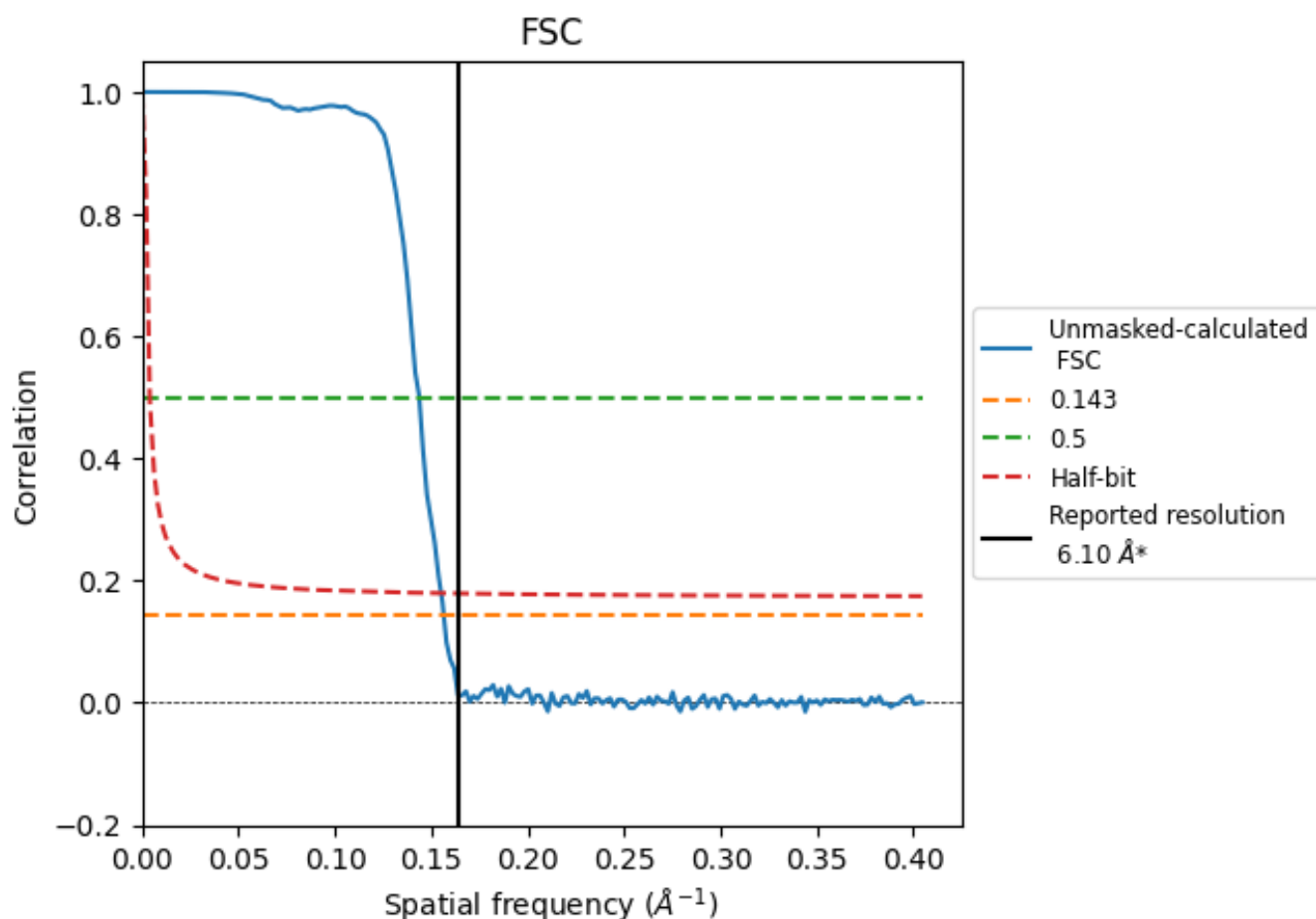
\*Reported resolution corresponds to spatial frequency of 0.164 Å<sup>-1</sup>



## 8 Fourier-Shell correlation [i](#)

Fourier-Shell Correlation (FSC) is the most commonly used method to estimate the resolution of single-particle and subtomogram-averaged maps. The shape of the curve depends on the imposed symmetry, mask and whether or not the two 3D reconstructions used were processed from a common reference. The reported resolution is shown as a black line. A curve is displayed for the half-bit criterion in addition to lines showing the 0.143 gold standard cut-off and 0.5 cut-off.

### 8.1 FSC [i](#)



\*Reported resolution corresponds to spatial frequency of  $0.164 \text{ \AA}^{-1}$



## 8.2 Resolution estimates [i](#)

Resolution estimate (Å)	Estimation criterion (FSC cut-off)		
	0.143	0.5	Half-bit
Reported by author	6.10	-	-
Author-provided FSC curve	-	-	-
Unmasked-calculated*	6.39	6.96	6.45

\*Resolution estimate based on FSC curve calculated by comparison of deposited half-maps.



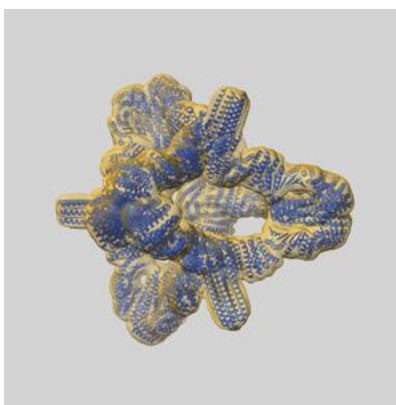
## 9 Map-model fit [i](#)

This section contains information regarding the fit between EMDB map EMD-47128 and PDB model 9DRL. Per-residue inclusion information can be found in section 3 on page 6.

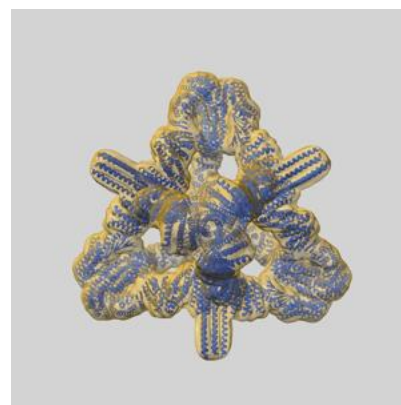
### 9.1 Map-model overlay [i](#)



X



Y

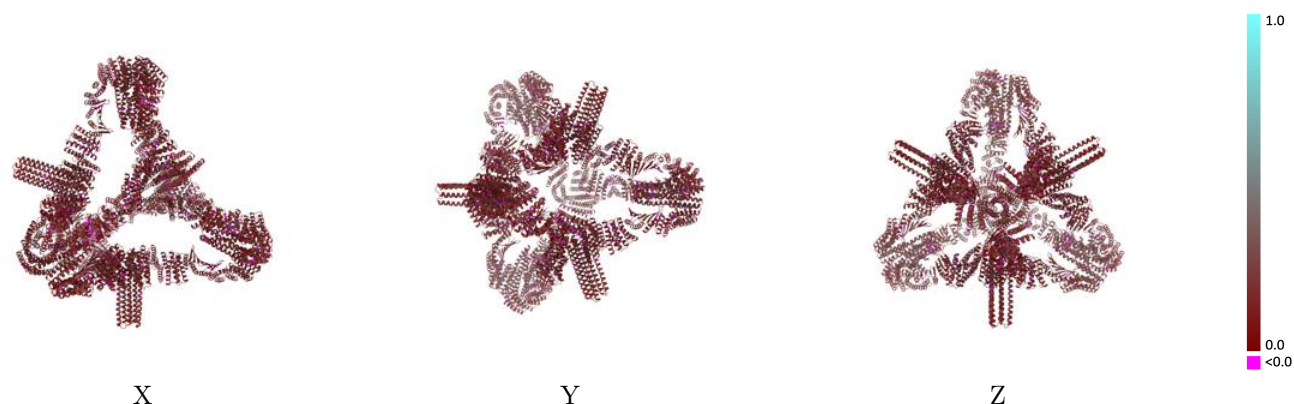


Z

The images above show the 3D surface view of the map at the recommended contour level 0.035 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

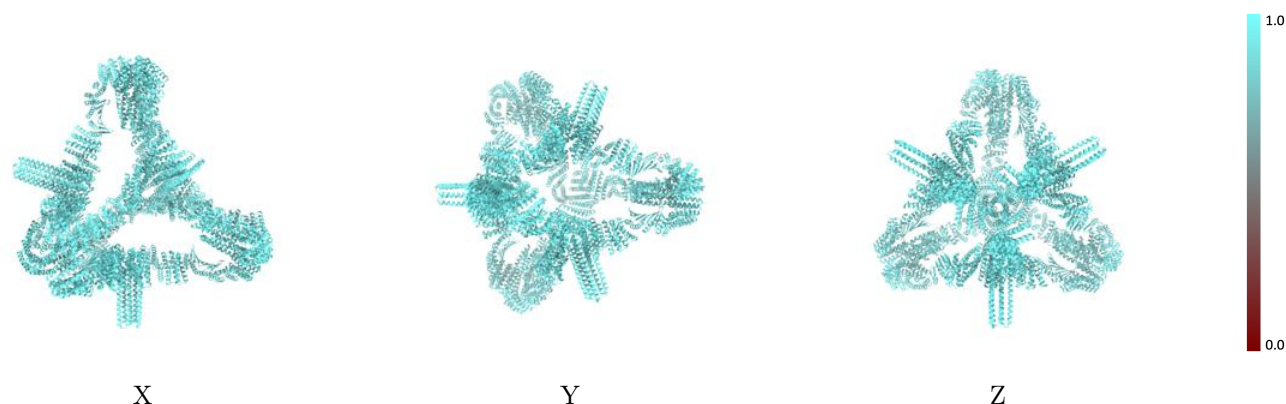


## 9.2 Q-score mapped to coordinate model [i](#)



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

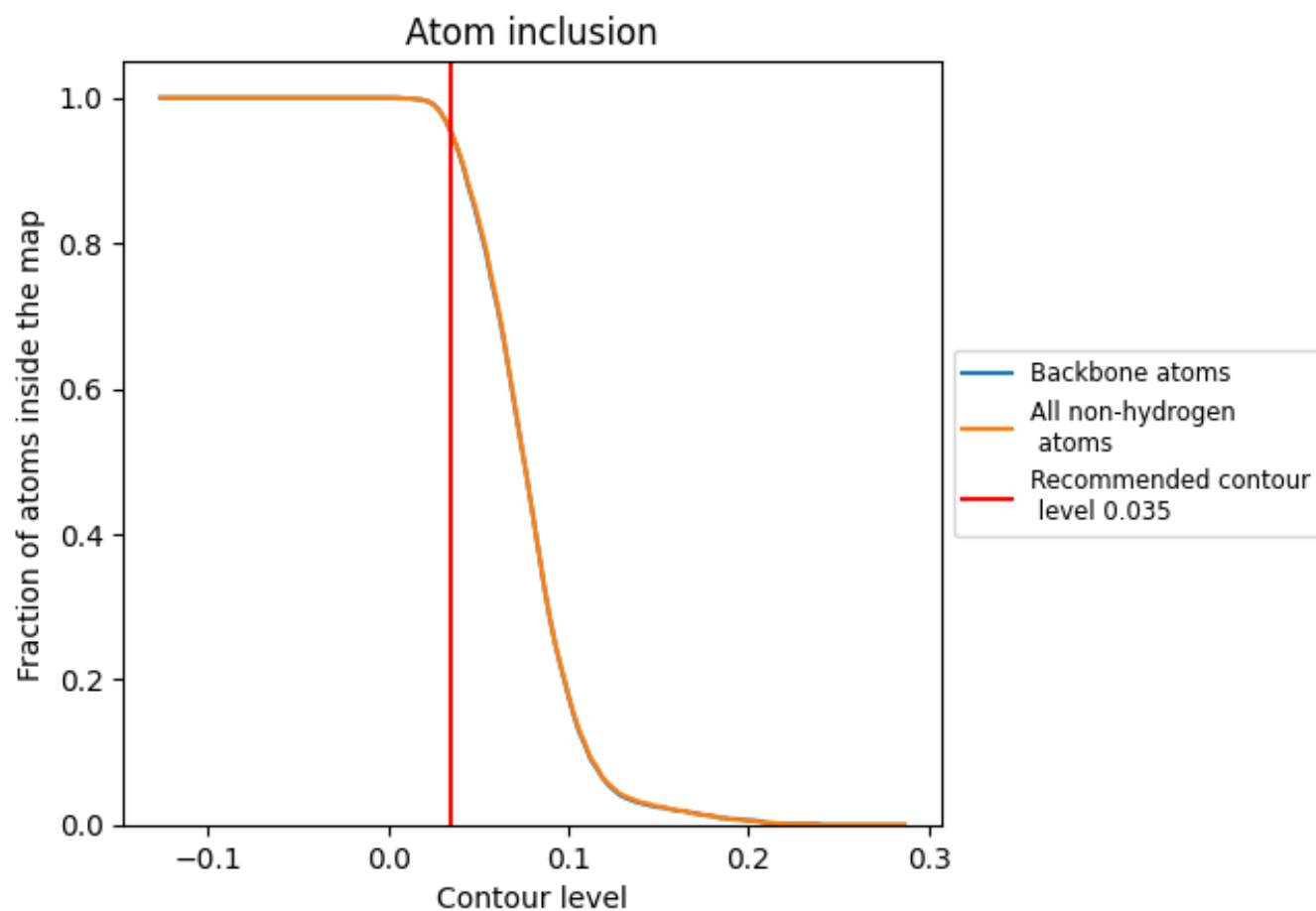
## 9.3 Atom inclusion mapped to coordinate model [i](#)



The images above show the model with each residue coloured according to its atom inclusion. This shows to what extent they are inside the map at the recommended contour level (0.035).



## 9.4 Atom inclusion [i](#)





















































At the recommended contour level, 95% of all backbone atoms, 95% of all non-hydrogen atoms, are inside the map.



## 9.5 Map-model fit summary ⓘ

The table lists the average atom inclusion at the recommended contour level (0.035) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	 0.9520	 0.1610
A	 0.9670	 0.1630
B	 0.9500	 0.1570
C	 0.9660	 0.1660
D	 0.9490	 0.1580
E	 0.9650	 0.1660
F	 0.9480	 0.1530
G	 0.9660	 0.1650
H	 0.9470	 0.1570
I	 0.9660	 0.1640
J	 0.9470	 0.1570
K	 0.9650	 0.1670
L	 0.9470	 0.1590
M	 0.9660	 0.1640
N	 0.9470	 0.1530
O	 0.9660	 0.1620
P	 0.9470	 0.1550
Q	 0.9660	 0.1640
R	 0.9480	 0.1530
S	 0.9660	 0.1640
T	 0.9490	 0.1550
U	 0.9660	 0.1670
V	 0.9470	 0.1590
W	 0.9660	 0.1640
X	 0.9500	 0.1570

