Full wwPDB EM Validation Report ⓘ

Apr 30, 2025 – 10:19 AM EDT

PDB ID	:	9O6T / pdb_00009o6t
EMDB ID	:	EMD-70180
Title	:	Structure of the human prohibitin complex in the open state
Authors	:	Rose, K.; Herrmann, E.; Hurley, J.H.
Deposited on	:	2025-04-14
Resolution	:	22.00 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*
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.

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

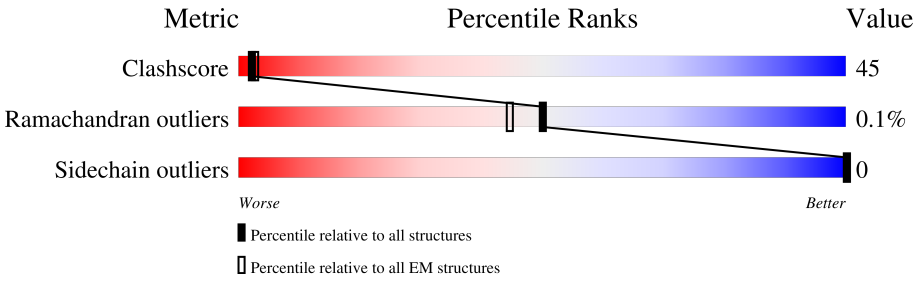
EMDB validation analysis	:	0.0.1.dev118
MolProbity	:	4-5-2 with Phenix2.0rc1
Percentile statistics	:	20231227.v01 (using entries in the PDB archive December 27th 2023)
MapQ	:	1.9.13
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	2.43.1

1 Overall quality at a glance (i)

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

The reported resolution of this entry is 22.00 Å.

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



Metric	Whole archive (#Entries)	EM structures (#Entries)
Clashscore	210492	15764
Ramachandran outliers	207382	16835
Sidechain outliers	206894	16415

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

Mol	Chain	Length	Quality of chain
1	A	299	7% 15% 20% 64%
1	C	299	7% 13% 22% 64%
1	E	299	16% 19% 64%
1	G	299	13% 58% 40%
1	I	299	5% 41% 57%
1	K	299	51% 48%
1	M	299	11% 61% 38%
1	O	299	13% 53% 46%

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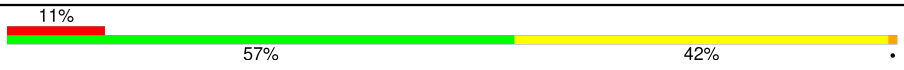
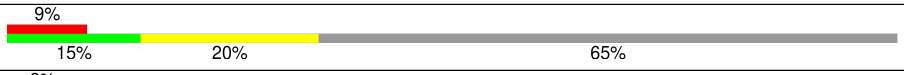
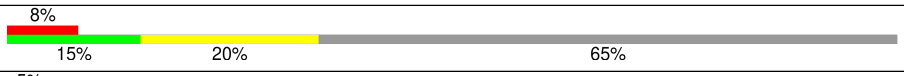
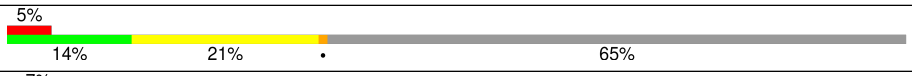
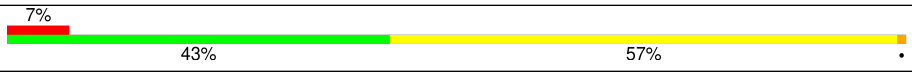
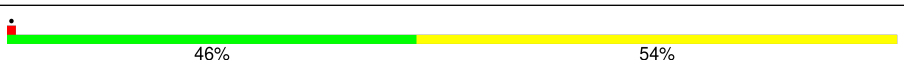
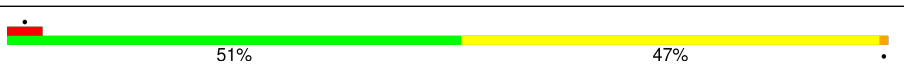
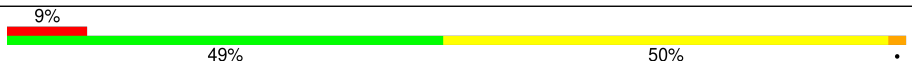
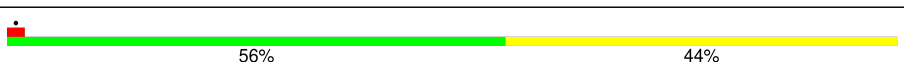
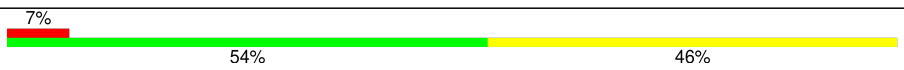
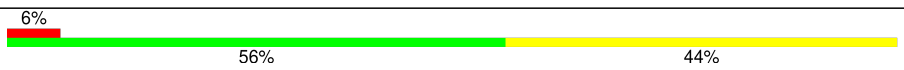
Mol	Chain	Length	Quality of chain
1	Q	299	
1	S	299	
1	U	299	
1	W	299	
2	B	272	
2	D	272	
2	F	272	
2	H	272	
2	J	272	
2	L	272	
2	N	272	
2	P	272	
2	R	272	
2	T	272	
2	V	272	
2	X	272	

2 Entry composition (i)

There are 2 unique types of molecules in this entry. The entry contains 88189 atoms, of which 44759 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 Prohibitin-2.

Mol	Chain	Residues	Atoms						AltConf	Trace
1	A	109	Total	C	H	N	O	S	0	0
			1742	528	887	159	167	1		
1	C	109	Total	C	H	N	O	S	0	0
			1742	528	887	159	167	1		
1	E	109	Total	C	H	N	O	S	0	0
			1742	528	887	159	167	1		
1	G	299	Total	C	H	N	O	S	0	0
			4779	1477	2434	428	435	5		
1	I	299	Total	C	H	N	O	S	0	0
			4779	1477	2434	428	435	5		
1	K	299	Total	C	H	N	O	S	0	0
			4779	1477	2434	428	435	5		
1	M	299	Total	C	H	N	O	S	0	0
			4779	1477	2434	428	435	5		
1	O	299	Total	C	H	N	O	S	0	0
			4779	1477	2434	428	435	5		
1	Q	299	Total	C	H	N	O	S	0	0
			4779	1477	2434	428	435	5		
1	S	299	Total	C	H	N	O	S	0	0
			4779	1477	2434	428	435	5		
1	U	299	Total	C	H	N	O	S	0	0
			4779	1477	2434	428	435	5		
1	W	299	Total	C	H	N	O	S	0	0
			4779	1477	2434	428	435	5		

- Molecule 2 is a protein called Prohibitin 1.

Mol	Chain	Residues	Atoms					AltConf	Trace
2	B	96	Total	C	H	N	O	0	0
			1482	456	748	129	149		
2	D	96	Total	C	H	N	O	0	0
			1482	456	748	129	149		
2	F	96	Total	C	H	N	O	0	0
			1482	456	748	129	149		

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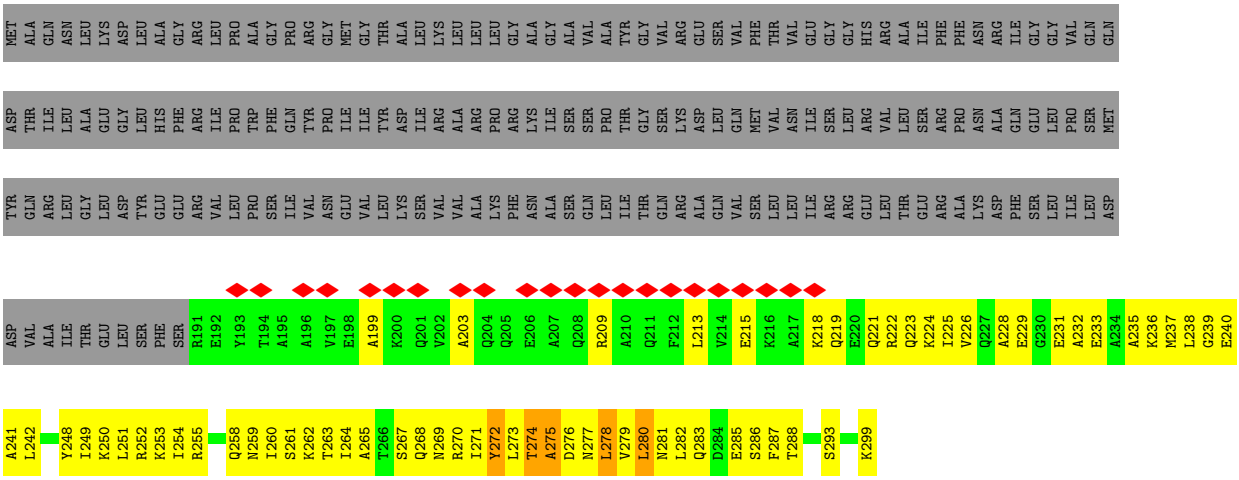
Mol	Chain	Residues	Atoms						AltConf	Trace
2	H	272	Total	C	H	N	O	S	0	0
			4253	1331	2150	370	400	2		
2	J	272	Total	C	H	N	O	S	0	0
			4253	1331	2150	370	400	2		
2	L	272	Total	C	H	N	O	S	0	0
			4253	1331	2150	370	400	2		
2	N	272	Total	C	H	N	O	S	0	0
			4253	1331	2150	370	400	2		
2	P	272	Total	C	H	N	O	S	0	0
			4253	1331	2150	370	400	2		
2	R	272	Total	C	H	N	O	S	0	0
			4253	1331	2150	370	400	2		
2	T	272	Total	C	H	N	O	S	0	0
			4253	1331	2150	370	400	2		
2	V	272	Total	C	H	N	O	S	0	0
			4253	1331	2150	370	400	2		
2	X	96	Total	C	H	N	O		0	0
			1482	456	748	129	149			

3 Residue-property plots (i)

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

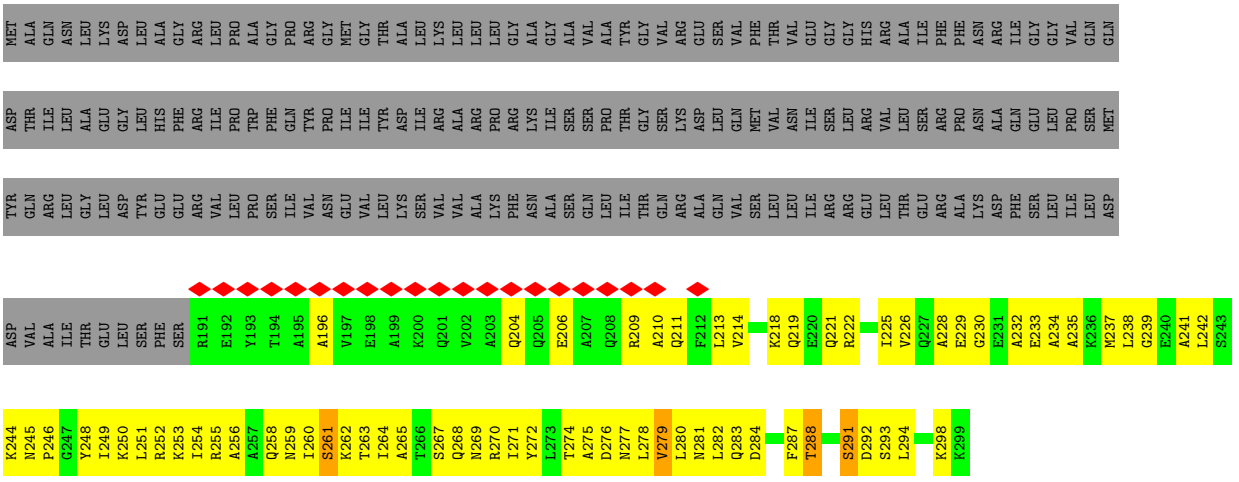
• Molecule 1: Prohibitin-2

Chain A:



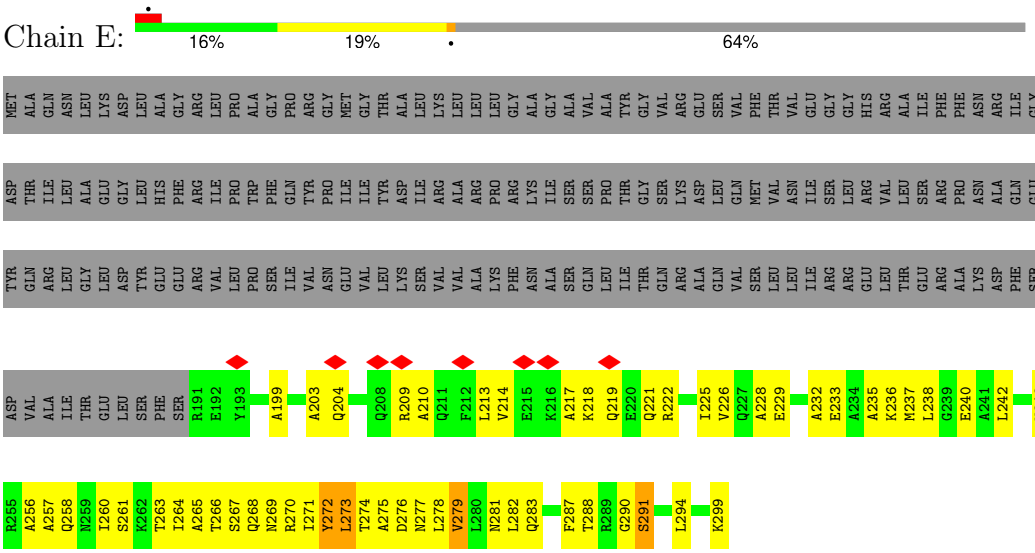
• Molecule 1: Prohibitin-2

Chain C:



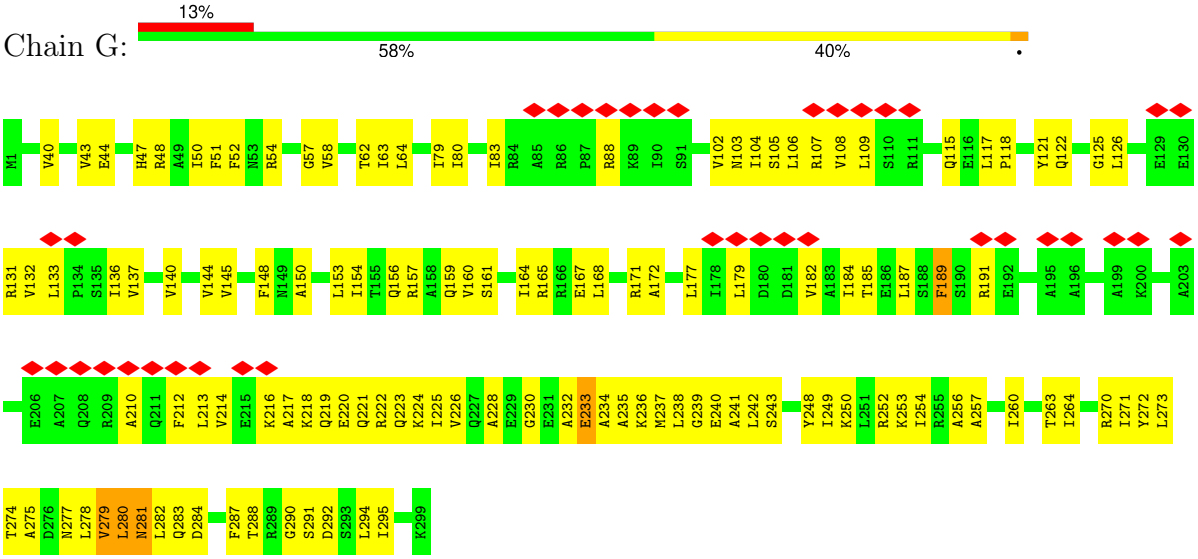
• Molecule 1: Prohibitin-2

Chain E:



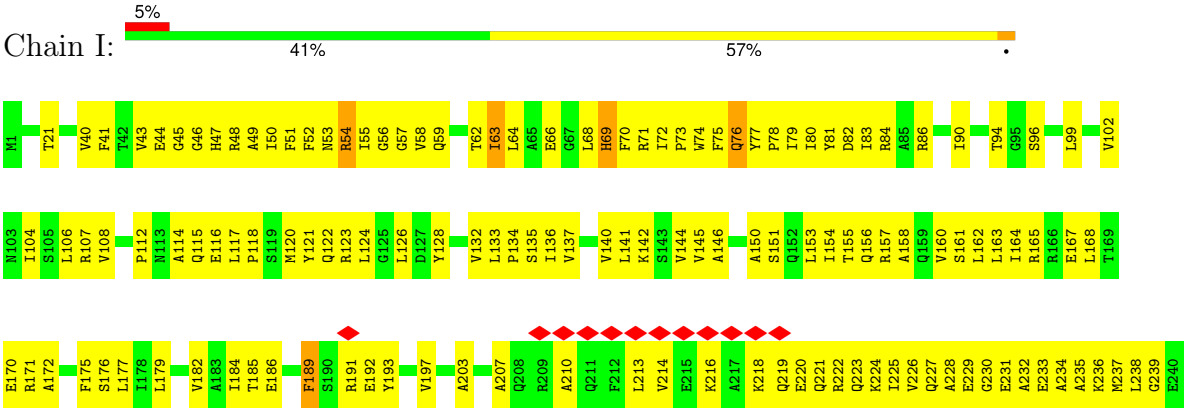
• Molecule 1: Prohibitin-2

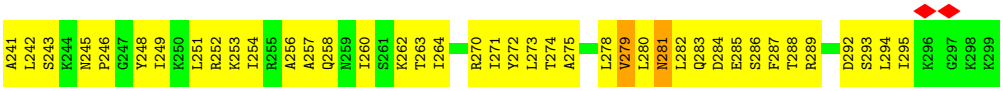
Chain G:



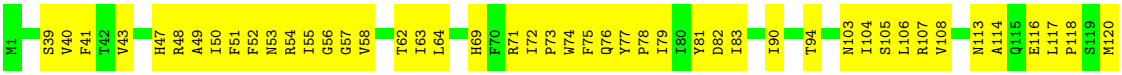
• Molecule 1: Prohibitin-2

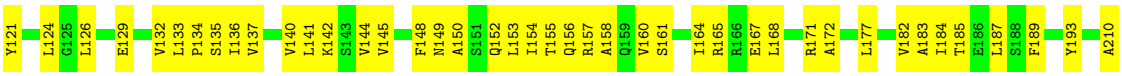
Chain I:



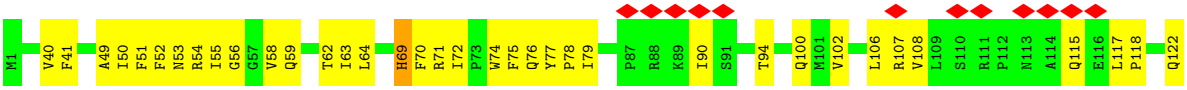


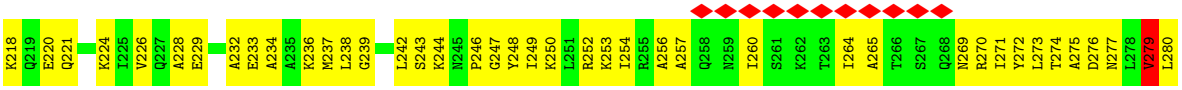
• Molecule 1: Prohibitin-2

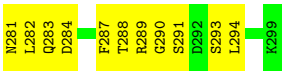




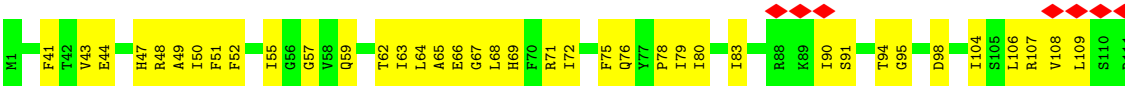
• Molecule 1: Prohibitin-2

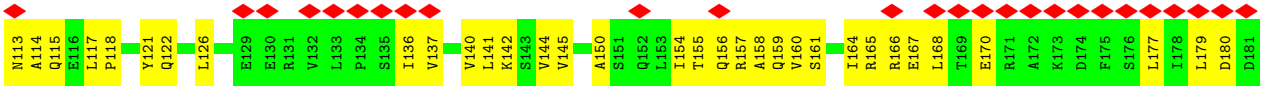


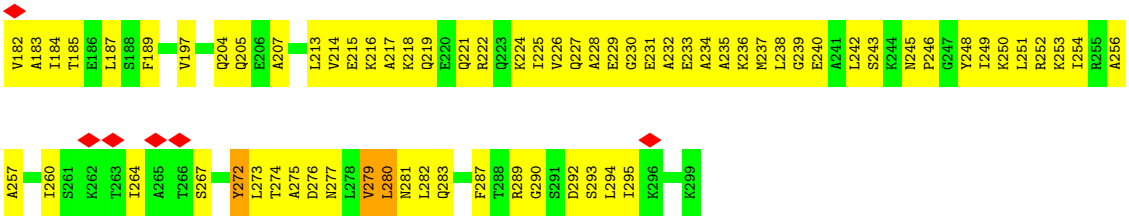




• Molecule 1: Prohibitin-2

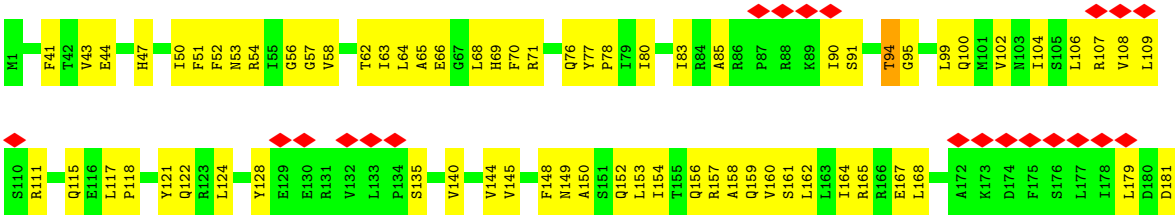






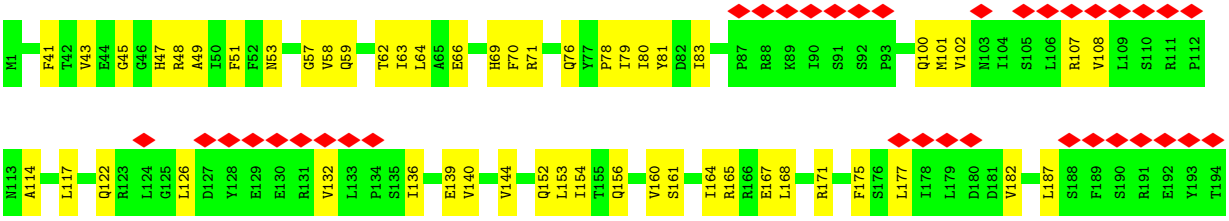
• Molecule 1: Prohibitin-2

Chain Q:



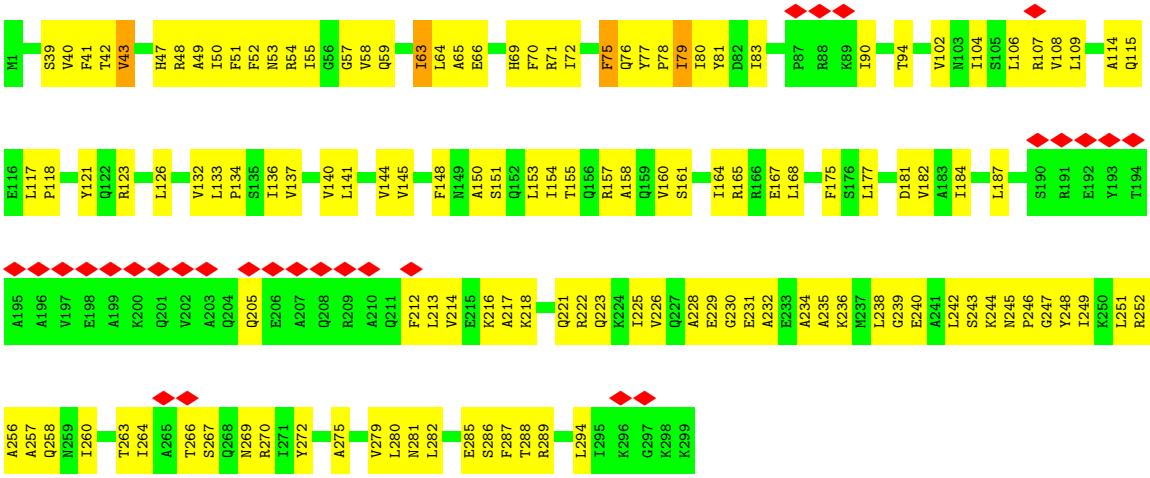
• Molecule 1: Prohibitin-2

Chain S:



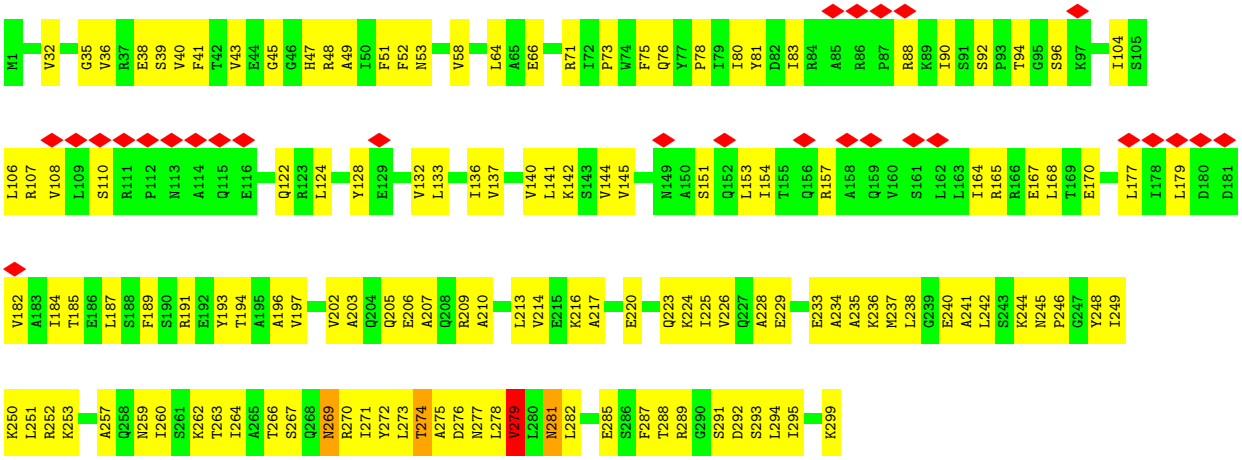
• Molecule 1: Prohibitin-2

Chain U:



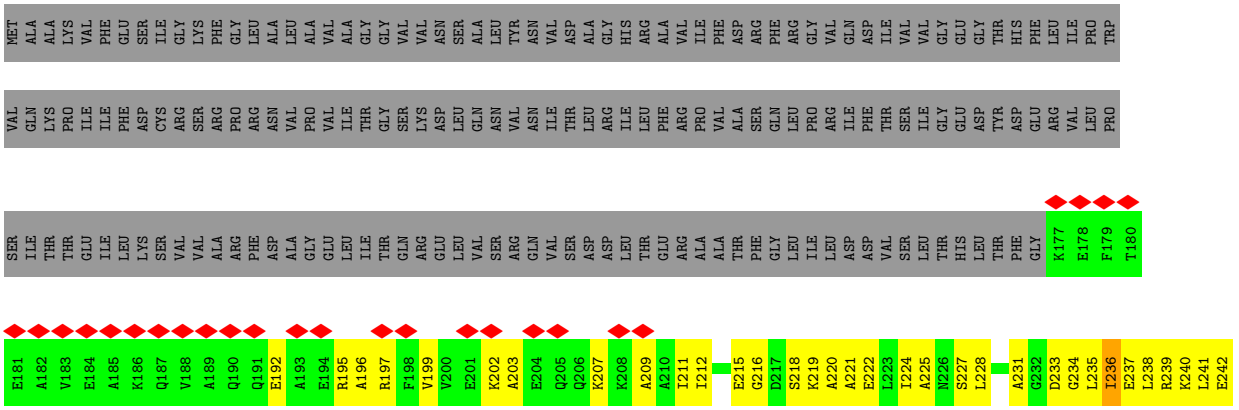
• Molecule 1: Prohibitin-2

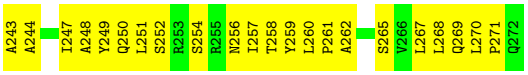
Chain W:



• Molecule 2: Prohibitin 1

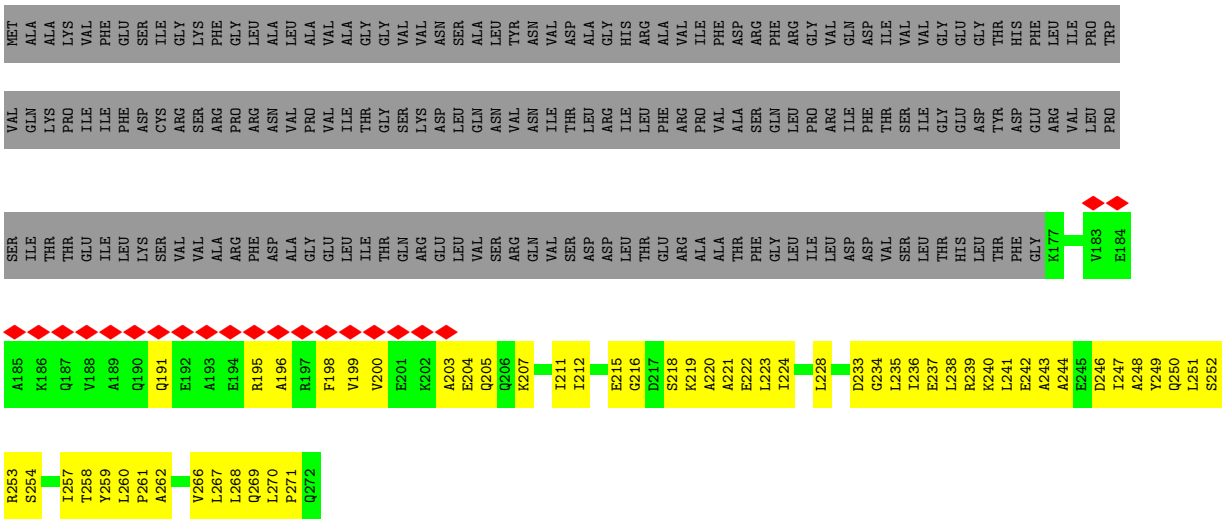
Chain B:





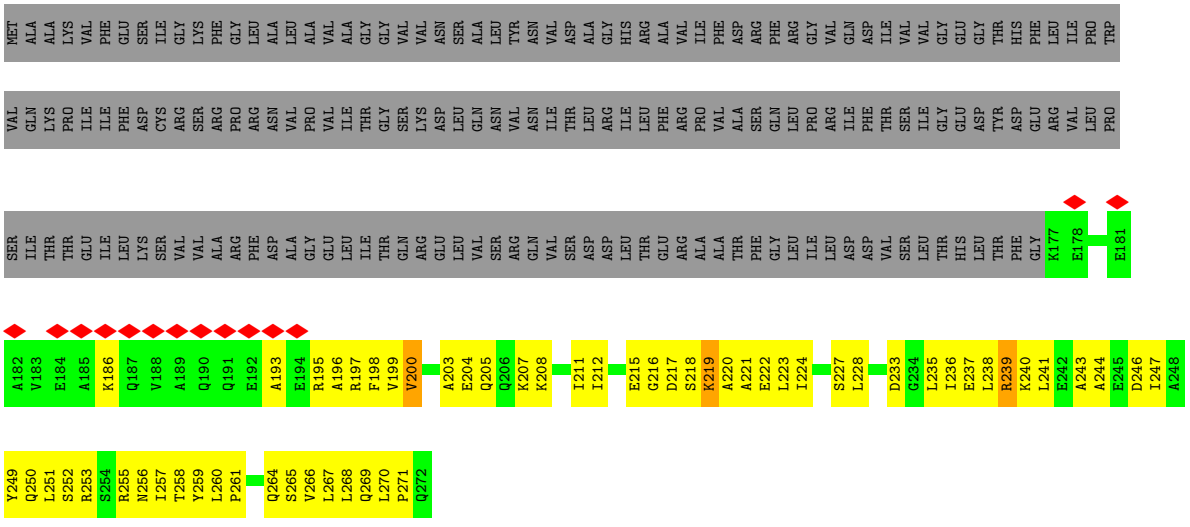
• Molecule 2: Prohibitin 1

Chain D:



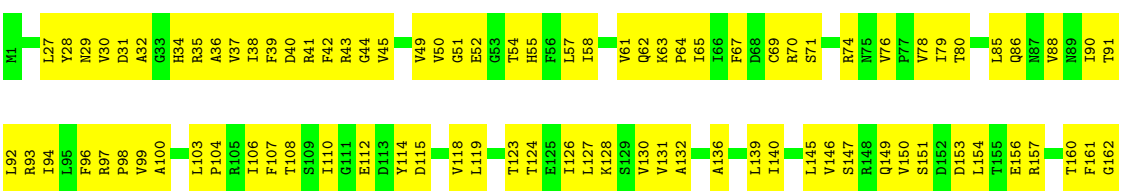
• Molecule 2: Prohibitin 1

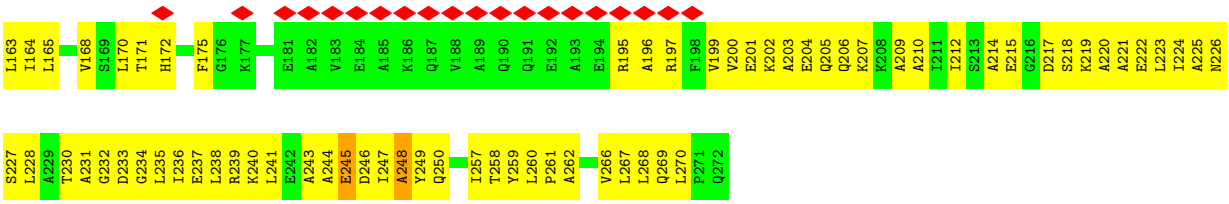
Chain F:



• Molecule 2: Prohibitin 1

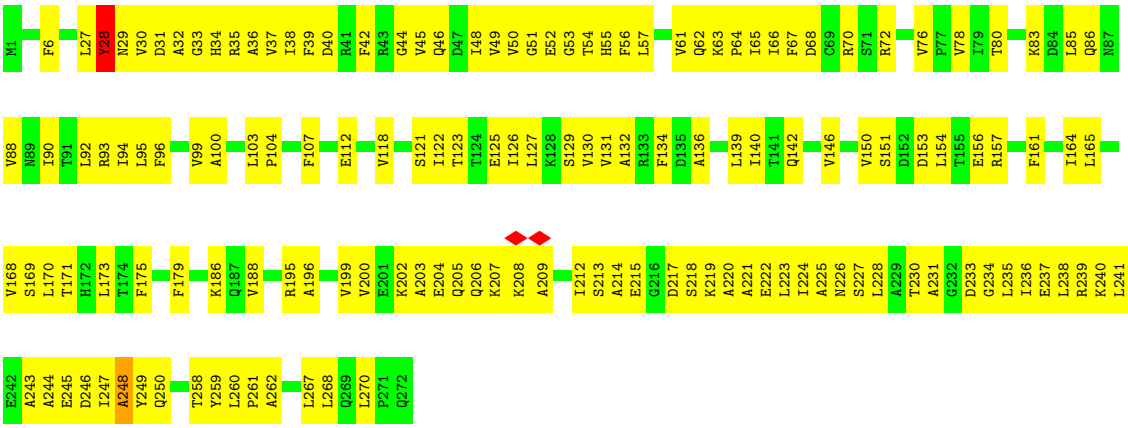
Chain H:





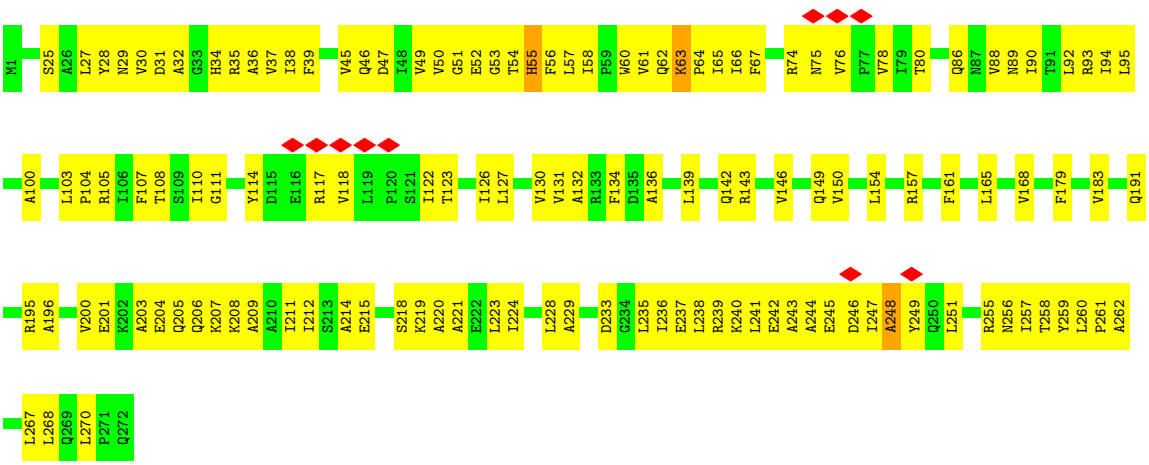
• Molecule 2: Prohibitin 1

Chain J:



• Molecule 2: Prohibitin 1

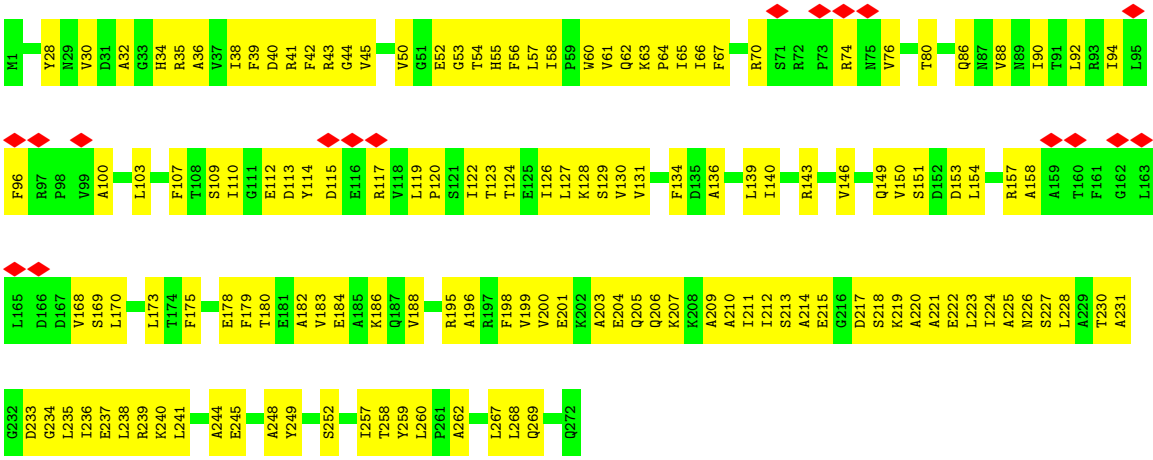
Chain L:



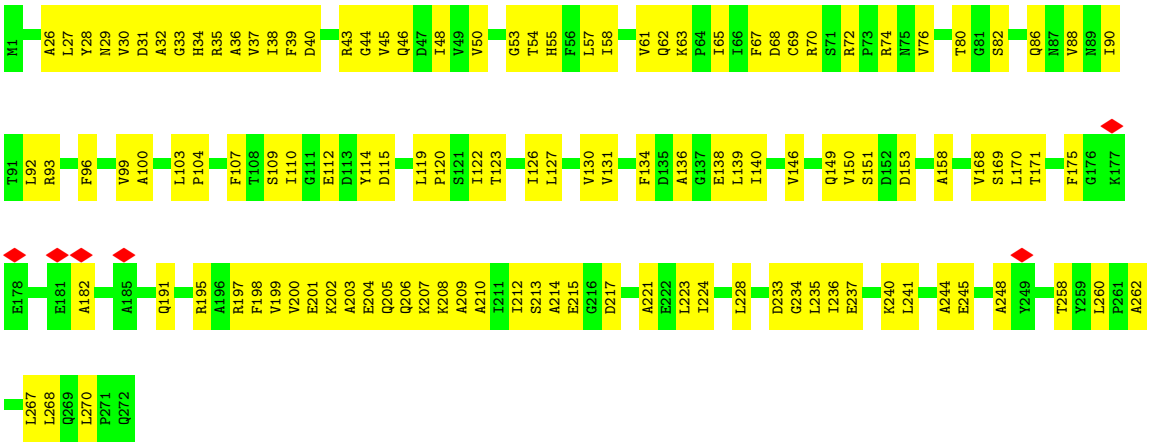
• Molecule 2: Prohibitin 1

Chain N:

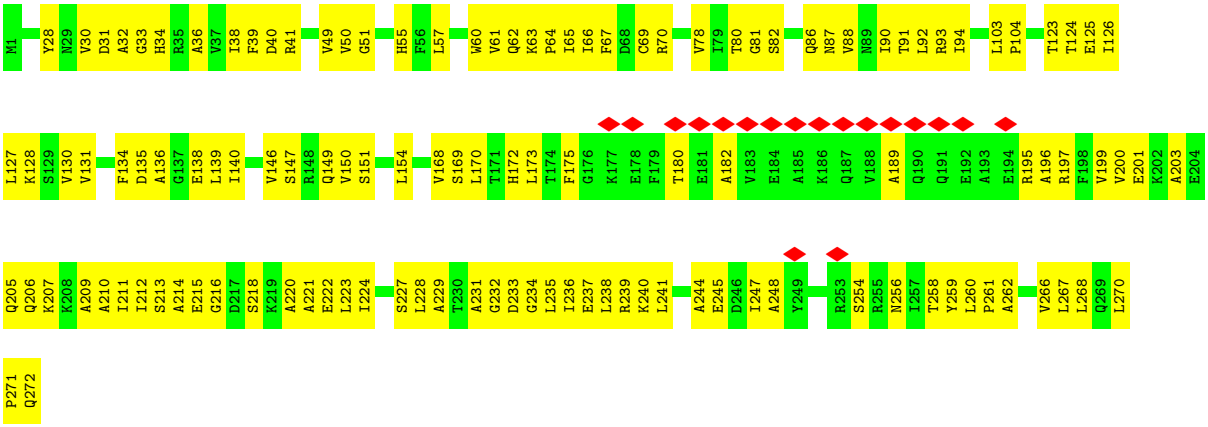
• Molecule 2: Prohibitin 1



• Molecule 2: Prohibitin 1

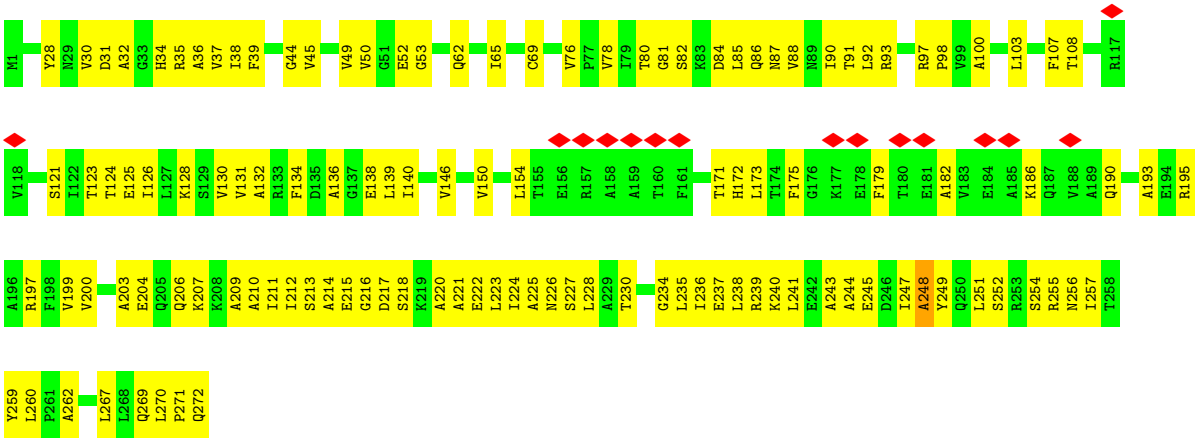


• Molecule 2: Prohibitin 1



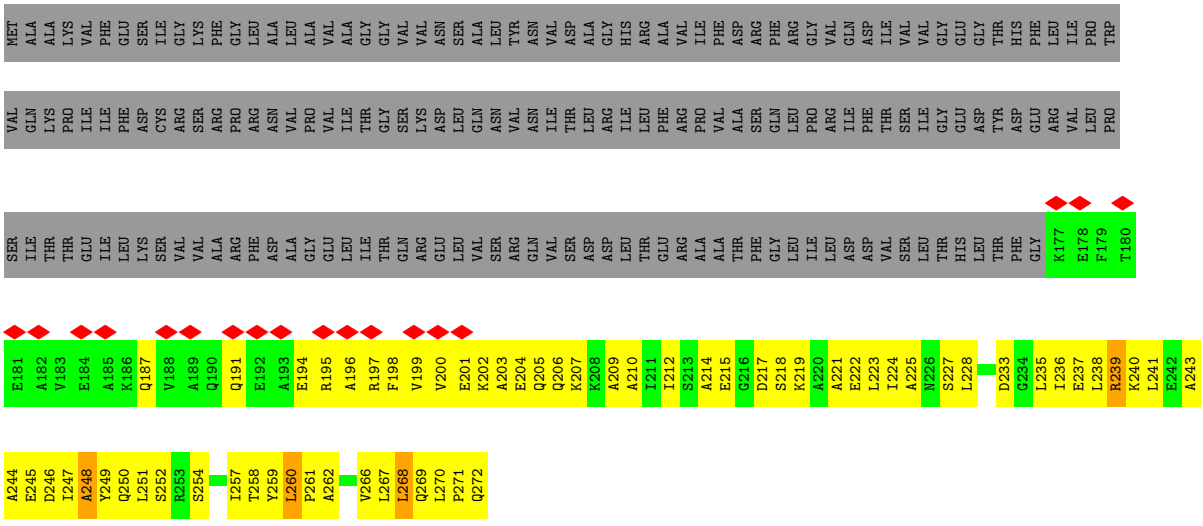
• Molecule 2: Prohibitin 1

Chain V:



• Molecule 2: Prohibitin 1

Chain X:



4 Experimental information (i)

Property	Value	Source
EM reconstruction method	SUBTOMOGRAM AVERAGING	Depositor
Imposed symmetry	POINT, C1	Depositor
Number of subtomograms used	1193	Depositor
Resolution determination method	FSC 0.143 CUT-OFF	Depositor
CTF correction method	PHASE FLIPPING AND AMPLITUDE CORRECTION	Depositor
Microscope	TFS KRIOS, TFS KRIOS, TFS KRIOS	Depositor
Voltage (kV)	300, 300, 300	Depositor
Electron dose ($e^-/Å^2$)	90, 120, 120	Depositor
Minimum defocus (nm)	2000, 2000, 2000	Depositor
Maximum defocus (nm)	6000, 6000, 6000	Depositor
Magnification	43000, 64000, 42000	Depositor
Image detector	GATAN K3 BIOQUANTUM (6k x 4k), FEI FALCON IV (4k x 4k), GATAN K3 BIOQUANTUM (6k x 4k)	Depositor
Maximum map value	0.002	Depositor
Minimum map value	-0.001	Depositor
Average map value	0.000	Depositor
Map value standard deviation	0.000	Depositor
Recommended contour level	0.0001	Depositor
Map size (Å)	503.99997, 503.99997, 503.99997	wwPDB
Map dimensions	120, 120, 120	wwPDB
Map angles (°)	90.0, 90.0, 90.0	wwPDB
Pixel spacing (Å)	4.2, 4.2, 4.2	Depositor

5 Model quality (i)

5.1 Standard geometry (i)

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

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#$\|Z\|$ >5	RMSZ	#$\|Z\|$ >5
1	A	0.38	0/860	0.77	1/1148 (0.1%)
1	C	0.33	0/860	0.64	0/1148
1	E	0.33	0/860	0.62	0/1148
1	G	0.23	0/2376	0.50	0/3198
1	I	0.33	0/2376	0.62	0/3198
1	K	0.25	0/2376	0.51	0/3198
1	M	0.23	0/2376	0.46	0/3198
1	O	0.28	0/2376	0.55	0/3198
1	Q	0.34	1/2376 (0.0%)	0.52	2/3198 (0.1%)
1	S	0.18	0/2376	0.42	0/3198
1	U	0.27	0/2376	0.52	2/3198 (0.1%)
1	W	0.24	0/2376	0.54	0/3198
2	B	0.31	0/739	0.68	1/993 (0.1%)
2	D	0.35	0/739	0.71	0/993
2	F	0.33	0/739	0.68	0/993
2	H	0.27	0/2133	0.56	0/2887
2	J	0.27	0/2133	0.56	1/2887 (0.0%)
2	L	0.26	0/2133	0.54	0/2887
2	N	0.27	0/2133	0.61	2/2887 (0.1%)
2	P	0.25	0/2133	0.50	0/2887
2	R	0.24	0/2133	0.52	0/2887
2	T	0.22	0/2133	0.48	0/2887
2	V	0.24	0/2133	0.48	0/2887
2	X	0.51	1/739 (0.1%)	0.93	1/993 (0.1%)
All	All	0.28	2/43984 (0.0%)	0.56	10/59294 (0.0%)

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

Mol	Chain	#Chirality outliers	#Planarity outliers
1	A	0	4

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Mol	Chain	#Chirality outliers	#Planarity outliers
1	C	0	3
1	E	0	3
1	G	0	6
1	I	0	8
1	K	0	2
1	M	0	2
1	O	0	3
1	Q	0	1
1	S	0	1
1	U	0	3
1	W	0	6
2	B	0	1
2	F	0	3
2	H	0	1
2	J	0	3
2	L	0	3
2	N	0	3
2	R	0	1
2	V	0	1
2	X	0	3
All	All	0	61

All (2) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	Q	94	THR	C-N	-10.92	1.28	1.33
2	X	260	LEU	N-CA	6.67	1.54	1.45

All (10) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	N	61	VAL	N-CA-C	-8.49	104.47	112.96
2	B	236	ILE	N-CA-C	-7.28	102.66	110.23
1	A	274	THR	CB-CA-C	6.23	122.81	110.42
2	J	28	TYR	CB-CA-C	6.21	119.72	109.72
2	X	260	LEU	N-CA-C	6.20	118.45	109.84
2	N	236	ILE	N-CA-C	-6.03	103.96	110.23
1	U	75	PHE	N-CA-C	-5.95	106.66	114.04
1	Q	221	GLN	N-CA-CB	5.78	118.55	109.94
1	U	79	ILE	N-CA-C	-5.22	102.47	109.30
1	Q	221	GLN	N-CA-C	-5.00	105.11	111.11

There are no chirality outliers.

All (61) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
1	A	272	TYR	Peptide
1	A	275	ALA	Peptide
1	A	278	LEU	Peptide
1	A	280	LEU	Peptide
2	B	252	SER	Peptide
1	C	261	SER	Peptide
1	C	288	THR	Peptide
1	C	291	SER	Peptide
1	E	272	TYR	Peptide
1	E	273	LEU	Peptide
1	E	291	SER	Peptide
2	F	200	VAL	Peptide
2	F	219	LYS	Peptide
2	F	239	ARG	Peptide
1	G	189	PHE	Peptide
1	G	191	ARG	Peptide
1	G	233	GLU	Peptide
1	G	279	VAL	Peptide
1	G	280	LEU	Peptide
1	G	281	ASN	Peptide
2	H	248	ALA	Peptide
1	I	189	PHE	Peptide
1	I	191	ARG	Peptide
1	I	279	VAL	Peptide
1	I	281	ASN	Peptide
1	I	54	ARG	Peptide
1	I	63	ILE	Peptide
1	I	69	HIS	Peptide
1	I	76	GLN	Peptide
2	J	248	ALA	Peptide
2	J	28	TYR	Peptide
2	J	33	GLY	Peptide
1	K	275	ALA	Peptide
1	K	281	ASN	Peptide
2	L	248	ALA	Peptide
2	L	55	HIS	Peptide
2	L	63	LYS	Peptide
1	M	279	VAL	Peptide
1	M	69	HIS	Peptide
2	N	248	ALA	Peptide

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Mol	Chain	Res	Type	Group
2	N	252	SER	Peptide
2	N	43	ARG	Sidechain
1	O	272	TYR	Peptide
1	O	279	VAL	Peptide
1	O	280	LEU	Peptide
1	Q	279	VAL	Peptide
2	R	43	ARG	Peptide
1	S	279	VAL	Peptide
1	U	244	LYS	Peptide
1	U	43	VAL	Peptide
1	U	63	ILE	Peptide
2	V	248	ALA	Peptide
1	W	191	ARG	Peptide
1	W	224	LYS	Peptide
1	W	269	ASN	Peptide
1	W	274	THR	Peptide
1	W	279	VAL	Peptide
1	W	281	ASN	Peptide
2	X	239	ARG	Peptide
2	X	248	ALA	Peptide
2	X	268	LEU	Peptide

5.2 Too-close contacts (i)

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

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	A	855	887	886	190	0
1	C	855	887	886	185	0
1	E	855	887	886	205	0
1	G	2345	2434	2434	275	0
1	I	2345	2434	2434	430	0
1	K	2345	2434	2434	297	0
1	M	2345	2434	2434	204	0
1	O	2345	2434	2434	254	0
1	Q	2345	2434	2434	176	0
1	S	2345	2434	2434	130	0
1	U	2345	2434	2434	256	0
1	W	2345	2434	2434	250	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
2	B	734	748	747	162	0
2	D	734	748	747	182	0
2	F	734	748	747	187	0
2	H	2103	2150	2150	329	0
2	J	2103	2150	2150	342	0
2	L	2103	2150	2150	236	0
2	N	2103	2150	2150	228	0
2	P	2103	2150	2150	218	0
2	R	2103	2150	2150	180	0
2	T	2103	2150	2150	204	0
2	V	2103	2150	2150	228	0
2	X	734	748	747	186	0
All	All	43430	44759	44752	4008	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 45.

All (4008) 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:A:228:ALA:HB3	2:B:220:ALA:HB1	1.21	1.15
1:M:238:LEU:HD13	2:N:235:LEU:HD13	1.29	1.14
1:I:238:LEU:HD13	2:J:235:LEU:HD13	1.40	1.01
1:U:214:VAL:HG12	2:V:209:ALA:HB3	1.42	1.00
1:Q:214:VAL:HG13	2:R:209:ALA:HB3	1.45	0.99
1:E:228:ALA:HB3	2:F:220:ALA:HB1	1.45	0.96
2:F:251:LEU:HD13	2:F:257:ILE:HG21	1.47	0.96
1:A:275:ALA:HB2	2:V:260:LEU:HD22	1.44	0.96
1:W:214:VAL:HG22	2:X:212:ILE:HD12	1.48	0.95
1:C:251:LEU:HA	1:C:254:ILE:HD12	1.48	0.95
1:S:214:VAL:HG13	2:T:209:ALA:HB3	1.48	0.95
2:P:228:LEU:HD13	2:P:236:ILE:HD11	1.48	0.95
1:W:225:ILE:HD13	2:X:219:LYS:HE2	1.49	0.94
1:I:107:ARG:O	1:I:182:VAL:HG13	1.69	0.92
2:F:243:ALA:HB1	1:G:254:ILE:HD13	1.51	0.92
2:V:251:LEU:HD13	1:W:273:LEU:HD11	1.51	0.92
1:E:257:ALA:HB1	1:G:279:VAL:HG13	1.49	0.92
1:I:256:ALA:HB3	2:J:241:LEU:HD12	1.51	0.92
1:Q:214:VAL:CG1	2:R:209:ALA:HB3	2.00	0.91
1:U:50:ILE:HD12	1:U:58:VAL:HG11	1.53	0.91
2:L:244:ALA:O	2:L:248:ALA:HB3	1.70	0.91

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:O:238:LEU:HD13	2:P:235:LEU:HD13	1.51	0.91
2:N:196:ALA:O	2:N:200:VAL:HG23	1.71	0.90
2:H:224:ILE:HD12	1:I:248:TYR:HA	1.53	0.90
1:W:260:ILE:HG23	1:W:264:ILE:HD12	1.51	0.90
1:K:145:VAL:HG13	1:K:153:LEU:HD11	1.55	0.89
2:N:236:ILE:HG22	2:N:240:LYS:HZ1	1.36	0.89
1:A:251:LEU:HD13	2:X:228:LEU:HD11	1.53	0.89
2:T:228:LEU:HD11	1:U:251:LEU:HB2	1.53	0.88
1:C:272:TYR:CD2	2:D:260:LEU:HD22	2.09	0.88
1:G:260:ILE:HG23	1:G:264:ILE:HB	1.54	0.88
2:F:200:VAL:HG11	1:G:223:GLN:O	1.74	0.88
2:H:228:LEU:HD13	2:H:236:ILE:HD11	1.55	0.88
1:A:228:ALA:HB1	2:B:224:ILE:HD11	1.53	0.88
2:F:247:ILE:HG12	1:I:280:LEU:HD22	1.53	0.88
1:G:264:ILE:HD11	2:H:248:ALA:HB1	1.56	0.88
1:I:106:LEU:HD23	1:I:137:VAL:HG13	1.57	0.87
1:M:242:LEU:HD13	2:N:238:LEU:HB2	1.56	0.87
1:C:282:LEU:HD21	2:X:240:LYS:HE3	1.56	0.86
2:J:130:VAL:HG21	2:J:150:VAL:HG22	1.58	0.86
1:A:226:VAL:HG11	2:X:207:LYS:HD2	1.57	0.86
2:R:260:LEU:HD22	2:R:268:LEU:HD13	1.55	0.86
1:U:242:LEU:HD13	1:U:249:ILE:HD11	1.55	0.86
2:B:238:LEU:HD23	2:B:241:LEU:HD12	1.57	0.86
1:A:262:LYS:HA	2:X:251:LEU:HD21	1.58	0.86
1:I:210:ALA:O	1:I:214:VAL:HG23	1.75	0.86
2:T:92:LEU:HD21	2:T:168:VAL:HG13	1.55	0.86
2:B:236:ILE:O	1:C:254:ILE:HD13	1.74	0.85
1:G:214:VAL:HG13	2:H:209:ALA:HB2	1.58	0.85
2:H:130:VAL:HG21	2:H:150:VAL:HG22	1.57	0.85
2:J:39:PHE:HB2	2:J:65:ILE:HD11	1.58	0.85
2:F:204:GLU:HG2	1:G:226:VAL:HG11	1.58	0.85
1:S:132:VAL:HG11	1:S:177:LEU:HD12	1.57	0.85
1:K:140:VAL:HG22	1:K:167:GLU:OE1	1.76	0.85
1:U:214:VAL:CG1	2:V:209:ALA:HB3	2.07	0.85
1:G:104:ILE:HD11	1:G:153:LEU:HD13	1.58	0.85
2:T:224:ILE:HD11	1:U:251:LEU:HD23	1.57	0.85
1:W:217:ALA:HB3	2:X:212:ILE:HG22	1.59	0.85
2:T:267:LEU:HD12	2:V:267:LEU:CD2	2.06	0.84
2:H:85:LEU:HD11	1:I:154:ILE:HD13	1.59	0.84
1:G:217:ALA:HB3	2:H:209:ALA:HB1	1.58	0.84
1:W:260:ILE:CG2	1:W:264:ILE:HD12	2.07	0.84

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:S:249:ILE:HD13	2:T:237:GLU:HG3	1.60	0.84
1:A:228:ALA:HB3	2:B:220:ALA:CB	2.05	0.83
2:N:239:ARG:HG3	2:N:242:GLU:HB2	1.61	0.83
2:B:195:ARG:O	2:B:199:VAL:HG23	1.77	0.83
2:F:260:LEU:HD12	2:F:268:LEU:HD12	1.61	0.83
1:A:279:VAL:HG21	1:A:286:SER:O	1.78	0.83
1:M:273:LEU:HB3	1:O:280:LEU:HD23	1.60	0.82
1:A:263:THR:HG21	2:B:249:TYR:CE1	2.14	0.82
2:V:90:ILE:CD1	2:V:131:VAL:HG21	2.08	0.82
2:J:30:VAL:HG13	2:J:54:THR:OG1	1.79	0.82
1:M:277:ASN:HB2	1:O:280:LEU:HD21	1.62	0.82
1:G:274:THR:HG22	1:G:275:ALA:H	1.45	0.82
2:N:39:PHE:CD1	2:N:45:VAL:HG22	2.14	0.82
1:W:264:ILE:HG23	2:X:252:SER:CB	2.10	0.82
1:A:226:VAL:HG21	2:X:206:GLN:NE2	1.94	0.82
2:P:130:VAL:HG22	2:P:149:GLN:OE1	1.79	0.82
2:L:260:LEU:O	1:M:275:ALA:HB2	1.80	0.81
2:F:247:ILE:HG23	1:I:280:LEU:HD13	1.60	0.81
2:L:235:LEU:HD12	2:L:238:LEU:HB3	1.62	0.81
1:U:51:PHE:O	1:U:58:VAL:HG13	1.80	0.81
2:H:235:LEU:HD12	2:H:238:LEU:HB3	1.63	0.81
1:I:106:LEU:HD21	1:I:165:ARG:NH2	1.94	0.81
1:K:106:LEU:HD23	1:K:137:VAL:HG13	1.63	0.81
1:A:271:ILE:HG22	2:B:258:THR:HA	1.61	0.81
2:V:131:VAL:HG13	2:V:139:LEU:HD11	1.61	0.81
2:H:228:LEU:CD1	2:H:236:ILE:HD11	2.10	0.81
2:D:236:ILE:O	1:E:254:ILE:HD13	1.80	0.80
1:I:43:VAL:HG12	1:I:47:HIS:HB2	1.63	0.80
2:J:228:LEU:HD13	2:J:236:ILE:HD11	1.62	0.80
2:N:130:VAL:HG22	2:N:149:GLN:OE1	1.80	0.80
1:K:107:ARG:O	1:K:182:VAL:HG13	1.81	0.80
1:M:238:LEU:HD22	2:N:238:LEU:HD23	1.64	0.80
1:S:165:ARG:HH12	1:S:168:LEU:HD23	1.46	0.80
1:A:237:MET:HE3	2:X:218:SER:O	1.81	0.80
1:Q:43:VAL:HG12	1:Q:47:HIS:HB2	1.64	0.80
2:P:154:LEU:HD23	2:P:168:VAL:HG22	1.64	0.80
1:W:272:TYR:CE1	2:X:258:THR:HG22	2.17	0.80
2:R:50:VAL:HG13	2:R:55:HIS:HB2	1.61	0.80
2:B:251:LEU:HD13	2:B:257:ILE:HG22	1.64	0.79
1:K:260:ILE:HG23	1:K:264:ILE:HD12	1.62	0.79
1:I:279:VAL:HB	1:I:280:LEU:HD23	1.63	0.79

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:108:VAL:HA	1:K:182:VAL:HG22	1.65	0.79
2:L:214:ALA:HB2	1:M:234:ALA:HB1	1.64	0.79
2:V:28:TYR:OH	2:V:50:VAL:HG11	1.82	0.79
1:I:243:SER:OG	2:J:231:ALA:HB1	1.83	0.79
1:I:104:ILE:HD12	1:I:145:VAL:HG21	1.63	0.78
1:M:242:LEU:HD22	1:M:249:ILE:HG13	1.65	0.78
2:N:260:LEU:O	1:O:275:ALA:HB2	1.83	0.78
2:V:259:TYR:C	2:V:260:LEU:HD12	2.09	0.78
2:X:240:LYS:O	2:X:244:ALA:HB2	1.83	0.78
2:N:28:TYR:OH	2:N:50:VAL:HG21	1.82	0.78
2:B:203:ALA:HB1	1:C:226:VAL:HG11	1.64	0.78
1:E:222:ARG:O	1:E:226:VAL:HG23	1.84	0.78
1:G:136:ILE:O	1:G:140:VAL:HG23	1.84	0.78
1:I:235:ALA:HB2	2:J:235:LEU:HD23	1.65	0.78
2:L:236:ILE:HD13	1:M:250:LYS:HD3	1.66	0.78
2:T:92:LEU:HD13	2:T:150:VAL:HG11	1.65	0.78
1:I:253:LYS:HA	2:J:241:LEU:HD11	1.66	0.78
1:I:43:VAL:HG13	1:I:80:ILE:HG23	1.64	0.78
2:P:92:LEU:HD21	2:P:168:VAL:HG13	1.66	0.78
1:W:133:LEU:HD23	1:W:136:ILE:HD11	1.66	0.78
1:K:58:VAL:HG23	2:L:52:GLU:HB3	1.67	0.77
2:R:30:VAL:HG13	2:R:34:HIS:O	1.83	0.77
2:N:214:ALA:HB2	1:O:234:ALA:HB1	1.66	0.77
2:T:90:ILE:HD11	2:T:139:LEU:HD13	1.66	0.77
1:A:242:LEU:HD13	1:A:249:ILE:HG13	1.63	0.77
2:F:204:GLU:CG	1:G:226:VAL:HG11	2.13	0.77
2:R:45:VAL:HG21	2:R:107:PHE:CD1	2.19	0.77
1:S:246:PRO:HB3	1:S:249:ILE:HD12	1.65	0.77
2:J:195:ARG:O	2:J:199:VAL:HG23	1.85	0.77
2:J:85:LEU:HD21	1:K:189:PHE:CE1	2.19	0.77
2:N:50:VAL:HG13	2:N:55:HIS:HB2	1.64	0.77
2:N:92:LEU:HD21	2:N:168:VAL:HG13	1.65	0.77
1:C:238:LEU:HD12	2:D:235:LEU:HD13	1.67	0.77
2:B:221:ALA:HB1	1:C:248:TYR:CD2	2.20	0.77
2:L:90:ILE:HD11	2:L:139:LEU:HD13	1.66	0.77
2:L:28:TYR:OH	2:L:50:VAL:HG11	1.85	0.77
2:J:244:ALA:O	2:J:248:ALA:HB3	1.85	0.76
1:W:132:VAL:HG11	1:W:177:LEU:HD12	1.66	0.76
2:J:228:LEU:HD22	2:J:233:ASP:HA	1.64	0.76
2:T:41:ARG:HE	1:U:65:ALA:HB3	1.51	0.76
1:K:221:GLN:OE1	2:L:212:ILE:HG23	1.86	0.76

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:O:242:LEU:HD13	2:P:238:LEU:HB2	1.67	0.76
1:M:250:LYS:HG2	1:O:279:VAL:HG22	1.67	0.76
2:T:228:LEU:HD12	1:U:247:GLY:O	1.86	0.76
2:H:218:SER:O	2:H:221:ALA:HB3	1.86	0.76
1:I:140:VAL:HG21	1:I:168:LEU:HB2	1.67	0.76
2:J:126:ILE:O	2:J:130:VAL:HG23	1.86	0.76
1:W:249:ILE:HG23	2:X:241:LEU:HD21	1.67	0.76
1:W:272:TYR:HE1	2:X:258:THR:HG22	1.48	0.76
2:J:36:ALA:HB1	2:J:62:GLN:NE2	2.00	0.76
2:P:235:LEU:HD11	2:P:239:ARG:HG3	1.68	0.76
2:P:236:ILE:HG22	2:P:240:LYS:HZ1	1.51	0.76
1:O:221:GLN:HB2	2:P:212:ILE:HG22	1.67	0.75
1:O:238:LEU:CD1	2:P:235:LEU:HD13	2.16	0.75
2:B:247:ILE:HD12	1:C:278:LEU:HD21	1.68	0.75
2:H:63:LYS:O	2:H:65:ILE:HD12	1.86	0.75
1:M:214:VAL:HG22	2:N:209:ALA:HB2	1.67	0.75
1:I:157:ARG:NH2	1:I:184:ILE:HG22	2.02	0.75
2:D:247:ILE:CD1	1:E:278:LEU:HD21	2.16	0.75
2:D:258:THR:OG1	2:D:260:LEU:HD21	1.86	0.75
1:M:50:ILE:HG21	1:M:117:LEU:HB2	1.69	0.75
1:Q:198:GLU:O	1:Q:202:VAL:HG23	1.86	0.75
1:A:225:ILE:HA	2:B:220:ALA:HB2	1.69	0.75
1:G:249:ILE:HG21	2:H:237:GLU:HB3	1.68	0.75
1:I:136:ILE:O	1:I:140:VAL:HG23	1.85	0.75
1:M:144:VAL:HG21	1:M:164:ILE:HG12	1.67	0.75
2:V:49:VAL:HG21	2:V:100:ALA:O	1.85	0.75
1:I:102:VAL:HG13	1:I:189:PHE:HE1	1.51	0.74
1:K:58:VAL:HG23	2:L:52:GLU:CB	2.16	0.74
1:I:260:ILE:HD11	2:J:244:ALA:HB1	1.68	0.74
1:I:263:THR:HG23	2:J:249:TYR:CE2	2.22	0.74
1:W:217:ALA:CB	2:X:212:ILE:HG22	2.16	0.74
1:E:272:TYR:CD1	2:F:260:LEU:HD22	2.22	0.74
1:W:228:ALA:HB1	2:X:223:LEU:HB3	1.68	0.74
1:E:228:ALA:HB3	2:F:220:ALA:CB	2.18	0.74
2:N:40:ASP:HA	2:N:61:VAL:HG22	1.69	0.74
2:T:260:LEU:CD2	2:T:268:LEU:HD21	2.18	0.74
2:N:61:VAL:HG23	1:O:67:GLY:CA	2.18	0.73
1:G:250:LYS:HA	1:I:279:VAL:HG22	1.70	0.73
2:X:218:SER:O	2:X:221:ALA:HB3	1.88	0.73
1:A:265:ALA:HB2	2:X:251:LEU:HD23	1.70	0.73
2:H:28:TYR:CZ	2:H:36:ALA:HB3	2.24	0.73

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:240:LYS:HZ1	1:K:282:LEU:HG	1.53	0.73
2:V:30:VAL:HG21	2:V:53:GLY:O	1.87	0.73
1:G:242:LEU:HD13	1:G:249:ILE:HD11	1.70	0.73
1:G:260:ILE:HG12	1:G:264:ILE:HD12	1.70	0.73
1:A:275:ALA:O	1:W:274:THR:HG21	1.88	0.73
2:R:130:VAL:HG22	2:R:149:GLN:OE1	1.88	0.73
1:W:108:VAL:HA	1:W:182:VAL:HG22	1.71	0.73
2:N:90:ILE:HD11	2:N:139:LEU:HD13	1.70	0.73
1:O:154:ILE:HD11	1:O:189:PHE:HE1	1.53	0.73
1:Q:217:ALA:HB1	2:R:213:SER:HB2	1.71	0.73
1:S:274:THR:HG22	1:S:275:ALA:H	1.54	0.73
1:I:99:LEU:HD13	2:J:179:PHE:CZ	2.24	0.73
1:O:51:PHE:CD2	1:O:62:THR:HG21	2.23	0.73
1:O:154:ILE:HD11	1:O:189:PHE:CE1	2.23	0.72
1:A:249:ILE:HG21	1:C:294:LEU:HG	1.71	0.72
2:J:92:LEU:HD21	2:J:168:VAL:HG13	1.70	0.72
1:A:237:MET:HE2	2:X:222:GLU:HG2	1.72	0.72
1:G:256:ALA:HB3	2:H:241:LEU:HD12	1.72	0.72
1:I:79:ILE:HD12	1:I:121:TYR:OH	1.89	0.72
1:Q:52:PHE:CE1	2:R:32:ALA:HB2	2.25	0.72
1:G:106:LEU:HD21	1:G:165:ARG:CZ	2.20	0.72
2:J:207:LYS:HZ1	1:K:229:GLU:HB2	1.55	0.72
2:T:92:LEU:HD21	2:T:168:VAL:CG1	2.19	0.72
2:V:195:ARG:O	2:V:199:VAL:HG23	1.89	0.72
2:F:240:LYS:HB3	1:I:282:LEU:HB2	1.71	0.72
1:G:217:ALA:CB	2:H:209:ALA:HB1	2.19	0.72
2:J:239:ARG:HB3	1:K:254:ILE:HD13	1.71	0.72
2:B:267:LEU:HD23	2:X:267:LEU:HD21	1.70	0.72
2:D:250:GLN:HE22	2:D:251:LEU:HD23	1.55	0.72
1:Q:207:ALA:HB3	2:R:198:PHE:CE2	2.25	0.71
2:T:224:ILE:HG23	1:U:248:TYR:HA	1.72	0.71
1:U:107:ARG:O	1:U:182:VAL:HG13	1.90	0.71
1:I:56:GLY:O	2:J:50:VAL:HG12	1.90	0.71
1:M:264:ILE:HG23	2:N:249:TYR:CD1	2.25	0.71
2:R:86:GLN:HB2	2:R:136:ALA:HB2	1.71	0.71
2:V:88:VAL:HG11	2:V:139:LEU:HD13	1.71	0.71
1:S:221:GLN:HB2	2:T:212:ILE:HG22	1.73	0.71
1:E:271:ILE:CD1	1:G:280:LEU:HD23	2.20	0.71
2:D:224:ILE:HG21	1:E:251:LEU:HD22	1.72	0.71
2:F:195:ARG:O	2:F:199:VAL:HG23	1.90	0.71
2:N:228:LEU:HD13	2:N:236:ILE:HD11	1.72	0.71

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:S:217:ALA:HB1	2:T:213:SER:HB2	1.71	0.71
1:E:273:LEU:HD23	1:G:280:LEU:O	1.90	0.71
1:I:55:ILE:HG23	1:I:55:ILE:O	1.90	0.71
1:K:106:LEU:HD21	1:K:165:ARG:NH2	2.06	0.71
2:B:270:LEU:HD23	1:E:272:TYR:CE1	2.26	0.71
2:F:260:LEU:HD12	2:F:268:LEU:CD1	2.20	0.71
1:G:250:LYS:HB3	1:I:279:VAL:HG13	1.73	0.71
2:L:270:LEU:HD13	2:N:258:THR:CG2	2.21	0.71
1:M:264:ILE:HG23	2:N:249:TYR:HD1	1.54	0.71
1:U:260:ILE:HG23	1:U:264:ILE:HB	1.73	0.71
2:L:228:LEU:CD1	2:L:236:ILE:HD11	2.20	0.71
1:A:262:LYS:CA	2:X:251:LEU:HD21	2.19	0.71
1:I:214:VAL:HG21	2:J:205:GLN:HB3	1.72	0.70
1:W:43:VAL:HG13	1:W:80:ILE:HG23	1.72	0.70
1:M:238:LEU:HD13	2:N:235:LEU:CD1	2.17	0.70
1:O:249:ILE:HD13	2:P:237:GLU:CB	2.20	0.70
2:V:218:SER:OG	1:W:241:ALA:HB3	1.91	0.70
2:F:221:ALA:HB2	1:G:248:TYR:CD2	2.26	0.70
1:S:214:VAL:HG13	2:T:209:ALA:CB	2.20	0.70
2:L:126:ILE:O	2:L:130:VAL:HG23	1.91	0.70
2:L:223:LEU:HD12	2:L:224:ILE:N	2.06	0.70
1:C:253:LYS:N	2:D:241:LEU:HD13	2.07	0.70
1:G:43:VAL:HG13	1:G:80:ILE:HG23	1.74	0.70
2:H:146:VAL:HG12	2:H:170:LEU:HD11	1.73	0.70
1:K:136:ILE:HD12	1:K:172:ALA:HB2	1.74	0.70
2:P:178:GLU:CD	1:Q:202:VAL:HG22	2.17	0.70
2:P:179:PHE:O	2:P:183:VAL:HG23	1.90	0.70
1:Q:232:ALA:HB3	2:R:223:LEU:HD22	1.73	0.70
2:R:151:SER:HA	2:R:168:VAL:HG11	1.72	0.70
1:G:105:SER:O	1:G:184:ILE:HG23	1.90	0.70
1:I:83:ILE:HA	1:I:112:PRO:HG2	1.74	0.70
1:I:151:SER:HA	1:I:154:ILE:HD12	1.73	0.70
1:K:157:ARG:NH2	1:K:184:ILE:HG22	2.06	0.70
2:P:28:TYR:CD1	2:P:57:LEU:HD23	2.27	0.70
2:T:261:PRO:HG2	2:T:266:VAL:HG11	1.73	0.70
1:U:106:LEU:HD21	1:U:165:ARG:HH22	1.54	0.70
1:W:274:THR:HG22	1:W:275:ALA:H	1.55	0.70
2:F:200:VAL:HA	2:F:203:ALA:HB3	1.71	0.70
2:V:247:ILE:HG22	2:V:251:LEU:HD12	1.73	0.70
2:B:268:LEU:HD11	2:D:260:LEU:HB3	1.71	0.69
1:G:79:ILE:HD12	1:G:121:TYR:OH	1.91	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:Q:99:LEU:HD21	2:R:140:ILE:HD13	1.72	0.69
1:U:246:PRO:CB	1:U:249:ILE:HD12	2.22	0.69
1:G:256:ALA:CB	2:H:241:LEU:HD12	2.22	0.69
1:K:105:SER:O	1:K:184:ILE:HG23	1.91	0.69
2:N:30:VAL:HG13	2:N:34:HIS:O	1.91	0.69
1:U:106:LEU:HD21	1:U:165:ARG:NH2	2.06	0.69
1:I:249:ILE:HG21	2:J:237:GLU:HB3	1.75	0.69
2:N:236:ILE:HG22	2:N:240:LYS:NZ	2.06	0.69
1:O:275:ALA:HB1	1:O:281:ASN:ND2	2.07	0.69
1:A:274:THR:HG22	1:A:275:ALA:H	1.56	0.69
1:E:263:THR:O	1:E:266:THR:HG22	1.92	0.69
1:K:214:VAL:HG22	2:L:209:ALA:HB2	1.73	0.69
2:P:178:GLU:OE1	1:Q:202:VAL:HG22	1.91	0.69
1:U:132:VAL:HG11	1:U:177:LEU:HD12	1.73	0.69
2:X:195:ARG:O	2:X:199:VAL:HG23	1.92	0.69
2:B:247:ILE:CD1	1:C:278:LEU:HD21	2.23	0.69
2:B:267:LEU:HD12	2:B:267:LEU:O	1.92	0.69
2:H:156:GLU:O	2:H:160:THR:HG23	1.92	0.69
1:I:214:VAL:HG22	2:J:209:ALA:HB2	1.74	0.69
1:M:107:ARG:O	1:M:182:VAL:HG13	1.92	0.69
2:R:26:ALA:HA	2:R:57:LEU:HD11	1.75	0.69
1:S:153:LEU:CD2	1:S:160:VAL:HG11	2.22	0.69
1:A:237:MET:HE2	2:X:222:GLU:CG	2.22	0.69
1:E:232:ALA:O	1:E:235:ALA:HB3	1.92	0.69
1:I:75:PHE:HA	2:J:28:TYR:HA	1.75	0.69
1:W:203:ALA:HB1	2:X:201:GLU:CB	2.22	0.69
1:C:214:VAL:HG13	2:D:212:ILE:CD1	2.23	0.69
1:G:264:ILE:HD11	2:H:248:ALA:CB	2.23	0.69
2:T:94:ILE:HG12	2:T:154:LEU:HD21	1.74	0.69
2:H:49:VAL:HG21	2:H:100:ALA:O	1.93	0.69
1:I:136:ILE:HD12	1:I:172:ALA:HB2	1.73	0.69
2:P:90:ILE:HD11	2:P:139:LEU:HD13	1.75	0.69
2:R:82:SER:HA	2:R:131:VAL:HG12	1.75	0.69
2:V:39:PHE:HA	2:V:45:VAL:HG22	1.74	0.69
1:W:106:LEU:HD23	1:W:137:VAL:HG13	1.73	0.69
2:H:221:ALA:HA	1:I:248:TYR:HB3	1.75	0.69
2:J:270:LEU:HD22	1:K:272:TYR:CZ	2.29	0.69
2:R:35:ARG:O	2:R:103:LEU:HD13	1.93	0.69
2:H:30:VAL:HG11	2:H:52:GLU:HA	1.75	0.68
1:K:41:PHE:CZ	1:K:64:LEU:HD13	2.28	0.68
1:S:246:PRO:CB	1:S:249:ILE:HD12	2.23	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:V:126:ILE:O	2:V:130:VAL:HG12	1.92	0.68
1:G:277:ASN:CG	1:G:278:LEU:HD12	2.17	0.68
2:J:36:ALA:HB1	2:J:62:GLN:HE22	1.58	0.68
1:M:41:PHE:CE2	1:M:49:ALA:HB3	2.28	0.68
1:S:63:ILE:HG23	1:S:117:LEU:HD12	1.74	0.68
2:D:259:TYR:O	2:D:260:LEU:HD23	1.92	0.68
2:P:239:ARG:HB3	1:Q:254:ILE:HG21	1.75	0.68
1:W:203:ALA:HB1	2:X:201:GLU:HB3	1.74	0.68
2:D:235:LEU:HD11	2:D:239:ARG:NH1	2.08	0.68
2:N:244:ALA:HA	2:N:248:ALA:HB3	1.75	0.68
1:W:136:ILE:HG13	1:W:168:LEU:HD11	1.75	0.68
2:D:268:LEU:HD11	2:F:260:LEU:HD13	1.75	0.68
2:L:65:ILE:HD13	2:L:107:PHE:CZ	2.28	0.68
1:O:122:GLN:HA	2:P:32:ALA:HB1	1.76	0.68
1:I:75:PHE:CD2	2:J:29:ASN:HB3	2.29	0.68
2:L:228:LEU:HD11	2:L:236:ILE:HD11	1.75	0.68
2:P:195:ARG:O	2:P:199:VAL:HG23	1.93	0.68
1:U:263:THR:HG21	2:V:245:GLU:HB3	1.74	0.68
1:I:107:ARG:NH2	1:I:185:THR:HG21	2.08	0.68
1:K:140:VAL:HG12	1:K:164:ILE:HG23	1.75	0.68
1:O:217:ALA:HB3	2:P:209:ALA:HB1	1.75	0.68
1:K:274:THR:HG21	1:M:284:ASP:CG	2.18	0.68
2:P:214:ALA:CB	1:Q:234:ALA:HB1	2.24	0.68
2:V:132:ALA:HB1	1:W:154:ILE:HG23	1.75	0.68
1:I:55:ILE:HA	2:J:28:TYR:CE2	2.29	0.68
2:D:259:TYR:HB2	1:E:273:LEU:HD12	1.76	0.68
1:I:79:ILE:HD13	1:I:126:LEU:HD11	1.74	0.68
2:L:251:LEU:O	2:L:257:ILE:HD11	1.93	0.68
2:P:30:VAL:HG13	2:P:34:HIS:O	1.94	0.68
1:W:41:PHE:HD1	1:W:43:VAL:HG23	1.58	0.68
1:E:232:ALA:HB2	2:F:224:ILE:HG13	1.76	0.67
2:H:200:VAL:HG22	1:I:223:GLN:HA	1.76	0.67
1:I:253:LYS:HD2	2:J:241:LEU:HD21	1.76	0.67
2:L:233:ASP:CB	2:L:236:ILE:HD12	2.24	0.67
2:P:57:LEU:HD22	2:P:62:GLN:OE1	1.95	0.67
2:H:92:LEU:HD22	2:H:150:VAL:HG12	1.77	0.67
1:C:222:ARG:O	1:C:226:VAL:HG23	1.94	0.67
2:F:228:LEU:HD13	2:F:236:ILE:HG13	1.77	0.67
1:G:150:ALA:HB1	1:G:189:PHE:CE1	2.30	0.67
2:J:199:VAL:HG12	1:K:223:GLN:NE2	2.09	0.67
1:O:214:VAL:HG13	2:P:209:ALA:CB	2.25	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:O:225:ILE:HG23	2:P:219:LYS:HD3	1.75	0.67
2:H:96:PHE:CD1	2:H:119:LEU:HD11	2.29	0.67
1:K:74:TRP:CD1	1:K:77:TYR:HH	2.12	0.67
2:P:134:PHE:CD2	2:P:146:VAL:HG22	2.29	0.67
1:E:209:ARG:NH1	1:E:213:LEU:HD11	2.10	0.67
1:G:43:VAL:HG12	1:G:47:HIS:HB2	1.74	0.67
2:N:239:ARG:HH12	1:O:257:ALA:HB3	1.60	0.67
1:Q:253:LYS:O	1:Q:257:ALA:HB2	1.95	0.67
2:J:260:LEU:HD21	1:K:272:TYR:CE1	2.30	0.67
2:L:221:ALA:HB1	1:M:242:LEU:CD2	2.24	0.67
1:O:273:LEU:HD22	1:Q:280:LEU:HD23	1.76	0.67
2:R:140:ILE:HD11	2:R:175:PHE:CE2	2.29	0.67
2:B:251:LEU:HD13	2:B:257:ILE:CG2	2.25	0.67
1:C:214:VAL:HG13	2:D:212:ILE:HD11	1.76	0.67
2:J:90:ILE:HG21	2:J:170:LEU:HD22	1.76	0.67
2:B:239:ARG:O	2:B:243:ALA:HB3	1.94	0.67
1:C:282:LEU:HD21	2:X:240:LYS:CE	2.24	0.67
1:G:235:ALA:HB3	2:H:224:ILE:HG12	1.77	0.67
2:H:260:LEU:HD21	2:H:268:LEU:HD11	1.77	0.67
1:I:132:VAL:HG11	1:I:177:LEU:HD12	1.77	0.67
1:S:214:VAL:CG1	2:T:209:ALA:HB3	2.25	0.67
2:T:130:VAL:HG22	2:T:149:GLN:OE1	1.94	0.67
1:U:218:LYS:O	1:U:221:GLN:HB3	1.95	0.67
1:K:260:ILE:CG2	1:K:264:ILE:HD12	2.24	0.67
1:Q:150:ALA:HB1	1:Q:189:PHE:CE2	2.30	0.67
2:R:200:VAL:HG13	1:S:222:ARG:NH1	2.09	0.67
1:E:228:ALA:CB	2:F:220:ALA:HB1	2.25	0.67
2:F:258:THR:OG1	2:F:260:LEU:HD21	1.95	0.67
2:H:40:ASP:HA	2:H:61:VAL:HG22	1.76	0.67
1:Q:264:ILE:HG22	1:Q:264:ILE:O	1.93	0.67
2:V:225:ALA:HB1	1:W:244:LYS:HB2	1.76	0.67
2:J:260:LEU:HD22	2:J:268:LEU:HD21	1.76	0.66
2:R:32:ALA:HB3	2:R:70:ARG:HH21	1.60	0.66
1:S:210:ALA:O	1:S:214:VAL:HG23	1.95	0.66
1:W:128:TYR:CE1	1:W:177:LEU:HD21	2.30	0.66
1:A:264:ILE:HD13	1:A:271:ILE:HD11	1.77	0.66
2:J:214:ALA:HB2	1:K:234:ALA:HA	1.76	0.66
1:O:249:ILE:HD13	2:P:237:GLU:HB3	1.77	0.66
2:F:219:LYS:HA	2:F:222:GLU:OE1	1.94	0.66
1:M:71:ARG:HB3	1:M:78:PRO:HG3	1.76	0.66
2:R:109:SER:OG	2:R:110:ILE:HD12	1.95	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:235:ALA:HB2	2:F:235:LEU:HD23	1.75	0.66
1:K:271:ILE:HG23	2:L:259:TYR:CE1	2.30	0.66
2:V:136:ALA:HB1	2:V:175:PHE:CE1	2.30	0.66
2:P:94:ILE:HG12	2:P:154:LEU:HD21	1.77	0.66
2:P:203:ALA:O	2:P:207:LYS:HG3	1.95	0.66
2:B:270:LEU:HD11	2:D:271:PRO:CD	2.25	0.66
1:I:252:ARG:HE	1:I:256:ALA:HB2	1.58	0.66
1:I:270:ARG:HH11	2:J:258:THR:HG22	1.60	0.66
2:L:221:ALA:HB1	1:M:242:LEU:HD21	1.76	0.66
1:Q:232:ALA:CB	2:R:223:LEU:HD22	2.25	0.66
1:U:232:ALA:HB3	2:V:223:LEU:HD22	1.78	0.66
1:A:219:GLN:OE1	2:X:200:VAL:HG13	1.95	0.66
2:B:265:SER:O	2:X:267:LEU:HD12	1.96	0.66
2:D:207:LYS:HE2	1:E:229:GLU:OE1	1.95	0.66
1:G:156:GLN:OE1	1:G:160:VAL:HG23	1.95	0.66
1:I:140:VAL:HG22	1:I:167:GLU:OE1	1.96	0.66
1:I:41:PHE:HD2	1:I:43:VAL:HG23	1.61	0.66
2:N:28:TYR:CE1	2:N:57:LEU:HD23	2.31	0.66
2:F:196:ALA:HB1	1:G:223:GLN:OE1	1.95	0.66
1:G:253:LYS:HD2	2:H:241:LEU:HD21	1.76	0.66
2:H:210:ALA:C	1:I:234:ALA:HB2	2.20	0.66
2:N:215:GLU:CD	1:O:237:MET:HE3	2.21	0.66
1:W:264:ILE:HG12	2:X:249:TYR:HA	1.77	0.66
2:D:268:LEU:HD21	2:F:260:LEU:HD13	1.78	0.65
1:G:79:ILE:HD13	1:G:126:LEU:HD11	1.77	0.65
2:J:90:ILE:CD1	2:J:131:VAL:HG21	2.26	0.65
2:J:228:LEU:HD12	1:K:247:GLY:HA3	1.78	0.65
1:K:136:ILE:O	1:K:140:VAL:HG23	1.96	0.65
2:R:214:ALA:HB2	1:S:234:ALA:HB1	1.77	0.65
1:A:274:THR:HG21	2:X:268:LEU:HD21	1.78	0.65
2:J:37:VAL:HG11	2:J:104:PRO:HG3	1.78	0.65
2:L:86:GLN:O	2:L:88:VAL:HG23	1.96	0.65
2:T:228:LEU:HD11	1:U:251:LEU:CB	2.24	0.65
1:W:140:VAL:HG22	1:W:167:GLU:OE1	1.96	0.65
1:G:253:LYS:CD	2:H:241:LEU:HD21	2.26	0.65
2:P:41:ARG:HA	1:Q:65:ALA:HB3	1.76	0.65
1:S:218:LYS:CE	2:T:212:ILE:HD13	2.26	0.65
1:K:63:ILE:HG21	1:K:114:ALA:O	1.96	0.65
2:X:244:ALA:HA	2:X:248:ALA:HB3	1.79	0.65
1:A:249:ILE:HD13	1:C:294:LEU:HG	1.78	0.65
2:H:203:ALA:HB3	1:I:226:VAL:HG13	1.76	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:M:154:ILE:HD11	1:M:189:PHE:CZ	2.32	0.65
1:M:238:LEU:HD22	2:N:238:LEU:CD2	2.26	0.65
1:M:243:SER:O	1:O:294:LEU:HB2	1.97	0.65
2:P:154:LEU:HD23	2:P:168:VAL:CG2	2.25	0.65
2:P:196:ALA:O	2:P:200:VAL:HG23	1.97	0.65
1:Q:274:THR:HG22	1:Q:275:ALA:H	1.62	0.65
1:G:106:LEU:HD21	1:G:165:ARG:NH2	2.11	0.65
2:H:203:ALA:CB	1:I:226:VAL:HG13	2.27	0.65
2:H:258:THR:OG1	1:I:272:TYR:HB2	1.97	0.65
1:K:50:ILE:HG21	1:K:118:PRO:HA	1.78	0.65
2:L:29:ASN:O	2:L:66:ILE:HG21	1.97	0.65
1:S:153:LEU:HD23	1:S:160:VAL:HG11	1.78	0.65
2:V:239:ARG:O	2:V:243:ALA:HB3	1.97	0.65
1:A:251:LEU:HD13	2:X:228:LEU:CD1	2.27	0.65
2:B:251:LEU:HD22	2:B:257:ILE:HG21	1.78	0.65
1:I:41:PHE:HE1	1:I:64:LEU:HD13	1.62	0.65
1:I:50:ILE:HG22	1:I:81:TYR:HE2	1.61	0.65
1:I:263:THR:HG21	2:J:245:GLU:HA	1.79	0.65
1:K:281:ASN:O	1:K:287:PHE:HB3	1.97	0.65
2:N:124:THR:HG21	1:O:185:THR:HA	1.79	0.65
2:D:215:GLU:HG3	1:E:237:MET:HE1	1.78	0.65
1:I:72:ILE:HD12	1:I:75:PHE:CD2	2.31	0.65
1:M:165:ARG:HH12	1:M:168:LEU:HD23	1.60	0.65
2:P:236:ILE:O	2:P:240:LYS:HG3	1.97	0.65
1:W:107:ARG:O	1:W:182:VAL:HG13	1.97	0.65
1:C:253:LYS:HZ1	1:E:279:VAL:HB	1.61	0.65
1:C:261:SER:CB	1:C:264:ILE:HD12	2.27	0.65
2:H:78:VAL:HG21	2:H:127:LEU:HB2	1.79	0.65
1:Q:256:ALA:HB3	2:R:241:LEU:HD12	1.79	0.65
2:R:28:TYR:HD1	2:R:57:LEU:HD23	1.61	0.65
2:T:136:ALA:HB1	2:T:175:PHE:CE1	2.32	0.65
1:W:157:ARG:NH2	1:W:184:ILE:HG22	2.11	0.65
2:B:270:LEU:HD11	2:D:271:PRO:HD3	1.77	0.64
1:G:214:VAL:HG21	2:H:205:GLN:HB3	1.79	0.64
1:I:120:MET:HA	1:I:124:LEU:HD12	1.80	0.64
1:E:221:GLN:NE2	1:E:225:ILE:HD11	2.11	0.64
1:G:236:LYS:O	1:G:240:GLU:OE1	2.15	0.64
2:H:92:LEU:HD22	2:H:150:VAL:CG1	2.27	0.64
2:H:207:LYS:HA	1:I:230:GLY:HA2	1.79	0.64
1:K:50:ILE:HD13	1:K:118:PRO:HA	1.79	0.64
2:T:214:ALA:HB2	1:U:234:ALA:HB1	1.79	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:271:ILE:HG23	2:H:259:TYR:CD1	2.31	0.64
2:H:162:GLY:O	2:H:163:LEU:HD23	1.96	0.64
2:J:243:ALA:HB2	1:K:254:ILE:HG23	1.79	0.64
1:U:157:ARG:NH2	1:U:184:ILE:HG22	2.13	0.64
2:V:217:ASP:OD2	2:X:238:LEU:HD13	1.97	0.64
1:W:96:SER:HA	1:W:145:VAL:HG12	1.78	0.64
1:A:250:LYS:HG2	1:C:288:THR:HG21	1.78	0.64
1:K:140:VAL:HG21	1:K:168:LEU:HA	1.79	0.64
2:N:197:ARG:HH22	1:O:222:ARG:HE	1.43	0.64
2:N:241:LEU:O	2:N:244:ALA:HB3	1.98	0.64
2:T:228:LEU:HD23	2:T:232:GLY:O	1.98	0.64
1:W:140:VAL:HG11	1:W:168:LEU:HB2	1.79	0.64
1:E:214:VAL:HG13	2:F:212:ILE:CD1	2.27	0.64
2:N:151:SER:HA	2:N:168:VAL:HG11	1.79	0.64
2:F:257:ILE:HG23	1:G:271:ILE:O	1.97	0.64
1:I:144:VAL:HG11	1:I:164:ILE:HG13	1.79	0.64
1:M:253:LYS:HG3	1:O:279:VAL:HG21	1.79	0.64
1:Q:207:ALA:HB3	2:R:198:PHE:CD2	2.32	0.64
2:D:244:ALA:HB1	1:E:278:LEU:HD22	1.78	0.64
2:D:262:ALA:HB3	1:E:274:THR:CG2	2.28	0.64
1:E:242:LEU:HD21	1:E:248:TYR:HB3	1.78	0.64
1:I:63:ILE:HG21	1:I:115:GLN:HA	1.80	0.64
1:K:90:ILE:HB	1:K:137:VAL:HG11	1.80	0.64
2:N:27:LEU:HD11	2:N:54:THR:HG21	1.80	0.64
1:S:136:ILE:HD12	2:T:93:ARG:HH12	1.62	0.64
1:E:235:ALA:HB1	2:F:228:LEU:HD21	1.80	0.64
1:G:221:GLN:O	1:G:225:ILE:HG12	1.98	0.64
2:H:69:CYS:HB3	2:H:103:LEU:HD11	1.79	0.64
1:K:51:PHE:CD1	1:K:64:LEU:HD11	2.32	0.64
1:S:222:ARG:NH1	1:S:226:VAL:HG21	2.13	0.64
1:I:122:GLN:OE1	2:J:31:ASP:OD2	2.16	0.64
1:K:221:GLN:O	1:K:225:ILE:HG12	1.98	0.64
1:M:249:ILE:HD13	2:N:238:LEU:N	2.13	0.64
2:N:82:SER:HA	2:N:131:VAL:HG12	1.80	0.64
1:Q:165:ARG:HH12	1:Q:168:LEU:HD23	1.63	0.64
1:K:129:GLU:HA	1:K:177:LEU:HD11	1.80	0.64
1:U:90:ILE:HB	1:U:137:VAL:HG11	1.79	0.64
2:V:270:LEU:HD23	2:X:269:GLN:O	1.98	0.64
2:D:204:GLU:O	2:D:207:LYS:HG2	1.98	0.63
1:I:243:SER:HA	1:K:294:LEU:HB3	1.80	0.63
2:L:196:ALA:O	2:L:200:VAL:HG23	1.99	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:P:39:PHE:CD1	2:P:45:VAL:HG22	2.33	0.63
2:P:45:VAL:HG21	2:P:107:PHE:HD2	1.63	0.63
2:R:228:LEU:HD11	2:R:236:ILE:HD11	1.80	0.63
1:A:275:ALA:CB	2:V:260:LEU:HD22	2.26	0.63
2:B:218:SER:OG	1:C:238:LEU:HD21	1.99	0.63
2:J:196:ALA:O	2:J:200:VAL:HG23	1.98	0.63
2:V:207:LYS:HE3	1:W:229:GLU:HB3	1.79	0.63
1:C:256:ALA:HB1	2:D:241:LEU:O	1.98	0.63
2:D:262:ALA:HB3	1:E:274:THR:HG23	1.81	0.63
1:G:260:ILE:HG23	1:G:264:ILE:CB	2.26	0.63
1:K:150:ALA:HB1	1:K:189:PHE:CZ	2.33	0.63
1:M:250:LYS:O	1:M:254:ILE:HD12	1.98	0.63
1:Q:51:PHE:CD2	1:Q:62:THR:HG21	2.33	0.63
1:Q:218:LYS:HE2	2:R:212:ILE:HD13	1.80	0.63
2:B:270:LEU:HD22	2:D:258:THR:HG21	1.80	0.63
2:F:244:ALA:CB	2:F:247:ILE:HD12	2.28	0.63
1:G:44:GLU:OE1	1:G:80:ILE:HD13	1.99	0.63
1:I:53:ASN:ND2	1:I:55:ILE:HG22	2.13	0.63
2:N:57:LEU:HD22	2:N:62:GLN:OE1	1.98	0.63
2:P:122:ILE:HG22	2:P:157:ARG:CG	2.29	0.63
1:K:221:GLN:HB2	2:L:212:ILE:CG2	2.28	0.63
2:T:206:GLN:O	2:T:210:ALA:HB3	1.98	0.63
1:U:48:ARG:HG2	1:U:83:ILE:HD13	1.79	0.63
1:A:262:LYS:HA	2:X:251:LEU:CD2	2.27	0.63
1:C:232:ALA:HB2	2:D:224:ILE:CG1	2.28	0.63
2:J:225:ALA:HB3	1:K:244:LYS:HZ2	1.64	0.63
1:O:107:ARG:HG2	1:O:183:ALA:HB3	1.79	0.63
2:P:122:ILE:CD1	2:P:158:ALA:HB2	2.28	0.63
2:T:228:LEU:HD13	2:T:236:ILE:HD11	1.81	0.63
2:V:207:LYS:HD3	1:W:226:VAL:O	1.99	0.63
2:V:224:ILE:HG21	1:W:248:TYR:HB2	1.80	0.63
2:V:251:LEU:HD22	1:W:273:LEU:HD21	1.80	0.63
2:B:235:LEU:HD11	2:B:239:ARG:HH11	1.63	0.63
1:C:272:TYR:OH	2:X:270:LEU:HD21	1.99	0.63
2:D:260:LEU:HD12	1:E:272:TYR:CZ	2.34	0.63
2:H:239:ARG:HD3	1:I:251:LEU:HD11	1.81	0.63
1:I:235:ALA:CB	2:J:224:ILE:HD13	2.29	0.63
1:I:263:THR:HG23	2:J:249:TYR:CZ	2.33	0.63
2:J:225:ALA:HB3	1:K:244:LYS:NZ	2.13	0.63
1:K:53:ASN:HB2	1:K:58:VAL:HG22	1.81	0.63
2:L:39:PHE:HD1	2:L:45:VAL:HG22	1.63	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:N:41:ARG:HG3	1:O:65:ALA:C	2.24	0.63
2:P:38:ILE:HD12	2:P:57:LEU:HA	1.81	0.63
2:V:125:GLU:HB2	1:W:185:THR:HG22	1.81	0.63
1:A:237:MET:CE	2:X:218:SER:O	2.46	0.63
2:F:235:LEU:HD11	2:F:239:ARG:HG2	1.80	0.63
2:T:224:ILE:HD11	1:U:251:LEU:CD2	2.29	0.63
2:T:224:ILE:CD1	1:U:251:LEU:HD23	2.29	0.63
1:U:217:ALA:HB1	2:V:213:SER:HB2	1.81	0.63
1:U:246:PRO:HB2	1:U:249:ILE:HD12	1.81	0.63
2:V:84:ASP:O	1:W:197:VAL:HG21	1.99	0.63
2:J:132:ALA:HB1	1:K:154:ILE:O	1.98	0.63
2:L:35:ARG:HD2	2:L:100:ALA:HB1	1.81	0.63
1:M:260:ILE:HG23	1:M:264:ILE:HB	1.81	0.63
2:N:126:ILE:O	2:N:130:VAL:HG23	1.99	0.63
1:O:107:ARG:O	1:O:182:VAL:HG13	1.99	0.63
2:V:228:LEU:HD13	2:V:236:ILE:HD11	1.79	0.63
1:W:260:ILE:HG23	1:W:264:ILE:CD1	2.28	0.63
2:J:126:ILE:HD11	2:J:157:ARG:CB	2.29	0.62
1:K:221:GLN:HB2	2:L:212:ILE:HG23	1.81	0.62
1:O:52:PHE:CE1	2:P:32:ALA:HB2	2.34	0.62
2:V:267:LEU:HD11	2:X:267:LEU:HD13	1.81	0.62
1:A:261:SER:HA	1:A:264:ILE:HD12	1.81	0.62
1:I:257:ALA:HA	1:I:260:ILE:HB	1.79	0.62
2:J:90:ILE:CG2	2:J:170:LEU:HD22	2.29	0.62
2:L:92:LEU:HD11	2:L:168:VAL:HG12	1.81	0.62
1:M:148:PHE:HZ	1:M:163:LEU:HD23	1.63	0.62
2:V:228:LEU:CD1	2:V:236:ILE:HD11	2.29	0.62
1:G:157:ARG:HH21	1:G:184:ILE:HG22	1.65	0.62
1:I:102:VAL:HG11	1:I:153:LEU:HD13	1.81	0.62
2:J:268:LEU:HB3	2:J:270:LEU:HD21	1.81	0.62
1:K:232:ALA:CB	2:L:223:LEU:HD11	2.29	0.62
1:K:271:ILE:HG23	2:L:259:TYR:HE1	1.64	0.62
2:L:34:HIS:ND1	2:L:66:ILE:HG22	2.14	0.62
2:L:130:VAL:HG13	2:L:149:GLN:OE1	1.99	0.62
1:M:140:VAL:HG21	1:M:168:LEU:HD12	1.81	0.62
1:M:221:GLN:HB2	2:N:212:ILE:HG22	1.81	0.62
1:O:214:VAL:HG13	2:P:209:ALA:HB3	1.81	0.62
1:U:108:VAL:HG11	1:U:133:LEU:HD22	1.81	0.62
2:X:203:ALA:O	2:X:207:LYS:HG2	1.99	0.62
2:D:238:LEU:HD23	2:D:241:LEU:HD12	1.80	0.62
1:I:124:LEU:HD11	1:I:176:SER:HB2	1.80	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:J:27:LEU:HD13	2:J:56:PHE:CZ	2.34	0.62
2:P:136:ALA:HB1	2:P:175:PHE:CE1	2.34	0.62
2:P:151:SER:HA	2:P:168:VAL:HG11	1.80	0.62
1:Q:106:LEU:HD11	1:Q:165:ARG:NH2	2.15	0.62
1:S:136:ILE:HD11	1:S:171:ARG:CB	2.29	0.62
2:F:228:LEU:HD22	2:F:236:ILE:H	1.64	0.62
2:H:94:ILE:HG23	2:H:165:LEU:HD13	1.80	0.62
2:H:118:VAL:HG11	2:H:163:LEU:HD12	1.82	0.62
2:J:92:LEU:HD22	2:J:127:LEU:HD11	1.81	0.62
1:K:41:PHE:CE2	1:K:64:LEU:HD13	2.34	0.62
2:P:146:VAL:HG12	2:P:170:LEU:HD11	1.81	0.62
2:R:126:ILE:O	2:R:130:VAL:HG23	2.00	0.62
2:B:267:LEU:HD23	2:X:267:LEU:CD2	2.28	0.62
1:I:58:VAL:HG21	2:J:34:HIS:HB2	1.81	0.62
1:K:72:ILE:HD13	1:K:75:PHE:CD2	2.35	0.62
1:Q:144:VAL:HG11	1:Q:164:ILE:CG1	2.30	0.62
1:W:144:VAL:HG11	1:W:164:ILE:HG13	1.80	0.62
2:B:267:LEU:HD11	2:X:269:GLN:HB2	1.81	0.62
2:N:28:TYR:HE1	2:N:57:LEU:HD23	1.64	0.62
1:U:41:PHE:CD1	1:U:43:VAL:HG23	2.34	0.62
1:U:41:PHE:CZ	1:U:69:HIS:HB2	2.35	0.62
2:V:248:ALA:CB	1:W:278:LEU:HD21	2.30	0.62
2:H:243:ALA:O	2:H:244:ALA:C	2.42	0.62
1:I:43:VAL:CG1	1:I:47:HIS:HB2	2.28	0.62
1:K:140:VAL:HG21	1:K:168:LEU:CA	2.30	0.62
1:Q:242:LEU:HD13	1:Q:249:ILE:HD11	1.81	0.62
2:R:217:ASP:OD1	1:S:248:TYR:CZ	2.53	0.62
1:W:165:ARG:NH1	1:W:182:VAL:HG21	2.15	0.62
1:A:262:LYS:HG2	2:X:247:ILE:HG22	1.82	0.62
1:C:242:LEU:HD13	1:C:249:ILE:HG13	1.82	0.62
1:C:279:VAL:HG11	1:C:287:PHE:O	2.00	0.62
2:L:28:TYR:CD1	2:L:57:LEU:HD23	2.35	0.62
2:H:45:VAL:HG21	2:H:107:PHE:CD2	2.35	0.62
2:H:214:ALA:O	2:H:215:GLU:C	2.42	0.62
1:I:104:ILE:HD12	1:I:145:VAL:CG2	2.29	0.62
2:J:239:ARG:CB	1:K:254:ILE:HD13	2.29	0.62
2:P:228:LEU:HD13	2:P:236:ILE:CD1	2.26	0.62
2:V:221:ALA:O	2:V:224:ILE:HG22	2.00	0.62
1:I:278:LEU:HD23	1:I:278:LEU:O	2.00	0.61
2:P:126:ILE:O	2:P:130:VAL:HG23	1.99	0.61
2:H:93:ARG:O	2:H:168:VAL:HG13	2.00	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:195:ARG:O	2:H:199:VAL:HG23	2.00	0.61
2:H:200:VAL:HG22	1:I:223:GLN:CA	2.30	0.61
2:N:236:ILE:HD13	1:O:250:LYS:HD2	1.83	0.61
2:T:87:ASN:OD1	1:U:154:ILE:HG21	1.99	0.61
2:V:222:GLU:HG3	1:W:241:ALA:HB1	1.81	0.61
1:I:165:ARG:NH1	1:I:182:VAL:HG11	2.15	0.61
1:E:299:LYS:O	1:G:295:ILE:HD11	2.00	0.61
2:F:200:VAL:O	2:F:200:VAL:HG12	2.00	0.61
2:H:92:LEU:HD21	2:H:168:VAL:HG11	1.82	0.61
1:O:235:ALA:HB2	2:P:235:LEU:HD23	1.82	0.61
1:S:236:LYS:O	1:S:240:GLU:OE1	2.18	0.61
2:F:222:GLU:OE2	1:G:241:ALA:HB2	2.01	0.61
1:I:225:ILE:HD13	2:J:219:LYS:HD3	1.82	0.61
2:L:126:ILE:HD11	2:L:157:ARG:HB2	1.81	0.61
1:M:51:PHE:CE1	1:M:64:LEU:HD11	2.36	0.61
2:P:129:SER:HB2	1:Q:158:ALA:HB2	1.81	0.61
2:V:88:VAL:HG12	2:V:90:ILE:CG1	2.30	0.61
2:H:203:ALA:HA	2:H:206:GLN:HG3	1.81	0.61
1:K:132:VAL:HG11	1:K:177:LEU:HD12	1.83	0.61
1:K:140:VAL:HG21	1:K:168:LEU:HB2	1.82	0.61
2:L:207:LYS:HE2	1:M:226:VAL:HG13	1.83	0.61
2:T:221:ALA:HA	1:U:248:TYR:CD1	2.35	0.61
1:U:90:ILE:HD13	1:U:134:PRO:HA	1.80	0.61
2:H:28:TYR:OH	2:H:50:VAL:HG11	2.00	0.61
1:O:52:PHE:HE1	2:P:32:ALA:HB2	1.65	0.61
1:O:165:ARG:HH12	1:O:168:LEU:HD23	1.65	0.61
2:P:65:ILE:HD13	2:P:107:PHE:CZ	2.35	0.61
2:R:195:ARG:O	2:R:199:VAL:HG23	2.00	0.61
1:A:251:LEU:HG	2:X:236:ILE:HD13	1.83	0.61
1:G:51:PHE:CE1	1:G:64:LEU:HD11	2.35	0.61
1:G:132:VAL:HG11	1:G:177:LEU:HD12	1.83	0.61
1:G:140:VAL:HG22	1:G:167:GLU:OE1	2.01	0.61
2:J:38:ILE:O	2:J:45:VAL:HG13	2.01	0.61
1:K:50:ILE:HG21	1:K:118:PRO:CA	2.30	0.61
1:K:232:ALA:HB1	2:L:223:LEU:HD11	1.83	0.61
1:M:41:PHE:HZ	1:M:64:LEU:HD13	1.65	0.61
1:M:260:ILE:HD11	2:N:245:GLU:HA	1.83	0.61
1:Q:140:VAL:HG22	1:Q:167:GLU:OE1	2.01	0.61
2:T:139:LEU:HA	2:T:146:VAL:HG21	1.82	0.61
2:T:140:ILE:HD11	2:T:175:PHE:CE2	2.36	0.61
1:C:251:LEU:HD21	1:C:255:ARG:NH2	2.15	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:257:ALA:CB	1:G:279:VAL:HG13	2.24	0.61
1:G:253:LYS:HD2	2:H:241:LEU:HD11	1.82	0.61
2:H:220:ALA:HB1	1:I:248:TYR:CD1	2.35	0.61
1:I:55:ILE:O	1:I:56:GLY:C	2.43	0.61
1:I:141:LEU:HD23	1:I:164:ILE:HD13	1.83	0.61
2:J:57:LEU:HB2	2:J:62:GLN:HB3	1.82	0.61
1:M:40:VAL:O	1:M:40:VAL:HG13	2.00	0.61
1:Q:100:GLN:O	1:Q:102:VAL:HG23	2.01	0.61
1:A:264:ILE:CD1	1:A:271:ILE:HD11	2.31	0.61
2:B:203:ALA:HB1	1:C:226:VAL:CG1	2.31	0.61
2:B:267:LEU:HB3	2:X:267:LEU:HD21	1.81	0.60
1:C:238:LEU:HD22	2:D:238:LEU:HD12	1.83	0.60
1:K:228:ALA:HB1	2:L:220:ALA:HB2	1.83	0.60
1:A:272:TYR:OH	2:B:260:LEU:HD23	2.02	0.60
1:E:273:LEU:HD22	1:E:277:ASN:HB2	1.82	0.60
1:G:161:SER:O	1:G:165:ARG:HG2	2.01	0.60
1:G:224:LYS:O	1:G:228:ALA:HB3	2.00	0.60
1:I:133:LEU:HD23	1:I:136:ILE:HD11	1.82	0.60
2:L:92:LEU:HD11	2:L:168:VAL:CG1	2.31	0.60
1:M:51:PHE:CD2	1:M:62:THR:HG21	2.36	0.60
1:Q:218:LYS:O	1:Q:221:GLN:HG2	2.01	0.60
2:V:200:VAL:HG22	1:W:223:GLN:HB2	1.83	0.60
2:V:222:GLU:CG	1:W:241:ALA:HB1	2.31	0.60
1:W:285:GLU:O	1:W:289:ARG:HG3	2.01	0.60
1:K:282:LEU:HD12	1:K:287:PHE:CE1	2.36	0.60
1:Q:50:ILE:HG22	1:Q:63:ILE:HA	1.82	0.60
2:T:195:ARG:CZ	2:T:199:VAL:HG21	2.31	0.60
1:W:264:ILE:HG23	2:X:252:SER:OG	2.01	0.60
1:G:136:ILE:HG13	1:G:168:LEU:HD11	1.82	0.60
1:S:136:ILE:HD11	1:S:171:ARG:HB3	1.83	0.60
1:W:124:LEU:HD13	1:W:132:VAL:HG21	1.84	0.60
1:A:203:ALA:HB1	2:B:202:LYS:HD2	1.83	0.60
1:A:274:THR:HB	2:X:261:PRO:HD2	1.83	0.60
2:F:266:VAL:HG12	2:F:268:LEU:H	1.66	0.60
1:I:54:ARG:NE	2:J:66:ILE:HD11	2.16	0.60
2:J:126:ILE:HD11	2:J:157:ARG:HB2	1.84	0.60
1:K:50:ILE:HG21	1:K:118:PRO:N	2.16	0.60
1:O:264:ILE:HG23	2:P:249:TYR:HD1	1.66	0.60
1:E:232:ALA:HB2	2:F:224:ILE:CG1	2.32	0.60
2:F:251:LEU:CD1	2:F:257:ILE:HG21	2.29	0.60
2:H:37:VAL:HG21	2:H:104:PRO:N	2.17	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:38:ILE:HA	2:H:62:GLN:HG3	1.83	0.60
1:I:225:ILE:HD11	2:J:215:GLU:OE1	2.02	0.60
2:N:200:VAL:HG11	1:O:222:ARG:CZ	2.32	0.60
2:N:224:ILE:HG12	1:O:251:LEU:HD22	1.83	0.60
2:N:262:ALA:HB3	1:O:289:ARG:NH2	2.16	0.60
2:X:196:ALA:O	2:X:200:VAL:HG23	2.00	0.60
1:C:228:ALA:HB3	2:D:220:ALA:CB	2.32	0.60
1:I:99:LEU:HD13	2:J:179:PHE:HZ	1.65	0.60
2:J:259:TYR:OH	1:M:280:LEU:HD21	2.02	0.60
2:L:110:ILE:HG21	2:L:114:TYR:HA	1.84	0.60
2:R:217:ASP:OD2	2:T:238:LEU:HD22	2.02	0.60
2:H:37:VAL:HG11	2:H:104:PRO:HB3	1.84	0.60
1:M:157:ARG:NH2	1:M:184:ILE:HG22	2.16	0.60
1:M:242:LEU:HB3	1:M:249:ILE:HD11	1.84	0.60
1:O:253:LYS:O	1:O:257:ALA:HB2	2.02	0.60
2:P:86:GLN:O	2:P:88:VAL:HG23	2.01	0.60
2:T:134:PHE:CD2	2:T:146:VAL:HG22	2.36	0.60
2:B:268:LEU:HB3	2:D:266:VAL:HG13	1.84	0.60
2:D:261:PRO:HA	1:E:275:ALA:H	1.67	0.60
1:E:229:GLU:HG2	2:F:223:LEU:HD13	1.83	0.60
1:I:76:GLN:HB2	2:J:29:ASN:ND2	2.16	0.60
1:Q:144:VAL:HG11	1:Q:164:ILE:HG12	1.82	0.60
1:A:209:ARG:NH1	1:A:213:LEU:HD11	2.17	0.60
1:A:219:GLN:HB3	2:X:200:VAL:HG22	1.84	0.60
2:D:200:VAL:HG21	1:E:222:ARG:HB2	1.82	0.60
1:E:254:ILE:O	1:E:257:ALA:HB3	2.02	0.60
2:F:258:THR:HG22	1:G:272:TYR:HB2	1.83	0.60
1:I:43:VAL:CG1	1:I:47:HIS:CB	2.79	0.60
2:J:235:LEU:HD12	2:J:238:LEU:HB3	1.83	0.60
1:K:235:ALA:CB	2:L:224:ILE:HD13	2.32	0.60
2:N:65:ILE:HD13	2:N:107:PHE:CE2	2.37	0.60
1:Q:64:LEU:HD22	1:Q:69:HIS:CG	2.36	0.60
1:E:264:ILE:HG23	1:E:267:SER:HB3	1.83	0.59
2:L:134:PHE:CD2	2:L:146:VAL:HG22	2.37	0.59
2:N:247:ILE:HG13	1:O:257:ALA:HB1	1.83	0.59
1:O:140:VAL:HG21	1:O:168:LEU:HD13	1.84	0.59
2:H:62:GLN:HE22	2:H:64:PRO:HA	1.66	0.59
2:J:235:LEU:HD11	2:J:239:ARG:HG3	1.84	0.59
2:L:86:GLN:HB2	2:L:136:ALA:HB2	1.85	0.59
2:N:98:PRO:HB2	2:N:103:LEU:HD21	1.83	0.59
1:G:270:ARG:O	2:H:258:THR:HG22	2.02	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:118:VAL:HG13	2:H:161:PHE:CB	2.32	0.59
1:I:46:GLY:O	1:I:83:ILE:HG13	2.01	0.59
2:J:88:VAL:HG11	2:J:139:LEU:CD1	2.32	0.59
2:J:241:LEU:O	2:J:244:ALA:HB3	2.02	0.59
2:L:49:VAL:HG21	2:L:100:ALA:O	2.02	0.59
2:N:236:ILE:O	2:N:240:LYS:HG3	2.03	0.59
1:Q:104:ILE:HD12	1:Q:145:VAL:HG21	1.84	0.59
2:D:251:LEU:HD21	1:G:280:LEU:CD2	2.33	0.59
2:L:57:LEU:HD22	2:L:62:GLN:OE1	2.03	0.59
2:X:236:ILE:HG22	2:X:236:ILE:O	2.01	0.59
1:C:235:ALA:HA	2:D:235:LEU:CB	2.33	0.59
2:H:224:ILE:HD12	1:I:248:TYR:CA	2.31	0.59
1:I:140:VAL:HG21	1:I:168:LEU:CB	2.32	0.59
1:M:41:PHE:HE2	1:M:49:ALA:HB3	1.65	0.59
2:N:146:VAL:HG12	2:N:170:LEU:HD11	1.83	0.59
1:Q:221:GLN:OE1	2:R:212:ILE:HG23	2.02	0.59
2:R:195:ARG:CZ	2:R:199:VAL:HG21	2.33	0.59
1:S:238:LEU:HD13	2:T:238:LEU:HD23	1.83	0.59
1:W:104:ILE:CD1	1:W:145:VAL:HG21	2.33	0.59
1:A:237:MET:SD	1:A:238:LEU:HG	2.42	0.59
1:E:225:ILE:HA	2:F:220:ALA:HB2	1.83	0.59
2:F:211:ILE:HD13	1:G:233:GLU:OE2	2.02	0.59
1:G:232:ALA:HA	2:H:224:ILE:HD11	1.84	0.59
1:K:94:THR:HG23	1:K:142:LYS:HD2	1.84	0.59
2:P:207:LYS:HE3	1:Q:226:VAL:CG1	2.33	0.59
2:R:241:LEU:O	2:R:244:ALA:HB3	2.03	0.59
1:A:249:ILE:HD11	2:B:234:GLY:HA2	1.85	0.59
2:D:250:GLN:NE2	2:D:251:LEU:HD23	2.18	0.59
1:E:269:ASN:HB3	2:F:257:ILE:HB	1.85	0.59
1:G:242:LEU:HD22	1:G:249:ILE:HG13	1.84	0.59
2:H:39:PHE:HA	2:H:45:VAL:HA	1.85	0.59
2:H:45:VAL:HB	2:H:108:THR:HG22	1.85	0.59
1:K:43:VAL:HG12	1:K:47:HIS:HB2	1.84	0.59
1:A:254:ILE:HG23	1:C:282:LEU:CD1	2.33	0.59
2:D:267:LEU:O	2:F:267:LEU:CD2	2.50	0.59
1:G:253:LYS:HA	2:H:241:LEU:HD11	1.84	0.59
2:H:126:ILE:HD11	2:H:157:ARG:HB2	1.84	0.59
1:I:21:THR:HG21	2:J:6:PHE:CD1	2.38	0.59
1:I:102:VAL:HG22	1:I:189:PHE:CE1	2.38	0.59
1:U:144:VAL:HG11	1:U:164:ILE:CG1	2.33	0.59
2:V:206:GLN:O	2:V:210:ALA:HB3	2.03	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:L:267:LEU:HD12	2:N:267:LEU:CD2	2.33	0.59
1:M:154:ILE:HD11	1:M:189:PHE:HZ	1.67	0.59
2:R:92:LEU:HD21	2:R:168:VAL:HG13	1.84	0.59
1:S:242:LEU:HD12	2:T:234:GLY:HA2	1.84	0.59
2:V:241:LEU:O	2:V:244:ALA:HB3	2.02	0.59
1:A:278:LEU:HD12	2:X:259:TYR:CD1	2.38	0.59
1:C:238:LEU:HD22	2:D:238:LEU:CD1	2.33	0.59
1:I:161:SER:O	1:I:165:ARG:HG2	2.03	0.59
2:L:28:TYR:CE2	2:L:30:VAL:HG22	2.37	0.59
2:P:180:THR:O	2:P:184:GLU:OE1	2.21	0.59
2:T:30:VAL:HG12	2:T:34:HIS:O	2.03	0.59
1:A:278:LEU:CD2	1:C:282:LEU:HB3	2.32	0.58
1:C:252:ARG:HE	1:C:256:ALA:HB2	1.68	0.58
2:D:247:ILE:HD13	1:E:278:LEU:HD21	1.85	0.58
2:F:236:ILE:O	2:F:240:LYS:HG3	2.02	0.58
2:H:79:ILE:O	2:H:79:ILE:HG23	2.03	0.58
2:P:122:ILE:HG22	2:P:157:ARG:HG2	1.83	0.58
2:R:93:ARG:CZ	2:R:171:THR:HG21	2.33	0.58
2:R:207:LYS:HE2	1:S:226:VAL:HG13	1.85	0.58
2:T:201:GLU:O	2:T:205:GLN:OE1	2.21	0.58
1:U:221:GLN:HB2	2:V:212:ILE:HG22	1.85	0.58
2:F:240:LYS:O	2:F:244:ALA:HB2	2.03	0.58
1:I:165:ARG:NE	1:I:165:ARG:HA	2.18	0.58
1:K:107:ARG:NH2	1:K:185:THR:HG21	2.18	0.58
2:T:237:GLU:HA	2:T:240:LYS:HB2	1.85	0.58
2:J:267:LEU:HD23	2:J:268:LEU:N	2.18	0.58
2:J:268:LEU:HD11	2:L:261:PRO:HD3	1.83	0.58
1:K:52:PHE:CZ	2:L:31:ASP:HA	2.39	0.58
1:K:150:ALA:O	1:K:154:ILE:HD12	2.02	0.58
1:K:250:LYS:HA	1:K:253:LYS:HG2	1.84	0.58
2:L:236:ILE:HG22	2:L:240:LYS:NZ	2.17	0.58
1:M:148:PHE:CZ	1:M:163:LEU:HD23	2.37	0.58
1:U:254:ILE:O	1:U:257:ALA:HB3	2.03	0.58
1:U:264:ILE:O	1:U:264:ILE:HG22	2.03	0.58
1:W:136:ILE:CG1	1:W:168:LEU:HD11	2.33	0.58
2:F:200:VAL:CG2	1:G:223:GLN:HB2	2.33	0.58
1:G:168:LEU:HD12	1:G:171:ARG:HB2	1.86	0.58
2:H:50:VAL:HG22	2:H:55:HIS:HB2	1.85	0.58
2:L:262:ALA:HB3	1:M:289:ARG:NH2	2.18	0.58
2:P:90:ILE:HG21	2:P:170:LEU:HD22	1.85	0.58
2:T:240:LYS:NZ	1:W:282:LEU:HD23	2.18	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:L:239:ARG:HG2	1:M:254:ILE:HG21	1.84	0.58
2:N:74:ARG:HG3	2:N:119:LEU:HD13	1.86	0.58
2:P:130:VAL:HG21	2:P:150:VAL:HA	1.85	0.58
1:S:228:ALA:HB2	2:T:220:ALA:HA	1.86	0.58
1:U:218:LYS:NZ	2:V:212:ILE:HD13	2.18	0.58
2:V:179:PHE:HA	1:W:202:VAL:HG22	1.85	0.58
1:W:94:THR:HG23	1:W:142:LYS:HA	1.84	0.58
1:C:279:VAL:HG12	1:C:287:PHE:CD1	2.38	0.58
1:E:222:ARG:HA	1:E:225:ILE:HD12	1.85	0.58
1:G:164:ILE:HG22	1:G:165:ARG:HH21	1.68	0.58
2:H:76:VAL:HB	2:H:123:THR:HG21	1.84	0.58
2:L:50:VAL:HG13	2:L:55:HIS:HB2	1.85	0.58
1:M:106:LEU:HD11	1:M:165:ARG:NH2	2.18	0.58
1:M:166:ARG:O	1:M:170:GLU:OE1	2.22	0.58
1:O:47:HIS:H	1:O:66:GLU:HB2	1.67	0.58
2:T:126:ILE:O	2:T:130:VAL:HG23	2.04	0.58
2:D:218:SER:O	2:D:222:GLU:OE1	2.22	0.58
1:E:279:VAL:HG21	1:E:290:GLY:HA3	1.85	0.58
2:H:217:ASP:OD2	2:J:238:LEU:HD13	2.04	0.58
1:I:53:ASN:HD21	1:I:58:VAL:HG22	1.68	0.58
1:I:59:GLN:HB3	2:J:30:VAL:HB	1.86	0.58
1:I:106:LEU:HD21	1:I:165:ARG:HH21	1.67	0.58
1:K:53:ASN:HB2	1:K:58:VAL:HA	1.86	0.58
1:K:157:ARG:CZ	1:K:184:ILE:HG22	2.33	0.58
2:P:211:ILE:HD11	1:Q:230:GLY:HA2	1.85	0.58
2:R:90:ILE:CG2	2:R:170:LEU:HD22	2.34	0.58
2:H:92:LEU:HD21	2:H:168:VAL:CG1	2.33	0.58
1:I:260:ILE:HG23	1:I:264:ILE:HB	1.86	0.58
1:K:229:GLU:HG2	2:L:219:LYS:NZ	2.19	0.58
1:W:207:ALA:HA	2:X:205:GLN:HG2	1.86	0.58
1:A:226:VAL:HG21	2:X:206:GLN:HE22	1.66	0.58
2:B:257:ILE:HG23	1:C:271:ILE:CG1	2.34	0.58
1:C:249:ILE:HG21	1:E:294:LEU:HG	1.85	0.58
1:K:288:THR:HA	1:K:292:ASP:HB3	1.85	0.58
2:L:27:LEU:HD12	2:L:28:TYR:N	2.19	0.58
2:P:221:ALA:HA	1:Q:248:TYR:CG	2.39	0.58
2:V:88:VAL:HG22	2:V:175:PHE:CE1	2.39	0.58
2:F:212:ILE:HA	2:F:215:GLU:HB2	1.85	0.58
1:I:52:PHE:HB3	1:I:77:TYR:O	2.03	0.58
2:J:207:LYS:HE2	2:J:207:LYS:HA	1.86	0.58
2:L:126:ILE:HD11	2:L:157:ARG:CB	2.34	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:O:79:ILE:CG2	1:O:126:LEU:HD23	2.34	0.58
1:Q:221:GLN:O	1:Q:225:ILE:HG12	2.04	0.58
2:T:240:LYS:HZ2	1:W:282:LEU:HD23	1.69	0.58
1:A:277:ASN:HB2	2:X:260:LEU:O	2.04	0.57
1:C:284:ASP:OD2	2:X:262:ALA:HB3	2.04	0.57
1:G:52:PHE:CD1	1:G:58:VAL:HG21	2.39	0.57
1:G:253:LYS:HB2	1:I:279:VAL:CG2	2.34	0.57
2:H:240:LYS:HG2	1:K:282:LEU:HD23	1.86	0.57
2:N:30:VAL:HG21	2:N:53:GLY:O	2.04	0.57
2:P:90:ILE:CG2	2:P:170:LEU:HD22	2.34	0.57
1:Q:102:VAL:HG22	1:Q:189:PHE:CE2	2.39	0.57
2:X:261:PRO:HG2	2:X:266:VAL:HG11	1.85	0.57
1:A:253:LYS:HE2	1:C:288:THR:HA	1.86	0.57
1:A:274:THR:HB	2:X:261:PRO:CD	2.34	0.57
1:E:214:VAL:HG13	2:F:212:ILE:HD11	1.87	0.57
1:K:40:VAL:O	1:K:40:VAL:HG13	2.04	0.57
1:M:153:LEU:HB3	1:M:187:LEU:HD21	1.85	0.57
2:R:151:SER:CA	2:R:168:VAL:HG11	2.34	0.57
1:S:48:ARG:HG3	1:S:83:ILE:HG21	1.86	0.57
1:U:266:THR:HG1	2:V:249:TYR:HE1	1.51	0.57
1:A:228:ALA:HB1	2:B:224:ILE:CD1	2.31	0.57
2:L:39:PHE:HD2	2:L:61:VAL:O	1.87	0.57
2:P:35:ARG:HD2	2:P:100:ALA:HB1	1.86	0.57
2:T:203:ALA:C	1:U:226:VAL:HG11	2.29	0.57
1:U:50:ILE:HG21	1:U:117:LEU:HB2	1.86	0.57
2:F:251:LEU:HD21	1:I:280:LEU:HD12	1.86	0.57
1:G:140:VAL:HG21	1:G:168:LEU:HD13	1.85	0.57
1:G:220:GLU:HA	1:G:223:GLN:HG2	1.86	0.57
1:G:270:ARG:O	2:H:258:THR:HA	2.04	0.57
1:M:64:LEU:HB3	1:M:69:HIS:CG	2.39	0.57
1:U:48:ARG:HG3	1:U:83:ILE:HG21	1.86	0.57
1:A:225:ILE:CA	2:B:220:ALA:HB2	2.35	0.57
2:H:31:ASP:O	2:H:32:ALA:C	2.46	0.57
1:Q:154:ILE:HD11	1:Q:189:PHE:CE1	2.38	0.57
2:V:262:ALA:HB3	1:W:289:ARG:HH22	1.69	0.57
1:A:273:LEU:HB3	2:X:260:LEU:N	2.20	0.57
1:E:273:LEU:HD23	1:G:280:LEU:C	2.30	0.57
2:F:211:ILE:CG1	1:G:234:ALA:HB2	2.34	0.57
2:H:50:VAL:HG13	2:H:55:HIS:HB2	1.87	0.57
2:H:237:GLU:O	2:H:240:LYS:HB2	2.04	0.57
1:I:90:ILE:HD13	1:I:134:PRO:HA	1.85	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:72:ILE:HD13	1:K:75:PHE:CE2	2.40	0.57
2:R:209:ALA:HA	2:R:212:ILE:HB	1.86	0.57
1:S:260:ILE:HG23	1:S:264:ILE:HB	1.86	0.57
2:T:125:GLU:O	1:U:158:ALA:HB2	2.05	0.57
2:V:203:ALA:O	2:V:207:LYS:HG2	2.04	0.57
2:B:269:GLN:HG3	2:D:269:GLN:HB3	1.87	0.57
2:B:270:LEU:HD12	2:B:271:PRO:O	2.04	0.57
2:F:251:LEU:HD21	1:I:280:LEU:CD1	2.35	0.57
1:I:229:GLU:O	1:I:233:GLU:HB2	2.04	0.57
1:K:150:ALA:HB1	1:K:189:PHE:CE2	2.40	0.57
1:K:164:ILE:HG22	1:K:165:ARG:HH21	1.69	0.57
1:O:150:ALA:HB1	1:O:189:PHE:CZ	2.39	0.57
1:O:221:GLN:OE1	2:P:212:ILE:O	2.23	0.57
2:P:110:ILE:HG21	2:P:114:TYR:HA	1.87	0.57
1:W:132:VAL:HG12	1:W:136:ILE:HD13	1.86	0.57
2:B:218:SER:O	2:B:221:ALA:HB3	2.04	0.57
2:D:247:ILE:HD12	1:E:278:LEU:HD21	1.87	0.57
1:G:273:LEU:CD1	1:I:280:LEU:HD12	2.35	0.57
1:I:50:ILE:HG22	1:I:81:TYR:CE2	2.39	0.57
2:J:203:ALA:CB	1:K:226:VAL:HG13	2.33	0.57
1:O:144:VAL:HG21	1:O:164:ILE:HG12	1.87	0.57
1:S:136:ILE:HD12	2:T:93:ARG:NH1	2.19	0.57
1:U:140:VAL:HG22	1:U:167:GLU:OE1	2.05	0.57
1:A:219:GLN:CG	2:X:200:VAL:HG22	2.35	0.57
1:I:71:ARG:HB2	1:I:76:GLN:HG3	1.85	0.57
1:I:107:ARG:O	1:I:107:ARG:HG3	2.05	0.57
1:I:137:VAL:HG22	1:I:168:LEU:HD22	1.86	0.57
1:I:253:LYS:CD	2:J:241:LEU:HD21	2.34	0.57
1:K:52:PHE:HA	2:L:32:ALA:HB2	1.87	0.57
1:K:107:ARG:C	1:K:182:VAL:HG13	2.29	0.57
1:O:274:THR:HG22	1:O:275:ALA:H	1.70	0.57
2:R:30:VAL:HG13	2:R:34:HIS:C	2.30	0.57
1:U:238:LEU:HD11	2:V:238:LEU:HD23	1.86	0.57
2:D:270:LEU:HD11	2:F:270:LEU:HA	1.86	0.57
1:E:273:LEU:HA	1:G:280:LEU:O	2.04	0.57
1:U:235:ALA:HB2	2:V:235:LEU:HB3	1.85	0.57
1:U:253:LYS:HD2	2:V:241:LEU:HD11	1.86	0.57
2:V:251:LEU:CD2	1:W:271:ILE:HG21	2.35	0.57
1:C:229:GLU:HA	1:C:232:ALA:HB3	1.87	0.56
1:I:252:ARG:NE	1:I:256:ALA:HB2	2.20	0.56
1:O:215:GLU:O	1:O:219:GLN:HG2	2.05	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:P:117:ARG:O	1:Q:109:LEU:HD11	2.05	0.56
2:R:134:PHE:CD2	2:R:146:VAL:HG22	2.40	0.56
1:U:55:ILE:HA	2:V:53:GLY:HA2	1.87	0.56
1:U:64:LEU:HD22	1:U:69:HIS:ND1	2.20	0.56
2:X:239:ARG:O	2:X:243:ALA:HB3	2.04	0.56
2:H:123:THR:HG22	2:H:127:LEU:HD13	1.87	0.56
1:I:235:ALA:HB2	2:J:235:LEU:CD2	2.35	0.56
2:L:30:VAL:HG21	2:L:53:GLY:O	2.05	0.56
2:L:233:ASP:CG	2:L:236:ILE:HD12	2.31	0.56
1:M:228:ALA:O	1:M:232:ALA:HB3	2.06	0.56
2:P:220:ALA:O	2:P:224:ILE:HG22	2.05	0.56
2:R:270:LEU:HD12	2:T:268:LEU:HD23	1.87	0.56
1:A:232:ALA:HB2	2:B:224:ILE:HG13	1.86	0.56
1:A:261:SER:O	2:X:251:LEU:HD21	2.05	0.56
1:A:273:LEU:HB2	2:X:258:THR:C	2.30	0.56
1:A:288:THR:HG21	1:W:299:LYS:NZ	2.20	0.56
1:G:243:SER:OG	2:H:231:ALA:HB1	2.05	0.56
2:H:67:PHE:HB3	2:H:103:LEU:HD22	1.87	0.56
1:I:102:VAL:HG13	1:I:189:PHE:CE1	2.38	0.56
2:J:28:TYR:CE1	2:J:57:LEU:HD23	2.40	0.56
2:J:240:LYS:HE3	1:M:282:LEU:HD23	1.87	0.56
1:K:51:PHE:CE2	1:K:62:THR:HG21	2.40	0.56
1:K:154:ILE:HA	1:K:187:LEU:HD23	1.86	0.56
1:K:266:THR:HG23	1:K:266:THR:O	2.03	0.56
1:O:264:ILE:HG23	2:P:249:TYR:CD1	2.41	0.56
2:P:50:VAL:HG13	2:P:55:HIS:HB2	1.88	0.56
2:P:207:LYS:O	2:P:211:ILE:HD12	2.05	0.56
2:P:236:ILE:HD13	1:Q:250:LYS:HD2	1.87	0.56
2:R:40:ASP:HA	2:R:61:VAL:HG22	1.85	0.56
2:R:90:ILE:HG21	2:R:170:LEU:HD22	1.87	0.56
2:T:207:LYS:HE2	1:U:226:VAL:HG13	1.87	0.56
1:U:49:ALA:O	1:U:64:LEU:HD12	2.05	0.56
1:U:153:LEU:CD2	1:U:160:VAL:HG11	2.35	0.56
1:U:221:GLN:OE1	2:V:215:GLU:CB	2.53	0.56
2:X:244:ALA:O	2:X:245:GLU:C	2.46	0.56
1:A:218:LYS:O	1:A:221:GLN:HB3	2.04	0.56
2:B:257:ILE:HG23	1:C:271:ILE:HG12	1.87	0.56
2:N:122:ILE:CD1	2:N:158:ALA:HB2	2.35	0.56
1:Q:50:ILE:HG21	1:Q:117:LEU:HB2	1.87	0.56
1:Q:150:ALA:HB1	1:Q:189:PHE:CZ	2.41	0.56
2:T:268:LEU:O	2:V:269:GLN:OE1	2.22	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:W:207:ALA:HA	2:X:205:GLN:CG	2.34	0.56
2:B:218:SER:O	2:B:222:GLU:OE1	2.23	0.56
1:E:271:ILE:HD11	1:G:280:LEU:HD23	1.86	0.56
1:G:232:ALA:C	2:H:223:LEU:HD22	2.30	0.56
1:M:150:ALA:HB1	1:M:189:PHE:CE1	2.40	0.56
1:M:264:ILE:O	1:M:264:ILE:HG22	2.06	0.56
2:N:136:ALA:HB1	2:N:175:PHE:CE1	2.39	0.56
1:O:260:ILE:HG23	1:O:264:ILE:HB	1.87	0.56
2:P:244:ALA:HA	2:P:248:ALA:HB3	1.87	0.56
2:R:92:LEU:HD12	2:R:169:SER:O	2.05	0.56
1:W:269:ASN:CB	1:W:271:ILE:HG13	2.36	0.56
1:A:232:ALA:HB2	2:B:224:ILE:CG1	2.35	0.56
1:G:137:VAL:HG22	1:G:168:LEU:HD22	1.88	0.56
1:G:217:ALA:O	1:G:220:GLU:HB2	2.05	0.56
1:I:51:PHE:CE1	1:I:64:LEU:HD11	2.40	0.56
1:I:53:ASN:HB3	2:J:29:ASN:OD1	2.05	0.56
1:K:41:PHE:CD1	1:K:43:VAL:HG23	2.41	0.56
1:K:257:ALA:HA	1:K:260:ILE:HB	1.88	0.56
2:N:258:THR:H	1:O:272:TYR:CB	2.19	0.56
2:R:37:VAL:HG11	2:R:45:VAL:CG1	2.36	0.56
1:U:50:ILE:CD1	1:U:58:VAL:HG11	2.33	0.56
1:W:71:ARG:HB2	1:W:76:GLN:HB3	1.87	0.56
2:H:240:LYS:HE3	1:K:282:LEU:HB3	1.86	0.56
1:I:58:VAL:CG1	2:J:31:ASP:C	2.79	0.56
1:I:253:LYS:O	1:I:257:ALA:CB	2.53	0.56
1:K:242:LEU:HD13	2:L:238:LEU:HB2	1.88	0.56
2:N:207:LYS:NZ	1:O:226:VAL:HG11	2.20	0.56
2:X:248:ALA:HA	2:X:251:LEU:HB2	1.88	0.56
2:D:218:SER:OG	1:E:238:LEU:HG	2.06	0.56
2:F:251:LEU:CD1	1:G:278:LEU:HD11	2.35	0.56
2:J:57:LEU:HD22	2:J:62:GLN:O	2.06	0.56
1:K:43:VAL:HG21	1:K:49:ALA:HB2	1.88	0.56
2:N:214:ALA:CB	1:O:234:ALA:HB1	2.35	0.56
2:P:184:GLU:O	2:P:188:VAL:HG23	2.06	0.56
2:D:212:ILE:HA	2:D:215:GLU:HB2	1.88	0.56
2:H:94:ILE:CG2	2:H:165:LEU:HD22	2.36	0.56
1:I:51:PHE:HA	1:I:76:GLN:CD	2.31	0.56
1:I:140:VAL:HG12	1:I:164:ILE:HG23	1.86	0.56
1:I:253:LYS:O	1:I:257:ALA:HB2	2.06	0.56
1:I:253:LYS:HB3	1:K:279:VAL:HG22	1.88	0.56
1:K:140:VAL:HG21	1:K:168:LEU:CB	2.35	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:238:LEU:HD22	2:L:238:LEU:HD23	1.88	0.56
2:L:110:ILE:HG23	2:L:111:GLY:N	2.20	0.56
1:M:140:VAL:HG21	1:M:168:LEU:CD1	2.36	0.56
1:O:43:VAL:HG22	1:O:80:ILE:HG12	1.88	0.56
1:U:246:PRO:HG2	1:W:292:ASP:HA	1.88	0.56
1:A:264:ILE:HA	1:A:267:SER:HB3	1.86	0.56
2:D:196:ALA:O	2:D:200:VAL:HG23	2.05	0.56
2:H:67:PHE:HB2	2:H:103:LEU:HD13	1.88	0.56
2:J:268:LEU:HD12	2:L:268:LEU:CD2	2.36	0.56
2:L:27:LEU:HB2	2:L:54:THR:HG21	1.88	0.56
2:L:30:VAL:HG11	2:L:53:GLY:N	2.21	0.56
2:N:199:VAL:HG13	2:N:202:LYS:HE3	1.87	0.56
1:S:140:VAL:HG21	1:S:168:LEU:HA	1.88	0.56
1:W:253:LYS:O	1:W:257:ALA:HB2	2.06	0.56
1:A:237:MET:SD	1:A:238:LEU:N	2.80	0.55
2:D:236:ILE:HG23	1:E:254:ILE:HD12	1.88	0.55
2:D:251:LEU:HD22	2:D:257:ILE:HG21	1.88	0.55
1:E:238:LEU:HD12	2:F:235:LEU:HD13	1.88	0.55
1:E:269:ASN:O	1:E:271:ILE:HG23	2.06	0.55
1:G:140:VAL:HG12	1:G:164:ILE:HG23	1.88	0.55
1:G:225:ILE:HD13	2:H:219:LYS:HE3	1.88	0.55
1:I:52:PHE:HA	2:J:31:ASP:OD2	2.06	0.55
1:I:145:VAL:HG13	1:I:153:LEU:HD11	1.88	0.55
2:J:126:ILE:HD13	2:J:154:LEU:HA	1.87	0.55
2:J:203:ALA:HB1	1:K:226:VAL:HG13	1.87	0.55
2:L:90:ILE:HD11	2:L:139:LEU:CD1	2.33	0.55
2:L:221:ALA:HB1	1:M:242:LEU:CG	2.35	0.55
1:M:63:ILE:HD13	1:M:115:GLN:HA	1.87	0.55
2:N:121:SER:CB	1:O:183:ALA:HB2	2.36	0.55
2:N:221:ALA:O	2:N:222:GLU:C	2.49	0.55
1:Q:94:THR:HG21	1:Q:145:VAL:HB	1.88	0.55
1:U:106:LEU:HB2	1:U:141:LEU:HD11	1.89	0.55
1:W:289:ARG:O	1:W:293:SER:HB3	2.05	0.55
1:A:293:SER:O	1:A:299:LYS:HG2	2.06	0.55
1:I:75:PHE:CG	2:J:29:ASN:HB3	2.41	0.55
1:K:132:VAL:CG1	1:K:177:LEU:HD12	2.37	0.55
1:M:273:LEU:HB3	1:O:280:LEU:CD2	2.35	0.55
1:U:252:ARG:HE	1:U:256:ALA:HB2	1.71	0.55
2:F:259:TYR:O	2:F:260:LEU:HD23	2.05	0.55
2:H:235:LEU:HD11	2:H:239:ARG:HG3	1.88	0.55
1:I:53:ASN:C	1:I:53:ASN:OD1	2.49	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:238:LEU:HD22	2:L:238:LEU:CD2	2.37	0.55
2:N:223:LEU:HD23	2:N:224:ILE:N	2.21	0.55
2:N:243:ALA:O	2:N:244:ALA:C	2.48	0.55
1:Q:242:LEU:HD12	2:R:234:GLY:CA	2.37	0.55
1:S:144:VAL:HG11	1:S:164:ILE:CG1	2.36	0.55
2:V:215:GLU:N	1:W:237:MET:HE1	2.21	0.55
1:W:43:VAL:HG22	1:W:80:ILE:HG12	1.88	0.55
1:A:274:THR:HB	2:X:260:LEU:HD23	1.87	0.55
1:E:277:ASN:HA	1:G:283:GLN:HB3	1.89	0.55
1:I:251:LEU:HA	1:I:254:ILE:HD12	1.87	0.55
1:K:50:ILE:HG23	1:K:117:LEU:HB3	1.87	0.55
2:L:37:VAL:HG11	2:L:104:PRO:HA	1.87	0.55
2:L:126:ILE:HD13	2:L:154:LEU:HA	1.86	0.55
1:O:51:PHE:HA	1:O:76:GLN:CD	2.31	0.55
2:R:88:VAL:HG11	2:R:139:LEU:HD13	1.89	0.55
1:W:48:ARG:HD3	1:W:83:ILE:HD13	1.88	0.55
1:W:257:ALA:HA	1:W:260:ILE:HB	1.87	0.55
1:A:252:ARG:C	2:B:241:LEU:HD13	2.32	0.55
1:C:272:TYR:HD2	2:D:260:LEU:HD22	1.66	0.55
1:E:214:VAL:HG22	2:F:208:LYS:CB	2.35	0.55
2:F:186:LYS:HG3	1:G:212:PHE:CD2	2.42	0.55
1:G:79:ILE:HG21	1:G:126:LEU:HD21	1.89	0.55
2:H:39:PHE:CD1	2:H:45:VAL:HG22	2.42	0.55
2:H:195:ARG:CZ	2:H:199:VAL:HG21	2.37	0.55
2:J:90:ILE:HD11	2:J:139:LEU:HD13	1.89	0.55
2:J:237:GLU:O	2:J:240:LYS:HB2	2.07	0.55
2:T:30:VAL:HG11	2:T:51:GLY:O	2.07	0.55
1:U:164:ILE:HG22	1:U:165:ARG:HH21	1.72	0.55
2:B:236:ILE:HG23	1:C:254:ILE:HD11	1.88	0.55
2:H:259:TYR:CE1	1:I:273:LEU:HD12	2.42	0.55
2:J:92:LEU:HD11	2:J:168:VAL:CG1	2.36	0.55
2:J:94:ILE:CG2	2:J:165:LEU:HD22	2.37	0.55
1:K:137:VAL:HG22	1:K:168:LEU:HD21	1.88	0.55
1:O:275:ALA:HB1	1:O:281:ASN:HD22	1.71	0.55
2:R:27:LEU:HD11	2:R:54:THR:HG21	1.87	0.55
2:T:69:CYS:HB3	2:T:103:LEU:HD11	1.87	0.55
2:T:82:SER:HA	2:T:131:VAL:HG12	1.87	0.55
1:U:228:ALA:HB2	2:V:220:ALA:HA	1.88	0.55
2:F:204:GLU:O	2:F:207:LYS:HG2	2.07	0.55
2:H:37:VAL:HG11	2:H:104:PRO:HA	1.89	0.55
2:H:221:ALA:O	2:H:222:GLU:C	2.49	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:N:108:THR:O	1:O:83:ILE:HD12	2.06	0.55
2:P:28:TYR:OH	2:P:50:VAL:HG21	2.06	0.55
2:P:244:ALA:O	2:P:245:GLU:C	2.49	0.55
2:R:58:ILE:HG13	2:R:61:VAL:CG1	2.36	0.55
2:T:92:LEU:HB2	2:T:170:LEU:HD23	1.88	0.55
1:W:292:ASP:OD2	1:W:295:ILE:HD11	2.06	0.55
2:D:260:LEU:HB2	1:E:272:TYR:CD2	2.42	0.55
2:F:239:ARG:O	2:F:243:ALA:HB3	2.05	0.55
2:H:35:ARG:CD	2:H:100:ALA:HB1	2.37	0.55
2:H:35:ARG:HB2	2:H:103:LEU:HD12	1.87	0.55
1:I:48:ARG:HG3	1:I:83:ILE:HG21	1.88	0.55
1:U:165:ARG:NH1	1:U:182:VAL:HB	2.22	0.55
2:B:260:LEU:HD11	2:B:268:LEU:HG	1.88	0.55
2:D:204:GLU:HA	2:D:207:LYS:CD	2.37	0.55
1:G:157:ARG:NH2	1:G:184:ILE:HG22	2.21	0.55
1:I:81:TYR:HD2	1:I:117:LEU:HD22	1.72	0.55
1:K:263:THR:HG21	2:L:249:TYR:OH	2.06	0.55
1:M:72:ILE:O	1:M:76:GLN:HB3	2.07	0.55
1:O:218:LYS:HD3	2:P:212:ILE:HG21	1.88	0.55
2:P:236:ILE:HD13	1:Q:250:LYS:HB2	1.89	0.55
1:U:79:ILE:HB	1:U:126:LEU:HD21	1.88	0.55
1:E:273:LEU:HD11	1:E:278:LEU:HG	1.88	0.55
2:F:267:LEU:HD12	2:H:267:LEU:HD22	1.89	0.55
1:I:260:ILE:HA	1:I:263:THR:HB	1.88	0.55
1:I:273:LEU:HD13	1:K:280:LEU:HB3	1.89	0.55
2:J:31:ASP:OD1	2:J:32:ALA:N	2.40	0.55
1:K:161:SER:O	1:K:165:ARG:HG2	2.06	0.55
2:L:221:ALA:HB1	1:M:242:LEU:HG	1.89	0.55
1:Q:140:VAL:HG13	1:Q:167:GLU:OE1	2.06	0.55
2:R:38:ILE:HA	2:R:62:GLN:HG3	1.89	0.55
2:T:260:LEU:HD22	2:T:268:LEU:HD21	1.89	0.55
1:U:238:LEU:HD11	2:V:238:LEU:CD2	2.37	0.55
2:V:35:ARG:HB2	2:V:103:LEU:CD1	2.37	0.55
2:V:236:ILE:O	2:V:240:LYS:HG3	2.07	0.55
1:W:164:ILE:HG22	1:W:165:ARG:HH21	1.72	0.55
2:F:200:VAL:HB	1:G:223:GLN:HB2	1.88	0.54
1:I:107:ARG:C	1:I:182:VAL:HG13	2.31	0.54
1:I:235:ALA:HA	2:J:235:LEU:HB2	1.89	0.54
1:M:289:ARG:HA	1:M:293:SER:HB3	1.89	0.54
2:N:92:LEU:HD22	2:N:127:LEU:HD11	1.89	0.54
1:Q:63:ILE:HG12	1:Q:118:PRO:HD3	1.89	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:R:122:ILE:HD12	2:R:158:ALA:HB2	1.90	0.54
2:R:236:ILE:HG22	2:R:240:LYS:NZ	2.22	0.54
2:T:90:ILE:CG2	2:T:170:LEU:HD22	2.37	0.54
2:B:203:ALA:CB	1:C:226:VAL:HG11	2.35	0.54
2:B:261:PRO:HD2	2:X:268:LEU:HD12	1.89	0.54
1:E:271:ILE:HD12	2:F:259:TYR:OH	2.07	0.54
1:G:218:LYS:O	1:G:221:GLN:HB3	2.07	0.54
1:I:52:PHE:HA	2:J:31:ASP:CG	2.32	0.54
1:I:75:PHE:O	2:J:29:ASN:CG	2.50	0.54
1:I:235:ALA:HB1	2:J:224:ILE:HD13	1.88	0.54
1:Q:214:VAL:HG12	2:R:209:ALA:HB3	1.85	0.54
2:R:37:VAL:HG12	2:R:38:ILE:N	2.22	0.54
2:T:267:LEU:HD12	2:V:267:LEU:HD22	1.88	0.54
1:U:252:ARG:O	1:U:256:ALA:HB3	2.06	0.54
1:A:274:THR:O	2:X:259:TYR:O	2.25	0.54
1:E:242:LEU:HD22	1:E:249:ILE:N	2.22	0.54
1:G:253:LYS:HB2	1:I:279:VAL:HG21	1.89	0.54
2:H:99:VAL:CG1	2:H:164:ILE:HD12	2.38	0.54
2:H:270:LEU:HD12	2:J:268:LEU:CD2	2.37	0.54
1:I:55:ILE:HD11	2:J:56:PHE:HA	1.89	0.54
1:I:116:GLU:C	1:I:118:PRO:CD	2.80	0.54
1:Q:253:LYS:HA	2:R:241:LEU:HD11	1.89	0.54
2:R:240:LYS:NZ	1:U:282:LEU:HD22	2.22	0.54
1:S:107:ARG:O	1:S:182:VAL:HG13	2.07	0.54
1:U:217:ALA:HB1	2:V:213:SER:CB	2.38	0.54
2:V:92:LEU:HD22	2:V:150:VAL:HG11	1.89	0.54
1:W:165:ARG:HH22	1:W:168:LEU:HD23	1.73	0.54
1:A:238:LEU:HD12	2:B:235:LEU:HD13	1.89	0.54
2:B:211:ILE:HG23	1:C:233:GLU:OE1	2.08	0.54
2:B:258:THR:HG23	1:C:272:TYR:CD1	2.42	0.54
1:G:270:ARG:HH11	2:H:258:THR:HG21	1.71	0.54
1:I:48:ARG:HE	1:I:114:ALA:HB1	1.73	0.54
2:N:239:ARG:NH1	1:O:254:ILE:O	2.40	0.54
2:R:90:ILE:HD11	2:R:139:LEU:HD13	1.89	0.54
1:S:249:ILE:HG23	2:T:237:GLU:HB3	1.89	0.54
1:U:78:PRO:O	1:U:79:ILE:C	2.49	0.54
2:X:240:LYS:O	2:X:244:ALA:CB	2.53	0.54
1:A:222:ARG:O	1:A:226:VAL:HG22	2.08	0.54
1:A:238:LEU:HD22	2:B:238:LEU:CD1	2.37	0.54
2:H:28:TYR:CD1	2:H:57:LEU:HD23	2.42	0.54
2:H:136:ALA:HB1	2:H:175:PHE:CE1	2.42	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:I:218:LYS:HA	2:J:212:ILE:HD12	1.89	0.54
1:I:286:SER:HA	1:I:289:ARG:HE	1.72	0.54
1:K:137:VAL:HG22	1:K:168:LEU:CD2	2.37	0.54
1:K:220:GLU:HA	1:K:223:GLN:HB3	1.90	0.54
1:K:235:ALA:HB1	2:L:224:ILE:HD13	1.90	0.54
2:L:88:VAL:HG11	2:L:139:LEU:CD1	2.38	0.54
2:L:94:ILE:CG2	2:L:165:LEU:HD22	2.38	0.54
2:L:214:ALA:O	2:L:215:GLU:C	2.50	0.54
2:P:28:TYR:CE1	2:P:57:LEU:HD23	2.42	0.54
1:Q:196:ALA:HB1	2:R:191:GLN:HG3	1.90	0.54
2:R:92:LEU:HD23	2:R:123:THR:HG23	1.89	0.54
1:S:122:GLN:OE1	2:T:32:ALA:HB3	2.07	0.54
1:S:242:LEU:HD12	2:T:234:GLY:O	2.07	0.54
1:W:145:VAL:HG13	1:W:153:LEU:HD11	1.88	0.54
1:C:232:ALA:HB2	2:D:224:ILE:HG13	1.88	0.54
2:D:260:LEU:HD12	1:E:272:TYR:CE2	2.42	0.54
2:F:197:ARG:HA	2:F:197:ARG:HE	1.73	0.54
1:G:52:PHE:HZ	2:H:30:VAL:O	1.89	0.54
2:J:76:VAL:HB	2:J:123:THR:HG21	1.89	0.54
1:Q:217:ALA:HB1	2:R:213:SER:CB	2.36	0.54
2:V:254:SER:HB2	1:W:271:ILE:C	2.32	0.54
1:W:236:LYS:O	1:W:240:GLU:OE1	2.25	0.54
2:X:236:ILE:O	2:X:240:LYS:HG3	2.08	0.54
2:B:240:LYS:HG3	1:C:254:ILE:HG12	1.88	0.54
1:I:50:ILE:H	1:I:117:LEU:HD13	1.71	0.54
1:I:107:ARG:CZ	1:I:185:THR:HG21	2.37	0.54
1:K:106:LEU:HD21	1:K:165:ARG:HH22	1.73	0.54
1:M:210:ALA:O	1:M:214:VAL:HG23	2.08	0.54
1:O:49:ALA:O	1:O:117:LEU:HD13	2.08	0.54
1:O:140:VAL:HG22	1:O:167:GLU:OE1	2.08	0.54
1:W:210:ALA:HB2	2:X:205:GLN:HB3	1.89	0.54
2:D:259:TYR:C	2:D:260:LEU:HD23	2.33	0.54
1:E:221:GLN:HG2	2:F:216:GLY:N	2.22	0.54
2:F:207:LYS:HD2	1:G:230:GLY:HA3	1.90	0.54
1:G:104:ILE:HG12	1:G:187:LEU:HD13	1.90	0.54
2:H:110:ILE:HG21	2:H:114:TYR:HA	1.89	0.54
1:I:99:LEU:HD13	2:J:179:PHE:CE2	2.41	0.54
2:R:65:ILE:HG21	2:R:67:PHE:CZ	2.42	0.54
1:S:221:GLN:O	1:S:225:ILE:HG12	2.08	0.54
2:T:221:ALA:O	2:T:222:GLU:C	2.51	0.54
1:U:43:VAL:HG12	1:U:47:HIS:CB	2.37	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:214:VAL:HG22	2:F:208:LYS:HB3	1.90	0.54
1:G:165:ARG:HH12	1:G:168:LEU:HD23	1.72	0.54
2:H:131:VAL:HG13	2:H:139:LEU:HD11	1.90	0.54
2:J:236:ILE:O	2:J:240:LYS:HG3	2.07	0.54
2:N:182:ALA:HB1	1:O:205:GLN:HB2	1.90	0.54
2:R:244:ALA:O	2:R:245:GLU:C	2.49	0.54
1:S:218:LYS:HE2	2:T:212:ILE:HD13	1.90	0.54
2:V:270:LEU:HB2	2:V:271:PRO:CD	2.37	0.54
1:W:41:PHE:CE1	1:W:49:ALA:HB3	2.42	0.54
2:J:207:LYS:NZ	1:K:229:GLU:HB2	2.22	0.54
2:N:204:GLU:HA	2:N:207:LYS:HZ3	1.72	0.54
2:N:237:GLU:O	2:N:240:LYS:HB2	2.07	0.54
1:O:238:LEU:HB2	2:P:235:LEU:HB2	1.89	0.54
2:R:214:ALA:O	2:R:215:GLU:C	2.51	0.54
1:S:238:LEU:CD1	2:T:238:LEU:HD23	2.38	0.54
1:W:107:ARG:HH22	1:W:185:THR:HG21	1.71	0.54
1:E:209:ARG:NH2	1:E:213:LEU:HD21	2.23	0.53
1:G:172:ALA:HB1	1:G:177:LEU:HB2	1.89	0.53
2:H:200:VAL:HG13	1:I:226:VAL:HG11	1.90	0.53
2:H:270:LEU:HD12	2:J:268:LEU:HD23	1.89	0.53
1:I:41:PHE:CD2	1:I:43:VAL:HG23	2.40	0.53
1:O:246:PRO:HD3	1:Q:294:LEU:HD12	1.90	0.53
1:O:277:ASN:ND2	1:Q:280:LEU:HD21	2.23	0.53
1:U:64:LEU:HB3	1:U:69:HIS:CD2	2.44	0.53
2:B:235:LEU:HD11	2:B:239:ARG:NH1	2.24	0.53
1:C:267:SER:HA	2:D:252:SER:OG	2.09	0.53
2:F:211:ILE:HG12	1:G:234:ALA:HB2	1.90	0.53
1:K:54:ARG:HB2	1:K:75:PHE:HA	1.89	0.53
1:O:140:VAL:HG21	1:O:168:LEU:CD1	2.39	0.53
1:U:236:LYS:O	1:U:240:GLU:OE1	2.26	0.53
1:W:43:VAL:CG1	1:W:47:HIS:HB2	2.39	0.53
2:B:258:THR:HG23	1:C:272:TYR:CE1	2.44	0.53
1:C:288:THR:O	1:C:292:ASP:HB2	2.08	0.53
2:D:240:LYS:O	2:D:244:ALA:HB2	2.08	0.53
1:E:199:ALA:O	1:E:203:ALA:HB2	2.08	0.53
1:G:214:VAL:HG21	2:H:205:GLN:CB	2.37	0.53
2:H:35:ARG:CZ	2:H:52:GLU:HG3	2.38	0.53
1:M:51:PHE:HA	1:M:76:GLN:CD	2.33	0.53
1:M:140:VAL:HG13	1:M:167:GLU:OE1	2.09	0.53
1:M:243:SER:O	1:M:244:LYS:C	2.50	0.53
2:N:61:VAL:HG23	1:O:67:GLY:HA2	1.87	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:N:86:GLN:O	2:N:88:VAL:HG23	2.08	0.53
2:N:129:SER:HB2	1:O:158:ALA:HB2	1.90	0.53
2:P:178:GLU:OE2	2:P:182:ALA:HB2	2.08	0.53
1:S:154:ILE:CG1	1:S:187:LEU:HD23	2.39	0.53
1:S:252:ARG:HE	1:S:256:ALA:HB2	1.72	0.53
2:T:207:LYS:CG	1:U:226:VAL:HG13	2.38	0.53
1:U:253:LYS:HB3	1:W:279:VAL:HG13	1.90	0.53
1:W:282:LEU:HD12	1:W:287:PHE:CE2	2.44	0.53
2:D:267:LEU:HB2	2:F:267:LEU:HD22	1.90	0.53
2:H:240:LYS:HE3	1:K:282:LEU:HD23	1.89	0.53
1:I:106:LEU:HD13	1:I:184:ILE:HG12	1.88	0.53
1:I:274:THR:HG22	1:I:275:ALA:H	1.72	0.53
2:L:228:LEU:HD11	1:M:247:GLY:HA2	1.91	0.53
1:M:107:ARG:NH2	1:M:185:THR:HG21	2.23	0.53
1:O:104:ILE:HD12	1:O:145:VAL:HG21	1.89	0.53
1:S:51:PHE:HB2	1:S:59:GLN:HE22	1.73	0.53
1:S:58:VAL:O	2:T:32:ALA:HB2	2.09	0.53
2:X:247:ILE:O	2:X:250:GLN:HB3	2.09	0.53
2:B:261:PRO:HB3	1:C:275:ALA:HB3	1.89	0.53
1:E:264:ILE:HA	1:E:267:SER:HB3	1.90	0.53
1:G:102:VAL:CG1	1:G:187:LEU:HD11	2.38	0.53
1:G:133:LEU:HD23	1:G:136:ILE:HD11	1.90	0.53
1:I:74:TRP:CD1	1:I:77:TYR:HH	2.27	0.53
2:J:270:LEU:HD22	1:K:272:TYR:OH	2.09	0.53
1:K:41:PHE:CD2	1:K:78:PRO:HG3	2.43	0.53
2:L:110:ILE:HG23	2:L:111:GLY:H	1.73	0.53
1:M:250:LYS:HG2	1:O:279:VAL:HG13	1.90	0.53
1:S:144:VAL:HG11	1:S:164:ILE:HG12	1.90	0.53
2:T:196:ALA:O	2:T:200:VAL:HG23	2.09	0.53
1:W:51:PHE:CE1	1:W:64:LEU:HD11	2.43	0.53
1:A:237:MET:HA	1:A:240:GLU:HG3	1.91	0.53
1:C:264:ILE:HA	1:C:267:SER:CB	2.38	0.53
2:H:123:THR:HG23	2:H:154:LEU:HD22	1.90	0.53
1:I:243:SER:CB	2:J:231:ALA:HB1	2.38	0.53
1:I:260:ILE:HD11	2:J:244:ALA:CB	2.36	0.53
1:M:257:ALA:HA	1:M:260:ILE:HB	1.89	0.53
2:N:28:TYR:CE2	2:N:36:ALA:HB3	2.43	0.53
2:P:39:PHE:CE2	1:Q:66:GLU:HB3	2.43	0.53
2:P:62:GLN:NE2	2:P:65:ILE:H	2.05	0.53
2:P:151:SER:CA	2:P:168:VAL:HG11	2.38	0.53
2:R:110:ILE:HG21	2:R:114:TYR:HA	1.89	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:T:244:ALA:O	2:T:245:GLU:C	2.52	0.53
2:V:214:ALA:HB2	1:W:234:ALA:HA	1.90	0.53
1:A:260:ILE:O	1:A:264:ILE:HG13	2.08	0.53
1:E:260:ILE:HB	1:G:279:VAL:HG22	1.90	0.53
1:G:140:VAL:O	1:G:144:VAL:HG23	2.09	0.53
1:G:150:ALA:HB1	1:G:189:PHE:CZ	2.43	0.53
1:G:281:ASN:O	1:G:287:PHE:CG	2.62	0.53
1:M:50:ILE:HD13	1:M:117:LEU:C	2.34	0.53
2:R:236:ILE:O	2:R:240:LYS:HG3	2.09	0.53
2:R:262:ALA:HB3	1:S:289:ARG:HH22	1.73	0.53
1:W:249:ILE:CG2	2:X:241:LEU:HD21	2.38	0.53
1:A:260:ILE:HD11	2:B:244:ALA:HB1	1.91	0.53
1:C:253:LYS:HB3	1:E:287:PHE:CZ	2.44	0.53
1:G:144:VAL:HG12	1:G:148:PHE:CD2	2.44	0.53
1:K:58:VAL:HG23	2:L:52:GLU:HB2	1.88	0.53
2:N:123:THR:O	2:N:127:LEU:HD13	2.09	0.53
2:P:200:VAL:HG22	1:Q:223:GLN:HB2	1.90	0.53
2:R:80:THR:HG21	2:R:90:ILE:HD12	1.90	0.53
2:R:206:GLN:O	2:R:207:LYS:C	2.51	0.53
1:S:264:ILE:HD11	2:T:244:ALA:C	2.34	0.53
2:T:49:VAL:O	2:T:49:VAL:HG13	2.07	0.53
1:U:63:ILE:HD13	1:U:115:GLN:HA	1.89	0.53
1:G:243:SER:CB	2:H:231:ALA:HB1	2.38	0.53
2:H:217:ASP:CG	2:J:238:LEU:HD22	2.34	0.53
1:I:104:ILE:HG23	1:I:184:ILE:HG23	1.90	0.53
1:I:137:VAL:HG22	1:I:168:LEU:CD2	2.39	0.53
1:I:233:GLU:HG3	2:J:223:LEU:HD11	1.91	0.53
2:J:39:PHE:O	2:J:61:VAL:O	2.27	0.53
1:K:218:LYS:O	1:K:221:GLN:HB3	2.08	0.53
2:N:30:VAL:O	2:N:30:VAL:HG12	2.07	0.53
2:P:207:LYS:HE3	1:Q:226:VAL:HG12	1.90	0.53
1:Q:274:THR:HG22	1:Q:275:ALA:N	2.24	0.53
2:T:81:GLY:HA3	1:U:155:THR:HG22	1.91	0.53
1:U:214:VAL:HG13	2:V:209:ALA:C	2.33	0.53
1:U:218:LYS:HZ3	2:V:212:ILE:HD13	1.72	0.53
2:V:259:TYR:O	2:V:260:LEU:HD12	2.09	0.53
1:E:236:LYS:O	1:E:240:GLU:OE1	2.26	0.53
2:F:267:LEU:HB2	2:H:267:LEU:HB3	1.90	0.53
1:G:220:GLU:O	1:G:221:GLN:C	2.52	0.53
1:G:294:LEU:HG	1:I:283:GLN:NE2	2.25	0.53
2:H:37:VAL:HG11	2:H:104:PRO:CB	2.39	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:233:ASP:CB	2:H:236:ILE:HD12	2.38	0.53
1:I:55:ILE:O	1:I:57:GLY:O	2.27	0.53
2:L:236:ILE:HG22	2:L:240:LYS:HZ3	1.74	0.53
1:O:225:ILE:O	1:O:228:ALA:HB3	2.08	0.53
2:R:90:ILE:HD12	2:R:131:VAL:HG21	1.90	0.53
2:T:241:LEU:O	2:T:244:ALA:HB3	2.09	0.53
2:V:248:ALA:O	2:V:252:SER:HB2	2.09	0.53
2:B:257:ILE:HG23	1:C:271:ILE:HD11	1.91	0.52
1:C:272:TYR:HB2	2:D:261:PRO:HD2	1.91	0.52
2:F:259:TYR:CZ	1:G:278:LEU:O	2.63	0.52
2:H:74:ARG:HB3	2:H:119:LEU:HD13	1.92	0.52
2:H:118:VAL:HG11	2:H:163:LEU:CD1	2.39	0.52
2:H:236:ILE:O	2:H:240:LYS:HG3	2.08	0.52
1:I:41:PHE:HD2	1:I:43:VAL:CG2	2.21	0.52
1:I:140:VAL:CG1	1:I:164:ILE:HG23	2.39	0.52
1:I:263:THR:HG21	2:J:245:GLU:O	2.09	0.52
1:K:51:PHE:O	1:K:58:VAL:HG13	2.09	0.52
1:K:72:ILE:O	1:K:76:GLN:HB3	2.08	0.52
1:O:50:ILE:CG2	1:O:117:LEU:HB3	2.40	0.52
2:P:260:LEU:HD22	2:P:268:LEU:CD1	2.39	0.52
1:Q:47:HIS:CD2	1:Q:80:ILE:HG22	2.44	0.52
1:S:58:VAL:HG12	1:S:59:GLN:O	2.09	0.52
1:U:251:LEU:HD12	1:U:254:ILE:HB	1.90	0.52
2:D:240:LYS:C	2:D:244:ALA:HB2	2.35	0.52
2:F:197:ARG:NH2	1:G:222:ARG:HB3	2.25	0.52
2:F:218:SER:HB2	2:H:238:LEU:HD22	1.91	0.52
2:F:237:GLU:HB2	1:G:294:LEU:HD11	1.90	0.52
1:G:79:ILE:CG2	1:G:126:LEU:HD21	2.40	0.52
1:G:242:LEU:HD13	2:H:238:LEU:HB2	1.91	0.52
2:J:57:LEU:CB	2:J:62:GLN:HB3	2.39	0.52
1:K:235:ALA:HA	2:L:235:LEU:CD2	2.40	0.52
1:M:154:ILE:CG1	1:M:187:LEU:HD23	2.39	0.52
2:T:203:ALA:O	2:T:206:GLN:HG3	2.09	0.52
1:U:236:LYS:HA	2:V:227:SER:OG	2.10	0.52
1:U:246:PRO:HB3	1:U:249:ILE:HD12	1.91	0.52
1:W:236:LYS:HB2	2:X:227:SER:OG	2.10	0.52
1:A:226:VAL:CG1	2:X:207:LYS:HD2	2.33	0.52
1:A:233:GLU:OE1	2:X:214:ALA:HB1	2.10	0.52
1:A:280:LEU:HB3	1:W:273:LEU:HB3	1.90	0.52
1:C:260:ILE:HG23	2:D:248:ALA:HB2	1.91	0.52
2:H:58:ILE:HD12	2:H:61:VAL:HG11	1.90	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:J:220:ALA:O	2:J:224:ILE:HG22	2.09	0.52
2:N:239:ARG:HG2	2:N:239:ARG:O	2.10	0.52
1:Q:220:GLU:O	1:Q:221:GLN:C	2.48	0.52
2:T:228:LEU:CD2	2:T:232:GLY:O	2.57	0.52
2:V:76:VAL:HB	2:V:123:THR:HG21	1.91	0.52
2:V:244:ALA:O	2:V:245:GLU:C	2.52	0.52
1:W:238:LEU:HD11	2:X:238:LEU:HD22	1.91	0.52
1:C:264:ILE:HA	1:C:267:SER:HB3	1.90	0.52
1:E:204:GLN:HA	2:F:198:PHE:CE2	2.45	0.52
2:F:251:LEU:HD22	2:F:257:ILE:HG12	1.91	0.52
1:I:53:ASN:ND2	2:J:31:ASP:H	2.07	0.52
1:I:53:ASN:CG	2:J:31:ASP:HB3	2.35	0.52
2:J:268:LEU:HD11	2:L:261:PRO:CD	2.38	0.52
1:K:72:ILE:HD12	1:K:72:ILE:H	1.73	0.52
2:L:130:VAL:HG11	2:L:150:VAL:HG23	1.91	0.52
1:M:100:GLN:O	1:M:102:VAL:HG23	2.10	0.52
2:N:197:ARG:CZ	1:O:219:GLN:OE1	2.57	0.52
2:R:203:ALA:HB1	1:S:226:VAL:HG12	1.90	0.52
1:S:43:VAL:HG12	1:S:47:HIS:HB2	1.90	0.52
1:S:140:VAL:O	1:S:144:VAL:HG23	2.09	0.52
1:S:242:LEU:HD13	1:S:249:ILE:HG12	1.91	0.52
2:T:211:ILE:HG13	1:U:230:GLY:HA2	1.92	0.52
2:V:121:SER:OG	1:W:107:ARG:NH1	2.43	0.52
1:A:242:LEU:CD2	2:X:225:ALA:HB1	2.39	0.52
2:D:268:LEU:CD1	2:F:260:LEU:HB3	2.38	0.52
1:G:57:GLY:O	2:H:52:GLU:O	2.27	0.52
1:G:232:ALA:O	1:G:235:ALA:HB3	2.10	0.52
2:H:28:TYR:CE2	2:H:36:ALA:HB3	2.43	0.52
2:H:146:VAL:HG12	2:H:170:LEU:CD1	2.38	0.52
1:I:218:LYS:O	1:I:221:GLN:HB3	2.10	0.52
1:I:260:ILE:HG23	1:I:264:ILE:CB	2.38	0.52
1:K:236:LYS:O	1:K:240:GLU:OE1	2.28	0.52
1:O:214:VAL:HG21	2:P:205:GLN:HB3	1.91	0.52
1:Q:165:ARG:NH1	1:Q:182:VAL:HG11	2.24	0.52
1:U:157:ARG:HH21	1:U:184:ILE:HG22	1.73	0.52
1:A:235:ALA:HA	2:B:235:LEU:CB	2.40	0.52
2:D:257:ILE:HG13	1:E:269:ASN:O	2.09	0.52
1:E:258:GLN:C	1:E:261:SER:HG	2.16	0.52
1:E:269:ASN:O	1:E:269:ASN:OD1	2.27	0.52
2:F:221:ALA:CB	1:G:242:LEU:HD21	2.39	0.52
2:F:228:LEU:HD13	2:F:236:ILE:CG1	2.39	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:103:ASN:O	1:G:187:LEU:HD12	2.10	0.52
2:H:203:ALA:HB3	1:I:226:VAL:CG1	2.40	0.52
1:I:118:PRO:HB3	2:J:32:ALA:HB3	1.91	0.52
1:I:214:VAL:HA	2:J:209:ALA:HB2	1.92	0.52
2:J:65:ILE:HD13	2:J:107:PHE:CG	2.45	0.52
2:J:221:ALA:HA	1:K:248:TYR:HB2	1.91	0.52
1:S:71:ARG:HD3	1:S:78:PRO:HG3	1.90	0.52
2:B:268:LEU:HD23	2:B:268:LEU:C	2.33	0.52
1:C:235:ALA:HA	2:D:235:LEU:HB2	1.90	0.52
2:D:196:ALA:HB3	1:E:219:GLN:CB	2.40	0.52
1:Q:109:LEU:O	1:Q:179:LEU:HD22	2.10	0.52
2:T:195:ARG:O	2:T:199:VAL:HG23	2.09	0.52
1:U:181:ASP:O	1:U:182:VAL:HG23	2.09	0.52
2:V:45:VAL:HB	2:V:108:THR:CG2	2.40	0.52
1:W:140:VAL:HG13	1:W:167:GLU:OE1	2.10	0.52
2:B:254:SER:HB2	1:C:268:GLN:HA	1.92	0.52
2:H:35:ARG:HH11	2:H:51:GLY:HA2	1.75	0.52
1:I:249:ILE:O	1:I:253:LYS:HG2	2.10	0.52
2:J:129:SER:CB	1:K:158:ALA:HB2	2.39	0.52
2:J:226:ASN:O	2:J:230:THR:HG23	2.10	0.52
2:L:228:LEU:HD22	2:L:233:ASP:HA	1.90	0.52
2:N:244:ALA:O	2:N:245:GLU:C	2.52	0.52
1:O:166:ARG:O	1:O:170:GLU:OE1	2.28	0.52
1:O:233:GLU:HG3	2:P:223:LEU:HD11	1.91	0.52
2:P:139:LEU:HD23	2:P:146:VAL:HG21	1.92	0.52
2:P:226:ASN:O	2:P:230:THR:HG23	2.09	0.52
1:Q:210:ALA:O	1:Q:214:VAL:HG23	2.09	0.52
1:W:220:GLU:HA	1:W:223:GLN:HB3	1.92	0.52
1:W:294:LEU:HD22	1:W:299:LYS:HE2	1.92	0.52
2:D:262:ALA:HB2	2:F:264:GLN:NE2	2.25	0.52
1:G:235:ALA:HA	2:H:235:LEU:CD2	2.40	0.52
2:H:131:VAL:HG13	2:H:139:LEU:HD21	1.91	0.52
1:I:74:TRP:HD1	1:I:77:TYR:HH	1.58	0.52
1:I:81:TYR:CD2	1:I:117:LEU:HD22	2.45	0.52
1:I:90:ILE:HB	1:I:137:VAL:HG11	1.92	0.52
1:I:239:GLY:HA2	2:J:234:GLY:HA3	1.90	0.52
1:K:54:ARG:C	2:L:53:GLY:HA2	2.35	0.52
2:L:233:ASP:HB3	2:L:236:ILE:HD12	1.89	0.52
1:Q:102:VAL:HG11	1:Q:187:LEU:HD11	1.92	0.52
2:R:28:TYR:OH	2:R:50:VAL:HG11	2.10	0.52
2:R:228:LEU:CD1	2:R:236:ILE:HD11	2.40	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:U:253:LYS:HE3	1:W:279:VAL:HG22	1.92	0.52
2:V:224:ILE:HG21	1:W:248:TYR:CB	2.39	0.52
2:X:214:ALA:O	2:X:215:GLU:C	2.53	0.52
2:B:259:TYR:CD2	1:C:275:ALA:HA	2.45	0.52
1:G:260:ILE:HG23	1:G:264:ILE:CG2	2.40	0.52
1:I:136:ILE:HG23	2:J:93:ARG:NE	2.24	0.52
1:I:233:GLU:HA	1:I:236:LYS:HB3	1.91	0.52
1:K:52:PHE:O	1:K:76:GLN:HA	2.09	0.52
1:K:74:TRP:HD1	1:K:77:TYR:HH	1.53	0.52
1:K:264:ILE:O	1:K:264:ILE:HG22	2.08	0.52
1:M:50:ILE:O	1:M:78:PRO:HB3	2.10	0.52
2:R:206:GLN:O	2:R:210:ALA:HB3	2.10	0.52
2:R:221:ALA:HA	1:S:248:TYR:HB2	1.92	0.52
1:U:79:ILE:HG21	1:U:126:LEU:HD13	1.91	0.52
1:U:153:LEU:HB3	1:U:187:LEU:HD21	1.92	0.52
2:V:80:THR:OG1	2:V:128:LYS:HA	2.10	0.52
1:W:108:VAL:HG22	1:W:182:VAL:HG11	1.92	0.52
1:W:264:ILE:HG23	2:X:252:SER:HB2	1.91	0.52
1:W:273:LEU:HD12	1:W:277:ASN:ND2	2.25	0.52
2:F:193:ALA:HB1	1:G:219:GLN:HG2	1.92	0.51
2:F:243:ALA:CB	1:G:254:ILE:HD13	2.31	0.51
1:I:71:ARG:O	1:I:72:ILE:HG13	2.09	0.51
1:I:118:PRO:HA	2:J:70:ARG:CZ	2.40	0.51
1:I:118:PRO:HA	2:J:70:ARG:NH2	2.24	0.51
1:I:225:ILE:HD13	2:J:219:LYS:CD	2.40	0.51
1:I:249:ILE:HA	1:I:252:ARG:HB3	1.92	0.51
2:J:88:VAL:HG11	2:J:139:LEU:HD13	1.90	0.51
2:J:204:GLU:O	2:J:207:LYS:HB2	2.10	0.51
1:O:221:GLN:CB	2:P:212:ILE:HG22	2.38	0.51
2:T:127:LEU:O	2:T:131:VAL:HG23	2.10	0.51
2:T:130:VAL:HG21	2:T:150:VAL:HG22	1.91	0.51
1:U:269:ASN:OD1	2:V:257:ILE:HD13	2.10	0.51
2:V:130:VAL:HG11	2:V:150:VAL:HG22	1.91	0.51
2:V:214:ALA:O	2:V:215:GLU:C	2.53	0.51
1:W:249:ILE:HG23	2:X:241:LEU:CD2	2.38	0.51
1:A:219:GLN:CB	2:X:200:VAL:HG22	2.41	0.51
1:A:275:ALA:N	2:X:261:PRO:HD3	2.25	0.51
1:C:251:LEU:HD23	1:C:251:LEU:O	2.10	0.51
1:I:47:HIS:O	1:I:66:GLU:OE1	2.28	0.51
1:I:72:ILE:HD12	1:I:75:PHE:CE2	2.45	0.51
2:J:203:ALA:O	1:K:226:VAL:HG22	2.08	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:O:136:ILE:O	1:O:140:VAL:HG23	2.11	0.51
2:P:146:VAL:O	2:P:150:VAL:HG23	2.10	0.51
2:P:235:LEU:HD12	2:P:238:LEU:HB3	1.92	0.51
1:Q:235:ALA:HB2	2:R:235:LEU:CD2	2.40	0.51
2:R:134:PHE:HD2	2:R:146:VAL:HG22	1.74	0.51
1:S:59:GLN:HE21	1:S:62:THR:HB	1.75	0.51
1:W:110:SER:HB2	1:W:177:LEU:HD22	1.92	0.51
1:W:269:ASN:OD1	2:X:252:SER:HA	2.10	0.51
2:B:240:LYS:HG2	1:E:282:LEU:O	2.11	0.51
1:C:277:ASN:CG	1:E:281:ASN:HA	2.35	0.51
1:E:257:ALA:HB1	1:G:279:VAL:CG1	2.31	0.51
1:G:238:LEU:HD13	2:H:235:LEU:HD13	1.92	0.51
2:J:236:ILE:HD13	1:K:250:LYS:CD	2.40	0.51
1:M:153:LEU:HD23	1:M:160:VAL:HG11	1.91	0.51
2:R:37:VAL:CG1	2:R:38:ILE:N	2.74	0.51
2:T:30:VAL:HG13	2:T:36:ALA:H	1.75	0.51
2:T:203:ALA:HB1	1:U:226:VAL:CG1	2.41	0.51
2:T:207:LYS:HG3	1:U:226:VAL:HG13	1.91	0.51
2:T:214:ALA:HB2	1:U:234:ALA:CB	2.40	0.51
2:V:207:LYS:O	2:V:211:ILE:HD12	2.10	0.51
1:W:206:GLU:C	2:X:205:GLN:HG2	2.35	0.51
1:A:281:ASN:ND2	1:W:274:THR:HG22	2.25	0.51
2:B:221:ALA:HB1	1:C:248:TYR:CE2	2.44	0.51
2:H:92:LEU:HD11	2:H:168:VAL:HG12	1.92	0.51
2:H:94:ILE:HG23	2:H:165:LEU:HD22	1.93	0.51
2:H:207:LYS:HA	1:I:230:GLY:CA	2.40	0.51
1:I:40:VAL:HG13	1:I:40:VAL:O	2.10	0.51
1:K:54:ARG:O	2:L:54:THR:N	2.44	0.51
1:O:214:VAL:HG21	2:P:205:GLN:C	2.35	0.51
1:O:224:LYS:HA	1:O:227:GLN:HB3	1.92	0.51
1:O:264:ILE:O	1:O:264:ILE:HG22	2.10	0.51
2:P:224:ILE:HG12	1:Q:251:LEU:HD22	1.92	0.51
1:Q:236:LYS:O	1:Q:240:GLU:OE1	2.29	0.51
2:R:208:LYS:O	2:R:212:ILE:HD12	2.09	0.51
1:A:219:GLN:HG3	2:X:200:VAL:HG22	1.91	0.51
1:C:274:THR:HB	1:C:277:ASN:CG	2.35	0.51
2:D:259:TYR:HB2	1:E:273:LEU:CD1	2.41	0.51
1:I:133:LEU:HA	1:I:136:ILE:HD11	1.93	0.51
2:L:191:GLN:O	2:L:195:ARG:HD3	2.11	0.51
2:L:257:ILE:HG22	2:L:259:TYR:CE1	2.46	0.51
2:N:65:ILE:HD13	2:N:107:PHE:CD2	2.45	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:N:221:ALA:HB1	1:O:242:LEU:HD21	1.92	0.51
2:R:39:PHE:O	2:R:62:GLN:HA	2.11	0.51
1:W:140:VAL:HG21	1:W:168:LEU:HD13	1.93	0.51
2:D:260:LEU:O	1:E:273:LEU:O	2.29	0.51
2:J:142:GLN:O	2:J:146:VAL:HG23	2.10	0.51
1:K:140:VAL:CG1	1:K:164:ILE:HG23	2.40	0.51
1:K:253:LYS:HD2	2:L:241:LEU:HD11	1.91	0.51
1:M:248:TYR:O	1:M:252:ARG:HB2	2.11	0.51
2:N:233:ASP:HA	2:N:236:ILE:HD12	1.93	0.51
1:O:41:PHE:HB3	1:O:78:PRO:HG3	1.92	0.51
1:O:43:VAL:HG13	1:O:80:ILE:HG23	1.93	0.51
2:P:65:ILE:HG23	2:P:112:GLU:HG2	1.92	0.51
2:P:195:ARG:CZ	2:P:199:VAL:HG21	2.39	0.51
2:R:33:GLY:C	2:R:69:CYS:SG	2.94	0.51
2:T:91:THR:HB	2:T:172:HIS:HB3	1.93	0.51
2:T:206:GLN:O	2:T:207:LYS:C	2.54	0.51
1:U:221:GLN:O	1:U:225:ILE:HG12	2.10	0.51
2:V:45:VAL:HG21	2:V:107:PHE:CD2	2.46	0.51
2:V:186:LYS:HB2	1:W:209:ARG:HB2	1.91	0.51
1:W:49:ALA:O	1:W:64:LEU:HD12	2.10	0.51
1:W:106:LEU:HB2	1:W:141:LEU:HD11	1.91	0.51
1:W:233:GLU:HA	1:W:236:LYS:HB3	1.91	0.51
1:C:248:TYR:CE2	1:C:252:ARG:HB2	2.46	0.51
1:G:51:PHE:CE2	1:G:62:THR:HG21	2.45	0.51
2:H:90:ILE:CG2	2:H:170:LEU:HD22	2.41	0.51
1:I:43:VAL:HA	1:I:80:ILE:HG12	1.92	0.51
1:K:54:ARG:HD2	1:K:74:TRP:O	2.11	0.51
2:L:241:LEU:O	2:L:244:ALA:HB3	2.11	0.51
1:U:52:PHE:O	1:U:76:GLN:OE1	2.27	0.51
1:U:144:VAL:HG11	1:U:164:ILE:HG12	1.93	0.51
2:V:131:VAL:CG1	2:V:139:LEU:HD11	2.37	0.51
1:E:210:ALA:HA	1:E:213:LEU:HB2	1.93	0.51
2:F:244:ALA:HA	2:F:247:ILE:HD12	1.93	0.51
1:G:224:LYS:O	1:G:228:ALA:CB	2.59	0.51
2:H:217:ASP:O	2:H:220:ALA:HB3	2.11	0.51
1:I:41:PHE:CZ	1:I:69:HIS:HB2	2.45	0.51
1:I:62:THR:HG22	1:I:64:LEU:HD21	1.92	0.51
1:I:249:ILE:HD13	2:J:238:LEU:N	2.26	0.51
2:J:195:ARG:NH1	2:J:199:VAL:HG21	2.25	0.51
2:L:25:SER:O	2:L:57:LEU:HD11	2.11	0.51
2:N:235:LEU:HD12	2:N:238:LEU:HB3	1.93	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:P:221:ALA:O	2:P:222:GLU:C	2.52	0.51
1:Q:109:LEU:HD13	1:Q:181:ASP:O	2.11	0.51
2:V:182:ALA:CB	1:W:202:VAL:HG13	2.40	0.51
2:B:260:LEU:CD1	2:B:268:LEU:HG	2.41	0.51
1:C:279:VAL:HG23	1:E:283:GLN:HB2	1.92	0.51
2:D:207:LYS:O	2:D:211:ILE:HD12	2.11	0.51
2:D:215:GLU:O	2:D:216:GLY:C	2.53	0.51
2:F:221:ALA:HB2	1:G:248:TYR:HD2	1.73	0.51
2:H:267:LEU:HD21	2:J:267:LEU:CB	2.41	0.51
1:I:161:SER:HA	1:I:184:ILE:HD12	1.92	0.51
2:J:94:ILE:HG12	2:J:154:LEU:HD21	1.93	0.51
2:J:206:GLN:NE2	1:K:227:GLN:HA	2.25	0.51
2:L:258:THR:OG1	1:M:272:TYR:HB2	2.10	0.51
1:M:249:ILE:HD13	2:N:237:GLU:C	2.36	0.51
1:Q:207:ALA:HB3	2:R:198:PHE:HE2	1.74	0.51
2:B:268:LEU:HD23	2:B:269:GLN:N	2.26	0.51
1:E:276:ASP:C	1:E:279:VAL:HG22	2.36	0.51
1:G:58:VAL:HG11	1:G:122:GLN:OE1	2.10	0.51
2:H:123:THR:HG23	2:H:154:LEU:CD2	2.41	0.51
1:I:50:ILE:N	1:I:117:LEU:HD13	2.26	0.51
2:J:80:THR:HG21	2:J:90:ILE:HD12	1.93	0.51
2:J:267:LEU:HD12	2:L:267:LEU:HD22	1.93	0.51
1:K:165:ARG:NE	1:K:165:ARG:HA	2.25	0.51
1:K:238:LEU:HD13	2:L:235:LEU:HD13	1.92	0.51
1:K:253:LYS:O	1:K:257:ALA:HB2	2.10	0.51
2:L:35:ARG:HG2	2:L:52:GLU:HG3	1.93	0.51
1:O:72:ILE:O	1:O:76:GLN:HB3	2.11	0.51
1:O:232:ALA:C	2:P:223:LEU:HD22	2.36	0.51
2:V:262:ALA:HB3	1:W:289:ARG:NH2	2.24	0.51
2:D:268:LEU:HB3	2:F:266:VAL:HG13	1.92	0.50
2:D:268:LEU:HG	1:E:272:TYR:CZ	2.47	0.50
1:G:249:ILE:O	1:G:249:ILE:HG22	2.11	0.50
2:H:42:PHE:HE1	1:I:68:LEU:HD11	1.77	0.50
2:H:232:GLY:HA3	1:I:294:LEU:HD22	1.92	0.50
1:I:56:GLY:HA2	2:J:36:ALA:O	2.11	0.50
1:I:59:GLN:N	2:J:52:GLU:O	2.43	0.50
1:I:118:PRO:HG3	2:J:32:ALA:CB	2.41	0.50
1:O:228:ALA:HB2	2:P:220:ALA:N	2.26	0.50
2:P:237:GLU:O	2:P:240:LYS:HB2	2.11	0.50
1:S:108:VAL:HG22	1:S:182:VAL:CG1	2.41	0.50
2:T:90:ILE:HD11	2:T:139:LEU:CD1	2.39	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:T:90:ILE:HD12	2:T:131:VAL:HG21	1.93	0.50
2:T:146:VAL:HG12	2:T:170:LEU:HD11	1.92	0.50
2:T:147:SER:OG	2:T:169:SER:HA	2.11	0.50
2:T:233:ASP:OD1	2:T:236:ILE:HD12	2.11	0.50
2:V:39:PHE:CB	2:V:65:ILE:HD11	2.41	0.50
1:W:47:HIS:O	1:W:66:GLU:HB2	2.10	0.50
1:W:271:ILE:HG22	1:W:272:TYR:N	2.26	0.50
1:A:273:LEU:HB3	2:X:260:LEU:HG	1.94	0.50
2:D:215:GLU:CG	1:E:237:MET:HE1	2.40	0.50
2:D:222:GLU:OE2	1:E:237:MET:HG2	2.12	0.50
1:E:271:ILE:HD12	1:G:280:LEU:HD23	1.94	0.50
2:H:42:PHE:CE1	1:I:68:LEU:HD11	2.46	0.50
2:H:226:ASN:O	2:H:230:THR:HG23	2.11	0.50
2:H:247:ILE:HD11	1:I:258:GLN:CG	2.42	0.50
1:I:71:ARG:CB	1:I:76:GLN:HG3	2.41	0.50
1:K:72:ILE:HB	1:K:75:PHE:HD2	1.75	0.50
1:K:225:ILE:HG23	2:L:219:LYS:HZ1	1.75	0.50
2:N:62:GLN:OE1	2:N:64:PRO:HA	2.11	0.50
2:N:218:SER:HB2	1:O:238:LEU:HD21	1.93	0.50
1:O:281:ASN:O	1:O:287:PHE:CB	2.60	0.50
1:W:217:ALA:HA	1:W:220:GLU:HB2	1.93	0.50
2:D:260:LEU:HD12	1:E:272:TYR:CE1	2.46	0.50
2:H:228:LEU:HD11	2:H:236:ILE:HD11	1.92	0.50
2:H:240:LYS:HZ1	1:K:282:LEU:CG	2.22	0.50
1:I:48:ARG:HD2	1:I:64:LEU:O	2.12	0.50
1:I:76:GLN:OE1	1:I:76:GLN:HA	2.11	0.50
1:I:136:ILE:HD12	1:I:168:LEU:HD11	1.93	0.50
2:J:92:LEU:HB2	2:J:127:LEU:HD21	1.92	0.50
2:J:244:ALA:O	2:J:245:GLU:C	2.53	0.50
1:O:154:ILE:HG12	1:O:187:LEU:HD23	1.94	0.50
1:Q:260:ILE:HG23	1:Q:264:ILE:HB	1.93	0.50
2:T:130:VAL:HG12	2:T:146:VAL:HG13	1.93	0.50
2:B:241:LEU:CD2	1:E:283:GLN:NE2	2.75	0.50
1:G:121:TYR:HE1	1:G:126:LEU:HG	1.77	0.50
2:H:96:PHE:CD2	2:H:163:LEU:HD22	2.47	0.50
2:H:196:ALA:O	2:H:200:VAL:HG23	2.11	0.50
1:I:58:VAL:CG2	2:J:34:HIS:HB2	2.41	0.50
1:K:53:ASN:H	2:L:32:ALA:HB2	1.76	0.50
2:N:203:ALA:O	2:N:207:LYS:HG3	2.11	0.50
2:T:197:ARG:O	2:T:201:GLU:OE1	2.29	0.50
2:V:193:ALA:HA	1:W:216:LYS:HA	1.94	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:W:214:VAL:HG13	2:X:212:ILE:HD13	1.93	0.50
2:B:236:ILE:HD13	1:C:250:LYS:HD3	1.92	0.50
2:B:269:GLN:OE1	2:X:269:GLN:NE2	2.45	0.50
2:B:270:LEU:HD11	2:D:271:PRO:CG	2.41	0.50
1:G:156:GLN:HE21	1:G:159:GLN:HB3	1.77	0.50
2:H:54:THR:O	2:H:54:THR:HG22	2.10	0.50
2:H:210:ALA:O	1:I:234:ALA:HB2	2.11	0.50
1:I:120:MET:O	1:I:124:LEU:HB2	2.11	0.50
2:J:250:GLN:HG3	1:K:261:SER:HA	1.94	0.50
1:M:214:VAL:HG21	2:N:205:GLN:HB3	1.94	0.50
1:M:228:ALA:O	1:M:229:GLU:C	2.55	0.50
2:N:74:ARG:NH1	2:N:75:ASN:O	2.44	0.50
2:N:182:ALA:HB1	1:O:205:GLN:CB	2.42	0.50
2:N:247:ILE:HD11	1:O:257:ALA:O	2.11	0.50
2:P:206:GLN:O	2:P:210:ALA:HB3	2.11	0.50
1:U:43:VAL:HG12	1:U:47:HIS:HB2	1.92	0.50
1:U:153:LEU:CB	1:U:187:LEU:HD21	2.41	0.50
1:A:258:GLN:OE1	1:C:282:LEU:HD22	2.12	0.50
1:C:204:GLN:HA	2:D:198:PHE:CE1	2.46	0.50
1:E:235:ALA:HB1	2:F:228:LEU:CD2	2.41	0.50
1:E:274:THR:HG22	1:E:276:ASP:OD1	2.11	0.50
2:H:88:VAL:HG11	2:H:139:LEU:HD13	1.94	0.50
1:I:285:GLU:O	1:I:289:ARG:HG3	2.11	0.50
2:J:37:VAL:HG11	2:J:104:PRO:CG	2.41	0.50
2:J:86:GLN:HB2	2:J:136:ALA:HB2	1.93	0.50
1:K:72:ILE:N	1:K:76:GLN:HB3	2.27	0.50
2:L:214:ALA:HB2	1:M:234:ALA:CB	2.38	0.50
2:L:236:ILE:HD13	1:M:250:LYS:CD	2.37	0.50
1:O:228:ALA:O	1:O:232:ALA:HB3	2.11	0.50
2:P:139:LEU:CD2	2:P:146:VAL:HG11	2.41	0.50
2:T:126:ILE:HD13	2:T:154:LEU:HA	1.93	0.50
2:T:200:VAL:HG22	1:U:223:GLN:HB2	1.92	0.50
2:X:221:ALA:HA	2:X:224:ILE:HG22	1.93	0.50
1:C:221:GLN:OE1	2:D:212:ILE:HG23	2.12	0.50
1:C:270:ARG:O	2:D:258:THR:HA	2.11	0.50
1:I:81:TYR:CE1	1:I:121:TYR:CD1	3.00	0.50
2:J:45:VAL:HG21	2:J:107:PHE:CD2	2.47	0.50
2:L:76:VAL:HB	2:L:123:THR:HG21	1.93	0.50
2:L:76:VAL:HG11	2:L:123:THR:HB	1.94	0.50
2:N:90:ILE:HA	2:N:172:HIS:O	2.12	0.50
1:O:71:ARG:HB2	1:O:76:GLN:CG	2.40	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:O:236:LYS:HA	2:P:227:SER:OG	2.11	0.50
1:O:249:ILE:HD13	2:P:237:GLU:HB2	1.91	0.50
2:P:32:ALA:HB3	2:P:70:ARG:NH2	2.27	0.50
2:P:206:GLN:O	2:P:207:LYS:C	2.55	0.50
1:U:221:GLN:OE1	2:V:216:GLY:N	2.45	0.50
2:V:88:VAL:HG12	2:V:90:ILE:HG13	1.92	0.50
1:W:235:ALA:HB2	2:X:235:LEU:HB2	1.94	0.50
1:A:199:ALA:O	1:A:203:ALA:HB2	2.12	0.50
2:B:265:SER:O	2:X:267:LEU:CD1	2.59	0.50
2:D:219:LYS:HA	2:D:222:GLU:OE1	2.11	0.50
2:D:244:ALA:HB1	1:E:278:LEU:CD2	2.41	0.50
2:D:261:PRO:HA	1:E:275:ALA:N	2.26	0.50
1:E:235:ALA:HA	2:F:235:LEU:CB	2.41	0.50
1:E:235:ALA:HA	2:F:235:LEU:HB3	1.93	0.50
1:E:260:ILE:HD11	2:F:244:ALA:HB3	1.92	0.50
2:H:37:VAL:HG23	2:H:67:PHE:CE2	2.47	0.50
1:I:41:PHE:N	1:I:71:ARG:HG2	2.27	0.50
1:I:235:ALA:HB3	2:J:224:ILE:HD13	1.94	0.50
2:N:27:LEU:CD1	2:N:54:THR:HG21	2.42	0.50
2:N:224:ILE:HG21	1:O:248:TYR:HD1	1.76	0.50
1:O:214:VAL:HG13	2:P:209:ALA:HB2	1.94	0.50
1:S:79:ILE:HG21	1:S:126:LEU:HD22	1.94	0.50
2:T:139:LEU:CD2	2:T:146:VAL:HG11	2.42	0.50
1:U:51:PHE:CG	1:U:64:LEU:HD11	2.47	0.50
1:U:154:ILE:CG1	1:U:187:LEU:HD23	2.42	0.50
1:U:253:LYS:CE	1:W:279:VAL:HG22	2.42	0.50
1:C:261:SER:HB3	1:C:264:ILE:HD12	1.93	0.50
1:C:272:TYR:HB2	2:D:261:PRO:CD	2.42	0.50
2:H:58:ILE:HD12	2:H:61:VAL:CG1	2.41	0.50
1:K:52:PHE:O	1:K:76:GLN:OE1	2.30	0.50
1:O:279:VAL:O	1:O:282:LEU:HA	2.12	0.50
2:R:28:TYR:CD1	2:R:57:LEU:HD23	2.43	0.50
2:R:119:LEU:HB2	2:R:120:PRO:HD3	1.94	0.50
1:A:281:ASN:HD22	1:W:275:ALA:HB3	1.77	0.49
1:C:269:ASN:HD22	2:D:257:ILE:C	2.20	0.49
1:E:238:LEU:HD22	2:F:238:LEU:HD12	1.93	0.49
1:G:168:LEU:HD23	1:G:179:LEU:HD11	1.94	0.49
1:G:222:ARG:HA	1:G:225:ILE:HG12	1.93	0.49
1:G:228:ALA:HB1	2:H:220:ALA:HB2	1.93	0.49
2:H:130:VAL:HG13	2:H:149:GLN:OE1	2.11	0.49
2:H:240:LYS:CG	1:K:282:LEU:HD23	2.41	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:I:55:ILE:HD13	2:J:28:TYR:O	2.11	0.49
2:J:37:VAL:O	2:J:62:GLN:HG2	2.12	0.49
1:K:281:ASN:O	1:K:287:PHE:CB	2.60	0.49
2:L:31:ASP:O	2:L:32:ALA:C	2.54	0.49
2:L:267:LEU:HD23	2:L:268:LEU:N	2.27	0.49
2:N:197:ARG:O	2:N:201:GLU:OE1	2.29	0.49
1:O:47:HIS:CD2	1:O:80:ILE:HG22	2.46	0.49
1:Q:140:VAL:HG21	1:Q:168:LEU:CD1	2.42	0.49
2:R:35:ARG:HD2	2:R:100:ALA:HB1	1.94	0.49
1:S:263:THR:HG21	2:T:245:GLU:HB3	1.93	0.49
2:V:224:ILE:O	2:V:228:LEU:HG	2.12	0.49
1:A:273:LEU:HD12	2:X:258:THR:O	2.12	0.49
1:A:283:GLN:O	1:W:276:ASP:HB2	2.11	0.49
2:D:250:GLN:NE2	1:E:261:SER:HB2	2.28	0.49
2:D:251:LEU:HD21	1:G:280:LEU:HD22	1.92	0.49
2:H:118:VAL:HG13	2:H:161:PHE:HB2	1.94	0.49
2:J:146:VAL:HG12	2:J:170:LEU:HD11	1.94	0.49
1:K:120:MET:O	1:K:124:LEU:HB2	2.11	0.49
2:L:235:LEU:O	2:L:235:LEU:HG	2.11	0.49
1:M:239:GLY:HA2	2:N:234:GLY:HA3	1.94	0.49
1:M:253:LYS:O	1:M:257:ALA:HB2	2.13	0.49
2:N:67:PHE:CG	2:N:103:LEU:HD22	2.47	0.49
2:N:221:ALA:HA	1:O:248:TYR:CB	2.43	0.49
2:P:123:THR:O	2:P:127:LEU:HD13	2.11	0.49
1:Q:68:LEU:HG	1:Q:68:LEU:O	2.12	0.49
1:Q:228:ALA:O	1:Q:229:GLU:C	2.55	0.49
2:R:260:LEU:HD22	2:R:268:LEU:CD1	2.35	0.49
1:S:273:LEU:HD22	1:U:280:LEU:HD13	1.93	0.49
2:T:125:GLU:HA	1:U:158:ALA:HA	1.93	0.49
1:U:228:ALA:O	1:U:229:GLU:C	2.55	0.49
2:V:260:LEU:H	1:W:275:ALA:HB2	1.77	0.49
2:B:270:LEU:HD12	2:B:270:LEU:C	2.38	0.49
2:D:262:ALA:HB2	2:F:264:GLN:HE21	1.76	0.49
1:I:116:GLU:C	1:I:118:PRO:HD2	2.37	0.49
2:N:239:ARG:HD3	1:O:254:ILE:HG23	1.94	0.49
1:Q:273:LEU:HD22	1:S:280:LEU:HD13	1.94	0.49
2:T:41:ARG:NE	1:U:69:HIS:NE2	2.60	0.49
1:U:41:PHE:CD1	1:U:43:VAL:CG2	2.95	0.49
1:U:41:PHE:CD1	1:U:41:PHE:O	2.65	0.49
1:U:102:VAL:HG12	1:U:104:ILE:HG13	1.93	0.49
1:W:196:ALA:HA	2:X:198:PHE:CZ	2.47	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:W:213:LEU:O	1:W:216:LYS:HG2	2.11	0.49
1:C:232:ALA:HB2	2:D:224:ILE:HG12	1.94	0.49
2:H:239:ARG:HB3	1:I:254:ILE:HD13	1.93	0.49
1:I:164:ILE:HD12	1:I:184:ILE:CD1	2.43	0.49
2:J:151:SER:HA	2:J:168:VAL:HG21	1.93	0.49
1:K:50:ILE:HG21	1:K:117:LEU:C	2.37	0.49
1:M:122:GLN:HG3	2:N:52:GLU:OE1	2.11	0.49
2:N:90:ILE:HD11	2:N:139:LEU:CD1	2.42	0.49
1:O:221:GLN:HB2	2:P:212:ILE:CG2	2.40	0.49
2:P:34:HIS:ND1	2:P:66:ILE:HG22	2.28	0.49
2:R:80:THR:HG23	2:R:131:VAL:HG11	1.94	0.49
1:U:54:ARG:HA	2:V:30:VAL:O	2.12	0.49
2:X:237:GLU:O	2:X:241:LEU:HD23	2.12	0.49
2:D:268:LEU:O	2:F:267:LEU:HD23	2.12	0.49
1:G:210:ALA:HB1	2:H:202:LYS:HG2	1.93	0.49
1:G:281:ASN:HB2	1:G:287:PHE:CD1	2.48	0.49
2:H:203:ALA:HA	2:H:206:GLN:CG	2.43	0.49
2:H:244:ALA:O	2:H:248:ALA:HB3	2.11	0.49
2:H:246:ASP:O	2:H:249:TYR:HB3	2.13	0.49
1:I:51:PHE:HA	1:I:76:GLN:OE1	2.12	0.49
2:J:90:ILE:HD13	2:J:131:VAL:HG21	1.95	0.49
2:J:224:ILE:CG2	1:K:248:TYR:HB2	2.42	0.49
1:K:79:ILE:HG21	1:K:126:LEU:HD11	1.94	0.49
1:K:152:GLN:HA	1:K:155:THR:OG1	2.12	0.49
1:M:276:ASP:OD2	1:M:290:GLY:HA3	2.11	0.49
2:N:92:LEU:HD12	2:N:169:SER:O	2.12	0.49
1:Q:235:ALA:HB2	2:R:235:LEU:HD23	1.94	0.49
1:W:58:VAL:HB	1:W:122:GLN:OE1	2.13	0.49
1:A:221:GLN:HB2	2:B:212:ILE:HG13	1.94	0.49
2:B:207:LYS:HG3	1:C:226:VAL:HG13	1.94	0.49
2:D:207:LYS:HE2	1:E:229:GLU:CD	2.37	0.49
1:G:277:ASN:HA	1:I:280:LEU:O	2.13	0.49
1:I:52:PHE:CG	1:I:121:TYR:HE2	2.30	0.49
1:I:157:ARG:CZ	1:I:184:ILE:HG22	2.42	0.49
2:J:83:LYS:HD2	1:K:155:THR:HG21	1.93	0.49
1:K:108:VAL:HG11	1:K:133:LEU:CD2	2.43	0.49
2:L:54:THR:HG22	2:L:56:PHE:CD2	2.48	0.49
2:L:74:ARG:NH1	2:L:75:ASN:O	2.45	0.49
2:L:244:ALA:O	2:L:248:ALA:CB	2.54	0.49
2:N:41:ARG:HD2	1:O:69:HIS:HB2	1.94	0.49
1:Q:53:ASN:H	1:Q:58:VAL:HG13	1.75	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:T:78:VAL:HG12	2:T:128:LYS:HE2	1.94	0.49
2:V:259:TYR:CD1	1:W:275:ALA:HA	2.48	0.49
2:B:196:ALA:HA	2:B:199:VAL:HB	1.94	0.49
2:B:209:ALA:O	2:B:212:ILE:HG22	2.13	0.49
2:F:267:LEU:O	2:F:268:LEU:C	2.55	0.49
1:I:54:ARG:HD3	2:J:64:PRO:HB2	1.94	0.49
1:I:73:PRO:C	1:I:75:PHE:H	2.20	0.49
1:I:222:ARG:O	1:I:226:VAL:HG12	2.12	0.49
1:I:242:LEU:HD13	2:J:234:GLY:O	2.12	0.49
2:J:27:LEU:HD12	2:J:28:TYR:H	1.78	0.49
2:J:29:ASN:OD1	2:J:29:ASN:C	2.54	0.49
1:K:104:ILE:HD13	1:K:145:VAL:HG21	1.94	0.49
2:L:105:ARG:O	2:L:108:THR:OG1	2.27	0.49
1:M:49:ALA:O	1:M:64:LEU:HB2	2.11	0.49
2:N:130:VAL:HG21	2:N:150:VAL:HG22	1.95	0.49
2:N:224:ILE:CG2	1:O:248:TYR:HB2	2.43	0.49
1:O:264:ILE:HG22	1:O:267:SER:HB2	1.95	0.49
2:P:262:ALA:HB3	1:Q:289:ARG:NH2	2.27	0.49
1:U:41:PHE:HD2	1:U:71:ARG:HB3	1.78	0.49
1:U:165:ARG:CZ	1:U:182:VAL:HB	2.43	0.49
2:X:202:LYS:HA	2:X:205:GLN:OE1	2.12	0.49
1:A:269:ASN:HB2	1:A:271:ILE:HG23	1.95	0.49
2:D:203:ALA:C	1:E:226:VAL:HG11	2.37	0.49
1:E:250:LYS:HA	1:E:253:LYS:HD3	1.94	0.49
1:E:260:ILE:O	1:E:264:ILE:HG13	2.12	0.49
1:I:48:ARG:HB3	1:I:117:LEU:HD11	1.94	0.49
1:I:150:ALA:HB1	1:I:189:PHE:CE2	2.47	0.49
2:J:32:ALA:O	2:J:70:ARG:NH2	2.46	0.49
2:J:46:GLN:O	2:J:104:PRO:HB3	2.11	0.49
2:J:122:ILE:HG22	2:J:157:ARG:CG	2.42	0.49
2:J:268:LEU:HD22	2:J:270:LEU:HD21	1.94	0.49
1:K:79:ILE:O	1:K:81:TYR:CD1	2.66	0.49
1:K:189:PHE:HB2	1:K:193:TYR:CD1	2.47	0.49
1:K:292:ASP:OD2	1:K:295:ILE:HD12	2.13	0.49
2:L:218:SER:O	2:L:221:ALA:HB3	2.12	0.49
1:M:243:SER:O	1:O:294:LEU:CB	2.61	0.49
2:N:31:ASP:O	2:N:32:ALA:C	2.55	0.49
2:N:85:LEU:HD11	1:O:154:ILE:HD12	1.95	0.49
1:O:90:ILE:HG22	1:O:91:SER:N	2.28	0.49
2:P:32:ALA:HB3	2:P:70:ARG:HH21	1.77	0.49
2:R:38:ILE:HG12	2:R:46:GLN:NE2	2.28	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:S:100:GLN:O	1:S:102:VAL:HG23	2.13	0.49
1:U:49:ALA:CB	1:U:78:PRO:HB2	2.43	0.49
1:U:140:VAL:HG21	1:U:168:LEU:HD13	1.93	0.49
2:V:88:VAL:HG22	2:V:175:PHE:HE1	1.76	0.49
1:W:145:VAL:HG13	1:W:153:LEU:CD1	2.42	0.49
1:W:157:ARG:HH21	1:W:184:ILE:HG22	1.75	0.49
1:W:165:ARG:CZ	1:W:182:VAL:HB	2.43	0.49
1:A:274:THR:HG22	2:X:261:PRO:HD3	1.95	0.49
1:I:51:PHE:O	2:J:31:ASP:OD1	2.30	0.49
2:J:35:ARG:CD	2:J:100:ALA:HB1	2.43	0.49
1:K:52:PHE:HA	2:L:32:ALA:CB	2.42	0.49
1:K:224:LYS:O	1:K:228:ALA:HB3	2.12	0.49
1:K:273:LEU:CD1	1:M:280:LEU:HB3	2.43	0.49
2:L:30:VAL:HG21	2:L:53:GLY:C	2.37	0.49
2:R:65:ILE:HD12	2:R:112:GLU:HG2	1.94	0.49
2:R:122:ILE:CD1	2:R:158:ALA:HB2	2.43	0.49
1:S:41:PHE:CE2	1:S:43:VAL:HG22	2.48	0.49
1:S:161:SER:O	1:S:165:ARG:HG2	2.13	0.49
2:T:256:ASN:CB	1:U:270:ARG:HE	2.26	0.49
1:U:51:PHE:C	1:U:76:GLN:OE1	2.56	0.49
1:U:71:ARG:HA	1:U:76:GLN:HG2	1.95	0.49
2:V:37:VAL:HG12	2:V:38:ILE:N	2.26	0.49
2:X:261:PRO:HG2	2:X:266:VAL:HG21	1.95	0.49
2:B:267:LEU:O	2:B:268:LEU:C	2.55	0.49
1:C:269:ASN:HA	2:D:257:ILE:O	2.12	0.49
1:C:287:PHE:CD2	1:C:288:THR:HG23	2.48	0.49
2:D:258:THR:CG2	1:E:271:ILE:O	2.61	0.49
2:F:267:LEU:C	2:H:267:LEU:HB3	2.38	0.49
1:I:218:LYS:HD2	2:J:212:ILE:CD1	2.42	0.49
1:I:273:LEU:HA	1:K:281:ASN:OD1	2.13	0.49
2:J:122:ILE:HG22	2:J:157:ARG:HG2	1.94	0.49
2:J:146:VAL:O	2:J:150:VAL:HG23	2.12	0.49
1:K:51:PHE:HB3	1:K:53:ASN:OD1	2.13	0.49
2:L:221:ALA:HA	1:M:248:TYR:HB2	1.95	0.49
1:M:54:ARG:HB3	2:N:53:GLY:HA2	1.93	0.49
1:M:156:GLN:OE1	1:M:160:VAL:HG23	2.13	0.49
2:N:50:VAL:HG13	2:N:55:HIS:CB	2.39	0.49
1:Q:237:MET:HA	1:Q:240:GLU:OE1	2.12	0.49
2:T:236:ILE:HG23	1:U:254:ILE:HD12	1.95	0.49
1:W:217:ALA:HB1	2:X:212:ILE:O	2.13	0.49
2:B:247:ILE:HG23	2:B:251:LEU:HD11	1.95	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:260:ILE:O	1:C:264:ILE:HG13	2.13	0.48
2:D:247:ILE:HD13	1:G:280:LEU:HD11	1.95	0.48
1:G:225:ILE:HD13	2:H:219:LYS:NZ	2.27	0.48
2:H:71:SER:HA	2:H:97:ARG:HB3	1.95	0.48
1:I:41:PHE:CE1	1:I:64:LEU:HD13	2.46	0.48
1:I:242:LEU:HD13	1:I:249:ILE:HD12	1.94	0.48
1:K:223:GLN:OE1	1:K:227:GLN:HB2	2.13	0.48
1:K:273:LEU:HD13	1:M:280:LEU:H	1.78	0.48
1:M:51:PHE:CD1	1:M:64:LEU:HD11	2.47	0.48
1:O:156:GLN:HE21	1:O:159:GLN:HB3	1.77	0.48
1:O:252:ARG:O	1:O:253:LYS:C	2.55	0.48
2:P:129:SER:CB	1:Q:158:ALA:HB2	2.43	0.48
1:Q:52:PHE:N	1:Q:76:GLN:HE22	2.11	0.48
2:R:45:VAL:HG11	2:R:107:PHE:HB3	1.95	0.48
2:R:92:LEU:HD22	2:R:127:LEU:HD11	1.95	0.48
2:R:126:ILE:HD13	2:R:153:ASP:C	2.38	0.48
2:R:201:GLU:O	2:R:205:GLN:OE1	2.30	0.48
1:U:72:ILE:H	1:U:72:ILE:HD12	1.78	0.48
1:U:79:ILE:O	1:U:81:TYR:CD1	2.66	0.48
2:V:88:VAL:HG11	2:V:139:LEU:CD1	2.40	0.48
1:W:32:VAL:O	1:W:36:VAL:HG23	2.12	0.48
1:W:40:VAL:HG13	1:W:40:VAL:O	2.12	0.48
1:W:281:ASN:O	1:W:287:PHE:CB	2.61	0.48
2:B:243:ALA:HB1	1:C:258:GLN:HG3	1.95	0.48
2:D:218:SER:O	2:D:221:ALA:HB3	2.13	0.48
1:G:52:PHE:CZ	2:H:30:VAL:O	2.65	0.48
1:G:222:ARG:O	1:G:225:ILE:HB	2.12	0.48
1:G:264:ILE:O	1:G:264:ILE:HG22	2.13	0.48
1:I:72:ILE:HB	1:I:75:PHE:HB3	1.95	0.48
2:J:50:VAL:HG12	2:J:55:HIS:HB3	1.95	0.48
2:L:31:ASP:O	2:L:34:HIS:CD2	2.66	0.48
1:M:221:GLN:CB	2:N:212:ILE:HG22	2.43	0.48
1:O:63:ILE:HG23	1:O:114:ALA:O	2.13	0.48
1:O:290:GLY:O	1:Q:283:GLN:HB3	2.13	0.48
2:T:88:VAL:HG22	2:T:175:PHE:CE1	2.48	0.48
2:T:224:ILE:CG1	1:U:251:LEU:HD23	2.43	0.48
1:U:71:ARG:HA	1:U:76:GLN:CG	2.42	0.48
1:A:254:ILE:HG23	1:C:282:LEU:HD13	1.93	0.48
1:C:232:ALA:O	1:C:235:ALA:HB3	2.14	0.48
1:G:62:THR:HG22	1:G:64:LEU:HD21	1.94	0.48
1:G:154:ILE:HD13	1:G:187:LEU:HD23	1.95	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:I:43:VAL:CG1	1:I:47:HIS:HB3	2.43	0.48
1:I:50:ILE:HB	1:I:117:LEU:HB2	1.95	0.48
1:I:273:LEU:HD22	1:K:280:LEU:HB2	1.94	0.48
1:K:108:VAL:HG11	1:K:133:LEU:HD22	1.94	0.48
1:K:223:GLN:O	1:K:226:VAL:HG12	2.13	0.48
2:L:270:LEU:HD13	2:N:258:THR:HG21	1.93	0.48
1:M:53:ASN:O	1:M:58:VAL:HG22	2.13	0.48
2:N:40:ASP:OD2	2:N:43:ARG:NH1	2.47	0.48
1:O:216:LYS:HA	1:O:219:GLN:HG2	1.94	0.48
1:O:229:GLU:O	1:O:233:GLU:HB2	2.13	0.48
2:P:38:ILE:HD12	2:P:57:LEU:CA	2.41	0.48
2:P:80:THR:HG21	2:P:90:ILE:HD12	1.94	0.48
1:S:51:PHE:CE1	1:S:64:LEU:HD11	2.48	0.48
1:S:228:ALA:O	1:S:229:GLU:C	2.55	0.48
1:U:72:ILE:N	1:U:76:GLN:HB3	2.28	0.48
1:A:221:GLN:HE22	2:B:215:GLU:CB	2.25	0.48
1:A:237:MET:SD	1:A:237:MET:C	2.97	0.48
1:A:238:LEU:HD21	2:X:221:ALA:HB1	1.95	0.48
1:A:249:ILE:HG21	1:C:294:LEU:CG	2.40	0.48
1:C:211:GLN:O	1:C:214:VAL:HB	2.13	0.48
1:C:253:LYS:HD2	1:E:291:SER:HB2	1.95	0.48
1:G:221:GLN:HB2	2:H:212:ILE:CG2	2.43	0.48
2:H:38:ILE:HA	2:H:62:GLN:CG	2.44	0.48
2:H:91:THR:HB	2:H:172:HIS:HB3	1.95	0.48
2:H:203:ALA:C	1:I:226:VAL:HG22	2.39	0.48
1:I:56:GLY:H	2:J:36:ALA:HB3	1.77	0.48
1:I:72:ILE:H	1:I:76:GLN:HB3	1.77	0.48
1:I:118:PRO:HG3	2:J:32:ALA:HB3	1.95	0.48
1:I:165:ARG:CD	1:I:182:VAL:HB	2.44	0.48
1:I:228:ALA:O	1:I:229:GLU:C	2.56	0.48
1:I:249:ILE:O	1:I:249:ILE:HG22	2.13	0.48
2:J:27:LEU:HD13	2:J:56:PHE:CE1	2.48	0.48
1:K:242:LEU:HD11	2:L:238:LEU:HD22	1.96	0.48
2:L:50:VAL:HG13	2:L:55:HIS:CB	2.43	0.48
1:M:249:ILE:CG2	2:N:241:LEU:HD23	2.43	0.48
1:M:250:LYS:CG	1:O:279:VAL:HG22	2.41	0.48
2:N:233:ASP:HB3	2:N:236:ILE:HB	1.95	0.48
2:P:54:THR:HG22	2:P:56:PHE:CE1	2.47	0.48
2:P:113:ASP:HB2	1:Q:85:ALA:HB3	1.94	0.48
1:Q:41:PHE:HB3	1:Q:71:ARG:HD3	1.94	0.48
1:Q:217:ALA:O	1:Q:220:GLU:HB2	2.13	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:R:88:VAL:HG11	2:R:139:LEU:CD1	2.43	0.48
1:S:101:MET:HE3	2:T:180:THR:OG1	2.13	0.48
2:V:78:VAL:HG13	2:V:124:THR:HG23	1.95	0.48
1:W:264:ILE:CG2	1:W:264:ILE:O	2.62	0.48
1:A:237:MET:HG2	2:X:218:SER:OG	2.13	0.48
1:C:277:ASN:O	1:E:283:GLN:N	2.46	0.48
2:D:271:PRO:HD2	1:E:270:ARG:HD3	1.94	0.48
2:F:207:LYS:HG3	2:F:208:LYS:N	2.27	0.48
1:G:274:THR:HG22	1:G:275:ALA:N	2.22	0.48
1:I:41:PHE:CD2	1:I:49:ALA:HB3	2.48	0.48
1:I:106:LEU:HD22	1:I:141:LEU:HD21	1.96	0.48
2:J:32:ALA:HB3	2:J:70:ARG:HH21	1.78	0.48
1:K:165:ARG:CZ	1:K:182:VAL:HB	2.44	0.48
2:L:228:LEU:HD13	2:L:236:ILE:HD11	1.96	0.48
2:N:42:PHE:HD1	1:O:69:HIS:CE1	2.32	0.48
2:N:43:ARG:HE	2:N:46:GLN:CA	2.26	0.48
2:N:103:LEU:HD23	2:N:106:ILE:HD11	1.96	0.48
1:O:221:GLN:O	1:O:225:ILE:HG12	2.13	0.48
2:P:35:ARG:CD	2:P:100:ALA:HB1	2.43	0.48
2:P:40:ASP:OD2	2:P:42:PHE:CZ	2.66	0.48
2:R:139:LEU:HD23	2:R:146:VAL:HG21	1.96	0.48
1:W:206:GLU:O	2:X:205:GLN:HG2	2.14	0.48
1:A:248:TYR:HB2	2:X:225:ALA:HA	1.96	0.48
2:B:247:ILE:HG13	1:C:258:GLN:HE22	1.79	0.48
2:D:235:LEU:HG	2:D:239:ARG:HG2	1.95	0.48
2:D:237:GLU:CB	1:E:294:LEU:HD21	2.43	0.48
2:D:246:ASP:O	2:D:250:GLN:HG3	2.13	0.48
1:E:264:ILE:HA	1:E:267:SER:CB	2.43	0.48
1:G:144:VAL:HG11	1:G:164:ILE:HG12	1.94	0.48
1:G:161:SER:HA	1:G:184:ILE:HD11	1.96	0.48
2:H:233:ASP:HA	2:H:236:ILE:HD12	1.95	0.48
2:H:235:LEU:HG	2:H:235:LEU:O	2.12	0.48
1:I:94:THR:HG21	1:I:145:VAL:HB	1.95	0.48
2:J:268:LEU:HB3	2:J:270:LEU:CD2	2.43	0.48
2:L:211:ILE:HA	1:M:233:GLU:OE2	2.12	0.48
2:L:256:ASN:HD22	1:M:270:ARG:HE	1.61	0.48
1:M:78:PRO:O	1:M:79:ILE:C	2.56	0.48
1:M:90:ILE:HB	1:M:137:VAL:HG11	1.95	0.48
1:O:144:VAL:HG21	1:O:164:ILE:CG1	2.43	0.48
2:P:54:THR:HG22	2:P:56:PHE:HE1	1.79	0.48
1:Q:68:LEU:H	1:Q:68:LEU:HD23	1.78	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:R:80:THR:HG21	2:R:131:VAL:HG21	1.95	0.48
1:W:128:TYR:HE1	1:W:177:LEU:HD21	1.73	0.48
2:B:225:ALA:HB2	1:C:242:LEU:HD21	1.95	0.48
2:B:228:LEU:HD22	2:B:236:ILE:HG13	1.95	0.48
1:C:225:ILE:O	1:C:229:GLU:CB	2.61	0.48
1:G:54:ARG:O	2:H:54:THR:N	2.46	0.48
2:H:233:ASP:CG	2:H:236:ILE:HD12	2.38	0.48
2:H:235:LEU:HD12	2:H:238:LEU:CB	2.40	0.48
1:I:155:THR:C	1:I:157:ARG:H	2.20	0.48
2:J:217:ASP:HB3	1:K:238:LEU:HD21	1.95	0.48
1:K:106:LEU:HD22	1:K:141:LEU:HD21	1.96	0.48
2:L:260:LEU:HD12	2:N:259:TYR:HB2	1.94	0.48
1:M:157:ARG:HA	1:M:160:VAL:HB	1.95	0.48
1:M:250:LYS:HG2	1:O:279:VAL:CG2	2.41	0.48
1:O:52:PHE:O	1:O:76:GLN:OE1	2.31	0.48
1:Q:52:PHE:CD1	1:Q:121:TYR:CD2	3.02	0.48
2:R:260:LEU:HD12	1:S:274:THR:HG23	1.94	0.48
2:T:63:LYS:O	2:T:65:ILE:HG13	2.14	0.48
1:U:151:SER:O	1:U:155:THR:HG23	2.12	0.48
1:W:213:LEU:HD22	2:X:209:ALA:HB1	1.96	0.48
1:C:269:ASN:HD21	2:D:251:LEU:HB3	1.78	0.48
2:F:257:ILE:HA	1:G:272:TYR:HA	1.96	0.48
2:F:259:TYR:HB3	1:G:277:ASN:HB3	1.95	0.48
1:G:274:THR:HG23	2:H:262:ALA:N	2.29	0.48
2:H:126:ILE:HD12	2:H:154:LEU:HD13	1.96	0.48
2:H:197:ARG:O	2:H:201:GLU:OE1	2.32	0.48
2:H:261:PRO:HG2	2:H:266:VAL:HG21	1.95	0.48
1:I:263:THR:HG23	2:J:249:TYR:CD2	2.49	0.48
1:K:233:GLU:O	1:K:236:LYS:HB2	2.14	0.48
2:L:90:ILE:CD1	2:L:131:VAL:HG21	2.44	0.48
2:L:233:ASP:HB3	2:L:236:ILE:HB	1.95	0.48
2:N:41:ARG:HE	1:O:66:GLU:C	2.22	0.48
2:N:218:SER:HB2	1:O:238:LEU:CD2	2.44	0.48
2:P:123:THR:HA	2:P:154:LEU:HD13	1.96	0.48
1:S:264:ILE:O	1:S:264:ILE:HG22	2.14	0.48
1:U:48:ARG:CG	1:U:83:ILE:HD13	2.43	0.48
1:U:49:ALA:HA	1:U:81:TYR:CD2	2.49	0.48
2:X:235:LEU:O	2:X:239:ARG:HB2	2.14	0.48
2:B:251:LEU:O	2:B:257:ILE:HD13	2.14	0.48
2:B:270:LEU:HA	1:C:272:TYR:OH	2.14	0.48
2:D:251:LEU:HD22	2:D:257:ILE:CG2	2.44	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:210:ALA:C	2:F:205:GLN:HB3	2.38	0.48
1:E:267:SER:OG	1:E:269:ASN:CG	2.57	0.48
2:F:204:GLU:HG3	1:G:226:VAL:HG11	1.91	0.48
1:G:210:ALA:O	1:G:214:VAL:HG23	2.14	0.48
1:G:224:LYS:O	1:G:225:ILE:C	2.56	0.48
1:I:232:ALA:HA	1:I:235:ALA:HB3	1.96	0.48
1:I:242:LEU:O	1:K:294:LEU:HD12	2.13	0.48
2:J:206:GLN:HE22	1:K:230:GLY:HA3	1.77	0.48
2:L:78:VAL:HG21	2:L:127:LEU:HB2	1.95	0.48
1:M:53:ASN:HB2	1:M:59:GLN:OE1	2.14	0.48
2:N:207:LYS:CE	1:O:226:VAL:HG11	2.44	0.48
1:O:109:LEU:O	1:O:179:LEU:HD22	2.14	0.48
1:O:276:ASP:HB2	1:Q:282:LEU:HD21	1.95	0.48
2:P:217:ASP:O	2:P:220:ALA:HB3	2.14	0.48
1:Q:63:ILE:HD13	1:Q:115:GLN:C	2.38	0.48
2:T:87:ASN:OD1	1:U:154:ILE:HD13	2.13	0.48
1:U:52:PHE:N	1:U:76:GLN:OE1	2.46	0.48
2:V:239:ARG:HD3	1:W:251:LEU:HD11	1.95	0.48
1:A:269:ASN:O	1:A:269:ASN:OD1	2.32	0.48
1:A:274:THR:CB	2:X:260:LEU:HD23	2.44	0.48
2:B:256:ASN:CB	1:C:270:ARG:HG2	2.44	0.48
2:D:215:GLU:HG2	1:E:237:MET:SD	2.54	0.48
1:E:277:ASN:ND2	1:G:281:ASN:C	2.72	0.48
2:H:37:VAL:HG21	2:H:104:PRO:CD	2.44	0.48
1:I:135:SER:HB2	2:J:93:ARG:HH11	1.79	0.48
1:K:54:ARG:NE	2:L:29:ASN:HA	2.28	0.48
2:L:220:ALA:O	2:L:223:LEU:HG	2.13	0.48
2:N:61:VAL:HG23	1:O:67:GLY:HA3	1.95	0.48
1:O:274:THR:HG21	1:Q:281:ASN:HA	1.96	0.48
2:P:221:ALA:HA	1:Q:248:TYR:CD1	2.49	0.48
1:S:63:ILE:HG21	1:S:114:ALA:O	2.11	0.48
1:S:242:LEU:HD13	1:S:249:ILE:CG1	2.44	0.48
1:S:253:LYS:O	1:S:257:ALA:HB2	2.13	0.48
1:U:236:LYS:CA	2:V:227:SER:OG	2.62	0.48
1:A:277:ASN:N	2:X:260:LEU:O	2.46	0.47
2:B:235:LEU:HD11	2:B:239:ARG:HG2	1.95	0.47
1:E:274:THR:H	1:E:277:ASN:ND2	2.12	0.47
1:G:264:ILE:CG2	1:G:264:ILE:O	2.62	0.47
2:H:69:CYS:HA	2:H:98:PRO:HG2	1.96	0.47
2:H:74:ARG:CB	2:H:119:LEU:HD13	2.43	0.47
1:I:51:PHE:HD2	2:J:30:VAL:O	1.98	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:I:71:ARG:CB	1:I:76:GLN:CG	2.92	0.47
1:I:279:VAL:HA	1:I:287:PHE:CZ	2.49	0.47
2:J:63:LYS:O	2:J:64:PRO:C	2.57	0.47
2:L:92:LEU:HD22	2:L:150:VAL:CG1	2.44	0.47
2:L:239:ARG:CG	1:M:254:ILE:HG21	2.44	0.47
1:O:106:LEU:HD23	1:O:137:VAL:HG13	1.96	0.47
1:O:228:ALA:O	1:O:229:GLU:C	2.55	0.47
1:Q:94:THR:HG22	1:Q:95:GLY:N	2.29	0.47
2:R:244:ALA:O	2:R:248:ALA:HB3	2.13	0.47
1:U:39:SER:O	1:U:71:ARG:N	2.47	0.47
1:U:54:ARG:O	2:V:53:GLY:HA2	2.14	0.47
1:U:94:THR:HG21	1:U:145:VAL:HB	1.96	0.47
2:V:204:GLU:CD	1:W:226:VAL:HG11	2.39	0.47
2:V:221:ALA:O	2:V:222:GLU:C	2.57	0.47
1:W:264:ILE:O	1:W:264:ILE:HG22	2.14	0.47
1:A:249:ILE:HG21	1:C:294:LEU:CD2	2.44	0.47
2:D:268:LEU:HD22	2:F:266:VAL:HG13	1.96	0.47
2:H:35:ARG:HB3	2:H:50:VAL:O	2.13	0.47
2:H:222:GLU:HG3	1:I:241:ALA:CB	2.44	0.47
2:H:243:ALA:HB1	2:H:247:ILE:HB	1.96	0.47
1:I:49:ALA:HA	1:I:81:TYR:CD2	2.49	0.47
2:N:258:THR:H	1:O:272:TYR:HB2	1.78	0.47
1:Q:106:LEU:HD12	1:Q:183:ALA:O	2.14	0.47
2:V:88:VAL:CG1	2:V:173:LEU:HD12	2.44	0.47
2:V:228:LEU:HD13	2:V:236:ILE:CD1	2.44	0.47
1:W:107:ARG:HH12	1:W:185:THR:HG21	1.79	0.47
1:W:252:ARG:HG3	2:X:241:LEU:HD12	1.96	0.47
1:A:221:GLN:HE22	2:B:215:GLU:HB3	1.79	0.47
1:A:265:ALA:HA	2:X:254:SER:CB	2.44	0.47
2:D:235:LEU:HA	2:D:238:LEU:HB2	1.95	0.47
1:E:270:ARG:N	2:F:257:ILE:O	2.47	0.47
1:E:270:ARG:O	2:F:258:THR:HA	2.14	0.47
1:G:213:LEU:O	1:G:216:LYS:HG2	2.15	0.47
1:G:235:ALA:HA	2:H:235:LEU:HD22	1.96	0.47
2:H:76:VAL:HG11	2:H:123:THR:HB	1.96	0.47
2:H:128:LYS:O	2:H:132:ALA:HB2	2.14	0.47
2:H:204:GLU:HA	2:H:207:LYS:HG3	1.95	0.47
2:H:267:LEU:HG	2:J:267:LEU:N	2.29	0.47
2:J:203:ALA:O	2:J:206:GLN:HG3	2.14	0.47
1:K:224:LYS:O	1:K:225:ILE:C	2.57	0.47
2:L:49:VAL:HG22	2:L:50:VAL:O	2.14	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:L:201:GLU:O	2:L:205:GLN:OE1	2.32	0.47
1:M:117:LEU:N	1:M:118:PRO:CD	2.76	0.47
2:N:103:LEU:N	2:N:104:PRO:CD	2.77	0.47
1:O:47:HIS:O	1:O:66:GLU:HB2	2.14	0.47
2:P:63:LYS:O	2:P:64:PRO:C	2.57	0.47
1:Q:257:ALA:HA	1:Q:260:ILE:HB	1.95	0.47
1:U:144:VAL:HG11	1:U:164:ILE:HG13	1.94	0.47
1:U:272:TYR:CE1	2:V:259:TYR:O	2.67	0.47
1:W:213:LEU:HG	1:W:216:LYS:HD3	1.96	0.47
1:A:261:SER:C	2:X:251:LEU:HD21	2.40	0.47
1:A:273:LEU:HD23	2:B:259:TYR:OH	2.14	0.47
2:D:224:ILE:HG22	2:D:228:LEU:CD1	2.45	0.47
2:F:197:ARG:HH22	1:G:222:ARG:HB3	1.79	0.47
1:G:48:ARG:CG	1:G:83:ILE:HD13	2.44	0.47
2:H:268:LEU:HD12	2:J:261:PRO:HG3	1.95	0.47
1:I:41:PHE:HZ	1:I:64:LEU:HB3	1.79	0.47
1:I:122:GLN:NE2	2:J:34:HIS:CE1	2.82	0.47
2:J:88:VAL:HG11	2:J:139:LEU:HD12	1.96	0.47
1:K:135:SER:HB3	2:L:93:ARG:HD3	1.96	0.47
2:L:89:ASN:OD1	2:L:89:ASN:O	2.31	0.47
2:L:267:LEU:HD11	2:P:269:GLN:OE1	2.14	0.47
1:M:74:TRP:O	1:M:74:TRP:CG	2.67	0.47
1:M:243:SER:HA	1:O:294:LEU:HD13	1.95	0.47
1:O:41:PHE:CD1	1:O:43:VAL:HG23	2.49	0.47
1:O:50:ILE:C	1:O:64:LEU:HD12	2.40	0.47
1:O:218:LYS:O	1:O:221:GLN:HB3	2.13	0.47
2:P:157:ARG:HH22	1:Q:162:LEU:HD13	1.79	0.47
2:R:31:ASP:O	2:R:32:ALA:C	2.57	0.47
2:R:39:PHE:CZ	1:S:45:GLY:HA3	2.49	0.47
1:S:136:ILE:HD13	1:S:175:PHE:CE1	2.50	0.47
1:S:167:GLU:O	1:S:171:ARG:HG2	2.15	0.47
1:U:51:PHE:CE2	1:U:70:PHE:CZ	3.03	0.47
1:W:294:LEU:HD22	1:W:299:LYS:CE	2.44	0.47
1:C:272:TYR:HE1	2:X:270:LEU:CD1	2.27	0.47
1:E:273:LEU:HG	1:G:280:LEU:HG	1.96	0.47
1:I:58:VAL:HG12	2:J:31:ASP:O	2.14	0.47
1:K:225:ILE:HD11	2:L:215:GLU:OE1	2.15	0.47
2:L:88:VAL:HG11	2:L:139:LEU:HD13	1.94	0.47
2:L:224:ILE:O	2:L:228:LEU:HG	2.15	0.47
1:M:106:LEU:HD21	1:M:165:ARG:HH22	1.78	0.47
2:N:92:LEU:HD12	2:N:169:SER:C	2.39	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:O:112:PRO:HA	1:O:177:LEU:HD23	1.96	0.47
2:P:260:LEU:HD22	2:P:268:LEU:HD11	1.95	0.47
1:Q:264:ILE:O	1:Q:264:ILE:CG2	2.62	0.47
1:S:281:ASN:O	1:S:287:PHE:CB	2.62	0.47
2:T:139:LEU:HD23	2:T:146:VAL:HG11	1.96	0.47
2:V:211:ILE:HD11	1:W:233:GLU:OE1	2.15	0.47
2:V:255:ARG:HE	1:W:270:ARG:HG2	1.79	0.47
2:V:270:LEU:CD2	2:X:269:GLN:O	2.62	0.47
1:W:104:ILE:HD13	1:W:145:VAL:HG21	1.96	0.47
1:A:226:VAL:HA	1:A:229:GLU:HB3	1.96	0.47
1:E:229:GLU:HG2	2:F:223:LEU:CD1	2.45	0.47
2:F:267:LEU:HB2	2:H:267:LEU:CB	2.44	0.47
1:I:58:VAL:N	2:J:52:GLU:HA	2.30	0.47
1:I:120:MET:HG3	1:I:128:TYR:CG	2.50	0.47
2:J:34:HIS:O	2:J:35:ARG:HG3	2.15	0.47
2:J:219:LYS:O	2:J:222:GLU:HG3	2.15	0.47
1:K:51:PHE:CE1	1:K:64:LEU:HD21	2.50	0.47
1:K:54:ARG:C	1:K:55:ILE:HG13	2.40	0.47
1:K:103:ASN:O	1:K:187:LEU:HD12	2.15	0.47
1:K:167:GLU:O	1:K:171:ARG:HG2	2.15	0.47
1:M:52:PHE:C	1:M:76:GLN:OE1	2.57	0.47
1:O:57:GLY:CA	2:P:52:GLU:HB3	2.44	0.47
2:P:92:LEU:HB2	2:P:127:LEU:HD11	1.97	0.47
2:T:34:HIS:HB3	2:T:66:ILE:HG22	1.97	0.47
2:T:235:LEU:HB3	1:U:251:LEU:HD21	1.96	0.47
2:T:239:ARG:HD3	1:U:254:ILE:HG22	1.96	0.47
1:U:221:GLN:OE1	2:V:215:GLU:HB2	2.15	0.47
2:V:217:ASP:C	2:V:217:ASP:OD1	2.58	0.47
2:V:254:SER:OG	2:V:257:ILE:HD11	2.14	0.47
1:A:226:VAL:HG11	2:X:206:GLN:HE22	1.80	0.47
1:A:235:ALA:HA	2:B:235:LEU:HB3	1.97	0.47
1:A:252:ARG:HD2	1:A:255:ARG:HB3	1.96	0.47
1:A:259:ASN:HA	1:A:262:LYS:HB2	1.96	0.47
1:A:283:GLN:OE1	1:W:291:SER:HB2	2.14	0.47
2:B:257:ILE:HG23	1:C:271:ILE:CD1	2.45	0.47
1:C:269:ASN:ND2	2:D:257:ILE:HB	2.30	0.47
2:D:196:ALA:HB3	1:E:219:GLN:HB2	1.95	0.47
2:D:238:LEU:O	2:D:242:GLU:HB2	2.14	0.47
1:E:264:ILE:CA	1:E:267:SER:HB3	2.44	0.47
2:F:195:ARG:NH1	2:F:199:VAL:HG21	2.29	0.47
2:F:259:TYR:C	2:F:260:LEU:HD23	2.40	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:214:VAL:HA	2:H:209:ALA:CB	2.45	0.47
1:G:217:ALA:O	2:H:212:ILE:CG2	2.63	0.47
1:G:271:ILE:O	1:G:271:ILE:HG22	2.13	0.47
1:G:274:THR:HG23	2:H:262:ALA:H	1.80	0.47
2:H:140:ILE:HD11	2:H:175:PHE:CD2	2.50	0.47
2:H:199:VAL:HG11	1:I:223:GLN:NE2	2.30	0.47
1:I:51:PHE:CE1	1:I:70:PHE:O	2.67	0.47
1:I:122:GLN:OE1	2:J:70:ARG:CZ	2.63	0.47
1:I:132:VAL:HG22	1:I:175:PHE:HB3	1.97	0.47
1:I:274:THR:HG22	1:I:275:ALA:N	2.29	0.47
2:J:125:GLU:HB2	1:K:183:ALA:HB1	1.97	0.47
2:J:130:VAL:CG2	2:J:150:VAL:HG22	2.39	0.47
2:J:224:ILE:HG23	2:J:225:ALA:N	2.29	0.47
2:J:262:ALA:HB1	1:K:289:ARG:HH22	1.79	0.47
2:L:30:VAL:HG13	2:L:34:HIS:O	2.13	0.47
2:L:179:PHE:O	2:L:183:VAL:HG23	2.14	0.47
1:M:52:PHE:O	1:M:52:PHE:CD2	2.68	0.47
1:M:249:ILE:HG12	2:N:238:LEU:HA	1.97	0.47
1:O:242:LEU:HD13	1:O:249:ILE:HD11	1.95	0.47
2:P:76:VAL:HB	2:P:123:THR:HG21	1.95	0.47
2:P:122:ILE:HD12	2:P:158:ALA:HB2	1.95	0.47
2:P:214:ALA:O	2:P:215:GLU:C	2.58	0.47
2:R:37:VAL:HG23	2:R:67:PHE:CE2	2.50	0.47
2:R:182:ALA:HB1	1:S:209:ARG:CZ	2.45	0.47
1:S:57:GLY:CA	2:T:31:ASP:HA	2.45	0.47
2:T:220:ALA:O	2:T:224:ILE:HG22	2.15	0.47
1:U:256:ALA:O	1:U:260:ILE:HB	2.15	0.47
1:W:104:ILE:HG23	1:W:184:ILE:HG23	1.97	0.47
2:X:201:GLU:O	2:X:205:GLN:OE1	2.32	0.47
2:B:237:GLU:O	2:B:241:LEU:HG	2.15	0.47
1:G:164:ILE:HG22	1:G:165:ARG:HE	1.79	0.47
2:H:39:PHE:N	2:H:62:GLN:HG2	2.30	0.47
2:H:41:ARG:HD2	1:I:66:GLU:HG3	1.97	0.47
2:H:268:LEU:HD12	2:J:261:PRO:HD3	1.97	0.47
1:I:41:PHE:CD2	1:I:43:VAL:CG2	2.98	0.47
1:I:58:VAL:HB	2:J:34:HIS:O	2.15	0.47
1:K:52:PHE:HD1	1:K:121:TYR:CE2	2.33	0.47
2:L:221:ALA:CB	1:M:242:LEU:HD21	2.45	0.47
2:N:37:VAL:HG12	2:N:38:ILE:N	2.30	0.47
2:T:33:GLY:HA3	2:T:70:ARG:HE	1.80	0.47
1:U:43:VAL:HG11	1:U:48:ARG:O	2.14	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:U:43:VAL:HG13	1:U:80:ILE:HG23	1.96	0.47
2:V:91:THR:HB	2:V:172:HIS:HB3	1.97	0.47
1:W:165:ARG:HA	1:W:165:ARG:NE	2.30	0.47
1:A:242:LEU:CD1	2:B:238:LEU:HD11	2.45	0.47
1:A:285:GLU:OE1	1:W:289:ARG:HB2	2.14	0.47
1:C:267:SER:HA	2:D:252:SER:CB	2.45	0.47
2:D:196:ALA:HA	2:D:199:VAL:HB	1.97	0.47
1:G:225:ILE:HA	2:H:219:LYS:CE	2.45	0.47
1:G:283:GLN:HG2	1:G:283:GLN:O	2.15	0.47
2:H:41:ARG:CD	1:I:66:GLU:CG	2.93	0.47
1:I:108:VAL:HA	1:I:182:VAL:HG22	1.97	0.47
1:I:122:GLN:H	2:J:70:ARG:HH11	1.62	0.47
1:I:132:VAL:HG13	1:I:175:PHE:CB	2.44	0.47
1:I:213:LEU:O	1:I:216:LYS:HG2	2.15	0.47
2:J:99:VAL:O	2:J:103:LEU:HG	2.15	0.47
2:J:267:LEU:CD1	2:L:267:LEU:HD22	2.45	0.47
1:M:233:GLU:O	1:M:236:LYS:HB3	2.15	0.47
2:N:121:SER:HB2	1:O:183:ALA:HB2	1.97	0.47
2:R:39:PHE:HB3	2:R:62:GLN:HG2	1.95	0.47
1:S:136:ILE:O	1:S:140:VAL:HG23	2.14	0.47
1:S:218:LYS:HE3	2:T:212:ILE:HD13	1.95	0.47
1:S:239:GLY:O	2:T:231:ALA:HB1	2.15	0.47
1:U:165:ARG:HA	1:U:165:ARG:NE	2.30	0.47
1:U:221:GLN:NE2	1:U:225:ILE:HD11	2.30	0.47
2:V:239:ARG:NH1	1:W:251:LEU:HD11	2.30	0.47
1:W:229:GLU:O	1:W:233:GLU:CG	2.63	0.47
1:A:253:LYS:HE2	1:C:288:THR:HG22	1.97	0.47
1:C:271:ILE:HA	2:D:260:LEU:HD21	1.97	0.47
2:F:259:TYR:CE2	1:G:278:LEU:HB2	2.49	0.47
2:H:247:ILE:HD11	1:I:258:GLN:HG3	1.97	0.47
1:I:57:GLY:O	1:I:58:VAL:CG2	2.63	0.47
1:I:57:GLY:HA2	2:J:35:ARG:HA	1.96	0.47
1:I:122:GLN:HB2	2:J:70:ARG:HD2	1.97	0.47
1:I:158:ALA:O	1:I:162:LEU:HG	2.14	0.47
1:I:165:ARG:HH22	1:I:168:LEU:HD23	1.80	0.47
1:I:233:GLU:CG	2:J:223:LEU:HD11	2.45	0.47
2:J:67:PHE:CB	2:J:103:LEU:HD13	2.46	0.47
1:K:79:ILE:HB	1:K:126:LEU:HD21	1.97	0.47
1:M:40:VAL:HA	1:M:69:HIS:O	2.15	0.47
1:M:220:GLU:OE2	1:M:224:LYS:HD2	2.14	0.47
1:M:246:PRO:HB3	1:M:249:ILE:HD12	1.96	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:N:86:GLN:HE22	1:O:197:VAL:HG11	1.80	0.47
2:N:262:ALA:HB3	1:O:289:ARG:HH22	1.80	0.47
2:N:267:LEU:HG	2:P:267:LEU:HD22	1.97	0.47
1:O:157:ARG:HA	1:O:160:VAL:HB	1.95	0.47
1:O:252:ARG:C	1:O:254:ILE:N	2.71	0.47
2:T:80:THR:C	1:U:154:ILE:HG22	2.40	0.47
2:T:214:ALA:CB	1:U:234:ALA:HB1	2.44	0.47
2:V:85:LEU:HG	1:W:193:TYR:CG	2.50	0.47
2:V:126:ILE:HD11	2:V:154:LEU:HD13	1.97	0.47
1:W:260:ILE:HG23	1:W:264:ILE:HB	1.96	0.47
1:A:229:GLU:HA	1:A:232:ALA:HB3	1.96	0.46
2:B:236:ILE:HD13	1:C:250:LYS:CD	2.46	0.46
1:E:225:ILE:HD13	2:F:219:LYS:HD2	1.96	0.46
1:E:260:ILE:HD11	2:F:244:ALA:CB	2.45	0.46
1:G:277:ASN:OD1	1:I:280:LEU:O	2.33	0.46
1:I:121:TYR:CD2	1:I:122:GLN:HG3	2.49	0.46
2:J:92:LEU:HD11	2:J:168:VAL:HG13	1.97	0.46
1:K:63:ILE:HG22	1:K:64:LEU:H	1.80	0.46
2:L:208:LYS:O	2:L:212:ILE:HG13	2.15	0.46
2:L:237:GLU:HG2	1:O:282:LEU:CD2	2.45	0.46
1:O:108:VAL:HG12	1:O:109:LEU:N	2.29	0.46
1:Q:90:ILE:HG22	1:Q:91:SER:N	2.30	0.46
1:Q:242:LEU:HD13	1:Q:249:ILE:CD1	2.45	0.46
2:R:39:PHE:N	2:R:62:GLN:HG2	2.30	0.46
1:U:132:VAL:HG13	1:U:175:PHE:CD2	2.50	0.46
2:B:260:LEU:O	1:C:274:THR:HA	2.16	0.46
1:C:250:LYS:HG2	1:E:288:THR:HG22	1.97	0.46
1:G:225:ILE:HD13	2:H:219:LYS:CE	2.44	0.46
1:G:271:ILE:HA	2:H:258:THR:HA	1.98	0.46
2:J:85:LEU:HG	1:K:193:TYR:CD2	2.50	0.46
1:K:154:ILE:O	1:K:157:ARG:HB2	2.15	0.46
2:L:35:ARG:HB2	2:L:103:LEU:CD1	2.46	0.46
2:L:204:GLU:O	2:L:207:LYS:HB2	2.16	0.46
2:N:37:VAL:CG1	2:N:38:ILE:N	2.78	0.46
2:P:262:ALA:HB3	1:Q:289:ARG:HH22	1.80	0.46
2:R:30:VAL:HG21	2:R:53:GLY:O	2.15	0.46
2:R:136:ALA:HB1	2:R:175:PHE:HE1	1.80	0.46
2:T:62:GLN:HE22	2:T:65:ILE:H	1.64	0.46
2:V:251:LEU:HD23	1:W:271:ILE:HG21	1.96	0.46
2:B:247:ILE:O	2:B:251:LEU:HG	2.16	0.46
1:C:267:SER:OG	1:C:269:ASN:HB2	2.16	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:272:TYR:HD1	2:F:260:LEU:HD22	1.72	0.46
2:F:196:ALA:HB1	1:G:223:GLN:CD	2.40	0.46
2:F:197:ARG:NH2	1:G:219:GLN:O	2.48	0.46
2:F:224:ILE:HD13	1:G:248:TYR:CD1	2.49	0.46
2:F:224:ILE:HG21	1:G:248:TYR:HB2	1.96	0.46
2:F:236:ILE:O	2:F:240:LYS:HE3	2.15	0.46
2:F:247:ILE:HG21	1:G:278:LEU:HG	1.96	0.46
1:G:235:ALA:HB2	1:I:251:LEU:HD22	1.96	0.46
2:H:32:ALA:HB3	2:H:70:ARG:HH21	1.79	0.46
2:H:221:ALA:HB2	1:I:242:LEU:CD2	2.45	0.46
1:I:52:PHE:N	1:I:76:GLN:OE1	2.49	0.46
1:I:108:VAL:CG1	1:I:179:LEU:HD22	2.46	0.46
2:J:44:GLY:O	2:J:45:VAL:C	2.57	0.46
2:L:80:THR:CG2	2:L:131:VAL:HG11	2.45	0.46
2:L:243:ALA:O	2:L:244:ALA:C	2.58	0.46
2:N:129:SER:CB	1:O:158:ALA:HB2	2.44	0.46
2:P:130:VAL:HG21	2:P:150:VAL:HG22	1.97	0.46
1:S:232:ALA:HB3	2:T:223:LEU:HD22	1.98	0.46
2:T:267:LEU:HD12	2:V:267:LEU:HD21	1.96	0.46
2:T:270:LEU:HD12	2:V:271:PRO:HD3	1.97	0.46
1:U:235:ALA:HB2	2:V:235:LEU:CB	2.44	0.46
1:W:206:GLU:OE1	2:X:205:GLN:OE1	2.33	0.46
2:B:250:GLN:HE22	1:C:265:ALA:H	1.62	0.46
1:C:246:PRO:HG3	1:E:291:SER:O	2.15	0.46
1:C:249:ILE:HD13	1:E:294:LEU:HD11	1.97	0.46
2:F:259:TYR:CE1	1:G:278:LEU:O	2.69	0.46
1:G:219:GLN:O	1:G:223:GLN:HG2	2.16	0.46
1:I:68:LEU:O	1:I:69:HIS:CD2	2.68	0.46
1:I:165:ARG:HD2	1:I:182:VAL:HB	1.97	0.46
1:K:50:ILE:HG23	1:K:117:LEU:CB	2.45	0.46
1:K:71:ARG:CB	1:K:76:GLN:HG3	2.45	0.46
1:K:72:ILE:HD13	1:K:75:PHE:HD2	1.80	0.46
1:K:156:GLN:O	1:K:160:VAL:HG23	2.15	0.46
2:L:200:VAL:O	2:L:203:ALA:HB3	2.15	0.46
1:M:236:LYS:HZ3	2:N:224:ILE:HD12	1.80	0.46
1:O:43:VAL:O	1:O:66:GLU:OE1	2.33	0.46
2:P:39:PHE:N	2:P:62:GLN:HG3	2.31	0.46
2:P:130:VAL:HG21	2:P:150:VAL:CA	2.44	0.46
2:P:211:ILE:HD11	1:Q:230:GLY:CA	2.46	0.46
2:P:244:ALA:O	2:P:248:ALA:HB3	2.15	0.46
2:P:267:LEU:HD23	2:P:268:LEU:N	2.30	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:R:58:ILE:HG13	2:R:61:VAL:HG12	1.98	0.46
2:R:236:ILE:HG22	2:R:240:LYS:HZ2	1.81	0.46
1:U:51:PHE:HA	1:U:76:GLN:CD	2.39	0.46
2:V:88:VAL:HG12	2:V:90:ILE:HG12	1.96	0.46
1:A:278:LEU:O	1:A:280:LEU:HG	2.16	0.46
2:D:259:TYR:HB2	1:E:273:LEU:CG	2.45	0.46
1:E:242:LEU:HD22	1:E:249:ILE:HG13	1.96	0.46
2:F:197:ARG:HA	2:F:197:ARG:NE	2.31	0.46
2:F:197:ARG:NH2	1:G:219:GLN:HA	2.31	0.46
2:H:235:LEU:HD13	2:H:238:LEU:HD23	1.98	0.46
1:I:231:GLU:O	1:I:234:ALA:HB3	2.15	0.46
1:I:260:ILE:HG23	1:I:264:ILE:CG1	2.45	0.46
2:J:35:ARG:HB2	2:J:103:LEU:CD1	2.45	0.46
1:M:288:THR:O	1:M:293:SER:HB3	2.15	0.46
2:N:37:VAL:HG11	2:N:45:VAL:CG1	2.45	0.46
2:N:221:ALA:HB1	1:O:242:LEU:CD2	2.45	0.46
1:O:41:PHE:HD1	1:O:43:VAL:HG23	1.81	0.46
1:O:217:ALA:HB1	2:P:213:SER:HB2	1.96	0.46
2:P:109:SER:O	1:Q:111:ARG:HD3	2.15	0.46
1:U:52:PHE:CE2	1:U:77:TYR:HB2	2.51	0.46
2:V:221:ALA:HB2	1:W:242:LEU:HD12	1.96	0.46
2:V:248:ALA:HA	2:V:251:LEU:HB2	1.97	0.46
1:A:221:GLN:HA	2:B:216:GLY:CA	2.45	0.46
1:A:228:ALA:O	2:B:224:ILE:HD11	2.15	0.46
1:A:276:ASP:O	1:A:276:ASP:OD1	2.33	0.46
2:B:240:LYS:HA	1:C:254:ILE:HG23	1.97	0.46
1:C:277:ASN:O	1:E:283:GLN:HB2	2.16	0.46
1:C:277:ASN:ND2	1:E:281:ASN:HA	2.31	0.46
1:G:63:ILE:HD13	1:G:115:GLN:HA	1.98	0.46
1:I:214:VAL:HG13	2:J:209:ALA:HB2	1.95	0.46
2:J:260:LEU:HD21	1:K:272:TYR:CD1	2.50	0.46
1:K:214:VAL:HG11	2:L:205:GLN:O	2.15	0.46
1:M:250:LYS:O	1:M:253:LYS:HB2	2.16	0.46
2:N:41:ARG:HE	1:O:67:GLY:N	2.14	0.46
1:O:48:ARG:HD3	1:O:65:ALA:HA	1.98	0.46
1:O:228:ALA:CB	2:P:220:ALA:HA	2.45	0.46
2:P:130:VAL:HG21	2:P:150:VAL:CG2	2.45	0.46
1:Q:52:PHE:HE1	2:R:32:ALA:HB2	1.77	0.46
2:R:80:THR:CG2	2:R:131:VAL:HG11	2.46	0.46
1:S:136:ILE:HD11	1:S:171:ARG:HB2	1.97	0.46
1:S:235:ALA:CB	2:T:224:ILE:HD11	2.46	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:T:258:THR:O	1:U:272:TYR:HA	2.16	0.46
1:U:144:VAL:HG12	1:U:148:PHE:CD2	2.50	0.46
2:V:186:LYS:HA	1:W:209:ARG:CG	2.45	0.46
1:A:215:GLU:O	1:A:219:GLN:HG2	2.15	0.46
1:A:282:LEU:HD12	1:A:287:PHE:CE1	2.51	0.46
1:C:239:GLY:HA2	2:D:234:GLY:HA3	1.97	0.46
1:C:274:THR:O	1:C:277:ASN:HB2	2.16	0.46
2:D:250:GLN:OE1	1:E:264:ILE:HG22	2.16	0.46
1:G:221:GLN:CA	2:H:212:ILE:HG23	2.45	0.46
1:G:256:ALA:HB3	2:H:241:LEU:CD1	2.44	0.46
2:H:118:VAL:CG1	2:H:163:LEU:HD12	2.46	0.46
1:I:55:ILE:CG1	2:J:28:TYR:O	2.64	0.46
2:J:203:ALA:HA	2:J:206:GLN:HG3	1.98	0.46
1:K:64:LEU:HB3	1:K:69:HIS:CB	2.46	0.46
1:K:239:GLY:HA2	2:L:235:LEU:H	1.81	0.46
2:L:50:VAL:HG13	2:L:55:HIS:H	1.81	0.46
2:N:45:VAL:HG12	2:N:104:PRO:HB3	1.97	0.46
2:P:228:LEU:HD12	1:Q:247:GLY:C	2.41	0.46
1:Q:53:ASN:O	1:Q:58:VAL:HG22	2.15	0.46
1:Q:117:LEU:N	1:Q:118:PRO:CD	2.78	0.46
1:Q:250:LYS:HG2	1:S:282:LEU:HD11	1.97	0.46
1:S:239:GLY:HA2	2:T:234:GLY:HA3	1.98	0.46
2:V:209:ALA:HA	2:V:212:ILE:HB	1.97	0.46
1:W:71:ARG:NH1	1:W:78:PRO:HD3	2.30	0.46
1:W:151:SER:O	1:W:154:ILE:HB	2.14	0.46
2:X:236:ILE:O	2:X:236:ILE:CG2	2.64	0.46
1:A:242:LEU:HD21	2:X:225:ALA:HB1	1.96	0.46
1:A:261:SER:OG	2:X:251:LEU:HD13	2.16	0.46
2:B:219:LYS:HA	2:B:222:GLU:OE1	2.16	0.46
2:B:270:LEU:HD23	1:E:272:TYR:HE1	1.79	0.46
2:D:239:ARG:HD3	2:D:243:ALA:HB2	1.98	0.46
1:E:217:ALA:O	2:F:212:ILE:HG22	2.16	0.46
2:F:200:VAL:CB	1:G:223:GLN:HB2	2.46	0.46
1:G:273:LEU:HD23	2:H:259:TYR:CB	2.46	0.46
2:H:86:GLN:O	2:H:88:VAL:HG23	2.16	0.46
2:H:214:ALA:CB	1:I:234:ALA:HA	2.45	0.46
1:I:193:TYR:O	1:I:197:VAL:HG23	2.16	0.46
1:K:253:LYS:HE2	1:M:279:VAL:HG22	1.98	0.46
1:K:264:ILE:O	1:K:264:ILE:CG2	2.63	0.46
1:M:246:PRO:HA	1:M:249:ILE:HD12	1.98	0.46
2:N:244:ALA:HA	2:N:248:ALA:CB	2.44	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:V:84:ASP:HB2	1:W:197:VAL:HG11	1.98	0.46
2:V:236:ILE:HD13	1:W:250:LYS:HD2	1.97	0.46
2:V:256:ASN:HB2	1:W:272:TYR:CE2	2.51	0.46
1:A:251:LEU:HD21	2:X:236:ILE:CD1	2.46	0.46
1:A:253:LYS:HD2	1:C:291:SER:HB2	1.98	0.46
1:A:263:THR:HG21	2:B:249:TYR:HE1	1.77	0.46
2:B:197:ARG:CG	1:C:219:GLN:NE2	2.79	0.46
1:E:199:ALA:O	1:E:203:ALA:CB	2.63	0.46
1:E:274:THR:O	1:E:277:ASN:CG	2.59	0.46
2:F:235:LEU:HD12	2:F:239:ARG:N	2.31	0.46
1:G:287:PHE:CZ	1:G:291:SER:HB3	2.51	0.46
2:H:259:TYR:OH	1:I:278:LEU:HB2	2.16	0.46
1:I:57:GLY:O	1:I:58:VAL:HG23	2.16	0.46
1:I:75:PHE:CE1	2:J:29:ASN:HA	2.51	0.46
1:I:102:VAL:HG12	1:I:104:ILE:HG13	1.98	0.46
1:K:107:ARG:O	1:K:182:VAL:HA	2.16	0.46
1:K:165:ARG:NH1	1:K:182:VAL:HB	2.31	0.46
1:K:229:GLU:HG2	2:L:219:LYS:HZ3	1.81	0.46
2:L:203:ALA:HB1	1:M:226:VAL:CG1	2.45	0.46
2:L:211:ILE:CG1	1:M:233:GLU:OE2	2.64	0.46
2:P:92:LEU:HD12	2:P:169:SER:C	2.40	0.46
2:R:28:TYR:OH	2:R:36:ALA:HB3	2.16	0.46
2:R:46:GLN:NE2	2:R:48:ILE:O	2.49	0.46
1:U:40:VAL:O	1:U:40:VAL:HG13	2.15	0.46
1:U:63:ILE:HG21	1:U:114:ALA:O	2.16	0.46
1:U:136:ILE:HG13	1:U:168:LEU:HD11	1.96	0.46
1:A:237:MET:CE	2:X:222:GLU:HG3	2.46	0.46
2:D:259:TYR:O	2:D:259:TYR:CD1	2.69	0.46
1:E:269:ASN:CB	2:F:257:ILE:HB	2.45	0.46
2:F:211:ILE:HG13	1:G:234:ALA:HB2	1.98	0.46
2:H:36:ALA:O	2:H:50:VAL:HB	2.15	0.46
2:H:204:GLU:HG2	1:I:226:VAL:HG21	1.97	0.46
1:I:242:LEU:CD1	1:I:249:ILE:HD12	2.46	0.46
2:J:228:LEU:HD13	2:J:236:ILE:CD1	2.42	0.46
1:M:108:VAL:HG12	1:M:179:LEU:HD22	1.98	0.46
1:M:270:ARG:HD3	2:N:255:ARG:HG3	1.96	0.46
1:M:291:SER:O	1:M:294:LEU:HG	2.16	0.46
1:Q:41:PHE:CG	1:Q:78:PRO:HG2	2.51	0.46
2:R:36:ALA:C	2:R:50:VAL:HB	2.40	0.46
1:S:108:VAL:HG22	1:S:182:VAL:HG11	1.97	0.46
2:T:38:ILE:HG22	2:T:39:PHE:N	2.31	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:T:233:ASP:CG	2:T:236:ILE:HD12	2.41	0.46
1:U:161:SER:O	1:U:165:ARG:HG2	2.16	0.46
2:V:215:GLU:HG2	1:W:237:MET:HE2	1.97	0.46
2:B:228:LEU:HD22	2:B:236:ILE:N	2.32	0.45
2:B:235:LEU:HG	2:B:235:LEU:O	2.15	0.45
2:H:45:VAL:HG21	2:H:107:PHE:HD2	1.80	0.45
1:I:43:VAL:HG21	1:I:49:ALA:HB2	1.98	0.45
2:J:35:ARG:HD3	2:J:100:ALA:HB1	1.98	0.45
2:J:92:LEU:HD11	2:J:168:VAL:HG12	1.97	0.45
1:M:233:GLU:HA	1:M:236:LYS:HB2	1.97	0.45
2:N:126:ILE:HD11	2:N:154:LEU:HD13	1.98	0.45
2:P:28:TYR:CE2	2:P:36:ALA:HB3	2.51	0.45
1:S:79:ILE:HG21	1:S:126:LEU:CD2	2.46	0.45
2:V:224:ILE:HG21	1:W:248:TYR:N	2.30	0.45
2:V:257:ILE:HA	1:W:272:TYR:HB2	1.97	0.45
2:V:272:GLN:C	2:X:271:PRO:HA	2.40	0.45
1:W:269:ASN:HB3	1:W:271:ILE:HG13	1.99	0.45
2:B:222:GLU:HG3	1:C:241:ALA:HB1	1.98	0.45
2:B:222:GLU:OE2	1:C:237:MET:SD	2.74	0.45
1:G:118:PRO:O	1:G:122:GLN:HG3	2.16	0.45
2:H:130:VAL:CG1	2:H:146:VAL:HG13	2.46	0.45
2:H:207:LYS:HE2	1:I:226:VAL:HG23	1.97	0.45
2:H:244:ALA:O	2:H:245:GLU:C	2.58	0.45
1:I:106:LEU:HD11	1:I:165:ARG:NE	2.31	0.45
1:I:252:ARG:HG3	2:J:241:LEU:HG	1.98	0.45
2:J:130:VAL:HG21	2:J:150:VAL:CG2	2.37	0.45
1:K:144:VAL:HG11	1:K:164:ILE:HG13	1.98	0.45
2:P:203:ALA:HA	2:P:206:GLN:HG3	1.96	0.45
1:Q:63:ILE:HD13	1:Q:115:GLN:HA	1.98	0.45
2:R:57:LEU:HB2	2:R:62:GLN:HB3	1.98	0.45
2:R:267:LEU:HD21	2:T:267:LEU:HD13	1.99	0.45
1:S:218:LYS:O	1:S:221:GLN:HB3	2.16	0.45
2:V:86:GLN:CG	2:V:136:ALA:HB2	2.47	0.45
1:W:43:VAL:HA	1:W:80:ILE:HG12	1.99	0.45
1:W:51:PHE:HA	1:W:76:GLN:OE1	2.15	0.45
1:W:229:GLU:HG2	2:X:223:LEU:HD11	1.98	0.45
2:X:201:GLU:C	2:X:205:GLN:OE1	2.59	0.45
1:A:237:MET:SD	2:X:218:SER:OG	2.74	0.45
1:A:253:LYS:CE	1:C:288:THR:HG22	2.46	0.45
1:A:280:LEU:HD22	1:W:273:LEU:HD13	1.99	0.45
1:C:234:ALA:HA	1:C:237:MET:HE3	1.99	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:253:LYS:HA	2:D:241:LEU:HD22	1.97	0.45
2:F:244:ALA:HB2	2:F:247:ILE:HD12	1.98	0.45
1:G:106:LEU:HD11	1:G:165:ARG:NE	2.31	0.45
1:G:107:ARG:CZ	1:G:185:THR:HG21	2.46	0.45
1:G:144:VAL:HG12	1:G:144:VAL:O	2.17	0.45
1:G:239:GLY:HA2	2:H:234:GLY:HA3	1.97	0.45
1:G:281:ASN:O	1:G:287:PHE:CB	2.65	0.45
2:H:37:VAL:HG11	2:H:104:PRO:CA	2.45	0.45
2:H:132:ALA:CB	1:I:155:THR:O	2.64	0.45
2:H:218:SER:O	1:I:241:ALA:HB1	2.16	0.45
1:I:51:PHE:HB2	2:J:31:ASP:HA	1.98	0.45
2:J:36:ALA:HA	2:J:67:PHE:HD2	1.82	0.45
2:J:45:VAL:HG21	2:J:107:PHE:HD2	1.81	0.45
1:K:253:LYS:CE	1:M:279:VAL:HG22	2.47	0.45
2:L:118:VAL:HG13	2:L:161:PHE:CD1	2.51	0.45
2:N:211:ILE:HD11	1:O:230:GLY:HA2	1.99	0.45
1:O:250:LYS:HG2	1:Q:279:VAL:HG13	1.97	0.45
1:O:274:THR:HG22	1:O:275:ALA:N	2.30	0.45
1:Q:213:LEU:HA	1:Q:216:LYS:HG2	1.98	0.45
2:T:123:THR:O	2:T:127:LEU:HD13	2.15	0.45
2:V:90:ILE:HD11	2:V:131:VAL:HG21	1.91	0.45
2:V:204:GLU:O	2:V:207:LYS:HB2	2.17	0.45
1:W:266:THR:O	2:X:249:TYR:HE1	1.99	0.45
1:A:237:MET:CE	2:X:222:GLU:CG	2.93	0.45
1:A:249:ILE:O	1:A:253:LYS:HG3	2.16	0.45
1:G:236:LYS:HA	2:H:227:SER:HB2	1.98	0.45
2:H:63:LYS:O	2:H:65:ILE:CD1	2.62	0.45
2:H:153:ASP:O	2:H:156:GLU:HG3	2.16	0.45
1:I:44:GLU:O	1:I:47:HIS:HB2	2.15	0.45
2:L:122:ILE:HG13	2:L:123:THR:N	2.32	0.45
2:N:183:VAL:HG23	2:N:186:LYS:HE2	1.97	0.45
2:P:224:ILE:HG23	1:Q:248:TYR:HA	1.98	0.45
1:Q:56:GLY:CA	2:R:53:GLY:HA2	2.46	0.45
2:T:200:VAL:O	2:T:203:ALA:HB3	2.15	0.45
1:U:213:LEU:HD23	1:U:213:LEU:C	2.40	0.45
2:V:69:CYS:HA	2:V:98:PRO:HG2	1.98	0.45
2:V:252:SER:HA	2:V:257:ILE:HD11	1.98	0.45
1:W:164:ILE:HG22	1:W:165:ARG:NH2	2.31	0.45
1:W:206:GLU:O	1:W:209:ARG:HB3	2.17	0.45
1:A:249:ILE:HD13	1:C:294:LEU:CD1	2.47	0.45
1:A:283:GLN:HG3	2:V:240:LYS:HD3	1.99	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:248:TYR:CD2	1:C:248:TYR:O	2.69	0.45
1:C:256:ALA:HB3	2:D:241:LEU:HB3	1.98	0.45
1:C:263:THR:HB	2:D:248:ALA:HB3	1.97	0.45
1:C:278:LEU:O	1:C:279:VAL:C	2.59	0.45
1:G:218:LYS:HA	2:H:212:ILE:HG21	1.98	0.45
2:H:37:VAL:HG21	2:H:104:PRO:CA	2.46	0.45
2:H:40:ASP:CA	2:H:61:VAL:HG22	2.45	0.45
2:H:221:ALA:HA	1:I:248:TYR:CB	2.46	0.45
2:H:225:ALA:HA	1:I:245:ASN:HB3	1.99	0.45
2:H:240:LYS:CE	1:K:282:LEU:HD23	2.46	0.45
1:I:278:LEU:O	1:I:280:LEU:HG	2.16	0.45
2:J:28:TYR:CZ	2:J:57:LEU:HD23	2.51	0.45
2:J:218:SER:CB	1:K:237:MET:SD	3.04	0.45
1:K:90:ILE:HD13	1:K:134:PRO:HA	1.99	0.45
1:K:132:VAL:HB	1:K:177:LEU:HD12	1.98	0.45
1:K:132:VAL:CB	1:K:177:LEU:HD12	2.47	0.45
2:N:246:ASP:O	2:N:249:TYR:HB3	2.16	0.45
1:O:71:ARG:HB2	1:O:76:GLN:HG3	1.98	0.45
1:O:249:ILE:HG23	2:P:241:LEU:HD23	1.98	0.45
1:S:235:ALA:HB3	2:T:224:ILE:CD1	2.47	0.45
2:V:34:HIS:O	2:V:52:GLU:HA	2.16	0.45
2:V:267:LEU:CD1	2:X:267:LEU:HD13	2.47	0.45
1:A:276:ASP:HB2	1:A:281:ASN:OD1	2.17	0.45
2:B:271:PRO:O	2:D:271:PRO:HB3	2.16	0.45
1:C:272:TYR:HE1	2:X:270:LEU:HD11	1.81	0.45
2:D:200:VAL:HG21	1:E:222:ARG:CB	2.47	0.45
2:D:262:ALA:CB	1:E:274:THR:HG23	2.46	0.45
2:D:268:LEU:HD12	1:E:272:TYR:CE2	2.52	0.45
2:F:268:LEU:HD13	2:H:261:PRO:HG3	1.97	0.45
2:H:37:VAL:HG23	2:H:67:PHE:HE2	1.81	0.45
2:H:65:ILE:HG23	2:H:112:GLU:CG	2.46	0.45
2:H:67:PHE:CB	2:H:103:LEU:HD22	2.47	0.45
1:I:47:HIS:CD2	1:I:82:ASP:HA	2.51	0.45
1:I:57:GLY:CA	2:J:35:ARG:HA	2.46	0.45
1:K:237:MET:HA	1:K:240:GLU:OE1	2.15	0.45
2:L:36:ALA:HA	2:L:67:PHE:HD2	1.81	0.45
2:L:218:SER:OG	1:M:238:LEU:HG	2.15	0.45
2:N:43:ARG:HE	2:N:46:GLN:HA	1.81	0.45
2:N:110:ILE:HD11	1:O:180:ASP:OD2	2.17	0.45
2:N:221:ALA:HA	1:O:248:TYR:CG	2.51	0.45
1:O:43:VAL:CG1	1:O:47:HIS:HB2	2.47	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:O:289:ARG:C	1:O:293:SER:HB3	2.41	0.45
2:P:92:LEU:HD13	2:P:150:VAL:HG11	1.99	0.45
2:P:122:ILE:HG13	2:P:154:LEU:HD11	1.97	0.45
2:R:35:ARG:HB2	2:R:103:LEU:CD1	2.47	0.45
2:R:37:VAL:HG21	2:R:104:PRO:HA	1.97	0.45
2:T:256:ASN:HB2	1:U:270:ARG:HE	1.81	0.45
2:V:49:VAL:CG2	2:V:103:LEU:HD12	2.47	0.45
2:V:93:ARG:CD	2:V:171:THR:HG21	2.45	0.45
2:X:246:ASP:O	2:X:249:TYR:HB3	2.17	0.45
2:X:267:LEU:C	2:X:267:LEU:HD23	2.41	0.45
1:A:242:LEU:HD21	2:X:225:ALA:CB	2.46	0.45
1:A:254:ILE:HG12	1:C:282:LEU:CD1	2.47	0.45
2:F:257:ILE:HA	1:G:271:ILE:O	2.17	0.45
1:I:144:VAL:O	1:I:144:VAL:HG12	2.15	0.45
2:J:239:ARG:O	2:J:243:ALA:HB3	2.17	0.45
1:K:149:ASN:N	1:K:152:GLN:HE21	2.14	0.45
1:M:51:PHE:CZ	1:M:70:PHE:O	2.70	0.45
1:M:58:VAL:HG12	1:M:59:GLN:O	2.16	0.45
1:M:77:TYR:HB3	1:M:79:ILE:HD11	1.98	0.45
2:P:38:ILE:HD12	2:P:57:LEU:CB	2.46	0.45
2:P:204:GLU:HA	2:P:207:LYS:HZ3	1.82	0.45
1:Q:50:ILE:CD1	1:Q:118:PRO:HA	2.47	0.45
1:Q:161:SER:O	1:Q:165:ARG:HG2	2.16	0.45
2:R:44:GLY:HA2	1:S:66:GLU:CG	2.47	0.45
2:T:86:GLN:O	2:T:88:VAL:HG23	2.16	0.45
2:T:247:ILE:HG13	1:U:257:ALA:HB1	1.98	0.45
1:U:133:LEU:HD23	1:U:136:ILE:HD11	1.99	0.45
2:V:82:SER:HA	2:V:131:VAL:O	2.17	0.45
2:V:87:ASN:N	1:W:194:THR:OG1	2.49	0.45
1:W:92:SER:HB3	1:W:141:LEU:HD12	1.97	0.45
1:W:229:GLU:O	1:W:233:GLU:HG3	2.17	0.45
1:A:273:LEU:C	2:X:258:THR:OG1	2.60	0.45
2:F:215:GLU:HG2	1:G:237:MET:SD	2.56	0.45
1:I:210:ALA:CB	2:J:202:LYS:HG2	2.47	0.45
2:J:35:ARG:NH2	2:J:52:GLU:OE2	2.50	0.45
1:K:51:PHE:C	1:K:76:GLN:OE1	2.60	0.45
1:K:214:VAL:HG21	2:L:205:GLN:C	2.41	0.45
2:L:228:LEU:HD11	1:M:247:GLY:CA	2.47	0.45
1:M:236:LYS:CE	2:N:227:SER:HB3	2.47	0.45
2:N:197:ARG:NH1	1:O:219:GLN:HB3	2.31	0.45
1:O:43:VAL:HG21	1:O:49:ALA:HB2	1.99	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:O:71:ARG:HD3	1:O:78:PRO:HG3	1.98	0.45
2:P:140:ILE:HG12	2:P:173:LEU:HD23	1.98	0.45
1:Q:64:LEU:CD2	1:Q:69:HIS:CG	3.00	0.45
1:U:213:LEU:O	1:U:216:LYS:HG2	2.17	0.45
1:U:243:SER:HA	1:W:294:LEU:O	2.17	0.45
2:V:91:THR:CB	2:V:172:HIS:HB3	2.47	0.45
2:V:244:ALA:O	2:V:248:ALA:HB3	2.17	0.45
1:W:154:ILE:HD11	1:W:189:PHE:CZ	2.51	0.45
1:A:275:ALA:C	2:X:259:TYR:O	2.60	0.45
2:B:235:LEU:HA	2:B:238:LEU:HB2	1.99	0.45
2:D:228:LEU:HD11	1:E:251:LEU:HD13	1.99	0.45
1:E:218:LYS:O	1:E:221:GLN:HB3	2.17	0.45
1:E:271:ILE:HG13	1:E:272:TYR:N	2.32	0.45
2:F:197:ARG:HE	2:F:197:ARG:CA	2.28	0.45
1:G:50:ILE:CG2	1:G:117:LEU:HB2	2.46	0.45
2:H:118:VAL:HG22	2:H:161:PHE:HB3	1.97	0.45
1:I:51:PHE:CB	2:J:31:ASP:HA	2.47	0.45
2:J:31:ASP:OD1	2:J:70:ARG:NH2	2.50	0.45
2:J:207:LYS:NZ	1:K:229:GLU:CB	2.80	0.45
2:J:270:LEU:HD13	1:K:272:TYR:OH	2.17	0.45
1:K:43:VAL:CG1	1:K:47:HIS:HB2	2.47	0.45
1:K:48:ARG:HG3	1:K:83:ILE:HD13	1.99	0.45
1:K:54:ARG:HA	2:L:30:VAL:HB	1.98	0.45
1:K:104:ILE:CD1	1:K:145:VAL:HG21	2.47	0.45
1:K:229:GLU:CG	2:L:219:LYS:HZ3	2.29	0.45
2:L:45:VAL:HB	2:L:108:THR:CG2	2.46	0.45
2:N:76:VAL:HB	2:N:123:THR:HG21	1.99	0.45
1:O:94:THR:HG23	1:O:142:LYS:CD	2.47	0.45
1:O:94:THR:HG23	1:O:142:LYS:HD3	1.99	0.45
1:O:253:LYS:HG3	1:Q:279:VAL:HG21	1.99	0.45
2:R:258:THR:OG1	1:S:272:TYR:HB2	2.17	0.45
1:S:144:VAL:HG11	1:S:164:ILE:HG13	1.99	0.45
1:S:222:ARG:C	1:S:222:ARG:HD3	2.41	0.45
1:S:242:LEU:HD12	2:T:234:GLY:CA	2.46	0.45
2:T:40:ASP:CB	2:T:61:VAL:HG22	2.47	0.45
2:V:30:VAL:HG13	2:V:34:HIS:O	2.17	0.45
2:V:236:ILE:HG21	1:W:250:LYS:HD3	1.99	0.45
1:W:140:VAL:CG2	1:W:168:LEU:HD13	2.47	0.45
1:W:206:GLU:OE1	2:X:205:GLN:HB2	2.17	0.45
1:A:254:ILE:HG23	1:C:282:LEU:HD11	1.97	0.45
1:A:278:LEU:HD12	2:X:259:TYR:HD1	1.77	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:228:LEU:HD11	1:C:251:LEU:HD13	1.98	0.45
2:B:268:LEU:HD22	1:E:272:TYR:CE2	2.52	0.45
2:D:259:TYR:HA	1:E:273:LEU:H	1.82	0.45
2:D:267:LEU:O	2:D:267:LEU:HD12	2.17	0.45
1:E:273:LEU:HD21	1:G:280:LEU:HD12	1.98	0.45
2:H:31:ASP:O	2:H:34:HIS:N	2.49	0.45
1:I:118:PRO:HB3	2:J:32:ALA:CB	2.47	0.45
1:K:106:LEU:HD13	1:K:184:ILE:HG12	1.98	0.45
1:K:242:LEU:CD2	1:K:248:TYR:HB3	2.46	0.45
2:L:58:ILE:HG13	2:L:61:VAL:HG12	1.98	0.45
2:L:229:ALA:HB3	1:M:244:LYS:HZ1	1.82	0.45
2:N:38:ILE:HA	2:N:62:GLN:HG3	1.98	0.45
2:P:39:PHE:CZ	1:Q:83:ILE:HD11	2.52	0.45
2:P:221:ALA:HB1	1:Q:242:LEU:HD21	1.99	0.45
2:P:241:LEU:O	2:P:244:ALA:HB3	2.16	0.45
1:Q:221:GLN:OE1	2:R:212:ILE:CG2	2.64	0.45
1:Q:235:ALA:HA	2:R:235:LEU:HB2	1.98	0.45
2:R:37:VAL:HG12	2:R:38:ILE:C	2.42	0.45
1:S:164:ILE:HG22	1:S:165:ARG:NH2	2.31	0.45
1:S:279:VAL:CG1	1:S:282:LEU:HD13	2.47	0.45
1:U:64:LEU:HD22	1:U:69:HIS:CE1	2.51	0.45
2:V:37:VAL:CG1	2:V:38:ILE:N	2.80	0.45
2:V:85:LEU:O	1:W:193:TYR:HB2	2.17	0.45
1:A:237:MET:HE1	2:X:222:GLU:N	2.32	0.44
1:A:277:ASN:OD1	1:C:284:ASP:CB	2.66	0.44
1:E:229:GLU:HA	1:E:232:ALA:HB3	1.98	0.44
1:G:220:GLU:O	1:G:224:LYS:HB2	2.18	0.44
2:H:123:THR:HA	2:H:154:LEU:HD13	1.98	0.44
2:H:214:ALA:HB2	1:I:234:ALA:CA	2.46	0.44
1:I:57:GLY:C	1:I:58:VAL:HG23	2.42	0.44
1:I:154:ILE:HD11	1:I:189:PHE:CE2	2.51	0.44
1:K:76:GLN:HE21	1:K:78:PRO:HB3	1.82	0.44
1:M:41:PHE:CZ	1:M:64:LEU:HD13	2.50	0.44
2:N:90:ILE:HD12	2:N:131:VAL:HG21	1.99	0.44
2:R:233:ASP:HB3	2:R:236:ILE:HB	1.98	0.44
1:S:229:GLU:O	1:S:233:GLU:HB2	2.18	0.44
1:U:58:VAL:HG23	2:V:32:ALA:HB1	1.98	0.44
1:U:218:LYS:HD3	2:V:212:ILE:HG21	1.97	0.44
2:V:247:ILE:HG23	1:W:257:ALA:HB1	1.99	0.44
1:W:90:ILE:HB	1:W:137:VAL:HG11	1.98	0.44
2:X:223:LEU:C	2:X:223:LEU:HD23	2.42	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:273:LEU:HB2	2:X:259:TYR:N	2.32	0.44
1:C:270:ARG:O	2:D:258:THR:CB	2.65	0.44
2:H:94:ILE:HG21	2:H:119:LEU:HD22	1.99	0.44
2:H:267:LEU:HD21	2:J:267:LEU:HB2	1.98	0.44
1:I:58:VAL:CG1	2:J:31:ASP:O	2.66	0.44
1:I:59:GLN:HB3	2:J:30:VAL:CB	2.46	0.44
1:I:71:ARG:HB2	1:I:76:GLN:CG	2.47	0.44
1:I:260:ILE:HG23	1:I:264:ILE:HG13	1.99	0.44
2:J:40:ASP:OD1	2:J:44:GLY:O	2.35	0.44
2:J:132:ALA:HB1	1:K:155:THR:HA	1.99	0.44
2:J:218:SER:HA	2:J:221:ALA:HB3	1.99	0.44
2:J:239:ARG:HB3	1:K:254:ILE:HG21	1.99	0.44
2:J:247:ILE:HD12	1:K:257:ALA:C	2.42	0.44
1:K:106:LEU:HD11	1:K:165:ARG:NH2	2.32	0.44
2:L:38:ILE:HD12	2:L:57:LEU:HA	1.99	0.44
2:L:211:ILE:HG12	1:M:233:GLU:OE2	2.18	0.44
2:N:28:TYR:O	2:N:54:THR:HG23	2.16	0.44
2:N:57:LEU:HB2	2:N:62:GLN:CB	2.48	0.44
2:N:235:LEU:HG	2:N:235:LEU:O	2.18	0.44
1:O:51:PHE:CE1	1:O:64:LEU:HD11	2.52	0.44
1:O:251:LEU:HA	1:O:254:ILE:HD12	1.99	0.44
2:P:35:ARG:O	2:P:103:LEU:HD13	2.17	0.44
2:P:80:THR:CG2	2:P:90:ILE:HD12	2.48	0.44
2:P:252:SER:HA	2:P:257:ILE:HD11	2.00	0.44
1:Q:238:LEU:CD1	2:R:235:LEU:HD13	2.47	0.44
1:Q:260:ILE:CG2	1:Q:264:ILE:HD12	2.47	0.44
2:R:39:PHE:HD2	2:R:62:GLN:HA	1.82	0.44
2:T:221:ALA:HA	1:U:248:TYR:CG	2.51	0.44
1:U:52:PHE:O	1:U:76:GLN:HA	2.17	0.44
1:U:140:VAL:HG11	1:U:168:LEU:HB2	1.97	0.44
1:W:71:ARG:CB	1:W:76:GLN:HB3	2.46	0.44
1:W:73:PRO:C	1:W:75:PHE:H	2.24	0.44
1:W:154:ILE:HA	1:W:187:LEU:HD21	2.00	0.44
1:A:252:ARG:HG2	2:B:238:LEU:HD22	2.00	0.44
2:B:267:LEU:O	2:B:267:LEU:CD1	2.61	0.44
1:E:257:ALA:HA	1:G:279:VAL:HG22	1.98	0.44
1:G:40:VAL:O	1:G:40:VAL:HG13	2.17	0.44
1:G:153:LEU:HB3	1:G:187:LEU:HD21	2.00	0.44
1:I:51:PHE:CE2	1:I:62:THR:HG21	2.51	0.44
1:I:53:ASN:N	2:J:31:ASP:HB2	2.31	0.44
1:I:236:LYS:HG3	2:J:227:SER:HB2	1.99	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:I:280:LEU:O	1:I:282:LEU:N	2.50	0.44
1:K:54:ARG:CZ	2:L:29:ASN:HA	2.46	0.44
1:K:141:LEU:O	1:K:145:VAL:HG23	2.17	0.44
1:K:142:LYS:HG2	2:L:143:ARG:CZ	2.47	0.44
1:M:153:LEU:CB	1:M:187:LEU:HD21	2.46	0.44
1:O:254:ILE:O	1:O:257:ALA:HB3	2.17	0.44
1:S:64:LEU:HB3	1:S:69:HIS:CG	2.52	0.44
1:S:243:SER:HA	1:U:294:LEU:HD13	1.99	0.44
1:S:273:LEU:HD22	1:U:280:LEU:HD22	2.00	0.44
1:U:48:ARG:HD2	1:U:64:LEU:O	2.17	0.44
1:U:221:GLN:HE22	1:U:225:ILE:HD11	1.82	0.44
1:U:231:GLU:O	1:U:234:ALA:HB3	2.18	0.44
1:U:281:ASN:O	1:U:282:LEU:C	2.60	0.44
2:V:85:LEU:O	1:W:193:TYR:HD1	2.00	0.44
2:V:259:TYR:OH	1:W:278:LEU:HB2	2.18	0.44
1:W:281:ASN:O	1:W:287:PHE:HB2	2.17	0.44
1:A:270:ARG:O	2:B:258:THR:HB	2.18	0.44
1:C:272:TYR:N	2:D:260:LEU:HD23	2.33	0.44
1:E:267:SER:HA	2:F:252:SER:HB3	1.99	0.44
1:G:107:ARG:O	1:G:182:VAL:HG13	2.17	0.44
1:G:278:LEU:O	1:G:279:VAL:HB	2.17	0.44
2:H:257:ILE:HG23	1:I:271:ILE:O	2.17	0.44
1:I:50:ILE:CD1	1:I:63:ILE:HG12	2.46	0.44
2:J:86:GLN:O	2:J:88:VAL:HG23	2.17	0.44
2:J:95:LEU:O	2:J:165:LEU:HA	2.17	0.44
2:J:134:PHE:CD2	2:J:146:VAL:HG22	2.52	0.44
2:J:207:LYS:HE3	1:K:226:VAL:CG2	2.48	0.44
2:J:221:ALA:HA	1:K:248:TYR:CB	2.47	0.44
2:J:236:ILE:HD13	1:K:250:LYS:HD2	2.00	0.44
1:K:285:GLU:HA	1:K:288:THR:OG1	2.17	0.44
2:L:244:ALA:O	2:L:245:GLU:C	2.58	0.44
1:M:294:LEU:HD23	1:O:283:GLN:OE1	2.18	0.44
2:N:63:LYS:O	2:N:64:PRO:C	2.60	0.44
2:N:258:THR:H	1:O:272:TYR:HB3	1.82	0.44
1:O:52:PHE:HE1	2:P:32:ALA:H	1.66	0.44
1:Q:229:GLU:O	1:Q:233:GLU:HB2	2.18	0.44
1:Q:242:LEU:HD12	2:R:234:GLY:C	2.43	0.44
2:R:57:LEU:C	2:R:57:LEU:HD12	2.41	0.44
2:R:203:ALA:HA	2:R:206:GLN:HG3	1.99	0.44
2:R:204:GLU:O	2:R:207:LYS:HB2	2.17	0.44
1:S:154:ILE:HG12	1:S:187:LEU:HD23	1.99	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:S:271:ILE:HG12	2:T:259:TYR:CE1	2.53	0.44
1:U:286:SER:HA	1:U:289:ARG:NE	2.33	0.44
2:V:267:LEU:CD2	2:X:267:LEU:HD22	2.48	0.44
1:W:260:ILE:O	1:W:264:ILE:N	2.49	0.44
1:A:235:ALA:HA	2:B:235:LEU:HB2	1.99	0.44
1:E:236:LYS:HB2	2:F:227:SER:HB2	2.00	0.44
1:G:58:VAL:CB	1:G:122:GLN:OE1	2.65	0.44
1:I:47:HIS:NE2	1:I:82:ASP:CG	2.75	0.44
1:I:192:GLU:HG3	2:J:188:VAL:CG2	2.48	0.44
2:J:61:VAL:HG13	2:J:62:GLN:N	2.32	0.44
2:J:260:LEU:HD22	2:J:268:LEU:CD2	2.47	0.44
1:K:53:ASN:N	2:L:32:ALA:HB2	2.32	0.44
1:K:104:ILE:HG12	1:K:187:LEU:HD13	1.98	0.44
1:K:264:ILE:O	1:K:265:ALA:C	2.60	0.44
2:L:39:PHE:H	2:L:62:GLN:HG3	1.83	0.44
1:M:55:ILE:O	1:M:56:GLY:C	2.60	0.44
1:M:250:LYS:HE2	1:O:287:PHE:HZ	1.83	0.44
2:N:239:ARG:HD3	1:O:254:ILE:CG2	2.48	0.44
1:O:161:SER:O	1:O:165:ARG:HG2	2.18	0.44
2:P:218:SER:HB3	1:Q:237:MET:HE1	2.00	0.44
1:U:235:ALA:HA	2:V:235:LEU:HB2	1.98	0.44
2:V:39:PHE:HB2	2:V:65:ILE:HD11	1.99	0.44
2:V:81:GLY:HA2	2:V:86:GLN:O	2.16	0.44
2:V:248:ALA:HB1	1:W:278:LEU:HD21	1.98	0.44
2:V:254:SER:HB2	1:W:271:ILE:O	2.18	0.44
2:B:228:LEU:HD22	2:B:236:ILE:H	1.82	0.44
2:D:207:LYS:HB3	1:E:226:VAL:HG12	1.99	0.44
1:G:106:LEU:HD11	1:G:165:ARG:HD2	1.99	0.44
2:H:32:ALA:HB3	2:H:70:ARG:NH2	2.33	0.44
2:J:80:THR:CG2	2:J:131:VAL:HG11	2.47	0.44
2:J:207:LYS:HE3	1:K:226:VAL:O	2.18	0.44
2:J:268:LEU:HD13	2:J:270:LEU:HD21	1.99	0.44
1:K:210:ALA:O	1:K:214:VAL:HG23	2.18	0.44
2:L:74:ARG:HD3	2:L:75:ASN:N	2.33	0.44
1:M:71:ARG:HD3	1:M:78:PRO:CG	2.46	0.44
1:M:79:ILE:HB	1:M:126:LEU:HD21	2.00	0.44
1:M:218:LYS:HD3	2:N:212:ILE:HG21	2.00	0.44
2:N:224:ILE:HG23	1:O:248:TYR:HB2	1.99	0.44
2:N:229:ALA:HB2	1:O:245:ASN:HD22	1.82	0.44
1:O:236:LYS:O	1:O:240:GLU:OE1	2.36	0.44
1:O:272:TYR:OH	2:P:258:THR:HB	2.18	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:P:41:ARG:HG2	1:Q:65:ALA:C	2.42	0.44
2:P:260:LEU:O	1:Q:275:ALA:HB2	2.18	0.44
1:Q:51:PHE:CZ	1:Q:70:PHE:O	2.71	0.44
2:R:68:ASP:OD1	2:R:70:ARG:HD2	2.17	0.44
2:R:235:LEU:O	2:R:235:LEU:HG	2.18	0.44
2:T:134:PHE:HB3	2:T:138:GLU:OE1	2.18	0.44
2:T:272:GLN:NE2	2:V:272:GLN:OE1	2.50	0.44
1:U:53:ASN:H	1:U:58:VAL:HG22	1.82	0.44
2:V:272:GLN:HE21	2:X:269:GLN:NE2	2.14	0.44
1:A:221:GLN:OE1	2:B:216:GLY:HA2	2.18	0.44
1:A:262:LYS:HA	2:X:251:LEU:CG	2.48	0.44
2:B:268:LEU:CD2	1:E:272:TYR:OH	2.66	0.44
2:D:236:ILE:HG23	1:E:254:ILE:CD1	2.46	0.44
1:E:258:GLN:HA	1:E:261:SER:OG	2.18	0.44
1:E:267:SER:HA	2:F:252:SER:CB	2.48	0.44
2:F:211:ILE:HG12	1:G:234:ALA:CA	2.48	0.44
1:G:108:VAL:HG22	1:G:165:ARG:NH1	2.31	0.44
2:H:214:ALA:HB1	1:I:237:MET:SD	2.57	0.44
1:I:71:ARG:C	1:I:72:ILE:HG13	2.43	0.44
2:J:37:VAL:HG12	2:J:45:VAL:HG12	1.99	0.44
2:L:35:ARG:HA	2:L:51:GLY:O	2.17	0.44
2:L:49:VAL:HA	2:L:104:PRO:HG3	1.98	0.44
1:M:54:ARG:NH2	2:N:30:VAL:O	2.51	0.44
1:M:107:ARG:HH22	1:M:185:THR:HG21	1.82	0.44
1:O:51:PHE:CD1	1:O:64:LEU:HD11	2.53	0.44
1:O:62:THR:O	1:O:118:PRO:HG3	2.17	0.44
1:O:94:THR:HG22	1:O:95:GLY:N	2.33	0.44
1:O:243:SER:OG	2:P:231:ALA:HB1	2.18	0.44
1:Q:107:ARG:HG2	1:Q:183:ALA:HB3	2.00	0.44
2:T:91:THR:CB	2:T:172:HIS:HB3	2.48	0.44
2:T:135:ASP:O	2:T:139:LEU:HG	2.18	0.44
1:U:260:ILE:HG23	1:U:264:ILE:CB	2.44	0.44
2:V:190:GLN:O	2:V:193:ALA:HB3	2.18	0.44
2:V:228:LEU:HB2	1:W:245:ASN:HD21	1.82	0.44
2:B:258:THR:O	1:C:272:TYR:HA	2.18	0.44
1:C:209:ARG:NH1	1:C:213:LEU:HD11	2.32	0.44
1:C:259:ASN:HA	1:C:262:LYS:HB2	1.99	0.44
1:C:279:VAL:C	1:C:281:ASN:H	2.26	0.44
2:D:236:ILE:HG12	1:E:251:LEU:HB2	2.00	0.44
2:D:260:LEU:O	1:E:274:THR:HA	2.18	0.44
2:F:218:SER:O	2:F:221:ALA:HB3	2.18	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:F:250:GLN:HB2	2:F:253:ARG:HH12	1.83	0.44
2:F:267:LEU:O	2:H:267:LEU:HB3	2.18	0.44
1:G:136:ILE:CG1	1:G:168:LEU:HD11	2.47	0.44
2:H:126:ILE:HD11	2:H:157:ARG:CB	2.48	0.44
1:I:44:GLU:O	1:I:66:GLU:OE2	2.36	0.44
1:I:76:GLN:O	1:I:78:PRO:HD3	2.18	0.44
1:I:260:ILE:C	1:I:262:LYS:N	2.75	0.44
1:I:283:GLN:O	1:I:284:ASP:C	2.61	0.44
1:I:292:ASP:OD2	1:I:295:ILE:HD12	2.17	0.44
2:L:131:VAL:HG13	2:L:139:LEU:HD21	2.00	0.44
2:L:132:ALA:HB1	1:M:155:THR:HA	1.99	0.44
1:M:246:PRO:CB	1:M:249:ILE:HD12	2.48	0.44
2:N:40:ASP:HA	2:N:61:VAL:CG2	2.45	0.44
1:O:49:ALA:C	1:O:64:LEU:HB2	2.43	0.44
1:O:207:ALA:HB1	2:P:201:GLU:OE1	2.18	0.44
1:S:281:ASN:O	1:S:287:PHE:HB3	2.17	0.44
2:T:258:THR:C	1:U:272:TYR:HB3	2.42	0.44
1:U:48:ARG:CG	1:U:83:ILE:HG21	2.48	0.44
1:U:76:GLN:O	1:U:78:PRO:HD3	2.17	0.44
2:V:28:TYR:OH	2:V:36:ALA:HB3	2.17	0.44
2:V:131:VAL:HG22	2:V:139:LEU:CD2	2.48	0.44
2:V:270:LEU:HD22	2:X:268:LEU:HD22	2.00	0.44
2:X:270:LEU:H	2:X:270:LEU:HD23	1.82	0.44
2:B:207:LYS:HD2	1:C:230:GLY:CA	2.48	0.44
2:B:224:ILE:HD13	1:C:255:ARG:HH12	1.82	0.44
1:C:254:ILE:O	1:C:258:GLN:HG2	2.18	0.44
2:F:203:ALA:O	2:F:207:LYS:HG2	2.17	0.44
2:F:217:ASP:OD2	2:H:238:LEU:CD1	2.66	0.44
1:G:217:ALA:O	2:H:212:ILE:HG21	2.18	0.44
2:H:147:SER:N	2:H:170:LEU:HD12	2.32	0.44
1:I:117:LEU:N	1:I:118:PRO:CD	2.81	0.44
1:I:229:GLU:O	1:I:233:GLU:CB	2.65	0.44
1:I:235:ALA:HB1	2:J:224:ILE:CD1	2.47	0.44
1:I:263:THR:HG21	2:J:245:GLU:CA	2.46	0.44
2:J:90:ILE:HD12	2:J:131:VAL:HG21	1.99	0.44
2:J:140:ILE:HG13	2:J:173:LEU:HD21	2.00	0.44
1:M:53:ASN:H	1:M:58:VAL:HG13	1.83	0.44
1:M:269:ASN:HB3	2:N:252:SER:OG	2.18	0.44
2:N:28:TYR:O	2:N:28:TYR:CD2	2.71	0.44
2:N:117:ARG:HD3	1:O:109:LEU:HG	2.00	0.44
1:O:157:ARG:CZ	1:O:184:ILE:HG22	2.47	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:O:243:SER:O	1:Q:294:LEU:HD13	2.18	0.44
2:R:140:ILE:HD11	2:R:175:PHE:CD2	2.52	0.44
2:T:36:ALA:HA	2:T:67:PHE:HD2	1.83	0.44
2:T:80:THR:HG21	2:T:90:ILE:HD12	1.99	0.44
2:T:218:SER:HA	2:T:221:ALA:HB3	2.00	0.44
1:U:108:VAL:HA	1:U:182:VAL:HG22	2.00	0.44
1:U:248:TYR:CE1	1:U:252:ARG:HB2	2.53	0.44
1:W:110:SER:HA	1:W:179:LEU:HD23	1.99	0.44
1:A:262:LYS:O	2:X:250:GLN:OE1	2.34	0.43
1:A:263:THR:OG1	2:B:248:ALA:HB3	2.18	0.43
1:C:282:LEU:HA	1:C:287:PHE:CE1	2.53	0.43
2:F:258:THR:HG23	1:G:273:LEU:O	2.17	0.43
2:F:268:LEU:HD13	2:H:261:PRO:CG	2.48	0.43
1:I:76:GLN:HB2	2:J:29:ASN:HD22	1.83	0.43
1:I:122:GLN:HB3	2:J:68:ASP:CG	2.43	0.43
1:I:135:SER:HB2	2:J:93:ARG:HD2	2.00	0.43
1:I:246:PRO:HD3	1:K:294:LEU:HB2	1.99	0.43
2:J:65:ILE:HG23	2:J:112:GLU:HG3	2.00	0.43
2:J:96:PHE:HA	2:J:164:ILE:O	2.18	0.43
2:J:131:VAL:HG13	2:J:139:LEU:HD21	2.00	0.43
1:K:236:LYS:HG2	2:L:223:LEU:HD13	1.99	0.43
1:K:250:LYS:HG2	1:M:282:LEU:HD11	2.00	0.43
2:L:57:LEU:C	2:L:57:LEU:HD12	2.43	0.43
2:L:95:LEU:O	2:L:165:LEU:HA	2.18	0.43
1:M:154:ILE:HG12	1:M:187:LEU:HD23	1.99	0.43
1:M:252:ARG:HE	1:M:256:ALA:HB2	1.83	0.43
2:P:214:ALA:HB1	1:Q:234:ALA:HB1	1.98	0.43
2:P:224:ILE:HD11	2:P:228:LEU:HD21	1.99	0.43
2:R:74:ARG:HE	2:R:119:LEU:HD13	1.82	0.43
2:T:229:ALA:CB	1:U:245:ASN:HD21	2.31	0.43
2:T:267:LEU:CD2	2:V:269:GLN:OE1	2.66	0.43
1:U:72:ILE:HB	1:U:75:PHE:HD2	1.83	0.43
1:U:280:LEU:HD23	1:U:280:LEU:O	2.18	0.43
1:W:260:ILE:O	1:W:264:ILE:HB	2.18	0.43
1:A:237:MET:O	1:A:240:GLU:HG3	2.18	0.43
2:B:237:GLU:HB2	1:C:294:LEU:HD11	2.00	0.43
2:D:268:LEU:HD12	1:E:272:TYR:CD2	2.53	0.43
2:D:270:LEU:HD11	2:F:271:PRO:HD3	1.98	0.43
2:F:200:VAL:O	2:F:200:VAL:CG1	2.65	0.43
2:F:223:LEU:C	2:F:223:LEU:HD12	2.43	0.43
2:F:267:LEU:CA	2:H:267:LEU:HB3	2.47	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:144:VAL:HG11	1:G:164:ILE:CG1	2.48	0.43
2:H:240:LYS:O	2:H:243:ALA:HB3	2.17	0.43
1:I:68:LEU:O	1:I:68:LEU:HG	2.17	0.43
2:J:214:ALA:CB	1:K:234:ALA:HA	2.45	0.43
1:K:52:PHE:HD2	1:K:77:TYR:H	1.66	0.43
1:K:113:ASN:ND2	1:K:116:GLU:HB3	2.34	0.43
1:K:165:ARG:HH22	1:K:168:LEU:HD23	1.83	0.43
1:K:277:ASN:ND2	1:M:280:LEU:HD11	2.34	0.43
2:L:94:ILE:HG22	2:L:165:LEU:HD22	2.00	0.43
2:L:221:ALA:HA	1:M:248:TYR:CB	2.48	0.43
2:L:247:ILE:HD12	1:M:257:ALA:HB1	1.99	0.43
2:L:258:THR:OG1	1:M:272:TYR:CB	2.65	0.43
1:M:248:TYR:O	1:M:252:ARG:CB	2.66	0.43
2:N:235:LEU:O	2:N:236:ILE:C	2.59	0.43
1:O:108:VAL:C	1:O:109:LEU:HD12	2.42	0.43
2:P:40:ASP:HA	2:P:61:VAL:HG22	2.00	0.43
1:Q:52:PHE:HE1	2:R:32:ALA:CB	2.31	0.43
2:T:244:ALA:O	2:T:248:ALA:HB3	2.18	0.43
1:U:257:ALA:HA	1:U:260:ILE:HB	2.00	0.43
2:X:221:ALA:HA	2:X:224:ILE:CG2	2.48	0.43
2:B:227:SER:O	2:B:231:ALA:HB3	2.18	0.43
1:C:293:SER:HA	1:C:298:LYS:HB2	2.01	0.43
2:D:247:ILE:O	2:D:251:LEU:HG	2.19	0.43
2:D:251:LEU:HD11	1:G:280:LEU:HD21	2.00	0.43
1:E:214:VAL:HG22	2:F:208:LYS:HB2	1.98	0.43
1:E:257:ALA:CA	1:G:279:VAL:HG13	2.48	0.43
2:H:96:PHE:CE1	2:H:119:LEU:HD11	2.54	0.43
2:J:224:ILE:O	2:J:228:LEU:HG	2.19	0.43
1:K:135:SER:CB	2:L:93:ARG:HD3	2.48	0.43
1:K:152:GLN:O	1:K:156:GLN:HB3	2.18	0.43
1:K:242:LEU:HB3	1:K:249:ILE:HD12	2.00	0.43
1:K:287:PHE:C	1:K:290:GLY:H	2.26	0.43
2:L:132:ALA:HB1	1:M:155:THR:O	2.18	0.43
1:M:228:ALA:HB1	2:N:220:ALA:HA	1.98	0.43
2:N:35:ARG:O	2:N:67:PHE:HB2	2.18	0.43
2:N:61:VAL:HB	1:O:68:LEU:CD2	2.48	0.43
2:N:67:PHE:CD1	2:N:103:LEU:HD22	2.53	0.43
2:N:184:GLU:O	2:N:188:VAL:HG23	2.19	0.43
1:O:290:GLY:O	1:Q:282:LEU:HG	2.19	0.43
1:Q:256:ALA:CB	2:R:241:LEU:HD12	2.46	0.43
2:R:58:ILE:HG13	2:R:61:VAL:HG11	1.99	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:S:232:ALA:HB1	2:T:224:ILE:HD13	2.00	0.43
1:U:246:PRO:HG3	1:W:294:LEU:HG	2.00	0.43
2:V:132:ALA:CB	1:W:154:ILE:HG23	2.46	0.43
2:V:206:GLN:O	2:V:207:LYS:C	2.57	0.43
2:X:236:ILE:HG22	2:X:240:LYS:HG3	2.00	0.43
1:A:274:THR:O	2:X:259:TYR:C	2.61	0.43
1:C:218:LYS:HA	1:C:221:GLN:HB3	2.00	0.43
1:C:228:ALA:HB3	2:D:220:ALA:HB1	2.00	0.43
1:E:238:LEU:CD1	2:F:235:LEU:HD13	2.48	0.43
2:F:244:ALA:HA	2:F:247:ILE:CG1	2.48	0.43
1:G:228:ALA:CB	2:H:220:ALA:HB2	2.49	0.43
1:G:272:TYR:CD2	2:H:258:THR:HB	2.53	0.43
2:H:128:LYS:HE2	1:I:157:ARG:HD3	1.99	0.43
1:I:58:VAL:HG21	2:J:34:HIS:CB	2.45	0.43
1:I:157:ARG:HH22	1:I:186:GLU:N	2.17	0.43
2:J:129:SER:OG	1:K:158:ALA:HB2	2.19	0.43
2:L:270:LEU:HD13	2:N:258:THR:HG22	1.98	0.43
1:O:51:PHE:HB3	1:O:59:GLN:HE22	1.83	0.43
1:O:98:ASP:OD1	1:O:98:ASP:O	2.37	0.43
2:P:36:ALA:O	2:P:50:VAL:HB	2.18	0.43
2:P:186:LYS:HG3	1:Q:212:PHE:CD2	2.53	0.43
1:Q:50:ILE:CG2	1:Q:117:LEU:HB2	2.48	0.43
2:R:39:PHE:HA	2:R:45:VAL:HG22	2.00	0.43
2:R:72:ARG:HB2	2:R:96:PHE:CZ	2.54	0.43
2:R:92:LEU:HD11	2:R:169:SER:N	2.34	0.43
2:R:267:LEU:HD21	2:T:267:LEU:HD22	2.00	0.43
2:T:80:THR:HG23	2:T:131:VAL:HG11	1.99	0.43
1:U:50:ILE:CG2	1:U:117:LEU:HB2	2.48	0.43
2:V:44:GLY:CA	1:W:45:GLY:HA2	2.49	0.43
1:W:229:GLU:O	1:W:233:GLU:HB2	2.19	0.43
2:D:266:VAL:HG11	2:F:264:GLN:NE2	2.34	0.43
2:F:261:PRO:HA	1:G:281:ASN:ND2	2.33	0.43
1:G:109:LEU:H	1:G:182:VAL:HG22	1.83	0.43
1:G:291:SER:HA	1:I:283:GLN:HB3	2.00	0.43
2:H:32:ALA:O	2:H:70:ARG:NE	2.51	0.43
1:I:53:ASN:ND2	1:I:58:VAL:HG22	2.34	0.43
1:I:156:GLN:O	1:I:160:VAL:HG23	2.18	0.43
2:J:78:VAL:HG21	2:J:127:LEU:HB2	2.01	0.43
2:J:94:ILE:HD11	2:J:123:THR:HG21	1.99	0.43
2:J:207:LYS:HE3	1:K:226:VAL:HG23	2.00	0.43
2:L:58:ILE:HG13	2:L:61:VAL:CG1	2.49	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:L:203:ALA:HA	2:L:206:GLN:HG3	2.00	0.43
2:L:267:LEU:HD21	2:N:269:GLN:HB2	2.00	0.43
1:O:44:GLU:C	1:O:47:HIS:HD1	2.27	0.43
1:O:52:PHE:HE1	2:P:32:ALA:N	2.16	0.43
1:O:154:ILE:HA	1:O:187:LEU:HD23	2.01	0.43
1:O:239:GLY:HA2	2:P:234:GLY:HA3	1.99	0.43
1:O:292:ASP:O	1:O:295:ILE:HD12	2.18	0.43
2:P:126:ILE:HD13	2:P:154:LEU:HA	1.99	0.43
2:R:99:VAL:O	2:R:103:LEU:HG	2.19	0.43
2:T:82:SER:HA	2:T:131:VAL:O	2.18	0.43
2:T:203:ALA:HB1	1:U:226:VAL:HG11	2.00	0.43
2:T:236:ILE:HA	1:U:254:ILE:HD12	2.00	0.43
1:U:108:VAL:HG21	1:U:137:VAL:HG22	1.99	0.43
1:U:154:ILE:HG13	1:U:187:LEU:HD23	1.99	0.43
2:V:39:PHE:H	2:V:62:GLN:HG2	1.83	0.43
2:V:134:PHE:HB3	2:V:138:GLU:OE1	2.17	0.43
1:W:144:VAL:HG11	1:W:164:ILE:CG1	2.47	0.43
2:B:236:ILE:O	2:B:240:LYS:HB2	2.19	0.43
2:F:260:LEU:N	1:G:275:ALA:HA	2.33	0.43
2:H:196:ALA:HB3	1:I:219:GLN:CB	2.49	0.43
2:H:237:GLU:O	2:H:241:LEU:HD23	2.18	0.43
2:H:257:ILE:CG2	1:I:273:LEU:HD11	2.49	0.43
2:H:268:LEU:HD12	2:J:261:PRO:CG	2.49	0.43
1:I:210:ALA:HB3	2:J:202:LYS:HG2	2.01	0.43
2:J:225:ALA:HB1	1:K:245:ASN:HB3	2.00	0.43
1:K:52:PHE:H	1:K:76:GLN:HE22	1.66	0.43
2:L:57:LEU:CD2	2:L:62:GLN:OE1	2.65	0.43
1:M:229:GLU:O	1:M:233:GLU:HG3	2.19	0.43
1:M:252:ARG:O	1:M:256:ALA:HB3	2.18	0.43
2:N:236:ILE:HA	1:O:254:ILE:HD11	2.00	0.43
1:Q:47:HIS:HD2	1:Q:80:ILE:HG22	1.84	0.43
1:Q:50:ILE:HG21	1:Q:117:LEU:CB	2.47	0.43
1:S:205:GLN:HB3	1:S:209:ARG:NH2	2.34	0.43
2:T:50:VAL:HG13	2:T:55:HIS:CG	2.54	0.43
1:U:43:VAL:HG13	1:U:80:ILE:HA	2.01	0.43
2:V:31:ASP:O	2:V:32:ALA:C	2.61	0.43
2:V:272:GLN:CD	2:X:272:GLN:HE21	2.27	0.43
1:W:267:SER:OG	2:X:252:SER:OG	2.30	0.43
2:X:254:SER:HG	2:X:257:ILE:HD11	1.83	0.43
1:A:251:LEU:CB	2:X:228:LEU:HD13	2.48	0.43
1:A:253:LYS:HZ2	1:C:291:SER:HB2	1.83	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:288:THR:HB	1:C:292:ASP:CG	2.43	0.43
1:E:254:ILE:HA	1:G:282:LEU:HD11	2.01	0.43
1:E:268:GLN:HB3	2:F:255:ARG:HA	2.00	0.43
2:F:219:LYS:CA	2:F:222:GLU:OE1	2.64	0.43
1:G:165:ARG:HD2	1:G:182:VAL:CG1	2.49	0.43
1:G:242:LEU:CD1	2:H:238:LEU:HB2	2.48	0.43
2:H:106:ILE:HG23	2:H:114:TYR:CB	2.48	0.43
2:H:235:LEU:CD1	2:H:238:LEU:HD23	2.49	0.43
2:J:61:VAL:CG1	2:J:62:GLN:N	2.82	0.43
2:J:118:VAL:HG21	2:J:161:PHE:HB3	2.00	0.43
2:J:258:THR:OG1	1:K:272:TYR:HB3	2.19	0.43
1:K:79:ILE:O	1:K:81:TYR:CE1	2.71	0.43
2:N:224:ILE:HG23	1:O:248:TYR:HA	2.01	0.43
1:Q:71:ARG:HD3	1:Q:78:PRO:HG3	1.99	0.43
1:Q:157:ARG:HA	1:Q:160:VAL:HB	2.00	0.43
1:S:221:GLN:HA	2:T:216:GLY:HA3	2.01	0.43
2:V:30:VAL:HG11	2:V:52:GLU:C	2.44	0.43
2:V:92:LEU:HD22	2:V:150:VAL:CG1	2.48	0.43
2:V:224:ILE:O	2:V:227:SER:HB3	2.19	0.43
1:W:53:ASN:H	1:W:58:VAL:HG22	1.83	0.43
2:D:257:ILE:HG23	1:E:271:ILE:HG12	2.00	0.43
2:D:258:THR:HG1	2:D:260:LEU:HD21	1.81	0.43
2:F:224:ILE:CD1	1:G:248:TYR:CD1	3.01	0.43
2:F:259:TYR:CB	1:G:277:ASN:HB3	2.48	0.43
1:G:214:VAL:HG22	2:H:209:ALA:HB3	2.01	0.43
1:I:242:LEU:HB2	2:J:234:GLY:HA2	2.00	0.43
1:K:253:LYS:O	1:K:257:ALA:CB	2.66	0.43
2:L:28:TYR:CD1	2:L:57:LEU:CD2	3.01	0.43
2:L:63:LYS:O	2:L:64:PRO:C	2.62	0.43
2:N:30:VAL:HG13	2:N:34:HIS:C	2.43	0.43
1:O:48:ARG:CD	1:O:65:ALA:HA	2.48	0.43
1:Q:148:PHE:HB2	1:Q:153:LEU:HD21	2.00	0.43
2:R:34:HIS:HA	2:R:67:PHE:O	2.19	0.43
1:S:71:ARG:HB2	1:S:76:GLN:HG3	2.00	0.43
2:T:94:ILE:HD11	2:T:123:THR:HG21	2.01	0.43
2:T:130:VAL:HG21	2:T:150:VAL:CG2	2.49	0.43
1:U:50:ILE:HG12	1:U:81:TYR:HE2	1.83	0.43
1:U:51:PHE:CD1	1:U:64:LEU:HD11	2.53	0.43
1:U:133:LEU:N	1:U:134:PRO:HD2	2.34	0.43
1:U:260:ILE:HA	1:U:263:THR:H	1.83	0.43
2:X:251:LEU:HD23	2:X:251:LEU:HA	1.55	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:195:ARG:O	2:D:199:VAL:HG23	2.19	0.43
2:D:233:ASP:HB2	1:E:294:LEU:HA	2.01	0.43
2:F:195:ARG:O	2:F:199:VAL:CG2	2.65	0.43
2:H:214:ALA:HB2	1:I:234:ALA:HA	2.01	0.43
2:H:247:ILE:HD12	1:I:257:ALA:HB3	2.01	0.43
1:I:176:SER:O	1:I:177:LEU:HD23	2.19	0.43
2:J:38:ILE:HA	2:J:62:GLN:CG	2.49	0.43
2:J:140:ILE:CG1	2:J:173:LEU:HD21	2.49	0.43
2:J:222:GLU:HA	1:K:244:LYS:CE	2.49	0.43
1:K:253:LYS:CD	2:L:241:LEU:HD21	2.49	0.43
1:K:290:GLY:O	1:M:283:GLN:OE1	2.36	0.43
2:N:224:ILE:HG12	1:O:251:LEU:CD2	2.48	0.43
2:P:126:ILE:HD13	2:P:153:ASP:C	2.44	0.43
2:P:203:ALA:O	2:P:206:GLN:HG3	2.19	0.43
1:Q:108:VAL:HA	1:Q:182:VAL:HG22	2.01	0.43
2:T:209:ALA:HA	2:T:212:ILE:HB	2.00	0.43
2:T:224:ILE:O	2:T:227:SER:HB2	2.19	0.43
1:U:50:ILE:HD13	1:U:118:PRO:N	2.34	0.43
1:U:281:ASN:O	1:U:287:PHE:CB	2.67	0.43
2:D:203:ALA:O	1:E:226:VAL:HG11	2.19	0.43
1:E:235:ALA:HB1	2:F:228:LEU:CG	2.49	0.43
1:G:252:ARG:HG3	2:H:241:LEU:HG	2.00	0.43
2:H:92:LEU:HD22	2:H:150:VAL:HG11	2.01	0.43
2:H:220:ALA:HB1	1:I:248:TYR:CE1	2.54	0.43
1:I:45:GLY:O	1:I:84:ARG:HD3	2.19	0.43
1:I:51:PHE:O	2:J:31:ASP:CG	2.62	0.43
1:I:243:SER:O	1:K:294:LEU:O	2.36	0.43
2:J:52:GLU:C	2:J:53:GLY:O	2.60	0.43
1:K:117:LEU:N	1:K:118:PRO:CD	2.82	0.43
1:K:157:ARG:HE	1:K:187:LEU:HD22	1.84	0.43
1:K:235:ALA:HB1	2:L:224:ILE:CD1	2.49	0.43
2:L:36:ALA:C	2:L:50:VAL:HB	2.43	0.43
2:L:50:VAL:HG22	2:L:55:HIS:HB2	2.00	0.43
2:L:110:ILE:HD11	2:L:117:ARG:NE	2.34	0.43
1:M:272:TYR:CE2	2:N:258:THR:HA	2.54	0.43
2:N:244:ALA:O	2:N:248:ALA:HB3	2.18	0.43
1:O:57:GLY:HA3	2:P:52:GLU:HB3	2.00	0.43
1:O:251:LEU:O	1:O:254:ILE:HB	2.19	0.43
2:P:235:LEU:HD21	2:P:239:ARG:CD	2.49	0.43
2:R:86:GLN:CB	2:R:136:ALA:HB2	2.44	0.43
2:T:63:LYS:O	2:T:64:PRO:C	2.61	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:U:57:GLY:HA3	2:V:52:GLU:OE1	2.19	0.43
1:U:77:TYR:O	1:U:79:ILE:HD12	2.19	0.43
1:U:109:LEU:HD12	1:U:109:LEU:N	2.34	0.43
2:V:186:LYS:HD3	1:W:205:GLN:O	2.19	0.43
2:V:267:LEU:HG	2:X:267:LEU:HD22	2.01	0.43
1:W:104:ILE:HG21	1:W:141:LEU:HD22	2.00	0.43
1:W:242:LEU:HD21	1:W:246:PRO:HA	2.00	0.43
2:B:221:ALA:HB1	1:C:248:TYR:CG	2.52	0.42
2:B:233:ASP:OD1	2:B:236:ILE:HD12	2.19	0.42
2:B:254:SER:CB	1:C:267:SER:O	2.66	0.42
2:D:224:ILE:HG21	1:E:248:TYR:HD2	1.84	0.42
1:E:238:LEU:HD13	2:F:238:LEU:HD12	2.00	0.42
2:H:41:ARG:CD	1:I:66:GLU:HG3	2.49	0.42
1:I:203:ALA:HB2	2:J:195:ARG:HG2	2.01	0.42
1:I:242:LEU:HB2	2:J:234:GLY:CA	2.49	0.42
2:J:214:ALA:HB1	1:K:237:MET:SD	2.59	0.42
2:J:246:ASP:O	2:J:249:TYR:HB2	2.19	0.42
1:K:260:ILE:HG23	1:K:264:ILE:HB	2.01	0.42
1:M:229:GLU:O	1:M:233:GLU:CG	2.67	0.42
1:M:264:ILE:O	1:M:265:ALA:C	2.62	0.42
2:N:41:ARG:HG3	1:O:65:ALA:HB3	2.01	0.42
2:N:82:SER:HA	2:N:131:VAL:O	2.18	0.42
2:N:130:VAL:HG11	2:N:150:VAL:HG23	2.00	0.42
1:O:156:GLN:OE1	1:O:160:VAL:HG23	2.18	0.42
2:P:96:PHE:CZ	2:P:115:ASP:CB	3.01	0.42
1:Q:253:LYS:O	1:Q:257:ALA:CB	2.65	0.42
2:T:235:LEU:O	2:T:235:LEU:HG	2.19	0.42
1:U:79:ILE:HD12	1:U:79:ILE:H	1.83	0.42
1:W:104:ILE:CG2	1:W:184:ILE:HG23	2.48	0.42
1:A:239:GLY:HA3	2:B:231:ALA:HB1	2.01	0.42
1:C:252:ARG:CZ	2:D:242:GLU:HG2	2.49	0.42
2:D:224:ILE:CG2	1:E:248:TYR:HD2	2.32	0.42
2:D:254:SER:CB	1:E:268:GLN:HA	2.49	0.42
1:E:256:ALA:CB	2:F:241:LEU:HB3	2.49	0.42
2:F:253:ARG:NH2	1:G:260:ILE:HG21	2.33	0.42
1:G:242:LEU:HD22	1:G:249:ILE:CG1	2.47	0.42
2:H:224:ILE:CD1	1:I:248:TYR:HA	2.38	0.42
1:I:82:ASP:HB2	1:I:86:ARG:NH2	2.35	0.42
2:J:62:GLN:O	2:J:62:GLN:OE1	2.38	0.42
1:K:58:VAL:HB	2:L:52:GLU:OE1	2.19	0.42
1:K:107:ARG:O	1:K:107:ARG:HG3	2.19	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:225:ILE:HA	2:L:219:LYS:NZ	2.34	0.42
1:K:287:PHE:CZ	1:K:291:SER:HB3	2.54	0.42
2:L:63:LYS:O	2:L:65:ILE:HG13	2.19	0.42
2:L:258:THR:H	1:M:272:TYR:HB2	1.84	0.42
1:M:52:PHE:CD1	1:M:58:VAL:HG21	2.54	0.42
1:M:72:ILE:H	1:M:72:ILE:HD12	1.84	0.42
2:N:239:ARG:HH11	1:O:254:ILE:HG23	1.84	0.42
1:O:204:GLN:HB2	2:P:198:PHE:CZ	2.53	0.42
2:P:43:ARG:HG3	2:P:43:ARG:O	2.19	0.42
1:Q:140:VAL:HG21	1:Q:168:LEU:HD12	2.01	0.42
2:R:46:GLN:O	2:R:104:PRO:HB2	2.19	0.42
1:S:49:ALA:HA	1:S:81:TYR:CD2	2.53	0.42
1:S:57:GLY:HA3	2:T:31:ASP:HA	2.00	0.42
1:S:152:GLN:O	1:S:156:GLN:HB3	2.19	0.42
1:U:43:VAL:HG12	1:U:47:HIS:HB3	2.00	0.42
2:V:45:VAL:HG21	2:V:107:PHE:CE2	2.53	0.42
2:V:186:LYS:HA	1:W:209:ARG:HG2	2.01	0.42
1:W:88:ARG:HB3	1:W:133:LEU:HD13	2.01	0.42
1:W:228:ALA:CB	2:X:223:LEU:HB3	2.45	0.42
1:A:238:LEU:HD13	2:B:238:LEU:HD12	2.01	0.42
2:B:222:GLU:CG	1:C:241:ALA:HB1	2.49	0.42
2:B:233:ASP:HA	2:B:236:ILE:HD12	2.00	0.42
1:C:267:SER:C	1:C:269:ASN:H	2.26	0.42
2:H:247:ILE:CD1	1:I:258:GLN:N	2.82	0.42
1:I:167:GLU:O	1:I:170:GLU:HG3	2.20	0.42
1:I:220:GLU:OE1	2:J:213:SER:HA	2.18	0.42
2:J:48:ILE:HG22	2:J:49:VAL:O	2.20	0.42
1:K:260:ILE:HG23	1:K:264:ILE:CD1	2.41	0.42
1:M:233:GLU:HA	1:M:236:LYS:CB	2.49	0.42
2:N:138:GLU:OE1	2:N:146:VAL:CG2	2.68	0.42
1:O:225:ILE:HD12	2:P:219:LYS:HD3	2.01	0.42
1:Q:43:VAL:HB	1:Q:66:GLU:OE1	2.20	0.42
1:Q:57:GLY:HA2	2:R:30:VAL:O	2.19	0.42
1:Q:232:ALA:HA	1:Q:235:ALA:HB3	2.02	0.42
2:R:130:VAL:HG11	2:R:150:VAL:HG23	2.01	0.42
2:R:136:ALA:HB1	2:R:175:PHE:CE1	2.54	0.42
2:R:197:ARG:O	2:R:200:VAL:HB	2.20	0.42
1:S:218:LYS:CE	2:T:212:ILE:HG21	2.48	0.42
2:T:78:VAL:HG13	2:T:124:THR:HG23	2.02	0.42
2:T:221:ALA:CB	1:U:248:TYR:CG	3.02	0.42
1:U:52:PHE:CD2	1:U:77:TYR:O	2.72	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:U:235:ALA:CA	2:V:235:LEU:HB2	2.49	0.42
2:X:204:GLU:HA	2:X:207:LYS:HG2	2.00	0.42
1:A:263:THR:OG1	2:B:248:ALA:CB	2.67	0.42
1:C:196:ALA:HB3	2:D:191:GLN:HB3	2.00	0.42
1:C:264:ILE:O	1:C:264:ILE:HG22	2.19	0.42
1:C:267:SER:C	1:C:269:ASN:N	2.77	0.42
2:D:260:LEU:C	1:E:275:ALA:H	2.27	0.42
2:F:211:ILE:CD1	1:G:233:GLU:OE2	2.67	0.42
2:F:237:GLU:HB2	1:G:294:LEU:CD1	2.49	0.42
2:F:270:LEU:HD21	2:H:270:LEU:HD23	2.01	0.42
1:G:140:VAL:HG13	1:G:167:GLU:OE1	2.19	0.42
2:J:65:ILE:HD13	2:J:107:PHE:CD1	2.54	0.42
1:K:249:ILE:HD13	2:L:237:GLU:CB	2.49	0.42
1:O:213:LEU:HA	1:O:216:LYS:HG2	2.00	0.42
2:P:131:VAL:HG13	2:P:139:LEU:HD11	2.00	0.42
1:Q:52:PHE:CD1	1:Q:121:TYR:HD2	2.37	0.42
1:Q:156:GLN:HE21	1:Q:159:GLN:HB3	1.83	0.42
1:Q:235:ALA:HA	2:R:235:LEU:CB	2.50	0.42
2:R:96:PHE:HB3	2:R:119:LEU:HD21	2.00	0.42
2:T:200:VAL:HG11	1:U:222:ARG:CZ	2.50	0.42
2:T:203:ALA:HA	2:T:206:GLN:HG3	2.02	0.42
1:U:51:PHE:CE1	1:U:70:PHE:O	2.73	0.42
1:U:123:ARG:HD2	2:V:97:ARG:HD3	2.01	0.42
2:V:45:VAL:HG23	1:W:45:GLY:HA3	2.01	0.42
2:X:197:ARG:O	2:X:200:VAL:HB	2.19	0.42
1:A:231:GLU:OE1	2:B:239:ARG:NE	2.51	0.42
1:A:241:ALA:HB1	2:X:225:ALA:HB3	2.02	0.42
1:A:273:LEU:O	2:X:258:THR:OG1	2.31	0.42
1:A:277:ASN:O	1:A:279:VAL:N	2.52	0.42
2:B:247:ILE:HD12	1:C:278:LEU:CD2	2.43	0.42
2:B:267:LEU:HB2	2:D:267:LEU:CG	2.50	0.42
1:C:210:ALA:HB3	2:D:205:GLN:HB2	2.00	0.42
1:C:264:ILE:CA	1:C:267:SER:HB3	2.48	0.42
2:D:268:LEU:CD2	2:F:268:LEU:HA	2.50	0.42
1:E:229:GLU:OE2	1:E:233:GLU:HB2	2.19	0.42
1:G:121:TYR:O	1:G:125:GLY:HA2	2.20	0.42
1:G:131:ARG:HH12	2:H:70:ARG:HB3	1.84	0.42
2:H:36:ALA:HA	2:H:67:PHE:CD2	2.54	0.42
1:I:72:ILE:HB	1:I:75:PHE:HD2	1.83	0.42
1:I:144:VAL:HG13	1:I:163:LEU:HD22	2.00	0.42
1:I:273:LEU:CD2	1:K:280:LEU:HB2	2.50	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:J:130:VAL:HG12	2:J:134:PHE:CE2	2.55	0.42
1:K:39:SER:HA	1:K:71:ARG:O	2.20	0.42
1:K:148:PHE:CD2	1:K:160:VAL:HG22	2.53	0.42
2:N:90:ILE:CG2	2:N:170:LEU:HD22	2.49	0.42
1:O:231:GLU:O	1:O:234:ALA:HB3	2.19	0.42
1:O:235:ALA:CB	2:P:224:ILE:HD13	2.49	0.42
1:O:289:ARG:C	1:O:289:ARG:HD2	2.44	0.42
2:P:57:LEU:HD12	2:P:58:ILE:O	2.20	0.42
2:P:107:PHE:HE1	2:P:112:GLU:HG3	1.83	0.42
2:R:260:LEU:CD1	2:T:261:PRO:HB3	2.49	0.42
1:S:279:VAL:HG12	1:S:282:LEU:HD13	2.01	0.42
2:T:78:VAL:CG1	2:T:128:LYS:HE2	2.49	0.42
2:T:262:ALA:HB3	1:U:275:ALA:HB3	2.02	0.42
1:U:59:GLN:O	1:U:59:GLN:HG2	2.18	0.42
1:U:235:ALA:CB	2:V:224:ILE:CD1	2.97	0.42
1:U:249:ILE:O	1:U:253:LYS:HG2	2.20	0.42
1:A:228:ALA:O	1:A:231:GLU:HB2	2.19	0.42
2:B:254:SER:CB	1:C:268:GLN:HA	2.49	0.42
1:C:277:ASN:HB3	1:E:281:ASN:HA	2.01	0.42
2:D:204:GLU:HA	2:D:207:LYS:HD3	2.01	0.42
2:D:221:ALA:HB1	1:E:248:TYR:CD1	2.54	0.42
2:F:259:TYR:HA	1:G:274:THR:O	2.20	0.42
1:G:232:ALA:HA	2:H:224:ILE:CD1	2.49	0.42
1:G:273:LEU:HB3	1:I:281:ASN:OD1	2.20	0.42
2:H:57:LEU:HD12	2:H:58:ILE:N	2.35	0.42
1:I:43:VAL:HG11	1:I:48:ARG:N	2.34	0.42
1:I:53:ASN:HD21	1:I:58:VAL:HG13	1.84	0.42
1:I:94:THR:OG1	1:I:142:LYS:HA	2.20	0.42
1:I:150:ALA:HB1	1:I:189:PHE:CD2	2.55	0.42
2:J:92:LEU:HA	2:J:169:SER:O	2.20	0.42
2:J:153:ASP:O	2:J:156:GLU:HG3	2.20	0.42
2:J:204:GLU:HA	2:J:207:LYS:HG2	2.01	0.42
1:K:41:PHE:CD1	1:K:43:VAL:CG2	3.02	0.42
1:K:48:ARG:HG3	1:K:83:ILE:HG21	2.01	0.42
2:L:38:ILE:O	2:L:45:VAL:HG13	2.20	0.42
2:N:40:ASP:O	2:N:44:GLY:O	2.37	0.42
2:N:132:ALA:CB	1:O:155:THR:O	2.67	0.42
2:N:146:VAL:O	2:N:150:VAL:HG23	2.19	0.42
1:O:41:PHE:HB3	1:O:71:ARG:HE	1.84	0.42
1:S:140:VAL:HG22	1:S:167:GLU:OE1	2.20	0.42
2:T:103:LEU:HB2	2:T:104:PRO:HD3	2.02	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:U:232:ALA:CB	2:V:223:LEU:HD22	2.47	0.42
2:V:131:VAL:HG22	2:V:139:LEU:HD21	2.00	0.42
2:X:212:ILE:O	2:X:215:GLU:HB2	2.19	0.42
2:X:212:ILE:HA	2:X:215:GLU:HB2	2.01	0.42
1:A:273:LEU:HB3	2:X:260:LEU:H	1.83	0.42
1:A:280:LEU:C	1:A:282:LEU:N	2.77	0.42
1:C:264:ILE:O	1:C:267:SER:HB3	2.20	0.42
2:D:196:ALA:HB3	1:E:219:GLN:HB3	2.01	0.42
2:D:233:ASP:HA	2:D:236:ILE:HD12	2.01	0.42
2:D:262:ALA:N	1:E:274:THR:HG23	2.35	0.42
1:G:234:ALA:C	1:G:238:LEU:HD12	2.45	0.42
2:H:40:ASP:CB	2:H:61:VAL:HG22	2.50	0.42
2:H:130:VAL:HG11	2:H:146:VAL:HG13	2.02	0.42
2:H:218:SER:HB2	1:I:238:LEU:HG	2.01	0.42
2:H:268:LEU:HD13	2:H:270:LEU:HD21	2.01	0.42
1:I:64:LEU:HB3	1:I:69:HIS:HB3	2.02	0.42
1:I:214:VAL:HG22	2:J:209:ALA:CB	2.48	0.42
2:J:40:ASP:HB2	2:J:42:PHE:CE2	2.54	0.42
2:J:259:TYR:HD2	1:K:275:ALA:HA	1.84	0.42
2:L:90:ILE:HD12	2:L:131:VAL:HG21	2.01	0.42
2:N:20:GLY:O	2:N:23:VAL:HG12	2.20	0.42
2:N:46:GLN:O	2:N:104:PRO:CB	2.67	0.42
2:N:91:THR:CB	2:N:172:HIS:HB3	2.49	0.42
1:O:249:ILE:CG2	2:P:241:LEU:HD23	2.50	0.42
1:Q:54:ARG:O	2:R:29:ASN:OD1	2.37	0.42
1:S:156:GLN:O	1:S:160:VAL:HG23	2.20	0.42
1:S:232:ALA:CB	2:T:224:ILE:HD13	2.50	0.42
1:S:282:LEU:HD12	1:S:287:PHE:CZ	2.55	0.42
2:T:40:ASP:HA	2:T:61:VAL:HG22	2.01	0.42
2:T:126:ILE:HD13	2:T:154:LEU:CA	2.50	0.42
2:T:261:PRO:CG	2:T:266:VAL:HG11	2.46	0.42
1:U:140:VAL:CG2	1:U:168:LEU:HD13	2.50	0.42
1:U:221:GLN:OE1	2:V:215:GLU:HB3	2.19	0.42
1:U:249:ILE:CD1	2:V:237:GLU:HB3	2.49	0.42
2:X:206:GLN:O	2:X:210:ALA:HB3	2.20	0.42
1:A:237:MET:CG	2:X:218:SER:OG	2.67	0.42
1:A:253:LYS:CD	1:C:291:SER:HB2	2.50	0.42
1:A:273:LEU:C	2:X:258:THR:HG1	2.26	0.42
2:B:215:GLU:O	2:B:219:LYS:HB2	2.20	0.42
1:E:242:LEU:HB3	1:E:249:ILE:CD1	2.49	0.42
1:E:277:ASN:OD1	1:G:284:ASP:N	2.52	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:F:240:LYS:O	2:F:244:ALA:N	2.52	0.42
1:G:287:PHE:HA	1:G:290:GLY:HA3	2.01	0.42
2:H:35:ARG:NH2	2:H:52:GLU:HG3	2.34	0.42
2:H:151:SER:CB	2:H:168:VAL:HB	2.50	0.42
1:I:54:ARG:C	2:J:28:TYR:HE2	2.28	0.42
1:I:55:ILE:CG2	2:J:29:ASN:O	2.68	0.42
1:I:58:VAL:HG12	2:J:32:ALA:HA	2.02	0.42
1:I:64:LEU:HB3	1:I:69:HIS:CB	2.50	0.42
1:I:175:PHE:CG	2:J:95:LEU:HD11	2.55	0.42
2:J:54:THR:HG22	2:J:56:PHE:HE1	1.84	0.42
1:K:57:GLY:HA2	2:L:52:GLU:N	2.35	0.42
1:O:252:ARG:O	1:O:256:ALA:HB3	2.20	0.42
2:P:57:LEU:CD2	2:P:62:GLN:OE1	2.67	0.42
2:P:74:ARG:HG3	2:P:119:LEU:HD13	2.02	0.42
2:R:31:ASP:O	2:R:34:HIS:N	2.53	0.42
2:R:76:VAL:HB	2:R:123:THR:HG21	2.02	0.42
2:T:88:VAL:HG11	2:T:173:LEU:HD12	2.02	0.42
2:T:228:LEU:HB2	1:U:247:GLY:HA3	2.02	0.42
2:V:237:GLU:HG3	1:W:294:LEU:HD11	1.99	0.42
1:W:107:ARG:HH12	1:W:185:THR:CG2	2.32	0.42
2:X:187:GLN:O	2:X:191:GLN:HG2	2.19	0.42
2:D:224:ILE:HG22	2:D:228:LEU:HD11	2.01	0.42
1:E:274:THR:CG2	1:E:276:ASP:OD1	2.68	0.42
2:F:235:LEU:HD12	2:F:238:LEU:C	2.45	0.42
1:G:253:LYS:HD3	2:H:241:LEU:HD21	2.01	0.42
1:I:248:TYR:O	1:I:248:TYR:CG	2.73	0.42
1:I:249:ILE:O	1:I:249:ILE:CG2	2.67	0.42
2:J:233:ASP:HB2	1:M:283:GLN:NE2	2.35	0.42
1:K:47:HIS:CD2	1:K:82:ASP:HA	2.55	0.42
1:M:94:THR:HG21	1:M:145:VAL:HB	2.02	0.42
1:M:108:VAL:CG1	1:M:179:LEU:HD22	2.50	0.42
1:M:239:GLY:HA2	2:N:234:GLY:CA	2.50	0.42
2:N:80:THR:CG2	2:N:90:ILE:HD12	2.50	0.42
1:O:104:ILE:HB	1:O:141:LEU:HD21	2.01	0.42
1:Q:52:PHE:HD2	1:Q:77:TYR:HB2	1.85	0.42
2:R:82:SER:HA	2:R:131:VAL:O	2.19	0.42
2:R:134:PHE:HB3	2:R:138:GLU:OE1	2.20	0.42
2:T:233:ASP:HB3	2:T:236:ILE:HB	2.00	0.42
2:T:239:ARG:HG2	2:T:239:ARG:O	2.20	0.42
1:U:270:ARG:HG3	1:U:270:ARG:O	2.19	0.42
1:W:271:ILE:CG2	1:W:272:TYR:N	2.83	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:W:281:ASN:O	1:W:287:PHE:HB3	2.19	0.42
2:D:250:GLN:CD	2:D:251:LEU:N	2.78	0.42
2:D:267:LEU:HA	2:F:265:SER:O	2.20	0.42
1:E:263:THR:HG23	2:F:249:TYR:CD1	2.55	0.42
1:E:264:ILE:HG23	1:E:267:SER:CB	2.49	0.42
1:E:276:ASP:O	1:E:279:VAL:HG22	2.20	0.42
2:F:200:VAL:HA	2:F:203:ALA:CB	2.46	0.42
2:H:145:LEU:C	2:H:145:LEU:HD23	2.45	0.42
1:I:52:PHE:CE2	1:I:77:TYR:HD2	2.37	0.42
1:I:55:ILE:C	1:I:57:GLY:O	2.63	0.42
2:J:50:VAL:CG1	2:J:55:HIS:HB3	2.50	0.42
2:J:259:TYR:HA	1:K:273:LEU:O	2.20	0.42
2:L:47:ASP:O	2:L:105:ARG:NH1	2.53	0.42
2:N:194:GLU:HA	2:N:197:ARG:HG2	2.02	0.42
1:O:79:ILE:HD13	1:O:121:TYR:OH	2.20	0.42
1:Q:135:SER:O	2:R:93:ARG:NH2	2.52	0.42
1:S:248:TYR:CD1	1:S:248:TYR:C	2.98	0.42
2:T:60:TRP:CH2	1:U:66:GLU:O	2.73	0.42
2:V:65:ILE:HD13	2:V:107:PHE:CE1	2.55	0.42
2:V:207:LYS:CD	1:W:226:VAL:O	2.67	0.42
1:W:242:LEU:HD13	1:W:249:ILE:HD12	2.02	0.42
1:A:224:LYS:O	2:B:220:ALA:HB2	2.20	0.41
1:A:251:LEU:HG	2:X:236:ILE:CD1	2.49	0.41
1:C:277:ASN:O	1:E:283:GLN:CB	2.68	0.41
2:D:233:ASP:O	2:D:234:GLY:C	2.62	0.41
2:F:204:GLU:O	2:F:207:LYS:CG	2.67	0.41
1:G:232:ALA:HA	2:H:224:ILE:CG1	2.49	0.41
1:G:254:ILE:O	1:G:257:ALA:HB3	2.20	0.41
2:H:80:THR:HG21	2:H:131:VAL:HB	2.01	0.41
2:H:92:LEU:CD2	2:H:150:VAL:HG12	2.46	0.41
1:I:71:ARG:HD3	1:I:78:PRO:HG3	2.01	0.41
1:I:135:SER:O	2:J:171:THR:HB	2.20	0.41
1:I:252:ARG:O	1:I:253:LYS:C	2.62	0.41
2:J:65:ILE:HG23	2:J:112:GLU:CG	2.49	0.41
2:L:28:TYR:HE2	2:L:36:ALA:HB2	1.85	0.41
2:L:62:GLN:HG2	2:L:65:ILE:HD12	2.01	0.41
1:M:51:PHE:CE2	1:M:62:THR:HG21	2.54	0.41
2:T:28:TYR:CE1	2:T:57:LEU:HD23	2.55	0.41
1:U:52:PHE:HD1	2:V:32:ALA:HB3	1.85	0.41
2:V:224:ILE:HD11	2:V:228:LEU:HD21	2.02	0.41
2:V:226:ASN:O	2:V:230:THR:HG23	2.20	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:W:167:GLU:O	1:W:170:GLU:HG3	2.20	0.41
1:W:207:ALA:CA	2:X:205:GLN:HG2	2.50	0.41
1:W:264:ILE:HG12	2:X:249:TYR:CA	2.46	0.41
1:W:288:THR:HA	1:W:292:ASP:HB3	2.01	0.41
2:X:203:ALA:HA	2:X:206:GLN:HE21	1.85	0.41
2:X:217:ASP:C	2:X:217:ASP:OD1	2.62	0.41
1:A:223:GLN:O	1:A:226:VAL:CG2	2.68	0.41
1:A:240:GLU:N	2:B:231:ALA:HB1	2.34	0.41
1:A:260:ILE:O	2:B:248:ALA:CB	2.67	0.41
1:A:268:GLN:O	1:A:269:ASN:C	2.63	0.41
2:B:247:ILE:HG23	2:B:251:LEU:CD1	2.50	0.41
2:B:270:LEU:HG	2:D:269:GLN:O	2.20	0.41
1:C:206:GLU:O	1:C:210:ALA:HB2	2.20	0.41
1:E:221:GLN:HA	2:F:216:GLY:HA3	2.03	0.41
1:E:273:LEU:HD22	1:E:277:ASN:CB	2.49	0.41
1:G:236:LYS:HB2	2:H:223:LEU:HD21	2.03	0.41
2:H:49:VAL:O	2:H:49:VAL:HG13	2.19	0.41
1:I:189:PHE:HB2	1:I:193:TYR:CE1	2.55	0.41
1:I:207:ALA:HA	2:J:202:LYS:HB2	2.01	0.41
2:J:28:TYR:OH	2:J:57:LEU:HD23	2.21	0.41
2:J:35:ARG:O	2:J:67:PHE:HD2	2.03	0.41
2:J:121:SER:HA	1:K:107:ARG:NH1	2.35	0.41
2:L:80:THR:HG23	2:L:131:VAL:HG11	2.00	0.41
1:M:242:LEU:C	2:N:234:GLY:HA2	2.44	0.41
1:M:271:ILE:HG22	1:M:273:LEU:HG	2.00	0.41
1:M:277:ASN:CA	1:O:280:LEU:HD11	2.50	0.41
1:M:281:ASN:O	1:M:287:PHE:CB	2.68	0.41
1:O:140:VAL:HG13	1:O:167:GLU:OE1	2.20	0.41
1:O:142:LYS:HE3	2:P:143:ARG:NH1	2.35	0.41
1:O:214:VAL:O	2:P:209:ALA:CB	2.68	0.41
1:O:251:LEU:O	1:O:251:LEU:HG	2.20	0.41
2:R:62:GLN:OE1	2:R:62:GLN:O	2.38	0.41
1:U:285:GLU:HA	1:U:288:THR:OG1	2.20	0.41
2:V:197:ARG:HA	2:V:200:VAL:HG23	2.02	0.41
2:V:200:VAL:HG22	1:W:223:GLN:CA	2.50	0.41
1:A:251:LEU:HB2	2:X:228:LEU:HD13	2.01	0.41
1:A:273:LEU:HD22	2:X:260:LEU:HG	2.02	0.41
2:D:212:ILE:O	2:D:215:GLU:HB2	2.21	0.41
2:D:235:LEU:HG	2:D:235:LEU:O	2.20	0.41
2:D:253:ARG:HD3	1:E:265:ALA:HB1	2.02	0.41
1:E:264:ILE:O	1:E:267:SER:HB3	2.19	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:276:ASP:C	1:E:276:ASP:OD1	2.63	0.41
2:F:269:GLN:OE1	2:H:269:GLN:HB2	2.21	0.41
1:G:165:ARG:HH12	1:G:168:LEU:CD2	2.31	0.41
1:G:235:ALA:HA	2:H:235:LEU:CB	2.50	0.41
2:H:29:ASN:OD1	2:H:29:ASN:O	2.38	0.41
2:H:67:PHE:CG	2:H:103:LEU:HD22	2.56	0.41
1:I:79:ILE:O	1:I:81:TYR:CD1	2.73	0.41
1:I:221:GLN:NE2	2:J:212:ILE:HA	2.35	0.41
2:J:88:VAL:HG22	2:J:175:PHE:HE1	1.86	0.41
1:K:73:PRO:C	1:K:75:PHE:H	2.29	0.41
1:K:214:VAL:HA	1:K:217:ALA:HB3	2.02	0.41
1:K:273:LEU:HD12	1:M:280:LEU:HB3	2.01	0.41
2:L:46:GLN:O	2:L:104:PRO:HB3	2.21	0.41
2:L:255:ARG:HG2	1:M:270:ARG:HB3	2.02	0.41
2:N:88:VAL:HG12	2:N:90:ILE:HG13	2.03	0.41
1:O:106:LEU:HD11	1:O:165:ARG:NH2	2.35	0.41
2:P:86:GLN:HE22	1:Q:197:VAL:HG13	1.85	0.41
2:P:225:ALA:HB1	1:Q:245:ASN:OD1	2.20	0.41
1:Q:214:VAL:HG11	2:R:205:GLN:O	2.20	0.41
2:R:46:GLN:O	2:R:104:PRO:CB	2.69	0.41
2:R:57:LEU:HD12	2:R:58:ILE:C	2.45	0.41
2:R:63:LYS:O	2:R:65:ILE:HG12	2.21	0.41
1:S:140:VAL:HG11	1:S:168:LEU:HB2	2.02	0.41
2:T:60:TRP:O	2:T:60:TRP:CG	2.73	0.41
1:U:81:TYR:CZ	1:U:121:TYR:CD1	3.09	0.41
1:U:221:GLN:HA	2:V:216:GLY:HA3	2.01	0.41
2:V:215:GLU:HG2	1:W:237:MET:CE	2.50	0.41
1:W:41:PHE:CD1	1:W:43:VAL:HG23	2.47	0.41
1:W:214:VAL:CG2	2:X:212:ILE:HD12	2.34	0.41
1:W:235:ALA:CB	2:X:235:LEU:HB2	2.50	0.41
1:W:237:MET:HA	1:W:240:GLU:OE1	2.20	0.41
1:A:225:ILE:O	1:A:229:GLU:HB2	2.20	0.41
1:A:233:GLU:O	1:A:236:LYS:HG3	2.19	0.41
1:C:232:ALA:CB	2:D:223:LEU:CD1	2.99	0.41
1:E:225:ILE:CD1	2:F:219:LYS:HD2	2.50	0.41
1:G:48:ARG:HG2	1:G:83:ILE:HD13	2.02	0.41
1:G:249:ILE:HD13	2:H:237:GLU:CB	2.51	0.41
1:G:279:VAL:HG12	1:G:280:LEU:HD13	2.02	0.41
2:H:39:PHE:CD1	2:H:40:ASP:N	2.88	0.41
2:H:85:LEU:O	2:H:85:LEU:CG	2.68	0.41
2:J:268:LEU:HD12	2:L:268:LEU:HD22	2.03	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:71:ARG:HB3	1:K:78:PRO:HG3	2.03	0.41
2:L:39:PHE:H	2:L:62:GLN:HB2	1.85	0.41
2:L:57:LEU:HB2	2:L:62:GLN:HB3	2.02	0.41
2:L:142:GLN:O	2:L:146:VAL:HG23	2.21	0.41
2:L:218:SER:CB	1:M:237:MET:SD	3.08	0.41
2:N:236:ILE:HA	1:O:254:ILE:CD1	2.50	0.41
1:O:249:ILE:HG23	2:P:241:LEU:CD2	2.50	0.41
2:P:38:ILE:HA	2:P:62:GLN:HG3	2.01	0.41
1:Q:62:THR:C	1:Q:63:ILE:HG13	2.45	0.41
2:R:207:LYS:CE	1:S:226:VAL:HG13	2.50	0.41
1:S:139:GLU:OE1	2:T:169:SER:HB2	2.20	0.41
1:U:41:PHE:HB2	1:U:43:VAL:HG23	2.01	0.41
1:W:278:LEU:C	1:W:279:VAL:HG23	2.44	0.41
2:D:235:LEU:CG	2:D:239:ARG:HG2	2.50	0.41
2:D:268:LEU:HD11	2:F:260:LEU:HB3	2.02	0.41
1:E:252:ARG:HG2	2:F:238:LEU:HD22	2.01	0.41
2:F:259:TYR:O	2:F:259:TYR:CD1	2.73	0.41
1:G:221:GLN:HB2	2:H:212:ILE:HG23	2.01	0.41
1:G:221:GLN:HA	2:H:212:ILE:HG23	2.02	0.41
2:H:93:ARG:CD	2:H:171:THR:HG21	2.50	0.41
1:I:54:ARG:HB2	2:J:28:TYR:CE2	2.56	0.41
1:I:278:LEU:HD23	1:I:280:LEU:HG	2.02	0.41
2:J:39:PHE:HD1	2:J:45:VAL:HG22	1.86	0.41
2:J:239:ARG:O	2:J:243:ALA:CB	2.68	0.41
1:K:150:ALA:HA	1:K:153:LEU:HD12	2.02	0.41
2:L:39:PHE:HB2	2:L:107:PHE:HE2	1.86	0.41
2:L:239:ARG:HG2	1:M:254:ILE:CG2	2.49	0.41
1:O:41:PHE:CD1	1:O:43:VAL:CG2	3.03	0.41
2:R:138:GLU:OE1	2:R:146:VAL:CG2	2.68	0.41
1:S:249:ILE:O	1:S:253:LYS:HG2	2.20	0.41
2:T:134:PHE:HD2	2:T:146:VAL:HG13	1.85	0.41
1:U:90:ILE:HD12	1:U:137:VAL:HG21	2.02	0.41
1:U:150:ALA:HA	1:U:153:LEU:HB2	2.02	0.41
1:U:154:ILE:HG12	1:U:187:LEU:HD23	2.01	0.41
1:W:242:LEU:HD23	1:W:242:LEU:C	2.45	0.41
2:B:218:SER:OG	1:C:237:MET:SD	2.73	0.41
2:B:237:GLU:O	2:B:241:LEU:N	2.54	0.41
2:D:250:GLN:OE1	1:E:264:ILE:HB	2.20	0.41
2:H:247:ILE:CD1	1:I:254:ILE:O	2.69	0.41
1:I:288:THR:O	1:I:292:ASP:HB3	2.20	0.41
1:K:49:ALA:O	1:K:64:LEU:HB2	2.21	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:L:45:VAL:HB	2:L:108:THR:HG23	2.03	0.41
2:L:49:VAL:O	2:L:49:VAL:HG13	2.21	0.41
1:M:140:VAL:HG11	1:M:168:LEU:HD13	2.02	0.41
2:N:39:PHE:CE1	2:N:45:VAL:HG22	2.54	0.41
2:N:197:ARG:N	2:N:197:ARG:HD2	2.35	0.41
2:P:60:TRP:CD2	2:P:60:TRP:O	2.74	0.41
2:P:120:PRO:O	2:P:124:THR:HG22	2.21	0.41
2:P:223:LEU:C	2:P:223:LEU:HD23	2.45	0.41
1:Q:249:ILE:HG21	2:R:237:GLU:HB3	2.03	0.41
2:R:224:ILE:O	2:R:228:LEU:HG	2.21	0.41
1:S:236:LYS:HA	2:T:227:SER:HB3	2.02	0.41
2:T:126:ILE:CD1	2:T:154:LEU:HA	2.50	0.41
1:U:42:THR:O	1:U:43:VAL:C	2.64	0.41
1:U:165:ARG:CD	1:U:182:VAL:HB	2.50	0.41
1:W:110:SER:HB3	1:W:133:LEU:HD21	2.03	0.41
1:W:229:GLU:O	1:W:233:GLU:CB	2.69	0.41
2:B:247:ILE:HG23	2:B:251:LEU:CG	2.51	0.41
1:C:244:LYS:HG3	1:C:245:ASN:N	2.36	0.41
1:C:263:THR:HG21	2:D:249:TYR:CG	2.56	0.41
2:D:239:ARG:HD3	2:D:243:ALA:CB	2.50	0.41
1:E:252:ARG:O	1:E:256:ALA:HB3	2.20	0.41
2:F:219:LYS:O	2:F:223:LEU:HG	2.21	0.41
2:F:260:LEU:H	1:G:275:ALA:HA	1.85	0.41
2:F:267:LEU:O	2:F:267:LEU:HG	2.20	0.41
2:H:90:ILE:HD11	2:H:139:LEU:HD13	2.01	0.41
2:H:131:VAL:HG13	2:H:139:LEU:CD1	2.51	0.41
2:H:225:ALA:HB1	1:I:245:ASN:N	2.35	0.41
2:H:241:LEU:N	2:H:241:LEU:HD22	2.36	0.41
1:I:46:GLY:O	1:I:84:ARG:HG3	2.20	0.41
1:I:50:ILE:CD1	1:I:118:PRO:HG3	2.50	0.41
1:I:274:THR:CG2	1:I:275:ALA:H	2.34	0.41
2:J:27:LEU:O	2:J:28:TYR:HB3	2.20	0.41
2:J:35:ARG:CZ	2:J:52:GLU:HG3	2.51	0.41
2:J:122:ILE:HG13	2:J:123:THR:N	2.36	0.41
2:J:123:THR:O	2:J:127:LEU:HD13	2.21	0.41
2:J:243:ALA:O	2:J:244:ALA:C	2.64	0.41
1:K:150:ALA:O	1:K:153:LEU:HB2	2.21	0.41
2:L:240:LYS:HE2	1:O:280:LEU:HD13	2.02	0.41
1:M:141:LEU:O	1:M:145:VAL:HG23	2.20	0.41
1:M:260:ILE:O	1:M:264:ILE:N	2.53	0.41
2:N:78:VAL:HG13	2:N:124:THR:HG23	2.02	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:P:90:ILE:HD12	2:P:131:VAL:HG21	2.02	0.41
2:P:233:ASP:CG	2:P:236:ILE:HD12	2.45	0.41
2:P:239:ARG:HH22	1:Q:255:ARG:HA	1.85	0.41
1:Q:149:ASN:N	1:Q:152:GLN:HE21	2.18	0.41
1:Q:154:ILE:HA	1:Q:187:LEU:HD23	2.02	0.41
1:S:47:HIS:CD2	1:S:80:ILE:HG22	2.55	0.41
1:S:63:ILE:HG12	1:S:117:LEU:HB2	2.02	0.41
2:T:80:THR:CG2	2:T:90:ILE:HD12	2.51	0.41
2:T:146:VAL:CG1	2:T:170:LEU:HD11	2.50	0.41
2:V:31:ASP:O	2:V:34:HIS:HB2	2.20	0.41
2:V:203:ALA:C	1:W:226:VAL:HG12	2.46	0.41
2:V:251:LEU:O	2:V:254:SER:OG	2.39	0.41
1:W:107:ARG:C	1:W:182:VAL:HG13	2.46	0.41
1:W:259:ASN:HA	1:W:262:LYS:HE2	2.03	0.41
1:A:226:VAL:CG2	2:X:206:GLN:NE2	2.77	0.41
1:A:250:LYS:HB3	2:X:233:ASP:OD2	2.20	0.41
1:A:273:LEU:HB2	2:X:258:THR:O	2.21	0.41
2:B:271:PRO:HB2	2:X:272:GLN:O	2.21	0.41
1:C:229:GLU:HA	1:C:232:ALA:CB	2.50	0.41
1:C:263:THR:HG22	1:C:263:THR:O	2.21	0.41
1:C:272:TYR:N	2:D:260:LEU:CD2	2.84	0.41
1:E:281:ASN:O	1:E:287:PHE:CD1	2.73	0.41
2:F:246:ASP:CB	1:G:254:ILE:HG23	2.51	0.41
1:G:217:ALA:HB3	2:H:209:ALA:CB	2.39	0.41
1:G:263:THR:HG21	2:H:245:GLU:O	2.21	0.41
2:H:98:PRO:HG3	2:H:114:TYR:CE2	2.56	0.41
1:I:48:ARG:NE	1:I:114:ALA:HB1	2.35	0.41
1:I:53:ASN:ND2	1:I:58:VAL:HG13	2.35	0.41
1:I:236:LYS:HA	2:J:227:SER:CB	2.50	0.41
1:I:257:ALA:HA	1:I:260:ILE:HD12	2.02	0.41
1:K:41:PHE:CZ	1:K:69:HIS:CB	3.04	0.41
1:K:53:ASN:OD1	1:K:75:PHE:CE2	2.74	0.41
2:L:60:TRP:HA	2:L:63:LYS:HA	2.02	0.41
2:L:242:GLU:O	2:L:246:ASP:OD1	2.39	0.41
2:L:267:LEU:HD21	2:N:269:GLN:CB	2.50	0.41
1:M:274:THR:HG22	1:M:275:ALA:N	2.36	0.41
2:N:57:LEU:HD12	2:N:58:ILE:C	2.46	0.41
2:N:80:THR:HG23	2:N:131:VAL:HG11	2.01	0.41
2:N:217:ASP:OD1	1:O:248:TYR:HE2	2.04	0.41
2:N:221:ALA:CB	1:O:242:LEU:HD21	2.51	0.41
2:P:92:LEU:HD22	2:P:127:LEU:HD11	2.03	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:Q:263:THR:HG21	2:R:245:GLU:HB3	2.03	0.41
1:Q:272:TYR:OH	2:R:258:THR:HB	2.21	0.41
2:R:37:VAL:HG21	2:R:104:PRO:CA	2.51	0.41
1:S:289:ARG:HA	1:S:293:SER:HB3	2.03	0.41
2:X:202:LYS:O	2:X:206:GLN:HG3	2.21	0.41
1:A:238:LEU:HD13	2:B:238:LEU:HB2	2.02	0.41
1:A:249:ILE:HD13	1:C:294:LEU:CG	2.46	0.41
2:B:262:ALA:CB	1:C:274:THR:HG21	2.51	0.41
2:B:267:LEU:CA	2:D:267:LEU:HG	2.51	0.41
1:C:225:ILE:O	1:C:229:GLU:HB2	2.21	0.41
1:C:276:ASP:O	1:C:279:VAL:HG22	2.21	0.41
1:E:261:SER:HA	1:E:264:ILE:HB	2.03	0.41
1:E:268:GLN:O	1:E:269:ASN:C	2.63	0.41
1:E:282:LEU:O	1:E:283:GLN:CG	2.69	0.41
1:E:290:GLY:O	1:G:283:GLN:OE1	2.38	0.41
2:F:233:ASP:OD1	2:F:233:ASP:O	2.39	0.41
2:F:251:LEU:HD12	1:G:278:LEU:HD11	2.03	0.41
1:G:210:ALA:HB1	2:H:202:LYS:CG	2.51	0.41
1:G:277:ASN:ND2	1:I:280:LEU:HB2	2.36	0.41
2:H:43:ARG:NE	2:H:43:ARG:HA	2.36	0.41
2:H:99:VAL:O	2:H:100:ALA:C	2.64	0.41
1:I:51:PHE:HA	1:I:76:GLN:NE2	2.36	0.41
1:I:53:ASN:ND2	2:J:29:ASN:O	2.49	0.41
1:I:74:TRP:HD1	1:I:77:TYR:OH	2.04	0.41
1:I:221:GLN:HE22	2:J:215:GLU:HB3	1.86	0.41
2:J:49:VAL:HG21	2:J:100:ALA:O	2.20	0.41
2:J:103:LEU:N	2:J:104:PRO:CD	2.83	0.41
1:K:55:ILE:HB	1:K:75:PHE:CE1	2.56	0.41
1:K:55:ILE:HG22	1:K:56:GLY:N	2.36	0.41
1:K:249:ILE:HG21	2:L:237:GLU:HB3	2.03	0.41
1:K:274:THR:HG22	1:K:275:ALA:H	1.86	0.41
2:L:51:GLY:C	2:L:53:GLY:H	2.29	0.41
2:L:228:LEU:CD1	1:M:247:GLY:HA2	2.51	0.41
1:M:55:ILE:HG13	1:M:75:PHE:CE2	2.56	0.41
1:M:252:ARG:O	1:M:253:LYS:C	2.63	0.41
2:N:214:ALA:O	2:N:215:GLU:C	2.64	0.41
2:N:247:ILE:O	2:N:250:GLN:HB3	2.20	0.41
2:N:260:LEU:HD11	2:P:259:TYR:O	2.21	0.41
1:O:113:ASN:O	1:O:117:LEU:HG	2.21	0.41
1:O:150:ALA:HB1	1:O:189:PHE:HZ	1.84	0.41
2:P:128:LYS:HB3	1:Q:157:ARG:HB3	2.03	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:Q:43:VAL:O	1:Q:44:GLU:C	2.63	0.41
1:Q:274:THR:CG2	1:Q:275:ALA:H	2.33	0.41
2:R:28:TYR:CE2	2:R:36:ALA:CB	3.04	0.41
2:R:96:PHE:CZ	2:R:115:ASP:HB2	2.56	0.41
1:S:53:ASN:H	1:S:58:VAL:HG22	1.84	0.41
1:S:217:ALA:HB3	2:T:209:ALA:HB1	2.03	0.41
1:S:249:ILE:HD13	2:T:237:GLU:CG	2.43	0.41
2:T:214:ALA:O	2:T:215:GLU:C	2.64	0.41
2:T:221:ALA:HA	1:U:248:TYR:HB2	2.01	0.41
2:T:239:ARG:NE	1:U:258:GLN:HG2	2.36	0.41
1:U:63:ILE:C	1:U:64:LEU:HD23	2.46	0.41
1:U:108:VAL:HA	1:U:182:VAL:CG2	2.51	0.41
1:U:214:VAL:O	1:U:217:ALA:HB3	2.20	0.41
1:U:238:LEU:HD22	2:V:238:LEU:HB2	2.02	0.41
1:U:248:TYR:O	1:U:252:ARG:CB	2.69	0.41
2:V:76:VAL:HG11	2:V:123:THR:HB	2.03	0.41
2:V:193:ALA:HB2	1:W:216:LYS:HB3	2.03	0.41
1:W:38:GLU:OE1	1:W:73:PRO:HA	2.21	0.41
1:W:285:GLU:HA	1:W:288:THR:OG1	2.20	0.41
2:X:219:LYS:HA	2:X:222:GLU:HG3	2.03	0.41
1:A:260:ILE:HG22	1:A:264:ILE:HD11	2.02	0.41
2:B:192:GLU:O	2:B:196:ALA:CB	2.69	0.41
2:B:238:LEU:O	2:B:242:GLU:OE1	2.38	0.41
2:B:261:PRO:CA	1:C:275:ALA:HB3	2.51	0.41
1:C:235:ALA:HA	2:D:235:LEU:HB3	2.02	0.41
1:G:288:THR:O	1:G:292:ASP:HB3	2.21	0.41
2:H:127:LEU:HD11	2:H:150:VAL:HG11	2.03	0.41
1:I:123:ARG:HG3	2:J:72:ARG:HB2	2.02	0.41
2:J:206:GLN:HA	2:J:209:ALA:HB3	2.02	0.41
2:L:60:TRP:O	2:L:60:TRP:CG	2.74	0.41
2:L:203:ALA:HB1	1:M:226:VAL:HG11	2.02	0.41
1:M:239:GLY:HA2	2:N:235:LEU:H	1.86	0.41
1:M:243:SER:CA	1:O:294:LEU:HD13	2.51	0.41
1:M:276:ASP:OD1	1:M:287:PHE:HA	2.21	0.41
2:N:39:PHE:HB3	2:N:62:GLN:HG2	2.03	0.41
2:N:74:ARG:HD3	2:N:75:ASN:N	2.35	0.41
2:N:92:LEU:HD23	2:N:94:ILE:HD11	2.03	0.41
2:N:207:LYS:HD3	1:O:226:VAL:CG1	2.51	0.41
1:O:63:ILE:HD13	1:O:115:GLN:HA	2.03	0.41
2:P:57:LEU:HD22	2:P:62:GLN:O	2.21	0.41
2:P:90:ILE:CD1	2:P:131:VAL:HG21	2.50	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:P:200:VAL:O	2:P:203:ALA:HB3	2.21	0.41
2:R:36:ALA:HA	2:R:67:PHE:HD2	1.86	0.41
2:T:254:SER:HB2	1:U:269:ASN:O	2.21	0.41
1:U:39:SER:O	1:U:71:ARG:CG	2.69	0.41
1:U:51:PHE:CD2	1:U:64:LEU:HD11	2.56	0.41
1:U:72:ILE:O	1:U:76:GLN:HB3	2.21	0.41
2:V:80:THR:HG23	2:V:131:VAL:HG11	2.03	0.41
2:V:85:LEU:O	1:W:193:TYR:CD1	2.74	0.41
2:V:140:ILE:HD11	2:V:175:PHE:CE2	2.56	0.41
2:V:237:GLU:CD	2:V:240:LYS:HZ3	2.28	0.41
2:V:237:GLU:O	2:V:240:LYS:HB2	2.21	0.41
2:V:270:LEU:CD2	2:X:268:LEU:HD22	2.51	0.41
1:W:49:ALA:HA	1:W:81:TYR:CD2	2.56	0.41
2:B:224:ILE:HG21	1:C:251:LEU:HD22	2.03	0.40
2:B:261:PRO:CB	1:C:275:ALA:HB3	2.51	0.40
1:C:272:TYR:CB	2:D:261:PRO:HD2	2.51	0.40
1:E:271:ILE:O	1:E:272:TYR:HD1	2.04	0.40
2:F:196:ALA:O	2:F:197:ARG:C	2.64	0.40
1:G:148:PHE:CE2	1:G:160:VAL:HG22	2.56	0.40
1:G:214:VAL:CG1	2:H:209:ALA:HB2	2.39	0.40
1:G:223:GLN:HG3	1:G:224:LYS:N	2.36	0.40
1:G:238:LEU:CD1	2:H:235:LEU:HD13	2.51	0.40
2:H:38:ILE:HG23	2:H:62:GLN:HG3	2.03	0.40
2:H:65:ILE:HG23	2:H:112:GLU:HG2	2.03	0.40
2:H:86:GLN:CG	2:H:136:ALA:HB2	2.51	0.40
2:H:218:SER:CB	1:I:237:MET:SD	3.08	0.40
1:I:57:GLY:HA3	2:J:51:GLY:O	2.22	0.40
1:I:214:VAL:CG2	2:J:209:ALA:HB2	2.47	0.40
1:M:52:PHE:N	1:M:76:GLN:HE22	2.19	0.40
1:M:54:ARG:HB3	2:N:53:GLY:CA	2.52	0.40
1:M:246:PRO:HB2	1:M:249:ILE:HB	2.03	0.40
2:N:57:LEU:HD13	2:N:62:GLN:HB3	2.03	0.40
2:N:58:ILE:HG13	2:N:61:VAL:CG1	2.50	0.40
1:O:52:PHE:HE1	2:P:32:ALA:CB	2.31	0.40
2:P:28:TYR:CD1	2:P:57:LEU:CD2	3.01	0.40
2:P:30:VAL:O	2:P:30:VAL:HG12	2.21	0.40
1:Q:68:LEU:O	1:Q:69:HIS:ND1	2.54	0.40
1:Q:124:LEU:HB3	1:Q:128:TYR:HA	2.03	0.40
2:R:31:ASP:HB3	2:R:34:HIS:CD2	2.56	0.40
2:T:125:GLU:CG	1:U:158:ALA:HB1	2.51	0.40
2:T:151:SER:HA	2:T:168:VAL:HB	2.03	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:T:182:ALA:HB1	1:U:205:GLN:CB	2.50	0.40
2:T:271:PRO:CD	1:U:270:ARG:NH2	2.84	0.40
1:U:239:GLY:N	2:V:234:GLY:HA3	2.37	0.40
2:V:239:ARG:O	2:V:243:ALA:CB	2.68	0.40
1:A:238:LEU:CD1	2:B:235:LEU:HD13	2.51	0.40
2:D:240:LYS:HG3	1:G:282:LEU:HG	2.02	0.40
1:E:225:ILE:HG12	2:F:219:LYS:HB3	2.02	0.40
2:F:219:LYS:C	2:F:221:ALA:N	2.79	0.40
1:I:63:ILE:HD13	1:I:115:GLN:O	2.21	0.40
1:I:165:ARG:HH22	1:I:168:LEU:CD2	2.33	0.40
1:I:167:GLU:O	1:I:171:ARG:HG2	2.21	0.40
1:I:289:ARG:O	1:I:293:SER:HB3	2.21	0.40
1:K:272:TYR:CD1	1:K:272:TYR:C	2.99	0.40
2:L:235:LEU:HD12	2:L:238:LEU:CB	2.41	0.40
2:L:259:TYR:HB3	1:M:275:ALA:HA	2.02	0.40
1:M:52:PHE:O	1:M:76:GLN:OE1	2.40	0.40
1:M:260:ILE:HG23	1:M:264:ILE:CB	2.50	0.40
1:M:264:ILE:HD11	2:N:245:GLU:O	2.22	0.40
2:N:45:VAL:HG21	2:N:107:PHE:HB3	2.03	0.40
2:N:91:THR:HB	2:N:172:HIS:HB3	2.03	0.40
2:N:134:PHE:HB3	2:N:138:GLU:OE1	2.21	0.40
1:O:48:ARG:HG2	1:O:83:ILE:CG2	2.51	0.40
1:O:51:PHE:CB	1:O:59:GLN:HE22	2.34	0.40
2:P:40:ASP:O	2:P:44:GLY:O	2.38	0.40
1:Q:118:PRO:O	1:Q:122:GLN:HG3	2.21	0.40
1:S:51:PHE:CE1	1:S:70:PHE:O	2.74	0.40
2:T:189:ALA:HB1	1:U:212:PHE:HB3	2.03	0.40
2:V:146:VAL:O	2:V:150:VAL:HG23	2.21	0.40
2:V:200:VAL:CG2	1:W:223:GLN:HB2	2.51	0.40
2:V:255:ARG:NE	1:W:270:ARG:HG2	2.36	0.40
2:V:272:GLN:HG3	2:X:269:GLN:NE2	2.37	0.40
1:W:52:PHE:HB2	1:W:81:TYR:OH	2.22	0.40
1:W:207:ALA:HA	2:X:205:GLN:HG3	2.02	0.40
1:W:259:ASN:O	1:W:263:THR:HG23	2.20	0.40
1:A:219:GLN:HG3	2:X:200:VAL:CG2	2.51	0.40
1:A:273:LEU:HD21	1:C:280:LEU:HB3	2.04	0.40
1:A:279:VAL:HG11	1:A:287:PHE:CA	2.52	0.40
2:B:224:ILE:HG22	2:B:228:LEU:CD1	2.51	0.40
2:B:268:LEU:HD22	1:E:272:TYR:HE2	1.86	0.40
1:C:225:ILE:HG13	2:D:216:GLY:HA2	2.03	0.40
1:C:272:TYR:CB	2:D:261:PRO:CD	2.99	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:236:ILE:CG2	1:E:250:LYS:HB3	2.51	0.40
2:D:258:THR:O	1:E:271:ILE:CG1	2.70	0.40
1:E:210:ALA:CB	2:F:205:GLN:HB2	2.51	0.40
1:E:282:LEU:O	1:E:283:GLN:HG2	2.21	0.40
2:F:256:ASN:HB2	1:G:270:ARG:HG2	2.02	0.40
1:G:168:LEU:O	1:G:168:LEU:HG	2.19	0.40
1:G:236:LYS:HA	2:H:227:SER:CB	2.51	0.40
2:H:40:ASP:OD1	2:H:44:GLY:O	2.39	0.40
2:H:85:LEU:O	2:H:85:LEU:HG	2.22	0.40
2:H:114:TYR:CD2	2:H:115:ASP:N	2.89	0.40
2:H:130:VAL:HG22	2:H:149:GLN:OE1	2.21	0.40
2:H:247:ILE:O	2:H:250:GLN:HB3	2.21	0.40
2:H:266:VAL:HG12	2:H:267:LEU:N	2.37	0.40
1:I:128:TYR:HD2	1:I:177:LEU:HD21	1.86	0.40
1:I:133:LEU:N	1:I:134:PRO:CD	2.84	0.40
1:I:224:LYS:HA	1:I:227:GLN:HB3	2.03	0.40
1:K:54:ARG:O	1:K:55:ILE:HG13	2.21	0.40
1:M:72:ILE:N	1:M:76:GLN:HB3	2.36	0.40
2:N:63:LYS:O	2:N:65:ILE:HG13	2.21	0.40
2:N:80:THR:HG21	2:N:90:ILE:HD12	2.03	0.40
2:N:131:VAL:O	2:N:134:PHE:O	2.38	0.40
1:O:55:ILE:HB	1:O:75:PHE:CZ	2.56	0.40
1:S:248:TYR:CZ	1:S:252:ARG:HB2	2.57	0.40
2:T:41:ARG:CZ	1:U:69:HIS:NE2	2.84	0.40
1:U:52:PHE:HA	1:U:58:VAL:HG22	2.02	0.40
1:U:71:ARG:HD3	1:U:78:PRO:CG	2.52	0.40
2:V:93:ARG:HD3	2:V:171:THR:HG21	2.03	0.40
1:W:106:LEU:HD21	1:W:165:ARG:HH22	1.87	0.40
1:W:107:ARG:NH2	1:W:185:THR:HG21	2.36	0.40
1:W:210:ALA:O	1:W:214:VAL:HG23	2.21	0.40
2:X:194:GLU:O	2:X:198:PHE:CD2	2.75	0.40
1:A:277:ASN:O	1:C:283:GLN:HB2	2.21	0.40
1:A:282:LEU:CD2	2:V:240:LYS:HG2	2.51	0.40
1:C:258:GLN:O	1:C:262:LYS:N	2.53	0.40
2:D:236:ILE:HG21	1:E:250:LYS:HB3	2.02	0.40
1:E:242:LEU:HD11	2:F:238:LEU:HD11	2.03	0.40
1:G:54:ARG:NH1	2:H:27:LEU:HD21	2.36	0.40
1:G:88:ARG:O	1:G:107:ARG:HA	2.22	0.40
2:H:78:VAL:HG22	2:H:124:THR:HA	2.04	0.40
2:H:146:VAL:O	2:H:150:VAL:HG23	2.21	0.40
1:I:96:SER:HA	1:I:146:ALA:HA	2.04	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:I:116:GLU:CD	1:I:118:PRO:HD2	2.46	0.40
2:J:203:ALA:HB3	1:K:226:VAL:CG1	2.52	0.40
2:J:208:LYS:O	2:J:212:ILE:HG12	2.21	0.40
1:K:39:SER:CA	1:K:71:ARG:O	2.69	0.40
2:L:215:GLU:O	2:L:219:LYS:HG3	2.22	0.40
2:N:75:ASN:OD1	2:N:93:ARG:HG2	2.22	0.40
2:N:221:ALA:HB1	1:O:242:LEU:HG	2.03	0.40
2:N:247:ILE:CG1	1:O:257:ALA:HB1	2.50	0.40
1:O:55:ILE:HA	2:P:53:GLY:HA2	2.04	0.40
1:O:57:GLY:HA3	2:P:52:GLU:CB	2.51	0.40
1:O:122:GLN:HG3	2:P:32:ALA:HB1	2.04	0.40
1:O:144:VAL:HG13	1:O:145:VAL:N	2.36	0.40
2:P:211:ILE:CD1	1:Q:230:GLY:HA2	2.50	0.40
1:Q:207:ALA:HB1	2:R:202:LYS:HB2	2.03	0.40
1:U:50:ILE:HD13	1:U:118:PRO:CD	2.52	0.40
2:V:131:VAL:O	2:V:134:PHE:O	2.39	0.40
1:W:35:GLY:O	1:W:39:SER:CB	2.70	0.40
1:A:278:LEU:HD21	1:C:282:LEU:HB3	2.04	0.40
1:A:282:LEU:HG	2:V:240:LYS:HE3	2.02	0.40
2:B:237:GLU:HB2	1:C:294:LEU:HD21	2.04	0.40
2:D:211:ILE:CD1	1:E:233:GLU:HB3	2.51	0.40
1:G:145:VAL:HG13	1:G:153:LEU:HD11	2.02	0.40
2:H:207:LYS:CE	1:I:226:VAL:HG23	2.52	0.40
1:I:55:ILE:HB	2:J:29:ASN:O	2.21	0.40
1:I:117:LEU:N	1:I:118:PRO:HD3	2.36	0.40
1:I:164:ILE:HD12	1:I:184:ILE:HD11	2.03	0.40
1:I:234:ALA:O	1:I:238:LEU:HD12	2.22	0.40
2:J:38:ILE:HG23	2:J:61:VAL:HG13	2.04	0.40
2:J:123:THR:HA	2:J:154:LEU:HD13	2.04	0.40
2:J:169:SER:O	2:J:171:THR:HG23	2.21	0.40
2:J:186:LYS:HG3	1:K:212:PHE:HD2	1.87	0.40
1:K:51:PHE:HA	1:K:76:GLN:CD	2.47	0.40
1:K:236:LYS:HD3	2:L:223:LEU:O	2.22	0.40
2:L:57:LEU:HD22	2:L:64:PRO:HA	2.04	0.40
2:N:99:VAL:O	2:N:103:LEU:HG	2.21	0.40
1:O:235:ALA:HA	2:P:235:LEU:HD22	2.02	0.40
2:P:67:PHE:HB3	2:P:103:LEU:HD22	2.03	0.40
2:P:199:VAL:HG12	1:Q:223:GLN:OE1	2.22	0.40
1:Q:282:LEU:HD23	1:Q:283:GLN:H	1.86	0.40
2:R:88:VAL:HG21	2:R:139:LEU:HD12	2.02	0.40
2:T:81:GLY:H	1:U:155:THR:HA	1.87	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:T:203:ALA:O	1:U:226:VAL:CG1	2.70	0.40
2:T:239:ARG:HB3	1:U:254:ILE:HG21	2.03	0.40
1:U:41:PHE:HB3	1:U:78:PRO:HG3	2.03	0.40
1:U:64:LEU:HB3	1:U:69:HIS:CG	2.56	0.40
1:U:81:TYR:CE1	1:U:121:TYR:CD1	3.09	0.40
1:U:243:SER:O	1:W:294:LEU:O	2.40	0.40
1:U:264:ILE:HG22	1:U:267:SER:HB2	2.03	0.40
2:V:221:ALA:HB1	1:W:242:LEU:HA	2.03	0.40
1:W:214:VAL:HG13	2:X:212:ILE:CD1	2.51	0.40
2:X:206:GLN:O	2:X:207:LYS:C	2.60	0.40

There are no symmetry-related clashes.

5.3 Torsion angles (i)

5.3.1 Protein backbone (i)

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

The Analysed column shows the number of residues for which the backbone conformation was analysed, and the total number of residues.

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
1	A	107/299 (36%)	93 (87%)	14 (13%)	0	100	100
1	C	107/299 (36%)	86 (80%)	20 (19%)	1 (1%)	14	52
1	E	107/299 (36%)	89 (83%)	17 (16%)	1 (1%)	14	52
1	G	297/299 (99%)	254 (86%)	43 (14%)	0	100	100
1	I	297/299 (99%)	243 (82%)	54 (18%)	0	100	100
1	K	297/299 (99%)	251 (84%)	45 (15%)	1 (0%)	37	73
1	M	297/299 (99%)	255 (86%)	41 (14%)	1 (0%)	37	73
1	O	297/299 (99%)	261 (88%)	36 (12%)	0	100	100
1	Q	297/299 (99%)	257 (86%)	40 (14%)	0	100	100
1	S	297/299 (99%)	259 (87%)	38 (13%)	0	100	100
1	U	297/299 (99%)	254 (86%)	42 (14%)	1 (0%)	37	73
1	W	297/299 (99%)	251 (84%)	45 (15%)	1 (0%)	37	73

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
2	B	94/272 (35%)	83 (88%)	11 (12%)	0	100	100
2	D	94/272 (35%)	85 (90%)	9 (10%)	0	100	100
2	F	94/272 (35%)	85 (90%)	9 (10%)	0	100	100
2	H	270/272 (99%)	228 (84%)	41 (15%)	1 (0%)	30	68
2	J	270/272 (99%)	238 (88%)	32 (12%)	0	100	100
2	L	270/272 (99%)	236 (87%)	34 (13%)	0	100	100
2	N	270/272 (99%)	235 (87%)	34 (13%)	1 (0%)	30	68
2	P	270/272 (99%)	235 (87%)	35 (13%)	0	100	100
2	R	270/272 (99%)	238 (88%)	32 (12%)	0	100	100
2	T	270/272 (99%)	237 (88%)	33 (12%)	0	100	100
2	V	270/272 (99%)	237 (88%)	33 (12%)	0	100	100
2	X	94/272 (35%)	84 (89%)	10 (11%)	0	100	100
All	All	5530/6852 (81%)	4774 (86%)	748 (14%)	8 (0%)	50	83

All (8) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	K	279	VAL
2	H	245	GLU
2	N	47	ASP
1	M	279	VAL
1	E	279	VAL
1	C	279	VAL
1	W	279	VAL
1	U	279	VAL

5.3.2 Protein sidechains (i)

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

The Analysed column shows the number of residues for which the sidechain conformation was analysed, and the total number of residues.

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
1	A	88/248 (36%)	88 (100%)	0	100	100

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
1	C	88/248 (36%)	88 (100%)	0	100	100
1	E	88/248 (36%)	88 (100%)	0	100	100
1	G	248/248 (100%)	248 (100%)	0	100	100
1	I	248/248 (100%)	248 (100%)	0	100	100
1	K	248/248 (100%)	248 (100%)	0	100	100
1	M	248/248 (100%)	248 (100%)	0	100	100
1	O	248/248 (100%)	248 (100%)	0	100	100
1	Q	248/248 (100%)	248 (100%)	0	100	100
1	S	248/248 (100%)	248 (100%)	0	100	100
1	U	248/248 (100%)	248 (100%)	0	100	100
1	W	248/248 (100%)	248 (100%)	0	100	100
2	B	74/224 (33%)	74 (100%)	0	100	100
2	D	74/224 (33%)	74 (100%)	0	100	100
2	F	74/224 (33%)	74 (100%)	0	100	100
2	H	224/224 (100%)	224 (100%)	0	100	100
2	J	224/224 (100%)	224 (100%)	0	100	100
2	L	224/224 (100%)	224 (100%)	0	100	100
2	N	224/224 (100%)	224 (100%)	0	100	100
2	P	224/224 (100%)	224 (100%)	0	100	100
2	R	224/224 (100%)	224 (100%)	0	100	100
2	T	224/224 (100%)	224 (100%)	0	100	100
2	V	224/224 (100%)	224 (100%)	0	100	100
2	X	74/224 (33%)	74 (100%)	0	100	100
All	All	4584/5664 (81%)	4584 (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 (47) such sidechains are listed below:

Mol	Chain	Res	Type
1	A	277	ASN
2	B	269	GLN
2	B	272	GLN
1	C	219	GLN

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Mol	Chain	Res	Type
1	C	258	GLN
1	C	269	ASN
2	D	226	ASN
1	E	205	GLN
1	E	268	GLN
1	G	281	ASN
2	H	55	HIS
2	H	62	GLN
1	I	47	HIS
1	I	122	GLN
1	I	201	GLN
1	I	205	GLN
1	I	258	GLN
2	J	206	GLN
1	K	100	GLN
1	K	152	GLN
2	L	226	ASN
1	M	69	HIS
1	M	283	GLN
2	N	191	GLN
1	O	53	ASN
1	O	113	ASN
1	O	205	GLN
2	P	75	ASN
2	P	272	GLN
1	Q	76	GLN
1	Q	122	GLN
1	Q	201	GLN
2	R	29	ASN
2	R	46	GLN
2	T	206	GLN
2	T	226	ASN
2	T	272	GLN
1	U	152	GLN
2	V	142	GLN
2	V	226	ASN
2	V	269	GLN
1	W	69	HIS
1	W	138	ASN
1	W	156	GLN
2	X	206	GLN
2	X	269	GLN

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Mol	Chain	Res	Type
2	X	272	GLN

5.3.3 RNA

There are no RNA molecules in this entry.

5.4 Non-standard residues in protein, DNA, RNA chains

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

5.5 Carbohydrates

There are no oligosaccharides in this entry.

5.6 Ligand geometry

There are no ligands in this entry.

5.7 Other polymers

There are no such residues in this entry.

5.8 Polymer linkage issues

There are no chain breaks in this entry.

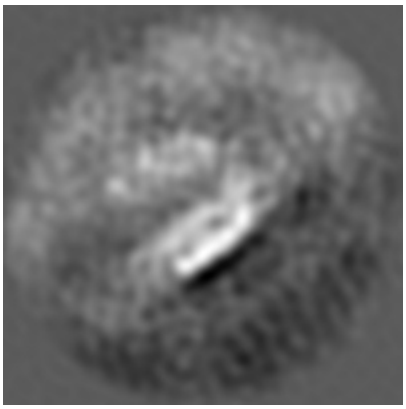
6 Map visualisation

This section contains visualisations of the EMDB entry EMD-70180. These allow visual inspection of the internal detail of the map and identification of artifacts.

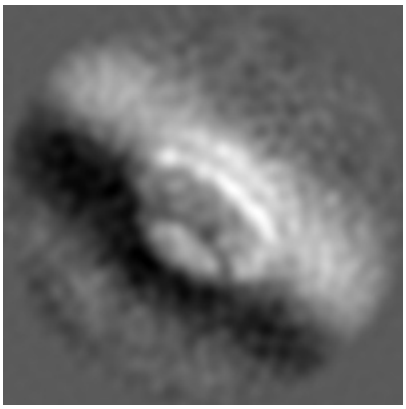
Images derived from a raw map, generated by summing the deposited half-maps, are presented below the corresponding image components of the primary map to allow further visual inspection and comparison with those of the primary map.

6.1 Orthogonal projections

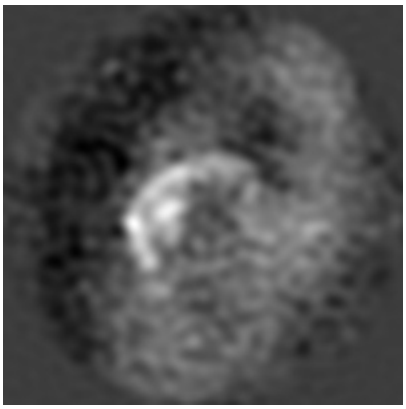
6.1.1 Primary map



X

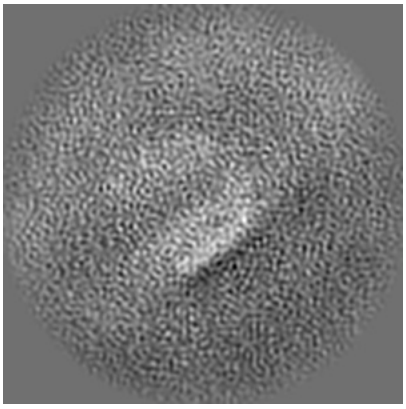


Y

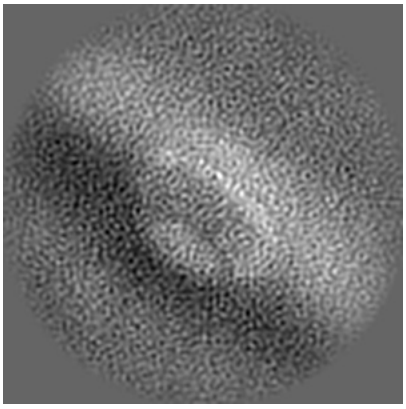


Z

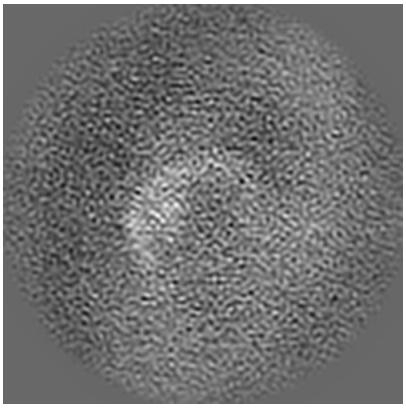
6.1.2 Raw map



X



Y

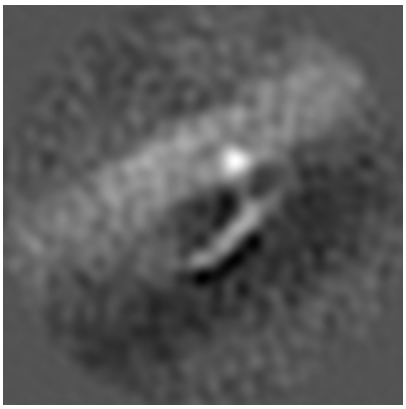


Z

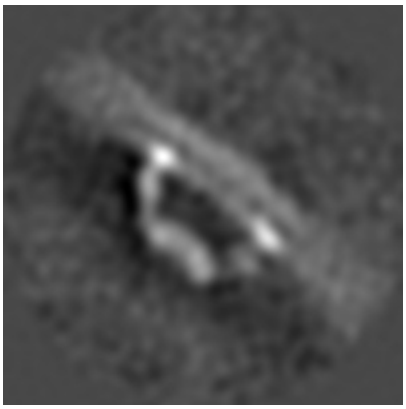
The images above show the map projected in three orthogonal directions.

6.2 Central slices (i)

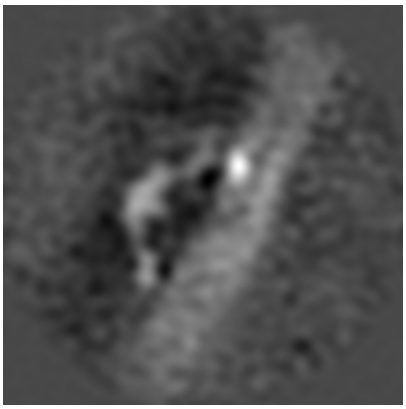
6.2.1 Primary map



X Index: 60

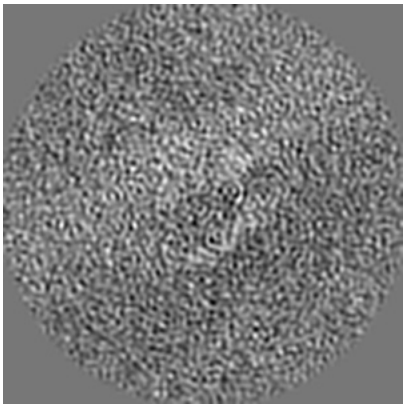


Y Index: 60

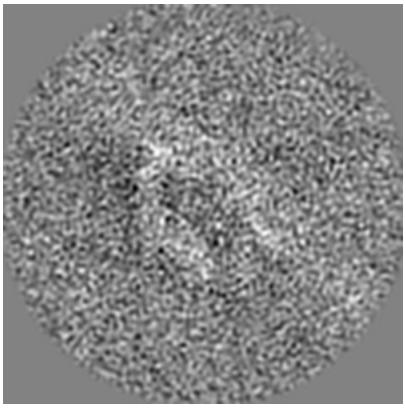


Z Index: 60

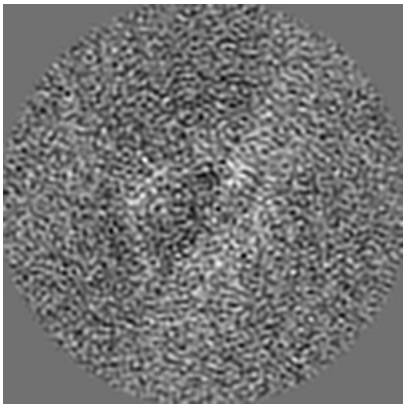
6.2.2 Raw map



X Index: 60



Y Index: 60

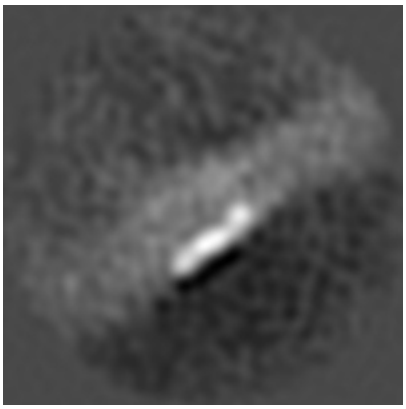


Z Index: 60

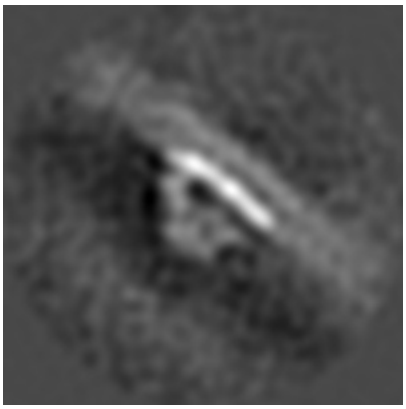
The images above show central slices of the map in three orthogonal directions.

6.3 Largest variance slices (i)

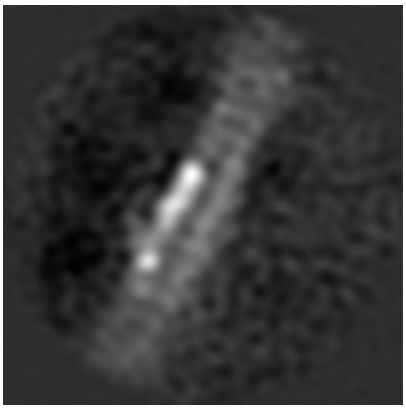
6.3.1 Primary map



X Index: 73

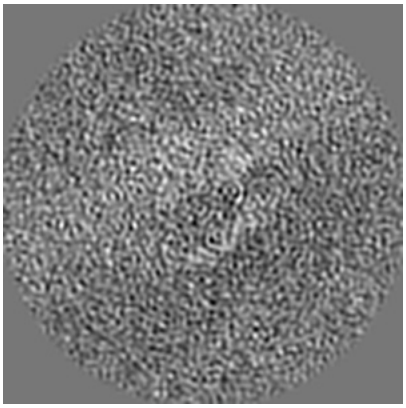


Y Index: 70

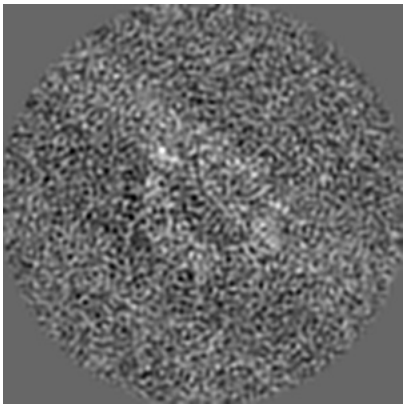


Z Index: 77

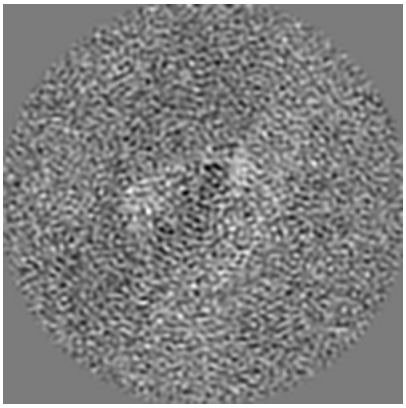
6.3.2 Raw map



X Index: 60



Y Index: 61

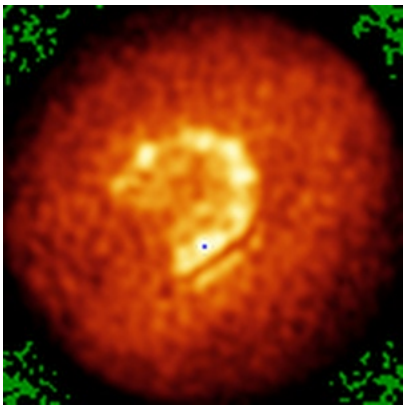


Z Index: 58

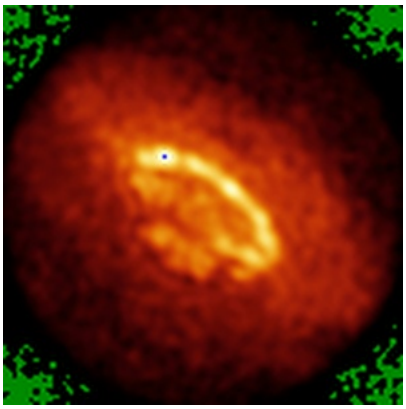
The images above show the largest variance slices of the map in three orthogonal directions.

6.4 Orthogonal standard-deviation projections (False-color) (i)

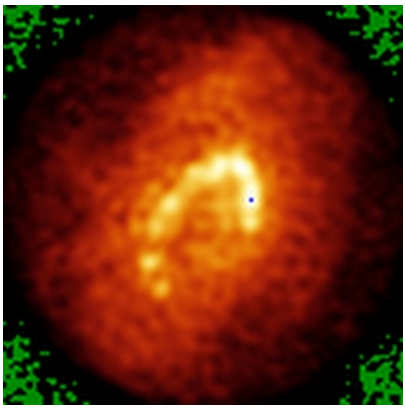
6.4.1 Primary map



X

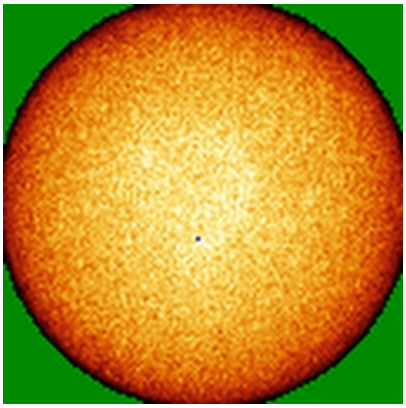


Y

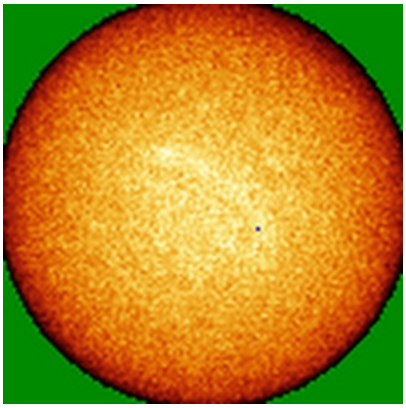


Z

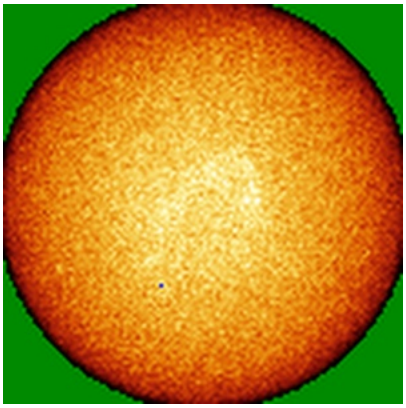
6.4.2 Raw map



X



Y

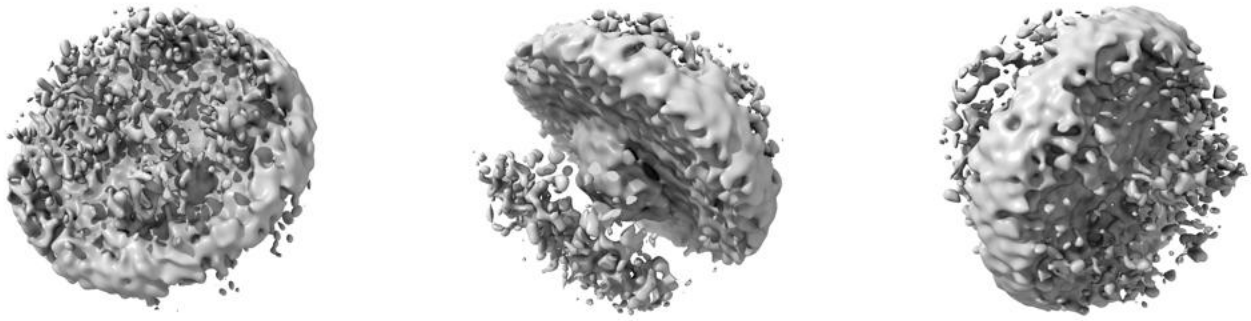


Z

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 0.0001. 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.

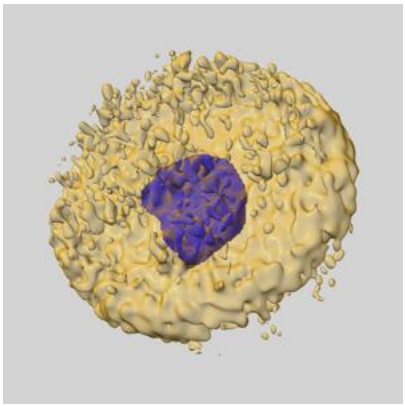
6.6 Mask visualisation (i)

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

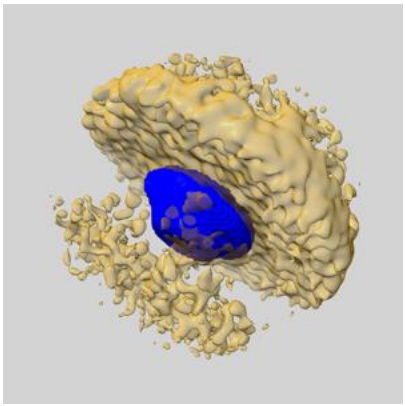
A mask typically either:

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

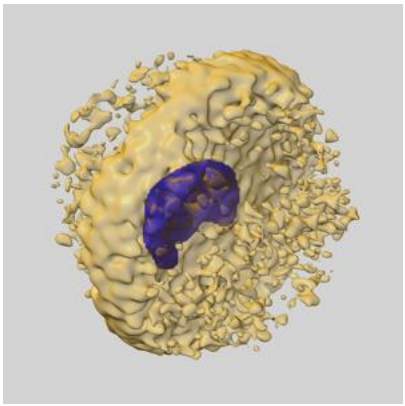
6.6.1 emd_70180_msk_1.map (i)



X



Y

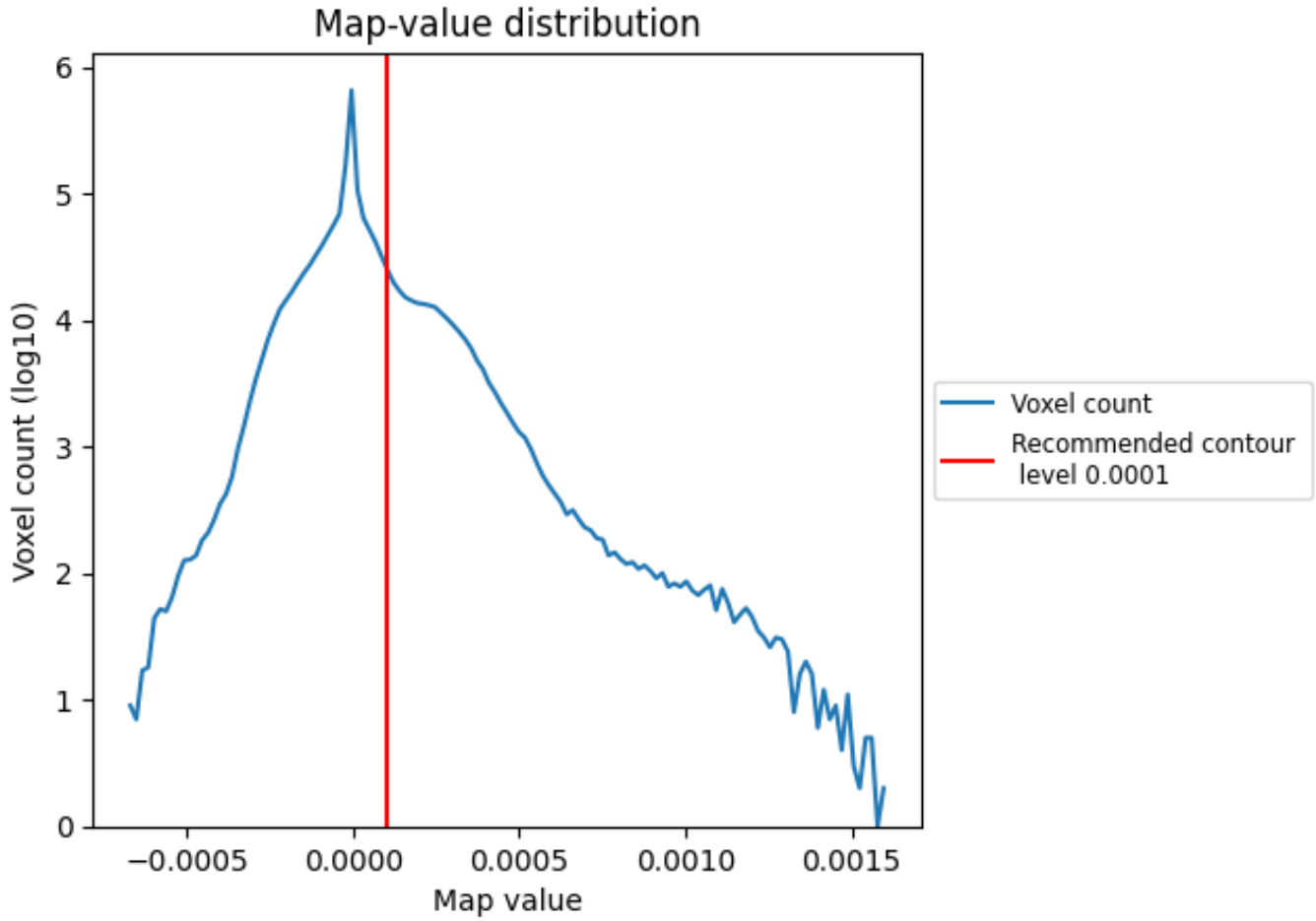


Z

7 Map analysis

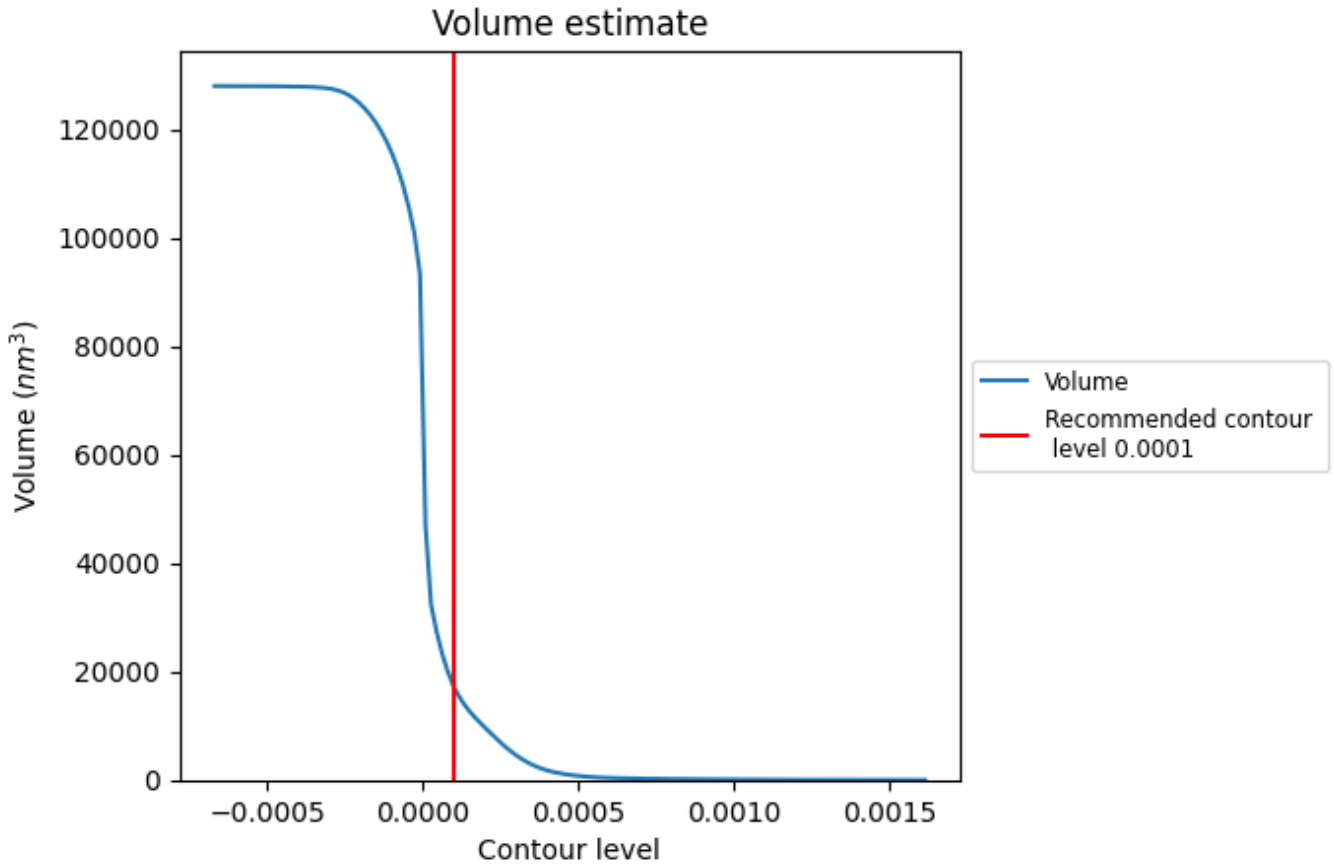
This section contains the results of statistical analysis of the map.

7.1 Map-value distribution



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

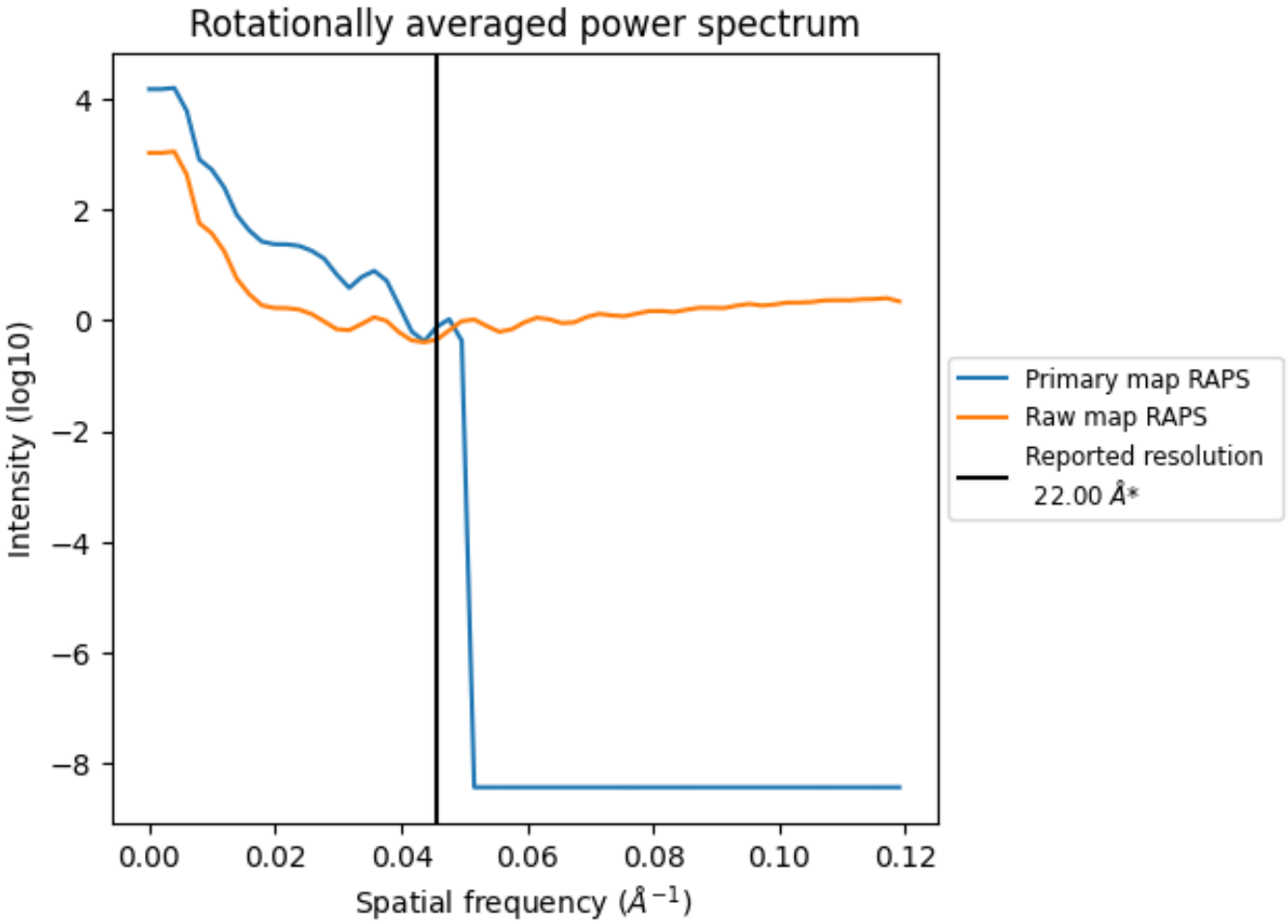
7.2 Volume estimate



The volume at the recommended contour level is 17141 nm^3; this corresponds to an approximate mass of 15484 kDa.

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

7.3 Rotationally averaged power spectrum (i)

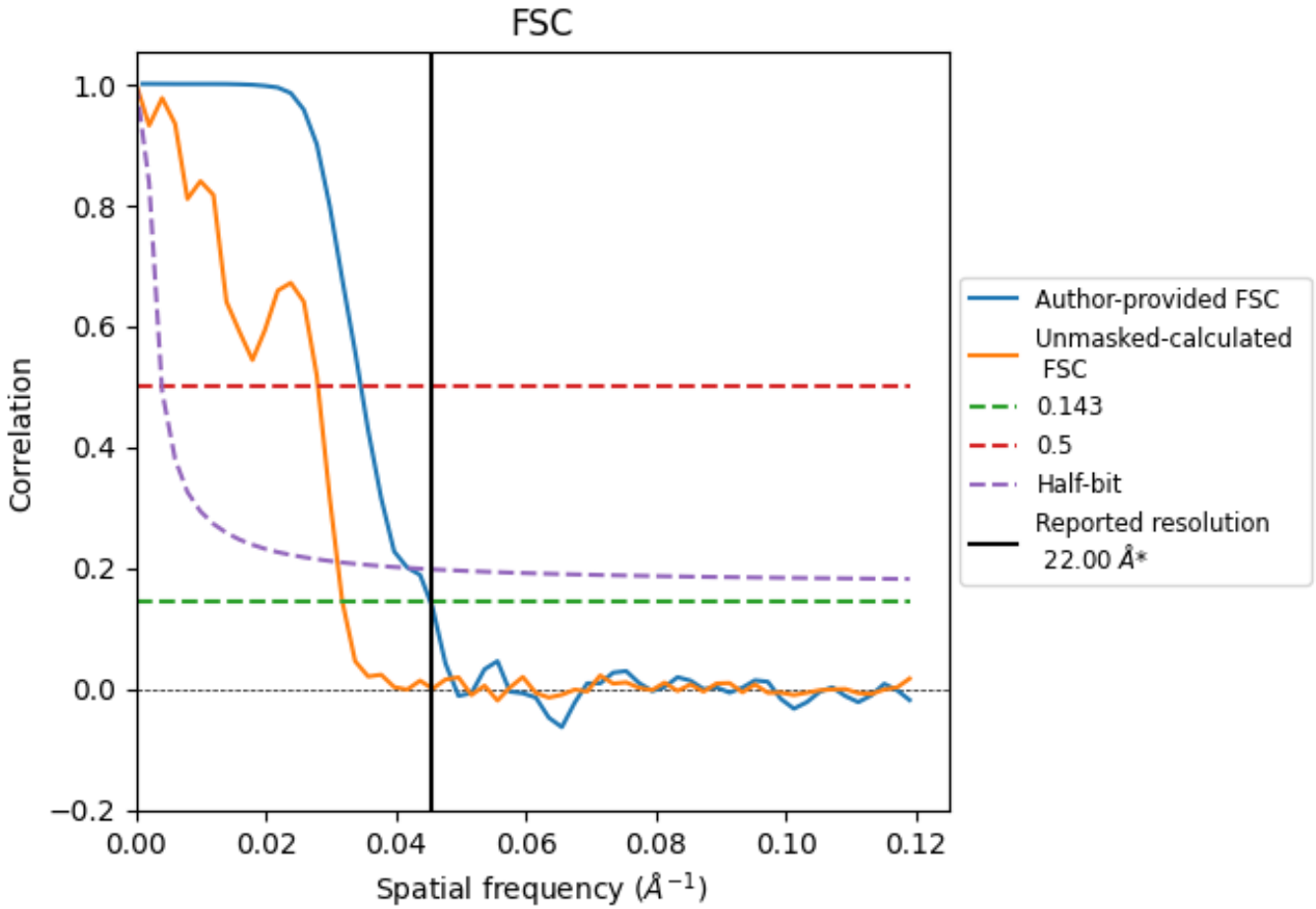


*Reported resolution corresponds to spatial frequency of 0.045 Å^{-1}

8 Fourier-Shell correlation

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



*Reported resolution corresponds to spatial frequency of 0.045 Å^{-1}

8.2 Resolution estimates (i)

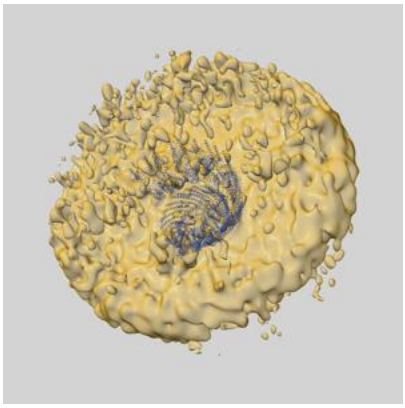
Resolution estimate (Å)	Estimation criterion (FSC cut-off)		
	0.143	0.5	Half-bit
Reported by author	22.00	-	-
Author-provided FSC curve	22.08	28.90	23.81
Unmasked-calculated*	31.45	35.84	32.26

*Resolution estimate based on FSC curve calculated by comparison of deposited half-maps. The value from deposited half-maps intersecting FSC 0.143 CUT-OFF 31.45 differs from the reported value 22.0 by more than 10 %

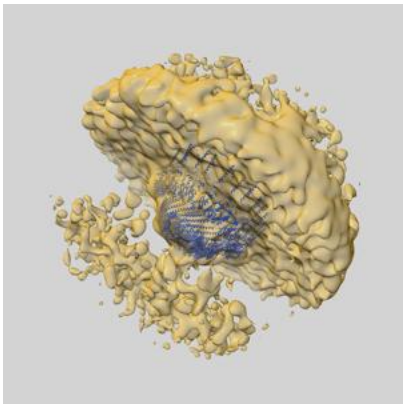
9 Map-model fit

This section contains information regarding the fit between EMDB map EMD-70180 and PDB model 9O6T. Per-residue inclusion information can be found in section 3 on page 6.

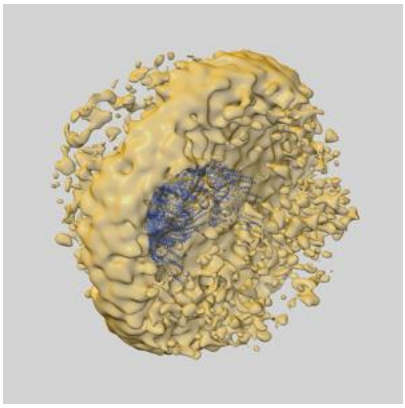
9.1 Map-model overlay



X



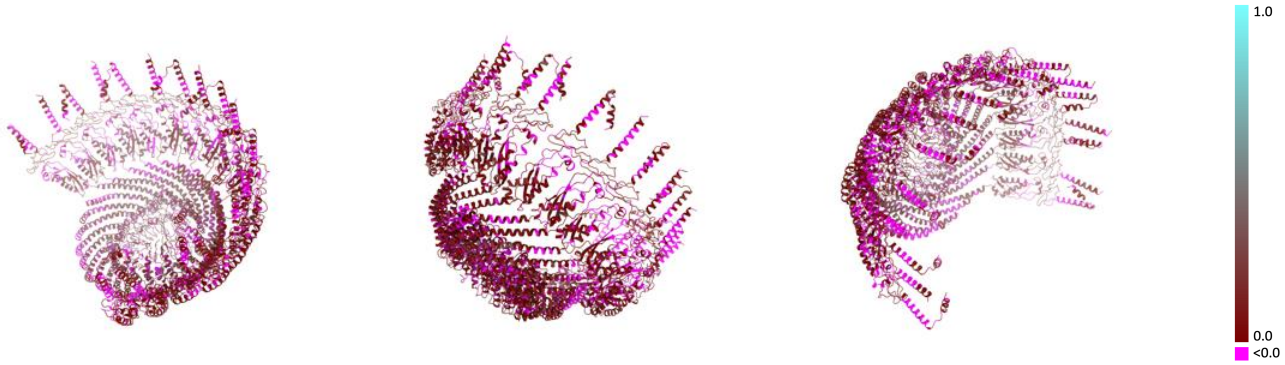
Y



Z

The images above show the 3D surface view of the map at the recommended contour level 0.0001 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.

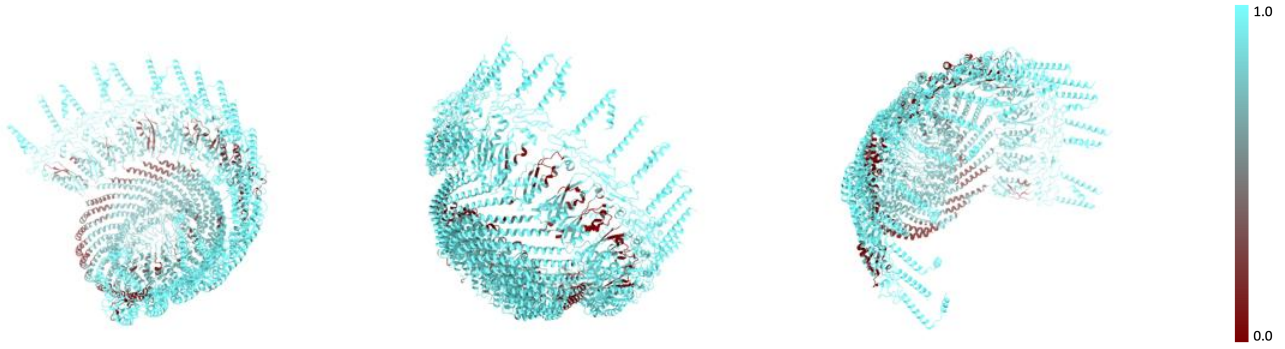
9.2 Q-score mapped to coordinate model (i)



X Y Z

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

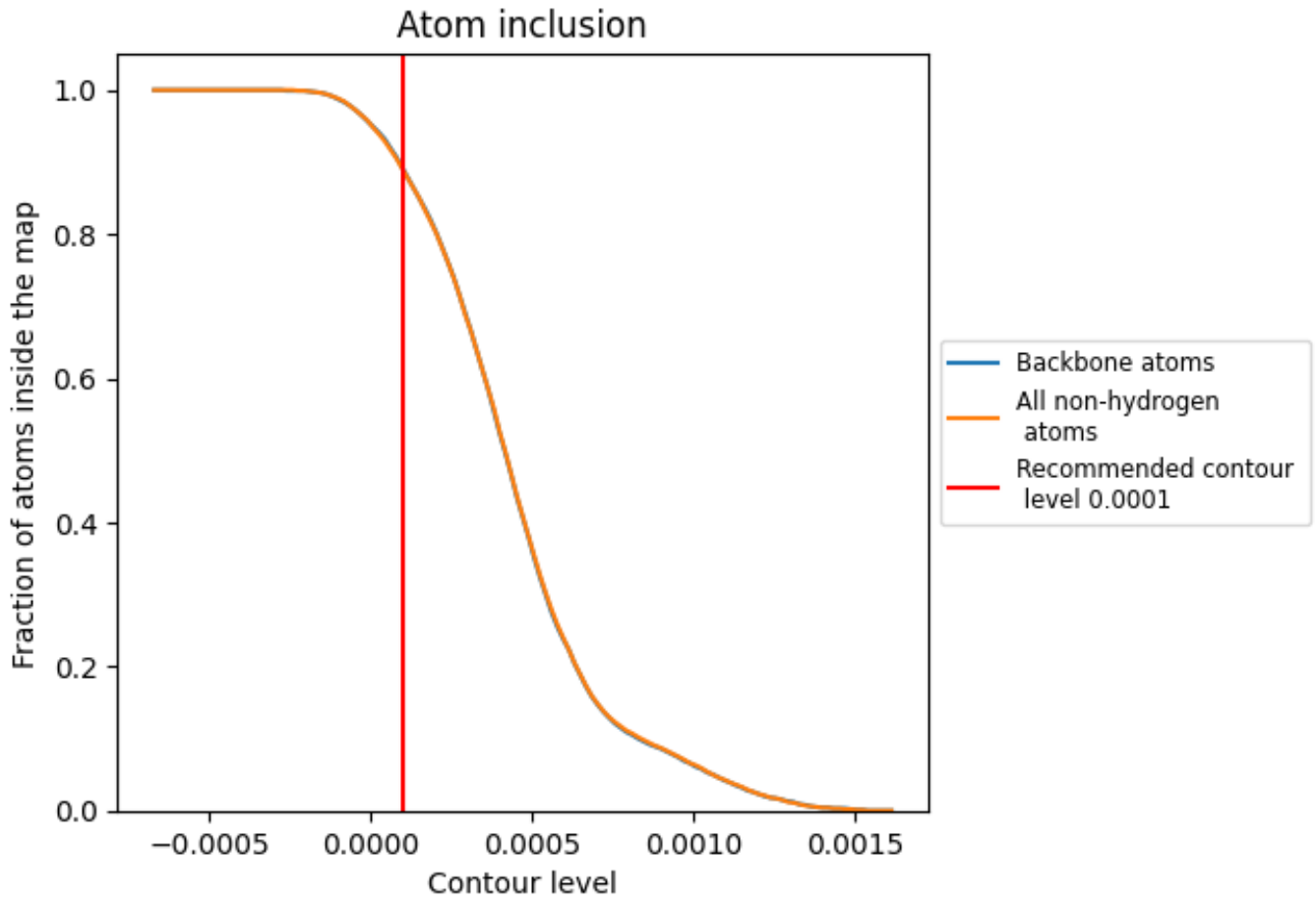
9.3 Atom inclusion mapped to coordinate model (i)



X Y Z

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 (0.0001).

9.4 Atom inclusion (i)



At the recommended contour level, 89% of all backbone atoms, 89% 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 (0.0001) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	0.8900	0.0470
A	0.7670	0.0410
B	0.6940	0.0300
C	0.8070	0.0290
D	0.7690	0.0460
E	0.8850	0.0570
F	0.8460	0.0340
G	0.8540	0.0330
H	0.9160	0.0550
I	0.9480	0.0620
J	0.9860	0.0670
K	0.9870	0.0710
L	0.9550	0.0530
M	0.8550	0.0390
N	0.8880	0.0460
O	0.8410	0.0450
P	0.9110	0.0600
Q	0.8800	0.0430
R	0.9750	0.0490
S	0.8380	0.0130
T	0.9300	0.0460
U	0.8960	0.0470
V	0.9270	0.0390
W	0.8880	0.0480
X	0.7890	0.0520