Full wwPDB EM Validation Report ⓘ

Nov 19, 2022 – 10:17 pm GMT

PDB ID	:	5JZT
EMDB ID	:	EMD-8187
Title	:	Cryo-EM structure of aerolysin pore in LMNG micelle
Authors	:	Iacovache, I.; Zuber, B.
Deposited on	:	2016-05-17
Resolution	:	7.40 Å(reported)
Based on initial model	:	3C0N

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:

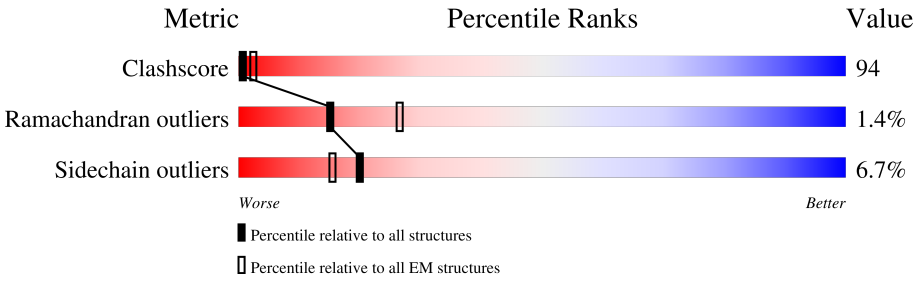
EMDB validation analysis	:	0.0.1.dev43
MolProbity	:	4.02b-467
Percentile statistics	:	20191225.v01 (using entries in the PDB archive December 25th 2019)
MapQ	:	1.9.9
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	2.31.2

1 Overall quality at a glance (i)

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

The reported resolution of this entry is 7.40 Å.

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



Metric	Whole archive (#Entries)	EM structures (#Entries)
Clashscore	158937	4297
Ramachandran outliers	154571	4023
Sidechain outliers	154315	3826

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

Mol	Chain	Length	Quality of chain
1	A	424	8% 32% 61% 7%
1	B	424	8% 31% 61% 7%
1	C	424	9% 31% 62% 7%
1	D	424	10% 30% 62% 7%
1	E	424	8% 29% 63% 7%
1	F	424	8% 30% 62% 7%
1	G	424	8% 33% 60% 7%

2 Entry composition (i)

There is only 1 type of molecule in this entry. The entry contains 23303 atoms, of which 0 are hydrogens and 0 are deuteriums.

In the tables below, the AltConf column contains the number of residues with at least one atom in alternate conformation and the Trace column contains the number of residues modelled with at most 2 atoms.

- Molecule 1 is a protein called Aerolysin.

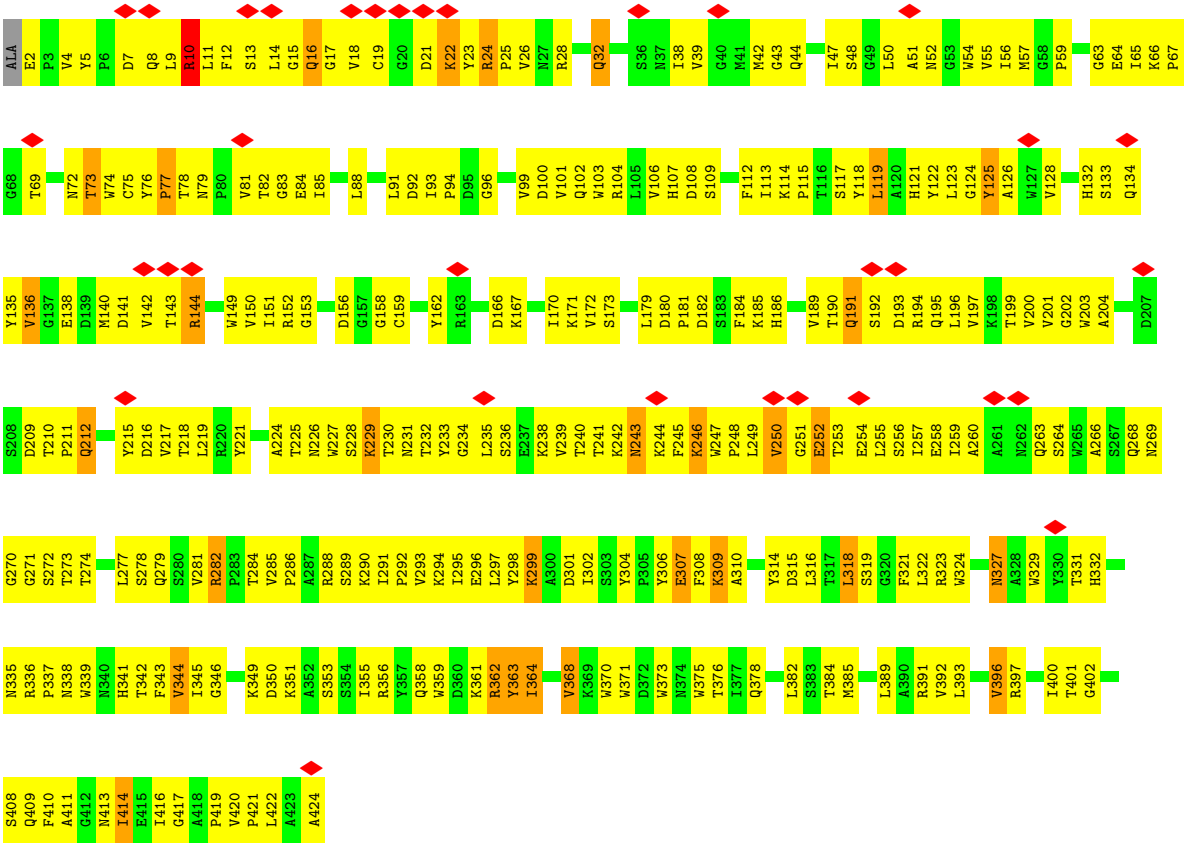
Mol	Chain	Residues	Atoms					AltConf	Trace
1	A	423	Total	C	N	O	S	0	0
			3329	2104	573	643	9		
1	B	423	Total	C	N	O	S	0	0
			3329	2104	573	643	9		
1	C	423	Total	C	N	O	S	0	0
			3329	2104	573	643	9		
1	D	423	Total	C	N	O	S	0	0
			3329	2104	573	643	9		
1	E	423	Total	C	N	O	S	0	0
			3329	2104	573	643	9		
1	F	423	Total	C	N	O	S	0	0
			3329	2104	573	643	9		
1	G	423	Total	C	N	O	S	0	0
			3329	2104	573	643	9		

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.

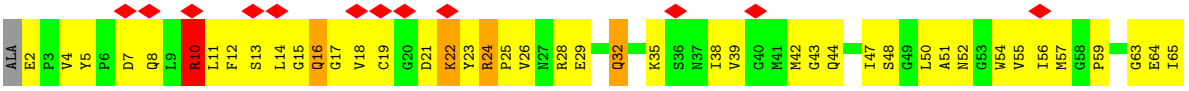
• Molecule 1: Aerolysin

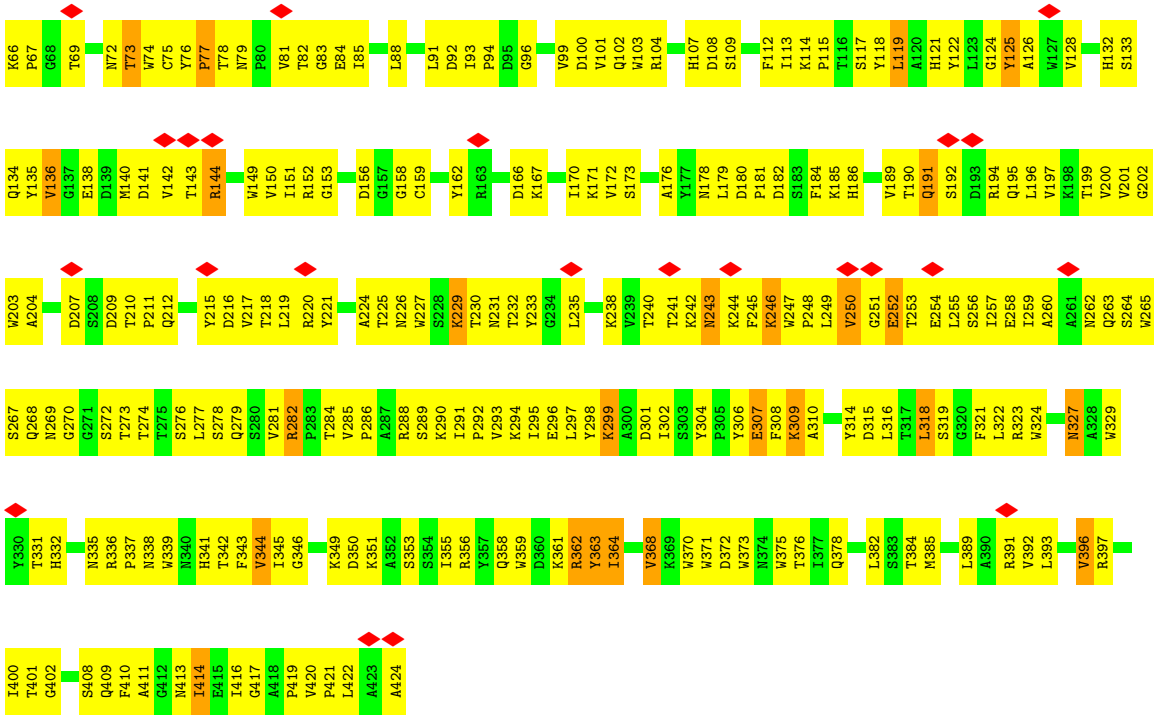
Chain A:



• Molecule 1: Aerolysin

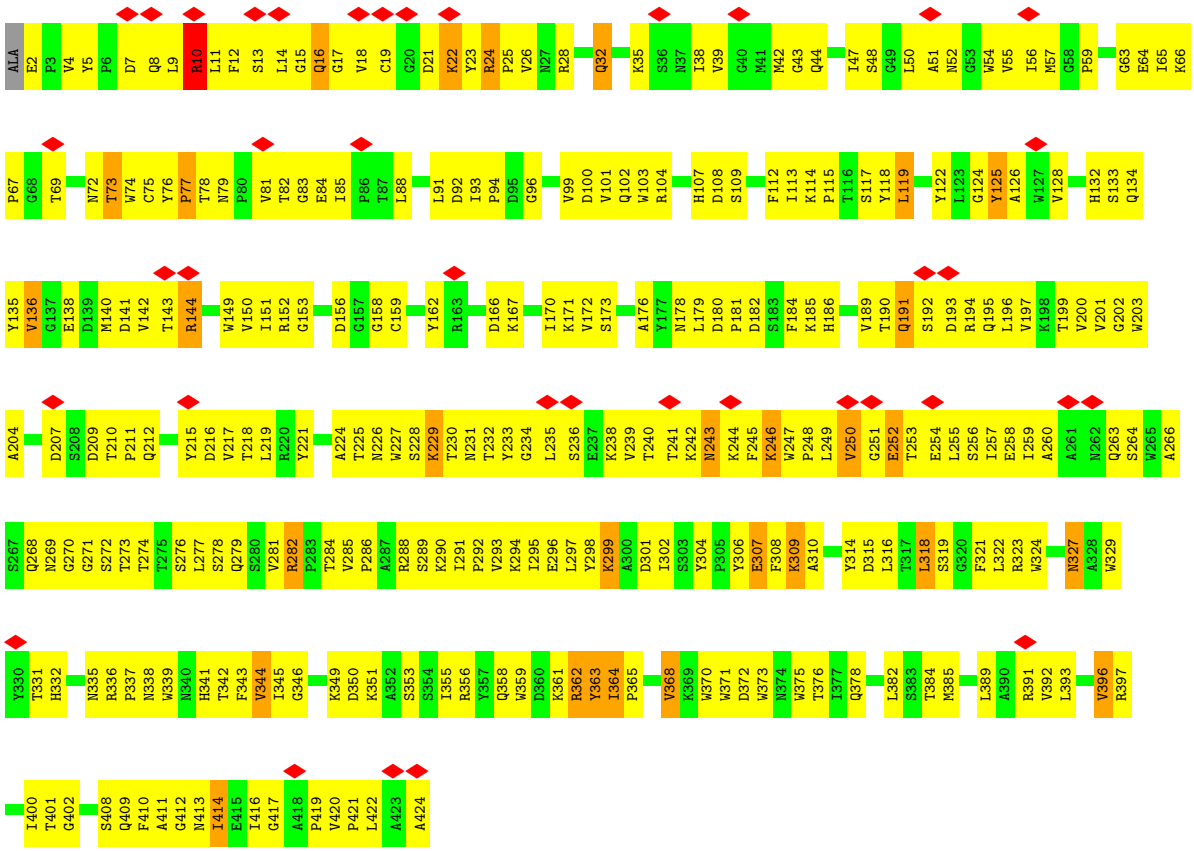
Chain B:





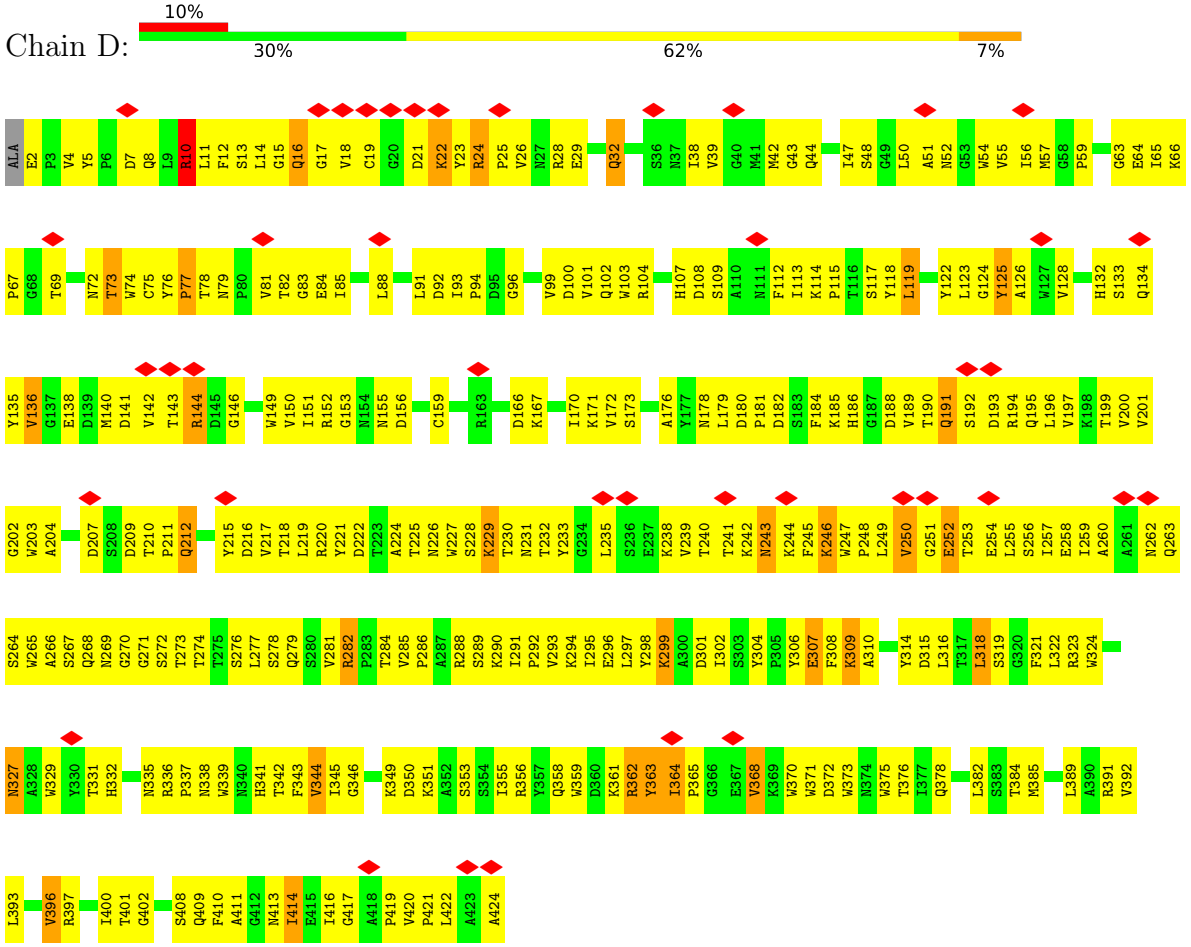
• Molecule 1: Aerolysin

Chain C:



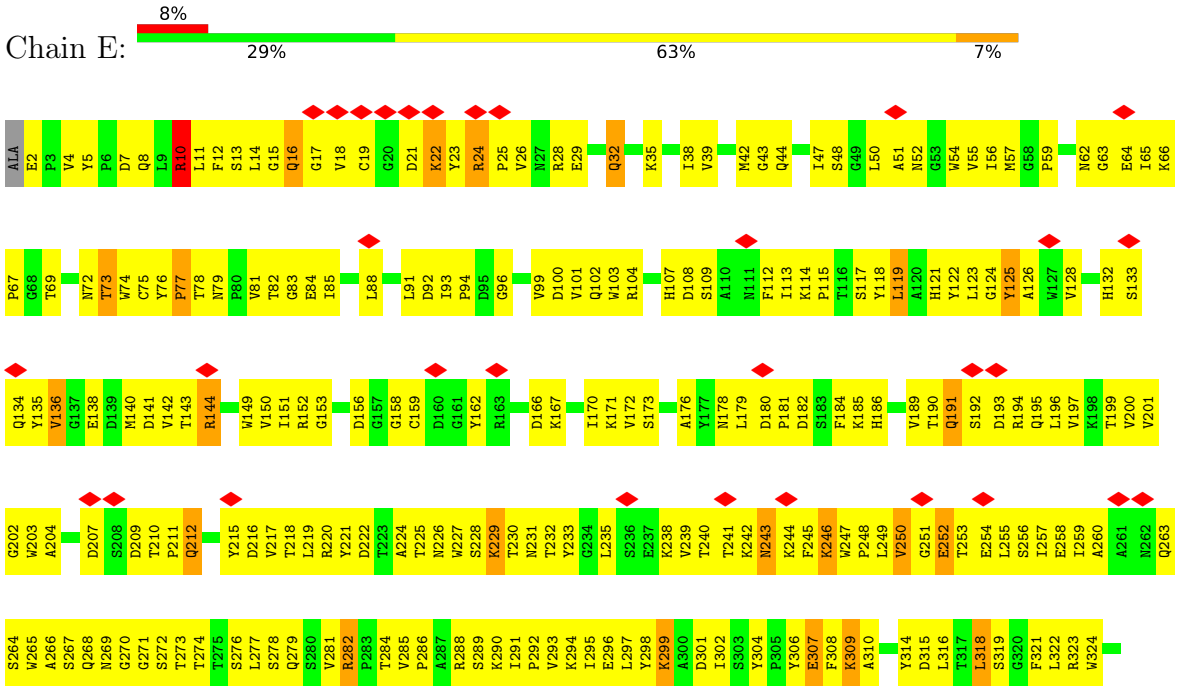
• Molecule 1: Aerolysin

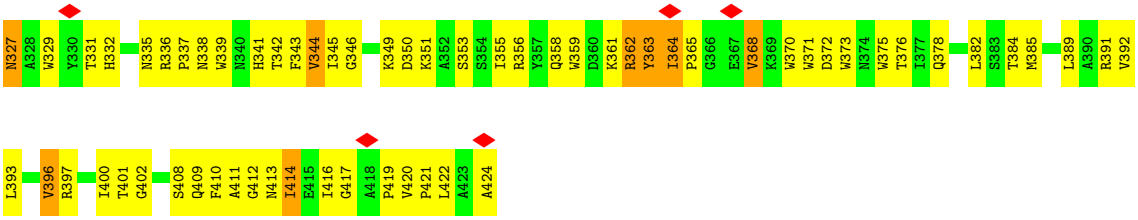
Chain D:



• Molecule 1: Aerolysin

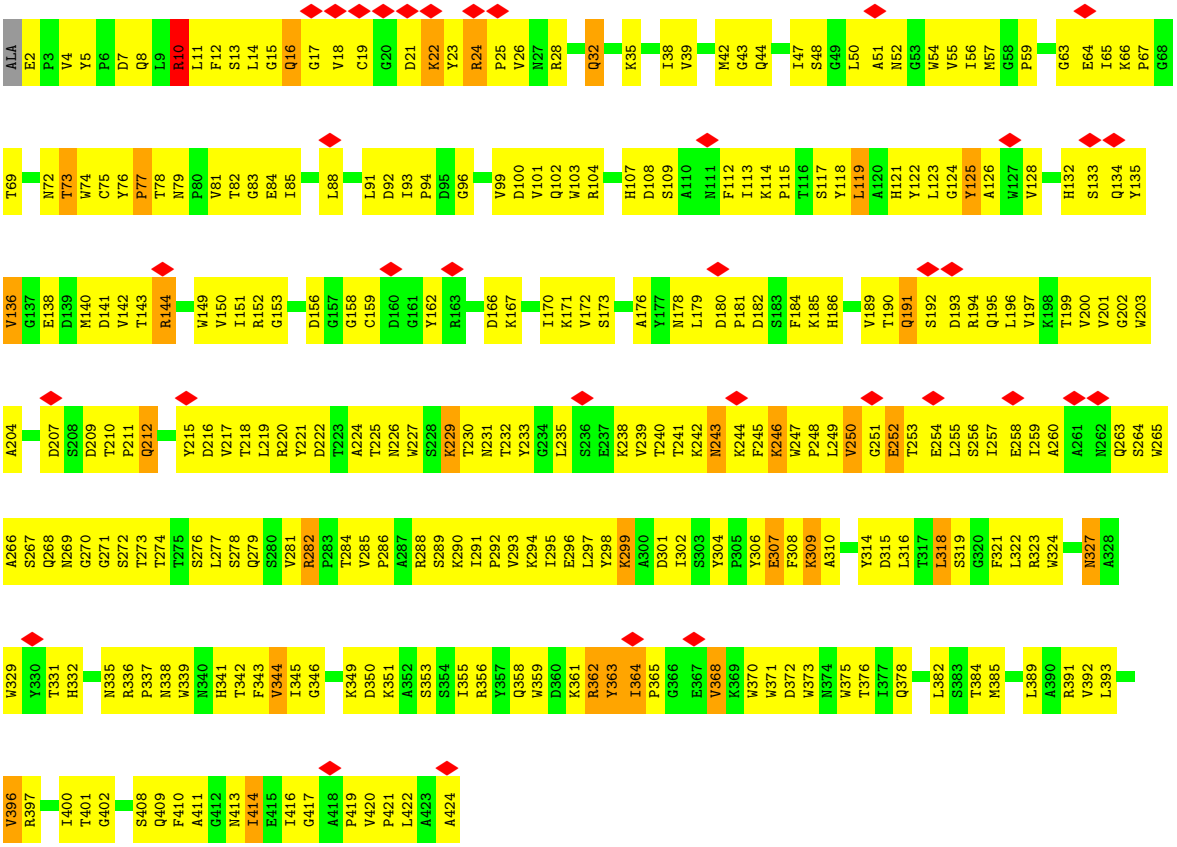
Chain E:





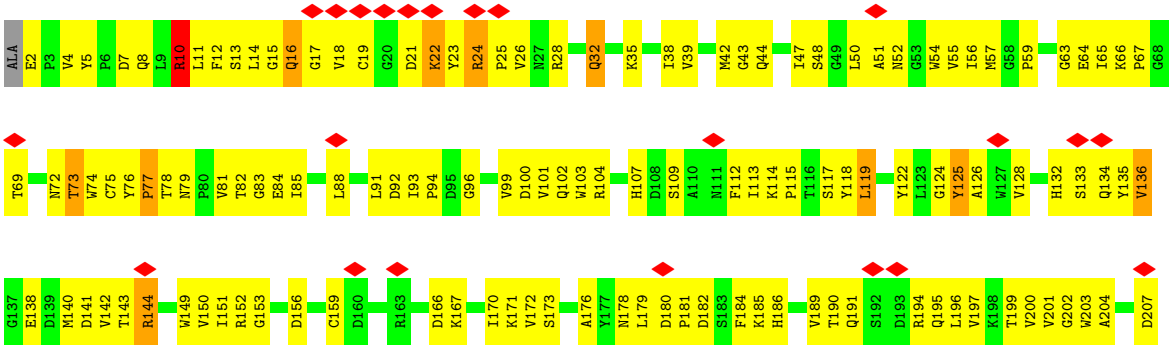
• Molecule 1: Aerolysin

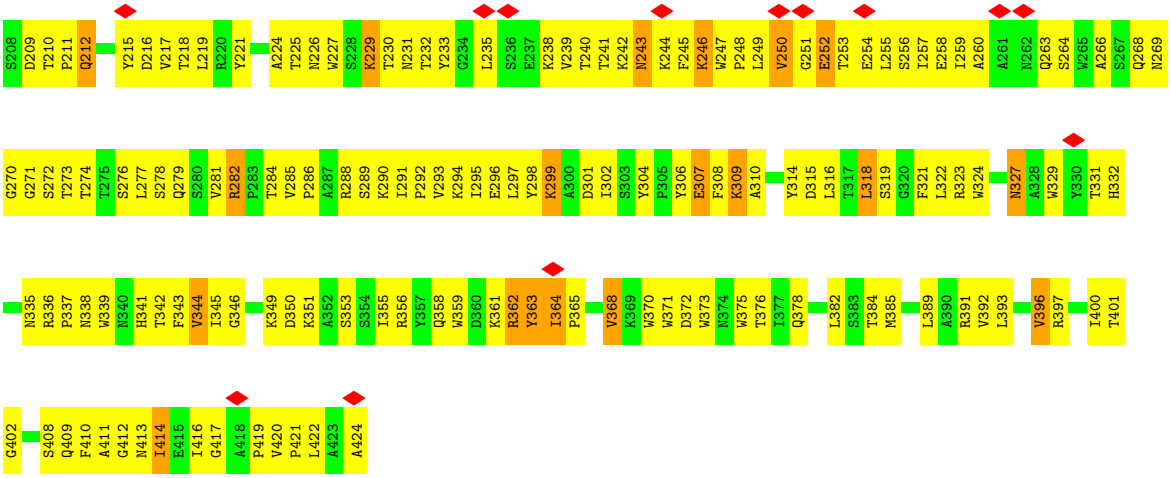
Chain F:



• Molecule 1: Aerolysin

Chain G:




S208 D209 T210 P211 Q212 Y215 D216 V217 T218 L219 R220 Y221 A224 T225 N226 W227 S228 K229 T230 N231 T232 Y233 G234 L235 S236 E237 K238 V239 T240 T241 K242 N243 K244 F245 K246 W247 P248 L249 V250 G251 E252 T253 E254 L255 S256 I257 E258 I259 A260 A261 N262 Q263 S264 W265 A266 S267 Q268 N269
G270 G271 S272 T273 T274 T275 S276 L277 S278 Q279 S280 V281 R282 P283 T284 V285 P286 A287 R288 S289 K290 I291 P292 Y293 K294 I295 E296 L297 Y298 K299 A300 D301 I302 S303 Y304 P305 Y306 E307 F308 K309 A310 Y314 D315 L316 T317 L318 S319 G320 F321 L322 R323 W324 N327 A328 W329 Y330 T331 H332
N335 R336 P337 N338 W339 N340 H341 T342 F343 V344 I345 G346 K349 D350 K351 A352 S353 S354 I355 R356 Y357 Q358 W359 D360 K361 R362 Y363 I364 P365 V368 K369 W370 W371 D372 W373 N374 W375 T376 I377 Q378 L382 S383 T384 M385 L389 A390 R391 V392 L393 V396 R397 I400 T401
G402 S408 Q409 F410 A411 G412 N413 I414 E415 I416 G417 A418 P419 V420 P421 L422 A423 A424

4 Experimental information (i)

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, Not provided	
Number of particles used	27108	Depositor
Resolution determination method	FSC 0.143 CUT-OFF	Depositor
CTF correction method	PHASE FLIPPING AND AMPLITUDE CORRECTION	Depositor
Microscope	FEI TECNAI F20	Depositor
Voltage (kV)	200	Depositor
Electron dose ($e^-/Å^2$)	22.42	Depositor
Minimum defocus (nm)	Not provided	
Maximum defocus (nm)	Not provided	
Magnification	Not provided	
Image detector	FEI FALCON II (4k x 4k)	Depositor
Maximum map value	0.472	Depositor
Minimum map value	-0.262	Depositor
Average map value	0.005	Depositor
Map value standard deviation	0.029	Depositor
Recommended contour level	0.1	Depositor
Map size (Å)	251.99998, 251.99998, 251.99998	wwPDB
Map dimensions	150, 150, 150	wwPDB
Map angles (°)	90.0, 90.0, 90.0	wwPDB
Pixel spacing (Å)	1.68, 1.68, 1.68	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	0.92	0/3425	1.18	7/4675 (0.1%)
1	B	0.92	0/3425	1.18	7/4675 (0.1%)
1	C	0.92	0/3425	1.18	7/4675 (0.1%)
1	D	0.92	0/3425	1.18	7/4675 (0.1%)
1	E	0.92	0/3425	1.18	7/4675 (0.1%)
1	F	0.92	0/3425	1.18	7/4675 (0.1%)
1	G	0.92	0/3425	1.18	7/4675 (0.1%)
All	All	0.92	0/23975	1.18	49/32725 (0.1%)

There are no bond length outliers.

All (49) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	B	319	SER	C-N-CA	-8.12	105.25	122.30
1	D	319	SER	C-N-CA	-8.10	105.29	122.30
1	G	319	SER	C-N-CA	-8.10	105.30	122.30
1	C	319	SER	C-N-CA	-8.09	105.30	122.30
1	F	319	SER	C-N-CA	-8.09	105.30	122.30
1	A	319	SER	C-N-CA	-8.09	105.31	122.30
1	E	319	SER	C-N-CA	-8.07	105.35	122.30
1	A	319	SER	CA-C-N	7.21	130.62	116.20
1	E	319	SER	CA-C-N	7.21	130.61	116.20
1	B	319	SER	CA-C-N	7.20	130.59	116.20
1	C	319	SER	CA-C-N	7.19	130.59	116.20
1	F	319	SER	CA-C-N	7.19	130.59	116.20
1	D	319	SER	CA-C-N	7.18	130.56	116.20
1	G	319	SER	CA-C-N	7.17	130.55	116.20
1	A	319	SER	O-C-N	-7.08	111.17	123.20
1	F	319	SER	O-C-N	-7.08	111.17	123.20
1	D	319	SER	O-C-N	-7.07	111.19	123.20
1	C	319	SER	O-C-N	-7.06	111.19	123.20
1	E	319	SER	O-C-N	-7.06	111.19	123.20
1	G	319	SER	O-C-N	-7.02	111.27	123.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	B	319	SER	O-C-N	-7.01	111.28	123.20
1	B	73	THR	C-N-CA	6.36	137.59	121.70
1	D	73	THR	C-N-CA	6.35	137.57	121.70
1	G	73	THR	C-N-CA	6.34	137.56	121.70
1	E	73	THR	C-N-CA	6.34	137.56	121.70
1	C	73	THR	C-N-CA	6.34	137.54	121.70
1	A	73	THR	C-N-CA	6.33	137.52	121.70
1	F	73	THR	C-N-CA	6.33	137.52	121.70
1	F	318	LEU	C-N-CA	5.31	134.98	121.70
1	C	318	LEU	C-N-CA	5.31	134.96	121.70
1	B	318	LEU	C-N-CA	5.30	134.96	121.70
1	D	318	LEU	C-N-CA	5.30	134.96	121.70
1	G	318	LEU	C-N-CA	5.30	134.96	121.70
1	B	10	ARG	CB-CA-C	-5.30	99.79	110.40
1	E	318	LEU	C-N-CA	5.30	134.94	121.70
1	F	10	ARG	CB-CA-C	-5.29	99.81	110.40
1	G	10	ARG	CB-CA-C	-5.29	99.81	110.40
1	A	318	LEU	C-N-CA	5.29	134.92	121.70
1	D	10	ARG	CB-CA-C	-5.29	99.82	110.40
1	A	10	ARG	CB-CA-C	-5.28	99.85	110.40
1	E	10	ARG	CB-CA-C	-5.27	99.86	110.40
1	C	10	ARG	CB-CA-C	-5.26	99.87	110.40
1	B	125	TYR	CA-CB-CG	-5.14	103.62	113.40
1	A	125	TYR	CA-CB-CG	-5.12	103.67	113.40
1	D	125	TYR	CA-CB-CG	-5.12	103.67	113.40
1	F	125	TYR	CA-CB-CG	-5.12	103.68	113.40
1	C	125	TYR	CA-CB-CG	-5.12	103.68	113.40
1	G	125	TYR	CA-CB-CG	-5.11	103.70	113.40
1	E	125	TYR	CA-CB-CG	-5.10	103.71	113.40

There are no chirality outliers.

There are no planarity outliers.

5.2 Too-close contacts (i)

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

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	A	3329	0	3160	636	0
1	B	3329	0	3161	694	0
1	C	3329	0	3161	737	0
1	D	3329	0	3159	791	0
1	E	3329	0	3159	819	0
1	F	3329	0	3160	761	0
1	G	3329	0	3159	687	0
All	All	23303	0	22119	4262	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 94.

All (4262) 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:D:143:THR:CB	1:E:35:LYS:NZ	1.67	1.57
1:D:243:ASN:CB	1:E:250:VAL:HG13	1.35	1.54
1:D:99:VAL:CG1	1:E:364:ILE:CG2	1.81	1.54
1:D:99:VAL:HG13	1:E:364:ILE:CG2	1.18	1.53
1:A:242:LYS:N	1:B:252:GLU:CB	1.68	1.48
1:E:99:VAL:CG1	1:F:364:ILE:CG2	1.89	1.48
1:C:242:LYS:N	1:D:252:GLU:CB	1.76	1.45
1:F:242:LYS:N	1:G:252:GLU:CB	1.82	1.41
1:D:243:ASN:CG	1:E:250:VAL:HG13	1.43	1.39
1:A:232:THR:HG22	1:B:264:SER:OG	1.24	1.37
1:E:99:VAL:HG13	1:F:364:ILE:CG2	1.50	1.32
1:B:242:LYS:N	1:C:252:GLU:CB	1.93	1.32
1:B:243:ASN:CB	1:C:250:VAL:HG13	1.60	1.32
1:C:232:THR:HG22	1:D:264:SER:OG	1.19	1.31
1:E:244:LYS:CG	1:F:253:THR:OG1	1.75	1.31
1:C:243:ASN:CB	1:D:250:VAL:HG13	1.59	1.31
1:D:243:ASN:HB3	1:E:250:VAL:CG1	1.57	1.31
1:E:142:VAL:O	1:F:32:GLN:HG2	1.28	1.31
1:D:143:THR:CG2	1:E:35:LYS:NZ	1.94	1.30
1:D:192:SER:O	1:E:176:ALA:HB3	1.22	1.29
1:D:243:ASN:HB3	1:E:250:VAL:CA	1.60	1.29
1:B:99:VAL:CG1	1:C:364:ILE:CG2	2.11	1.27
1:B:99:VAL:HG11	1:C:364:ILE:CG2	1.64	1.27
1:D:192:SER:O	1:E:176:ALA:CB	1.79	1.27
1:F:243:ASN:CB	1:G:250:VAL:HG13	1.66	1.25
1:D:243:ASN:HB3	1:E:250:VAL:CB	1.66	1.24
1:C:192:SER:O	1:D:176:ALA:HB3	1.39	1.23

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:243:ASN:CB	1:E:250:VAL:CG1	2.14	1.22
1:E:243:ASN:CB	1:F:250:VAL:HG13	1.68	1.22
1:B:203:TRP:NE1	1:C:413:ASN:ND2	1.88	1.21
1:B:242:LYS:N	1:C:252:GLU:HB2	1.01	1.21
1:D:243:ASN:ND2	1:E:250:VAL:HG13	1.54	1.20
1:D:243:ASN:ND2	1:E:250:VAL:CG1	2.02	1.20
1:F:244:LYS:CG	1:G:253:THR:OG1	1.88	1.20
1:E:242:LYS:N	1:F:251:GLY:O	1.74	1.20
1:F:99:VAL:CG1	1:G:364:ILE:CG2	2.19	1.20
1:E:243:ASN:ND2	1:F:250:VAL:HG13	1.54	1.20
1:D:244:LYS:CG	1:E:253:THR:OG1	1.91	1.19
1:E:232:THR:HG22	1:F:264:SER:OG	1.43	1.19
1:F:99:VAL:HG11	1:G:364:ILE:CG2	1.71	1.19
1:A:253:THR:OG1	1:G:244:LYS:HG2	1.39	1.18
1:E:99:VAL:HG11	1:F:364:ILE:CG2	1.58	1.18
1:E:243:ASN:CG	1:F:250:VAL:HG13	1.63	1.18
1:D:227:TRP:CE3	1:E:269:ASN:HB3	1.79	1.17
1:D:232:THR:HG22	1:E:264:SER:OG	1.43	1.17
1:C:103:TRP:HZ2	1:D:365:PRO:HD2	1.03	1.17
1:A:253:THR:OG1	1:G:244:LYS:CG	1.92	1.17
1:C:103:TRP:CZ2	1:D:365:PRO:HD2	1.80	1.16
1:D:141:ASP:OD2	1:E:65:ILE:HG12	1.40	1.16
1:E:215:TYR:CD1	1:F:414:ILE:HD12	1.79	1.16
1:F:242:LYS:N	1:G:252:GLU:HB2	0.91	1.16
1:D:143:THR:HG21	1:E:35:LYS:CE	1.74	1.16
1:C:232:THR:CG2	1:D:264:SER:OG	1.93	1.16
1:E:359:TRP:HB3	1:E:364:ILE:HD11	1.27	1.15
1:D:215:TYR:CD1	1:E:414:ILE:HD12	1.79	1.15
1:D:242:LYS:N	1:E:251:GLY:O	1.76	1.15
1:F:242:LYS:N	1:G:251:GLY:O	1.80	1.15
1:E:215:TYR:HE1	1:F:279:GLN:NE2	1.44	1.15
1:E:244:LYS:HG2	1:F:253:THR:OG1	1.36	1.15
1:B:242:LYS:N	1:C:251:GLY:O	1.79	1.15
1:B:359:TRP:HB3	1:B:364:ILE:HD11	1.27	1.14
1:C:359:TRP:HB3	1:C:364:ILE:HD11	1.26	1.14
1:A:359:TRP:HB3	1:A:364:ILE:HD11	1.26	1.14
1:D:243:ASN:CB	1:E:250:VAL:HA	1.77	1.14
1:E:243:ASN:HB3	1:F:250:VAL:CA	1.75	1.14
1:G:359:TRP:HB3	1:G:364:ILE:HD11	1.26	1.14
1:B:243:ASN:HB3	1:C:250:VAL:HA	1.25	1.13
1:D:99:VAL:CG1	1:E:364:ILE:HG21	1.56	1.13

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:242:LYS:N	1:E:252:GLU:CB	2.08	1.13
1:D:207:ASP:OD2	1:F:185:LYS:HG3	1.48	1.13
1:E:99:VAL:HG13	1:F:364:ILE:HG22	1.20	1.13
1:F:359:TRP:HB3	1:F:364:ILE:HD11	1.26	1.13
1:B:243:ASN:HB3	1:C:250:VAL:CA	1.79	1.13
1:F:204:ALA:HB2	1:G:414:ILE:HD11	1.30	1.13
1:C:226:ASN:N	1:D:270:GLY:O	1.82	1.12
1:E:99:VAL:CG1	1:F:364:ILE:HG21	1.69	1.13
1:D:359:TRP:HB3	1:D:364:ILE:HD11	1.26	1.12
1:E:207:ASP:OD2	1:G:185:LYS:HG3	1.45	1.12
1:D:244:LYS:HG3	1:E:253:THR:OG1	1.45	1.12
1:C:243:ASN:HB3	1:D:250:VAL:CG1	1.78	1.12
1:A:243:ASN:HB3	1:B:250:VAL:HG13	1.15	1.12
1:A:252:GLU:HB3	1:A:255:LEU:HD23	1.30	1.12
1:F:215:TYR:HE1	1:G:279:GLN:NE2	1.48	1.12
1:G:252:GLU:HB3	1:G:255:LEU:HD23	1.30	1.12
1:B:243:ASN:HB3	1:C:250:VAL:CG1	1.80	1.12
1:F:215:TYR:CD1	1:G:414:ILE:HD12	1.84	1.12
1:A:279:GLN:NE2	1:G:215:TYR:HE1	1.46	1.11
1:D:143:THR:CG2	1:E:35:LYS:CE	2.27	1.11
1:D:143:THR:HG21	1:E:35:LYS:NZ	1.57	1.11
1:D:191:GLN:H	1:E:178:ASN:HB2	1.00	1.11
1:F:243:ASN:ND2	1:G:250:VAL:HG13	1.65	1.11
1:E:243:ASN:HB3	1:F:250:VAL:HA	1.17	1.11
1:C:141:ASP:OD2	1:D:65:ILE:HG12	1.48	1.11
1:E:99:VAL:HG11	1:F:364:ILE:HG23	1.16	1.11
1:B:182:ASP:CB	1:G:422:LEU:HD13	1.80	1.11
1:B:243:ASN:HB3	1:C:250:VAL:HG13	1.30	1.11
1:C:243:ASN:HB3	1:D:250:VAL:HG13	1.18	1.11
1:D:143:THR:OG1	1:E:35:LYS:NZ	1.84	1.11
1:B:142:VAL:O	1:C:32:GLN:HG2	1.51	1.10
1:D:99:VAL:CG1	1:E:364:ILE:HG23	1.62	1.10
1:B:243:ASN:ND2	1:C:250:VAL:HG13	1.67	1.10
1:F:243:ASN:HB3	1:G:250:VAL:HA	1.25	1.10
1:F:244:LYS:HG2	1:G:253:THR:OG1	1.49	1.10
1:F:252:GLU:HB3	1:F:255:LEU:HD23	1.30	1.10
1:A:232:THR:CG2	1:B:264:SER:OG	2.00	1.10
1:E:143:THR:HB	1:F:35:LYS:HZ2	0.96	1.10
1:F:243:ASN:HB3	1:G:250:VAL:CA	1.82	1.09
1:D:243:ASN:HB3	1:E:250:VAL:HA	1.23	1.09
1:C:242:LYS:N	1:D:252:GLU:HB2	0.82	1.09

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:103:TRP:CZ2	1:E:365:PRO:HD2	1.88	1.09
1:D:143:THR:HA	1:E:32:GLN:HB3	1.33	1.09
1:D:143:THR:HB	1:E:35:LYS:NZ	1.53	1.09
1:C:227:TRP:CE3	1:D:269:ASN:HB3	1.85	1.08
1:D:242:LYS:N	1:E:252:GLU:HB2	1.18	1.08
1:D:99:VAL:HG11	1:E:364:ILE:HG23	1.22	1.08
1:F:243:ASN:HB3	1:G:250:VAL:HG13	1.33	1.07
1:F:243:ASN:CG	1:G:250:VAL:HG13	1.72	1.07
1:B:99:VAL:HG13	1:C:364:ILE:CG2	1.84	1.07
1:B:99:VAL:CG1	1:C:364:ILE:HG21	1.83	1.07
1:D:99:VAL:HG11	1:E:362:ARG:HG3	1.37	1.07
1:B:252:GLU:HB3	1:B:255:LEU:HD23	1.30	1.07
1:E:252:GLU:HB3	1:E:255:LEU:HD23	1.30	1.07
1:C:192:SER:O	1:D:176:ALA:CB	2.03	1.06
1:E:142:VAL:O	1:F:32:GLN:CG	2.04	1.06
1:C:242:LYS:H	1:D:252:GLU:CB	1.47	1.06
1:D:252:GLU:HB3	1:D:255:LEU:HD23	1.31	1.06
1:F:203:TRP:NE1	1:G:413:ASN:ND2	2.02	1.06
1:C:252:GLU:HB3	1:C:255:LEU:HD23	1.30	1.06
1:E:204:ALA:HB2	1:F:414:ILE:HD11	1.35	1.06
1:F:232:THR:HG22	1:G:264:SER:OG	1.55	1.06
1:B:91:LEU:HB3	1:B:396:VAL:HG23	1.37	1.05
1:C:91:LEU:HB3	1:C:396:VAL:HG23	1.37	1.05
1:E:215:TYR:CE1	1:F:279:GLN:NE2	2.23	1.05
1:E:243:ASN:ND2	1:F:250:VAL:CG1	2.19	1.05
1:F:243:ASN:HB3	1:G:250:VAL:CG1	1.86	1.05
1:B:243:ASN:CG	1:C:250:VAL:HG13	1.74	1.05
1:A:414:ILE:HD12	1:G:215:TYR:CD1	1.91	1.05
1:B:244:LYS:CG	1:C:253:THR:OG1	2.05	1.05
1:F:91:LEU:HB3	1:F:396:VAL:HG23	1.37	1.05
1:A:250:VAL:HG13	1:G:243:ASN:CB	1.87	1.04
1:E:143:THR:CB	1:F:35:LYS:HZ2	1.70	1.04
1:E:243:ASN:HB3	1:F:250:VAL:HG13	1.40	1.04
1:A:250:VAL:HG13	1:G:243:ASN:HB3	1.35	1.04
1:E:244:LYS:HG3	1:F:253:THR:OG1	1.49	1.04
1:E:192:SER:O	1:F:176:ALA:HB3	1.57	1.03
1:E:226:ASN:N	1:F:270:GLY:O	1.88	1.03
1:B:204:ALA:HB2	1:C:414:ILE:HD11	1.41	1.03
1:B:243:ASN:HB3	1:C:250:VAL:CB	1.87	1.03
1:D:91:LEU:HB3	1:D:396:VAL:HG23	1.37	1.03
1:D:203:TRP:NE1	1:E:413:ASN:ND2	2.06	1.03

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:91:LEU:HB3	1:A:396:VAL:HG23	1.37	1.03
1:B:204:ALA:CB	1:C:414:ILE:HD11	1.89	1.03
1:E:243:ASN:CB	1:F:250:VAL:HA	1.88	1.03
1:D:226:ASN:N	1:E:270:GLY:O	1.89	1.03
1:D:243:ASN:CG	1:E:250:VAL:CG1	2.21	1.03
1:F:215:TYR:CE1	1:G:279:GLN:NE2	2.26	1.03
1:C:243:ASN:CG	1:D:250:VAL:HG13	1.78	1.02
1:D:99:VAL:HG13	1:E:364:ILE:HG22	1.29	1.02
1:E:243:ASN:HB3	1:F:250:VAL:CG1	1.89	1.02
1:B:204:ALA:HA	1:C:414:ILE:CD1	1.89	1.02
1:D:103:TRP:HZ2	1:E:365:PRO:HD2	1.21	1.02
1:A:279:GLN:NE2	1:G:215:TYR:CE1	2.28	1.02
1:B:143:THR:HB	1:C:35:LYS:HZ2	1.17	1.02
1:A:414:ILE:HD11	1:G:204:ALA:HB2	1.39	1.02
1:F:244:LYS:HG3	1:G:253:THR:OG1	1.59	1.01
1:E:143:THR:CB	1:F:35:LYS:NZ	2.24	1.01
1:G:150:VAL:HG12	1:G:170:ILE:H	1.24	1.01
1:A:243:ASN:CB	1:B:250:VAL:HG13	1.89	1.01
1:C:191:GLN:H	1:D:178:ASN:HB2	1.23	1.01
1:E:91:LEU:HB3	1:E:396:VAL:HG23	1.37	1.01
1:F:204:ALA:CB	1:G:414:ILE:HD11	1.90	1.01
1:G:91:LEU:HB3	1:G:396:VAL:HG23	1.37	1.01
1:A:99:VAL:HG11	1:B:364:ILE:CG2	1.91	1.00
1:B:99:VAL:HG11	1:C:364:ILE:HG23	1.43	1.00
1:E:143:THR:HB	1:F:35:LYS:NZ	1.74	1.00
1:F:99:VAL:HG13	1:G:364:ILE:CG2	1.91	1.00
1:F:150:VAL:HG12	1:F:170:ILE:H	1.24	1.00
1:B:182:ASP:HB2	1:G:422:LEU:HD13	1.42	1.00
1:D:99:VAL:CG1	1:E:362:ARG:HG3	1.90	1.00
1:C:243:ASN:HB3	1:D:250:VAL:HA	1.43	1.00
1:G:242:LYS:HE2	1:G:254:GLU:HG3	1.44	1.00
1:B:143:THR:HG21	1:C:35:LYS:HZ1	1.24	1.00
1:D:199:THR:HB	1:E:409:GLN:NE2	1.76	1.00
1:A:242:LYS:N	1:B:252:GLU:HB2	0.74	0.99
1:F:242:LYS:HE2	1:F:254:GLU:HG3	1.44	0.99
1:B:150:VAL:HG12	1:B:170:ILE:H	1.24	0.99
1:B:243:ASN:ND2	1:C:250:VAL:CG1	2.24	0.99
1:C:244:LYS:CG	1:D:253:THR:OG1	2.11	0.99
1:A:242:LYS:HE2	1:A:254:GLU:HG3	1.44	0.99
1:A:150:VAL:HG12	1:A:170:ILE:H	1.24	0.99
1:B:242:LYS:HE2	1:B:254:GLU:HG3	1.44	0.99

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:241:THR:HB	1:B:251:GLY:O	1.62	0.98
1:B:232:THR:HG22	1:C:264:SER:OG	1.63	0.98
1:D:150:VAL:HG12	1:D:170:ILE:H	1.24	0.98
1:A:264:SER:OG	1:G:232:THR:HG22	1.62	0.98
1:C:242:LYS:HE2	1:C:254:GLU:HG3	1.44	0.98
1:E:227:TRP:CE3	1:F:269:ASN:HB3	1.98	0.98
1:G:5:TYR:CE2	1:G:361:LYS:HB3	1.99	0.98
1:E:150:VAL:HG12	1:E:170:ILE:H	1.24	0.98
1:D:203:TRP:HE1	1:E:413:ASN:HD21	1.11	0.97
1:A:5:TYR:CE2	1:A:361:LYS:HB3	1.99	0.97
1:E:5:TYR:CE2	1:E:361:LYS:HB3	1.99	0.97
1:E:242:LYS:HE2	1:E:254:GLU:HG3	1.44	0.97
1:G:310:ALA:HB1	1:G:397:ARG:HD2	1.46	0.97
1:C:150:VAL:HG12	1:C:170:ILE:H	1.24	0.97
1:D:294:LYS:CE	1:E:304:TYR:OH	2.12	0.97
1:F:310:ALA:HB1	1:F:397:ARG:HD2	1.47	0.97
1:A:310:ALA:HB1	1:A:397:ARG:HD2	1.47	0.97
1:B:5:TYR:CE2	1:B:361:LYS:HB3	1.99	0.97
1:A:414:ILE:HD11	1:G:204:ALA:CB	1.93	0.97
1:C:5:TYR:CE2	1:C:361:LYS:HB3	1.99	0.97
1:F:5:TYR:CE2	1:F:361:LYS:HB3	1.99	0.97
1:B:99:VAL:HG13	1:C:364:ILE:HG22	1.45	0.97
1:D:243:ASN:HD22	1:E:250:VAL:CG1	1.73	0.96
1:D:5:TYR:CE2	1:D:361:LYS:HB3	1.99	0.96
1:E:203:TRP:NE1	1:F:413:ASN:ND2	2.13	0.96
1:B:243:ASN:CB	1:C:250:VAL:HA	1.95	0.96
1:E:310:ALA:HB1	1:E:397:ARG:HD2	1.46	0.96
1:C:203:TRP:NE1	1:D:413:ASN:ND2	2.14	0.96
1:F:243:ASN:ND2	1:G:250:VAL:CG1	2.28	0.96
1:C:215:TYR:CD1	1:D:414:ILE:HD12	2.00	0.96
1:B:215:TYR:HE1	1:C:279:GLN:NE2	1.64	0.96
1:D:242:LYS:HE2	1:D:254:GLU:HG3	1.44	0.95
1:E:204:ALA:CB	1:F:414:ILE:HD11	1.96	0.95
1:B:310:ALA:HB1	1:B:397:ARG:HD2	1.46	0.95
1:A:251:GLY:O	1:G:241:THR:HB	1.65	0.95
1:D:243:ASN:ND2	1:E:250:VAL:HG11	1.80	0.95
1:B:318:LEU:HD23	1:B:343:PHE:CD2	2.02	0.95
1:C:244:LYS:HG2	1:D:253:THR:OG1	1.66	0.95
1:D:143:THR:CG2	1:E:35:LYS:HE3	1.97	0.95
1:F:203:TRP:HE1	1:G:413:ASN:HD21	1.07	0.95
1:A:227:TRP:CE3	1:B:269:ASN:HB3	2.02	0.95

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:203:TRP:HE1	1:D:413:ASN:HD21	1.11	0.95
1:E:216:ASP:O	1:F:279:GLN:HG3	1.64	0.95
1:F:318:LEU:HD23	1:F:343:PHE:CD2	2.02	0.95
1:C:243:ASN:ND2	1:D:250:VAL:HG13	1.81	0.94
1:F:243:ASN:CB	1:G:250:VAL:HA	1.96	0.94
1:D:232:THR:CG2	1:E:264:SER:OG	2.15	0.94
1:F:179:LEU:HD23	1:F:184:PHE:CD2	2.02	0.94
1:A:179:LEU:HD23	1:A:184:PHE:CD2	2.02	0.94
1:C:318:LEU:HD23	1:C:343:PHE:CD2	2.02	0.94
1:E:318:LEU:HD23	1:E:343:PHE:CD2	2.02	0.94
1:A:99:VAL:CG1	1:B:364:ILE:CG2	2.45	0.94
1:G:318:LEU:HD23	1:G:343:PHE:CD2	2.02	0.94
1:C:215:TYR:HE1	1:D:279:GLN:NE2	1.65	0.94
1:D:310:ALA:HB1	1:D:397:ARG:HD2	1.47	0.94
1:B:179:LEU:HD23	1:B:184:PHE:CD2	2.02	0.94
1:C:310:ALA:HB1	1:C:397:ARG:HD2	1.46	0.94
1:D:242:LYS:CE	1:D:254:GLU:HG3	1.98	0.94
1:E:232:THR:CG2	1:F:264:SER:OG	2.15	0.94
1:G:179:LEU:HD23	1:G:184:PHE:CD2	2.02	0.94
1:A:318:LEU:HD23	1:A:343:PHE:CD2	2.02	0.94
1:C:179:LEU:HD23	1:C:184:PHE:CD2	2.02	0.94
1:D:143:THR:HG21	1:E:35:LYS:HZ3	1.24	0.94
1:D:318:LEU:HD23	1:D:343:PHE:CD2	2.02	0.94
1:E:179:LEU:HD23	1:E:184:PHE:CD2	2.02	0.94
1:E:242:LYS:CE	1:E:254:GLU:HG3	1.98	0.94
1:F:99:VAL:CG1	1:G:364:ILE:HG21	1.94	0.94
1:D:294:LYS:HE3	1:E:304:TYR:OH	1.66	0.94
1:D:179:LEU:HD23	1:D:184:PHE:CD2	2.02	0.94
1:C:242:LYS:CE	1:C:254:GLU:HG3	1.98	0.93
1:A:251:GLY:O	1:G:242:LYS:N	2.00	0.93
1:B:227:TRP:CE3	1:C:269:ASN:HB3	2.03	0.93
1:F:143:THR:HB	1:G:35:LYS:HZ2	1.33	0.93
1:F:243:ASN:HB3	1:G:250:VAL:CB	1.99	0.93
1:D:207:ASP:OD2	1:F:185:LYS:CG	2.16	0.93
1:C:284:THR:HG23	1:C:286:PRO:HD3	1.50	0.93
1:D:204:ALA:HB2	1:E:414:ILE:HD11	1.49	0.93
1:F:227:TRP:CE3	1:G:269:ASN:HB3	2.04	0.93
1:D:284:THR:HG23	1:D:286:PRO:HD3	1.51	0.93
1:D:73:THR:HG22	1:D:77:PRO:HD2	1.51	0.93
1:A:215:TYR:CD1	1:B:414:ILE:HD12	2.03	0.92
1:F:99:VAL:HG13	1:G:364:ILE:HG22	1.49	0.92

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:284:THR:HG23	1:B:286:PRO:HD3	1.51	0.92
1:E:73:THR:HG22	1:E:77:PRO:HD2	1.51	0.92
1:F:99:VAL:HG11	1:G:364:ILE:HG23	1.48	0.92
1:G:242:LYS:CE	1:G:254:GLU:HG3	1.98	0.92
1:A:73:THR:HG22	1:A:77:PRO:HD2	1.51	0.92
1:E:143:THR:HG21	1:F:35:LYS:HZ1	1.31	0.92
1:E:191:GLN:H	1:F:178:ASN:HB2	1.35	0.92
1:A:242:LYS:CE	1:A:254:GLU:HG3	1.98	0.92
1:B:242:LYS:H	1:C:252:GLU:HB2	1.15	0.92
1:C:243:ASN:HB3	1:D:250:VAL:CA	1.98	0.92
1:A:250:VAL:HA	1:G:243:ASN:HB3	1.50	0.92
1:E:284:THR:HG23	1:E:286:PRO:HD3	1.51	0.92
1:B:244:LYS:HG2	1:C:253:THR:OG1	1.68	0.92
1:C:73:THR:HG22	1:C:77:PRO:HD2	1.51	0.92
1:D:244:LYS:HG2	1:E:253:THR:OG1	1.67	0.92
1:E:421:PRO:O	1:G:182:ASP:HB3	1.69	0.92
1:G:73:THR:HG22	1:G:77:PRO:HD2	1.51	0.92
1:D:153:GLY:HA3	1:E:64:GLU:OE2	1.69	0.92
1:F:242:LYS:CE	1:F:254:GLU:HG3	1.98	0.92
1:A:284:THR:HG23	1:A:286:PRO:HD3	1.51	0.92
1:B:73:THR:HG22	1:B:77:PRO:HD2	1.51	0.92
1:F:242:LYS:H	1:G:252:GLU:CB	1.63	0.92
1:C:242:LYS:N	1:D:251:GLY:O	2.02	0.91
1:F:142:VAL:O	1:G:32:GLN:HG2	1.70	0.91
1:G:284:THR:HG23	1:G:286:PRO:HD3	1.51	0.91
1:A:243:ASN:HB3	1:B:250:VAL:CG1	2.01	0.91
1:B:242:LYS:CE	1:B:254:GLU:HG3	1.98	0.91
1:E:150:VAL:CG1	1:E:170:ILE:HG13	2.01	0.91
1:B:230:THR:HG22	1:B:268:GLN:CB	2.01	0.91
1:C:150:VAL:CG1	1:C:170:ILE:HG13	2.01	0.91
1:D:99:VAL:HG13	1:E:364:ILE:HG21	0.92	0.91
1:D:150:VAL:CG1	1:D:170:ILE:HG13	2.01	0.91
1:G:242:LYS:HE3	1:G:256:SER:HB2	1.52	0.91
1:A:242:LYS:HE3	1:A:256:SER:HB2	1.52	0.91
1:B:244:LYS:HG3	1:C:253:THR:OG1	1.70	0.91
1:C:5:TYR:CD2	1:C:361:LYS:HB3	2.06	0.91
1:E:230:THR:HG22	1:E:268:GLN:CB	2.01	0.91
1:F:150:VAL:CG1	1:F:170:ILE:HG13	2.01	0.91
1:F:242:LYS:HE3	1:F:256:SER:HB2	1.52	0.91
1:F:284:THR:HG23	1:F:286:PRO:HD3	1.51	0.91
1:C:422:LEU:HD13	1:E:182:ASP:HB2	1.53	0.91

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:5:TYR:CD2	1:D:361:LYS:HB3	2.06	0.91
1:E:101:VAL:HG21	1:E:400:ILE:CD1	2.01	0.91
1:A:5:TYR:CD2	1:A:361:LYS:HB3	2.06	0.90
1:A:101:VAL:HG21	1:A:400:ILE:CD1	2.01	0.90
1:C:153:GLY:HA3	1:D:64:GLU:OE2	1.71	0.90
1:D:230:THR:HG22	1:D:268:GLN:CB	2.01	0.90
1:E:243:ASN:HB3	1:F:250:VAL:CB	2.00	0.90
1:A:26:VAL:CG2	1:A:50:LEU:HA	2.02	0.90
1:C:230:THR:HG22	1:C:268:GLN:CB	2.01	0.90
1:D:242:LYS:H	1:E:252:GLU:HB2	1.29	0.90
1:E:242:LYS:HE3	1:E:256:SER:HB2	1.52	0.90
1:G:230:THR:HG22	1:G:268:GLN:CB	2.01	0.90
1:G:101:VAL:HG21	1:G:400:ILE:CD1	2.01	0.90
1:A:150:VAL:CG1	1:A:170:ILE:HG13	2.01	0.90
1:B:204:ALA:HA	1:C:414:ILE:HD13	1.52	0.90
1:D:26:VAL:CG2	1:D:50:LEU:HA	2.02	0.90
1:B:99:VAL:CG1	1:C:364:ILE:HG22	1.97	0.90
1:B:101:VAL:HG21	1:B:400:ILE:CD1	2.02	0.90
1:F:26:VAL:CG2	1:F:50:LEU:HA	2.02	0.90
1:G:26:VAL:CG2	1:G:50:LEU:HA	2.02	0.90
1:C:26:VAL:CG2	1:C:50:LEU:HA	2.02	0.90
1:A:230:THR:HG22	1:A:268:GLN:CB	2.01	0.90
1:B:5:TYR:CD2	1:B:361:LYS:HB3	2.06	0.90
1:B:204:ALA:CA	1:C:414:ILE:HD11	2.02	0.90
1:E:5:TYR:CD2	1:E:361:LYS:HB3	2.06	0.90
1:B:142:VAL:HG13	1:B:150:VAL:CG2	2.02	0.90
1:B:242:LYS:HE3	1:B:256:SER:HB2	1.52	0.90
1:F:5:TYR:CD2	1:F:361:LYS:HB3	2.06	0.90
1:F:73:THR:HG22	1:F:77:PRO:HD2	1.51	0.90
1:B:26:VAL:CG2	1:B:50:LEU:HA	2.02	0.90
1:F:230:THR:HG22	1:F:268:GLN:CB	2.01	0.90
1:E:26:VAL:CG2	1:E:50:LEU:HA	2.02	0.89
1:F:101:VAL:HG21	1:F:400:ILE:CD1	2.01	0.89
1:F:142:VAL:HG13	1:F:150:VAL:CG2	2.02	0.89
1:B:215:TYR:CE1	1:C:279:GLN:NE2	2.39	0.89
1:F:47:ILE:CD1	1:F:57:MET:HG2	2.02	0.89
1:F:216:ASP:O	1:G:279:GLN:HG3	1.73	0.89
1:F:242:LYS:H	1:G:252:GLU:HB2	1.12	0.89
1:A:142:VAL:HG13	1:A:150:VAL:CG2	2.02	0.89
1:C:142:VAL:HG13	1:C:150:VAL:CG2	2.02	0.89
1:C:204:ALA:HB2	1:D:414:ILE:HD11	1.55	0.89

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:47:ILE:CD1	1:A:57:MET:HG2	2.02	0.89
1:D:101:VAL:HG21	1:D:400:ILE:CD1	2.01	0.89
1:G:47:ILE:CD1	1:G:57:MET:HG2	2.02	0.89
1:C:101:VAL:HG21	1:C:400:ILE:CD1	2.02	0.89
1:E:244:LYS:HG3	1:F:253:THR:HG1	1.32	0.89
1:B:150:VAL:CG1	1:B:170:ILE:HG13	2.01	0.89
1:C:242:LYS:HE3	1:C:256:SER:HB2	1.52	0.89
1:G:152:ARG:HH22	1:G:156:ASP:HB3	1.38	0.89
1:B:47:ILE:CD1	1:B:57:MET:HG2	2.02	0.89
1:G:5:TYR:CD2	1:G:361:LYS:HB3	2.06	0.89
1:E:142:VAL:HG13	1:E:150:VAL:CG2	2.02	0.89
1:G:150:VAL:CG1	1:G:170:ILE:HG13	2.01	0.89
1:D:47:ILE:CD1	1:D:57:MET:HG2	2.02	0.89
1:E:192:SER:O	1:F:176:ALA:CB	2.20	0.89
1:C:47:ILE:CD1	1:C:57:MET:HG2	2.03	0.88
1:D:142:VAL:HG13	1:D:150:VAL:CG2	2.02	0.88
1:D:191:GLN:N	1:E:178:ASN:HB2	1.86	0.88
1:E:17:GLY:HA2	1:E:74:TRP:CZ3	2.09	0.88
1:E:47:ILE:CD1	1:E:57:MET:HG2	2.02	0.88
1:F:247:TRP:HB3	1:F:251:GLY:HA3	1.55	0.88
1:A:17:GLY:HA2	1:A:74:TRP:CZ3	2.09	0.88
1:B:17:GLY:HA2	1:B:74:TRP:CZ3	2.09	0.88
1:D:17:GLY:HA2	1:D:74:TRP:CZ3	2.09	0.88
1:D:199:THR:HB	1:E:409:GLN:HE22	1.36	0.88
1:C:99:VAL:HG11	1:D:362:ARG:HG3	1.55	0.88
1:D:215:TYR:HE1	1:E:279:GLN:NE2	1.71	0.88
1:E:247:TRP:HB3	1:E:251:GLY:HA3	1.54	0.88
1:G:142:VAL:HG13	1:G:150:VAL:CG2	2.02	0.88
1:A:152:ARG:HH22	1:A:156:ASP:HB3	1.38	0.88
1:A:226:ASN:N	1:B:270:GLY:O	2.06	0.88
1:C:17:GLY:HA2	1:C:74:TRP:CZ3	2.09	0.88
1:D:242:LYS:HE3	1:D:256:SER:HB2	1.52	0.88
1:F:17:GLY:HA2	1:F:74:TRP:CZ3	2.09	0.88
1:G:17:GLY:HA2	1:G:74:TRP:CZ3	2.09	0.88
1:F:152:ARG:HH22	1:F:156:ASP:HB3	1.38	0.88
1:G:247:TRP:HB3	1:G:251:GLY:HA3	1.54	0.88
1:C:204:ALA:CB	1:D:414:ILE:HD11	2.04	0.88
1:F:226:ASN:N	1:G:270:GLY:O	2.05	0.88
1:C:152:ARG:HH22	1:C:156:ASP:HB3	1.38	0.88
1:D:247:TRP:HB3	1:D:251:GLY:CA	2.04	0.88
1:G:28:ARG:HD3	1:G:54:TRP:CZ3	2.09	0.88

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:28:ARG:HD3	1:B:54:TRP:CZ3	2.09	0.87
1:E:247:TRP:HB3	1:E:251:GLY:CA	2.04	0.87
1:F:247:TRP:HB3	1:F:251:GLY:CA	2.04	0.87
1:B:152:ARG:HH22	1:B:156:ASP:HB3	1.38	0.87
1:B:203:TRP:CE2	1:C:413:ASN:ND2	2.41	0.87
1:C:28:ARG:HD3	1:C:54:TRP:CZ3	2.09	0.87
1:C:247:TRP:HB3	1:C:251:GLY:CA	2.04	0.87
1:E:28:ARG:HD3	1:E:54:TRP:CZ3	2.09	0.87
1:E:252:GLU:HB3	1:E:255:LEU:CD2	2.05	0.87
1:F:28:ARG:HD3	1:F:54:TRP:CZ3	2.09	0.87
1:D:152:ARG:HH22	1:D:156:ASP:HB3	1.38	0.87
1:E:152:ARG:HH22	1:E:156:ASP:HB3	1.38	0.87
1:B:247:TRP:HB3	1:B:251:GLY:CA	2.04	0.87
1:F:252:GLU:HB3	1:F:255:LEU:CD2	2.05	0.87
1:A:250:VAL:CG1	1:G:243:ASN:HB3	2.04	0.87
1:B:243:ASN:HD22	1:C:250:VAL:CG1	1.86	0.87
1:D:247:TRP:HB3	1:D:251:GLY:HA3	1.54	0.87
1:F:243:ASN:CB	1:G:250:VAL:CG1	2.49	0.87
1:A:28:ARG:HD3	1:A:54:TRP:CZ3	2.09	0.87
1:D:252:GLU:HB3	1:D:255:LEU:CD2	2.05	0.87
1:C:143:THR:HA	1:D:32:GLN:HB3	1.54	0.87
1:E:359:TRP:HA	1:E:362:ARG:HD3	1.57	0.87
1:C:252:GLU:HB3	1:C:255:LEU:CD2	2.05	0.86
1:D:28:ARG:HD3	1:D:54:TRP:CZ3	2.09	0.86
1:A:279:GLN:HG3	1:G:216:ASP:O	1.75	0.86
1:D:191:GLN:H	1:E:178:ASN:CB	1.85	0.86
1:D:359:TRP:HA	1:D:362:ARG:HD3	1.57	0.86
1:E:103:TRP:HZ2	1:F:365:PRO:HD2	1.40	0.86
1:G:252:GLU:HB3	1:G:255:LEU:CD2	2.05	0.86
1:A:247:TRP:HB3	1:A:251:GLY:HA3	1.54	0.86
1:B:247:TRP:HB3	1:B:251:GLY:HA3	1.54	0.86
1:C:342:THR:CG2	1:C:344:VAL:HG23	2.06	0.86
1:G:247:TRP:HB3	1:G:251:GLY:CA	2.04	0.86
1:D:243:ASN:CB	1:E:250:VAL:CB	2.50	0.86
1:F:99:VAL:CG1	1:G:364:ILE:HG22	2.02	0.86
1:G:25:PRO:HA	1:G:74:TRP:CD1	2.11	0.86
1:B:215:TYR:CD1	1:C:414:ILE:HD12	2.10	0.86
1:D:141:ASP:OD2	1:E:65:ILE:CG1	2.21	0.86
1:D:152:ARG:HG3	1:D:167:LYS:CD	2.06	0.86
1:D:281:VAL:CG2	1:D:295:ILE:HD11	2.06	0.86
1:A:359:TRP:HA	1:A:362:ARG:HD3	1.57	0.86

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:152:ARG:HG3	1:F:167:LYS:CD	2.06	0.86
1:G:50:LEU:HD23	1:G:51:ALA:N	1.91	0.86
1:G:342:THR:CG2	1:G:344:VAL:HG23	2.06	0.86
1:E:25:PRO:HA	1:E:74:TRP:CD1	2.11	0.86
1:E:152:ARG:HG3	1:E:167:LYS:CD	2.06	0.86
1:E:342:THR:CG2	1:E:344:VAL:HG23	2.06	0.86
1:A:247:TRP:HB3	1:A:251:GLY:CA	2.04	0.86
1:F:25:PRO:HA	1:F:74:TRP:CD1	2.11	0.86
1:F:359:TRP:HA	1:F:362:ARG:HD3	1.57	0.86
1:G:152:ARG:HG3	1:G:167:LYS:CD	2.06	0.86
1:F:50:LEU:HD23	1:F:51:ALA:N	1.91	0.85
1:A:252:GLU:HB3	1:A:255:LEU:CD2	2.05	0.85
1:E:281:VAL:CG2	1:E:295:ILE:HD11	2.06	0.85
1:B:342:THR:CG2	1:B:344:VAL:HG23	2.06	0.85
1:B:359:TRP:HA	1:B:362:ARG:HD3	1.57	0.85
1:C:25:PRO:HA	1:C:74:TRP:CD1	2.11	0.85
1:C:50:LEU:HD23	1:C:51:ALA:N	1.91	0.85
1:C:281:VAL:CG2	1:C:295:ILE:HD11	2.06	0.85
1:G:91:LEU:HD23	1:G:93:ILE:HD11	1.57	0.85
1:A:25:PRO:HA	1:A:74:TRP:CD1	2.11	0.85
1:A:50:LEU:HD23	1:A:51:ALA:N	1.91	0.85
1:A:413:ASN:ND2	1:G:203:TRP:NE1	2.25	0.85
1:B:25:PRO:HA	1:B:74:TRP:CD1	2.11	0.85
1:C:247:TRP:HB3	1:C:251:GLY:HA3	1.55	0.85
1:C:359:TRP:HA	1:C:362:ARG:HD3	1.57	0.85
1:D:99:VAL:HG11	1:E:364:ILE:CG2	1.80	0.85
1:D:342:THR:CG2	1:D:344:VAL:HG23	2.06	0.85
1:E:294:LYS:HE3	1:F:304:TYR:OH	1.75	0.85
1:A:281:VAL:CG2	1:A:295:ILE:HD11	2.06	0.85
1:D:25:PRO:HA	1:D:74:TRP:CD1	2.11	0.85
1:G:281:VAL:CG2	1:G:295:ILE:HD11	2.06	0.85
1:A:253:THR:OG1	1:G:244:LYS:HG3	1.73	0.85
1:B:99:VAL:HG11	1:C:364:ILE:HG21	1.51	0.85
1:B:252:GLU:HB3	1:B:255:LEU:CD2	2.05	0.85
1:C:26:VAL:HG23	1:C:50:LEU:HA	1.59	0.85
1:C:246:LYS:HB2	1:C:253:THR:HA	1.59	0.85
1:D:91:LEU:HD23	1:D:93:ILE:HD11	1.57	0.85
1:A:342:THR:CG2	1:A:344:VAL:HG23	2.06	0.85
1:C:99:VAL:CG1	1:D:362:ARG:HG3	2.06	0.85
1:E:422:LEU:HA	1:G:182:ASP:HB2	1.59	0.85
1:F:342:THR:CG2	1:F:344:VAL:HG23	2.06	0.85

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:243:ASN:HB3	1:D:250:VAL:CB	2.05	0.85
1:B:246:LYS:HB2	1:B:253:THR:HA	1.59	0.85
1:D:242:LYS:CE	1:D:256:SER:HB2	2.07	0.85
1:D:246:LYS:HB2	1:D:253:THR:HA	1.59	0.85
1:E:246:LYS:HB2	1:E:253:THR:HA	1.59	0.85
1:F:281:VAL:CG2	1:F:295:ILE:HD11	2.06	0.85
1:A:152:ARG:HG3	1:A:167:LYS:CD	2.06	0.84
1:B:50:LEU:HD23	1:B:51:ALA:N	1.91	0.84
1:F:91:LEU:HD23	1:F:93:ILE:HD11	1.57	0.84
1:G:359:TRP:HA	1:G:362:ARG:HD3	1.57	0.84
1:B:152:ARG:HG3	1:B:167:LYS:CD	2.06	0.84
1:C:243:ASN:ND2	1:D:250:VAL:CG1	2.40	0.84
1:D:50:LEU:HD23	1:D:51:ALA:N	1.91	0.84
1:E:50:LEU:HD23	1:E:51:ALA:N	1.91	0.84
1:A:182:ASP:HB2	1:F:422:LEU:HD13	1.58	0.84
1:B:281:VAL:CG2	1:B:295:ILE:HD11	2.06	0.84
1:C:152:ARG:HG3	1:C:167:LYS:CD	2.06	0.84
1:C:227:TRP:HE3	1:D:269:ASN:HB3	1.37	0.84
1:C:242:LYS:CE	1:C:256:SER:HB2	2.07	0.84
1:G:242:LYS:CE	1:G:256:SER:HB2	2.07	0.84
1:A:242:LYS:CE	1:A:256:SER:HB2	2.07	0.84
1:B:24:ARG:HD3	1:B:77:PRO:HB2	1.60	0.84
1:B:26:VAL:HG23	1:B:50:LEU:HA	1.59	0.84
1:B:91:LEU:HD23	1:B:93:ILE:HD11	1.57	0.84
1:C:91:LEU:HD23	1:C:93:ILE:HD11	1.57	0.84
1:E:243:ASN:HD22	1:F:250:VAL:CG1	1.89	0.84
1:F:246:LYS:HB2	1:F:253:THR:HA	1.59	0.84
1:A:153:GLY:O	1:A:167:LYS:HD3	1.78	0.84
1:C:24:ARG:HD3	1:C:77:PRO:HB2	1.60	0.84
1:E:91:LEU:HD23	1:E:93:ILE:HD11	1.57	0.84
1:C:144:ARG:HB3	1:C:144:ARG:CZ	2.08	0.84
1:D:422:LEU:HD13	1:F:182:ASP:HB2	1.59	0.84
1:E:24:ARG:HD3	1:E:77:PRO:HB2	1.60	0.84
1:B:153:GLY:O	1:B:167:LYS:HD3	1.78	0.84
1:D:143:THR:CG2	1:E:35:LYS:HZ3	1.78	0.84
1:G:153:GLY:O	1:G:167:LYS:HD3	1.78	0.84
1:A:250:VAL:HG13	1:G:243:ASN:ND2	1.92	0.84
1:D:24:ARG:HD3	1:D:77:PRO:HB2	1.60	0.84
1:A:91:LEU:HD23	1:A:93:ILE:HD11	1.57	0.84
1:F:24:ARG:HD3	1:F:77:PRO:HB2	1.60	0.84
1:D:26:VAL:HG23	1:D:50:LEU:HA	1.59	0.84

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:242:LYS:CE	1:E:256:SER:HB2	2.07	0.83
1:E:422:LEU:HD13	1:G:182:ASP:HB2	1.60	0.83
1:G:246:LYS:HB2	1:G:253:THR:HA	1.59	0.83
1:A:24:ARG:HD3	1:A:77:PRO:HB2	1.60	0.83
1:E:199:THR:HB	1:F:409:GLN:NE2	1.93	0.83
1:A:358:GLN:O	1:A:362:ARG:HD2	1.79	0.83
1:G:24:ARG:HD3	1:G:77:PRO:HB2	1.60	0.83
1:G:144:ARG:HB3	1:G:144:ARG:CZ	2.08	0.83
1:F:242:LYS:CE	1:F:256:SER:HB2	2.07	0.83
1:B:143:THR:CB	1:C:35:LYS:NZ	2.42	0.83
1:B:358:GLN:O	1:B:362:ARG:HD2	1.79	0.83
1:C:153:GLY:O	1:C:167:LYS:HD3	1.78	0.83
1:E:26:VAL:HG23	1:E:50:LEU:HA	1.59	0.83
1:B:142:VAL:O	1:C:32:GLN:CG	2.27	0.83
1:B:242:LYS:H	1:C:252:GLU:CB	1.72	0.83
1:F:153:GLY:O	1:F:167:LYS:HD3	1.78	0.83
1:B:143:THR:CB	1:C:35:LYS:HZ2	1.91	0.83
1:B:144:ARG:HB3	1:B:144:ARG:CZ	2.08	0.83
1:B:203:TRP:HE1	1:C:413:ASN:HD21	0.86	0.83
1:B:242:LYS:CE	1:B:256:SER:HB2	2.07	0.83
1:C:103:TRP:HZ2	1:D:365:PRO:CD	1.89	0.83
1:E:144:ARG:HB3	1:E:144:ARG:CZ	2.08	0.83
1:E:203:TRP:HE1	1:F:413:ASN:HD21	1.25	0.83
1:A:246:LYS:HB2	1:A:253:THR:HA	1.59	0.83
1:B:143:THR:HB	1:C:35:LYS:NZ	1.93	0.82
1:G:26:VAL:HG23	1:G:50:LEU:HA	1.59	0.82
1:G:358:GLN:O	1:G:362:ARG:HD2	1.79	0.82
1:D:215:TYR:CE1	1:E:279:GLN:NE2	2.47	0.82
1:F:144:ARG:CZ	1:F:144:ARG:HB3	2.08	0.82
1:A:132:HIS:CD2	1:A:138:GLU:HB2	2.15	0.82
1:C:215:TYR:CE1	1:D:279:GLN:NE2	2.46	0.82
1:C:241:THR:HB	1:D:251:GLY:O	1.79	0.82
1:C:358:GLN:O	1:C:362:ARG:HD2	1.78	0.82
1:D:153:GLY:O	1:D:167:LYS:HD3	1.78	0.82
1:E:358:GLN:O	1:E:362:ARG:HD2	1.79	0.82
1:C:103:TRP:CZ2	1:D:365:PRO:CD	2.61	0.82
1:D:204:ALA:CB	1:E:414:ILE:HD11	2.09	0.82
1:G:132:HIS:CD2	1:G:138:GLU:HB2	2.15	0.82
1:A:26:VAL:HG23	1:A:50:LEU:HA	1.59	0.82
1:A:144:ARG:CZ	1:A:144:ARG:HB3	2.08	0.82
1:D:358:GLN:O	1:D:362:ARG:HD2	1.78	0.82

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:153:GLY:O	1:E:167:LYS:HD3	1.78	0.82
1:B:75:CYS:O	1:B:78:THR:HG22	1.80	0.82
1:B:355:ILE:HG13	1:B:356:ARG:N	1.95	0.82
1:C:244:LYS:HG3	1:D:253:THR:OG1	1.79	0.82
1:F:132:HIS:CD2	1:F:138:GLU:HB2	2.15	0.82
1:F:192:SER:O	1:G:176:ALA:HB3	1.80	0.82
1:G:247:TRP:CG	1:G:248:PRO:HD2	2.15	0.82
1:B:132:HIS:CD2	1:B:138:GLU:HB2	2.15	0.82
1:C:199:THR:HB	1:D:409:GLN:NE2	1.95	0.82
1:C:247:TRP:CG	1:C:248:PRO:HD2	2.15	0.82
1:F:204:ALA:HA	1:G:414:ILE:HD13	1.60	0.82
1:B:247:TRP:CG	1:B:248:PRO:HD2	2.15	0.82
1:D:294:LYS:CE	1:E:304:TYR:CZ	2.62	0.82
1:F:75:CYS:O	1:F:78:THR:HG22	1.80	0.82
1:F:247:TRP:CG	1:F:248:PRO:HD2	2.15	0.81
1:A:247:TRP:CG	1:A:248:PRO:HD2	2.15	0.81
1:D:144:ARG:HB3	1:D:144:ARG:CZ	2.08	0.81
1:F:358:GLN:O	1:F:362:ARG:HD2	1.78	0.81
1:B:230:THR:HG22	1:B:268:GLN:HB3	1.62	0.81
1:C:355:ILE:HG13	1:C:356:ARG:N	1.95	0.81
1:D:75:CYS:O	1:D:78:THR:HG22	1.80	0.81
1:D:247:TRP:CG	1:D:248:PRO:HD2	2.15	0.81
1:D:359:TRP:HB3	1:D:364:ILE:CD1	2.09	0.81
1:F:26:VAL:HG23	1:F:50:LEU:HA	1.59	0.81
1:G:75:CYS:O	1:G:78:THR:HG22	1.80	0.81
1:C:359:TRP:HB3	1:C:364:ILE:CD1	2.09	0.81
1:D:230:THR:HG22	1:D:268:GLN:HB3	1.62	0.81
1:E:143:THR:CG2	1:F:35:LYS:HZ1	1.93	0.81
1:F:298:TYR:CE1	1:F:411:ALA:HB3	2.16	0.81
1:B:243:ASN:CB	1:C:250:VAL:CG1	2.43	0.81
1:D:103:TRP:NE1	1:E:364:ILE:HG22	1.96	0.81
1:E:75:CYS:O	1:E:78:THR:HG22	1.80	0.81
1:E:230:THR:HG22	1:E:268:GLN:HB3	1.62	0.81
1:F:316:LEU:HD21	1:F:318:LEU:HD21	1.63	0.81
1:E:132:HIS:CD2	1:E:138:GLU:HB2	2.15	0.81
1:A:250:VAL:HG13	1:G:243:ASN:CG	1.99	0.81
1:B:298:TYR:CE1	1:B:411:ALA:HB3	2.16	0.81
1:E:22:LYS:HA	1:E:22:LYS:NZ	1.96	0.81
1:F:355:ILE:HG13	1:F:356:ARG:N	1.95	0.81
1:G:316:LEU:HD21	1:G:318:LEU:HD21	1.63	0.81
1:B:242:LYS:H	1:C:251:GLY:C	1.83	0.81

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:107:HIS:O	1:D:29:GLU:HG2	1.80	0.81
1:G:298:TYR:CE1	1:G:411:ALA:HB3	2.16	0.81
1:A:75:CYS:O	1:A:78:THR:HG22	1.80	0.81
1:D:103:TRP:HE1	1:E:364:ILE:HG22	1.45	0.81
1:E:247:TRP:CG	1:E:248:PRO:HD2	2.15	0.81
1:D:132:HIS:CD2	1:D:138:GLU:HB2	2.15	0.81
1:E:298:TYR:CE1	1:E:411:ALA:HB3	2.16	0.81
1:F:101:VAL:HG21	1:F:400:ILE:HG12	1.63	0.81
1:F:243:ASN:HD22	1:G:250:VAL:HG13	1.42	0.81
1:A:298:TYR:CE1	1:A:411:ALA:HB3	2.16	0.80
1:B:22:LYS:HA	1:B:22:LYS:NZ	1.96	0.80
1:B:143:THR:CG2	1:C:35:LYS:HZ1	1.93	0.80
1:C:132:HIS:CD2	1:C:138:GLU:HB2	2.15	0.80
1:C:298:TYR:CE1	1:C:411:ALA:HB3	2.16	0.80
1:D:22:LYS:HA	1:D:22:LYS:NZ	1.96	0.80
1:E:112:PHE:HB3	1:E:113:ILE:HD12	1.63	0.80
1:G:359:TRP:HB3	1:G:364:ILE:CD1	2.09	0.80
1:A:413:ASN:HD21	1:G:203:TRP:HE1	1.29	0.80
1:D:189:VAL:HB	1:D:304:TYR:CE2	2.17	0.80
1:D:243:ASN:N	1:E:252:GLU:OE1	2.08	0.80
1:E:359:TRP:HB3	1:E:364:ILE:CD1	2.09	0.80
1:A:22:LYS:HA	1:A:22:LYS:NZ	1.96	0.80
1:A:355:ILE:HG13	1:A:356:ARG:N	1.95	0.80
1:B:359:TRP:HB3	1:B:364:ILE:CD1	2.09	0.80
1:C:230:THR:HG22	1:C:268:GLN:HB3	1.62	0.80
1:C:189:VAL:HB	1:C:304:TYR:CE2	2.17	0.80
1:D:298:TYR:CE1	1:D:411:ALA:HB3	2.16	0.80
1:E:189:VAL:HB	1:E:304:TYR:CE2	2.17	0.80
1:A:182:ASP:CB	1:F:422:LEU:HD13	2.10	0.80
1:D:143:THR:CB	1:E:35:LYS:CE	2.58	0.80
1:D:355:ILE:HG13	1:D:356:ARG:N	1.95	0.80
1:E:243:ASN:CG	1:F:250:VAL:CG1	2.49	0.80
1:E:316:LEU:HD21	1:E:318:LEU:HD21	1.63	0.80
1:E:355:ILE:HG13	1:E:356:ARG:N	1.95	0.80
1:A:115:PRO:HG3	1:A:391:ARG:HG2	1.64	0.80
1:A:316:LEU:HD21	1:A:318:LEU:HD21	1.63	0.80
1:B:420:VAL:HG13	1:B:421:PRO:HD2	1.64	0.80
1:C:22:LYS:HA	1:C:22:LYS:NZ	1.96	0.80
1:D:103:TRP:HZ2	1:E:364:ILE:HA	1.46	0.80
1:D:112:PHE:HB3	1:D:113:ILE:HD12	1.63	0.80
1:A:215:TYR:HE1	1:B:279:GLN:NE2	1.79	0.80

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:227:TRP:HE3	1:E:269:ASN:HB3	1.40	0.80
1:E:243:ASN:HD22	1:F:250:VAL:HG13	1.37	0.80
1:B:204:ALA:CA	1:C:414:ILE:CD1	2.58	0.80
1:C:75:CYS:O	1:C:78:THR:HG22	1.80	0.80
1:E:101:VAL:HG21	1:E:400:ILE:HG12	1.63	0.80
1:F:420:VAL:HG13	1:F:421:PRO:HD2	1.64	0.80
1:B:91:LEU:HB3	1:B:396:VAL:CG2	2.12	0.80
1:D:421:PRO:O	1:F:182:ASP:HB3	1.80	0.80
1:F:189:VAL:HB	1:F:304:TYR:CE2	2.17	0.80
1:F:230:THR:HG22	1:F:268:GLN:HB3	1.62	0.80
1:G:91:LEU:HB3	1:G:396:VAL:CG2	2.12	0.80
1:G:101:VAL:HG21	1:G:400:ILE:HG12	1.63	0.80
1:G:115:PRO:HG3	1:G:391:ARG:HG2	1.64	0.80
1:B:115:PRO:HG3	1:B:391:ARG:HG2	1.64	0.80
1:B:189:VAL:HB	1:B:304:TYR:CE2	2.17	0.80
1:D:91:LEU:HB3	1:D:396:VAL:CG2	2.12	0.80
1:F:109:SER:O	1:F:114:LYS:HG2	1.82	0.80
1:G:230:THR:HG22	1:G:268:GLN:HB3	1.62	0.80
1:A:359:TRP:HB3	1:A:364:ILE:CD1	2.09	0.79
1:G:189:VAL:HB	1:G:304:TYR:CE2	2.17	0.79
1:G:22:LYS:HA	1:G:22:LYS:NZ	1.96	0.79
1:D:207:ASP:OD2	1:F:185:LYS:CD	2.30	0.79
1:C:316:LEU:HD21	1:C:318:LEU:HD21	1.63	0.79
1:A:132:HIS:NE2	1:A:138:GLU:HB2	1.98	0.79
1:A:230:THR:HG22	1:A:268:GLN:HB3	1.62	0.79
1:A:420:VAL:HG13	1:A:421:PRO:HD2	1.64	0.79
1:B:101:VAL:HG21	1:B:400:ILE:HG12	1.63	0.79
1:B:109:SER:O	1:B:114:LYS:HG2	1.82	0.79
1:B:112:PHE:HB3	1:B:113:ILE:HD12	1.63	0.79
1:C:101:VAL:HG21	1:C:400:ILE:HG12	1.63	0.79
1:C:109:SER:O	1:C:114:LYS:HG2	1.82	0.79
1:D:132:HIS:NE2	1:D:138:GLU:HB2	1.98	0.79
1:A:47:ILE:HD12	1:A:57:MET:HG2	1.64	0.79
1:B:316:LEU:HD21	1:B:318:LEU:HD21	1.63	0.79
1:F:112:PHE:HB3	1:F:113:ILE:HD12	1.63	0.79
1:F:232:THR:CG2	1:G:264:SER:OG	2.30	0.79
1:F:359:TRP:HB3	1:F:364:ILE:CD1	2.09	0.79
1:G:420:VAL:HG13	1:G:421:PRO:HD2	1.64	0.79
1:C:420:VAL:HG13	1:C:421:PRO:HD2	1.64	0.79
1:D:103:TRP:HE1	1:E:364:ILE:CG2	1.96	0.79
1:D:316:LEU:HD21	1:D:318:LEU:HD21	1.63	0.79

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:132:HIS:NE2	1:E:138:GLU:HB2	1.98	0.79
1:A:189:VAL:HB	1:A:304:TYR:CE2	2.17	0.79
1:C:132:HIS:NE2	1:C:138:GLU:HB2	1.98	0.79
1:A:112:PHE:HB3	1:A:113:ILE:HD12	1.63	0.79
1:C:47:ILE:HD12	1:C:57:MET:HG2	1.64	0.79
1:D:47:ILE:HD12	1:D:57:MET:HG2	1.64	0.79
1:D:109:SER:O	1:D:114:LYS:HG2	1.82	0.79
1:C:112:PHE:HB3	1:C:113:ILE:HD12	1.63	0.79
1:F:22:LYS:HA	1:F:22:LYS:NZ	1.96	0.79
1:F:285:VAL:HG11	1:F:291:ILE:HD13	1.65	0.79
1:A:109:SER:O	1:A:114:LYS:HG2	1.82	0.78
1:A:185:LYS:HG3	1:F:207:ASP:OD2	1.83	0.78
1:B:243:ASN:HD22	1:C:250:VAL:HG13	1.39	0.78
1:C:115:PRO:HG3	1:C:391:ARG:HG2	1.64	0.78
1:E:91:LEU:HB3	1:E:396:VAL:CG2	2.12	0.78
1:F:244:LYS:HG3	1:G:253:THR:HG1	1.47	0.78
1:G:355:ILE:HG13	1:G:356:ARG:N	1.95	0.78
1:A:91:LEU:HB3	1:A:396:VAL:CG2	2.12	0.78
1:D:101:VAL:HG21	1:D:400:ILE:HG12	1.63	0.78
1:D:118:TYR:CE1	1:D:134:GLN:HB2	2.19	0.78
1:B:132:HIS:NE2	1:B:138:GLU:HB2	1.98	0.78
1:D:115:PRO:HG3	1:D:391:ARG:HG2	1.64	0.78
1:E:109:SER:O	1:E:114:LYS:HG2	1.82	0.78
1:E:118:TYR:CE1	1:E:134:GLN:HB2	2.19	0.78
1:E:285:VAL:HG11	1:E:291:ILE:HD13	1.65	0.78
1:E:420:VAL:HG13	1:E:421:PRO:HD2	1.64	0.78
1:B:118:TYR:CE1	1:B:134:GLN:HB2	2.19	0.78
1:B:277:LEU:HD21	1:B:410:PHE:CG	2.19	0.78
1:C:91:LEU:HB3	1:C:396:VAL:CG2	2.12	0.78
1:D:193:ASP:HA	1:E:176:ALA:CB	2.14	0.78
1:F:47:ILE:HD12	1:F:57:MET:HG2	1.64	0.78
1:G:285:VAL:HG11	1:G:291:ILE:HD13	1.65	0.78
1:B:47:ILE:HD12	1:B:57:MET:HG2	1.64	0.78
1:F:118:TYR:CE1	1:F:134:GLN:HB2	2.19	0.78
1:A:277:LEU:HD21	1:A:410:PHE:CG	2.19	0.78
1:F:242:LYS:H	1:G:251:GLY:C	1.87	0.78
1:G:112:PHE:HB3	1:G:113:ILE:HD12	1.63	0.78
1:G:118:TYR:CE1	1:G:134:GLN:HB2	2.19	0.78
1:D:420:VAL:HG13	1:D:421:PRO:HD2	1.64	0.78
1:A:101:VAL:HG21	1:A:400:ILE:HG12	1.63	0.78
1:C:243:ASN:CB	1:D:250:VAL:HA	2.13	0.78

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:47:ILE:HD12	1:E:57:MET:HG2	1.64	0.78
1:F:115:PRO:HG3	1:F:391:ARG:HG2	1.64	0.78
1:C:118:TYR:CE1	1:C:134:GLN:HB2	2.19	0.78
1:D:277:LEU:HD21	1:D:410:PHE:CG	2.19	0.78
1:F:132:HIS:NE2	1:F:138:GLU:HB2	1.98	0.78
1:G:47:ILE:HD12	1:G:57:MET:HG2	1.64	0.78
1:G:132:HIS:NE2	1:G:138:GLU:HB2	1.98	0.78
1:A:285:VAL:HG11	1:A:291:ILE:HD13	1.65	0.78
1:E:115:PRO:HG3	1:E:391:ARG:HG2	1.64	0.78
1:E:242:LYS:H	1:F:251:GLY:C	1.86	0.78
1:A:99:VAL:CG1	1:B:364:ILE:HG22	2.14	0.77
1:G:109:SER:O	1:G:114:LYS:HG2	1.82	0.77
1:A:24:ARG:CD	1:A:77:PRO:HB2	2.14	0.77
1:E:207:ASP:OD2	1:G:185:LYS:CG	2.29	0.77
1:G:179:LEU:HD23	1:G:184:PHE:HD2	1.49	0.77
1:B:24:ARG:CD	1:B:77:PRO:HB2	2.14	0.77
1:B:359:TRP:HA	1:B:362:ARG:CD	2.15	0.77
1:C:140:MET:SD	1:C:152:ARG:HD2	2.25	0.77
1:E:422:LEU:HD13	1:G:182:ASP:CB	2.15	0.77
1:F:24:ARG:CD	1:F:77:PRO:HB2	2.15	0.77
1:F:277:LEU:HD21	1:F:410:PHE:CG	2.18	0.77
1:A:246:LYS:CG	1:A:253:THR:HA	2.15	0.77
1:C:289:SER:C	1:C:422:LEU:HD23	2.05	0.77
1:D:24:ARG:CD	1:D:77:PRO:HB2	2.14	0.77
1:D:140:MET:SD	1:D:152:ARG:HD2	2.25	0.77
1:E:140:MET:SD	1:E:152:ARG:HD2	2.25	0.77
1:F:179:LEU:HD23	1:F:184:PHE:HD2	1.49	0.77
1:B:246:LYS:CG	1:B:253:THR:HA	2.15	0.77
1:C:103:TRP:NE1	1:D:363:TYR:O	2.17	0.77
1:D:285:VAL:HG11	1:D:291:ILE:HD13	1.65	0.77
1:D:289:SER:C	1:D:422:LEU:HD23	2.05	0.77
1:D:359:TRP:HA	1:D:362:ARG:CD	2.15	0.77
1:C:246:LYS:CG	1:C:253:THR:HA	2.15	0.77
1:F:359:TRP:HA	1:F:362:ARG:CD	2.15	0.77
1:A:99:VAL:HG13	1:B:364:ILE:HG22	1.65	0.77
1:B:289:SER:C	1:B:422:LEU:HD23	2.05	0.77
1:D:73:THR:CG2	1:D:76:TYR:H	1.98	0.77
1:E:226:ASN:O	1:F:269:ASN:HA	1.83	0.77
1:A:290:LYS:HB2	1:A:422:LEU:HD21	1.67	0.77
1:B:285:VAL:HG11	1:B:291:ILE:HD13	1.65	0.77
1:C:232:THR:N	1:D:264:SER:O	2.16	0.77

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:24:ARG:HD2	1:D:77:PRO:C	2.05	0.77
1:G:277:LEU:HD21	1:G:410:PHE:CG	2.18	0.77
1:B:73:THR:CG2	1:B:76:TYR:H	1.98	0.77
1:C:24:ARG:CD	1:C:77:PRO:HB2	2.14	0.77
1:E:277:LEU:HD21	1:E:410:PHE:CG	2.18	0.77
1:B:140:MET:SD	1:B:152:ARG:HD2	2.25	0.77
1:C:285:VAL:HG11	1:C:291:ILE:HD13	1.65	0.77
1:D:143:THR:HB	1:E:35:LYS:CE	2.15	0.77
1:E:24:ARG:CD	1:E:77:PRO:HB2	2.15	0.77
1:E:201:VAL:O	1:F:411:ALA:HA	1.84	0.77
1:E:203:TRP:CH2	1:F:298:TYR:OH	2.38	0.77
1:E:289:SER:C	1:E:422:LEU:HD23	2.05	0.77
1:F:73:THR:HG23	1:F:75:CYS:SG	2.25	0.77
1:G:24:ARG:HD2	1:G:77:PRO:C	2.05	0.77
1:B:226:ASN:N	1:C:270:GLY:O	2.17	0.76
1:E:73:THR:CG2	1:E:76:TYR:H	1.98	0.76
1:G:101:VAL:HG21	1:G:400:ILE:CG1	2.16	0.76
1:A:118:TYR:CE1	1:A:134:GLN:HB2	2.19	0.76
1:C:171:LYS:HG2	1:C:172:VAL:O	1.86	0.76
1:C:234:GLY:O	1:D:262:ASN:N	2.13	0.76
1:D:192:SER:O	1:E:176:ALA:HB1	1.84	0.76
1:F:140:MET:SD	1:F:152:ARG:HD2	2.25	0.76
1:G:73:THR:HG23	1:G:75:CYS:SG	2.25	0.76
1:C:277:LEU:HD21	1:C:410:PHE:CG	2.19	0.76
1:C:359:TRP:HA	1:C:362:ARG:CD	2.15	0.76
1:D:242:LYS:H	1:E:252:GLU:CB	1.87	0.76
1:D:243:ASN:CA	1:E:250:VAL:HG13	2.14	0.76
1:G:171:LYS:HG2	1:G:172:VAL:O	1.86	0.76
1:G:246:LYS:CG	1:G:253:THR:HA	2.15	0.76
1:G:359:TRP:HA	1:G:362:ARG:CD	2.15	0.76
1:A:73:THR:CG2	1:A:76:TYR:H	1.98	0.76
1:C:294:LYS:HE3	1:D:304:TYR:OH	1.86	0.76
1:D:73:THR:HG23	1:D:75:CYS:SG	2.25	0.76
1:E:359:TRP:HA	1:E:362:ARG:CD	2.15	0.76
1:F:24:ARG:HD2	1:F:77:PRO:C	2.05	0.76
1:G:24:ARG:CD	1:G:77:PRO:HB2	2.14	0.76
1:G:73:THR:CG2	1:G:76:TYR:H	1.98	0.76
1:D:290:LYS:HB2	1:D:422:LEU:HD21	1.67	0.76
1:E:143:THR:CG2	1:F:35:LYS:NZ	2.49	0.76
1:E:179:LEU:HD23	1:E:184:PHE:HD2	1.49	0.76
1:F:73:THR:CG2	1:F:76:TYR:H	1.98	0.76

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:289:SER:C	1:F:422:LEU:HD23	2.05	0.76
1:G:290:LYS:HB2	1:G:422:LEU:HD21	1.67	0.76
1:A:101:VAL:HG21	1:A:400:ILE:CG1	2.16	0.76
1:A:171:LYS:HG2	1:A:172:VAL:O	1.86	0.76
1:B:101:VAL:HG21	1:B:400:ILE:CG1	2.16	0.76
1:C:24:ARG:HD2	1:C:77:PRO:C	2.05	0.76
1:A:204:ALA:CB	1:B:414:ILE:HD11	2.15	0.76
1:A:264:SER:OG	1:G:232:THR:CG2	2.34	0.76
1:C:73:THR:CG2	1:C:76:TYR:H	1.98	0.76
1:G:289:SER:C	1:G:422:LEU:HD23	2.05	0.76
1:A:24:ARG:HD2	1:A:77:PRO:C	2.05	0.76
1:A:26:VAL:HG11	1:A:72:ASN:OD1	1.86	0.76
1:E:26:VAL:HG11	1:E:72:ASN:OD1	1.86	0.76
1:E:99:VAL:CG1	1:F:364:ILE:HG22	1.86	0.76
1:E:294:LYS:HE2	1:F:304:TYR:CE1	2.20	0.76
1:A:140:MET:SD	1:A:152:ARG:HD2	2.25	0.76
1:B:171:LYS:HG2	1:B:172:VAL:O	1.86	0.76
1:B:290:LYS:HB2	1:B:422:LEU:HD21	1.67	0.76
1:C:26:VAL:HG11	1:C:72:ASN:OD1	1.86	0.76
1:A:179:LEU:HD23	1:A:184:PHE:HD2	1.49	0.76
1:C:101:VAL:HG21	1:C:400:ILE:CG1	2.16	0.76
1:C:193:ASP:HA	1:D:176:ALA:CB	2.15	0.76
1:D:171:LYS:HG2	1:D:172:VAL:O	1.86	0.76
1:D:294:LYS:HE2	1:E:304:TYR:OH	1.85	0.76
1:E:73:THR:HG23	1:E:75:CYS:SG	2.25	0.76
1:E:101:VAL:HG21	1:E:400:ILE:CG1	2.16	0.76
1:F:26:VAL:HG11	1:F:72:ASN:OD1	1.86	0.76
1:F:191:GLN:H	1:G:178:ASN:HB2	1.48	0.76
1:A:289:SER:C	1:A:422:LEU:HD23	2.05	0.75
1:A:414:ILE:HD13	1:G:204:ALA:HA	1.66	0.75
1:C:204:ALA:HA	1:D:414:ILE:CD1	2.15	0.75
1:C:228:SER:O	1:D:268:GLN:N	2.19	0.75
1:E:153:GLY:HA3	1:F:64:GLU:OE2	1.86	0.75
1:E:241:THR:HB	1:F:251:GLY:O	1.86	0.75
1:E:290:LYS:HB2	1:E:422:LEU:HD21	1.67	0.75
1:F:91:LEU:HB3	1:F:396:VAL:CG2	2.12	0.75
1:A:298:TYR:OH	1:G:203:TRP:CH2	2.38	0.75
1:E:24:ARG:HD2	1:E:77:PRO:C	2.05	0.75
1:E:281:VAL:HG21	1:E:295:ILE:HD11	1.69	0.75
1:G:140:MET:SD	1:G:152:ARG:HD2	2.25	0.75
1:A:359:TRP:HA	1:A:362:ARG:CD	2.15	0.75

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:24:ARG:HD2	1:B:77:PRO:C	2.05	0.75
1:D:246:LYS:CG	1:D:253:THR:HA	2.15	0.75
1:F:290:LYS:HB2	1:F:422:LEU:HD21	1.67	0.75
1:D:26:VAL:HG11	1:D:72:ASN:OD1	1.86	0.75
1:D:179:LEU:HD23	1:D:184:PHE:HD2	1.49	0.75
1:B:26:VAL:HG11	1:B:72:ASN:OD1	1.86	0.75
1:B:73:THR:HG23	1:B:75:CYS:SG	2.25	0.75
1:D:281:VAL:HG21	1:D:295:ILE:HD11	1.69	0.75
1:F:171:LYS:HG2	1:F:172:VAL:O	1.85	0.75
1:A:73:THR:HG23	1:A:75:CYS:SG	2.25	0.75
1:A:250:VAL:CA	1:G:243:ASN:HB3	2.17	0.75
1:C:73:THR:HG23	1:C:75:CYS:SG	2.26	0.75
1:E:294:LYS:CE	1:F:304:TYR:CE1	2.70	0.75
1:F:246:LYS:CG	1:F:253:THR:HA	2.15	0.75
1:B:179:LEU:HD23	1:B:184:PHE:HD2	1.49	0.75
1:C:179:LEU:HD23	1:C:184:PHE:HD2	1.49	0.75
1:E:171:LYS:HG2	1:E:172:VAL:O	1.86	0.75
1:F:281:VAL:HG21	1:F:295:ILE:HD11	1.69	0.75
1:A:203:TRP:HE1	1:B:413:ASN:HD21	1.30	0.75
1:A:204:ALA:HB2	1:B:414:ILE:HD11	1.68	0.75
1:C:281:VAL:HG21	1:C:295:ILE:HD11	1.69	0.75
1:C:294:LYS:CE	1:D:304:TYR:OH	2.34	0.75
1:D:101:VAL:HG21	1:D:400:ILE:CG1	2.16	0.75
1:F:203:TRP:CH2	1:G:298:TYR:OH	2.39	0.75
1:B:242:LYS:HG3	1:B:255:LEU:O	1.87	0.74
1:C:93:ILE:CD1	1:C:396:VAL:HG22	2.17	0.74
1:A:91:LEU:CD2	1:A:93:ILE:HD11	2.17	0.74
1:A:241:THR:C	1:B:252:GLU:HB2	1.97	0.74
1:B:170:ILE:HD12	1:B:170:ILE:O	1.87	0.74
1:D:93:ILE:CD1	1:D:396:VAL:HG22	2.17	0.74
1:F:88:LEU:O	1:F:88:LEU:HD13	1.88	0.74
1:G:88:LEU:O	1:G:88:LEU:HD13	1.87	0.74
1:A:93:ILE:CD1	1:A:396:VAL:HG22	2.17	0.74
1:C:290:LYS:HB2	1:C:422:LEU:HD21	1.67	0.74
1:D:224:ALA:HB2	1:D:274:THR:HB	1.69	0.74
1:E:91:LEU:CD2	1:E:93:ILE:HD11	2.17	0.74
1:G:170:ILE:O	1:G:170:ILE:HD12	1.87	0.74
1:B:93:ILE:CD1	1:B:396:VAL:HG22	2.17	0.74
1:B:203:TRP:O	1:C:414:ILE:HD13	1.88	0.74
1:C:170:ILE:HD12	1:C:170:ILE:O	1.87	0.74
1:D:215:TYR:CD1	1:E:414:ILE:CD1	2.66	0.74

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:88:LEU:O	1:E:88:LEU:HD13	1.88	0.74
1:E:242:LYS:HG3	1:E:255:LEU:O	1.87	0.74
1:E:246:LYS:CG	1:E:253:THR:HA	2.15	0.74
1:F:170:ILE:HD12	1:F:170:ILE:O	1.87	0.74
1:A:170:ILE:HD12	1:A:170:ILE:O	1.87	0.74
1:A:242:LYS:HG3	1:A:255:LEU:O	1.87	0.74
1:B:91:LEU:CD2	1:B:93:ILE:HD11	2.17	0.74
1:C:91:LEU:CD2	1:C:93:ILE:HD11	2.17	0.74
1:C:204:ALA:HA	1:D:414:ILE:HD13	1.69	0.74
1:G:26:VAL:HG11	1:G:72:ASN:OD1	1.86	0.74
1:G:91:LEU:CD2	1:G:93:ILE:HD11	2.17	0.74
1:B:281:VAL:HG21	1:B:295:ILE:HD11	1.69	0.74
1:C:226:ASN:O	1:D:269:ASN:HA	1.86	0.74
1:E:93:ILE:CD1	1:E:396:VAL:HG22	2.17	0.74
1:F:91:LEU:CD2	1:F:93:ILE:HD11	2.17	0.74
1:G:93:ILE:CD1	1:G:396:VAL:HG22	2.18	0.74
1:C:242:LYS:HG3	1:C:255:LEU:O	1.87	0.74
1:D:88:LEU:O	1:D:88:LEU:HD13	1.88	0.74
1:E:294:LYS:CE	1:F:304:TYR:CZ	2.71	0.74
1:F:101:VAL:HG21	1:F:400:ILE:CG1	2.16	0.74
1:G:281:VAL:HG21	1:G:295:ILE:HD11	1.69	0.74
1:C:88:LEU:HD13	1:C:88:LEU:O	1.87	0.74
1:D:91:LEU:CD2	1:D:93:ILE:HD11	2.17	0.74
1:F:199:THR:HB	1:G:409:GLN:NE2	2.03	0.74
1:F:242:LYS:HG3	1:F:255:LEU:O	1.87	0.74
1:A:88:LEU:O	1:A:88:LEU:HD13	1.88	0.74
1:A:281:VAL:HG21	1:A:295:ILE:HD11	1.69	0.74
1:A:364:ILE:CG2	1:G:99:VAL:HG11	2.18	0.74
1:D:242:LYS:HG3	1:D:255:LEU:O	1.87	0.74
1:F:93:ILE:CD1	1:F:396:VAL:HG22	2.17	0.74
1:G:224:ALA:HB2	1:G:274:THR:HB	1.69	0.74
1:B:192:SER:O	1:C:176:ALA:CB	2.36	0.74
1:C:149:TRP:CE2	1:C:171:LYS:HG3	2.23	0.73
1:C:224:ALA:HB2	1:C:274:THR:HB	1.69	0.73
1:C:243:ASN:CB	1:D:250:VAL:CG1	2.47	0.73
1:D:149:TRP:CE2	1:D:171:LYS:HG3	2.23	0.73
1:E:170:ILE:HD12	1:E:170:ILE:O	1.87	0.73
1:A:224:ALA:HB2	1:A:274:THR:HB	1.69	0.73
1:B:23:TYR:CD1	1:B:75:CYS:HA	2.24	0.73
1:D:143:THR:HA	1:E:32:GLN:CB	2.17	0.73
1:E:227:TRP:HE3	1:F:269:ASN:HB3	1.48	0.73

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:192:SER:O	1:G:176:ALA:CB	2.36	0.73
1:F:224:ALA:HB2	1:F:274:THR:HB	1.69	0.73
1:A:149:TRP:CE2	1:A:171:LYS:HG3	2.23	0.73
1:A:238:LYS:HG2	1:A:260:ALA:CB	2.18	0.73
1:B:88:LEU:O	1:B:88:LEU:HD13	1.88	0.73
1:E:99:VAL:HG11	1:F:362:ARG:HG3	1.70	0.73
1:G:242:LYS:HG3	1:G:255:LEU:O	1.87	0.73
1:A:203:TRP:NE1	1:B:413:ASN:ND2	2.36	0.73
1:C:5:TYR:HE2	1:C:361:LYS:HB3	1.54	0.73
1:D:107:HIS:O	1:E:29:GLU:HG2	1.87	0.73
1:D:243:ASN:HB2	1:E:250:VAL:HA	1.69	0.73
1:E:224:ALA:HB2	1:E:274:THR:HB	1.69	0.73
1:F:23:TYR:CD1	1:F:75:CYS:HA	2.23	0.73
1:C:128:VAL:HG21	1:C:140:MET:HE1	1.71	0.73
1:G:5:TYR:HE2	1:G:361:LYS:HB3	1.54	0.73
1:G:23:TYR:CD1	1:G:75:CYS:HA	2.24	0.73
1:A:66:LYS:HB3	1:A:67:PRO:HD2	1.69	0.73
1:D:216:ASP:O	1:E:279:GLN:HG3	1.87	0.73
1:F:241:THR:HB	1:G:251:GLY:O	1.87	0.73
1:G:238:LYS:HG2	1:G:260:ALA:CB	2.18	0.73
1:B:149:TRP:CE2	1:B:171:LYS:HG3	2.23	0.73
1:E:23:TYR:CD1	1:E:75:CYS:HA	2.23	0.73
1:E:149:TRP:CE2	1:E:171:LYS:HG3	2.24	0.73
1:E:238:LYS:HG2	1:E:260:ALA:CB	2.19	0.73
1:B:192:SER:O	1:C:176:ALA:HB3	1.88	0.73
1:C:238:LYS:HG2	1:C:260:ALA:CB	2.19	0.73
1:E:246:LYS:CB	1:E:253:THR:HA	2.19	0.73
1:F:246:LYS:CB	1:F:253:THR:HA	2.19	0.73
1:B:66:LYS:HB3	1:B:67:PRO:HD2	1.70	0.73
1:C:229:LYS:HA	1:D:267:SER:HA	1.69	0.73
1:D:143:THR:HG22	1:E:35:LYS:HE3	1.71	0.73
1:E:150:VAL:HG11	1:E:170:ILE:HG13	1.70	0.73
1:A:23:TYR:CD1	1:A:75:CYS:HA	2.23	0.73
1:A:99:VAL:HG11	1:B:364:ILE:HG23	1.71	0.73
1:D:238:LYS:HG2	1:D:260:ALA:CB	2.19	0.73
1:D:246:LYS:CB	1:D:253:THR:HA	2.19	0.73
1:F:149:TRP:CE2	1:F:171:LYS:HG3	2.23	0.73
1:C:23:TYR:CD1	1:C:75:CYS:HA	2.24	0.72
1:D:170:ILE:HD12	1:D:170:ILE:O	1.87	0.72
1:F:66:LYS:HB3	1:F:67:PRO:HD2	1.70	0.72
1:G:66:LYS:HB3	1:G:67:PRO:HD2	1.69	0.72

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:242:LYS:HE3	1:A:256:SER:CB	2.19	0.72
1:D:103:TRP:NE1	1:E:363:TYR:O	2.23	0.72
1:F:294:LYS:HE3	1:G:304:TYR:OH	1.89	0.72
1:G:149:TRP:CE2	1:G:171:LYS:HG3	2.23	0.72
1:A:281:VAL:HG22	1:A:295:ILE:HD11	1.72	0.72
1:B:243:ASN:CG	1:C:250:VAL:CG1	2.54	0.72
1:C:66:LYS:HB3	1:C:67:PRO:HD2	1.69	0.72
1:D:23:TYR:CD1	1:D:75:CYS:HA	2.23	0.72
1:E:66:LYS:HB3	1:E:67:PRO:HD2	1.69	0.72
1:F:238:LYS:HG2	1:F:260:ALA:CB	2.19	0.72
1:A:251:GLY:O	1:G:241:THR:CB	2.36	0.72
1:B:150:VAL:HG11	1:B:170:ILE:HG13	1.70	0.72
1:D:66:LYS:HB3	1:D:67:PRO:HD2	1.69	0.72
1:D:242:LYS:HE3	1:D:256:SER:CB	2.19	0.72
1:A:150:VAL:HG11	1:A:170:ILE:HG13	1.71	0.72
1:C:246:LYS:CB	1:C:253:THR:HA	2.19	0.72
1:D:293:VAL:HG22	1:D:416:ILE:CD1	2.20	0.72
1:E:242:LYS:HE3	1:E:256:SER:CB	2.19	0.72
1:F:281:VAL:HG22	1:F:295:ILE:HD11	1.72	0.72
1:G:246:LYS:CB	1:G:253:THR:HA	2.19	0.72
1:A:118:TYR:HE1	1:A:134:GLN:HB2	1.55	0.72
1:B:5:TYR:HE2	1:B:361:LYS:HB3	1.54	0.72
1:E:323:ARG:HD3	1:E:335:ASN:O	1.90	0.72
1:F:204:ALA:HA	1:G:414:ILE:CD1	2.18	0.72
1:F:373:TRP:O	1:F:376:THR:HG22	1.90	0.72
1:G:323:ARG:HD3	1:G:335:ASN:O	1.90	0.72
1:G:373:TRP:O	1:G:376:THR:HG22	1.90	0.72
1:B:331:THR:HG23	1:B:375:TRP:HE1	1.55	0.72
1:C:335:ASN:OD1	1:C:337:PRO:HD2	1.90	0.72
1:E:204:ALA:HA	1:F:414:ILE:HD13	1.70	0.72
1:E:294:LYS:CE	1:F:304:TYR:OH	2.38	0.72
1:E:373:TRP:O	1:E:376:THR:HG22	1.90	0.72
1:D:331:THR:HG23	1:D:375:TRP:HE1	1.55	0.72
1:F:242:LYS:HE3	1:F:256:SER:CB	2.19	0.72
1:B:142:VAL:HG13	1:B:150:VAL:HG21	1.72	0.72
1:B:224:ALA:HB2	1:B:274:THR:HB	1.69	0.72
1:B:238:LYS:HG2	1:B:260:ALA:CB	2.19	0.72
1:C:199:THR:HB	1:D:409:GLN:HE22	1.52	0.72
1:E:221:TYR:CD1	1:E:297:LEU:HD11	2.25	0.72
1:F:293:VAL:HG22	1:F:416:ILE:CD1	2.20	0.72
1:A:393:LEU:O	1:A:393:LEU:HD13	1.90	0.72

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:393:LEU:O	1:G:393:LEU:HD13	1.90	0.72
1:A:373:TRP:O	1:A:376:THR:HG22	1.90	0.71
1:B:335:ASN:OD1	1:B:337:PRO:HD2	1.90	0.71
1:D:373:TRP:O	1:D:376:THR:HG22	1.90	0.71
1:E:331:THR:HG23	1:E:375:TRP:HE1	1.55	0.71
1:F:393:LEU:O	1:F:393:LEU:HD13	1.90	0.71
1:B:393:LEU:O	1:B:393:LEU:HD13	1.90	0.71
1:C:242:LYS:HE3	1:C:256:SER:CB	2.19	0.71
1:A:331:THR:HG23	1:A:375:TRP:HE1	1.55	0.71
1:B:242:LYS:HE3	1:B:256:SER:CB	2.19	0.71
1:D:118:TYR:HE1	1:D:134:GLN:HB2	1.55	0.71
1:D:150:VAL:HG11	1:D:170:ILE:HG13	1.70	0.71
1:D:221:TYR:CD1	1:D:297:LEU:HD11	2.25	0.71
1:E:103:TRP:CZ2	1:F:365:PRO:HD2	2.24	0.71
1:F:118:TYR:HE1	1:F:134:GLN:HB2	1.55	0.71
1:F:243:ASN:HD22	1:G:250:VAL:CG1	1.94	0.71
1:A:142:VAL:HG13	1:A:150:VAL:HG21	1.72	0.71
1:A:246:LYS:CB	1:A:253:THR:HA	2.19	0.71
1:C:221:TYR:CD1	1:C:297:LEU:HD11	2.25	0.71
1:C:331:THR:HG23	1:C:375:TRP:HE1	1.55	0.71
1:D:48:SER:OG	1:D:72:ASN:HB3	1.91	0.71
1:D:335:ASN:OD1	1:D:337:PRO:HD2	1.90	0.71
1:G:293:VAL:HG22	1:G:416:ILE:CD1	2.20	0.71
1:A:16:GLN:HB2	1:A:19:CYS:SG	2.30	0.71
1:A:48:SER:OG	1:A:72:ASN:HB3	1.91	0.71
1:A:221:TYR:CD1	1:A:297:LEU:HD11	2.25	0.71
1:B:48:SER:OG	1:B:72:ASN:HB3	1.91	0.71
1:C:242:LYS:H	1:D:252:GLU:HB2	0.90	0.71
1:C:293:VAL:HG22	1:C:416:ILE:CD1	2.20	0.71
1:D:16:GLN:HB2	1:D:19:CYS:SG	2.30	0.71
1:E:335:ASN:OD1	1:E:337:PRO:HD2	1.90	0.71
1:G:221:TYR:CD1	1:G:297:LEU:HD11	2.25	0.71
1:A:50:LEU:CD2	1:A:52:ASN:H	2.04	0.71
1:A:293:VAL:HG22	1:A:416:ILE:CD1	2.20	0.71
1:B:246:LYS:CB	1:B:253:THR:HA	2.19	0.71
1:B:422:LEU:HD13	1:D:182:ASP:HB2	1.73	0.71
1:C:16:GLN:HB2	1:C:19:CYS:SG	2.30	0.71
1:C:103:TRP:HE1	1:D:364:ILE:HG22	1.55	0.71
1:C:118:TYR:HE1	1:C:134:GLN:HB2	1.55	0.71
1:C:323:ARG:HD3	1:C:335:ASN:O	1.90	0.71
1:C:373:TRP:O	1:C:376:THR:HG22	1.90	0.71

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:323:ARG:HD3	1:D:335:ASN:O	1.90	0.71
1:E:142:VAL:HG13	1:E:150:VAL:HG21	1.72	0.71
1:E:143:THR:HG21	1:F:35:LYS:NZ	2.03	0.71
1:E:393:LEU:O	1:E:393:LEU:HD13	1.90	0.71
1:F:221:TYR:CD1	1:F:297:LEU:HD11	2.25	0.71
1:A:244:LYS:HG2	1:B:253:THR:OG1	1.90	0.71
1:B:221:TYR:CD1	1:B:297:LEU:HD11	2.25	0.71
1:B:373:TRP:O	1:B:376:THR:HG22	1.90	0.71
1:C:48:SER:OG	1:C:72:ASN:HB3	1.91	0.71
1:C:207:ASP:OD2	1:E:185:LYS:HG3	1.90	0.71
1:C:393:LEU:O	1:C:393:LEU:HD13	1.90	0.71
1:D:99:VAL:HG11	1:E:362:ARG:CG	2.19	0.71
1:E:26:VAL:HG21	1:E:50:LEU:HA	1.73	0.71
1:E:118:TYR:HE1	1:E:134:GLN:HB2	1.55	0.71
1:F:5:TYR:HE2	1:F:361:LYS:HB3	1.54	0.71
1:F:331:THR:HG23	1:F:375:TRP:HE1	1.55	0.71
1:B:293:VAL:HG22	1:B:416:ILE:CD1	2.20	0.71
1:D:142:VAL:HG13	1:D:150:VAL:HG21	1.72	0.71
1:E:293:VAL:HG22	1:E:416:ILE:CD1	2.20	0.71
1:G:16:GLN:HB2	1:G:19:CYS:SG	2.30	0.71
1:B:323:ARG:HD3	1:B:335:ASN:O	1.90	0.71
1:D:393:LEU:O	1:D:393:LEU:HD13	1.90	0.71
1:E:48:SER:OG	1:E:72:ASN:HB3	1.91	0.71
1:G:50:LEU:CD2	1:G:52:ASN:H	2.04	0.71
1:G:150:VAL:HG11	1:G:170:ILE:HG13	1.71	0.71
1:B:118:TYR:HE1	1:B:134:GLN:HB2	1.55	0.71
1:B:143:THR:HG21	1:C:35:LYS:NZ	2.02	0.71
1:B:281:VAL:HG22	1:B:295:ILE:HD11	1.72	0.71
1:C:150:VAL:HG11	1:C:170:ILE:HG13	1.71	0.71
1:E:99:VAL:HG13	1:F:364:ILE:HG21	1.36	0.71
1:F:335:ASN:OD1	1:F:337:PRO:HD2	1.90	0.71
1:C:26:VAL:HG21	1:C:50:LEU:HA	1.73	0.70
1:E:50:LEU:CD2	1:E:52:ASN:H	2.04	0.70
1:F:142:VAL:HG13	1:F:150:VAL:HG21	1.72	0.70
1:F:240:THR:HG23	1:F:257:ILE:O	1.92	0.70
1:G:48:SER:OG	1:G:72:ASN:HB3	1.91	0.70
1:A:204:ALA:HA	1:B:414:ILE:CD1	2.20	0.70
1:C:240:THR:HG23	1:C:257:ILE:O	1.92	0.70
1:E:16:GLN:HB2	1:E:19:CYS:SG	2.30	0.70
1:F:50:LEU:CD2	1:F:52:ASN:H	2.04	0.70
1:G:242:LYS:HE3	1:G:256:SER:CB	2.19	0.70

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:240:THR:HG23	1:E:257:ILE:O	1.91	0.70
1:F:323:ARG:HD3	1:F:335:ASN:O	1.90	0.70
1:G:142:VAL:HG13	1:G:150:VAL:HG21	1.72	0.70
1:C:50:LEU:CD2	1:C:52:ASN:H	2.04	0.70
1:C:141:ASP:OD2	1:D:65:ILE:CG1	2.36	0.70
1:F:281:VAL:CG1	1:F:414:ILE:HG21	2.22	0.70
1:G:331:THR:HG23	1:G:375:TRP:HE1	1.55	0.70
1:A:335:ASN:OD1	1:A:337:PRO:HD2	1.90	0.70
1:B:16:GLN:HB2	1:B:19:CYS:SG	2.30	0.70
1:D:240:THR:HG23	1:D:257:ILE:O	1.92	0.70
1:D:281:VAL:HG22	1:D:295:ILE:HD11	1.72	0.70
1:G:118:TYR:HE1	1:G:134:GLN:HB2	1.55	0.70
1:G:281:VAL:CG1	1:G:414:ILE:HG21	2.22	0.70
1:G:335:ASN:OD1	1:G:337:PRO:HD2	1.90	0.70
1:A:323:ARG:HD3	1:A:335:ASN:O	1.90	0.70
1:B:191:GLN:H	1:C:178:ASN:HB2	1.56	0.70
1:C:294:LYS:CE	1:D:304:TYR:CZ	2.75	0.70
1:E:197:VAL:HG22	1:E:298:TYR:HA	1.73	0.70
1:F:143:THR:HG21	1:G:35:LYS:HZ1	1.55	0.70
1:G:281:VAL:HG22	1:G:295:ILE:HD11	1.72	0.70
1:B:143:THR:CG2	1:C:35:LYS:NZ	2.54	0.70
1:B:281:VAL:CG1	1:B:414:ILE:HG21	2.22	0.70
1:C:281:VAL:HG22	1:C:295:ILE:HD11	1.72	0.70
1:E:243:ASN:CB	1:F:250:VAL:CG1	2.50	0.70
1:G:240:THR:HG23	1:G:257:ILE:O	1.92	0.70
1:A:281:VAL:CG1	1:A:414:ILE:HG21	2.22	0.70
1:B:243:ASN:ND2	1:C:250:VAL:HG11	2.07	0.70
1:E:281:VAL:CG1	1:E:414:ILE:HG21	2.22	0.70
1:B:50:LEU:CD2	1:B:52:ASN:H	2.04	0.70
1:B:232:THR:CG2	1:C:264:SER:OG	2.40	0.70
1:C:281:VAL:CG1	1:C:414:ILE:HG21	2.22	0.70
1:D:281:VAL:CG1	1:D:414:ILE:HG21	2.22	0.70
1:C:232:THR:HG22	1:D:264:SER:HG	1.55	0.70
1:C:243:ASN:ND2	1:C:255:LEU:HB2	2.07	0.70
1:D:50:LEU:CD2	1:D:52:ASN:H	2.04	0.70
1:D:103:TRP:CZ2	1:E:365:PRO:CD	2.73	0.70
1:D:197:VAL:HG22	1:D:298:TYR:HA	1.73	0.70
1:A:270:GLY:O	1:G:226:ASN:N	2.23	0.69
1:B:243:ASN:ND2	1:B:255:LEU:HB2	2.07	0.69
1:D:26:VAL:HG21	1:D:50:LEU:HA	1.73	0.69
1:D:103:TRP:CZ2	1:E:364:ILE:HA	2.26	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:13:SER:OG	1:E:14:LEU:HD22	1.92	0.69
1:E:128:VAL:HG21	1:E:140:MET:CE	2.22	0.69
1:F:16:GLN:HB2	1:F:19:CYS:SG	2.30	0.69
1:F:197:VAL:HG22	1:F:298:TYR:HA	1.73	0.69
1:B:240:THR:HG23	1:B:257:ILE:O	1.92	0.69
1:C:142:VAL:HG13	1:C:150:VAL:HG21	1.72	0.69
1:D:243:ASN:ND2	1:D:255:LEU:HB2	2.07	0.69
1:F:13:SER:OG	1:F:14:LEU:HD22	1.92	0.69
1:F:150:VAL:HG11	1:F:170:ILE:HG13	1.71	0.69
1:A:13:SER:OG	1:A:14:LEU:HD22	1.93	0.69
1:A:128:VAL:HG21	1:A:140:MET:CE	2.22	0.69
1:B:128:VAL:HG21	1:B:140:MET:CE	2.22	0.69
1:D:227:TRP:CZ3	1:E:269:ASN:HB3	2.26	0.69
1:E:5:TYR:HE2	1:E:361:LYS:HB3	1.54	0.69
1:E:414:ILE:H	1:E:414:ILE:HD13	1.57	0.69
1:C:128:VAL:HG21	1:C:140:MET:CE	2.22	0.69
1:E:203:TRP:CD1	1:F:413:ASN:ND2	2.60	0.69
1:G:26:VAL:HG21	1:G:50:LEU:HA	1.73	0.69
1:G:128:VAL:HG21	1:G:140:MET:CE	2.22	0.69
1:A:26:VAL:HG21	1:A:50:LEU:HA	1.73	0.69
1:A:101:VAL:HG12	1:A:104:ARG:NH2	2.08	0.69
1:B:26:VAL:HG21	1:B:50:LEU:HA	1.73	0.69
1:B:251:GLY:C	1:B:255:LEU:HD21	2.13	0.69
1:D:128:VAL:HG21	1:D:140:MET:CE	2.22	0.69
1:E:199:THR:HB	1:F:409:GLN:HE22	1.58	0.69
1:E:281:VAL:HG22	1:E:295:ILE:HD11	1.72	0.69
1:F:44:GLN:OE1	1:F:59:PRO:HG2	1.93	0.69
1:F:128:VAL:HG21	1:F:140:MET:CE	2.22	0.69
1:G:44:GLN:OE1	1:G:59:PRO:HG2	1.93	0.69
1:A:293:VAL:HG22	1:A:416:ILE:HD12	1.74	0.69
1:C:414:ILE:HD13	1:C:414:ILE:H	1.57	0.69
1:D:293:VAL:HG22	1:D:416:ILE:HD12	1.74	0.69
1:E:243:ASN:ND2	1:E:255:LEU:HB2	2.07	0.69
1:G:414:ILE:HD13	1:G:414:ILE:H	1.58	0.69
1:A:150:VAL:HG12	1:A:170:ILE:HG13	1.74	0.69
1:G:101:VAL:HG12	1:G:104:ARG:NH2	2.08	0.69
1:G:197:VAL:HG22	1:G:298:TYR:HA	1.73	0.69
1:A:197:VAL:HG22	1:A:298:TYR:HA	1.73	0.69
1:A:215:TYR:CE1	1:B:279:GLN:NE2	2.61	0.69
1:A:251:GLY:C	1:A:255:LEU:HD21	2.13	0.69
1:A:420:VAL:CG1	1:A:421:PRO:HD2	2.23	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:13:SER:OG	1:B:14:LEU:HD22	1.93	0.69
1:B:203:TRP:CH2	1:C:298:TYR:OH	2.46	0.69
1:B:420:VAL:CG1	1:B:421:PRO:HD2	2.23	0.69
1:C:251:GLY:C	1:C:255:LEU:HD21	2.13	0.69
1:C:420:VAL:CG1	1:C:421:PRO:HD2	2.23	0.69
1:D:13:SER:OG	1:D:14:LEU:HD22	1.93	0.69
1:D:150:VAL:HG12	1:D:170:ILE:HG13	1.74	0.69
1:D:207:ASP:OD2	1:F:185:LYS:HD3	1.92	0.69
1:D:414:ILE:HD13	1:D:414:ILE:H	1.57	0.69
1:D:420:VAL:CG1	1:D:421:PRO:HD2	2.23	0.69
1:E:44:GLN:OE1	1:E:59:PRO:HG2	1.93	0.69
1:E:150:VAL:HG12	1:E:170:ILE:HG13	1.74	0.69
1:E:420:VAL:CG1	1:E:421:PRO:HD2	2.23	0.69
1:F:26:VAL:HG21	1:F:50:LEU:HA	1.73	0.69
1:F:48:SER:OG	1:F:72:ASN:HB3	1.91	0.69
1:G:251:GLY:C	1:G:255:LEU:HD21	2.13	0.69
1:A:243:ASN:ND2	1:A:255:LEU:HB2	2.07	0.69
1:A:414:ILE:HD13	1:A:414:ILE:H	1.57	0.69
1:B:414:ILE:H	1:B:414:ILE:HD13	1.58	0.69
1:C:293:VAL:HG22	1:C:416:ILE:HD12	1.74	0.69
1:C:309:LYS:O	1:C:309:LYS:HD3	1.93	0.69
1:E:293:VAL:HG22	1:E:416:ILE:HD12	1.74	0.69
1:E:309:LYS:O	1:E:309:LYS:HD3	1.93	0.69
1:F:243:ASN:ND2	1:F:255:LEU:HB2	2.07	0.69
1:A:240:THR:HG23	1:A:257:ILE:O	1.92	0.69
1:B:182:ASP:CA	1:G:422:LEU:HD13	2.23	0.69
1:B:197:VAL:HG22	1:B:298:TYR:HA	1.73	0.69
1:C:197:VAL:HG22	1:C:298:TYR:HA	1.73	0.69
1:F:218:THR:HB	1:G:278:SER:O	1.91	0.69
1:F:294:LYS:CE	1:G:304:TYR:OH	2.41	0.69
1:G:150:VAL:HG12	1:G:170:ILE:HG13	1.74	0.69
1:G:293:VAL:HG22	1:G:416:ILE:HD12	1.74	0.69
1:C:243:ASN:CG	1:D:250:VAL:CG1	2.61	0.68
1:D:215:TYR:CE1	1:E:414:ILE:HD12	2.25	0.68
1:G:224:ALA:HB2	1:G:274:THR:CB	2.23	0.68
1:D:251:GLY:C	1:D:255:LEU:HD21	2.13	0.68
1:E:422:LEU:HD13	1:G:182:ASP:CA	2.23	0.68
1:G:309:LYS:O	1:G:309:LYS:HD3	1.93	0.68
1:A:224:ALA:HB2	1:A:274:THR:CB	2.23	0.68
1:B:101:VAL:HG12	1:B:104:ARG:NH2	2.08	0.68
1:E:143:THR:CB	1:F:35:LYS:HZ1	2.05	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:44:GLN:OE1	1:A:59:PRO:HG2	1.93	0.68
1:A:309:LYS:O	1:A:309:LYS:HD3	1.93	0.68
1:C:44:GLN:OE1	1:C:59:PRO:HG2	1.93	0.68
1:B:282:ARG:O	1:B:282:ARG:HD3	1.94	0.68
1:B:293:VAL:HG22	1:B:416:ILE:HD12	1.74	0.68
1:D:309:LYS:O	1:D:309:LYS:HD3	1.93	0.68
1:F:142:VAL:O	1:G:32:GLN:CG	2.40	0.68
1:G:243:ASN:ND2	1:G:255:LEU:HB2	2.07	0.68
1:B:309:LYS:O	1:B:309:LYS:HD3	1.93	0.68
1:C:13:SER:OG	1:C:14:LEU:HD22	1.93	0.68
1:C:282:ARG:O	1:C:282:ARG:HD3	1.94	0.68
1:E:101:VAL:HG12	1:E:104:ARG:NH2	2.08	0.68
1:F:282:ARG:O	1:F:282:ARG:HD3	1.94	0.68
1:D:243:ASN:HD21	1:D:255:LEU:HB2	1.59	0.68
1:E:224:ALA:HB2	1:E:274:THR:CB	2.23	0.68
1:F:101:VAL:HG12	1:F:104:ARG:NH2	2.08	0.68
1:F:251:GLY:C	1:F:255:LEU:HD21	2.13	0.68
1:F:309:LYS:O	1:F:309:LYS:HD3	1.93	0.68
1:A:99:VAL:HG13	1:B:364:ILE:CG2	2.20	0.68
1:A:282:ARG:O	1:A:282:ARG:HD3	1.94	0.68
1:C:226:ASN:O	1:D:270:GLY:N	2.25	0.68
1:E:196:LEU:HD11	1:E:296:GLU:HG3	1.76	0.68
1:E:251:GLY:C	1:E:255:LEU:HD21	2.13	0.68
1:G:13:SER:OG	1:G:14:LEU:HD22	1.93	0.68
1:G:420:VAL:CG1	1:G:421:PRO:HD2	2.23	0.68
1:A:246:LYS:HG3	1:A:253:THR:HA	1.76	0.68
1:B:23:TYR:HB2	1:B:74:TRP:HB3	1.75	0.68
1:B:243:ASN:HD21	1:B:255:LEU:HB2	1.59	0.68
1:D:5:TYR:HE2	1:D:361:LYS:HB3	1.54	0.68
1:D:101:VAL:HG12	1:D:104:ARG:NH2	2.07	0.68
1:D:203:TRP:CE2	1:E:413:ASN:ND2	2.62	0.68
1:E:243:ASN:HD21	1:E:255:LEU:HB2	1.59	0.68
1:F:23:TYR:HB2	1:F:74:TRP:HB3	1.75	0.68
1:F:224:ALA:HB2	1:F:274:THR:CB	2.23	0.68
1:F:243:ASN:HD21	1:F:255:LEU:HB2	1.59	0.68
1:F:414:ILE:HD13	1:F:414:ILE:H	1.58	0.68
1:F:420:VAL:CG1	1:F:421:PRO:HD2	2.23	0.68
1:G:282:ARG:O	1:G:282:ARG:HD3	1.94	0.68
1:A:243:ASN:HD21	1:A:255:LEU:HB2	1.59	0.68
1:B:128:VAL:HG21	1:B:140:MET:HE1	1.76	0.68
1:C:23:TYR:HB2	1:C:74:TRP:HB3	1.75	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:293:VAL:HG22	1:F:416:ILE:HD12	1.74	0.68
1:G:23:TYR:HB2	1:G:74:TRP:HB3	1.75	0.67
1:G:246:LYS:HG3	1:G:253:THR:HA	1.76	0.67
1:B:16:GLN:OE1	1:B:21:ASP:HA	1.95	0.67
1:B:44:GLN:OE1	1:B:59:PRO:HG2	1.93	0.67
1:B:99:VAL:HG13	1:C:364:ILE:HG21	1.60	0.67
1:C:101:VAL:HG12	1:C:104:ARG:NH2	2.08	0.67
1:C:150:VAL:HG12	1:C:170:ILE:HG13	1.74	0.67
1:E:282:ARG:O	1:E:282:ARG:HD3	1.94	0.67
1:F:196:LEU:HD11	1:F:296:GLU:HG3	1.76	0.67
1:G:243:ASN:HD21	1:G:255:LEU:HB2	1.59	0.67
1:B:224:ALA:HB2	1:B:274:THR:CB	2.23	0.67
1:C:243:ASN:HD21	1:C:255:LEU:HB2	1.59	0.67
1:D:282:ARG:O	1:D:282:ARG:HD3	1.94	0.67
1:A:23:TYR:HB2	1:A:74:TRP:HB3	1.75	0.67
1:A:241:THR:CB	1:B:251:GLY:O	2.41	0.67
1:C:16:GLN:OE1	1:C:21:ASP:HA	1.95	0.67
1:D:44:GLN:OE1	1:D:59:PRO:HG2	1.93	0.67
1:D:224:ALA:HB2	1:D:274:THR:CB	2.23	0.67
1:D:246:LYS:HG3	1:D:253:THR:HA	1.76	0.67
1:E:23:TYR:HB2	1:E:74:TRP:HB3	1.75	0.67
1:A:196:LEU:HD11	1:A:296:GLU:HG3	1.76	0.67
1:C:375:TRP:CE3	1:C:375:TRP:HA	2.30	0.67
1:D:204:ALA:HA	1:E:414:ILE:HD13	1.75	0.67
1:E:246:LYS:HG3	1:E:253:THR:HA	1.76	0.67
1:F:246:LYS:HG3	1:F:253:THR:HA	1.76	0.67
1:B:246:LYS:HG3	1:B:253:THR:HA	1.76	0.67
1:C:246:LYS:HG3	1:C:253:THR:HA	1.76	0.67
1:D:229:LYS:HD3	1:D:269:ASN:OD1	1.95	0.67
1:C:224:ALA:HB2	1:C:274:THR:CB	2.23	0.67
1:D:22:LYS:HA	1:D:22:LYS:HZ3	1.59	0.67
1:D:103:TRP:CH2	1:E:365:PRO:HD2	2.30	0.67
1:D:242:LYS:H	1:E:251:GLY:C	1.96	0.67
1:A:16:GLN:OE1	1:A:21:ASP:HA	1.95	0.67
1:B:196:LEU:HD11	1:B:296:GLU:HG3	1.76	0.67
1:D:196:LEU:HD11	1:D:296:GLU:HG3	1.76	0.67
1:D:23:TYR:HB2	1:D:74:TRP:HB3	1.75	0.67
1:E:375:TRP:HA	1:E:375:TRP:CE3	2.30	0.67
1:F:16:GLN:OE1	1:F:21:ASP:HA	1.95	0.67
1:A:253:THR:HG1	1:G:244:LYS:HG3	1.56	0.67
1:G:229:LYS:HD3	1:G:269:ASN:OD1	1.95	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:230:THR:HG22	1:A:268:GLN:HB2	1.77	0.66
1:C:103:TRP:NE1	1:D:364:ILE:HG22	2.11	0.66
1:D:16:GLN:OE1	1:D:21:ASP:HA	1.94	0.66
1:D:189:VAL:O	1:E:178:ASN:ND2	2.28	0.66
1:D:314:TYR:CD1	1:D:345:ILE:HD12	2.31	0.66
1:E:229:LYS:HD3	1:E:269:ASN:OD1	1.95	0.66
1:C:107:HIS:HB3	1:D:29:GLU:HB3	1.77	0.66
1:E:218:THR:HB	1:F:278:SER:O	1.95	0.66
1:E:314:TYR:CD1	1:E:345:ILE:HD12	2.31	0.66
1:B:314:TYR:CD1	1:B:345:ILE:HD12	2.31	0.66
1:D:230:THR:HG22	1:D:268:GLN:HB2	1.77	0.66
1:F:227:TRP:HE3	1:G:269:ASN:HB3	1.58	0.66
1:G:196:LEU:HD11	1:G:296:GLU:HG3	1.76	0.66
1:A:229:LYS:HD3	1:A:269:ASN:OD1	1.95	0.66
1:B:4:VAL:HG13	1:B:76:TYR:CE2	2.31	0.66
1:B:150:VAL:HG12	1:B:170:ILE:HG13	1.74	0.66
1:B:180:ASP:HB3	1:B:181:PRO:HD3	1.78	0.66
1:C:4:VAL:HG13	1:C:76:TYR:CE2	2.31	0.66
1:C:28:ARG:HD3	1:C:54:TRP:HZ3	1.60	0.66
1:C:243:ASN:HD22	1:D:250:VAL:CG1	2.09	0.66
1:D:4:VAL:HG13	1:D:76:TYR:CE2	2.31	0.66
1:E:4:VAL:HG13	1:E:76:TYR:CE2	2.31	0.66
1:F:150:VAL:HG12	1:F:170:ILE:HG13	1.74	0.66
1:F:180:ASP:HB3	1:F:181:PRO:HD3	1.78	0.66
1:G:28:ARG:HD3	1:G:54:TRP:HZ3	1.60	0.66
1:G:180:ASP:HB3	1:G:181:PRO:HD3	1.78	0.66
1:D:294:LYS:HE2	1:E:304:TYR:CE1	2.31	0.66
1:D:298:TYR:CZ	1:D:411:ALA:HB3	2.31	0.66
1:D:375:TRP:HA	1:D:375:TRP:CE3	2.30	0.66
1:G:4:VAL:HG13	1:G:76:TYR:CE2	2.31	0.66
1:A:101:VAL:HG11	1:A:400:ILE:HG12	1.78	0.66
1:C:314:TYR:CD1	1:C:345:ILE:HD12	2.31	0.66
1:E:93:ILE:HD11	1:E:396:VAL:HG22	1.78	0.66
1:E:230:THR:HG22	1:E:268:GLN:HB2	1.77	0.66
1:F:128:VAL:HG21	1:F:140:MET:HE1	1.77	0.66
1:A:180:ASP:HB3	1:A:181:PRO:HD3	1.78	0.66
1:B:241:THR:HB	1:C:251:GLY:O	1.95	0.66
1:C:101:VAL:HG11	1:C:400:ILE:HG12	1.78	0.66
1:D:93:ILE:HD11	1:D:396:VAL:HG22	1.78	0.66
1:D:421:PRO:O	1:F:182:ASP:CB	2.43	0.66
1:E:16:GLN:OE1	1:E:21:ASP:HA	1.94	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:103:TRP:HE1	1:F:364:ILE:HG22	1.60	0.66
1:F:4:VAL:HG13	1:F:76:TYR:CE2	2.31	0.66
1:F:203:TRP:CD1	1:G:413:ASN:ND2	2.64	0.66
1:F:229:LYS:HD3	1:F:269:ASN:OD1	1.95	0.66
1:G:16:GLN:OE1	1:G:21:ASP:HA	1.94	0.66
1:G:101:VAL:HG11	1:G:400:ILE:HG12	1.78	0.66
1:G:230:THR:HG22	1:G:268:GLN:HB2	1.77	0.66
1:G:314:TYR:CD1	1:G:345:ILE:HD12	2.30	0.66
1:A:5:TYR:HE2	1:A:361:LYS:HB3	1.54	0.66
1:C:229:LYS:HD3	1:C:269:ASN:OD1	1.95	0.66
1:A:269:ASN:HB3	1:G:227:TRP:CE3	2.30	0.66
1:B:227:TRP:HE3	1:C:269:ASN:HB3	1.60	0.66
1:C:180:ASP:HB3	1:C:181:PRO:HD3	1.78	0.66
1:C:196:LEU:HD11	1:C:296:GLU:HG3	1.76	0.66
1:D:101:VAL:HG11	1:D:400:ILE:HG12	1.78	0.66
1:D:193:ASP:HA	1:E:176:ALA:HB2	1.78	0.66
1:D:204:ALA:HA	1:E:414:ILE:CD1	2.25	0.66
1:F:101:VAL:HG11	1:F:400:ILE:HG12	1.78	0.66
1:F:230:THR:HG22	1:F:268:GLN:HB2	1.77	0.66
1:G:375:TRP:HA	1:G:375:TRP:CE3	2.30	0.66
1:B:101:VAL:HG11	1:B:400:ILE:HG12	1.78	0.66
1:B:298:TYR:CZ	1:B:411:ALA:HB3	2.31	0.66
1:C:229:LYS:HA	1:D:266:ALA:O	1.96	0.66
1:C:246:LYS:HD3	1:C:247:TRP:O	1.97	0.66
1:E:101:VAL:HG11	1:E:400:ILE:HG12	1.78	0.66
1:E:246:LYS:HD3	1:E:247:TRP:O	1.96	0.66
1:G:128:VAL:HG21	1:G:140:MET:HE1	1.78	0.66
1:A:375:TRP:HA	1:A:375:TRP:CE3	2.30	0.65
1:C:294:LYS:HE2	1:D:304:TYR:CE1	2.31	0.65
1:C:298:TYR:CZ	1:C:411:ALA:HB3	2.31	0.65
1:F:375:TRP:HA	1:F:375:TRP:CE3	2.30	0.65
1:A:143:THR:HB	1:B:35:LYS:HZ2	1.60	0.65
1:C:93:ILE:HD11	1:C:396:VAL:HG22	1.78	0.65
1:C:290:LYS:CB	1:C:422:LEU:HD21	2.26	0.65
1:E:180:ASP:HB3	1:E:181:PRO:HD3	1.78	0.65
1:F:21:ASP:HB3	1:F:23:TYR:HD2	1.61	0.65
1:F:143:THR:CB	1:G:35:LYS:HZ2	2.08	0.65
1:B:290:LYS:CB	1:B:422:LEU:HD21	2.26	0.65
1:C:21:ASP:HB3	1:C:23:TYR:HD2	1.61	0.65
1:C:230:THR:HG22	1:C:268:GLN:HB2	1.77	0.65
1:F:201:VAL:O	1:G:411:ALA:HA	1.97	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:246:LYS:HD3	1:G:247:TRP:O	1.96	0.65
1:B:103:TRP:HE1	1:C:364:ILE:HG22	1.62	0.65
1:D:193:ASP:HA	1:E:176:ALA:HB1	1.78	0.65
1:F:93:ILE:HD11	1:F:396:VAL:HG22	1.78	0.65
1:A:290:LYS:CB	1:A:422:LEU:HD21	2.26	0.65
1:D:180:ASP:HB3	1:D:181:PRO:HD3	1.78	0.65
1:D:290:LYS:CB	1:D:422:LEU:HD21	2.26	0.65
1:D:382:LEU:HD12	1:D:385:MET:SD	2.37	0.65
1:F:310:ALA:CB	1:F:397:ARG:HD2	2.26	0.65
1:A:4:VAL:HG13	1:A:76:TYR:CE2	2.31	0.65
1:A:21:ASP:HB3	1:A:23:TYR:HD2	1.61	0.65
1:A:298:TYR:CZ	1:A:411:ALA:HB3	2.31	0.65
1:A:382:LEU:HD12	1:A:385:MET:SD	2.37	0.65
1:E:21:ASP:HB3	1:E:23:TYR:HD2	1.61	0.65
1:E:128:VAL:HG21	1:E:140:MET:HE1	1.78	0.65
1:F:99:VAL:HG11	1:G:364:ILE:HG21	1.60	0.65
1:F:143:THR:HB	1:G:35:LYS:NZ	2.10	0.65
1:A:314:TYR:CD1	1:A:345:ILE:HD12	2.31	0.65
1:B:382:LEU:HD12	1:B:385:MET:SD	2.37	0.65
1:E:28:ARG:HD3	1:E:54:TRP:HZ3	1.61	0.65
1:E:224:ALA:O	1:F:271:GLY:HA3	1.95	0.65
1:F:247:TRP:CB	1:F:251:GLY:HA3	2.27	0.65
1:F:314:TYR:CD1	1:F:345:ILE:HD12	2.31	0.65
1:A:93:ILE:HD11	1:A:396:VAL:HG22	1.78	0.65
1:B:21:ASP:HB3	1:B:23:TYR:HD2	1.61	0.65
1:F:243:ASN:CG	1:G:250:VAL:CG1	2.56	0.65
1:F:246:LYS:HD3	1:F:247:TRP:O	1.96	0.65
1:F:298:TYR:CZ	1:F:411:ALA:HB3	2.31	0.65
1:A:150:VAL:CG1	1:A:170:ILE:H	2.07	0.65
1:A:246:LYS:HD3	1:A:247:TRP:O	1.97	0.65
1:A:422:LEU:HD13	1:C:182:ASP:HB2	1.78	0.65
1:B:229:LYS:HD3	1:B:269:ASN:OD1	1.95	0.65
1:B:246:LYS:HD3	1:B:247:TRP:O	1.96	0.65
1:E:290:LYS:CB	1:E:422:LEU:HD21	2.26	0.65
1:E:382:LEU:HD12	1:E:385:MET:SD	2.37	0.65
1:E:422:LEU:HA	1:G:182:ASP:CB	2.27	0.65
1:C:243:ASN:HD22	1:D:250:VAL:HG13	1.60	0.64
1:E:298:TYR:CZ	1:E:411:ALA:HB3	2.31	0.64
1:F:290:LYS:CB	1:F:422:LEU:HD21	2.26	0.64
1:G:21:ASP:HB3	1:G:23:TYR:HD2	1.61	0.64
1:B:103:TRP:HZ2	1:C:365:PRO:HD2	1.61	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:182:ASP:HA	1:G:422:LEU:CD1	2.26	0.64
1:C:22:LYS:HA	1:C:22:LYS:HZ3	1.61	0.64
1:C:191:GLN:H	1:D:178:ASN:CB	2.06	0.64
1:D:246:LYS:HD3	1:D:247:TRP:O	1.96	0.64
1:B:93:ILE:HD11	1:B:396:VAL:HG22	1.78	0.64
1:B:242:LYS:CD	1:B:256:SER:HB2	2.28	0.64
1:B:375:TRP:HA	1:B:375:TRP:CE3	2.30	0.64
1:F:24:ARG:HG2	1:F:78:THR:HA	1.80	0.64
1:F:382:LEU:HD12	1:F:385:MET:SD	2.37	0.64
1:G:290:LYS:CB	1:G:422:LEU:HD21	2.26	0.64
1:B:285:VAL:CG1	1:B:291:ILE:HD13	2.28	0.64
1:E:54:TRP:CE3	1:E:65:ILE:HG22	2.33	0.64
1:G:54:TRP:CE3	1:G:65:ILE:HG22	2.33	0.64
1:B:28:ARG:HD3	1:B:54:TRP:HZ3	1.60	0.64
1:B:227:TRP:CZ3	1:C:269:ASN:HB3	2.33	0.64
1:C:285:VAL:CG1	1:C:291:ILE:HD13	2.28	0.64
1:D:143:THR:CB	1:E:35:LYS:HZ3	1.97	0.64
1:D:242:LYS:CD	1:D:256:SER:HB2	2.28	0.64
1:G:24:ARG:HG2	1:G:78:THR:HA	1.79	0.64
1:G:247:TRP:CB	1:G:251:GLY:HA3	2.27	0.64
1:G:298:TYR:CZ	1:G:411:ALA:HB3	2.31	0.64
1:C:247:TRP:CB	1:C:251:GLY:HA3	2.27	0.64
1:D:54:TRP:CE3	1:D:65:ILE:HG22	2.33	0.64
1:E:285:VAL:CG1	1:E:291:ILE:HD13	2.28	0.64
1:E:310:ALA:CB	1:E:397:ARG:HD2	2.26	0.64
1:G:382:LEU:HD12	1:G:385:MET:SD	2.37	0.64
1:A:414:ILE:CD1	1:G:204:ALA:HA	2.27	0.64
1:C:103:TRP:HZ2	1:D:364:ILE:HA	1.63	0.64
1:C:193:ASP:HA	1:D:176:ALA:HB2	1.78	0.64
1:D:285:VAL:CG1	1:D:291:ILE:HD13	2.28	0.64
1:D:294:LYS:HE2	1:E:304:TYR:CZ	2.32	0.64
1:F:242:LYS:CD	1:F:256:SER:HB2	2.28	0.64
1:F:336:ARG:HB2	1:F:337:PRO:HD3	1.80	0.64
1:G:336:ARG:HB2	1:G:337:PRO:HD3	1.80	0.64
1:A:54:TRP:CE3	1:A:65:ILE:HG22	2.33	0.64
1:A:99:VAL:CG1	1:B:364:ILE:HG21	2.28	0.64
1:D:21:ASP:HB3	1:D:23:TYR:HD2	1.61	0.64
1:D:336:ARG:HB2	1:D:337:PRO:HD3	1.80	0.64
1:E:73:THR:HG23	1:E:76:TYR:H	1.63	0.64
1:E:242:LYS:CD	1:E:256:SER:HB2	2.28	0.64
1:E:336:ARG:HB2	1:E:337:PRO:HD3	1.80	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:54:TRP:CE3	1:F:65:ILE:HG22	2.33	0.64
1:A:285:VAL:CG1	1:A:291:ILE:HD13	2.28	0.64
1:D:225:THR:O	1:D:272:SER:HB2	1.98	0.64
1:D:422:LEU:HA	1:F:182:ASP:HB2	1.80	0.64
1:G:242:LYS:CD	1:G:256:SER:HB2	2.28	0.64
1:A:32:GLN:HG2	1:G:143:THR:HG22	1.80	0.64
1:C:54:TRP:CE3	1:C:65:ILE:HG22	2.33	0.64
1:C:382:LEU:HD12	1:C:385:MET:SD	2.37	0.64
1:A:251:GLY:O	1:G:241:THR:CA	2.45	0.63
1:B:73:THR:HG23	1:B:76:TYR:H	1.63	0.63
1:E:229:LYS:HA	1:F:266:ALA:O	1.98	0.63
1:G:93:ILE:HD11	1:G:396:VAL:HG22	1.78	0.63
1:C:225:THR:O	1:C:272:SER:HB2	1.98	0.63
1:C:299:LYS:HE2	1:C:409:GLN:C	2.19	0.63
1:G:73:THR:HG23	1:G:76:TYR:H	1.63	0.63
1:A:242:LYS:CD	1:A:256:SER:HB2	2.28	0.63
1:C:336:ARG:HB2	1:C:337:PRO:HD3	1.80	0.63
1:D:150:VAL:CG1	1:D:170:ILE:H	2.07	0.63
1:D:247:TRP:CD2	1:D:248:PRO:HD2	2.33	0.63
1:E:141:ASP:OD2	1:F:65:ILE:HG12	1.99	0.63
1:B:24:ARG:HG2	1:B:78:THR:HA	1.80	0.63
1:C:247:TRP:CD2	1:C:248:PRO:HD2	2.33	0.63
1:D:199:THR:CB	1:E:409:GLN:HE22	2.09	0.63
1:E:24:ARG:HG2	1:E:78:THR:HA	1.80	0.63
1:E:56:ILE:CD1	1:E:65:ILE:HD12	2.29	0.63
1:E:247:TRP:CD2	1:E:248:PRO:HD2	2.33	0.63
1:F:285:VAL:CG1	1:F:291:ILE:HD13	2.28	0.63
1:B:54:TRP:CE3	1:B:65:ILE:HG22	2.33	0.63
1:C:231:ASN:HA	1:D:265:TRP:HA	1.80	0.63
1:D:56:ILE:CD1	1:D:65:ILE:HD12	2.29	0.63
1:D:218:THR:HB	1:E:278:SER:O	1.98	0.63
1:E:247:TRP:CB	1:E:251:GLY:HA3	2.27	0.63
1:F:56:ILE:CD1	1:F:65:ILE:HD12	2.29	0.63
1:G:247:TRP:CD2	1:G:248:PRO:HD2	2.33	0.63
1:A:234:GLY:O	1:B:262:ASN:N	2.22	0.63
1:B:230:THR:HG22	1:B:268:GLN:HB2	1.77	0.63
1:C:56:ILE:CD1	1:C:65:ILE:HD12	2.29	0.63
1:F:8:GLN:HB2	1:F:76:TYR:CD1	2.34	0.63
1:F:247:TRP:CD2	1:F:248:PRO:HD2	2.33	0.63
1:G:56:ILE:CD1	1:G:65:ILE:HD12	2.29	0.63
1:A:8:GLN:HB2	1:A:76:TYR:CD1	2.34	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:24:ARG:HG2	1:A:78:THR:HA	1.80	0.63
1:A:152:ARG:HG3	1:A:167:LYS:HD3	1.81	0.63
1:B:25:PRO:HA	1:B:74:TRP:HD1	1.63	0.63
1:B:201:VAL:HG13	1:C:411:ALA:HB1	1.80	0.63
1:C:8:GLN:HB2	1:C:76:TYR:CD1	2.34	0.63
1:C:242:LYS:CD	1:C:256:SER:HB2	2.28	0.63
1:D:128:VAL:HG21	1:D:140:MET:HE1	1.81	0.63
1:F:225:THR:O	1:F:272:SER:HB2	1.98	0.63
1:B:82:THR:OG1	1:B:84:GLU:HG3	1.99	0.63
1:B:336:ARG:HB2	1:B:337:PRO:HD3	1.80	0.63
1:D:82:THR:OG1	1:D:84:GLU:HG3	1.99	0.63
1:A:247:TRP:CD2	1:A:248:PRO:HD2	2.33	0.63
1:B:8:GLN:HB2	1:B:76:TYR:CD1	2.34	0.63
1:B:247:TRP:CD2	1:B:248:PRO:HD2	2.33	0.63
1:B:355:ILE:O	1:B:358:GLN:HG2	1.99	0.63
1:E:101:VAL:HG12	1:E:104:ARG:HH21	1.64	0.63
1:E:225:THR:O	1:E:272:SER:HB2	1.98	0.63
1:G:8:GLN:HB2	1:G:76:TYR:CD1	2.34	0.63
1:A:25:PRO:HA	1:A:74:TRP:HD1	1.63	0.62
1:A:101:VAL:HG12	1:A:104:ARG:HH21	1.64	0.62
1:A:225:THR:O	1:A:272:SER:HB2	1.98	0.62
1:A:250:VAL:CG1	1:G:243:ASN:ND2	2.61	0.62
1:A:336:ARG:HB2	1:A:337:PRO:HD3	1.80	0.62
1:C:73:THR:HG23	1:C:76:TYR:H	1.63	0.62
1:D:8:GLN:HB2	1:D:76:TYR:CD1	2.34	0.62
1:D:144:ARG:CD	1:E:363:TYR:HE2	2.12	0.62
1:E:299:LYS:HE2	1:E:409:GLN:C	2.19	0.62
1:G:152:ARG:HG3	1:G:167:LYS:HD3	1.81	0.62
1:G:299:LYS:HE2	1:G:409:GLN:C	2.19	0.62
1:A:204:ALA:HA	1:B:414:ILE:HD13	1.80	0.62
1:A:299:LYS:HE2	1:A:409:GLN:C	2.19	0.62
1:C:310:ALA:CB	1:C:397:ARG:HD2	2.26	0.62
1:F:82:THR:OG1	1:F:84:GLU:HG3	1.98	0.62
1:B:152:ARG:HG3	1:B:167:LYS:HD3	1.81	0.62
1:C:24:ARG:HG2	1:C:78:THR:HA	1.79	0.62
1:C:216:ASP:O	1:D:279:GLN:HG3	1.99	0.62
1:D:24:ARG:HG2	1:D:78:THR:HA	1.79	0.62
1:E:364:ILE:HD13	1:E:364:ILE:H	1.64	0.62
1:G:225:THR:O	1:G:272:SER:HB2	1.98	0.62
1:G:285:VAL:CG1	1:G:291:ILE:HD13	2.28	0.62
1:A:73:THR:HG23	1:A:76:TYR:H	1.63	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:247:TRP:CB	1:A:251:GLY:HA3	2.27	0.62
1:A:353:SER:HA	1:A:356:ARG:HG2	1.82	0.62
1:B:310:ALA:CB	1:B:397:ARG:HD2	2.26	0.62
1:D:310:ALA:CB	1:D:397:ARG:HD2	2.26	0.62
1:B:56:ILE:CD1	1:B:65:ILE:HD12	2.29	0.62
1:C:355:ILE:O	1:C:358:GLN:HG2	1.99	0.62
1:D:226:ASN:O	1:E:270:GLY:N	2.32	0.62
1:D:294:LYS:NZ	1:E:304:TYR:CE1	2.67	0.62
1:E:8:GLN:HB2	1:E:76:TYR:CD1	2.34	0.62
1:F:226:ASN:O	1:G:269:ASN:HA	1.98	0.62
1:F:353:SER:HA	1:F:356:ARG:HG2	1.82	0.62
1:F:355:ILE:O	1:F:358:GLN:HG2	1.99	0.62
1:A:278:SER:O	1:G:218:THR:HB	1.98	0.62
1:B:24:ARG:HD2	1:B:77:PRO:O	2.00	0.62
1:B:199:THR:HB	1:C:409:GLN:NE2	2.14	0.62
1:B:299:LYS:HE2	1:B:409:GLN:C	2.19	0.62
1:C:82:THR:OG1	1:C:84:GLU:HG3	1.98	0.62
1:D:73:THR:HG23	1:D:76:TYR:H	1.63	0.62
1:F:24:ARG:HD2	1:F:77:PRO:O	2.00	0.62
1:G:401:THR:HG22	1:G:402:GLY:N	2.15	0.62
1:B:364:ILE:HD13	1:B:364:ILE:H	1.65	0.62
1:E:24:ARG:HD2	1:E:77:PRO:O	2.00	0.62
1:E:294:LYS:NZ	1:F:304:TYR:CE1	2.67	0.62
1:E:355:ILE:O	1:E:358:GLN:HG2	1.99	0.62
1:F:299:LYS:HE2	1:F:409:GLN:C	2.19	0.62
1:G:24:ARG:HD2	1:G:77:PRO:O	2.00	0.62
1:A:24:ARG:HD2	1:A:77:PRO:O	2.00	0.62
1:A:269:ASN:HA	1:G:226:ASN:O	2.00	0.62
1:A:401:THR:HG22	1:A:402:GLY:N	2.15	0.62
1:A:128:VAL:HG21	1:A:140:MET:HE1	1.82	0.62
1:B:243:ASN:CA	1:C:250:VAL:HG13	2.29	0.62
1:D:299:LYS:HE2	1:D:409:GLN:C	2.19	0.62
1:E:82:THR:OG1	1:E:84:GLU:HG3	1.99	0.62
1:E:353:SER:HA	1:E:356:ARG:HG2	1.82	0.62
1:G:364:ILE:HD13	1:G:364:ILE:H	1.64	0.62
1:A:56:ILE:CD1	1:A:65:ILE:HD12	2.29	0.62
1:A:82:THR:OG1	1:A:84:GLU:HG3	1.99	0.62
1:A:355:ILE:O	1:A:358:GLN:HG2	1.99	0.62
1:B:353:SER:HA	1:B:356:ARG:HG2	1.82	0.62
1:B:401:THR:HG22	1:B:402:GLY:N	2.15	0.62
1:C:24:ARG:HD2	1:C:77:PRO:O	2.00	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:151:ILE:HG13	1:C:152:ARG:H	1.65	0.62
1:D:24:ARG:HD2	1:D:77:PRO:O	2.00	0.62
1:D:355:ILE:O	1:D:358:GLN:HG2	1.99	0.62
1:G:353:SER:HA	1:G:356:ARG:HG2	1.82	0.62
1:A:244:LYS:CG	1:B:253:THR:OG1	2.47	0.61
1:A:364:ILE:H	1:A:364:ILE:HD13	1.64	0.61
1:C:152:ARG:HG3	1:C:167:LYS:HD3	1.81	0.61
1:C:364:ILE:HD13	1:C:364:ILE:H	1.64	0.61
1:D:152:ARG:HG3	1:D:167:LYS:HD3	1.81	0.61
1:D:246:LYS:HD2	1:D:246:LYS:C	2.21	0.61
1:F:101:VAL:HG21	1:F:400:ILE:HD11	1.82	0.61
1:F:246:LYS:HD2	1:F:246:LYS:C	2.21	0.61
1:G:82:THR:OG1	1:G:84:GLU:HG3	1.99	0.61
1:B:151:ILE:HG13	1:B:152:ARG:H	1.65	0.61
1:B:246:LYS:HD2	1:B:246:LYS:C	2.21	0.61
1:C:25:PRO:HA	1:C:74:TRP:HD1	1.63	0.61
1:C:101:VAL:HG12	1:C:104:ARG:HH21	1.64	0.61
1:C:227:TRP:HA	1:D:269:ASN:HA	1.82	0.61
1:D:101:VAL:HG12	1:D:104:ARG:HH21	1.64	0.61
1:D:364:ILE:H	1:D:364:ILE:HD13	1.65	0.61
1:F:152:ARG:HG3	1:F:167:LYS:HD3	1.81	0.61
1:A:246:LYS:HD2	1:A:246:LYS:C	2.21	0.61
1:B:225:THR:O	1:B:272:SER:HB2	1.98	0.61
1:C:203:TRP:CH2	1:D:298:TYR:OH	2.53	0.61
1:C:235:LEU:HB3	1:C:263:GLN:HG3	1.83	0.61
1:D:151:ILE:HG13	1:D:152:ARG:H	1.65	0.61
1:D:229:LYS:N	1:D:229:LYS:HD2	2.16	0.61
1:D:246:LYS:HG2	1:D:252:GLU:C	2.21	0.61
1:D:294:LYS:CE	1:E:304:TYR:CE1	2.83	0.61
1:E:151:ILE:HG13	1:E:152:ARG:N	2.15	0.61
1:F:73:THR:HG23	1:F:76:TYR:H	1.63	0.61
1:A:142:VAL:O	1:B:32:GLN:HG2	2.00	0.61
1:A:235:LEU:HB3	1:A:263:GLN:HG3	1.83	0.61
1:A:375:TRP:HA	1:A:375:TRP:HE3	1.65	0.61
1:B:101:VAL:HG12	1:B:104:ARG:HH21	1.64	0.61
1:B:235:LEU:HB3	1:B:263:GLN:HG3	1.83	0.61
1:E:203:TRP:HH2	1:F:191:GLN:OE1	1.84	0.61
1:E:246:LYS:HD2	1:E:246:LYS:C	2.21	0.61
1:F:151:ILE:HG13	1:F:152:ARG:H	1.65	0.61
1:B:294:LYS:CE	1:C:304:TYR:OH	2.48	0.61
1:E:101:VAL:HG21	1:E:400:ILE:HD11	1.82	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:375:TRP:HA	1:F:375:TRP:HE3	1.65	0.61
1:G:101:VAL:HG12	1:G:104:ARG:HH21	1.64	0.61
1:G:150:VAL:CG1	1:G:170:ILE:H	2.07	0.61
1:G:246:LYS:HD2	1:G:246:LYS:C	2.21	0.61
1:G:355:ILE:O	1:G:358:GLN:HG2	1.99	0.61
1:B:196:LEU:HD12	1:B:298:TYR:HB3	1.82	0.61
1:C:196:LEU:HD12	1:C:298:TYR:HB3	1.82	0.61
1:C:364:ILE:HD13	1:C:364:ILE:N	2.16	0.61
1:C:401:THR:HG22	1:C:402:GLY:N	2.15	0.61
1:D:353:SER:HA	1:D:356:ARG:HG2	1.82	0.61
1:E:229:LYS:HD2	1:E:229:LYS:N	2.16	0.61
1:F:196:LEU:HD12	1:F:298:TYR:HB3	1.82	0.61
1:G:151:ILE:HG13	1:G:152:ARG:H	1.65	0.61
1:G:235:LEU:HB3	1:G:263:GLN:HG3	1.83	0.61
1:E:151:ILE:HG13	1:E:152:ARG:H	1.65	0.61
1:E:243:ASN:ND2	1:F:250:VAL:HG11	2.12	0.61
1:F:229:LYS:N	1:F:229:LYS:HD2	2.16	0.61
1:G:25:PRO:HA	1:G:74:TRP:HD1	1.63	0.61
1:A:115:PRO:CG	1:A:391:ARG:HG2	2.31	0.61
1:A:142:VAL:HG13	1:A:150:VAL:HG23	1.83	0.61
1:C:353:SER:HA	1:C:356:ARG:HG2	1.82	0.61
1:D:235:LEU:HB3	1:D:263:GLN:HG3	1.83	0.61
1:E:246:LYS:HG2	1:E:252:GLU:C	2.21	0.61
1:E:421:PRO:O	1:G:182:ASP:CB	2.47	0.61
1:G:115:PRO:CG	1:G:391:ARG:HG2	2.31	0.61
1:G:229:LYS:N	1:G:229:LYS:HD2	2.16	0.61
1:A:310:ALA:CB	1:A:397:ARG:HD2	2.26	0.61
1:C:246:LYS:HG2	1:C:252:GLU:C	2.21	0.61
1:D:101:VAL:HG21	1:D:400:ILE:HD11	1.82	0.61
1:E:152:ARG:HG3	1:E:167:LYS:HD3	1.81	0.61
1:E:193:ASP:HA	1:F:176:ALA:CB	2.30	0.61
1:F:199:THR:HB	1:G:409:GLN:HE22	1.65	0.61
1:F:204:ALA:CB	1:G:414:ILE:CD1	2.75	0.61
1:G:375:TRP:HA	1:G:375:TRP:HE3	1.65	0.61
1:A:151:ILE:HG13	1:A:152:ARG:H	1.65	0.61
1:A:411:ALA:HA	1:G:201:VAL:O	2.01	0.61
1:B:207:ASP:OD2	1:D:185:LYS:HG3	2.01	0.61
1:B:375:TRP:HA	1:B:375:TRP:HE3	1.66	0.61
1:C:115:PRO:CG	1:C:391:ARG:HG2	2.31	0.61
1:C:207:ASP:OD2	1:E:185:LYS:HD3	2.01	0.61
1:D:364:ILE:HD13	1:D:364:ILE:N	2.16	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:401:THR:HG22	1:D:402:GLY:N	2.15	0.61
1:E:241:THR:C	1:F:251:GLY:O	2.39	0.61
1:A:28:ARG:HD3	1:A:54:TRP:HZ3	1.60	0.60
1:A:189:VAL:HG22	1:A:190:THR:N	2.16	0.60
1:C:229:LYS:N	1:C:229:LYS:HD2	2.16	0.60
1:E:401:THR:HG22	1:E:402:GLY:N	2.15	0.60
1:F:151:ILE:HG13	1:F:152:ARG:N	2.15	0.60
1:F:364:ILE:HD13	1:F:364:ILE:N	2.15	0.60
1:C:246:LYS:HD2	1:C:246:LYS:C	2.21	0.60
1:D:107:HIS:O	1:E:29:GLU:CG	2.49	0.60
1:E:93:ILE:HD11	1:E:396:VAL:CG2	2.31	0.60
1:E:196:LEU:HD12	1:E:298:TYR:HB3	1.82	0.60
1:G:151:ILE:HG13	1:G:152:ARG:N	2.15	0.60
1:G:196:LEU:HD12	1:G:298:TYR:HB3	1.82	0.60
1:B:279:GLN:OE1	1:B:295:ILE:HG23	2.02	0.60
1:C:101:VAL:HG21	1:C:400:ILE:HD11	1.83	0.60
1:D:151:ILE:HG13	1:D:152:ARG:N	2.15	0.60
1:F:28:ARG:HD3	1:F:54:TRP:HZ3	1.61	0.60
1:G:364:ILE:HD13	1:G:364:ILE:N	2.15	0.60
1:B:189:VAL:HG22	1:B:190:THR:N	2.16	0.60
1:B:246:LYS:HG2	1:B:252:GLU:C	2.21	0.60
1:B:364:ILE:HD13	1:B:364:ILE:N	2.16	0.60
1:C:108:ASP:HA	1:D:29:GLU:OE2	1.99	0.60
1:E:201:VAL:O	1:F:411:ALA:CA	2.49	0.60
1:E:238:LYS:O	1:F:257:ILE:HD12	2.01	0.60
1:E:364:ILE:HD13	1:E:364:ILE:N	2.16	0.60
1:F:246:LYS:HG2	1:F:252:GLU:C	2.21	0.60
1:F:401:THR:HG22	1:F:402:GLY:N	2.15	0.60
1:G:93:ILE:HD11	1:G:396:VAL:CG2	2.31	0.60
1:A:151:ILE:HG13	1:A:152:ARG:N	2.15	0.60
1:A:229:LYS:N	1:A:229:LYS:HD2	2.16	0.60
1:C:151:ILE:HG13	1:C:152:ARG:N	2.15	0.60
1:D:279:GLN:OE1	1:D:295:ILE:HG23	2.02	0.60
1:E:235:LEU:HB3	1:E:263:GLN:HG3	1.83	0.60
1:F:115:PRO:CG	1:F:391:ARG:HG2	2.31	0.60
1:F:235:LEU:HB3	1:F:263:GLN:HG3	1.83	0.60
1:G:22:LYS:HA	1:G:22:LYS:HZ3	1.65	0.60
1:G:189:VAL:HG22	1:G:190:THR:N	2.16	0.60
1:G:279:GLN:OE1	1:G:295:ILE:HG23	2.02	0.60
1:A:364:ILE:HD13	1:A:364:ILE:N	2.15	0.60
1:B:229:LYS:HD2	1:B:229:LYS:N	2.16	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:93:ILE:HD11	1:C:396:VAL:CG2	2.31	0.60
1:C:103:TRP:HE1	1:D:364:ILE:CG2	2.13	0.60
1:C:323:ARG:HG3	1:C:338:ASN:HA	1.84	0.60
1:D:196:LEU:HD12	1:D:298:TYR:HB3	1.82	0.60
1:D:199:THR:CG2	1:D:294:LYS:HD2	2.32	0.60
1:A:196:LEU:HD12	1:A:298:TYR:HB3	1.82	0.60
1:B:93:ILE:HD11	1:B:396:VAL:CG2	2.31	0.60
1:D:323:ARG:HG3	1:D:338:ASN:HA	1.84	0.60
1:F:189:VAL:HG22	1:F:190:THR:N	2.16	0.60
1:G:149:TRP:CD1	1:G:172:VAL:HG12	2.37	0.60
1:A:257:ILE:HD12	1:G:238:LYS:O	2.01	0.60
1:B:150:VAL:CG1	1:B:170:ILE:H	2.07	0.60
1:B:323:ARG:HG3	1:B:338:ASN:HA	1.84	0.60
1:C:118:TYR:HE1	1:C:134:GLN:CB	2.15	0.60
1:F:101:VAL:HG12	1:F:104:ARG:HH21	1.64	0.60
1:F:364:ILE:HD13	1:F:364:ILE:H	1.64	0.60
1:B:114:LYS:HB2	1:B:115:PRO:HD3	1.84	0.60
1:B:115:PRO:CG	1:B:391:ARG:HG2	2.31	0.60
1:B:199:THR:CG2	1:B:294:LYS:HD2	2.32	0.60
1:B:216:ASP:O	1:C:279:GLN:HG3	2.02	0.60
1:E:12:PHE:CE2	1:E:14:LEU:HB2	2.37	0.60
1:E:22:LYS:HA	1:E:22:LYS:HZ2	1.67	0.60
1:E:279:GLN:OE1	1:E:295:ILE:HG23	2.02	0.60
1:E:375:TRP:HA	1:E:375:TRP:HE3	1.66	0.60
1:A:114:LYS:HB2	1:A:115:PRO:HD3	1.84	0.60
1:A:118:TYR:HE1	1:A:134:GLN:CB	2.15	0.60
1:C:189:VAL:HG22	1:C:190:THR:N	2.16	0.60
1:D:149:TRP:CD1	1:D:172:VAL:HG12	2.37	0.60
1:E:189:VAL:HG22	1:E:190:THR:N	2.16	0.60
1:F:12:PHE:CE2	1:F:14:LEU:HB2	2.37	0.60
1:F:149:TRP:CD1	1:F:172:VAL:HG12	2.37	0.60
1:G:12:PHE:CE2	1:G:14:LEU:HB2	2.37	0.60
1:G:118:TYR:HE1	1:G:134:GLN:CB	2.15	0.60
1:A:93:ILE:HD11	1:A:396:VAL:CG2	2.31	0.59
1:A:199:THR:CG2	1:A:294:LYS:HD2	2.32	0.59
1:B:101:VAL:HG21	1:B:400:ILE:HD11	1.83	0.59
1:B:151:ILE:HG13	1:B:152:ARG:N	2.15	0.59
1:B:247:TRP:CB	1:B:251:GLY:HA3	2.27	0.59
1:D:91:LEU:HD23	1:D:396:VAL:CG2	2.32	0.59
1:D:189:VAL:HG22	1:D:190:THR:N	2.16	0.59
1:D:247:TRP:CB	1:D:251:GLY:HA3	2.27	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:368:VAL:HG22	1:D:370:TRP:CZ2	2.37	0.59
1:E:91:LEU:HD23	1:E:396:VAL:CG2	2.32	0.59
1:E:150:VAL:CG1	1:E:170:ILE:H	2.07	0.59
1:A:246:LYS:HG2	1:A:252:GLU:C	2.21	0.59
1:A:279:GLN:OE1	1:A:295:ILE:HG23	2.02	0.59
1:C:142:VAL:HG13	1:C:150:VAL:HG23	1.83	0.59
1:C:368:VAL:HG22	1:C:370:TRP:CZ2	2.37	0.59
1:D:12:PHE:CE2	1:D:14:LEU:HB2	2.37	0.59
1:E:149:TRP:CD1	1:E:172:VAL:HG12	2.37	0.59
1:F:91:LEU:HD23	1:F:396:VAL:CG2	2.32	0.59
1:G:101:VAL:HG23	1:G:102:GLN:N	2.18	0.59
1:G:113:ILE:HD12	1:G:113:ILE:N	2.17	0.59
1:G:114:LYS:HB2	1:G:115:PRO:HD3	1.83	0.59
1:B:91:LEU:HD23	1:B:396:VAL:CG2	2.32	0.59
1:C:199:THR:CG2	1:C:294:LYS:HD2	2.32	0.59
1:D:25:PRO:HA	1:D:74:TRP:HD1	1.63	0.59
1:D:277:LEU:N	1:D:277:LEU:HD12	2.18	0.59
1:E:118:TYR:HE1	1:E:134:GLN:CB	2.15	0.59
1:E:323:ARG:HG3	1:E:338:ASN:HA	1.84	0.59
1:F:93:ILE:HD11	1:F:396:VAL:CG2	2.31	0.59
1:F:279:GLN:OE1	1:F:295:ILE:HG23	2.02	0.59
1:G:246:LYS:HG2	1:G:252:GLU:C	2.21	0.59
1:B:22:LYS:HA	1:B:22:LYS:HZ3	1.65	0.59
1:B:241:THR:CA	1:C:251:GLY:O	2.50	0.59
1:D:28:ARG:HD3	1:D:54:TRP:HZ3	1.61	0.59
1:D:118:TYR:HE1	1:D:134:GLN:CB	2.15	0.59
1:E:222:ASP:O	1:F:273:THR:OG1	2.15	0.59
1:G:199:THR:CG2	1:G:294:LYS:HD2	2.32	0.59
1:G:310:ALA:CB	1:G:397:ARG:HD2	2.26	0.59
1:B:277:LEU:HD12	1:B:277:LEU:N	2.18	0.59
1:C:114:LYS:HB2	1:C:115:PRO:HD3	1.84	0.59
1:C:323:ARG:HG3	1:C:337:PRO:O	2.03	0.59
1:D:93:ILE:HD11	1:D:396:VAL:CG2	2.31	0.59
1:D:101:VAL:HG23	1:D:102:GLN:N	2.18	0.59
1:D:150:VAL:HG12	1:D:170:ILE:N	2.07	0.59
1:D:375:TRP:HA	1:D:375:TRP:HE3	1.65	0.59
1:E:17:GLY:HA2	1:E:74:TRP:CH2	2.37	0.59
1:E:239:VAL:HA	1:F:257:ILE:CD1	2.32	0.59
1:F:25:PRO:HA	1:F:74:TRP:HD1	1.63	0.59
1:F:113:ILE:HD12	1:F:113:ILE:N	2.17	0.59
1:F:118:TYR:HE1	1:F:134:GLN:CB	2.15	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:277:LEU:HD12	1:G:277:LEU:N	2.18	0.59
1:B:17:GLY:HA2	1:B:74:TRP:CH2	2.37	0.59
1:B:149:TRP:CD1	1:B:172:VAL:HG12	2.37	0.59
1:C:101:VAL:HG23	1:C:102:GLN:N	2.17	0.59
1:D:210:THR:CG2	1:D:211:PRO:HD3	2.33	0.59
1:E:114:LYS:HB2	1:E:115:PRO:HD3	1.84	0.59
1:E:199:THR:CG2	1:E:294:LYS:HD2	2.32	0.59
1:F:17:GLY:HA2	1:F:74:TRP:CH2	2.37	0.59
1:F:101:VAL:HG23	1:F:102:GLN:N	2.18	0.59
1:F:199:THR:CG2	1:F:294:LYS:HD2	2.32	0.59
1:A:149:TRP:CD1	1:A:172:VAL:HG12	2.37	0.59
1:A:277:LEU:N	1:A:277:LEU:HD12	2.18	0.59
1:C:91:LEU:HD23	1:C:396:VAL:CG2	2.32	0.59
1:C:279:GLN:OE1	1:C:295:ILE:HG23	2.02	0.59
1:E:204:ALA:CB	1:F:414:ILE:CD1	2.77	0.59
1:E:226:ASN:O	1:F:270:GLY:N	2.36	0.59
1:F:323:ARG:HG3	1:F:337:PRO:O	2.03	0.59
1:A:91:LEU:HD23	1:A:396:VAL:CG2	2.32	0.59
1:A:101:VAL:HG23	1:A:102:GLN:N	2.17	0.59
1:A:113:ILE:HD12	1:A:113:ILE:N	2.18	0.59
1:A:250:VAL:HG13	1:G:243:ASN:HD22	1.68	0.59
1:A:323:ARG:HG3	1:A:337:PRO:O	2.03	0.59
1:E:368:VAL:HG22	1:E:370:TRP:CZ2	2.37	0.59
1:G:210:THR:CG2	1:G:211:PRO:HD3	2.33	0.59
1:A:12:PHE:CE2	1:A:14:LEU:HB2	2.37	0.59
1:D:17:GLY:HA2	1:D:74:TRP:CH2	2.37	0.59
1:D:47:ILE:HG23	1:D:55:VAL:CG1	2.33	0.59
1:E:277:LEU:HD12	1:E:277:LEU:N	2.18	0.59
1:F:210:THR:CG2	1:F:211:PRO:HD3	2.33	0.59
1:G:323:ARG:HG3	1:G:337:PRO:O	2.03	0.59
1:A:210:THR:CG2	1:A:211:PRO:HD3	2.33	0.59
1:B:101:VAL:HG23	1:B:102:GLN:N	2.17	0.59
1:B:368:VAL:HG22	1:B:370:TRP:CZ2	2.38	0.59
1:C:230:THR:N	1:D:266:ALA:O	2.33	0.59
1:E:142:VAL:O	1:F:32:GLN:CD	2.40	0.59
1:F:143:THR:CB	1:G:35:LYS:NZ	2.64	0.59
1:G:91:LEU:HD23	1:G:396:VAL:CG2	2.32	0.59
1:G:368:VAL:HG22	1:G:370:TRP:CZ2	2.38	0.59
1:A:47:ILE:HG23	1:A:55:VAL:CG1	2.33	0.58
1:B:113:ILE:HD12	1:B:113:ILE:N	2.17	0.58
1:B:118:TYR:HE1	1:B:134:GLN:CB	2.15	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:323:ARG:HG3	1:B:337:PRO:O	2.03	0.58
1:C:17:GLY:HA2	1:C:74:TRP:CH2	2.37	0.58
1:F:114:LYS:HB2	1:F:115:PRO:HD3	1.84	0.58
1:F:277:LEU:N	1:F:277:LEU:HD12	2.18	0.58
1:F:294:LYS:CE	1:G:304:TYR:CZ	2.86	0.58
1:G:152:ARG:HG3	1:G:167:LYS:HD2	1.85	0.58
1:A:323:ARG:HG3	1:A:338:ASN:HA	1.84	0.58
1:B:12:PHE:CE2	1:B:14:LEU:HB2	2.37	0.58
1:B:47:ILE:HG23	1:B:55:VAL:CG1	2.33	0.58
1:B:238:LYS:O	1:C:257:ILE:HD12	2.04	0.58
1:C:12:PHE:CE2	1:C:14:LEU:HB2	2.37	0.58
1:C:241:THR:CB	1:D:251:GLY:O	2.51	0.58
1:D:114:LYS:HB2	1:D:115:PRO:HD3	1.84	0.58
1:D:152:ARG:HG3	1:D:167:LYS:HD2	1.85	0.58
1:E:150:VAL:HG12	1:E:170:ILE:N	2.07	0.58
1:G:47:ILE:HG23	1:G:55:VAL:CG1	2.33	0.58
1:G:142:VAL:HG13	1:G:150:VAL:HG23	1.83	0.58
1:A:93:ILE:HD12	1:A:93:ILE:N	2.19	0.58
1:A:368:VAL:HG22	1:A:370:TRP:CZ2	2.38	0.58
1:B:210:THR:CG2	1:B:211:PRO:HD3	2.33	0.58
1:C:113:ILE:HD12	1:C:113:ILE:N	2.17	0.58
1:C:204:ALA:CA	1:D:414:ILE:HD11	2.32	0.58
1:D:113:ILE:HD12	1:D:113:ILE:N	2.17	0.58
1:F:243:ASN:ND2	1:G:250:VAL:HG11	2.16	0.58
1:G:17:GLY:HA2	1:G:74:TRP:CH2	2.37	0.58
1:G:93:ILE:HD12	1:G:93:ILE:N	2.19	0.58
1:A:152:ARG:HG3	1:A:167:LYS:HD2	1.86	0.58
1:A:204:ALA:CA	1:B:414:ILE:HD11	2.34	0.58
1:C:47:ILE:HG23	1:C:55:VAL:CG1	2.33	0.58
1:E:210:THR:CG2	1:E:211:PRO:HD3	2.33	0.58
1:E:294:LYS:HE2	1:F:304:TYR:HE1	1.65	0.58
1:F:93:ILE:N	1:F:93:ILE:HD12	2.19	0.58
1:F:142:VAL:HG13	1:F:150:VAL:HG23	1.83	0.58
1:F:368:VAL:HG22	1:F:370:TRP:CZ2	2.38	0.58
1:B:93:ILE:HD12	1:B:93:ILE:N	2.19	0.58
1:C:23:TYR:CB	1:C:74:TRP:HB3	2.34	0.58
1:C:149:TRP:CD1	1:C:172:VAL:HG12	2.37	0.58
1:D:323:ARG:HG3	1:D:337:PRO:O	2.03	0.58
1:E:25:PRO:HA	1:E:74:TRP:HD1	1.63	0.58
1:E:203:TRP:O	1:F:413:ASN:HA	2.03	0.58
1:F:47:ILE:HG23	1:F:55:VAL:CG1	2.33	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:241:THR:CA	1:G:251:GLY:O	2.51	0.58
1:G:323:ARG:HG3	1:G:338:ASN:HA	1.84	0.58
1:A:285:VAL:HG23	1:A:285:VAL:O	2.04	0.58
1:B:203:TRP:HE1	1:C:413:ASN:ND2	1.71	0.58
1:C:207:ASP:OD2	1:E:185:LYS:CD	2.52	0.58
1:C:277:LEU:N	1:C:277:LEU:HD12	2.18	0.58
1:D:422:LEU:HD13	1:F:182:ASP:CB	2.32	0.58
1:E:47:ILE:HG23	1:E:55:VAL:CG1	2.33	0.58
1:E:93:ILE:HD12	1:E:93:ILE:N	2.19	0.58
1:E:142:VAL:HG13	1:E:150:VAL:HG23	1.83	0.58
1:E:215:TYR:HE1	1:F:279:GLN:HE22	1.42	0.58
1:F:22:LYS:HA	1:F:22:LYS:HZ3	1.67	0.58
1:F:91:LEU:HG	1:F:93:ILE:CD1	2.34	0.58
1:A:91:LEU:HG	1:A:93:ILE:CD1	2.34	0.58
1:B:23:TYR:CB	1:B:74:TRP:HB3	2.34	0.58
1:D:389:LEU:O	1:D:392:VAL:HG22	2.04	0.58
1:E:113:ILE:HD12	1:E:113:ILE:N	2.17	0.58
1:F:238:LYS:O	1:G:257:ILE:HD12	2.04	0.58
1:F:323:ARG:HG3	1:F:338:ASN:HA	1.84	0.58
1:G:24:ARG:HG2	1:G:78:THR:CA	2.34	0.58
1:A:8:GLN:HA	1:A:10:ARG:NH1	2.19	0.58
1:C:24:ARG:O	1:C:24:ARG:HG3	2.04	0.58
1:C:226:ASN:O	1:D:269:ASN:CA	2.52	0.58
1:D:26:VAL:HG23	1:D:51:ALA:H	1.69	0.58
1:E:294:LYS:HE3	1:F:304:TYR:CZ	2.38	0.58
1:A:23:TYR:CB	1:A:74:TRP:HB3	2.34	0.58
1:A:101:VAL:HG21	1:A:400:ILE:HD11	1.82	0.58
1:A:389:LEU:O	1:A:392:VAL:HG22	2.04	0.58
1:C:93:ILE:N	1:C:93:ILE:HD12	2.19	0.58
1:C:152:ARG:HG3	1:C:167:LYS:HD2	1.85	0.58
1:G:8:GLN:HA	1:G:10:ARG:NH1	2.19	0.58
1:G:389:LEU:O	1:G:392:VAL:HG22	2.04	0.58
1:A:17:GLY:HA2	1:A:74:TRP:CH2	2.37	0.58
1:C:8:GLN:HA	1:C:10:ARG:NH1	2.19	0.58
1:C:389:LEU:O	1:C:392:VAL:HG22	2.04	0.58
1:E:323:ARG:HG3	1:E:337:PRO:O	2.03	0.58
1:F:204:ALA:CA	1:G:414:ILE:CD1	2.81	0.58
1:B:8:GLN:HA	1:B:10:ARG:NH1	2.19	0.57
1:D:91:LEU:HG	1:D:93:ILE:CD1	2.34	0.57
1:D:93:ILE:HD12	1:D:93:ILE:N	2.19	0.57
1:E:101:VAL:HG23	1:E:102:GLN:N	2.18	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:115:PRO:CG	1:E:391:ARG:HG2	2.31	0.57
1:F:8:GLN:HA	1:F:10:ARG:NH1	2.19	0.57
1:A:134:GLN:HA	1:A:134:GLN:NE2	2.19	0.57
1:A:250:VAL:CB	1:G:243:ASN:HB3	2.33	0.57
1:B:389:LEU:O	1:B:392:VAL:HG22	2.04	0.57
1:C:230:THR:O	1:D:266:ALA:N	2.36	0.57
1:C:375:TRP:HA	1:C:375:TRP:HE3	1.65	0.57
1:E:389:LEU:O	1:E:392:VAL:HG22	2.04	0.57
1:F:389:LEU:O	1:F:392:VAL:HG22	2.04	0.57
1:B:134:GLN:HA	1:B:134:GLN:NE2	2.19	0.57
1:C:26:VAL:HG23	1:C:51:ALA:H	1.69	0.57
1:C:150:VAL:HG12	1:C:170:ILE:N	2.08	0.57
1:C:210:THR:CG2	1:C:211:PRO:HD3	2.33	0.57
1:D:323:ARG:HD2	1:D:337:PRO:O	2.04	0.57
1:E:26:VAL:HG23	1:E:51:ALA:H	1.69	0.57
1:E:422:LEU:HD13	1:G:182:ASP:HA	1.86	0.57
1:F:8:GLN:HA	1:F:10:ARG:HH12	1.69	0.57
1:F:384:THR:HG22	1:F:384:THR:O	2.04	0.57
1:G:26:VAL:HG23	1:G:51:ALA:H	1.69	0.57
1:B:24:ARG:HG3	1:B:24:ARG:O	2.04	0.57
1:B:91:LEU:HG	1:B:93:ILE:CD1	2.34	0.57
1:E:244:LYS:HE3	1:E:254:GLU:OE1	2.05	0.57
1:F:285:VAL:HG23	1:F:285:VAL:O	2.04	0.57
1:G:285:VAL:HG23	1:G:285:VAL:O	2.04	0.57
1:A:384:THR:HG22	1:A:384:THR:O	2.05	0.57
1:B:24:ARG:HG2	1:B:78:THR:CA	2.34	0.57
1:C:384:THR:O	1:C:384:THR:HG22	2.05	0.57
1:F:23:TYR:CB	1:F:74:TRP:HB3	2.34	0.57
1:F:24:ARG:HG2	1:F:78:THR:CA	2.34	0.57
1:A:24:ARG:HG2	1:A:78:THR:CA	2.34	0.57
1:B:202:GLY:HA2	1:C:412:GLY:O	2.04	0.57
1:C:117:SER:OG	1:C:135:TYR:HB2	2.05	0.57
1:C:294:LYS:HE2	1:D:304:TYR:OH	2.04	0.57
1:C:323:ARG:HD2	1:C:337:PRO:O	2.05	0.57
1:D:23:TYR:CB	1:D:74:TRP:HB3	2.34	0.57
1:D:24:ARG:HG2	1:D:78:THR:CA	2.34	0.57
1:E:384:THR:O	1:E:384:THR:HG22	2.04	0.57
1:C:422:LEU:HD13	1:E:182:ASP:CB	2.31	0.57
1:D:108:ASP:HA	1:E:29:GLU:OE2	2.04	0.57
1:E:8:GLN:HA	1:E:10:ARG:NH1	2.19	0.57
1:B:117:SER:OG	1:B:135:TYR:HB2	2.05	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:244:LYS:HE3	1:B:254:GLU:OE1	2.04	0.57
1:B:323:ARG:HD2	1:B:337:PRO:O	2.05	0.57
1:C:2:GLU:HG3	1:C:2:GLU:O	2.05	0.57
1:C:5:TYR:HD2	1:C:361:LYS:HB3	1.69	0.57
1:C:150:VAL:CG1	1:C:170:ILE:H	2.07	0.57
1:D:115:PRO:CG	1:D:391:ARG:HG2	2.31	0.57
1:D:117:SER:OG	1:D:135:TYR:HB2	2.05	0.57
1:D:143:THR:HG21	1:E:35:LYS:HE2	1.79	0.57
1:E:241:THR:CA	1:F:251:GLY:O	2.52	0.57
1:F:4:VAL:HG13	1:F:76:TYR:HE2	1.70	0.57
1:G:384:THR:O	1:G:384:THR:HG22	2.04	0.57
1:A:91:LEU:HG	1:A:93:ILE:HD12	1.87	0.57
1:A:93:ILE:HD13	1:A:396:VAL:HG22	1.87	0.57
1:A:204:ALA:HA	1:B:414:ILE:HD11	1.85	0.57
1:B:152:ARG:HG3	1:B:167:LYS:HD2	1.85	0.57
1:D:114:LYS:HB2	1:D:115:PRO:CD	2.35	0.57
1:D:244:LYS:HE3	1:D:254:GLU:OE1	2.04	0.57
1:E:114:LYS:HB2	1:E:115:PRO:CD	2.35	0.57
1:E:134:GLN:HA	1:E:134:GLN:NE2	2.19	0.57
1:E:285:VAL:HG23	1:E:285:VAL:O	2.04	0.57
1:F:91:LEU:HG	1:F:93:ILE:HD12	1.87	0.57
1:F:244:LYS:HE3	1:F:254:GLU:OE1	2.05	0.57
1:G:91:LEU:HG	1:G:93:ILE:CD1	2.34	0.57
1:B:93:ILE:HD13	1:B:396:VAL:HG22	1.87	0.57
1:D:8:GLN:HA	1:D:10:ARG:HH12	1.69	0.57
1:D:24:ARG:HG3	1:D:24:ARG:O	2.04	0.57
1:E:23:TYR:CB	1:E:74:TRP:HB3	2.34	0.57
1:E:91:LEU:HG	1:E:93:ILE:HD12	1.87	0.57
1:F:114:LYS:HB2	1:F:115:PRO:CD	2.35	0.57
1:G:4:VAL:HG13	1:G:76:TYR:HE2	1.70	0.57
1:G:50:LEU:HD22	1:G:52:ASN:H	1.70	0.57
1:G:101:VAL:HG21	1:G:400:ILE:HD11	1.82	0.57
1:G:134:GLN:HA	1:G:134:GLN:NE2	2.19	0.57
1:A:117:SER:OG	1:A:135:TYR:HB2	2.05	0.56
1:A:244:LYS:HE3	1:A:254:GLU:OE1	2.04	0.56
1:B:2:GLU:O	1:B:2:GLU:HG3	2.05	0.56
1:C:24:ARG:HG2	1:C:78:THR:CA	2.34	0.56
1:C:91:LEU:HG	1:C:93:ILE:CD1	2.34	0.56
1:C:134:GLN:NE2	1:C:134:GLN:HA	2.19	0.56
1:E:91:LEU:HG	1:E:93:ILE:CD1	2.34	0.56
1:F:93:ILE:HD13	1:F:396:VAL:HG22	1.87	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:91:LEU:HG	1:G:93:ILE:HD12	1.87	0.56
1:G:114:LYS:HB2	1:G:115:PRO:CD	2.35	0.56
1:A:215:TYR:CE1	1:B:414:ILE:HD12	2.40	0.56
1:B:26:VAL:HG23	1:B:51:ALA:H	1.69	0.56
1:B:199:THR:HG21	1:B:294:LYS:HD2	1.87	0.56
1:C:199:THR:HG21	1:C:294:LYS:HD2	1.87	0.56
1:C:242:LYS:H	1:D:251:GLY:C	2.08	0.56
1:C:285:VAL:HG23	1:C:285:VAL:O	2.04	0.56
1:D:8:GLN:HA	1:D:10:ARG:NH1	2.19	0.56
1:D:107:HIS:O	1:E:29:GLU:CD	2.43	0.56
1:E:24:ARG:HG2	1:E:78:THR:CA	2.34	0.56
1:E:24:ARG:HG3	1:E:24:ARG:O	2.04	0.56
1:E:200:VAL:HG23	1:F:410:PHE:O	2.05	0.56
1:G:93:ILE:HD13	1:G:396:VAL:HG22	1.87	0.56
1:G:117:SER:OG	1:G:135:TYR:HB2	2.05	0.56
1:A:323:ARG:HD2	1:A:337:PRO:O	2.05	0.56
1:B:16:GLN:H	1:B:16:GLN:CD	2.09	0.56
1:B:182:ASP:HB3	1:G:422:LEU:HD13	1.83	0.56
1:C:224:ALA:O	1:D:271:GLY:HA3	2.05	0.56
1:C:227:TRP:HD1	1:C:229:LYS:HZ1	1.52	0.56
1:C:290:LYS:HD3	1:C:292:PRO:HD3	1.88	0.56
1:D:16:GLN:H	1:D:16:GLN:CD	2.09	0.56
1:D:134:GLN:HA	1:D:134:GLN:NE2	2.19	0.56
1:D:142:VAL:HG13	1:D:150:VAL:HG23	1.83	0.56
1:D:290:LYS:HD3	1:D:292:PRO:HD3	1.88	0.56
1:D:384:THR:HG22	1:D:384:THR:O	2.04	0.56
1:E:117:SER:OG	1:E:135:TYR:HB2	2.05	0.56
1:E:285:VAL:N	1:E:286:PRO:HD3	2.20	0.56
1:E:323:ARG:HD2	1:E:337:PRO:O	2.04	0.56
1:F:189:VAL:HB	1:F:304:TYR:CZ	2.40	0.56
1:F:199:THR:HG21	1:F:294:LYS:HD2	1.87	0.56
1:F:323:ARG:HD2	1:F:337:PRO:O	2.04	0.56
1:G:23:TYR:CB	1:G:74:TRP:HB3	2.34	0.56
1:G:24:ARG:HG3	1:G:24:ARG:O	2.04	0.56
1:G:244:LYS:HE3	1:G:254:GLU:OE1	2.04	0.56
1:G:290:LYS:HD3	1:G:292:PRO:HD3	1.88	0.56
1:A:227:TRP:HE3	1:B:269:ASN:HB3	1.62	0.56
1:A:285:VAL:N	1:A:286:PRO:HD3	2.20	0.56
1:B:4:VAL:HG13	1:B:76:TYR:HE2	1.70	0.56
1:B:285:VAL:HG23	1:B:285:VAL:O	2.04	0.56
1:B:384:THR:O	1:B:384:THR:HG22	2.04	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:2:GLU:HG3	1:D:2:GLU:O	2.05	0.56
1:E:16:GLN:CD	1:E:16:GLN:H	2.09	0.56
1:F:2:GLU:HG3	1:F:2:GLU:O	2.05	0.56
1:F:203:TRP:CE2	1:G:413:ASN:ND2	2.73	0.56
1:F:285:VAL:N	1:F:286:PRO:HD3	2.20	0.56
1:A:22:LYS:HA	1:A:22:LYS:HZ3	1.68	0.56
1:A:189:VAL:HB	1:A:304:TYR:CZ	2.40	0.56
1:B:5:TYR:HD2	1:B:361:LYS:HB3	1.69	0.56
1:C:244:LYS:HE3	1:C:254:GLU:OE1	2.04	0.56
1:E:228:SER:O	1:F:268:GLN:N	2.38	0.56
1:F:26:VAL:HG23	1:F:51:ALA:H	1.69	0.56
1:A:24:ARG:HG3	1:A:24:ARG:O	2.04	0.56
1:A:26:VAL:HG23	1:A:51:ALA:H	1.69	0.56
1:B:290:LYS:HD3	1:B:292:PRO:HD3	1.88	0.56
1:C:114:LYS:HB2	1:C:115:PRO:CD	2.35	0.56
1:D:285:VAL:HG23	1:D:285:VAL:O	2.04	0.56
1:E:4:VAL:HG13	1:E:76:TYR:HE2	1.70	0.56
1:E:215:TYR:CD1	1:F:414:ILE:CD1	2.73	0.56
1:F:24:ARG:HG3	1:F:24:ARG:O	2.04	0.56
1:F:134:GLN:NE2	1:F:134:GLN:HA	2.19	0.56
1:A:290:LYS:HD3	1:A:292:PRO:HD3	1.88	0.56
1:C:4:VAL:HG13	1:C:76:TYR:HE2	1.70	0.56
1:C:16:GLN:CD	1:C:16:GLN:H	2.09	0.56
1:C:93:ILE:HD13	1:C:396:VAL:HG22	1.87	0.56
1:D:81:VAL:HG12	1:D:82:THR:N	2.21	0.56
1:D:91:LEU:HG	1:D:93:ILE:HD12	1.87	0.56
1:D:191:GLN:NE2	1:E:178:ASN:OD1	2.38	0.56
1:E:93:ILE:HD13	1:E:396:VAL:HG22	1.87	0.56
1:E:241:THR:CB	1:F:251:GLY:O	2.52	0.56
1:E:290:LYS:HD3	1:E:292:PRO:HD3	1.88	0.56
1:G:16:GLN:H	1:G:16:GLN:CD	2.09	0.56
1:A:2:GLU:HG3	1:A:2:GLU:O	2.05	0.56
1:A:196:LEU:HD11	1:A:296:GLU:CG	2.36	0.56
1:B:142:VAL:HG13	1:B:150:VAL:HG23	1.83	0.56
1:C:285:VAL:N	1:C:286:PRO:HD3	2.21	0.56
1:C:350:ASP:CG	1:C:351:LYS:HD2	2.27	0.56
1:E:81:VAL:HG12	1:E:82:THR:N	2.21	0.56
1:F:50:LEU:HD22	1:F:52:ASN:H	1.70	0.56
1:F:117:SER:OG	1:F:135:TYR:HB2	2.05	0.56
1:A:8:GLN:HA	1:A:10:ARG:HH12	1.69	0.56
1:A:191:GLN:H	1:B:178:ASN:HB2	1.71	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:91:LEU:HG	1:B:93:ILE:HD12	1.87	0.56
1:C:193:ASP:HA	1:D:176:ALA:HB1	1.84	0.56
1:C:294:LYS:HE2	1:D:304:TYR:CZ	2.41	0.56
1:E:2:GLU:HG3	1:E:2:GLU:O	2.05	0.56
1:E:239:VAL:HA	1:F:257:ILE:HD12	1.88	0.56
1:E:310:ALA:O	1:E:397:ARG:HB2	2.06	0.56
1:E:355:ILE:HD12	1:E:359:TRP:CZ2	2.41	0.56
1:F:16:GLN:H	1:F:16:GLN:CD	2.09	0.56
1:F:204:ALA:CA	1:G:414:ILE:HD11	2.36	0.56
1:F:290:LYS:HD3	1:F:292:PRO:HD3	1.88	0.56
1:G:2:GLU:HG3	1:G:2:GLU:O	2.05	0.56
1:G:323:ARG:HD2	1:G:337:PRO:O	2.04	0.56
1:A:193:ASP:HA	1:B:176:ALA:HB1	1.87	0.56
1:B:152:ARG:HD3	1:B:167:LYS:HG2	1.88	0.56
1:B:189:VAL:HB	1:B:304:TYR:CZ	2.40	0.56
1:B:231:ASN:HD22	1:B:233:TYR:HE1	1.54	0.56
1:C:103:TRP:CZ2	1:D:364:ILE:HA	2.41	0.56
1:C:173:SER:HB3	1:C:315:ASP:O	2.06	0.56
1:D:93:ILE:HD13	1:D:396:VAL:HG22	1.87	0.56
1:D:189:VAL:HB	1:D:304:TYR:CZ	2.40	0.56
1:D:285:VAL:N	1:D:286:PRO:HD3	2.20	0.56
1:E:8:GLN:HA	1:E:10:ARG:HH12	1.69	0.56
1:E:91:LEU:CB	1:E:396:VAL:HG23	2.26	0.56
1:E:226:ASN:O	1:F:269:ASN:CA	2.53	0.56
1:F:350:ASP:CG	1:F:351:LYS:HD2	2.26	0.56
1:G:8:GLN:HA	1:G:10:ARG:HH12	1.69	0.56
1:G:189:VAL:HB	1:G:304:TYR:CZ	2.40	0.56
1:G:196:LEU:HD11	1:G:296:GLU:CG	2.36	0.56
1:G:285:VAL:N	1:G:286:PRO:HD3	2.20	0.56
1:A:250:VAL:HA	1:G:243:ASN:CB	2.29	0.55
1:B:50:LEU:HD22	1:B:52:ASN:H	1.71	0.55
1:D:4:VAL:HG13	1:D:76:TYR:HE2	1.70	0.55
1:D:199:THR:HG21	1:D:294:LYS:HD2	1.87	0.55
1:D:355:ILE:HD12	1:D:359:TRP:CZ2	2.42	0.55
1:E:199:THR:HG21	1:E:294:LYS:HD2	1.87	0.55
1:F:22:LYS:HA	1:F:22:LYS:HZ2	1.69	0.55
1:G:350:ASP:CG	1:G:351:LYS:HD2	2.27	0.55
1:A:5:TYR:HD2	1:A:361:LYS:HB3	1.69	0.55
1:A:199:THR:HG21	1:A:294:LYS:HD2	1.87	0.55
1:B:114:LYS:HB2	1:B:115:PRO:CD	2.35	0.55
1:B:218:THR:HB	1:C:278:SER:O	2.05	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:152:ARG:HD3	1:C:167:LYS:HG2	1.88	0.55
1:D:173:SER:HB3	1:D:315:ASP:O	2.07	0.55
1:E:209:ASP:HB2	1:E:288:ARG:HH12	1.71	0.55
1:F:81:VAL:HG12	1:F:82:THR:N	2.21	0.55
1:F:150:VAL:HG12	1:F:170:ILE:N	2.07	0.55
1:F:224:ALA:O	1:G:271:GLY:HA3	2.05	0.55
1:F:231:ASN:HD22	1:F:233:TYR:HE1	1.54	0.55
1:G:199:THR:HG21	1:G:294:LYS:HD2	1.87	0.55
1:A:50:LEU:HD22	1:A:52:ASN:H	1.70	0.55
1:B:173:SER:HB3	1:B:315:ASP:O	2.06	0.55
1:C:81:VAL:HG12	1:C:82:THR:N	2.21	0.55
1:C:294:LYS:CE	1:D:304:TYR:CE1	2.88	0.55
1:C:355:ILE:HD12	1:C:359:TRP:CZ2	2.41	0.55
1:D:350:ASP:CG	1:D:351:LYS:HD2	2.27	0.55
1:E:196:LEU:HD11	1:E:296:GLU:CG	2.36	0.55
1:F:355:ILE:HD12	1:F:359:TRP:CZ2	2.41	0.55
1:A:22:LYS:HA	1:A:22:LYS:HZ2	1.67	0.55
1:A:114:LYS:HB2	1:A:115:PRO:CD	2.35	0.55
1:A:414:ILE:HD13	1:A:414:ILE:N	2.22	0.55
1:B:8:GLN:HA	1:B:10:ARG:HH12	1.69	0.55
1:C:196:LEU:HD11	1:C:296:GLU:CG	2.36	0.55
1:E:189:VAL:HB	1:E:304:TYR:CZ	2.40	0.55
1:E:414:ILE:HD13	1:E:414:ILE:N	2.22	0.55
1:G:285:VAL:HG11	1:G:291:ILE:CD1	2.37	0.55
1:A:16:GLN:H	1:A:16:GLN:CD	2.09	0.55
1:A:152:ARG:HD3	1:A:167:LYS:HG2	1.88	0.55
1:A:226:ASN:O	1:B:269:ASN:HA	2.06	0.55
1:C:56:ILE:HD11	1:C:65:ILE:HD12	1.89	0.55
1:C:189:VAL:HB	1:C:304:TYR:CZ	2.40	0.55
1:C:209:ASP:HB2	1:C:288:ARG:HH12	1.71	0.55
1:C:231:ASN:HD22	1:C:233:TYR:HE1	1.54	0.55
1:C:239:VAL:HA	1:D:257:ILE:HD12	1.87	0.55
1:D:310:ALA:O	1:D:397:ARG:HB2	2.06	0.55
1:E:22:LYS:HA	1:E:22:LYS:HZ3	1.68	0.55
1:F:150:VAL:CG1	1:F:170:ILE:H	2.07	0.55
1:F:196:LEU:HD11	1:F:296:GLU:CG	2.36	0.55
1:F:285:VAL:HG11	1:F:291:ILE:CD1	2.36	0.55
1:F:310:ALA:O	1:F:397:ARG:HB2	2.06	0.55
1:F:316:LEU:CD2	1:F:318:LEU:HD21	2.36	0.55
1:B:241:THR:C	1:C:251:GLY:O	2.44	0.55
1:B:285:VAL:N	1:B:286:PRO:HD3	2.20	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:314:TYR:HE1	1:C:316:LEU:HB2	1.72	0.55
1:D:56:ILE:HD11	1:D:65:ILE:HD12	1.89	0.55
1:D:196:LEU:HD11	1:D:296:GLU:CG	2.36	0.55
1:E:350:ASP:CG	1:E:351:LYS:HD2	2.26	0.55
1:G:56:ILE:HD11	1:G:65:ILE:HD12	1.89	0.55
1:G:91:LEU:CB	1:G:396:VAL:HG23	2.26	0.55
1:A:128:VAL:HG21	1:A:140:MET:HE2	1.88	0.55
1:A:310:ALA:O	1:A:397:ARG:HB2	2.06	0.55
1:B:310:ALA:O	1:B:397:ARG:HB2	2.06	0.55
1:B:316:LEU:CD2	1:B:318:LEU:HD21	2.36	0.55
1:C:316:LEU:CD2	1:C:318:LEU:HD21	2.36	0.55
1:D:50:LEU:HD22	1:D:52:ASN:H	1.71	0.55
1:E:173:SER:HB3	1:E:315:ASP:O	2.07	0.55
1:E:204:ALA:HA	1:F:414:ILE:CD1	2.37	0.55
1:A:316:LEU:CD2	1:A:318:LEU:HD21	2.36	0.55
1:B:196:LEU:HD11	1:B:296:GLU:CG	2.36	0.55
1:C:414:ILE:HD13	1:C:414:ILE:N	2.22	0.55
1:F:56:ILE:HD11	1:F:65:ILE:HD12	1.89	0.55
1:F:152:ARG:HD3	1:F:167:LYS:HG2	1.88	0.55
1:A:350:ASP:CG	1:A:351:LYS:HD2	2.27	0.55
1:C:14:LEU:HD22	1:C:14:LEU:N	2.22	0.55
1:C:91:LEU:HG	1:C:93:ILE:HD12	1.87	0.55
1:C:310:ALA:O	1:C:397:ARG:HB2	2.06	0.55
1:D:314:TYR:HE1	1:D:316:LEU:HB2	1.72	0.55
1:E:231:ASN:HD22	1:E:233:TYR:HE1	1.54	0.55
1:E:285:VAL:HG11	1:E:291:ILE:CD1	2.36	0.55
1:F:122:TYR:CZ	1:F:385:MET:HG2	2.42	0.55
1:F:314:TYR:HE1	1:F:316:LEU:HB2	1.72	0.55
1:G:173:SER:HB3	1:G:315:ASP:O	2.06	0.55
1:A:56:ILE:HD11	1:A:65:ILE:HD12	1.89	0.55
1:A:122:TYR:CZ	1:A:385:MET:HG2	2.42	0.55
1:A:173:SER:HB3	1:A:315:ASP:O	2.07	0.55
1:A:192:SER:O	1:B:176:ALA:HB3	2.07	0.55
1:B:350:ASP:CG	1:B:351:LYS:HD2	2.27	0.55
1:D:231:ASN:HD22	1:D:233:TYR:HE1	1.54	0.55
1:D:294:LYS:NZ	1:E:304:TYR:CZ	2.74	0.55
1:D:393:LEU:HD13	1:D:393:LEU:C	2.28	0.55
1:E:152:ARG:HD3	1:E:167:LYS:HG2	1.88	0.55
1:E:199:THR:O	1:F:409:GLN:HB2	2.05	0.55
1:F:393:LEU:HD13	1:F:393:LEU:C	2.28	0.55
1:G:22:LYS:HA	1:G:22:LYS:HZ2	1.70	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:4:VAL:HG13	1:A:76:TYR:HE2	1.70	0.54
1:A:99:VAL:HG12	1:A:103:TRP:CD1	2.43	0.54
1:A:314:TYR:HE1	1:A:316:LEU:HB2	1.72	0.54
1:B:56:ILE:HD11	1:B:65:ILE:HD12	1.89	0.54
1:B:355:ILE:HD12	1:B:359:TRP:CZ2	2.41	0.54
1:D:107:HIS:HB3	1:E:29:GLU:HB3	1.88	0.54
1:D:152:ARG:HD3	1:D:167:LYS:HG2	1.88	0.54
1:E:393:LEU:HD13	1:E:393:LEU:C	2.28	0.54
1:F:227:TRP:CZ3	1:G:269:ASN:HB3	2.41	0.54
1:G:122:TYR:CZ	1:G:385:MET:HG2	2.42	0.54
1:B:81:VAL:HG12	1:B:82:THR:N	2.21	0.54
1:B:153:GLY:HA3	1:C:64:GLU:OE2	2.07	0.54
1:B:201:VAL:HG22	1:B:202:GLY:N	2.23	0.54
1:B:355:ILE:HD12	1:B:359:TRP:CE2	2.42	0.54
1:C:207:ASP:OD2	1:E:185:LYS:CG	2.55	0.54
1:C:239:VAL:HG22	1:D:257:ILE:HD11	1.89	0.54
1:C:393:LEU:HD13	1:C:393:LEU:C	2.28	0.54
1:F:173:SER:HB3	1:F:315:ASP:O	2.07	0.54
1:F:318:LEU:HB2	1:F:343:PHE:CE2	2.42	0.54
1:G:81:VAL:HG12	1:G:82:THR:N	2.21	0.54
1:B:73:THR:CG2	1:B:77:PRO:HD2	2.33	0.54
1:C:8:GLN:HA	1:C:10:ARG:HH12	1.69	0.54
1:C:201:VAL:HG22	1:C:202:GLY:N	2.23	0.54
1:D:64:GLU:HB2	1:D:66:LYS:HE3	1.89	0.54
1:D:203:TRP:CD1	1:E:413:ASN:ND2	2.75	0.54
1:D:229:LYS:HA	1:E:267:SER:HA	1.88	0.54
1:D:316:LEU:CD2	1:D:318:LEU:HD21	2.36	0.54
1:E:201:VAL:HG22	1:E:202:GLY:N	2.23	0.54
1:E:318:LEU:HB2	1:E:343:PHE:CE2	2.42	0.54
1:F:14:LEU:HD22	1:F:14:LEU:N	2.22	0.54
1:G:14:LEU:HD22	1:G:14:LEU:N	2.22	0.54
1:G:231:ASN:HD22	1:G:233:TYR:HE1	1.54	0.54
1:A:355:ILE:HD12	1:A:359:TRP:CE2	2.42	0.54
1:C:64:GLU:HB2	1:C:66:LYS:HE3	1.89	0.54
1:C:288:ARG:HH21	1:C:424:ALA:N	2.06	0.54
1:D:227:TRP:HE3	1:E:269:ASN:CB	2.18	0.54
1:D:285:VAL:HG11	1:D:291:ILE:CD1	2.36	0.54
1:D:288:ARG:HH21	1:D:424:ALA:N	2.06	0.54
1:E:99:VAL:CG1	1:F:362:ARG:HG3	2.37	0.54
1:E:122:TYR:CZ	1:E:385:MET:HG2	2.42	0.54
1:F:215:TYR:CD1	1:G:414:ILE:CD1	2.75	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:281:VAL:HG11	1:F:414:ILE:HG21	1.90	0.54
1:G:152:ARG:HD3	1:G:167:LYS:HG2	1.88	0.54
1:G:318:LEU:HB2	1:G:343:PHE:CE2	2.43	0.54
1:A:231:ASN:HD22	1:A:233:TYR:HE1	1.54	0.54
1:B:14:LEU:HD22	1:B:14:LEU:N	2.22	0.54
1:C:355:ILE:HD12	1:C:359:TRP:CE2	2.42	0.54
1:D:201:VAL:HG13	1:E:411:ALA:HB1	1.89	0.54
1:D:355:ILE:HD12	1:D:359:TRP:CE2	2.42	0.54
1:E:355:ILE:HD12	1:E:359:TRP:CE2	2.42	0.54
1:G:99:VAL:HG12	1:G:103:TRP:CD1	2.43	0.54
1:G:355:ILE:HD12	1:G:359:TRP:CZ2	2.41	0.54
1:A:14:LEU:HD22	1:A:14:LEU:N	2.22	0.54
1:A:73:THR:CG2	1:A:77:PRO:HD2	2.33	0.54
1:A:318:LEU:HB2	1:A:343:PHE:CE2	2.43	0.54
1:B:22:LYS:HA	1:B:22:LYS:HZ2	1.70	0.54
1:B:99:VAL:HG12	1:B:103:TRP:CD1	2.43	0.54
1:B:150:VAL:HG12	1:B:170:ILE:N	2.08	0.54
1:D:14:LEU:HD22	1:D:14:LEU:N	2.22	0.54
1:E:56:ILE:HD11	1:E:65:ILE:HD12	1.89	0.54
1:F:201:VAL:HG22	1:F:202:GLY:N	2.23	0.54
1:F:241:THR:CB	1:G:251:GLY:O	2.54	0.54
1:F:288:ARG:HH21	1:F:424:ALA:N	2.06	0.54
1:G:355:ILE:HD12	1:G:359:TRP:CE2	2.42	0.54
1:G:393:LEU:HD13	1:G:393:LEU:C	2.28	0.54
1:A:81:VAL:HG12	1:A:82:THR:N	2.21	0.54
1:B:122:TYR:CZ	1:B:385:MET:HG2	2.42	0.54
1:B:209:ASP:HB2	1:B:288:ARG:HH12	1.72	0.54
1:B:243:ASN:CB	1:C:250:VAL:HG22	2.38	0.54
1:B:393:LEU:HD13	1:B:393:LEU:C	2.28	0.54
1:D:93:ILE:HG22	1:D:94:PRO:N	2.23	0.54
1:D:209:ASP:HB2	1:D:288:ARG:HH12	1.72	0.54
1:G:281:VAL:HG11	1:G:414:ILE:HG21	1.90	0.54
1:A:201:VAL:HG22	1:A:202:GLY:N	2.23	0.54
1:B:215:TYR:CE1	1:C:414:ILE:HD12	2.42	0.54
1:C:99:VAL:HG12	1:C:103:TRP:CD1	2.42	0.54
1:D:226:ASN:O	1:E:269:ASN:HA	2.07	0.54
1:E:281:VAL:HG11	1:E:414:ILE:HG21	1.90	0.54
1:E:314:TYR:HE1	1:E:316:LEU:HB2	1.72	0.54
1:F:355:ILE:HD12	1:F:359:TRP:CE2	2.42	0.54
1:G:310:ALA:O	1:G:397:ARG:HB2	2.06	0.54
1:B:240:THR:HG22	1:B:241:THR:N	2.23	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:107:HIS:O	1:D:29:GLU:CG	2.53	0.54
1:D:99:VAL:HG12	1:D:103:TRP:CD1	2.43	0.54
1:D:201:VAL:HG22	1:D:202:GLY:N	2.23	0.54
1:D:243:ASN:CB	1:E:250:VAL:HG22	2.38	0.54
1:E:222:ASP:O	1:F:273:THR:HA	2.08	0.54
1:G:64:GLU:HB2	1:G:66:LYS:HE3	1.89	0.54
1:G:209:ASP:HB2	1:G:288:ARG:HH12	1.72	0.54
1:G:288:ARG:HH21	1:G:424:ALA:N	2.06	0.54
1:A:240:THR:HG22	1:A:241:THR:N	2.23	0.54
1:B:194:ARG:HD3	1:B:298:TYR:HB2	1.90	0.54
1:B:226:ASN:O	1:C:269:ASN:HA	2.08	0.54
1:B:318:LEU:HB2	1:B:343:PHE:CE2	2.42	0.54
1:E:99:VAL:HG12	1:E:103:TRP:CD1	2.43	0.54
1:E:99:VAL:CG2	1:F:364:ILE:HG21	2.37	0.54
1:E:288:ARG:HH21	1:E:424:ALA:N	2.06	0.54
1:F:64:GLU:HB2	1:F:66:LYS:HE3	1.89	0.54
1:F:99:VAL:HG12	1:F:103:TRP:CD1	2.42	0.54
1:G:414:ILE:HD13	1:G:414:ILE:N	2.22	0.54
1:A:21:ASP:O	1:A:22:LYS:HB2	2.09	0.53
1:A:93:ILE:HG22	1:A:94:PRO:N	2.23	0.53
1:A:393:LEU:HD13	1:A:393:LEU:C	2.28	0.53
1:B:288:ARG:HH21	1:B:424:ALA:N	2.06	0.53
1:C:122:TYR:CZ	1:C:385:MET:HG2	2.43	0.53
1:C:194:ARG:HD3	1:C:298:TYR:HB2	1.90	0.53
1:C:230:THR:O	1:D:265:TRP:HA	2.08	0.53
1:C:245:PHE:O	1:C:246:LYS:HB3	2.09	0.53
1:D:122:TYR:CZ	1:D:385:MET:HG2	2.42	0.53
1:D:414:ILE:HD13	1:D:414:ILE:N	2.22	0.53
1:E:64:GLU:HB2	1:E:66:LYS:HE3	1.89	0.53
1:E:199:THR:CB	1:F:409:GLN:HE22	2.20	0.53
1:E:221:TYR:CG	1:E:297:LEU:HD11	2.43	0.53
1:A:364:ILE:CG2	1:G:99:VAL:CG1	2.86	0.53
1:C:318:LEU:HB2	1:C:343:PHE:CE2	2.43	0.53
1:D:318:LEU:HB2	1:D:343:PHE:CE2	2.43	0.53
1:E:245:PHE:O	1:E:246:LYS:HB3	2.09	0.53
1:E:255:LEU:O	1:F:252:GLU:OE1	2.26	0.53
1:G:149:TRP:CZ2	1:G:171:LYS:HG3	2.43	0.53
1:G:314:TYR:HE1	1:G:316:LEU:HB2	1.72	0.53
1:A:216:ASP:O	1:B:279:GLN:HG3	2.08	0.53
1:A:342:THR:HG22	1:A:344:VAL:H	1.74	0.53
1:A:355:ILE:HD12	1:A:359:TRP:CZ2	2.42	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:221:TYR:CG	1:B:297:LEU:HD11	2.43	0.53
1:B:314:TYR:HE1	1:B:316:LEU:HB2	1.72	0.53
1:C:99:VAL:HG11	1:D:362:ARG:CG	2.35	0.53
1:D:128:VAL:HG21	1:D:140:MET:HE2	1.90	0.53
1:E:152:ARG:HG3	1:E:167:LYS:HD2	1.85	0.53
1:E:240:THR:HG22	1:E:241:THR:N	2.23	0.53
1:F:245:PHE:O	1:F:246:LYS:HB3	2.09	0.53
1:A:221:TYR:CG	1:A:297:LEU:HD11	2.43	0.53
1:A:288:ARG:HH21	1:A:424:ALA:N	2.06	0.53
1:C:221:TYR:CG	1:C:297:LEU:HD11	2.43	0.53
1:E:124:GLY:HA3	1:E:322:LEU:CD1	2.39	0.53
1:F:93:ILE:HG22	1:F:94:PRO:N	2.22	0.53
1:G:342:THR:HG22	1:G:344:VAL:H	1.74	0.53
1:A:194:ARG:HD3	1:A:298:TYR:HB2	1.90	0.53
1:B:64:GLU:HB2	1:B:66:LYS:HE3	1.89	0.53
1:B:414:ILE:HD13	1:B:414:ILE:N	2.22	0.53
1:C:229:LYS:CA	1:D:266:ALA:O	2.55	0.53
1:C:240:THR:HG22	1:C:241:THR:N	2.23	0.53
1:C:243:ASN:ND2	1:D:250:VAL:HG11	2.23	0.53
1:D:91:LEU:CB	1:D:396:VAL:HG23	2.26	0.53
1:D:221:TYR:CG	1:D:297:LEU:HD11	2.43	0.53
1:D:245:PHE:O	1:D:246:LYS:HB3	2.08	0.53
1:E:50:LEU:HD22	1:E:52:ASN:H	1.70	0.53
1:F:209:ASP:HB2	1:F:288:ARG:HH12	1.71	0.53
1:F:229:LYS:HA	1:G:266:ALA:O	2.08	0.53
1:D:240:THR:HG22	1:D:241:THR:N	2.23	0.53
1:E:14:LEU:HD22	1:E:14:LEU:N	2.22	0.53
1:E:143:THR:HA	1:F:32:GLN:HB3	1.91	0.53
1:E:249:LEU:HG	1:E:250:VAL:HG23	1.91	0.53
1:F:103:TRP:HZ2	1:G:365:PRO:HD2	1.73	0.53
1:F:152:ARG:HG3	1:F:167:LYS:HD2	1.85	0.53
1:F:221:TYR:CG	1:F:297:LEU:HD11	2.43	0.53
1:F:249:LEU:HG	1:F:250:VAL:HG23	1.91	0.53
1:G:21:ASP:O	1:G:22:LYS:HB2	2.09	0.53
1:G:235:LEU:HB3	1:G:263:GLN:CG	2.39	0.53
1:G:240:THR:HG22	1:G:241:THR:N	2.23	0.53
1:A:64:GLU:HB2	1:A:66:LYS:HE3	1.89	0.53
1:A:193:ASP:HA	1:B:176:ALA:CB	2.39	0.53
1:A:235:LEU:HB3	1:A:263:GLN:CG	2.39	0.53
1:B:82:THR:HG23	1:B:83:GLY:N	2.24	0.53
1:B:101:VAL:CG2	1:B:400:ILE:HG12	2.37	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:149:TRP:CZ2	1:B:171:LYS:HG3	2.43	0.53
1:B:235:LEU:HB3	1:B:263:GLN:CG	2.39	0.53
1:B:350:ASP:OD1	1:B:351:LYS:HD2	2.09	0.53
1:C:73:THR:CG2	1:C:77:PRO:HD2	2.33	0.53
1:C:342:THR:HG22	1:C:344:VAL:H	1.74	0.53
1:D:82:THR:HG23	1:D:83:GLY:N	2.24	0.53
1:D:124:GLY:HA3	1:D:322:LEU:CD1	2.39	0.53
1:D:194:ARG:HD3	1:D:298:TYR:HB2	1.90	0.53
1:F:149:TRP:CZ2	1:F:171:LYS:HG3	2.43	0.53
1:G:5:TYR:HD2	1:G:361:LYS:HB3	1.69	0.53
1:G:180:ASP:HB3	1:G:181:PRO:CD	2.39	0.53
1:G:350:ASP:OD1	1:G:351:LYS:HD2	2.09	0.53
1:A:128:VAL:CG2	1:A:140:MET:HE2	2.39	0.53
1:A:227:TRP:CZ3	1:B:269:ASN:HB3	2.43	0.53
1:A:350:ASP:OD1	1:A:351:LYS:HD2	2.09	0.53
1:B:21:ASP:O	1:B:22:LYS:HB2	2.09	0.53
1:B:93:ILE:HG22	1:B:94:PRO:N	2.22	0.53
1:C:50:LEU:HD22	1:C:52:ASN:H	1.70	0.53
1:F:82:THR:HG23	1:F:83:GLY:N	2.24	0.53
1:F:91:LEU:CB	1:F:396:VAL:HG23	2.26	0.53
1:F:99:VAL:HG11	1:G:362:ARG:HG3	1.91	0.53
1:F:241:THR:C	1:G:251:GLY:O	2.44	0.53
1:F:294:LYS:HE2	1:G:304:TYR:CE1	2.43	0.53
1:G:93:ILE:HG22	1:G:94:PRO:N	2.23	0.53
1:G:201:VAL:HG22	1:G:202:GLY:N	2.23	0.53
1:G:245:PHE:O	1:G:246:LYS:HB3	2.09	0.53
1:A:143:THR:HB	1:B:35:LYS:NZ	2.23	0.53
1:A:281:VAL:HG11	1:A:414:ILE:HG21	1.90	0.53
1:B:50:LEU:HD23	1:B:51:ALA:H	1.73	0.53
1:B:143:THR:CB	1:C:35:LYS:HZ1	2.18	0.53
1:B:215:TYR:CE1	1:C:414:ILE:HG23	2.44	0.53
1:C:292:PRO:HG2	1:C:417:GLY:HA3	1.91	0.53
1:E:93:ILE:HG22	1:E:94:PRO:N	2.22	0.53
1:E:422:LEU:CD1	1:G:182:ASP:HA	2.39	0.53
1:F:124:GLY:HA3	1:F:322:LEU:CD1	2.39	0.53
1:F:243:ASN:HD21	1:F:255:LEU:CB	2.22	0.53
1:A:91:LEU:CB	1:A:396:VAL:HG23	2.26	0.53
1:A:101:VAL:CG2	1:A:400:ILE:HG12	2.37	0.53
1:A:180:ASP:HB3	1:A:181:PRO:CD	2.39	0.53
1:A:209:ASP:HB2	1:A:288:ARG:HH12	1.72	0.53
1:A:243:ASN:HD21	1:A:255:LEU:CB	2.22	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:103:TRP:CZ2	1:C:365:PRO:HD2	2.44	0.53
1:B:245:PHE:O	1:B:246:LYS:HB3	2.09	0.53
1:B:292:PRO:HG2	1:B:417:GLY:HA3	1.91	0.53
1:B:294:LYS:HE2	1:C:304:TYR:OH	2.09	0.53
1:B:342:THR:HG22	1:B:344:VAL:H	1.74	0.53
1:C:235:LEU:HB3	1:C:263:GLN:CG	2.39	0.53
1:C:350:ASP:OD1	1:C:351:LYS:HD2	2.09	0.53
1:D:149:TRP:CZ2	1:D:171:LYS:HG3	2.43	0.53
1:D:249:LEU:HG	1:D:250:VAL:HG23	1.91	0.53
1:E:21:ASP:O	1:E:22:LYS:HB2	2.09	0.53
1:E:238:LYS:HG2	1:E:260:ALA:HB2	1.91	0.53
1:F:103:TRP:HE1	1:G:364:ILE:HG22	1.74	0.53
1:F:235:LEU:HB3	1:F:263:GLN:CG	2.39	0.53
1:F:350:ASP:OD1	1:F:351:LYS:HD2	2.09	0.53
1:A:82:THR:HG23	1:A:83:GLY:N	2.24	0.52
1:B:201:VAL:HG13	1:C:411:ALA:CB	2.39	0.52
1:C:124:GLY:HA3	1:C:322:LEU:CD1	2.39	0.52
1:F:238:LYS:HG2	1:F:260:ALA:HB2	1.91	0.52
1:G:368:VAL:HG22	1:G:370:TRP:CE2	2.45	0.52
1:A:124:GLY:HA3	1:A:322:LEU:CD1	2.39	0.52
1:A:149:TRP:CZ2	1:A:171:LYS:HG3	2.44	0.52
1:A:245:PHE:O	1:A:246:LYS:HB3	2.09	0.52
1:A:285:VAL:HG11	1:A:291:ILE:CD1	2.36	0.52
1:C:149:TRP:CZ2	1:C:171:LYS:HG3	2.44	0.52
1:D:368:VAL:HG22	1:D:370:TRP:CE2	2.44	0.52
1:E:259:ILE:HG23	1:E:259:ILE:O	2.10	0.52
1:F:368:VAL:HG22	1:F:370:TRP:CE2	2.45	0.52
1:G:221:TYR:CG	1:G:297:LEU:HD11	2.43	0.52
1:A:242:LYS:NZ	1:A:254:GLU:HG3	2.24	0.52
1:A:292:PRO:HG2	1:A:417:GLY:HA3	1.91	0.52
1:C:101:VAL:CG2	1:C:400:ILE:HG12	2.37	0.52
1:D:350:ASP:OD1	1:D:351:LYS:HD2	2.09	0.52
1:E:82:THR:HG23	1:E:83:GLY:N	2.24	0.52
1:E:194:ARG:HD3	1:E:298:TYR:HB2	1.90	0.52
1:E:227:TRP:HA	1:F:268:GLN:O	2.08	0.52
1:E:353:SER:O	1:E:356:ARG:HG2	2.10	0.52
1:G:194:ARG:HD3	1:G:298:TYR:HB2	1.90	0.52
1:G:238:LYS:HG2	1:G:260:ALA:HB2	1.90	0.52
1:B:368:VAL:HG22	1:B:370:TRP:CE2	2.44	0.52
1:D:50:LEU:HD23	1:D:51:ALA:H	1.72	0.52
1:D:259:ILE:O	1:D:259:ILE:HG23	2.10	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:194:ARG:HD3	1:F:298:TYR:HB2	1.90	0.52
1:F:201:VAL:HG13	1:G:411:ALA:CB	2.40	0.52
1:G:73:THR:CG2	1:G:77:PRO:HD2	2.33	0.52
1:G:124:GLY:HA3	1:G:322:LEU:CD1	2.39	0.52
1:B:242:LYS:NZ	1:B:254:GLU:HG3	2.24	0.52
1:C:69:THR:HG23	1:C:69:THR:O	2.10	0.52
1:C:82:THR:HG23	1:C:83:GLY:N	2.24	0.52
1:C:203:TRP:CE2	1:D:413:ASN:ND2	2.78	0.52
1:C:368:VAL:HG22	1:C:370:TRP:CE2	2.45	0.52
1:D:342:THR:HG22	1:D:344:VAL:H	1.74	0.52
1:E:350:ASP:OD1	1:E:351:LYS:HD2	2.09	0.52
1:F:240:THR:HG22	1:F:241:THR:N	2.24	0.52
1:F:342:THR:HG22	1:F:344:VAL:H	1.74	0.52
1:G:101:VAL:CG2	1:G:400:ILE:HG12	2.37	0.52
1:G:150:VAL:HG12	1:G:170:ILE:N	2.07	0.52
1:G:242:LYS:NZ	1:G:254:GLU:HG3	2.24	0.52
1:G:249:LEU:HG	1:G:250:VAL:HG23	1.91	0.52
1:B:243:ASN:HD21	1:B:255:LEU:CB	2.22	0.52
1:C:180:ASP:HB3	1:C:181:PRO:CD	2.39	0.52
1:C:227:TRP:HA	1:D:268:GLN:O	2.10	0.52
1:C:242:LYS:NZ	1:C:254:GLU:HG3	2.24	0.52
1:C:249:LEU:HG	1:C:250:VAL:HG23	1.91	0.52
1:D:21:ASP:O	1:D:22:LYS:HB2	2.09	0.52
1:D:235:LEU:HB3	1:D:263:GLN:CG	2.39	0.52
1:E:149:TRP:CZ2	1:E:171:LYS:HG3	2.44	0.52
1:E:292:PRO:HG2	1:E:417:GLY:HA3	1.91	0.52
1:F:292:PRO:HG2	1:F:417:GLY:HA3	1.91	0.52
1:G:82:THR:HG23	1:G:83:GLY:N	2.24	0.52
1:B:207:ASP:OD2	1:D:185:LYS:HD3	2.10	0.52
1:B:210:THR:HG23	1:B:211:PRO:HD3	1.92	0.52
1:C:93:ILE:HG22	1:C:94:PRO:N	2.23	0.52
1:C:204:ALA:HA	1:D:414:ILE:HD11	1.90	0.52
1:D:128:VAL:CG2	1:D:140:MET:HE2	2.40	0.52
1:D:180:ASP:HB3	1:D:181:PRO:CD	2.39	0.52
1:D:292:PRO:HG2	1:D:417:GLY:HA3	1.91	0.52
1:E:368:VAL:HG22	1:E:370:TRP:CE2	2.45	0.52
1:G:210:THR:HG23	1:G:211:PRO:HD3	1.92	0.52
1:A:50:LEU:HD23	1:A:51:ALA:H	1.72	0.52
1:A:210:THR:HG23	1:A:211:PRO:HD3	1.92	0.52
1:A:229:LYS:HA	1:B:267:SER:HA	1.91	0.52
1:B:69:THR:HG23	1:B:69:THR:O	2.10	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:124:GLY:HA3	1:B:322:LEU:CD1	2.39	0.52
1:B:244:LYS:HG3	1:C:253:THR:HG1	1.72	0.52
1:C:21:ASP:O	1:C:22:LYS:HB2	2.09	0.52
1:C:22:LYS:HA	1:C:22:LYS:HZ2	1.74	0.52
1:D:238:LYS:HG2	1:D:260:ALA:HB2	1.91	0.52
1:E:229:LYS:HA	1:F:267:SER:HA	1.91	0.52
1:F:21:ASP:O	1:F:22:LYS:HB2	2.09	0.52
1:F:210:THR:HG23	1:F:211:PRO:HD3	1.92	0.52
1:G:316:LEU:CD2	1:G:318:LEU:HD21	2.36	0.52
1:B:99:VAL:HG11	1:C:362:ARG:HG3	1.92	0.52
1:B:180:ASP:HB3	1:B:181:PRO:CD	2.39	0.52
1:C:99:VAL:CB	1:D:362:ARG:HG3	2.39	0.52
1:D:101:VAL:CG2	1:D:400:ILE:HG12	2.37	0.52
1:D:228:SER:O	1:E:268:GLN:N	2.36	0.52
1:E:284:THR:HG23	1:E:286:PRO:CD	2.34	0.52
1:F:180:ASP:HB3	1:F:181:PRO:CD	2.38	0.52
1:C:318:LEU:HB2	1:C:343:PHE:HE2	1.75	0.52
1:C:322:LEU:HD22	1:C:341:HIS:CE1	2.45	0.52
1:C:353:SER:O	1:C:356:ARG:HG2	2.10	0.52
1:D:69:THR:HG23	1:D:69:THR:O	2.10	0.52
1:E:69:THR:HG23	1:E:69:THR:O	2.10	0.52
1:E:318:LEU:HB2	1:E:343:PHE:HE2	1.75	0.52
1:G:243:ASN:HD21	1:G:255:LEU:CB	2.22	0.52
1:A:353:SER:O	1:A:356:ARG:HG2	2.10	0.51
1:B:249:LEU:HG	1:B:250:VAL:HG23	1.91	0.51
1:B:322:LEU:HD22	1:B:341:HIS:CE1	2.45	0.51
1:C:259:ILE:HG23	1:C:259:ILE:O	2.10	0.51
1:E:180:ASP:HB3	1:E:181:PRO:CD	2.39	0.51
1:F:101:VAL:CG2	1:F:400:ILE:HG12	2.37	0.51
1:F:191:GLN:H	1:G:178:ASN:CB	2.19	0.51
1:F:414:ILE:HD13	1:F:414:ILE:N	2.22	0.51
1:A:249:LEU:HG	1:A:250:VAL:HG23	1.91	0.51
1:B:243:ASN:N	1:C:250:VAL:HG13	2.25	0.51
1:B:281:VAL:HG11	1:B:414:ILE:HG21	1.90	0.51
1:B:353:SER:O	1:B:356:ARG:HG2	2.10	0.51
1:D:242:LYS:NZ	1:D:254:GLU:HG3	2.24	0.51
1:D:243:ASN:HD21	1:D:255:LEU:CB	2.22	0.51
1:E:235:LEU:HB3	1:E:263:GLN:CG	2.39	0.51
1:E:342:THR:HG22	1:E:344:VAL:H	1.74	0.51
1:F:259:ILE:HG23	1:F:259:ILE:O	2.10	0.51
1:B:191:GLN:H	1:C:178:ASN:CB	2.21	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:203:TRP:CD1	1:C:413:ASN:ND2	2.75	0.51
1:D:243:ASN:CB	1:E:250:VAL:CG2	2.88	0.51
1:E:243:ASN:HD21	1:E:255:LEU:CB	2.22	0.51
1:A:38:ILE:HG23	1:A:39:VAL:N	2.26	0.51
1:A:368:VAL:HG22	1:A:370:TRP:CE2	2.45	0.51
1:C:234:GLY:N	1:D:262:ASN:O	2.25	0.51
1:G:17:GLY:CA	1:G:74:TRP:CH2	2.94	0.51
1:G:259:ILE:O	1:G:259:ILE:HG23	2.10	0.51
1:G:292:PRO:HG2	1:G:417:GLY:HA3	1.91	0.51
1:C:50:LEU:HD23	1:C:52:ASN:H	1.76	0.51
1:C:281:VAL:HG11	1:C:414:ILE:HG21	1.90	0.51
1:D:199:THR:O	1:E:409:GLN:HB2	2.10	0.51
1:D:227:TRP:HA	1:E:269:ASN:HA	1.91	0.51
1:D:284:THR:HG23	1:D:286:PRO:CD	2.34	0.51
1:D:318:LEU:HB2	1:D:343:PHE:HE2	1.75	0.51
1:D:353:SER:O	1:D:356:ARG:HG2	2.10	0.51
1:E:17:GLY:CA	1:E:74:TRP:CH2	2.94	0.51
1:E:101:VAL:CG2	1:E:400:ILE:HG12	2.37	0.51
1:E:277:LEU:HD21	1:E:410:PHE:CB	2.40	0.51
1:F:50:LEU:HD23	1:F:51:ALA:H	1.73	0.51
1:F:69:THR:O	1:F:69:THR:HG23	2.10	0.51
1:G:353:SER:O	1:G:356:ARG:HG2	2.10	0.51
1:A:23:TYR:HB2	1:A:74:TRP:CB	2.41	0.51
1:A:243:ASN:CG	1:B:250:VAL:HG13	2.31	0.51
1:B:66:LYS:HB3	1:B:67:PRO:CD	2.40	0.51
1:B:125:TYR:OH	1:B:318:LEU:HB2	2.11	0.51
1:B:182:ASP:HA	1:G:422:LEU:HD11	1.92	0.51
1:E:50:LEU:HD23	1:E:52:ASN:H	1.76	0.51
1:E:73:THR:CG2	1:E:77:PRO:HD2	2.33	0.51
1:E:193:ASP:HA	1:F:176:ALA:HB2	1.92	0.51
1:E:219:LEU:N	1:E:219:LEU:HD22	2.26	0.51
1:F:5:TYR:HD2	1:F:361:LYS:HB3	1.69	0.51
1:F:17:GLY:CA	1:F:74:TRP:CH2	2.94	0.51
1:F:353:SER:O	1:F:356:ARG:HG2	2.10	0.51
1:A:238:LYS:HG2	1:A:260:ALA:HB2	1.91	0.51
1:B:284:THR:HG23	1:B:286:PRO:CD	2.34	0.51
1:C:238:LYS:HG2	1:C:260:ALA:HB2	1.91	0.51
1:C:243:ASN:HD21	1:C:255:LEU:CB	2.22	0.51
1:D:125:TYR:OH	1:D:318:LEU:HB2	2.11	0.51
1:D:204:ALA:CA	1:E:414:ILE:HD11	2.41	0.51
1:D:210:THR:HG23	1:D:211:PRO:HD3	1.92	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:281:VAL:HG11	1:D:414:ILE:HG21	1.90	0.51
1:D:322:LEU:HD22	1:D:341:HIS:CE1	2.45	0.51
1:A:17:GLY:CA	1:A:74:TRP:CH2	2.94	0.51
1:A:322:LEU:HB3	1:A:341:HIS:NE2	2.26	0.51
1:B:241:THR:CB	1:C:251:GLY:O	2.59	0.51
1:C:125:TYR:OH	1:C:318:LEU:HB2	2.11	0.51
1:C:219:LEU:HD22	1:C:219:LEU:N	2.26	0.51
1:E:23:TYR:HB2	1:E:74:TRP:CB	2.41	0.51
1:E:242:LYS:NZ	1:E:254:GLU:HG3	2.24	0.51
1:E:322:LEU:HD22	1:E:341:HIS:CE1	2.45	0.51
1:F:66:LYS:HB3	1:F:67:PRO:CD	2.40	0.51
1:F:73:THR:HG21	1:F:76:TYR:HB3	1.92	0.51
1:G:200:VAL:CG1	1:G:295:ILE:HB	2.41	0.51
1:A:182:ASP:CA	1:F:422:LEU:HD13	2.40	0.51
1:A:322:LEU:HD22	1:A:341:HIS:CE1	2.45	0.51
1:B:186:HIS:CD2	1:B:306:TYR:CE1	2.99	0.51
1:B:219:LEU:HD22	1:B:219:LEU:N	2.26	0.51
1:B:221:TYR:CG	1:B:297:LEU:CD1	2.94	0.51
1:D:73:THR:HG21	1:D:76:TYR:HB3	1.92	0.51
1:F:221:TYR:CG	1:F:297:LEU:CD1	2.94	0.51
1:F:277:LEU:HD21	1:F:410:PHE:CB	2.40	0.51
1:F:322:LEU:HD22	1:F:341:HIS:CE1	2.45	0.51
1:G:73:THR:HG21	1:G:76:TYR:HB3	1.92	0.51
1:G:221:TYR:CG	1:G:297:LEU:CD1	2.94	0.51
1:A:69:THR:O	1:A:69:THR:HG23	2.10	0.51
1:A:200:VAL:CG1	1:A:295:ILE:HB	2.41	0.51
1:A:422:LEU:HD13	1:C:182:ASP:CB	2.40	0.51
1:B:238:LYS:HG2	1:B:260:ALA:HB2	1.91	0.51
1:C:91:LEU:CB	1:C:396:VAL:HG23	2.26	0.51
1:C:284:THR:HG23	1:C:286:PRO:CD	2.34	0.51
1:D:73:THR:CG2	1:D:77:PRO:HD2	2.33	0.51
1:D:277:LEU:HD21	1:D:410:PHE:CB	2.40	0.51
1:E:73:THR:HG21	1:E:76:TYR:HB3	1.92	0.51
1:E:125:TYR:OH	1:E:318:LEU:HB2	2.11	0.51
1:E:200:VAL:CG1	1:E:295:ILE:HB	2.41	0.51
1:F:23:TYR:HB2	1:F:74:TRP:CB	2.41	0.51
1:F:200:VAL:CG1	1:F:295:ILE:HB	2.41	0.51
1:G:301:ASP:OD1	1:G:408:SER:HB3	2.11	0.51
1:G:322:LEU:HB3	1:G:341:HIS:NE2	2.26	0.51
1:A:219:LEU:HD22	1:A:219:LEU:N	2.26	0.50
1:B:73:THR:HG21	1:B:76:TYR:HB3	1.92	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:322:LEU:HB3	1:B:341:HIS:NE2	2.26	0.50
1:C:73:THR:HG21	1:C:76:TYR:HB3	1.92	0.50
1:C:221:TYR:CG	1:C:297:LEU:CD1	2.94	0.50
1:C:236:SER:HB3	1:D:260:ALA:HB3	1.92	0.50
1:C:301:ASP:OD1	1:C:408:SER:HB3	2.12	0.50
1:D:215:TYR:CE1	1:E:414:ILE:HG23	2.46	0.50
1:D:243:ASN:N	1:E:250:VAL:HG13	2.26	0.50
1:E:210:THR:HG23	1:E:211:PRO:HD3	1.92	0.50
1:E:221:TYR:CG	1:E:297:LEU:CD1	2.94	0.50
1:E:301:ASP:OD1	1:E:408:SER:HB3	2.11	0.50
1:F:38:ILE:HG23	1:F:39:VAL:N	2.26	0.50
1:F:215:TYR:CE1	1:G:414:ILE:HG23	2.46	0.50
1:B:259:ILE:HG23	1:B:259:ILE:O	2.10	0.50
1:C:17:GLY:CA	1:C:74:TRP:CH2	2.94	0.50
1:C:186:HIS:CD2	1:C:306:TYR:CE1	2.99	0.50
1:C:421:PRO:O	1:E:182:ASP:HB3	2.11	0.50
1:D:146:GLY:O	1:E:365:PRO:HB2	2.12	0.50
1:F:242:LYS:NZ	1:F:254:GLU:HG3	2.24	0.50
1:G:23:TYR:HB2	1:G:74:TRP:CB	2.41	0.50
1:G:125:TYR:OH	1:G:318:LEU:HB2	2.11	0.50
1:A:186:HIS:CD2	1:A:306:TYR:CE1	2.99	0.50
1:A:221:TYR:CG	1:A:297:LEU:CD1	2.94	0.50
1:A:236:SER:HB3	1:B:260:ALA:HB3	1.93	0.50
1:B:277:LEU:HD21	1:B:410:PHE:CB	2.40	0.50
1:D:17:GLY:CA	1:D:74:TRP:CH2	2.94	0.50
1:D:190:THR:HA	1:E:178:ASN:ND2	2.25	0.50
1:D:200:VAL:CG1	1:D:295:ILE:HB	2.41	0.50
1:D:221:TYR:CG	1:D:297:LEU:CD1	2.94	0.50
1:D:250:VAL:HG12	1:D:250:VAL:O	2.11	0.50
1:F:125:TYR:OH	1:F:318:LEU:HB2	2.11	0.50
1:F:318:LEU:HB2	1:F:343:PHE:HE2	1.75	0.50
1:G:322:LEU:HD22	1:G:341:HIS:CE1	2.45	0.50
1:A:66:LYS:HB3	1:A:67:PRO:CD	2.40	0.50
1:A:150:VAL:HG12	1:A:170:ILE:N	2.08	0.50
1:B:17:GLY:CA	1:B:74:TRP:CH2	2.94	0.50
1:B:197:VAL:CG2	1:B:297:LEU:HB3	2.42	0.50
1:C:197:VAL:CG2	1:C:297:LEU:HB3	2.42	0.50
1:C:285:VAL:HG11	1:C:291:ILE:CD1	2.36	0.50
1:C:322:LEU:HB3	1:C:341:HIS:NE2	2.26	0.50
1:C:355:ILE:CD1	1:C:359:TRP:CZ2	2.95	0.50
1:D:219:LEU:HD22	1:D:219:LEU:N	2.26	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:227:TRP:HD1	1:E:229:LYS:HZ1	1.54	0.50
1:G:277:LEU:HD21	1:G:410:PHE:CB	2.40	0.50
1:G:368:VAL:CG2	1:G:370:TRP:CZ2	2.95	0.50
1:A:93:ILE:HG23	1:A:94:PRO:HD2	1.94	0.50
1:A:368:VAL:CG2	1:A:370:TRP:CZ2	2.95	0.50
1:B:182:ASP:CA	1:G:422:LEU:CD1	2.87	0.50
1:B:318:LEU:HB2	1:B:343:PHE:HE2	1.75	0.50
1:C:221:TYR:CD1	1:C:297:LEU:CD1	2.95	0.50
1:D:54:TRP:HE3	1:D:65:ILE:CG2	2.25	0.50
1:D:301:ASP:OD1	1:D:408:SER:HB3	2.11	0.50
1:D:355:ILE:CD1	1:D:359:TRP:CZ2	2.95	0.50
1:E:38:ILE:HG23	1:E:39:VAL:N	2.26	0.50
1:F:54:TRP:HE3	1:F:65:ILE:CG2	2.25	0.50
1:G:93:ILE:HG23	1:G:94:PRO:HD2	1.94	0.50
1:A:125:TYR:OH	1:A:318:LEU:HB2	2.11	0.50
1:A:197:VAL:CG2	1:A:297:LEU:HB3	2.42	0.50
1:A:259:ILE:HG23	1:A:259:ILE:O	2.10	0.50
1:A:277:LEU:HD21	1:A:410:PHE:CB	2.40	0.50
1:B:54:TRP:HE3	1:B:65:ILE:CG2	2.25	0.50
1:B:221:TYR:CD1	1:B:297:LEU:CD1	2.95	0.50
1:D:322:LEU:HB3	1:D:341:HIS:NE2	2.26	0.50
1:D:355:ILE:CD1	1:D:359:TRP:CH2	2.95	0.50
1:E:199:THR:CG2	1:F:409:GLN:HE22	2.24	0.50
1:E:201:VAL:HG13	1:F:411:ALA:CB	2.41	0.50
1:E:316:LEU:CD2	1:E:318:LEU:HD21	2.36	0.50
1:E:322:LEU:HB3	1:E:341:HIS:NE2	2.26	0.50
1:F:73:THR:CG2	1:F:77:PRO:HD2	2.33	0.50
1:F:284:THR:HG23	1:F:286:PRO:CD	2.34	0.50
1:G:69:THR:HG23	1:G:69:THR:O	2.10	0.50
1:G:355:ILE:CD1	1:G:359:TRP:CH2	2.95	0.50
1:A:73:THR:HG21	1:A:76:TYR:HB3	1.92	0.50
1:A:231:ASN:HA	1:B:265:TRP:HA	1.93	0.50
1:A:271:GLY:HA3	1:G:224:ALA:O	2.12	0.50
1:A:318:LEU:HB2	1:A:343:PHE:HE2	1.75	0.50
1:A:364:ILE:HG22	1:G:99:VAL:CG1	2.42	0.50
1:A:413:ASN:ND2	1:G:203:TRP:CD1	2.79	0.50
1:A:414:ILE:CD1	1:G:204:ALA:CB	2.79	0.50
1:B:38:ILE:HG23	1:B:39:VAL:N	2.26	0.50
1:B:50:LEU:HD23	1:B:52:ASN:H	1.76	0.50
1:B:355:ILE:CD1	1:B:359:TRP:CH2	2.95	0.50
1:C:93:ILE:HG23	1:C:94:PRO:HD2	1.94	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:119:LEU:HD12	1:C:392:VAL:HG21	1.94	0.50
1:C:210:THR:HG23	1:C:211:PRO:HD3	1.92	0.50
1:C:215:TYR:CE2	1:C:217:VAL:CG2	2.95	0.50
1:C:241:THR:CA	1:D:251:GLY:O	2.60	0.50
1:D:119:LEU:HD12	1:D:392:VAL:HG21	1.94	0.50
1:D:189:VAL:HG21	1:D:302:ILE:CG1	2.42	0.50
1:F:93:ILE:HG23	1:F:94:PRO:HD2	1.94	0.50
1:F:119:LEU:HD12	1:F:392:VAL:HG21	1.94	0.50
1:F:186:HIS:CD2	1:F:306:TYR:CE1	2.99	0.50
1:F:219:LEU:HD21	1:F:295:ILE:HD13	1.94	0.50
1:F:246:LYS:HD2	1:F:247:TRP:N	2.27	0.50
1:G:219:LEU:HD22	1:G:219:LEU:N	2.26	0.50
1:A:189:VAL:HG21	1:A:302:ILE:CG1	2.42	0.50
1:A:250:VAL:O	1:A:250:VAL:HG12	2.11	0.50
1:B:93:ILE:HG23	1:B:94:PRO:HD2	1.94	0.50
1:B:189:VAL:HG21	1:B:302:ILE:CG1	2.42	0.50
1:C:38:ILE:HG23	1:C:39:VAL:N	2.26	0.50
1:C:200:VAL:CG1	1:C:295:ILE:HB	2.41	0.50
1:C:250:VAL:O	1:C:250:VAL:HG12	2.11	0.50
1:C:368:VAL:CG2	1:C:370:TRP:CZ2	2.95	0.50
1:D:85:ILE:CD1	1:D:389:LEU:HD23	2.42	0.50
1:D:219:LEU:HD21	1:D:295:ILE:HD13	1.94	0.50
1:D:239:VAL:HA	1:E:257:ILE:CD1	2.42	0.50
1:F:126:ALA:HB3	1:F:321:PHE:HD2	1.77	0.50
1:F:219:LEU:HD22	1:F:219:LEU:N	2.26	0.50
1:F:290:LYS:N	1:F:422:LEU:HD23	2.27	0.50
1:G:119:LEU:HD12	1:G:392:VAL:HG21	1.94	0.50
1:A:119:LEU:HD12	1:A:392:VAL:HG21	1.94	0.50
1:A:189:VAL:HG21	1:A:302:ILE:HG13	1.94	0.50
1:A:221:TYR:CD1	1:A:297:LEU:CD1	2.95	0.50
1:A:298:TYR:CZ	1:A:411:ALA:CB	2.95	0.50
1:A:355:ILE:CD1	1:A:359:TRP:CH2	2.95	0.50
1:B:186:HIS:CE1	1:B:306:TYR:CD1	3.00	0.50
1:D:50:LEU:HD23	1:D:52:ASN:H	1.76	0.50
1:E:194:ARG:HD2	1:E:195:GLN:N	2.27	0.50
1:F:322:LEU:HB3	1:F:341:HIS:NE2	2.26	0.50
1:G:194:ARG:HD2	1:G:195:GLN:N	2.27	0.50
1:G:246:LYS:HD2	1:G:247:TRP:N	2.27	0.50
1:G:318:LEU:HB2	1:G:343:PHE:HE2	1.75	0.50
1:A:229:LYS:HA	1:B:266:ALA:O	2.11	0.49
1:A:301:ASP:OD1	1:A:408:SER:HB3	2.11	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:200:VAL:CG1	1:B:295:ILE:HB	2.41	0.49
1:B:246:LYS:HD2	1:B:247:TRP:N	2.27	0.49
1:C:219:LEU:HD21	1:C:295:ILE:HD13	1.94	0.49
1:C:239:VAL:HA	1:D:257:ILE:CD1	2.42	0.49
1:C:277:LEU:HD21	1:C:410:PHE:CB	2.40	0.49
1:D:23:TYR:HB2	1:D:74:TRP:CB	2.41	0.49
1:D:93:ILE:HG23	1:D:94:PRO:HD2	1.94	0.49
1:D:186:HIS:CD2	1:D:306:TYR:CE1	2.99	0.49
1:D:194:ARG:HD2	1:D:195:GLN:N	2.27	0.49
1:D:197:VAL:CG2	1:D:297:LEU:HB3	2.42	0.49
1:D:246:LYS:HD2	1:D:247:TRP:N	2.27	0.49
1:E:119:LEU:HD12	1:E:392:VAL:HG21	1.94	0.49
1:E:186:HIS:CE1	1:E:306:TYR:CD1	3.00	0.49
1:E:219:LEU:HD21	1:E:295:ILE:HD13	1.94	0.49
1:E:250:VAL:O	1:E:250:VAL:HG12	2.11	0.49
1:F:215:TYR:CE2	1:F:217:VAL:CG2	2.95	0.49
1:F:251:GLY:O	1:F:255:LEU:HD21	2.12	0.49
1:F:301:ASP:OD1	1:F:408:SER:HB3	2.11	0.49
1:G:54:TRP:CE3	1:G:65:ILE:CG2	2.95	0.49
1:G:119:LEU:O	1:G:119:LEU:HD23	2.12	0.49
1:G:126:ALA:HB3	1:G:321:PHE:HD2	1.77	0.49
1:G:250:VAL:O	1:G:250:VAL:HG12	2.11	0.49
1:G:298:TYR:CZ	1:G:411:ALA:CB	2.95	0.49
1:A:119:LEU:O	1:A:119:LEU:HD23	2.12	0.49
1:A:194:ARG:HD2	1:A:195:GLN:N	2.27	0.49
1:B:91:LEU:CB	1:B:396:VAL:HG23	2.26	0.49
1:B:128:VAL:HG21	1:B:140:MET:HE2	1.94	0.49
1:B:251:GLY:O	1:B:255:LEU:HD21	2.12	0.49
1:B:294:LYS:HE3	1:C:304:TYR:OH	2.12	0.49
1:C:126:ALA:HB3	1:C:321:PHE:HD2	1.77	0.49
1:C:246:LYS:HD2	1:C:247:TRP:N	2.27	0.49
1:C:355:ILE:CD1	1:C:359:TRP:CH2	2.95	0.49
1:D:54:TRP:CE3	1:D:65:ILE:CG2	2.95	0.49
1:D:221:TYR:CD1	1:D:297:LEU:CD1	2.95	0.49
1:D:230:THR:CG2	1:D:268:GLN:HB3	2.40	0.49
1:D:368:VAL:CG2	1:D:370:TRP:CZ2	2.95	0.49
1:E:186:HIS:CD2	1:E:306:TYR:CE1	2.99	0.49
1:E:355:ILE:CD1	1:E:359:TRP:CZ2	2.95	0.49
1:F:186:HIS:CE1	1:F:306:TYR:CD1	3.00	0.49
1:F:197:VAL:CG2	1:F:297:LEU:HB3	2.42	0.49
1:F:201:VAL:CG1	1:G:411:ALA:HB2	2.42	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:197:VAL:CG2	1:G:297:LEU:HB3	2.42	0.49
1:G:221:TYR:CD1	1:G:297:LEU:CD1	2.95	0.49
1:G:221:TYR:CD2	1:G:297:LEU:HD12	2.48	0.49
1:A:246:LYS:HD2	1:A:247:TRP:N	2.27	0.49
1:A:304:TYR:CE1	1:G:294:LYS:HE2	2.47	0.49
1:A:355:ILE:CD1	1:A:359:TRP:CZ2	2.95	0.49
1:B:250:VAL:O	1:B:250:VAL:HG12	2.11	0.49
1:C:194:ARG:HD2	1:C:195:GLN:N	2.27	0.49
1:D:251:GLY:O	1:D:255:LEU:HD21	2.12	0.49
1:E:355:ILE:CD1	1:E:359:TRP:CH2	2.95	0.49
1:G:38:ILE:HG23	1:G:39:VAL:N	2.26	0.49
1:G:85:ILE:CD1	1:G:389:LEU:HD23	2.42	0.49
1:B:54:TRP:CE3	1:B:65:ILE:CG2	2.95	0.49
1:B:119:LEU:O	1:B:119:LEU:HD23	2.12	0.49
1:B:119:LEU:HD12	1:B:392:VAL:HG21	1.94	0.49
1:B:215:TYR:CE2	1:B:217:VAL:CG2	2.95	0.49
1:B:290:LYS:N	1:B:422:LEU:HD23	2.27	0.49
1:B:368:VAL:CG2	1:B:370:TRP:CZ2	2.95	0.49
1:D:221:TYR:CD2	1:D:297:LEU:HD12	2.48	0.49
1:E:119:LEU:O	1:E:119:LEU:HD23	2.12	0.49
1:E:368:VAL:CG2	1:E:370:TRP:CZ2	2.95	0.49
1:F:119:LEU:HD23	1:F:119:LEU:O	2.12	0.49
1:F:221:TYR:CD1	1:F:297:LEU:CD1	2.95	0.49
1:F:299:LYS:HE2	1:F:409:GLN:O	2.13	0.49
1:F:355:ILE:CD1	1:F:359:TRP:CH2	2.95	0.49
1:G:54:TRP:HE3	1:G:65:ILE:CG2	2.25	0.49
1:G:186:HIS:CD2	1:G:306:TYR:CE1	2.99	0.49
1:G:189:VAL:HG21	1:G:302:ILE:HG13	1.95	0.49
1:G:189:VAL:HG21	1:G:302:ILE:CG1	2.42	0.49
1:G:215:TYR:CE2	1:G:217:VAL:CG2	2.95	0.49
1:G:219:LEU:HD21	1:G:295:ILE:HD13	1.94	0.49
1:G:251:GLY:O	1:G:255:LEU:HD21	2.12	0.49
1:A:186:HIS:CE1	1:A:306:TYR:CD1	3.00	0.49
1:A:215:TYR:CE2	1:A:217:VAL:CG2	2.95	0.49
1:B:144:ARG:HB3	1:B:144:ARG:NH1	2.28	0.49
1:B:189:VAL:HG21	1:B:302:ILE:HG13	1.95	0.49
1:B:301:ASP:OD1	1:B:408:SER:HB3	2.11	0.49
1:C:85:ILE:CD1	1:C:389:LEU:HD23	2.42	0.49
1:C:144:ARG:HB3	1:C:144:ARG:NH1	2.27	0.49
1:C:186:HIS:CE1	1:C:306:TYR:CD1	3.00	0.49
1:C:290:LYS:N	1:C:422:LEU:HD23	2.27	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:99:VAL:CB	1:E:364:ILE:HG21	2.37	0.49
1:D:136:VAL:HG23	1:D:136:VAL:O	2.13	0.49
1:D:186:HIS:CE1	1:D:306:TYR:CD1	3.00	0.49
1:D:298:TYR:CZ	1:D:411:ALA:CB	2.95	0.49
1:D:299:LYS:HE2	1:D:409:GLN:O	2.13	0.49
1:E:54:TRP:CE3	1:E:65:ILE:CG2	2.95	0.49
1:F:54:TRP:CE3	1:F:65:ILE:CG2	2.95	0.49
1:F:221:TYR:CD2	1:F:297:LEU:HD12	2.48	0.49
1:G:355:ILE:CD1	1:G:359:TRP:CZ2	2.95	0.49
1:A:54:TRP:CE3	1:A:65:ILE:CG2	2.95	0.49
1:A:136:VAL:HG23	1:A:136:VAL:O	2.13	0.49
1:A:143:THR:HG21	1:B:35:LYS:HZ1	1.78	0.49
1:A:221:TYR:CD2	1:A:297:LEU:HD12	2.48	0.49
1:B:229:LYS:HA	1:C:266:ALA:O	2.11	0.49
1:B:355:ILE:CD1	1:B:359:TRP:CZ2	2.95	0.49
1:C:54:TRP:CE3	1:C:65:ILE:CG2	2.95	0.49
1:C:189:VAL:HG21	1:C:302:ILE:CG1	2.42	0.49
1:C:221:TYR:CD2	1:C:297:LEU:HD12	2.48	0.49
1:D:103:TRP:HE1	1:E:364:ILE:HG23	1.77	0.49
1:E:5:TYR:HD2	1:E:361:LYS:HB3	1.69	0.49
1:E:85:ILE:CD1	1:E:389:LEU:HD23	2.42	0.49
1:E:93:ILE:HG23	1:E:94:PRO:HD2	1.94	0.49
1:E:197:VAL:CG2	1:E:297:LEU:HB3	2.42	0.49
1:E:221:TYR:CD1	1:E:297:LEU:CD1	2.95	0.49
1:E:221:TYR:CD2	1:E:297:LEU:HD12	2.47	0.49
1:F:85:ILE:CD1	1:F:389:LEU:HD23	2.42	0.49
1:F:189:VAL:HG21	1:F:302:ILE:CG1	2.42	0.49
1:G:128:VAL:CG2	1:G:140:MET:HE2	2.42	0.49
1:G:290:LYS:N	1:G:422:LEU:HD23	2.27	0.49
1:A:54:TRP:HE3	1:A:65:ILE:CG2	2.25	0.49
1:A:251:GLY:O	1:A:255:LEU:HD21	2.12	0.49
1:C:54:TRP:HE3	1:C:65:ILE:CG2	2.25	0.49
1:C:204:ALA:CA	1:D:414:ILE:CD1	2.87	0.49
1:C:230:THR:CG2	1:C:268:GLN:HB3	2.40	0.49
1:C:298:TYR:CZ	1:C:411:ALA:CB	2.95	0.49
1:C:364:ILE:O	1:C:364:ILE:HG12	2.13	0.49
1:D:38:ILE:HG23	1:D:39:VAL:N	2.26	0.49
1:E:54:TRP:HE3	1:E:65:ILE:CG2	2.25	0.49
1:E:126:ALA:HB3	1:E:321:PHE:HD2	1.77	0.49
1:E:128:VAL:CG2	1:E:140:MET:HE2	2.42	0.49
1:E:149:TRP:HD1	1:E:172:VAL:HG12	1.78	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:189:VAL:HG21	1:E:302:ILE:CG1	2.42	0.49
1:E:251:GLY:O	1:E:255:LEU:HD21	2.12	0.49
1:F:298:TYR:CZ	1:F:411:ALA:CB	2.95	0.49
1:F:355:ILE:CD1	1:F:359:TRP:CZ2	2.95	0.49
1:F:368:VAL:CG2	1:F:370:TRP:CZ2	2.95	0.49
1:B:136:VAL:O	1:B:136:VAL:HG23	2.13	0.49
1:B:219:LEU:HD21	1:B:295:ILE:HD13	1.94	0.49
1:B:224:ALA:O	1:C:271:GLY:HA3	2.13	0.49
1:B:285:VAL:HG11	1:B:291:ILE:CD1	2.36	0.49
1:C:136:VAL:HG23	1:C:136:VAL:O	2.13	0.49
1:C:152:ARG:HG3	1:C:167:LYS:CG	2.42	0.49
1:C:247:TRP:HB3	1:C:251:GLY:N	2.28	0.49
1:D:96:GLY:HA3	1:D:100:ASP:OD2	2.13	0.49
1:D:119:LEU:O	1:D:119:LEU:HD23	2.12	0.49
1:D:152:ARG:HG3	1:D:167:LYS:CG	2.42	0.49
1:D:215:TYR:CE2	1:D:217:VAL:CG2	2.95	0.49
1:E:136:VAL:HG23	1:E:136:VAL:O	2.13	0.49
1:E:152:ARG:HG3	1:E:167:LYS:CG	2.42	0.49
1:E:203:TRP:CZ3	1:F:298:TYR:OH	2.66	0.49
1:E:290:LYS:N	1:E:422:LEU:HD23	2.27	0.49
1:E:364:ILE:O	1:E:364:ILE:HG12	2.13	0.49
1:F:99:VAL:HG13	1:G:364:ILE:HG21	1.70	0.49
1:G:186:HIS:CE1	1:G:306:TYR:CD1	3.00	0.49
1:A:85:ILE:CD1	1:A:389:LEU:HD23	2.42	0.49
1:A:266:ALA:O	1:G:229:LYS:HA	2.12	0.49
1:B:247:TRP:HB3	1:B:251:GLY:N	2.28	0.49
1:D:290:LYS:N	1:D:422:LEU:HD23	2.27	0.49
1:E:298:TYR:CZ	1:E:411:ALA:CB	2.95	0.49
1:A:4:VAL:HG13	1:A:76:TYR:CD2	2.48	0.49
1:A:191:GLN:H	1:B:178:ASN:CB	2.26	0.49
1:B:4:VAL:HG13	1:B:76:TYR:CD2	2.48	0.49
1:B:66:LYS:CB	1:B:67:PRO:HD2	2.42	0.49
1:B:194:ARG:HD2	1:B:195:GLN:N	2.27	0.49
1:B:230:THR:CG2	1:B:268:GLN:HB3	2.39	0.49
1:C:201:VAL:O	1:D:411:ALA:HA	2.13	0.49
1:C:215:TYR:CE1	1:D:414:ILE:HD12	2.46	0.49
1:D:4:VAL:HG13	1:D:76:TYR:CD2	2.48	0.49
1:E:201:VAL:CG1	1:F:411:ALA:HB2	2.41	0.49
1:F:96:GLY:HA3	1:F:100:ASP:OD2	2.13	0.49
1:A:219:LEU:HD21	1:A:295:ILE:HD13	1.94	0.48
1:A:294:LYS:CE	1:B:304:TYR:OH	2.61	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:85:ILE:CD1	1:B:389:LEU:HD23	2.42	0.48
1:C:119:LEU:HD23	1:C:119:LEU:O	2.12	0.48
1:D:247:TRP:HB3	1:D:251:GLY:N	2.28	0.48
1:E:215:TYR:CE2	1:E:217:VAL:CG2	2.95	0.48
1:F:4:VAL:HG13	1:F:76:TYR:CD2	2.48	0.48
1:F:152:ARG:HG3	1:F:167:LYS:CG	2.42	0.48
1:F:355:ILE:HG13	1:F:356:ARG:H	1.78	0.48
1:G:96:GLY:HA3	1:G:100:ASP:OD2	2.13	0.48
1:B:47:ILE:HG22	1:B:48:SER:N	2.29	0.48
1:B:201:VAL:CG1	1:C:411:ALA:CB	2.91	0.48
1:C:152:ARG:CG	1:C:167:LYS:HG2	2.44	0.48
1:D:364:ILE:O	1:D:364:ILE:HG12	2.13	0.48
1:E:96:GLY:HA3	1:E:100:ASP:OD2	2.13	0.48
1:E:144:ARG:HB3	1:E:144:ARG:NH1	2.28	0.48
1:E:230:THR:O	1:F:265:TRP:HA	2.12	0.48
1:E:247:TRP:HB3	1:E:251:GLY:N	2.28	0.48
1:F:136:VAL:HG23	1:F:136:VAL:O	2.13	0.48
1:F:189:VAL:HG21	1:F:302:ILE:HG13	1.95	0.48
1:F:194:ARG:HD2	1:F:195:GLN:N	2.27	0.48
1:G:152:ARG:HG3	1:G:167:LYS:CG	2.42	0.48
1:G:299:LYS:HE2	1:G:409:GLN:O	2.13	0.48
1:A:14:LEU:HD22	1:A:14:LEU:H	1.79	0.48
1:A:16:GLN:HG3	1:A:19:CYS:SG	2.54	0.48
1:A:96:GLY:HA3	1:A:100:ASP:OD2	2.13	0.48
1:A:126:ALA:HB3	1:A:321:PHE:HD2	1.77	0.48
1:B:14:LEU:HD22	1:B:14:LEU:H	1.79	0.48
1:C:14:LEU:HD22	1:C:14:LEU:H	1.79	0.48
1:C:23:TYR:HB2	1:C:74:TRP:CB	2.41	0.48
1:C:126:ALA:HB2	1:C:324:TRP:HB2	1.95	0.48
1:C:189:VAL:HG21	1:C:302:ILE:HG13	1.94	0.48
1:C:299:LYS:HE2	1:C:409:GLN:O	2.13	0.48
1:D:201:VAL:HG13	1:E:411:ALA:CB	2.44	0.48
1:E:230:THR:CG2	1:E:268:GLN:HB3	2.39	0.48
1:F:16:GLN:HG3	1:F:19:CYS:SG	2.54	0.48
1:F:50:LEU:HD23	1:F:52:ASN:H	1.76	0.48
1:F:203:TRP:O	1:G:413:ASN:HA	2.12	0.48
1:G:136:VAL:O	1:G:136:VAL:HG23	2.13	0.48
1:A:24:ARG:HD2	1:A:77:PRO:HB2	1.95	0.48
1:A:144:ARG:HB3	1:A:144:ARG:NH1	2.28	0.48
1:A:152:ARG:CG	1:A:167:LYS:HG2	2.43	0.48
1:A:247:TRP:HB3	1:A:251:GLY:N	2.28	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:290:LYS:N	1:A:422:LEU:HD23	2.27	0.48
1:B:16:GLN:HG3	1:B:19:CYS:SG	2.54	0.48
1:B:126:ALA:HB2	1:B:324:TRP:HB2	1.95	0.48
1:B:152:ARG:CG	1:B:167:LYS:HG2	2.43	0.48
1:B:199:THR:HB	1:C:409:GLN:HE22	1.78	0.48
1:B:221:TYR:CD2	1:B:297:LEU:HD12	2.48	0.48
1:B:364:ILE:O	1:B:364:ILE:HG12	2.13	0.48
1:C:96:GLY:HA3	1:C:100:ASP:OD2	2.13	0.48
1:D:22:LYS:HA	1:D:22:LYS:HZ2	1.76	0.48
1:D:24:ARG:O	1:D:74:TRP:HD1	1.96	0.48
1:D:232:THR:HG22	1:E:264:SER:HG	1.67	0.48
1:D:339:TRP:CE3	1:D:341:HIS:CE1	3.02	0.48
1:E:24:ARG:HD2	1:E:77:PRO:HB2	1.95	0.48
1:E:24:ARG:O	1:E:74:TRP:HD1	1.97	0.48
1:E:339:TRP:CE3	1:E:341:HIS:CE1	3.02	0.48
1:F:152:ARG:CG	1:F:167:LYS:HG2	2.44	0.48
1:F:201:VAL:HG13	1:G:411:ALA:HB1	1.95	0.48
1:G:50:LEU:HD23	1:G:52:ASN:H	1.76	0.48
1:G:144:ARG:HB3	1:G:144:ARG:NH1	2.28	0.48
1:A:8:GLN:CB	1:A:76:TYR:CD1	2.97	0.48
1:A:364:ILE:O	1:A:364:ILE:HG12	2.13	0.48
1:A:414:ILE:CD1	1:G:204:ALA:CA	2.91	0.48
1:B:8:GLN:CB	1:B:76:TYR:CD1	2.97	0.48
1:B:152:ARG:HG3	1:B:167:LYS:CG	2.42	0.48
1:C:47:ILE:HG22	1:C:48:SER:N	2.28	0.48
1:D:24:ARG:HD2	1:D:77:PRO:HB2	1.95	0.48
1:D:144:ARG:HB3	1:D:144:ARG:NH1	2.28	0.48
1:D:196:LEU:CD1	1:D:298:TYR:HB3	2.44	0.48
1:F:126:ALA:HB2	1:F:324:TRP:HB2	1.95	0.48
1:G:24:ARG:HD2	1:G:77:PRO:HB2	1.95	0.48
1:B:128:VAL:CG2	1:B:140:MET:HE2	2.44	0.48
1:C:16:GLN:HG3	1:C:19:CYS:SG	2.54	0.48
1:C:196:LEU:CD1	1:C:298:TYR:HB3	2.44	0.48
1:E:152:ARG:CG	1:E:167:LYS:HG2	2.44	0.48
1:E:196:LEU:CD1	1:E:298:TYR:HB3	2.44	0.48
1:F:144:ARG:HB3	1:F:144:ARG:NH1	2.28	0.48
1:G:14:LEU:HD22	1:G:14:LEU:H	1.78	0.48
1:G:50:LEU:HD23	1:G:51:ALA:H	1.72	0.48
1:G:140:MET:HG3	1:G:141:ASP:N	2.29	0.48
1:A:143:THR:HA	1:B:32:GLN:HG2	1.96	0.48
1:A:199:THR:HB	1:B:409:GLN:HE22	1.79	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:339:TRP:CE3	1:C:341:HIS:CE1	3.02	0.48
1:D:152:ARG:CG	1:D:167:LYS:HG2	2.43	0.48
1:E:16:GLN:HG3	1:E:19:CYS:SG	2.54	0.48
1:E:56:ILE:HG22	1:E:57:MET:N	2.29	0.48
1:E:246:LYS:HD2	1:E:247:TRP:N	2.27	0.48
1:E:299:LYS:HE2	1:E:409:GLN:O	2.13	0.48
1:F:24:ARG:HD2	1:F:77:PRO:HB2	1.95	0.48
1:F:140:MET:HG3	1:F:141:ASP:N	2.29	0.48
1:F:153:GLY:HA3	1:G:64:GLU:OE2	2.13	0.48
1:F:250:VAL:O	1:F:250:VAL:HG12	2.11	0.48
1:A:50:LEU:HD23	1:A:52:ASN:H	1.76	0.48
1:A:152:ARG:HG3	1:A:167:LYS:CG	2.42	0.48
1:A:215:TYR:CD1	1:B:414:ILE:CD1	2.88	0.48
1:A:235:LEU:CB	1:A:263:GLN:HE21	2.27	0.48
1:A:342:THR:HG22	1:A:344:VAL:HG23	1.94	0.48
1:B:24:ARG:O	1:B:74:TRP:HD1	1.97	0.48
1:B:201:VAL:CG1	1:C:411:ALA:HB2	2.43	0.48
1:C:231:ASN:ND2	1:C:233:TYR:HE1	2.12	0.48
1:D:14:LEU:HD22	1:D:14:LEU:H	1.79	0.48
1:D:99:VAL:CB	1:E:362:ARG:HG3	2.44	0.48
1:E:8:GLN:CB	1:E:76:TYR:CD1	2.97	0.48
1:E:189:VAL:HG21	1:E:302:ILE:HG13	1.94	0.48
1:F:47:ILE:HG22	1:F:48:SER:N	2.29	0.48
1:F:215:TYR:CE1	1:G:414:ILE:HD12	2.42	0.48
1:G:4:VAL:HG13	1:G:76:TYR:CD2	2.48	0.48
1:G:126:ALA:HB2	1:G:324:TRP:HB2	1.95	0.48
1:G:235:LEU:CB	1:G:263:GLN:HE21	2.27	0.48
1:A:56:ILE:HG22	1:A:57:MET:N	2.29	0.48
1:A:239:VAL:HG22	1:B:257:ILE:HD11	1.95	0.48
1:A:339:TRP:CE3	1:A:341:HIS:CE1	3.02	0.48
1:B:96:GLY:HA3	1:B:100:ASP:OD2	2.13	0.48
1:B:126:ALA:HB3	1:B:321:PHE:HD2	1.77	0.48
1:D:16:GLN:HG3	1:D:19:CYS:SG	2.53	0.48
1:E:235:LEU:CB	1:E:263:GLN:HE21	2.27	0.48
1:G:47:ILE:HG22	1:G:48:SER:N	2.28	0.48
1:G:56:ILE:HG22	1:G:57:MET:N	2.29	0.48
1:A:24:ARG:O	1:A:74:TRP:HD1	1.97	0.48
1:A:230:THR:HG22	1:A:268:GLN:CD	2.35	0.48
1:A:294:LYS:HE2	1:B:304:TYR:OH	2.14	0.48
1:A:364:ILE:HG22	1:G:99:VAL:HG11	1.95	0.48
1:B:23:TYR:HB2	1:B:74:TRP:CB	2.41	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:196:LEU:CD1	1:B:298:TYR:HB3	2.44	0.48
1:C:219:LEU:HD21	1:C:295:ILE:CD1	2.44	0.48
1:D:126:ALA:HB3	1:D:321:PHE:HD2	1.77	0.48
1:D:189:VAL:HG21	1:D:302:ILE:HG13	1.95	0.48
1:D:202:GLY:HA2	1:E:412:GLY:O	2.13	0.48
1:E:54:TRP:HE3	1:E:65:ILE:HG22	1.78	0.48
1:F:8:GLN:CB	1:F:76:TYR:CD1	2.97	0.48
1:F:14:LEU:HD22	1:F:14:LEU:H	1.79	0.48
1:F:339:TRP:CE3	1:F:341:HIS:CE1	3.02	0.48
1:G:16:GLN:HG3	1:G:19:CYS:SG	2.54	0.48
1:G:247:TRP:HB3	1:G:251:GLY:N	2.28	0.48
1:A:11:LEU:HD21	1:A:42:MET:HE1	1.96	0.47
1:A:251:GLY:O	1:G:241:THR:C	2.52	0.47
1:B:56:ILE:HG22	1:B:57:MET:N	2.29	0.47
1:B:219:LEU:HD21	1:B:295:ILE:CD1	2.44	0.47
1:B:299:LYS:HE2	1:B:409:GLN:O	2.13	0.47
1:C:4:VAL:HG13	1:C:76:TYR:CD2	2.48	0.47
1:C:251:GLY:O	1:C:255:LEU:HD21	2.12	0.47
1:D:5:TYR:HD2	1:D:361:LYS:HB3	1.69	0.47
1:D:47:ILE:HG22	1:D:48:SER:N	2.28	0.47
1:D:201:VAL:CG1	1:E:411:ALA:HB2	2.44	0.47
1:D:204:ALA:CA	1:E:414:ILE:CD1	2.92	0.47
1:E:99:VAL:CB	1:F:364:ILE:HG21	2.40	0.47
1:E:126:ALA:HB2	1:E:324:TRP:HB2	1.95	0.47
1:E:201:VAL:O	1:F:411:ALA:CB	2.62	0.47
1:E:355:ILE:HG13	1:E:356:ARG:H	1.78	0.47
1:F:196:LEU:CD1	1:F:298:TYR:HB3	2.44	0.47
1:F:247:TRP:HB3	1:F:251:GLY:N	2.28	0.47
1:F:294:LYS:CE	1:G:304:TYR:CE1	2.97	0.47
1:G:230:THR:HG22	1:G:268:GLN:CD	2.34	0.47
1:A:299:LYS:HE2	1:A:409:GLN:O	2.13	0.47
1:A:413:ASN:HA	1:G:203:TRP:O	2.14	0.47
1:B:230:THR:HG22	1:B:268:GLN:CD	2.35	0.47
1:D:219:LEU:HD21	1:D:295:ILE:CD1	2.44	0.47
1:F:54:TRP:HE3	1:F:65:ILE:HG22	1.78	0.47
1:G:17:GLY:H	1:G:21:ASP:CG	2.18	0.47
1:A:140:MET:HG3	1:A:141:ASP:N	2.29	0.47
1:B:235:LEU:CB	1:B:263:GLN:HE21	2.27	0.47
1:B:339:TRP:CE3	1:B:341:HIS:CE1	3.02	0.47
1:C:99:VAL:HB	1:D:362:ARG:HG3	1.95	0.47
1:C:132:HIS:O	1:C:133:SER:HB3	2.15	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:314:TYR:CE1	1:D:316:LEU:HB2	2.49	0.47
1:E:238:LYS:O	1:F:257:ILE:CD1	2.62	0.47
1:F:231:ASN:ND2	1:F:233:TYR:HE1	2.12	0.47
1:G:132:HIS:O	1:G:133:SER:HB3	2.14	0.47
1:G:196:LEU:CD1	1:G:298:TYR:HB3	2.44	0.47
1:B:298:TYR:CZ	1:B:411:ALA:CB	2.95	0.47
1:B:355:ILE:HD12	1:B:359:TRP:CH2	2.50	0.47
1:D:114:LYS:N	1:D:115:PRO:HD2	2.30	0.47
1:D:201:VAL:HG12	1:E:411:ALA:HB2	1.96	0.47
1:E:47:ILE:HG22	1:E:48:SER:N	2.28	0.47
1:E:140:MET:HG3	1:E:141:ASP:N	2.29	0.47
1:E:219:LEU:HD21	1:E:295:ILE:CD1	2.44	0.47
1:F:132:HIS:O	1:F:133:SER:HB3	2.15	0.47
1:F:143:THR:HG21	1:G:35:LYS:NZ	2.27	0.47
1:F:201:VAL:O	1:G:411:ALA:CA	2.63	0.47
1:G:24:ARG:O	1:G:74:TRP:HD1	1.97	0.47
1:G:231:ASN:ND2	1:G:233:TYR:HE1	2.12	0.47
1:A:126:ALA:HB2	1:A:324:TRP:HB2	1.95	0.47
1:B:215:TYR:CZ	1:C:279:GLN:NE2	2.80	0.47
1:B:243:ASN:CB	1:C:250:VAL:CB	2.75	0.47
1:C:8:GLN:CB	1:C:76:TYR:CD1	2.96	0.47
1:C:103:TRP:CH2	1:D:365:PRO:HD2	2.40	0.47
1:D:25:PRO:HA	1:D:74:TRP:NE1	2.30	0.47
1:D:56:ILE:HG22	1:D:57:MET:N	2.29	0.47
1:D:212:GLN:HE21	1:D:212:GLN:HB3	1.49	0.47
1:D:235:LEU:CB	1:D:263:GLN:HE21	2.27	0.47
1:E:231:ASN:ND2	1:E:233:TYR:HE1	2.12	0.47
1:F:355:ILE:HD12	1:F:359:TRP:CH2	2.50	0.47
1:G:25:PRO:HA	1:G:74:TRP:NE1	2.30	0.47
1:G:152:ARG:CG	1:G:167:LYS:HG2	2.43	0.47
1:A:47:ILE:HG22	1:A:48:SER:N	2.28	0.47
1:A:218:THR:HB	1:B:278:SER:O	2.14	0.47
1:B:114:LYS:N	1:B:115:PRO:HD2	2.29	0.47
1:B:185:LYS:H	1:B:307:GLU:HB3	1.79	0.47
1:B:231:ASN:ND2	1:B:233:TYR:HE1	2.12	0.47
1:C:355:ILE:HD12	1:C:359:TRP:CH2	2.50	0.47
1:D:355:ILE:HG13	1:D:356:ARG:H	1.78	0.47
1:E:14:LEU:HD22	1:E:14:LEU:H	1.79	0.47
1:F:128:VAL:CG2	1:F:140:MET:HE2	2.44	0.47
1:F:212:GLN:HE21	1:F:212:GLN:HB3	1.49	0.47
1:F:219:LEU:HD21	1:F:295:ILE:CD1	2.44	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:273:THR:O	1:F:273:THR:HG23	2.15	0.47
1:G:92:ASP:C	1:G:93:ILE:HD12	2.35	0.47
1:G:273:THR:HG23	1:G:273:THR:O	2.15	0.47
1:G:339:TRP:CE3	1:G:341:HIS:CE1	3.02	0.47
1:G:344:VAL:HG12	1:G:346:GLY:O	2.15	0.47
1:G:355:ILE:HD12	1:G:359:TRP:CH2	2.50	0.47
1:G:364:ILE:HG12	1:G:364:ILE:O	2.13	0.47
1:A:132:HIS:O	1:A:133:SER:HB3	2.15	0.47
1:A:196:LEU:CD1	1:A:298:TYR:HB3	2.44	0.47
1:B:149:TRP:HD1	1:B:172:VAL:HG12	1.78	0.47
1:D:92:ASP:C	1:D:93:ILE:HD12	2.35	0.47
1:D:126:ALA:HB2	1:D:324:TRP:HB2	1.95	0.47
1:D:132:HIS:O	1:D:133:SER:HB3	2.14	0.47
1:D:230:THR:HG22	1:D:268:GLN:CD	2.34	0.47
1:D:231:ASN:ND2	1:D:233:TYR:HE1	2.12	0.47
1:D:342:THR:HG22	1:D:344:VAL:HG23	1.95	0.47
1:E:17:GLY:H	1:E:21:ASP:CG	2.17	0.47
1:E:132:HIS:O	1:E:133:SER:HB3	2.14	0.47
1:F:56:ILE:HG22	1:F:57:MET:N	2.29	0.47
1:F:91:LEU:HD23	1:F:396:VAL:HG21	1.97	0.47
1:F:92:ASP:C	1:F:93:ILE:HD12	2.35	0.47
1:F:193:ASP:HA	1:G:176:ALA:CB	2.44	0.47
1:F:235:LEU:CB	1:F:263:GLN:HE21	2.27	0.47
1:F:294:LYS:HE2	1:G:304:TYR:OH	2.14	0.47
1:G:8:GLN:CB	1:G:76:TYR:CD1	2.97	0.47
1:G:114:LYS:N	1:G:115:PRO:HD2	2.30	0.47
1:A:92:ASP:C	1:A:93:ILE:HD12	2.35	0.47
1:B:17:GLY:H	1:B:21:ASP:CG	2.18	0.47
1:C:55:VAL:HG12	1:C:56:ILE:N	2.30	0.47
1:C:230:THR:HG22	1:C:268:GLN:CD	2.35	0.47
1:C:235:LEU:CB	1:C:263:GLN:HE21	2.27	0.47
1:C:344:VAL:HG12	1:C:346:GLY:O	2.15	0.47
1:D:344:VAL:HG12	1:D:346:GLY:O	2.15	0.47
1:D:355:ILE:HD12	1:D:359:TRP:CH2	2.50	0.47
1:E:4:VAL:HG13	1:E:76:TYR:CD2	2.48	0.47
1:E:344:VAL:HG12	1:E:346:GLY:O	2.15	0.47
1:F:24:ARG:O	1:F:74:TRP:HD1	1.97	0.47
1:F:230:THR:HG22	1:F:268:GLN:CD	2.35	0.47
1:A:149:TRP:HD1	1:A:172:VAL:HG12	1.78	0.47
1:A:232:THR:N	1:B:264:SER:O	2.33	0.47
1:A:273:THR:HG23	1:A:273:THR:O	2.15	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:25:PRO:HA	1:B:74:TRP:NE1	2.30	0.47
1:B:132:HIS:O	1:B:133:SER:HB3	2.15	0.47
1:B:140:MET:HG3	1:B:141:ASP:N	2.29	0.47
1:B:142:VAL:O	1:C:32:GLN:CD	2.54	0.47
1:B:215:TYR:HE1	1:C:279:GLN:CD	2.17	0.47
1:C:24:ARG:O	1:C:74:TRP:HD1	1.97	0.47
1:C:114:LYS:N	1:C:115:PRO:HD2	2.30	0.47
1:C:140:MET:HG3	1:C:141:ASP:N	2.29	0.47
1:C:238:LYS:O	1:D:257:ILE:HD12	2.14	0.47
1:C:314:TYR:CE1	1:C:316:LEU:HB2	2.49	0.47
1:D:8:GLN:CB	1:D:76:TYR:CD1	2.97	0.47
1:D:185:LYS:H	1:D:307:GLU:HB3	1.79	0.47
1:D:241:THR:HB	1:E:251:GLY:O	2.15	0.47
1:D:336:ARG:HH11	1:D:336:ARG:HA	1.80	0.47
1:E:243:ASN:CB	1:F:250:VAL:CB	2.84	0.47
1:E:273:THR:HG23	1:E:273:THR:O	2.15	0.47
1:F:17:GLY:H	1:F:21:ASP:CG	2.17	0.47
1:F:114:LYS:N	1:F:115:PRO:HD2	2.30	0.47
1:F:220:ARG:HB2	1:G:276:SER:OG	2.14	0.47
1:F:364:ILE:O	1:F:364:ILE:HG12	2.13	0.47
1:G:185:LYS:H	1:G:307:GLU:HB3	1.79	0.47
1:A:28:ARG:HG3	1:A:52:ASN:ND2	2.30	0.47
1:A:185:LYS:H	1:A:307:GLU:HB3	1.79	0.47
1:A:242:LYS:HD2	1:A:256:SER:HB2	1.97	0.47
1:A:302:ILE:HD12	1:G:201:VAL:HG11	1.96	0.47
1:A:355:ILE:HD12	1:A:359:TRP:CH2	2.50	0.47
1:A:375:TRP:HA	1:A:378:GLN:OE1	2.15	0.47
1:B:375:TRP:HA	1:B:378:GLN:OE1	2.15	0.47
1:C:17:GLY:H	1:C:21:ASP:CG	2.18	0.47
1:C:200:VAL:HG13	1:C:200:VAL:O	2.15	0.47
1:D:17:GLY:H	1:D:21:ASP:CG	2.17	0.47
1:D:91:LEU:HD23	1:D:396:VAL:HG21	1.97	0.47
1:D:140:MET:HG3	1:D:141:ASP:N	2.29	0.47
1:G:55:VAL:HG12	1:G:56:ILE:N	2.30	0.47
1:G:128:VAL:HG21	1:G:140:MET:HE2	1.93	0.47
1:G:219:LEU:HD21	1:G:295:ILE:CD1	2.44	0.47
1:G:242:LYS:HD2	1:G:256:SER:HB2	1.97	0.47
1:G:336:ARG:HH11	1:G:336:ARG:HA	1.80	0.47
1:A:219:LEU:HD21	1:A:295:ILE:CD1	2.44	0.46
1:A:294:LYS:HE2	1:B:304:TYR:CZ	2.50	0.46
1:A:314:TYR:CE1	1:A:316:LEU:HB2	2.49	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:55:VAL:HG12	1:B:56:ILE:N	2.30	0.46
1:B:242:LYS:H	1:C:252:GLU:CA	2.28	0.46
1:C:11:LEU:HD21	1:C:42:MET:HE1	1.97	0.46
1:C:28:ARG:HG3	1:C:52:ASN:ND2	2.30	0.46
1:C:92:ASP:C	1:C:93:ILE:HD12	2.35	0.46
1:E:212:GLN:HE21	1:E:212:GLN:HB3	1.49	0.46
1:F:55:VAL:HG12	1:F:56:ILE:N	2.30	0.46
1:F:200:VAL:HG13	1:F:200:VAL:O	2.15	0.46
1:F:239:VAL:HA	1:G:257:ILE:CD1	2.45	0.46
1:F:252:GLU:HG2	1:F:254:GLU:O	2.16	0.46
1:G:91:LEU:CG	1:G:93:ILE:HD11	2.45	0.46
1:B:344:VAL:HG12	1:B:346:GLY:O	2.15	0.46
1:C:54:TRP:HE3	1:C:65:ILE:HG22	1.78	0.46
1:C:227:TRP:CZ3	1:D:269:ASN:HB3	2.44	0.46
1:D:189:VAL:CG2	1:D:302:ILE:CG1	2.93	0.46
1:D:201:VAL:O	1:E:411:ALA:HA	2.15	0.46
1:E:72:ASN:ND2	1:E:74:TRP:CZ3	2.84	0.46
1:E:92:ASP:C	1:E:93:ILE:HD12	2.35	0.46
1:F:28:ARG:CD	1:F:54:TRP:HZ3	2.28	0.46
1:F:314:TYR:CE1	1:F:316:LEU:HB2	2.49	0.46
1:F:344:VAL:HG12	1:F:346:GLY:O	2.15	0.46
1:G:189:VAL:CG2	1:G:302:ILE:CG1	2.93	0.46
1:G:252:GLU:HG2	1:G:254:GLU:O	2.16	0.46
1:G:342:THR:HG22	1:G:344:VAL:HG23	1.94	0.46
1:A:55:VAL:HG12	1:A:56:ILE:N	2.30	0.46
1:A:114:LYS:N	1:A:115:PRO:HD2	2.30	0.46
1:B:28:ARG:HG3	1:B:52:ASN:ND2	2.30	0.46
1:B:336:ARG:HA	1:B:336:ARG:HH11	1.81	0.46
1:C:375:TRP:HA	1:C:378:GLN:OE1	2.15	0.46
1:D:103:TRP:HZ2	1:E:365:PRO:CD	2.08	0.46
1:D:342:THR:HG23	1:D:344:VAL:HG23	1.96	0.46
1:D:375:TRP:HA	1:D:378:GLN:OE1	2.15	0.46
1:G:284:THR:HG23	1:G:286:PRO:CD	2.34	0.46
1:A:191:GLN:OE1	1:G:203:TRP:HH2	1.97	0.46
1:B:92:ASP:C	1:B:93:ILE:HD12	2.35	0.46
1:B:273:THR:HG23	1:B:273:THR:O	2.15	0.46
1:C:91:LEU:HD23	1:C:396:VAL:HG21	1.97	0.46
1:C:242:LYS:HD2	1:C:256:SER:HB2	1.97	0.46
1:D:28:ARG:HG3	1:D:52:ASN:ND2	2.30	0.46
1:E:114:LYS:N	1:E:115:PRO:HD2	2.29	0.46
1:E:189:VAL:CG2	1:E:302:ILE:CG1	2.93	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:230:THR:HG22	1:E:268:GLN:CD	2.35	0.46
1:F:76:TYR:HB3	1:F:77:PRO:CD	2.46	0.46
1:F:375:TRP:HA	1:F:378:GLN:OE1	2.15	0.46
1:G:28:ARG:HG3	1:G:52:ASN:ND2	2.30	0.46
1:G:72:ASN:ND2	1:G:74:TRP:CZ3	2.84	0.46
1:A:344:VAL:HG12	1:A:346:GLY:O	2.15	0.46
1:B:76:TYR:HB3	1:B:77:PRO:CD	2.46	0.46
1:B:243:ASN:HB3	1:C:250:VAL:CG2	2.44	0.46
1:D:242:LYS:HD2	1:D:256:SER:HB2	1.97	0.46
1:E:55:VAL:HG12	1:E:56:ILE:N	2.30	0.46
1:E:91:LEU:HD23	1:E:396:VAL:HG21	1.97	0.46
1:E:91:LEU:CG	1:E:93:ILE:HD11	2.45	0.46
1:E:200:VAL:O	1:E:200:VAL:HG13	2.15	0.46
1:E:336:ARG:HA	1:E:336:ARG:HH11	1.80	0.46
1:F:25:PRO:HA	1:F:74:TRP:NE1	2.30	0.46
1:F:142:VAL:O	1:G:32:GLN:CD	2.53	0.46
1:F:185:LYS:H	1:F:307:GLU:HB3	1.79	0.46
1:A:128:VAL:HG23	1:A:128:VAL:O	2.16	0.46
1:A:189:VAL:CG2	1:A:302:ILE:CG1	2.93	0.46
1:B:242:LYS:HD2	1:B:256:SER:HB2	1.98	0.46
1:B:314:TYR:CE1	1:B:316:LEU:HB2	2.49	0.46
1:C:72:ASN:ND2	1:C:74:TRP:CZ3	2.84	0.46
1:C:76:TYR:HB3	1:C:77:PRO:CD	2.46	0.46
1:C:180:ASP:N	1:C:181:PRO:HD2	2.31	0.46
1:C:185:LYS:H	1:C:307:GLU:HB3	1.79	0.46
1:C:273:THR:O	1:C:273:THR:HG23	2.15	0.46
1:D:26:VAL:HG23	1:D:50:LEU:CA	2.39	0.46
1:E:28:ARG:HG3	1:E:52:ASN:ND2	2.30	0.46
1:E:203:TRP:CH2	1:F:191:GLN:OE1	2.68	0.46
1:F:149:TRP:HD1	1:F:172:VAL:HG12	1.78	0.46
1:F:189:VAL:CG2	1:F:302:ILE:CG1	2.93	0.46
1:F:230:THR:CG2	1:F:268:GLN:HB3	2.39	0.46
1:G:26:VAL:HG23	1:G:50:LEU:CA	2.40	0.46
1:A:17:GLY:H	1:A:21:ASP:CG	2.17	0.46
1:A:32:GLN:HE21	1:A:32:GLN:HB2	1.31	0.46
1:A:72:ASN:ND2	1:A:74:TRP:CZ3	2.84	0.46
1:A:91:LEU:HD23	1:A:396:VAL:HG21	1.97	0.46
1:A:180:ASP:N	1:A:181:PRO:HD2	2.31	0.46
1:A:231:ASN:ND2	1:A:233:TYR:HE1	2.12	0.46
1:B:72:ASN:ND2	1:B:74:TRP:CZ3	2.84	0.46
1:B:227:TRP:HD1	1:B:229:LYS:HZ1	1.61	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:24:ARG:HD2	1:C:77:PRO:HB2	1.95	0.46
1:C:355:ILE:HG13	1:C:356:ARG:H	1.78	0.46
1:D:273:THR:HG23	1:D:273:THR:O	2.15	0.46
1:E:201:VAL:HG13	1:F:411:ALA:HB2	1.97	0.46
1:G:54:TRP:HE3	1:G:65:ILE:HG22	1.78	0.46
1:G:76:TYR:HB3	1:G:77:PRO:CD	2.46	0.46
1:G:180:ASP:N	1:G:181:PRO:HD2	2.31	0.46
1:A:91:LEU:CG	1:A:93:ILE:HD11	2.45	0.46
1:A:252:GLU:HG2	1:A:254:GLU:O	2.16	0.46
1:B:128:VAL:HG23	1:B:128:VAL:O	2.16	0.46
1:B:189:VAL:CG2	1:B:302:ILE:CG1	2.93	0.46
1:C:56:ILE:HG22	1:C:57:MET:N	2.29	0.46
1:C:189:VAL:CG2	1:C:302:ILE:CG1	2.93	0.46
1:D:76:TYR:HB3	1:D:77:PRO:CD	2.46	0.46
1:E:76:TYR:HB3	1:E:77:PRO:CD	2.46	0.46
1:E:185:LYS:H	1:E:307:GLU:HB3	1.79	0.46
1:F:28:ARG:HG3	1:F:52:ASN:ND2	2.30	0.46
1:G:118:TYR:CE1	1:G:134:GLN:CB	2.94	0.46
1:B:91:LEU:HD23	1:B:396:VAL:HG21	1.97	0.46
1:B:180:ASP:N	1:B:181:PRO:HD2	2.31	0.46
1:C:28:ARG:CD	1:C:54:TRP:HZ3	2.28	0.46
1:D:123:LEU:HD23	1:D:123:LEU:HA	1.71	0.46
1:E:128:VAL:HG21	1:E:140:MET:HE2	1.92	0.46
1:E:342:THR:HG22	1:E:344:VAL:HG23	1.94	0.46
1:E:375:TRP:HA	1:E:378:GLN:OE1	2.15	0.46
1:F:336:ARG:HA	1:F:336:ARG:HH11	1.80	0.46
1:G:91:LEU:HD23	1:G:396:VAL:HG21	1.97	0.46
1:G:200:VAL:O	1:G:200:VAL:HG13	2.15	0.46
1:G:314:TYR:CE1	1:G:316:LEU:HB2	2.49	0.46
1:G:375:TRP:HA	1:G:378:GLN:OE1	2.15	0.46
1:A:28:ARG:CD	1:A:54:TRP:HZ3	2.27	0.46
1:A:199:THR:HG22	1:A:200:VAL:N	2.31	0.46
1:A:294:LYS:CE	1:B:304:TYR:CZ	2.99	0.46
1:B:153:GLY:C	1:B:167:LYS:HD3	2.37	0.46
1:C:26:VAL:HG23	1:C:50:LEU:CA	2.40	0.46
1:C:228:SER:N	1:D:268:GLN:O	2.39	0.46
1:D:56:ILE:CD1	1:D:65:ILE:CD1	2.94	0.46
1:D:72:ASN:ND2	1:D:74:TRP:CZ3	2.84	0.46
1:D:414:ILE:O	1:D:414:ILE:HG12	2.16	0.46
1:E:314:TYR:CE1	1:E:316:LEU:HB2	2.49	0.46
1:E:355:ILE:HD12	1:E:359:TRP:CH2	2.50	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:128:VAL:HG21	1:F:140:MET:HE2	1.94	0.46
1:F:215:TYR:CE2	1:F:217:VAL:HG23	2.51	0.46
1:G:212:GLN:HE21	1:G:212:GLN:HB3	1.49	0.46
1:B:215:TYR:CE2	1:B:217:VAL:HG23	2.51	0.45
1:C:128:VAL:HG23	1:C:128:VAL:O	2.16	0.45
1:C:149:TRP:HD1	1:C:172:VAL:HG12	1.78	0.45
1:D:28:ARG:CD	1:D:54:TRP:HZ3	2.28	0.45
1:D:200:VAL:HG13	1:D:200:VAL:O	2.16	0.45
1:D:224:ALA:O	1:E:271:GLY:HA3	2.16	0.45
1:E:199:THR:HG22	1:E:200:VAL:N	2.32	0.45
1:E:215:TYR:CG	1:F:414:ILE:HD12	2.43	0.45
1:F:56:ILE:CD1	1:F:65:ILE:CD1	2.94	0.45
1:F:72:ASN:ND2	1:F:74:TRP:CZ3	2.84	0.45
1:F:91:LEU:CG	1:F:93:ILE:HD11	2.46	0.45
1:F:242:LYS:HD2	1:F:256:SER:HB2	1.97	0.45
1:F:281:VAL:HG11	1:F:414:ILE:CG2	2.46	0.45
1:G:230:THR:CG2	1:G:268:GLN:HB3	2.40	0.45
1:B:200:VAL:O	1:B:200:VAL:HG13	2.16	0.45
1:D:128:VAL:HG23	1:D:128:VAL:O	2.16	0.45
1:D:199:THR:HG22	1:D:200:VAL:N	2.32	0.45
1:D:243:ASN:CG	1:E:250:VAL:HG22	2.36	0.45
1:E:50:LEU:HD23	1:E:51:ALA:H	1.72	0.45
1:E:238:LYS:HG2	1:E:260:ALA:HB1	1.98	0.45
1:E:252:GLU:HG2	1:E:254:GLU:O	2.16	0.45
1:F:43:GLY:O	1:F:59:PRO:HD2	2.16	0.45
1:F:216:ASP:O	1:G:279:GLN:CG	2.55	0.45
1:G:128:VAL:HG23	1:G:128:VAL:O	2.16	0.45
1:G:199:THR:HG22	1:G:200:VAL:N	2.32	0.45
1:A:12:PHE:CD2	1:A:15:GLY:N	2.85	0.45
1:A:153:GLY:C	1:A:167:LYS:HD3	2.37	0.45
1:B:43:GLY:O	1:B:59:PRO:HD2	2.16	0.45
1:B:54:TRP:HE3	1:B:65:ILE:HG22	1.78	0.45
1:C:50:LEU:HD23	1:C:51:ALA:H	1.72	0.45
1:D:149:TRP:HD1	1:D:172:VAL:HG12	1.78	0.45
1:D:180:ASP:N	1:D:181:PRO:HD2	2.31	0.45
1:D:284:THR:HG23	1:D:285:VAL:N	2.32	0.45
1:E:284:THR:HG23	1:E:285:VAL:N	2.32	0.45
1:F:180:ASP:N	1:F:181:PRO:HD2	2.31	0.45
1:F:199:THR:HG22	1:F:200:VAL:N	2.31	0.45
1:F:342:THR:HG22	1:F:344:VAL:HG23	1.94	0.45
1:A:124:GLY:C	1:A:322:LEU:HD12	2.37	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:200:VAL:HG13	1:A:200:VAL:O	2.15	0.45
1:B:28:ARG:CD	1:B:54:TRP:HZ3	2.27	0.45
1:B:199:THR:HG22	1:B:200:VAL:N	2.32	0.45
1:B:215:TYR:OH	1:C:279:GLN:NE2	2.49	0.45
1:B:285:VAL:CG1	1:B:291:ILE:CD1	2.94	0.45
1:C:5:TYR:HD2	1:C:361:LYS:HD2	1.82	0.45
1:C:48:SER:O	1:C:55:VAL:HG13	2.17	0.45
1:C:128:VAL:HG12	1:C:159:CYS:HA	1.99	0.45
1:C:152:ARG:CD	1:C:167:LYS:HG2	2.47	0.45
1:D:91:LEU:CG	1:D:93:ILE:HD11	2.45	0.45
1:D:252:GLU:HG2	1:D:254:GLU:O	2.16	0.45
1:E:128:VAL:O	1:E:128:VAL:HG23	2.16	0.45
1:E:242:LYS:N	1:F:251:GLY:C	2.55	0.45
1:G:32:GLN:HE21	1:G:32:GLN:HB2	1.31	0.45
1:G:281:VAL:HG11	1:G:414:ILE:CG2	2.46	0.45
1:A:43:GLY:O	1:A:59:PRO:HD2	2.17	0.45
1:A:284:THR:HG23	1:A:285:VAL:N	2.32	0.45
1:B:91:LEU:CG	1:B:93:ILE:HD11	2.45	0.45
1:B:128:VAL:HG12	1:B:159:CYS:HA	1.99	0.45
1:C:43:GLY:O	1:C:59:PRO:HD2	2.17	0.45
1:C:91:LEU:CG	1:C:93:ILE:HD11	2.45	0.45
1:C:103:TRP:HA	1:C:103:TRP:CE3	2.52	0.45
1:C:199:THR:HG22	1:C:200:VAL:N	2.32	0.45
1:C:215:TYR:CE2	1:C:217:VAL:HG23	2.51	0.45
1:C:252:GLU:HG2	1:C:254:GLU:O	2.16	0.45
1:C:284:THR:HG23	1:C:285:VAL:N	2.32	0.45
1:D:5:TYR:HD2	1:D:361:LYS:HD2	1.82	0.45
1:D:128:VAL:HG12	1:D:159:CYS:HA	1.99	0.45
1:D:215:TYR:CE2	1:D:217:VAL:HG23	2.51	0.45
1:E:180:ASP:N	1:E:181:PRO:HD2	2.31	0.45
1:E:242:LYS:HE3	1:E:256:SER:N	2.32	0.45
1:E:414:ILE:O	1:E:414:ILE:HG12	2.16	0.45
1:F:48:SER:O	1:F:55:VAL:HG13	2.17	0.45
1:F:152:ARG:CD	1:F:167:LYS:HG2	2.47	0.45
1:G:12:PHE:CD2	1:G:15:GLY:N	2.85	0.45
1:G:48:SER:O	1:G:55:VAL:HG13	2.17	0.45
1:G:284:THR:HG23	1:G:285:VAL:N	2.32	0.45
1:A:230:THR:CG2	1:A:268:GLN:HB3	2.39	0.45
1:A:414:ILE:HD11	1:G:204:ALA:CA	2.45	0.45
1:B:24:ARG:HD2	1:B:77:PRO:HB2	1.95	0.45
1:B:26:VAL:HG23	1:B:50:LEU:CA	2.40	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:103:TRP:HA	1:D:103:TRP:CE3	2.52	0.45
1:D:124:GLY:C	1:D:322:LEU:HD12	2.37	0.45
1:E:103:TRP:HA	1:E:103:TRP:CE3	2.52	0.45
1:E:124:GLY:C	1:E:322:LEU:HD12	2.37	0.45
1:E:227:TRP:HA	1:F:269:ASN:HA	1.97	0.45
1:F:12:PHE:CD2	1:F:15:GLY:N	2.85	0.45
1:F:222:ASP:O	1:G:273:THR:HA	2.16	0.45
1:F:284:THR:HG23	1:F:285:VAL:N	2.32	0.45
1:G:56:ILE:CD1	1:G:65:ILE:CD1	2.94	0.45
1:A:48:SER:O	1:A:55:VAL:HG13	2.17	0.45
1:A:66:LYS:CB	1:A:67:PRO:HD2	2.42	0.45
1:A:242:LYS:HE3	1:A:256:SER:N	2.32	0.45
1:A:281:VAL:HG11	1:A:414:ILE:CG2	2.46	0.45
1:A:336:ARG:HH11	1:A:336:ARG:HA	1.81	0.45
1:C:218:THR:HB	1:D:278:SER:O	2.16	0.45
1:D:124:GLY:O	1:D:322:LEU:HD12	2.17	0.45
1:E:56:ILE:CD1	1:E:65:ILE:CD1	2.94	0.45
1:E:342:THR:HG23	1:E:344:VAL:HG23	1.96	0.45
1:F:242:LYS:HE3	1:F:256:SER:N	2.32	0.45
1:G:99:VAL:CG1	1:G:103:TRP:HE1	2.30	0.45
1:A:47:ILE:CG2	1:A:55:VAL:CG1	2.95	0.45
1:A:76:TYR:N	1:A:77:PRO:HD2	2.32	0.45
1:A:215:TYR:CE2	1:A:217:VAL:HG23	2.51	0.45
1:B:185:LYS:HG3	1:G:207:ASP:OD2	2.16	0.45
1:B:242:LYS:HE3	1:B:256:SER:N	2.32	0.45
1:B:284:THR:HG23	1:B:285:VAL:N	2.32	0.45
1:D:152:ARG:CD	1:D:167:LYS:HG2	2.47	0.45
1:D:203:TRP:CH2	1:E:298:TYR:OH	2.60	0.45
1:E:48:SER:O	1:E:55:VAL:HG13	2.17	0.45
1:E:99:VAL:CG1	1:E:103:TRP:HE1	2.30	0.45
1:E:215:TYR:CE2	1:E:217:VAL:HG23	2.51	0.45
1:F:124:GLY:O	1:F:322:LEU:HD12	2.17	0.45
1:G:55:VAL:CG1	1:G:56:ILE:N	2.80	0.45
1:G:76:TYR:N	1:G:77:PRO:HD2	2.32	0.45
1:G:257:ILE:O	1:G:257:ILE:HG23	2.17	0.45
1:A:5:TYR:HD2	1:A:361:LYS:HD2	1.82	0.45
1:A:11:LEU:HD21	1:A:42:MET:CE	2.47	0.45
1:A:26:VAL:HG23	1:A:50:LEU:CA	2.40	0.45
1:A:128:VAL:HG12	1:A:159:CYS:HA	1.98	0.45
1:A:224:ALA:CB	1:A:274:THR:HB	2.45	0.45
1:A:257:ILE:O	1:A:257:ILE:HG23	2.17	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:76:TYR:N	1:B:77:PRO:HD2	2.32	0.45
1:C:93:ILE:CG2	1:C:94:PRO:N	2.80	0.45
1:C:124:GLY:O	1:C:322:LEU:HD12	2.17	0.45
1:C:215:TYR:CD1	1:D:414:ILE:CD1	2.88	0.45
1:C:232:THR:HG21	1:D:264:SER:OG	2.03	0.45
1:C:281:VAL:HG11	1:C:414:ILE:CG2	2.46	0.45
1:C:285:VAL:CG1	1:C:291:ILE:CD1	2.95	0.45
1:C:336:ARG:HA	1:C:336:ARG:HH11	1.80	0.45
1:C:349:LYS:O	1:C:355:ILE:HD13	2.17	0.45
1:D:188:ASP:OD2	1:E:180:ASP:OD2	2.34	0.45
1:D:229:LYS:HA	1:E:266:ALA:O	2.17	0.45
1:E:5:TYR:HD2	1:E:361:LYS:HD2	1.82	0.45
1:E:11:LEU:HD21	1:E:42:MET:CE	2.47	0.45
1:E:26:VAL:HG23	1:E:50:LEU:CA	2.40	0.45
1:E:99:VAL:CG1	1:F:364:ILE:HG23	1.88	0.45
1:E:124:GLY:O	1:E:322:LEU:HD12	2.17	0.45
1:E:281:VAL:HG11	1:E:414:ILE:CG2	2.46	0.45
1:F:11:LEU:HD21	1:F:42:MET:CE	2.47	0.45
1:F:99:VAL:CG1	1:F:103:TRP:HE1	2.30	0.45
1:F:128:VAL:HG23	1:F:128:VAL:O	2.16	0.45
1:G:43:GLY:O	1:G:59:PRO:HD2	2.17	0.45
1:G:93:ILE:CG2	1:G:94:PRO:N	2.80	0.45
1:G:149:TRP:HD1	1:G:172:VAL:HG12	1.78	0.45
1:G:152:ARG:CD	1:G:167:LYS:HG2	2.47	0.45
1:G:242:LYS:HE3	1:G:256:SER:N	2.32	0.45
1:G:349:LYS:O	1:G:355:ILE:HD13	2.17	0.45
1:A:76:TYR:HB3	1:A:77:PRO:CD	2.46	0.45
1:A:103:TRP:HB3	1:A:107:HIS:CD2	2.52	0.45
1:A:152:ARG:CD	1:A:167:LYS:HG2	2.47	0.45
1:A:226:ASN:O	1:B:270:GLY:N	2.48	0.45
1:B:5:TYR:HD2	1:B:361:LYS:HD2	1.82	0.45
1:B:11:LEU:HD21	1:B:42:MET:CE	2.47	0.45
1:B:48:SER:O	1:B:55:VAL:HG13	2.17	0.45
1:B:182:ASP:HB2	1:G:422:LEU:CD1	2.28	0.45
1:B:207:ASP:OD2	1:D:185:LYS:CD	2.65	0.45
1:B:252:GLU:HG2	1:B:254:GLU:O	2.16	0.45
1:C:56:ILE:CD1	1:C:65:ILE:CD1	2.94	0.45
1:C:76:TYR:N	1:C:77:PRO:HD2	2.32	0.45
1:C:189:VAL:CB	1:C:304:TYR:CE2	2.97	0.45
1:C:414:ILE:HG12	1:C:414:ILE:O	2.16	0.45
1:D:47:ILE:CG2	1:D:55:VAL:CG1	2.95	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:55:VAL:CG1	1:F:56:ILE:N	2.80	0.45
1:F:93:ILE:CG2	1:F:94:PRO:N	2.80	0.45
1:F:166:ASP:HB3	1:F:321:PHE:CZ	2.52	0.45
1:G:47:ILE:CG2	1:G:55:VAL:CG1	2.95	0.45
1:G:124:GLY:C	1:G:322:LEU:HD12	2.37	0.45
1:G:124:GLY:O	1:G:322:LEU:HD12	2.17	0.45
1:G:215:TYR:CE2	1:G:217:VAL:HG23	2.51	0.45
1:A:103:TRP:HA	1:A:103:TRP:CE3	2.52	0.44
1:A:294:LYS:HE2	1:B:304:TYR:CE1	2.51	0.44
1:A:414:ILE:O	1:A:414:ILE:HG12	2.16	0.44
1:B:124:GLY:C	1:B:322:LEU:HD12	2.37	0.44
1:B:281:VAL:HG11	1:B:414:ILE:CG2	2.46	0.44
1:C:11:LEU:HD21	1:C:42:MET:CE	2.47	0.44
1:C:242:LYS:HE3	1:C:256:SER:N	2.32	0.44
1:D:11:LEU:HD21	1:D:42:MET:CE	2.47	0.44
1:D:93:ILE:CG2	1:D:94:PRO:N	2.80	0.44
1:E:28:ARG:CD	1:E:54:TRP:HZ3	2.28	0.44
1:E:128:VAL:CG2	1:E:140:MET:CE	2.95	0.44
1:E:242:LYS:HD2	1:E:256:SER:HB2	1.98	0.44
1:F:285:VAL:CG1	1:F:291:ILE:CD1	2.95	0.44
1:G:5:TYR:HD2	1:G:361:LYS:HD2	1.82	0.44
1:G:11:LEU:HD21	1:G:42:MET:CE	2.47	0.44
1:G:189:VAL:CB	1:G:304:TYR:CE2	2.97	0.44
1:G:285:VAL:CG1	1:G:291:ILE:CD1	2.95	0.44
1:A:143:THR:HG22	1:B:32:GLN:HG2	1.98	0.44
1:B:47:ILE:CG2	1:B:55:VAL:CG1	2.95	0.44
1:B:103:TRP:HB3	1:B:107:HIS:CD2	2.52	0.44
1:B:257:ILE:O	1:B:257:ILE:HG23	2.17	0.44
1:C:25:PRO:HA	1:C:74:TRP:NE1	2.30	0.44
1:D:43:GLY:O	1:D:59:PRO:HD2	2.17	0.44
1:D:99:VAL:CG1	1:D:103:TRP:HE1	2.30	0.44
1:D:222:ASP:O	1:E:273:THR:OG1	2.27	0.44
1:D:242:LYS:HE3	1:D:256:SER:N	2.32	0.44
1:E:47:ILE:CG2	1:E:55:VAL:CG1	2.95	0.44
1:E:103:TRP:HB3	1:E:107:HIS:CD2	2.52	0.44
1:F:349:LYS:O	1:F:355:ILE:HD13	2.17	0.44
1:A:25:PRO:HA	1:A:74:TRP:NE1	2.30	0.44
1:A:93:ILE:CG2	1:A:94:PRO:N	2.80	0.44
1:A:239:VAL:HG22	1:B:257:ILE:CD1	2.47	0.44
1:B:166:ASP:HB3	1:B:321:PHE:CZ	2.52	0.44
1:C:47:ILE:CG2	1:C:55:VAL:CG1	2.95	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:124:GLY:C	1:C:322:LEU:HD12	2.37	0.44
1:C:185:LYS:HB2	1:C:185:LYS:NZ	2.33	0.44
1:D:281:VAL:HG11	1:D:414:ILE:CG2	2.46	0.44
1:E:25:PRO:HA	1:E:74:TRP:NE1	2.30	0.44
1:F:189:VAL:CB	1:F:304:TYR:CE2	2.97	0.44
1:G:103:TRP:HB3	1:G:107:HIS:CD2	2.53	0.44
1:A:238:LYS:HG2	1:A:260:ALA:HB1	1.98	0.44
1:A:304:TYR:OH	1:G:294:LYS:HE3	2.18	0.44
1:B:201:VAL:HG12	1:C:411:ALA:HB2	2.00	0.44
1:D:12:PHE:CD2	1:D:15:GLY:N	2.85	0.44
1:D:55:VAL:HG12	1:D:56:ILE:N	2.30	0.44
1:D:103:TRP:HB3	1:D:107:HIS:CD2	2.52	0.44
1:D:166:ASP:HB3	1:D:321:PHE:CZ	2.52	0.44
1:E:12:PHE:CD2	1:E:15:GLY:N	2.85	0.44
1:E:43:GLY:O	1:E:59:PRO:HD2	2.16	0.44
1:E:101:VAL:CG1	1:E:400:ILE:HG12	2.47	0.44
1:E:128:VAL:HG12	1:E:159:CYS:HA	1.99	0.44
1:E:152:ARG:CD	1:E:167:LYS:HG2	2.47	0.44
1:E:327:ASN:HD22	1:E:327:ASN:H	1.65	0.44
1:F:76:TYR:N	1:F:77:PRO:HD2	2.32	0.44
1:F:101:VAL:CG1	1:F:400:ILE:HG12	2.47	0.44
1:F:112:PHE:CE2	1:F:170:ILE:HD13	2.53	0.44
1:F:143:THR:CG2	1:G:35:LYS:NZ	2.81	0.44
1:A:166:ASP:HB3	1:A:321:PHE:CZ	2.52	0.44
1:B:327:ASN:ND2	1:B:329:TRP:CH2	2.86	0.44
1:B:349:LYS:O	1:B:355:ILE:HD13	2.17	0.44
1:B:355:ILE:HG13	1:B:356:ARG:H	1.78	0.44
1:C:12:PHE:CD2	1:C:15:GLY:N	2.85	0.44
1:C:166:ASP:HB3	1:C:321:PHE:CZ	2.52	0.44
1:C:238:LYS:HG2	1:C:260:ALA:HB1	1.98	0.44
1:C:294:LYS:NZ	1:D:304:TYR:CE1	2.84	0.44
1:D:76:TYR:N	1:D:77:PRO:HD2	2.32	0.44
1:D:327:ASN:H	1:D:327:ASN:HD22	1.65	0.44
1:E:18:VAL:HG13	1:E:19:CYS:N	2.33	0.44
1:E:66:LYS:HB3	1:E:67:PRO:CD	2.40	0.44
1:E:93:ILE:CG2	1:E:94:PRO:N	2.80	0.44
1:E:185:LYS:HB2	1:E:185:LYS:NZ	2.33	0.44
1:F:103:TRP:HB3	1:F:107:HIS:CD2	2.52	0.44
1:F:257:ILE:O	1:F:257:ILE:HG23	2.17	0.44
1:G:112:PHE:CE2	1:G:170:ILE:HD13	2.53	0.44
1:A:112:PHE:CE2	1:A:170:ILE:HD13	2.53	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:123:LEU:HD23	1:A:123:LEU:HA	1.71	0.44
1:A:250:VAL:CG1	1:G:243:ASN:HD22	2.28	0.44
1:B:99:VAL:CG1	1:B:103:TRP:HE1	2.30	0.44
1:B:124:GLY:O	1:B:322:LEU:HD12	2.17	0.44
1:C:196:LEU:HD12	1:C:297:LEU:O	2.18	0.44
1:C:197:VAL:HG22	1:C:298:TYR:CA	2.46	0.44
1:D:196:LEU:HD12	1:D:297:LEU:O	2.18	0.44
1:D:244:LYS:HG3	1:E:253:THR:HG1	1.71	0.44
1:E:197:VAL:HG22	1:E:298:TYR:CA	2.45	0.44
1:F:332:HIS:HD2	1:F:371:TRP:HD1	1.65	0.44
1:G:153:GLY:C	1:G:167:LYS:HD3	2.37	0.44
1:A:124:GLY:O	1:A:322:LEU:HD12	2.17	0.44
1:A:285:VAL:CG1	1:A:291:ILE:CD1	2.94	0.44
1:A:349:LYS:O	1:A:355:ILE:HD13	2.17	0.44
1:B:12:PHE:CD2	1:B:15:GLY:N	2.85	0.44
1:B:414:ILE:O	1:B:414:ILE:HG12	2.16	0.44
1:C:103:TRP:HB3	1:C:107:HIS:CD2	2.52	0.44
1:D:349:LYS:O	1:D:355:ILE:HD13	2.17	0.44
1:E:76:TYR:N	1:E:77:PRO:HD2	2.32	0.44
1:F:47:ILE:CG2	1:F:55:VAL:CG1	2.95	0.44
1:F:99:VAL:HG12	1:F:103:TRP:NE1	2.33	0.44
1:F:124:GLY:C	1:F:322:LEU:HD12	2.37	0.44
1:F:197:VAL:HG22	1:F:298:TYR:CA	2.45	0.44
1:F:342:THR:HG23	1:F:344:VAL:HG23	1.96	0.44
1:G:227:TRP:HD1	1:G:229:LYS:HZ1	1.62	0.44
1:G:414:ILE:O	1:G:414:ILE:HG12	2.17	0.44
1:A:243:ASN:HB3	1:B:250:VAL:HA	1.99	0.44
1:B:197:VAL:HG22	1:B:298:TYR:CA	2.45	0.44
1:C:55:VAL:CG1	1:C:56:ILE:N	2.80	0.44
1:D:48:SER:O	1:D:55:VAL:HG13	2.17	0.44
1:D:55:VAL:CG1	1:D:56:ILE:N	2.80	0.44
1:D:112:PHE:CE2	1:D:170:ILE:HD13	2.53	0.44
1:D:153:GLY:C	1:D:167:LYS:HD3	2.37	0.44
1:E:99:VAL:HG12	1:E:103:TRP:NE1	2.33	0.44
1:E:112:PHE:CE2	1:E:170:ILE:HD13	2.53	0.44
1:E:166:ASP:HB3	1:E:321:PHE:CZ	2.52	0.44
1:E:189:VAL:O	1:F:178:ASN:ND2	2.51	0.44
1:E:285:VAL:CG1	1:E:291:ILE:CD1	2.94	0.44
1:F:66:LYS:CB	1:F:67:PRO:HD2	2.42	0.44
1:G:16:GLN:HE21	1:G:16:GLN:HB3	1.59	0.44
1:A:182:ASP:HB3	1:F:421:PRO:O	2.18	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:242:LYS:N	1:B:251:GLY:O	2.50	0.44
1:A:392:VAL:HG23	1:A:393:LEU:N	2.33	0.44
1:B:55:VAL:CG1	1:B:56:ILE:N	2.80	0.44
1:B:196:LEU:HD12	1:B:297:LEU:O	2.18	0.44
1:B:336:ARG:CB	1:B:337:PRO:HD3	2.48	0.44
1:D:101:VAL:CG1	1:D:400:ILE:HG12	2.47	0.44
1:D:197:VAL:HG22	1:D:298:TYR:CA	2.45	0.44
1:D:210:THR:HG22	1:D:211:PRO:HD3	2.00	0.44
1:D:285:VAL:CG1	1:D:291:ILE:CD1	2.94	0.44
1:E:55:VAL:CG1	1:E:56:ILE:N	2.80	0.44
1:E:186:HIS:CG	1:E:306:TYR:HD1	2.36	0.44
1:E:196:LEU:HD12	1:E:297:LEU:O	2.18	0.44
1:E:207:ASP:OD2	1:G:185:LYS:CD	2.65	0.44
1:E:220:ARG:HB2	1:F:276:SER:OG	2.18	0.44
1:F:5:TYR:HD2	1:F:361:LYS:HD2	1.82	0.44
1:F:103:TRP:HA	1:F:103:TRP:CE3	2.52	0.44
1:G:103:TRP:CE3	1:G:103:TRP:HA	2.52	0.44
1:G:132:HIS:CD2	1:G:138:GLU:CB	2.96	0.44
1:A:18:VAL:HG13	1:A:19:CYS:N	2.33	0.43
1:A:55:VAL:CG1	1:A:56:ILE:N	2.80	0.43
1:A:199:THR:HB	1:B:409:GLN:NE2	2.32	0.43
1:A:210:THR:HG22	1:A:211:PRO:HD3	2.00	0.43
1:A:228:SER:O	1:B:268:GLN:N	2.41	0.43
1:A:257:ILE:HD12	1:G:239:VAL:HA	1.99	0.43
1:B:215:TYR:CD1	1:C:414:ILE:CD1	2.94	0.43
1:D:18:VAL:HG13	1:D:19:CYS:N	2.33	0.43
1:D:327:ASN:ND2	1:D:329:TRP:CH2	2.86	0.43
1:F:123:LEU:HD23	1:F:123:LEU:HA	1.71	0.43
1:F:210:THR:HG22	1:F:211:PRO:HD3	2.00	0.43
1:F:414:ILE:O	1:F:414:ILE:HG12	2.16	0.43
1:G:101:VAL:CG1	1:G:400:ILE:HG12	2.47	0.43
1:A:99:VAL:CG1	1:A:103:TRP:HE1	2.30	0.43
1:B:18:VAL:HG13	1:B:19:CYS:N	2.33	0.43
1:B:56:ILE:CD1	1:B:65:ILE:CD1	2.94	0.43
1:B:152:ARG:CD	1:B:167:LYS:HG2	2.47	0.43
1:B:323:ARG:NH2	1:B:339:TRP:CE3	2.87	0.43
1:C:336:ARG:CB	1:C:337:PRO:HD3	2.48	0.43
1:D:155:ASN:OD1	1:E:62:ASN:HB2	2.19	0.43
1:D:239:VAL:HA	1:E:257:ILE:HD12	1.99	0.43
1:D:392:VAL:HG23	1:D:393:LEU:N	2.33	0.43
1:E:153:GLY:C	1:E:167:LYS:HD3	2.37	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:199:THR:CB	1:F:409:GLN:NE2	2.73	0.43
1:F:85:ILE:HD11	1:F:389:LEU:HD23	2.01	0.43
1:F:364:ILE:HA	1:F:365:PRO:HD2	1.87	0.43
1:G:28:ARG:CD	1:G:54:TRP:HZ3	2.28	0.43
1:G:332:HIS:HD2	1:G:371:TRP:HD1	1.65	0.43
1:A:210:THR:HG23	1:A:211:PRO:CD	2.49	0.43
1:B:93:ILE:CG2	1:B:94:PRO:N	2.80	0.43
1:B:103:TRP:CE3	1:B:103:TRP:HA	2.52	0.43
1:B:238:LYS:HG2	1:B:260:ALA:HB1	1.99	0.43
1:C:99:VAL:CG1	1:C:103:TRP:HE1	2.30	0.43
1:C:125:TYR:HD2	1:C:321:PHE:HB2	1.84	0.43
1:C:132:HIS:CD2	1:C:138:GLU:CB	2.96	0.43
1:C:186:HIS:CG	1:C:306:TYR:HD1	2.36	0.43
1:C:257:ILE:O	1:C:257:ILE:HG23	2.17	0.43
1:D:114:LYS:NZ	1:E:28:ARG:NH2	2.66	0.43
1:E:189:VAL:CB	1:E:304:TYR:CE2	2.97	0.43
1:E:349:LYS:O	1:E:355:ILE:HD13	2.17	0.43
1:E:392:VAL:HG23	1:E:393:LEU:N	2.33	0.43
1:F:32:GLN:HE21	1:F:32:GLN:HB2	1.30	0.43
1:F:128:VAL:CG2	1:F:140:MET:CE	2.95	0.43
1:F:128:VAL:HG12	1:F:159:CYS:HA	1.99	0.43
1:F:210:THR:HG23	1:F:211:PRO:CD	2.48	0.43
1:F:327:ASN:H	1:F:327:ASN:HD22	1.65	0.43
1:G:18:VAL:HG13	1:G:19:CYS:N	2.33	0.43
1:G:99:VAL:HG12	1:G:103:TRP:NE1	2.33	0.43
1:B:99:VAL:HG12	1:B:103:TRP:NE1	2.33	0.43
1:B:112:PHE:CE2	1:B:170:ILE:HD13	2.53	0.43
1:B:152:ARG:CG	1:B:167:LYS:CG	2.96	0.43
1:B:186:HIS:CG	1:B:306:TYR:HD1	2.36	0.43
1:B:210:THR:HG22	1:B:211:PRO:HD3	2.00	0.43
1:C:18:VAL:HG13	1:C:19:CYS:N	2.33	0.43
1:C:227:TRP:HE3	1:D:269:ASN:CB	2.20	0.43
1:C:323:ARG:NH2	1:C:339:TRP:CE3	2.87	0.43
1:C:364:ILE:HA	1:C:365:PRO:HD2	1.87	0.43
1:C:392:VAL:HG23	1:C:393:LEU:N	2.33	0.43
1:D:103:TRP:CZ3	1:D:144:ARG:NH1	2.87	0.43
1:E:85:ILE:HD11	1:E:389:LEU:HD23	2.01	0.43
1:E:103:TRP:NE1	1:F:364:ILE:HG22	2.30	0.43
1:E:221:TYR:CE2	1:E:297:LEU:HD12	2.54	0.43
1:E:323:ARG:NH2	1:E:339:TRP:CE3	2.86	0.43
1:E:332:HIS:HD2	1:E:371:TRP:HD1	1.65	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:185:LYS:NZ	1:F:185:LYS:HB2	2.33	0.43
1:F:323:ARG:NH2	1:F:339:TRP:CE3	2.87	0.43
1:A:16:GLN:CB	1:A:19:CYS:SG	3.05	0.43
1:A:182:ASP:HA	1:F:422:LEU:HD13	2.00	0.43
1:A:189:VAL:CB	1:A:304:TYR:CE2	2.97	0.43
1:A:323:ARG:NH2	1:A:339:TRP:CE3	2.86	0.43
1:A:327:ASN:ND2	1:A:329:TRP:CH2	2.86	0.43
1:A:336:ARG:CB	1:A:337:PRO:HD3	2.48	0.43
1:B:32:GLN:HE21	1:B:32:GLN:HB2	1.30	0.43
1:C:128:VAL:CG2	1:C:140:MET:HE2	2.49	0.43
1:C:203:TRP:CD1	1:D:413:ASN:ND2	2.85	0.43
1:D:10:ARG:H	1:D:10:ARG:HG3	1.71	0.43
1:D:72:ASN:ND2	1:D:74:TRP:CH2	2.87	0.43
1:D:125:TYR:HD2	1:D:321:PHE:HB2	1.84	0.43
1:D:189:VAL:HG13	1:E:178:ASN:HD21	1.83	0.43
1:D:238:LYS:HG2	1:D:260:ALA:HB1	1.98	0.43
1:F:152:ARG:CG	1:F:167:LYS:CG	2.97	0.43
1:F:152:ARG:O	1:F:167:LYS:HD2	2.19	0.43
1:F:392:VAL:HG23	1:F:393:LEU:N	2.34	0.43
1:G:128:VAL:HG12	1:G:159:CYS:HA	1.99	0.43
1:A:72:ASN:ND2	1:A:74:TRP:CH2	2.87	0.43
1:A:152:ARG:O	1:A:167:LYS:HD2	2.19	0.43
1:A:185:LYS:NZ	1:A:185:LYS:HB2	2.33	0.43
1:A:322:LEU:CB	1:A:341:HIS:NE2	2.82	0.43
1:C:143:THR:HA	1:D:32:GLN:CB	2.38	0.43
1:D:99:VAL:HG12	1:D:103:TRP:NE1	2.33	0.43
1:D:323:ARG:NH2	1:D:339:TRP:CE3	2.87	0.43
1:D:332:HIS:HD2	1:D:371:TRP:HD1	1.65	0.43
1:E:201:VAL:O	1:F:411:ALA:HB1	2.19	0.43
1:F:101:VAL:HG21	1:F:400:ILE:HD13	1.97	0.43
1:F:224:ALA:CB	1:F:274:THR:HB	2.45	0.43
1:F:226:ASN:O	1:G:270:GLY:N	2.52	0.43
1:F:238:LYS:O	1:G:257:ILE:CD1	2.66	0.43
1:G:103:TRP:CZ3	1:G:144:ARG:NH1	2.87	0.43
1:G:166:ASP:HB3	1:G:321:PHE:CZ	2.52	0.43
1:G:327:ASN:H	1:G:327:ASN:HD22	1.65	0.43
1:G:364:ILE:CD1	1:G:364:ILE:N	2.82	0.43
1:A:103:TRP:CZ3	1:A:144:ARG:NH1	2.87	0.43
1:A:182:ASP:HA	1:F:422:LEU:CD1	2.49	0.43
1:A:186:HIS:CG	1:A:306:TYR:HD1	2.36	0.43
1:B:238:LYS:O	1:C:257:ILE:CD1	2.66	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:322:LEU:CB	1:B:341:HIS:NE2	2.82	0.43
1:B:327:ASN:HD22	1:B:327:ASN:H	1.65	0.43
1:C:17:GLY:HA2	1:C:21:ASP:OD2	2.19	0.43
1:C:210:THR:HG23	1:C:211:PRO:CD	2.49	0.43
1:C:327:ASN:HD22	1:C:327:ASN:H	1.65	0.43
1:E:277:LEU:N	1:E:277:LEU:CD1	2.82	0.43
1:F:153:GLY:C	1:F:167:LYS:HD3	2.37	0.43
1:F:186:HIS:CG	1:F:306:TYR:HD1	2.36	0.43
1:F:364:ILE:CD1	1:F:364:ILE:N	2.82	0.43
1:G:72:ASN:ND2	1:G:74:TRP:CH2	2.87	0.43
1:G:152:ARG:O	1:G:167:LYS:HD2	2.19	0.43
1:G:186:HIS:CG	1:G:306:TYR:HD1	2.37	0.43
1:G:197:VAL:HG22	1:G:298:TYR:CA	2.46	0.43
1:G:323:ARG:NH2	1:G:339:TRP:CE3	2.87	0.43
1:A:99:VAL:HG12	1:A:103:TRP:NE1	2.33	0.43
1:A:327:ASN:H	1:A:327:ASN:HD22	1.65	0.43
1:B:72:ASN:ND2	1:B:74:TRP:CH2	2.87	0.43
1:B:185:LYS:NZ	1:B:185:LYS:HB2	2.33	0.43
1:B:190:THR:HA	1:C:178:ASN:ND2	2.34	0.43
1:B:210:THR:HG23	1:B:211:PRO:CD	2.49	0.43
1:B:342:THR:HG23	1:B:344:VAL:HG23	1.96	0.43
1:B:392:VAL:HG23	1:B:393:LEU:N	2.34	0.43
1:C:103:TRP:CZ3	1:C:144:ARG:NH1	2.87	0.43
1:C:153:GLY:C	1:C:167:LYS:HD3	2.37	0.43
1:C:332:HIS:HD2	1:C:371:TRP:HD1	1.65	0.43
1:D:185:LYS:HB2	1:D:185:LYS:NZ	2.33	0.43
1:D:277:LEU:N	1:D:277:LEU:CD1	2.82	0.43
1:D:322:LEU:CB	1:D:341:HIS:NE2	2.82	0.43
1:F:7:ASP:OD1	1:F:361:LYS:HE3	2.19	0.43
1:F:196:LEU:HD12	1:F:297:LEU:O	2.18	0.43
1:G:125:TYR:HD2	1:G:321:PHE:HB2	1.84	0.43
1:G:152:ARG:CG	1:G:167:LYS:CG	2.97	0.43
1:G:185:LYS:NZ	1:G:185:LYS:HB2	2.33	0.43
1:A:196:LEU:HD12	1:A:297:LEU:O	2.18	0.43
1:A:210:THR:HG23	1:A:211:PRO:N	2.34	0.43
1:B:103:TRP:CZ3	1:B:144:ARG:NH1	2.87	0.43
1:B:210:THR:HG23	1:B:211:PRO:N	2.34	0.43
1:B:332:HIS:HD2	1:B:371:TRP:HD1	1.65	0.43
1:C:72:ASN:ND2	1:C:74:TRP:CH2	2.87	0.43
1:C:99:VAL:HG12	1:C:103:TRP:NE1	2.33	0.43
1:C:112:PHE:CE2	1:C:170:ILE:HD13	2.53	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:85:ILE:HD11	1:D:389:LEU:HD23	2.01	0.43
1:D:186:HIS:CG	1:D:306:TYR:HD1	2.36	0.43
1:D:231:ASN:HA	1:E:265:TRP:HA	2.00	0.43
1:E:103:TRP:CZ3	1:E:144:ARG:NH1	2.87	0.43
1:E:125:TYR:HD2	1:E:321:PHE:HB2	1.83	0.43
1:G:252:GLU:O	1:G:255:LEU:HG	2.19	0.43
1:A:56:ILE:CD1	1:A:65:ILE:CD1	2.95	0.43
1:A:308:PHE:HA	1:A:400:ILE:O	2.19	0.43
1:B:189:VAL:CB	1:B:304:TYR:CE2	2.97	0.43
1:C:101:VAL:CG1	1:C:400:ILE:HG12	2.47	0.43
1:C:144:ARG:CD	1:D:363:TYR:HE2	2.32	0.43
1:C:308:PHE:HA	1:C:400:ILE:O	2.19	0.43
1:D:336:ARG:CB	1:D:337:PRO:HD3	2.48	0.43
1:E:210:THR:HG23	1:E:211:PRO:N	2.34	0.43
1:E:257:ILE:O	1:E:257:ILE:HG23	2.17	0.43
1:F:72:ASN:ND2	1:F:74:TRP:CH2	2.87	0.43
1:F:277:LEU:N	1:F:277:LEU:CD1	2.82	0.43
1:A:17:GLY:HA2	1:A:21:ASP:OD2	2.19	0.42
1:A:47:ILE:CG2	1:A:48:SER:N	2.82	0.42
1:A:152:ARG:CG	1:A:167:LYS:CG	2.97	0.42
1:B:17:GLY:HA2	1:B:21:ASP:OD2	2.19	0.42
1:B:47:ILE:CG2	1:B:48:SER:N	2.82	0.42
1:B:152:ARG:O	1:B:167:LYS:HD2	2.19	0.42
1:B:221:TYR:CE2	1:B:297:LEU:HD12	2.54	0.42
1:B:252:GLU:O	1:B:255:LEU:HG	2.19	0.42
1:C:66:LYS:HB3	1:C:67:PRO:CD	2.40	0.42
1:C:322:LEU:CB	1:C:341:HIS:NE2	2.82	0.42
1:D:17:GLY:HA2	1:D:21:ASP:OD2	2.19	0.42
1:D:101:VAL:HG21	1:D:400:ILE:HD13	1.97	0.42
1:D:152:ARG:CG	1:D:167:LYS:CG	2.97	0.42
1:D:210:THR:HG23	1:D:211:PRO:CD	2.49	0.42
1:D:362:ARG:O	1:D:363:TYR:HB3	2.19	0.42
1:E:47:ILE:CG2	1:E:48:SER:N	2.82	0.42
1:E:189:VAL:HG23	1:E:302:ILE:HG12	2.01	0.42
1:E:191:GLN:H	1:F:178:ASN:CB	2.17	0.42
1:E:252:GLU:O	1:E:255:LEU:HG	2.19	0.42
1:F:18:VAL:HG13	1:F:19:CYS:N	2.33	0.42
1:F:24:ARG:O	1:F:74:TRP:CD1	2.73	0.42
1:F:47:ILE:CG2	1:F:48:SER:N	2.82	0.42
1:F:78:THR:CG2	1:F:79:ASN:N	2.82	0.42
1:G:47:ILE:CG2	1:G:48:SER:N	2.82	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:210:THR:HG23	1:G:211:PRO:CD	2.48	0.42
1:G:221:TYR:CE2	1:G:297:LEU:HD12	2.54	0.42
1:G:392:VAL:HG23	1:G:393:LEU:N	2.33	0.42
1:A:24:ARG:O	1:A:74:TRP:CD1	2.73	0.42
1:A:54:TRP:HE3	1:A:65:ILE:HG22	1.78	0.42
1:A:101:VAL:CG1	1:A:400:ILE:HG12	2.47	0.42
1:A:257:ILE:CD1	1:G:239:VAL:HA	2.48	0.42
1:B:7:ASP:OD1	1:B:361:LYS:HE3	2.19	0.42
1:B:224:ALA:CB	1:B:274:THR:HB	2.45	0.42
1:C:189:VAL:O	1:D:178:ASN:ND2	2.52	0.42
1:C:221:TYR:CE2	1:C:297:LEU:HD12	2.54	0.42
1:C:281:VAL:O	1:C:281:VAL:HG23	2.19	0.42
1:C:351:LYS:HD2	1:C:351:LYS:N	2.35	0.42
1:D:114:LYS:HZ1	1:E:28:ARG:NH2	2.17	0.42
1:D:189:VAL:HG23	1:D:302:ILE:HG12	2.01	0.42
1:D:291:ILE:HG12	1:D:419:PRO:CB	2.49	0.42
1:D:322:LEU:CD2	1:D:341:HIS:CE1	3.03	0.42
1:D:401:THR:CG2	1:D:402:GLY:N	2.83	0.42
1:E:17:GLY:CA	1:E:74:TRP:CZ3	2.94	0.42
1:E:24:ARG:O	1:E:74:TRP:CD1	2.72	0.42
1:E:72:ASN:ND2	1:E:74:TRP:CH2	2.87	0.42
1:E:204:ALA:CA	1:F:414:ILE:CD1	2.97	0.42
1:E:229:LYS:CA	1:F:266:ALA:O	2.64	0.42
1:E:281:VAL:HG23	1:E:281:VAL:O	2.19	0.42
1:F:221:TYR:CE2	1:F:297:LEU:HD12	2.54	0.42
1:F:239:VAL:HA	1:G:257:ILE:HD12	2.01	0.42
1:G:85:ILE:HD11	1:G:389:LEU:HD23	2.01	0.42
1:G:128:VAL:CG2	1:G:140:MET:CE	2.95	0.42
1:G:210:THR:HG23	1:G:211:PRO:N	2.34	0.42
1:A:241:THR:CA	1:B:251:GLY:O	2.68	0.42
1:B:125:TYR:HD2	1:B:321:PHE:HB2	1.84	0.42
1:B:291:ILE:HG12	1:B:419:PRO:CB	2.49	0.42
1:B:362:ARG:O	1:B:363:TYR:HB3	2.20	0.42
1:C:152:ARG:O	1:C:167:LYS:HD2	2.19	0.42
1:C:170:ILE:HD12	1:C:170:ILE:C	2.40	0.42
1:C:210:THR:HG23	1:C:211:PRO:N	2.34	0.42
1:C:242:LYS:H	1:D:252:GLU:HB3	1.64	0.42
1:C:285:VAL:HB	1:C:291:ILE:CD1	2.49	0.42
1:D:308:PHE:HA	1:D:400:ILE:O	2.19	0.42
1:D:351:LYS:HD2	1:D:351:LYS:N	2.35	0.42
1:E:17:GLY:HA2	1:E:21:ASP:OD2	2.19	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:81:VAL:CG1	1:E:82:THR:N	2.83	0.42
1:E:101:VAL:HG21	1:E:400:ILE:HD13	1.97	0.42
1:E:285:VAL:HB	1:E:291:ILE:CD1	2.50	0.42
1:E:362:ARG:O	1:E:363:TYR:HB3	2.19	0.42
1:E:364:ILE:CD1	1:E:364:ILE:N	2.82	0.42
1:F:81:VAL:CG1	1:F:82:THR:N	2.83	0.42
1:F:170:ILE:HD12	1:F:170:ILE:C	2.40	0.42
1:F:210:THR:HG23	1:F:211:PRO:N	2.34	0.42
1:F:322:LEU:CB	1:F:341:HIS:NE2	2.82	0.42
1:G:17:GLY:HA2	1:G:21:ASP:OD2	2.19	0.42
1:G:24:ARG:O	1:G:74:TRP:CD1	2.73	0.42
1:G:73:THR:HG21	1:G:76:TYR:CB	2.49	0.42
1:G:288:ARG:HH11	1:G:288:ARG:HD2	1.72	0.42
1:A:78:THR:CG2	1:A:79:ASN:N	2.82	0.42
1:A:170:ILE:HD12	1:A:170:ILE:C	2.40	0.42
1:A:182:ASP:HB2	1:F:422:LEU:HA	2.02	0.42
1:A:291:ILE:HG12	1:A:419:PRO:CB	2.49	0.42
1:A:322:LEU:CD2	1:A:341:HIS:CE1	3.03	0.42
1:A:353:SER:CA	1:A:356:ARG:HG2	2.49	0.42
1:B:11:LEU:HD21	1:B:42:MET:HE1	2.02	0.42
1:B:73:THR:HG21	1:B:76:TYR:CB	2.49	0.42
1:B:229:LYS:HD2	1:B:229:LYS:H	1.84	0.42
1:C:7:ASP:OD1	1:C:361:LYS:HE3	2.19	0.42
1:C:152:ARG:CG	1:C:167:LYS:CG	2.97	0.42
1:C:186:HIS:CG	1:C:306:TYR:CD1	3.07	0.42
1:C:189:VAL:HG23	1:C:302:ILE:HG12	2.02	0.42
1:C:252:GLU:O	1:C:255:LEU:HG	2.19	0.42
1:D:210:THR:HG23	1:D:211:PRO:N	2.34	0.42
1:D:285:VAL:HB	1:D:291:ILE:CD1	2.49	0.42
1:E:78:THR:CG2	1:E:79:ASN:N	2.82	0.42
1:E:152:ARG:CG	1:E:167:LYS:CG	2.97	0.42
1:E:291:ILE:HG12	1:E:419:PRO:CB	2.49	0.42
1:E:322:LEU:CD2	1:E:341:HIS:CE1	3.03	0.42
1:F:103:TRP:CZ3	1:F:144:ARG:NH1	2.87	0.42
1:F:193:ASP:HA	1:G:176:ALA:HB1	2.01	0.42
1:G:16:GLN:CB	1:G:19:CYS:SG	3.05	0.42
1:G:291:ILE:HG12	1:G:419:PRO:CB	2.49	0.42
1:A:17:GLY:CA	1:A:74:TRP:CZ3	2.94	0.42
1:A:277:LEU:N	1:A:277:LEU:CD1	2.82	0.42
1:B:186:HIS:CG	1:B:306:TYR:CD1	3.07	0.42
1:B:322:LEU:CD2	1:B:341:HIS:CE1	3.03	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:351:LYS:HD2	1:B:351:LYS:N	2.34	0.42
1:C:47:ILE:CG2	1:C:48:SER:N	2.82	0.42
1:C:73:THR:HG21	1:C:76:TYR:CB	2.49	0.42
1:C:103:TRP:CH2	1:D:365:PRO:CD	3.01	0.42
1:C:322:LEU:CD2	1:C:341:HIS:CE1	3.03	0.42
1:C:327:ASN:ND2	1:C:329:TRP:CH2	2.86	0.42
1:D:152:ARG:O	1:D:167:LYS:HD2	2.19	0.42
1:D:220:ARG:HB2	1:E:276:SER:OG	2.20	0.42
1:E:32:GLN:HE21	1:E:32:GLN:HB2	1.30	0.42
1:E:143:THR:HA	1:F:32:GLN:HG2	2.01	0.42
1:E:322:LEU:CB	1:E:341:HIS:NE2	2.82	0.42
1:F:113:ILE:N	1:F:113:ILE:CD1	2.83	0.42
1:F:308:PHE:HA	1:F:400:ILE:O	2.19	0.42
1:G:7:ASP:OD1	1:G:361:LYS:HE3	2.19	0.42
1:G:336:ARG:CB	1:G:337:PRO:HD3	2.48	0.42
1:A:125:TYR:HD2	1:A:321:PHE:HB2	1.84	0.42
1:A:186:HIS:CG	1:A:306:TYR:CD1	3.07	0.42
1:A:355:ILE:HG13	1:A:356:ARG:H	1.78	0.42
1:C:247:TRP:CD1	1:C:248:PRO:HD2	2.54	0.42
1:D:54:TRP:HE3	1:D:65:ILE:HG22	1.78	0.42
1:D:192:SER:C	1:E:176:ALA:HB1	2.38	0.42
1:D:221:TYR:CE2	1:D:297:LEU:HD12	2.54	0.42
1:E:308:PHE:HA	1:E:400:ILE:O	2.19	0.42
1:E:351:LYS:HD2	1:E:351:LYS:N	2.35	0.42
1:F:44:GLN:HA	1:F:59:PRO:HG2	2.02	0.42
1:F:125:TYR:HD2	1:F:321:PHE:HB2	1.84	0.42
1:F:203:TRP:CZ3	1:G:298:TYR:OH	2.72	0.42
1:A:189:VAL:CG2	1:A:190:THR:N	2.83	0.42
1:A:414:ILE:CD1	1:G:215:TYR:CD1	2.83	0.42
1:B:132:HIS:CD2	1:B:138:GLU:CB	2.96	0.42
1:B:281:VAL:O	1:B:281:VAL:HG23	2.19	0.42
1:C:78:THR:CG2	1:C:79:ASN:N	2.82	0.42
1:C:85:ILE:HD11	1:C:389:LEU:HD23	2.01	0.42
1:C:291:ILE:HG12	1:C:419:PRO:CB	2.49	0.42
1:D:103:TRP:CH2	1:E:365:PRO:CD	2.99	0.42
1:D:215:TYR:HE1	1:E:414:ILE:HG23	1.83	0.42
1:D:243:ASN:CB	1:E:250:VAL:CA	2.45	0.42
1:D:252:GLU:O	1:D:255:LEU:HG	2.19	0.42
1:E:152:ARG:O	1:E:167:LYS:HD2	2.19	0.42
1:E:210:THR:HG23	1:E:211:PRO:CD	2.49	0.42
1:F:73:THR:HG21	1:F:76:TYR:CB	2.49	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:285:VAL:HB	1:F:291:ILE:CD1	2.49	0.42
1:G:322:LEU:CD2	1:G:341:HIS:CE1	3.03	0.42
1:A:7:ASP:OD1	1:A:361:LYS:HE3	2.19	0.42
1:A:153:GLY:HA3	1:B:64:GLU:OE2	2.19	0.42
1:B:209:ASP:HA	1:B:288:ARG:NH1	2.35	0.42
1:C:362:ARG:O	1:C:363:TYR:HB3	2.20	0.42
1:D:73:THR:HG21	1:D:76:TYR:CB	2.49	0.42
1:D:78:THR:CG2	1:D:79:ASN:N	2.82	0.42
1:D:186:HIS:CG	1:D:306:TYR:CD1	3.07	0.42
1:D:243:ASN:N	1:E:250:VAL:CG1	2.83	0.42
1:D:247:TRP:CD1	1:D:248:PRO:HD2	2.54	0.42
1:E:113:ILE:N	1:E:113:ILE:CD1	2.83	0.42
1:E:189:VAL:CG2	1:E:190:THR:N	2.83	0.42
1:E:210:THR:HG22	1:E:211:PRO:HD3	2.00	0.42
1:E:355:ILE:HA	1:E:358:GLN:HG2	2.02	0.42
1:F:17:GLY:HA2	1:F:21:ASP:OD2	2.19	0.42
1:F:189:VAL:HG23	1:F:302:ILE:HG12	2.02	0.42
1:F:252:GLU:O	1:F:255:LEU:HG	2.19	0.42
1:F:322:LEU:CD2	1:F:341:HIS:CE1	3.03	0.42
1:G:281:VAL:O	1:G:281:VAL:HG23	2.19	0.42
1:A:355:ILE:HA	1:A:358:GLN:HG2	2.02	0.42
1:B:24:ARG:O	1:B:74:TRP:CD1	2.73	0.42
1:B:308:PHE:HA	1:B:400:ILE:O	2.19	0.42
1:B:364:ILE:CD1	1:B:364:ILE:N	2.82	0.42
1:C:364:ILE:CD1	1:C:364:ILE:N	2.82	0.42
1:D:7:ASP:OD1	1:D:361:LYS:HE3	2.19	0.42
1:D:24:ARG:O	1:D:74:TRP:CD1	2.72	0.42
1:D:189:VAL:CG2	1:D:190:THR:N	2.83	0.42
1:D:243:ASN:CG	1:E:250:VAL:CG2	2.88	0.42
1:D:355:ILE:HA	1:D:358:GLN:HG2	2.02	0.42
1:D:364:ILE:CD1	1:D:364:ILE:N	2.82	0.42
1:E:123:LEU:HA	1:E:123:LEU:HD23	1.71	0.42
1:E:246:LYS:CG	1:E:253:THR:CA	2.95	0.42
1:E:401:THR:CG2	1:E:402:GLY:N	2.83	0.42
1:G:113:ILE:N	1:G:113:ILE:CD1	2.83	0.42
1:G:170:ILE:HD12	1:G:170:ILE:C	2.40	0.42
1:G:196:LEU:HD12	1:G:297:LEU:O	2.18	0.42
1:G:308:PHE:HA	1:G:400:ILE:O	2.19	0.42
1:G:351:LYS:HD2	1:G:351:LYS:N	2.34	0.42
1:G:353:SER:CA	1:G:356:ARG:HG2	2.49	0.42
1:A:47:ILE:CG2	1:A:55:VAL:HG11	2.50	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:221:TYR:CE2	1:A:297:LEU:HD12	2.54	0.42
1:A:252:GLU:OE1	1:G:255:LEU:O	2.38	0.42
1:A:285:VAL:HB	1:A:291:ILE:CD1	2.49	0.42
1:A:332:HIS:HD2	1:A:371:TRP:HD1	1.65	0.42
1:B:81:VAL:CG1	1:B:82:THR:N	2.82	0.42
1:B:189:VAL:HG23	1:B:302:ILE:HG12	2.01	0.42
1:B:243:ASN:CB	1:C:250:VAL:CG2	2.98	0.42
1:B:355:ILE:HA	1:B:358:GLN:HG2	2.02	0.42
1:C:355:ILE:HA	1:C:358:GLN:HG2	2.02	0.42
1:D:257:ILE:O	1:D:257:ILE:HG23	2.17	0.42
1:D:289:SER:CA	1:D:422:LEU:HD23	2.50	0.42
1:E:7:ASP:OD1	1:E:361:LYS:HE3	2.19	0.42
1:E:73:THR:HG21	1:E:76:TYR:CB	2.49	0.42
1:E:209:ASP:HA	1:E:288:ARG:NH1	2.35	0.42
1:E:424:ALA:HA	1:G:185:LYS:HE2	2.02	0.42
1:F:281:VAL:HG23	1:F:281:VAL:O	2.19	0.42
1:G:78:THR:CG2	1:G:79:ASN:N	2.82	0.42
1:G:277:LEU:N	1:G:277:LEU:CD1	2.82	0.42
1:A:229:LYS:HD2	1:A:229:LYS:H	1.85	0.41
1:A:257:ILE:CD1	1:G:238:LYS:O	2.67	0.41
1:A:281:VAL:HG23	1:A:281:VAL:O	2.19	0.41
1:C:209:ASP:HA	1:C:288:ARG:NH1	2.35	0.41
1:D:189:VAL:CB	1:D:304:TYR:CE2	2.97	0.41
1:D:335:ASN:CG	1:D:337:PRO:HD2	2.41	0.41
1:D:342:THR:HG21	1:D:344:VAL:HG23	1.98	0.41
1:E:336:ARG:CB	1:E:337:PRO:HD3	2.48	0.41
1:F:327:ASN:ND2	1:F:329:TRP:CH2	2.86	0.41
1:G:44:GLN:HA	1:G:59:PRO:HG2	2.02	0.41
1:G:210:THR:HG22	1:G:211:PRO:HD3	2.00	0.41
1:G:322:LEU:CB	1:G:341:HIS:NE2	2.82	0.41
1:A:107:HIS:HB3	1:B:29:GLU:CD	2.40	0.41
1:A:132:HIS:CD2	1:A:138:GLU:CB	2.96	0.41
1:A:252:GLU:O	1:A:255:LEU:HG	2.19	0.41
1:A:413:ASN:ND2	1:G:203:TRP:HE1	2.01	0.41
1:B:101:VAL:CG1	1:B:400:ILE:HG12	2.47	0.41
1:B:277:LEU:N	1:B:277:LEU:CD1	2.82	0.41
1:C:44:GLN:HA	1:C:59:PRO:HG2	2.02	0.41
1:C:189:VAL:CG2	1:C:302:ILE:HG13	2.51	0.41
1:D:209:ASP:HA	1:D:288:ARG:NH1	2.35	0.41
1:E:44:GLN:HA	1:E:59:PRO:HG2	2.02	0.41
1:F:108:ASP:O	1:F:113:ILE:HD13	2.20	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:143:THR:CG2	1:G:35:LYS:HZ1	2.26	0.41
1:F:227:TRP:HA	1:G:268:GLN:O	2.20	0.41
1:F:291:ILE:HG12	1:F:419:PRO:CB	2.49	0.41
1:F:336:ARG:CB	1:F:337:PRO:HD3	2.48	0.41
1:F:351:LYS:HD2	1:F:351:LYS:N	2.35	0.41
1:F:355:ILE:HA	1:F:358:GLN:HG2	2.02	0.41
1:F:362:ARG:O	1:F:363:TYR:HB3	2.19	0.41
1:G:186:HIS:CG	1:G:306:TYR:CD1	3.07	0.41
1:G:285:VAL:HB	1:G:291:ILE:CD1	2.49	0.41
1:G:355:ILE:HA	1:G:358:GLN:HG2	2.02	0.41
1:A:81:VAL:CG1	1:A:82:THR:N	2.82	0.41
1:A:212:GLN:HE21	1:A:212:GLN:HB3	1.49	0.41
1:B:47:ILE:CG2	1:B:55:VAL:HG11	2.50	0.41
1:B:220:ARG:HB2	1:C:276:SER:OG	2.21	0.41
1:B:285:VAL:HB	1:B:291:ILE:CD1	2.49	0.41
1:C:210:THR:HG22	1:C:211:PRO:HD3	2.00	0.41
1:D:16:GLN:H	1:D:16:GLN:NE2	2.18	0.41
1:E:16:GLN:H	1:E:16:GLN:NE2	2.18	0.41
1:E:108:ASP:O	1:E:113:ILE:HD13	2.21	0.41
1:F:16:GLN:H	1:F:16:GLN:NE2	2.18	0.41
1:F:353:SER:CA	1:F:356:ARG:HG2	2.49	0.41
1:G:327:ASN:ND2	1:G:329:TRP:CH2	2.86	0.41
1:A:284:THR:HG23	1:A:286:PRO:CD	2.34	0.41
1:B:44:GLN:HA	1:B:59:PRO:HG2	2.02	0.41
1:B:85:ILE:HD11	1:B:389:LEU:HD23	2.01	0.41
1:B:170:ILE:HD12	1:B:170:ILE:C	2.40	0.41
1:B:289:SER:CA	1:B:422:LEU:HD23	2.50	0.41
1:E:47:ILE:CG2	1:E:55:VAL:HG11	2.50	0.41
1:E:189:VAL:CG2	1:E:302:ILE:HG13	2.51	0.41
1:E:401:THR:HG22	1:E:402:GLY:H	1.85	0.41
1:F:47:ILE:CG2	1:F:55:VAL:HG11	2.50	0.41
1:F:202:GLY:HA2	1:G:412:GLY:O	2.21	0.41
1:G:81:VAL:CG1	1:G:82:THR:N	2.82	0.41
1:A:44:GLN:HA	1:A:59:PRO:HG2	2.02	0.41
1:A:73:THR:HG21	1:A:76:TYR:CB	2.49	0.41
1:A:85:ILE:HD11	1:A:389:LEU:HD23	2.01	0.41
1:A:351:LYS:HD2	1:A:351:LYS:N	2.35	0.41
1:A:362:ARG:O	1:A:363:TYR:HB3	2.20	0.41
1:C:101:VAL:CG2	1:C:102:GLN:N	2.82	0.41
1:C:342:THR:HG21	1:C:344:VAL:HG23	1.98	0.41
1:D:26:VAL:HG23	1:D:51:ALA:N	2.36	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:47:ILE:CG2	1:D:55:VAL:HG11	2.50	0.41
1:E:101:VAL:CG2	1:E:102:GLN:N	2.83	0.41
1:E:143:THR:OG1	1:F:35:LYS:NZ	2.54	0.41
1:E:186:HIS:CG	1:E:306:TYR:CD1	3.07	0.41
1:E:327:ASN:ND2	1:E:329:TRP:CH2	2.86	0.41
1:F:101:VAL:CG2	1:F:102:GLN:N	2.83	0.41
1:F:294:LYS:HE2	1:G:304:TYR:CZ	2.55	0.41
1:G:189:VAL:HG23	1:G:302:ILE:HG12	2.01	0.41
1:G:246:LYS:HA	1:G:252:GLU:O	2.21	0.41
1:A:113:ILE:N	1:A:113:ILE:CD1	2.83	0.41
1:A:189:VAL:CG2	1:A:302:ILE:HG13	2.51	0.41
1:A:242:LYS:HG3	1:A:255:LEU:C	2.40	0.41
1:B:78:THR:CG2	1:B:79:ASN:N	2.82	0.41
1:B:335:ASN:CG	1:B:337:PRO:HD2	2.41	0.41
1:D:44:GLN:HA	1:D:59:PRO:HG2	2.02	0.41
1:D:47:ILE:CG2	1:D:48:SER:N	2.82	0.41
1:D:199:THR:HG22	1:E:409:GLN:OE1	2.19	0.41
1:E:99:VAL:O	1:E:103:TRP:CD1	2.74	0.41
1:F:16:GLN:CB	1:F:19:CYS:SG	3.05	0.41
1:F:26:VAL:HG23	1:F:50:LEU:CA	2.40	0.41
1:F:186:HIS:NE2	1:F:306:TYR:CE1	2.89	0.41
1:F:209:ASP:HA	1:F:288:ARG:NH1	2.36	0.41
1:F:243:ASN:CB	1:G:250:VAL:CB	2.85	0.41
1:F:255:LEU:O	1:G:252:GLU:OE1	2.39	0.41
1:G:47:ILE:CG2	1:G:55:VAL:HG11	2.50	0.41
1:G:362:ARG:O	1:G:363:TYR:HB3	2.19	0.41
1:A:16:GLN:H	1:A:16:GLN:NE2	2.18	0.41
1:A:128:VAL:CG2	1:A:140:MET:CE	2.95	0.41
1:A:186:HIS:NE2	1:A:306:TYR:CE1	2.89	0.41
1:B:108:ASP:O	1:B:113:ILE:HD13	2.21	0.41
1:B:189:VAL:CG2	1:B:302:ILE:HG13	2.51	0.41
1:B:242:LYS:HG3	1:B:255:LEU:C	2.40	0.41
1:B:247:TRP:CD1	1:B:248:PRO:HD2	2.54	0.41
1:C:26:VAL:HG23	1:C:51:ALA:N	2.36	0.41
1:C:186:HIS:NE2	1:C:306:TYR:CE1	2.89	0.41
1:C:189:VAL:CG2	1:C:190:THR:N	2.83	0.41
1:C:224:ALA:CB	1:C:274:THR:HB	2.45	0.41
1:C:372:ASP:OD1	1:C:375:TRP:CD1	2.74	0.41
1:D:201:VAL:CG1	1:E:411:ALA:CB	2.99	0.41
1:E:158:GLY:HA2	1:E:162:TYR:O	2.21	0.41
1:E:170:ILE:HD12	1:E:170:ILE:C	2.40	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:21:ASP:OD2	1:F:74:TRP:CE3	2.74	0.41
1:F:186:HIS:CG	1:F:306:TYR:CD1	3.07	0.41
1:F:242:LYS:HG3	1:F:255:LEU:C	2.40	0.41
1:F:242:LYS:HG3	1:F:256:SER:HA	2.03	0.41
1:G:101:VAL:CG2	1:G:102:GLN:N	2.83	0.41
1:G:209:ASP:HA	1:G:288:ARG:NH1	2.35	0.41
1:A:21:ASP:OD2	1:A:74:TRP:CE3	2.74	0.41
1:A:167:LYS:O	1:A:321:PHE:CE1	2.74	0.41
1:A:246:LYS:HA	1:A:252:GLU:O	2.21	0.41
1:B:16:GLN:H	1:B:16:GLN:NE2	2.18	0.41
1:B:16:GLN:CB	1:B:19:CYS:SG	3.05	0.41
1:B:21:ASP:OD2	1:B:74:TRP:CE3	2.74	0.41
1:B:235:LEU:HB2	1:B:263:GLN:HE21	1.86	0.41
1:B:242:LYS:HG3	1:B:256:SER:HA	2.03	0.41
1:B:372:ASP:OD1	1:B:375:TRP:CD1	2.74	0.41
1:C:16:GLN:H	1:C:16:GLN:NE2	2.19	0.41
1:C:52:ASN:OD1	1:C:54:TRP:CG	2.74	0.41
1:C:99:VAL:O	1:C:103:TRP:CD1	2.74	0.41
1:C:289:SER:CA	1:C:422:LEU:HD23	2.50	0.41
1:D:108:ASP:O	1:D:113:ILE:HD13	2.21	0.41
1:D:128:VAL:CG2	1:D:140:MET:CE	2.95	0.41
1:D:224:ALA:CB	1:D:274:THR:HB	2.45	0.41
1:D:281:VAL:HG23	1:D:281:VAL:O	2.19	0.41
1:D:297:LEU:HD23	1:D:297:LEU:HA	1.87	0.41
1:E:193:ASP:HA	1:F:176:ALA:HB1	2.01	0.41
1:E:342:THR:HG21	1:E:344:VAL:HG23	1.98	0.41
1:F:189:VAL:CG2	1:F:190:THR:N	2.83	0.41
1:F:235:LEU:HB2	1:F:263:GLN:HE21	1.86	0.41
1:F:246:LYS:HA	1:F:252:GLU:O	2.21	0.41
1:A:108:ASP:O	1:A:113:ILE:HD13	2.20	0.41
1:A:189:VAL:HG23	1:A:302:ILE:HG12	2.01	0.41
1:A:289:SER:CA	1:A:422:LEU:HD23	2.50	0.41
1:A:304:TYR:CZ	1:G:294:LYS:CE	3.04	0.41
1:B:26:VAL:HG23	1:B:51:ALA:N	2.36	0.41
1:B:52:ASN:OD1	1:B:54:TRP:CG	2.74	0.41
1:B:121:HIS:CE1	1:B:134:GLN:HE21	2.39	0.41
1:B:158:GLY:HA2	1:B:162:TYR:O	2.21	0.41
1:B:197:VAL:HG22	1:B:297:LEU:C	2.41	0.41
1:B:201:VAL:O	1:C:411:ALA:HA	2.20	0.41
1:B:246:LYS:CG	1:B:253:THR:CA	2.95	0.41
1:C:21:ASP:OD2	1:C:74:TRP:CE3	2.74	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:32:GLN:HE21	1:C:32:GLN:HB2	1.30	0.41
1:C:47:ILE:CG2	1:C:55:VAL:HG11	2.50	0.41
1:C:81:VAL:CG1	1:C:82:THR:N	2.82	0.41
1:C:113:ILE:HD12	1:C:113:ILE:H	1.86	0.41
1:C:239:VAL:HG22	1:D:257:ILE:CD1	2.49	0.41
1:C:401:THR:HG22	1:C:402:GLY:H	1.85	0.41
1:D:21:ASP:OD2	1:D:74:TRP:CE3	2.74	0.41
1:D:52:ASN:OD1	1:D:54:TRP:CG	2.74	0.41
1:D:167:LYS:O	1:D:321:PHE:CE1	2.74	0.41
1:D:246:LYS:HA	1:D:252:GLU:O	2.21	0.41
1:D:294:LYS:HE3	1:E:304:TYR:HH	1.81	0.41
1:E:21:ASP:OD2	1:E:74:TRP:CE3	2.74	0.41
1:E:113:ILE:HD12	1:E:113:ILE:H	1.86	0.41
1:E:167:LYS:O	1:E:321:PHE:CE1	2.74	0.41
1:E:186:HIS:NE2	1:E:306:TYR:CE1	2.89	0.41
1:E:224:ALA:CB	1:E:274:THR:HB	2.45	0.41
1:E:242:LYS:HG3	1:E:256:SER:HA	2.03	0.41
1:E:353:SER:CA	1:E:356:ARG:HG2	2.49	0.41
1:E:372:ASP:OD1	1:E:375:TRP:CD1	2.74	0.41
1:F:78:THR:HG23	1:F:79:ASN:N	2.36	0.41
1:F:91:LEU:HG	1:F:93:ILE:HD11	2.03	0.41
1:F:143:THR:HA	1:G:32:GLN:HG2	2.03	0.41
1:F:158:GLY:HA2	1:F:162:TYR:O	2.21	0.41
1:F:189:VAL:CG2	1:F:302:ILE:HG13	2.51	0.41
1:F:289:SER:CA	1:F:422:LEU:HD23	2.50	0.41
1:F:335:ASN:CG	1:F:337:PRO:HD2	2.41	0.41
1:G:16:GLN:H	1:G:16:GLN:NE2	2.19	0.41
1:G:78:THR:HG23	1:G:79:ASN:N	2.36	0.41
1:G:99:VAL:O	1:G:103:TRP:CD1	2.74	0.41
1:G:167:LYS:O	1:G:321:PHE:CE1	2.74	0.41
1:G:186:HIS:NE2	1:G:306:TYR:CE1	2.89	0.41
1:G:189:VAL:CG2	1:G:302:ILE:HG13	2.51	0.41
1:G:189:VAL:CG2	1:G:190:THR:N	2.83	0.41
1:G:401:THR:CG2	1:G:402:GLY:N	2.82	0.41
1:A:52:ASN:OD1	1:A:54:TRP:CG	2.74	0.41
1:A:101:VAL:CG2	1:A:102:GLN:N	2.83	0.41
1:A:158:GLY:HA2	1:A:162:TYR:O	2.21	0.41
1:B:99:VAL:O	1:B:103:TRP:CD1	2.74	0.41
1:B:101:VAL:CG2	1:B:102:GLN:N	2.83	0.41
1:B:167:LYS:O	1:B:321:PHE:CE1	2.74	0.41
1:B:246:LYS:HA	1:B:252:GLU:O	2.21	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:24:ARG:O	1:C:74:TRP:CD1	2.73	0.41
1:C:128:VAL:CG2	1:C:140:MET:CE	2.95	0.41
1:C:199:THR:CB	1:D:409:GLN:HE22	2.26	0.41
1:C:245:PHE:CD2	1:C:246:LYS:O	2.74	0.41
1:C:246:LYS:HA	1:C:252:GLU:O	2.21	0.41
1:D:16:GLN:CB	1:D:19:CYS:SG	3.05	0.41
1:D:189:VAL:CG2	1:D:302:ILE:HG13	2.51	0.41
1:E:242:LYS:HG3	1:E:255:LEU:C	2.40	0.41
1:E:245:PHE:CD2	1:E:246:LYS:O	2.74	0.41
1:E:335:ASN:CG	1:E:337:PRO:HD2	2.41	0.41
1:F:215:TYR:CG	1:G:414:ILE:HD12	2.48	0.41
1:G:10:ARG:H	1:G:10:ARG:HG3	1.71	0.41
1:G:91:LEU:HG	1:G:93:ILE:HD11	2.03	0.41
1:G:229:LYS:HD2	1:G:229:LYS:H	1.84	0.41
1:A:209:ASP:HA	1:A:288:ARG:NH1	2.36	0.40
1:A:245:PHE:CD2	1:A:246:LYS:O	2.74	0.40
1:B:207:ASP:OD2	1:D:185:LYS:CG	2.67	0.40
1:B:342:THR:HG21	1:B:344:VAL:HG23	1.98	0.40
1:C:158:GLY:HA2	1:C:162:TYR:O	2.21	0.40
1:C:401:THR:CG2	1:C:402:GLY:N	2.82	0.40
1:F:372:ASP:OD1	1:F:375:TRP:CD1	2.74	0.40
1:G:21:ASP:OD2	1:G:74:TRP:CE3	2.74	0.40
1:G:197:VAL:HG22	1:G:297:LEU:C	2.42	0.40
1:G:342:THR:HG23	1:G:344:VAL:HG23	1.96	0.40
1:A:121:HIS:CE1	1:A:134:GLN:HE21	2.39	0.40
1:A:401:THR:CG2	1:A:402:GLY:N	2.83	0.40
1:B:128:VAL:CG2	1:B:140:MET:CE	2.95	0.40
1:B:353:SER:CA	1:B:356:ARG:HG2	2.49	0.40
1:C:185:LYS:O	1:C:306:TYR:CD1	2.74	0.40
1:C:242:LYS:HG3	1:C:255:LEU:C	2.40	0.40
1:C:277:LEU:N	1:C:277:LEU:CD1	2.82	0.40
1:C:335:ASN:CG	1:C:337:PRO:HD2	2.41	0.40
1:D:11:LEU:HD21	1:D:42:MET:HE1	2.03	0.40
1:D:186:HIS:NE2	1:D:306:TYR:CE1	2.89	0.40
1:E:141:ASP:OD2	1:F:65:ILE:CG1	2.68	0.40
1:E:217:VAL:HG11	1:E:295:ILE:HD12	2.03	0.40
1:F:355:ILE:HD12	1:F:359:TRP:CD2	2.57	0.40
1:G:245:PHE:CD2	1:G:246:LYS:O	2.74	0.40
1:A:9:LEU:O	1:A:9:LEU:HG	2.22	0.40
1:A:197:VAL:HG22	1:A:298:TYR:CA	2.46	0.40
1:A:235:LEU:HB2	1:A:263:GLN:HE21	1.86	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:112:PHE:HE2	1:B:170:ILE:CD1	2.35	0.40
1:B:221:TYR:O	1:B:276:SER:HA	2.22	0.40
1:B:245:PHE:CD2	1:B:246:LYS:O	2.74	0.40
1:C:191:GLN:NE2	1:D:178:ASN:OD1	2.54	0.40
1:D:81:VAL:CG1	1:D:82:THR:N	2.82	0.40
1:D:113:ILE:N	1:D:113:ILE:CD1	2.83	0.40
1:D:242:LYS:HG3	1:D:256:SER:HA	2.03	0.40
1:E:52:ASN:OD1	1:E:54:TRP:CG	2.74	0.40
1:E:246:LYS:HA	1:E:252:GLU:O	2.21	0.40
1:F:121:HIS:CE1	1:F:134:GLN:HE21	2.39	0.40
1:F:132:HIS:CD2	1:F:138:GLU:CB	2.96	0.40
1:F:167:LYS:O	1:F:321:PHE:CE1	2.74	0.40
1:G:113:ILE:HD12	1:G:113:ILE:H	1.86	0.40
1:G:242:LYS:HG3	1:G:255:LEU:C	2.40	0.40
1:G:242:LYS:HG3	1:G:256:SER:HA	2.03	0.40
1:G:246:LYS:HB2	1:G:253:THR:CA	2.42	0.40
1:G:372:ASP:OD1	1:G:375:TRP:CD1	2.74	0.40
1:A:78:THR:HG23	1:A:79:ASN:N	2.36	0.40
1:A:192:SER:O	1:B:176:ALA:CB	2.70	0.40
1:A:409:GLN:NE2	1:G:199:THR:HB	2.36	0.40
1:B:113:ILE:N	1:B:113:ILE:CD1	2.83	0.40
1:B:167:LYS:O	1:B:321:PHE:HE1	2.05	0.40
1:C:221:TYR:O	1:C:276:SER:HA	2.22	0.40
1:C:242:LYS:HG3	1:C:256:SER:HA	2.03	0.40
1:D:103:TRP:CE2	1:E:364:ILE:HG22	2.55	0.40
1:D:185:LYS:O	1:D:306:TYR:CD1	2.74	0.40
1:E:121:HIS:CE1	1:E:134:GLN:HE21	2.39	0.40
1:E:185:LYS:O	1:E:306:TYR:CD1	2.74	0.40
1:E:197:VAL:HG22	1:E:297:LEU:C	2.41	0.40
1:E:235:LEU:HB3	1:E:263:GLN:HE21	1.87	0.40
1:F:217:VAL:HG11	1:F:295:ILE:HD12	2.03	0.40
1:G:355:ILE:HD12	1:G:359:TRP:CD2	2.57	0.40
1:A:99:VAL:O	1:A:103:TRP:CD1	2.74	0.40
1:A:106:VAL:O	1:A:106:VAL:HG12	2.22	0.40
1:A:203:TRP:CH2	1:B:298:TYR:OH	2.70	0.40
1:A:217:VAL:HG11	1:A:295:ILE:HD12	2.03	0.40
1:A:342:THR:HG21	1:A:344:VAL:HG23	1.98	0.40
1:A:355:ILE:HD12	1:A:359:TRP:CD2	2.57	0.40
1:B:118:TYR:CD1	1:B:134:GLN:HB2	2.56	0.40
1:B:192:SER:O	1:C:176:ALA:HB1	2.17	0.40
1:C:9:LEU:O	1:C:9:LEU:HG	2.22	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:118:TYR:CD1	1:C:134:GLN:HB2	2.56	0.40
1:C:194:ARG:NH1	1:C:298:TYR:CG	2.87	0.40
1:C:197:VAL:HG22	1:C:297:LEU:C	2.42	0.40
1:D:112:PHE:HE2	1:D:170:ILE:CD1	2.35	0.40
1:D:221:TYR:O	1:D:276:SER:HA	2.22	0.40
1:D:372:ASP:OD1	1:D:375:TRP:CD1	2.74	0.40
1:E:10:ARG:H	1:E:10:ARG:HG3	1.71	0.40
1:E:78:THR:HG23	1:E:79:ASN:N	2.36	0.40
1:E:228:SER:O	1:F:267:SER:HA	2.21	0.40
1:F:99:VAL:O	1:F:103:TRP:CD1	2.74	0.40
1:F:143:THR:HG22	1:G:32:GLN:HG2	2.03	0.40
1:F:229:LYS:HD2	1:F:229:LYS:H	1.84	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	421/424 (99%)	392 (93%)	23 (6%)	6 (1%)	11	46
1	B	421/424 (99%)	392 (93%)	23 (6%)	6 (1%)	11	46
1	C	421/424 (99%)	392 (93%)	23 (6%)	6 (1%)	11	46
1	D	421/424 (99%)	392 (93%)	23 (6%)	6 (1%)	11	46
1	E	421/424 (99%)	392 (93%)	23 (6%)	6 (1%)	11	46
1	F	421/424 (99%)	392 (93%)	23 (6%)	6 (1%)	11	46
1	G	421/424 (99%)	392 (93%)	23 (6%)	6 (1%)	11	46
All	All	2947/2968 (99%)	2744 (93%)	161 (6%)	42 (1%)	15	46

All (42) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	A	63	GLY
1	A	136	VAL
1	A	252	GLU
1	B	63	GLY
1	B	136	VAL
1	B	252	GLU
1	C	63	GLY
1	C	136	VAL
1	C	252	GLU
1	D	63	GLY
1	D	136	VAL
1	D	252	GLU
1	E	63	GLY
1	E	136	VAL
1	E	252	GLU
1	F	63	GLY
1	F	136	VAL
1	F	252	GLU
1	G	63	GLY
1	G	136	VAL
1	G	252	GLU
1	A	250	VAL
1	B	250	VAL
1	C	250	VAL
1	D	250	VAL
1	E	250	VAL
1	F	250	VAL
1	G	250	VAL
1	A	344	VAL
1	B	344	VAL
1	C	344	VAL
1	D	344	VAL
1	E	344	VAL
1	F	344	VAL
1	G	344	VAL
1	A	363	TYR
1	B	363	TYR
1	C	363	TYR
1	D	363	TYR
1	E	363	TYR
1	F	363	TYR
1	G	363	TYR

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	356/356 (100%)	332 (93%)	24 (7%)	16	41
1	B	356/356 (100%)	332 (93%)	24 (7%)	16	41
1	C	356/356 (100%)	332 (93%)	24 (7%)	16	41
1	D	356/356 (100%)	332 (93%)	24 (7%)	16	41
1	E	356/356 (100%)	332 (93%)	24 (7%)	16	41
1	F	356/356 (100%)	332 (93%)	24 (7%)	16	41
1	G	356/356 (100%)	332 (93%)	24 (7%)	16	41
All	All	2492/2492 (100%)	2324 (93%)	168 (7%)	20	41

All (168) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	A	10	ARG
1	A	16	GLN
1	A	22	LYS
1	A	24	ARG
1	A	32	GLN
1	A	77	PRO
1	A	119	LEU
1	A	144	ARG
1	A	191	GLN
1	A	212	GLN
1	A	229	LYS
1	A	243	ASN
1	A	246	LYS
1	A	258	GLU
1	A	282	ARG
1	A	299	LYS
1	A	307	GLU
1	A	309	LYS
1	A	327	ASN
1	A	362	ARG

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Mol	Chain	Res	Type
1	A	364	ILE
1	A	368	VAL
1	A	396	VAL
1	A	414	ILE
1	B	10	ARG
1	B	16	GLN
1	B	22	LYS
1	B	24	ARG
1	B	32	GLN
1	B	77	PRO
1	B	119	LEU
1	B	144	ARG
1	B	191	GLN
1	B	212	GLN
1	B	229	LYS
1	B	243	ASN
1	B	246	LYS
1	B	258	GLU
1	B	282	ARG
1	B	299	LYS
1	B	307	GLU
1	B	309	LYS
1	B	327	ASN
1	B	362	ARG
1	B	364	ILE
1	B	368	VAL
1	B	396	VAL
1	B	414	ILE
1	C	10	ARG
1	C	16	GLN
1	C	22	LYS
1	C	24	ARG
1	C	32	GLN
1	C	77	PRO
1	C	119	LEU
1	C	144	ARG
1	C	191	GLN
1	C	212	GLN
1	C	229	LYS
1	C	243	ASN
1	C	246	LYS
1	C	258	GLU

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Mol	Chain	Res	Type
1	C	282	ARG
1	C	299	LYS
1	C	307	GLU
1	C	309	LYS
1	C	327	ASN
1	C	362	ARG
1	C	364	ILE
1	C	368	VAL
1	C	396	VAL
1	C	414	ILE
1	D	10	ARG
1	D	16	GLN
1	D	22	LYS
1	D	24	ARG
1	D	32	GLN
1	D	77	PRO
1	D	119	LEU
1	D	144	ARG
1	D	191	GLN
1	D	212	GLN
1	D	229	LYS
1	D	243	ASN
1	D	246	LYS
1	D	258	GLU
1	D	282	ARG
1	D	299	LYS
1	D	307	GLU
1	D	309	LYS
1	D	327	ASN
1	D	362	ARG
1	D	364	ILE
1	D	368	VAL
1	D	396	VAL
1	D	414	ILE
1	E	10	ARG
1	E	16	GLN
1	E	22	LYS
1	E	24	ARG
1	E	32	GLN
1	E	77	PRO
1	E	119	LEU
1	E	144	ARG

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Mol	Chain	Res	Type
1	E	191	GLN
1	E	212	GLN
1	E	229	LYS
1	E	243	ASN
1	E	246	LYS
1	E	258	GLU
1	E	282	ARG
1	E	299	LYS
1	E	307	GLU
1	E	309	LYS
1	E	327	ASN
1	E	362	ARG
1	E	364	ILE
1	E	368	VAL
1	E	396	VAL
1	E	414	ILE
1	F	10	ARG
1	F	16	GLN
1	F	22	LYS
1	F	24	ARG
1	F	32	GLN
1	F	77	PRO
1	F	119	LEU
1	F	144	ARG
1	F	191	GLN
1	F	212	GLN
1	F	229	LYS
1	F	243	ASN
1	F	246	LYS
1	F	258	GLU
1	F	282	ARG
1	F	299	LYS
1	F	307	GLU
1	F	309	LYS
1	F	327	ASN
1	F	362	ARG
1	F	364	ILE
1	F	368	VAL
1	F	396	VAL
1	F	414	ILE
1	G	10	ARG
1	G	16	GLN

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Mol	Chain	Res	Type
1	G	22	LYS
1	G	24	ARG
1	G	32	GLN
1	G	77	PRO
1	G	119	LEU
1	G	144	ARG
1	G	191	GLN
1	G	212	GLN
1	G	229	LYS
1	G	243	ASN
1	G	246	LYS
1	G	258	GLU
1	G	282	ARG
1	G	299	LYS
1	G	307	GLU
1	G	309	LYS
1	G	327	ASN
1	G	362	ARG
1	G	364	ILE
1	G	368	VAL
1	G	396	VAL
1	G	414	ILE

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (83) such sidechains are listed below:

Mol	Chain	Res	Type
1	A	32	GLN
1	A	107	HIS
1	A	111	ASN
1	A	134	GLN
1	A	212	GLN
1	A	243	ASN
1	A	327	ASN
1	A	332	HIS
1	A	358	GLN
1	A	388	ASN
1	A	413	ASN
1	B	32	GLN
1	B	107	HIS
1	B	111	ASN
1	B	134	GLN
1	B	206	ASN

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Mol	Chain	Res	Type
1	B	212	GLN
1	B	243	ASN
1	B	332	HIS
1	B	358	GLN
1	B	388	ASN
1	B	409	GLN
1	B	413	ASN
1	C	32	GLN
1	C	107	HIS
1	C	111	ASN
1	C	134	GLN
1	C	191	GLN
1	C	206	ASN
1	C	212	GLN
1	C	243	ASN
1	C	327	ASN
1	C	332	HIS
1	C	358	GLN
1	C	388	ASN
1	C	413	ASN
1	D	32	GLN
1	D	107	HIS
1	D	111	ASN
1	D	134	GLN
1	D	191	GLN
1	D	206	ASN
1	D	212	GLN
1	D	243	ASN
1	D	332	HIS
1	D	388	ASN
1	D	413	ASN
1	E	32	GLN
1	E	107	HIS
1	E	111	ASN
1	E	134	GLN
1	E	191	GLN
1	E	206	ASN
1	E	212	GLN
1	E	243	ASN
1	E	327	ASN
1	E	332	HIS
1	E	388	ASN

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Mol	Chain	Res	Type
1	E	413	ASN
1	F	32	GLN
1	F	107	HIS
1	F	111	ASN
1	F	134	GLN
1	F	191	GLN
1	F	206	ASN
1	F	212	GLN
1	F	243	ASN
1	F	327	ASN
1	F	332	HIS
1	F	358	GLN
1	F	388	ASN
1	G	32	GLN
1	G	107	HIS
1	G	111	ASN
1	G	134	GLN
1	G	206	ASN
1	G	212	GLN
1	G	243	ASN
1	G	327	ASN
1	G	332	HIS
1	G	358	GLN
1	G	388	ASN
1	G	413	ASN

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 monosaccharides 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

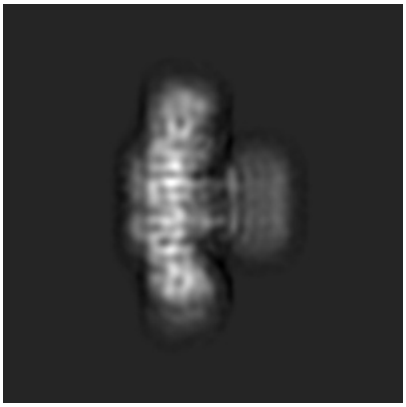
This section contains visualisations of the EMDB entry EMD-8187. These allow visual inspection of the internal detail of the map and identification of artifacts.

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

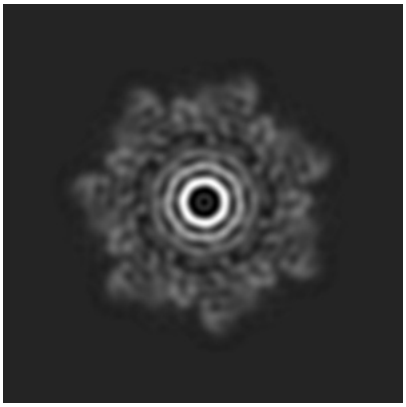
6.1 Orthogonal projections

6.1.1 Primary map

X



Y

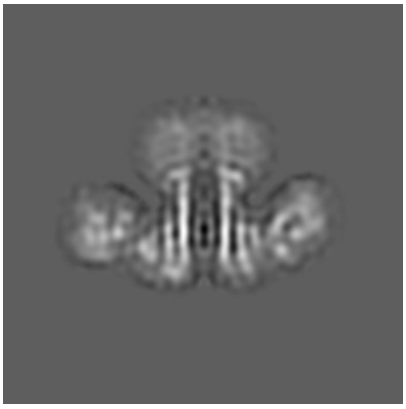


Z

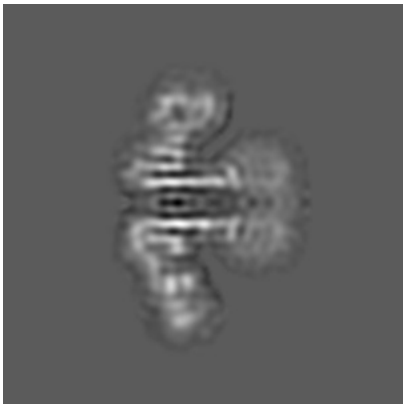
The images above show the map projected in three orthogonal directions.

6.2 Central slices

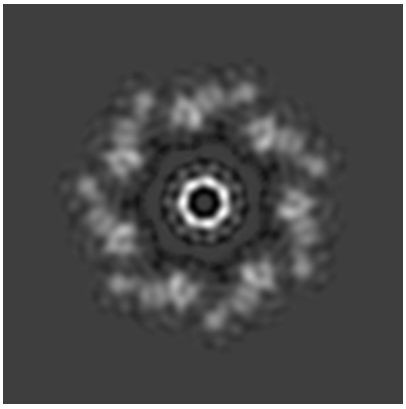
6.2.1 Primary map



X Index: 75



Y Index: 75



Z Index: 75

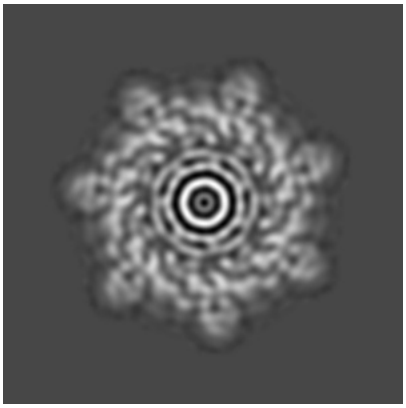
The images above show central slices of the map in three orthogonal directions.

6.3 Largest variance slices (i)

6.3.1 Primary map

X Index: 82

Y Index: 68

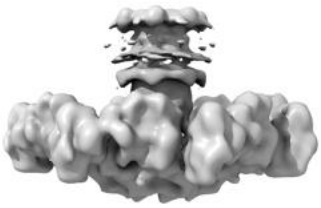


Z Index: 63

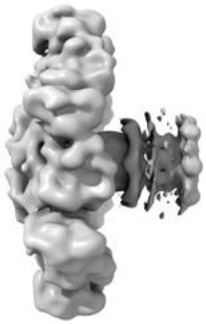
The images above show the largest variance slices of the map in three orthogonal directions.

6.4 Orthogonal surface views (i)

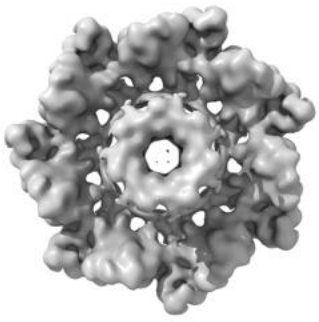
6.4.1 Primary map



X



Y



Z

The images above show the 3D surface view of the map at the recommended contour level 0.1. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

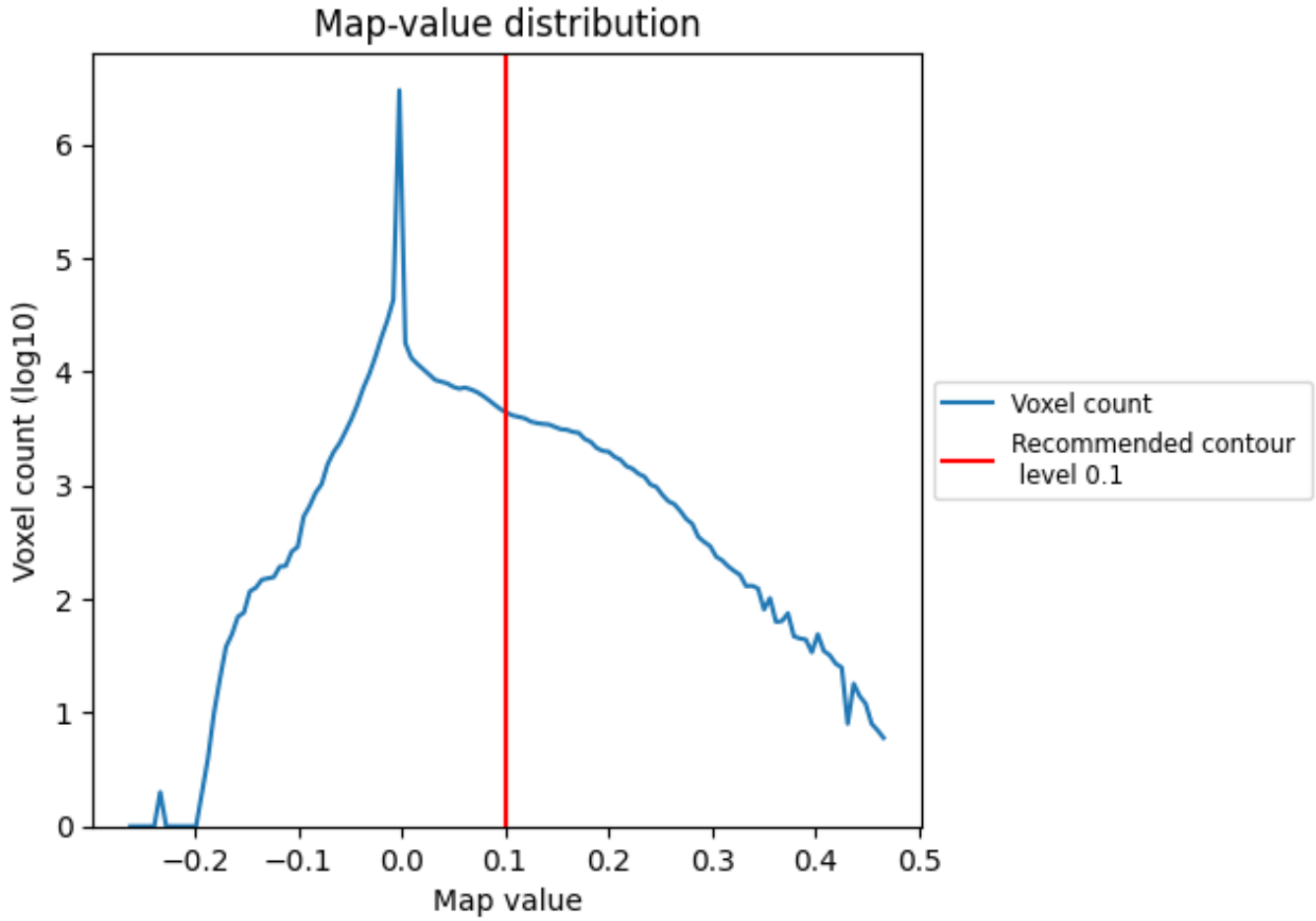
6.5 Mask visualisation (i)

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

7 Map analysis

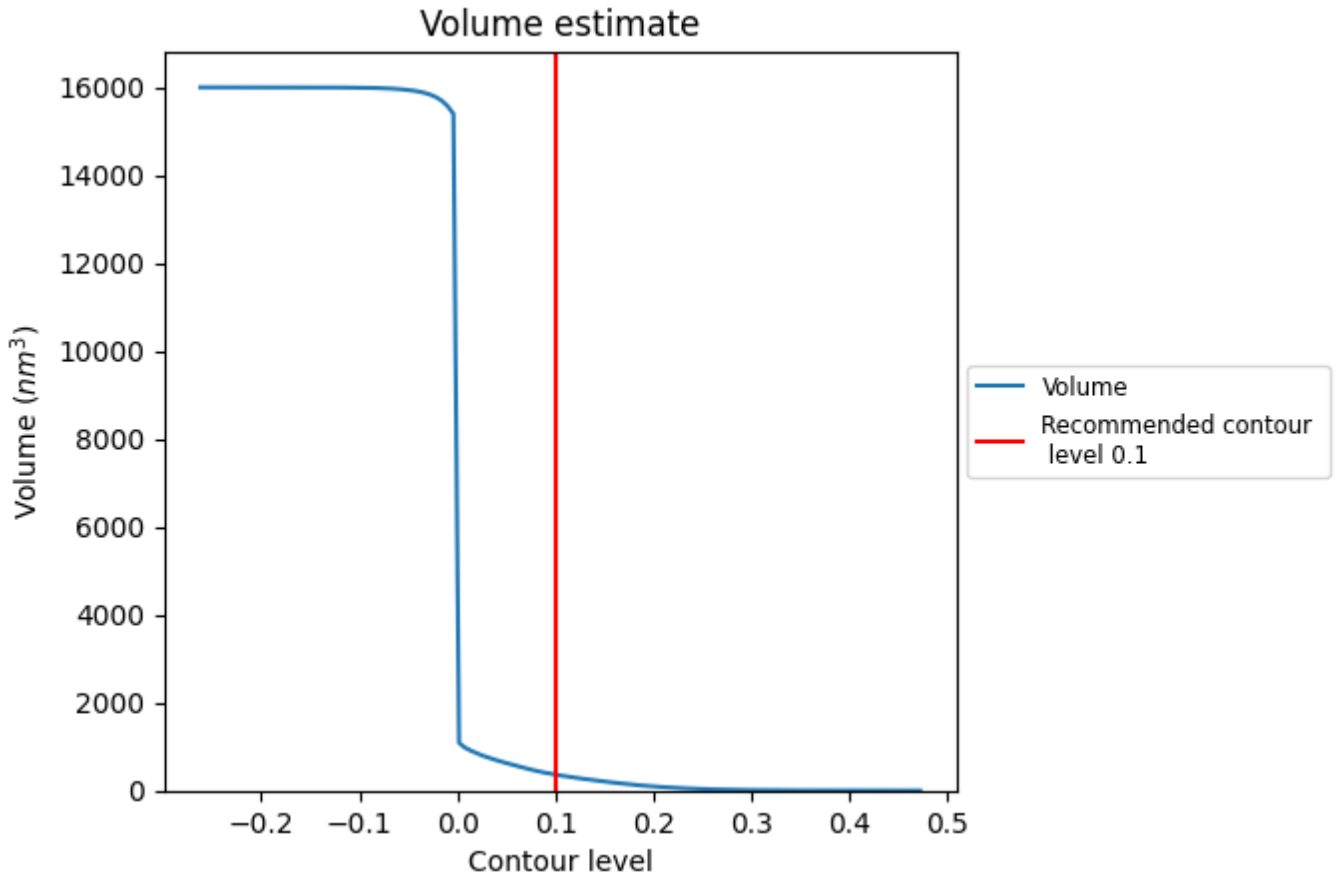
This section contains the results of statistical analysis of the map.

7.1 Map-value distribution



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

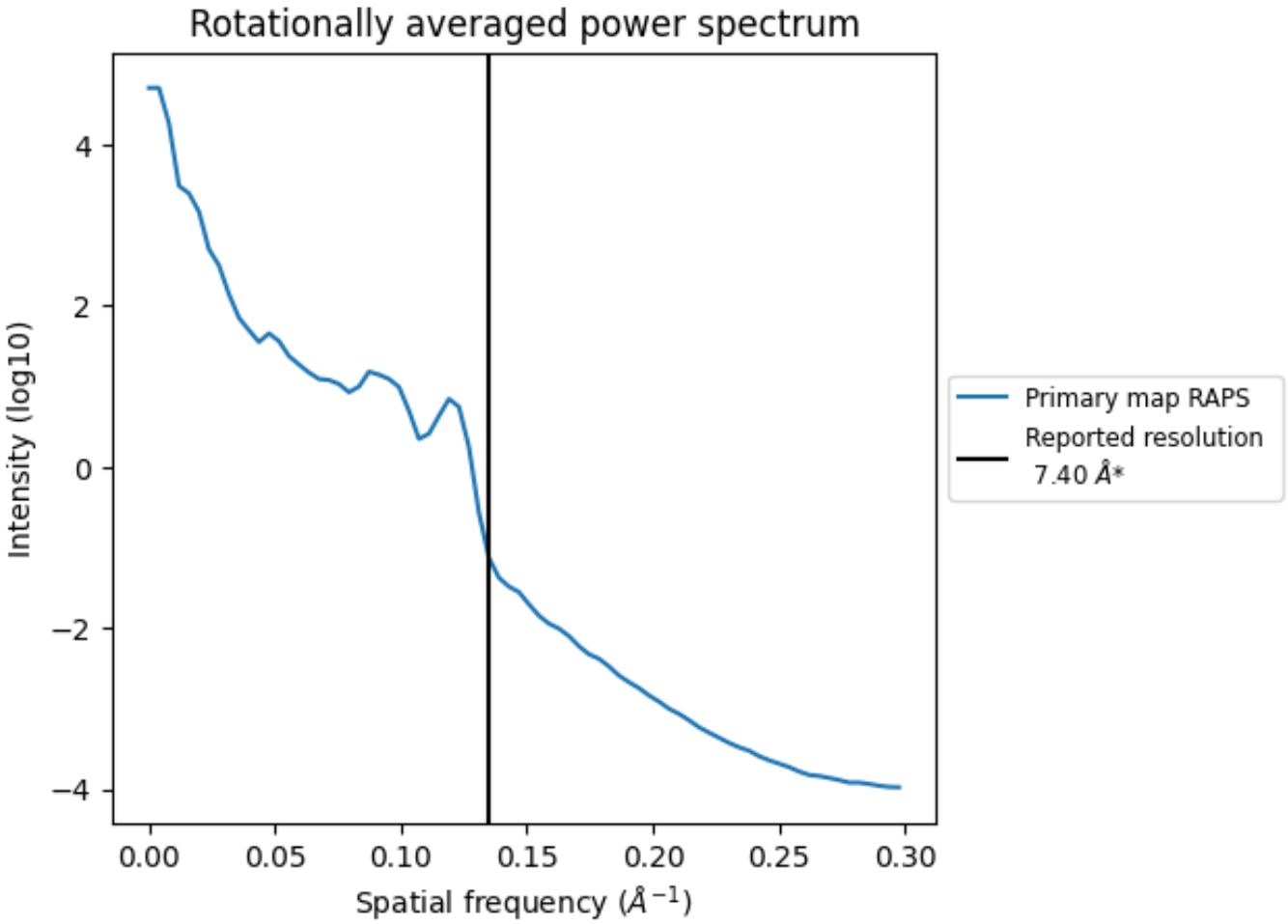
7.2 Volume estimate



The volume at the recommended contour level is 362 nm^3; this corresponds to an approximate mass of 327 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)

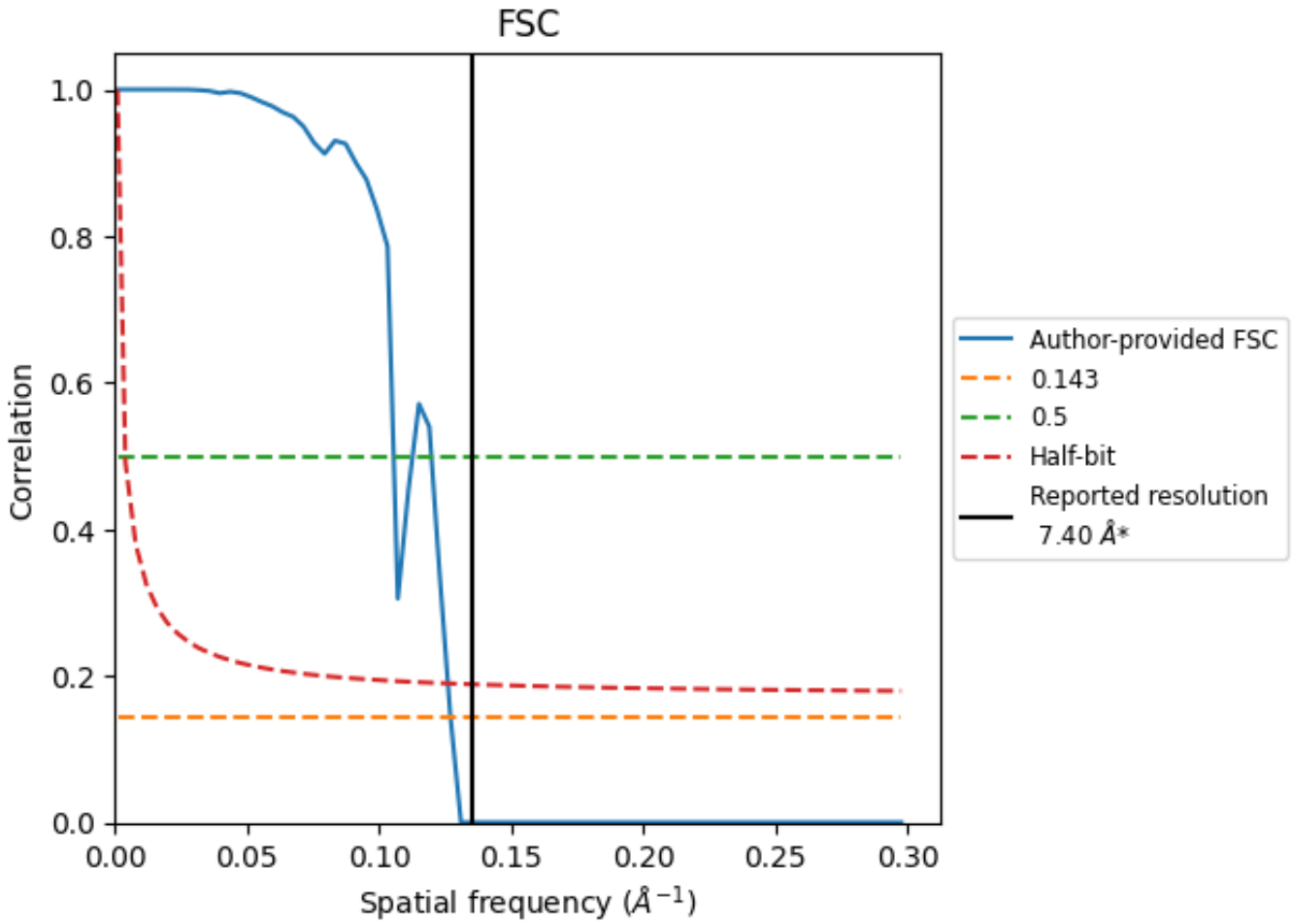


*Reported resolution corresponds to spatial frequency of 0.135 Å^{-1}

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 0.135 Å^{-1}

8.2 Resolution estimates (i)

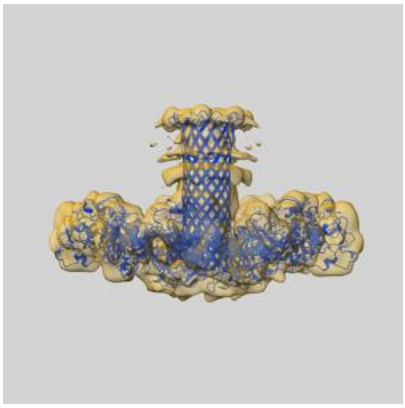
Resolution estimate (Å)	Estimation criterion (FSC cut-off)		
	0.143	0.5	Half-bit
Reported by author	7.40	-	-
Author-provided FSC curve	7.87	9.48	7.94
Unmasked-calculated*	-	-	-

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

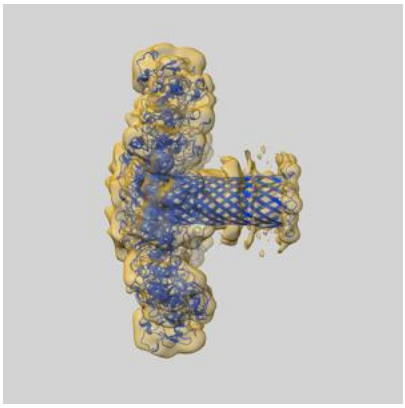
9 Map-model fit

This section contains information regarding the fit between EMDB map EMD-8187 and PDB model 5JZT. Per-residue inclusion information can be found in section 3 on page 4.

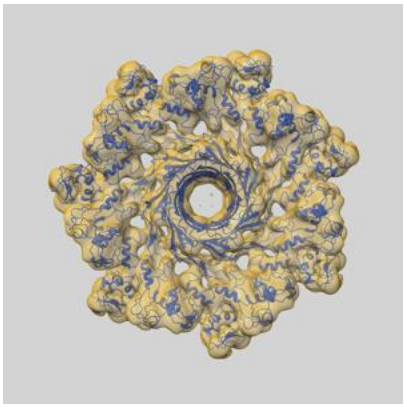
9.1 Map-model overlay



X



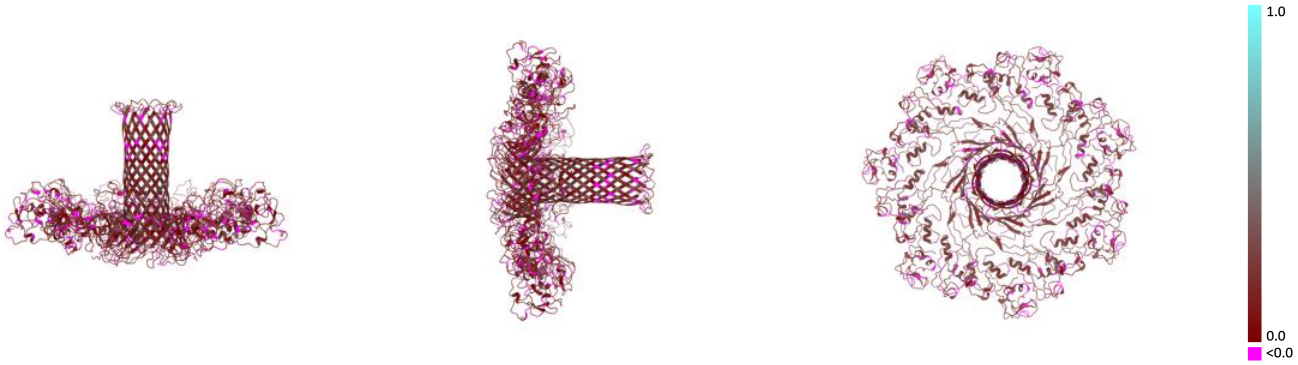
Y



Z

The images above show the 3D surface view of the map at the recommended contour level 0.1 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.

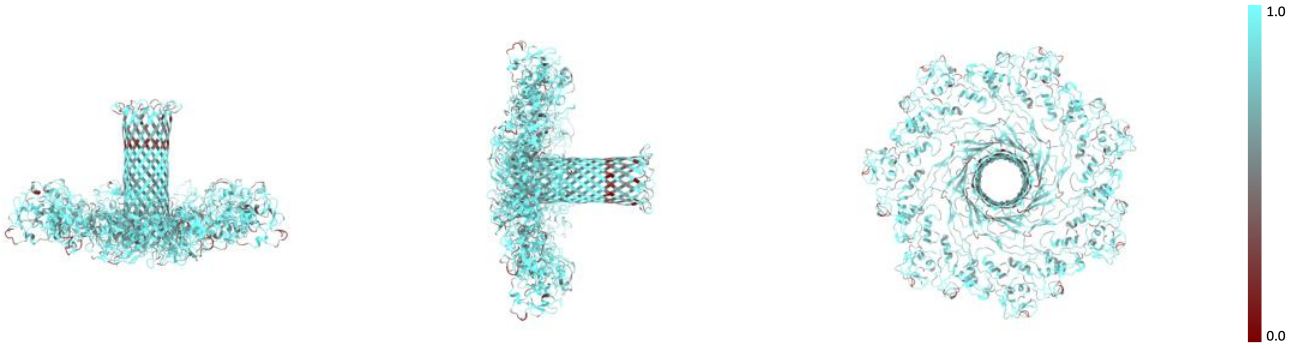
9.2 Q-score mapped to coordinate model (i)



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.

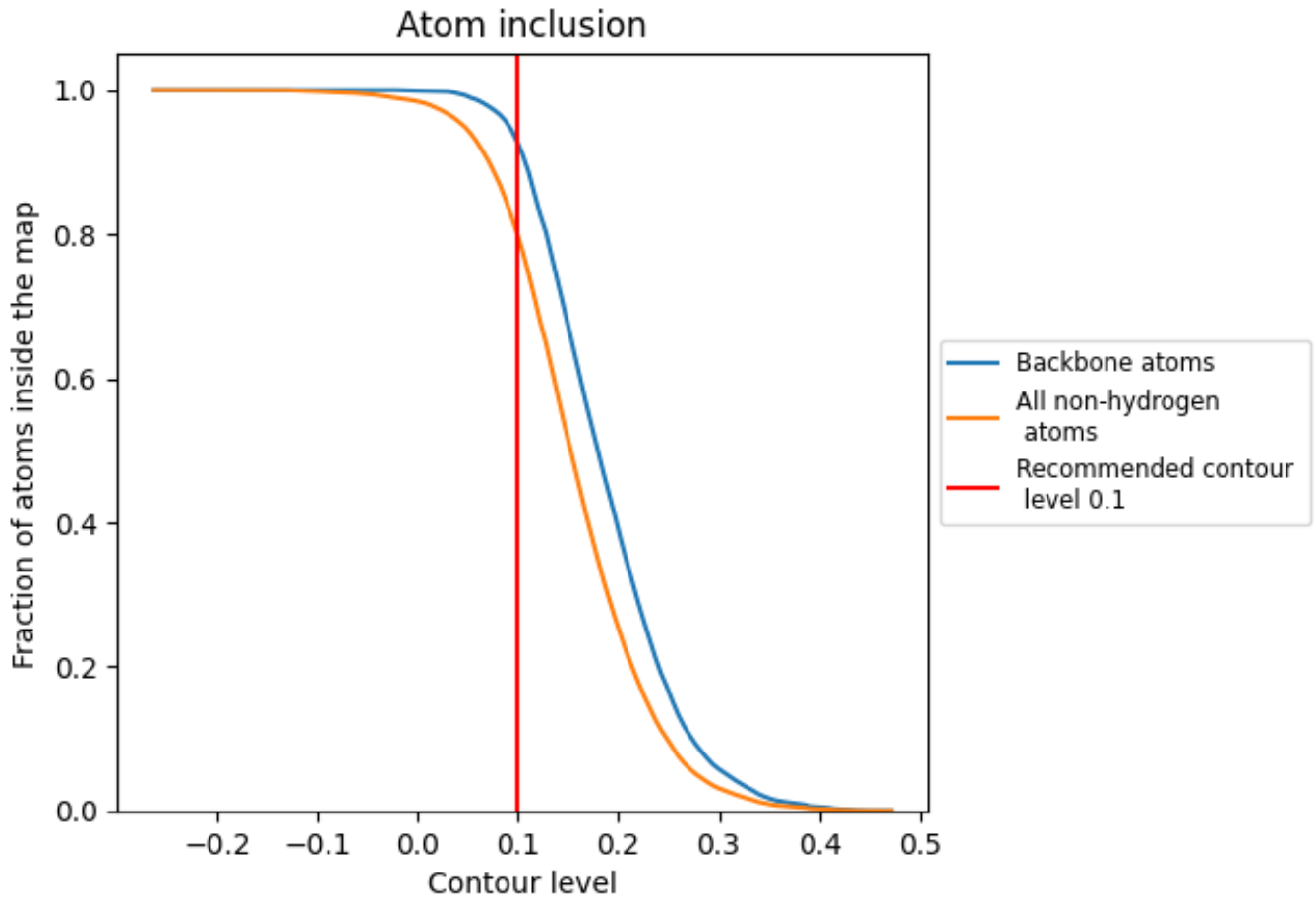
9.3 Atom inclusion mapped to coordinate model (i)



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 (0.1).

9.4 Atom inclusion (i)



At the recommended contour level, 93% of all backbone atoms, 80% 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 (0.1) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	0.7983	0.1230
A	0.8036	0.1280
B	0.8024	0.1220
C	0.7996	0.1230
D	0.7956	0.1200
E	0.7929	0.1200
F	0.7938	0.1230
G	0.7999	0.1250