



Full wwPDB X-ray Structure Validation Report

Feb 27, 2014 – 06:43 AM GMT

PDB ID : 1CX8
Title : CRYTAL STRUCTURE OF THE ECTODOMAIN OF HUMAN TRANS-FERRIN RECEPTOR
Authors : Lawrence, C.M.; Ray, S.; Babyonyshev, M.; Galluser, R.; Borhani, D.; Harrison, S.C.
Deposited on : 1999-08-28
Resolution : 3.20 Å(reported)

This is a full wwPDB validation report for a publicly released PDB entry.
We welcome your comments at validation@mail.wwpdb.org
A user guide is available at <http://wwpdb.org/ValidationPDFNotes.html>

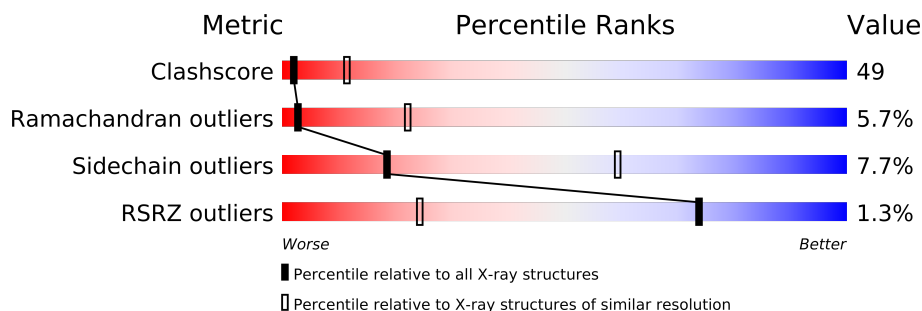
The following versions of software and data (see [references](#)) were used in the production of this report:

MolProbity : 4.02b-467
Mogul : 1.15 2013
Xtriage (Phenix) : dev-1323
EDS : stable22639
Percentile statistics : 21963
Refmac : 5.8.0049
CCP4 : 6.3.0 (Settle)
Ideal geometry (proteins) : Engh & Huber (2001)
Ideal geometry (DNA, RNA) : Parkinson et. al. (1996)
Validation Pipeline (wwPDB-VP) : stable22683

1 Overall quality at a glance

The reported resolution of this entry is 3.20 Å.

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



Metric	Whole archive (#Entries)	Similar resolution (#Entries, resolution range(Å))
Clashscore	79885	1078 (3.26-3.14)
Ramachandran outliers	78287	1059 (3.26-3.14)
Sidechain outliers	78261	1058 (3.26-3.14)
RSRZ outliers	66119	1825 (3.30-3.10)

The table below summarises the geometric issues observed across the polymeric chains and their fit to the electron density. The red, orange, yellow and green segments on the lower bar indicate the fraction of residues that contain outliers for ≥ 3 , 2, 1 and 0 types of geometric quality criteria. The upper red bar (where present) indicates the fraction of residues that have poor fit to the electron density.

Mol	Chain	Length	Quality of chain
1	A	639	
1	B	639	
1	C	639	
1	D	639	
1	E	639	
1	F	639	
1	G	639	
1	H	639	

The following table lists non-polymeric compounds that are outliers for geometric or electron-density-fit criteria:

Mol	Type	Chain	Res	Geometry	Electron density
2	NAG	A	761	-	X
2	NAG	B	761	-	X
2	NAG	D	761	-	X

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Mol	Type	Chain	Res	Geometry	Electron density
2	NAG	D	763	-	X
2	NAG	E	761	-	X
2	NAG	F	763	-	X
2	NAG	G	761	-	X
2	NAG	G	763	-	X
2	NAG	H	761	-	X
2	NAG	H	763	-	X
3	SM	B	764	-	X
3	SM	B	766	-	X
3	SM	D	764	-	X
3	SM	G	764	-	X

2 Entry composition

There are 3 unique types of molecules in this entry. The entry contains 40808 atoms, of which 0 are hydrogen and 0 are deuterium.

In the tables below, the ZeroOcc column contains the number of atoms modelled with zero occupancy, 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 TRANSFERRIN RECEPTOR PROTEIN.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	A	639	Total	C	N	O	S	0	0	0
			5056	3244	846	952	14			
1	B	639	Total	C	N	O	S	0	0	0
			5056	3244	846	952	14			
1	C	639	Total	C	N	O	S	0	0	0
			5056	3244	846	952	14			
1	D	639	Total	C	N	O	S	0	0	0
			5056	3244	846	952	14			
1	E	639	Total	C	N	O	S	0	0	0
			5056	3244	846	952	14			
1	F	639	Total	C	N	O	S	0	0	0
			5056	3244	846	952	14			
1	G	639	Total	C	N	O	S	0	0	0
			5056	3244	846	952	14			
1	H	639	Total	C	N	O	S	0	0	0
			5056	3244	846	952	14			

- Molecule 2 is SUGAR (N-ACETYL-D-GLUCOSAMINE) (three-letter code: NAG) (formula: $C_8H_{15}NO_6$).



Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
2	A	1	Total	C	N	O	0	0
			14	8	1	5		
2	A	1	Total	C	N	O	0	0
			14	8	1	5		
2	A	1	Total	C	N	O	0	0
			14	8	1	5		
2	B	1	Total	C	N	O	0	0
			14	8	1	5		
2	B	1	Total	C	N	O	0	0
			14	8	1	5		
2	B	1	Total	C	N	O	0	0
			14	8	1	5		
2	C	1	Total	C	N	O	0	0
			14	8	1	5		
2	C	1	Total	C	N	O	0	0
			14	8	1	5		
2	C	1	Total	C	N	O	0	0
			14	8	1	5		
2	D	1	Total	C	N	O	0	0
			14	8	1	5		
2	D	1	Total	C	N	O	0	0
			14	8	1	5		
2	D	1	Total	C	N	O	0	0
			14	8	1	5		
2	E	1	Total	C	N	O	0	0
			14	8	1	5		
2	E	1	Total	C	N	O	0	0
			14	8	1	5		

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Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
2	E	1	Total	C	N	O	0	0
			14	8	1	5		
2	F	1	Total	C	N	O	0	0
			14	8	1	5		
2	F	1	Total	C	N	O	0	0
			14	8	1	5		
2	F	1	Total	C	N	O	0	0
			14	8	1	5		
2	G	1	Total	C	N	O	0	0
			14	8	1	5		
2	G	1	Total	C	N	O	0	0
			14	8	1	5		
2	G	1	Total	C	N	O	0	0
			14	8	1	5		
2	H	1	Total	C	N	O	0	0
			14	8	1	5		
2	H	1	Total	C	N	O	0	0
			14	8	1	5		
2	H	1	Total	C	N	O	0	0
			14	8	1	5		

- Molecule 3 is SAMARIUM (III) ION (three-letter code: Sm) (formula: Sm).

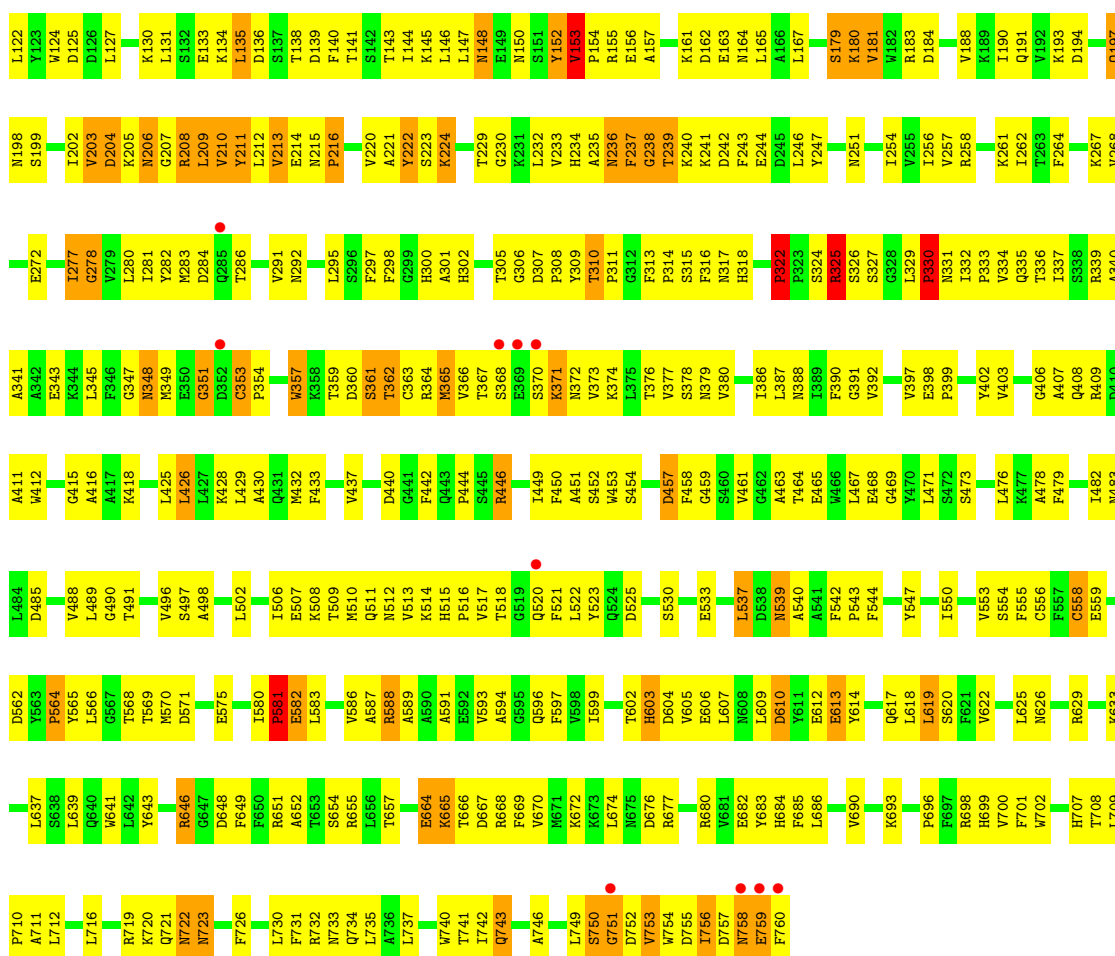
Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
3	G	3	Total	Sm	0	0
			3	3		
3	D	3	Total	Sm	0	0
			3	3		
3	E	3	Total	Sm	0	0
			3	3		
3	H	3	Total	Sm	0	0
			3	3		
3	B	3	Total	Sm	0	0
			3	3		
3	C	3	Total	Sm	0	0
			3	3		
3	A	3	Total	Sm	0	0
			3	3		
3	F	3	Total	Sm	0	0
			3	3		

3 Residue-property plots

These plots are drawn for all protein, RNA and DNA chains in the entry. The first graphic for a chain summarises the proportions of errors displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and electron 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 dot above a residue indicates a poor fit to the electron density ($RSRZ > 2$). 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.

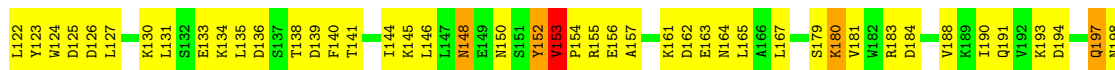
• Molecule 1: TRANSFERRIN RECEPTOR PROTEIN

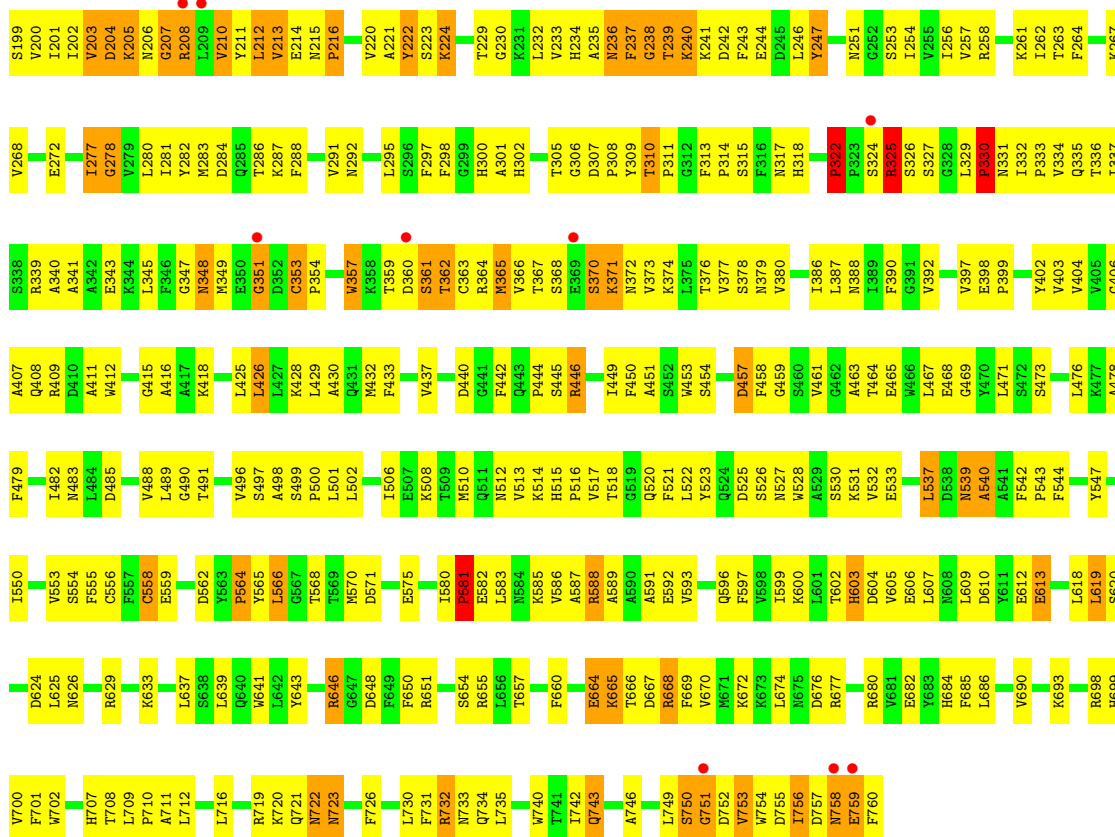
Chain A:

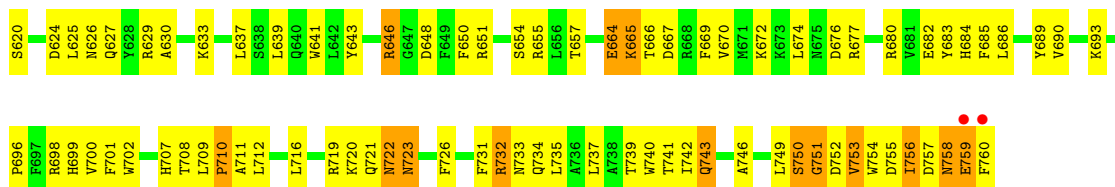


• Molecule 1: TRANSFERRIN RECEPTOR PROTEIN

Chain B:

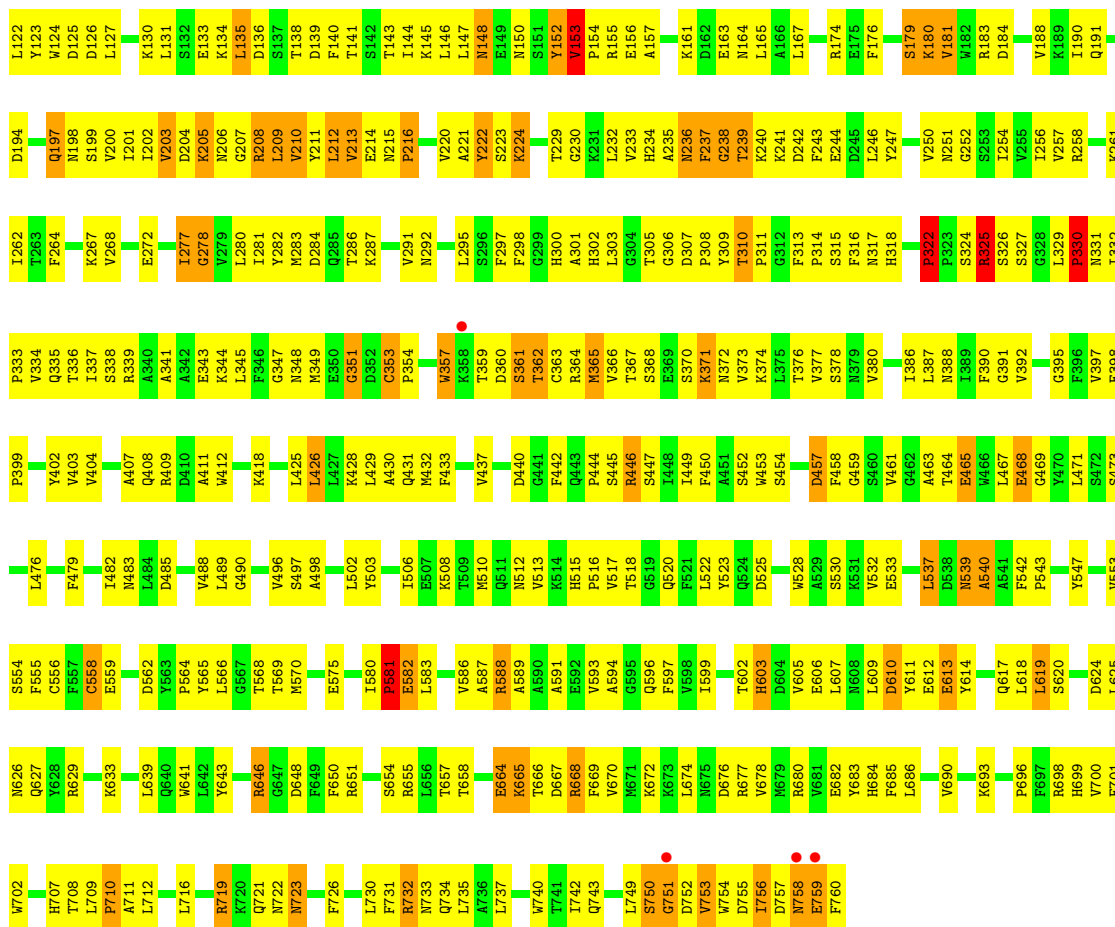






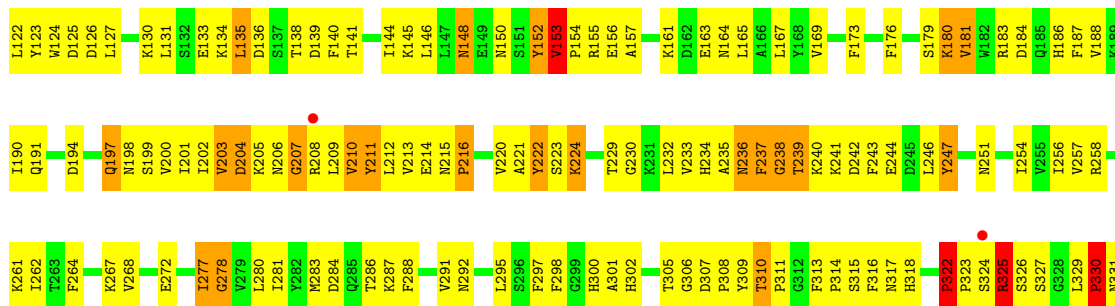
• Molecule 1: TRANSFERRIN RECEPTOR PROTEIN

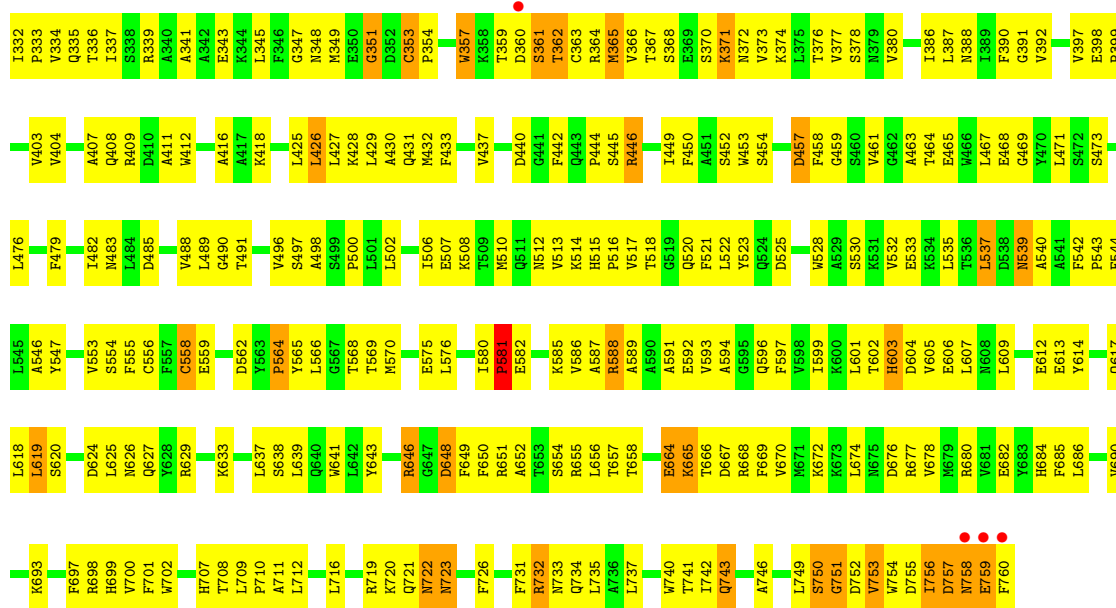
Chain D:



• Molecule 1: TRANSFERRIN RECEPTOR PROTEIN

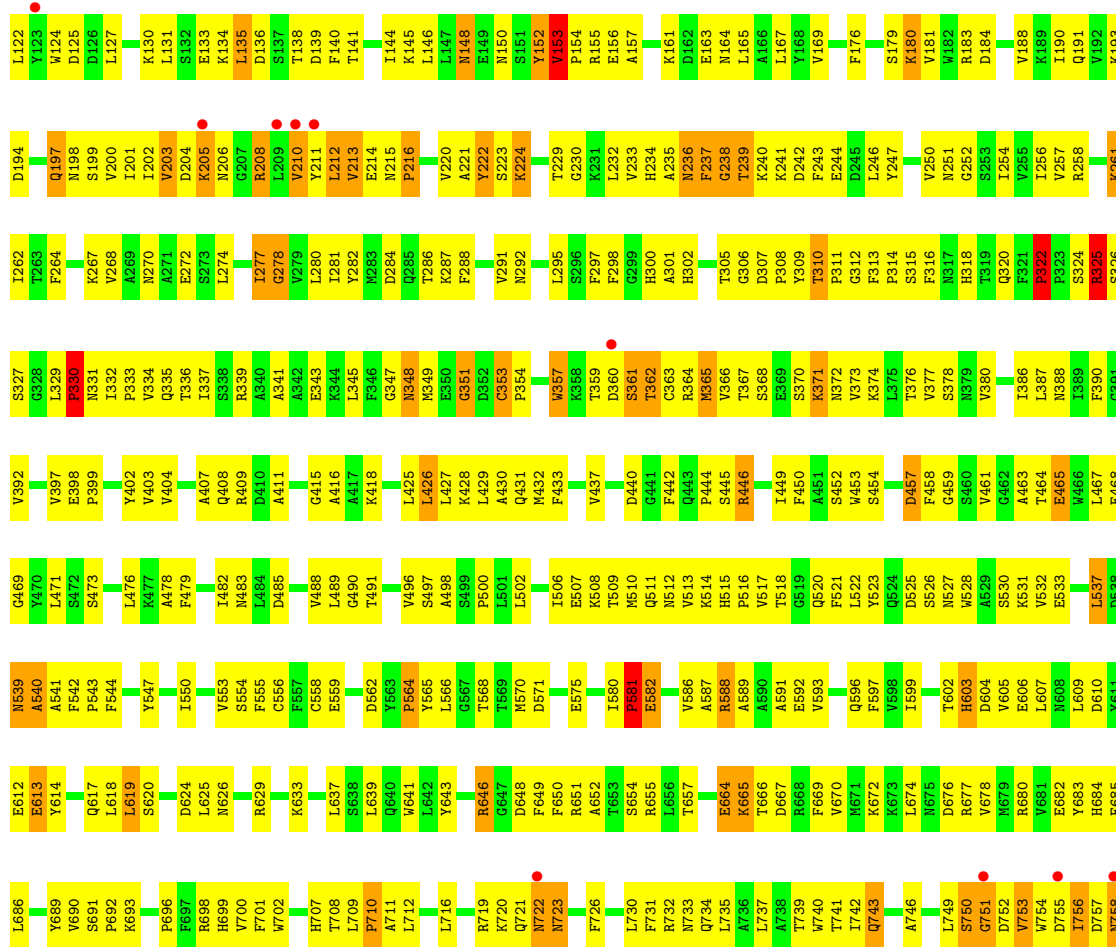
Chain E:





• Molecule 1: TRANSFERRIN RECEPTOR PROTEIN

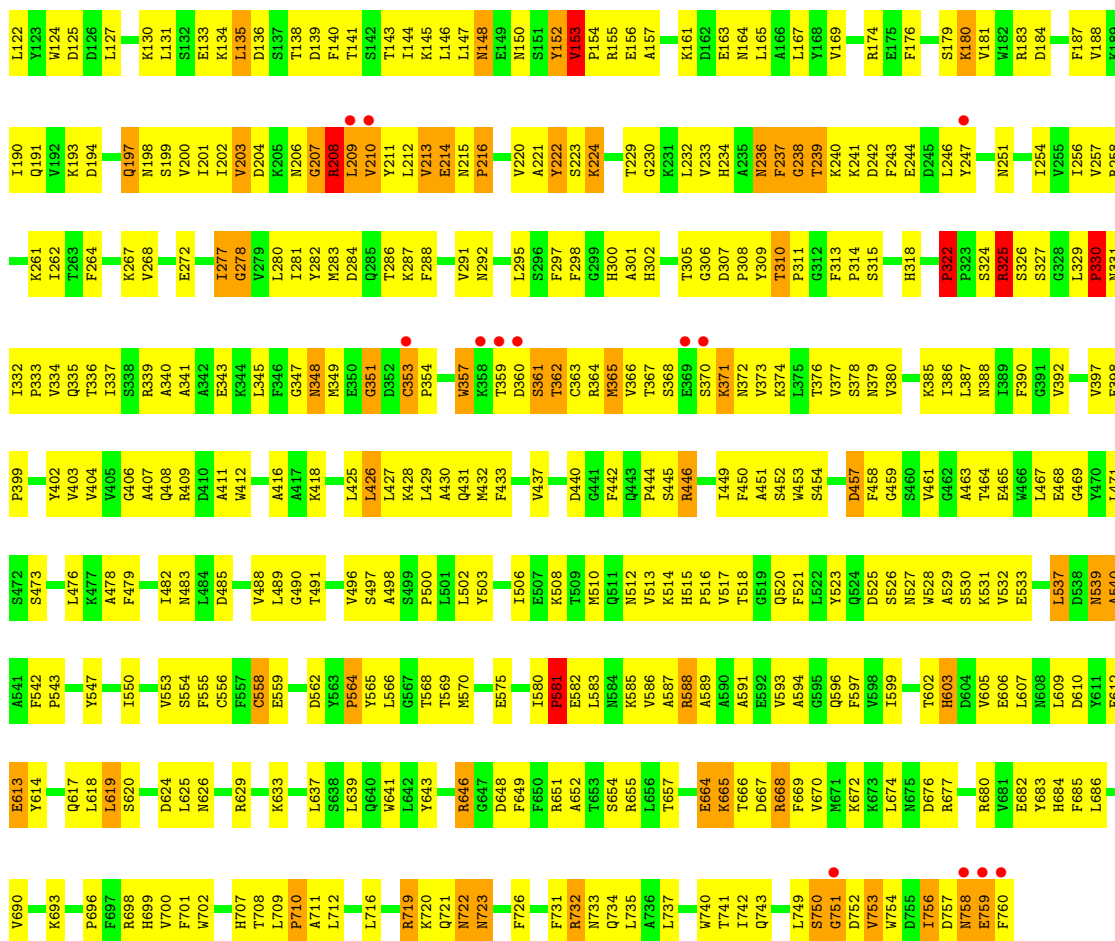
Chain F:





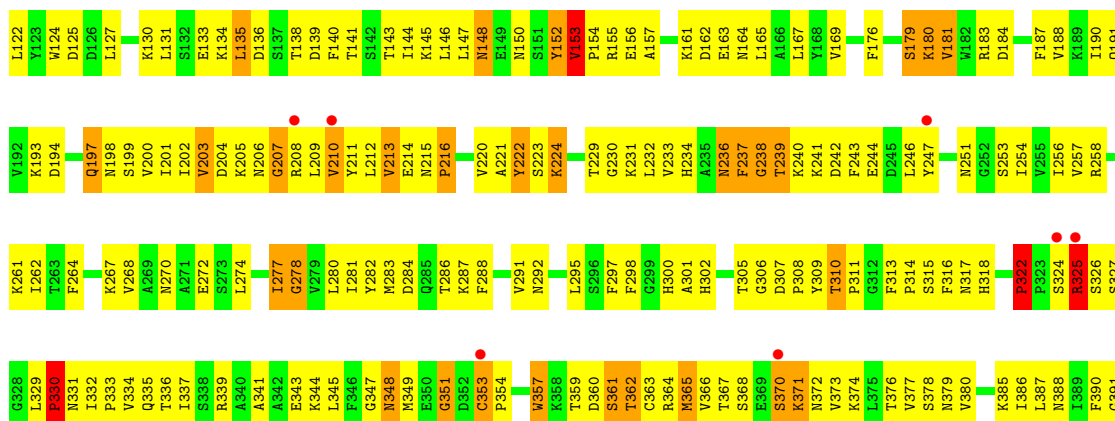
• Molecule 1: TRANSFERRIN RECEPTOR PROTEIN

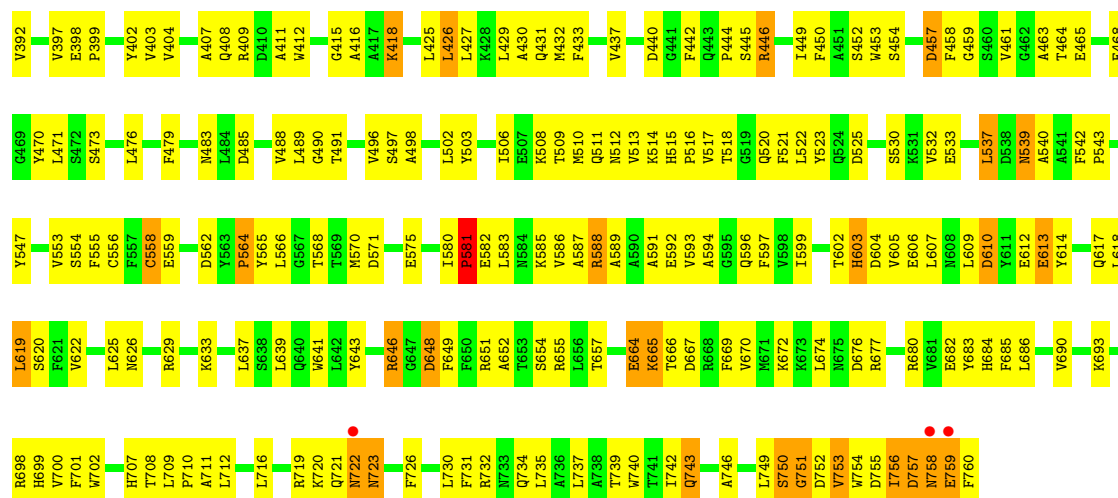
Chain G:



• Molecule 1: TRANSFERRIN RECEPTOR PROTEIN

Chain H:





4 Data and refinement statistics

Property	Value	Source
Space group	P 21 21 21	Depositor
Cell constants a, b, c, α , β , γ	105.40Å 216.90Å 361.90Å 90.00° 90.00° 90.00°	Depositor
Resolution (Å)	8.00 – 3.20 14.94 – 3.20	Depositor EDS
% Data completeness (in resolution range)	79.2 (8.00-3.20) 80.1 (14.94-3.20)	Depositor EDS
R_{merge}	0.10	Depositor
R_{sym}	(Not available)	Depositor
$\langle I/\sigma(I) \rangle$ ¹	2.83 (at 3.19Å)	Xtriage
Refinement program	CNS	Depositor
R, R_{free}	0.243 , 0.284 0.267 , (Not available)	Depositor DCC
R_{free} test set	No test flags present.	DCC
Wilson B-factor (Å ²)	91.6	Xtriage
Anisotropy	0.149	Xtriage
Bulk solvent k_{sol} (e/Å ³), B_{sol} (Å ²)	0.27 , 16.9	EDS
Estimated twinning fraction	No twinning to report.	Xtriage
L-test for twinning	$\langle L \rangle = 0.49$, $\langle L^2 \rangle = 0.32$	Xtriage
Outliers	0 of 110471 reflections	Xtriage
F_o, F_c correlation	0.88	EDS
Total number of atoms	40808	wwPDB-VP
Average B, all atoms (Å ²)	69.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 3.34% of the height of the origin peak. No significant pseudotranslation is detected.*

¹Intensities estimated from amplitudes.

5 Model quality

5.1 Standard geometry

Bond lengths and bond angles in the following residue types are not validated in this section: NAG, SM

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

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
1	A	0.38	0/5177	0.61	1/7021 (0.0%)
1	B	0.37	0/5177	0.61	1/7021 (0.0%)
1	C	0.40	0/5177	0.64	3/7021 (0.0%)
1	D	0.40	0/5177	0.64	4/7021 (0.1%)
1	E	0.38	0/5177	0.62	1/7021 (0.0%)
1	F	0.38	0/5177	0.63	2/7021 (0.0%)
1	G	0.37	0/5177	0.61	1/7021 (0.0%)
1	H	0.38	0/5177	0.61	1/7021 (0.0%)
All	All	0.38	0/41416	0.62	14/56168 (0.0%)

There are no bond length outliers.

All (14) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	D	468	GLU	OE1-CD-OE2	-6.58	115.40	123.30
1	C	468	GLU	OE1-CD-OE2	-6.33	115.71	123.30
1	D	212	LEU	N-CA-C	-6.05	94.65	111.00
1	D	465	GLU	OE1-CD-OE2	-5.78	116.36	123.30
1	C	465	GLU	OE1-CD-OE2	-5.61	116.57	123.30
1	F	465	GLU	OE1-CD-OE2	-5.42	116.79	123.30
1	G	751	GLY	N-CA-C	-5.27	99.93	113.10
1	B	751	GLY	N-CA-C	-5.22	100.04	113.10
1	E	751	GLY	N-CA-C	-5.14	100.25	113.10
1	A	751	GLY	N-CA-C	-5.11	100.32	113.10
1	H	751	GLY	N-CA-C	-5.11	100.33	113.10
1	C	751	GLY	N-CA-C	-5.07	100.42	113.10
1	D	751	GLY	N-CA-C	-5.06	100.46	113.10
1	F	751	GLY	N-CA-C	-5.00	100.60	113.10

There are no chirality outliers.

There are no planarity outliers.

5.2 Close contacts

In the following table, the Non-H and H(model) columns list the number of non-hydrogen atoms and hydrogen atoms in the chain respectively. The H(added) column lists the number of hydrogens added by MolProbity. The Clashes column lists the number of clashes within the asymmetric unit, and the number in parentheses is this value normalized per 1000 atoms of the molecule in the chain. The Symm-Clashes column gives symmetry related clashes, in the same way as for the Clashes column.

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	A	5056	0	4978	501	0
1	B	5056	0	4978	502	0
1	C	5056	0	4978	519	0
1	D	5056	0	4978	512	0
1	E	5056	0	4978	516	0
1	F	5056	0	4978	510	0
1	G	5056	0	4977	536	0
1	H	5056	0	4978	507	0
2	A	42	0	39	3	0
2	B	42	0	39	3	0
2	C	42	0	39	2	0
2	D	42	0	39	2	0
2	E	42	0	39	1	0
2	F	42	0	39	1	0
2	G	42	0	39	2	0
2	H	42	0	39	1	0
3	A	3	0	0	0	0
3	B	3	0	0	0	0
3	C	3	0	0	0	0
3	D	3	0	0	0	0
3	E	3	0	0	0	0
3	F	3	0	0	0	0
3	G	3	0	0	0	0
3	H	3	0	0	0	0
All	All	40808	0	40135	3954	0

Clashscore is defined as the number of clashes calculated for the entry per 1000 atoms (including hydrogens) of the entry. The overall clashscore for this entry is 49.

All (3954) close contacts within the same asymmetric unit are listed below.

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:F:201:ILE:HD13	1:F:212:LEU:HA	1.21	1.18

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:G:153:VAL:HG13	1:G:154:PRO:HD3	1.22	1.16
1:F:153:VAL:HG13	1:F:154:PRO:HD3	1.17	1.14
1:E:203:VAL:HA	1:E:209:LEU:HB3	1.23	1.13
1:D:153:VAL:HG13	1:D:154:PRO:HD3	1.17	1.11
1:A:153:VAL:HG13	1:A:154:PRO:HD3	1.20	1.11
1:B:153:VAL:HG13	1:B:154:PRO:HD3	1.21	1.11
1:C:153:VAL:HG13	1:C:154:PRO:HD3	1.20	1.10
1:E:153:VAL:HG13	1:E:154:PRO:HD3	1.17	1.10
1:H:153:VAL:HG13	1:H:154:PRO:HD3	1.17	1.07
1:F:210:VAL:HG13	1:F:211:TYR:H	1.20	1.06
1:D:201:ILE:HD13	1:D:212:LEU:HA	1.39	1.03
1:H:210:VAL:HG22	1:H:211:TYR:H	1.17	1.03
1:C:359:THR:HG22	1:C:360:ASP:H	1.20	1.03
1:C:306:GLY:HA2	1:C:461:VAL:HA	1.41	1.02
1:G:208:ARG:HG2	1:G:209:LEU:H	1.21	1.02
1:B:210:VAL:HG13	1:B:211:TYR:H	1.22	1.02
1:E:359:THR:HG22	1:E:360:ASP:H	1.26	1.01
1:B:359:THR:HG22	1:B:360:ASP:H	1.22	1.00
1:F:348:ASN:HB3	1:F:371:LYS:HE3	1.43	1.00
1:G:359:THR:HG22	1:G:360:ASP:H	1.26	1.00
1:E:201:ILE:HD13	1:E:212:LEU:HA	1.44	0.99
1:A:359:THR:HG22	1:A:360:ASP:H	1.25	0.99
1:F:359:THR:HG22	1:F:360:ASP:H	1.26	0.98
1:G:348:ASN:HB3	1:G:371:LYS:HE3	1.47	0.96
1:B:348:ASN:HB3	1:B:371:LYS:HE3	1.47	0.96
1:D:359:THR:HG22	1:D:360:ASP:H	1.26	0.96
1:H:359:THR:HG22	1:H:360:ASP:H	1.27	0.96
1:C:354:PRO:HD3	1:C:365:MET:SD	2.05	0.95
1:G:200:VAL:O	1:G:213:VAL:HB	1.67	0.95
1:B:184:ASP:HB3	1:B:388:ASN:HB2	1.46	0.95
1:D:348:ASN:HB3	1:D:371:LYS:HE3	1.49	0.94
1:H:348:ASN:HB3	1:H:371:LYS:HE3	1.49	0.94
1:E:348:ASN:HB3	1:E:371:LYS:HE3	1.49	0.94
1:G:184:ASP:HB3	1:G:388:ASN:HB2	1.49	0.94
1:B:306:GLY:HA2	1:B:461:VAL:HA	1.50	0.94
1:E:708:THR:HG22	1:E:711:ALA:H	1.32	0.94
1:H:708:THR:HG22	1:H:711:ALA:H	1.33	0.93
1:A:203:VAL:HB	1:A:208:ARG:HA	1.49	0.93
1:D:708:THR:HG22	1:D:711:ALA:H	1.30	0.93
1:D:354:PRO:HD3	1:D:365:MET:SD	2.08	0.93
1:H:184:ASP:HB3	1:H:388:ASN:HB2	1.49	0.93
1:H:306:GLY:HA2	1:H:461:VAL:HA	1.51	0.93

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:C:708:THR:HG22	1:C:711:ALA:H	1.30	0.93
1:G:708:THR:HG22	1:G:711:ALA:H	1.30	0.93
1:F:130:LYS:HE3	1:F:134:LYS:HD3	1.50	0.93
1:E:130:LYS:HE3	1:E:134:LYS:HD3	1.49	0.92
1:F:184:ASP:HB3	1:F:388:ASN:HB2	1.49	0.92
1:B:708:THR:HG22	1:B:711:ALA:H	1.31	0.92
1:A:348:ASN:HB3	1:A:371:LYS:HE3	1.49	0.92
1:F:708:THR:HG22	1:F:711:ALA:H	1.35	0.92
1:A:354:PRO:HD3	1:A:365:MET:SD	2.09	0.91
1:D:184:ASP:HB3	1:D:388:ASN:HB2	1.50	0.91
1:H:426:LEU:HD21	1:H:450:PHE:HB3	1.52	0.91
1:E:354:PRO:HD3	1:E:365:MET:SD	2.09	0.91
1:C:348:ASN:HB3	1:C:371:LYS:HE3	1.53	0.91
1:F:153:VAL:HG13	1:F:154:PRO:CD	2.01	0.91
1:C:239:THR:HB	1:C:244:GLU:HG2	1.52	0.91
1:H:667:ASP:HB3	1:H:670:VAL:HG22	1.53	0.91
1:C:211:TYR:CD1	1:C:344:LYS:HE3	2.06	0.91
1:H:300:HIS:HE1	1:H:302:HIS:HB3	1.35	0.90
1:E:426:LEU:HD21	1:E:450:PHE:HB3	1.53	0.90
1:A:130:LYS:HE3	1:A:134:LYS:HD3	1.50	0.90
1:D:153:VAL:HG13	1:D:154:PRO:CD	2.00	0.90
1:H:130:LYS:HE3	1:H:134:LYS:HD3	1.50	0.90
1:C:184:ASP:HB3	1:C:388:ASN:HB2	1.52	0.90
1:B:349:MET:HB2	1:B:364:ARG:HG3	1.54	0.90
1:D:153:VAL:CG1	1:D:154:PRO:HD3	2.02	0.90
1:G:130:LYS:HE3	1:G:134:LYS:HD3	1.52	0.90
1:A:209:LEU:HG	1:A:210:VAL:H	1.35	0.90
1:A:140:PHE:HE1	1:A:588:ARG:HA	1.36	0.90
1:F:426:LEU:HD21	1:F:450:PHE:HB3	1.54	0.90
1:H:200:VAL:O	1:H:213:VAL:HB	1.71	0.89
1:F:306:GLY:HA2	1:F:461:VAL:HA	1.53	0.89
1:H:153:VAL:HG13	1:H:154:PRO:CD	2.03	0.89
1:E:300:HIS:HE1	1:E:302:HIS:HB3	1.36	0.89
1:B:130:LYS:HE3	1:B:134:LYS:HD3	1.54	0.89
1:F:153:VAL:CG1	1:F:154:PRO:HD3	2.01	0.89
1:C:667:ASP:HB3	1:C:670:VAL:HG22	1.55	0.89
1:A:349:MET:HB2	1:A:364:ARG:HG3	1.54	0.89
1:E:667:ASP:HB3	1:E:670:VAL:HG22	1.55	0.89
1:A:184:ASP:HB3	1:A:388:ASN:HB2	1.52	0.89
1:A:161:LYS:HA	1:A:164:ASN:HD22	1.37	0.89
1:E:153:VAL:CG1	1:E:154:PRO:HD3	2.03	0.88
1:H:349:MET:HB2	1:H:364:ARG:HG3	1.55	0.88

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:G:161:LYS:HA	1:G:164:ASN:HD22	1.39	0.88
1:D:239:THR:HB	1:D:244:GLU:HG2	1.54	0.88
1:B:161:LYS:HA	1:B:164:ASN:HD22	1.39	0.88
1:E:140:PHE:HE1	1:E:588:ARG:HA	1.38	0.88
1:D:140:PHE:HE1	1:D:588:ARG:HA	1.36	0.88
1:C:300:HIS:HE1	1:C:302:HIS:HB3	1.39	0.87
1:B:354:PRO:HD3	1:B:365:MET:SD	2.14	0.87
1:C:130:LYS:HE3	1:C:134:LYS:HD3	1.54	0.87
1:A:153:VAL:HG13	1:A:154:PRO:CD	2.04	0.87
1:H:153:VAL:CG1	1:H:154:PRO:HD3	2.03	0.87
1:H:239:THR:HB	1:H:244:GLU:HG2	1.56	0.87
1:D:667:ASP:HB3	1:D:670:VAL:HG22	1.56	0.87
1:E:153:VAL:HG13	1:E:154:PRO:CD	2.04	0.87
1:A:153:VAL:CG1	1:A:154:PRO:HD3	2.03	0.87
1:B:153:VAL:CG1	1:B:154:PRO:HD3	2.05	0.87
1:E:184:ASP:HB3	1:E:388:ASN:HB2	1.55	0.87
1:B:444:PRO:HB3	1:B:602:THR:HG21	1.56	0.87
1:D:208:ARG:H	1:D:208:ARG:HD2	1.40	0.87
1:G:667:ASP:HB3	1:G:670:VAL:HG22	1.56	0.87
1:A:353:CYS:HA	1:A:365:MET:SD	2.15	0.87
1:B:300:HIS:HE1	1:B:302:HIS:HB3	1.39	0.87
1:G:426:LEU:HD21	1:G:450:PHE:HB3	1.57	0.87
1:E:161:LYS:HA	1:E:164:ASN:HD22	1.38	0.87
1:C:444:PRO:HB3	1:C:602:THR:HG21	1.54	0.87
1:B:667:ASP:HB3	1:B:670:VAL:HG22	1.57	0.87
1:A:708:THR:HG22	1:A:711:ALA:H	1.39	0.87
1:C:140:PHE:HE1	1:C:588:ARG:HA	1.37	0.87
1:H:444:PRO:HB3	1:H:602:THR:HG21	1.56	0.86
1:D:442:PHE:CZ	1:D:444:PRO:HG3	2.11	0.86
1:F:646:ARG:HH11	1:F:646:ARG:HG2	1.40	0.86
1:H:685:PHE:O	1:H:700:VAL:HG22	1.74	0.86
1:G:354:PRO:HD3	1:G:365:MET:SD	2.15	0.86
1:C:153:VAL:HG13	1:C:154:PRO:CD	2.06	0.86
1:H:300:HIS:CE1	1:H:302:HIS:HB3	2.10	0.86
1:H:354:PRO:HD3	1:H:365:MET:SD	2.15	0.86
1:G:153:VAL:CG1	1:G:154:PRO:HD3	2.05	0.86
1:A:239:THR:HB	1:A:244:GLU:HG2	1.55	0.86
1:G:239:THR:HB	1:G:244:GLU:HG2	1.57	0.86
1:F:239:THR:HB	1:F:244:GLU:HG2	1.56	0.86
1:F:354:PRO:HD3	1:F:365:MET:SD	2.15	0.86
1:C:426:LEU:HD21	1:C:450:PHE:HB3	1.57	0.86
1:C:153:VAL:CG1	1:C:154:PRO:HD3	2.06	0.85

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:F:140:PHE:HE1	1:F:588:ARG:HA	1.37	0.85
1:B:353:CYS:HA	1:B:365:MET:SD	2.16	0.85
1:E:646:ARG:HH11	1:E:646:ARG:HG2	1.42	0.85
1:E:349:MET:HB2	1:E:364:ARG:HG3	1.57	0.85
1:H:140:PHE:HE1	1:H:588:ARG:HA	1.40	0.85
1:B:426:LEU:HD21	1:B:450:PHE:HB3	1.59	0.85
1:G:349:MET:HB2	1:G:364:ARG:HG3	1.58	0.85
1:A:300:HIS:HE1	1:A:302:HIS:HB3	1.42	0.85
1:B:140:PHE:HE1	1:B:588:ARG:HA	1.38	0.85
1:B:239:THR:HB	1:B:244:GLU:HG2	1.57	0.85
1:B:646:ARG:HG2	1:B:646:ARG:HH11	1.42	0.85
1:F:667:ASP:HB3	1:F:670:VAL:HG22	1.58	0.85
1:G:300:HIS:HE1	1:G:302:HIS:HB3	1.41	0.85
1:C:646:ARG:HH11	1:C:646:ARG:HG2	1.42	0.85
1:A:426:LEU:HD21	1:A:450:PHE:HB3	1.59	0.84
1:B:153:VAL:HG13	1:B:154:PRO:CD	2.07	0.84
1:G:306:GLY:HA2	1:G:461:VAL:HA	1.58	0.84
1:E:300:HIS:CE1	1:E:302:HIS:HB3	2.11	0.84
1:A:667:ASP:HB3	1:A:670:VAL:HG22	1.57	0.84
1:G:280:LEU:HD12	1:G:337:ILE:HD13	1.59	0.84
1:B:708:THR:HG23	1:B:710:PRO:HD2	1.59	0.84
1:G:353:CYS:HA	1:G:365:MET:SD	2.17	0.84
1:H:353:CYS:HA	1:H:365:MET:SD	2.16	0.84
1:E:444:PRO:HB3	1:E:602:THR:HG21	1.57	0.84
1:D:646:ARG:HH11	1:D:646:ARG:HG2	1.41	0.84
1:H:161:LYS:HA	1:H:164:ASN:HD22	1.42	0.84
1:D:161:LYS:HA	1:D:164:ASN:HD22	1.41	0.84
1:E:353:CYS:HA	1:E:365:MET:SD	2.18	0.84
1:A:708:THR:HG23	1:A:710:PRO:HD2	1.59	0.84
1:C:349:MET:HB2	1:C:364:ARG:HG3	1.60	0.84
1:B:201:ILE:HD11	1:B:208:ARG:HB2	1.57	0.84
1:D:306:GLY:HA2	1:D:461:VAL:HA	1.57	0.84
1:D:188:VAL:CG2	1:D:386:ILE:HD11	2.08	0.83
1:A:306:GLY:HA2	1:A:461:VAL:HA	1.59	0.83
1:D:708:THR:HG23	1:D:710:PRO:HD2	1.61	0.83
1:E:306:GLY:HA2	1:E:461:VAL:HA	1.58	0.83
1:F:349:MET:HB2	1:F:364:ARG:HG3	1.59	0.83
1:C:442:PHE:CZ	1:C:444:PRO:HG3	2.13	0.83
1:D:444:PRO:HB3	1:D:602:THR:HG21	1.57	0.83
1:A:442:PHE:CZ	1:A:444:PRO:HG3	2.13	0.83
1:F:444:PRO:HB3	1:F:602:THR:HG21	1.59	0.83
1:E:239:THR:HB	1:E:244:GLU:HG2	1.58	0.83

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:G:442:PHE:CZ	1:G:444:PRO:HG3	2.14	0.83
1:G:153:VAL:HG13	1:G:154:PRO:CD	2.06	0.83
1:D:426:LEU:HD21	1:D:450:PHE:HB3	1.60	0.83
1:E:210:VAL:HG22	1:E:211:TYR:H	1.43	0.82
1:F:211:TYR:HD2	1:F:212:LEU:H	1.26	0.82
1:D:349:MET:HB2	1:D:364:ARG:HG3	1.59	0.82
1:B:300:HIS:CE1	1:B:302:HIS:HB3	2.14	0.82
1:B:442:PHE:CZ	1:B:444:PRO:HG3	2.14	0.82
1:B:280:LEU:HD12	1:B:337:ILE:HD13	1.61	0.82
1:H:309:TYR:HE2	1:H:325:ARG:HA	1.45	0.82
1:F:520:GLN:HE22	1:G:240:LYS:NZ	1.78	0.82
1:C:305:THR:HG23	1:C:464:THR:HG21	1.60	0.82
1:C:161:LYS:HA	1:C:164:ASN:HD22	1.45	0.82
1:F:161:LYS:HA	1:F:164:ASN:HD22	1.45	0.82
1:A:300:HIS:CE1	1:A:302:HIS:HB3	2.15	0.82
1:G:140:PHE:HE1	1:G:588:ARG:HA	1.42	0.82
1:H:203:VAL:HG23	1:H:206:ASN:O	1.79	0.81
1:G:300:HIS:CE1	1:G:302:HIS:HB3	2.15	0.81
1:C:208:ARG:O	1:C:209:LEU:HD12	1.80	0.81
1:H:442:PHE:CZ	1:H:444:PRO:HG3	2.15	0.81
1:F:442:PHE:CZ	1:F:444:PRO:HG3	2.16	0.81
1:G:444:PRO:HB3	1:G:602:THR:HG21	1.62	0.81
1:D:130:LYS:HE3	1:D:134:LYS:HD3	1.59	0.81
1:E:442:PHE:CZ	1:E:444:PRO:HG3	2.15	0.81
1:F:300:HIS:HE1	1:F:302:HIS:HB3	1.44	0.81
1:G:208:ARG:H	1:G:208:ARG:HD3	1.45	0.81
1:A:758:ASN:HB2	1:B:183:ARG:O	1.79	0.81
1:E:309:TYR:HE2	1:E:325:ARG:HA	1.45	0.81
1:C:353:CYS:HA	1:C:365:MET:SD	2.21	0.81
1:C:300:HIS:CE1	1:C:302:HIS:HB3	2.15	0.81
1:G:646:ARG:HG2	1:G:646:ARG:HH11	1.44	0.81
1:D:353:CYS:HA	1:D:365:MET:SD	2.20	0.81
1:A:646:ARG:HH11	1:A:646:ARG:HG2	1.46	0.80
1:H:280:LEU:HD12	1:H:337:ILE:HD13	1.61	0.80
1:B:527:ASN:ND2	1:C:531:LYS:HE3	1.96	0.80
1:G:309:TYR:HE2	1:G:325:ARG:HA	1.46	0.80
1:E:204:ASP:HB2	1:E:209:LEU:HD22	1.64	0.80
1:D:205:LYS:HD2	1:D:205:LYS:H	1.44	0.80
1:B:199:SER:HB2	1:B:212:LEU:HD11	1.63	0.80
1:G:183:ARG:O	1:H:758:ASN:HB2	1.82	0.80
1:B:309:TYR:HE2	1:B:325:ARG:HA	1.47	0.80
1:G:310:THR:HG21	1:G:315:SER:HB3	1.64	0.80

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:H:646:ARG:HG2	1:H:646:ARG:HH11	1.47	0.79
1:E:213:VAL:HG11	1:E:345:LEU:HD21	1.63	0.79
1:F:201:ILE:CD1	1:F:212:LEU:HA	2.08	0.79
1:G:188:VAL:CG2	1:G:386:ILE:HD11	2.13	0.79
1:D:310:THR:HG21	1:D:315:SER:HB3	1.64	0.79
1:F:353:CYS:HA	1:F:365:MET:SD	2.23	0.79
1:A:465:GLU:OE2	1:A:468:GLU:CD	2.17	0.79
1:A:140:PHE:CE1	1:A:588:ARG:HA	2.17	0.79
1:G:208:ARG:HG2	1:G:209:LEU:N	1.97	0.79
1:D:140:PHE:CE1	1:D:588:ARG:HA	2.17	0.79
1:D:309:TYR:HE2	1:D:325:ARG:HA	1.48	0.79
1:D:300:HIS:HE1	1:D:302:HIS:HB3	1.46	0.78
1:A:444:PRO:HB3	1:A:602:THR:HG21	1.64	0.78
1:F:188:VAL:CG2	1:F:386:ILE:HD11	2.13	0.78
1:G:150:ASN:HA	1:G:153:VAL:HG12	1.65	0.78
1:B:210:VAL:HG13	1:B:211:TYR:N	1.97	0.78
1:C:708:THR:HG23	1:C:710:PRO:HD2	1.65	0.78
1:C:140:PHE:CE1	1:C:588:ARG:HA	2.18	0.78
1:B:496:VAL:HG11	1:B:506:ILE:HG21	1.65	0.78
1:H:188:VAL:CG2	1:H:386:ILE:HD11	2.14	0.78
1:G:211:TYR:HD2	1:G:212:LEU:H	1.29	0.78
1:B:619:LEU:HD13	1:C:612:GLU:OE1	1.84	0.78
1:B:685:PHE:O	1:B:700:VAL:HG22	1.84	0.78
1:G:201:ILE:HD11	1:G:208:ARG:HB2	1.66	0.78
1:D:685:PHE:O	1:D:700:VAL:HG22	1.84	0.78
1:B:310:THR:HG21	1:B:315:SER:HB3	1.63	0.78
1:F:140:PHE:CE1	1:F:588:ARG:HA	2.18	0.78
1:D:300:HIS:CE1	1:D:302:HIS:HB3	2.18	0.78
1:B:150:ASN:HA	1:B:153:VAL:HG12	1.64	0.77
1:C:309:TYR:HE2	1:C:325:ARG:HA	1.49	0.77
1:E:140:PHE:CE1	1:E:588:ARG:HA	2.18	0.77
1:B:140:PHE:CE1	1:B:588:ARG:HA	2.18	0.77
1:C:518:THR:HG22	1:C:520:GLN:H	1.48	0.77
1:H:278:GLY:H	1:H:332:ILE:HG23	1.49	0.77
1:F:496:VAL:HG11	1:F:506:ILE:HG21	1.66	0.77
1:E:740:TRP:CZ2	1:F:314:PRO:HB2	2.19	0.77
1:E:280:LEU:HD12	1:E:337:ILE:HD13	1.65	0.77
1:A:310:THR:HG21	1:A:315:SER:HB3	1.66	0.77
1:A:208:ARG:O	1:A:208:ARG:HD2	1.83	0.77
1:H:140:PHE:CE1	1:H:588:ARG:HA	2.19	0.77
1:H:496:VAL:HG11	1:H:506:ILE:HG21	1.65	0.77
1:E:150:ASN:HA	1:E:153:VAL:HG12	1.66	0.77

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:C:496:VAL:HG11	1:C:506:ILE:HG21	1.66	0.77
1:G:314:PRO:HB2	1:H:740:TRP:CZ2	2.19	0.77
1:G:685:PHE:O	1:G:700:VAL:HG22	1.85	0.77
1:D:188:VAL:HG21	1:D:386:ILE:HD11	1.67	0.77
1:E:200:VAL:O	1:E:213:VAL:HB	1.85	0.77
1:E:188:VAL:CG2	1:E:386:ILE:HD11	2.14	0.77
1:G:310:THR:O	1:G:468:GLU:OE1	2.03	0.77
1:F:300:HIS:CE1	1:F:302:HIS:HB3	2.19	0.76
1:G:209:LEU:HG	1:G:210:VAL:H	1.50	0.76
1:A:280:LEU:HD12	1:A:337:ILE:HD13	1.66	0.76
1:A:309:TYR:HE2	1:A:325:ARG:HA	1.50	0.76
1:A:496:VAL:HG11	1:A:506:ILE:HG21	1.65	0.76
1:F:220:VAL:HG21	1:F:334:VAL:HG12	1.66	0.76
1:C:150:ASN:HA	1:C:153:VAL:HG12	1.67	0.76
1:G:140:PHE:CE1	1:G:588:ARG:HA	2.20	0.76
1:H:191:GLN:HE22	1:H:223:SER:H	1.33	0.76
1:D:515:HIS:HD2	1:D:517:VAL:H	1.33	0.76
1:G:191:GLN:HE22	1:G:223:SER:H	1.34	0.76
1:G:518:THR:HG22	1:G:520:GLN:H	1.50	0.76
1:C:201:ILE:HD13	1:C:212:LEU:HA	1.66	0.76
1:B:238:GLY:HA3	1:B:267:LYS:HG2	1.67	0.76
1:A:188:VAL:CG2	1:A:386:ILE:HD11	2.14	0.76
1:C:191:GLN:HE22	1:C:223:SER:H	1.32	0.76
1:F:515:HIS:HD2	1:F:517:VAL:H	1.32	0.76
1:H:210:VAL:HG22	1:H:211:TYR:N	1.97	0.76
1:E:758:ASN:HB2	1:F:183:ARG:O	1.85	0.75
1:D:508:LYS:NZ	1:E:624:ASP:HB2	2.00	0.75
1:E:220:VAL:HG21	1:E:334:VAL:HG12	1.68	0.75
1:G:210:VAL:HG13	1:G:211:TYR:H	1.52	0.75
1:C:310:THR:HG21	1:C:315:SER:HB3	1.68	0.75
1:B:191:GLN:HE22	1:B:223:SER:H	1.33	0.75
1:G:496:VAL:HG11	1:G:506:ILE:HG21	1.67	0.75
1:D:732:ARG:HH11	1:D:732:ARG:HG3	1.52	0.75
1:F:310:THR:HG21	1:F:315:SER:HB3	1.69	0.75
1:H:232:LEU:HD22	1:H:373:VAL:HG11	1.69	0.75
1:B:232:LEU:HD22	1:B:373:VAL:HG11	1.68	0.75
1:E:708:THR:HG23	1:E:710:PRO:HD2	1.69	0.75
1:G:318:HIS:O	1:G:322:PRO:HB3	1.87	0.75
1:H:220:VAL:HG21	1:H:334:VAL:HG12	1.69	0.74
1:E:349:MET:HG2	1:E:367:THR:HA	1.68	0.74
1:G:708:THR:HG23	1:G:710:PRO:HD2	1.69	0.74
1:B:518:THR:HG22	1:B:520:GLN:H	1.50	0.74

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:G:732:ARG:HH11	1:G:732:ARG:HG3	1.52	0.74
1:H:150:ASN:HA	1:H:153:VAL:HG12	1.68	0.74
1:C:238:GLY:O	1:C:240:LYS:N	2.20	0.74
1:C:188:VAL:HG21	1:C:386:ILE:HD11	1.69	0.74
1:E:278:GLY:H	1:E:332:ILE:HG23	1.51	0.74
1:F:309:TYR:HE2	1:F:325:ARG:HA	1.51	0.74
1:E:496:VAL:HG11	1:E:506:ILE:HG21	1.68	0.74
1:C:278:GLY:H	1:C:332:ILE:HG23	1.51	0.74
1:D:518:THR:HG22	1:D:520:GLN:H	1.52	0.74
1:E:310:THR:HG21	1:E:315:SER:HB3	1.70	0.74
1:H:310:THR:HG21	1:H:315:SER:HB3	1.69	0.74
1:F:307:ASP:HB3	1:F:465:GLU:OE1	1.87	0.74
1:A:150:ASN:HA	1:A:153:VAL:HG12	1.69	0.74
1:D:496:VAL:HG11	1:D:506:ILE:HG21	1.69	0.74
1:D:278:GLY:H	1:D:332:ILE:HG23	1.52	0.74
1:F:280:LEU:HD12	1:F:337:ILE:HD13	1.70	0.74
1:G:213:VAL:O	1:G:214:GLU:HB2	1.86	0.74
1:A:278:GLY:H	1:A:332:ILE:HG23	1.53	0.74
1:C:359:THR:HG22	1:C:360:ASP:N	2.02	0.73
1:G:349:MET:HG2	1:G:367:THR:HA	1.70	0.73
1:G:232:LEU:HD22	1:G:373:VAL:HG11	1.70	0.73
1:E:398:GLU:HB2	1:E:446:ARG:HG2	1.70	0.73
1:H:318:HIS:O	1:H:322:PRO:HB3	1.88	0.73
1:C:246:LEU:HD12	1:C:247:TYR:N	2.03	0.73
1:C:685:PHE:O	1:C:700:VAL:HG22	1.88	0.73
1:C:188:VAL:CG2	1:C:386:ILE:HD11	2.18	0.73
1:C:214:GLU:O	1:C:216:PRO:HD3	1.87	0.73
1:C:314:PRO:HB2	1:D:740:TRP:CZ2	2.23	0.73
1:F:232:LEU:HD22	1:F:373:VAL:HG11	1.70	0.73
1:A:191:GLN:HE22	1:A:223:SER:H	1.34	0.73
1:A:232:LEU:HD22	1:A:373:VAL:HG11	1.70	0.73
1:F:518:THR:HG22	1:F:520:GLN:H	1.52	0.73
1:A:183:ARG:O	1:B:758:ASN:HB2	1.87	0.73
1:A:295:LEU:HD21	1:A:568:THR:HG21	1.70	0.73
1:E:232:LEU:HD22	1:E:373:VAL:HG11	1.71	0.73
1:G:238:GLY:HA3	1:G:267:LYS:HG2	1.71	0.73
1:G:278:GLY:H	1:G:332:ILE:HG23	1.53	0.73
1:D:232:LEU:HD22	1:D:373:VAL:HG11	1.71	0.73
1:C:232:LEU:HD22	1:C:373:VAL:HG11	1.71	0.73
1:C:239:THR:HB	1:C:244:GLU:CG	2.19	0.73
1:B:407:ALA:HB3	1:B:426:LEU:HD12	1.70	0.73
1:F:619:LEU:HD13	1:G:612:GLU:OE1	1.89	0.73

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:518:THR:HG22	1:A:520:GLN:H	1.54	0.73
1:C:758:ASN:HB2	1:D:183:ARG:O	1.89	0.73
1:C:349:MET:HG2	1:C:367:THR:HA	1.71	0.73
1:H:140:PHE:O	1:H:144:ILE:HG13	1.89	0.73
1:E:397:VAL:C	1:E:399:PRO:HD3	2.09	0.73
1:F:612:GLU:OE1	1:G:619:LEU:HD13	1.88	0.73
1:E:685:PHE:O	1:E:700:VAL:HG22	1.88	0.73
1:G:220:VAL:HG21	1:G:334:VAL:HG12	1.69	0.72
1:E:518:THR:HG22	1:E:520:GLN:H	1.54	0.72
1:A:188:VAL:HG21	1:A:386:ILE:HD11	1.70	0.72
1:A:229:THR:HB	1:A:374:LYS:HG3	1.71	0.72
1:D:213:VAL:HG11	1:D:345:LEU:HD21	1.70	0.72
1:A:220:VAL:HG21	1:A:334:VAL:HG12	1.69	0.72
1:B:398:GLU:HB2	1:B:446:ARG:HG2	1.72	0.72
1:H:398:GLU:HB2	1:H:446:ARG:HG2	1.72	0.72
1:F:397:VAL:C	1:F:399:PRO:HD3	2.09	0.72
1:B:531:LYS:HE3	1:C:527:ASN:ND2	2.04	0.72
1:F:210:VAL:HG13	1:F:211:TYR:N	2.00	0.72
1:B:305:THR:HG23	1:B:464:THR:HG21	1.71	0.72
1:A:740:TRP:CZ2	1:B:314:PRO:HB2	2.25	0.72
1:B:318:HIS:O	1:B:322:PRO:HB3	1.88	0.72
1:C:397:VAL:C	1:C:399:PRO:HD3	2.10	0.72
1:C:318:HIS:O	1:C:322:PRO:HB3	1.89	0.72
1:B:278:GLY:H	1:B:332:ILE:HG23	1.54	0.72
1:B:295:LEU:HD21	1:B:568:THR:HG21	1.71	0.72
1:G:214:GLU:OE1	1:G:341:ALA:HB2	1.89	0.72
1:F:214:GLU:O	1:F:216:PRO:HD3	1.88	0.72
1:A:397:VAL:C	1:A:399:PRO:HD3	2.10	0.72
1:E:238:GLY:HA3	1:E:267:LYS:HG2	1.72	0.72
1:C:398:GLU:HB2	1:C:446:ARG:HG2	1.71	0.72
1:G:515:HIS:HD2	1:G:517:VAL:H	1.36	0.72
1:C:732:ARG:HH11	1:C:732:ARG:HG3	1.55	0.72
1:D:349:MET:HG2	1:D:367:THR:HA	1.72	0.72
1:A:407:ALA:HB3	1:A:426:LEU:HD12	1.72	0.72
1:G:397:VAL:C	1:G:399:PRO:HD3	2.10	0.72
1:B:183:ARG:NH1	1:B:387:LEU:HD21	2.04	0.72
1:C:515:HIS:HD2	1:C:517:VAL:H	1.38	0.72
1:D:150:ASN:HA	1:D:153:VAL:HG12	1.72	0.71
1:G:465:GLU:OE2	1:G:468:GLU:CD	2.27	0.71
1:B:297:PHE:O	1:B:336:THR:HG21	1.90	0.71
1:A:212:LEU:HD21	1:A:215:ASN:HD21	1.55	0.71
1:B:515:HIS:HD2	1:B:517:VAL:H	1.38	0.71

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:H:349:MET:HG2	1:H:367:THR:HA	1.72	0.71
1:F:188:VAL:HG21	1:F:386:ILE:HD11	1.70	0.71
1:H:229:THR:HB	1:H:374:LYS:HG3	1.71	0.71
1:E:203:VAL:HA	1:E:209:LEU:CB	2.11	0.71
1:B:229:THR:HB	1:B:374:LYS:HG3	1.70	0.71
1:A:318:HIS:O	1:A:322:PRO:HB3	1.90	0.71
1:C:256:ILE:HD11	1:C:349:MET:HE1	1.73	0.71
1:G:130:LYS:HE2	1:G:440:ASP:OD1	1.91	0.71
1:H:397:VAL:C	1:H:399:PRO:HD3	2.11	0.71
1:D:330:PRO:O	1:D:331:ASN:HB3	1.91	0.71
1:H:295:LEU:HD21	1:H:568:THR:HG21	1.72	0.71
1:E:732:ARG:HH11	1:E:732:ARG:HG3	1.55	0.71
1:E:318:HIS:O	1:E:322:PRO:HB3	1.90	0.71
1:E:515:HIS:HD2	1:E:517:VAL:H	1.38	0.71
1:H:518:THR:HG22	1:H:520:GLN:H	1.56	0.71
1:H:202:ILE:HG22	1:H:209:LEU:HD23	1.73	0.71
1:H:708:THR:HG23	1:H:710:PRO:HD2	1.72	0.71
1:D:398:GLU:HB2	1:D:446:ARG:HG2	1.73	0.71
1:H:330:PRO:O	1:H:331:ASN:HB3	1.91	0.71
1:F:278:GLY:H	1:F:332:ILE:HG23	1.53	0.71
1:H:188:VAL:HG21	1:H:386:ILE:HD11	1.71	0.71
1:F:238:GLY:HA3	1:F:267:LYS:HG2	1.72	0.71
1:D:397:VAL:C	1:D:399:PRO:HD3	2.12	0.71
1:G:313:PHE:O	1:G:468:GLU:OE1	2.09	0.71
1:B:188:VAL:CG2	1:B:386:ILE:HD11	2.21	0.71
1:F:732:ARG:HH11	1:F:732:ARG:HG3	1.56	0.71
1:D:239:THR:HB	1:D:244:GLU:CG	2.21	0.70
1:F:398:GLU:HB2	1:F:446:ARG:HG2	1.72	0.70
1:A:515:HIS:HD2	1:A:517:VAL:H	1.37	0.70
1:D:651:ARG:HH21	1:E:658:THR:HG21	1.57	0.70
1:H:297:PHE:O	1:H:336:THR:HG21	1.91	0.70
1:B:341:ALA:O	1:B:345:LEU:HD23	1.91	0.70
1:E:313:PHE:O	1:E:468:GLU:OE1	2.09	0.70
1:D:191:GLN:HE22	1:D:223:SER:H	1.40	0.70
1:B:229:THR:HB	1:B:374:LYS:CG	2.21	0.70
1:D:200:VAL:HG23	1:D:213:VAL:HB	1.72	0.70
1:E:295:LEU:HD21	1:E:568:THR:HG21	1.71	0.70
1:F:239:THR:HB	1:F:244:GLU:CG	2.21	0.70
1:C:211:TYR:HB3	1:C:213:VAL:H	1.57	0.70
1:E:188:VAL:HG21	1:E:386:ILE:HD11	1.72	0.70
1:A:685:PHE:O	1:A:700:VAL:HG22	1.90	0.70
1:F:150:ASN:HA	1:F:153:VAL:HG12	1.72	0.70

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:H:209:LEU:HD21	1:H:371:LYS:HG2	1.72	0.70
1:F:520:GLN:NE2	1:G:240:LYS:HZ3	1.90	0.70
1:F:318:HIS:O	1:F:322:PRO:HB3	1.91	0.70
1:D:297:PHE:O	1:D:336:THR:HG21	1.90	0.70
1:E:200:VAL:HG23	1:E:213:VAL:HB	1.72	0.70
1:E:297:PHE:O	1:E:336:THR:HG21	1.92	0.70
1:A:130:LYS:HE2	1:A:440:ASP:OD1	1.92	0.70
1:G:398:GLU:HB2	1:G:446:ARG:HG2	1.72	0.70
1:C:330:PRO:O	1:C:331:ASN:HB3	1.92	0.70
1:B:732:ARG:HH11	1:B:732:ARG:HG3	1.55	0.70
1:G:188:VAL:HG21	1:G:386:ILE:HD11	1.72	0.70
1:F:708:THR:HG23	1:F:710:PRO:HD2	1.73	0.70
1:C:232:LEU:HB3	1:C:367:THR:HG23	1.71	0.70
1:C:280:LEU:HD12	1:C:337:ILE:HD13	1.73	0.70
1:D:140:PHE:O	1:D:144:ILE:HG13	1.90	0.70
1:G:140:PHE:O	1:G:144:ILE:HG13	1.91	0.70
1:D:130:LYS:HE2	1:D:440:ASP:OD1	1.92	0.70
1:F:191:GLN:HE22	1:F:223:SER:H	1.40	0.70
1:E:229:THR:HB	1:E:374:LYS:HG3	1.73	0.70
1:E:191:GLN:HE22	1:E:223:SER:H	1.37	0.69
1:E:183:ARG:NH1	1:E:387:LEU:HD21	2.06	0.69
1:E:330:PRO:O	1:E:331:ASN:HB3	1.92	0.69
1:G:297:PHE:O	1:G:336:THR:HG21	1.92	0.69
1:G:239:THR:HB	1:G:244:GLU:CG	2.22	0.69
1:A:183:ARG:NH1	1:A:387:LEU:HD21	2.08	0.69
1:H:732:ARG:HG3	1:H:732:ARG:HH11	1.56	0.69
1:F:238:GLY:O	1:F:240:LYS:N	2.25	0.69
1:G:202:ILE:H	1:G:213:VAL:HG21	1.56	0.69
1:D:620:SER:OG	1:E:508:LYS:HE2	1.93	0.69
1:A:229:THR:HB	1:A:374:LYS:CG	2.21	0.69
1:B:204:ASP:C	1:B:206:ASN:H	1.95	0.69
1:H:214:GLU:O	1:H:216:PRO:HD3	1.90	0.69
1:B:238:GLY:HA3	1:B:267:LYS:CG	2.22	0.69
1:B:397:VAL:C	1:B:399:PRO:HD3	2.12	0.69
1:F:254:ILE:HA	1:F:277:ILE:O	1.92	0.69
1:H:488:VAL:O	1:H:489:LEU:HD12	1.92	0.69
1:C:238:GLY:HA3	1:C:267:LYS:HG2	1.74	0.69
1:G:310:THR:OG1	1:G:468:GLU:OE1	2.09	0.69
1:G:210:VAL:HG22	1:G:211:TYR:N	2.08	0.69
1:E:214:GLU:O	1:E:216:PRO:HD3	1.93	0.69
1:G:309:TYR:CE2	1:G:325:ARG:HA	2.28	0.69
1:G:330:PRO:O	1:G:331:ASN:HB3	1.92	0.69

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:C:131:LEU:O	1:C:135:LEU:HD23	1.93	0.69
1:G:740:TRP:CZ2	1:H:314:PRO:HB2	2.28	0.69
1:A:626:ASN:HB3	1:A:629:ARG:HH21	1.58	0.69
1:E:314:PRO:HB2	1:F:740:TRP:CZ2	2.28	0.69
1:H:183:ARG:NH1	1:H:387:LEU:HD21	2.08	0.69
1:H:239:THR:HB	1:H:244:GLU:CG	2.23	0.69
1:D:624:ASP:HB2	1:E:508:LYS:NZ	2.07	0.69
1:B:625:LEU:HD21	1:B:639:LEU:HD11	1.73	0.69
1:C:210:VAL:HG12	1:C:210:VAL:O	1.92	0.69
1:A:732:ARG:HH11	1:A:732:ARG:HG3	1.58	0.69
1:A:398:GLU:HB2	1:A:446:ARG:HG2	1.75	0.68
1:B:150:ASN:HA	1:B:153:VAL:CG1	2.22	0.68
1:G:183:ARG:NH1	1:G:387:LEU:HD21	2.08	0.68
1:B:309:TYR:CE2	1:B:325:ARG:HA	2.28	0.68
1:H:605:VAL:HG11	1:H:665:LYS:HB3	1.76	0.68
1:B:351:GLY:O	1:B:364:ARG:HD3	1.93	0.68
1:A:214:GLU:O	1:A:216:PRO:HD3	1.94	0.68
1:A:708:THR:CG2	1:A:710:PRO:HD2	2.22	0.68
1:H:229:THR:HB	1:H:374:LYS:CG	2.23	0.68
1:G:131:LEU:O	1:G:135:LEU:HD23	1.93	0.68
1:F:246:LEU:HD12	1:F:247:TYR:N	2.08	0.68
1:F:624:ASP:HB2	1:G:508:LYS:NZ	2.08	0.68
1:A:330:PRO:O	1:A:331:ASN:HB3	1.93	0.68
1:C:238:GLY:HA3	1:C:267:LYS:CG	2.23	0.68
1:G:204:ASP:C	1:G:206:ASN:H	1.95	0.68
1:B:506:ILE:O	1:B:510:MET:HG3	1.93	0.68
1:E:229:THR:HB	1:E:374:LYS:CG	2.24	0.68
1:C:300:HIS:HE2	1:C:459:GLY:CA	2.07	0.68
1:C:130:LYS:HE2	1:C:440:ASP:OD1	1.92	0.68
1:B:183:ARG:HH12	1:B:387:LEU:HD21	1.58	0.68
1:F:183:ARG:NH1	1:F:387:LEU:HD21	2.08	0.68
1:F:208:ARG:H	1:F:208:ARG:HD3	1.59	0.68
1:D:232:LEU:HB3	1:D:367:THR:HG23	1.75	0.68
1:H:209:LEU:HD12	1:H:210:VAL:H	1.59	0.68
1:B:349:MET:HG2	1:B:367:THR:HA	1.76	0.68
1:E:488:VAL:O	1:E:489:LEU:HD12	1.93	0.68
1:H:490:GLY:HA3	1:H:559:GLU:HG2	1.76	0.68
1:G:208:ARG:CG	1:G:209:LEU:H	2.02	0.68
1:F:520:GLN:NE2	1:G:240:LYS:NZ	2.42	0.68
1:H:309:TYR:CE2	1:H:325:ARG:HA	2.27	0.68
1:B:330:PRO:O	1:B:331:ASN:HB3	1.94	0.68
1:D:318:HIS:O	1:D:322:PRO:HB3	1.93	0.68

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:B:213:VAL:HG11	1:B:345:LEU:HD21	1.74	0.68
1:A:349:MET:HG2	1:A:367:THR:HA	1.73	0.68
1:A:488:VAL:O	1:A:489:LEU:HD12	1.94	0.68
1:H:515:HIS:HD2	1:H:517:VAL:H	1.41	0.68
1:A:239:THR:HB	1:A:244:GLU:CG	2.22	0.68
1:F:646:ARG:HG2	1:F:646:ARG:NH1	2.09	0.68
1:H:298:PHE:HB2	1:H:412:TRP:CD2	2.29	0.67
1:B:542:PHE:HB3	1:B:543:PRO:HD3	1.75	0.67
1:D:313:PHE:O	1:D:468:GLU:OE1	2.11	0.67
1:F:685:PHE:O	1:F:700:VAL:HG22	1.94	0.67
1:F:626:ASN:HB3	1:F:629:ARG:HH21	1.60	0.67
1:F:229:THR:HB	1:F:374:LYS:HG3	1.74	0.67
1:F:330:PRO:O	1:F:331:ASN:HB3	1.94	0.67
1:G:150:ASN:HA	1:G:153:VAL:CG1	2.24	0.67
1:D:213:VAL:HG11	1:D:345:LEU:CD2	2.24	0.67
1:B:239:THR:HB	1:B:244:GLU:CG	2.24	0.67
1:E:309:TYR:CE2	1:E:325:ARG:HA	2.27	0.67
1:F:351:GLY:O	1:F:364:ARG:HD3	1.94	0.67
1:E:210:VAL:HG22	1:E:211:TYR:N	2.09	0.67
1:G:238:GLY:HA3	1:G:267:LYS:CG	2.23	0.67
1:F:240:LYS:NZ	1:G:520:GLN:HE22	1.92	0.67
1:B:220:VAL:HG21	1:B:334:VAL:HG12	1.75	0.67
1:A:297:PHE:O	1:A:336:THR:HG21	1.94	0.67
1:A:341:ALA:O	1:A:345:LEU:HD23	1.95	0.67
1:D:220:VAL:HG21	1:D:334:VAL:HG12	1.74	0.67
1:D:658:THR:HG21	1:E:651:ARG:HH21	1.58	0.67
1:G:254:ILE:HA	1:G:277:ILE:O	1.95	0.67
1:B:254:ILE:HA	1:B:277:ILE:O	1.94	0.67
1:B:337:ILE:HG23	1:B:341:ALA:HB3	1.77	0.67
1:E:232:LEU:HB3	1:E:367:THR:HG23	1.75	0.67
1:H:407:ALA:HB3	1:H:426:LEU:HD12	1.77	0.67
1:D:309:TYR:CE2	1:D:325:ARG:HA	2.29	0.67
1:D:619:LEU:HD13	1:E:612:GLU:OE1	1.94	0.67
1:A:155:ARG:HH21	1:A:165:LEU:HD22	1.60	0.67
1:B:307:ASP:HB3	1:B:465:GLU:OE1	1.94	0.67
1:B:313:PHE:O	1:B:468:GLU:OE1	2.12	0.67
1:F:349:MET:HG2	1:F:367:THR:HA	1.77	0.67
1:B:188:VAL:HG21	1:B:386:ILE:HD11	1.76	0.67
1:E:740:TRP:CH2	1:F:314:PRO:HB2	2.30	0.67
1:H:690:VAL:HG23	1:H:698:ARG:HG2	1.77	0.67
1:C:542:PHE:HB3	1:C:543:PRO:HD3	1.74	0.67
1:F:297:PHE:O	1:F:336:THR:HG21	1.95	0.67

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:C:150:ASN:HA	1:C:153:VAL:CG1	2.24	0.67
1:F:238:GLY:HA3	1:F:267:LYS:CG	2.25	0.67
1:H:238:GLY:HA3	1:H:267:LYS:HG2	1.76	0.67
1:F:403:VAL:HG22	1:F:479:PHE:CZ	2.29	0.67
1:B:300:HIS:HE2	1:B:459:GLY:CA	2.07	0.67
1:E:403:VAL:HG22	1:E:479:PHE:CZ	2.30	0.67
1:F:232:LEU:HD11	1:F:256:ILE:HG13	1.76	0.66
1:E:150:ASN:HA	1:E:153:VAL:CG1	2.24	0.66
1:C:191:GLN:HE22	1:C:223:SER:N	1.93	0.66
1:B:208:ARG:HG2	1:B:208:ARG:O	1.94	0.66
1:A:309:TYR:CE2	1:A:325:ARG:HA	2.30	0.66
1:B:526:SER:O	1:C:533:GLU:HG3	1.94	0.66
1:G:229:THR:HB	1:G:374:LYS:HG3	1.77	0.66
1:G:465:GLU:OE2	1:G:468:GLU:OE2	2.12	0.66
1:E:130:LYS:HE2	1:E:440:ASP:OD1	1.94	0.66
1:A:254:ILE:HA	1:A:277:ILE:O	1.95	0.66
1:A:686:LEU:HD23	1:A:699:HIS:CA	2.25	0.66
1:D:254:ILE:HA	1:D:277:ILE:O	1.95	0.66
1:D:280:LEU:HD12	1:D:337:ILE:HD13	1.77	0.66
1:G:407:ALA:HB3	1:G:426:LEU:HD12	1.78	0.66
1:E:626:ASN:HB3	1:E:629:ARG:HH21	1.61	0.66
1:F:490:GLY:HA3	1:F:559:GLU:HG2	1.77	0.66
1:H:351:GLY:O	1:H:364:ARG:HD3	1.95	0.66
1:A:351:GLY:O	1:A:364:ARG:HD3	1.95	0.66
1:C:297:PHE:O	1:C:336:THR:HG21	1.94	0.66
1:G:183:ARG:HH12	1:G:387:LEU:HD21	1.60	0.66
1:G:758:ASN:N	1:G:758:ASN:HD22	1.93	0.66
1:C:254:ILE:HA	1:C:277:ILE:O	1.96	0.66
1:C:309:TYR:CE2	1:C:325:ARG:HA	2.30	0.66
1:E:239:THR:HB	1:E:244:GLU:CG	2.25	0.66
1:E:201:ILE:CD1	1:E:212:LEU:HA	2.23	0.66
1:D:238:GLY:HA3	1:D:267:LYS:HG2	1.77	0.66
1:A:311:PRO:O	1:A:693:LYS:HA	1.96	0.66
1:A:150:ASN:HA	1:A:153:VAL:CG1	2.26	0.66
1:G:202:ILE:N	1:G:213:VAL:HG21	2.10	0.66
1:D:359:THR:HG22	1:D:360:ASP:N	2.07	0.66
1:E:238:GLY:HA3	1:E:267:LYS:CG	2.26	0.66
1:F:407:ALA:HB3	1:F:426:LEU:HD12	1.77	0.66
1:D:183:ARG:NH1	1:D:387:LEU:HD21	2.09	0.66
1:F:229:THR:HB	1:F:374:LYS:CG	2.25	0.66
1:H:625:LEU:HD21	1:H:639:LEU:HD11	1.78	0.66
1:A:490:GLY:HA3	1:A:559:GLU:HG2	1.76	0.66

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:D:336:THR:O	1:D:337:ILE:HD12	1.96	0.66
1:G:349:MET:HB3	1:G:366:VAL:O	1.95	0.66
1:D:238:GLY:HA3	1:D:267:LYS:CG	2.26	0.66
1:A:140:PHE:O	1:A:144:ILE:HG13	1.94	0.66
1:B:167:LEU:HD22	1:B:183:ARG:HH22	1.58	0.66
1:B:527:ASN:CG	1:C:531:LYS:HE3	2.15	0.66
1:A:359:THR:HG22	1:A:360:ASP:N	2.06	0.66
1:E:664:GLU:H	1:E:664:GLU:CD	1.99	0.66
1:F:309:TYR:CE2	1:F:325:ARG:HA	2.31	0.66
1:D:211:TYR:HD2	1:D:213:VAL:HA	1.61	0.66
1:E:351:GLY:O	1:E:364:ARG:HD3	1.96	0.66
1:D:664:GLU:H	1:D:664:GLU:CD	1.98	0.66
1:C:618:LEU:HD11	1:C:742:ILE:HD13	1.77	0.66
1:G:156:GLU:HG2	1:G:157:ALA:H	1.60	0.66
1:F:542:PHE:HB3	1:F:543:PRO:HD3	1.76	0.66
1:E:203:VAL:HG23	1:E:206:ASN:O	1.96	0.65
1:G:211:TYR:HD2	1:G:212:LEU:N	1.94	0.65
1:G:201:ILE:HA	1:G:213:VAL:CG2	2.26	0.65
1:F:758:ASN:HD22	1:F:758:ASN:N	1.93	0.65
1:E:213:VAL:CG1	1:E:345:LEU:HD21	2.26	0.65
1:H:709:LEU:HB3	1:H:710:PRO:HD3	1.78	0.65
1:A:337:ILE:HG23	1:A:341:ALA:HB3	1.77	0.65
1:E:167:LEU:HD22	1:E:183:ARG:HH22	1.61	0.65
1:F:625:LEU:HD21	1:F:639:LEU:HD11	1.77	0.65
1:D:758:ASN:HD22	1:D:758:ASN:N	1.94	0.65
1:B:359:THR:HG22	1:B:360:ASP:N	2.03	0.65
1:A:664:GLU:CD	1:A:664:GLU:H	2.00	0.65
1:C:490:GLY:HA3	1:C:559:GLU:HG2	1.78	0.65
1:A:238:GLY:O	1:A:240:LYS:N	2.29	0.65
1:A:209:LEU:CG	1:A:210:VAL:H	2.07	0.65
1:D:588:ARG:HG3	1:D:588:ARG:HH11	1.62	0.65
1:D:686:LEU:HD23	1:D:699:HIS:CA	2.26	0.65
1:H:626:ASN:HB3	1:H:629:ARG:HH21	1.62	0.65
1:F:337:ILE:HG23	1:F:341:ALA:HB3	1.79	0.65
1:C:155:ARG:HH21	1:C:165:LEU:HD22	1.62	0.65
1:H:232:LEU:HB3	1:H:367:THR:HG23	1.78	0.65
1:B:232:LEU:HB3	1:B:367:THR:HG23	1.76	0.65
1:F:664:GLU:H	1:F:664:GLU:CD	2.00	0.65
1:B:353:CYS:HB2	1:B:363:CYS:O	1.96	0.65
1:F:130:LYS:HE2	1:F:440:ASP:OD1	1.96	0.65
1:D:167:LEU:HD22	1:D:183:ARG:HH22	1.61	0.65
1:B:139:ASP:OD1	1:B:141:THR:HG22	1.97	0.65

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:E:210:VAL:HG13	1:E:211:TYR:N	2.10	0.65
1:H:256:ILE:HD11	1:H:349:MET:HE1	1.78	0.65
1:H:254:ILE:HA	1:H:277:ILE:O	1.96	0.65
1:G:211:TYR:HD2	1:G:213:VAL:H	1.45	0.65
1:G:232:LEU:HB3	1:G:367:THR:HG23	1.77	0.65
1:E:341:ALA:O	1:E:345:LEU:HD23	1.97	0.65
1:H:359:THR:HG22	1:H:360:ASP:N	2.08	0.65
1:B:527:ASN:HD21	1:C:531:LYS:HE3	1.60	0.65
1:H:758:ASN:N	1:H:758:ASN:HD22	1.95	0.65
1:G:716:LEU:HD13	1:G:731:PHE:CE1	2.32	0.65
1:E:686:LEU:HD23	1:E:699:HIS:CA	2.27	0.65
1:G:229:THR:HB	1:G:374:LYS:CG	2.26	0.65
1:C:183:ARG:NH1	1:C:387:LEU:HD21	2.11	0.65
1:E:194:ASP:HB3	1:E:378:SER:O	1.96	0.65
1:F:256:ILE:HD11	1:F:349:MET:HE1	1.79	0.65
1:C:191:GLN:NE2	1:C:223:SER:H	1.94	0.65
1:A:232:LEU:HD21	1:A:256:ILE:HD11	1.79	0.65
1:B:140:PHE:O	1:B:144:ILE:HG13	1.96	0.65
1:C:506:ILE:O	1:C:510:MET:HG3	1.96	0.65
1:A:183:ARG:HH12	1:A:387:LEU:HD21	1.61	0.65
1:C:488:VAL:O	1:C:489:LEU:HD12	1.97	0.65
1:H:240:LYS:C	1:H:242:ASP:H	2.00	0.65
1:G:446:ARG:HD2	1:G:479:PHE:CE2	2.31	0.65
1:A:232:LEU:HB3	1:A:367:THR:HG23	1.78	0.65
1:C:351:GLY:O	1:C:364:ARG:HD3	1.96	0.65
1:B:686:LEU:HD23	1:B:699:HIS:CA	2.26	0.65
1:H:506:ILE:O	1:H:510:MET:HG3	1.96	0.65
1:B:626:ASN:HB3	1:B:629:ARG:HH21	1.62	0.65
1:D:626:ASN:HB3	1:D:629:ARG:HH21	1.62	0.65
1:H:150:ASN:HA	1:H:153:VAL:CG1	2.26	0.64
1:C:204:ASP:O	1:C:206:ASN:N	2.30	0.64
1:D:188:VAL:HG21	1:D:461:VAL:HG11	1.77	0.64
1:A:686:LEU:HD23	1:A:699:HIS:HA	1.79	0.64
1:B:612:GLU:OE1	1:C:619:LEU:HD13	1.95	0.64
1:D:139:ASP:OD1	1:D:141:THR:HG22	1.97	0.64
1:D:341:ALA:O	1:D:345:LEU:HD23	1.98	0.64
1:C:307:ASP:HB3	1:C:465:GLU:OE1	1.96	0.64
1:A:353:CYS:HB2	1:A:363:CYS:O	1.97	0.64
1:B:191:GLN:NE2	1:B:223:SER:H	1.95	0.64
1:G:130:LYS:HE2	1:G:440:ASP:CG	2.17	0.64
1:B:664:GLU:H	1:B:664:GLU:CD	2.01	0.64
1:C:758:ASN:HD22	1:C:758:ASN:N	1.92	0.64

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:B:229:THR:HB	1:B:374:LYS:CB	2.27	0.64
1:D:542:PHE:HB3	1:D:543:PRO:HD3	1.77	0.64
1:G:626:ASN:HB3	1:G:629:ARG:HH21	1.61	0.64
1:E:131:LEU:O	1:E:135:LEU:HD23	1.96	0.64
1:F:232:LEU:HB3	1:F:367:THR:HG23	1.78	0.64
1:G:155:ARG:HH21	1:G:165:LEU:HD22	1.62	0.64
1:G:337:ILE:HG23	1:G:341:ALA:HB3	1.78	0.64
1:D:708:THR:CG2	1:D:710:PRO:HD2	2.27	0.64
1:A:625:LEU:HD21	1:A:639:LEU:HD11	1.79	0.64
1:D:605:VAL:HG11	1:D:665:LYS:HB3	1.79	0.64
1:D:214:GLU:O	1:D:216:PRO:HD3	1.96	0.64
1:D:246:LEU:HD12	1:D:247:TYR:N	2.11	0.64
1:H:300:HIS:HE2	1:H:459:GLY:CA	2.09	0.64
1:G:351:GLY:O	1:G:364:ARG:HD3	1.97	0.64
1:E:213:VAL:O	1:E:214:GLU:HB2	1.97	0.64
1:A:758:ASN:HD22	1:A:758:ASN:N	1.96	0.64
1:E:183:ARG:HH12	1:E:387:LEU:HD21	1.61	0.64
1:H:183:ARG:HH12	1:H:387:LEU:HD21	1.62	0.64
1:H:246:LEU:HD12	1:H:247:TYR:N	2.11	0.64
1:A:654:SER:O	1:A:657:THR:HG22	1.98	0.64
1:F:349:MET:HB3	1:F:366:VAL:O	1.98	0.64
1:G:664:GLU:H	1:G:664:GLU:CD	2.01	0.64
1:H:403:VAL:HG22	1:H:479:PHE:CZ	2.33	0.64
1:G:758:ASN:HB2	1:H:183:ARG:O	1.97	0.64
1:H:204:ASP:HB2	1:H:371:LYS:HB3	1.80	0.64
1:A:240:LYS:C	1:A:242:ASP:H	2.00	0.64
1:F:664:GLU:OE1	1:F:667:ASP:HB2	1.97	0.64
1:H:220:VAL:HG12	1:H:301:ALA:HB2	1.80	0.64
1:C:306:GLY:HA2	1:C:461:VAL:CA	2.24	0.64
1:E:254:ILE:HA	1:E:277:ILE:O	1.98	0.64
1:E:256:ILE:HD11	1:E:349:MET:HE1	1.80	0.64
1:A:238:GLY:HA3	1:A:267:LYS:HG2	1.79	0.64
1:H:238:GLY:HA3	1:H:267:LYS:CG	2.27	0.64
1:E:130:LYS:HE2	1:E:440:ASP:CG	2.18	0.64
1:D:664:GLU:OE1	1:D:667:ASP:HB2	1.96	0.64
1:D:324:SER:HB3	1:D:325:ARG:HE	1.63	0.64
1:D:508:LYS:HE2	1:E:620:SER:OG	1.97	0.64
1:E:471:LEU:HD13	1:E:547:TYR:OH	1.98	0.64
1:G:246:LEU:HD12	1:G:247:TYR:N	2.12	0.64
1:H:191:GLN:NE2	1:H:223:SER:H	1.95	0.64
1:E:349:MET:HB3	1:E:366:VAL:O	1.97	0.64
1:F:515:HIS:CD2	1:F:517:VAL:H	2.15	0.64

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:H:131:LEU:O	1:H:135:LEU:HD23	1.98	0.64
1:A:246:LEU:HD12	1:A:247:TYR:N	2.12	0.64
1:F:531:LYS:HE3	1:G:527:ASN:ND2	2.12	0.64
1:G:542:PHE:HB3	1:G:543:PRO:HD3	1.79	0.64
1:E:490:GLY:HA3	1:E:559:GLU:HG2	1.78	0.64
1:G:295:LEU:HD21	1:G:568:THR:HG21	1.79	0.64
1:C:295:LEU:HD21	1:C:568:THR:HG21	1.79	0.64
1:C:238:GLY:O	1:C:262:ILE:HD11	1.98	0.64
1:B:130:LYS:HE2	1:B:440:ASP:OD1	1.97	0.64
1:E:664:GLU:OE1	1:E:667:ASP:HB2	1.98	0.64
1:B:716:LEU:HD13	1:B:731:PHE:CE1	2.33	0.64
1:H:130:LYS:HE2	1:H:440:ASP:OD1	1.97	0.64
1:C:130:LYS:HE2	1:C:440:ASP:CG	2.19	0.64
1:D:220:VAL:CG1	1:D:301:ALA:HB2	2.27	0.64
1:A:542:PHE:HB3	1:A:543:PRO:HD3	1.80	0.64
1:B:349:MET:HB3	1:B:366:VAL:O	1.98	0.63
1:A:210:VAL:HG22	1:A:211:TYR:H	1.63	0.63
1:H:686:LEU:HD23	1:H:699:HIS:CA	2.28	0.63
1:A:167:LEU:HD22	1:A:183:ARG:HH22	1.63	0.63
1:G:341:ALA:O	1:G:345:LEU:HD23	1.97	0.63
1:B:220:VAL:CG1	1:B:301:ALA:HB2	2.28	0.63
1:A:232:LEU:HD11	1:A:256:ILE:HG13	1.79	0.63
1:D:515:HIS:CD2	1:D:517:VAL:H	2.15	0.63
1:B:758:ASN:N	1:B:758:ASN:HD22	1.97	0.63
1:G:488:VAL:C	1:G:489:LEU:HD12	2.19	0.63
1:H:191:GLN:HE22	1:H:223:SER:N	1.97	0.63
1:E:238:GLY:O	1:E:240:LYS:N	2.30	0.63
1:G:646:ARG:NH1	1:G:646:ARG:HG2	2.14	0.63
1:A:488:VAL:C	1:A:489:LEU:HD12	2.18	0.63
1:E:353:CYS:HB2	1:E:363:CYS:O	1.98	0.63
1:D:240:LYS:C	1:D:242:ASP:H	2.02	0.63
1:C:336:THR:O	1:C:337:ILE:HD12	1.98	0.63
1:D:407:ALA:HB3	1:D:426:LEU:HD12	1.80	0.63
1:F:336:THR:O	1:F:337:ILE:HD12	1.99	0.63
1:A:515:HIS:CD2	1:A:517:VAL:H	2.16	0.63
1:B:155:ARG:HH21	1:B:165:LEU:HD22	1.64	0.63
1:B:201:ILE:HD13	1:B:212:LEU:HA	1.80	0.63
1:C:349:MET:HB3	1:C:366:VAL:O	1.98	0.63
1:H:324:SER:HB3	1:H:325:ARG:HE	1.64	0.63
1:H:298:PHE:HE2	1:H:457:ASP:HB3	1.62	0.63
1:E:605:VAL:HG11	1:E:665:LYS:HB3	1.81	0.63
1:D:256:ILE:HD11	1:D:349:MET:HE1	1.81	0.63

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:D:351:GLY:O	1:D:364:ARG:HD3	1.99	0.63
1:E:336:THR:O	1:E:337:ILE:HD12	1.99	0.63
1:D:353:CYS:HB2	1:D:363:CYS:O	1.99	0.63
1:D:686:LEU:HD23	1:D:699:HIS:HA	1.79	0.63
1:H:349:MET:HB2	1:H:364:ARG:CG	2.28	0.63
1:G:191:GLN:NE2	1:G:223:SER:H	1.96	0.63
1:B:200:VAL:HG23	1:B:213:VAL:HB	1.79	0.63
1:F:130:LYS:HE2	1:F:440:ASP:CG	2.20	0.63
1:B:690:VAL:HG23	1:B:698:ARG:HG2	1.81	0.63
1:A:555:PHE:CE2	1:A:593:VAL:HG23	2.34	0.63
1:E:737:LEU:HD11	1:F:693:LYS:HE2	1.81	0.63
1:H:220:VAL:CG1	1:H:301:ALA:HB2	2.29	0.63
1:B:349:MET:HB2	1:B:364:ARG:CG	2.27	0.63
1:E:359:THR:HG22	1:E:360:ASP:N	2.06	0.63
1:A:130:LYS:HE2	1:A:440:ASP:CG	2.19	0.63
1:B:446:ARG:HD2	1:B:479:PHE:CE2	2.34	0.63
1:A:664:GLU:OE1	1:A:667:ASP:HB2	1.99	0.63
1:F:183:ARG:HH12	1:F:387:LEU:HD21	1.62	0.63
1:H:542:PHE:HB3	1:H:543:PRO:HD3	1.78	0.63
1:G:191:GLN:HE22	1:G:223:SER:N	1.96	0.62
1:B:256:ILE:HD11	1:B:349:MET:HE1	1.81	0.62
1:A:238:GLY:HA3	1:A:267:LYS:CG	2.29	0.62
1:C:211:TYR:C	1:C:213:VAL:H	2.01	0.62
1:H:278:GLY:H	1:H:332:ILE:CG2	2.12	0.62
1:F:300:HIS:HE2	1:F:459:GLY:CA	2.12	0.62
1:G:256:ILE:HD11	1:G:349:MET:HE1	1.81	0.62
1:E:324:SER:HB3	1:E:325:ARG:HE	1.63	0.62
1:E:758:ASN:N	1:E:758:ASN:HD22	1.96	0.62
1:E:686:LEU:HD23	1:E:699:HIS:HA	1.80	0.62
1:A:156:GLU:HG2	1:A:157:ALA:H	1.64	0.62
1:C:654:SER:O	1:C:657:THR:HG22	1.99	0.62
1:D:201:ILE:HD13	1:D:212:LEU:CA	2.24	0.62
1:F:140:PHE:O	1:F:144:ILE:HG13	1.99	0.62
1:G:686:LEU:HD23	1:G:699:HIS:CA	2.29	0.62
1:E:167:LEU:CD2	1:E:183:ARG:HH22	2.11	0.62
1:B:625:LEU:CD2	1:B:639:LEU:HD11	2.28	0.62
1:G:540:ALA:O	1:G:543:PRO:HD2	2.00	0.62
1:F:305:THR:HG23	1:F:464:THR:HG21	1.79	0.62
1:A:191:GLN:NE2	1:A:223:SER:H	1.97	0.62
1:H:664:GLU:CD	1:H:664:GLU:H	2.03	0.62
1:E:407:ALA:HB3	1:E:426:LEU:HD12	1.81	0.62
1:A:446:ARG:HD2	1:A:479:PHE:CE2	2.34	0.62

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:H:324:SER:CB	1:H:325:ARG:HE	2.13	0.62
1:D:130:LYS:HE2	1:D:440:ASP:CG	2.20	0.62
1:D:229:THR:HB	1:D:374:LYS:HG3	1.80	0.62
1:G:240:LYS:C	1:G:242:ASP:H	2.03	0.62
1:D:238:GLY:H	1:D:257:VAL:HB	1.65	0.62
1:G:664:GLU:OE1	1:G:667:ASP:HB2	1.99	0.62
1:C:515:HIS:CD2	1:C:517:VAL:H	2.17	0.62
1:F:155:ARG:HH21	1:F:165:LEU:HD22	1.64	0.62
1:H:155:ARG:HH21	1:H:165:LEU:HD22	1.65	0.62
1:H:306:GLY:HA2	1:H:461:VAL:CA	2.28	0.62
1:D:238:GLY:O	1:D:240:LYS:N	2.32	0.62
1:D:278:GLY:H	1:D:332:ILE:CG2	2.12	0.62
1:E:655:ARG:NH1	1:E:751:GLY:HA2	2.14	0.62
1:B:488:VAL:O	1:B:489:LEU:HD12	1.98	0.62
1:F:655:ARG:NH1	1:F:751:GLY:HA2	2.13	0.62
1:B:238:GLY:O	1:B:240:LYS:N	2.31	0.62
1:B:191:GLN:HE22	1:B:223:SER:N	1.98	0.62
1:E:220:VAL:CG1	1:E:301:ALA:HB2	2.30	0.62
1:A:506:ILE:O	1:A:510:MET:HG3	2.00	0.62
1:A:278:GLY:H	1:A:332:ILE:CG2	2.12	0.62
1:F:625:LEU:CD2	1:F:639:LEU:HD11	2.30	0.62
1:D:513:VAL:HG21	1:D:593:VAL:HG12	1.81	0.62
1:H:655:ARG:NH1	1:H:751:GLY:HA2	2.14	0.62
1:H:280:LEU:HD12	1:H:337:ILE:CD1	2.29	0.62
1:A:349:MET:HB2	1:A:364:ARG:CG	2.27	0.62
1:C:664:GLU:OE1	1:C:667:ASP:HB2	1.99	0.62
1:E:155:ARG:HH21	1:E:165:LEU:HD22	1.65	0.62
1:D:307:ASP:HB3	1:D:465:GLU:OE1	1.99	0.62
1:F:167:LEU:HD22	1:F:183:ARG:HH22	1.64	0.62
1:A:539:ASN:HD22	1:A:540:ALA:N	1.97	0.62
1:D:490:GLY:HA3	1:D:559:GLU:HG2	1.81	0.62
1:F:295:LEU:HD21	1:F:568:THR:HG21	1.81	0.62
1:C:756:ILE:HG22	1:C:756:ILE:O	1.99	0.62
1:F:188:VAL:HG21	1:F:461:VAL:HG11	1.80	0.62
1:D:349:MET:HA	1:D:367:THR:HA	1.82	0.62
1:G:280:LEU:HD12	1:G:337:ILE:CD1	2.29	0.62
1:F:240:LYS:C	1:F:242:ASP:H	2.03	0.62
1:A:349:MET:HB3	1:A:366:VAL:O	1.99	0.62
1:C:407:ALA:HB3	1:C:426:LEU:HD12	1.82	0.62
1:G:490:GLY:HA3	1:G:559:GLU:HG2	1.80	0.62
1:D:719:ARG:HD3	1:D:726:PHE:CD2	2.34	0.62
1:D:349:MET:HB3	1:D:366:VAL:O	2.00	0.62

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:C:238:GLY:C	1:C:240:LYS:H	2.02	0.62
1:F:238:GLY:C	1:F:240:LYS:H	2.02	0.62
1:C:130:LYS:O	1:C:134:LYS:HG2	2.00	0.62
1:A:229:THR:HB	1:A:374:LYS:CB	2.30	0.62
1:G:229:THR:HB	1:G:374:LYS:CB	2.30	0.62
1:C:169:VAL:HG13	1:C:427:LEU:HD21	1.82	0.62
1:F:131:LEU:O	1:F:135:LEU:HD23	2.00	0.62
1:H:204:ASP:OD1	1:H:371:LYS:HA	1.99	0.61
1:H:349:MET:HA	1:H:367:THR:HA	1.82	0.61
1:C:240:LYS:C	1:C:242:ASP:H	2.04	0.61
1:E:140:PHE:O	1:E:144:ILE:HG13	1.99	0.61
1:H:167:LEU:HD22	1:H:183:ARG:HH22	1.64	0.61
1:F:156:GLU:HG2	1:F:157:ALA:H	1.64	0.61
1:D:210:VAL:HG22	1:D:211:TYR:H	1.63	0.61
1:H:337:ILE:HG23	1:H:341:ALA:HB3	1.80	0.61
1:E:349:MET:HB2	1:E:364:ARG:CG	2.29	0.61
1:A:238:GLY:H	1:A:257:VAL:HB	1.65	0.61
1:B:531:LYS:HE3	1:C:527:ASN:HD21	1.63	0.61
1:H:488:VAL:C	1:H:489:LEU:HD12	2.21	0.61
1:D:204:ASP:C	1:D:206:ASN:H	2.03	0.61
1:D:425:LEU:O	1:D:429:LEU:HB2	2.00	0.61
1:D:131:LEU:O	1:D:135:LEU:HD23	1.98	0.61
1:D:337:ILE:HG23	1:D:341:ALA:HB3	1.81	0.61
1:H:426:LEU:CD2	1:H:450:PHE:HB3	2.28	0.61
1:B:324:SER:HB3	1:B:325:ARG:HE	1.64	0.61
1:A:139:ASP:OD1	1:A:141:THR:HG22	2.01	0.61
1:C:626:ASN:HB3	1:C:629:ARG:HH21	1.64	0.61
1:G:152:TYR:HA	1:G:161:LYS:HE2	1.81	0.61
1:C:313:PHE:O	1:C:468:GLU:OE1	2.19	0.61
1:B:238:GLY:C	1:B:240:LYS:H	2.03	0.61
1:B:188:VAL:HG21	1:B:461:VAL:HG11	1.82	0.61
1:B:708:THR:CG2	1:B:710:PRO:HD2	2.28	0.61
1:A:349:MET:HA	1:A:367:THR:HA	1.83	0.61
1:B:348:ASN:HD22	1:B:348:ASN:N	1.97	0.61
1:A:210:VAL:HG13	1:A:211:TYR:O	2.01	0.61
1:B:664:GLU:OE1	1:B:667:ASP:HB2	1.99	0.61
1:B:515:HIS:CD2	1:B:517:VAL:H	2.18	0.61
1:E:488:VAL:C	1:E:489:LEU:HD12	2.21	0.61
1:G:625:LEU:HD21	1:G:639:LEU:HD11	1.82	0.61
1:D:612:GLU:OE1	1:E:619:LEU:HD13	2.00	0.61
1:B:152:TYR:HA	1:B:161:LYS:HE2	1.81	0.61
1:B:167:LEU:CD2	1:B:183:ARG:HH22	2.12	0.61

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:E:278:GLY:HA2	1:E:333:PRO:O	2.01	0.61
1:D:651:ARG:NH2	1:E:658:THR:HG21	2.16	0.61
1:A:605:VAL:HG11	1:A:665:LYS:HB3	1.83	0.61
1:A:191:GLN:HE22	1:A:223:SER:N	1.98	0.61
1:H:618:LEU:HD11	1:H:742:ILE:HD13	1.82	0.61
1:A:690:VAL:HG23	1:A:698:ARG:HG2	1.82	0.61
1:G:555:PHE:CE2	1:G:593:VAL:HG23	2.36	0.61
1:G:194:ASP:HB3	1:G:378:SER:O	2.00	0.61
1:F:232:LEU:HD21	1:F:256:ILE:HD11	1.81	0.61
1:A:236:ASN:OD1	1:A:258:ARG:HD3	2.00	0.61
1:E:188:VAL:HG21	1:E:461:VAL:HG11	1.81	0.61
1:A:446:ARG:H	1:A:602:THR:CG2	2.13	0.61
1:H:758:ASN:HD22	1:H:758:ASN:H	1.49	0.61
1:B:686:LEU:HD23	1:B:699:HIS:HA	1.82	0.61
1:D:229:THR:HB	1:D:374:LYS:CG	2.30	0.61
1:F:488:VAL:HG13	1:F:586:VAL:HG11	1.82	0.61
1:E:139:ASP:OD1	1:E:141:THR:HG22	2.00	0.61
1:B:490:GLY:HA3	1:B:559:GLU:HG2	1.82	0.61
1:B:280:LEU:HD12	1:B:337:ILE:CD1	2.30	0.61
1:E:240:LYS:C	1:E:242:ASP:H	2.03	0.61
1:H:130:LYS:HE2	1:H:440:ASP:CG	2.21	0.61
1:E:268:VAL:HG21	1:E:334:VAL:HG21	1.83	0.61
1:G:664:GLU:C	1:G:666:THR:H	2.03	0.61
1:D:539:ASN:HD22	1:D:540:ALA:N	1.99	0.61
1:H:555:PHE:CE2	1:H:593:VAL:HG23	2.36	0.61
1:B:156:GLU:HG2	1:B:157:ALA:H	1.64	0.61
1:C:740:TRP:CZ2	1:D:314:PRO:HB2	2.35	0.61
1:B:654:SER:O	1:B:657:THR:HG22	2.01	0.61
1:G:349:MET:HA	1:G:367:THR:HA	1.83	0.61
1:B:240:LYS:C	1:B:242:ASP:H	2.04	0.61
1:B:236:ASN:OD1	1:B:258:ARG:HD3	2.00	0.61
1:G:353:CYS:HB2	1:G:363:CYS:O	2.01	0.61
1:G:686:LEU:HD23	1:G:699:HIS:HA	1.81	0.61
1:D:183:ARG:HH12	1:D:387:LEU:HD21	1.64	0.61
1:E:229:THR:HB	1:E:374:LYS:CB	2.30	0.61
1:C:183:ARG:HH12	1:C:387:LEU:HD21	1.66	0.61
1:A:655:ARG:NH1	1:A:751:GLY:HA2	2.16	0.61
1:F:220:VAL:CG1	1:F:301:ALA:HB2	2.31	0.60
1:F:313:PHE:O	1:F:468:GLU:OE1	2.19	0.60
1:H:348:ASN:HD22	1:H:348:ASN:N	1.98	0.60
1:G:237:PHE:HB2	1:G:243:PHE:HE1	1.66	0.60
1:A:336:THR:O	1:A:337:ILE:HD12	2.01	0.60

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:313:PHE:O	1:A:468:GLU:OE1	2.18	0.60
1:H:664:GLU:OE1	1:H:667:ASP:HB2	2.01	0.60
1:D:446:ARG:H	1:D:602:THR:HG23	1.66	0.60
1:G:446:ARG:H	1:G:602:THR:CG2	2.14	0.60
1:C:686:LEU:HD23	1:C:699:HIS:CA	2.31	0.60
1:F:278:GLY:HA2	1:F:333:PRO:O	2.01	0.60
1:E:542:PHE:HB3	1:E:543:PRO:HD3	1.81	0.60
1:B:131:LEU:O	1:B:135:LEU:HD23	2.00	0.60
1:H:238:GLY:H	1:H:257:VAL:HB	1.66	0.60
1:A:204:ASP:C	1:A:206:ASN:H	2.02	0.60
1:A:368:SER:OG	1:A:371:LYS:HE2	2.01	0.60
1:A:307:ASP:HB3	1:A:465:GLU:OE1	2.01	0.60
1:D:488:VAL:O	1:D:489:LEU:HD12	2.00	0.60
1:G:471:LEU:HD13	1:G:547:TYR:OH	2.02	0.60
1:F:349:MET:HB2	1:F:364:ARG:CG	2.31	0.60
1:H:349:MET:HB3	1:H:366:VAL:O	2.00	0.60
1:G:368:SER:OG	1:G:371:LYS:HE2	2.02	0.60
1:A:220:VAL:HG12	1:A:301:ALA:HB2	1.83	0.60
1:C:278:GLY:HA2	1:C:333:PRO:O	2.01	0.60
1:G:488:VAL:O	1:G:489:LEU:HD12	2.00	0.60
1:D:295:LEU:HD21	1:D:568:THR:HG21	1.82	0.60
1:D:625:LEU:HD21	1:D:639:LEU:HD11	1.82	0.60
1:F:201:ILE:HD13	1:F:212:LEU:CA	2.13	0.60
1:G:220:VAL:HG12	1:G:301:ALA:HB2	1.83	0.60
1:G:238:GLY:O	1:G:240:LYS:N	2.33	0.60
1:F:426:LEU:CD2	1:F:450:PHE:HB3	2.29	0.60
1:E:646:ARG:HG2	1:E:646:ARG:NH1	2.13	0.60
1:F:506:ILE:O	1:F:510:MET:HG3	2.01	0.60
1:B:278:GLY:HA2	1:B:333:PRO:O	2.00	0.60
1:F:194:ASP:HB3	1:F:378:SER:O	2.01	0.60
1:F:150:ASN:HA	1:F:153:VAL:CG1	2.30	0.60
1:D:349:MET:HB2	1:D:364:ARG:CG	2.31	0.60
1:H:341:ALA:O	1:H:345:LEU:HD23	2.00	0.60
1:E:568:THR:HG23	1:E:570:MET:H	1.66	0.60
1:D:655:ARG:NH1	1:D:751:GLY:HA2	2.15	0.60
1:H:194:ASP:HB3	1:H:378:SER:O	2.01	0.60
1:G:348:ASN:HD22	1:G:348:ASN:N	1.99	0.60
1:B:310:THR:OG1	1:B:465:GLU:OE2	2.20	0.60
1:B:403:VAL:HG22	1:B:479:PHE:CZ	2.37	0.60
1:D:403:VAL:HG22	1:D:479:PHE:CZ	2.37	0.60
1:H:353:CYS:HB2	1:H:363:CYS:O	2.02	0.60
1:F:508:LYS:HE2	1:G:620:SER:OG	2.02	0.60

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:D:758:ASN:HD22	1:D:758:ASN:H	1.50	0.60
1:B:246:LEU:HD12	1:B:247:TYR:N	2.16	0.60
1:D:156:GLU:HG2	1:D:157:ALA:H	1.66	0.60
1:B:194:ASP:HB3	1:B:378:SER:O	2.00	0.60
1:C:220:VAL:CG1	1:C:301:ALA:HB2	2.32	0.60
1:B:349:MET:HA	1:B:367:THR:HA	1.84	0.60
1:B:368:SER:OG	1:B:371:LYS:HE2	2.01	0.60
1:G:236:ASN:OD1	1:G:258:ARG:HD3	2.02	0.60
1:A:238:GLY:C	1:A:240:LYS:H	2.04	0.60
1:D:300:HIS:HE2	1:D:459:GLY:CA	2.15	0.60
1:C:295:LEU:HD11	1:C:568:THR:OG1	2.01	0.60
1:D:719:ARG:HH11	1:D:719:ARG:HG3	1.65	0.60
1:C:220:VAL:HG21	1:C:334:VAL:HG12	1.82	0.60
1:E:238:GLY:C	1:E:240:LYS:H	2.04	0.60
1:A:220:VAL:CG1	1:A:301:ALA:HB2	2.31	0.60
1:C:446:ARG:HD2	1:C:479:PHE:CE2	2.37	0.60
1:B:426:LEU:CD2	1:B:450:PHE:HB3	2.31	0.60
1:B:167:LEU:HD22	1:B:183:ARG:NH2	2.17	0.60
1:G:278:GLY:H	1:G:332:ILE:CG2	2.14	0.60
1:H:540:ALA:O	1:H:543:PRO:HD2	2.02	0.60
1:F:680:ARG:HB3	1:F:684:HIS:HD2	1.66	0.60
1:F:236:ASN:OD1	1:F:258:ARG:HD3	2.02	0.60
1:C:403:VAL:HG22	1:C:479:PHE:CZ	2.37	0.60
1:D:188:VAL:HG22	1:D:386:ILE:HD11	1.82	0.60
1:G:515:HIS:CD2	1:G:517:VAL:H	2.18	0.60
1:H:135:LEU:HD22	1:H:432:MET:SD	2.42	0.60
1:H:156:GLU:HG2	1:H:157:ALA:H	1.65	0.60
1:F:345:LEU:O	1:F:349:MET:HG3	2.02	0.60
1:G:202:ILE:H	1:G:213:VAL:CG2	2.15	0.60
1:E:349:MET:HA	1:E:367:THR:HA	1.84	0.60
1:A:348:ASN:N	1:A:348:ASN:HD22	2.00	0.60
1:C:664:GLU:H	1:C:664:GLU:CD	2.05	0.60
1:B:324:SER:CB	1:B:325:ARG:HE	2.15	0.60
1:F:758:ASN:HD22	1:F:758:ASN:H	1.49	0.60
1:G:305:THR:HG23	1:G:464:THR:HG21	1.83	0.60
1:E:664:GLU:C	1:E:666:THR:H	2.04	0.59
1:B:588:ARG:HH11	1:B:588:ARG:HG3	1.67	0.59
1:D:167:LEU:CD2	1:D:183:ARG:HH22	2.14	0.59
1:F:716:LEU:HD13	1:F:731:PHE:CE1	2.37	0.59
1:C:539:ASN:HD22	1:C:540:ALA:N	2.00	0.59
1:H:139:ASP:OD1	1:H:141:THR:HG22	2.01	0.59
1:G:139:ASP:OD1	1:G:141:THR:HG22	2.02	0.59

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:D:150:ASN:HA	1:D:153:VAL:CG1	2.30	0.59
1:E:130:LYS:O	1:E:134:LYS:HG2	2.02	0.59
1:E:191:GLN:HE22	1:E:223:SER:N	1.99	0.59
1:D:442:PHE:CE2	1:D:444:PRO:HG3	2.37	0.59
1:H:686:LEU:HD23	1:H:699:HIS:HA	1.83	0.59
1:H:588:ARG:HH11	1:H:588:ARG:HG3	1.66	0.59
1:F:664:GLU:C	1:F:666:THR:H	2.05	0.59
1:A:758:ASN:HD22	1:A:758:ASN:H	1.50	0.59
1:G:167:LEU:HD22	1:G:183:ARG:HH22	1.66	0.59
1:D:716:LEU:HD13	1:D:731:PHE:CE1	2.37	0.59
1:F:488:VAL:C	1:F:489:LEU:HD12	2.23	0.59
1:F:349:MET:HA	1:F:367:THR:HA	1.84	0.59
1:F:152:TYR:HA	1:F:161:LYS:HE2	1.83	0.59
1:G:220:VAL:CG1	1:G:301:ALA:HB2	2.31	0.59
1:E:337:ILE:HG23	1:E:341:ALA:HB3	1.83	0.59
1:D:237:PHE:HB2	1:D:243:PHE:HE1	1.66	0.59
1:G:403:VAL:HG22	1:G:479:PHE:CZ	2.37	0.59
1:G:506:ILE:O	1:G:510:MET:HG3	2.02	0.59
1:E:278:GLY:H	1:E:332:ILE:CG2	2.14	0.59
1:B:295:LEU:HD11	1:B:568:THR:OG1	2.01	0.59
1:B:655:ARG:NH1	1:B:751:GLY:HA2	2.18	0.59
1:A:131:LEU:O	1:A:135:LEU:HD23	2.01	0.59
1:F:237:PHE:HB2	1:F:243:PHE:HE1	1.68	0.59
1:B:646:ARG:NH1	1:B:646:ARG:HG2	2.11	0.59
1:H:513:VAL:HG21	1:H:593:VAL:HG12	1.83	0.59
1:H:345:LEU:O	1:H:349:MET:HG3	2.02	0.59
1:G:238:GLY:C	1:G:240:LYS:H	2.06	0.59
1:D:664:GLU:C	1:D:666:THR:H	2.06	0.59
1:F:167:LEU:CD2	1:F:183:ARG:HH22	2.14	0.59
1:F:324:SER:CB	1:F:325:ARG:HE	2.15	0.59
1:E:167:LEU:HD22	1:E:183:ARG:NH2	2.17	0.59
1:G:298:PHE:HB2	1:G:412:TRP:CD2	2.37	0.59
1:F:488:VAL:O	1:F:489:LEU:HD12	2.01	0.59
1:B:214:GLU:O	1:B:216:PRO:HD3	2.03	0.59
1:F:527:ASN:ND2	1:G:531:LYS:HE3	2.18	0.59
1:C:238:GLY:H	1:C:257:VAL:HB	1.68	0.59
1:E:300:HIS:HE2	1:E:459:GLY:CA	2.16	0.59
1:C:426:LEU:CD2	1:C:450:PHE:HB3	2.31	0.59
1:B:488:VAL:C	1:B:489:LEU:HD12	2.22	0.59
1:F:553:VAL:HG22	1:F:554:SER:N	2.18	0.59
1:C:300:HIS:HE2	1:C:459:GLY:N	2.01	0.59
1:G:345:LEU:O	1:G:349:MET:HG3	2.02	0.59

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:G:709:LEU:HB3	1:G:710:PRO:HD3	1.84	0.59
1:A:209:LEU:HG	1:A:210:VAL:N	2.11	0.59
1:C:140:PHE:O	1:C:144:ILE:HG13	2.02	0.59
1:C:646:ARG:NH1	1:C:646:ARG:HG2	2.12	0.59
1:D:646:ARG:NH1	1:D:646:ARG:HG2	2.13	0.59
1:G:758:ASN:H	1:G:758:ASN:HD22	1.51	0.59
1:F:528:TRP:CZ3	1:G:500:PRO:HB3	2.37	0.59
1:A:298:PHE:HB2	1:A:412:TRP:CD2	2.38	0.59
1:B:237:PHE:HB2	1:B:243:PHE:HE1	1.67	0.59
1:E:214:GLU:OE2	1:E:216:PRO:HA	2.03	0.59
1:A:237:PHE:CD2	1:A:258:ARG:HB2	2.38	0.59
1:F:709:LEU:HB3	1:F:710:PRO:HD3	1.84	0.59
1:A:167:LEU:CD2	1:A:183:ARG:HH22	2.14	0.59
1:F:620:SER:OG	1:G:508:LYS:HE2	2.02	0.59
1:B:278:GLY:H	1:B:332:ILE:CG2	2.16	0.59
1:A:699:HIS:HD2	1:A:702:TRP:H	1.51	0.59
1:H:756:ILE:O	1:H:756:ILE:HG22	2.03	0.59
1:H:203:VAL:HG23	1:H:206:ASN:C	2.23	0.59
1:E:588:ARG:HH11	1:E:588:ARG:HG3	1.66	0.59
1:F:618:LEU:HD21	1:F:742:ILE:HG23	1.85	0.59
1:G:156:GLU:HG2	1:G:157:ALA:N	2.17	0.59
1:C:553:VAL:HG22	1:C:554:SER:N	2.18	0.59
1:C:156:GLU:HG2	1:C:157:ALA:H	1.67	0.59
1:A:314:PRO:HB2	1:B:740:TRP:CZ2	2.37	0.59
1:G:349:MET:HB2	1:G:364:ARG:CG	2.32	0.59
1:F:240:LYS:NZ	1:G:520:GLN:NE2	2.51	0.59
1:E:307:ASP:HB3	1:E:465:GLU:OE1	2.03	0.59
1:B:130:LYS:HE2	1:B:440:ASP:CG	2.23	0.59
1:C:588:ARG:HH11	1:C:588:ARG:HG3	1.68	0.59
1:A:625:LEU:CD2	1:A:639:LEU:HD11	2.33	0.59
1:D:498:ALA:HB2	1:D:553:VAL:HA	1.85	0.59
1:C:555:PHE:CE2	1:C:593:VAL:HG23	2.37	0.59
1:G:655:ARG:NH1	1:G:751:GLY:HA2	2.18	0.59
1:H:152:TYR:HA	1:H:161:LYS:HE2	1.84	0.58
1:G:359:THR:HG22	1:G:360:ASP:N	2.07	0.58
1:B:130:LYS:O	1:B:134:LYS:HG2	2.02	0.58
1:D:699:HIS:HD2	1:D:702:TRP:H	1.51	0.58
1:H:278:GLY:HA2	1:H:333:PRO:O	2.03	0.58
1:C:758:ASN:HD22	1:C:758:ASN:H	1.51	0.58
1:G:539:ASN:HD22	1:G:540:ALA:N	2.01	0.58
1:D:194:ASP:HB3	1:D:378:SER:O	2.02	0.58
1:C:690:VAL:HG23	1:C:698:ARG:HG2	1.85	0.58

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:G:690:VAL:HG23	1:G:698:ARG:HG2	1.85	0.58
1:H:300:HIS:O	1:H:301:ALA:HB3	2.03	0.58
1:C:220:VAL:HG12	1:C:301:ALA:HB2	1.85	0.58
1:H:238:GLY:O	1:H:240:LYS:N	2.34	0.58
1:A:324:SER:HB3	1:A:325:ARG:HE	1.68	0.58
1:A:345:LEU:O	1:A:349:MET:HG3	2.03	0.58
1:C:349:MET:HB2	1:C:364:ARG:CG	2.32	0.58
1:H:130:LYS:O	1:H:134:LYS:HG2	2.02	0.58
1:E:190:ILE:HG13	1:E:458:PHE:CD2	2.38	0.58
1:D:324:SER:CB	1:D:325:ARG:HE	2.16	0.58
1:H:229:THR:HB	1:H:374:LYS:CB	2.32	0.58
1:E:716:LEU:HD13	1:E:731:PHE:CE1	2.38	0.58
1:C:229:THR:HB	1:C:374:LYS:HG3	1.84	0.58
1:B:528:TRP:HE1	1:C:532:VAL:HG12	1.68	0.58
1:F:191:GLN:NE2	1:F:223:SER:H	2.01	0.58
1:A:152:TYR:HA	1:A:161:LYS:HE2	1.84	0.58
1:D:348:ASN:N	1:D:348:ASN:HD22	2.01	0.58
1:D:520:GLN:HE22	1:E:240:LYS:NZ	2.02	0.58
1:A:280:LEU:HD12	1:A:337:ILE:CD1	2.33	0.58
1:A:300:HIS:O	1:A:301:ALA:HB3	2.02	0.58
1:H:667:ASP:HB3	1:H:670:VAL:CG2	2.32	0.58
1:E:191:GLN:NE2	1:E:223:SER:H	2.00	0.58
1:B:442:PHE:CE2	1:B:444:PRO:HG3	2.38	0.58
1:D:300:HIS:O	1:D:301:ALA:HB3	2.04	0.58
1:E:324:SER:CB	1:E:325:ARG:HE	2.17	0.58
1:H:646:ARG:HG2	1:H:646:ARG:NH1	2.17	0.58
1:E:515:HIS:CD2	1:E:517:VAL:H	2.19	0.58
1:A:515:HIS:CD2	1:A:516:PRO:HD2	2.38	0.58
1:F:139:ASP:OD1	1:F:141:THR:HG22	2.03	0.58
1:D:232:LEU:HB3	1:D:367:THR:CG2	2.33	0.58
1:C:236:ASN:HB2	1:C:357:TRP:CD1	2.38	0.58
1:G:232:LEU:HD11	1:G:256:ILE:HG13	1.85	0.58
1:G:232:LEU:HB3	1:G:367:THR:CG2	2.34	0.58
1:D:238:GLY:C	1:D:240:LYS:H	2.06	0.58
1:C:442:PHE:CE2	1:C:444:PRO:HG3	2.38	0.58
1:G:537:LEU:HD22	1:G:542:PHE:CE2	2.37	0.58
1:E:553:VAL:HG22	1:E:554:SER:N	2.17	0.58
1:H:307:ASP:HB3	1:H:465:GLU:OE1	2.02	0.58
1:A:307:ASP:H	1:A:461:VAL:HG13	1.68	0.58
1:C:229:THR:HB	1:C:374:LYS:CG	2.33	0.58
1:E:246:LEU:HD12	1:E:247:TYR:N	2.18	0.58
1:H:336:THR:O	1:H:337:ILE:HD12	2.04	0.58

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:E:348:ASN:N	1:E:348:ASN:HD22	2.00	0.58
1:C:232:LEU:HB3	1:C:367:THR:CG2	2.32	0.58
1:D:618:LEU:HD13	1:D:701:PHE:HZ	1.67	0.58
1:C:686:LEU:HD23	1:C:699:HIS:HA	1.84	0.58
1:F:508:LYS:NZ	1:G:624:ASP:HB2	2.18	0.58
1:G:719:ARG:HD3	1:G:726:PHE:CD2	2.38	0.58
1:H:236:ASN:OD1	1:H:258:ARG:HD3	2.03	0.58
1:D:220:VAL:HG12	1:D:301:ALA:HB2	1.84	0.58
1:A:446:ARG:H	1:A:602:THR:HG23	1.68	0.58
1:F:278:GLY:H	1:F:332:ILE:CG2	2.17	0.58
1:F:537:LEU:HD22	1:F:542:PHE:CE2	2.38	0.58
1:F:156:GLU:HG2	1:F:157:ALA:N	2.18	0.58
1:C:655:ARG:NH1	1:C:751:GLY:HA2	2.18	0.58
1:E:203:VAL:HB	1:E:209:LEU:H	1.69	0.58
1:H:264:PHE:CE2	1:H:281:ILE:HG21	2.39	0.58
1:G:237:PHE:CD2	1:G:258:ARG:HB2	2.38	0.58
1:H:446:ARG:H	1:H:602:THR:HG23	1.68	0.58
1:F:686:LEU:HD23	1:F:699:HIS:CA	2.34	0.58
1:F:229:THR:HB	1:F:374:LYS:CB	2.34	0.58
1:G:752:ASP:O	1:G:753:VAL:HB	2.03	0.58
1:E:756:ILE:O	1:E:756:ILE:HG22	2.03	0.58
1:D:201:ILE:CD1	1:D:212:LEU:HA	2.26	0.58
1:G:306:GLY:HA2	1:G:461:VAL:CA	2.31	0.58
1:G:307:ASP:H	1:G:461:VAL:HG13	1.67	0.58
1:F:359:THR:HG22	1:F:360:ASP:N	2.07	0.58
1:B:220:VAL:HG12	1:B:301:ALA:HB2	1.85	0.58
1:H:496:VAL:CG1	1:H:506:ILE:HD13	2.33	0.58
1:F:749:LEU:O	1:F:750:SER:CB	2.51	0.58
1:G:676:ASP:O	1:G:680:ARG:HG3	2.04	0.58
1:G:336:THR:O	1:G:337:ILE:HD12	2.04	0.58
1:B:238:GLY:O	1:B:262:ILE:HD11	2.04	0.58
1:B:268:VAL:HG21	1:B:334:VAL:HG21	1.86	0.58
1:G:324:SER:HB3	1:G:325:ARG:HE	1.67	0.58
1:B:758:ASN:H	1:B:758:ASN:HD22	1.52	0.58
1:H:167:LEU:CD2	1:H:183:ARG:HH22	2.17	0.58
1:H:305:THR:HG23	1:H:464:THR:HG21	1.86	0.58
1:C:194:ASP:HB3	1:C:378:SER:O	2.04	0.58
1:D:232:LEU:HD11	1:D:256:ILE:HG13	1.86	0.57
1:E:339:ARG:O	1:E:343:GLU:HG2	2.05	0.57
1:E:197:GLN:HE21	1:E:215:ASN:HB3	1.68	0.57
1:E:709:LEU:HB3	1:E:710:PRO:HD3	1.85	0.57
1:A:202:ILE:HB	1:A:210:VAL:HG11	1.86	0.57

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:G:398:GLU:N	1:G:399:PRO:HD3	2.19	0.57
1:G:446:ARG:H	1:G:602:THR:HG23	1.69	0.57
1:F:528:TRP:CH2	1:G:500:PRO:HB3	2.38	0.57
1:H:197:GLN:HE21	1:H:215:ASN:HB3	1.69	0.57
1:E:156:GLU:HG2	1:E:157:ALA:H	1.68	0.57
1:A:719:ARG:HH11	1:A:719:ARG:HG3	1.68	0.57
1:G:553:VAL:HG22	1:G:554:SER:N	2.19	0.57
1:B:345:LEU:O	1:B:349:MET:HG3	2.05	0.57
1:B:239:THR:C	1:B:241:LYS:H	2.08	0.57
1:C:348:ASN:N	1:C:348:ASN:HD22	2.01	0.57
1:C:488:VAL:C	1:C:489:LEU:HD12	2.25	0.57
1:D:156:GLU:HG2	1:D:157:ALA:N	2.19	0.57
1:B:555:PHE:CE2	1:B:593:VAL:HG23	2.39	0.57
1:B:756:ILE:HG22	1:B:756:ILE:O	2.04	0.57
1:H:209:LEU:CD2	1:H:371:LYS:HG2	2.34	0.57
1:C:200:VAL:O	1:C:212:LEU:O	2.22	0.57
1:C:349:MET:HA	1:C:367:THR:HA	1.86	0.57
1:E:446:ARG:H	1:E:602:THR:HG23	1.69	0.57
1:H:515:HIS:CD2	1:H:517:VAL:H	2.21	0.57
1:F:686:LEU:HD23	1:F:699:HIS:HA	1.86	0.57
1:A:238:GLY:O	1:A:262:ILE:HD11	2.05	0.57
1:C:664:GLU:C	1:C:666:THR:H	2.08	0.57
1:A:442:PHE:CE2	1:A:444:PRO:HG3	2.40	0.57
1:G:324:SER:CB	1:G:325:ARG:HE	2.17	0.57
1:C:135:LEU:HD22	1:C:432:MET:SD	2.44	0.57
1:H:515:HIS:CD2	1:H:516:PRO:HD2	2.40	0.57
1:F:539:ASN:HD22	1:F:540:ALA:N	2.02	0.57
1:B:719:ARG:HD3	1:B:726:PHE:CD2	2.40	0.57
1:H:368:SER:OG	1:H:371:LYS:HE2	2.04	0.57
1:C:324:SER:HB3	1:C:325:ARG:HE	1.69	0.57
1:C:708:THR:CG2	1:C:710:PRO:HD2	2.33	0.57
1:G:426:LEU:CD2	1:G:450:PHE:HB3	2.32	0.57
1:D:446:ARG:HD2	1:D:479:PHE:CE2	2.40	0.57
1:A:167:LEU:HD22	1:A:183:ARG:NH2	2.20	0.57
1:C:167:LEU:HD22	1:C:183:ARG:HH22	1.70	0.57
1:H:553:VAL:HG22	1:H:554:SER:N	2.19	0.57
1:A:433:PHE:O	1:A:437:VAL:HG23	2.04	0.57
1:G:693:LYS:HE2	1:H:737:LEU:HD11	1.86	0.57
1:F:605:VAL:HG11	1:F:665:LYS:HB3	1.87	0.57
1:H:313:PHE:O	1:H:468:GLU:OE1	2.23	0.57
1:A:496:VAL:HG11	1:A:506:ILE:CG2	2.35	0.57
1:C:699:HIS:HD2	1:C:702:TRP:H	1.52	0.57

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:D:167:LEU:HD22	1:D:183:ARG:NH2	2.19	0.57
1:E:540:ALA:O	1:E:543:PRO:HD2	2.04	0.57
1:F:368:SER:OG	1:F:371:LYS:HE2	2.04	0.57
1:E:232:LEU:HB3	1:E:367:THR:CG2	2.34	0.57
1:A:339:ARG:O	1:A:343:GLU:HG2	2.05	0.57
1:H:625:LEU:CD2	1:H:639:LEU:HD11	2.34	0.57
1:D:555:PHE:CE2	1:D:593:VAL:HG23	2.40	0.57
1:C:268:VAL:HG21	1:C:334:VAL:HG21	1.86	0.57
1:A:237:PHE:HB2	1:A:243:PHE:HE1	1.69	0.57
1:A:670:VAL:O	1:A:674:LEU:HG	2.05	0.57
1:F:398:GLU:N	1:F:399:PRO:HD3	2.19	0.57
1:F:446:ARG:H	1:F:602:THR:CG2	2.17	0.57
1:E:740:TRP:CD2	1:F:314:PRO:HD2	2.40	0.57
1:B:531:LYS:HE3	1:C:527:ASN:CG	2.25	0.57
1:E:654:SER:O	1:E:657:THR:HG22	2.05	0.57
1:H:155:ARG:HA	1:H:161:LYS:HB2	1.87	0.57
1:C:307:ASP:H	1:C:461:VAL:HG13	1.70	0.57
1:B:336:THR:O	1:B:337:ILE:HD12	2.05	0.57
1:F:353:CYS:HB2	1:F:363:CYS:O	2.05	0.57
1:H:238:GLY:C	1:H:240:LYS:H	2.08	0.57
1:E:446:ARG:HD2	1:E:479:PHE:CE2	2.39	0.57
1:C:278:GLY:H	1:C:332:ILE:CG2	2.16	0.57
1:D:658:THR:HG21	1:E:651:ARG:NH2	2.20	0.57
1:D:752:ASP:O	1:D:753:VAL:HB	2.05	0.57
1:G:654:SER:O	1:G:657:THR:HG22	2.03	0.57
1:A:672:LYS:HD3	1:A:676:ASP:OD2	2.05	0.57
1:H:300:HIS:HE2	1:H:459:GLY:N	2.02	0.57
1:G:214:GLU:O	1:G:216:PRO:HD3	2.05	0.57
1:E:280:LEU:HD12	1:E:337:ILE:CD1	2.33	0.57
1:H:238:GLY:N	1:H:257:VAL:HB	2.20	0.57
1:H:238:GLY:O	1:H:262:ILE:HD11	2.05	0.57
1:B:664:GLU:C	1:B:666:THR:H	2.07	0.57
1:E:442:PHE:CE2	1:E:444:PRO:HG3	2.40	0.57
1:A:272:GLU:OE2	1:A:330:PRO:O	2.23	0.57
1:A:453:TRP:CD2	1:A:463:ALA:HB2	2.40	0.57
1:G:190:ILE:HG13	1:G:458:PHE:CD2	2.40	0.56
1:G:238:GLY:H	1:G:257:VAL:HB	1.69	0.56
1:D:488:VAL:C	1:D:489:LEU:HD12	2.26	0.56
1:F:324:SER:HB3	1:F:325:ARG:HE	1.69	0.56
1:C:272:GLU:OE2	1:C:330:PRO:O	2.22	0.56
1:H:167:LEU:HD22	1:H:183:ARG:NH2	2.20	0.56
1:C:183:ARG:O	1:D:758:ASN:HB2	2.05	0.56

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:E:539:ASN:HD22	1:E:540:ALA:N	2.03	0.56
1:E:453:TRP:CE3	1:E:463:ALA:HA	2.40	0.56
1:H:146:LEU:O	1:H:146:LEU:HD23	2.05	0.56
1:C:139:ASP:OD1	1:C:141:THR:HG22	2.05	0.56
1:E:607:LEU:CD1	1:E:609:LEU:HG	2.34	0.56
1:H:664:GLU:C	1:H:666:THR:H	2.09	0.56
1:G:699:HIS:HD2	1:G:702:TRP:H	1.53	0.56
1:H:539:ASN:HD22	1:H:540:ALA:N	2.03	0.56
1:B:533:GLU:HG3	1:C:526:SER:O	2.04	0.56
1:F:756:ILE:HD12	1:F:756:ILE:H	1.69	0.56
1:F:220:VAL:HG12	1:F:301:ALA:HB2	1.86	0.56
1:G:203:VAL:HG23	1:G:206:ASN:O	2.05	0.56
1:B:232:LEU:HB3	1:B:367:THR:CG2	2.35	0.56
1:B:286:THR:CG2	1:B:360:ASP:HB2	2.35	0.56
1:G:237:PHE:CD1	1:G:261:LYS:HG3	2.40	0.56
1:C:709:LEU:HB3	1:C:710:PRO:HD3	1.86	0.56
1:C:213:VAL:HG11	1:C:345:LEU:HD21	1.88	0.56
1:E:220:VAL:HG12	1:E:301:ALA:HB2	1.85	0.56
1:H:442:PHE:CE2	1:H:444:PRO:HG3	2.40	0.56
1:F:555:PHE:CE2	1:F:593:VAL:HG23	2.40	0.56
1:A:426:LEU:CD2	1:A:450:PHE:HB3	2.34	0.56
1:A:664:GLU:C	1:A:666:THR:H	2.08	0.56
1:A:398:GLU:N	1:A:399:PRO:HD3	2.21	0.56
1:A:403:VAL:HG22	1:A:479:PHE:CZ	2.40	0.56
1:F:442:PHE:CE2	1:F:444:PRO:HG3	2.39	0.56
1:D:130:LYS:O	1:D:134:LYS:HG2	2.06	0.56
1:B:496:VAL:HG11	1:B:506:ILE:CG2	2.34	0.56
1:G:618:LEU:HD13	1:G:701:PHE:HZ	1.71	0.56
1:H:488:VAL:HG13	1:H:586:VAL:HG11	1.87	0.56
1:D:229:THR:HB	1:D:374:LYS:CB	2.35	0.56
1:F:135:LEU:HD22	1:F:432:MET:SD	2.45	0.56
1:A:749:LEU:O	1:A:750:SER:CB	2.53	0.56
1:A:298:PHE:HE2	1:A:457:ASP:HB3	1.70	0.56
1:G:719:ARG:HG3	1:G:719:ARG:HH11	1.70	0.56
1:C:749:LEU:O	1:C:750:SER:CB	2.52	0.56
1:A:719:ARG:HD3	1:A:726:PHE:CD2	2.41	0.56
1:F:523:TYR:HE1	1:F:530:SER:OG	1.89	0.56
1:H:654:SER:O	1:H:657:THR:HG22	2.06	0.56
1:A:756:ILE:HG22	1:A:756:ILE:O	2.05	0.56
1:C:237:PHE:HB2	1:C:243:PHE:HE1	1.71	0.56
1:E:152:TYR:HA	1:E:161:LYS:HE2	1.86	0.56
1:D:426:LEU:CD2	1:D:450:PHE:HB3	2.33	0.56

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:G:588:ARG:HH11	1:G:588:ARG:HG3	1.70	0.56
1:B:527:ASN:OD1	1:C:531:LYS:HE3	2.05	0.56
1:D:272:GLU:OE2	1:D:330:PRO:O	2.23	0.56
1:G:135:LEU:HD22	1:G:432:MET:SD	2.46	0.56
1:D:232:LEU:HD21	1:D:256:ILE:HD11	1.86	0.56
1:G:202:ILE:HG13	1:G:213:VAL:CG2	2.35	0.56
1:H:237:PHE:CD2	1:H:258:ARG:HB2	2.40	0.56
1:A:264:PHE:CE2	1:A:281:ILE:HG21	2.39	0.56
1:A:324:SER:CB	1:A:325:ARG:HE	2.19	0.56
1:C:212:LEU:HD23	1:C:212:LEU:O	2.05	0.56
1:E:446:ARG:H	1:E:602:THR:CG2	2.17	0.56
1:G:272:GLU:OE2	1:G:330:PRO:O	2.23	0.56
1:G:607:LEU:CD1	1:G:609:LEU:HG	2.36	0.56
1:F:654:SER:O	1:F:657:THR:HG22	2.06	0.56
1:G:300:HIS:HE2	1:G:459:GLY:CA	2.17	0.56
1:B:300:HIS:O	1:B:301:ALA:HB3	2.06	0.56
1:A:256:ILE:HD11	1:A:349:MET:HE1	1.86	0.56
1:A:300:HIS:HE2	1:A:459:GLY:CA	2.18	0.56
1:F:756:ILE:HG22	1:F:756:ILE:O	2.05	0.56
1:E:204:ASP:OD1	1:E:205:LYS:HG2	2.04	0.56
1:H:307:ASP:H	1:H:461:VAL:HG13	1.69	0.56
1:A:238:GLY:N	1:A:257:VAL:HB	2.20	0.56
1:H:339:ARG:O	1:H:343:GLU:HG2	2.06	0.56
1:C:314:PRO:HB2	1:D:740:TRP:CH2	2.40	0.56
1:C:716:LEU:HD13	1:C:731:PHE:CE1	2.40	0.56
1:F:531:LYS:HE3	1:G:527:ASN:HD21	1.71	0.56
1:G:498:ALA:HB2	1:G:553:VAL:HA	1.88	0.56
1:A:194:ASP:HB3	1:A:378:SER:O	2.05	0.56
1:F:232:LEU:HB3	1:F:367:THR:CG2	2.36	0.56
1:C:239:THR:C	1:C:241:LYS:H	2.09	0.56
1:D:238:GLY:N	1:D:257:VAL:HB	2.20	0.56
1:E:188:VAL:HG22	1:E:386:ILE:HD11	1.87	0.56
1:D:446:ARG:H	1:D:602:THR:CG2	2.18	0.56
1:F:167:LEU:HD22	1:F:183:ARG:NH2	2.20	0.56
1:B:197:GLN:HE21	1:B:215:ASN:HB3	1.71	0.56
1:C:238:GLY:HA3	1:C:267:LYS:CD	2.36	0.56
1:G:300:HIS:O	1:G:301:ALA:HB3	2.06	0.56
1:E:237:PHE:CD2	1:E:258:ARG:HB2	2.41	0.56
1:C:398:GLU:N	1:C:399:PRO:HD3	2.20	0.56
1:E:398:GLU:N	1:E:399:PRO:HD3	2.20	0.56
1:F:446:ARG:H	1:F:602:THR:HG23	1.71	0.56
1:A:646:ARG:NH1	1:A:646:ARG:HG2	2.17	0.56

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:H:272:GLU:OE2	1:H:330:PRO:O	2.23	0.56
1:B:719:ARG:HG3	1:B:719:ARG:HH11	1.70	0.56
1:D:650:PHE:CD2	1:E:657:THR:HG21	2.41	0.56
1:H:654:SER:HA	1:H:657:THR:HG22	1.88	0.56
1:D:756:ILE:O	1:D:756:ILE:HG22	2.06	0.56
1:H:497:SER:OG	1:H:533:GLU:HB3	2.06	0.56
1:C:238:GLY:HA3	1:C:267:LYS:HD3	1.86	0.56
1:G:339:ARG:O	1:G:343:GLU:HG2	2.06	0.56
1:E:368:SER:OG	1:E:371:LYS:HE2	2.05	0.56
1:G:442:PHE:CE2	1:G:444:PRO:HG3	2.40	0.56
1:H:156:GLU:HG2	1:H:157:ALA:N	2.21	0.56
1:E:298:PHE:HE2	1:E:457:ASP:HB3	1.71	0.56
1:E:433:PHE:O	1:E:437:VAL:HG23	2.07	0.56
1:C:625:LEU:HD21	1:C:639:LEU:HD11	1.88	0.56
1:G:208:ARG:HD3	1:G:208:ARG:N	2.19	0.55
1:B:237:PHE:CD2	1:B:258:ARG:HB2	2.40	0.55
1:H:398:GLU:N	1:H:399:PRO:HD3	2.21	0.55
1:D:191:GLN:NE2	1:D:223:SER:H	2.03	0.55
1:E:618:LEU:HD11	1:E:742:ILE:HD13	1.88	0.55
1:B:272:GLU:OE2	1:B:330:PRO:O	2.23	0.55
1:A:654:SER:HA	1:A:657:THR:HG22	1.89	0.55
1:G:756:ILE:O	1:G:756:ILE:HG22	2.06	0.55
1:B:676:ASP:O	1:B:680:ARG:HG3	2.06	0.55
1:F:191:GLN:HE22	1:F:223:SER:N	2.03	0.55
1:D:368:SER:OG	1:D:371:LYS:HE2	2.05	0.55
1:H:210:VAL:CG2	1:H:211:TYR:H	2.01	0.55
1:C:307:ASP:N	1:C:461:VAL:HG13	2.21	0.55
1:G:201:ILE:HA	1:G:213:VAL:HG21	1.87	0.55
1:G:188:VAL:HG22	1:G:386:ILE:HD11	1.87	0.55
1:B:446:ARG:H	1:B:602:THR:HG23	1.70	0.55
1:G:222:TYR:HB3	1:G:329:LEU:HD23	1.89	0.55
1:B:618:LEU:HD11	1:B:742:ILE:HD13	1.87	0.55
1:E:740:TRP:NE1	1:F:316:PHE:CZ	2.72	0.55
1:F:295:LEU:HD11	1:F:568:THR:OG1	2.05	0.55
1:G:749:LEU:O	1:G:750:SER:CB	2.53	0.55
1:F:654:SER:HA	1:F:657:THR:HG22	1.88	0.55
1:F:453:TRP:CD2	1:F:463:ALA:HB2	2.41	0.55
1:D:690:VAL:HG23	1:D:698:ARG:HG2	1.88	0.55
1:B:238:GLY:H	1:B:257:VAL:HB	1.72	0.55
1:E:345:LEU:O	1:E:349:MET:HG3	2.06	0.55
1:C:256:ILE:CD1	1:C:349:MET:HE1	2.36	0.55
1:D:208:ARG:HH11	1:D:208:ARG:HB3	1.71	0.55

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:G:167:LEU:CD2	1:G:183:ARG:HH22	2.19	0.55
1:G:496:VAL:CG1	1:G:506:ILE:HD13	2.36	0.55
1:F:272:GLU:OE2	1:F:330:PRO:O	2.24	0.55
1:D:553:VAL:HG22	1:D:554:SER:N	2.21	0.55
1:D:471:LEU:HD13	1:D:547:TYR:OH	2.06	0.55
1:E:237:PHE:HB2	1:E:243:PHE:HE1	1.70	0.55
1:A:306:GLY:HA2	1:A:461:VAL:CA	2.34	0.55
1:B:398:GLU:N	1:B:399:PRO:HD3	2.22	0.55
1:D:398:GLU:N	1:D:399:PRO:HD3	2.21	0.55
1:G:163:GLU:O	1:G:167:LEU:HG	2.07	0.55
1:G:183:ARG:O	1:H:758:ASN:CB	2.54	0.55
1:H:131:LEU:HD22	1:H:599:ILE:HD11	1.88	0.55
1:E:654:SER:HA	1:E:657:THR:HG22	1.88	0.55
1:E:719:ARG:HD3	1:E:726:PHE:CD2	2.41	0.55
1:C:680:ARG:HB3	1:C:684:HIS:HD2	1.70	0.55
1:A:607:LEU:CD1	1:A:609:LEU:HG	2.36	0.55
1:G:210:VAL:HG13	1:G:211:TYR:N	2.20	0.55
1:A:286:THR:CG2	1:A:360:ASP:HB2	2.36	0.55
1:A:232:LEU:HB3	1:A:367:THR:CG2	2.36	0.55
1:C:210:VAL:O	1:C:211:TYR:HB2	2.06	0.55
1:B:565:TYR:CE1	1:B:575:GLU:HB3	2.41	0.55
1:F:618:LEU:HD11	1:F:742:ILE:HD13	1.88	0.55
1:F:756:ILE:HD12	1:F:756:ILE:N	2.21	0.55
1:F:341:ALA:O	1:F:345:LEU:HD23	2.07	0.55
1:F:190:ILE:HG13	1:F:458:PHE:CD2	2.41	0.55
1:H:209:LEU:HG	1:H:210:VAL:HG12	1.88	0.55
1:C:341:ALA:O	1:C:345:LEU:HD23	2.06	0.55
1:C:204:ASP:HB2	1:C:371:LYS:HB3	1.89	0.55
1:H:496:VAL:HG11	1:H:506:ILE:CG2	2.36	0.55
1:C:131:LEU:HD22	1:C:599:ILE:HD11	1.89	0.55
1:A:156:GLU:HG2	1:A:157:ALA:N	2.22	0.55
1:H:680:ARG:HB3	1:H:684:HIS:HD2	1.70	0.55
1:A:619:LEU:HD23	1:A:620:SER:N	2.22	0.55
1:C:240:LYS:HA	1:C:262:ILE:HD13	1.87	0.55
1:G:347:GLY:C	1:G:348:ASN:HD22	2.10	0.55
1:D:670:VAL:O	1:D:674:LEU:HG	2.07	0.55
1:D:719:ARG:HH11	1:D:719:ARG:CG	2.20	0.55
1:B:680:ARG:HB3	1:B:684:HIS:HD2	1.70	0.55
1:G:146:LEU:O	1:G:146:LEU:HD23	2.05	0.55
1:B:752:ASP:O	1:B:753:VAL:HB	2.06	0.55
1:G:268:VAL:HG21	1:G:334:VAL:HG21	1.88	0.55
1:B:709:LEU:HB3	1:B:710:PRO:HD3	1.88	0.55

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:E:749:LEU:O	1:E:750:SER:CB	2.54	0.55
1:C:156:GLU:HG2	1:C:157:ALA:N	2.22	0.55
1:D:756:ILE:HD12	1:D:756:ILE:H	1.72	0.55
1:D:654:SER:O	1:D:657:THR:HG22	2.07	0.55
1:E:693:LYS:HE2	1:F:737:LEU:HD11	1.88	0.55
1:C:607:LEU:CD1	1:C:609:LEU:HG	2.37	0.55
1:F:256:ILE:CD1	1:F:349:MET:HE1	2.36	0.55
1:F:348:ASN:HD22	1:F:348:ASN:N	2.02	0.55
1:E:236:ASN:OD1	1:E:258:ARG:HD3	2.07	0.55
1:D:238:GLY:HA3	1:D:267:LYS:HD3	1.89	0.55
1:E:155:ARG:HA	1:E:161:LYS:HB2	1.89	0.55
1:E:161:LYS:O	1:E:164:ASN:HB2	2.07	0.55
1:B:539:ASN:HD22	1:B:540:ALA:N	2.04	0.55
1:C:229:THR:HB	1:C:374:LYS:CB	2.37	0.55
1:E:298:PHE:HB2	1:E:412:TRP:CD2	2.42	0.55
1:A:565:TYR:CE1	1:A:575:GLU:HB3	2.42	0.55
1:H:188:VAL:HG21	1:H:461:VAL:HG11	1.88	0.55
1:H:204:ASP:HB2	1:H:371:LYS:CB	2.37	0.55
1:C:353:CYS:HB2	1:C:363:CYS:O	2.07	0.55
1:G:211:TYR:CD2	1:G:212:LEU:N	2.69	0.55
1:B:222:TYR:HB3	1:B:329:LEU:HD23	1.89	0.55
1:H:496:VAL:HG11	1:H:506:ILE:HD13	1.88	0.55
1:E:758:ASN:H	1:E:758:ASN:HD22	1.54	0.55
1:E:135:LEU:HD22	1:E:432:MET:SD	2.47	0.55
1:B:135:LEU:HD22	1:B:432:MET:SD	2.47	0.55
1:F:527:ASN:HD21	1:G:531:LYS:HE3	1.72	0.55
1:A:680:ARG:HB3	1:A:684:HIS:HD2	1.71	0.55
1:F:453:TRP:CG	1:F:463:ALA:HB2	2.42	0.55
1:A:471:LEU:HD13	1:A:547:TYR:OH	2.07	0.55
1:G:737:LEU:HD11	1:H:693:LYS:HE2	1.88	0.55
1:F:719:ARG:HG3	1:F:719:ARG:HH11	1.72	0.55
1:D:345:LEU:O	1:D:349:MET:HG3	2.07	0.54
1:G:188:VAL:HG21	1:G:461:VAL:HG11	1.89	0.54
1:F:238:GLY:O	1:F:262:ILE:HD11	2.07	0.54
1:E:426:LEU:CD2	1:E:450:PHE:HB3	2.29	0.54
1:D:191:GLN:HE22	1:D:223:SER:N	2.04	0.54
1:E:183:ARG:O	1:F:758:ASN:HB2	2.07	0.54
1:F:655:ARG:HH11	1:F:751:GLY:HA2	1.72	0.54
1:F:749:LEU:O	1:F:750:SER:HB3	2.06	0.54
1:B:156:GLU:HG2	1:B:157:ALA:N	2.22	0.54
1:D:295:LEU:HD11	1:D:568:THR:OG1	2.07	0.54
1:E:498:ALA:HB2	1:E:553:VAL:HA	1.89	0.54

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:E:156:GLU:HG2	1:E:157:ALA:N	2.22	0.54
1:B:756:ILE:H	1:B:756:ILE:HD12	1.72	0.54
1:A:453:TRP:CG	1:A:463:ALA:HB2	2.41	0.54
1:C:693:LYS:HE2	1:D:737:LEU:HD11	1.89	0.54
1:C:453:TRP:CE3	1:C:463:ALA:HA	2.43	0.54
1:F:268:VAL:HG21	1:F:334:VAL:HG21	1.89	0.54
1:F:280:LEU:HD12	1:F:337:ILE:CD1	2.37	0.54
1:C:152:TYR:HA	1:C:161:LYS:HE2	1.87	0.54
1:H:188:VAL:HG22	1:H:386:ILE:HD11	1.89	0.54
1:C:368:SER:OG	1:C:371:LYS:HE2	2.08	0.54
1:F:680:ARG:HB3	1:F:684:HIS:CD2	2.42	0.54
1:C:752:ASP:O	1:C:753:VAL:HB	2.06	0.54
1:E:555:PHE:CE2	1:E:593:VAL:HG23	2.43	0.54
1:C:155:ARG:HA	1:C:161:LYS:HB2	1.90	0.54
1:C:339:ARG:O	1:C:343:GLU:HG2	2.07	0.54
1:E:238:GLY:H	1:E:257:VAL:HB	1.72	0.54
1:A:239:THR:C	1:A:241:LYS:H	2.10	0.54
1:D:238:GLY:HA3	1:D:267:LYS:CD	2.37	0.54
1:F:130:LYS:O	1:F:134:LYS:HG2	2.08	0.54
1:C:232:LEU:HD11	1:C:256:ILE:HG13	1.89	0.54
1:D:496:VAL:HG11	1:D:506:ILE:CG2	2.36	0.54
1:G:488:VAL:HG13	1:G:586:VAL:HG11	1.89	0.54
1:D:625:LEU:CD2	1:D:639:LEU:HD11	2.37	0.54
1:E:719:ARG:HH11	1:E:719:ARG:HG3	1.71	0.54
1:E:625:LEU:CD2	1:E:639:LEU:HD11	2.38	0.54
1:D:155:ARG:HH21	1:D:165:LEU:HD22	1.71	0.54
1:H:207:GLY:O	1:H:209:LEU:N	2.40	0.54
1:C:237:PHE:CD2	1:C:258:ARG:HB2	2.43	0.54
1:G:409:ARG:NH2	1:G:454:SER:HB2	2.22	0.54
1:E:286:THR:CG2	1:E:360:ASP:HB2	2.37	0.54
1:F:236:ASN:HB2	1:F:357:TRP:CD1	2.43	0.54
1:B:190:ILE:HG13	1:B:458:PHE:CD2	2.43	0.54
1:A:347:GLY:C	1:A:348:ASN:HD22	2.11	0.54
1:B:446:ARG:H	1:B:602:THR:CG2	2.20	0.54
1:H:446:ARG:H	1:H:602:THR:CG2	2.19	0.54
1:D:222:TYR:HB3	1:D:329:LEU:HD23	1.90	0.54
1:D:298:PHE:HE2	1:D:457:ASP:HB3	1.72	0.54
1:C:719:ARG:HG3	1:C:719:ARG:HH11	1.72	0.54
1:C:324:SER:CB	1:C:325:ARG:HE	2.20	0.54
1:F:286:THR:CG2	1:F:360:ASP:HB2	2.36	0.54
1:G:130:LYS:O	1:G:134:LYS:HG2	2.07	0.54
1:H:446:ARG:HD2	1:H:479:PHE:CE2	2.43	0.54

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:D:409:ARG:NH2	1:D:454:SER:HB2	2.23	0.54
1:A:295:LEU:HD11	1:A:568:THR:OG1	2.08	0.54
1:G:278:GLY:HA2	1:G:333:PRO:O	2.07	0.54
1:B:201:ILE:HB	1:B:212:LEU:HD12	1.90	0.54
1:D:239:THR:C	1:D:241:LYS:H	2.10	0.54
1:A:268:VAL:HG21	1:A:334:VAL:HG21	1.87	0.54
1:C:337:ILE:HG23	1:C:341:ALA:HB3	1.88	0.54
1:C:345:LEU:O	1:C:349:MET:HG3	2.08	0.54
1:H:309:TYR:HE2	1:H:325:ARG:CA	2.19	0.54
1:H:716:LEU:HD13	1:H:731:PHE:CE1	2.43	0.54
1:B:672:LYS:HD3	1:B:676:ASP:OD2	2.08	0.54
1:H:565:TYR:CE1	1:H:575:GLU:HB3	2.43	0.54
1:G:605:VAL:HG11	1:G:665:LYS:HB3	1.90	0.54
1:H:392:VAL:HG12	1:H:449:ILE:HG13	1.88	0.54
1:D:680:ARG:HB3	1:D:684:HIS:HD2	1.72	0.54
1:C:312:GLY:HA2	1:C:547:TYR:OH	2.07	0.54
1:F:465:GLU:HA	1:F:468:GLU:HB2	1.90	0.54
1:B:256:ILE:CD1	1:B:349:MET:HE1	2.37	0.54
1:G:239:THR:C	1:G:241:LYS:H	2.10	0.54
1:H:295:LEU:HD22	1:H:570:MET:HE1	1.90	0.54
1:A:513:VAL:HG21	1:A:593:VAL:HG12	1.89	0.54
1:H:198:ASN:OD1	1:H:378:SER:N	2.38	0.54
1:C:759:GLU:HG3	1:C:760:PHE:N	2.22	0.54
1:F:433:PHE:O	1:F:437:VAL:HG23	2.08	0.54
1:H:347:GLY:C	1:H:348:ASN:HD22	2.11	0.54
1:B:232:LEU:HD11	1:B:256:ILE:HG13	1.90	0.54
1:D:238:GLY:O	1:D:262:ILE:HD11	2.08	0.54
1:E:409:ARG:HB2	1:E:452:SER:OG	2.08	0.54
1:D:278:GLY:HA2	1:D:333:PRO:O	2.07	0.54
1:C:618:LEU:HD21	1:C:742:ILE:HG23	1.90	0.54
1:G:232:LEU:HD21	1:G:256:ILE:HD11	1.88	0.54
1:G:264:PHE:CE2	1:G:281:ILE:HG21	2.43	0.54
1:B:347:GLY:C	1:B:348:ASN:HD22	2.11	0.54
1:F:240:LYS:HZ3	1:G:520:GLN:NE2	2.04	0.54
1:H:236:ASN:HB2	1:H:357:TRP:CD1	2.42	0.54
1:G:167:LEU:HD22	1:G:183:ARG:NH2	2.23	0.54
1:B:619:LEU:HD23	1:B:620:SER:N	2.23	0.54
1:B:699:HIS:HD2	1:B:702:TRP:H	1.55	0.54
1:A:654:SER:C	1:A:657:THR:HG22	2.28	0.54
1:D:759:GLU:HG3	1:D:760:PHE:N	2.23	0.54
1:B:759:GLU:HG3	1:B:760:PHE:N	2.22	0.54
1:C:737:LEU:HD11	1:D:693:LYS:HE2	1.90	0.54

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:B:580:ILE:HG23	1:B:580:ILE:O	2.08	0.54
1:G:238:GLY:N	1:G:257:VAL:HB	2.22	0.54
1:E:708:THR:CG2	1:E:710:PRO:HD2	2.37	0.54
1:A:335:GLN:NE2	1:A:336:THR:HG22	2.23	0.54
1:A:588:ARG:HH11	1:A:588:ARG:HG3	1.73	0.54
1:E:496:VAL:CG1	1:E:506:ILE:HD13	2.37	0.54
1:E:564:PRO:HG2	1:E:565:TYR:H	1.73	0.54
1:B:749:LEU:O	1:B:750:SER:CB	2.55	0.54
1:F:471:LEU:HD13	1:F:547:TYR:OH	2.08	0.54
1:A:743:GLN:O	1:A:746:ALA:HB3	2.08	0.54
1:E:523:TYR:HE1	1:E:530:SER:OG	1.91	0.54
1:F:188:VAL:HG22	1:F:386:ILE:HD11	1.89	0.53
1:G:300:HIS:HE2	1:G:459:GLY:N	2.06	0.53
1:B:199:SER:CB	1:B:212:LEU:HD11	2.38	0.53
1:B:237:PHE:CD1	1:B:261:LYS:HG3	2.43	0.53
1:A:237:PHE:CD1	1:A:261:LYS:HG3	2.42	0.53
1:D:236:ASN:HB2	1:D:357:TRP:CD1	2.44	0.53
1:D:237:PHE:CD2	1:D:258:ARG:HB2	2.43	0.53
1:D:286:THR:CG2	1:D:360:ASP:HB2	2.37	0.53
1:C:232:LEU:HD21	1:C:256:ILE:HD11	1.90	0.53
1:C:214:GLU:OE1	1:C:341:ALA:HB2	2.07	0.53
1:H:580:ILE:O	1:H:580:ILE:HG23	2.08	0.53
1:G:672:LYS:HD3	1:G:676:ASP:OD2	2.08	0.53
1:D:199:SER:O	1:D:376:THR:HG22	2.07	0.53
1:B:471:LEU:HD13	1:B:547:TYR:OH	2.08	0.53
1:C:146:LEU:O	1:C:146:LEU:HD23	2.08	0.53
1:C:300:HIS:O	1:C:301:ALA:HB3	2.09	0.53
1:G:286:THR:CG2	1:G:360:ASP:HB2	2.37	0.53
1:F:239:THR:C	1:F:241:LYS:H	2.12	0.53
1:H:237:PHE:HB2	1:H:243:PHE:HE1	1.73	0.53
1:F:670:VAL:O	1:F:674:LEU:HG	2.09	0.53
1:D:306:GLY:HA2	1:D:461:VAL:CA	2.33	0.53
1:B:618:LEU:HD13	1:B:701:PHE:HZ	1.72	0.53
1:C:496:VAL:CG1	1:C:506:ILE:HD13	2.38	0.53
1:E:496:VAL:HG11	1:E:506:ILE:CG2	2.38	0.53
1:D:749:LEU:O	1:D:750:SER:CB	2.55	0.53
1:E:756:ILE:H	1:E:756:ILE:HD12	1.73	0.53
1:A:425:LEU:HD22	1:A:591:ALA:HB2	1.88	0.53
1:E:759:GLU:HG3	1:E:760:PHE:N	2.23	0.53
1:E:210:VAL:HG13	1:E:211:TYR:H	1.73	0.53
1:C:238:GLY:N	1:C:257:VAL:HB	2.22	0.53
1:G:203:VAL:HG22	1:G:204:ASP:O	2.07	0.53

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:212:LEU:HD21	1:A:215:ASN:ND2	2.23	0.53
1:A:197:GLN:HE21	1:A:215:ASN:HB3	1.74	0.53
1:H:201:ILE:HA	1:H:213:VAL:CG2	2.38	0.53
1:F:588:ARG:HG3	1:F:588:ARG:HH11	1.72	0.53
1:B:654:SER:HA	1:B:657:THR:HG22	1.90	0.53
1:C:698:ARG:HA	1:C:707:HIS:NE2	2.23	0.53
1:H:752:ASP:O	1:H:753:VAL:HB	2.06	0.53
1:F:306:GLY:HA2	1:F:461:VAL:CA	2.31	0.53
1:G:237:PHE:HB2	1:G:243:PHE:CE1	2.44	0.53
1:D:163:GLU:O	1:D:167:LEU:HG	2.08	0.53
1:D:204:ASP:C	1:D:206:ASN:N	2.62	0.53
1:G:625:LEU:CD2	1:G:639:LEU:HD11	2.36	0.53
1:B:513:VAL:HG21	1:B:593:VAL:HG12	1.90	0.53
1:B:756:ILE:N	1:B:756:ILE:HD12	2.24	0.53
1:G:311:PRO:O	1:G:693:LYS:HA	2.09	0.53
1:B:523:TYR:HE1	1:B:530:SER:OG	1.91	0.53
1:D:146:LEU:O	1:D:146:LEU:HD23	2.08	0.53
1:F:155:ARG:HA	1:F:161:LYS:HB2	1.90	0.53
1:H:232:LEU:HB3	1:H:367:THR:CG2	2.38	0.53
1:C:446:ARG:H	1:C:602:THR:HG23	1.74	0.53
1:D:515:HIS:CD2	1:D:516:PRO:HD2	2.43	0.53
1:A:278:GLY:HA2	1:A:333:PRO:O	2.07	0.53
1:F:699:HIS:HD2	1:F:702:TRP:H	1.55	0.53
1:C:167:LEU:CD2	1:C:183:ARG:HH22	2.21	0.53
1:E:756:ILE:HD12	1:E:756:ILE:N	2.24	0.53
1:E:752:ASP:O	1:E:753:VAL:HB	2.09	0.53
1:F:300:HIS:O	1:F:301:ALA:HB3	2.09	0.53
1:D:347:GLY:C	1:D:348:ASN:HD22	2.11	0.53
1:H:210:VAL:HG11	1:H:348:ASN:OD1	2.08	0.53
1:C:309:TYR:HE2	1:C:325:ARG:CA	2.21	0.53
1:A:131:LEU:HD22	1:A:599:ILE:HD11	1.90	0.53
1:E:625:LEU:HD21	1:E:639:LEU:HD11	1.90	0.53
1:E:305:THR:HG23	1:E:464:THR:HG21	1.90	0.53
1:E:425:LEU:O	1:E:429:LEU:HB2	2.08	0.53
1:C:515:HIS:CD2	1:C:516:PRO:HD2	2.43	0.53
1:H:295:LEU:HD22	1:H:570:MET:SD	2.49	0.53
1:A:540:ALA:O	1:A:543:PRO:HD2	2.08	0.53
1:C:756:ILE:H	1:C:756:ILE:HD12	1.74	0.53
1:D:677:ARG:NE	1:D:750:SER:HB2	2.24	0.53
1:C:498:ALA:HB2	1:C:553:VAL:HA	1.90	0.53
1:G:238:GLY:O	1:G:262:ILE:HD11	2.08	0.53
1:A:212:LEU:CD2	1:A:215:ASN:HD21	2.21	0.53

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:F:708:THR:CG2	1:F:710:PRO:HD2	2.37	0.53
1:E:515:HIS:CD2	1:E:516:PRO:HD2	2.44	0.53
1:F:672:LYS:HD3	1:F:676:ASP:OD2	2.09	0.53
1:C:513:VAL:HG21	1:C:593:VAL:HG12	1.90	0.53
1:G:425:LEU:HD22	1:G:591:ALA:HB2	1.91	0.53
1:B:212:LEU:O	1:B:213:VAL:C	2.47	0.53
1:A:236:ASN:HB2	1:A:357:TRP:CD1	2.44	0.53
1:E:409:ARG:NH2	1:E:454:SER:HB2	2.24	0.53
1:C:496:VAL:HG11	1:C:506:ILE:CG2	2.38	0.53
1:H:756:ILE:H	1:H:756:ILE:HD12	1.74	0.53
1:A:145:LYS:O	1:A:148:ASN:HB2	2.09	0.53
1:A:752:ASP:O	1:A:753:VAL:HB	2.09	0.53
1:E:169:VAL:HG13	1:E:427:LEU:HD21	1.91	0.53
1:A:155:ARG:HA	1:A:161:LYS:HB2	1.90	0.53
1:G:239:THR:HB	1:G:244:GLU:CD	2.29	0.53
1:E:232:LEU:HD21	1:E:256:ILE:HD11	1.90	0.53
1:D:268:VAL:HG21	1:D:334:VAL:HG21	1.90	0.53
1:B:502:LEU:O	1:B:506:ILE:HG13	2.08	0.53
1:H:163:GLU:O	1:H:167:LEU:HG	2.09	0.53
1:F:540:ALA:O	1:F:543:PRO:HD2	2.09	0.53
1:F:750:SER:OG	1:F:751:GLY:N	2.42	0.53
1:A:135:LEU:HD22	1:A:432:MET:SD	2.49	0.53
1:G:719:ARG:CG	1:G:719:ARG:HH11	2.22	0.53
1:G:146:LEU:HD23	1:G:146:LEU:C	2.30	0.53
1:H:523:TYR:HE1	1:H:530:SER:OG	1.91	0.53
1:B:311:PRO:O	1:B:693:LYS:HA	2.08	0.53
1:H:719:ARG:HD3	1:H:726:PHE:CD2	2.44	0.53
1:F:212:LEU:O	1:F:212:LEU:HG	2.09	0.52
1:C:236:ASN:OD1	1:C:258:ARG:HD3	2.08	0.52
1:E:239:THR:C	1:E:241:LYS:H	2.13	0.52
1:B:236:ASN:HB2	1:B:357:TRP:CD1	2.44	0.52
1:D:237:PHE:HB2	1:D:243:PHE:CE1	2.44	0.52
1:F:446:ARG:HH12	1:F:602:THR:HA	1.75	0.52
1:D:618:LEU:HD21	1:D:742:ILE:HG23	1.90	0.52
1:B:564:PRO:HG2	1:B:565:TYR:H	1.74	0.52
1:A:515:HIS:CD2	1:A:516:PRO:CD	2.93	0.52
1:A:488:VAL:HG13	1:A:586:VAL:HG11	1.90	0.52
1:C:740:TRP:NE1	1:D:316:PHE:CZ	2.73	0.52
1:D:756:ILE:N	1:D:756:ILE:HD12	2.24	0.52
1:B:433:PHE:O	1:B:437:VAL:HG23	2.10	0.52
1:C:127:LEU:N	1:C:127:LEU:HD22	2.23	0.52
1:C:286:THR:CG2	1:C:360:ASP:HB2	2.39	0.52

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:B:409:ARG:NH2	1:B:454:SER:HB2	2.24	0.52
1:E:300:HIS:O	1:E:301:ALA:HB3	2.09	0.52
1:D:506:ILE:O	1:D:510:MET:HG3	2.10	0.52
1:B:540:ALA:O	1:B:543:PRO:HD2	2.10	0.52
1:H:655:ARG:HH11	1:H:751:GLY:HA2	1.74	0.52
1:D:565:TYR:O	1:D:568:THR:HG22	2.08	0.52
1:H:756:ILE:N	1:H:756:ILE:HD12	2.24	0.52
1:G:654:SER:HA	1:G:657:THR:HG22	1.91	0.52
1:A:453:TRP:CE3	1:A:463:ALA:HA	2.44	0.52
1:F:580:ILE:O	1:F:580:ILE:HG23	2.09	0.52
1:B:498:ALA:HB2	1:B:553:VAL:HA	1.91	0.52
1:B:155:ARG:HA	1:B:161:LYS:HB2	1.92	0.52
1:B:206:ASN:O	1:B:207:GLY:O	2.27	0.52
1:B:339:ARG:O	1:B:343:GLU:HG2	2.09	0.52
1:E:214:GLU:HG2	1:E:215:ASN:H	1.74	0.52
1:H:286:THR:CG2	1:H:360:ASP:HB2	2.38	0.52
1:A:232:LEU:CD2	1:A:256:ILE:HD11	2.38	0.52
1:H:222:TYR:HB3	1:H:329:LEU:HD23	1.91	0.52
1:F:496:VAL:HG11	1:F:506:ILE:CG2	2.38	0.52
1:A:496:VAL:CG1	1:A:506:ILE:HD13	2.39	0.52
1:B:515:HIS:CD2	1:B:516:PRO:HD2	2.44	0.52
1:H:483:ASN:ND2	1:H:540:ALA:HB3	2.24	0.52
1:F:568:THR:HG23	1:F:570:MET:H	1.74	0.52
1:E:537:LEU:HD22	1:E:542:PHE:CE2	2.44	0.52
1:B:750:SER:OG	1:B:751:GLY:N	2.42	0.52
1:E:230:GLY:O	1:E:372:ASN:HB2	2.10	0.52
1:C:605:VAL:HG11	1:C:665:LYS:HB3	1.91	0.52
1:G:230:GLY:O	1:G:372:ASN:HB2	2.09	0.52
1:F:752:ASP:O	1:F:753:VAL:HB	2.08	0.52
1:D:264:PHE:CE2	1:D:281:ILE:HG21	2.44	0.52
1:H:268:VAL:HG21	1:H:334:VAL:HG21	1.90	0.52
1:G:349:MET:HA	1:G:368:SER:N	2.24	0.52
1:G:708:THR:CG2	1:G:710:PRO:HD2	2.37	0.52
1:A:130:LYS:O	1:A:134:LYS:HG2	2.10	0.52
1:D:208:ARG:N	1:D:208:ARG:HD2	2.19	0.52
1:G:496:VAL:HG11	1:G:506:ILE:CG2	2.38	0.52
1:B:719:ARG:CG	1:B:719:ARG:HH11	2.22	0.52
1:G:453:TRP:CE3	1:G:463:ALA:HA	2.45	0.52
1:F:204:ASP:O	1:F:205:LYS:HB3	2.09	0.52
1:G:155:ARG:HA	1:G:161:LYS:HB2	1.91	0.52
1:B:306:GLY:HA2	1:B:461:VAL:CA	2.32	0.52
1:B:698:ARG:HA	1:B:707:HIS:NE2	2.24	0.52

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:B:657:THR:HG21	1:C:650:PHE:CG	2.43	0.52
1:H:197:GLN:NE2	1:H:215:ASN:HB3	2.25	0.52
1:C:357:TRP:O	1:C:359:THR:N	2.40	0.52
1:A:210:VAL:HG22	1:A:211:TYR:N	2.25	0.52
1:E:306:GLY:HA2	1:E:461:VAL:CA	2.35	0.52
1:A:667:ASP:OD1	1:A:669:PHE:HB3	2.08	0.52
1:G:496:VAL:HG11	1:G:506:ILE:HD13	1.91	0.52
1:A:539:ASN:O	1:A:542:PHE:N	2.38	0.52
1:C:654:SER:HA	1:C:657:THR:HG22	1.91	0.52
1:C:719:ARG:HD3	1:C:726:PHE:CD2	2.45	0.52
1:H:425:LEU:HD22	1:H:591:ALA:HB2	1.91	0.52
1:H:471:LEU:HD13	1:H:547:TYR:OH	2.10	0.52
1:F:200:VAL:O	1:F:213:VAL:HB	2.10	0.52
1:G:204:ASP:C	1:G:206:ASN:N	2.59	0.52
1:B:204:ASP:C	1:B:206:ASN:N	2.63	0.52
1:B:201:ILE:HD13	1:B:212:LEU:CA	2.40	0.52
1:B:240:LYS:HA	1:B:262:ILE:HD13	1.90	0.52
1:E:197:GLN:NE2	1:E:215:ASN:HB3	2.24	0.52
1:E:256:ILE:CD1	1:E:349:MET:HE1	2.40	0.52
1:F:239:THR:HB	1:F:244:GLU:CD	2.29	0.52
1:H:239:THR:C	1:H:241:LYS:H	2.12	0.52
1:E:307:ASP:H	1:E:461:VAL:HG13	1.74	0.52
1:C:667:ASP:HB3	1:C:670:VAL:CG2	2.34	0.52
1:D:607:LEU:CD1	1:D:609:LEU:HG	2.40	0.52
1:H:537:LEU:HD22	1:H:542:PHE:CE2	2.44	0.52
1:A:719:ARG:HH11	1:A:719:ARG:CG	2.22	0.52
1:A:498:ALA:HB2	1:A:553:VAL:HA	1.92	0.52
1:F:213:VAL:HG11	1:F:345:LEU:HD21	1.92	0.52
1:D:152:TYR:HA	1:D:161:LYS:HE2	1.90	0.52
1:H:190:ILE:HG13	1:H:458:PHE:CD2	2.44	0.52
1:C:190:ILE:HG13	1:C:458:PHE:CD2	2.45	0.52
1:G:197:GLN:HE21	1:G:215:ASN:HB3	1.75	0.52
1:F:237:PHE:CD2	1:F:258:ARG:HB2	2.44	0.52
1:F:513:VAL:HG21	1:F:593:VAL:HG12	1.91	0.52
1:A:618:LEU:HD11	1:A:742:ILE:HD13	1.92	0.52
1:H:131:LEU:HD22	1:H:599:ILE:CD1	2.39	0.52
1:H:749:LEU:O	1:H:750:SER:CB	2.58	0.52
1:G:756:ILE:H	1:G:756:ILE:HD12	1.74	0.52
1:E:719:ARG:CG	1:E:719:ARG:HH11	2.23	0.52
1:F:719:ARG:HD3	1:F:726:PHE:CD2	2.44	0.52
1:E:425:LEU:HD22	1:E:591:ALA:HB2	1.91	0.52
1:E:680:ARG:HB3	1:E:684:HIS:HD2	1.73	0.52

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:B:298:PHE:HE2	1:B:457:ASP:HB3	1.74	0.52
1:C:361:SER:O	1:C:362:THR:CB	2.57	0.52
1:E:237:PHE:CD1	1:E:261:LYS:HG3	2.45	0.52
1:E:238:GLY:O	1:E:262:ILE:HD11	2.10	0.52
1:G:236:ASN:HB2	1:G:357:TRP:CD1	2.45	0.52
1:D:236:ASN:OD1	1:D:258:ARG:HD3	2.09	0.52
1:H:670:VAL:O	1:H:674:LEU:HG	2.09	0.52
1:A:709:LEU:HB3	1:A:710:PRO:HD3	1.91	0.52
1:F:446:ARG:HD2	1:F:479:PHE:CE2	2.45	0.52
1:H:513:VAL:HB	1:H:522:LEU:HD12	1.90	0.52
1:G:680:ARG:HB3	1:G:684:HIS:HD2	1.73	0.52
1:H:719:ARG:HH11	1:H:719:ARG:HG3	1.74	0.52
1:F:298:PHE:HE2	1:F:457:ASP:HB3	1.74	0.52
1:E:648:ASP:OD2	1:E:757:ASP:OD2	2.27	0.52
1:E:603:HIS:ND1	1:E:604:ASP:OD1	2.43	0.52
1:G:256:ILE:CD1	1:G:349:MET:HE1	2.39	0.52
1:G:465:GLU:OE2	1:G:468:GLU:OE1	2.28	0.52
1:D:339:ARG:O	1:D:343:GLU:HG2	2.10	0.52
1:E:670:VAL:O	1:E:674:LEU:HG	2.10	0.52
1:H:618:LEU:HD21	1:H:742:ILE:HG23	1.92	0.52
1:D:190:ILE:HG13	1:D:458:PHE:CD2	2.45	0.52
1:E:222:TYR:HB3	1:E:329:LEU:HD23	1.92	0.52
1:F:619:LEU:HD23	1:F:620:SER:N	2.25	0.52
1:B:565:TYR:HE1	1:B:575:GLU:HB3	1.75	0.52
1:A:483:ASN:HD21	1:A:540:ALA:HB3	1.75	0.52
1:C:680:ARG:HB3	1:C:684:HIS:CD2	2.45	0.52
1:D:654:SER:HA	1:D:657:THR:HG22	1.92	0.52
1:E:690:VAL:HG23	1:E:698:ARG:HG2	1.91	0.52
1:A:759:GLU:O	1:A:760:PHE:C	2.49	0.52
1:H:127:LEU:N	1:H:127:LEU:HD22	2.25	0.52
1:F:425:LEU:HD22	1:F:591:ALA:HB2	1.92	0.52
1:D:209:LEU:O	1:D:210:VAL:O	2.27	0.51
1:D:256:ILE:CD1	1:D:349:MET:HE1	2.40	0.51
1:H:256:ILE:CD1	1:H:349:MET:HE1	2.40	0.51
1:C:237:PHE:CD1	1:C:261:LYS:HG3	2.45	0.51
1:A:357:TRP:O	1:A:359:THR:N	2.43	0.51
1:A:361:SER:O	1:A:362:THR:CB	2.58	0.51
1:A:256:ILE:CD1	1:A:349:MET:HE1	2.40	0.51
1:A:188:VAL:HG22	1:A:386:ILE:HD11	1.90	0.51
1:A:669:PHE:CD2	1:B:668:ARG:HD2	2.46	0.51
1:G:618:LEU:HD11	1:G:742:ILE:HD13	1.91	0.51
1:C:163:GLU:O	1:C:167:LEU:HG	2.10	0.51

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:C:568:THR:HG23	1:C:570:MET:H	1.75	0.51
1:A:676:ASP:O	1:A:680:ARG:HG3	2.10	0.51
1:C:759:GLU:O	1:C:760:PHE:C	2.49	0.51
1:D:759:GLU:O	1:D:760:PHE:C	2.49	0.51
1:G:759:GLU:HG3	1:G:760:PHE:N	2.25	0.51
1:F:408:GLN:HB3	1:F:485:ASP:OD1	2.10	0.51
1:H:232:LEU:HD11	1:H:256:ILE:HG13	1.92	0.51
1:B:335:GLN:NE2	1:B:336:THR:HG22	2.25	0.51
1:D:709:LEU:HB3	1:D:710:PRO:HD3	1.91	0.51
1:A:668:ARG:HD2	1:B:669:PHE:CD2	2.45	0.51
1:D:465:GLU:HA	1:D:468:GLU:HB2	1.93	0.51
1:A:502:LEU:O	1:A:506:ILE:HG13	2.10	0.51
1:E:618:LEU:HD13	1:E:701:PHE:HZ	1.76	0.51
1:D:540:ALA:O	1:D:543:PRO:HD2	2.11	0.51
1:E:291:VAL:HG13	1:E:292:ASN:N	2.25	0.51
1:A:473:SER:O	1:A:476:LEU:HB2	2.09	0.51
1:H:232:LEU:HD21	1:H:256:ILE:HD11	1.92	0.51
1:H:307:ASP:N	1:H:461:VAL:HG13	2.25	0.51
1:E:238:GLY:N	1:E:257:VAL:HB	2.25	0.51
1:G:430:ALA:HA	1:G:450:PHE:CZ	2.45	0.51
1:D:496:VAL:CG1	1:D:506:ILE:HD13	2.41	0.51
1:E:488:VAL:HG13	1:E:586:VAL:HG11	1.92	0.51
1:H:483:ASN:HD21	1:H:540:ALA:HB3	1.75	0.51
1:D:135:LEU:HD22	1:D:432:MET:SD	2.50	0.51
1:C:471:LEU:HD13	1:C:547:TYR:OH	2.10	0.51
1:D:433:PHE:O	1:D:437:VAL:HG23	2.11	0.51
1:F:409:ARG:NH2	1:F:454:SER:HB2	2.25	0.51
1:C:239:THR:HB	1:C:244:GLU:CD	2.30	0.51
1:F:496:VAL:CG1	1:F:506:ILE:HD13	2.41	0.51
1:E:496:VAL:HG11	1:E:506:ILE:HD13	1.92	0.51
1:A:183:ARG:O	1:B:758:ASN:CB	2.58	0.51
1:F:618:LEU:HD13	1:F:701:PHE:HZ	1.74	0.51
1:B:508:LYS:NZ	1:C:624:ASP:HB2	2.26	0.51
1:D:537:LEU:HD22	1:D:542:PHE:CE2	2.45	0.51
1:G:152:TYR:HA	1:G:161:LYS:HB3	1.92	0.51
1:B:237:PHE:HB2	1:B:243:PHE:CE1	2.46	0.51
1:G:361:SER:O	1:G:362:THR:CB	2.59	0.51
1:G:309:TYR:HE2	1:G:325:ARG:CA	2.21	0.51
1:B:682:GLU:OE2	1:B:699:HIS:CE1	2.64	0.51
1:C:758:ASN:CB	1:D:183:ARG:O	2.56	0.51
1:B:224:LYS:HA	1:B:224:LYS:HE3	1.93	0.51
1:A:700:VAL:HG23	1:A:701:PHE:CD1	2.46	0.51

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:618:LEU:HD21	1:A:742:ILE:HG23	1.92	0.51
1:D:568:THR:HG23	1:D:570:MET:H	1.74	0.51
1:D:655:ARG:HH11	1:D:751:GLY:HA2	1.75	0.51
1:H:473:SER:O	1:H:476:LEU:HB2	2.09	0.51
1:H:349:MET:HA	1:H:368:SER:N	2.25	0.51
1:E:349:MET:HA	1:E:368:SER:N	2.25	0.51
1:H:357:TRP:O	1:H:359:THR:N	2.39	0.51
1:H:699:HIS:HD2	1:H:702:TRP:H	1.58	0.51
1:B:531:LYS:HE3	1:C:527:ASN:OD1	2.11	0.51
1:G:515:HIS:CD2	1:G:516:PRO:HD2	2.46	0.51
1:H:698:ARG:HA	1:H:707:HIS:NE2	2.26	0.51
1:C:539:ASN:HD22	1:C:539:ASN:C	2.13	0.51
1:C:167:LEU:HD22	1:C:183:ARG:NH2	2.25	0.51
1:E:198:ASN:OD1	1:E:377:VAL:HA	2.11	0.51
1:E:513:VAL:HG21	1:E:593:VAL:HG12	1.91	0.51
1:E:676:ASP:O	1:E:680:ARG:HG3	2.11	0.51
1:H:759:GLU:O	1:H:760:PHE:C	2.49	0.51
1:B:361:SER:O	1:B:362:THR:CB	2.59	0.51
1:F:238:GLY:H	1:F:257:VAL:HB	1.75	0.51
1:D:237:PHE:CD1	1:D:261:LYS:HG3	2.45	0.51
1:A:232:LEU:HD11	1:A:256:ILE:CG1	2.40	0.51
1:B:309:TYR:HE2	1:B:325:ARG:CA	2.21	0.51
1:A:163:GLU:O	1:A:167:LEU:HG	2.10	0.51
1:E:565:TYR:CE1	1:E:575:GLU:HB3	2.46	0.51
1:D:425:LEU:HD22	1:D:591:ALA:HB2	1.92	0.51
1:H:759:GLU:HG3	1:H:760:PHE:N	2.25	0.51
1:B:146:LEU:HD23	1:B:146:LEU:O	2.10	0.51
1:A:199:SER:O	1:A:376:THR:HG22	2.11	0.51
1:F:232:LEU:HD11	1:F:256:ILE:CG1	2.41	0.51
1:C:222:TYR:HB3	1:C:329:LEU:HD23	1.93	0.51
1:B:238:GLY:N	1:B:257:VAL:HB	2.26	0.51
1:B:238:GLY:HA3	1:B:267:LYS:CD	2.41	0.51
1:F:361:SER:O	1:F:362:THR:CB	2.59	0.51
1:H:515:HIS:CD2	1:H:516:PRO:CD	2.94	0.51
1:G:580:ILE:HG23	1:G:580:ILE:O	2.11	0.51
1:B:749:LEU:O	1:B:750:SER:HB3	2.11	0.51
1:D:146:LEU:C	1:D:146:LEU:HD23	2.31	0.51
1:B:553:VAL:HG22	1:B:554:SER:N	2.26	0.51
1:A:553:VAL:HG21	1:A:597:PHE:CE2	2.46	0.51
1:B:605:VAL:HG11	1:B:665:LYS:HB3	1.92	0.51
1:F:473:SER:O	1:F:476:LEU:HB2	2.11	0.51
1:G:408:GLN:HB3	1:G:485:ASP:OD1	2.10	0.51

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:B:232:LEU:HD21	1:B:256:ILE:HD11	1.91	0.51
1:G:239:THR:O	1:G:243:PHE:HB2	2.11	0.51
1:E:214:GLU:HG2	1:E:215:ASN:N	2.26	0.51
1:H:237:PHE:CD1	1:H:261:LYS:HG3	2.46	0.51
1:D:300:HIS:HE2	1:D:459:GLY:N	2.08	0.51
1:E:750:SER:OG	1:E:751:GLY:N	2.42	0.51
1:A:716:LEU:HD13	1:A:731:PHE:CE1	2.46	0.51
1:G:513:VAL:HG21	1:G:593:VAL:HG12	1.91	0.51
1:F:676:ASP:O	1:F:680:ARG:HG3	2.10	0.51
1:H:146:LEU:C	1:H:146:LEU:HD23	2.31	0.51
1:G:759:GLU:O	1:G:760:PHE:C	2.50	0.51
1:C:404:VAL:HA	1:C:449:ILE:HG23	1.93	0.51
1:B:607:LEU:CD1	1:B:609:LEU:HG	2.40	0.51
1:E:580:ILE:HG23	1:E:580:ILE:O	2.10	0.51
1:C:264:PHE:CE2	1:C:281:ILE:HG21	2.46	0.51
1:B:199:SER:O	1:B:376:THR:HG22	2.11	0.51
1:E:239:THR:O	1:E:243:PHE:HB2	2.10	0.51
1:E:264:PHE:CE2	1:E:281:ILE:HG21	2.46	0.51
1:H:330:PRO:O	1:H:331:ASN:CB	2.59	0.51
1:D:624:ASP:HB2	1:E:508:LYS:HZ2	1.76	0.51
1:H:568:THR:HG23	1:H:570:MET:H	1.76	0.51
1:C:565:TYR:O	1:C:568:THR:HG22	2.10	0.51
1:H:672:LYS:HD3	1:H:676:ASP:OD2	2.11	0.51
1:F:690:VAL:HG23	1:F:698:ARG:HG2	1.93	0.51
1:G:210:VAL:HG22	1:G:211:TYR:H	1.74	0.50
1:B:349:MET:HA	1:B:368:SER:N	2.26	0.50
1:F:239:THR:O	1:F:243:PHE:HB2	2.11	0.50
1:G:134:LYS:O	1:G:138:THR:HG23	2.11	0.50
1:E:409:ARG:HH11	1:E:409:ARG:HG2	1.76	0.50
1:H:618:LEU:HD13	1:H:701:PHE:HZ	1.77	0.50
1:A:758:ASN:CB	1:B:183:ARG:O	2.55	0.50
1:B:278:GLY:HA2	1:B:333:PRO:HG2	1.93	0.50
1:B:568:THR:HG23	1:B:570:MET:H	1.76	0.50
1:A:537:LEU:HD22	1:A:542:PHE:CE2	2.46	0.50
1:G:749:LEU:O	1:G:750:SER:HB3	2.11	0.50
1:C:625:LEU:CD2	1:C:639:LEU:HD11	2.41	0.50
1:D:145:LYS:O	1:D:148:ASN:HB2	2.11	0.50
1:B:532:VAL:HG12	1:C:528:TRP:HE1	1.75	0.50
1:B:282:TYR:HE1	1:B:284:ASP:HB3	1.76	0.50
1:B:201:ILE:HD12	1:B:202:ILE:N	2.25	0.50
1:E:361:SER:O	1:E:362:THR:CB	2.60	0.50
1:D:238:GLY:HA2	1:D:257:VAL:HG11	1.94	0.50

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:H:361:SER:O	1:H:362:THR:CB	2.59	0.50
1:D:409:ARG:HB2	1:D:452:SER:OG	2.10	0.50
1:G:568:THR:HG23	1:G:570:MET:H	1.75	0.50
1:A:316:PHE:CZ	1:B:740:TRP:NE1	2.75	0.50
1:D:298:PHE:HB2	1:D:412:TRP:CD2	2.46	0.50
1:H:425:LEU:O	1:H:429:LEU:HB2	2.12	0.50
1:B:145:LYS:O	1:B:148:ASN:HB2	2.11	0.50
1:H:433:PHE:O	1:H:437:VAL:HG23	2.11	0.50
1:F:232:LEU:CD2	1:F:256:ILE:HD11	2.41	0.50
1:C:409:ARG:NH2	1:C:454:SER:HB2	2.26	0.50
1:B:239:THR:C	1:B:241:LYS:N	2.64	0.50
1:A:238:GLY:HA3	1:A:267:LYS:CD	2.42	0.50
1:A:238:GLY:HA3	1:A:267:LYS:HD3	1.94	0.50
1:H:239:THR:O	1:H:243:PHE:HB2	2.12	0.50
1:E:134:LYS:O	1:E:138:THR:HG23	2.11	0.50
1:A:224:LYS:HE3	1:A:224:LYS:HA	1.94	0.50
1:E:749:LEU:O	1:E:750:SER:HB3	2.11	0.50
1:C:756:ILE:N	1:C:756:ILE:HD12	2.25	0.50
1:B:655:ARG:HH11	1:B:751:GLY:HA2	1.77	0.50
1:B:528:TRP:HE1	1:C:532:VAL:CG1	2.24	0.50
1:H:453:TRP:CE3	1:H:463:ALA:HA	2.46	0.50
1:D:127:LEU:N	1:D:127:LEU:HD22	2.25	0.50
1:F:212:LEU:CG	1:F:212:LEU:O	2.59	0.50
1:H:335:GLN:NE2	1:H:336:THR:HG22	2.26	0.50
1:C:286:THR:HG21	1:C:360:ASP:HB2	1.94	0.50
1:G:307:ASP:N	1:G:461:VAL:HG13	2.26	0.50
1:G:335:GLN:NE2	1:G:336:THR:HG22	2.26	0.50
1:E:240:LYS:O	1:E:241:LYS:HB3	2.11	0.50
1:E:232:LEU:HD13	1:E:254:ILE:HG22	1.93	0.50
1:A:239:THR:C	1:A:241:LYS:N	2.65	0.50
1:A:286:THR:HG21	1:A:360:ASP:HB2	1.94	0.50
1:D:239:THR:HB	1:D:244:GLU:CD	2.32	0.50
1:A:307:ASP:N	1:A:461:VAL:HG13	2.26	0.50
1:C:446:ARG:H	1:C:602:THR:CG2	2.24	0.50
1:D:508:LYS:HZ2	1:E:624:ASP:HB2	1.72	0.50
1:E:655:ARG:HH11	1:E:751:GLY:HA2	1.74	0.50
1:E:295:LEU:HD11	1:E:568:THR:OG1	2.10	0.50
1:F:553:VAL:HG22	1:F:554:SER:H	1.77	0.50
1:E:553:VAL:HG22	1:E:554:SER:H	1.77	0.50
1:F:453:TRP:CE3	1:F:463:ALA:HA	2.47	0.50
1:D:672:LYS:HD3	1:D:676:ASP:OD2	2.12	0.50
1:A:425:LEU:O	1:A:429:LEU:HB2	2.11	0.50

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:G:425:LEU:O	1:G:429:LEU:HB2	2.12	0.50
1:A:523:TYR:HE1	1:A:530:SER:OG	1.95	0.50
1:B:453:TRP:CG	1:B:463:ALA:HB2	2.45	0.50
1:F:759:GLU:HG3	1:F:760:PHE:N	2.26	0.50
1:E:127:LEU:N	1:E:127:LEU:HD22	2.27	0.50
1:F:127:LEU:N	1:F:127:LEU:HD22	2.26	0.50
1:C:291:VAL:HG13	1:C:292:ASN:N	2.27	0.50
1:A:408:GLN:HB3	1:A:485:ASP:OD1	2.12	0.50
1:C:325:ARG:HG2	1:C:326:SER:N	2.27	0.50
1:B:286:THR:HG21	1:B:360:ASP:HB2	1.93	0.50
1:D:361:SER:O	1:D:362:THR:CB	2.60	0.50
1:B:618:LEU:HD21	1:B:742:ILE:HG23	1.94	0.50
1:E:224:LYS:HE3	1:E:224:LYS:HA	1.94	0.50
1:E:502:LEU:O	1:E:506:ILE:HG13	2.12	0.50
1:E:677:ARG:NE	1:E:750:SER:HB2	2.26	0.50
1:H:677:ARG:NE	1:H:750:SER:HB2	2.27	0.50
1:E:453:TRP:CG	1:E:463:ALA:HB2	2.46	0.50
1:H:680:ARG:HB3	1:H:684:HIS:CD2	2.46	0.50
1:D:528:TRP:HE1	1:E:532:VAL:HG12	1.76	0.50
1:B:127:LEU:HD22	1:B:127:LEU:N	2.25	0.50
1:F:237:PHE:HB2	1:F:243:PHE:CE1	2.45	0.50
1:C:496:VAL:HG11	1:C:506:ILE:HD13	1.94	0.50
1:A:496:VAL:HG11	1:A:506:ILE:HD13	1.94	0.50
1:A:618:LEU:HD13	1:A:701:PHE:HZ	1.76	0.50
1:A:483:ASN:ND2	1:A:540:ALA:HB3	2.27	0.50
1:A:756:ILE:HD12	1:A:756:ILE:H	1.77	0.50
1:C:719:ARG:CG	1:C:719:ARG:HH11	2.25	0.50
1:B:453:TRP:CD2	1:B:463:ALA:HB2	2.47	0.50
1:G:433:PHE:O	1:G:437:VAL:HG23	2.11	0.50
1:A:124:TRP:HH2	1:A:596:GLN:HG2	1.75	0.50
1:B:291:VAL:HG13	1:B:292:ASN:N	2.27	0.50
1:F:307:ASP:H	1:F:461:VAL:HG13	1.76	0.50
1:D:297:PHE:N	1:D:297:PHE:CD1	2.80	0.50
1:G:206:ASN:O	1:G:207:GLY:O	2.29	0.50
1:E:244:GLU:OE1	1:E:244:GLU:HA	2.12	0.50
1:F:286:THR:HG21	1:F:360:ASP:HB2	1.93	0.50
1:F:134:LYS:O	1:F:138:THR:HG23	2.12	0.50
1:C:488:VAL:HG13	1:C:586:VAL:HG11	1.94	0.50
1:A:539:ASN:C	1:A:539:ASN:HD22	2.15	0.50
1:A:677:ARG:NE	1:A:750:SER:HB2	2.26	0.50
1:F:553:VAL:HG21	1:F:597:PHE:CE2	2.47	0.50
1:G:677:ARG:NE	1:G:750:SER:HB2	2.27	0.50

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:G:750:SER:OG	1:G:751:GLY:N	2.45	0.50
1:E:453:TRP:CD2	1:E:463:ALA:HB2	2.46	0.50
1:B:497:SER:OG	1:B:533:GLU:HB3	2.12	0.50
1:F:230:GLY:O	1:F:372:ASN:HB2	2.12	0.50
1:E:146:LEU:HD23	1:E:146:LEU:O	2.12	0.50
1:E:582:GLU:H	1:E:582:GLU:CD	2.15	0.50
1:D:155:ARG:HA	1:D:161:LYS:HB2	1.94	0.50
1:D:349:MET:HA	1:D:368:SER:N	2.25	0.50
1:C:239:THR:C	1:C:241:LYS:N	2.65	0.50
1:G:306:GLY:N	1:G:459:GLY:O	2.45	0.50
1:D:286:THR:HG21	1:D:360:ASP:HB2	1.94	0.50
1:A:349:MET:HA	1:A:368:SER:N	2.26	0.50
1:B:670:VAL:O	1:B:674:LEU:HG	2.12	0.50
1:H:295:LEU:HD22	1:H:570:MET:CE	2.42	0.50
1:H:539:ASN:O	1:H:542:PHE:N	2.42	0.50
1:D:131:LEU:HD22	1:D:599:ILE:CD1	2.41	0.50
1:H:553:VAL:HG21	1:H:597:PHE:CE2	2.47	0.50
1:H:553:VAL:HG22	1:H:554:SER:H	1.77	0.50
1:H:565:TYR:HE1	1:H:575:GLU:HB3	1.77	0.50
1:E:698:ARG:HA	1:E:707:HIS:NE2	2.27	0.50
1:G:361:SER:O	1:G:362:THR:HB	2.11	0.50
1:E:347:GLY:C	1:E:348:ASN:HD22	2.16	0.50
1:B:300:HIS:HE2	1:B:459:GLY:N	2.10	0.50
1:A:222:TYR:HB3	1:A:329:LEU:HD23	1.94	0.50
1:A:300:HIS:HE2	1:A:459:GLY:N	2.09	0.50
1:B:667:ASP:OD1	1:B:669:PHE:HB3	2.12	0.50
1:D:214:GLU:OE2	1:D:338:SER:HB3	2.11	0.50
1:G:539:ASN:O	1:G:542:PHE:N	2.40	0.50
1:F:565:TYR:O	1:F:568:THR:HG22	2.12	0.50
1:D:749:LEU:O	1:D:750:SER:HB3	2.12	0.50
1:F:211:TYR:HB3	1:F:213:VAL:H	1.76	0.49
1:F:297:PHE:N	1:F:297:PHE:CD1	2.80	0.49
1:E:357:TRP:O	1:E:359:THR:N	2.44	0.49
1:E:325:ARG:HG2	1:E:326:SER:N	2.27	0.49
1:A:198:ASN:OD1	1:A:378:SER:N	2.44	0.49
1:A:553:VAL:HG22	1:A:554:SER:N	2.27	0.49
1:C:282:TYR:HE1	1:C:284:ASP:HB3	1.76	0.49
1:F:291:VAL:HG13	1:F:292:ASN:N	2.26	0.49
1:G:153:VAL:HG22	1:G:154:PRO:CD	2.41	0.49
1:H:221:ALA:O	1:H:223:SER:N	2.45	0.49
1:H:306:GLY:CA	1:H:461:VAL:HA	2.34	0.49
1:D:357:TRP:O	1:D:359:THR:N	2.40	0.49

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:197:GLN:NE2	1:A:215:ASN:HB3	2.27	0.49
1:E:309:TYR:HE2	1:E:325:ARG:CA	2.20	0.49
1:C:316:PHE:CZ	1:D:740:TRP:NE1	2.79	0.49
1:F:699:HIS:CD2	1:F:701:PHE:HB2	2.47	0.49
1:F:488:VAL:HG13	1:F:586:VAL:CG1	2.42	0.49
1:D:565:TYR:CE1	1:D:575:GLU:HB3	2.47	0.49
1:D:680:ARG:HB3	1:D:684:HIS:CD2	2.47	0.49
1:C:425:LEU:HD22	1:C:591:ALA:HB2	1.94	0.49
1:A:180:LYS:N	1:A:180:LYS:HD2	2.27	0.49
1:E:210:VAL:CG2	1:E:211:TYR:H	2.12	0.49
1:C:152:TYR:HA	1:C:161:LYS:HB3	1.94	0.49
1:H:238:GLY:HA2	1:H:257:VAL:HG11	1.95	0.49
1:G:667:ASP:OD1	1:G:669:PHE:HB3	2.12	0.49
1:B:508:LYS:HE2	1:C:620:SER:OG	2.12	0.49
1:F:677:ARG:NE	1:F:750:SER:HB2	2.26	0.49
1:F:565:TYR:CE1	1:F:575:GLU:HB3	2.47	0.49
1:B:654:SER:C	1:B:657:THR:HG22	2.32	0.49
1:B:677:ARG:NE	1:B:750:SER:HB2	2.28	0.49
1:F:553:VAL:HG21	1:F:597:PHE:HE2	1.77	0.49
1:H:311:PRO:O	1:H:693:LYS:HA	2.13	0.49
1:D:676:ASP:O	1:D:680:ARG:HG3	2.12	0.49
1:A:759:GLU:HG3	1:A:760:PHE:N	2.27	0.49
1:B:264:PHE:CE2	1:B:281:ILE:HG21	2.47	0.49
1:G:473:SER:O	1:G:476:LEU:HB2	2.11	0.49
1:D:735:LEU:C	1:D:735:LEU:HD23	2.32	0.49
1:F:343:GLU:OE2	1:F:362:THR:HG21	2.12	0.49
1:A:188:VAL:HG21	1:A:461:VAL:HG11	1.92	0.49
1:B:163:GLU:O	1:B:167:LEU:HG	2.12	0.49
1:E:699:HIS:HD2	1:E:702:TRP:H	1.60	0.49
1:F:700:VAL:HG23	1:F:701:PHE:CD1	2.47	0.49
1:H:198:ASN:OD1	1:H:377:VAL:HA	2.12	0.49
1:F:498:ALA:HB2	1:F:553:VAL:HA	1.94	0.49
1:C:749:LEU:O	1:C:750:SER:HB3	2.11	0.49
1:E:473:SER:O	1:E:476:LEU:HB2	2.13	0.49
1:C:433:PHE:O	1:C:437:VAL:HG23	2.12	0.49
1:G:565:TYR:CE1	1:G:575:GLU:HB3	2.48	0.49
2:A:762:NAG:H82	1:B:641:TRP:CZ2	2.48	0.49
1:D:712:LEU:C	1:D:712:LEU:HD23	2.32	0.49
1:G:238:GLY:HA3	1:G:267:LYS:CD	2.42	0.49
1:A:237:PHE:HB2	1:A:243:PHE:CE1	2.47	0.49
1:A:209:LEU:O	1:A:210:VAL:HG12	2.12	0.49
1:A:213:VAL:O	1:A:214:GLU:HB2	2.13	0.49

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:F:308:PRO:HG3	1:F:329:LEU:HD21	1.95	0.49
1:G:278:GLY:HA2	1:G:333:PRO:HG2	1.95	0.49
1:E:330:PRO:O	1:E:331:ASN:CB	2.60	0.49
1:H:508:LYS:O	1:H:512:ASN:ND2	2.45	0.49
1:A:282:TYR:HE1	1:A:284:ASP:HB3	1.77	0.49
1:F:180:LYS:N	1:F:180:LYS:HD2	2.27	0.49
1:C:361:SER:O	1:C:362:THR:HB	2.13	0.49
1:E:236:ASN:HB2	1:E:357:TRP:CD1	2.47	0.49
1:G:239:THR:C	1:G:241:LYS:N	2.66	0.49
1:A:240:LYS:O	1:A:241:LYS:HB3	2.13	0.49
1:A:238:GLY:HA2	1:A:257:VAL:HG11	1.95	0.49
1:B:307:ASP:H	1:B:461:VAL:HG13	1.76	0.49
1:A:409:ARG:HB2	1:A:452:SER:OG	2.11	0.49
1:H:667:ASP:OD1	1:H:669:PHE:HB3	2.13	0.49
1:G:682:GLU:OE2	1:G:699:HIS:CE1	2.65	0.49
1:D:278:GLY:HA2	1:D:333:PRO:HG2	1.95	0.49
1:A:278:GLY:HA2	1:A:333:PRO:HG2	1.94	0.49
1:C:131:LEU:HD22	1:C:599:ILE:CD1	2.42	0.49
1:G:740:TRP:CH2	1:H:314:PRO:HB2	2.47	0.49
1:F:539:ASN:O	1:F:542:PHE:N	2.38	0.49
1:G:482:ILE:HG22	1:G:483:ASN:N	2.27	0.49
1:G:553:VAL:HG22	1:G:554:SER:H	1.78	0.49
1:H:654:SER:C	1:H:657:THR:HG22	2.33	0.49
1:A:756:ILE:HD12	1:A:756:ILE:N	2.27	0.49
1:B:680:ARG:HB3	1:B:684:HIS:CD2	2.47	0.49
1:D:580:ILE:O	1:D:580:ILE:HG23	2.11	0.49
1:C:199:SER:O	1:C:376:THR:HG22	2.12	0.49
1:G:180:LYS:N	1:G:180:LYS:HD2	2.28	0.49
1:B:152:TYR:HA	1:B:161:LYS:HB3	1.95	0.49
1:H:306:GLY:N	1:H:459:GLY:O	2.46	0.49
1:E:297:PHE:CD1	1:E:297:PHE:N	2.81	0.49
1:E:349:MET:CG	1:E:367:THR:HA	2.41	0.49
1:A:361:SER:O	1:A:362:THR:HB	2.12	0.49
1:F:238:GLY:N	1:F:257:VAL:HB	2.27	0.49
1:H:240:LYS:O	1:H:241:LYS:HB3	2.12	0.49
1:H:708:THR:CG2	1:H:710:PRO:HD2	2.40	0.49
1:A:465:GLU:HA	1:A:468:GLU:HB2	1.95	0.49
1:C:201:ILE:HD11	1:C:209:LEU:H	1.76	0.49
1:H:134:LYS:O	1:H:138:THR:HG23	2.13	0.49
1:C:224:LYS:HE3	1:C:224:LYS:HA	1.95	0.49
1:E:272:GLU:OE2	1:E:330:PRO:O	2.29	0.49
1:A:680:ARG:HB3	1:A:684:HIS:CD2	2.48	0.49

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:C:146:LEU:C	1:C:146:LEU:HD23	2.33	0.49
1:D:453:TRP:CG	1:D:463:ALA:HB2	2.47	0.49
1:C:124:TRP:HH2	1:C:596:GLN:HG2	1.77	0.49
1:A:305:THR:HG23	1:A:464:THR:HG21	1.93	0.49
1:D:582:GLU:CD	1:D:582:GLU:H	2.15	0.49
1:F:347:GLY:C	1:F:348:ASN:HD22	2.16	0.49
1:A:240:LYS:O	1:A:240:LYS:HG2	2.12	0.49
1:D:240:LYS:NZ	1:E:520:GLN:HE22	2.11	0.49
1:H:239:THR:HB	1:H:244:GLU:CD	2.32	0.49
1:C:335:GLN:NE2	1:C:336:THR:HG22	2.28	0.49
1:E:307:ASP:N	1:E:461:VAL:HG13	2.28	0.49
1:A:446:ARG:HH12	1:A:602:THR:HA	1.77	0.49
1:C:330:PRO:O	1:C:331:ASN:CB	2.60	0.49
1:C:682:GLU:OE2	1:C:699:HIS:CE1	2.66	0.49
1:D:619:LEU:HD23	1:D:620:SER:N	2.28	0.49
1:H:749:LEU:O	1:H:750:SER:HB3	2.13	0.49
1:C:676:ASP:O	1:C:680:ARG:HG3	2.12	0.49
1:E:311:PRO:O	1:E:693:LYS:HA	2.11	0.49
1:D:311:PRO:O	1:D:693:LYS:HA	2.13	0.49
1:B:411:ALA:HA	1:B:457:ASP:OD2	2.13	0.49
1:C:281:ILE:HD12	1:C:281:ILE:N	2.28	0.49
1:G:240:LYS:O	1:G:240:LYS:HG2	2.13	0.49
1:E:232:LEU:HD11	1:E:256:ILE:HG13	1.95	0.49
1:F:237:PHE:CD1	1:F:261:LYS:HG3	2.48	0.49
1:F:240:LYS:O	1:F:241:LYS:HB3	2.13	0.49
1:D:239:THR:C	1:D:241:LYS:N	2.65	0.49
1:B:698:ARG:HA	1:B:707:HIS:HE2	1.78	0.49
1:F:719:ARG:CG	1:F:719:ARG:HH11	2.26	0.49
1:G:161:LYS:HA	1:G:164:ASN:ND2	2.19	0.49
1:H:409:ARG:NH2	1:H:454:SER:HB2	2.26	0.49
1:B:361:SER:O	1:B:362:THR:HB	2.13	0.49
1:G:240:LYS:O	1:G:241:LYS:HB3	2.12	0.49
1:A:237:PHE:HD2	1:A:258:ARG:HB2	1.78	0.49
1:B:386:ILE:CG2	1:B:454:SER:HB3	2.43	0.49
1:B:496:VAL:CG1	1:B:506:ILE:HD13	2.43	0.49
1:B:620:SER:OG	1:C:508:LYS:HE2	2.13	0.49
1:E:506:ILE:O	1:E:510:MET:HG3	2.13	0.49
1:G:224:LYS:HA	1:G:224:LYS:HE3	1.95	0.49
1:B:305:THR:HG23	1:B:305:THR:O	2.13	0.49
1:H:295:LEU:HD11	1:H:568:THR:OG1	2.13	0.49
1:A:682:GLU:OE2	1:A:699:HIS:CE1	2.65	0.49
1:F:618:LEU:HD21	1:F:742:ILE:CG2	2.43	0.49

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:G:298:PHE:HE2	1:G:457:ASP:HB3	1.77	0.49
1:C:654:SER:C	1:C:657:THR:HG22	2.33	0.49
1:C:677:ARG:NE	1:C:750:SER:HB2	2.28	0.49
1:H:453:TRP:CG	1:H:463:ALA:HB2	2.47	0.49
1:D:180:LYS:HD2	1:D:180:LYS:N	2.28	0.49
1:B:425:LEU:O	1:B:429:LEU:HB2	2.13	0.49
1:F:349:MET:HA	1:F:368:SER:N	2.27	0.48
1:H:232:LEU:HD13	1:H:254:ILE:HG22	1.94	0.48
1:G:286:THR:HG21	1:G:360:ASP:HB2	1.94	0.48
1:A:240:LYS:HA	1:A:262:ILE:HD13	1.95	0.48
1:D:357:TRP:HE1	1:D:365:MET:CE	2.26	0.48
1:G:446:ARG:HH12	1:G:602:THR:HA	1.78	0.48
1:G:222:TYR:CE2	1:G:308:PRO:HG3	2.48	0.48
1:G:732:ARG:HH11	1:G:732:ARG:CG	2.23	0.48
1:D:539:ASN:HD22	1:D:539:ASN:C	2.15	0.48
1:E:131:LEU:HD22	1:E:599:ILE:HD11	1.94	0.48
1:A:677:ARG:HE	1:A:750:SER:HB2	1.78	0.48
1:B:753:VAL:HG12	1:B:754:TRP:CG	2.48	0.48
1:F:759:GLU:O	1:F:760:PHE:C	2.50	0.48
1:C:317:ASN:OD1	2:C:762:NAG:O7	2.31	0.48
1:B:230:GLY:O	1:B:372:ASN:HB2	2.13	0.48
1:G:721:GLN:O	1:G:723:ASN:N	2.46	0.48
1:C:233:VAL:HG12	1:C:234:HIS:N	2.28	0.48
1:G:199:SER:O	1:G:376:THR:HG22	2.12	0.48
1:A:467:LEU:HD21	1:A:544:PHE:CZ	2.48	0.48
1:F:582:GLU:CD	1:F:582:GLU:H	2.17	0.48
1:F:201:ILE:CD1	1:F:211:TYR:O	2.60	0.48
1:F:409:ARG:HB2	1:F:452:SER:OG	2.13	0.48
1:G:161:LYS:O	1:G:164:ASN:HB2	2.13	0.48
1:F:161:LYS:O	1:F:164:ASN:HB2	2.13	0.48
1:A:153:VAL:HG22	1:A:154:PRO:CD	2.43	0.48
1:H:409:ARG:HB2	1:H:452:SER:OG	2.14	0.48
1:E:238:GLY:HA3	1:E:267:LYS:CD	2.44	0.48
1:A:297:PHE:N	1:A:297:PHE:CD1	2.81	0.48
1:C:430:ALA:HA	1:C:450:PHE:CZ	2.48	0.48
1:D:430:ALA:HA	1:D:450:PHE:CZ	2.48	0.48
1:D:205:LYS:H	1:D:205:LYS:CD	2.19	0.48
1:C:515:HIS:CD2	1:C:516:PRO:CD	2.97	0.48
1:F:208:ARG:HD3	1:F:208:ARG:N	2.27	0.48
1:F:539:ASN:HD22	1:F:539:ASN:C	2.16	0.48
1:H:498:ALA:HB2	1:H:553:VAL:HA	1.95	0.48
1:B:197:GLN:NE2	1:B:215:ASN:HB3	2.27	0.48

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:G:756:ILE:N	1:G:756:ILE:HD12	2.28	0.48
1:D:404:VAL:HA	1:D:449:ILE:HG23	1.95	0.48
1:H:161:LYS:O	1:H:164:ASN:HB2	2.13	0.48
1:G:238:GLY:HA2	1:G:257:VAL:HB	1.95	0.48
1:D:244:GLU:OE1	1:D:244:GLU:HA	2.13	0.48
1:F:430:ALA:HA	1:F:450:PHE:CZ	2.48	0.48
1:A:667:ASP:HB3	1:A:670:VAL:CG2	2.36	0.48
1:D:324:SER:O	1:D:325:ARG:HB3	2.13	0.48
1:F:163:GLU:O	1:F:167:LEU:HG	2.13	0.48
1:D:732:ARG:NH1	1:D:732:ARG:HG3	2.23	0.48
1:E:278:GLY:HA2	1:E:333:PRO:HG2	1.94	0.48
1:F:222:TYR:HB3	1:F:329:LEU:HD23	1.95	0.48
1:C:700:VAL:HG23	1:C:701:PHE:CD1	2.48	0.48
1:A:655:ARG:HH11	1:A:751:GLY:HA2	1.76	0.48
1:B:198:ASN:OD1	1:B:378:SER:N	2.44	0.48
1:E:305:THR:HG23	1:E:305:THR:O	2.12	0.48
1:H:607:LEU:CD1	1:H:609:LEU:HG	2.43	0.48
1:F:282:TYR:HE1	1:F:284:ASP:HB3	1.78	0.48
1:F:197:GLN:HE21	1:F:215:ASN:HB3	1.78	0.48
1:H:199:SER:O	1:H:376:THR:HG22	2.13	0.48
1:B:712:LEU:HD23	1:B:712:LEU:C	2.34	0.48
1:F:122:LEU:HD12	1:F:122:LEU:N	2.28	0.48
1:F:306:GLY:N	1:F:459:GLY:O	2.46	0.48
1:D:201:ILE:HA	1:D:213:VAL:HG23	1.94	0.48
1:D:202:ILE:HB	1:D:210:VAL:CG1	2.44	0.48
1:H:283:MET:HG3	1:H:297:PHE:CE1	2.49	0.48
1:B:211:TYR:CG	1:B:212:LEU:N	2.81	0.48
1:B:236:ASN:O	1:B:243:PHE:HD1	1.96	0.48
1:B:343:GLU:OE2	1:B:362:THR:HG21	2.13	0.48
1:E:335:GLN:NE2	1:E:336:THR:HG22	2.28	0.48
1:C:212:LEU:O	1:C:214:GLU:N	2.46	0.48
1:H:699:HIS:CD2	1:H:701:PHE:HB2	2.48	0.48
1:B:650:PHE:CG	1:C:657:THR:HG21	2.48	0.48
1:E:539:ASN:C	1:E:539:ASN:HD22	2.16	0.48
1:G:127:LEU:N	1:G:127:LEU:HD22	2.27	0.48
1:A:712:LEU:HD23	1:A:712:LEU:C	2.33	0.48
1:H:712:LEU:C	1:H:712:LEU:HD23	2.33	0.48
1:A:152:TYR:HA	1:A:161:LYS:HB3	1.96	0.48
1:C:237:PHE:HB2	1:C:243:PHE:CE1	2.48	0.48
1:G:297:PHE:N	1:G:297:PHE:CD1	2.81	0.48
1:G:237:PHE:HD2	1:G:258:ARG:HB2	1.78	0.48
1:F:238:GLY:HA3	1:F:267:LYS:CD	2.44	0.48

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:324:SER:O	1:A:325:ARG:HB3	2.14	0.48
1:E:667:ASP:HB3	1:E:670:VAL:CG2	2.33	0.48
1:E:667:ASP:OD1	1:E:669:PHE:HB3	2.14	0.48
1:H:446:ARG:HH12	1:H:602:THR:HA	1.79	0.48
1:D:325:ARG:HG2	1:D:326:SER:N	2.29	0.48
1:E:700:VAL:HG11	1:E:741:THR:HG21	1.95	0.48
1:A:699:HIS:CD2	1:A:701:PHE:HB2	2.49	0.48
1:F:330:PRO:O	1:F:331:ASN:CB	2.61	0.48
1:G:654:SER:C	1:G:657:THR:HG22	2.34	0.48
1:E:759:GLU:O	1:E:760:PHE:C	2.51	0.48
1:F:204:ASP:OD2	1:F:206:ASN:OD1	2.32	0.48
1:E:672:LYS:HD3	1:E:676:ASP:OD2	2.13	0.48
1:F:532:VAL:HG12	1:G:528:TRP:HE1	1.78	0.48
1:D:305:THR:HG23	1:D:464:THR:HG21	1.94	0.48
1:C:465:GLU:HA	1:C:468:GLU:HB2	1.96	0.48
1:E:361:SER:O	1:E:362:THR:HB	2.13	0.48
1:A:239:THR:HB	1:A:244:GLU:CD	2.33	0.48
1:H:286:THR:HG21	1:H:360:ASP:HB2	1.96	0.48
1:A:309:TYR:HE2	1:A:325:ARG:CA	2.24	0.48
1:G:670:VAL:O	1:G:674:LEU:HG	2.14	0.48
1:D:409:ARG:HH11	1:D:409:ARG:HG2	1.77	0.48
1:H:502:LEU:O	1:H:506:ILE:HG13	2.12	0.48
1:B:759:GLU:O	1:B:760:PHE:C	2.52	0.48
1:A:553:VAL:HG21	1:A:597:PHE:HE2	1.79	0.48
1:B:146:LEU:HD23	1:B:146:LEU:C	2.32	0.48
1:D:528:TRP:CZ3	1:E:500:PRO:HB3	2.48	0.48
1:F:733:ASN:O	1:F:734:GLN:C	2.52	0.48
1:H:619:LEU:HD23	1:H:620:SER:N	2.28	0.48
1:G:712:LEU:C	1:G:712:LEU:HD23	2.34	0.48
1:B:297:PHE:N	1:B:297:PHE:CD1	2.82	0.48
1:E:286:THR:HG21	1:E:360:ASP:HB2	1.96	0.48
1:F:361:SER:O	1:F:362:THR:HB	2.14	0.48
1:H:238:GLY:HA3	1:H:267:LYS:CD	2.43	0.48
1:H:239:THR:C	1:H:241:LYS:N	2.67	0.48
1:C:204:ASP:O	1:C:205:LYS:C	2.51	0.48
1:C:667:ASP:OD1	1:C:669:PHE:HB3	2.14	0.48
1:D:309:TYR:HE2	1:D:325:ARG:CA	2.22	0.48
1:G:618:LEU:HD21	1:G:742:ILE:HG23	1.95	0.48
1:C:655:ARG:HH11	1:C:751:GLY:HA2	1.79	0.48
1:A:392:VAL:HG12	1:A:449:ILE:HB	1.94	0.48
1:H:564:PRO:HG2	1:H:565:TYR:H	1.79	0.48
1:A:305:THR:O	1:A:305:THR:HG23	2.13	0.48

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:D:224:LYS:HE3	1:D:224:LYS:HA	1.96	0.48
1:F:211:TYR:HD2	1:F:213:VAL:N	2.11	0.48
1:B:240:LYS:O	1:B:241:LYS:HB3	2.14	0.48
1:H:361:SER:O	1:H:362:THR:HB	2.14	0.48
1:F:639:LEU:HD23	1:F:643:TYR:HE1	1.78	0.48
1:A:749:LEU:O	1:A:750:SER:HB3	2.14	0.48
1:G:655:ARG:HH11	1:G:751:GLY:HA2	1.79	0.48
1:G:145:LYS:O	1:G:148:ASN:HB2	2.14	0.48
1:H:719:ARG:HH11	1:H:719:ARG:CG	2.27	0.48
1:D:453:TRP:CE3	1:D:463:ALA:HA	2.49	0.48
1:C:408:GLN:HB3	1:C:485:ASP:OD1	2.13	0.48
1:G:193:LYS:HA	1:G:379:ASN:OD1	2.14	0.48
1:F:607:LEU:CD1	1:F:609:LEU:HG	2.44	0.48
1:F:386:ILE:CG2	1:F:454:SER:HB3	2.44	0.48
1:E:207:GLY:O	1:E:209:LEU:N	2.47	0.48
1:A:161:LYS:O	1:A:164:ASN:HB2	2.14	0.48
1:B:161:LYS:O	1:B:164:ASN:HB2	2.14	0.48
1:C:240:LYS:HG2	1:C:240:LYS:O	2.14	0.48
1:G:236:ASN:O	1:G:243:PHE:HD1	1.96	0.48
1:H:240:LYS:HG2	1:H:240:LYS:O	2.14	0.48
1:A:203:VAL:HG23	1:A:206:ASN:O	2.14	0.48
1:E:465:GLU:HA	1:E:468:GLU:HB2	1.96	0.48
1:E:664:GLU:O	1:E:666:THR:N	2.46	0.48
1:B:444:PRO:CB	1:B:602:THR:HG21	2.37	0.48
1:E:161:LYS:HA	1:E:164:ASN:ND2	2.18	0.48
1:H:324:SER:O	1:H:325:ARG:HB3	2.14	0.48
1:D:134:LYS:O	1:D:138:THR:HG23	2.13	0.48
1:F:502:LEU:O	1:F:506:ILE:HG13	2.14	0.48
1:G:732:ARG:NH1	1:G:732:ARG:HG3	2.25	0.48
1:B:330:PRO:O	1:B:331:ASN:CB	2.62	0.48
1:C:619:LEU:HD23	1:C:620:SER:N	2.29	0.48
1:C:698:ARG:HA	1:C:707:HIS:HE2	1.79	0.48
1:H:145:LYS:O	1:H:148:ASN:HB2	2.12	0.48
1:F:654:SER:C	1:F:657:THR:HG22	2.34	0.48
1:F:651:ARG:HG2	1:F:651:ARG:HH11	1.79	0.48
1:C:240:LYS:O	1:C:241:LYS:HB3	2.14	0.48
1:C:244:GLU:HA	1:C:244:GLU:OE1	2.13	0.48
1:G:349:MET:CG	1:G:367:THR:HA	2.41	0.48
1:A:325:ARG:HG2	1:A:326:SER:N	2.29	0.48
1:F:324:SER:O	1:F:325:ARG:HB3	2.14	0.48
1:A:568:THR:HG23	1:A:570:MET:H	1.77	0.48
1:E:618:LEU:HD21	1:E:742:ILE:HG23	1.94	0.48

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:B:515:HIS:CD2	1:B:516:PRO:CD	2.97	0.48
1:E:732:ARG:NH1	1:E:732:ARG:HG3	2.27	0.48
1:A:580:ILE:HG23	1:A:580:ILE:O	2.13	0.48
1:A:700:VAL:HG23	1:A:701:PHE:HD1	1.79	0.48
1:H:488:VAL:HG21	1:H:587:ALA:HA	1.96	0.48
1:G:305:THR:HG23	1:G:305:THR:O	2.12	0.48
1:F:528:TRP:CH2	1:G:500:PRO:HA	2.49	0.48
1:B:453:TRP:CE3	1:B:463:ALA:HA	2.49	0.48
1:G:497:SER:OG	1:G:533:GLU:HB3	2.13	0.48
1:F:390:PHE:CD2	1:F:449:ILE:HD11	2.49	0.48
1:A:497:SER:OG	1:A:533:GLU:HB3	2.14	0.48
1:A:478:ALA:O	1:A:550:ILE:HD12	2.14	0.48
1:A:133:GLU:HA	1:A:136:ASP:HB2	1.95	0.48
1:C:343:GLU:OE2	1:C:362:THR:HG21	2.14	0.47
1:C:409:ARG:HH11	1:C:409:ARG:HG2	1.78	0.47
1:G:240:LYS:HA	1:G:262:ILE:HD13	1.96	0.47
1:A:239:THR:O	1:A:243:PHE:HB2	2.14	0.47
1:D:239:THR:O	1:D:243:PHE:HB2	2.14	0.47
1:C:347:GLY:C	1:C:348:ASN:HD22	2.17	0.47
1:A:430:ALA:HA	1:A:450:PHE:CZ	2.49	0.47
1:E:445:SER:N	1:E:602:THR:HG22	2.29	0.47
1:D:205:LYS:N	1:D:205:LYS:HD2	2.22	0.47
1:B:325:ARG:HG2	1:B:326:SER:N	2.28	0.47
1:F:496:VAL:HG11	1:F:506:ILE:HD13	1.96	0.47
1:G:700:VAL:HG11	1:G:741:THR:HG21	1.96	0.47
1:D:488:VAL:HG13	1:D:586:VAL:HG11	1.96	0.47
1:B:229:THR:HB	1:B:374:LYS:HB2	1.96	0.47
1:E:515:HIS:CD2	1:E:516:PRO:CD	2.97	0.47
1:D:565:TYR:N	1:D:565:TYR:CD2	2.82	0.47
1:D:453:TRP:CD2	1:D:463:ALA:HB2	2.48	0.47
1:B:425:LEU:HD22	1:B:591:ALA:HB2	1.96	0.47
1:E:392:VAL:HG12	1:E:449:ILE:HG13	1.96	0.47
1:D:408:GLN:HB3	1:D:485:ASP:OD1	2.14	0.47
1:B:408:GLN:HB3	1:B:485:ASP:OD1	2.14	0.47
1:C:523:TYR:HE1	1:C:530:SER:OG	1.97	0.47
1:G:390:PHE:CD2	1:G:449:ILE:HD11	2.48	0.47
1:C:180:LYS:N	1:C:180:LYS:HD2	2.29	0.47
1:C:237:PHE:O	1:C:238:GLY:C	2.52	0.47
1:G:357:TRP:O	1:G:359:THR:N	2.45	0.47
1:D:236:ASN:O	1:D:243:PHE:HD1	1.97	0.47
1:B:409:ARG:HG2	1:B:409:ARG:HH11	1.79	0.47
1:H:430:ALA:HA	1:H:450:PHE:CZ	2.49	0.47

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:C:197:GLN:HA	1:C:197:GLN:OE1	2.14	0.47
1:D:699:HIS:CD2	1:D:701:PHE:HB2	2.49	0.47
1:D:515:HIS:CD2	1:D:516:PRO:CD	2.97	0.47
1:B:537:LEU:HD22	1:B:542:PHE:CE2	2.48	0.47
1:H:564:PRO:HG2	1:H:565:TYR:CD2	2.48	0.47
1:C:390:PHE:CD2	1:C:449:ILE:HD11	2.49	0.47
1:E:408:GLN:HB3	1:E:485:ASP:OD1	2.14	0.47
1:H:152:TYR:HA	1:H:161:LYS:HB3	1.96	0.47
1:H:409:ARG:HH11	1:H:409:ARG:HG2	1.79	0.47
1:E:237:PHE:HB2	1:E:243:PHE:CE1	2.48	0.47
1:E:239:THR:HB	1:E:244:GLU:CD	2.34	0.47
1:A:236:ASN:O	1:A:243:PHE:HD1	1.97	0.47
1:D:238:GLY:HA2	1:D:257:VAL:HB	1.96	0.47
1:A:232:LEU:HB2	1:A:373:VAL:CG1	2.44	0.47
1:E:152:TYR:HA	1:E:161:LYS:HB3	1.97	0.47
1:H:444:PRO:CB	1:H:602:THR:HG21	2.38	0.47
1:F:667:ASP:HB3	1:F:670:VAL:CG2	2.37	0.47
1:D:386:ILE:CG2	1:D:454:SER:HB3	2.43	0.47
1:D:699:HIS:CD2	1:D:702:TRP:H	2.32	0.47
1:B:732:ARG:HH11	1:B:732:ARG:CG	2.25	0.47
1:A:654:SER:CA	1:A:657:THR:HG22	2.45	0.47
1:C:565:TYR:CE1	1:C:575:GLU:HB3	2.50	0.47
1:A:131:LEU:HD22	1:A:599:ILE:CD1	2.43	0.47
1:C:473:SER:O	1:C:476:LEU:HB2	2.14	0.47
1:F:446:ARG:NH1	1:F:602:THR:HA	2.30	0.47
1:C:305:THR:HG23	1:C:464:THR:CG2	2.39	0.47
1:H:411:ALA:HA	1:H:457:ASP:OD2	2.14	0.47
1:E:131:LEU:HD22	1:E:599:ILE:CD1	2.44	0.47
1:C:513:VAL:HG22	1:C:592:GLU:HG2	1.96	0.47
1:B:754:TRP:O	1:B:755:ASP:C	2.53	0.47
1:E:146:LEU:C	1:E:146:LEU:HD23	2.34	0.47
1:C:298:PHE:HE2	1:C:457:ASP:HB3	1.78	0.47
1:D:280:LEU:HD12	1:D:337:ILE:CD1	2.44	0.47
1:H:297:PHE:N	1:H:297:PHE:CD1	2.83	0.47
1:B:244:GLU:OE1	1:B:244:GLU:HA	2.14	0.47
1:G:667:ASP:HB3	1:G:670:VAL:CG2	2.35	0.47
1:A:699:HIS:CD2	1:A:702:TRP:H	2.32	0.47
1:B:539:ASN:O	1:B:542:PHE:N	2.39	0.47
1:G:198:ASN:OD1	1:G:377:VAL:HA	2.14	0.47
1:G:376:THR:HG23	1:G:376:THR:O	2.15	0.47
1:D:210:VAL:HG22	1:D:211:TYR:N	2.28	0.47
1:C:308:PRO:HG3	1:C:329:LEU:HD21	1.97	0.47

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:E:239:THR:C	1:E:241:LYS:N	2.68	0.47
1:B:239:THR:O	1:B:243:PHE:HB2	2.15	0.47
1:F:339:ARG:O	1:F:343:GLU:HG2	2.14	0.47
1:A:232:LEU:CD1	1:A:256:ILE:HG13	2.45	0.47
1:A:386:ILE:CG2	1:A:454:SER:HB3	2.44	0.47
1:C:305:THR:O	1:C:305:THR:HG23	2.14	0.47
1:G:330:PRO:O	1:G:331:ASN:CB	2.61	0.47
1:G:483:ASN:HD21	1:G:540:ALA:HB3	1.80	0.47
1:E:654:SER:C	1:E:657:THR:HG22	2.34	0.47
1:H:754:TRP:O	1:H:755:ASP:C	2.53	0.47
1:F:743:GLN:O	1:F:746:ALA:HB3	2.15	0.47
1:B:473:SER:O	1:B:476:LEU:HB2	2.15	0.47
1:F:335:GLN:NE2	1:F:336:THR:HG22	2.29	0.47
1:C:239:THR:O	1:C:241:LYS:N	2.48	0.47
1:G:208:ARG:O	1:G:209:LEU:CB	2.62	0.47
1:E:343:GLU:OE2	1:E:362:THR:HG21	2.15	0.47
1:D:240:LYS:O	1:D:240:LYS:HG2	2.14	0.47
1:B:188:VAL:HG22	1:B:386:ILE:HD11	1.97	0.47
1:H:709:LEU:CB	1:H:710:PRO:HD3	2.42	0.47
1:A:134:LYS:O	1:A:138:THR:HG23	2.14	0.47
1:B:646:ARG:NH1	1:B:646:ARG:CG	2.77	0.47
1:F:667:ASP:OD1	1:F:669:PHE:HB3	2.14	0.47
1:A:446:ARG:NH1	1:A:602:THR:HA	2.30	0.47
1:B:222:TYR:CE2	1:B:308:PRO:HG3	2.50	0.47
1:E:677:ARG:HE	1:E:750:SER:HB2	1.79	0.47
1:F:208:ARG:H	1:F:208:ARG:CD	2.26	0.47
1:G:677:ARG:HE	1:G:750:SER:HB2	1.80	0.47
1:H:553:VAL:HG21	1:H:597:PHE:HE2	1.79	0.47
1:A:564:PRO:HG2	1:A:565:TYR:H	1.80	0.47
1:E:759:GLU:HG3	1:E:760:PHE:H	1.80	0.47
1:E:580:ILE:N	1:E:581:PRO:HD3	2.30	0.47
1:A:180:LYS:H	1:A:180:LYS:HD2	1.80	0.47
1:F:180:LYS:HD2	1:F:180:LYS:H	1.80	0.47
1:D:181:VAL:HA	1:D:391:GLY:HA2	1.96	0.47
1:D:230:GLY:O	1:D:372:ASN:HB2	2.15	0.47
1:H:193:LYS:HA	1:H:379:ASN:OD1	2.15	0.47
1:F:153:VAL:HG22	1:F:154:PRO:CD	2.45	0.47
1:B:203:VAL:HB	1:B:208:ARG:HA	1.97	0.47
1:E:232:LEU:CD2	1:E:256:ILE:HD11	2.45	0.47
1:F:238:GLY:C	1:F:240:LYS:N	2.67	0.47
1:A:190:ILE:HG13	1:A:458:PHE:CD2	2.50	0.47
1:A:409:ARG:HG2	1:A:409:ARG:HH11	1.78	0.47

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:C:297:PHE:N	1:C:297:PHE:CD1	2.83	0.47
1:D:667:ASP:HB3	1:D:670:VAL:CG2	2.35	0.47
1:G:700:VAL:HG23	1:G:701:PHE:CD1	2.49	0.47
1:D:330:PRO:O	1:D:331:ASN:CB	2.59	0.47
1:E:699:HIS:CD2	1:E:701:PHE:HB2	2.50	0.47
1:G:515:HIS:CD2	1:G:516:PRO:CD	2.98	0.47
1:G:539:ASN:C	1:G:539:ASN:HD22	2.18	0.47
1:D:131:LEU:HD22	1:D:599:ILE:HD11	1.96	0.47
1:F:377:VAL:HG23	1:F:377:VAL:O	2.14	0.47
1:D:750:SER:OG	1:D:751:GLY:N	2.46	0.47
1:G:698:ARG:HA	1:G:707:HIS:NE2	2.29	0.47
1:F:233:VAL:HG12	1:F:234:HIS:N	2.30	0.47
1:E:712:LEU:C	1:E:712:LEU:HD23	2.35	0.47
1:E:735:LEU:C	1:E:735:LEU:HD23	2.34	0.47
1:F:307:ASP:N	1:F:461:VAL:HG13	2.30	0.47
1:H:232:LEU:HB2	1:H:373:VAL:CG1	2.45	0.47
1:G:202:ILE:HG13	1:G:213:VAL:HG21	1.97	0.47
1:F:239:THR:C	1:F:241:LYS:N	2.68	0.47
1:F:240:LYS:O	1:F:240:LYS:HG2	2.15	0.47
1:E:327:SER:N	1:E:329:LEU:HD12	2.30	0.47
1:E:612:GLU:O	1:E:614:TYR:N	2.48	0.47
1:C:731:PHE:O	1:C:732:ARG:C	2.53	0.47
1:A:639:LEU:HD23	1:A:643:TYR:HE1	1.79	0.47
1:C:198:ASN:OD1	1:C:377:VAL:HA	2.15	0.47
1:H:676:ASP:O	1:H:680:ARG:HG3	2.14	0.47
1:G:523:TYR:HE1	1:G:530:SER:OG	1.98	0.47
1:A:730:LEU:HG	1:A:734:GLN:OE1	2.15	0.47
1:F:145:LYS:O	1:F:148:ASN:HB2	2.15	0.47
1:G:291:VAL:HG13	1:G:292:ASN:N	2.30	0.47
1:B:743:GLN:O	1:B:746:ALA:HB3	2.15	0.47
1:F:211:TYR:CD2	1:F:212:LEU:N	2.70	0.47
1:H:264:PHE:O	1:H:268:VAL:HG23	2.15	0.47
1:B:239:THR:HB	1:B:244:GLU:CD	2.34	0.47
1:B:239:THR:O	1:B:241:LYS:N	2.48	0.47
1:G:244:GLU:OE1	1:G:244:GLU:HA	2.15	0.47
1:E:202:ILE:HG13	1:E:213:VAL:CG2	2.45	0.47
1:H:237:PHE:HB2	1:H:243:PHE:CE1	2.50	0.47
1:A:190:ILE:CG2	1:A:191:GLN:N	2.78	0.47
1:A:213:VAL:HG11	1:A:345:LEU:CD2	2.44	0.47
1:C:283:MET:HG3	1:C:297:PHE:CE1	2.50	0.47
1:D:667:ASP:CB	1:D:670:VAL:HG22	2.38	0.47
1:F:664:GLU:O	1:F:666:THR:N	2.48	0.47

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:H:224:LYS:HB3	1:H:332:ILE:C	2.35	0.47
1:G:508:LYS:O	1:G:512:ASN:ND2	2.48	0.47
1:A:683:TYR:CD1	1:A:686:LEU:HD12	2.50	0.47
1:B:639:LEU:HD23	1:B:643:TYR:HE1	1.80	0.47
1:F:700:VAL:HG23	1:F:701:PHE:HD1	1.80	0.47
1:H:197:GLN:HA	1:H:197:GLN:OE1	2.15	0.47
1:D:654:SER:C	1:D:657:THR:HG22	2.35	0.47
1:E:145:LYS:O	1:E:148:ASN:HB2	2.15	0.47
1:G:564:PRO:HG2	1:G:565:TYR:H	1.80	0.47
1:D:305:THR:O	1:D:305:THR:HG23	2.14	0.47
1:G:221:ALA:O	1:G:223:SER:N	2.47	0.46
1:B:240:LYS:O	1:B:240:LYS:HG2	2.15	0.46
1:A:409:ARG:NH2	1:A:454:SER:HB2	2.31	0.46
1:C:201:ILE:CD1	1:C:211:TYR:O	2.63	0.46
1:C:349:MET:HA	1:C:368:SER:N	2.30	0.46
1:C:314:PRO:HD2	1:D:740:TRP:CD2	2.50	0.46
1:F:732:ARG:HG3	1:F:732:ARG:NH1	2.28	0.46
1:G:483:ASN:ND2	1:G:540:ALA:HB3	2.30	0.46
1:H:750:SER:OG	1:H:751:GLY:N	2.48	0.46
1:F:198:ASN:OD1	1:F:377:VAL:HA	2.14	0.46
1:C:677:ARG:HE	1:C:750:SER:HB2	1.80	0.46
1:A:753:VAL:HG11	1:B:402:TYR:CE1	2.50	0.46
1:F:197:GLN:HA	1:F:197:GLN:OE1	2.15	0.46
1:H:556:CYS:C	1:H:558:CYS:H	2.17	0.46
1:B:180:LYS:N	1:B:180:LYS:HD2	2.30	0.46
1:D:153:VAL:HG22	1:D:154:PRO:CD	2.45	0.46
1:D:232:LEU:CD2	1:D:256:ILE:HD11	2.45	0.46
1:F:353:CYS:HA	1:F:354:PRO:HD3	1.76	0.46
1:A:307:ASP:OD1	1:A:309:TYR:N	2.48	0.46
1:B:446:ARG:HH12	1:B:602:THR:HA	1.81	0.46
1:F:278:GLY:HA2	1:F:333:PRO:HG2	1.98	0.46
1:D:198:ASN:OD1	1:D:377:VAL:HA	2.15	0.46
1:G:680:ARG:HB3	1:G:684:HIS:CD2	2.50	0.46
1:G:453:TRP:CD2	1:G:463:ALA:HB2	2.50	0.46
1:G:453:TRP:CG	1:G:463:ALA:HB2	2.49	0.46
1:H:453:TRP:CD2	1:H:463:ALA:HB2	2.51	0.46
1:G:180:LYS:H	1:G:180:LYS:HD2	1.80	0.46
1:C:145:LYS:O	1:C:148:ASN:HB2	2.14	0.46
1:E:180:LYS:HD2	1:E:180:LYS:N	2.30	0.46
1:D:161:LYS:HA	1:D:164:ASN:ND2	2.19	0.46
1:D:154:PRO:HD2	1:D:161:LYS:HZ3	1.80	0.46
1:B:153:VAL:HG22	1:B:154:PRO:CD	2.45	0.46

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:D:281:ILE:N	1:D:281:ILE:HD12	2.29	0.46
1:G:202:ILE:HG13	1:G:213:VAL:HG22	1.96	0.46
1:G:306:GLY:HA2	1:G:461:VAL:HG22	1.97	0.46
1:D:240:LYS:O	1:D:241:LYS:HB3	2.15	0.46
1:B:134:LYS:O	1:B:138:THR:HG23	2.16	0.46
1:E:667:ASP:CB	1:E:670:VAL:HG22	2.36	0.46
1:H:588:ARG:HD3	1:H:589:ALA:N	2.31	0.46
1:B:430:ALA:HA	1:B:450:PHE:CZ	2.50	0.46
1:G:325:ARG:HG2	1:G:326:SER:N	2.30	0.46
1:D:496:VAL:HG11	1:D:506:ILE:HD13	1.98	0.46
1:C:732:ARG:NH1	1:C:732:ARG:HG3	2.26	0.46
1:A:700:VAL:HG11	1:A:741:THR:HG21	1.97	0.46
1:H:580:ILE:N	1:H:581:PRO:HD3	2.30	0.46
1:G:295:LEU:HD11	1:G:568:THR:OG1	2.14	0.46
1:D:749:LEU:O	1:D:749:LEU:HG	2.16	0.46
1:C:753:VAL:HG12	1:C:754:TRP:CG	2.50	0.46
1:B:580:ILE:N	1:B:581:PRO:HD3	2.30	0.46
1:B:500:PRO:HB3	1:C:528:TRP:CH2	2.50	0.46
1:E:649:PHE:O	1:E:652:ALA:HB3	2.16	0.46
1:F:264:PHE:CE2	1:F:281:ILE:HG21	2.50	0.46
1:F:161:LYS:HA	1:F:164:ASN:ND2	2.22	0.46
1:D:283:MET:HG3	1:D:297:PHE:CE1	2.51	0.46
1:C:324:SER:O	1:C:325:ARG:HB3	2.15	0.46
1:C:409:ARG:HB2	1:C:452:SER:OG	2.15	0.46
1:B:232:LEU:HD13	1:B:254:ILE:HG22	1.96	0.46
1:B:348:ASN:HB3	1:B:371:LYS:CE	2.33	0.46
1:F:244:GLU:OE1	1:F:244:GLU:HA	2.15	0.46
1:F:357:TRP:HE1	1:F:365:MET:CE	2.29	0.46
1:D:343:GLU:OE2	1:D:362:THR:HG21	2.15	0.46
1:G:664:GLU:O	1:G:666:THR:N	2.49	0.46
1:B:732:ARG:HG3	1:B:732:ARG:NH1	2.27	0.46
1:H:732:ARG:CG	1:H:732:ARG:HH11	2.27	0.46
1:G:488:VAL:HG21	1:G:587:ALA:HA	1.97	0.46
1:C:198:ASN:OD1	1:C:378:SER:N	2.46	0.46
1:A:547:TYR:HD1	1:A:696:PRO:O	1.99	0.46
1:B:553:VAL:HG21	1:B:597:PHE:CE2	2.51	0.46
1:D:197:GLN:OE1	1:D:197:GLN:HA	2.16	0.46
1:E:638:SER:HB3	1:F:320:GLN:OE1	2.15	0.46
1:E:754:TRP:O	1:E:755:ASP:C	2.54	0.46
1:G:282:TYR:HE1	1:G:284:ASP:HB3	1.79	0.46
1:G:651:ARG:HG2	1:G:651:ARG:HH11	1.79	0.46
1:F:409:ARG:HH11	1:F:409:ARG:HG2	1.79	0.46

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:G:203:VAL:HB	1:G:208:ARG:HA	1.97	0.46
1:C:618:LEU:HD11	1:C:742:ILE:CD1	2.46	0.46
1:B:565:TYR:CD2	1:B:565:TYR:N	2.83	0.46
1:E:198:ASN:OD1	1:E:378:SER:N	2.47	0.46
1:G:580:ILE:N	1:G:581:PRO:HD3	2.30	0.46
1:A:750:SER:OG	1:A:751:GLY:N	2.48	0.46
1:C:750:SER:OG	1:C:751:GLY:N	2.49	0.46
1:D:650:PHE:CE2	1:E:654:SER:HA	2.51	0.46
1:D:759:GLU:HG3	1:D:760:PHE:H	1.80	0.46
1:F:580:ILE:N	1:F:581:PRO:HD3	2.31	0.46
1:F:603:HIS:ND1	1:F:604:ASP:OD1	2.49	0.46
1:H:211:TYR:CD1	1:H:344:LYS:HE3	2.50	0.46
1:G:238:GLY:HA3	1:G:267:LYS:HD3	1.97	0.46
1:D:667:ASP:OD1	1:D:669:PHE:HB3	2.16	0.46
1:F:646:ARG:CG	1:F:646:ARG:NH1	2.76	0.46
1:H:325:ARG:HG2	1:H:326:SER:N	2.30	0.46
1:G:324:SER:O	1:G:325:ARG:HB3	2.15	0.46
1:G:314:PRO:HB2	1:H:740:TRP:CH2	2.49	0.46
1:H:488:VAL:HG13	1:H:586:VAL:CG1	2.45	0.46
1:A:330:PRO:O	1:A:331:ASN:CB	2.62	0.46
1:F:488:VAL:HG21	1:F:587:ALA:HA	1.97	0.46
1:H:122:LEU:N	1:H:122:LEU:HD12	2.31	0.46
1:B:651:ARG:HG2	1:B:651:ARG:HH11	1.79	0.46
1:G:349:MET:HG2	1:G:367:THR:HG22	1.98	0.46
1:E:359:THR:CG2	1:E:360:ASP:H	2.05	0.46
1:H:244:GLU:HA	1:H:244:GLU:OE1	2.16	0.46
1:A:188:VAL:HG23	1:A:190:ILE:HD13	1.98	0.46
1:H:224:LYS:HA	1:H:224:LYS:HE3	1.97	0.46
1:A:491:THR:HB	1:A:517:VAL:HG21	1.98	0.46
1:G:411:ALA:HA	1:G:457:ASP:OD2	2.16	0.46
1:C:194:ASP:HB2	1:C:380:VAL:HG13	1.97	0.46
1:C:639:LEU:HD23	1:C:643:TYR:HE1	1.81	0.46
1:A:146:LEU:HD23	1:A:146:LEU:C	2.36	0.46
1:C:411:ALA:HA	1:C:457:ASP:OD2	2.15	0.46
1:G:556:CYS:C	1:G:558:CYS:H	2.19	0.46
1:H:281:ILE:HD12	1:H:281:ILE:N	2.31	0.46
1:G:232:LEU:CD2	1:G:256:ILE:HD11	2.46	0.46
1:D:588:ARG:HD3	1:D:589:ALA:N	2.31	0.46
1:F:325:ARG:HG2	1:F:326:SER:N	2.31	0.46
1:F:564:PRO:HG2	1:F:565:TYR:H	1.81	0.46
1:C:547:TYR:HD1	1:C:696:PRO:O	1.99	0.46
1:E:556:CYS:C	1:E:558:CYS:H	2.18	0.46

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:F:124:TRP:HH2	1:F:596:GLN:HG2	1.81	0.46
1:D:209:LEU:HG	1:D:210:VAL:N	2.30	0.46
1:H:386:ILE:CG2	1:H:454:SER:HB3	2.45	0.46
1:C:238:GLY:C	1:C:240:LYS:N	2.68	0.46
1:C:300:HIS:NE2	1:C:458:PHE:C	2.69	0.46
1:E:238:GLY:C	1:E:240:LYS:N	2.69	0.46
1:A:244:GLU:HA	1:A:244:GLU:OE1	2.15	0.46
1:C:670:VAL:O	1:C:674:LEU:HG	2.16	0.46
1:H:445:SER:N	1:H:602:THR:HG22	2.31	0.46
1:D:307:ASP:H	1:D:461:VAL:HG13	1.80	0.46
1:D:308:PRO:HG2	1:D:309:TYR:CE1	2.51	0.46
1:F:445:SER:N	1:F:602:THR:HG22	2.31	0.46
1:H:326:SER:N	1:H:329:LEU:HD13	2.30	0.46
1:G:614:TYR:HA	1:G:617:GLN:HB2	1.97	0.46
1:G:733:ASN:O	1:G:734:GLN:C	2.54	0.46
1:C:618:LEU:HD13	1:C:701:PHE:HZ	1.81	0.46
1:C:699:HIS:CD2	1:C:702:TRP:H	2.34	0.46
1:B:539:ASN:HD22	1:B:539:ASN:C	2.19	0.46
1:F:305:THR:HG23	1:F:305:THR:O	2.16	0.46
1:B:194:ASP:HB2	1:B:380:VAL:HG13	1.96	0.46
1:E:607:LEU:HD11	1:E:609:LEU:HG	1.97	0.46
1:H:654:SER:CA	1:H:657:THR:HG22	2.46	0.46
1:D:698:ARG:HA	1:D:707:HIS:NE2	2.30	0.46
1:C:453:TRP:CG	1:C:463:ALA:HB2	2.50	0.46
1:E:240:LYS:HA	1:E:262:ILE:HD13	1.97	0.46
1:A:280:LEU:C	1:A:281:ILE:HD12	2.36	0.46
1:C:210:VAL:CG1	1:C:210:VAL:O	2.63	0.46
1:C:214:GLU:C	1:C:216:PRO:HD3	2.36	0.46
1:C:232:LEU:HB2	1:C:373:VAL:CG1	2.46	0.46
1:H:588:ARG:HG3	1:H:588:ARG:NH1	2.31	0.46
1:A:664:GLU:CD	1:A:664:GLU:N	2.69	0.46
1:C:758:ASN:ND2	1:C:758:ASN:N	2.63	0.46
1:C:537:LEU:HD22	1:C:542:PHE:CE2	2.50	0.46
1:G:555:PHE:HZ	1:G:594:ALA:HB2	1.79	0.46
1:G:754:TRP:HA	1:H:470:TYR:OH	2.15	0.46
1:H:288:PHE:HD2	1:H:564:PRO:HA	1.80	0.46
1:A:753:VAL:HG12	1:A:754:TRP:CG	2.51	0.46
1:D:291:VAL:HG13	1:D:292:ASN:N	2.31	0.46
1:H:743:GLN:O	1:H:746:ALA:HB3	2.15	0.46
1:A:582:GLU:CD	1:A:582:GLU:H	2.18	0.46
1:D:349:MET:CG	1:D:367:THR:HA	2.43	0.45
1:C:191:GLN:NE2	1:C:222:TYR:N	2.65	0.45

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:G:280:LEU:C	1:G:281:ILE:HD12	2.37	0.45
1:G:409:ARG:HB2	1:G:452:SER:OG	2.16	0.45
1:B:211:TYR:CE1	1:B:212:LEU:O	2.69	0.45
1:B:238:GLY:C	1:B:240:LYS:N	2.69	0.45
1:B:238:GLY:HA3	1:B:267:LYS:HD3	1.98	0.45
1:H:240:LYS:HA	1:H:262:ILE:HD13	1.97	0.45
1:B:307:ASP:N	1:B:461:VAL:HG13	2.30	0.45
1:C:588:ARG:HD3	1:C:589:ALA:N	2.31	0.45
1:F:515:HIS:CD2	1:F:516:PRO:HD2	2.51	0.45
1:E:732:ARG:HH11	1:E:732:ARG:CG	2.26	0.45
1:E:163:GLU:O	1:E:167:LEU:HG	2.16	0.45
1:H:690:VAL:CG2	1:H:698:ARG:HG2	2.45	0.45
1:E:553:VAL:HG21	1:E:597:PHE:CE2	2.51	0.45
1:B:759:GLU:HG3	1:B:760:PHE:H	1.80	0.45
1:G:649:PHE:O	1:G:652:ALA:HB3	2.16	0.45
1:F:735:LEU:HD23	1:F:735:LEU:C	2.36	0.45
1:F:300:HIS:HE2	1:F:459:GLY:N	2.13	0.45
1:E:209:LEU:O	1:E:210:VAL:O	2.34	0.45
1:D:152:TYR:HA	1:D:161:LYS:HB3	1.98	0.45
1:C:357:TRP:HE1	1:C:365:MET:CE	2.30	0.45
1:D:239:THR:O	1:D:241:LYS:N	2.49	0.45
1:D:262:ILE:HD11	1:D:267:LYS:HG2	1.98	0.45
1:D:361:SER:O	1:D:362:THR:HB	2.16	0.45
1:E:326:SER:N	1:E:329:LEU:HD13	2.31	0.45
1:D:683:TYR:CD1	1:D:686:LEU:HD12	2.50	0.45
1:F:308:PRO:CG	1:F:329:LEU:HD21	2.46	0.45
1:E:749:LEU:O	1:E:749:LEU:HG	2.17	0.45
1:F:677:ARG:HE	1:F:750:SER:HB2	1.79	0.45
1:B:198:ASN:OD1	1:B:377:VAL:HA	2.16	0.45
1:F:654:SER:CA	1:F:657:THR:HG22	2.46	0.45
1:C:576:LEU:O	1:C:580:ILE:HG22	2.15	0.45
1:C:406:GLY:HA2	1:C:451:ALA:O	2.16	0.45
1:D:233:VAL:HG12	1:D:234:HIS:N	2.31	0.45
1:A:291:VAL:HG13	1:A:292:ASN:N	2.30	0.45
1:B:122:LEU:HD12	1:B:122:LEU:N	2.30	0.45
1:F:232:LEU:CD1	1:F:256:ILE:HG13	2.44	0.45
1:H:211:TYR:CD2	1:H:212:LEU:N	2.84	0.45
1:C:235:ALA:O	1:C:236:ASN:O	2.34	0.45
1:C:188:VAL:HG21	1:C:461:VAL:HG11	1.96	0.45
1:B:204:ASP:OD1	1:B:205:LYS:N	2.43	0.45
1:A:262:ILE:HD11	1:A:267:LYS:HG2	1.98	0.45
1:A:353:CYS:HA	1:A:354:PRO:HD3	1.74	0.45

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:359:THR:CG2	1:A:360:ASP:N	2.74	0.45
1:E:588:ARG:NH1	1:E:588:ARG:HG3	2.32	0.45
1:H:700:VAL:HG23	1:H:701:PHE:CD1	2.51	0.45
1:G:699:HIS:CD2	1:G:701:PHE:HB2	2.51	0.45
1:D:508:LYS:HZ1	1:E:624:ASP:HB2	1.79	0.45
1:F:624:ASP:HB2	1:G:508:LYS:HZ2	1.81	0.45
1:A:580:ILE:N	1:A:581:PRO:HD3	2.31	0.45
1:A:731:PHE:O	1:A:732:ARG:C	2.54	0.45
1:D:719:ARG:CG	1:D:719:ARG:NH1	2.78	0.45
1:D:754:TRP:O	1:D:755:ASP:C	2.55	0.45
1:D:580:ILE:N	1:D:581:PRO:HD3	2.31	0.45
1:D:512:ASN:HD21	1:E:627:GLN:HE22	1.64	0.45
1:B:556:CYS:C	1:B:558:CYS:H	2.19	0.45
1:D:232:LEU:HD11	1:D:256:ILE:CG1	2.46	0.45
1:H:204:ASP:HB2	1:H:371:LYS:HA	1.98	0.45
1:G:208:ARG:O	1:G:209:LEU:HB3	2.17	0.45
1:E:201:ILE:HA	1:E:213:VAL:HG23	1.98	0.45
1:A:340:ALA:O	1:A:343:GLU:HB2	2.16	0.45
1:D:588:ARG:HG3	1:D:588:ARG:NH1	2.27	0.45
1:B:445:SER:N	1:B:602:THR:HG22	2.31	0.45
1:G:664:GLU:C	1:G:666:THR:N	2.70	0.45
1:B:664:GLU:O	1:B:666:THR:N	2.50	0.45
1:C:646:ARG:NH1	1:C:646:ARG:CG	2.78	0.45
1:D:308:PRO:HG3	1:D:329:LEU:HD21	1.99	0.45
1:G:326:SER:N	1:G:329:LEU:HD13	2.32	0.45
1:B:700:VAL:HG23	1:B:701:PHE:CD1	2.51	0.45
1:G:699:HIS:CD2	1:G:702:TRP:H	2.34	0.45
1:C:539:ASN:O	1:C:542:PHE:N	2.43	0.45
1:G:198:ASN:OD1	1:G:378:SER:N	2.46	0.45
1:F:194:ASP:HB2	1:F:380:VAL:HG13	1.98	0.45
1:C:753:VAL:HG12	1:C:754:TRP:N	2.31	0.45
1:F:425:LEU:O	1:F:429:LEU:HB2	2.17	0.45
1:E:148:ASN:HD21	1:E:416:ALA:HB2	1.82	0.45
1:C:148:ASN:HD21	1:C:416:ALA:HB2	1.81	0.45
1:E:467:LEU:HD21	1:E:544:PHE:CZ	2.52	0.45
1:D:349:MET:HG2	1:D:367:THR:HG22	1.99	0.45
1:H:188:VAL:HG23	1:H:190:ILE:HD13	1.98	0.45
1:H:349:MET:CG	1:H:367:THR:HA	2.44	0.45
1:C:238:GLY:HA2	1:C:257:VAL:HG11	1.99	0.45
1:G:281:ILE:N	1:G:281:ILE:HD12	2.31	0.45
1:G:343:GLU:OE2	1:G:362:THR:HG21	2.16	0.45
1:H:238:GLY:HA3	1:H:267:LYS:HD3	1.97	0.45

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:C:214:GLU:HG3	1:C:215:ASN:N	2.31	0.45
1:C:232:LEU:CD2	1:C:256:ILE:HD11	2.47	0.45
1:F:515:HIS:HD2	1:F:517:VAL:N	2.09	0.45
1:A:618:LEU:O	1:A:622:VAL:HG23	2.16	0.45
1:F:758:ASN:N	1:F:758:ASN:ND2	2.64	0.45
1:A:732:ARG:NH1	1:A:732:ARG:HG3	2.28	0.45
1:G:547:TYR:HD1	1:G:696:PRO:O	2.00	0.45
1:D:564:PRO:HG2	1:D:565:TYR:H	1.81	0.45
1:D:677:ARG:HE	1:D:750:SER:HB2	1.82	0.45
1:B:197:GLN:OE1	1:B:197:GLN:HA	2.16	0.45
1:D:282:TYR:HE1	1:D:284:ASP:HB3	1.81	0.45
1:B:317:ASN:OD1	2:B:762:NAG:O7	2.35	0.45
1:D:721:GLN:O	1:D:723:ASN:N	2.50	0.45
1:H:723:ASN:HD22	1:H:723:ASN:N	2.14	0.45
1:D:335:GLN:NE2	1:D:336:THR:HG22	2.32	0.45
1:H:232:LEU:CD2	1:H:256:ILE:HD11	2.47	0.45
1:G:232:LEU:HB2	1:G:373:VAL:CG1	2.47	0.45
1:E:353:CYS:HA	1:E:354:PRO:HD3	1.75	0.45
1:F:360:ASP:O	1:F:361:SER:O	2.35	0.45
1:C:197:GLN:HE21	1:C:215:ASN:HB3	1.82	0.45
1:H:222:TYR:CE2	1:H:308:PRO:HG3	2.52	0.45
1:A:612:GLU:O	1:A:614:TYR:N	2.50	0.45
1:C:564:PRO:HG2	1:C:565:TYR:H	1.82	0.45
1:A:555:PHE:HZ	1:A:594:ALA:HB2	1.80	0.45
1:E:654:SER:CA	1:E:657:THR:HG22	2.47	0.45
1:E:411:ALA:HA	1:E:457:ASP:OD2	2.16	0.45
1:H:565:TYR:N	1:H:565:TYR:CD2	2.83	0.45
1:H:753:VAL:HG12	1:H:754:TRP:CG	2.52	0.45
1:B:500:PRO:HB3	1:C:528:TRP:CZ3	2.51	0.45
1:E:392:VAL:HG12	1:E:449:ILE:HB	1.97	0.45
1:F:146:LEU:C	1:F:146:LEU:HD23	2.36	0.45
1:C:580:ILE:O	1:C:580:ILE:HG23	2.16	0.45
1:F:467:LEU:HD21	1:F:544:PHE:CZ	2.52	0.45
1:B:610:ASP:HB3	1:B:613:GLU:CG	2.47	0.45
1:D:523:TYR:HE1	1:D:530:SER:OG	1.99	0.45
1:C:122:LEU:HD12	1:C:122:LEU:N	2.31	0.45
1:D:122:LEU:HD12	1:D:122:LEU:N	2.31	0.45
1:G:197:GLN:OE1	1:G:197:GLN:HA	2.16	0.45
1:B:340:ALA:O	1:B:343:GLU:HB2	2.17	0.45
1:G:238:GLY:HA2	1:G:257:VAL:HG11	1.98	0.45
1:H:240:LYS:C	1:H:242:ASP:N	2.68	0.45
1:A:209:LEU:CG	1:A:210:VAL:N	2.76	0.45

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:E:221:ALA:O	1:E:223:SER:N	2.50	0.45
1:E:306:GLY:N	1:E:459:GLY:O	2.49	0.45
1:D:646:ARG:CG	1:D:646:ARG:NH1	2.77	0.45
1:B:699:HIS:CD2	1:B:702:TRP:CD1	3.05	0.45
1:H:698:ARG:HA	1:H:707:HIS:HE2	1.82	0.45
1:G:194:ASP:HB2	1:G:380:VAL:HG13	1.98	0.45
1:C:740:TRP:CH2	1:D:314:PRO:HB2	2.52	0.45
1:C:641:TRP:CZ2	1:D:316:PHE:HB3	2.52	0.45
1:D:657:THR:HG21	1:E:650:PHE:CD2	2.52	0.45
1:A:565:TYR:HE1	1:A:575:GLU:HB3	1.78	0.45
1:E:680:ARG:HB3	1:E:684:HIS:CD2	2.52	0.45
1:A:508:LYS:O	1:A:512:ASN:ND2	2.49	0.45
1:F:169:VAL:HG13	1:F:427:LEU:HD21	1.99	0.45
1:G:478:ALA:O	1:G:550:ILE:HD12	2.17	0.45
1:C:743:GLN:O	1:C:746:ALA:HB3	2.17	0.45
1:C:235:ALA:O	1:C:236:ASN:C	2.55	0.45
1:H:238:GLY:HA2	1:H:257:VAL:HB	1.98	0.45
1:A:281:ILE:N	1:A:281:ILE:HD12	2.30	0.45
1:C:349:MET:CG	1:C:367:THR:HA	2.44	0.45
1:C:669:PHE:CD1	1:C:669:PHE:C	2.90	0.45
1:E:324:SER:O	1:E:325:ARG:HB3	2.17	0.45
1:B:496:VAL:HG11	1:B:506:ILE:HD13	1.99	0.45
1:F:612:GLU:O	1:F:614:TYR:N	2.50	0.45
1:C:733:ASN:O	1:C:734:GLN:C	2.55	0.45
1:D:483:ASN:ND2	1:D:540:ALA:HB3	2.32	0.45
1:F:553:VAL:HG11	1:F:597:PHE:CD2	2.51	0.45
1:C:754:TRP:O	1:C:755:ASP:C	2.54	0.45
1:A:553:VAL:HG11	1:A:597:PHE:CD2	2.52	0.45
1:A:233:VAL:HG12	1:A:234:HIS:N	2.32	0.45
1:F:533:GLU:HG3	1:G:526:SER:O	2.17	0.45
2:H:761:NAG:H3	2:H:761:NAG:O7	2.16	0.45
1:D:428:LYS:HA	1:D:428:LYS:HD3	1.79	0.45
1:C:150:ASN:O	1:C:161:LYS:NZ	2.49	0.45
1:G:197:GLN:NE2	1:G:215:ASN:HB3	2.31	0.45
1:B:237:PHE:HD2	1:B:258:ARG:HB2	1.82	0.45
1:B:357:TRP:HE1	1:B:365:MET:CE	2.29	0.45
1:B:465:GLU:HA	1:B:468:GLU:HB2	1.99	0.45
1:C:207:GLY:O	1:C:208:ARG:O	2.34	0.45
1:H:700:VAL:HG23	1:H:701:PHE:HD1	1.82	0.45
1:D:731:PHE:HA	1:D:734:GLN:OE1	2.17	0.45
1:G:637:LEU:CD1	1:G:731:PHE:HE2	2.30	0.45
1:F:614:TYR:HA	1:F:617:GLN:HB2	1.99	0.45

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:C:540:ALA:O	1:C:543:PRO:HD2	2.17	0.45
1:D:568:THR:C	1:D:570:MET:H	2.19	0.45
1:D:498:ALA:CB	1:D:553:VAL:HA	2.46	0.45
1:A:607:LEU:HD11	1:A:609:LEU:HG	1.98	0.45
1:B:281:ILE:HD12	1:B:281:ILE:N	2.32	0.45
1:F:146:LEU:O	1:F:146:LEU:HD23	2.17	0.45
1:D:197:GLN:HE21	1:D:215:ASN:HB3	1.82	0.45
1:D:467:LEU:C	1:D:469:GLY:N	2.69	0.45
1:F:649:PHE:O	1:F:652:ALA:HB3	2.17	0.45
1:H:465:GLU:HA	1:H:468:GLU:HB2	1.99	0.45
1:A:197:GLN:HA	1:A:197:GLN:OE1	2.16	0.45
1:F:709:LEU:CB	1:F:710:PRO:HD3	2.46	0.45
1:D:446:ARG:HH12	1:D:602:THR:HA	1.82	0.45
1:E:446:ARG:HH12	1:E:602:THR:HA	1.82	0.45
1:A:224:LYS:HB3	1:A:332:ILE:C	2.37	0.45
1:D:513:VAL:HB	1:D:522:LEU:HD12	1.98	0.45
1:G:498:ALA:CB	1:G:553:VAL:HA	2.46	0.45
1:F:754:TRP:O	1:F:755:ASP:C	2.54	0.45
1:G:723:ASN:HD22	1:G:723:ASN:N	2.14	0.45
1:B:499:SER:O	1:B:501:LEU:N	2.50	0.45
1:H:176:PHE:CE1	1:H:431:GLN:HB2	2.52	0.45
1:H:180:LYS:N	1:H:180:LYS:HD2	2.32	0.45
1:F:152:TYR:HA	1:F:161:LYS:HB3	1.99	0.44
1:A:161:LYS:HA	1:A:164:ASN:ND2	2.19	0.44
1:H:280:LEU:C	1:H:281:ILE:HD12	2.37	0.44
1:C:236:ASN:HB2	1:C:357:TRP:NE1	2.32	0.44
1:C:238:GLY:CA	1:C:267:LYS:HD3	2.46	0.44
1:G:465:GLU:HA	1:G:468:GLU:HB2	1.99	0.44
1:A:212:LEU:O	1:A:213:VAL:C	2.55	0.44
1:C:203:VAL:CG2	1:C:204:ASP:N	2.80	0.44
1:H:200:VAL:HG23	1:H:213:VAL:CG1	2.47	0.44
1:E:300:HIS:HE2	1:E:459:GLY:N	2.14	0.44
1:H:682:GLU:OE2	1:H:699:HIS:CE1	2.70	0.44
1:G:683:TYR:CD1	1:G:686:LEU:HD12	2.52	0.44
1:F:508:LYS:O	1:F:512:ASN:ND2	2.50	0.44
1:E:733:ASN:O	1:E:734:GLN:C	2.55	0.44
1:H:677:ARG:HE	1:H:750:SER:HB2	1.82	0.44
1:A:698:ARG:HA	1:A:707:HIS:NE2	2.31	0.44
1:B:532:VAL:CG1	1:C:528:TRP:HE1	2.30	0.44
1:G:176:PHE:CE1	1:G:431:GLN:HB2	2.52	0.44
1:C:133:GLU:HA	1:C:136:ASP:HB2	1.98	0.44
1:D:497:SER:OG	1:D:533:GLU:HB3	2.17	0.44

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:B:193:LYS:HA	1:B:379:ASN:OD1	2.17	0.44
1:H:291:VAL:HG13	1:H:292:ASN:N	2.31	0.44
1:C:651:ARG:HH11	1:C:651:ARG:HG2	1.82	0.44
1:F:210:VAL:CG1	1:F:211:TYR:H	2.04	0.44
1:F:212:LEU:O	1:F:214:GLU:N	2.51	0.44
1:H:349:MET:HE3	1:H:367:THR:HG22	1.99	0.44
1:E:238:GLY:HA2	1:E:257:VAL:HB	1.99	0.44
1:G:239:THR:O	1:G:241:LYS:N	2.51	0.44
1:G:340:ALA:O	1:G:343:GLU:HB2	2.17	0.44
1:F:238:GLY:HA2	1:F:257:VAL:HB	1.99	0.44
1:A:190:ILE:HG23	1:A:191:GLN:N	2.32	0.44
1:E:386:ILE:CG2	1:E:454:SER:HB3	2.47	0.44
1:D:614:TYR:HA	1:D:617:GLN:HB2	1.98	0.44
1:E:682:GLU:OE2	1:E:699:HIS:CE1	2.70	0.44
1:B:224:LYS:HB3	1:B:332:ILE:C	2.37	0.44
1:B:565:TYR:HB3	1:B:570:MET:HB3	1.99	0.44
1:C:731:PHE:HA	1:C:734:GLN:OE1	2.17	0.44
1:E:564:PRO:HG2	1:E:565:TYR:CD2	2.51	0.44
1:G:740:TRP:NE1	1:H:316:PHE:CZ	2.83	0.44
1:H:639:LEU:HD23	1:H:643:TYR:HE1	1.82	0.44
1:D:483:ASN:HD21	1:D:540:ALA:HB3	1.82	0.44
1:F:131:LEU:HD22	1:F:599:ILE:CD1	2.47	0.44
1:C:553:VAL:HG22	1:C:554:SER:H	1.82	0.44
1:F:270:ASN:O	1:F:274:LEU:HD23	2.17	0.44
1:D:124:TRP:HH2	1:D:596:GLN:HG2	1.82	0.44
1:B:733:ASN:O	1:B:734:GLN:C	2.56	0.44
1:G:406:GLY:HA2	1:G:451:ALA:O	2.18	0.44
1:B:582:GLU:H	1:B:582:GLU:CD	2.21	0.44
1:G:582:GLU:H	1:G:582:GLU:CD	2.21	0.44
1:A:154:PRO:HD2	1:A:161:LYS:HZ3	1.82	0.44
1:G:307:ASP:HB3	1:G:465:GLU:OE1	2.17	0.44
1:B:232:LEU:HB2	1:B:373:VAL:CG1	2.47	0.44
1:B:359:THR:CG2	1:B:360:ASP:N	2.71	0.44
1:A:239:THR:O	1:A:241:LYS:N	2.51	0.44
1:A:221:ALA:O	1:A:223:SER:N	2.50	0.44
1:C:211:TYR:C	1:C:213:VAL:N	2.65	0.44
1:D:664:GLU:CD	1:D:664:GLU:N	2.67	0.44
1:G:731:PHE:HA	1:G:734:GLN:OE1	2.17	0.44
1:G:731:PHE:O	1:G:732:ARG:C	2.55	0.44
1:E:224:LYS:HB3	1:E:332:ILE:C	2.38	0.44
1:A:740:TRP:CD2	1:B:314:PRO:HD2	2.52	0.44
1:H:194:ASP:HB2	1:H:380:VAL:HG13	1.99	0.44

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:D:198:ASN:OD1	1:D:378:SER:N	2.48	0.44
1:H:404:VAL:HA	1:H:449:ILE:HG23	1.98	0.44
1:G:721:GLN:C	1:G:723:ASN:H	2.21	0.44
1:E:124:TRP:HH2	1:E:596:GLN:HG2	1.82	0.44
1:E:133:GLU:HA	1:E:136:ASP:HB2	1.99	0.44
1:F:281:ILE:HD12	1:F:281:ILE:N	2.31	0.44
1:G:190:ILE:HG13	1:G:458:PHE:CE2	2.53	0.44
1:E:281:ILE:N	1:E:281:ILE:HD12	2.31	0.44
1:F:236:ASN:O	1:F:243:PHE:HD1	2.01	0.44
1:D:238:GLY:HA2	1:D:257:VAL:CG1	2.47	0.44
1:C:708:THR:HG22	1:C:711:ALA:N	2.14	0.44
1:G:646:ARG:NH1	1:G:646:ARG:CG	2.78	0.44
1:D:716:LEU:HD13	1:D:731:PHE:CZ	2.53	0.44
1:A:637:LEU:CD1	1:A:731:PHE:HE2	2.31	0.44
1:F:482:ILE:HG22	1:F:483:ASN:N	2.32	0.44
1:B:508:LYS:O	1:B:512:ASN:ND2	2.51	0.44
1:A:482:ILE:HG22	1:A:483:ASN:N	2.33	0.44
1:D:553:VAL:HG21	1:D:597:PHE:CE2	2.52	0.44
1:F:698:ARG:HA	1:F:707:HIS:NE2	2.32	0.44
1:G:565:TYR:CD2	1:G:565:TYR:N	2.84	0.44
1:A:733:ASN:O	1:A:734:GLN:C	2.55	0.44
1:B:124:TRP:HH2	1:B:596:GLN:HG2	1.82	0.44
1:A:143:THR:O	1:A:147:LEU:HG	2.17	0.44
1:H:408:GLN:HB3	1:H:485:ASP:OD1	2.18	0.44
1:C:467:LEU:C	1:C:469:GLY:N	2.69	0.44
1:E:317:ASN:OD1	2:E:762:NAG:O7	2.36	0.44
1:G:122:LEU:N	1:G:122:LEU:HD12	2.32	0.44
1:C:535:LEU:N	1:C:535:LEU:HD22	2.32	0.44
1:F:264:PHE:O	1:F:268:VAL:HG23	2.17	0.44
1:H:154:PRO:HD2	1:H:161:LYS:HZ3	1.83	0.44
1:G:232:LEU:HD11	1:G:256:ILE:CG1	2.47	0.44
1:E:240:LYS:HG2	1:E:240:LYS:O	2.18	0.44
1:E:232:LEU:CD1	1:E:254:ILE:HG22	2.48	0.44
1:H:343:GLU:OE2	1:H:362:THR:HG21	2.16	0.44
1:D:614:TYR:O	1:D:618:LEU:HB2	2.17	0.44
1:A:229:THR:HB	1:A:374:LYS:HB2	2.00	0.44
1:E:731:PHE:O	1:E:732:ARG:C	2.54	0.44
1:B:654:SER:CA	1:B:657:THR:HG22	2.47	0.44
1:A:390:PHE:CD2	1:A:449:ILE:HD11	2.51	0.44
1:C:453:TRP:CD2	1:C:463:ALA:HB2	2.52	0.44
1:D:180:LYS:HD2	1:D:180:LYS:H	1.82	0.44
1:B:133:GLU:HA	1:B:136:ASP:HB2	2.00	0.44

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:F:153:VAL:O	1:F:155:ARG:N	2.49	0.44
1:B:201:ILE:HD12	1:B:202:ILE:H	1.81	0.44
1:B:201:ILE:HD13	1:B:212:LEU:N	2.32	0.44
1:D:238:GLY:HA2	1:D:257:VAL:CB	2.47	0.44
1:A:221:ALA:O	1:A:301:ALA:HB3	2.18	0.44
1:C:209:LEU:O	1:C:211:TYR:N	2.51	0.44
1:B:667:ASP:HB3	1:B:670:VAL:CG2	2.37	0.44
1:D:607:LEU:HD12	1:D:678:VAL:HG11	1.99	0.44
1:H:327:SER:N	1:H:329:LEU:HD12	2.31	0.44
1:D:730:LEU:HG	1:D:734:GLN:OE1	2.18	0.44
1:H:731:PHE:O	1:H:732:ARG:C	2.56	0.44
1:F:311:PRO:O	1:F:693:LYS:HA	2.17	0.44
1:D:204:ASP:O	1:D:206:ASN:N	2.50	0.44
1:B:404:VAL:HA	1:B:449:ILE:HG23	2.00	0.44
1:F:730:LEU:HG	1:F:734:GLN:OE1	2.18	0.44
1:C:580:ILE:N	1:C:581:PRO:HD3	2.31	0.44
1:F:199:SER:O	1:F:376:THR:HG22	2.17	0.44
1:H:282:TYR:HE1	1:H:284:ASP:HB3	1.83	0.44
1:C:181:VAL:HA	1:C:391:GLY:HA2	1.99	0.44
1:F:633:LYS:O	1:F:633:LYS:HD3	2.18	0.44
1:F:232:LEU:HB2	1:F:373:VAL:CG1	2.47	0.44
1:D:212:LEU:O	1:D:212:LEU:HD23	2.18	0.44
1:G:232:LEU:HD13	1:G:254:ILE:HG22	2.00	0.44
1:B:348:ASN:ND2	1:B:348:ASN:N	2.65	0.44
1:F:237:PHE:O	1:F:238:GLY:C	2.53	0.44
1:H:236:ASN:O	1:H:243:PHE:HD1	2.01	0.44
1:B:588:ARG:HG3	1:B:588:ARG:NH1	2.31	0.44
1:F:224:LYS:HE3	1:F:224:LYS:HA	2.00	0.44
1:A:580:ILE:HG23	1:A:583:LEU:HB2	1.99	0.44
1:H:732:ARG:HG3	1:H:732:ARG:NH1	2.29	0.44
1:A:467:LEU:C	1:A:469:GLY:N	2.70	0.44
1:D:392:VAL:HG12	1:D:449:ILE:HB	1.99	0.44
1:F:404:VAL:HA	1:F:449:ILE:HG23	1.99	0.44
1:E:284:ASP:OD1	1:E:287:LYS:HB2	2.18	0.44
1:G:133:GLU:HA	1:G:136:ASP:HB2	1.99	0.44
1:H:349:MET:HG2	1:H:367:THR:HG22	2.00	0.44
1:A:238:GLY:C	1:A:240:LYS:N	2.70	0.44
1:A:238:GLY:HA2	1:A:257:VAL:HB	2.00	0.44
1:F:357:TRP:O	1:F:359:THR:N	2.46	0.44
1:A:306:GLY:HA2	1:A:461:VAL:HG22	1.99	0.44
1:H:201:ILE:HA	1:H:213:VAL:HG21	1.98	0.44
1:H:618:LEU:O	1:H:622:VAL:HG23	2.17	0.44

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:F:588:ARG:HD3	1:F:589:ALA:N	2.33	0.44
1:C:278:GLY:HA2	1:C:333:PRO:HG2	2.00	0.44
1:A:488:VAL:HG21	1:A:587:ALA:HA	2.00	0.44
1:H:730:LEU:HG	1:H:734:GLN:OE1	2.17	0.44
1:H:491:THR:HB	1:H:517:VAL:HG21	2.00	0.44
1:D:411:ALA:HA	1:D:457:ASP:OD2	2.17	0.44
1:A:721:GLN:O	1:A:723:ASN:N	2.50	0.44
1:D:176:PHE:CE1	1:D:431:GLN:HB2	2.53	0.44
1:A:127:LEU:N	1:A:127:LEU:HD22	2.32	0.44
1:D:633:LYS:O	1:D:633:LYS:HD3	2.18	0.44
1:C:633:LYS:HD3	1:C:633:LYS:O	2.18	0.44
1:B:357:TRP:O	1:B:359:THR:N	2.44	0.44
1:G:238:GLY:HA2	1:G:257:VAL:CB	2.48	0.44
1:F:238:GLY:HA3	1:F:267:LYS:HD3	2.00	0.44
1:E:430:ALA:HA	1:E:450:PHE:CZ	2.53	0.44
1:C:134:LYS:O	1:C:138:THR:HG23	2.18	0.44
1:H:585:LYS:O	1:H:588:ARG:HB3	2.18	0.44
1:H:278:GLY:HA2	1:H:333:PRO:HG2	2.00	0.44
1:F:731:PHE:O	1:F:732:ARG:C	2.56	0.44
1:B:731:PHE:O	1:B:732:ARG:C	2.56	0.44
1:G:641:TRP:CZ2	1:H:316:PHE:HB3	2.53	0.44
1:H:749:LEU:O	1:H:749:LEU:HG	2.18	0.44
1:F:198:ASN:OD1	1:F:378:SER:N	2.49	0.44
1:G:607:LEU:HD11	1:G:609:LEU:HG	1.99	0.44
1:A:146:LEU:O	1:A:146:LEU:HD23	2.17	0.44
1:A:146:LEU:C	1:A:148:ASN:H	2.22	0.44
1:G:404:VAL:HA	1:G:449:ILE:HG23	2.00	0.44
1:B:180:LYS:H	1:B:180:LYS:HD2	1.83	0.44
1:F:478:ALA:O	1:F:550:ILE:HD12	2.18	0.44
1:G:603:HIS:C	1:G:603:HIS:CD2	2.91	0.44
1:C:161:LYS:O	1:C:164:ASN:HB2	2.18	0.43
1:H:190:ILE:CG2	1:H:191:GLN:N	2.81	0.43
1:D:708:THR:HG22	1:D:711:ALA:N	2.14	0.43
1:C:709:LEU:CB	1:C:710:PRO:HD3	2.48	0.43
1:A:349:MET:HG2	1:A:367:THR:HG22	2.00	0.43
1:D:664:GLU:O	1:D:666:THR:N	2.49	0.43
1:B:699:HIS:CD2	1:B:701:PHE:HB2	2.53	0.43
1:F:309:TYR:HE2	1:F:325:ARG:CA	2.24	0.43
1:C:699:HIS:CD2	1:C:701:PHE:HB2	2.53	0.43
1:H:555:PHE:HZ	1:H:594:ALA:HB2	1.82	0.43
1:B:677:ARG:HE	1:B:750:SER:HB2	1.83	0.43
1:B:719:ARG:CG	1:B:719:ARG:NH1	2.80	0.43

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:H:148:ASN:HD21	1:H:416:ALA:HB2	1.83	0.43
1:C:672:LYS:HD3	1:C:676:ASP:OD2	2.18	0.43
1:A:392:VAL:HG12	1:A:449:ILE:CB	2.48	0.43
1:A:376:THR:HG23	1:A:376:THR:O	2.18	0.43
1:H:721:GLN:O	1:H:723:ASN:N	2.51	0.43
1:F:467:LEU:C	1:F:469:GLY:N	2.69	0.43
1:A:603:HIS:ND1	1:A:604:ASP:OD1	2.51	0.43
1:G:467:LEU:C	1:G:469:GLY:N	2.70	0.43
1:A:122:LEU:HD12	1:A:122:LEU:N	2.32	0.43
1:G:428:LYS:HD3	1:G:428:LYS:HA	1.79	0.43
1:B:428:LYS:HA	1:B:428:LYS:HD3	1.79	0.43
1:E:428:LYS:HD3	1:E:428:LYS:HA	1.79	0.43
1:F:201:ILE:HD12	1:F:202:ILE:N	2.32	0.43
1:E:153:VAL:HG22	1:E:154:PRO:CD	2.48	0.43
1:G:409:ARG:HH11	1:G:409:ARG:HG2	1.83	0.43
1:E:238:GLY:HA3	1:E:267:LYS:HD3	2.00	0.43
1:A:357:TRP:HE1	1:A:365:MET:CE	2.31	0.43
1:D:240:LYS:HA	1:D:262:ILE:HD13	1.99	0.43
1:H:359:THR:CG2	1:H:360:ASP:N	2.75	0.43
1:C:614:TYR:HA	1:C:617:GLN:HB2	2.00	0.43
1:C:224:LYS:HB3	1:C:332:ILE:C	2.38	0.43
1:C:331:ASN:O	1:C:332:ILE:HD13	2.18	0.43
1:D:331:ASN:O	1:D:332:ILE:HD13	2.18	0.43
1:G:229:THR:HB	1:G:374:LYS:HB2	1.99	0.43
1:D:539:ASN:O	1:D:542:PHE:N	2.45	0.43
1:B:690:VAL:CG2	1:B:698:ARG:HG2	2.47	0.43
1:G:753:VAL:HG12	1:G:754:TRP:CG	2.53	0.43
1:B:513:VAL:HB	1:B:522:LEU:HD12	2.00	0.43
1:A:754:TRP:O	1:A:755:ASP:C	2.55	0.43
1:A:737:LEU:HD11	1:B:693:LYS:HE2	2.00	0.43
1:H:284:ASP:OD1	1:H:287:LYS:HB2	2.18	0.43
1:B:233:VAL:HG12	1:B:234:HIS:N	2.33	0.43
1:C:721:GLN:O	1:C:723:ASN:N	2.51	0.43
2:B:761:NAG:H3	2:B:761:NAG:O7	2.18	0.43
1:A:633:LYS:O	1:A:633:LYS:HD3	2.18	0.43
1:A:735:LEU:HD23	1:A:735:LEU:C	2.38	0.43
1:F:188:VAL:HB	1:F:307:ASP:HB2	2.00	0.43
1:F:211:TYR:HD2	1:F:212:LEU:N	2.06	0.43
1:C:238:GLY:HA2	1:C:257:VAL:HB	2.00	0.43
1:C:359:THR:CG2	1:C:360:ASP:H	2.01	0.43
1:G:188:VAL:HG23	1:G:190:ILE:HD13	2.00	0.43
1:E:197:GLN:OE1	1:E:197:GLN:HA	2.17	0.43

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:359:THR:CG2	1:A:360:ASP:H	2.04	0.43
1:C:203:VAL:HG23	1:C:204:ASP:N	2.34	0.43
1:H:308:PRO:HG3	1:H:329:LEU:HD21	1.99	0.43
1:H:758:ASN:N	1:H:758:ASN:ND2	2.66	0.43
1:B:637:LEU:CD1	1:B:731:PHE:HE2	2.30	0.43
1:G:758:ASN:N	1:G:758:ASN:ND2	2.64	0.43
1:F:749:LEU:HG	1:F:749:LEU:O	2.18	0.43
1:B:513:VAL:HG22	1:B:592:GLU:HG2	2.01	0.43
1:E:576:LEU:O	1:E:580:ILE:HG22	2.18	0.43
1:G:402:TYR:HB3	1:G:449:ILE:HG22	1.99	0.43
1:G:233:VAL:HG12	1:G:234:HIS:N	2.33	0.43
1:A:556:CYS:C	1:A:558:CYS:H	2.21	0.43
1:B:478:ALA:O	1:B:550:ILE:HD12	2.18	0.43
1:H:402:TYR:CD1	1:H:402:TYR:N	2.87	0.43
1:A:428:LYS:HD3	1:A:428:LYS:HA	1.82	0.43
1:F:221:ALA:O	1:F:223:SER:N	2.52	0.43
1:H:230:GLY:O	1:H:372:ASN:HB2	2.19	0.43
1:H:203:VAL:O	1:H:372:ASN:O	2.36	0.43
1:F:262:ILE:HD11	1:F:267:LYS:HG2	1.99	0.43
1:C:280:LEU:HD12	1:C:337:ILE:CD1	2.46	0.43
1:D:188:VAL:HB	1:D:307:ASP:HB2	2.00	0.43
1:G:327:SER:N	1:G:329:LEU:HD12	2.33	0.43
1:C:612:GLU:O	1:C:614:TYR:N	2.51	0.43
1:A:614:TYR:HA	1:A:617:GLN:HB2	1.99	0.43
1:H:580:ILE:HG23	1:H:583:LEU:HB2	1.99	0.43
1:C:539:ASN:O	1:C:541:ALA:N	2.51	0.43
1:C:497:SER:OG	1:C:533:GLU:HB3	2.17	0.43
1:G:754:TRP:HA	1:G:754:TRP:HE3	1.83	0.43
1:A:719:ARG:NH1	1:A:719:ARG:CG	2.80	0.43
1:E:719:ARG:CG	1:E:719:ARG:NH1	2.81	0.43
1:H:753:VAL:HG12	1:H:754:TRP:N	2.33	0.43
1:E:199:SER:O	1:E:376:THR:HG22	2.18	0.43
1:A:406:GLY:HA2	1:A:451:ALA:O	2.18	0.43
1:C:582:GLU:H	1:C:582:GLU:CD	2.22	0.43
2:F:761:NAG:O7	2:F:761:NAG:H3	2.17	0.43
1:B:153:VAL:O	1:B:155:ARG:N	2.50	0.43
1:C:153:VAL:HG22	1:C:154:PRO:CD	2.48	0.43
1:C:307:ASP:OD1	1:C:309:TYR:N	2.50	0.43
1:B:232:LEU:CD2	1:B:256:ILE:HD11	2.49	0.43
1:E:238:GLY:HA2	1:E:257:VAL:HG11	2.01	0.43
1:G:238:GLY:CA	1:G:257:VAL:HB	2.48	0.43
1:H:238:GLY:HA2	1:H:257:VAL:CB	2.48	0.43

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:B:188:VAL:HB	1:B:307:ASP:HB2	2.00	0.43
1:E:709:LEU:CB	1:E:710:PRO:HD3	2.49	0.43
1:A:214:GLU:OE1	1:A:341:ALA:HB2	2.19	0.43
1:A:222:TYR:CE2	1:A:308:PRO:HG3	2.53	0.43
1:F:327:SER:N	1:F:329:LEU:HD12	2.33	0.43
1:D:620:SER:O	1:E:508:LYS:HE3	2.19	0.43
1:A:690:VAL:CG2	1:A:698:ARG:HG2	2.47	0.43
1:E:539:ASN:O	1:E:542:PHE:N	2.45	0.43
1:D:284:ASP:OD1	1:D:287:LYS:HB2	2.19	0.43
1:G:124:TRP:HH2	1:G:596:GLN:HG2	1.83	0.43
1:G:610:ASP:HB3	1:G:613:GLU:CG	2.49	0.43
1:H:648:ASP:OD1	1:H:757:ASP:OD2	2.37	0.43
1:H:633:LYS:O	1:H:633:LYS:HD3	2.18	0.43
1:C:360:ASP:O	1:C:361:SER:O	2.36	0.43
1:C:188:VAL:HG22	1:C:386:ILE:HD11	1.98	0.43
1:G:348:ASN:HB3	1:G:371:LYS:CE	2.34	0.43
1:G:386:ILE:CG2	1:G:454:SER:HB3	2.49	0.43
1:D:238:GLY:CA	1:D:267:LYS:HD3	2.49	0.43
1:A:264:PHE:O	1:A:268:VAL:HG23	2.19	0.43
1:A:300:HIS:O	1:A:301:ALA:CB	2.66	0.43
1:A:348:ASN:HB3	1:A:371:LYS:CE	2.35	0.43
1:C:211:TYR:HD1	1:C:344:LYS:HE3	1.73	0.43
1:F:664:GLU:C	1:F:666:THR:N	2.72	0.43
1:C:689:TYR:CE2	1:D:313:PHE:HB3	2.54	0.43
1:G:222:TYR:CD2	1:G:308:PRO:HG3	2.54	0.43
1:D:488:VAL:HG21	1:D:587:ALA:HA	2.00	0.43
1:E:614:TYR:O	1:E:618:LEU:HB2	2.18	0.43
1:E:488:VAL:HG21	1:E:587:ALA:HA	2.00	0.43
1:A:639:LEU:O	1:A:643:TYR:CD1	2.72	0.43
1:A:194:ASP:HB2	1:A:380:VAL:HG13	1.99	0.43
1:F:148:ASN:HD21	1:F:416:ALA:HB2	1.83	0.43
1:B:603:HIS:ND1	1:B:604:ASP:OD1	2.52	0.43
1:F:133:GLU:HA	1:F:136:ASP:HB2	2.01	0.43
1:H:582:GLU:CD	1:H:582:GLU:H	2.22	0.43
1:C:428:LYS:HA	1:C:428:LYS:HD3	1.80	0.43
1:B:633:LYS:O	1:B:633:LYS:HD3	2.18	0.43
1:D:280:LEU:C	1:D:281:ILE:HD12	2.38	0.43
1:D:349:MET:HB2	1:D:364:ARG:CB	2.49	0.43
1:B:238:GLY:HA2	1:B:257:VAL:HB	2.01	0.43
1:A:343:GLU:OE2	1:A:362:THR:HG21	2.18	0.43
1:H:262:ILE:HD11	1:H:267:LYS:HG2	2.00	0.43
1:B:221:ALA:O	1:B:301:ALA:HB3	2.19	0.43

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:D:708:THR:CG2	1:D:711:ALA:H	2.17	0.43
1:C:349:MET:HG2	1:C:367:THR:HG22	2.01	0.43
1:H:667:ASP:CB	1:H:670:VAL:HG22	2.36	0.43
1:E:188:VAL:HG11	1:E:461:VAL:HG12	2.00	0.43
1:F:664:GLU:N	1:F:664:GLU:CD	2.69	0.43
1:G:446:ARG:NH1	1:G:602:THR:HA	2.33	0.43
1:B:324:SER:O	1:B:325:ARG:HB3	2.19	0.43
1:G:502:LEU:O	1:G:506:ILE:HG13	2.18	0.43
1:E:614:TYR:HA	1:E:617:GLN:HB2	1.99	0.43
1:F:637:LEU:CD1	1:F:731:PHE:HE2	2.31	0.43
1:G:377:VAL:O	1:G:377:VAL:HG23	2.18	0.43
1:A:411:ALA:HA	1:A:457:ASP:OD2	2.19	0.43
1:C:749:LEU:O	1:C:749:LEU:HG	2.18	0.43
1:E:513:VAL:HG22	1:E:592:GLU:HG2	2.01	0.43
1:F:547:TYR:HD1	1:F:696:PRO:O	2.01	0.43
1:A:723:ASN:HD22	1:A:723:ASN:N	2.17	0.43
1:C:721:GLN:C	1:C:723:ASN:H	2.22	0.43
1:F:720:LYS:C	1:F:722:ASN:H	2.22	0.43
1:F:721:GLN:O	1:F:723:ASN:N	2.51	0.43
1:C:603:HIS:CD2	1:C:603:HIS:C	2.91	0.43
1:D:133:GLU:HA	1:D:136:ASP:HB2	1.98	0.43
1:B:467:LEU:HD21	1:B:544:PHE:CZ	2.54	0.43
1:D:627:GLN:HE22	1:E:512:ASN:HD21	1.67	0.43
1:G:735:LEU:C	1:G:735:LEU:HD23	2.39	0.43
1:B:735:LEU:C	1:B:735:LEU:HD23	2.38	0.43
1:C:386:ILE:CG2	1:C:454:SER:HB3	2.49	0.43
1:G:264:PHE:O	1:G:268:VAL:HG23	2.19	0.43
1:E:360:ASP:O	1:E:361:SER:O	2.37	0.43
1:E:213:VAL:CG1	1:E:345:LEU:CD2	2.96	0.43
1:H:360:ASP:O	1:H:361:SER:O	2.37	0.43
1:C:232:LEU:HD11	1:C:256:ILE:CG1	2.49	0.43
1:A:588:ARG:HD3	1:A:589:ALA:N	2.34	0.43
1:G:699:HIS:CD2	1:G:702:TRP:CD1	3.07	0.43
1:C:699:HIS:CD2	1:C:702:TRP:CD1	3.07	0.43
1:G:619:LEU:HD23	1:G:620:SER:N	2.34	0.43
1:E:229:THR:HB	1:E:374:LYS:HB2	2.00	0.43
1:H:637:LEU:CD1	1:H:731:PHE:HE2	2.31	0.43
1:A:654:SER:HA	1:A:657:THR:CG2	2.48	0.43
1:C:565:TYR:N	1:C:565:TYR:CD2	2.87	0.43
1:C:565:TYR:HB3	1:C:570:MET:HB3	2.00	0.43
1:B:488:VAL:HG13	1:B:586:VAL:HG11	2.01	0.43
1:A:749:LEU:O	1:A:749:LEU:HG	2.19	0.43

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:C:499:SER:O	1:C:501:LEU:N	2.52	0.43
1:A:392:VAL:HG12	1:A:449:ILE:HG13	2.00	0.43
1:A:565:TYR:CD2	1:A:565:TYR:N	2.86	0.43
1:F:203:VAL:HG23	1:F:204:ASP:N	2.33	0.43
1:B:146:LEU:C	1:B:148:ASN:H	2.22	0.43
1:D:402:TYR:HB3	1:D:449:ILE:HG22	2.00	0.43
1:E:404:VAL:HA	1:E:449:ILE:HG23	2.00	0.43
1:E:122:LEU:N	1:E:122:LEU:HD12	2.33	0.43
1:H:735:LEU:C	1:H:735:LEU:HD23	2.39	0.43
1:C:308:PRO:HG2	1:C:309:TYR:CE1	2.54	0.43
1:B:204:ASP:OD2	1:B:370:SER:O	2.36	0.43
1:D:520:GLN:NE2	1:E:240:LYS:HZ3	2.17	0.43
1:E:283:MET:HG3	1:E:297:PHE:CE1	2.53	0.43
1:D:353:CYS:HA	1:D:354:PRO:HD3	1.75	0.43
1:A:232:LEU:HD13	1:A:254:ILE:HG22	2.01	0.43
1:E:307:ASP:HB3	1:E:310:THR:HG23	2.01	0.43
1:G:491:THR:HB	1:G:517:VAL:HG21	2.01	0.43
1:E:565:TYR:O	1:E:568:THR:HG22	2.19	0.43
1:A:732:ARG:CG	1:A:732:ARG:HH11	2.28	0.43
1:F:639:LEU:O	1:F:643:TYR:CD1	2.72	0.43
1:G:749:LEU:O	1:G:749:LEU:HG	2.18	0.43
1:E:639:LEU:HD23	1:E:643:TYR:HE1	1.84	0.43
1:A:754:TRP:HA	1:A:754:TRP:HE3	1.84	0.43
1:B:392:VAL:HG12	1:B:449:ILE:HG13	1.99	0.43
1:A:610:ASP:HB3	1:A:613:GLU:CG	2.49	0.43
1:B:482:ILE:HG22	1:B:483:ASN:N	2.34	0.43
1:B:600:LYS:HE3	1:C:627:GLN:HE21	1.84	0.43
1:H:651:ARG:HG2	1:H:651:ARG:HH11	1.83	0.43
1:D:349:MET:CA	1:D:367:THR:HA	2.49	0.43
1:B:376:THR:O	1:B:376:THR:HG23	2.19	0.43
1:E:280:LEU:N	1:E:280:LEU:HD22	2.33	0.43
1:E:349:MET:HB2	1:E:364:ARG:CB	2.49	0.43
1:D:238:GLY:CA	1:D:257:VAL:HB	2.48	0.43
1:A:326:SER:N	1:A:329:LEU:HD13	2.34	0.43
1:H:446:ARG:NH1	1:H:602:THR:HA	2.34	0.43
1:G:445:SER:N	1:G:602:THR:HG22	2.34	0.43
1:G:314:PRO:HD2	1:H:740:TRP:CD2	2.53	0.43
1:D:508:LYS:HE3	1:E:620:SER:O	2.18	0.43
1:H:214:GLU:C	1:H:216:PRO:HD3	2.39	0.43
1:F:699:HIS:CD2	1:F:702:TRP:H	2.35	0.43
1:F:539:ASN:O	1:F:541:ALA:N	2.52	0.43
1:A:513:VAL:HB	1:A:522:LEU:HD12	2.00	0.43

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:H:449:ILE:O	1:H:449:ILE:HG23	2.19	0.43
1:H:376:THR:HG23	1:H:376:THR:O	2.19	0.43
1:A:230:GLY:O	1:A:372:ASN:HB2	2.19	0.43
1:D:303:LEU:HG	1:D:303:LEU:O	2.18	0.43
1:C:161:LYS:HA	1:C:164:ASN:ND2	2.22	0.42
1:H:204:ASP:OD2	1:H:205:LYS:HG3	2.19	0.42
1:C:239:THR:O	1:C:243:PHE:HB2	2.19	0.42
1:G:210:VAL:CG1	1:G:211:TYR:H	2.20	0.42
1:G:306:GLY:CA	1:G:461:VAL:HA	2.38	0.42
1:A:213:VAL:HG11	1:A:345:LEU:HD21	2.01	0.42
1:A:349:MET:CG	1:A:367:THR:HA	2.45	0.42
1:D:208:ARG:HG2	1:D:208:ARG:O	2.18	0.42
1:B:308:PRO:HB2	1:B:329:LEU:HD11	2.01	0.42
1:D:733:ASN:O	1:D:734:GLN:C	2.57	0.42
1:F:308:PRO:HG2	1:F:309:TYR:CE1	2.55	0.42
1:D:502:LEU:O	1:D:506:ILE:HG13	2.19	0.42
1:G:224:LYS:HB3	1:G:332:ILE:C	2.39	0.42
1:B:716:LEU:HD13	1:B:731:PHE:CZ	2.54	0.42
1:C:488:VAL:HG11	1:C:583:LEU:HD12	2.00	0.42
1:G:568:THR:C	1:G:570:MET:H	2.22	0.42
1:F:131:LEU:HD22	1:F:599:ILE:HD11	2.01	0.42
1:G:639:LEU:HD23	1:G:643:TYR:HE1	1.82	0.42
1:E:482:ILE:HG22	1:E:483:ASN:N	2.34	0.42
1:D:553:VAL:HG21	1:D:597:PHE:HE2	1.84	0.42
1:C:759:GLU:HG3	1:C:760:PHE:H	1.83	0.42
1:F:753:VAL:HG12	1:F:754:TRP:CG	2.53	0.42
1:G:759:GLU:HG3	1:G:760:PHE:H	1.83	0.42
1:A:179:SER:O	1:A:180:LYS:C	2.58	0.42
1:F:500:PRO:HB3	1:G:528:TRP:CZ3	2.54	0.42
1:G:169:VAL:HG13	1:G:427:LEU:HD21	2.01	0.42
1:H:143:THR:O	1:H:147:LEU:HG	2.19	0.42
1:E:123:TYR:O	1:E:126:ASP:HB2	2.19	0.42
1:D:603:HIS:CD2	1:D:603:HIS:C	2.92	0.42
1:D:202:ILE:HB	1:D:210:VAL:HG13	2.01	0.42
1:H:349:MET:HB2	1:H:364:ARG:CB	2.50	0.42
1:B:201:ILE:HB	1:B:212:LEU:CD1	2.49	0.42
1:B:349:MET:CG	1:B:367:THR:HA	2.48	0.42
1:B:360:ASP:O	1:B:361:SER:O	2.38	0.42
1:D:238:GLY:C	1:D:240:LYS:N	2.72	0.42
1:D:240:LYS:C	1:D:242:ASP:N	2.70	0.42
1:H:237:PHE:O	1:H:238:GLY:C	2.58	0.42
1:C:444:PRO:CB	1:C:602:THR:HG21	2.38	0.42

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:D:221:ALA:O	1:D:301:ALA:HB3	2.18	0.42
1:D:306:GLY:N	1:D:459:GLY:O	2.52	0.42
1:G:614:TYR:O	1:G:618:LEU:HB2	2.19	0.42
1:F:515:HIS:CD2	1:F:516:PRO:CD	3.02	0.42
1:F:683:TYR:CD1	1:F:686:LEU:HD12	2.53	0.42
1:G:488:VAL:HG11	1:G:583:LEU:HD12	2.00	0.42
1:D:719:ARG:HD3	1:D:726:PHE:CE2	2.53	0.42
1:B:528:TRP:NE1	1:C:532:VAL:HG12	2.33	0.42
1:G:553:VAL:HG21	1:G:597:PHE:CE2	2.54	0.42
1:H:392:VAL:HG12	1:H:449:ILE:CG1	2.49	0.42
1:B:402:TYR:HB3	1:B:449:ILE:HG22	2.00	0.42
1:D:528:TRP:CH2	1:E:500:PRO:HA	2.54	0.42
1:D:390:PHE:CD2	1:D:449:ILE:HD11	2.54	0.42
1:F:497:SER:OG	1:F:533:GLU:HB3	2.19	0.42
1:D:556:CYS:C	1:D:558:CYS:H	2.22	0.42
1:D:473:SER:O	1:D:476:LEU:HB2	2.18	0.42
1:H:181:VAL:HA	1:H:391:GLY:HA2	2.00	0.42
1:D:123:TYR:O	1:D:126:ASP:HB2	2.18	0.42
1:E:176:PHE:CE1	1:E:431:GLN:HB2	2.54	0.42
1:C:610:ASP:HB3	1:C:613:GLU:CG	2.48	0.42
1:F:712:LEU:C	1:F:712:LEU:HD23	2.39	0.42
1:A:651:ARG:HH11	1:A:651:ARG:HG2	1.83	0.42
1:G:190:ILE:CG2	1:G:191:GLN:N	2.83	0.42
1:D:235:ALA:O	1:D:236:ASN:C	2.58	0.42
1:H:239:THR:O	1:H:241:LYS:N	2.53	0.42
1:A:307:ASP:HB3	1:A:310:THR:HG23	2.01	0.42
1:B:664:GLU:C	1:B:666:THR:N	2.73	0.42
1:E:446:ARG:NH1	1:E:602:THR:HA	2.35	0.42
1:D:310:THR:OG1	1:D:465:GLU:OE1	2.37	0.42
1:G:588:ARG:HG3	1:G:588:ARG:NH1	2.34	0.42
1:D:731:PHE:O	1:D:732:ARG:C	2.57	0.42
1:H:731:PHE:HA	1:H:734:GLN:OE1	2.19	0.42
1:F:753:VAL:HG12	1:F:754:TRP:N	2.34	0.42
1:A:514:LYS:HA	1:A:521:PHE:HA	2.00	0.42
1:D:317:ASN:OD1	2:D:762:NAG:O7	2.38	0.42
1:F:556:CYS:C	1:F:558:CYS:H	2.22	0.42
1:D:503:TYR:HD1	1:D:532:VAL:HG21	1.85	0.42
1:F:221:ALA:O	1:F:301:ALA:HB3	2.19	0.42
1:H:206:ASN:OD1	1:H:206:ASN:O	2.38	0.42
1:G:353:CYS:HA	1:G:354:PRO:HD3	1.74	0.42
1:H:236:ASN:HB2	1:H:357:TRP:NE1	2.34	0.42
1:E:446:ARG:NH1	1:E:601:LEU:O	2.52	0.42

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:E:222:TYR:CE2	1:E:308:PRO:HG3	2.54	0.42
1:F:326:SER:N	1:F:329:LEU:HD13	2.33	0.42
1:A:686:LEU:HD23	1:A:699:HIS:N	2.34	0.42
1:C:537:LEU:O	1:C:537:LEU:HD13	2.19	0.42
1:G:488:VAL:HG13	1:G:586:VAL:CG1	2.48	0.42
1:G:555:PHE:CZ	1:G:594:ALA:HB2	2.54	0.42
1:H:392:VAL:HG12	1:H:449:ILE:HB	2.01	0.42
1:A:145:LYS:O	1:A:148:ASN:N	2.52	0.42
1:B:402:TYR:N	1:B:402:TYR:CD1	2.88	0.42
1:H:133:GLU:HA	1:H:136:ASP:HB2	2.00	0.42
1:F:509:THR:C	1:F:511:GLN:N	2.72	0.42
1:D:143:THR:O	1:D:147:LEU:HG	2.18	0.42
1:H:649:PHE:O	1:H:652:ALA:HB3	2.19	0.42
1:H:187:PHE:CZ	1:H:385:LYS:HG3	2.55	0.42
1:C:188:VAL:HB	1:C:307:ASP:HB2	2.01	0.42
1:G:203:VAL:HA	1:G:208:ARG:HA	2.02	0.42
1:B:283:MET:HG3	1:B:297:PHE:CE1	2.54	0.42
1:E:357:TRP:HE1	1:E:365:MET:CE	2.33	0.42
1:B:353:CYS:HA	1:B:354:PRO:HD3	1.75	0.42
1:F:359:THR:CG2	1:F:360:ASP:H	2.05	0.42
1:G:708:THR:HG22	1:G:711:ALA:N	2.14	0.42
1:G:708:THR:CG2	1:G:711:ALA:H	2.16	0.42
1:A:327:SER:N	1:A:329:LEU:HD12	2.34	0.42
1:E:190:ILE:HG23	1:E:191:GLN:N	2.35	0.42
1:E:184:ASP:OD2	1:E:186:HIS:NE2	2.53	0.42
1:B:588:ARG:HD3	1:B:589:ALA:N	2.34	0.42
1:A:669:PHE:CE2	1:B:668:ARG:HD2	2.55	0.42
1:E:398:GLU:N	1:E:399:PRO:CD	2.83	0.42
1:B:699:HIS:CD2	1:B:702:TRP:H	2.36	0.42
1:C:618:LEU:HD21	1:C:742:ILE:CG2	2.49	0.42
1:F:224:LYS:HB3	1:F:332:ILE:C	2.39	0.42
1:F:732:ARG:CG	1:F:732:ARG:NH1	2.83	0.42
1:A:488:VAL:HG13	1:A:586:VAL:CG1	2.49	0.42
1:D:651:ARG:HH11	1:D:651:ARG:HG2	1.84	0.42
1:E:565:TYR:CD2	1:E:565:TYR:N	2.84	0.42
1:G:641:TRP:CH2	1:H:316:PHE:HB3	2.54	0.42
1:F:483:ASN:ND2	1:F:540:ALA:HB3	2.35	0.42
1:G:654:SER:CA	1:G:657:THR:HG22	2.48	0.42
1:F:203:VAL:CG2	1:F:204:ASP:N	2.81	0.42
1:G:392:VAL:HG12	1:G:449:ILE:HG13	2.01	0.42
1:F:721:GLN:C	1:F:723:ASN:H	2.22	0.42
1:E:743:GLN:O	1:E:746:ALA:HB3	2.19	0.42

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:C:509:THR:C	1:C:511:GLN:H	2.22	0.42
1:F:349:MET:HB2	1:F:364:ARG:CB	2.50	0.42
1:C:153:VAL:O	1:C:155:ARG:N	2.50	0.42
1:D:201:ILE:HD12	1:D:202:ILE:N	2.34	0.42
1:H:300:HIS:O	1:H:301:ALA:CB	2.68	0.42
1:C:262:ILE:HD11	1:C:267:LYS:HG2	2.01	0.42
1:C:264:PHE:O	1:C:268:VAL:HG23	2.19	0.42
1:C:306:GLY:CA	1:C:461:VAL:HA	2.31	0.42
1:B:208:ARG:H	1:B:208:ARG:HD3	1.84	0.42
1:E:348:ASN:ND2	1:E:348:ASN:N	2.67	0.42
1:H:238:GLY:HA2	1:H:257:VAL:CG1	2.49	0.42
1:A:300:HIS:NE2	1:A:458:PHE:C	2.73	0.42
1:E:190:ILE:HG13	1:E:458:PHE:CE2	2.54	0.42
1:E:221:ALA:O	1:E:301:ALA:HB3	2.19	0.42
1:E:588:ARG:HD3	1:E:589:ALA:N	2.35	0.42
1:D:446:ARG:NH1	1:D:602:THR:HA	2.34	0.42
1:H:618:LEU:HD11	1:H:742:ILE:CD1	2.49	0.42
1:H:353:CYS:HA	1:H:354:PRO:HD3	1.77	0.42
1:D:327:SER:N	1:D:329:LEU:HD12	2.34	0.42
1:G:700:VAL:HG23	1:G:701:PHE:HD1	1.84	0.42
1:E:732:ARG:NH1	1:E:732:ARG:CG	2.82	0.42
1:D:482:ILE:HG22	1:D:483:ASN:N	2.35	0.42
1:C:654:SER:CA	1:C:657:THR:HG22	2.48	0.42
1:D:194:ASP:HB2	1:D:380:VAL:HG13	2.00	0.42
1:C:690:VAL:CG2	1:C:698:ARG:HG2	2.49	0.42
1:F:650:PHE:CG	1:G:657:THR:HG21	2.54	0.42
1:F:526:SER:O	1:G:533:GLU:HG3	2.20	0.42
1:F:146:LEU:C	1:F:148:ASN:H	2.23	0.42
1:E:180:LYS:HD2	1:E:180:LYS:H	1.85	0.42
1:G:720:LYS:C	1:G:722:ASN:H	2.23	0.42
1:H:270:ASN:O	1:H:274:LEU:HD23	2.19	0.42
1:A:649:PHE:O	1:A:652:ALA:HB3	2.20	0.42
1:E:233:VAL:HG12	1:E:234:HIS:N	2.34	0.42
1:C:308:PRO:CG	1:C:329:LEU:HD21	2.50	0.42
1:A:238:GLY:HA2	1:A:257:VAL:CG1	2.49	0.42
1:A:208:ARG:O	1:A:208:ARG:CD	2.63	0.42
1:C:445:SER:N	1:C:602:THR:HG22	2.35	0.42
1:F:513:VAL:HG22	1:F:592:GLU:HG2	2.00	0.42
1:E:646:ARG:CG	1:E:646:ARG:NH1	2.79	0.42
1:D:221:ALA:O	1:D:223:SER:N	2.53	0.42
1:D:326:SER:N	1:D:329:LEU:HD13	2.35	0.42
1:D:555:PHE:HZ	1:D:594:ALA:HB2	1.85	0.42

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:B:654:SER:HA	1:C:650:PHE:CD2	2.54	0.42
1:B:131:LEU:HD22	1:B:599:ILE:HD11	2.01	0.42
1:H:654:SER:HA	1:H:657:THR:CG2	2.49	0.42
1:G:146:LEU:C	1:G:148:ASN:H	2.23	0.42
1:H:390:PHE:CD2	1:H:449:ILE:HD11	2.54	0.42
1:C:390:PHE:HD2	1:C:449:ILE:HD11	1.85	0.42
1:D:179:SER:O	1:D:180:LYS:C	2.58	0.42
1:G:390:PHE:HD2	1:G:449:ILE:HD11	1.84	0.42
1:A:603:HIS:CD2	1:A:603:HIS:C	2.91	0.42
1:H:720:LYS:C	1:H:722:ASN:H	2.23	0.42
1:B:721:GLN:C	1:B:723:ASN:H	2.23	0.42
1:C:720:LYS:C	1:C:722:ASN:H	2.23	0.42
1:G:153:VAL:O	1:G:155:ARG:N	2.50	0.42
1:H:348:ASN:ND2	1:H:348:ASN:N	2.66	0.42
1:H:203:VAL:O	1:H:372:ASN:OD1	2.38	0.42
1:C:190:ILE:CG2	1:C:191:GLN:N	2.83	0.42
1:B:221:ALA:O	1:B:223:SER:N	2.53	0.42
1:A:308:PRO:HB2	1:A:329:LEU:HD11	2.01	0.42
1:G:668:ARG:HD2	1:H:669:PHE:CD2	2.54	0.42
1:D:479:PHE:CD1	1:D:607:LEU:HD21	2.55	0.42
1:D:300:HIS:O	1:D:301:ALA:CB	2.68	0.42
1:G:588:ARG:HD3	1:G:589:ALA:N	2.34	0.42
1:G:716:LEU:HD13	1:G:731:PHE:CZ	2.55	0.42
1:E:700:VAL:HG23	1:E:701:PHE:CD1	2.55	0.42
1:B:491:THR:HB	1:B:517:VAL:HG21	2.02	0.42
1:A:555:PHE:CZ	1:A:594:ALA:HB2	2.55	0.42
1:G:754:TRP:HA	1:G:754:TRP:CE3	2.54	0.42
1:A:402:TYR:CD1	1:A:402:TYR:N	2.87	0.42
1:A:402:TYR:HB3	1:A:449:ILE:HG22	2.01	0.42
1:D:145:LYS:O	1:D:148:ASN:N	2.52	0.42
1:A:753:VAL:HG12	1:A:754:TRP:N	2.35	0.42
1:E:603:HIS:CE1	1:E:604:ASP:OD2	2.72	0.42
1:H:759:GLU:HG3	1:H:760:PHE:H	1.84	0.42
1:B:148:ASN:HD21	1:B:416:ALA:HB2	1.85	0.42
1:F:607:LEU:HD12	1:F:678:VAL:HG11	2.02	0.42
1:D:197:GLN:NE2	1:D:215:ASN:HB3	2.35	0.42
1:E:467:LEU:C	1:E:469:GLY:N	2.70	0.42
1:A:721:GLN:C	1:A:723:ASN:H	2.22	0.42
1:B:406:GLY:HA2	1:B:451:ALA:O	2.20	0.42
1:E:546:ALA:O	1:E:697:PHE:HA	2.20	0.42
1:A:181:VAL:HA	1:A:391:GLY:HA2	2.00	0.42
1:E:206:ASN:O	1:E:207:GLY:O	2.37	0.42

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:G:262:ILE:HD11	1:G:267:LYS:HG2	2.01	0.42
1:A:202:ILE:HG13	1:A:213:VAL:HG21	2.01	0.42
1:C:370:SER:OG	1:C:371:LYS:HG3	2.20	0.42
1:C:664:GLU:O	1:C:666:THR:N	2.51	0.42
1:H:308:PRO:HB2	1:H:329:LEU:HD11	2.02	0.42
1:H:308:PRO:HG2	1:H:309:TYR:CE1	2.54	0.42
1:D:700:VAL:HG23	1:D:701:PHE:CD1	2.54	0.42
1:H:278:GLY:N	1:H:332:ILE:HG23	2.27	0.42
1:C:716:LEU:HD13	1:C:731:PHE:CZ	2.55	0.42
1:C:637:LEU:CD1	1:C:731:PHE:HE2	2.33	0.42
1:G:580:ILE:HG23	1:G:583:LEU:HB2	2.01	0.42
1:E:737:LEU:CD1	1:F:693:LYS:HE2	2.49	0.42
1:G:148:ASN:HD21	1:G:416:ALA:HB2	1.84	0.42
1:A:402:TYR:CE1	1:B:753:VAL:HG11	2.55	0.42
1:D:611:TYR:OH	1:D:657:THR:HA	2.20	0.42
1:F:737:LEU:C	1:F:739:THR:N	2.73	0.42
1:A:124:TRP:CH2	1:A:596:GLN:HG2	2.54	0.42
1:C:376:THR:O	1:C:376:THR:HG23	2.20	0.42
1:F:509:THR:C	1:F:511:GLN:H	2.22	0.42
1:B:123:TYR:CG	1:C:630:ALA:HB2	2.55	0.42
1:H:610:ASP:HB3	1:H:613:GLU:HG2	2.01	0.42
1:D:349:MET:HA	1:D:367:THR:CA	2.50	0.42
1:C:221:ALA:O	1:C:223:SER:N	2.53	0.42
1:G:351:GLY:O	1:G:364:ARG:HB3	2.19	0.42
1:E:232:LEU:HA	1:E:254:ILE:O	2.19	0.42
1:F:240:LYS:HA	1:F:262:ILE:HD13	2.00	0.42
1:D:664:GLU:C	1:D:666:THR:N	2.72	0.42
1:D:190:ILE:CG2	1:D:191:GLN:N	2.83	0.42
1:D:686:LEU:HD23	1:D:699:HIS:N	2.35	0.42
1:H:278:GLY:N	1:H:332:ILE:CG2	2.81	0.42
1:D:758:ASN:ND2	1:D:758:ASN:N	2.65	0.42
1:H:539:ASN:C	1:H:539:ASN:HD22	2.22	0.42
1:E:483:ASN:ND2	1:E:540:ALA:HB3	2.34	0.42
1:E:483:ASN:HD21	1:E:540:ALA:HB3	1.85	0.42
1:A:564:PRO:HG2	1:A:565:TYR:CD2	2.54	0.42
1:E:555:PHE:HZ	1:E:594:ALA:HB2	1.84	0.42
1:C:737:LEU:C	1:C:739:THR:N	2.73	0.42
1:D:146:LEU:C	1:D:148:ASN:H	2.23	0.42
1:F:411:ALA:HA	1:F:457:ASP:OD2	2.20	0.42
1:F:402:TYR:N	1:F:402:TYR:CD1	2.87	0.42
1:G:188:VAL:HB	1:G:307:ASP:HB2	2.01	0.41
1:G:238:GLY:HA2	1:G:257:VAL:CG1	2.50	0.41

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:G:240:LYS:C	1:G:242:ASP:N	2.72	0.41
1:A:204:ASP:C	1:A:206:ASN:N	2.71	0.41
1:D:669:PHE:CD1	1:D:669:PHE:C	2.92	0.41
1:C:446:ARG:HH12	1:C:602:THR:HA	1.85	0.41
1:D:307:ASP:N	1:D:461:VAL:HG13	2.35	0.41
1:D:682:GLU:OE2	1:D:699:HIS:CE1	2.73	0.41
1:D:699:HIS:CD2	1:D:702:TRP:CD1	3.08	0.41
1:C:683:TYR:CD1	1:C:686:LEU:HD12	2.55	0.41
1:A:488:VAL:HG11	1:A:583:LEU:HD12	2.02	0.41
1:G:131:LEU:HD22	1:G:599:ILE:HD11	2.02	0.41
1:F:699:HIS:CD2	1:F:702:TRP:CD1	3.08	0.41
1:G:719:ARG:CG	1:G:719:ARG:NH1	2.80	0.41
1:G:753:VAL:HG12	1:G:754:TRP:N	2.35	0.41
1:G:145:LYS:O	1:G:148:ASN:N	2.53	0.41
1:D:376:THR:HG23	1:D:376:THR:O	2.20	0.41
1:H:754:TRP:HA	1:H:754:TRP:HE3	1.85	0.41
1:F:197:GLN:NE2	1:F:215:ASN:HB3	2.34	0.41
1:E:392:VAL:HG12	1:E:449:ILE:CB	2.50	0.41
1:H:124:TRP:HH2	1:H:596:GLN:HG2	1.85	0.41
1:F:176:PHE:CE1	1:F:431:GLN:HB2	2.54	0.41
1:H:603:HIS:CD2	1:H:603:HIS:C	2.93	0.41
1:B:415:GLY:HA2	1:B:571:ASP:CG	2.40	0.41
1:A:720:LYS:C	1:A:722:ASN:H	2.22	0.41
1:F:415:GLY:HA2	1:F:571:ASP:CG	2.40	0.41
1:A:193:LYS:HA	1:A:379:ASN:OD1	2.20	0.41
1:D:250:VAL:O	1:D:252:GLY:N	2.53	0.41
1:F:190:ILE:CG2	1:F:191:GLN:N	2.82	0.41
1:G:190:ILE:HG23	1:G:191:GLN:N	2.36	0.41
1:G:349:MET:CB	1:G:367:THR:HA	2.51	0.41
1:G:237:PHE:O	1:G:238:GLY:C	2.58	0.41
1:A:238:GLY:HA2	1:A:257:VAL:CB	2.50	0.41
1:B:188:VAL:HG23	1:B:190:ILE:HD13	2.02	0.41
1:G:709:LEU:CB	1:G:710:PRO:HD3	2.48	0.41
1:A:349:MET:HB2	1:A:364:ARG:CB	2.51	0.41
1:D:445:SER:N	1:D:602:THR:HG22	2.35	0.41
1:A:667:ASP:CB	1:A:670:VAL:HG22	2.40	0.41
1:C:700:VAL:HG23	1:C:701:PHE:HD1	1.84	0.41
1:E:637:LEU:CD1	1:E:731:PHE:HE2	2.33	0.41
1:E:731:PHE:HA	1:E:734:GLN:OE1	2.20	0.41
1:A:637:LEU:HD21	1:A:732:ARG:HE	1.85	0.41
1:E:488:VAL:HG13	1:E:586:VAL:CG1	2.50	0.41
1:F:700:VAL:HG11	1:F:741:THR:HG21	2.01	0.41

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:C:253:SER:C	1:C:277:ILE:HD12	2.41	0.41
1:B:553:VAL:HG11	1:B:597:PHE:CD2	2.54	0.41
1:G:564:PRO:HG2	1:G:565:TYR:CD2	2.54	0.41
1:F:532:VAL:HB	1:G:529:ALA:HB3	2.02	0.41
1:B:730:LEU:HG	1:B:734:GLN:OE1	2.19	0.41
1:B:467:LEU:C	1:B:469:GLY:N	2.73	0.41
1:C:556:CYS:C	1:C:558:CYS:H	2.23	0.41
1:H:514:LYS:HA	1:H:521:PHE:HA	2.02	0.41
1:H:161:LYS:HA	1:H:164:ASN:ND2	2.22	0.41
1:D:232:LEU:HB2	1:D:373:VAL:CG1	2.50	0.41
1:H:300:HIS:NE2	1:H:458:PHE:C	2.72	0.41
1:C:240:LYS:C	1:C:242:ASP:N	2.72	0.41
1:B:351:GLY:O	1:B:364:ARG:HB3	2.20	0.41
1:B:370:SER:OG	1:B:371:LYS:HG3	2.20	0.41
1:H:238:GLY:CA	1:H:257:VAL:HB	2.49	0.41
1:C:202:ILE:HG13	1:C:213:VAL:HG21	2.03	0.41
1:E:190:ILE:CG2	1:E:191:GLN:N	2.81	0.41
1:E:664:GLU:N	1:E:664:GLU:CD	2.68	0.41
1:A:668:ARG:HD2	1:B:669:PHE:CG	2.55	0.41
1:F:513:VAL:HB	1:F:522:LEU:HD12	2.02	0.41
1:G:398:GLU:N	1:G:399:PRO:CD	2.83	0.41
1:E:641:TRP:CD2	1:F:316:PHE:HD2	2.39	0.41
1:E:565:TYR:HE1	1:E:575:GLU:HB3	1.82	0.41
1:C:568:THR:C	1:C:570:MET:H	2.23	0.41
1:D:654:SER:CA	1:D:657:THR:HG22	2.50	0.41
1:E:698:ARG:HA	1:E:707:HIS:HE2	1.85	0.41
1:C:402:TYR:HB3	1:C:449:ILE:HG22	2.02	0.41
1:F:449:ILE:O	1:F:449:ILE:HG23	2.20	0.41
1:C:298:PHE:HB2	1:C:412:TRP:CD2	2.55	0.41
1:B:721:GLN:O	1:B:723:ASN:N	2.53	0.41
1:G:143:THR:O	1:G:147:LEU:HG	2.20	0.41
1:H:503:TYR:HD1	1:H:532:VAL:HG21	1.85	0.41
1:G:503:TYR:HD1	1:G:532:VAL:HG21	1.85	0.41
1:B:514:LYS:HA	1:B:521:PHE:HA	2.02	0.41
1:D:174:ARG:HG2	1:D:174:ARG:HH11	1.86	0.41
1:F:211:TYR:CD2	1:F:213:VAL:N	2.89	0.41
1:F:214:GLU:C	1:F:216:PRO:HD3	2.40	0.41
1:F:280:LEU:C	1:F:281:ILE:HD12	2.40	0.41
1:D:232:LEU:CD1	1:D:256:ILE:HG13	2.49	0.41
1:H:190:ILE:HG23	1:H:191:GLN:N	2.34	0.41
1:H:232:LEU:CD1	1:H:254:ILE:HG22	2.50	0.41
1:H:349:MET:HA	1:H:367:THR:CA	2.49	0.41

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:C:310:THR:OG1	1:C:465:GLU:OE1	2.39	0.41
1:E:237:PHE:O	1:E:238:GLY:C	2.57	0.41
1:B:240:LYS:C	1:B:242:ASP:N	2.72	0.41
1:E:232:LEU:HB2	1:E:373:VAL:CG1	2.49	0.41
1:F:239:THR:O	1:F:241:LYS:N	2.54	0.41
1:F:240:LYS:C	1:F:242:ASP:N	2.72	0.41
1:B:386:ILE:HG22	1:B:454:SER:HB3	2.02	0.41
1:B:709:LEU:CB	1:B:710:PRO:HD3	2.51	0.41
1:A:306:GLY:N	1:A:459:GLY:O	2.53	0.41
1:C:208:ARG:O	1:C:209:LEU:CD1	2.61	0.41
1:C:669:PHE:CD2	1:D:668:ARG:HD2	2.56	0.41
1:F:589:ALA:O	1:F:592:GLU:N	2.53	0.41
1:A:398:GLU:N	1:A:399:PRO:CD	2.84	0.41
1:F:444:PRO:CB	1:F:602:THR:HG21	2.41	0.41
1:E:308:PRO:HG2	1:E:309:TYR:CE1	2.55	0.41
1:C:488:VAL:HG13	1:C:586:VAL:CG1	2.51	0.41
1:A:619:LEU:C	1:A:619:LEU:HD23	2.40	0.41
1:A:148:ASN:HD21	1:A:416:ALA:HB2	1.86	0.41
1:A:754:TRP:NE1	1:B:449:ILE:HD12	2.35	0.41
1:B:498:ALA:CB	1:B:553:VAL:HA	2.50	0.41
1:C:509:THR:C	1:C:511:GLN:N	2.74	0.41
1:G:187:PHE:CZ	1:G:385:LYS:HG3	2.55	0.41
1:B:566:LEU:HA	1:B:566:LEU:HD12	1.92	0.41
2:A:761:NAG:O7	2:A:761:NAG:H3	2.20	0.41
1:F:188:VAL:HG23	1:F:190:ILE:HD13	2.01	0.41
1:H:280:LEU:HD22	1:H:280:LEU:N	2.36	0.41
1:C:191:GLN:HB3	1:C:222:TYR:H	1.85	0.41
1:B:213:VAL:HG11	1:B:345:LEU:CD2	2.47	0.41
1:E:236:ASN:O	1:E:243:PHE:HD1	2.04	0.41
1:B:237:PHE:O	1:B:238:GLY:C	2.59	0.41
1:G:238:GLY:C	1:G:240:LYS:N	2.72	0.41
1:E:201:ILE:HD12	1:E:202:ILE:N	2.35	0.41
1:E:280:LEU:HA	1:E:335:GLN:O	2.19	0.41
1:E:585:LYS:O	1:E:588:ARG:HB3	2.20	0.41
1:D:398:GLU:N	1:D:399:PRO:CD	2.83	0.41
1:F:588:ARG:NH1	1:F:588:ARG:HG3	2.35	0.41
1:H:222:TYR:CD2	1:H:308:PRO:HG3	2.56	0.41
1:D:516:PRO:HG3	1:D:586:VAL:HA	2.02	0.41
1:C:254:ILE:HG22	1:C:255:VAL:N	2.35	0.41
1:B:654:SER:HA	1:B:657:THR:CG2	2.50	0.41
1:D:639:LEU:O	1:D:643:TYR:CD1	2.73	0.41
1:B:528:TRP:CH2	1:C:500:PRO:HA	2.56	0.41

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:H:737:LEU:C	1:H:739:THR:N	2.74	0.41
1:C:402:TYR:CD1	1:C:402:TYR:N	2.88	0.41
1:F:284:ASP:OD1	1:F:287:LYS:HB2	2.21	0.41
1:A:641:TRP:CZ2	2:B:762:NAG:H82	2.56	0.41
1:H:721:GLN:C	1:H:723:ASN:H	2.23	0.41
1:D:203:VAL:HG23	1:D:207:GLY:O	2.21	0.41
1:H:169:VAL:HG13	1:H:427:LEU:HD21	2.03	0.41
2:G:762:NAG:H82	1:H:641:TRP:CZ2	2.56	0.41
2:G:761:NAG:O7	2:G:761:NAG:H3	2.20	0.41
1:F:307:ASP:HB3	1:F:310:THR:HG23	2.02	0.41
1:F:351:GLY:O	1:F:364:ARG:HB3	2.20	0.41
1:B:201:ILE:HD13	1:B:211:TYR:C	2.41	0.41
1:E:212:LEU:O	1:E:212:LEU:HG	2.20	0.41
1:A:280:LEU:HD22	1:A:280:LEU:N	2.36	0.41
1:A:348:ASN:ND2	1:A:348:ASN:N	2.67	0.41
1:C:351:GLY:O	1:C:364:ARG:HB3	2.20	0.41
1:C:669:PHE:CE2	1:D:668:ARG:HD2	2.55	0.41
1:G:664:GLU:N	1:G:664:GLU:CD	2.70	0.41
1:A:664:GLU:C	1:A:666:THR:N	2.74	0.41
1:E:444:PRO:CB	1:E:602:THR:HG21	2.38	0.41
1:B:619:LEU:HD13	1:C:612:GLU:CD	2.40	0.41
1:D:488:VAL:HG11	1:D:583:LEU:HD12	2.01	0.41
1:H:568:THR:C	1:H:570:MET:H	2.24	0.41
1:E:655:ARG:O	1:E:658:THR:N	2.52	0.41
1:E:568:THR:C	1:E:570:MET:H	2.22	0.41
1:C:539:ASN:C	1:C:539:ASN:ND2	2.74	0.41
1:G:639:LEU:O	1:G:643:TYR:CD1	2.74	0.41
1:C:553:VAL:HG11	1:C:597:PHE:CD2	2.56	0.41
1:A:198:ASN:OD1	1:A:377:VAL:HA	2.19	0.41
1:D:721:GLN:C	1:D:723:ASN:H	2.23	0.41
1:B:123:TYR:O	1:B:126:ASP:HB2	2.20	0.41
1:F:250:VAL:O	1:F:252:GLY:N	2.53	0.41
1:G:287:LYS:HB3	1:G:288:PHE:CD1	2.56	0.41
1:B:720:LYS:C	1:B:722:ASN:H	2.24	0.41
1:E:535:LEU:HD22	1:E:535:LEU:N	2.35	0.41
2:C:761:NAG:H3	2:C:761:NAG:O7	2.20	0.41
2:D:761:NAG:H3	2:D:761:NAG:O7	2.21	0.41
1:E:210:VAL:CG1	1:E:211:TYR:N	2.77	0.41
1:H:307:ASP:HB3	1:H:310:THR:HG23	2.01	0.41
1:G:232:LEU:CD1	1:G:256:ILE:HG13	2.51	0.41
1:E:235:ALA:O	1:E:236:ASN:C	2.58	0.41
1:E:232:LEU:HD13	1:E:254:ILE:CG2	2.51	0.41

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:D:360:ASP:O	1:D:361:SER:O	2.39	0.41
1:C:398:GLU:N	1:C:399:PRO:CD	2.83	0.41
1:B:585:LYS:O	1:B:588:ARG:HB3	2.21	0.41
1:A:740:TRP:CH2	1:B:314:PRO:HB2	2.55	0.41
1:G:719:ARG:HD3	1:G:726:PHE:CE2	2.55	0.41
1:C:377:VAL:O	1:C:377:VAL:HG23	2.20	0.41
1:E:654:SER:HA	1:E:657:THR:CG2	2.50	0.41
1:B:754:TRP:HA	1:B:754:TRP:HE3	1.84	0.41
1:F:471:LEU:HD13	1:F:547:TYR:HH	1.86	0.41
1:C:127:LEU:N	1:C:127:LEU:CD2	2.83	0.41
1:C:392:VAL:HG12	1:C:449:ILE:HB	2.02	0.41
1:E:146:LEU:C	1:E:148:ASN:H	2.24	0.41
1:A:317:ASN:OD1	2:A:762:NAG:O7	2.39	0.41
1:E:449:ILE:HG23	1:E:449:ILE:O	2.21	0.41
1:G:402:TYR:CD1	1:G:402:TYR:N	2.88	0.41
1:A:730:LEU:O	1:A:734:GLN:HG3	2.21	0.41
1:E:754:TRP:HA	1:E:754:TRP:HE3	1.86	0.41
1:D:610:ASP:HB3	1:D:613:GLU:CG	2.50	0.41
1:G:174:ARG:HG2	1:G:174:ARG:HH11	1.86	0.41
1:C:712:LEU:HD23	1:C:712:LEU:C	2.41	0.41
1:H:153:VAL:HG22	1:H:154:PRO:CD	2.50	0.41
1:D:280:LEU:HA	1:D:335:GLN:O	2.21	0.41
1:G:283:MET:HG3	1:G:297:PHE:CE1	2.55	0.41
1:G:349:MET:HA	1:G:367:THR:CA	2.50	0.41
1:B:253:SER:C	1:B:277:ILE:HD12	2.41	0.41
1:B:359:THR:CG2	1:B:360:ASP:H	2.02	0.41
1:E:349:MET:HG2	1:E:367:THR:HG22	2.03	0.41
1:D:237:PHE:HD2	1:D:258:ARG:HB2	1.84	0.41
1:A:188:VAL:HB	1:A:307:ASP:HB2	2.03	0.41
1:A:335:GLN:NE2	1:A:336:THR:N	2.68	0.41
1:G:430:ALA:HA	1:G:450:PHE:CE2	2.56	0.41
1:B:327:SER:N	1:B:329:LEU:HD12	2.35	0.41
1:B:326:SER:N	1:B:329:LEU:HD13	2.35	0.41
1:H:646:ARG:CG	1:H:646:ARG:NH1	2.81	0.41
1:C:316:PHE:HB3	1:D:641:TRP:CH2	2.56	0.41
1:E:491:THR:HB	1:E:517:VAL:HG21	2.03	0.41
1:E:314:PRO:HB2	1:F:740:TRP:CH2	2.55	0.41
1:F:229:THR:HB	1:F:374:LYS:HB2	2.03	0.41
1:B:650:PHE:CD2	1:C:654:SER:HA	2.56	0.41
1:B:488:VAL:HG21	1:B:587:ALA:HA	2.02	0.41
1:C:555:PHE:HZ	1:C:594:ALA:HB2	1.85	0.41
1:G:651:ARG:HG2	1:G:651:ARG:NH1	2.36	0.41

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:F:723:ASN:N	1:F:723:ASN:HD22	2.18	0.41
1:F:415:GLY:HA2	1:F:571:ASP:OD2	2.20	0.41
1:H:233:VAL:HG12	1:H:234:HIS:N	2.36	0.41
1:E:187:PHE:HB2	1:E:316:PHE:O	2.21	0.41
1:H:614:TYR:HA	1:H:617:GLN:HB2	2.01	0.41
1:G:633:LYS:HD3	1:G:633:LYS:O	2.20	0.41
1:A:153:VAL:O	1:A:155:ARG:N	2.52	0.41
1:C:154:PRO:HD2	1:C:161:LYS:HZ3	1.86	0.41
1:D:264:PHE:H	1:D:264:PHE:HD1	1.69	0.41
1:H:280:LEU:HA	1:H:335:GLN:O	2.21	0.41
1:C:327:SER:N	1:C:329:LEU:HD12	2.35	0.41
1:G:200:VAL:HG23	1:G:213:VAL:HG12	2.02	0.41
1:G:214:GLU:HG2	1:G:215:ASN:N	2.35	0.41
1:B:280:LEU:HD22	1:B:280:LEU:N	2.36	0.41
1:A:237:PHE:O	1:A:238:GLY:C	2.59	0.41
1:A:360:ASP:O	1:A:361:SER:O	2.39	0.41
1:D:237:PHE:O	1:D:238:GLY:C	2.57	0.41
1:B:190:ILE:HG23	1:B:191:GLN:N	2.36	0.41
1:A:283:MET:HG3	1:A:297:PHE:CE1	2.55	0.41
1:A:335:GLN:NE2	1:A:336:THR:H	2.18	0.41
1:E:188:VAL:HG23	1:E:190:ILE:HD13	2.02	0.41
1:E:664:GLU:C	1:E:666:THR:N	2.70	0.41
1:G:667:ASP:O	1:G:669:PHE:N	2.53	0.41
1:A:758:ASN:ND2	1:A:758:ASN:N	2.66	0.41
1:E:308:PRO:HG3	1:E:329:LEU:HD21	2.02	0.41
1:G:732:ARG:NH1	1:G:732:ARG:CG	2.81	0.41
1:C:700:VAL:HG11	1:C:741:THR:HG21	2.03	0.41
1:C:316:PHE:HB3	1:D:641:TRP:CZ2	2.56	0.41
1:B:758:ASN:N	1:B:758:ASN:ND2	2.67	0.41
1:B:564:PRO:HG2	1:B:565:TYR:CD2	2.54	0.41
1:E:749:LEU:O	1:E:749:LEU:CG	2.69	0.41
1:E:314:PRO:HD2	1:F:740:TRP:CD2	2.56	0.41
1:E:471:LEU:HD22	1:F:689:TYR:CE2	2.56	0.41
1:B:698:ARG:HA	1:B:707:HIS:CD2	2.56	0.41
1:C:611:TYR:OH	1:C:657:THR:HA	2.21	0.41
1:B:156:GLU:O	1:B:162:ASP:HB2	2.21	0.41
1:D:749:LEU:O	1:D:749:LEU:CG	2.68	0.41
1:B:377:VAL:O	1:B:377:VAL:HG23	2.21	0.41
1:H:156:GLU:O	1:H:162:ASP:HB2	2.20	0.41
1:F:528:TRP:CZ2	1:G:500:PRO:HA	2.56	0.41
1:C:499:SER:O	1:C:500:PRO:C	2.59	0.41
1:D:547:TYR:HD1	1:D:696:PRO:O	2.04	0.41

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:F:392:VAL:HG12	1:F:449:ILE:HB	2.01	0.41
1:C:180:LYS:H	1:C:180:LYS:HD2	1.85	0.41
1:H:180:LYS:H	1:H:180:LYS:HD2	1.86	0.41
1:E:173:PHE:HA	1:E:176:PHE:HD2	1.86	0.41
1:D:532:VAL:HG12	1:E:528:TRP:HE1	1.86	0.41
1:D:610:ASP:HB3	1:D:613:GLU:HG2	2.02	0.41
1:H:415:GLY:HA2	1:H:571:ASP:OD2	2.21	0.41
1:C:176:PHE:CE1	1:C:431:GLN:HB2	2.56	0.41
1:C:174:ARG:HG2	1:C:174:ARG:HH11	1.85	0.41
1:E:181:VAL:HA	1:E:391:GLY:HA2	2.02	0.41
1:H:231:LYS:HB2	1:H:253:SER:HB2	2.03	0.41
1:E:656:LEU:HD21	1:E:678:VAL:HG22	2.03	0.41
1:C:735:LEU:C	1:C:735:LEU:HD23	2.41	0.41
1:F:212:LEU:O	1:F:212:LEU:HD23	2.20	0.41
1:D:209:LEU:HG	1:D:210:VAL:H	1.86	0.41
1:B:235:ALA:O	1:B:236:ASN:C	2.60	0.41
1:G:360:ASP:O	1:G:361:SER:O	2.39	0.41
1:B:458:PHE:HB2	1:B:461:VAL:HG21	2.02	0.41
1:A:349:MET:HA	1:A:367:THR:CA	2.50	0.41
1:C:369:GLU:O	1:C:371:LYS:N	2.54	0.41
1:H:664:GLU:O	1:H:666:THR:N	2.54	0.41
1:E:409:ARG:NH1	1:E:409:ARG:HG2	2.36	0.41
1:A:430:ALA:HA	1:A:450:PHE:CE2	2.56	0.41
1:G:308:PRO:HB2	1:G:329:LEU:HD11	2.03	0.41
1:B:222:TYR:CD2	1:B:308:PRO:HG3	2.56	0.41
1:B:624:ASP:HB2	1:C:508:LYS:NZ	2.36	0.41
1:A:568:THR:C	1:A:570:MET:H	2.23	0.41
1:H:229:THR:HB	1:H:374:LYS:HB2	2.03	0.41
1:H:639:LEU:O	1:H:643:TYR:CD1	2.73	0.41
1:E:377:VAL:O	1:E:377:VAL:HG23	2.21	0.41
1:D:539:ASN:ND2	1:D:539:ASN:C	2.74	0.41
1:H:305:THR:HG23	1:H:305:THR:O	2.21	0.41
1:D:753:VAL:HG12	1:D:754:TRP:N	2.36	0.41
1:H:146:LEU:C	1:H:148:ASN:H	2.25	0.41
1:E:513:VAL:HB	1:E:522:LEU:HD12	2.02	0.41
1:E:390:PHE:CD2	1:E:449:ILE:HD11	2.55	0.41
1:H:179:SER:O	1:H:180:LYS:C	2.58	0.41
1:B:193:LYS:HB2	1:B:193:LYS:NZ	2.35	0.41
1:C:603:HIS:ND1	1:C:604:ASP:OD1	2.55	0.41
1:H:610:ASP:HB3	1:H:613:GLU:CG	2.51	0.41
1:A:509:THR:C	1:A:511:GLN:H	2.24	0.41
1:D:395:GLY:H	1:D:447:SER:HB3	1.85	0.41

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:E:633:LYS:HD3	1:E:633:LYS:O	2.20	0.41
1:F:386:ILE:HG22	1:F:454:SER:HB3	2.02	0.40
1:H:204:ASP:C	1:H:206:ASN:H	2.23	0.40
1:H:300:HIS:NE2	1:H:459:GLY:N	2.68	0.40
1:G:348:ASN:ND2	1:G:348:ASN:N	2.66	0.40
1:B:349:MET:HB2	1:B:364:ARG:CB	2.50	0.40
1:E:239:THR:O	1:E:241:LYS:N	2.55	0.40
1:H:238:GLY:C	1:H:240:LYS:N	2.73	0.40
1:G:709:LEU:HD12	1:G:709:LEU:HA	1.95	0.40
1:A:351:GLY:O	1:A:364:ARG:HB3	2.21	0.40
1:B:667:ASP:O	1:B:669:PHE:N	2.54	0.40
1:H:589:ALA:O	1:H:592:GLU:N	2.51	0.40
1:H:308:PRO:CG	1:H:329:LEU:HD21	2.51	0.40
1:F:222:TYR:CE2	1:F:308:PRO:HG3	2.55	0.40
1:C:316:PHE:HD2	1:D:641:TRP:CD2	2.39	0.40
1:H:488:VAL:HG11	1:H:583:LEU:HD12	2.02	0.40
1:B:139:ASP:OD1	1:B:141:THR:CG2	2.68	0.40
1:C:295:LEU:HD12	1:C:296:SER:H	1.86	0.40
1:A:156:GLU:O	1:A:162:ASP:HB2	2.21	0.40
1:C:513:VAL:HB	1:C:522:LEU:HD12	2.02	0.40
1:H:553:VAL:HG11	1:H:597:PHE:CD2	2.56	0.40
1:D:753:VAL:HG12	1:D:754:TRP:CG	2.57	0.40
1:D:402:TYR:CD1	1:D:402:TYR:N	2.88	0.40
1:F:390:PHE:HD2	1:F:449:ILE:HD11	1.85	0.40
1:E:316:PHE:HB3	1:F:641:TRP:CH2	2.56	0.40
1:E:316:PHE:HB3	1:F:641:TRP:CZ2	2.56	0.40
1:E:720:LYS:C	1:E:722:ASN:H	2.24	0.40
1:G:514:LYS:HA	1:G:521:PHE:HA	2.02	0.40
1:F:691:SER:HA	1:F:692:PRO:HD3	1.98	0.40
1:F:428:LYS:HA	1:F:428:LYS:HD3	1.82	0.40
1:G:349:MET:HA	1:G:368:SER:H	1.87	0.40
1:E:237:PHE:O	1:E:239:THR:N	2.54	0.40
1:A:238:GLY:CA	1:A:257:VAL:HB	2.51	0.40
1:F:430:ALA:HA	1:F:450:PHE:CE2	2.57	0.40
1:E:188:VAL:HB	1:E:307:ASP:HB2	2.03	0.40
1:C:664:GLU:C	1:C:666:THR:N	2.74	0.40
1:A:709:LEU:HD12	1:A:709:LEU:HA	1.97	0.40
1:F:669:PHE:CD1	1:F:669:PHE:C	2.95	0.40
1:G:618:LEU:HD21	1:G:742:ILE:CG2	2.50	0.40
1:B:488:VAL:HG11	1:B:583:LEU:HD12	2.02	0.40
1:C:498:ALA:CB	1:C:553:VAL:HA	2.51	0.40
1:C:607:LEU:HD11	1:C:609:LEU:HG	2.01	0.40

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:B:298:PHE:HB2	1:B:412:TRP:CD2	2.57	0.40
1:C:287:LYS:HB3	1:C:288:PHE:CD1	2.56	0.40
1:F:287:LYS:HB3	1:F:288:PHE:CD1	2.56	0.40
1:F:402:TYR:HB3	1:F:449:ILE:HG22	2.03	0.40
1:H:603:HIS:ND1	1:H:604:ASP:OD1	2.54	0.40
1:E:721:GLN:C	1:E:723:ASN:H	2.24	0.40
1:B:287:LYS:HB3	1:B:288:PHE:CD1	2.56	0.40
1:H:418:LYS:O	1:H:418:LYS:HG3	2.21	0.40
1:D:211:TYR:CD2	1:D:344:LYS:HE3	2.56	0.40
1:H:221:ALA:O	1:H:301:ALA:HB3	2.21	0.40
1:G:280:LEU:HA	1:G:335:GLN:O	2.21	0.40
1:B:232:LEU:HD11	1:B:256:ILE:CG1	2.51	0.40
1:E:240:LYS:C	1:E:242:ASP:N	2.71	0.40
1:B:238:GLY:HA2	1:B:257:VAL:HG11	2.02	0.40
1:E:280:LEU:C	1:E:281:ILE:HD12	2.41	0.40
1:A:235:ALA:O	1:A:236:ASN:C	2.59	0.40
1:F:235:ALA:O	1:F:236:ASN:C	2.60	0.40
1:E:130:LYS:HA	1:E:130:LYS:HD2	1.89	0.40
1:C:202:ILE:HG13	1:C:213:VAL:CG2	2.51	0.40
1:C:335:GLN:NE2	1:C:336:THR:H	2.20	0.40
1:C:349:MET:HB2	1:C:364:ARG:CB	2.51	0.40
1:H:130:LYS:HD2	1:H:130:LYS:HA	1.89	0.40
1:E:184:ASP:N	1:E:388:ASN:O	2.54	0.40
1:G:667:ASP:CB	1:G:670:VAL:HG22	2.39	0.40
1:D:444:PRO:CB	1:D:602:THR:HG21	2.40	0.40
1:D:308:PRO:HB2	1:D:329:LEU:HD11	2.03	0.40
1:H:331:ASN:O	1:H:332:ILE:HD13	2.20	0.40
1:D:278:GLY:N	1:D:332:ILE:CG2	2.82	0.40
1:A:278:GLY:N	1:A:332:ILE:CG2	2.82	0.40
1:A:516:PRO:HG3	1:A:586:VAL:HA	2.02	0.40
1:A:614:TYR:O	1:A:618:LEU:HB2	2.20	0.40
1:E:194:ASP:HB2	1:E:380:VAL:HG13	2.02	0.40
1:D:377:VAL:HG23	1:D:377:VAL:O	2.22	0.40
1:E:498:ALA:CB	1:E:553:VAL:HA	2.50	0.40
1:D:754:TRP:HE3	1:D:754:TRP:HA	1.86	0.40
1:E:648:ASP:CG	1:E:757:ASP:OD2	2.59	0.40
1:A:759:GLU:HG3	1:A:760:PHE:H	1.85	0.40
1:H:127:LEU:CD2	1:H:127:LEU:N	2.84	0.40
1:F:376:THR:HG23	1:F:376:THR:O	2.22	0.40
1:E:287:LYS:HB3	1:E:288:PHE:CD1	2.56	0.40
1:F:610:ASP:HB3	1:F:613:GLU:CG	2.51	0.40
1:H:509:THR:C	1:H:511:GLN:H	2.24	0.40

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:H:317:ASN:HD22	1:H:317:ASN:HA	1.70	0.40
1:F:193:LYS:HB2	1:F:193:LYS:NZ	2.36	0.40
1:E:237:PHE:HD2	1:E:258:ARG:HB2	1.84	0.40
1:G:357:TRP:HE1	1:G:365:MET:CE	2.34	0.40
1:F:237:PHE:O	1:F:239:THR:N	2.54	0.40
1:G:668:ARG:HD2	1:H:669:PHE:CE2	2.56	0.40
1:B:130:LYS:HD2	1:B:130:LYS:HA	1.90	0.40
1:B:398:GLU:N	1:B:399:PRO:CD	2.84	0.40
1:H:398:GLU:N	1:H:399:PRO:CD	2.84	0.40
1:D:307:ASP:OD1	1:D:309:TYR:N	2.51	0.40
1:A:646:ARG:NH1	1:A:646:ARG:CG	2.81	0.40
1:F:491:THR:HB	1:F:517:VAL:HG21	2.03	0.40
1:F:308:PRO:HB2	1:F:329:LEU:HD11	2.03	0.40
1:E:322:PRO:N	1:E:323:PRO:HD3	2.36	0.40
1:F:682:GLU:OE2	1:F:699:HIS:CE1	2.74	0.40
1:G:156:GLU:HA	1:G:411:ALA:O	2.22	0.40
1:D:650:PHE:CG	1:E:657:THR:HG21	2.57	0.40
1:F:737:LEU:O	1:F:739:THR:N	2.55	0.40
1:F:312:GLY:HA2	1:F:547:TYR:OH	2.22	0.40
1:D:528:TRP:HE1	1:E:532:VAL:CG1	2.33	0.40
1:C:284:ASP:OD1	1:C:287:LYS:HB2	2.22	0.40
1:B:263:THR:O	1:B:264:PHE:C	2.59	0.40
1:H:612:GLU:O	1:H:614:TYR:N	2.55	0.40
1:E:514:LYS:HA	1:E:521:PHE:HA	2.02	0.40
1:C:514:LYS:HA	1:C:521:PHE:HA	2.02	0.40
1:C:270:ASN:O	1:C:274:LEU:HD23	2.22	0.40
1:F:201:ILE:HD11	1:F:211:TYR:O	2.21	0.40
1:H:370:SER:OG	1:H:371:LYS:HG3	2.21	0.40
1:C:667:ASP:CG	1:C:670:VAL:HG13	2.42	0.40
1:C:130:LYS:HA	1:C:130:LYS:HD2	1.92	0.40
1:H:683:TYR:CD1	1:H:686:LEU:HD12	2.56	0.40
1:H:699:HIS:CD2	1:H:702:TRP:H	2.39	0.40
1:D:409:ARG:NH1	1:D:409:ARG:HG2	2.37	0.40
1:G:585:LYS:O	1:G:588:ARG:HB3	2.22	0.40
1:E:716:LEU:HD13	1:E:731:PHE:CZ	2.56	0.40
1:F:483:ASN:HD21	1:F:540:ALA:HB3	1.87	0.40
1:F:553:VAL:CG2	1:F:554:SER:N	2.85	0.40
1:B:754:TRP:HA	1:B:754:TRP:CE3	2.56	0.40
1:F:719:ARG:CG	1:F:719:ARG:NH1	2.84	0.40
1:H:754:TRP:HA	1:H:754:TRP:CE3	2.56	0.40
1:A:754:TRP:CE3	1:A:754:TRP:HA	2.56	0.40
1:B:390:PHE:CD2	1:B:449:ILE:HD11	2.56	0.40

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:C:449:ILE:HG23	1:C:449:ILE:O	2.22	0.40
1:B:723:ASN:C	1:B:723:ASN:HD22	2.25	0.40
1:E:497:SER:OG	1:E:533:GLU:HB3	2.21	0.40
1:A:415:GLY:HA2	1:A:571:ASP:CG	2.42	0.40
1:F:514:LYS:HA	1:F:521:PHE:HA	2.02	0.40

There are no symmetry-related clashes.

5.3 Torsion angles

5.3.1 Protein backbone ⓘ

In the following table, the Percentiles column shows the percent Ramachandran outliers of the chain as a percentile score with respect to all X-ray entries followed by that with respect to entries of similar resolution. 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	637/639 (100%)	498 (78%)	101 (16%)	38 (6%)	2	20
1	B	637/639 (100%)	498 (78%)	100 (16%)	39 (6%)	2	19
1	C	637/639 (100%)	498 (78%)	103 (16%)	36 (6%)	3	22
1	D	637/639 (100%)	496 (78%)	106 (17%)	35 (6%)	3	23
1	E	637/639 (100%)	498 (78%)	102 (16%)	37 (6%)	3	21
1	F	637/639 (100%)	498 (78%)	105 (16%)	34 (5%)	3	24
1	G	637/639 (100%)	498 (78%)	101 (16%)	38 (6%)	2	20
1	H	637/639 (100%)	496 (78%)	108 (17%)	33 (5%)	3	25
All	All	5096/5112 (100%)	3980 (78%)	826 (16%)	290 (6%)	3	22

All (290) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	A	206	ASN
1	A	210	VAL
1	A	251	ASN
1	A	330	PRO
1	A	361	SER
1	A	362	THR
1	A	722	ASN

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Mol	Chain	Res	Type
1	A	750	SER
1	A	753	VAL
1	A	759	GLU
1	B	179	SER
1	B	207	GLY
1	B	210	VAL
1	B	251	ASN
1	B	361	SER
1	B	362	THR
1	B	722	ASN
1	B	750	SER
1	B	753	VAL
1	B	759	GLU
1	C	179	SER
1	C	205	LYS
1	C	208	ARG
1	C	210	VAL
1	C	236	ASN
1	C	251	ASN
1	C	361	SER
1	C	362	THR
1	C	722	ASN
1	C	750	SER
1	C	753	VAL
1	C	759	GLU
1	D	210	VAL
1	D	251	ASN
1	D	330	PRO
1	D	361	SER
1	D	722	ASN
1	D	750	SER
1	D	753	VAL
1	D	759	GLU
1	E	179	SER
1	E	207	GLY
1	E	208	ARG
1	E	210	VAL
1	E	251	ASN
1	E	330	PRO
1	E	361	SER
1	E	362	THR
1	E	750	SER

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Mol	Chain	Res	Type
1	E	753	VAL
1	E	759	GLU
1	F	205	LYS
1	F	210	VAL
1	F	213	VAL
1	F	330	PRO
1	F	361	SER
1	F	362	THR
1	F	722	ASN
1	F	750	SER
1	F	753	VAL
1	F	759	GLU
1	G	179	SER
1	G	207	GLY
1	G	209	LEU
1	G	222	TYR
1	G	251	ASN
1	G	361	SER
1	G	362	THR
1	G	722	ASN
1	G	750	SER
1	G	753	VAL
1	G	759	GLU
1	H	207	GLY
1	H	208	ARG
1	H	210	VAL
1	H	213	VAL
1	H	222	TYR
1	H	251	ASN
1	H	361	SER
1	H	722	ASN
1	H	750	SER
1	H	753	VAL
1	H	759	GLU
1	A	179	SER
1	A	207	GLY
1	A	209	LEU
1	A	236	ASN
1	A	613	GLU
1	B	213	VAL
1	B	222	TYR
1	B	238	GLY

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Mol	Chain	Res	Type
1	B	278	GLY
1	B	330	PRO
1	B	665	LYS
1	C	207	GLY
1	C	222	TYR
1	C	238	GLY
1	C	239	THR
1	C	330	PRO
1	C	613	GLU
1	C	665	LYS
1	D	179	SER
1	D	209	LEU
1	D	236	ASN
1	D	325	ARG
1	D	362	THR
1	D	665	LYS
1	E	222	TYR
1	E	236	ASN
1	E	237	PHE
1	E	238	GLY
1	E	613	GLU
1	E	665	LYS
1	E	722	ASN
1	F	179	SER
1	F	222	TYR
1	F	236	ASN
1	F	237	PHE
1	F	238	GLY
1	F	251	ASN
1	F	613	GLU
1	F	665	LYS
1	G	210	VAL
1	G	214	GLU
1	G	236	ASN
1	G	238	GLY
1	G	330	PRO
1	G	665	LYS
1	H	179	SER
1	H	236	ASN
1	H	238	GLY
1	H	330	PRO
1	H	362	THR

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Mol	Chain	Res	Type
1	A	208	ARG
1	A	222	TYR
1	A	237	PHE
1	A	238	GLY
1	A	239	THR
1	A	278	GLY
1	A	322	PRO
1	A	325	ARG
1	A	370	SER
1	A	558	CYS
1	A	581	PRO
1	A	665	LYS
1	B	236	ASN
1	B	237	PHE
1	B	322	PRO
1	B	325	ARG
1	B	581	PRO
1	C	237	PHE
1	C	278	GLY
1	C	322	PRO
1	C	325	ARG
1	C	540	ALA
1	C	581	PRO
1	D	222	TYR
1	D	237	PHE
1	D	238	GLY
1	D	239	THR
1	D	322	PRO
1	D	569	THR
1	D	581	PRO
1	D	613	GLU
1	E	204	ASP
1	E	278	GLY
1	E	322	PRO
1	E	325	ARG
1	E	558	CYS
1	E	581	PRO
1	F	239	THR
1	F	278	GLY
1	F	322	PRO
1	F	325	ARG
1	F	370	SER

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Mol	Chain	Res	Type
1	F	540	ALA
1	G	237	PHE
1	G	322	PRO
1	G	325	ARG
1	G	370	SER
1	G	558	CYS
1	G	566	LEU
1	G	581	PRO
1	G	613	GLU
1	H	237	PHE
1	H	278	GLY
1	H	322	PRO
1	H	325	ARG
1	H	370	SER
1	H	558	CYS
1	H	566	LEU
1	H	581	PRO
1	H	613	GLU
1	H	665	LYS
1	A	180	LYS
1	A	566	LEU
1	B	204	ASP
1	B	212	LEU
1	B	239	THR
1	B	566	LEU
1	B	613	GLU
1	C	216	PRO
1	C	370	SER
1	C	558	CYS
1	D	278	GLY
1	D	370	SER
1	D	566	LEU
1	E	239	THR
1	E	370	SER
1	F	581	PRO
1	G	180	LYS
1	G	239	THR
1	G	278	GLY
1	G	569	THR
1	G	668	ARG
1	H	180	LYS
1	H	239	THR

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Mol	Chain	Res	Type
1	A	213	VAL
1	A	507	GLU
1	B	180	LYS
1	B	205	LYS
1	B	240	LYS
1	B	370	SER
1	B	540	ALA
1	B	558	CYS
1	B	668	ARG
1	C	537	LEU
1	C	566	LEU
1	D	180	LYS
1	D	216	PRO
1	D	558	CYS
1	E	153	VAL
1	E	247	TYR
1	E	351	GLY
1	E	507	GLU
1	E	566	LEU
1	E	569	THR
1	E	668	ARG
1	F	180	LYS
1	F	566	LEU
1	G	208	ARG
1	A	153	VAL
1	A	205	LYS
1	A	569	THR
1	B	153	VAL
1	B	247	TYR
1	B	351	GLY
1	C	153	VAL
1	C	240	LYS
1	D	153	VAL
1	D	205	LYS
1	D	540	ALA
1	D	668	ARG
1	E	180	LYS
1	F	153	VAL
1	F	261	LYS
1	F	351	GLY
1	F	507	GLU
1	G	153	VAL

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Mol	Chain	Res	Type
1	G	540	ALA
1	H	153	VAL
1	B	216	PRO
1	D	213	VAL
1	D	351	GLY
1	G	216	PRO
1	G	351	GLY
1	H	216	PRO
1	H	351	GLY
1	A	216	PRO
1	B	564	PRO
1	C	213	VAL
1	C	351	GLY
1	E	564	PRO
1	G	213	VAL
1	G	564	PRO
1	A	351	GLY
1	C	564	PRO
1	C	756	ILE
1	D	756	ILE
1	F	216	PRO
1	F	564	PRO
1	G	756	ILE
1	H	564	PRO
1	A	564	PRO
1	A	756	ILE
1	B	756	ILE
1	E	216	PRO
1	E	756	ILE
1	F	756	ILE
1	H	756	ILE

5.3.2 Protein sidechains ⓘ

In the following table, the Percentiles column shows the percent sidechain outliers of the chain as a percentile score with respect to all X-ray entries followed by that with respect to entries of similar resolution. 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	548/548 (100%)	505 (92%)	43 (8%)	18 59

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
1	B	548/548 (100%)	507 (92%)	41 (8%)	19	61
1	C	548/548 (100%)	503 (92%)	45 (8%)	17	56
1	D	548/548 (100%)	504 (92%)	44 (8%)	17	57
1	E	548/548 (100%)	508 (93%)	40 (7%)	20	62
1	F	548/548 (100%)	505 (92%)	43 (8%)	18	59
1	G	548/548 (100%)	505 (92%)	43 (8%)	18	59
1	H	548/548 (100%)	508 (93%)	40 (7%)	20	62
All	All	4384/4384 (100%)	4045 (92%)	339 (8%)	18	59

All (339) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	A	125	ASP
1	A	135	LEU
1	A	148	ASN
1	A	152	TYR
1	A	153	VAL
1	A	181	VAL
1	A	197	GLN
1	A	203	VAL
1	A	204	ASP
1	A	211	TYR
1	A	224	LYS
1	A	277	ILE
1	A	310	THR
1	A	322	PRO
1	A	325	ARG
1	A	330	PRO
1	A	348	ASN
1	A	353	CYS
1	A	357	TRP
1	A	365	MET
1	A	371	LYS
1	A	418	LYS
1	A	426	LEU
1	A	446	ARG
1	A	457	ASP
1	A	525	ASP
1	A	537	LEU
1	A	539	ASN

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Mol	Chain	Res	Type
1	A	562	ASP
1	A	581	PRO
1	A	582	GLU
1	A	588	ARG
1	A	603	HIS
1	A	606	GLU
1	A	610	ASP
1	A	619	LEU
1	A	646	ARG
1	A	648	ASP
1	A	664	GLU
1	A	723	ASN
1	A	743	GLN
1	A	757	ASP
1	A	758	ASN
1	B	125	ASP
1	B	148	ASN
1	B	152	TYR
1	B	153	VAL
1	B	181	VAL
1	B	197	GLN
1	B	203	VAL
1	B	208	ARG
1	B	224	LYS
1	B	277	ILE
1	B	310	THR
1	B	322	PRO
1	B	325	ARG
1	B	330	PRO
1	B	348	ASN
1	B	353	CYS
1	B	357	TRP
1	B	365	MET
1	B	371	LYS
1	B	418	LYS
1	B	426	LEU
1	B	446	ARG
1	B	457	ASP
1	B	525	ASP
1	B	537	LEU
1	B	539	ASN
1	B	562	ASP

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Mol	Chain	Res	Type
1	B	581	PRO
1	B	588	ARG
1	B	603	HIS
1	B	606	GLU
1	B	619	LEU
1	B	646	ARG
1	B	648	ASP
1	B	660	PHE
1	B	664	GLU
1	B	723	ASN
1	B	732	ARG
1	B	743	GLN
1	B	757	ASP
1	B	758	ASN
1	C	125	ASP
1	C	135	LEU
1	C	148	ASN
1	C	152	TYR
1	C	153	VAL
1	C	181	VAL
1	C	197	GLN
1	C	203	VAL
1	C	206	ASN
1	C	208	ARG
1	C	211	TYR
1	C	212	LEU
1	C	224	LYS
1	C	277	ILE
1	C	310	THR
1	C	322	PRO
1	C	325	ARG
1	C	330	PRO
1	C	348	ASN
1	C	353	CYS
1	C	357	TRP
1	C	365	MET
1	C	371	LYS
1	C	418	LYS
1	C	426	LEU
1	C	446	ARG
1	C	457	ASP
1	C	525	ASP

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Mol	Chain	Res	Type
1	C	537	LEU
1	C	539	ASN
1	C	562	ASP
1	C	581	PRO
1	C	588	ARG
1	C	603	HIS
1	C	606	GLU
1	C	619	LEU
1	C	646	ARG
1	C	648	ASP
1	C	664	GLU
1	C	710	PRO
1	C	723	ASN
1	C	732	ARG
1	C	743	GLN
1	C	757	ASP
1	C	758	ASN
1	D	125	ASP
1	D	135	LEU
1	D	148	ASN
1	D	152	TYR
1	D	153	VAL
1	D	181	VAL
1	D	197	GLN
1	D	203	VAL
1	D	208	ARG
1	D	224	LYS
1	D	277	ILE
1	D	310	THR
1	D	322	PRO
1	D	325	ARG
1	D	330	PRO
1	D	353	CYS
1	D	357	TRP
1	D	365	MET
1	D	371	LYS
1	D	418	LYS
1	D	426	LEU
1	D	446	ARG
1	D	457	ASP
1	D	525	ASP
1	D	537	LEU

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Mol	Chain	Res	Type
1	D	539	ASN
1	D	562	ASP
1	D	581	PRO
1	D	582	GLU
1	D	588	ARG
1	D	603	HIS
1	D	606	GLU
1	D	610	ASP
1	D	619	LEU
1	D	646	ARG
1	D	648	ASP
1	D	664	GLU
1	D	710	PRO
1	D	719	ARG
1	D	723	ASN
1	D	732	ARG
1	D	743	GLN
1	D	757	ASP
1	D	758	ASN
1	E	125	ASP
1	E	135	LEU
1	E	148	ASN
1	E	152	TYR
1	E	153	VAL
1	E	181	VAL
1	E	197	GLN
1	E	203	VAL
1	E	211	TYR
1	E	224	LYS
1	E	277	ILE
1	E	310	THR
1	E	322	PRO
1	E	325	ARG
1	E	330	PRO
1	E	353	CYS
1	E	357	TRP
1	E	365	MET
1	E	371	LYS
1	E	418	LYS
1	E	426	LEU
1	E	446	ARG
1	E	457	ASP

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Mol	Chain	Res	Type
1	E	525	ASP
1	E	537	LEU
1	E	539	ASN
1	E	562	ASP
1	E	581	PRO
1	E	588	ARG
1	E	603	HIS
1	E	606	GLU
1	E	619	LEU
1	E	646	ARG
1	E	648	ASP
1	E	664	GLU
1	E	723	ASN
1	E	732	ARG
1	E	743	GLN
1	E	757	ASP
1	E	758	ASN
1	F	125	ASP
1	F	135	LEU
1	F	148	ASN
1	F	152	TYR
1	F	153	VAL
1	F	181	VAL
1	F	197	GLN
1	F	203	VAL
1	F	208	ARG
1	F	212	LEU
1	F	224	LYS
1	F	277	ILE
1	F	310	THR
1	F	322	PRO
1	F	325	ARG
1	F	330	PRO
1	F	348	ASN
1	F	353	CYS
1	F	357	TRP
1	F	365	MET
1	F	371	LYS
1	F	418	LYS
1	F	426	LEU
1	F	446	ARG
1	F	457	ASP

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Mol	Chain	Res	Type
1	F	525	ASP
1	F	537	LEU
1	F	539	ASN
1	F	562	ASP
1	F	581	PRO
1	F	582	GLU
1	F	588	ARG
1	F	603	HIS
1	F	606	GLU
1	F	619	LEU
1	F	646	ARG
1	F	648	ASP
1	F	664	GLU
1	F	710	PRO
1	F	723	ASN
1	F	743	GLN
1	F	757	ASP
1	F	758	ASN
1	G	125	ASP
1	G	135	LEU
1	G	148	ASN
1	G	152	TYR
1	G	153	VAL
1	G	181	VAL
1	G	197	GLN
1	G	203	VAL
1	G	208	ARG
1	G	224	LYS
1	G	277	ILE
1	G	310	THR
1	G	322	PRO
1	G	325	ARG
1	G	330	PRO
1	G	348	ASN
1	G	353	CYS
1	G	357	TRP
1	G	365	MET
1	G	371	LYS
1	G	418	LYS
1	G	426	LEU
1	G	446	ARG
1	G	457	ASP

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Mol	Chain	Res	Type
1	G	525	ASP
1	G	537	LEU
1	G	539	ASN
1	G	562	ASP
1	G	581	PRO
1	G	588	ARG
1	G	603	HIS
1	G	606	GLU
1	G	619	LEU
1	G	646	ARG
1	G	648	ASP
1	G	664	GLU
1	G	710	PRO
1	G	719	ARG
1	G	723	ASN
1	G	732	ARG
1	G	743	GLN
1	G	757	ASP
1	G	758	ASN
1	H	125	ASP
1	H	135	LEU
1	H	148	ASN
1	H	152	TYR
1	H	153	VAL
1	H	181	VAL
1	H	197	GLN
1	H	203	VAL
1	H	224	LYS
1	H	277	ILE
1	H	310	THR
1	H	322	PRO
1	H	325	ARG
1	H	330	PRO
1	H	348	ASN
1	H	353	CYS
1	H	357	TRP
1	H	365	MET
1	H	371	LYS
1	H	418	LYS
1	H	426	LEU
1	H	446	ARG
1	H	457	ASP

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Mol	Chain	Res	Type
1	H	525	ASP
1	H	537	LEU
1	H	539	ASN
1	H	562	ASP
1	H	581	PRO
1	H	588	ARG
1	H	603	HIS
1	H	606	GLU
1	H	610	ASP
1	H	619	LEU
1	H	646	ARG
1	H	648	ASP
1	H	664	GLU
1	H	723	ASN
1	H	743	GLN
1	H	757	ASP
1	H	758	ASN

Some sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (146) such sidechains are listed below:

Mol	Chain	Res	Type
1	A	148	ASN
1	A	160	GLN
1	A	164	ASN
1	A	191	GLN
1	A	215	ASN
1	A	275	ASN
1	A	335	GLN
1	A	348	ASN
1	A	408	GLN
1	A	515	HIS
1	A	539	ASN
1	A	662	ASN
1	A	684	HIS
1	A	699	HIS
1	A	723	ASN
1	A	758	ASN
1	B	148	ASN
1	B	160	GLN
1	B	164	ASN
1	B	191	GLN
1	B	270	ASN

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Mol	Chain	Res	Type
1	B	275	ASN
1	B	335	GLN
1	B	348	ASN
1	B	408	GLN
1	B	512	ASN
1	B	515	HIS
1	B	520	GLN
1	B	539	ASN
1	B	617	GLN
1	B	627	GLN
1	B	662	ASN
1	B	684	HIS
1	B	699	HIS
1	B	723	ASN
1	B	758	ASN
1	C	148	ASN
1	C	160	GLN
1	C	164	ASN
1	C	191	GLN
1	C	275	ASN
1	C	335	GLN
1	C	348	ASN
1	C	408	GLN
1	C	512	ASN
1	C	515	HIS
1	C	520	GLN
1	C	539	ASN
1	C	603	HIS
1	C	617	GLN
1	C	627	GLN
1	C	662	ASN
1	C	684	HIS
1	C	699	HIS
1	C	723	ASN
1	C	758	ASN
1	D	148	ASN
1	D	160	GLN
1	D	164	ASN
1	D	191	GLN
1	D	275	ASN
1	D	335	GLN
1	D	348	ASN

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Mol	Chain	Res	Type
1	D	408	GLN
1	D	512	ASN
1	D	515	HIS
1	D	520	GLN
1	D	539	ASN
1	D	627	GLN
1	D	662	ASN
1	D	684	HIS
1	D	699	HIS
1	D	723	ASN
1	D	758	ASN
1	E	148	ASN
1	E	160	GLN
1	E	164	ASN
1	E	191	GLN
1	E	275	ASN
1	E	335	GLN
1	E	348	ASN
1	E	408	GLN
1	E	512	ASN
1	E	515	HIS
1	E	520	GLN
1	E	539	ASN
1	E	627	GLN
1	E	662	ASN
1	E	684	HIS
1	E	699	HIS
1	E	723	ASN
1	E	758	ASN
1	F	148	ASN
1	F	160	GLN
1	F	164	ASN
1	F	191	GLN
1	F	206	ASN
1	F	275	ASN
1	F	335	GLN
1	F	408	GLN
1	F	512	ASN
1	F	515	HIS
1	F	520	GLN
1	F	539	ASN
1	F	617	GLN

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Mol	Chain	Res	Type
1	F	627	GLN
1	F	662	ASN
1	F	684	HIS
1	F	699	HIS
1	F	723	ASN
1	F	758	ASN
1	G	148	ASN
1	G	160	GLN
1	G	164	ASN
1	G	191	GLN
1	G	275	ASN
1	G	335	GLN
1	G	348	ASN
1	G	408	GLN
1	G	512	ASN
1	G	515	HIS
1	G	520	GLN
1	G	539	ASN
1	G	603	HIS
1	G	617	GLN
1	G	627	GLN
1	G	662	ASN
1	G	684	HIS
1	G	699	HIS
1	G	723	ASN
1	G	758	ASN
1	H	148	ASN
1	H	160	GLN
1	H	164	ASN
1	H	191	GLN
1	H	206	ASN
1	H	275	ASN
1	H	335	GLN
1	H	408	GLN
1	H	515	HIS
1	H	539	ASN
1	H	662	ASN
1	H	684	HIS
1	H	699	HIS
1	H	723	ASN
1	H	758	ASN

5.3.3 RNA ⓘ

There are no RNA chains 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 carbohydrates in this entry.

5.6 Ligand geometry ⓘ

Of 48 ligands modelled in this entry, 24 are monoatomic - leaving 24 for Mogul analysis.

In the following table, the Counts columns list the number of bonds (or angles) for which Mogul statistics could be retrieved, the number of bonds (or angles) that are observed in the model and the number of bonds (or angles) that are defined in the chemical component dictionary. The Link column lists molecule types, if any, to which the group is linked. 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 $|Z| > 2$ is considered an outlier worth inspection. RMSZ is the root-mean-square of all Z scores of the bond lengths (or angles).

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\# Z > 2$	Counts	RMSZ	$\# Z > 2$
2	NAG	A	761	1	12,14,15	0.59	0	15,19,21	0.58	0
2	NAG	A	762	1	12,14,15	0.52	0	15,19,21	0.64	0
2	NAG	A	763	1	12,14,15	0.49	0	15,19,21	0.67	1 (6%)
2	NAG	B	761	1	12,14,15	0.57	0	15,19,21	0.58	0
2	NAG	B	762	1	12,14,15	0.50	0	15,19,21	0.59	0
2	NAG	B	763	1	12,14,15	0.54	0	15,19,21	0.69	1 (6%)
2	NAG	C	761	1	12,14,15	0.55	0	15,19,21	0.59	0
2	NAG	C	762	1	12,14,15	0.53	0	15,19,21	0.61	0
2	NAG	C	763	1	12,14,15	0.52	0	15,19,21	0.70	1 (6%)
2	NAG	D	761	1	12,14,15	0.58	0	15,19,21	0.55	0
2	NAG	D	762	1	12,14,15	0.54	0	15,19,21	0.59	0
2	NAG	D	763	1	12,14,15	0.49	0	15,19,21	0.62	0
2	NAG	E	761	1	12,14,15	0.60	0	15,19,21	0.56	0
2	NAG	E	762	1	12,14,15	0.56	0	15,19,21	0.67	0
2	NAG	E	763	1	12,14,15	0.51	0	15,19,21	0.68	0
2	NAG	F	761	1	12,14,15	0.57	0	15,19,21	0.54	0
2	NAG	F	762	1	12,14,15	0.54	0	15,19,21	0.59	0

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
2	NAG	F	763	1	12,14,15	0.46	0	15,19,21	0.72	0
2	NAG	G	761	1	12,14,15	0.60	0	15,19,21	0.56	0
2	NAG	G	762	1	12,14,15	0.49	0	15,19,21	0.63	0
2	NAG	G	763	1	12,14,15	0.45	0	15,19,21	0.66	0
2	NAG	H	761	1	12,14,15	0.59	0	15,19,21	0.57	0
2	NAG	H	762	1	12,14,15	0.53	0	15,19,21	0.62	0
2	NAG	H	763	1	12,14,15	0.51	0	15,19,21	0.68	0

In the following table, the Chirals column lists the number of chiral outliers, the number of chiral centers analysed, the number of these observed in the model and the number defined in the chemical component dictionary. Similar counts are reported in the Torsion and Rings columns. '-' means no outliers of that kind were identified.

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
2	NAG	A	761	1	-	0/6/23/26	0/1/1/1
2	NAG	A	762	1	-	0/6/23/26	0/1/1/1
2	NAG	A	763	1	-	0/6/23/26	0/1/1/1
2	NAG	B	761	1	-	0/6/23/26	0/1/1/1
2	NAG	B	762	1	-	0/6/23/26	0/1/1/1
2	NAG	B	763	1	-	0/6/23/26	0/1/1/1
2	NAG	C	761	1	-	0/6/23/26	0/1/1/1
2	NAG	C	762	1	-	0/6/23/26	0/1/1/1
2	NAG	C	763	1	-	0/6/23/26	0/1/1/1
2	NAG	D	761	1	-	0/6/23/26	0/1/1/1
2	NAG	D	762	1	-	0/6/23/26	0/1/1/1
2	NAG	D	763	1	-	0/6/23/26	0/1/1/1
2	NAG	E	761	1	-	0/6/23/26	0/1/1/1
2	NAG	E	762	1	-	0/6/23/26	0/1/1/1
2	NAG	E	763	1	-	0/6/23/26	0/1/1/1
2	NAG	F	761	1	-	0/6/23/26	0/1/1/1
2	NAG	F	762	1	-	0/6/23/26	0/1/1/1
2	NAG	F	763	1	-	0/6/23/26	0/1/1/1
2	NAG	G	761	1	-	0/6/23/26	0/1/1/1
2	NAG	G	762	1	-	0/6/23/26	0/1/1/1
2	NAG	G	763	1	-	0/6/23/26	0/1/1/1
2	NAG	H	761	1	-	0/6/23/26	0/1/1/1
2	NAG	H	762	1	-	0/6/23/26	0/1/1/1
2	NAG	H	763	1	-	0/6/23/26	0/1/1/1

There are no bond length outliers.

All (3) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	C	763	NAG	C2-N2-C7	-2.11	119.55	123.09
2	A	763	NAG	C2-N2-C7	-2.06	119.62	123.09
2	B	763	NAG	C2-N2-C7	-2.00	119.73	123.09

There are no chirality outliers.

There are no torsion outliers.

There are no ring outliers.

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 Fit of model and data ⓘ

6.1 Protein, DNA and RNA chains ⓘ

In the following table, the column labelled ‘#RSRZ> 2’ contains the number (and percentage) of RSRZ outliers, followed by percent RSRZ outliers for the chain as percentile scores relative to all X-ray entries and entries of similar resolution. The OWAB column contains the minimum, median, 95th percentile and maximum values of the occupancy-weighted average B-factor per residue. The column labelled ‘Q< 0.9’ lists the number of (and percentage) of residues with an average occupancy less than 0.9.

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
1	A	639/639 (100%)	-0.02	10 (1%) 68 20	32, 79, 98, 99	0
1	B	639/639 (100%)	-0.08	9 (1%) 72 22	24, 72, 98, 99	0
1	C	639/639 (100%)	-0.19	3 (0%) 88 46	20, 58, 91, 99	0
1	D	639/639 (100%)	-0.20	4 (0%) 86 41	17, 58, 96, 99	0
1	E	639/639 (100%)	-0.11	6 (0%) 81 32	19, 67, 98, 99	0
1	F	639/639 (100%)	-0.13	12 (1%) 64 18	20, 65, 95, 99	0
1	G	639/639 (100%)	-0.04	13 (2%) 62 17	25, 79, 98, 99	0
1	H	639/639 (100%)	0.03	10 (1%) 68 20	32, 84, 98, 99	0
All	All	5112/5112 (100%)	-0.09	67 (1%) 74 24	17, 70, 98, 99	0

All (67) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
1	F	209	LEU	4.9
1	A	369	GLU	4.0
1	G	759	GLU	3.8
1	F	205	LYS	3.7
1	E	759	GLU	3.6
1	C	759	GLU	3.3
1	B	360	ASP	3.1
1	E	758	ASN	3.0
1	H	324	SER	3.0
1	G	360	ASP	3.0
1	G	353	CYS	3.0
1	B	751	GLY	2.8
1	B	369	GLU	2.8
1	E	208	ARG	2.8
1	F	211	TYR	2.7
1	C	360	ASP	2.7

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Mol	Chain	Res	Type	RSRZ
1	B	759	GLU	2.7
1	D	759	GLU	2.7
1	H	759	GLU	2.7
1	G	760	PHE	2.6
1	F	759	GLU	2.6
1	D	758	ASN	2.6
1	H	758	ASN	2.6
1	B	208	ARG	2.5
1	H	325	ARG	2.5
1	C	760	PHE	2.5
1	A	520	GLN	2.5
1	A	760	PHE	2.5
1	A	759	GLU	2.4
1	E	760	PHE	2.4
1	A	758	ASN	2.4
1	F	755	ASP	2.4
1	D	358	LYS	2.4
1	G	758	ASN	2.4
1	G	209	LEU	2.4
1	H	370	SER	2.4
1	A	352	ASP	2.4
1	D	751	GLY	2.4
1	F	123	TYR	2.3
1	B	209	LEU	2.3
1	F	760	PHE	2.3
1	H	353	CYS	2.3
1	G	359	THR	2.3
1	B	758	ASN	2.3
1	G	358	LYS	2.3
1	H	208	ARG	2.2
1	G	210	VAL	2.2
1	G	247	TYR	2.2
1	H	210	VAL	2.2
1	F	751	GLY	2.2
1	H	722	ASN	2.2
1	G	751	GLY	2.2
1	A	370	SER	2.2
1	H	247	TYR	2.2
1	G	369	GLU	2.2
1	F	210	VAL	2.1
1	F	722	ASN	2.1
1	B	351	GLY	2.1

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Mol	Chain	Res	Type	RSRZ
1	E	360	ASP	2.1
1	G	370	SER	2.1
1	F	758	ASN	2.1
1	F	360	ASP	2.0
1	B	324	SER	2.0
1	E	324	SER	2.0
1	A	285	GLN	2.0
1	A	368	SER	2.0
1	A	751	GLY	2.0

6.2 Non-standard residues in protein, DNA, RNA chains ⓘ

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

6.3 Carbohydrates ⓘ

There are no carbohydrates in this entry.

6.4 Ligands ⓘ

In the following table, the Atoms column lists the number of modelled atoms in the group and the number defined in the chemical component dictionary. LLDF column lists the quality of electron density of the group with respect to its neighbouring residues in protein, DNA or RNA chains. The B-factors column lists the minimum, median, 95th percentile and maximum values of B factors of atoms in the group. The column labelled 'Q < 0.9' lists the number of atoms with occupancy less than 0.9.

Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(Å ²)	Q<0.9
2	NAG	H	761	14/15	0.54	343.00	97,98,98,98	0
2	NAG	A	761	14/15	0.43	24.71	93,98,98,98	0
2	NAG	F	763	14/15	0.33	7.82	81,87,92,92	0
2	NAG	G	763	14/15	0.27	6.57	92,96,98,98	0
3	SM	B	766	1/1	0.27	5.40	45,45,45,45	0
2	NAG	D	763	14/15	0.29	5.15	68,83,91,94	0
2	NAG	H	763	14/15	0.37	3.53	85,98,98,98	0
3	SM	G	764	1/1	0.31	3.03	27,27,27,27	0
2	NAG	B	761	14/15	0.45	3.02	92,98,98,98	0
2	NAG	D	761	14/15	0.30	2.45	95,98,98,98	0
2	NAG	G	761	14/15	0.43	2.32	94,98,98,98	0
3	SM	D	764	1/1	0.37	2.30	2,2,2,2	0

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Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
2	NAG	E	761	14/15	0.45	2.20	91,98,98,98	0
3	SM	B	764	1/1	0.30	2.07	2,2,2,2	0
3	SM	G	766	1/1	0.28	1.88	56,56,56,56	0
2	NAG	B	763	14/15	0.29	1.84	90,98,98,98	0
2	NAG	A	763	14/15	0.29	1.82	91,98,98,98	0
3	SM	A	764	1/1	0.29	1.66	2,2,2,2	0
2	NAG	C	761	14/15	0.20	1.63	95,98,98,98	0
2	NAG	F	761	14/15	0.36	1.60	78,98,98,98	0
3	SM	E	764	1/1	0.30	1.57	2,2,2,2	0
2	NAG	E	763	14/15	0.25	1.38	70,78,82,84	0
2	NAG	C	763	14/15	0.29	1.13	61,86,89,95	0
3	SM	H	764	1/1	0.28	0.83	2,2,2,2	0
3	SM	D	766	1/1	0.19	0.71	38,38,38,38	0
3	SM	H	766	1/1	0.29	0.67	54,54,54,54	0
3	SM	C	764	1/1	0.23	0.45	2,2,2,2	0
3	SM	A	766	1/1	0.36	0.22	34,34,34,34	0
3	SM	F	764	1/1	0.26	0.00	2,2,2,2	0
3	SM	C	766	1/1	0.29	-0.00	5,5,5,5	0
3	SM	F	766	1/1	0.17	-0.09	56,56,56,56	0
3	SM	A	765	1/1	0.26	-0.18	2,2,2,2	0
2	NAG	B	762	14/15	0.25	-0.23	66,87,98,98	0
2	NAG	C	762	14/15	0.20	-0.25	46,69,81,81	0
2	NAG	A	762	14/15	0.23	-0.37	76,93,98,98	0
2	NAG	F	762	14/15	0.19	-0.50	67,86,94,95	0
2	NAG	H	762	14/15	0.23	-0.50	89,97,98,98	0
2	NAG	D	762	14/15	0.18	-0.56	62,81,93,94	0
2	NAG	E	762	14/15	0.20	-0.56	64,80,90,92	0
2	NAG	G	762	14/15	0.20	-0.72	80,91,96,98	0
3	SM	G	765	1/1	0.21	-0.86	2,2,2,2	0
3	SM	B	765	1/1	0.18	-1.26	2,2,2,2	0
3	SM	C	765	1/1	0.17	-1.44	2,2,2,2	0
3	SM	E	765	1/1	0.17	-1.49	2,2,2,2	0
3	SM	H	765	1/1	0.16	-1.89	2,2,2,2	0
3	SM	D	765	1/1	0.13	-2.07	2,2,2,2	0
3	SM	F	765	1/1	0.14	-2.23	2,2,2,2	0
3	SM	E	766	1/1	0.30	-34.00	2,2,2,2	0

6.5 Other polymers ⓘ

There are no such residues in this entry.