



# Full wwPDB X-ray Structure Validation Report

Jun 16, 2014 – 08:28 PM BST

PDB ID : 4V58  
Title : Crystal structure of fatty acid synthase from thermomyces lanuginosus at 3.1 angstrom resolution.  
Authors : JENNI, S.; LEIBUNDGUT, M.; BOEHRINGER, D.; FRICK, C.; MIKO-LASEK, B.; BAN, N.  
Deposited on : 2007-03-09  
Resolution : 3.10 Å(reported)

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

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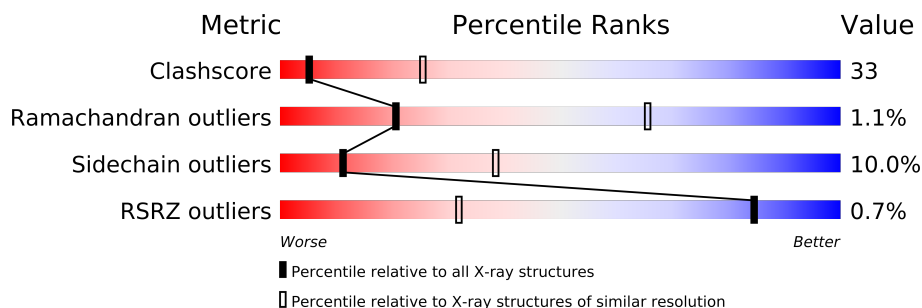
The following versions of software and data (see [references](#)) were used in the production of this report:

MolProbity : 4.02b-467  
Mogul : 1.16 November 2013  
Xtriage (Phenix) : dev-1323  
EDS : stable23397  
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) : stable23397

# 1 Overall quality at a glance

The reported resolution of this entry is 3.10 Å.

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



Metric	Whole archive (#Entries)	Similar resolution (#Entries, resolution range(Å))
Clashscore	79885	1078 (3.16-3.04)
Ramachandran outliers	78287	1044 (3.16-3.04)
Sidechain outliers	78261	1044 (3.16-3.04)
RSRZ outliers	66119	1008 (3.18-3.02)

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  $\geq 3$ , 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	1878	
1	B	1878	
1	C	1878	
1	D	1878	
1	E	1878	
1	F	1878	
2	G	2060	
2	H	2060	
2	I	2060	
2	J	2060	
2	K	2060	
2	L	2060	

## 2 Entry composition

There are 3 unique types of molecules in this entry. The entry contains 166671 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.

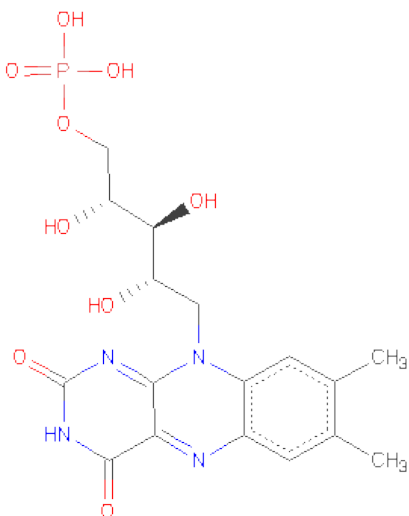
- Molecule 1 is a protein called FATTY ACID SYNTHASE ALPHA SUBUNITS.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	A	1457	Total	C	N	O	S	0	0	0
			11514	7290	2005	2170	49			
1	B	1464	Total	C	N	O	S	0	0	0
			11571	7323	2015	2183	50			
1	C	1462	Total	C	N	O	S	0	0	0
			11555	7312	2012	2181	50			
1	D	1467	Total	C	N	O	S	0	0	0
			11593	7336	2021	2186	50			
1	E	1456	Total	C	N	O	S	0	0	0
			11506	7285	2004	2169	48			
1	F	1461	Total	C	N	O	S	0	0	0
			11546	7307	2010	2179	50			

- Molecule 2 is a protein called FATTY ACID SYNTHASE BETA SUBUNITS.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
2	G	2060	Total	C	N	O	S	0	0	0
			16200	10314	2781	3051	54			
2	H	2060	Total	C	N	O	S	0	0	0
			16200	10314	2781	3051	54			
2	I	2060	Total	C	N	O	S	0	0	0
			16200	10314	2781	3051	54			
2	J	2060	Total	C	N	O	S	0	0	0
			16200	10314	2781	3051	54			
2	K	2060	Total	C	N	O	S	0	0	0
			16200	10314	2781	3051	54			
2	L	2060	Total	C	N	O	S	0	0	0
			16200	10314	2781	3051	54			

- Molecule 3 is FLAVIN MONONUCLEOTIDE (three-letter code: FMN) (formula: C<sub>17</sub>H<sub>21</sub>N<sub>4</sub>O<sub>9</sub>P).



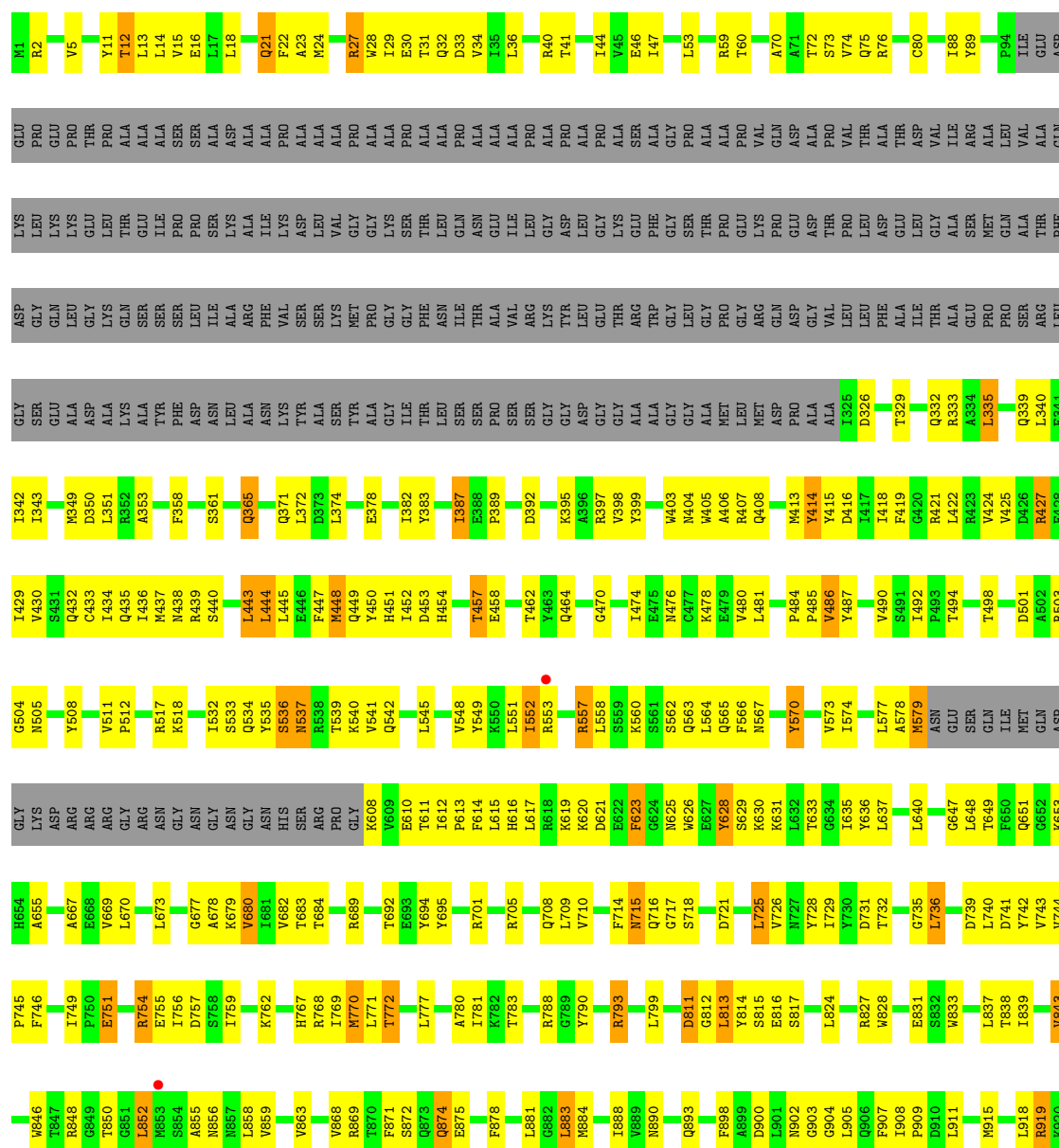
Mol	Chain	Residues	Atoms					ZeroOcc	AltConf
3	G	1	Total	C	N	O	P	0	0
			31	17	4	9	1		
3	H	1	Total	C	N	O	P	0	0
			31	17	4	9	1		
3	I	1	Total	C	N	O	P	0	0
			31	17	4	9	1		
3	J	1	Total	C	N	O	P	0	0
			31	17	4	9	1		
3	K	1	Total	C	N	O	P	0	0
			31	17	4	9	1		
3	L	1	Total	C	N	O	P	0	0
			31	17	4	9	1		

### 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.

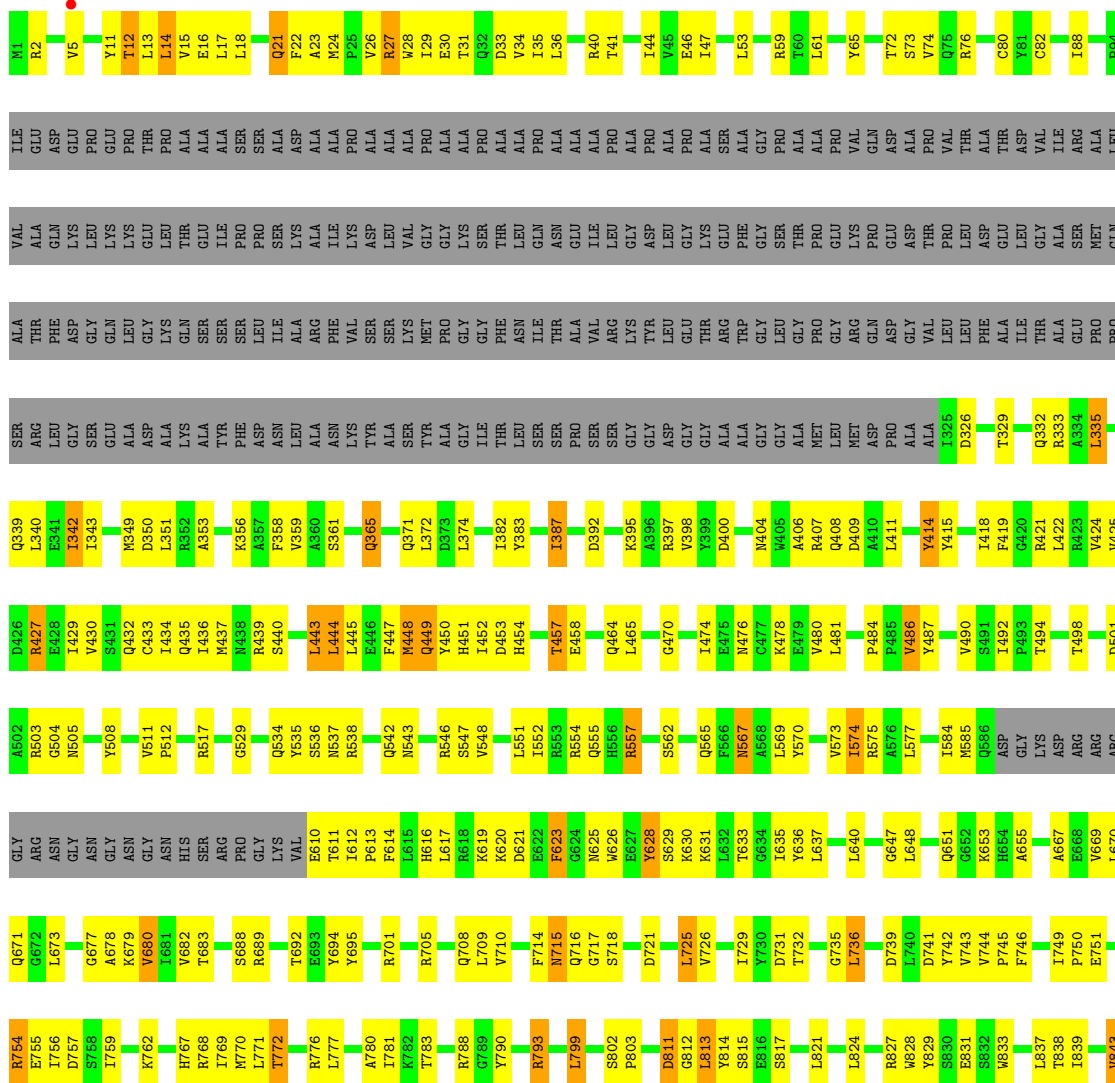
#### • Molecule 1: FATTY ACID SYNTHASE ALPHA SUBUNITS

Chain A: 

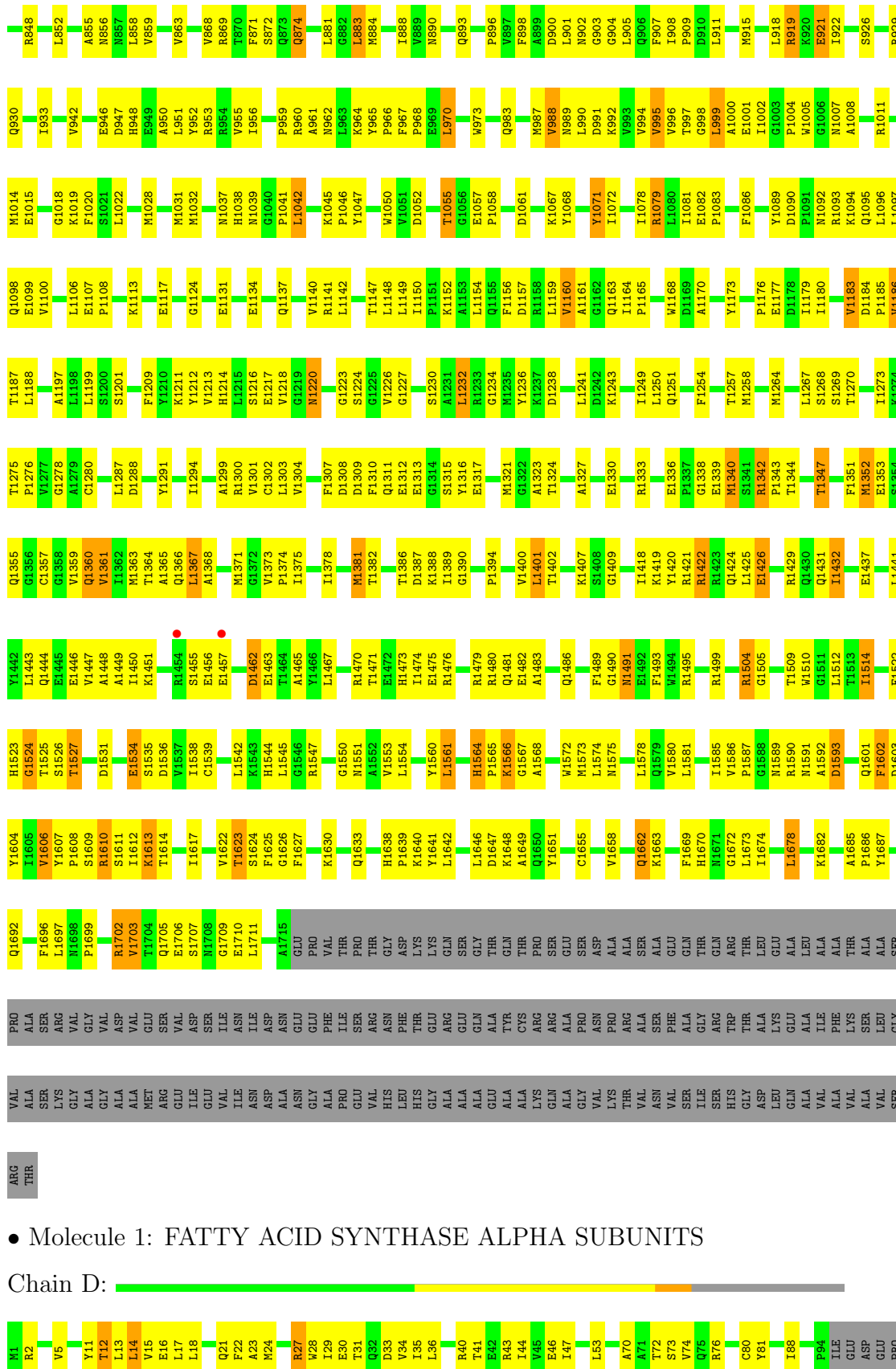




S1455	L1367	V1213	I1129	M1028	E946	R848	R754	G683	ASP	ASP	T498	R423	I342	GLY	ASP	LYS
E1466	A1368	H1214	I1129	A1029	D947	G849	E755	G683	ARG	ARG	T499	V424	I343	SER	GLY	LEU
E1467	F1130	L1215	F1130	M1030	E948	T850	I756	V669	ARG	ARG	I500	V425	L347	GLU	GLN	LYS
F1461	M1371	S1216	E1131	M1031	E949	G851	D757	V669	GLY	GLY	D501	R426	L347	LYS	LEU	LYS
D1462	G1372	E1217	Q1137	M1032	A950	L852	S758	L673	ASP	ASP	N505	E427	M349	ALA	LYS	LEU
E1463	V1373	V1218	Y1138	M1037	L951	R853	I759	L673	ASN	ASN	N505	T429	D350	LYS	GLN	THR
E1464	P1374	G1219	Y1138	M1037	Y952	S854	I759	L673	ASN	ASN	N505	T429	D350	LYS	GLN	THR
T1465	I1375	M1220	Y1138	M1037	A953	R855	K762	G677	GLY	GLY	Y508	V430	L351	ALA	SER	GLU
I1466	F1307	G1223	V1140	M1038	R953	R856	K762	G677	ASN	ASN	Y508	V430	L351	ALA	SER	GLU
I1467	D1308	G1223	R1141	M1039	I956	R857	H767	A678	ASN	ASN	Y508	V430	L351	ALA	SER	GLU
I1470	D1309	G1223	R1141	M1039	I956	R857	H767	A678	ASN	ASN	Y508	V430	L351	ALA	SER	GLU
T1471	F1310	G1225	R1143	M1042	P959	V868	I769	I681	GLY	GLY	P512	T434	K356	ILE	SER	LYS
E1472	E1312	G1227	L1148	P1046	A961	R869	M770	V682	ASN	ASN	R517	T436	K357	ALA	ARG	ALA
E1473	E1313	G1228	L1149	P1047	R962	T870	L772	T683	SER	SER	A527	T437	S361	VAL	PHE	ILE
H1472	G1314	T1229	L1150	M1050	X964	F871	R776	S688	ARG	ARG	A527	T437	S361	VAL	PHE	ILE
I1474	S1315	G1230	P1151	M1051	X964	F871	R776	S688	ARG	ARG	A527	T437	S361	VAL	PHE	ILE
E1475	Y1316	A1231	K1152	V1051	Y965	O874	L777	R689	PRO	PRO	Y535	T438	S361	VAL	PHE	ILE
R1476	E1317	L1232	A1153	D1052	P966	L881	L777	R689	GLY	GLY	Y535	T438	S361	VAL	PHE	ILE
R1479	M1321	G1234	Q1155	T1055	P967	L882	A780	T692	GLY	GLY	Y535	T438	S361	VAL	PHE	ILE
R1480	G1322	M1235	Q1155	T1055	P967	L882	A780	T692	GLY	GLY	Y535	T438	S361	VAL	PHE	ILE
Q1481	A1323	Y1236	D1157	G1056	P968	G882	I781	Y695	PRO	PRO	Y535	T438	S361	VAL	PHE	ILE
E1482	T1324	K1237	R1158	P1058	L970	M884	T783	R701	GLY	GLY	Y535	T438	S361	VAL	PHE	ILE
A1483	T1326	D1238	L1159	P1058	L970	M884	T783	R701	GLY	GLY	Y535	T438	S361	VAL	PHE	ILE
Q1486	M1326	L1241	V1160	D1061	L973	L888	R788	R705	GLY	GLY	Y535	T438	S361	VAL	PHE	ILE
F1489	E1330	K1243	A1161	K1067	Q983	P896	Y790	Q708	ASN	ASN	Y535	T438	S361	VAL	PHE	ILE
Q1490	E1330	K1243	A1161	K1067	Q983	P896	Y790	Q708	ASN	ASN	Y535	T438	S361	VAL	PHE	ILE
P1414	E1330	K1243	A1161	K1067	Q983	P896	Y790	Q708	ASN	ASN	Y535	T438	S361	VAL	PHE	ILE
I1418	R1333	L1250	P1165	I1071	N989	D901	L799	F714	GLY	GLY	Y535	T438	S361	VAL	PHE	ILE
E1492	E1336	F1254	Y1168	I1072	L990	L901	D811	Q716	GLY	GLY	Y535	T438	S361	VAL	PHE	ILE
E1493	P1337	F1254	Y1168	I1072	L990	L901	D811	Q716	GLY	GLY	Y535	T438	S361	VAL	PHE	ILE
R1499	E1338	M1257	A1170	I1078	D991	G903	G812	Q717	GLY	GLY	Y535	T438	S361	VAL	PHE	ILE
A1501	E1339	T1267	Y1173	L1080	Y995	G906	S815	S718	GLY	GLY	Y535	T438	S361	VAL	PHE	ILE
E1504	S1341	M1264	G1174	E1082	Y996	F907	E816	D721	GLY	GLY	Y535	T438	S361	VAL	PHE	ILE
G1505	R1342	M1264	G1174	E1082	Y996	F907	E816	D721	GLY	GLY	Y535	T438	S361	VAL	PHE	ILE
T1509	P1343	L1267	V1175	P1083	P997	I908	S817	L725	GLY	GLY	Y535	T438	S361	VAL	PHE	ILE
W1510	T1344	S1268	E1177	F1086	G998	P909	R818	V726	GLY	GLY	Y535	T438	S361	VAL	PHE	ILE
G1511	T1347	S1269	I1179	Y1089	L1000	D910	L819	N727	GLY	GLY	Y535	T438	S361	VAL	PHE	ILE
L1512	F1351	T1270	I1180	R1093	E1001	N915	L821	Y730	GLY	GLY	Y535	T438	S361	VAL	PHE	ILE
T1513	M1352	L1273	Y1183	K1094	G1003	L918	L824	D731	GLY	GLY	Y535	T438	S361	VAL	PHE	ILE
T1514	E1352	K1274	D1184	Q1095	P1004	R919	R827	T732	GLY	GLY	Y535	T438	S361	VAL	PHE	ILE
F1522	Q1355	T1275	P1185	L1096	W1005	X920	W828	G735	GLY	GLY	Y535	T438	S361	VAL	PHE	ILE
H1523	G1355	P1276	Y1186	L1097	G1006	E921	Y829	L736	GLY	GLY	Y535	T438	S361	VAL	PHE	ILE
G1524	G1357	Y1277	T1187	Q1098	N1007	I922	S830	L740	GLY	GLY	Y535	T438	S361	VAL	PHE	ILE
S1526	G1357	G1278	L1188	E1099	R1011	I922	S830	L740	GLY	GLY	Y535	T438	S361	VAL	PHE	ILE
D1531	V1359	C1280	L1199	V1100	M1014	S926	W833	D741	GLY	GLY	Y535	T438	S361	VAL	PHE	ILE
E1534	V1361	L1287	S1200	L1106	M1014	S926	W833	D741	GLY	GLY	Y535	T438	S361	VAL	PHE	ILE
S1535	V1361	L1287	S1201	E1107	G1018	R929	L837	V744	GLY	GLY	Y535	T438	S361	VAL	PHE	ILE
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S1546	V1361	L1287	S1201	E1107	G1018	R929	L837	V744	GLY	GLY	Y535	T438	S361	VAL	PHE	ILE
S1547	V1361	L1287	S1201	E1107	G1018	R929	L837	V744	GLY	GLY	Y535	T438	S361	VAL	PHE	ILE
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S1552	V1361	L1287	S1201	E1107	G1018	R929	L837	V744	GLY	GLY	Y535	T438	S361	VAL	PHE	ILE
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S1562	V1361	L1287	S1201	E1107	G1018	R929	L837	V744	GLY	GLY	Y535	T438	S361	VAL	PHE	ILE
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S1571	V1361	L1287	S1201	E1107	G1018	R929	L837	V744	GLY	GLY	Y535	T438	S361	VAL	PHE	ILE
S1572	V1361	L1287	S1201	E1107	G1018	R929	L837	V744	GLY	GLY	Y535	T438	S361	VAL	PHE	ILE
S1573	V1361	L1287	S1201	E1107	G1018	R929	L837	V744	GLY	GLY	Y535	T438	S361	VAL	PHE	ILE
S1574	V1361	L1287	S1201	E1107	G1018	R929	L837	V744	GLY	GLY	Y535	T438	S361	VAL	PHE	ILE
S1575	V1361	L1287	S1201	E1107	G1018	R929	L837	V744	GLY	GLY	Y535	T438	S361	VAL	PHE	ILE
S1576	V1361	L1287	S1201	E1107	G1018	R929	L837	V744	GLY	GLY	Y535	T438	S361	VAL	PHE	ILE
S1577	V1361	L1287	S1201	E1107	G1018	R929	L837	V744	GLY	GLY	Y535	T438	S361	VAL	PHE	ILE
S1578	V1361	L1287	S1201	E1107	G1018	R929	L837	V744	GLY	GLY	Y535	T438	S361	VAL	PHE	ILE
S1579	V1361	L1287	S1201	E1107	G1018	R929	L837	V744	GLY	GLY	Y535	T438	S361	VAL	PHE	ILE
S1580	V1361	L1287	S1201	E1107	G1018	R929	L837	V744	GLY	GLY	Y535	T438	S361	VAL	PHE	ILE











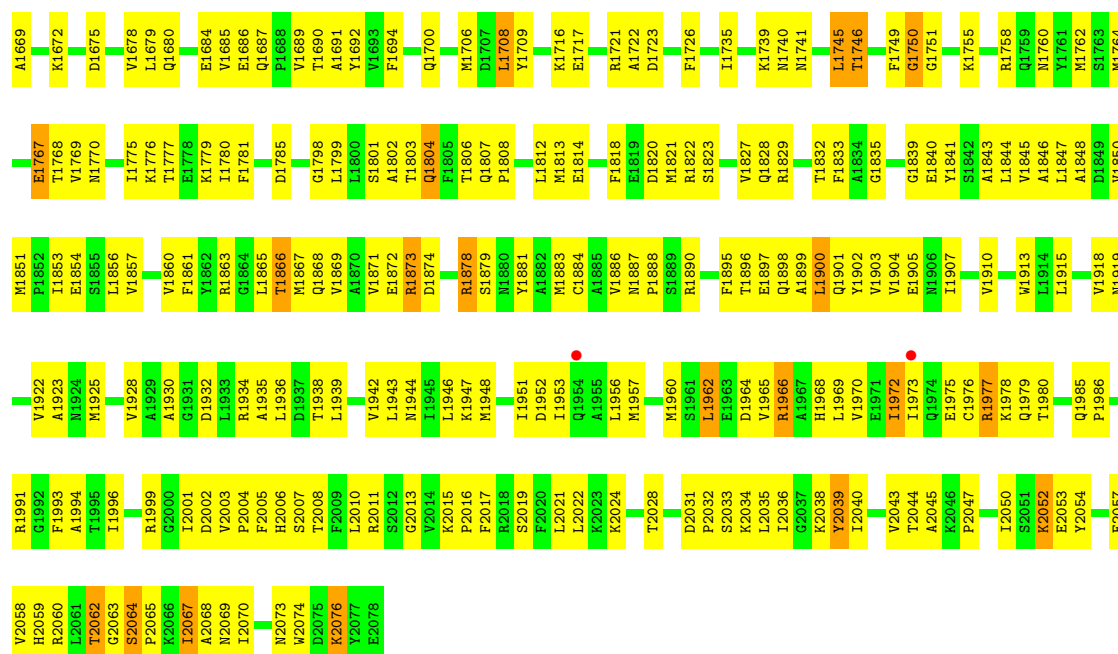
- Molecule 1: FATTY ACID SYNTHASE ALPHA SUBUNITS

## Chain F:

P1185	L1097	G1006	S926	R848	F746	K853	ASP	D501	E498	Q339	SER	ALA	VAL	ILE	R1
V1186	Q1098	M1007	S929	G849	E751	H854	GLY	N505	I429	L940	ARG	THR	ALA	GLU	R2
T1187	E1099	A1008	R929	T850	G851	A855	LYS	N506	V430	E941	LEU	PHE	GLN	ASP	V5
L1188	V1100	R1011	Q930	G851	R754	A867	ASP	Y508	S431	I342	SER	GLY	LYS	PRO	
L1199	D1105	M1014	I333	M853	E755	E868	ARG	Y508	C432	I343	GLU	GLN	LYS	LEU	Y11
S1200	L1106	E1015	I333	S854	I756	V669	ARG	V511	I434	M349	ALA	GLY	LYS	PRO	T12
S1201	E1107	E1015	I333	S854	I756	L670	ARG	P512	Q435	D350	ASP	GLY	LYS	THR	L13
F1209	P1108	G1018	V942	N856	I759	L673	GLY	R517	M437	R352	LYS	GLN	THR	PRO	L14
K1210	K1113	K1019	N944	N857	K762	L673	ASN	R517	N438	A353	ALA	SER	ALA	ALA	E16
K1211	E1117	S1021	E946	V859	K762	L673	GLY	M526	R439	K356	TYR	SER	ILE	ALA	E17
K1212	E1117	S1021	E946	V859	K762	L673	ASN	A527	S440	K357	PHE	SER	ILE	ALA	L18
K1213	E1117	S1021	E946	V859	K762	L673	ASN	A527	S440	K357	ASP	SER	PRO	SER	
K1214	E1117	S1021	E946	V859	K762	L673	ASN	A527	S440	K357	ASP	SER	PRO	SER	
K1215	E1117	S1021	E946	V859	K762	L673	ASN	A527	S440	K357	ASP	SER	PRO	SER	
K1216	E1117	S1021	E946	V859	K762	L673	ASN	A527	S440	K357	ASP	SER	PRO	SER	
K1217	E1117	S1021	E946	V859	K762	L673	ASN	A527	S440	K357	ASP	SER	PRO	SER	
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K1228	E1117	S1021	E946	V859	K762	L673	ASN	A527	S440	K357	ASP	SER	PRO	SER	
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K1231	E1117	S1021	E946	V859	K762	L673	ASN	A527	S440	K357	ASP	SER	PRO	SER	
K1232	E1117	S1021	E946	V859	K762	L673	ASN	A527	S440	K357	ASP	SER	PRO	SER	
K1233	E1117	S1021	E946	V859	K762	L673	ASN	A527	S440	K357	ASP	SER	PRO	SER	
K1234	E1117	S1021	E946	V859	K762	L673	ASN	A527	S440	K357	ASP	SER	PRO	SER	
K1235	E1117	S1021	E946	V859	K762	L673	ASN	A527	S440	K357	ASP	SER	PRO	SER	
K1236	E1117	S1021	E946	V859	K762	L673	ASN	A527	S440	K357	ASP	SER	PRO	SER	
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K1238	E1117	S1021	E946	V859	K762	L673	ASN	A527	S440	K357	ASP	SER	PRO	SER	
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K1240	E1117	S1021	E946	V859	K762	L673	ASN	A527	S440	K357	ASP	SER	PRO	SER	
K1241	E1117	S1021	E946	V859	K762	L673	ASN	A527	S440	K357	ASP	SER	PRO	SER	
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K1245	E1117	S1021	E946	V859	K762	L673	ASN	A527	S440	K357	ASP	SER	PRO	SER	
K1246	E1117	S1021	E946	V859	K762	L673	ASN	A527	S440	K357	ASP	SER	PRO	SER	
K1247	E1117	S1021	E946	V859	K762	L673	ASN	A527	S440	K357	ASP	SER	PRO	SER	
K1248	E1117	S1021	E946	V859	K762	L673	ASN	A527	S440	K357	ASP	SER	PRO	SER	
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K1252	E1117	S1021	E946	V859	K762	L673	ASN	A527	S440	K357	ASP	SER	PRO	SER	
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K1255	E1117	S1021	E946	V859	K762	L673	ASN	A527	S440	K357	ASP	SER	PRO	SER	
K1256	E1117	S1021	E946	V859	K762	L673	ASN	A527	S440	K357	ASP	SER	PRO	SER	
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K1258	E1117	S1021	E946	V859	K762	L673	ASN	A527	S440	K357	ASP	SER	PRO	SER	
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K1260	E1117	S1021	E946	V859	K762	L673	ASN	A527	S440	K357	ASP	SER	PRO	SER	
K1261	E1117	S1021	E946	V859	K762	L673	ASN	A527	S440	K357	ASP	SER	PRO	SER	
K1262	E1117	S1021	E946	V859	K762	L673	ASN	A527	S440	K357	ASP	SER	PRO	SER	
K1263	E1117	S1021	E946	V859	K762	L673	ASN	A527	S440	K357	ASP	SER	PRO	SER	
K1264	E1117	S1021	E946	V859	K762	L673	ASN	A527	S440	K357	ASP	SER	PRO	SER	
K1265	E1117	S1021	E946	V859	K762	L673	ASN	A527	S440	K357	ASP	SER	PRO	SER	
K1266	E1117	S1021	E946	V859	K762	L673	ASN	A527	S440	K357	ASP	SER	PRO	SER	
K1267	E1117	S1021	E946	V859	K762	L673	ASN	A527	S440	K357	ASP	SER	PRO	SER	
K1268	E1117	S1021	E946	V859	K762	L673	ASN	A527	S440	K357	ASP	SER	PRO	SER	
K1269	E1117	S1021	E946	V859	K762	L673	ASN	A527	S440	K357	ASP	SER	PRO	SER	
K1270	E1117	S1021	E946	V859	K762	L673	ASN	A527	S440	K357	ASP	SER	PRO	SER	
K1271	E1117	S1021	E946	V859	K762	L673	ASN	A527	S440	K357	ASP	SER	PRO	SER	
K1272	E1117	S1021	E946	V859	K762	L673	ASN	A527	S440	K357	ASP	SER	PRO	SER	
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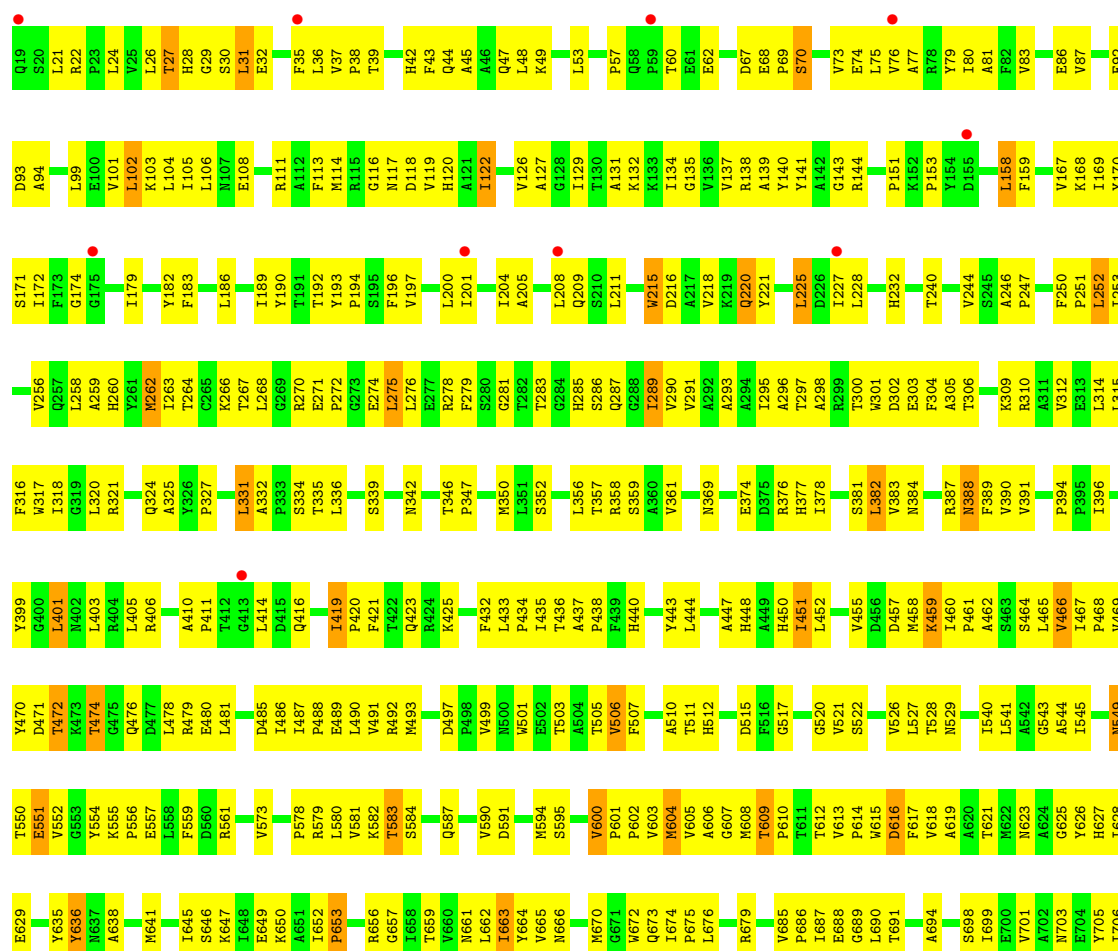


WORLDWIDE  
**PDB**  
PROTEIN DATA BANK



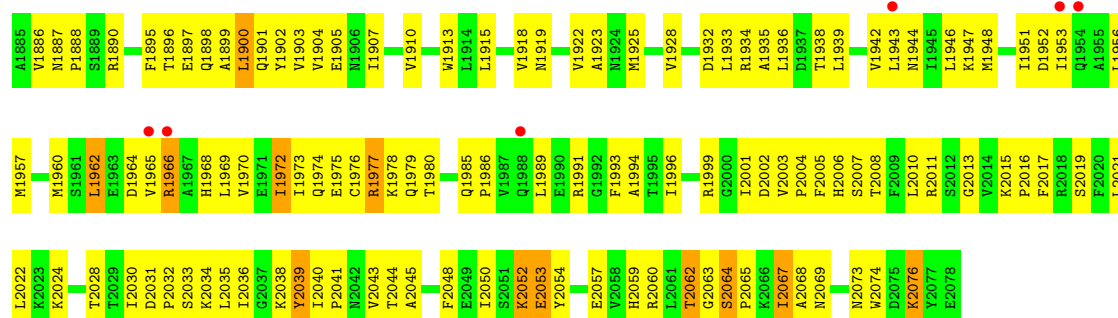
## • Molecule 2: FATTY ACID SYNTHASE BETA SUBUNITS

Chain H:



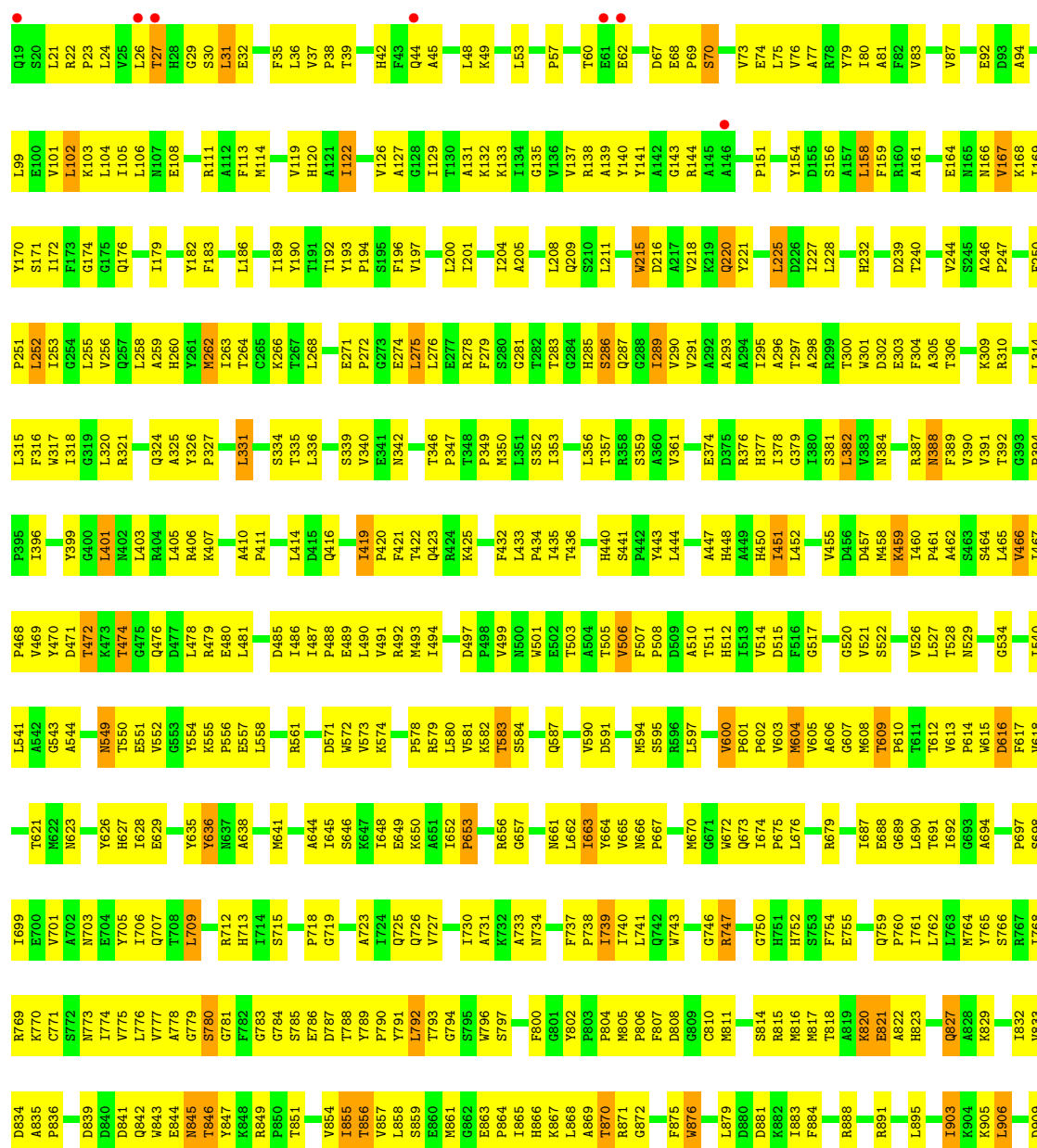


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E1819	G1641	R1572	M1500	M1427	V1352	G1270	P1198	L1121	E1051	L979	K912	D841	A778	T708
D1820	L1644	A1573	Y1504	T1430	G1354	Y1271	T1199	K1122	D1052	L980	V913	Q842	G779	L709
M1821	L1647	P1574	S1505	S1431	K1355	I1275	G1201	A1123	I1053	D985	F915	Q844	S780	R712
R1822	D1648	E1578	S1506	Q1432	K1356	R1274	M1202	T1124	Y1057	D986	G916	N845	F781	H713
S1823	L1649	M1579	V1507	F1433	A1356	E1276	Y1203	E1126	Y1061	D987	R917	T846	G783	V714
V1827	T1650				K1359	M1277	V1204		V1062	E988	N918	T847	G784	S715
Q1828	L1653	R1582	G1511	Y1435	P1360	M1278	E1205		G1062	E989	G921	R848	S785	F716
R1829	G1511	G1511		R1436	F1362	T1279	T1207		T1064	Y990		R849	D787	K717
T1832	L1514	L1514	L1514	V1439	R1284	R1284	T1284		R1063	P850	V924	P850	T788	G719
F1833	E1516	E1516	E1516	F1440	K1365	K1286	P1209		C1065	I896	D925	T851	Y789	
A1834	L1517	L1517	L1517	D1441	I1366	E1287	D1210		C1066	L997	L926	V854	P790	A723
G1835	L1518	L1518	L1518	V1442	I1367	F1288	D1211		C1068	A998	E927	T855	Y791	I724
	T1519	T1519	T1519	V1442	G1368	Y1289	P1212		G1069	A999	D928	T856	L792	Q725
	K1520	K1520	K1520	T1445	D1369	Y1290	K1141		P1070	Y1000	M929	T857	T793	Q726
	E1521	E1521	E1521		R1291	K1142	T1142		P1071	P1001	G794	L858	G794	V727
	L1522	L1522	L1522		V1292	S1143	S1143		A1072	E1002	Y931	S859	S795	
	I1523	I1523	I1523		I1217				A1073		A932	E860	S796	T730
	Q1524	Q1524	Q1524		S1218				K1074	Q1006	E933	R861	S797	A731
	V1525	V1525	V1525		V1219				Y1075	L1007	E934	G862	T798	
	A1526	A1526	A1526		R1220				S1076	I1008	V935	E863	K799	N734
	S1527	S1527	S1527						K1077	N1009	G800	P864	F800	
	V1528	V1528	V1528		S1223					A1010	R937	T865	G801	F737
	D1529	D1529	D1529		Q1224					Q1011	M938	R866	Y802	P738
	M1530	M1530	M1530		S1225					D1012	V939	K867	P803	I739
	L1531	L1531	L1531		A1226					V1013	R941	L868	P804	I740
	A1532	A1532	A1532		K1227					Q1014	L941	A869	M805	L741
	G1533	G1533	G1533		L1228					H1015	M942	T870	P806	Q742
	E1534	E1534	E1534		V1229					F1016	Y943	R871	F807	W743
					K1230					L1017	V944	G872	D808	W743
										L1018			G809	G746
					I1164					L1019	K948	R875	C810	R747
					Y1169					C1020	R949	W876	M811	
					S1170					Q1021	W950	K877		G750
					W1171					R1022	I951	E878	S814	H751
					R1172						D952	L879	R815	H752
					H1173					K1026	P953	D880	M816	
					A1174					P1027	S954	D881	M817	E755
					M1175					V1028	L955		T818	D756
										P1029	K956	F884	A819	F757
					T1178					F1030	K957		K820	W758
					E1179					V1031	L958		E821	Q759
					V1180					P1032	T959		A822	P760
					F1181					A1033	G960		H823	I761
					V1182					L1034	D961		T824	L762
					Q1183					G1035	P962		S825	
										E1036	I963		K826	Y765
					R1186						R964		Q827	S766
					F1187					E1039	R965		A828	R767
					Q1188					Y1040	V966		K829	I768
					T1189					W1041	E967			R769
					M1190					F1042	E968		I832	K770
					P1191					K1043	R969		I903	C771
					L1192					K1044	P970		D834	S772
					K1193					E1114	T971		A835	N773
					H1195					L1047	S972		P836	I774
					R1196					W1048				V775
					F1196					Q1049	P977		D839	L776



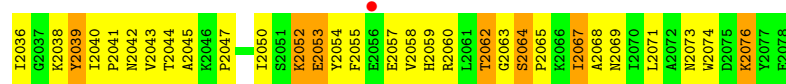
## ● Molecule 2: FATTY ACID SYNTHASE BETA SUBUNIT

Chain I:



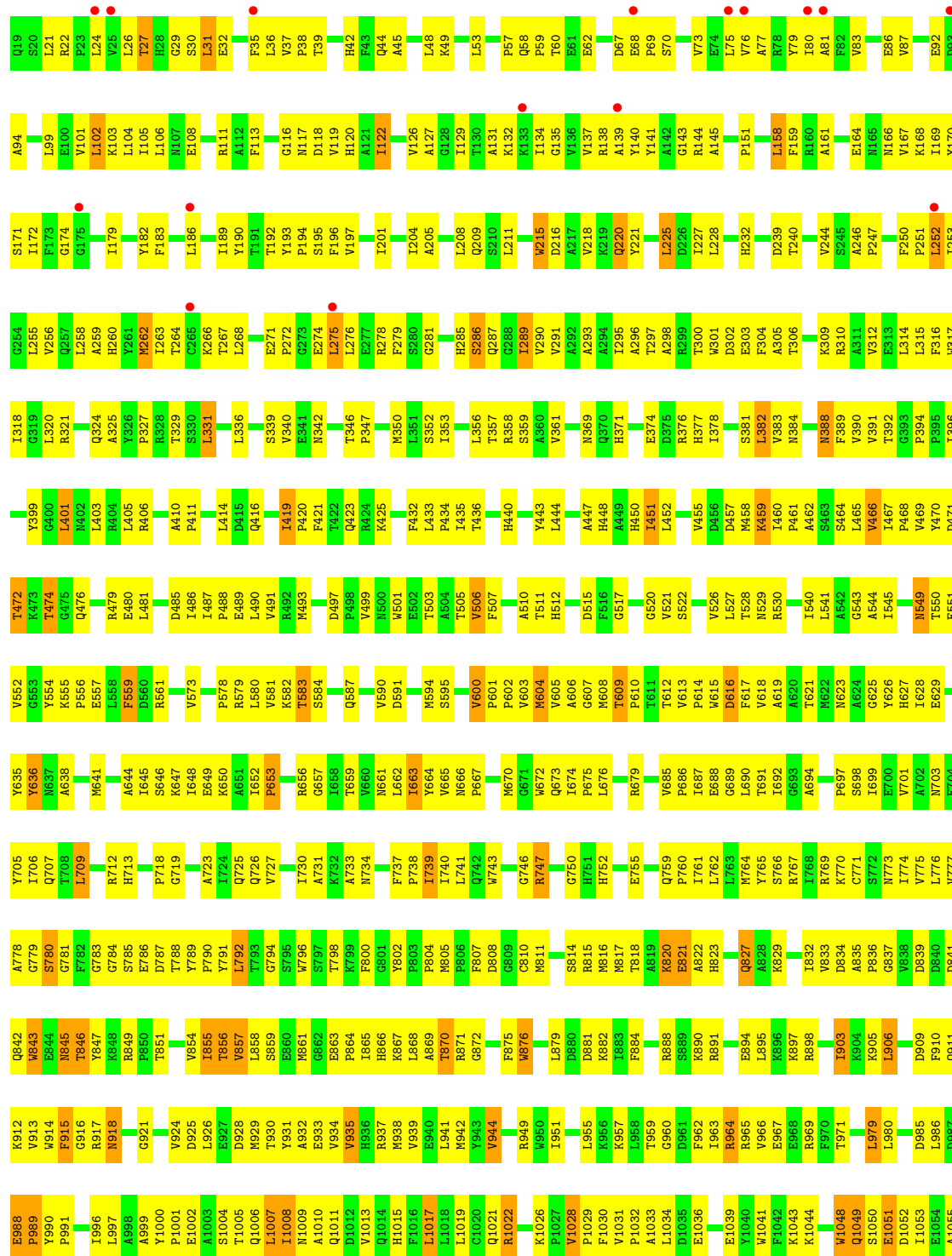


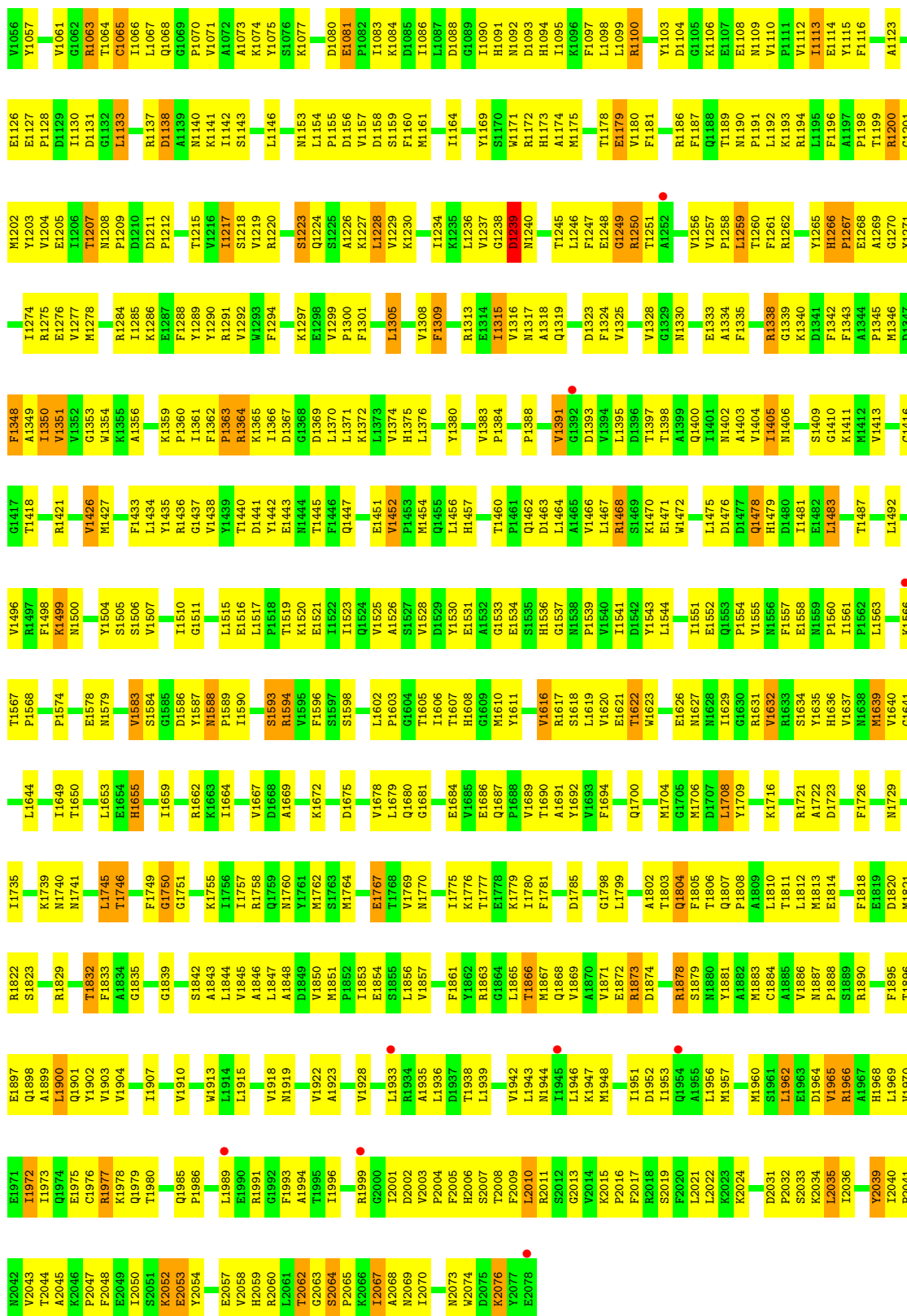
WORLD WIDE  
PDB  
PROTEIN DATA BANK



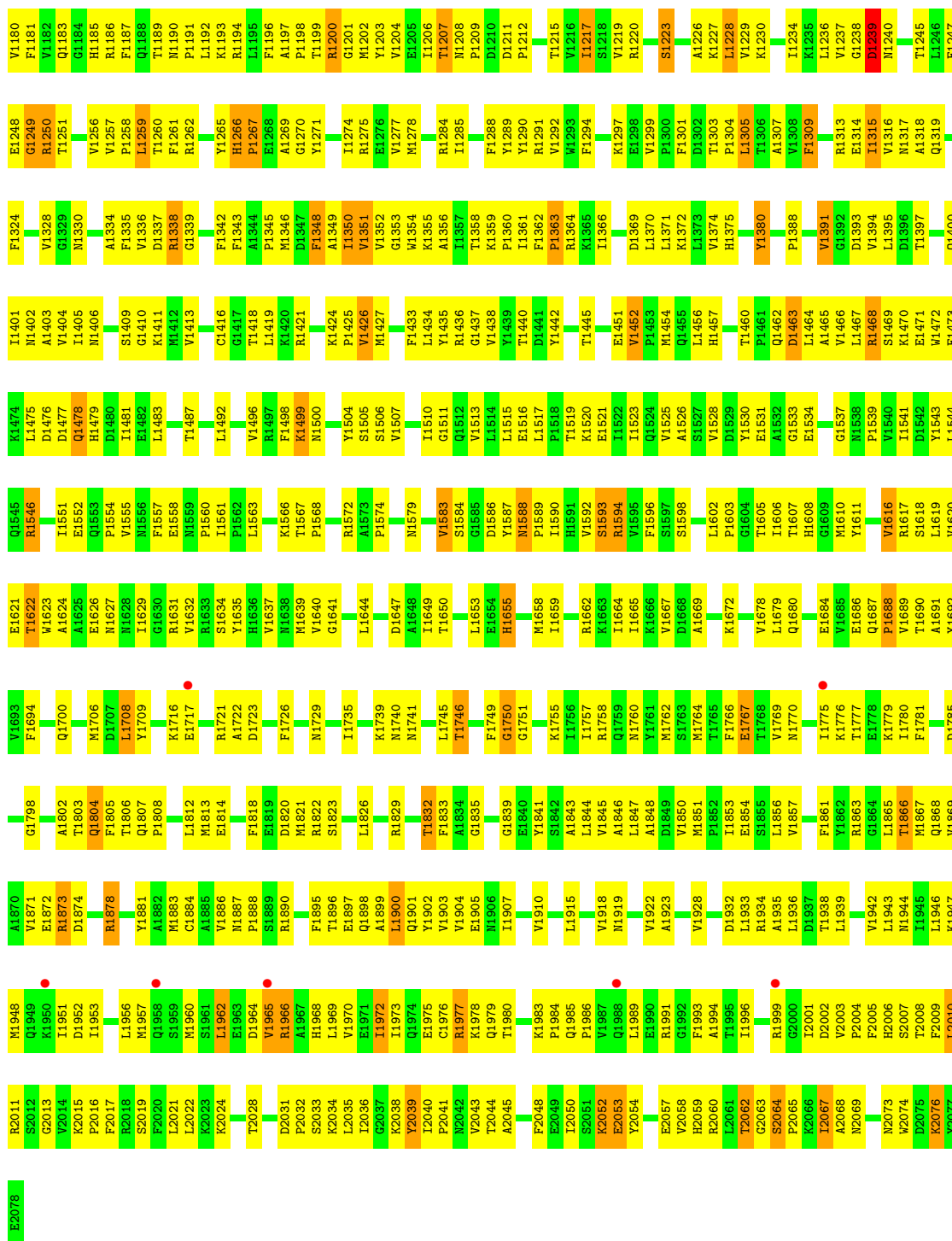
• Molecule 2: FATTY ACID SYNTHASE BETA SUBUNITS

Chain J:









V1277	G1201	D1125	Y1057	L986	W914	E844	S780	L709	Y635	E551	D471	G400	G319	L258	F173
M1278	Y1203	E1126	V1061	E988	G916	T846	G782	R712	N637	G553	T472	L401	L320	A259	G174
R1284	V1204	P1128	G1062	P989	R917	Y847	G783	H713	A638	Y554	T474	L403	R321	H260	I179
I1285	E1205	R1129	R1063	G990	N918	X848	G784	I714	X555	K555	G475	R404	Q324	M262	Y182
K1286	I1206	I1130	T1064	P991		R849	S785	S715	M641	P556	Q476	L405	A325	L263	
E1287	T1207	D1131	G1065		G921	P850	E786	F716		E557	D477	R406	Y926	T264	F183
F1288	N1208	G1132	L1066	I987	E922	T851	D787	K717	A644		L478	K407	P327	G285	
Y1289	L1133	L1067	L1067	L998	P923	V854	T788	F718	I645		R479		R327	G285	
R1290		Q1068		A998	V924	R855	P790	G719	S646	V561	E480	A410	L331	K266	L186
I1291	T1215	R1137	G1069	A999	D925	T856	P789		K647	V673	E480	P411	L331	T267	
Y1292	V1216	D1138	V1070	A998	L926	T856	Y791	A723	I648		L481	T412	S334	L268	I189
M1293	S1217	N1139	V1071	E1001	E927	T857	L792	I724	E649	P578	D485	G413	T335	G289	
F1294	L1140	R1140	A1072	E1002	D928	L858	T793	Q725	K650	R579	I486	L414	L336	R270	T191
			A1073		M929	S859	G794	Q726	A651	L580	I487	D415		P272	Y193
R1220		I1142	K1074	T1005	T930	E860	S795	W727	I652	V581	P488	Q416	S339	G273	P194
K1297	S1143	S1143	Y1075	L1006	Y931	K861	H796	W743	P653	K582	E489		V340	E274	S195
E1298			S1076	L1007	A932	G862	S797	W730	R656	T583	L490	T419	E541	L275	F196
Y1299			K1077	I1008	E933	E863	T798	A731	G657	S584	V491	P420	N342	T276	V197
F1300		L1146		N1009	V934	P864	K799				R492	F421		E277	
L1305		N1153	D1080	I1010	V935	T865	F800	N734	N661	V590	D497	T422	T346	R278	L200
V1229	K1218	L1154	R936	Q1011	H936	H866	G801		L662	D591	P498	R424	T348	F279	I201
K1230	P1155	P1156	I1083	V1013	R937	K867	Y802	F737	I663		P435	R425	P349	G281	T204
F1309	D1157	D1158	K1084	Q1014	M938	L868	P803	I739	V664	D591	V499		M350	T282	A205
I1234	L1234	L1235	D1085	Q1015	V939	A869	P804	T739	T663	M594	H500	F432	L351	T283	
K1313	K1236	S1159	L1086	F1016	E940	T870	M805	I740	N666	M594	H501	L433	S352	G284	L208
E1314	F1160	F1160	L1087	L1017	L941	R871	P806	L741	P667	R596	E502	P434	I353	H285	Q209
L1315			G1089	L1018	M942	G872	D808	W743		L597	T503	T435		S286	S210
V1316	G1238	I1164	I1030	L1019	V944	F875	G809		M670		A504	T436	L356	Q287	L211
N1317	D1239	H1091	Q1020	Q1020		N876	C810	G746	G671	V600	T505	A437	T357	G288	
A1318	M1240	N1167	N1092	Q1021	R949	N876	M811	R747	W672	P601	F507	P438	R358	L289	W215
Q1319		S1168	D1093	R1022	W950	L879			Q673	P602		F439	S359	V290	D216
T1245		Y1169	H1094		I951	D880	S814	G750	L674	V603		H440	A360	G291	A217
L1246		S1170	I1095	K1026	L955	D881	R815	H751	P675	M604	A510		V361	A292	V218
F1247		W1171	K1086	P1027	L985	K882	M816	H752	L676	V605	T511	L444		A293	K219
E1248		R1172	K1097	I1028	A956	T883	R816			A606	H512		P373	A294	Q220
G1249	H1173	L1098	P1029	F1029	K957	F884	T818	E755	R679	G606	T513	A447	D374	L295	Y221
A1334	F1030	A1174	L1098	P1030	L958	R884	A819			M608	V514	H448	E375	A296	
F1335	M1175	M1175	V1031	V1031	T959	R888	K820	Q759	V685	T609	D515	A449	R376	T297	L225
			P1032	P1032	G960	S889	E821	P760	P686	P610	F516	H450	H377	A298	
			A1033	A1033	G961	K890	A822	I761	I687	T611	G517	L451	I378	R299	L227
			L1034	L1034	F962	R891	H823	L762	L688	T612		L452		T300	L228
			D1035	D1035	I963	E894	Q827	W764	G689	V613	G520	V455	S381	W301	
			E1036	E1036	R964	L895	A828	Y765	L690	P614	V521	D456	L382	D302	H232
			Y1039	Y1039	V966	K896	K829	S766	T691	W615	S522	D457	V383	E303	
			E1040	E1040	E967	K897	R767	R767	A694	F617	V526	M458	N384	F304	T240
			Q1188	Q1188	E968	R898	I832	I768		V618	L527	K459	R387	A305	V244
			P1111	P1111	R969		V833		S698	A619	T528	T460	N388	T306	
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			K1044	K1044	T971	X904	A835	C771	E700	T621		A462	V390	R310	P247
			E1114	E1114	Q976	K905	P836	S772	V701	M622	I540	S463	V391	A311	
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			F1116	F1116	P977	D909	V838	I774	N703	G542	G543	V466	G393	V312	P251
					S978	F910	D839	L776	E705	H627	A544	I467	P394	L252	L253
			I1120	I1120	L980	Q911	D841	V777	I706	I628		V469	P396	F316	
						K912	Q842	V778	Q707	E629	N549	V469	I396	W317	
			F1123	F1123		T912	Q842	C779	T708		T550	Y470		T319	
			A1290	A1290		T926									



K1359	R1436	L1514	V1583	L1653	R1758	A1843	V1913	T1980	K2046
P1360	G1437	L1515	S1584	E1654	Q1759	L1844	L1914	Q1985	P2047
F1361	Y1439	E1516	G1585	H1655	M1760	V1845	L1915	P1986	I2050
F1362	Y1439	E1517	D1586	I1659	Y1761	A1846	L1916		S2051
P1363	T1440	P1518	N1588	R1662	M1762	A1848	V1918		K2052
R1364	D1441	T1519	P1589	K1663	S1763	V1849	M1919		E2053
K1365	Y1442	K1520	I1590	T1664	M1764	V1850	Y1920		Y2054
I1366		E1521	H1591	K1665	F1765	M1851	N1921		
D1367		I1522	V1592	T1667	F1766	P1852	V1922		
G1368		I1523	S1593	V1667	E1767	L1853	A1923		
D1369		Q1524	D1594	D1668	T1768	E1854	T1995		
L1370		P1525	R1595	A1669	V1769	S1855	I1996		
L1371		A1526	F1596	K1672	M1770	L1856	P1997		
K1372		S1527				V1857	V1928		
L1373		V1528	L1602	D1675	I1775		D1932		
V1374		D1529	P1603	D1676	K1776	F1861	L1933		
H1375		Y1530	G1604	V1678	T1777	Y1862	R1934		
		E1531	T1605	L1679	E1778	R1863	A1935		
Y1380		A1532	I1606	Q1680	K1779	G1864	V2003		
R1381		G1533	H1608	G1681	T1780	T1865	P2004		
M1382		E1534	G1609	E1684	F1781	T1866	F2005		
		S1535	M1610	E1685		M1867	H2006		
P1388		H1536	Y1611	V1685	D1785	Q1868	S2007		
		V1465		E1686		V1869	T2008		
V1391		G1537		Q1687	Y1793	A1870	Y1942		
G1392		H1538	V1616	Q1688	L1799	V1871	L1943		
D1393		P1539	R1617	V1689		R1872	M1944		
V1394		V1540	S1618	T1690	A1802	R1873	L1945		
L1395		I1541	L1619	A1691	T1803	D1874	K1947		
D1396		D1542	V1620	Y1692	Q1804		M1948		
E1471		Y1543	E1621	V1693	F1805	R1878			
D1397		L1544	T1622	F1694	T1806	S1879	T1951		
T1398		Q1545	W1623	M1706	Q1807	V1880	D1952		
A1399		R1546		D1707	P1808	Y1881	I1953		
Q1400		I1551	E1626	L1708	L1812	M1882	L1956		
Q1401		E1552	N1627	Y1709	M1813	C1884	M1957		
N1402		Q1478	H1628	K1716	E1814	V1886			
N1403		H1477	I1629	R1721	F1818	N1887	S1961		
V1404		H1479	G1630	A1722	E1819	P1888	L1962		
I1405		D1480	R1631	F1726	D1820	S1889	E1963		
M1406		T1481	V1632	K1739	M1821	L1895	D1964		
		L1483	E1557	N1740	S1823	T1896	V1965		
S1409		L1492	N1558	M1741	Q1828	E1897	R1966		
G1410		T1487	E1559	P1742	R1829	Q1898	A1967		
K1411		L1488	P1560		Q1829	I1899	H1968		
M1412		V1489	I1561		R1829	L1900	L1969		
V1413			P1562		T1832	Q1901	V1970		
			L1563		F1833	Y1902	E1971		
C1416			K1566		A1834	V1903	I1972		
G1417			T1567		G1835	V1904	T1973		
T1418			N1568			E1905	Q1974		
					F1749	L1906	I1975		
R1421					G1750	I1907	C1976		
					G1751		R1977		
K1424					K1755	V1910	K1978		
P1425									
Y1426									
V1427									
L1434									
Y1435									

## 4 Data and refinement statistics

Property	Value	Source
Space group	P 1 21 1	Depositor
Cell constants a, b, c, $\alpha$ , $\beta$ , $\gamma$	216.37Å 414.43Å 221.51Å 90.00° 111.65° 90.00°	Depositor
Resolution (Å)	12.00 – 3.10 88.45 – 3.10	Depositor EDS
% Data completeness (in resolution range)	(Not available) (12.00-3.10) 89.5 (88.45-3.10)	Depositor EDS
$R_{merge}$	0.16	Depositor
$R_{sym}$	(Not available)	Depositor
$\langle I/\sigma(I) \rangle$ <sup>1</sup>	3.59 (at 3.13Å)	Xtriage
Refinement program	PHENIX.REFINE	Depositor
R, $R_{free}$	0.290 , 0.320 0.253 , (Not available)	Depositor DCC
$R_{free}$ test set	No test flags present.	DCC
Wilson B-factor (Å <sup>2</sup> )	38.3	Xtriage
Anisotropy	0.105	Xtriage
Bulk solvent $k_{sol}$ (e/Å <sup>3</sup> ), $B_{sol}$ (Å <sup>2</sup> )	0.29 , 65.9	EDS
Estimated twinning fraction	0.280 for l,-k,h	Xtriage
L-test for twinning	$\langle  L  \rangle = 0.21$ , $\langle L^2 \rangle = 0.07$	Xtriage
Outliers	0 of 629508 reflections	Xtriage
$F_o, F_c$ correlation	0.78	EDS
Total number of atoms	166671	wwPDB-VP
Average B, all atoms (Å <sup>2</sup> )	76.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 1.42% of the height of the origin peak. No significant pseudotranslation is detected.*

<sup>1</sup>Intensities 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: FMN

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	0/11744	0.55	1/15873 (0.0%)
1	B	0.39	0/11801	0.55	1/15949 (0.0%)
1	C	0.40	0/11785	0.56	0/15928
1	D	0.39	0/11824	0.55	0/15980
1	E	0.39	0/11736	0.55	1/15863 (0.0%)
1	F	0.40	0/11776	0.56	2/15916 (0.0%)
2	G	0.34	0/16573	0.52	0/22516
2	H	0.34	0/16573	0.52	0/22516
2	I	0.34	0/16573	0.52	0/22516
2	J	0.35	0/16573	0.53	0/22516
2	K	0.38	0/16573	0.54	0/22516
2	L	0.35	0/16573	0.53	0/22516
All	All	0.37	0/170104	0.54	5/230605 (0.0%)

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

Mol	Chain	#Chirality outliers	#Planarity outliers
1	A	0	1
1	F	0	1
All	All	0	2

There are no bond length outliers.

All (5) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	F	585	MET	N-CA-C	9.68	137.14	111.00
1	B	608	LYS	N-CA-C	-7.98	89.44	111.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	E	538	ARG	NE-CZ-NH2	-5.78	117.41	120.30
1	A	579	MET	N-CA-C	5.72	126.45	111.00
1	F	585	MET	CA-C-O	5.45	131.53	120.10

There are no chirality outliers.

All (2) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
1	A	578	ALA	Peptide
1	F	584	ILE	Peptide

## 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	11514	0	11476	745	0
1	B	11571	0	11529	706	1
1	C	11555	0	11507	695	0
1	D	11593	0	11552	733	0
1	E	11506	0	11467	745	0
1	F	11546	0	11499	701	0
2	G	16200	0	16081	1178	1
2	H	16200	0	16081	1209	1
2	I	16200	0	16081	1238	0
2	J	16200	0	16081	1213	0
2	K	16200	0	16081	1262	1
2	L	16200	0	16081	1219	0
3	G	31	0	19	10	0
3	H	31	0	19	11	0
3	I	31	0	19	9	0
3	J	31	0	19	9	0
3	K	31	0	19	12	0
3	L	31	0	19	10	0
All	All	166671	0	165630	11004	2

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 33.

All (11004) close contacts within the same asymmetric unit are listed below.

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:H:43:PHE:HB2	2:I:22:ARG:NH2	1.54	1.21
2:K:1594:ARG:HG2	2:K:1594:ARG:HH11	1.05	1.20
2:H:1594:ARG:HH11	2:H:1594:ARG:HG2	1.02	1.17
1:E:1610:ARG:HH11	1:E:1610:ARG:HG2	1.00	1.16
2:L:1594:ARG:HG2	2:L:1594:ARG:HH11	1.03	1.16
1:C:1268:SER:HB3	1:F:1389:ILE:HG13	1.14	1.14
1:F:1504:ARG:HH11	1:F:1504:ARG:HG3	1.00	1.14
1:B:1268:SER:HB3	1:D:1389:ILE:HG13	1.19	1.13
1:F:1610:ARG:HG2	1:F:1610:ARG:HH11	1.01	1.13
1:A:1610:ARG:HH11	1:A:1610:ARG:HG2	1.00	1.13
2:J:1594:ARG:HG2	2:J:1594:ARG:HH11	0.98	1.12
1:E:1504:ARG:HG3	1:E:1504:ARG:HH11	1.02	1.12
1:B:427:ARG:HH12	1:B:492:ILE:HG12	1.02	1.12
1:D:1610:ARG:HH11	1:D:1610:ARG:HG2	1.06	1.12
1:B:1389:ILE:HG13	1:D:1268:SER:HB3	1.17	1.12
1:C:1610:ARG:HH11	1:C:1610:ARG:HG2	1.08	1.11
1:D:1504:ARG:HH11	1:D:1504:ARG:HG3	1.02	1.11
1:A:427:ARG:HH11	1:A:427:ARG:HG3	1.16	1.11
2:G:374:GLU:HA	2:G:377:HIS:CD2	1.86	1.11
2:I:1594:ARG:HH11	2:I:1594:ARG:HG2	0.98	1.11
2:I:374:GLU:HA	2:I:377:HIS:CD2	1.85	1.11
2:L:374:GLU:HA	2:L:377:HIS:CD2	1.86	1.10
1:A:1504:ARG:HH11	1:A:1504:ARG:HG3	1.03	1.10
2:J:374:GLU:HA	2:J:377:HIS:CD2	1.87	1.10
2:H:374:GLU:HA	2:H:377:HIS:CD2	1.85	1.10
2:I:1767:GLU:HB2	2:I:2016:PRO:HG3	1.29	1.09
1:F:427:ARG:HG3	1:F:427:ARG:HH11	1.13	1.09
1:B:1610:ARG:HG2	1:B:1610:ARG:HH11	1.01	1.09
1:A:1268:SER:HB3	1:E:1389:ILE:HG13	1.19	1.08
1:B:1504:ARG:HH11	1:B:1504:ARG:HG3	0.99	1.08
1:E:557:ARG:HH11	1:E:557:ARG:HG3	1.17	1.08
2:G:1594:ARG:HH11	2:G:1594:ARG:HG2	1.05	1.08
2:K:374:GLU:HA	2:K:377:HIS:CD2	1.87	1.08
1:C:1504:ARG:HG3	1:C:1504:ARG:HH11	0.97	1.07
1:B:1499:ARG:HD3	1:D:1476:ARG:HH12	1.14	1.07
1:B:427:ARG:HH11	1:B:427:ARG:HG3	1.13	1.07
2:J:1338:ARG:HH21	2:L:327:PRO:HD2	1.12	1.06
1:D:427:ARG:HH11	1:D:427:ARG:HG3	1.16	1.06
1:F:1703:VAL:HG11	1:F:1711:LEU:HB3	1.37	1.06

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:H:327:PRO:HD2	2:I:1338:ARG:HH21	1.18	1.06
2:J:1767:GLU:HB2	2:J:2016:PRO:HG3	1.08	1.06
2:L:511:THR:HG22	2:L:512:HIS:CD2	1.92	1.05
1:C:1389:ILE:HG13	1:F:1268:SER:HB3	1.13	1.05
1:C:427:ARG:HG3	1:C:427:ARG:HH11	1.16	1.04
1:D:557:ARG:HG3	1:D:557:ARG:HH11	1.17	1.04
1:C:1702:ARG:HH11	1:C:1702:ARG:HG3	1.22	1.04
1:C:1342:ARG:NH1	1:C:1347:THR:HB	1.73	1.04
2:I:511:THR:HG22	2:I:512:HIS:CD2	1.92	1.03
1:E:427:ARG:HH11	1:E:427:ARG:HG3	1.16	1.03
2:G:2052:LYS:H	2:G:2052:LYS:HE2	1.22	1.03
1:F:427:ARG:HH12	1:F:492:ILE:HG12	1.24	1.03
2:I:2052:LYS:H	2:I:2052:LYS:HE2	1.23	1.03
1:D:527:ALA:HB2	1:D:637:LEU:HD22	1.40	1.03
1:D:1342:ARG:NH1	1:D:1347:THR:HB	1.73	1.03
1:C:339:GLN:HE21	1:E:339:GLN:HE21	1.04	1.02
2:L:1985:GLN:HG3	2:L:1986:PRO:HD3	1.39	1.02
1:F:961:ALA:HB2	1:F:1022:LEU:HD12	1.41	1.02
1:F:989:ASN:H	1:F:1491:ASN:HD21	1.03	1.02
1:A:1389:ILE:HG13	1:E:1268:SER:HB3	1.08	1.02
1:A:557:ARG:HG3	1:A:557:ARG:HH11	1.19	1.02
2:H:511:THR:HG22	2:H:512:HIS:CD2	1.95	1.02
1:A:1342:ARG:NH1	1:A:1347:THR:HB	1.74	1.02
2:J:2005:PHE:HA	2:J:2010:LEU:HD11	1.41	1.02
2:J:327:PRO:HD2	2:K:1338:ARG:HH21	1.22	1.02
2:J:595:SER:HB3	2:J:602:PRO:HG3	1.42	1.02
2:G:2005:PHE:HA	2:G:2010:LEU:HD11	1.40	1.01
1:F:1342:ARG:NH1	1:F:1347:THR:HB	1.73	1.01
2:G:1844:LEU:HB3	2:G:1850:VAL:HG21	1.39	1.01
2:L:1123:ALA:HB3	2:L:1126:GLU:HG3	1.41	1.01
2:L:1844:LEU:HB3	2:L:1850:VAL:HG21	1.38	1.01
2:H:1844:LEU:HB3	2:H:1850:VAL:HG21	1.40	1.01
1:F:1702:ARG:HG3	1:F:1702:ARG:HH11	1.25	1.01
2:K:501:TRP:HE1	2:K:528:THR:HG22	1.24	1.01
2:K:1844:LEU:HB3	2:K:1850:VAL:HG21	1.41	1.01
2:G:1985:GLN:HG3	2:G:1986:PRO:HD3	1.39	1.01
2:L:1468:ARG:HH11	2:L:1468:ARG:HG2	1.24	1.01
1:D:1702:ARG:HH11	1:D:1702:ARG:HG3	1.22	1.01
2:L:300:THR:HB	2:L:303:GLU:H	1.26	1.01
1:B:989:ASN:H	1:B:1491:ASN:HD21	1.01	1.00
1:E:1702:ARG:HH11	1:E:1702:ARG:HG3	1.25	1.00
2:I:374:GLU:HA	2:I:377:HIS:HD2	1.24	1.00

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:B:1499:ARG:HD3	1:D:1476:ARG:NH1	1.76	1.00
2:K:2052:LYS:H	2:K:2052:LYS:HE2	1.22	1.00
2:I:1985:GLN:HG3	2:I:1986:PRO:HD3	1.40	1.00
2:L:2005:PHE:HA	2:L:2010:LEU:HD11	1.43	1.00
1:D:989:ASN:H	1:D:1491:ASN:HD21	1.08	1.00
2:H:2052:LYS:H	2:H:2052:LYS:HE2	1.24	1.00
2:J:2052:LYS:H	2:J:2052:LYS:HE2	1.22	1.00
2:L:595:SER:HB3	2:L:602:PRO:HG3	1.44	1.00
2:L:2052:LYS:HE2	2:L:2052:LYS:H	1.26	1.00
2:G:511:THR:HG22	2:G:512:HIS:CD2	1.97	0.99
2:I:300:THR:HB	2:I:303:GLU:H	1.24	0.99
2:I:1468:ARG:HH11	2:I:1468:ARG:HG2	1.25	0.99
2:K:1985:GLN:HG3	2:K:1986:PRO:HD3	1.44	0.99
2:I:1844:LEU:HB3	2:I:1850:VAL:HG21	1.42	0.99
2:G:501:TRP:HE1	2:G:528:THR:HG22	1.27	0.99
1:B:427:ARG:HH11	1:B:427:ARG:CG	1.76	0.99
2:G:374:GLU:HA	2:G:377:HIS:HD2	1.26	0.99
1:C:427:ARG:HH12	1:C:492:ILE:HG12	1.26	0.99
1:D:1234:GLY:HA2	1:D:1238:ASP:HB2	1.44	0.99
2:I:501:TRP:HE1	2:I:528:THR:HG22	1.24	0.98
2:G:300:THR:HB	2:G:303:GLU:H	1.27	0.98
2:G:1468:ARG:HH11	2:G:1468:ARG:HG2	1.25	0.98
1:A:1079:ARG:HH11	1:A:1079:ARG:HG2	1.27	0.98
2:H:300:THR:HB	2:H:303:GLU:H	1.28	0.98
2:L:374:GLU:HA	2:L:377:HIS:HD2	1.26	0.98
2:K:300:THR:HB	2:K:303:GLU:H	1.28	0.98
2:K:468:PRO:HG3	2:K:479:ARG:NH2	1.79	0.98
1:A:1702:ARG:HH11	1:A:1702:ARG:HG3	1.27	0.98
2:I:595:SER:HB3	2:I:602:PRO:HG3	1.46	0.98
2:H:2005:PHE:HA	2:H:2010:LEU:HD11	1.43	0.98
1:B:1702:ARG:HG3	1:B:1702:ARG:HH11	1.25	0.98
2:G:595:SER:HB3	2:G:602:PRO:HG3	1.44	0.98
1:A:1476:ARG:HH12	1:E:1499:ARG:HD3	1.26	0.98
2:K:595:SER:HB3	2:K:602:PRO:HG3	1.42	0.98
2:J:1468:ARG:HG2	2:J:1468:ARG:HH11	1.24	0.98
2:J:511:THR:HG22	2:J:512:HIS:CD2	1.99	0.98
2:L:501:TRP:HE1	2:L:528:THR:HG22	1.25	0.98
2:J:300:THR:HB	2:J:303:GLU:H	1.24	0.98
2:J:1338:ARG:NH2	2:L:327:PRO:HD2	1.78	0.98
1:D:961:ALA:HB2	1:D:1022:LEU:HD12	1.42	0.98
1:D:1079:ARG:HH11	1:D:1079:ARG:HG2	1.29	0.98
2:K:511:THR:HG22	2:K:512:HIS:CD2	1.99	0.97

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:H:43:PHE:HB2	2:I:22:ARG:HH21	1.23	0.97
2:J:1985:GLN:HG3	2:J:1986:PRO:HD3	1.44	0.97
2:K:1468:ARG:HH11	2:K:1468:ARG:HG2	1.25	0.97
1:B:1234:GLY:HA2	1:B:1238:ASP:HB2	1.43	0.97
1:F:427:ARG:CG	1:F:427:ARG:HH11	1.77	0.97
2:J:1767:GLU:HB2	2:J:2016:PRO:CG	1.94	0.97
2:I:2005:PHE:HA	2:I:2010:LEU:HD11	1.43	0.97
1:B:1342:ARG:NH1	1:B:1347:THR:HB	1.77	0.97
2:H:501:TRP:HE1	2:H:528:THR:HG22	1.29	0.97
1:E:570:TYR:O	1:E:574:ILE:HG13	1.63	0.97
1:E:1342:ARG:NH1	1:E:1347:THR:HB	1.78	0.97
2:H:1468:ARG:HH11	2:H:1468:ARG:HG2	1.27	0.96
1:A:339:GLN:HE21	1:D:339:GLN:HE21	1.00	0.96
1:F:855:ALA:HA	1:F:919:ARG:HH21	1.29	0.96
2:G:327:PRO:HD2	2:H:1338:ARG:HH21	1.30	0.96
2:I:1594:ARG:NH1	2:I:1594:ARG:HG2	1.77	0.96
2:J:501:TRP:HE1	2:J:528:THR:HG22	1.28	0.96
1:F:1234:GLY:HA2	1:F:1238:ASP:HB2	1.44	0.96
1:A:1234:GLY:HA2	1:A:1238:ASP:HB2	1.45	0.96
1:E:427:ARG:CG	1:E:427:ARG:HH11	1.79	0.96
1:C:1234:GLY:HA2	1:C:1238:ASP:HB2	1.46	0.96
1:B:961:ALA:HB2	1:B:1022:LEU:HD12	1.44	0.96
1:D:427:ARG:CG	1:D:427:ARG:HH11	1.79	0.96
1:A:427:ARG:CG	1:A:427:ARG:HH11	1.79	0.95
1:D:1702:ARG:HH11	1:D:1702:ARG:CG	1.79	0.95
1:E:1234:GLY:HA2	1:E:1238:ASP:HB2	1.45	0.95
1:C:831:GLU:HG2	1:D:755:GLU:HG2	1.48	0.95
1:A:1703:VAL:HG11	1:A:1711:LEU:HB3	1.45	0.95
2:K:2005:PHE:HA	2:K:2010:LEU:HD11	1.46	0.95
1:B:1703:VAL:HG11	1:B:1711:LEU:HB3	1.47	0.95
2:H:595:SER:HB3	2:H:602:PRO:HG3	1.46	0.95
1:B:1005:TRP:NE1	1:B:1561:LEU:HD22	1.81	0.95
1:A:989:ASN:H	1:A:1491:ASN:HD21	0.97	0.95
1:B:427:ARG:HH12	1:B:492:ILE:CG1	1.78	0.95
1:B:427:ARG:NH1	1:B:492:ILE:HG12	1.80	0.95
1:E:962:ASN:HD22	2:K:1006:GLN:HE22	0.96	0.95
2:G:792:LEU:HD23	2:G:1094:HIS:CE1	2.02	0.95
2:K:374:GLU:HA	2:K:377:HIS:HD2	1.28	0.95
2:K:792:LEU:HD23	2:K:1094:HIS:CE1	2.02	0.95
1:F:1610:ARG:HG2	1:F:1610:ARG:NH1	1.78	0.94
2:H:1985:GLN:HG3	2:H:1986:PRO:HD3	1.46	0.94
2:J:1844:LEU:HB3	2:J:1850:VAL:HG21	1.47	0.94

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:J:1594:ARG:HG2	2:J:1594:ARG:NH1	1.77	0.94
1:A:1148:LEU:HD13	1:E:1148:LEU:HD13	1.47	0.94
2:G:1468:ARG:CG	2:G:1468:ARG:HH11	1.80	0.94
2:I:468:PRO:HG3	2:I:479:ARG:NH2	1.82	0.94
2:J:1468:ARG:CG	2:J:1468:ARG:HH11	1.80	0.94
1:E:1079:ARG:HG2	1:E:1079:ARG:HH11	1.32	0.94
1:C:427:ARG:HH11	1:C:427:ARG:CG	1.80	0.94
2:G:468:PRO:HG3	2:G:479:ARG:NH2	1.82	0.94
2:J:1338:ARG:HH21	2:L:327:PRO:CD	1.81	0.93
2:L:792:LEU:HD23	2:L:1094:HIS:CE1	2.03	0.93
2:K:857:VAL:HG13	2:K:876:TRP:NE1	1.83	0.93
1:A:570:TYR:O	1:A:574:ILE:HG13	1.67	0.93
2:K:685:VAL:HG23	2:K:1186:ARG:HH12	1.34	0.93
2:I:384:ASN:HB3	2:I:527:LEU:HD11	1.50	0.93
1:E:1610:ARG:HG2	1:E:1610:ARG:NH1	1.77	0.93
2:L:1468:ARG:HH11	2:L:1468:ARG:CG	1.80	0.93
2:J:1918:VAL:HG13	2:J:2006:HIS:HB2	1.50	0.93
2:J:792:LEU:HD23	2:J:1094:HIS:CE1	2.03	0.93
1:F:1702:ARG:HH11	1:F:1702:ARG:CG	1.80	0.93
2:I:1468:ARG:HH11	2:I:1468:ARG:CG	1.80	0.93
2:J:698:SER:HB3	2:J:701:VAL:HG23	1.50	0.93
1:C:1504:ARG:NH1	1:C:1504:ARG:HG3	1.78	0.93
1:C:1702:ARG:HH11	1:C:1702:ARG:CG	1.82	0.93
1:B:612:ILE:HG23	1:B:628:TYR:CD2	2.02	0.93
2:H:1290:TYR:CG	2:H:1299:VAL:HG12	2.03	0.93
1:E:989:ASN:H	1:E:1491:ASN:HD21	1.14	0.93
2:K:1468:ARG:CG	2:K:1468:ARG:HH11	1.80	0.93
2:H:1468:ARG:CG	2:H:1468:ARG:HH11	1.82	0.93
1:E:1703:VAL:HG11	1:E:1711:LEU:HB3	1.48	0.93
1:B:586:GLN:O	1:E:538:ARG:NH2	2.00	0.93
1:E:1005:TRP:NE1	1:E:1561:LEU:HD22	1.84	0.93
1:F:1504:ARG:HG3	1:F:1504:ARG:NH1	1.81	0.92
1:C:1079:ARG:HG2	1:C:1079:ARG:HH11	1.31	0.92
1:B:1702:ARG:CG	1:B:1702:ARG:HH11	1.83	0.92
2:H:792:LEU:HD23	2:H:1094:HIS:CE1	2.04	0.92
2:L:468:PRO:HG3	2:L:479:ARG:NH2	1.83	0.92
2:H:2059:HIS:HE1	2:H:2068:ALA:HB2	1.34	0.92
2:J:1767:GLU:CB	2:J:2016:PRO:HG3	1.99	0.92
1:C:989:ASN:H	1:C:1491:ASN:HD21	1.09	0.92
1:E:1702:ARG:HH11	1:E:1702:ARG:CG	1.83	0.92
2:I:792:LEU:HD23	2:I:1094:HIS:CE1	2.04	0.92
1:B:1079:ARG:HG2	1:B:1079:ARG:HH11	1.33	0.92

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:B:1148:LEU:HD13	1:D:1148:LEU:HD13	1.49	0.92
1:B:1504:ARG:NH1	1:B:1504:ARG:HG3	1.79	0.92
1:C:1504:ARG:CG	1:C:1504:ARG:HH11	1.81	0.92
1:B:1425:LEU:HD21	1:B:1429:ARG:HH21	1.35	0.92
2:I:1969:LEU:HD23	2:I:1972:ILE:HD12	1.50	0.92
2:L:1290:TYR:CG	2:L:1299:VAL:HG12	2.05	0.92
2:L:698:SER:HB3	2:L:701:VAL:HG23	1.51	0.92
2:H:327:PRO:HD2	2:I:1338:ARG:NH2	1.83	0.92
1:A:881:LEU:HA	1:A:884:MET:HG3	1.52	0.92
1:C:1703:VAL:HG11	1:C:1711:LEU:HB3	1.51	0.91
1:E:967:PHE:CD2	1:E:1374:PRO:HG3	2.05	0.91
1:A:1610:ARG:NH1	1:A:1610:ARG:HG2	1.77	0.91
2:G:1594:ARG:NH1	2:G:1594:ARG:HG2	1.82	0.91
2:I:468:PRO:HG3	2:I:479:ARG:HH21	1.36	0.91
2:J:1290:TYR:CG	2:J:1299:VAL:HG12	2.05	0.91
1:A:1425:LEU:HD21	1:A:1429:ARG:HH21	1.36	0.91
2:H:48:LEU:HD12	2:H:101:VAL:HG11	1.51	0.91
1:F:1663:LYS:HG2	2:L:1007:LEU:HD11	1.53	0.91
1:D:1342:ARG:HH11	1:D:1347:THR:HB	1.35	0.91
2:G:1290:TYR:CG	2:G:1299:VAL:HG12	2.05	0.91
1:D:1425:LEU:HD21	1:D:1429:ARG:HH21	1.33	0.91
1:E:689:ARG:HD2	1:E:1339:GLU:CD	1.90	0.91
1:F:1342:ARG:HH11	1:F:1347:THR:HB	1.32	0.91
1:A:1702:ARG:HH11	1:A:1702:ARG:CG	1.84	0.91
2:K:698:SER:HB3	2:K:701:VAL:HG23	1.53	0.91
2:J:374:GLU:HA	2:J:377:HIS:HD2	1.26	0.90
2:I:1637:VAL:HG11	2:I:1679:LEU:HD13	1.52	0.90
1:B:1504:ARG:CG	1:B:1504:ARG:HH11	1.85	0.90
2:I:1305:LEU:HD11	2:I:1365:LYS:HD2	1.54	0.90
2:J:48:LEU:HD12	2:J:101:VAL:HG11	1.51	0.90
1:D:570:TYR:O	1:D:574:ILE:HG13	1.71	0.90
2:L:1721:ARG:NH2	2:L:1853:ILE:HD12	1.87	0.90
1:E:1213:VAL:HG22	1:E:1300:ARG:HH21	1.33	0.90
2:I:1721:ARG:NH2	2:I:1853:ILE:HD12	1.86	0.90
1:A:1504:ARG:NH1	1:A:1504:ARG:HG3	1.84	0.90
1:F:1504:ARG:HH11	1:F:1504:ARG:CG	1.84	0.90
2:K:685:VAL:HG23	2:K:1186:ARG:NH1	1.86	0.90
2:G:1266:HIS:HE1	2:G:1275:ARG:HD2	1.34	0.90
1:A:1499:ARG:HD3	1:E:1476:ARG:HH12	1.36	0.89
2:K:582:LYS:HB2	2:K:1112:VAL:HG22	1.52	0.89
1:D:1504:ARG:CG	1:D:1504:ARG:HH11	1.84	0.89
2:K:468:PRO:HG3	2:K:479:ARG:HH21	1.36	0.89

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:G:1969:LEU:HD23	2:G:1972:ILE:HD12	1.53	0.89
2:K:1290:TYR:CG	2:K:1299:VAL:HG12	2.07	0.89
2:K:1769:VAL:HG22	2:K:1775:ILE:HA	1.52	0.89
2:G:2052:LYS:HB3	2:G:2074:TRP:CE2	2.08	0.89
1:A:574:ILE:CG2	1:A:579:MET:HB2	2.03	0.89
2:H:1090:ILE:O	2:H:1094:HIS:HD2	1.54	0.89
2:H:2059:HIS:CE1	2:H:2068:ALA:HB2	2.08	0.89
2:I:1090:ILE:O	2:I:1094:HIS:HD2	1.56	0.89
2:I:1290:TYR:CG	2:I:1299:VAL:HG12	2.06	0.89
1:C:1610:ARG:NH1	1:C:1610:ARG:HG2	1.84	0.89
2:J:2059:HIS:HE1	2:J:2068:ALA:HB2	1.37	0.89
2:G:468:PRO:HG3	2:G:479:ARG:HH21	1.37	0.89
2:J:1090:ILE:O	2:J:1094:HIS:HD2	1.56	0.89
2:H:846:THR:HG21	2:H:866:HIS:CD2	2.08	0.89
1:D:824:LEU:HB3	1:D:839:ILE:HD13	1.54	0.89
1:C:40:ARG:HH21	1:C:74:VAL:HG22	1.38	0.89
2:J:1637:VAL:HG11	2:J:1679:LEU:HD13	1.55	0.89
1:C:824:LEU:HB3	1:C:839:ILE:HD13	1.51	0.89
2:J:762:LEU:HD22	2:J:802:TYR:HD2	1.38	0.89
2:H:1721:ARG:NH2	2:H:1853:ILE:HD12	1.88	0.89
1:D:1504:ARG:NH1	1:D:1504:ARG:HG3	1.83	0.88
1:C:961:ALA:HB2	1:C:1022:LEU:HD12	1.55	0.88
1:D:1213:VAL:HG22	1:D:1300:ARG:HH21	1.37	0.88
1:F:1005:TRP:NE1	1:F:1561:LEU:HD22	1.87	0.88
2:K:846:THR:HG21	2:K:866:HIS:CD2	2.08	0.88
1:D:1610:ARG:NH1	1:D:1610:ARG:HG2	1.82	0.88
2:H:374:GLU:HA	2:H:377:HIS:HD2	1.24	0.88
2:G:698:SER:HB3	2:G:701:VAL:HG23	1.53	0.88
2:G:1802:ALA:HB1	2:G:1804:GLN:HE22	1.38	0.88
1:F:1079:ARG:HG2	1:F:1079:ARG:HH11	1.35	0.88
1:E:1504:ARG:CG	1:E:1504:ARG:HH11	1.85	0.88
2:L:468:PRO:HG3	2:L:479:ARG:HH21	1.38	0.88
1:D:689:ARG:HD2	1:D:1339:GLU:CD	1.93	0.88
2:I:1156:ASP:HB2	2:I:1159:SER:H	1.37	0.88
1:C:1148:LEU:HD13	1:F:1148:LEU:HD13	1.55	0.88
2:L:582:LYS:HB2	2:L:1112:VAL:HG22	1.55	0.88
2:L:1123:ALA:CB	2:L:1126:GLU:HG3	2.02	0.88
2:G:1896:THR:HG22	2:G:1898:GLN:H	1.39	0.88
1:A:533:SER:HB2	1:A:612:ILE:HB	1.56	0.88
2:H:468:PRO:HG3	2:H:479:ARG:NH2	1.89	0.88
2:J:582:LYS:HB2	2:J:1112:VAL:HG22	1.55	0.88
2:G:1767:GLU:HB2	2:G:2016:PRO:HG3	1.56	0.88

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:I:1802:ALA:HB1	2:I:1804:GLN:HE22	1.37	0.88
1:A:1005:TRP:NE1	1:A:1561:LEU:HD22	1.88	0.88
2:G:48:LEU:HD12	2:G:101:VAL:HG11	1.54	0.88
2:H:43:PHE:HB2	2:I:22:ARG:CZ	2.03	0.88
2:I:2052:LYS:HB3	2:I:2074:TRP:CE2	2.08	0.88
2:G:582:LYS:HB2	2:G:1112:VAL:HG22	1.53	0.88
2:G:1436:ARG:NH2	2:G:1602:LEU:HD21	1.89	0.88
1:B:1610:ARG:HG2	1:B:1610:ARG:NH1	1.78	0.88
2:I:1769:VAL:HG22	2:I:1775:ILE:HA	1.56	0.88
2:J:1969:LEU:HD23	2:J:1972:ILE:HD12	1.56	0.88
2:L:2059:HIS:HE1	2:L:2068:ALA:HB2	1.39	0.88
2:G:1918:VAL:HG13	2:G:2006:HIS:HB2	1.52	0.87
2:K:1969:LEU:HD23	2:K:1972:ILE:HD12	1.54	0.87
1:B:427:ARG:NH1	1:B:492:ILE:CG1	2.36	0.87
2:G:1266:HIS:CE1	2:G:1275:ARG:HD2	2.08	0.87
2:I:1266:HIS:HE1	2:I:1275:ARG:HD2	1.39	0.87
2:L:1770:ASN:HB2	2:L:1776:LYS:HE2	1.55	0.87
1:F:1213:VAL:HG22	1:F:1300:ARG:HH21	1.37	0.87
1:E:1425:LEU:HD21	1:E:1429:ARG:HH21	1.37	0.87
2:I:698:SER:HB3	2:I:701:VAL:HG23	1.55	0.87
1:C:1005:TRP:NE1	1:C:1561:LEU:HD22	1.88	0.87
2:H:1594:ARG:NH1	2:H:1594:ARG:HG2	1.81	0.87
2:L:1594:ARG:NH1	2:L:1594:ARG:HG2	1.82	0.87
2:L:1090:ILE:O	2:L:1094:HIS:HD2	1.55	0.87
1:C:1273:ILE:HD11	1:F:1630:LYS:HD2	1.57	0.87
2:K:190:TYR:HD1	2:K:201:ILE:HD13	1.39	0.87
2:J:468:PRO:HG3	2:J:479:ARG:NH2	1.88	0.87
1:B:342:ILE:HD11	1:F:342:ILE:HD11	1.56	0.87
1:E:1504:ARG:HG3	1:E:1504:ARG:NH1	1.83	0.87
1:A:689:ARG:HD2	1:A:1339:GLU:CD	1.94	0.87
2:L:1637:VAL:HG11	2:L:1679:LEU:HD13	1.55	0.87
2:I:422:THR:HG23	2:I:844:GLU:OE2	1.75	0.87
2:K:1594:ARG:HG2	2:K:1594:ARG:NH1	1.83	0.87
2:K:57:PRO:HG3	2:K:68:GLU:HG3	1.56	0.87
1:D:427:ARG:HH12	1:D:492:ILE:HG12	1.38	0.87
2:K:2052:LYS:HB3	2:K:2074:TRP:CE2	2.10	0.87
2:I:48:LEU:HD12	2:I:101:VAL:HG11	1.57	0.87
2:J:1721:ARG:NH2	2:J:1853:ILE:HD12	1.89	0.87
1:C:1425:LEU:HD21	1:C:1429:ARG:HH21	1.38	0.87
1:A:824:LEU:HB3	1:A:839:ILE:HD13	1.55	0.87
2:I:416:GLN:HE22	2:I:425:LYS:H	1.23	0.87
1:B:1213:VAL:HG22	1:B:1300:ARG:HH21	1.40	0.87

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:H:1969:LEU:HD23	2:H:1972:ILE:HD12	1.57	0.87
2:G:2052:LYS:HD3	2:G:2074:TRP:NE1	1.90	0.86
1:E:962:ASN:HD22	2:K:1006:GLN:NE2	1.71	0.86
2:G:1770:ASN:HB2	2:G:1776:LYS:HE2	1.57	0.86
1:B:1630:LYS:HD2	1:D:1273:ILE:HD11	1.57	0.86
1:C:1342:ARG:HH11	1:C:1347:THR:HB	1.35	0.86
2:L:1969:LEU:HD23	2:L:1972:ILE:HD12	1.55	0.86
2:L:2052:LYS:HB3	2:L:2074:TRP:CE2	2.10	0.86
2:H:1156:ASP:HB2	2:H:1159:SER:H	1.40	0.86
1:F:881:LEU:HA	1:F:884:MET:HG3	1.57	0.86
2:H:2052:LYS:HB3	2:H:2074:TRP:CE2	2.09	0.86
2:K:48:LEU:HD12	2:K:101:VAL:HG11	1.58	0.86
2:K:2059:HIS:CE1	2:K:2068:ALA:HB2	2.09	0.86
2:J:1266:HIS:HE1	2:J:1275:ARG:HD2	1.38	0.86
2:K:327:PRO:HD2	2:L:1338:ARG:HH21	1.41	0.86
2:K:2059:HIS:HE1	2:K:2068:ALA:HB2	1.37	0.86
1:E:824:LEU:HB3	1:E:839:ILE:HD13	1.57	0.86
2:I:779:GLY:O	2:I:780:SER:HB3	1.74	0.86
1:E:557:ARG:HH11	1:E:557:ARG:CG	1.88	0.86
2:H:2052:LYS:HD3	2:H:2074:TRP:NE1	1.90	0.86
2:H:1266:HIS:HE1	2:H:1275:ARG:HD2	1.38	0.86
2:L:1802:ALA:HB1	2:L:1804:GLN:HE22	1.39	0.86
1:D:557:ARG:HH11	1:D:557:ARG:CG	1.89	0.86
1:B:535:TYR:OH	1:B:630:LYS:HE3	1.75	0.86
2:L:2059:HIS:CE1	2:L:2068:ALA:HB2	2.11	0.86
2:J:1156:ASP:HB2	2:J:1159:SER:H	1.37	0.86
2:H:582:LYS:HB2	2:H:1112:VAL:HG22	1.58	0.86
2:L:1156:ASP:HB2	2:L:1159:SER:H	1.39	0.86
1:E:532:ILE:CG2	1:E:907:PHE:HB2	2.05	0.86
2:H:1266:HIS:CE1	2:H:1275:ARG:HD2	2.09	0.86
2:L:1266:HIS:HE1	2:L:1275:ARG:HD2	1.39	0.86
1:B:824:LEU:HB3	1:B:839:ILE:HD13	1.57	0.86
2:K:1721:ARG:NH2	2:K:1853:ILE:HD12	1.91	0.86
1:D:1005:TRP:NE1	1:D:1561:LEU:HD22	1.89	0.86
2:J:2059:HIS:CE1	2:J:2068:ALA:HB2	2.11	0.86
2:H:1802:ALA:HB1	2:H:1804:GLN:HE22	1.41	0.86
2:L:1769:VAL:HG22	2:L:1775:ILE:HA	1.56	0.86
1:A:1504:ARG:HH11	1:A:1504:ARG:CG	1.85	0.85
2:H:1769:VAL:HG22	2:H:1775:ILE:HA	1.56	0.85
2:K:1457:HIS:ND1	2:K:1487:THR:HG22	1.91	0.85
2:G:1156:ASP:HB2	2:G:1159:SER:H	1.41	0.85
1:A:1389:ILE:CG1	1:E:1268:SER:HB3	2.03	0.85

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:K:1266:HIS:HE1	2:K:1275:ARG:HD2	1.39	0.85
1:F:616:HIS:HA	1:F:633:THR:HG23	1.59	0.85
2:J:327:PRO:O	2:K:1338:ARG:NH2	2.09	0.85
1:E:689:ARG:NE	1:E:1339:GLU:HG2	1.90	0.85
1:D:689:ARG:CZ	1:D:1339:GLU:HG2	2.07	0.85
2:G:2059:HIS:CE1	2:G:2068:ALA:HB2	2.11	0.85
2:K:1156:ASP:HB2	2:K:1159:SER:H	1.39	0.85
1:F:1425:LEU:HD21	1:F:1429:ARG:HH21	1.37	0.85
2:J:1770:ASN:HB2	2:J:1776:LYS:HE2	1.58	0.85
2:G:1637:VAL:HG11	2:G:1679:LEU:HD13	1.57	0.85
2:I:846:THR:HG21	2:I:866:HIS:CD2	2.10	0.85
2:I:1918:VAL:HG13	2:I:2006:HIS:HB2	1.58	0.85
1:F:824:LEU:HB3	1:F:839:ILE:HD13	1.56	0.85
2:G:1721:ARG:NH2	2:G:1853:ILE:HD12	1.90	0.85
2:I:1460:THR:HG22	2:I:1462:GLN:H	1.42	0.85
2:J:1802:ALA:HB1	2:J:1804:GLN:HE22	1.41	0.85
1:A:40:ARG:HH21	1:A:74:VAL:HG22	1.40	0.85
1:A:557:ARG:CG	1:A:557:ARG:HH11	1.90	0.85
2:G:1090:ILE:O	2:G:1094:HIS:HD2	1.58	0.85
2:K:1616:VAL:HG11	2:K:1679:LEU:HD12	1.58	0.85
2:K:465:LEU:O	2:K:479:ARG:HD3	1.77	0.85
2:L:48:LEU:HD12	2:L:101:VAL:HG11	1.58	0.85
2:K:1896:THR:HG22	2:K:1898:GLN:H	1.41	0.85
2:I:582:LYS:HB2	2:I:1112:VAL:HG22	1.58	0.85
2:H:468:PRO:HG3	2:H:479:ARG:HH21	1.42	0.85
2:K:1802:ALA:HB1	2:K:1804:GLN:HE22	1.41	0.85
2:L:846:THR:HG21	2:L:866:HIS:CD2	2.12	0.85
2:I:1770:ASN:HB2	2:I:1776:LYS:HE2	1.58	0.85
1:D:679:LYS:HG2	1:D:708:GLN:HB3	1.59	0.85
2:H:24:LEU:HD12	2:H:37:VAL:HG21	1.58	0.85
1:D:1363:MET:HE1	1:D:1373:VAL:HG21	1.57	0.85
1:C:755:GLU:HG2	1:D:831:GLU:HG2	1.59	0.85
2:L:779:GLY:O	2:L:780:SER:HB3	1.77	0.84
1:E:965:TYR:CZ	1:E:1199:LEU:HD22	2.12	0.84
1:B:1273:ILE:HD11	1:D:1630:LYS:HD2	1.59	0.84
2:K:781:GLY:HA2	2:K:1071:VAL:HG13	1.57	0.84
2:I:2052:LYS:HD3	2:I:2074:TRP:NE1	1.91	0.84
2:L:1985:GLN:CG	2:L:1986:PRO:HD3	2.07	0.84
2:I:2059:HIS:HE1	2:I:2068:ALA:HB2	1.41	0.84
2:J:1769:VAL:HG22	2:J:1775:ILE:HA	1.58	0.84
1:E:612:ILE:HG12	1:E:628:TYR:CE2	2.13	0.84
2:J:781:GLY:HA2	2:J:1071:VAL:HG13	1.58	0.84

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:K:468:PRO:CG	2:K:479:ARG:HH21	1.90	0.84
1:E:1342:ARG:HH11	1:E:1347:THR:HB	1.42	0.84
2:G:2059:HIS:HE1	2:G:2068:ALA:HB2	1.41	0.84
1:C:881:LEU:HA	1:C:884:MET:HG3	1.59	0.84
2:L:2052:LYS:HD3	2:L:2074:TRP:NE1	1.93	0.84
2:H:698:SER:HB3	2:H:701:VAL:HG23	1.59	0.84
2:H:762:LEU:HD22	2:H:802:TYR:HD2	1.40	0.84
2:J:1594:ARG:HH11	2:J:1594:ARG:CG	1.89	0.84
1:E:427:ARG:NH1	1:E:427:ARG:HG3	1.90	0.84
2:K:743:TRP:CD2	2:K:761:ILE:HD11	2.12	0.84
2:G:1769:VAL:HG22	2:G:1775:ILE:HA	1.59	0.84
2:G:781:GLY:HA2	2:G:1071:VAL:HG13	1.59	0.84
2:G:416:GLN:HE22	2:G:425:LYS:H	1.25	0.84
2:L:762:LEU:HD22	2:L:802:TYR:HD2	1.39	0.84
2:L:485:ASP:HB3	2:L:488:PRO:HD2	1.59	0.84
2:H:1637:VAL:HG11	2:H:1679:LEU:HD13	1.59	0.84
1:A:427:ARG:NH1	1:A:427:ARG:HG3	1.91	0.84
2:J:1266:HIS:CE1	2:J:1275:ARG:HD2	2.12	0.84
1:C:1476:ARG:HH12	1:F:1499:ARG:HD3	1.41	0.84
2:G:327:PRO:HD2	2:H:1338:ARG:NH2	1.91	0.84
2:H:750:GLY:HA2	2:H:865:ILE:HG23	1.60	0.84
1:C:679:LYS:HG2	1:C:708:GLN:HB3	1.60	0.84
2:K:762:LEU:HD22	2:K:802:TYR:HD2	1.43	0.84
2:K:24:LEU:HD12	2:K:37:VAL:HG21	1.59	0.84
2:H:1770:ASN:HB2	2:H:1776:LYS:HE2	1.58	0.83
2:K:1090:ILE:O	2:K:1094:HIS:HD2	1.61	0.83
2:G:24:LEU:HD12	2:G:37:VAL:HG21	1.60	0.83
1:B:40:ARG:HH21	1:B:74:VAL:HG22	1.42	0.83
2:J:1610:MET:HA	2:J:1610:MET:HE2	1.58	0.83
1:A:1342:ARG:HH11	1:A:1347:THR:HB	1.37	0.83
2:G:846:THR:HG21	2:G:866:HIS:CD2	2.13	0.83
1:D:40:ARG:HH21	1:D:74:VAL:HG22	1.41	0.83
1:E:40:ARG:HH21	1:E:74:VAL:HG22	1.42	0.83
1:E:1623:THR:HG22	1:E:1633:GLN:HG3	1.59	0.83
1:E:558:LEU:HB2	1:E:563:GLN:HG3	1.60	0.83
2:J:468:PRO:HG3	2:J:479:ARG:HH21	1.41	0.83
2:J:779:GLY:O	2:J:780:SER:HB3	1.77	0.83
2:J:416:GLN:HE22	2:J:425:LYS:H	1.24	0.83
2:K:914:TRP:NE1	2:K:916:GLY:HA3	1.93	0.83
1:A:1213:VAL:HG22	1:A:1300:ARG:HH21	1.43	0.83
1:A:962:ASN:HD22	2:G:1006:GLN:HE22	1.26	0.83
2:I:762:LEU:HD22	2:I:802:TYR:HD2	1.42	0.83

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:G:57:PRO:HG3	2:G:68:GLU:HG3	1.59	0.83
1:F:422:LEU:HD13	1:F:429:ILE:HG12	1.61	0.83
2:J:1896:THR:HG22	2:J:1898:GLN:H	1.43	0.83
1:A:1214:HIS:HD2	1:A:1216:SER:OG	1.61	0.83
1:D:605:ARG:HB3	1:D:606:PRO:CD	2.08	0.83
1:B:679:LYS:HG2	1:B:708:GLN:HB3	1.61	0.83
2:J:57:PRO:HG3	2:J:68:GLU:HG3	1.59	0.83
1:C:567:ASN:HA	1:C:570:TYR:HB3	1.61	0.83
1:B:1241:LEU:HD23	1:B:1243:LYS:HE3	1.60	0.83
2:L:416:GLN:HE22	2:L:425:LYS:H	1.27	0.83
1:C:427:ARG:HG3	1:C:427:ARG:NH1	1.91	0.82
1:B:1342:ARG:HH11	1:B:1347:THR:HB	1.40	0.82
2:I:1896:THR:HG22	2:I:1898:GLN:H	1.44	0.82
1:D:427:ARG:NH1	1:D:427:ARG:HG3	1.90	0.82
2:L:590:VAL:HG23	2:L:1091:HIS:NE2	1.94	0.82
1:E:1099:GLU:HG2	1:E:1149:LEU:HD21	1.61	0.82
2:J:846:THR:HG21	2:J:866:HIS:CD2	2.14	0.82
2:I:1457:HIS:ND1	2:I:1487:THR:HG22	1.95	0.82
2:H:485:ASP:HB3	2:H:488:PRO:HD2	1.61	0.82
2:L:24:LEU:HD12	2:L:37:VAL:HG21	1.60	0.82
2:L:57:PRO:HG3	2:L:68:GLU:HG3	1.61	0.82
1:C:1363:MET:HE1	1:C:1373:VAL:HG21	1.61	0.82
2:K:2052:LYS:HD3	2:K:2074:TRP:NE1	1.93	0.82
2:K:857:VAL:CG1	2:K:876:TRP:NE1	2.42	0.82
2:I:1266:HIS:CE1	2:I:1275:ARG:HD2	2.14	0.82
2:H:1460:THR:HG22	2:H:1462:GLN:H	1.44	0.82
1:C:683:THR:HB	1:C:714:PHE:HB3	1.61	0.82
2:G:762:LEU:HD22	2:G:802:TYR:HD2	1.43	0.82
1:B:1094:LYS:HE3	1:B:1316:TYR:CD1	2.14	0.82
1:B:434:ILE:HD11	1:B:490:VAL:HG21	1.61	0.82
1:D:689:ARG:NE	1:D:1339:GLU:HG2	1.94	0.82
2:L:781:GLY:HA2	2:L:1071:VAL:HG13	1.62	0.82
2:L:485:ASP:CB	2:L:488:PRO:HD2	2.10	0.82
2:G:1457:HIS:ND1	2:G:1487:THR:HG22	1.93	0.82
2:K:942:MET:HE2	2:K:955:LEU:HD13	1.62	0.82
2:L:521:VAL:HG11	2:L:549:ASN:HB2	1.62	0.82
2:K:779:GLY:O	2:K:780:SER:HB3	1.79	0.82
2:G:750:GLY:HA2	2:G:865:ILE:HG23	1.62	0.82
1:A:1241:LEU:HD23	1:A:1243:LYS:HE3	1.60	0.82
1:B:565:GLN:O	1:B:569:LEU:HD12	1.79	0.82
1:F:427:ARG:HG3	1:F:427:ARG:NH1	1.87	0.82
2:L:1266:HIS:CE1	2:L:1275:ARG:HD2	2.14	0.82

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:B:567:ASN:HA	1:B:570:TYR:HB3	1.59	0.82
1:D:881:LEU:HA	1:D:884:MET:HG3	1.59	0.82
2:J:1404:VAL:HG22	2:J:1413:VAL:HG22	1.60	0.82
2:H:1457:HIS:ND1	2:H:1487:THR:HG22	1.95	0.82
2:J:1457:HIS:ND1	2:J:1487:THR:HG22	1.94	0.82
2:J:396:ILE:H	2:J:396:ILE:HD12	1.43	0.82
2:K:1067:LEU:HD13	3:K:2101:FMN:HM72	1.62	0.82
2:H:779:GLY:O	2:H:780:SER:HB3	1.78	0.82
1:F:1094:LYS:HE3	1:F:1316:TYR:CD1	2.14	0.82
1:D:558:LEU:HB2	1:D:563:GLN:HG3	1.61	0.81
2:L:465:LEU:O	2:L:479:ARG:HD3	1.79	0.81
2:K:1266:HIS:CE1	2:K:1275:ARG:HD2	2.14	0.81
1:D:855:ALA:HA	1:D:919:ARG:HH21	1.45	0.81
2:L:743:TRP:CD2	2:L:761:ILE:HD11	2.15	0.81
2:H:781:GLY:HA2	2:H:1071:VAL:HG13	1.61	0.81
2:G:471:ASP:HB3	2:G:474:THR:O	1.80	0.81
2:I:57:PRO:HG3	2:I:68:GLU:HG3	1.60	0.81
2:L:914:TRP:NE1	2:L:916:GLY:HA3	1.94	0.81
1:B:1363:MET:HE1	1:B:1373:VAL:HG21	1.60	0.81
2:G:396:ILE:H	2:G:396:ILE:HD12	1.45	0.81
1:E:427:ARG:HH12	1:E:492:ILE:HG12	1.44	0.81
1:A:689:ARG:NE	1:A:1339:GLU:HG2	1.95	0.81
2:L:750:GLY:HA2	2:L:865:ILE:HG23	1.61	0.81
1:E:1108:PRO:HG3	1:E:1141:ARG:HE	1.46	0.81
1:A:552:ILE:HD11	1:F:552:ILE:HG12	1.59	0.81
2:J:24:LEU:HD12	2:J:37:VAL:HG21	1.61	0.81
2:J:2052:LYS:HB3	2:J:2074:TRP:CE2	2.14	0.81
2:G:468:PRO:CG	2:G:479:ARG:HH21	1.92	0.81
2:J:590:VAL:HG23	2:J:1091:HIS:NE2	1.95	0.81
1:D:542:GLN:HB3	1:D:579:MET:HE2	1.60	0.81
1:D:1099:GLU:HG2	1:D:1149:LEU:HD21	1.63	0.81
1:D:1241:LEU:HD23	1:D:1243:LYS:HE3	1.61	0.81
2:G:914:TRP:NE1	2:G:916:GLY:HA3	1.95	0.81
1:C:729:ILE:HA	1:C:736:LEU:HD21	1.63	0.81
2:L:857:VAL:HG13	2:L:876:TRP:NE1	1.96	0.81
2:L:1436:ARG:NH2	2:L:1602:LEU:HD21	1.96	0.81
2:H:416:GLN:HE22	2:H:425:LYS:H	1.26	0.81
1:A:1363:MET:HE1	1:A:1373:VAL:HG21	1.61	0.81
2:I:468:PRO:CG	2:I:479:ARG:HH21	1.94	0.81
2:K:846:THR:HG21	2:K:866:HIS:HD2	1.45	0.81
2:K:521:VAL:HG11	2:K:549:ASN:HB2	1.62	0.81
1:F:1363:MET:HE1	1:F:1373:VAL:HG21	1.62	0.81

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:F:1674:ILE:HD11	2:L:1011:GLN:HG3	1.60	0.81
1:F:679:LYS:HG2	1:F:708:GLN:HB3	1.61	0.81
1:B:881:LEU:HA	1:B:884:MET:HG3	1.60	0.81
2:I:674:ILE:HD13	2:I:705:TYR:CE2	2.15	0.81
2:H:743:TRP:CD2	2:H:761:ILE:HD11	2.15	0.81
1:B:1476:ARG:HH12	1:D:1499:ARG:HD3	1.46	0.81
1:F:1241:LEU:HD23	1:F:1243:LYS:HE3	1.63	0.81
2:J:1479:HIS:HD2	2:J:1481:ILE:HG12	1.44	0.81
2:I:24:LEU:HD12	2:I:37:VAL:HG21	1.63	0.81
1:C:729:ILE:HA	1:C:736:LEU:CD2	2.11	0.81
2:J:914:TRP:CD1	2:J:916:GLY:HA3	2.16	0.81
2:G:2005:PHE:CA	2:G:2010:LEU:HD11	2.10	0.80
1:A:1099:GLU:HG2	1:A:1149:LEU:HD21	1.62	0.80
1:B:1099:GLU:HG2	1:B:1149:LEU:HD21	1.62	0.80
2:J:521:VAL:HG11	2:J:549:ASN:HB2	1.63	0.80
2:I:485:ASP:HB3	2:I:488:PRO:HD2	1.61	0.80
1:F:1610:ARG:CG	1:F:1610:ARG:HH11	1.91	0.80
1:A:558:LEU:HB2	1:A:563:GLN:HG3	1.63	0.80
2:L:468:PRO:CG	2:L:479:ARG:HH21	1.94	0.80
2:I:2059:HIS:CE1	2:I:2068:ALA:HB2	2.14	0.80
2:H:485:ASP:CB	2:H:488:PRO:HD2	2.11	0.80
1:C:1213:VAL:HG22	1:C:1300:ARG:HH21	1.46	0.80
1:B:422:LEU:HD13	1:B:429:ILE:HG12	1.64	0.80
2:I:396:ILE:H	2:I:396:ILE:HD12	1.45	0.80
1:C:1241:LEU:HD23	1:C:1243:LYS:HE3	1.63	0.80
1:F:1623:THR:HG22	1:F:1633:GLN:HG3	1.60	0.80
2:K:1479:HIS:HD2	2:K:1481:ILE:HG12	1.45	0.80
2:H:1896:THR:HG22	2:H:1898:GLN:H	1.46	0.80
2:K:1770:ASN:HB2	2:K:1776:LYS:HE2	1.61	0.80
1:B:1674:ILE:HD11	2:H:1011:GLN:HG3	1.61	0.80
2:I:1985:GLN:CG	2:I:1986:PRO:HD3	2.09	0.80
2:J:465:LEU:O	2:J:479:ARG:HD3	1.82	0.80
2:K:251:PRO:HG3	2:K:316:PHE:HA	1.63	0.80
2:K:1369:ASP:OD1	2:K:1371:LEU:HB3	1.81	0.80
1:C:890:ASN:OD1	2:J:1755:LYS:HE2	1.82	0.80
2:J:674:ILE:HD13	2:J:705:TYR:CE2	2.16	0.80
2:K:1404:VAL:HG22	2:K:1413:VAL:HG22	1.62	0.80
1:A:1476:ARG:NH1	1:E:1499:ARG:HD3	1.95	0.80
2:L:1460:THR:HG22	2:L:1462:GLN:H	1.46	0.80
2:L:1896:THR:HG22	2:L:1898:GLN:H	1.46	0.80
2:K:1460:THR:HG22	2:K:1462:GLN:H	1.45	0.80
1:B:326:ASP:HB3	1:B:333:ARG:HH12	1.47	0.80

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:E:679:LYS:HG2	1:E:708:GLN:HB3	1.64	0.80
2:J:2052:LYS:HD3	2:J:2074:TRP:NE1	1.96	0.80
2:L:1554:PRO:HG3	2:L:1659:ILE:HD11	1.64	0.80
1:A:729:ILE:HA	1:A:736:LEU:CD2	2.12	0.80
1:D:422:LEU:HD13	1:D:429:ILE:HG12	1.64	0.80
2:K:1985:GLN:CG	2:K:1986:PRO:HD3	2.12	0.80
1:E:689:ARG:CZ	1:E:1339:GLU:HG2	2.12	0.80
2:G:779:GLY:O	2:G:780:SER:HB3	1.78	0.80
2:J:914:TRP:NE1	2:J:916:GLY:HA3	1.95	0.80
2:I:485:ASP:CB	2:I:488:PRO:HD2	2.12	0.80
1:C:407:ARG:NH1	1:C:1606:VAL:HG23	1.96	0.80
2:H:521:VAL:HG11	2:H:549:ASN:HB2	1.64	0.80
1:B:689:ARG:HD2	1:B:1339:GLU:CD	2.02	0.80
2:I:1436:ARG:NH2	2:I:1602:LEU:HD21	1.97	0.80
1:F:567:ASN:HA	1:F:570:TYR:HB3	1.62	0.80
1:B:1623:THR:HG22	1:B:1633:GLN:HG3	1.62	0.80
1:A:326:ASP:HB3	1:A:333:ARG:HH12	1.46	0.80
2:H:590:VAL:HG23	2:H:1091:HIS:NE2	1.98	0.79
1:F:824:LEU:HB3	1:F:839:ILE:CD1	2.12	0.79
1:B:552:ILE:HG12	1:E:552:ILE:HD11	1.63	0.79
1:C:326:ASP:HB3	1:C:333:ARG:HH12	1.47	0.79
1:B:551:LEU:HD11	1:E:565:GLN:HG3	1.62	0.79
1:B:616:HIS:HA	1:B:633:THR:HG23	1.64	0.79
2:I:1554:PRO:HG3	2:I:1659:ILE:HD11	1.62	0.79
1:C:868:VAL:HG11	1:C:908:ILE:HD11	1.63	0.79
2:H:1404:VAL:HG22	2:H:1413:VAL:HG22	1.64	0.79
1:E:1663:LYS:HG2	2:K:1007:LEU:HD11	1.64	0.79
2:H:605:VAL:HB	2:H:628:ILE:HG13	1.64	0.79
2:G:1554:PRO:HG3	2:G:1659:ILE:HD11	1.61	0.79
2:K:501:TRP:HE1	2:K:528:THR:CG2	1.94	0.79
1:D:683:THR:HB	1:D:714:PHE:HB3	1.62	0.79
2:K:416:GLN:HE22	2:K:425:LYS:H	1.27	0.79
1:B:372:LEU:HD11	1:E:371:GLN:HG2	1.64	0.79
2:H:43:PHE:CG	2:I:22:ARG:NE	2.49	0.79
2:I:511:THR:HG22	2:I:512:HIS:HD2	1.44	0.79
2:J:2005:PHE:CA	2:J:2010:LEU:HD11	2.12	0.79
2:G:487:ILE:HB	2:G:488:PRO:HD3	1.65	0.79
1:C:824:LEU:HB3	1:C:839:ILE:CD1	2.13	0.79
2:K:750:GLY:HA2	2:K:865:ILE:HG23	1.64	0.79
2:K:485:ASP:HB3	2:K:488:PRO:HD2	1.63	0.79
1:B:855:ALA:HA	1:B:919:ARG:HH21	1.47	0.79
1:A:574:ILE:HG23	1:A:579:MET:HB2	1.63	0.79

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:E:855:ALA:HA	1:E:919:ARG:HH21	1.47	0.79
2:J:251:PRO:HG3	2:J:316:PHE:HA	1.64	0.79
2:G:521:VAL:HG11	2:G:549:ASN:HB2	1.63	0.79
1:A:679:LYS:HG2	1:A:708:GLN:HB3	1.63	0.79
2:G:1404:VAL:HG22	2:G:1413:VAL:HG22	1.65	0.79
2:H:846:THR:HG21	2:H:866:HIS:HD2	1.46	0.79
2:J:485:ASP:HB3	2:J:488:PRO:HD2	1.65	0.79
2:K:471:ASP:HB3	2:K:474:THR:O	1.83	0.79
1:F:326:ASP:HB3	1:F:333:ARG:HH12	1.48	0.79
1:F:1099:GLU:HG2	1:F:1149:LEU:HD21	1.63	0.79
2:I:521:VAL:HG11	2:I:549:ASN:HB2	1.65	0.79
2:K:605:VAL:HB	2:K:628:ILE:HG13	1.64	0.79
1:A:439:ARG:HA	1:A:705:ARG:HG2	1.65	0.79
2:G:215:TRP:HE3	2:G:216:ASP:H	1.29	0.79
2:K:1637:VAL:HG11	2:K:1679:LEU:HD13	1.65	0.79
1:E:965:TYR:CE1	1:E:1199:LEU:HD22	2.18	0.79
1:C:1630:LYS:HD2	1:F:1273:ILE:HD11	1.65	0.79
2:L:1610:MET:HE2	2:L:1610:MET:HA	1.63	0.79
2:H:138:ARG:HB3	2:H:192:THR:HG23	1.64	0.79
1:D:1330:GLU:OE1	1:D:1340:MET:HB3	1.83	0.79
2:L:1871:VAL:HG21	2:L:2004:PRO:HD3	1.63	0.79
2:G:590:VAL:HG23	2:G:1091:HIS:NE2	1.97	0.79
1:B:628:TYR:HD1	1:B:629:SER:N	1.80	0.79
2:J:1616:VAL:HG11	2:J:1679:LEU:HD12	1.64	0.79
2:K:914:TRP:CD1	2:K:916:GLY:HA3	2.18	0.79
2:G:485:ASP:HB3	2:G:488:PRO:HD2	1.64	0.79
1:C:422:LEU:HD13	1:C:429:ILE:HG12	1.64	0.79
2:H:465:LEU:O	2:H:479:ARG:HD3	1.82	0.78
2:K:706:ILE:HG22	2:K:707:GLN:HG2	1.65	0.78
2:G:674:ILE:HD13	2:G:705:TYR:CE2	2.18	0.78
1:D:392:ASP:HB3	1:D:395:LYS:HD2	1.64	0.78
1:C:392:ASP:HB3	1:C:395:LYS:HD2	1.66	0.78
2:I:2005:PHE:CA	2:I:2010:LEU:HD11	2.13	0.78
2:I:467:ILE:HG23	2:I:468:PRO:HD2	1.65	0.78
2:L:1457:HIS:ND1	2:L:1487:THR:HG22	1.98	0.78
2:H:1554:PRO:HG3	2:H:1659:ILE:HD11	1.66	0.78
2:L:605:VAL:HB	2:L:628:ILE:HG13	1.64	0.78
1:D:30:GLU:HB2	2:J:2045:ALA:HB1	1.65	0.78
1:D:27:ARG:HG3	2:J:2045:ALA:HB2	1.66	0.78
1:E:486:VAL:HG11	1:E:647:GLY:HA3	1.66	0.78
2:H:1436:ARG:NH2	2:H:1602:LEU:HD21	1.97	0.78
2:H:190:TYR:HD1	2:H:201:ILE:HD13	1.46	0.78

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:H:57:PRO:HG3	2:H:68:GLU:HG3	1.63	0.78
2:H:251:PRO:HG3	2:H:316:PHE:HA	1.63	0.78
1:F:1703:VAL:CG1	1:F:1711:LEU:HB3	2.11	0.78
2:G:1985:GLN:CG	2:G:1986:PRO:HD3	2.11	0.78
1:C:1499:ARG:HD3	1:F:1476:ARG:HH12	1.48	0.78
1:E:881:LEU:HA	1:E:884:MET:HG3	1.65	0.78
2:L:674:ILE:HD13	2:L:705:TYR:CE2	2.18	0.78
2:H:674:ILE:HD13	2:H:705:TYR:CE2	2.18	0.78
1:E:998:GLY:HA3	1:E:1361:VAL:HG13	1.64	0.78
2:L:1007:LEU:HD12	2:L:1007:LEU:H	1.45	0.78
2:K:1764:MET:HB3	2:K:1780:ILE:HD12	1.65	0.78
2:H:1616:VAL:HG11	2:H:1679:LEU:HD12	1.63	0.78
2:K:485:ASP:CB	2:K:488:PRO:HD2	2.14	0.78
2:L:1369:ASP:OD1	2:L:1371:LEU:HB3	1.83	0.78
2:L:1115:TYR:HB3	2:L:1267:PRO:HB3	1.65	0.78
1:E:1223:GLY:HA3	1:E:1276:PRO:HD2	1.66	0.78
2:G:610:PRO:HD2	3:G:2101:FMN:H6	1.66	0.78
2:I:215:TRP:HE3	2:I:216:ASP:H	1.31	0.78
1:D:326:ASP:HB3	1:D:333:ARG:HH12	1.46	0.78
2:J:1436:ARG:NH2	2:J:1602:LEU:HD21	1.98	0.78
2:L:251:PRO:HG3	2:L:316:PHE:HA	1.63	0.78
2:J:190:TYR:HD1	2:J:201:ILE:HD13	1.48	0.78
2:H:1090:ILE:O	2:H:1094:HIS:CD2	2.37	0.78
2:K:376:ARG:HB3	2:K:394:PRO:HG2	1.65	0.78
2:H:1479:HIS:HD2	2:H:1481:ILE:HG12	1.49	0.78
2:I:251:PRO:HG3	2:I:316:PHE:HA	1.63	0.78
2:H:638:ALA:HA	2:H:672:TRP:CZ3	2.19	0.78
2:H:2005:PHE:CA	2:H:2010:LEU:HD11	2.13	0.78
1:D:1278:GLY:HA2	1:D:1630:LYS:HE2	1.66	0.78
1:B:427:ARG:NH1	1:B:427:ARG:HG3	1.88	0.78
1:C:339:GLN:NE2	1:E:339:GLN:HE21	1.82	0.78
2:J:1985:GLN:CG	2:J:1986:PRO:HD3	2.13	0.78
2:G:1616:VAL:HG11	2:G:1679:LEU:HD12	1.66	0.78
1:F:868:VAL:HG11	1:F:908:ILE:HD11	1.63	0.78
2:H:1918:VAL:HG13	2:H:2006:HIS:HB2	1.64	0.78
2:H:1067:LEU:HD13	3:H:2101:FMN:HM72	1.66	0.78
1:E:1674:ILE:HD11	2:K:1011:GLN:HG3	1.64	0.78
2:J:605:VAL:HB	2:J:628:ILE:HG13	1.66	0.78
2:L:1404:VAL:HG22	2:L:1413:VAL:HG22	1.66	0.78
1:B:1610:ARG:CG	1:B:1610:ARG:HH11	1.90	0.78
2:I:501:TRP:HE1	2:I:528:THR:CG2	1.97	0.78
2:K:867:LYS:HD3	2:K:1065:CYS:SG	2.24	0.78

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:H:487:ILE:HB	2:H:488:PRO:HD3	1.66	0.78
1:F:486:VAL:HG11	1:F:647:GLY:HA3	1.65	0.78
2:K:638:ALA:HA	2:K:672:TRP:CZ3	2.18	0.78
1:E:43:ARG:NH1	2:K:1687:GLN:HE21	1.81	0.78
2:J:638:ALA:HA	2:J:672:TRP:CZ3	2.19	0.78
1:E:1241:LEU:HD23	1:E:1243:LYS:HE3	1.66	0.78
2:I:1767:GLU:CB	2:I:2016:PRO:HG3	2.11	0.77
2:K:1918:VAL:HG13	2:K:2006:HIS:HB2	1.66	0.77
2:J:467:ILE:HG23	2:J:468:PRO:HD2	1.66	0.77
2:I:781:GLY:HA2	2:I:1071:VAL:HG13	1.66	0.77
1:C:1099:GLU:HG2	1:C:1149:LEU:HD21	1.63	0.77
1:B:729:ILE:HA	1:B:736:LEU:CD2	2.13	0.77
1:A:683:THR:HB	1:A:714:PHE:HB3	1.66	0.77
1:F:40:ARG:HH21	1:F:74:VAL:HG22	1.48	0.77
2:I:914:TRP:NE1	2:I:916:GLY:HA3	1.99	0.77
2:I:376:ARG:HB3	2:I:394:PRO:HG2	1.66	0.77
1:C:1674:ILE:HD11	2:I:1011:GLN:HG3	1.63	0.77
2:J:1338:ARG:NH2	2:L:327:PRO:CD	2.44	0.77
2:L:914:TRP:CD1	2:L:916:GLY:HA3	2.19	0.77
2:J:485:ASP:CB	2:J:488:PRO:HD2	2.15	0.77
2:G:638:ALA:HA	2:G:672:TRP:CZ3	2.19	0.77
2:I:750:GLY:HA2	2:I:865:ILE:HG23	1.65	0.77
1:B:72:THR:HB	1:B:74:VAL:HG23	1.63	0.77
1:F:612:ILE:HG23	1:F:628:TYR:CD2	2.18	0.77
1:A:422:LEU:HD13	1:A:429:ILE:HG12	1.65	0.77
1:D:1108:PRO:HG3	1:D:1141:ARG:HE	1.50	0.77
2:H:396:ILE:H	2:H:396:ILE:HD12	1.47	0.77
2:G:190:TYR:HD1	2:G:201:ILE:HD13	1.47	0.77
2:I:765:TYR:HB2	2:I:805:MET:HE3	1.67	0.77
2:I:1007:LEU:H	2:I:1007:LEU:HD12	1.47	0.77
2:J:743:TRP:CD2	2:J:761:ILE:HD11	2.19	0.77
1:C:40:ARG:NH2	1:C:74:VAL:HG22	1.99	0.77
2:L:487:ILE:HB	2:L:488:PRO:HD3	1.66	0.77
1:A:729:ILE:HA	1:A:736:LEU:HD21	1.65	0.77
2:L:1288:PHE:O	2:L:1292:VAL:HG23	1.84	0.77
2:J:410:ALA:HB1	2:J:414:LEU:HD12	1.66	0.77
1:A:1674:ILE:HD11	2:G:1011:GLN:HG3	1.65	0.77
2:G:743:TRP:CD2	2:G:761:ILE:HD11	2.20	0.77
1:C:973:TRP:CE2	1:C:1648:LYS:HB2	2.20	0.77
1:C:486:VAL:HG11	1:C:647:GLY:HA3	1.66	0.77
2:K:1919:ASN:HB2	2:K:1928:VAL:HB	1.66	0.77
2:L:511:THR:HG22	2:L:512:HIS:HD2	1.45	0.77

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:L:1616:VAL:HG11	2:L:1679:LEU:HD12	1.66	0.77
2:J:487:ILE:HB	2:J:488:PRO:HD3	1.67	0.77
2:I:1764:MET:HB3	2:I:1780:ILE:HD12	1.66	0.77
1:A:1565:PRO:HG3	1:A:1572:TRP:CZ3	2.19	0.77
2:G:501:TRP:HE1	2:G:528:THR:CG2	1.98	0.77
2:L:501:TRP:HE1	2:L:528:THR:CG2	1.97	0.77
2:G:485:ASP:CB	2:G:488:PRO:HD2	2.15	0.77
2:I:942:MET:HE2	2:I:955:LEU:HD13	1.66	0.77
1:B:1330:GLU:OE1	1:B:1340:MET:HB3	1.83	0.77
2:I:605:VAL:HB	2:I:628:ILE:HG13	1.64	0.77
1:B:406:ALA:HA	1:B:439:ARG:HH11	1.48	0.77
2:K:590:VAL:HG23	2:K:1091:HIS:NE2	1.98	0.77
2:G:376:ARG:HB3	2:G:394:PRO:HG2	1.65	0.77
1:E:326:ASP:HB3	1:E:333:ARG:HH12	1.48	0.77
1:D:486:VAL:HG11	1:D:647:GLY:HA3	1.67	0.77
2:H:857:VAL:HG13	2:H:876:TRP:NE1	2.00	0.77
1:D:616:HIS:HA	1:D:633:THR:HG23	1.67	0.77
2:H:172:ILE:HD11	2:H:501:TRP:HZ2	1.50	0.77
2:J:1090:ILE:O	2:J:1094:HIS:CD2	2.38	0.77
1:B:1278:GLY:HA2	1:B:1630:LYS:HE2	1.66	0.77
1:E:72:THR:HB	1:E:74:VAL:HG23	1.66	0.77
2:I:420:PRO:HA	2:I:754:PHE:HB3	1.67	0.77
1:D:1623:THR:HG22	1:D:1633:GLN:HG3	1.66	0.77
1:B:868:VAL:HG11	1:B:908:ILE:HD11	1.67	0.77
1:C:1623:THR:HG22	1:C:1633:GLN:HG3	1.66	0.77
2:L:511:THR:CG2	2:L:512:HIS:CD2	2.68	0.77
2:L:172:ILE:HD11	2:L:501:TRP:HZ2	1.48	0.77
1:D:1079:ARG:HH11	1:D:1079:ARG:CG	1.97	0.77
1:D:72:THR:HB	1:D:74:VAL:HG23	1.67	0.77
2:K:1521:GLU:OE2	2:K:2028:THR:HG22	1.85	0.77
1:D:1565:PRO:HG3	1:D:1572:TRP:CZ3	2.20	0.77
2:K:215:TRP:HE3	2:K:216:ASP:H	1.32	0.77
1:E:1278:GLY:HA2	1:E:1630:LYS:HE2	1.67	0.77
1:A:689:ARG:CZ	1:A:1339:GLU:HG2	2.14	0.77
2:K:814:SER:HB2	3:K:2101:FMN:O3P	1.85	0.77
1:F:612:ILE:HG23	1:F:628:TYR:HD2	1.49	0.77
2:L:942:MET:HE2	2:L:955:LEU:HD13	1.67	0.77
1:A:392:ASP:HB3	1:A:395:LYS:HD2	1.67	0.77
2:G:31:LEU:HD13	2:G:75:LEU:HD11	1.68	0.77
2:I:290:VAL:HA	2:I:490:LEU:HD13	1.67	0.77
2:L:698:SER:HB3	2:L:701:VAL:CG2	2.15	0.76
1:D:40:ARG:NH2	1:D:74:VAL:HG22	1.99	0.76

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:E:729:ILE:HA	1:E:736:LEU:HD21	1.65	0.76
2:G:616:ASP:OD2	2:G:823:HIS:HE1	1.68	0.76
2:H:1007:LEU:H	2:H:1007:LEU:HD12	1.48	0.76
2:L:410:ALA:HB1	2:L:414:LEU:HD12	1.67	0.76
1:D:407:ARG:NH1	1:D:1606:VAL:HG23	2.01	0.76
1:A:339:GLN:HE21	1:D:339:GLN:NE2	1.80	0.76
2:H:1985:GLN:CG	2:H:1986:PRO:HD3	2.15	0.76
2:H:1265:TYR:CZ	2:H:1267:PRO:HG3	2.21	0.76
1:E:406:ALA:HA	1:E:439:ARG:HH11	1.51	0.76
1:E:983:GLN:HB3	1:E:1418:ILE:HD13	1.65	0.76
2:H:511:THR:HG22	2:H:512:HIS:HD2	1.47	0.76
2:L:1871:VAL:CG2	2:L:2004:PRO:HD3	2.14	0.76
2:J:698:SER:HB3	2:J:701:VAL:CG2	2.16	0.76
1:C:72:THR:HB	1:C:74:VAL:HG23	1.67	0.76
2:K:487:ILE:HB	2:K:488:PRO:HD3	1.67	0.76
1:F:1565:PRO:HG3	1:F:1572:TRP:CZ3	2.20	0.76
2:H:942:MET:HE2	2:H:955:LEU:HD13	1.66	0.76
1:A:1330:GLU:OE1	1:A:1340:MET:HB3	1.86	0.76
1:C:669:VAL:O	1:C:673:LEU:HD12	1.86	0.76
2:G:1919:ASN:HB2	2:G:1928:VAL:HB	1.67	0.76
1:B:683:THR:HB	1:B:714:PHE:HB3	1.68	0.76
2:I:743:TRP:CD2	2:I:761:ILE:HD11	2.20	0.76
1:B:1565:PRO:HG3	1:B:1572:TRP:CZ3	2.20	0.76
1:E:422:LEU:HD13	1:E:429:ILE:HG12	1.67	0.76
2:L:1335:PHE:HE1	2:L:1629:ILE:CD1	1.98	0.76
2:I:190:TYR:HD1	2:I:201:ILE:HD13	1.51	0.76
2:L:2005:PHE:CA	2:L:2010:LEU:HD11	2.14	0.76
1:D:824:LEU:HB3	1:D:839:ILE:CD1	2.15	0.76
1:A:755:GLU:HG2	1:F:831:GLU:HG2	1.67	0.76
2:L:1265:TYR:CZ	2:L:1267:PRO:HG3	2.20	0.76
1:F:729:ILE:HA	1:F:736:LEU:HD21	1.65	0.76
1:D:70:ALA:HB2	2:L:407:LYS:NZ	2.01	0.76
2:G:1265:TYR:CZ	2:G:1267:PRO:HG3	2.21	0.76
2:J:468:PRO:CG	2:J:479:ARG:HH21	1.98	0.76
1:E:43:ARG:NH1	2:K:1687:GLN:NE2	2.34	0.76
1:B:729:ILE:HA	1:B:736:LEU:HD21	1.65	0.76
1:F:729:ILE:HA	1:F:736:LEU:CD2	2.15	0.76
2:L:215:TRP:HE3	2:L:216:ASP:H	1.32	0.76
1:C:1330:GLU:OE1	1:C:1340:MET:HB3	1.84	0.76
1:A:40:ARG:NH2	1:A:74:VAL:HG22	1.98	0.76
1:D:729:ILE:HA	1:D:736:LEU:CD2	2.16	0.76
2:L:396:ILE:HD12	2:L:396:ILE:H	1.48	0.76

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:C:855:ALA:HA	1:C:919:ARG:HH21	1.51	0.76
2:K:1468:ARG:NH1	2:K:1468:ARG:HG2	1.98	0.76
2:H:1468:ARG:NH1	2:H:1468:ARG:HG2	2.00	0.76
1:A:339:GLN:NE2	1:D:339:GLN:HE21	1.81	0.76
2:K:2005:PHE:CA	2:K:2010:LEU:HD11	2.15	0.76
1:A:532:ILE:CG2	1:A:907:PHE:CB	2.64	0.76
1:E:824:LEU:HB3	1:E:839:ILE:CD1	2.16	0.76
2:K:1007:LEU:HD12	2:K:1007:LEU:H	1.49	0.76
1:A:1623:THR:HG22	1:A:1633:GLN:HG3	1.66	0.76
1:F:1108:PRO:HG3	1:F:1141:ARG:HE	1.49	0.76
2:L:1694:PHE:CD2	2:L:1843:ALA:HA	2.21	0.76
1:C:1108:PRO:HG3	1:C:1141:ARG:HE	1.49	0.76
1:F:427:ARG:NH1	1:F:492:ILE:HG12	2.00	0.76
1:F:1330:GLU:OE1	1:F:1340:MET:HB3	1.85	0.76
2:G:1339:GLY:HA2	2:I:376:ARG:HH21	1.50	0.76
1:F:628:TYR:HD1	1:F:629:SER:N	1.84	0.76
2:G:1460:THR:HG22	2:G:1462:GLN:H	1.51	0.76
2:H:914:TRP:NE1	2:H:916:GLY:HA3	1.99	0.76
2:H:327:PRO:CD	2:I:1338:ARG:HH21	1.98	0.76
2:G:511:THR:HG22	2:G:512:HIS:HD2	1.51	0.76
1:E:628:TYR:HD1	1:E:629:SER:N	1.84	0.76
2:K:38:PRO:HD3	2:K:104:LEU:HD11	1.68	0.76
1:B:998:GLY:HA3	1:B:1361:VAL:HG13	1.68	0.76
2:G:1479:HIS:HD2	2:G:1481:ILE:HG12	1.51	0.76
1:B:1686:PRO:HB2	1:B:1713:PHE:CD2	2.21	0.76
2:G:251:PRO:HG3	2:G:316:PHE:HA	1.68	0.76
2:H:1919:ASN:HB2	2:H:1928:VAL:HB	1.66	0.76
2:G:942:MET:HE2	2:G:955:LEU:HD13	1.67	0.76
2:I:1479:HIS:HD2	2:I:1481:ILE:HG12	1.51	0.76
2:J:511:THR:HG22	2:J:512:HIS:HD2	1.52	0.75
1:A:1499:ARG:HD3	1:E:1476:ARG:NH1	2.01	0.75
2:H:914:TRP:CD1	2:H:916:GLY:HA3	2.21	0.75
1:E:947:ASP:O	1:E:951:LEU:HG	1.86	0.75
1:B:824:LEU:HB3	1:B:839:ILE:CD1	2.16	0.75
2:J:1067:LEU:HD13	3:J:2101:FMN:HM72	1.69	0.75
2:G:1764:MET:HB3	2:G:1780:ILE:HD12	1.67	0.75
2:H:158:LEU:HD22	2:H:169:ILE:HD11	1.68	0.75
1:A:998:GLY:HA3	1:A:1361:VAL:HG13	1.67	0.75
2:J:1460:THR:HG22	2:J:1462:GLN:H	1.49	0.75
2:H:215:TRP:HE3	2:H:216:ASP:H	1.31	0.75
2:L:1479:HIS:HD2	2:L:1481:ILE:HG12	1.49	0.75
2:L:706:ILE:HG22	2:L:707:GLN:HG2	1.69	0.75

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:K:635:TYR:CG	2:K:641:MET:HG3	2.22	0.75
1:C:427:ARG:HH12	1:C:492:ILE:CG1	2.00	0.75
2:I:511:THR:CG2	2:I:512:HIS:CD2	2.69	0.75
2:K:172:ILE:HD11	2:K:501:TRP:HZ2	1.51	0.75
2:L:1468:ARG:HG2	2:L:1468:ARG:NH1	1.97	0.75
2:I:590:VAL:HG23	2:I:1091:HIS:NE2	2.00	0.75
1:A:612:ILE:HD12	1:F:579:MET:CE	2.16	0.75
2:J:290:VAL:HA	2:J:490:LEU:HD13	1.67	0.75
1:E:392:ASP:HB3	1:E:395:LYS:HD2	1.67	0.75
1:A:1094:LYS:HE3	1:A:1316:TYR:CD1	2.21	0.75
2:K:1265:TYR:CZ	2:K:1267:PRO:HG3	2.21	0.75
2:G:410:ALA:HB1	2:G:414:LEU:HD12	1.69	0.75
1:E:962:ASN:ND2	2:K:1006:GLN:HE22	1.80	0.75
2:I:846:THR:HG21	2:I:866:HIS:HD2	1.50	0.75
1:E:729:ILE:HA	1:E:736:LEU:CD2	2.15	0.75
1:E:67:ALA:CB	2:J:371:HIS:CE1	2.70	0.75
2:G:1375:HIS:HE1	2:G:1610:MET:SD	2.09	0.75
1:A:1317:GLU:HG3	1:E:1250:LEU:HB2	1.69	0.75
2:L:638:ALA:HA	2:L:672:TRP:CZ3	2.22	0.75
2:J:1369:ASP:OD1	2:J:1371:LEU:HB3	1.84	0.75
1:D:1703:VAL:HG11	1:D:1711:LEU:HB3	1.69	0.75
2:K:674:ILE:HD13	2:K:705:TYR:CE2	2.21	0.75
2:J:327:PRO:CD	2:K:1338:ARG:HH21	1.98	0.75
2:J:1499:LYS:HB3	2:J:1505:SER:HB3	1.69	0.75
2:I:487:ILE:HB	2:I:488:PRO:HD3	1.67	0.75
2:I:1517:LEU:HG	2:I:1523:ILE:HD11	1.67	0.75
2:K:967:GLU:HG2	2:K:1000:TYR:CE1	2.21	0.75
2:H:467:ILE:HG23	2:H:468:PRO:HD2	1.67	0.75
2:J:610:PRO:HD2	3:J:2101:FMN:H6	1.67	0.75
2:L:857:VAL:CG1	2:L:876:TRP:NE1	2.50	0.75
1:C:893:GLN:OE1	2:J:1751:GLY:HA2	1.86	0.75
2:K:1554:PRO:HG3	2:K:1659:ILE:HD11	1.69	0.75
2:L:967:GLU:HG2	2:L:1000:TYR:CE1	2.22	0.75
2:I:172:ILE:HD11	2:I:501:TRP:HZ2	1.52	0.75
1:E:1079:ARG:HH11	1:E:1079:ARG:CG	1.99	0.75
2:G:465:LEU:O	2:G:479:ARG:HD3	1.86	0.75
2:I:1090:ILE:O	2:I:1094:HIS:CD2	2.39	0.75
2:G:1897:GLU:HG2	2:G:1901:GLN:HE21	1.52	0.75
2:J:750:GLY:HA2	2:J:865:ILE:HG23	1.67	0.75
2:J:38:PRO:HD3	2:J:104:LEU:HD11	1.68	0.75
1:F:72:THR:HB	1:F:74:VAL:HG23	1.69	0.75
1:B:1108:PRO:HG3	1:B:1141:ARG:HE	1.52	0.75

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:E:616:HIS:HA	1:E:633:THR:HG23	1.69	0.75
2:J:1554:PRO:HG3	2:J:1659:ILE:HD11	1.69	0.75
2:H:1299:VAL:HG23	2:H:1301:PHE:CE2	2.22	0.75
2:G:1436:ARG:HH22	2:G:1602:LEU:HD21	1.49	0.75
2:I:610:PRO:HD2	3:I:2101:FMN:H6	1.69	0.75
2:L:855:ILE:HD13	2:L:856:THR:H	1.52	0.75
1:E:612:ILE:HG12	1:E:628:TYR:CD2	2.20	0.75
2:I:967:GLU:HG2	2:I:1000:TYR:CE1	2.22	0.75
1:C:1250:LEU:HB2	1:F:1317:GLU:HG3	1.69	0.75
1:A:831:GLU:HG2	1:F:755:GLU:HG2	1.68	0.75
1:C:616:HIS:HA	1:C:633:THR:HG23	1.68	0.75
2:K:1803:THR:HA	2:K:1806:THR:HB	1.68	0.75
2:J:1299:VAL:HG23	2:J:1301:PHE:CE2	2.22	0.75
2:L:846:THR:HG21	2:L:866:HIS:HD2	1.50	0.75
2:L:867:LYS:HD3	2:L:1065:CYS:SG	2.27	0.75
1:E:40:ARG:NH2	1:E:74:VAL:HG22	2.01	0.75
2:I:1404:VAL:HG22	2:I:1413:VAL:HG22	1.69	0.75
2:H:49:LYS:O	2:H:53:LEU:HG	1.86	0.75
1:F:689:ARG:HD2	1:F:1339:GLU:CD	2.06	0.75
1:D:868:VAL:HG11	1:D:908:ILE:HD11	1.69	0.75
1:A:824:LEU:HB3	1:A:839:ILE:CD1	2.16	0.74
2:K:49:LYS:O	2:K:53:LEU:HG	1.85	0.74
1:D:729:ILE:HA	1:D:736:LEU:HD21	1.69	0.74
2:G:1517:LEU:HG	2:G:1523:ILE:HD11	1.68	0.74
1:B:755:GLU:HG2	1:E:831:GLU:HG2	1.69	0.74
1:F:392:ASP:HB3	1:F:395:LYS:HD2	1.69	0.74
1:B:1317:GLU:HG3	1:D:1250:LEU:HB2	1.67	0.74
1:F:427:ARG:HH12	1:F:492:ILE:CG1	1.99	0.74
2:G:1090:ILE:O	2:G:1094:HIS:CD2	2.39	0.74
2:I:1616:VAL:HG11	2:I:1679:LEU:HD12	1.68	0.74
1:A:72:THR:HB	1:A:74:VAL:HG23	1.69	0.74
2:G:846:THR:HG21	2:G:866:HIS:HD2	1.50	0.74
2:K:290:VAL:HA	2:K:490:LEU:HD13	1.70	0.74
1:B:1663:LYS:HG2	2:H:1007:LEU:HD11	1.68	0.74
1:B:1490:GLY:O	1:B:1509:THR:HB	1.87	0.74
2:H:1369:ASP:OD1	2:H:1371:LEU:HB3	1.87	0.74
2:H:765:TYR:HB2	2:H:805:MET:HE3	1.68	0.74
1:A:1079:ARG:HH11	1:A:1079:ARG:CG	1.96	0.74
2:K:1090:ILE:O	2:K:1094:HIS:CD2	2.40	0.74
2:K:857:VAL:HG13	2:K:876:TRP:HE1	1.47	0.74
2:K:855:ILE:HD13	2:K:856:THR:H	1.52	0.74
2:H:468:PRO:CG	2:H:479:ARG:HH21	1.99	0.74

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:I:1067:LEU:HD13	3:I:2101:FMN:HM72	1.69	0.74
1:B:40:ARG:NH2	1:B:74:VAL:HG22	2.03	0.74
2:J:1517:LEU:HG	2:J:1523:ILE:HD11	1.66	0.74
1:F:689:ARG:CZ	1:F:1339:GLU:HG2	2.17	0.74
2:L:87:VAL:HG21	2:L:102:LEU:HD12	1.69	0.74
2:L:1767:GLU:HB2	2:L:2016:PRO:HG3	1.70	0.74
2:H:410:ALA:HB1	2:H:414:LEU:HD12	1.69	0.74
2:I:1369:ASP:OD1	2:I:1371:LEU:HB3	1.87	0.74
2:K:87:VAL:HG21	2:K:102:LEU:HD12	1.69	0.74
2:H:1335:PHE:CE2	2:H:1345:PRO:HG3	2.21	0.74
1:A:486:VAL:HG11	1:A:647:GLY:HA3	1.69	0.74
1:A:427:ARG:HD2	1:A:490:VAL:HG12	1.68	0.74
2:L:272:PRO:O	2:L:276:LEU:HB2	1.87	0.74
2:J:172:ILE:HD11	2:J:501:TRP:HZ2	1.53	0.74
2:I:465:LEU:O	2:I:479:ARG:HD3	1.87	0.74
2:H:855:ILE:HD13	2:H:856:THR:H	1.52	0.74
2:G:914:TRP:CD1	2:G:916:GLY:HA3	2.22	0.74
2:H:1803:THR:HA	2:H:1806:THR:HB	1.69	0.74
2:H:376:ARG:HB3	2:H:394:PRO:HG2	1.68	0.74
1:D:439:ARG:HA	1:D:705:ARG:HG2	1.68	0.74
2:I:38:PRO:HD3	2:I:104:LEU:HD11	1.67	0.74
2:J:1918:VAL:HG13	2:J:2006:HIS:CB	2.16	0.74
2:J:846:THR:HG21	2:J:866:HIS:HD2	1.51	0.74
2:L:1919:ASN:HB2	2:L:1928:VAL:HB	1.69	0.74
1:C:628:TYR:HD1	1:C:629:SER:N	1.86	0.74
2:J:1265:TYR:CZ	2:J:1267:PRO:HG3	2.23	0.74
1:E:1094:LYS:HE3	1:E:1316:TYR:CD1	2.22	0.74
2:J:49:LYS:O	2:J:53:LEU:HG	1.87	0.74
1:D:1574:LEU:HD12	1:D:1622:VAL:HG11	1.70	0.74
2:I:1179:GLU:CD	2:I:1179:GLU:H	1.89	0.74
2:K:410:ALA:HB1	2:K:414:LEU:HD12	1.70	0.74
2:J:1919:ASN:HB2	2:J:1928:VAL:HB	1.69	0.74
2:J:327:PRO:HD2	2:K:1338:ARG:NH2	2.01	0.74
2:K:698:SER:HB3	2:K:701:VAL:CG2	2.17	0.74
1:A:628:TYR:HD1	1:A:629:SER:N	1.85	0.74
2:L:31:LEU:HD13	2:L:75:LEU:HD11	1.68	0.74
2:G:605:VAL:HB	2:G:628:ILE:HG13	1.68	0.74
1:A:973:TRP:CE2	1:A:1648:LYS:HB2	2.22	0.74
1:C:1565:PRO:HG3	1:C:1572:TRP:CZ3	2.23	0.74
2:L:1594:ARG:CG	2:L:1594:ARG:HH11	1.94	0.74
1:D:962:ASN:HB3	2:J:969:ARG:HD2	1.70	0.74
2:K:610:PRO:HD2	3:K:2101:FMN:H6	1.69	0.74

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:B:486:VAL:HG11	1:B:647:GLY:HA3	1.68	0.74
2:K:158:LEU:HD22	2:K:169:ILE:HD11	1.70	0.74
2:G:663:ILE:HD13	2:G:666:ASN:HB3	1.70	0.74
2:K:1269:ALA:HB1	2:K:1271:TYR:CZ	2.22	0.74
2:J:1867:MET:O	2:J:2003:VAL:HG21	1.88	0.74
1:C:1703:VAL:CG1	1:C:1711:LEU:HB3	2.18	0.74
1:A:616:HIS:HA	1:A:633:THR:HG23	1.70	0.74
2:H:38:PRO:HD3	2:H:104:LEU:HD11	1.70	0.74
2:H:1517:LEU:HG	2:H:1523:ILE:HD11	1.68	0.74
1:A:983:GLN:HB3	1:A:1418:ILE:HD13	1.70	0.74
1:E:30:GLU:HB2	2:K:2045:ALA:HB1	1.70	0.74
2:L:1318:ALA:HA	2:L:1391:VAL:HG21	1.70	0.74
1:E:683:THR:HB	1:E:714:PHE:HB3	1.69	0.74
1:C:1079:ARG:HH11	1:C:1079:ARG:CG	1.99	0.74
2:I:1410:GLY:HA3	2:I:1436:ARG:HA	1.70	0.74
1:D:406:ALA:HA	1:D:439:ARG:HH11	1.52	0.74
1:A:540:LYS:HG3	1:A:608:LYS:N	2.03	0.74
2:K:616:ASP:OD2	2:K:823:HIS:HE1	1.71	0.74
2:J:1764:MET:HB3	2:J:1780:ILE:HD12	1.67	0.74
1:B:1250:LEU:HB2	1:D:1317:GLU:HG3	1.70	0.74
1:B:392:ASP:HB3	1:B:395:LYS:HD2	1.70	0.74
2:I:706:ILE:HG22	2:I:707:GLN:HG2	1.69	0.74
1:E:868:VAL:HG11	1:E:908:ILE:HD11	1.68	0.74
1:F:1223:GLY:HA3	1:F:1276:PRO:HD2	1.70	0.74
1:B:1214:HIS:HD2	1:B:1216:SER:OG	1.70	0.74
2:I:22:ARG:HG3	2:I:39:THR:HA	1.69	0.73
2:K:600:VAL:HG13	2:K:601:PRO:HD2	1.70	0.73
2:H:501:TRP:HE1	2:H:528:THR:CG2	2.00	0.73
2:L:38:PRO:HD3	2:L:104:LEU:HD11	1.69	0.73
2:I:1499:LYS:HB3	2:I:1505:SER:HB3	1.68	0.73
2:I:49:LYS:O	2:I:53:LEU:HG	1.87	0.73
2:I:1123:ALA:HB3	2:I:1126:GLU:HG3	1.69	0.73
1:A:1278:GLY:HA2	1:A:1630:LYS:HE2	1.68	0.73
1:E:964:LYS:O	1:E:966:PRO:HD3	1.88	0.73
2:G:1960:MET:HB3	2:G:1964:ASP:HB2	1.70	0.73
1:D:628:TYR:HD1	1:D:629:SER:N	1.86	0.73
1:A:552:ILE:HG21	1:A:566:PHE:CZ	2.22	0.73
2:H:610:PRO:HD2	3:H:2101:FMN:H6	1.69	0.73
2:J:663:ILE:HD13	2:J:666:ASN:HB3	1.70	0.73
1:D:1214:HIS:HD2	1:D:1216:SER:OG	1.71	0.73
2:H:706:ILE:HG22	2:H:707:GLN:HG2	1.70	0.73
1:A:868:VAL:HG11	1:A:908:ILE:HD11	1.68	0.73

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:K:765:TYR:HB2	2:K:805:MET:HE3	1.69	0.73
2:I:1610:MET:HE2	2:I:1610:MET:HA	1.69	0.73
2:H:2032:PRO:O	2:H:2036:ILE:HG13	1.89	0.73
2:I:87:VAL:HG21	2:I:102:LEU:HD12	1.69	0.73
1:F:1032:MET:CE	1:F:1165:PRO:HB3	2.18	0.73
2:G:1338:ARG:HH21	2:I:327:PRO:HD2	1.51	0.73
2:L:1090:ILE:O	2:L:1094:HIS:CD2	2.38	0.73
2:K:1299:VAL:HG23	2:K:1301:PHE:CE2	2.23	0.73
1:C:1278:GLY:HA2	1:C:1630:LYS:HE2	1.69	0.73
2:J:87:VAL:HG21	2:J:102:LEU:HD12	1.68	0.73
1:F:947:ASP:O	1:F:951:LEU:HG	1.88	0.73
2:H:511:THR:CG2	2:H:512:HIS:CD2	2.71	0.73
2:I:1468:ARG:NH1	2:I:1468:ARG:HG2	1.98	0.73
2:L:1436:ARG:HH22	2:L:1602:LEU:HD21	1.52	0.73
2:J:197:VAL:HG21	2:J:263:ILE:HD11	1.70	0.73
2:K:272:PRO:O	2:K:276:LEU:HB2	1.88	0.73
2:G:49:LYS:O	2:G:53:LEU:HG	1.89	0.73
2:J:1442:TYR:HA	2:J:1445:THR:HG22	1.69	0.73
2:G:1610:MET:HE2	2:G:1610:MET:HA	1.70	0.73
1:D:947:ASP:O	1:D:951:LEU:HG	1.88	0.73
2:K:396:ILE:H	2:K:396:ILE:HD12	1.54	0.73
1:D:1032:MET:CE	1:D:1165:PRO:HB3	2.19	0.73
2:J:1007:LEU:H	2:J:1007:LEU:HD12	1.53	0.73
2:I:511:THR:CG2	2:I:512:HIS:HD2	2.02	0.73
2:I:855:ILE:HD13	2:I:856:THR:H	1.53	0.73
2:K:1897:GLU:HG2	2:K:1901:GLN:HE21	1.53	0.73
2:I:31:LEU:HD13	2:I:75:LEU:HD11	1.71	0.73
1:C:998:GLY:HA3	1:C:1361:VAL:HG13	1.71	0.73
1:E:407:ARG:NH1	1:E:1606:VAL:HG23	2.04	0.73
2:G:1468:ARG:NH1	2:G:1468:ARG:HG2	1.98	0.73
2:H:752:HIS:HE1	2:H:847:TYR:CE2	2.07	0.73
2:G:698:SER:HB3	2:G:701:VAL:CG2	2.17	0.73
1:D:1032:MET:HE2	1:D:1165:PRO:HB3	1.70	0.73
2:H:1269:ALA:HB1	2:H:1271:TYR:CZ	2.23	0.73
2:I:1919:ASN:HB2	2:I:1928:VAL:HB	1.69	0.73
2:J:706:ILE:HG22	2:J:707:GLN:HG2	1.70	0.73
1:B:371:GLN:HG2	1:E:372:LEU:HD11	1.71	0.73
1:A:669:VAL:O	1:A:673:LEU:HD12	1.89	0.73
1:D:1443:LEU:O	1:D:1447:VAL:HG23	1.88	0.73
1:A:1389:ILE:HG13	1:E:1268:SER:CB	2.04	0.73
2:J:501:TRP:HE1	2:J:528:THR:CG2	1.99	0.73
1:F:1217:GLU:O	1:F:1299:ALA:HB1	1.89	0.73

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:L:1067:LEU:HD13	3:L:2101:FMN:HM72	1.70	0.73
2:G:1067:LEU:HD13	3:G:2101:FMN:HM72	1.69	0.73
2:J:1694:PHE:CD2	2:J:1843:ALA:HA	2.24	0.73
2:H:31:LEU:HD13	2:H:75:LEU:HD11	1.69	0.73
2:I:1265:TYR:CZ	2:I:1267:PRO:HG3	2.24	0.73
2:L:600:VAL:HG13	2:L:601:PRO:HD2	1.71	0.73
1:A:532:ILE:HG21	1:A:907:PHE:HB2	1.69	0.73
2:J:955:LEU:HD21	2:J:1026:LYS:HB3	1.71	0.73
2:J:1305:LEU:HD11	2:J:1365:LYS:HD2	1.71	0.73
2:I:638:ALA:HA	2:I:672:TRP:CZ3	2.23	0.73
2:H:471:ASP:HB3	2:H:474:THR:O	1.88	0.73
2:G:1369:ASP:OD1	2:G:1371:LEU:HB3	1.89	0.73
2:I:663:ILE:HD13	2:I:666:ASN:HB3	1.70	0.73
1:E:1363:MET:HE1	1:E:1373:VAL:HG21	1.70	0.73
2:J:471:ASP:HB3	2:J:474:THR:O	1.88	0.73
2:K:752:HIS:HE1	2:K:847:TYR:CE2	2.07	0.73
1:F:1214:HIS:HD2	1:F:1216:SER:OG	1.72	0.73
2:J:1897:GLU:HG2	2:J:1901:GLN:HE21	1.52	0.73
2:L:1554:PRO:HA	2:L:1659:ILE:HG12	1.70	0.73
1:F:998:GLY:HA3	1:F:1361:VAL:HG13	1.70	0.73
2:I:1960:MET:HB3	2:I:1964:ASP:HB2	1.71	0.73
2:I:1694:PHE:CE2	2:I:1843:ALA:HA	2.24	0.73
1:B:1443:LEU:O	1:B:1447:VAL:HG23	1.89	0.73
2:J:1335:PHE:CE2	2:J:1345:PRO:HG3	2.24	0.73
2:G:1694:PHE:CE2	2:G:1843:ALA:HA	2.24	0.73
2:J:272:PRO:O	2:J:276:LEU:HB2	1.89	0.72
2:L:1335:PHE:CE2	2:L:1345:PRO:HG3	2.24	0.72
1:F:683:THR:HB	1:F:714:PHE:HB3	1.70	0.72
2:H:87:VAL:HG21	2:H:102:LEU:HD12	1.70	0.72
2:L:190:TYR:HD1	2:L:201:ILE:HD13	1.50	0.72
2:J:221:TYR:HE1	2:J:320:LEU:HD13	1.54	0.72
1:C:1317:GLU:HG3	1:F:1250:LEU:HB2	1.70	0.72
1:F:1278:GLY:HA2	1:F:1630:LYS:HE2	1.70	0.72
2:G:855:ILE:HD13	2:G:856:THR:H	1.53	0.72
2:H:1897:GLU:HG2	2:H:1901:GLN:HE21	1.51	0.72
2:H:1436:ARG:HH22	2:H:1602:LEU:HD21	1.53	0.72
2:I:903:ILE:HD11	2:I:914:TRP:CE2	2.24	0.72
2:J:1694:PHE:CE2	2:J:1843:ALA:HA	2.24	0.72
2:I:1694:PHE:CD2	2:I:1843:ALA:HA	2.23	0.72
2:L:193:TYR:HD2	2:L:263:ILE:HD13	1.54	0.72
1:A:1431:GLN:HG2	1:E:1431:GLN:OE1	1.89	0.72
2:K:31:LEU:HD13	2:K:75:LEU:HD11	1.69	0.72

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:I:2019:SER:HA	2:I:2022:LEU:HD12	1.70	0.72
2:I:1289:TYR:CG	2:I:1370:LEU:HD23	2.23	0.72
2:L:174:GLY:H	2:L:517:GLY:HA3	1.54	0.72
2:H:1952:ASP:O	2:H:1956:LEU:HG	1.89	0.72
2:J:1092:ASN:HA	2:J:1095:ILE:HG12	1.72	0.72
2:I:698:SER:HB3	2:I:701:VAL:CG2	2.18	0.72
1:E:669:VAL:O	1:E:673:LEU:HD12	1.88	0.72
2:G:290:VAL:HA	2:G:490:LEU:HD13	1.71	0.72
2:K:193:TYR:HD2	2:K:263:ILE:HD13	1.55	0.72
2:I:1506:SER:HA	2:I:1533:GLY:HA2	1.71	0.72
2:K:503:THR:O	2:K:506:VAL:HG12	1.89	0.72
1:E:36:LEU:HD21	1:E:44:ILE:HD11	1.71	0.72
1:C:339:GLN:HE21	1:E:339:GLN:NE2	1.82	0.72
2:G:1410:GLY:HA3	2:G:1436:ARG:HA	1.70	0.72
2:K:1410:GLY:HA3	2:K:1436:ARG:HA	1.71	0.72
1:D:41:THR:HG22	2:J:1689:VAL:HG12	1.72	0.72
2:K:1499:LYS:HB3	2:K:1505:SER:HB3	1.70	0.72
1:D:998:GLY:HA3	1:D:1361:VAL:HG13	1.69	0.72
2:I:1318:ALA:HA	2:I:1391:VAL:HG21	1.70	0.72
2:L:467:ILE:HG23	2:L:468:PRO:HD2	1.72	0.72
2:G:44:GLN:O	2:G:48:LEU:HG	1.90	0.72
2:K:1517:LEU:HG	2:K:1523:ILE:HD11	1.71	0.72
2:J:771:CYS:HB3	2:J:774:ILE:HD12	1.71	0.72
2:G:685:VAL:HG23	2:G:1186:ARG:NH1	2.04	0.72
2:J:138:ARG:HB3	2:J:192:THR:HG23	1.69	0.72
1:D:552:ILE:HG21	1:D:566:PHE:CZ	2.23	0.72
1:A:1323:ALA:HB1	1:A:1351:PHE:CE2	2.24	0.72
2:L:511:THR:CG2	2:L:512:HIS:HD2	2.02	0.72
2:K:327:PRO:CD	2:L:1338:ARG:HH21	2.02	0.72
1:E:533:SER:O	1:E:611:THR:HA	1.90	0.72
2:J:855:ILE:HD13	2:J:856:THR:H	1.54	0.72
2:L:1410:GLY:HA3	2:L:1436:ARG:HA	1.70	0.72
2:J:174:GLY:H	2:J:517:GLY:HA3	1.55	0.72
2:H:967:GLU:HG2	2:H:1000:TYR:CE1	2.25	0.72
2:H:1092:ASN:HA	2:H:1095:ILE:HG12	1.71	0.72
2:G:38:PRO:HD3	2:G:104:LEU:HD11	1.71	0.72
2:J:215:TRP:HE3	2:J:216:ASP:H	1.30	0.72
2:L:471:ASP:HB3	2:L:474:THR:O	1.88	0.72
2:G:1867:MET:O	2:G:2003:VAL:HG21	1.89	0.72
2:G:221:TYR:HE1	2:G:320:LEU:HD13	1.54	0.72
2:G:765:TYR:HB2	2:G:805:MET:HE3	1.71	0.72
2:L:1499:LYS:HB3	2:L:1505:SER:HB3	1.72	0.72

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:J:1468:ARG:HG2	2:J:1468:ARG:NH1	1.97	0.72
1:E:689:ARG:HH21	1:E:1591:ASN:ND2	1.87	0.72
1:E:1213:VAL:HG22	1:E:1300:ARG:NH2	2.05	0.72
2:K:221:TYR:HE1	2:K:320:LEU:HD13	1.54	0.72
2:L:1897:GLU:HG2	2:L:1901:GLN:HE21	1.54	0.72
2:H:814:SER:HB2	3:H:2101:FMN:O3P	1.89	0.72
2:I:914:TRP:CD1	2:I:916:GLY:HA3	2.23	0.72
1:B:964:LYS:O	1:B:966:PRO:HD3	1.90	0.72
2:L:1179:GLU:H	2:L:1179:GLU:CD	1.92	0.72
1:F:407:ARG:NH1	1:F:1606:VAL:HG23	2.04	0.72
2:J:765:TYR:HB2	2:J:805:MET:HE3	1.70	0.72
1:F:673:LEU:O	1:F:678:ALA:HB3	1.89	0.72
2:J:1952:ASP:O	2:J:1956:LEU:HG	1.90	0.72
1:B:36:LEU:HD21	1:B:44:ILE:HD11	1.72	0.72
2:L:1123:ALA:HB3	2:L:1126:GLU:CG	2.17	0.72
2:K:468:PRO:CD	2:K:479:ARG:HH21	2.03	0.72
2:G:1092:ASN:HA	2:G:1095:ILE:HG12	1.70	0.72
2:I:1092:ASN:HA	2:I:1095:ILE:HG12	1.71	0.72
2:J:44:GLN:O	2:J:48:LEU:HG	1.89	0.72
2:I:752:HIS:HE1	2:I:847:TYR:CE2	2.08	0.72
2:H:1410:GLY:HA3	2:H:1436:ARG:HA	1.72	0.72
2:I:1179:GLU:HA	2:I:1190:ASN:HB2	1.72	0.72
2:L:49:LYS:O	2:L:53:LEU:HG	1.90	0.72
2:I:1745:LEU:HB3	2:I:1799:LEU:CD2	2.20	0.72
2:I:616:ASP:OD2	2:I:823:HIS:HE1	1.72	0.72
2:J:1269:ALA:HB1	2:J:1271:TYR:CZ	2.24	0.72
1:E:1330:GLU:OE1	1:E:1340:MET:HB3	1.90	0.72
2:G:503:THR:O	2:G:506:VAL:HG12	1.88	0.72
2:H:1960:MET:HB3	2:H:1964:ASP:HB2	1.72	0.72
1:B:1223:GLY:HA3	1:B:1276:PRO:HD2	1.72	0.72
2:H:43:PHE:CD2	2:I:22:ARG:HG2	2.25	0.71
1:C:427:ARG:NH1	1:C:492:ILE:HG12	2.04	0.71
2:K:511:THR:HG22	2:K:512:HIS:HD2	1.51	0.71
2:K:1092:ASN:HA	2:K:1095:ILE:HG12	1.72	0.71
2:L:610:PRO:HD2	3:L:2101:FMN:H6	1.69	0.71
1:A:1273:ILE:HD11	1:E:1630:LYS:HD2	1.71	0.71
2:L:1517:LEU:HG	2:L:1523:ILE:HD11	1.69	0.71
2:I:1335:PHE:CE2	2:I:1345:PRO:HG3	2.24	0.71
2:J:31:LEU:HD13	2:J:75:LEU:HD11	1.70	0.71
1:C:1443:LEU:O	1:C:1447:VAL:HG23	1.89	0.71
2:J:752:HIS:HE1	2:J:847:TYR:CE2	2.08	0.71
2:I:1289:TYR:CB	2:I:1370:LEU:HD23	2.19	0.71

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:G:1335:PHE:CE2	2:G:1345:PRO:HG3	2.25	0.71
2:K:1288:PHE:O	2:K:1292:VAL:HG23	1.89	0.71
2:I:1288:PHE:O	2:I:1292:VAL:HG23	1.90	0.71
1:A:1108:PRO:HG3	1:A:1141:ARG:HE	1.53	0.71
2:L:1960:MET:HB3	2:L:1964:ASP:HB2	1.71	0.71
1:A:855:ALA:HA	1:A:919:ARG:HH21	1.56	0.71
1:E:552:ILE:HG21	1:E:566:PHE:CZ	2.25	0.71
1:C:1142:LEU:H	1:C:1142:LEU:HD12	1.55	0.71
2:I:129:ILE:HG23	2:I:132:LYS:H	1.55	0.71
2:G:706:ILE:HG22	2:G:707:GLN:HG2	1.72	0.71
1:A:1230:SER:HA	1:A:1311:GLN:HE22	1.55	0.71
2:I:193:TYR:HD2	2:I:263:ILE:HD13	1.55	0.71
2:L:1803:THR:HA	2:L:1806:THR:HB	1.70	0.71
2:I:1299:VAL:HG23	2:I:1301:PHE:CE2	2.24	0.71
1:F:1079:ARG:CG	1:F:1079:ARG:HH11	2.02	0.71
1:B:689:ARG:NE	1:B:1339:GLU:HG2	2.05	0.71
1:F:689:ARG:NE	1:F:1339:GLU:HG2	2.05	0.71
2:G:1269:ALA:HB1	2:G:1271:TYR:CZ	2.25	0.71
1:F:999:LEU:HD21	1:F:1575:ASN:OD1	1.90	0.71
2:J:2032:PRO:O	2:J:2036:ILE:HG13	1.90	0.71
1:A:406:ALA:HA	1:A:439:ARG:HH11	1.54	0.71
2:H:857:VAL:CG1	2:H:876:TRP:NE1	2.53	0.71
1:F:930:GLN:HA	1:F:933:ILE:HD12	1.72	0.71
1:E:1510:TRP:HZ3	1:E:1642:LEU:HA	1.56	0.71
1:C:1230:SER:HA	1:C:1311:GLN:HE22	1.54	0.71
2:K:81:ALA:HB2	2:K:139:ALA:HA	1.72	0.71
2:L:221:TYR:HE1	2:L:320:LEU:HD13	1.54	0.71
1:C:36:LEU:HD21	1:C:44:ILE:HD11	1.71	0.71
2:H:1764:MET:HB3	2:H:1780:ILE:HD12	1.72	0.71
2:K:1335:PHE:CE2	2:K:1345:PRO:HG3	2.26	0.71
1:A:1149:LEU:HB2	1:E:1149:LEU:HB2	1.72	0.71
1:D:30:GLU:HB2	2:J:2045:ALA:CB	2.20	0.71
1:C:1214:HIS:HD2	1:C:1216:SER:OG	1.74	0.71
1:B:983:GLN:HB3	1:B:1418:ILE:HD13	1.71	0.71
2:H:1506:SER:HA	2:H:1533:GLY:HA2	1.73	0.71
2:G:1803:THR:HA	2:G:1806:THR:HB	1.72	0.71
2:L:1120:ILE:CD1	2:L:1167:ASN:O	2.38	0.71
2:G:87:VAL:HG21	2:G:102:LEU:HD12	1.71	0.71
2:J:2008:THR:O	2:J:2011:ARG:HB2	1.90	0.71
1:F:964:LYS:O	1:F:966:PRO:HD3	1.90	0.71
1:B:947:ASP:O	1:B:951:LEU:HG	1.90	0.71
2:K:789:TYR:HB3	2:K:790:PRO:HD3	1.73	0.71

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:G:752:HIS:HE1	2:G:847:TYR:CE2	2.09	0.71
2:H:290:VAL:HA	2:H:490:LEU:HD13	1.73	0.71
2:L:1694:PHE:CE2	2:L:1843:ALA:HA	2.25	0.71
2:I:503:THR:O	2:I:506:VAL:HG12	1.91	0.71
2:J:1960:MET:HB3	2:J:1964:ASP:HB2	1.72	0.71
2:K:1960:MET:HB3	2:K:1964:ASP:HB2	1.71	0.71
1:F:1230:SER:HA	1:F:1311:GLN:HE22	1.56	0.71
2:H:129:ILE:HG23	2:H:132:LYS:H	1.54	0.71
1:A:612:ILE:HD12	1:F:579:MET:HE3	1.71	0.71
1:A:962:ASN:HD22	2:G:1006:GLN:NE2	1.89	0.71
1:E:973:TRP:CE2	1:E:1648:LYS:HB2	2.25	0.71
2:L:1884:CYS:HB3	2:L:1936:LEU:HD12	1.73	0.71
1:E:930:GLN:HA	1:E:933:ILE:HD12	1.72	0.71
2:I:221:TYR:HE1	2:I:320:LEU:HD13	1.54	0.71
1:D:1323:ALA:HB1	1:D:1351:PHE:CE2	2.26	0.71
1:C:406:ALA:HA	1:C:439:ARG:HH11	1.55	0.71
2:L:1223:SER:HB2	2:L:1226:ALA:HB3	1.72	0.71
1:B:831:GLU:HG2	1:E:755:GLU:HG2	1.71	0.71
2:J:1179:GLU:CD	2:J:1179:GLU:H	1.94	0.71
1:C:965:TYR:CZ	1:C:1199:LEU:HD22	2.26	0.71
1:B:1230:SER:HA	1:B:1311:GLN:HE22	1.56	0.71
1:B:1005:TRP:NE1	1:B:1561:LEU:CD2	2.54	0.71
1:A:574:ILE:HG22	1:A:579:MET:HB2	1.71	0.71
2:K:1780:ILE:HG23	2:K:1869:VAL:HG11	1.73	0.71
1:B:1142:LEU:H	1:B:1142:LEU:HD12	1.55	0.71
2:L:22:ARG:HG3	2:L:39:THR:HA	1.71	0.71
2:K:845:ASN:HB3	2:K:851:THR:OG1	1.89	0.71
1:B:999:LEU:HD21	1:B:1575:ASN:OD1	1.91	0.71
2:I:2008:THR:O	2:I:2011:ARG:HB2	1.91	0.71
2:K:174:GLY:H	2:K:517:GLY:HA3	1.55	0.71
2:H:663:ILE:HD13	2:H:666:ASN:HB3	1.72	0.71
1:F:636:TYR:CZ	1:F:640:LEU:HD22	2.26	0.71
1:D:474:ILE:O	1:D:478:LYS:HG3	1.91	0.71
2:L:1125:ASP:O	2:L:1126:GLU:HB2	1.90	0.70
2:L:172:ILE:HD11	2:L:501:TRP:CZ2	2.25	0.70
2:L:857:VAL:HG13	2:L:876:TRP:HE1	1.54	0.70
2:K:250:PHE:HB2	2:K:251:PRO:HD3	1.73	0.70
1:B:406:ALA:HA	1:B:439:ARG:NH1	2.05	0.70
1:A:1223:GLY:HA3	1:A:1276:PRO:HD2	1.73	0.70
2:H:1179:GLU:H	2:H:1179:GLU:CD	1.94	0.70
1:B:474:ILE:O	1:B:478:LYS:HG3	1.91	0.70
2:I:771:CYS:HB3	2:I:774:ILE:HD12	1.73	0.70

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:C:1476:ARG:NH1	1:F:1499:ARG:HD3	2.05	0.70
1:A:1168:TRP:NE1	1:A:1173:TYR:HE1	1.90	0.70
2:K:854:VAL:HG21	2:K:1070:PRO:HA	1.74	0.70
1:E:1230:SER:HA	1:E:1311:GLN:HE22	1.55	0.70
2:I:174:GLY:H	2:I:517:GLY:HA3	1.56	0.70
2:H:1694:PHE:CE2	2:H:1843:ALA:HA	2.27	0.70
2:G:467:ILE:HG23	2:G:468:PRO:HD2	1.72	0.70
2:J:814:SER:HB2	3:J:2101:FMN:O3P	1.90	0.70
2:I:1115:TYR:OH	2:I:1173:HIS:HD2	1.74	0.70
2:H:1694:PHE:CD2	2:H:1843:ALA:HA	2.26	0.70
1:E:1565:PRO:HG3	1:E:1572:TRP:CZ3	2.26	0.70
2:L:1807:GLN:HB2	2:L:1808:PRO:HD3	1.73	0.70
2:G:511:THR:CG2	2:G:512:HIS:CD2	2.72	0.70
1:B:612:ILE:HG23	1:B:628:TYR:CE2	2.26	0.70
2:H:22:ARG:HG3	2:H:39:THR:HA	1.74	0.70
2:I:193:TYR:CD2	2:I:263:ILE:HD13	2.26	0.70
1:F:973:TRP:CE2	1:F:1648:LYS:HB2	2.26	0.70
1:B:339:GLN:HE21	1:F:339:GLN:HE21	1.38	0.70
2:H:1288:PHE:O	2:H:1292:VAL:HG23	1.91	0.70
2:I:1269:ALA:HB1	2:I:1271:TYR:CZ	2.25	0.70
2:L:1952:ASP:O	2:L:1956:LEU:HG	1.91	0.70
1:E:427:ARG:HD2	1:E:490:VAL:HG12	1.73	0.70
1:A:552:ILE:CD1	1:F:552:ILE:HG12	2.20	0.70
1:B:962:ASN:HD22	2:H:1006:GLN:HE22	1.37	0.70
1:A:999:LEU:HD21	1:A:1575:ASN:OD1	1.91	0.70
2:G:845:ASN:HB3	2:G:851:THR:OG1	1.91	0.70
2:J:376:ARG:HB3	2:J:394:PRO:HG2	1.73	0.70
1:C:947:ASP:O	1:C:951:LEU:HG	1.92	0.70
2:H:43:PHE:CG	2:I:22:ARG:CZ	2.75	0.70
1:E:1610:ARG:CG	1:E:1610:ARG:HH11	1.91	0.70
1:B:1005:TRP:HE1	1:B:1561:LEU:HD22	1.56	0.70
2:G:1299:VAL:HG23	2:G:1301:PHE:CE2	2.27	0.70
1:E:1214:HIS:HD2	1:E:1216:SER:OG	1.74	0.70
2:K:663:ILE:HD13	2:K:666:ASN:HB3	1.73	0.70
1:C:1547:ARG:HG2	1:C:1604:TYR:HD1	1.57	0.70
2:J:1318:ALA:HA	2:J:1391:VAL:HG21	1.72	0.70
2:K:783:GLY:HA3	2:K:1075:TYR:HB3	1.72	0.70
1:A:30:GLU:HB2	2:G:2045:ALA:CB	2.21	0.70
1:A:574:ILE:HG23	1:A:579:MET:CB	2.22	0.70
2:H:752:HIS:HE1	2:H:847:TYR:HE2	1.39	0.70
2:J:752:HIS:HE1	2:J:847:TYR:HE2	1.39	0.70
1:C:633:THR:HG22	1:C:637:LEU:HD12	1.73	0.70

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:I:1952:ASP:O	2:I:1956:LEU:HG	1.91	0.70
2:I:1803:THR:HA	2:I:1806:THR:HB	1.73	0.70
2:I:1729:ASN:O	2:I:1757:ILE:HG23	1.91	0.70
1:C:1223:GLY:HA3	1:C:1276:PRO:HD2	1.73	0.70
1:C:474:ILE:O	1:C:478:LYS:HG3	1.92	0.70
2:H:771:CYS:HB3	2:H:774:ILE:HD12	1.73	0.70
1:B:1079:ARG:HH11	1:B:1079:ARG:CG	2.03	0.70
1:E:532:ILE:HG21	1:E:907:PHE:HB2	1.73	0.70
1:B:1149:LEU:HB2	1:D:1149:LEU:HB2	1.74	0.70
2:I:1436:ARG:HH22	2:I:1602:LEU:HD21	1.57	0.70
2:I:1554:PRO:HA	2:I:1659:ILE:HG12	1.74	0.70
1:B:557:ARG:HD2	1:E:557:ARG:O	1.92	0.70
2:H:600:VAL:HG13	2:H:601:PRO:HD2	1.74	0.70
2:K:57:PRO:CG	2:K:68:GLU:HG3	2.21	0.70
2:G:685:VAL:HG23	2:G:1186:ARG:HH12	1.55	0.70
2:I:1335:PHE:HE1	2:I:1629:ILE:CD1	2.04	0.70
2:L:1269:ALA:HB1	2:L:1271:TYR:CZ	2.27	0.70
1:E:741:ASP:OD1	1:E:793:ARG:HD3	1.92	0.70
1:B:1431:GLN:HG2	1:D:1431:GLN:OE1	1.91	0.70
1:D:964:LYS:O	1:D:966:PRO:HD3	1.92	0.70
2:I:584:SER:HB2	2:I:1114:GLU:HA	1.74	0.70
2:K:172:ILE:HD11	2:K:501:TRP:CZ2	2.27	0.70
2:H:272:PRO:O	2:H:276:LEU:HB2	1.91	0.70
2:H:582:LYS:HG3	2:H:1110:VAL:HG11	1.74	0.70
2:K:197:VAL:HG21	2:K:263:ILE:HD11	1.73	0.70
2:G:783:GLY:HA3	2:G:1075:TYR:HB3	1.74	0.70
2:I:1884:CYS:HB3	2:I:1936:LEU:HD12	1.73	0.70
2:L:2019:SER:HA	2:L:2022:LEU:HD12	1.74	0.70
2:K:752:HIS:NE2	2:K:856:THR:HG21	2.07	0.69
2:K:129:ILE:HG23	2:K:132:LYS:H	1.56	0.69
1:B:1547:ARG:HG2	1:B:1604:TYR:HD1	1.57	0.69
2:L:290:VAL:HA	2:L:490:LEU:HD13	1.73	0.69
2:J:608:MET:H	2:J:612:THR:HB	1.55	0.69
2:H:1223:SER:HB2	2:H:1226:ALA:HB3	1.74	0.69
2:L:1092:ASN:HA	2:L:1095:ILE:HG12	1.73	0.69
2:G:1554:PRO:HA	2:G:1659:ILE:HG12	1.72	0.69
1:A:47:ILE:HB	2:G:1694:PHE:CD1	2.27	0.69
1:B:777:LEU:O	1:B:781:ILE:HG13	1.91	0.69
1:C:689:ARG:HD2	1:C:1339:GLU:CD	2.12	0.69
2:G:967:GLU:HG2	2:G:1000:TYR:CE1	2.27	0.69
2:G:964:ARG:O	2:G:967:GLU:HB2	1.92	0.69
1:D:741:ASP:OD1	1:D:793:ARG:HD3	1.92	0.69

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:K:1328:VAL:HA	2:K:1611:TYR:HE1	1.56	0.69
1:E:954:ARG:HA	2:K:981:GLN:OE1	1.92	0.69
1:A:947:ASP:O	1:A:951:LEU:HG	1.91	0.69
2:K:594:MET:HB3	2:K:808:ASP:O	1.92	0.69
1:E:1443:LEU:O	1:E:1447:VAL:HG23	1.92	0.69
2:K:2008:THR:O	2:K:2011:ARG:HB2	1.92	0.69
2:I:789:TYR:HB3	2:I:790:PRO:HD3	1.73	0.69
2:K:1156:ASP:HB3	2:K:1158:ASP:H	1.57	0.69
2:J:1410:GLY:HA3	2:J:1436:ARG:HA	1.72	0.69
1:E:67:ALA:HB1	2:J:371:HIS:CE1	2.26	0.69
2:J:1554:PRO:HA	2:J:1659:ILE:HG12	1.73	0.69
1:C:682:VAL:HG11	1:C:695:TYR:HE2	1.56	0.69
2:J:129:ILE:HG23	2:J:132:LYS:H	1.57	0.69
2:H:845:ASN:HB3	2:H:851:THR:OG1	1.92	0.69
2:L:1299:VAL:HG23	2:L:1301:PHE:CE2	2.28	0.69
2:I:1156:ASP:HB3	2:I:1158:ASP:H	1.57	0.69
2:J:845:ASN:HB3	2:J:851:THR:OG1	1.92	0.69
1:C:1032:MET:CE	1:C:1165:PRO:HB3	2.22	0.69
2:H:1093:ASP:O	2:H:1097:PHE:HD1	1.75	0.69
2:L:1305:LEU:HD23	2:L:1366:ILE:HD11	1.74	0.69
1:A:36:LEU:HD21	1:A:44:ILE:HD11	1.73	0.69
2:J:967:GLU:HG2	2:J:1000:TYR:CE1	2.28	0.69
1:B:1504:ARG:CG	1:B:1504:ARG:NH1	2.50	0.69
2:L:590:VAL:HG23	2:L:1091:HIS:CD2	2.27	0.69
2:H:1299:VAL:HG23	2:H:1301:PHE:HE2	1.58	0.69
1:D:1209:PHE:CE2	1:D:1301:VAL:HG21	2.28	0.69
2:H:698:SER:HB3	2:H:701:VAL:CG2	2.22	0.69
2:I:1478:GLN:HG3	2:I:1479:HIS:H	1.57	0.69
1:D:1443:LEU:CD1	1:D:1470:ARG:HB3	2.22	0.69
2:K:766:SER:O	2:K:770:LYS:HG3	1.92	0.69
1:A:1663:LYS:HG2	2:G:1007:LEU:HD11	1.74	0.69
2:K:771:CYS:HB3	2:K:774:ILE:HD12	1.73	0.69
2:H:43:PHE:CB	2:I:22:ARG:CZ	2.71	0.69
2:H:511:THR:CG2	2:H:512:HIS:HD2	2.03	0.69
2:K:595:SER:HB3	2:K:602:PRO:CG	2.19	0.69
2:J:1881:TYR:CB	2:J:2004:PRO:HG3	2.22	0.69
2:J:789:TYR:HB3	2:J:790:PRO:HD3	1.74	0.69
1:C:833:TRP:HH2	1:C:839:ILE:HD11	1.58	0.69
1:C:973:TRP:NE1	1:C:1648:LYS:HB2	2.07	0.69
2:I:938:MET:HE2	2:I:959:THR:HG22	1.74	0.69
2:G:193:TYR:HD2	2:G:263:ILE:HD13	1.58	0.69
2:H:2015:LYS:HB2	2:H:2016:PRO:HD3	1.74	0.69

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:D:636:TYR:CZ	1:D:640:LEU:HD22	2.27	0.69
1:C:741:ASP:OD1	1:C:793:ARG:HD3	1.93	0.69
1:C:1702:ARG:HG3	1:C:1702:ARG:NH1	2.03	0.69
2:K:868:LEU:O	2:K:870:THR:HG23	1.92	0.69
1:F:633:THR:HG22	1:F:637:LEU:HD12	1.74	0.69
1:B:570:TYR:CE1	1:B:574:ILE:HD11	2.27	0.69
2:L:1506:SER:HA	2:L:1533:GLY:HA2	1.74	0.69
2:J:384:ASN:HB3	2:J:527:LEU:HD11	1.74	0.69
2:K:529:ASN:HD22	2:K:552:VAL:HG22	1.57	0.69
2:H:172:ILE:HD11	2:H:501:TRP:CZ2	2.27	0.69
2:I:384:ASN:CB	2:I:527:LEU:HD11	2.22	0.69
2:K:865:ILE:HG21	2:K:867:LYS:HE3	1.73	0.69
2:I:44:GLN:O	2:I:48:LEU:HG	1.92	0.69
2:L:752:HIS:HE1	2:L:847:TYR:CE2	2.11	0.69
2:K:955:LEU:HD21	2:K:1026:LYS:HB3	1.74	0.69
1:B:552:ILE:HG12	1:E:552:ILE:CD1	2.22	0.69
2:L:2008:THR:O	2:L:2011:ARG:HB2	1.91	0.69
2:I:600:VAL:HG13	2:I:601:PRO:HD2	1.75	0.69
2:L:2032:PRO:O	2:L:2036:ILE:HG13	1.93	0.69
1:C:30:GLU:HB2	2:I:2045:ALA:HB1	1.75	0.69
1:F:406:ALA:HA	1:F:439:ARG:HH11	1.58	0.69
1:A:1697:LEU:O	1:A:1699:PRO:HD3	1.92	0.69
1:A:557:ARG:HG3	1:A:557:ARG:NH1	2.01	0.69
2:K:22:ARG:HG3	2:K:39:THR:HA	1.75	0.69
2:G:752:HIS:HE1	2:G:847:TYR:HE2	1.40	0.69
1:B:669:VAL:O	1:B:673:LEU:HD12	1.93	0.69
1:E:633:THR:HG22	1:E:637:LEU:HD12	1.75	0.69
2:G:1694:PHE:CD2	2:G:1843:ALA:HA	2.27	0.69
2:L:193:TYR:CD2	2:L:263:ILE:HD13	2.27	0.69
2:L:376:ARG:HB3	2:L:394:PRO:HG2	1.75	0.69
1:A:1089:TYR:CE1	1:A:1312:GLU:HG3	2.28	0.69
1:C:983:GLN:HB3	1:C:1418:ILE:HD13	1.74	0.69
1:A:930:GLN:HA	1:A:933:ILE:HD12	1.74	0.69
2:I:1472:TRP:HB3	2:I:1530:TYR:HB2	1.75	0.69
2:L:503:THR:O	2:L:506:VAL:HG12	1.93	0.69
1:F:427:ARG:NH1	1:F:492:ILE:CG1	2.56	0.69
2:K:752:HIS:HE1	2:K:847:TYR:HE2	1.39	0.69
2:G:814:SER:HB2	3:G:2101:FMN:O3P	1.93	0.69
2:J:1179:GLU:HA	2:J:1190:ASN:HB2	1.75	0.69
2:L:663:ILE:HD13	2:L:666:ASN:HB3	1.74	0.69
2:J:503:THR:O	2:J:506:VAL:HG12	1.93	0.69
1:A:965:TYR:CZ	1:A:1199:LEU:HD22	2.28	0.69

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:B:1209:PHE:CE2	1:B:1301:VAL:HG21	2.28	0.69
1:E:1100:VAL:HG21	1:E:1150:ILE:HD12	1.75	0.68
2:H:867:LYS:HD3	2:H:1065:CYS:SG	2.33	0.68
2:J:1479:HIS:CD2	2:J:1481:ILE:HG12	2.27	0.68
2:H:1554:PRO:HA	2:H:1659:ILE:HG12	1.74	0.68
1:F:40:ARG:NH2	1:F:74:VAL:HG22	2.07	0.68
2:K:193:TYR:CD2	2:K:263:ILE:HD13	2.28	0.68
2:G:174:GLY:H	2:G:517:GLY:HA3	1.57	0.68
1:C:930:GLN:HA	1:C:933:ILE:HD12	1.75	0.68
2:J:1478:GLN:HG3	2:J:1479:HIS:H	1.58	0.68
1:A:1323:ALA:HB1	1:A:1351:PHE:HE2	1.58	0.68
1:A:1510:TRP:HZ3	1:A:1642:LEU:HA	1.58	0.68
1:A:407:ARG:NH1	1:A:1606:VAL:HG23	2.08	0.68
1:C:1705:GLN:NE2	1:C:1709:GLY:HA2	2.07	0.68
1:E:557:ARG:NH1	1:E:557:ARG:CG	2.53	0.68
2:K:190:TYR:CD1	2:K:201:ILE:HD13	2.26	0.68
2:J:250:PHE:HB2	2:J:251:PRO:HD3	1.75	0.68
2:H:503:THR:O	2:H:506:VAL:HG12	1.92	0.68
1:C:911:LEU:O	1:C:915:MET:HG3	1.94	0.68
1:F:36:LEU:HD21	1:F:44:ILE:HD11	1.74	0.68
2:I:410:ALA:HB1	2:I:414:LEU:HD12	1.75	0.68
1:B:636:TYR:CZ	1:B:640:LEU:HD22	2.29	0.68
1:A:1032:MET:CE	1:A:1165:PRO:HB3	2.22	0.68
2:K:775:VAL:O	2:K:777:VAL:HG23	1.94	0.68
1:D:973:TRP:CE2	1:D:1648:LYS:HB2	2.27	0.68
1:D:1514:ILE:O	1:D:1547:ARG:NH1	2.27	0.68
2:H:616:ASP:OD2	2:H:823:HIS:HE1	1.75	0.68
2:J:1803:THR:HA	2:J:1806:THR:HB	1.75	0.68
2:H:221:TYR:HE1	2:H:320:LEU:HD13	1.57	0.68
2:H:955:LEU:HD21	2:H:1026:LYS:HB3	1.75	0.68
2:K:1952:ASP:O	2:K:1956:LEU:HG	1.93	0.68
1:D:527:ALA:HB2	1:D:637:LEU:CD2	2.21	0.68
1:E:1211:LYS:O	1:E:1702:ARG:HD3	1.94	0.68
2:G:327:PRO:CD	2:H:1338:ARG:HH21	2.06	0.68
1:C:673:LEU:O	1:C:678:ALA:HB3	1.94	0.68
1:B:1476:ARG:NH1	1:D:1499:ARG:HD3	2.06	0.68
1:E:406:ALA:HA	1:E:439:ARG:NH1	2.07	0.68
1:E:1330:GLU:HG2	1:E:1333:ARG:HH11	1.58	0.68
1:B:1323:ALA:HB1	1:B:1351:PHE:CE2	2.28	0.68
2:I:1807:GLN:HB2	2:I:1808:PRO:HD3	1.76	0.68
1:A:474:ILE:O	1:A:478:LYS:HG3	1.93	0.68
2:I:272:PRO:O	2:I:276:LEU:HB2	1.93	0.68

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:G:590:VAL:HG23	2:G:1091:HIS:CD2	2.29	0.68
2:K:788:THR:HG22	2:K:1094:HIS:HE1	1.59	0.68
2:G:22:ARG:HG3	2:G:39:THR:HA	1.75	0.68
2:H:1478:GLN:HG3	2:H:1479:HIS:H	1.56	0.68
2:K:964:ARG:O	2:K:967:GLU:HB2	1.94	0.68
1:A:973:TRP:NE1	1:A:1648:LYS:HB2	2.09	0.68
2:J:942:MET:HE2	2:J:955:LEU:HD13	1.76	0.68
1:E:1330:GLU:HG2	1:E:1333:ARG:NH1	2.08	0.68
2:J:938:MET:HE2	2:J:959:THR:HG22	1.74	0.68
1:D:1230:SER:HA	1:D:1311:GLN:HE22	1.58	0.68
1:A:372:LEU:HD11	1:F:371:GLN:HG2	1.75	0.68
2:K:1506:SER:HA	2:K:1533:GLY:HA2	1.76	0.68
2:G:854:VAL:HG21	2:G:1070:PRO:HA	1.75	0.68
2:J:1506:SER:HA	2:J:1533:GLY:HA2	1.74	0.68
2:G:172:ILE:HD11	2:G:501:TRP:HZ2	1.58	0.68
2:I:172:ILE:HD11	2:I:501:TRP:CZ2	2.28	0.68
2:G:789:TYR:HB3	2:G:790:PRO:HD3	1.76	0.68
2:G:468:PRO:CD	2:G:479:ARG:HH21	2.06	0.68
2:J:1871:VAL:HG21	2:J:2004:PRO:HD3	1.75	0.68
2:G:613:VAL:HG12	2:G:614:PRO:HD3	1.75	0.68
2:K:613:VAL:HG12	2:K:614:PRO:HD3	1.76	0.68
2:L:1593:SER:OG	2:L:1596:PHE:HB2	1.94	0.68
1:E:1493:PHE:CE2	1:E:1509:THR:HG22	2.28	0.68
1:A:1547:ARG:HG2	1:A:1604:TYR:HD1	1.58	0.68
2:K:293:ALA:HA	2:K:469:VAL:HG21	1.75	0.68
2:J:584:SER:HB2	2:J:1114:GLU:HA	1.75	0.68
1:C:960:ARG:NH1	2:I:968:GLU:OE1	2.27	0.68
2:H:1499:LYS:HB3	2:H:1505:SER:HB3	1.74	0.68
2:L:845:ASN:HB3	2:L:851:THR:OG1	1.93	0.68
2:G:1179:GLU:H	2:G:1179:GLU:CD	1.97	0.68
2:K:1868:GLN:HG2	2:K:1873:ARG:HH22	1.57	0.68
1:D:907:PHE:O	1:D:909:PRO:HD3	1.93	0.68
2:K:1694:PHE:CD2	2:K:1843:ALA:HA	2.28	0.68
1:B:1367:LEU:HD22	1:B:1371:MET:HG3	1.76	0.68
1:A:1574:LEU:HD12	1:A:1622:VAL:HG11	1.74	0.68
2:I:1551:ILE:HG12	2:I:1552:GLU:H	1.58	0.68
1:F:534:GLN:HA	1:F:534:GLN:OE1	1.93	0.68
1:B:930:GLN:HA	1:B:933:ILE:HD12	1.75	0.68
1:D:1702:ARG:HG3	1:D:1702:ARG:NH1	2.03	0.68
2:G:272:PRO:O	2:G:276:LEU:HB2	1.93	0.68
2:L:1179:GLU:HA	2:L:1190:ASN:HB2	1.76	0.68
2:K:1610:MET:HE2	2:K:1610:MET:HA	1.76	0.68

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:K:1179:GLU:H	2:K:1179:GLU:CD	1.97	0.68
2:K:875:PHE:CD1	2:K:905:LYS:HD3	2.29	0.68
1:C:1574:LEU:HD12	1:C:1622:VAL:HG11	1.74	0.68
2:I:1353:GLY:HA2	2:I:1397:THR:HG21	1.75	0.68
2:I:501:TRP:NE1	2:I:528:THR:HG22	2.05	0.68
1:E:532:ILE:CG2	1:E:907:PHE:CB	2.71	0.68
2:K:186:LEU:CD2	2:K:256:VAL:HG22	2.24	0.68
1:A:30:GLU:HB2	2:G:2045:ALA:HB1	1.76	0.68
1:A:421:ARG:HH22	1:A:1613:LYS:HB3	1.58	0.68
2:H:2008:THR:O	2:H:2011:ARG:HB2	1.94	0.68
2:H:1884:CYS:HB3	2:H:1936:LEU:HD12	1.76	0.68
2:J:580:LEU:HD21	2:J:1095:ILE:HA	1.76	0.68
1:D:1213:VAL:HG22	1:D:1300:ARG:NH2	2.09	0.68
1:F:1213:VAL:HG22	1:F:1300:ARG:NH2	2.09	0.68
2:G:1338:ARG:NH2	2:I:327:PRO:HD2	2.08	0.68
2:G:1007:LEU:HD12	2:G:1007:LEU:H	1.58	0.68
2:K:1868:GLN:HG2	2:K:1873:ARG:NH2	2.09	0.68
2:H:174:GLY:H	2:H:517:GLY:HA3	1.58	0.68
2:L:616:ASP:OD2	2:L:823:HIS:HE1	1.77	0.68
1:A:548:VAL:HG23	1:F:569:LEU:HD13	1.74	0.68
2:H:1807:GLN:HB2	2:H:1808:PRO:HD3	1.75	0.68
2:L:129:ILE:HG23	2:L:132:LYS:H	1.59	0.68
1:B:973:TRP:CE2	1:B:1648:LYS:HB2	2.29	0.68
1:E:999:LEU:HD21	1:E:1575:ASN:OD1	1.91	0.68
2:J:1472:TRP:HB3	2:J:1530:TYR:HB2	1.76	0.68
2:L:1200:ARG:H	2:L:1200:ARG:HD3	1.59	0.68
2:J:2019:SER:HA	2:J:2022:LEU:HD12	1.76	0.68
2:G:1952:ASP:O	2:G:1956:LEU:HG	1.94	0.68
2:H:43:PHE:CB	2:I:22:ARG:NE	2.57	0.67
2:K:590:VAL:HG23	2:K:1091:HIS:CD2	2.29	0.67
2:J:590:VAL:HG23	2:J:1091:HIS:CD2	2.29	0.67
2:G:1478:GLN:HG3	2:G:1479:HIS:H	1.58	0.67
1:E:474:ILE:O	1:E:478:LYS:HG3	1.94	0.67
2:L:1289:TYR:CB	2:L:1370:LEU:HD23	2.24	0.67
2:K:584:SER:HB2	2:K:1114:GLU:HA	1.74	0.67
2:H:197:VAL:HG21	2:H:263:ILE:HD11	1.77	0.67
2:H:915:PHE:HB2	2:H:1030:PHE:CD1	2.29	0.67
2:K:1442:TYR:O	2:K:1445:THR:HG22	1.93	0.67
1:F:983:GLN:HB3	1:F:1418:ILE:HD13	1.76	0.67
1:C:372:LEU:HD11	1:D:371:GLN:HG2	1.76	0.67
2:G:1884:CYS:HB3	2:G:1936:LEU:HD12	1.75	0.67
1:D:1702:ARG:NH1	1:D:1702:ARG:CG	2.48	0.67

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:I:1897:GLU:HG2	2:I:1901:GLN:HE21	1.59	0.67
2:H:250:PHE:HB2	2:H:251:PRO:HD3	1.75	0.67
1:F:2:ARG:HD2	1:F:5:VAL:HG21	1.76	0.67
2:K:1223:SER:HB2	2:K:1226:ALA:HB3	1.76	0.67
1:A:1224:SER:HB2	1:A:1307:PHE:O	1.94	0.67
1:B:828:TRP:HE1	1:B:838:THR:HA	1.60	0.67
2:L:1867:MET:O	2:L:2003:VAL:HG21	1.94	0.67
2:J:511:THR:CG2	2:J:512:HIS:CD2	2.76	0.67
2:K:511:THR:CG2	2:K:512:HIS:CD2	2.76	0.67
2:K:580:LEU:HD21	2:K:1095:ILE:HA	1.75	0.67
2:G:250:PHE:HB2	2:G:251:PRO:HD3	1.76	0.67
2:K:1351:VAL:HG23	2:K:1584:SER:HA	1.75	0.67
2:J:1868:GLN:HG2	2:J:1873:ARG:NH2	2.09	0.67
1:C:999:LEU:HD21	1:C:1575:ASN:OD1	1.94	0.67
1:B:1186:VAL:HG23	1:B:1309:ASP:HB2	1.75	0.67
2:H:1551:ILE:HG12	2:H:1552:GLU:H	1.58	0.67
1:C:1448:ALA:HA	1:C:1451:LYS:HD2	1.77	0.67
2:G:1499:LYS:HB3	2:G:1505:SER:HB3	1.74	0.67
1:D:36:LEU:HD21	1:D:44:ILE:HD11	1.76	0.67
2:G:915:PHE:HB2	2:G:1030:PHE:CD1	2.29	0.67
2:I:1948:MET:HA	2:I:1948:MET:CE	2.25	0.67
1:E:967:PHE:CG	1:E:1374:PRO:HG3	2.29	0.67
2:J:250:PHE:HA	2:J:287:GLN:NE2	2.09	0.67
2:L:955:LEU:HD21	2:L:1026:LYS:HB3	1.76	0.67
2:K:1554:PRO:HA	2:K:1659:ILE:HG12	1.77	0.67
1:D:406:ALA:HA	1:D:439:ARG:NH1	2.10	0.67
1:A:983:GLN:O	1:A:1418:ILE:HD11	1.95	0.67
1:B:1514:ILE:O	1:B:1547:ARG:NH1	2.27	0.67
2:K:1694:PHE:CE2	2:K:1843:ALA:HA	2.29	0.67
2:J:1868:GLN:HG2	2:J:1873:ARG:HH22	1.60	0.67
1:B:1574:LEU:HD12	1:B:1622:VAL:HG11	1.76	0.67
2:G:2032:PRO:O	2:G:2036:ILE:HG13	1.93	0.67
1:C:1389:ILE:CG1	1:F:1268:SER:HB3	2.08	0.67
2:J:600:VAL:HG13	2:J:601:PRO:HD2	1.76	0.67
1:A:533:SER:O	1:A:611:THR:HA	1.95	0.67
2:K:44:GLN:O	2:K:48:LEU:HG	1.94	0.67
2:L:1764:MET:HB3	2:L:1780:ILE:HD12	1.75	0.67
2:K:1179:GLU:HA	2:K:1190:ASN:HB2	1.77	0.67
1:A:408:GLN:HE22	1:A:1609:SER:H	1.41	0.67
2:K:2032:PRO:O	2:K:2036:ILE:HG13	1.94	0.67
2:I:876:TRP:CH2	2:I:1043:LYS:HB2	2.28	0.67
2:L:765:TYR:HB2	2:L:805:MET:HE3	1.77	0.67

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:I:1888:PRO:HB3	2:I:1895:PHE:HD1	1.60	0.67
2:L:1353:GLY:HA2	2:L:1397:THR:HG21	1.76	0.67
2:H:81:ALA:HB2	2:H:139:ALA:HA	1.76	0.67
1:D:557:ARG:HG3	1:D:557:ARG:NH1	1.99	0.67
2:L:272:PRO:HD3	2:L:301:TRP:CE2	2.30	0.67
2:K:1061:VAL:CG1	2:K:1066:ILE:HD11	2.25	0.67
2:L:44:GLN:O	2:L:48:LEU:HG	1.94	0.67
2:I:250:PHE:HB2	2:I:251:PRO:HD3	1.75	0.67
2:H:857:VAL:HG13	2:H:876:TRP:HE1	1.58	0.67
1:D:47:ILE:HB	2:J:1694:PHE:CD1	2.29	0.67
2:J:1351:VAL:HG23	2:J:1584:SER:HA	1.76	0.67
1:F:1443:LEU:CD1	1:F:1470:ARG:HB3	2.25	0.67
1:E:1209:PHE:CE2	1:E:1301:VAL:HG21	2.28	0.67
1:A:1443:LEU:CD1	1:A:1470:ARG:HB3	2.25	0.67
1:D:31:THR:HG23	2:J:2040:ILE:CG2	2.25	0.67
1:B:18:LEU:HD21	2:H:1844:LEU:HD11	1.77	0.67
1:E:968:PRO:HD2	1:E:1374:PRO:HB3	1.76	0.67
1:B:487:TYR:CE2	1:B:881:LEU:HD13	2.29	0.67
1:F:911:LEU:O	1:F:915:MET:HG3	1.95	0.67
1:A:673:LEU:O	1:A:678:ALA:HB3	1.94	0.67
2:J:1324:PHE:N	2:J:1583:VAL:HG11	2.10	0.67
1:B:1431:GLN:OE1	1:D:1431:GLN:HG2	1.95	0.67
1:E:1443:LEU:CD1	1:E:1470:ARG:HB3	2.25	0.67
2:L:1888:PRO:HB3	2:L:1895:PHE:HD1	1.58	0.67
1:D:999:LEU:HD21	1:D:1575:ASN:OD1	1.94	0.67
2:K:1888:PRO:HB3	2:K:1895:PHE:HD1	1.60	0.67
1:F:1547:ARG:HG2	1:F:1604:TYR:HD1	1.59	0.67
2:H:272:PRO:HD3	2:H:301:TRP:CE2	2.30	0.67
1:A:1703:VAL:CG1	1:A:1711:LEU:HB3	2.22	0.67
2:G:788:THR:HG22	2:G:1094:HIS:HE1	1.60	0.67
2:K:855:ILE:HB	2:K:869:ALA:HB2	1.75	0.67
2:L:250:PHE:HB2	2:L:251:PRO:HD3	1.77	0.67
2:I:845:ASN:HB3	2:I:851:THR:OG1	1.93	0.67
2:G:1506:SER:HA	2:G:1533:GLY:HA2	1.77	0.67
2:J:595:SER:HB3	2:J:602:PRO:CG	2.22	0.67
1:B:1211:LYS:O	1:B:1702:ARG:HD3	1.95	0.67
2:H:44:GLN:O	2:H:48:LEU:HG	1.94	0.67
2:K:938:MET:HE2	2:K:959:THR:HG22	1.76	0.67
2:L:1602:LEU:HD13	2:L:1606:ILE:HD12	1.77	0.67
2:L:1335:PHE:HE1	2:L:1629:ILE:HD13	1.58	0.67
2:G:955:LEU:HD21	2:G:1026:LYS:HB3	1.76	0.67
2:K:1436:ARG:NH2	2:K:1602:LEU:HD21	2.09	0.67

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:D:2:ARG:HD2	1:D:5:VAL:HG21	1.76	0.67
2:J:1353:GLY:HA2	2:J:1397:THR:HG21	1.76	0.67
1:C:1089:TYR:CE1	1:C:1312:GLU:HG3	2.30	0.67
2:L:1472:TRP:HB3	2:L:1530:TYR:HB2	1.75	0.67
1:B:1086:PHE:CE2	1:B:1310:PHE:HD2	2.13	0.67
2:H:21:LEU:HD22	2:H:36:LEU:HD22	1.77	0.67
1:B:30:GLU:HB2	2:H:2045:ALA:HB1	1.76	0.67
1:A:1078:ILE:HD13	1:A:1352:MET:HG2	1.76	0.67
1:D:1100:VAL:HG21	1:D:1150:ILE:HD12	1.75	0.67
2:H:1156:ASP:HB3	2:H:1158:ASP:H	1.60	0.67
2:I:752:HIS:HE1	2:I:847:TYR:HE2	1.41	0.67
2:K:486:ILE:HG22	2:K:490:LEU:HG	1.76	0.67
2:G:293:ALA:HA	2:G:469:VAL:HG21	1.77	0.67
1:B:407:ARG:NH1	1:B:1606:VAL:HG23	2.10	0.67
2:G:129:ILE:HG23	2:G:132:LYS:H	1.59	0.67
2:J:1289:TYR:CB	2:J:1370:LEU:HD23	2.25	0.67
1:D:633:THR:HG22	1:D:637:LEU:HD12	1.76	0.66
1:F:1330:GLU:HG2	1:F:1333:ARG:NH1	2.09	0.66
2:L:1094:HIS:O	2:L:1098:LEU:HB2	1.95	0.66
1:E:967:PHE:CE2	1:E:1374:PRO:HG3	2.29	0.66
2:I:1301:PHE:HB3	2:I:1364:ARG:NH1	2.10	0.66
1:B:633:THR:HG22	1:B:637:LEU:HD12	1.75	0.66
2:K:2015:LYS:HB2	2:K:2016:PRO:HD3	1.75	0.66
1:E:1032:MET:CE	1:E:1165:PRO:HB3	2.25	0.66
2:I:2032:PRO:O	2:I:2036:ILE:HG13	1.95	0.66
1:B:1462:ASP:HB2	1:B:1465:ALA:HB3	1.75	0.66
2:K:1884:CYS:HB3	2:K:1936:LEU:HD12	1.75	0.66
2:J:1288:PHE:O	2:J:1292:VAL:HG23	1.94	0.66
1:A:1268:SER:HB3	1:E:1389:ILE:CG1	2.11	0.66
1:A:833:TRP:HH2	1:A:839:ILE:HD11	1.59	0.66
2:K:327:PRO:HD2	2:L:1338:ARG:NH2	2.08	0.66
1:C:682:VAL:HG11	1:C:695:TYR:CE2	2.30	0.66
2:H:1097:PHE:HD2	2:H:1100:ARG:HH12	1.43	0.66
2:G:1807:GLN:HB2	2:G:1808:PRO:HD3	1.76	0.66
2:J:783:GLY:HA3	2:J:1075:TYR:HB3	1.75	0.66
2:G:1692:TYR:HD1	2:G:1847:LEU:HD21	1.60	0.66
1:F:434:ILE:HD11	1:F:490:VAL:HG21	1.76	0.66
1:C:1211:LYS:O	1:C:1702:ARG:HD3	1.94	0.66
2:K:467:ILE:HG23	2:K:468:PRO:HD2	1.76	0.66
2:H:590:VAL:HG23	2:H:1091:HIS:CD2	2.29	0.66
2:J:1299:VAL:HG23	2:J:1301:PHE:HE2	1.58	0.66
2:J:22:ARG:HG3	2:J:39:THR:HA	1.76	0.66

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:K:440:HIS:HD2	2:K:497:ASP:O	1.78	0.66
1:D:422:LEU:HB3	1:D:429:ILE:HD11	1.77	0.66
1:B:1330:GLU:HG2	1:B:1333:ARG:NH1	2.11	0.66
2:I:471:ASP:HB3	2:I:474:THR:O	1.95	0.66
2:H:930:THR:CG2	2:H:933:GLU:H	2.09	0.66
1:C:406:ALA:HA	1:C:439:ARG:NH1	2.09	0.66
2:L:1305:LEU:HD11	2:L:1365:LYS:HD2	1.77	0.66
2:G:193:TYR:CD2	2:G:263:ILE:HD13	2.29	0.66
2:G:1179:GLU:HA	2:G:1190:ASN:HB2	1.77	0.66
2:I:1223:SER:HB2	2:I:1226:ALA:HB3	1.78	0.66
1:F:30:GLU:HB2	2:L:2045:ALA:CB	2.26	0.66
2:L:1848:ALA:HA	2:L:2034:LYS:HD3	1.78	0.66
1:A:741:ASP:OD1	1:A:793:ARG:HD3	1.95	0.66
1:E:1547:ARG:HG2	1:E:1604:TYR:HD1	1.60	0.66
2:G:1918:VAL:HG13	2:G:2006:HIS:CB	2.22	0.66
1:C:905:LEU:HD23	1:C:908:ILE:HD12	1.76	0.66
2:J:1602:LEU:HD13	2:J:1606:ILE:HD12	1.78	0.66
1:D:911:LEU:O	1:D:915:MET:HG3	1.96	0.66
1:E:1510:TRP:CZ3	1:E:1642:LEU:HA	2.31	0.66
2:J:1053:ILE:HD12	2:J:1061:VAL:HG22	1.76	0.66
1:D:1510:TRP:HZ3	1:D:1642:LEU:HA	1.60	0.66
1:E:1638:HIS:ND1	1:E:1639:PRO:HD2	2.11	0.66
1:A:532:ILE:HG22	1:A:907:PHE:CB	2.26	0.66
1:C:487:TYR:CE2	1:C:881:LEU:HD13	2.30	0.66
2:J:964:ARG:O	2:J:967:GLU:HB2	1.96	0.66
1:E:911:LEU:O	1:E:915:MET:HG3	1.94	0.66
2:K:1472:TRP:HB3	2:K:1530:TYR:HB2	1.78	0.66
2:L:461:PRO:HD2	2:L:464:SER:OG	1.95	0.66
2:K:1867:MET:O	2:K:2003:VAL:HG21	1.95	0.66
1:C:534:GLN:HG3	1:C:610:GLU:O	1.95	0.66
1:B:562:SER:CB	1:E:551:LEU:HD21	2.25	0.66
2:K:794:GLY:O	2:K:804:PRO:HA	1.96	0.66
2:I:2015:LYS:HB2	2:I:2016:PRO:HD3	1.78	0.66
1:D:833:TRP:HH2	1:D:839:ILE:HD11	1.61	0.66
2:L:582:LYS:HG3	2:L:1110:VAL:HG11	1.76	0.66
2:H:783:GLY:HA3	2:H:1075:TYR:HB3	1.77	0.66
1:E:673:LEU:O	1:E:678:ALA:HB3	1.94	0.66
1:B:1443:LEU:CD1	1:B:1470:ARG:HB3	2.25	0.66
2:L:1289:TYR:HB2	2:L:1370:LEU:HD23	1.78	0.66
2:G:2019:SER:HA	2:G:2022:LEU:HD12	1.78	0.66
1:D:1705:GLN:HE21	1:D:1709:GLY:HA2	1.61	0.66
1:C:1510:TRP:HZ3	1:C:1642:LEU:HA	1.60	0.66

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:L:1918:VAL:HG13	2:L:2006:HIS:HB2	1.75	0.66
1:B:1702:ARG:CG	1:B:1702:ARG:NH1	2.52	0.66
2:J:1093:ASP:O	2:J:1097:PHE:HD1	1.77	0.66
2:G:35:PHE:CZ	2:G:105:ILE:HD13	2.30	0.66
2:H:762:LEU:HD22	2:H:802:TYR:CD2	2.28	0.66
2:G:57:PRO:CG	2:G:68:GLU:HG3	2.25	0.66
2:H:382:LEU:HB3	2:H:499:VAL:HB	1.78	0.66
1:E:636:TYR:CZ	1:E:640:LEU:HD22	2.31	0.66
1:F:1443:LEU:O	1:F:1447:VAL:HG23	1.96	0.66
2:L:789:TYR:HB3	2:L:790:PRO:HD3	1.77	0.66
2:L:584:SER:HB2	2:L:1114:GLU:HA	1.77	0.66
2:L:594:MET:HB3	2:L:808:ASP:O	1.95	0.66
2:G:1948:MET:HA	2:G:1948:MET:CE	2.24	0.66
2:G:635:TYR:CG	2:G:641:MET:HG3	2.31	0.66
1:A:964:LYS:O	1:A:966:PRO:HD3	1.96	0.66
1:A:970:LEU:HD21	1:A:1658:VAL:HG11	1.78	0.66
2:H:1318:ALA:HA	2:H:1391:VAL:HG21	1.77	0.66
2:G:1468:ARG:CB	2:G:1468:ARG:HH11	2.08	0.66
2:J:272:PRO:HD3	2:J:301:TRP:CE2	2.31	0.66
1:D:18:LEU:HD21	2:J:1844:LEU:HD11	1.77	0.66
2:L:1156:ASP:HB3	2:L:1158:ASP:H	1.61	0.66
2:J:609:THR:OG1	2:J:610:PRO:HD3	1.95	0.66
2:I:1602:LEU:HD13	2:I:1606:ILE:HD12	1.78	0.66
1:E:997:THR:CG2	1:E:1361:VAL:HG22	2.26	0.66
2:L:1478:GLN:HG3	2:L:1479:HIS:H	1.60	0.66
1:E:67:ALA:HB3	2:J:371:HIS:CE1	2.30	0.66
2:H:789:TYR:HB3	2:H:790:PRO:HD3	1.77	0.66
2:G:2008:THR:O	2:G:2011:ARG:HB2	1.96	0.66
2:K:1019:LEU:O	2:K:1022:ARG:HG2	1.96	0.66
1:D:682:VAL:HG11	1:D:695:TYR:HE2	1.61	0.66
1:C:1364:THR:HG22	1:C:1366:GLN:H	1.61	0.66
2:H:1948:MET:CE	2:H:1948:MET:HA	2.25	0.66
1:C:828:TRP:HE1	1:C:838:THR:HA	1.60	0.66
1:A:70:ALA:HB2	2:I:407:LYS:HZ1	1.60	0.66
1:E:1573:MET:HE2	1:E:1622:VAL:HG23	1.77	0.66
2:H:1061:VAL:CG1	2:H:1066:ILE:HD11	2.26	0.66
2:K:1479:HIS:CD2	2:K:1481:ILE:HG12	2.28	0.66
1:F:535:TYR:HB3	1:F:540:LYS:HG3	1.76	0.66
2:K:1551:ILE:HG12	2:K:1552:GLU:H	1.60	0.66
2:G:1346:MET:HB2	2:G:1427:MET:HE3	1.78	0.66
1:E:1001:GLU:O	1:E:1007:ASN:HA	1.96	0.66
1:F:1323:ALA:HB1	1:F:1351:PHE:CE2	2.31	0.66

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:I:635:TYR:CG	2:I:641:MET:HG3	2.30	0.66
1:B:427:ARG:NH1	1:B:492:ILE:HG13	2.11	0.66
1:D:962:ASN:HD22	2:J:1006:GLN:HE22	1.42	0.66
2:J:1299:VAL:CG2	2:J:1301:PHE:HE2	2.09	0.66
2:H:35:PHE:CZ	2:H:105:ILE:HD13	2.30	0.66
2:I:1641:GLY:HA3	2:I:1678:VAL:HA	1.78	0.66
2:G:582:LYS:HG3	2:G:1110:VAL:HG11	1.78	0.66
1:C:570:TYR:CE1	1:C:574:ILE:HD11	2.31	0.66
2:H:1602:LEU:HD13	2:H:1606:ILE:HD12	1.76	0.66
1:F:47:ILE:HB	2:L:1694:PHE:CD1	2.31	0.66
2:L:2015:LYS:HB2	2:L:2016:PRO:HD3	1.77	0.66
2:K:77:ALA:O	2:K:139:ALA:HB1	1.96	0.66
2:I:783:GLY:HA3	2:I:1075:TYR:HB3	1.77	0.66
2:H:2019:SER:HA	2:H:2022:LEU:HD12	1.78	0.66
2:H:47:GLN:HG3	2:I:23:PRO:HG2	1.78	0.66
1:D:828:TRP:HE1	1:D:838:THR:HA	1.60	0.66
2:H:1871:VAL:CG2	2:H:2004:PRO:HD3	2.26	0.66
2:G:511:THR:CG2	2:G:512:HIS:HD2	2.06	0.65
2:J:172:ILE:HD11	2:J:501:TRP:CZ2	2.31	0.65
2:H:1299:VAL:CG2	2:H:1301:PHE:HE2	2.08	0.65
2:J:762:LEU:HD22	2:J:802:TYR:CD2	2.27	0.65
2:L:783:GLY:HA3	2:L:1075:TYR:HB3	1.77	0.65
1:C:1217:GLU:O	1:C:1299:ALA:HB1	1.97	0.65
2:G:461:PRO:HD2	2:G:464:SER:OG	1.96	0.65
1:E:439:ARG:HA	1:E:705:ARG:HG2	1.76	0.65
2:L:1335:PHE:CE1	2:L:1629:ILE:HD11	2.31	0.65
1:F:1032:MET:HE3	1:F:1165:PRO:HB3	1.78	0.65
1:B:1421:ARG:HD2	1:B:1489:PHE:O	1.94	0.65
2:J:81:ALA:HB2	2:J:139:ALA:HA	1.76	0.65
1:F:777:LEU:O	1:F:781:ILE:HG13	1.97	0.65
2:H:1888:PRO:HB3	2:H:1895:PHE:HD1	1.61	0.65
1:E:1697:LEU:O	1:E:1699:PRO:HD3	1.96	0.65
2:I:21:LEU:HD22	2:I:36:LEU:HD22	1.79	0.65
1:C:1183:VAL:HG11	1:C:1187:THR:HG21	1.77	0.65
2:L:1053:ILE:HD12	2:L:1061:VAL:HG22	1.77	0.65
2:L:1442:TYR:HA	2:L:1445:THR:HG22	1.78	0.65
2:K:876:TRP:CH2	2:K:1043:LYS:HB2	2.32	0.65
2:L:468:PRO:CD	2:L:479:ARG:HH21	2.08	0.65
2:G:752:HIS:NE2	2:G:856:THR:HG21	2.12	0.65
2:J:57:PRO:CG	2:J:68:GLU:HG3	2.26	0.65
2:K:608:MET:H	2:K:612:THR:HB	1.60	0.65
1:A:1218:VAL:HG13	1:A:1301:VAL:CG1	2.27	0.65

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:J:903:ILE:HD11	2:J:914:TRP:CE2	2.31	0.65
2:K:1478:GLN:HG3	2:K:1479:HIS:H	1.61	0.65
2:L:486:ILE:HG22	2:L:490:LEU:HG	1.77	0.65
1:B:562:SER:HB3	1:E:551:LEU:HD21	1.77	0.65
1:A:1496:ARG:CZ	1:E:1297:GLY:HA2	2.26	0.65
1:D:777:LEU:O	1:D:781:ILE:HG13	1.96	0.65
2:K:915:PHE:HB2	2:K:1030:PHE:CD1	2.30	0.65
2:H:260:HIS:CE1	2:H:543:GLY:HA2	2.31	0.65
1:C:440:SER:HB3	1:C:481:LEU:HD23	1.77	0.65
2:J:1551:ILE:HG12	2:J:1552:GLU:H	1.60	0.65
1:C:1330:GLU:HG2	1:C:1333:ARG:NH1	2.10	0.65
2:K:1094:HIS:O	2:K:1098:LEU:HB2	1.96	0.65
2:I:582:LYS:HG3	2:I:1110:VAL:HG11	1.78	0.65
1:D:487:TYR:CE2	1:D:881:LEU:HD13	2.30	0.65
1:F:613:PRO:O	1:F:614:PHE:HB2	1.96	0.65
1:F:1280:CYS:HB2	1:F:1626:GLY:HA2	1.78	0.65
2:K:1602:LEU:HD13	2:K:1606:ILE:HD12	1.78	0.65
1:C:1510:TRP:CZ3	1:C:1642:LEU:HA	2.32	0.65
2:G:1888:PRO:HB3	2:G:1895:PHE:HD1	1.62	0.65
2:J:876:TRP:CH2	2:J:1043:LYS:HB2	2.30	0.65
1:E:777:LEU:O	1:E:781:ILE:HG13	1.95	0.65
2:H:1946:LEU:HD22	2:H:1951:ILE:HD13	1.77	0.65
2:H:1305:LEU:HD23	2:H:1366:ILE:HD11	1.77	0.65
1:E:1089:TYR:CE1	1:E:1312:GLU:HG3	2.31	0.65
1:D:1330:GLU:HG2	1:D:1333:ARG:NH1	2.11	0.65
2:J:511:THR:CG2	2:J:512:HIS:HD2	2.09	0.65
1:D:962:ASN:HB3	2:J:969:ARG:CD	2.25	0.65
2:H:1468:ARG:CB	2:H:1468:ARG:HH11	2.09	0.65
1:A:1100:VAL:HG21	1:A:1150:ILE:HD12	1.77	0.65
2:I:788:THR:HG22	2:I:1094:HIS:HE1	1.62	0.65
2:K:582:LYS:HG3	2:K:1110:VAL:HG11	1.79	0.65
1:D:1217:GLU:O	1:D:1299:ALA:HB1	1.96	0.65
2:J:1156:ASP:HB3	2:J:1158:ASP:H	1.62	0.65
2:L:752:HIS:HE1	2:L:847:TYR:HE2	1.43	0.65
1:F:1142:LEU:HD12	1:F:1142:LEU:H	1.59	0.65
1:A:1493:PHE:CE2	1:A:1509:THR:HG22	2.32	0.65
2:L:1551:ILE:HG12	2:L:1552:GLU:H	1.61	0.65
2:K:1200:ARG:H	2:K:1200:ARG:HD3	1.60	0.65
1:D:1448:ALA:HA	1:D:1451:LYS:HD2	1.76	0.65
2:H:584:SER:HB2	2:H:1114:GLU:HA	1.78	0.65
1:E:767:HIS:HB2	1:E:813:LEU:HD12	1.78	0.65
1:B:430:VAL:HG11	1:B:490:VAL:HG11	1.77	0.65

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:G:501:TRP:NE1	2:G:528:THR:HG22	2.07	0.65
2:J:35:PHE:CZ	2:J:105:ILE:HD13	2.32	0.65
2:K:1053:ILE:HD12	2:K:1061:VAL:HG22	1.78	0.65
2:J:752:HIS:NE2	2:J:856:THR:HG21	2.12	0.65
2:L:485:ASP:HB3	2:L:488:PRO:CD	2.27	0.65
2:H:609:THR:OG1	2:H:610:PRO:HD3	1.95	0.65
2:H:1335:PHE:HE1	2:H:1629:ILE:CD1	2.09	0.65
2:J:1115:TYR:OH	2:J:1173:HIS:HD2	1.80	0.65
1:C:30:GLU:HB2	2:I:2045:ALA:CB	2.27	0.65
1:A:1250:LEU:HB2	1:E:1317:GLU:HG3	1.77	0.65
2:J:1807:GLN:HB2	2:J:1808:PRO:HD3	1.79	0.65
1:F:1510:TRP:HZ3	1:F:1642:LEU:HA	1.60	0.65
1:A:1462:ASP:HB2	1:A:1465:ALA:HB3	1.79	0.65
2:J:325:ALA:HB2	2:J:447:ALA:HB2	1.78	0.65
1:D:433:CYS:O	1:D:437:MET:HG3	1.97	0.65
1:D:440:SER:HB3	1:D:481:LEU:HD23	1.78	0.65
1:B:1499:ARG:CD	1:D:1476:ARG:NH1	2.58	0.65
1:F:1330:GLU:HG2	1:F:1333:ARG:HH11	1.62	0.65
1:D:542:GLN:HB3	1:D:579:MET:CE	2.26	0.65
1:D:580:ASN:O	1:D:584:ILE:HG13	1.96	0.65
2:L:1335:PHE:CE1	2:L:1629:ILE:CD1	2.79	0.65
1:B:1686:PRO:HB2	1:B:1713:PHE:CE2	2.31	0.65
1:E:973:TRP:NE1	1:E:1648:LYS:HB2	2.12	0.65
2:J:67:ASP:HA	2:J:132:LYS:HE2	1.78	0.65
1:D:1547:ARG:HG2	1:D:1604:TYR:HD1	1.62	0.65
2:I:1551:ILE:HG12	2:I:1552:GLU:N	2.12	0.65
1:B:440:SER:HB3	1:B:481:LEU:HD23	1.79	0.65
2:I:594:MET:HB3	2:I:808:ASP:O	1.96	0.65
2:H:635:TYR:CG	2:H:641:MET:HG3	2.32	0.65
2:I:1750:GLY:O	2:I:1755:LYS:HE3	1.97	0.65
2:I:1468:ARG:HH11	2:I:1468:ARG:CB	2.08	0.65
1:A:532:ILE:CG2	1:A:907:PHE:HB2	2.25	0.65
1:A:406:ALA:HA	1:A:439:ARG:NH1	2.11	0.65
1:A:1510:TRP:CZ3	1:A:1642:LEU:HA	2.30	0.65
1:D:31:THR:HG23	2:J:2040:ILE:HG21	1.76	0.65
2:I:1053:ILE:HD12	2:I:1061:VAL:HG22	1.78	0.65
2:J:260:HIS:CE1	2:J:543:GLY:HA2	2.31	0.65
2:L:771:CYS:HB3	2:L:774:ILE:HD12	1.77	0.65
2:I:260:HIS:CE1	2:I:543:GLY:HA2	2.32	0.65
1:D:1223:GLY:HA3	1:D:1276:PRO:HD2	1.78	0.65
1:B:340:LEU:HD21	1:E:340:LEU:HD21	1.79	0.65
1:E:1702:ARG:HG3	1:E:1702:ARG:NH1	2.06	0.65

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:C:831:GLU:HG2	1:D:755:GLU:CG	2.25	0.65
2:K:789:TYR:CE1	2:K:1097:PHE:HB3	2.32	0.65
2:I:468:PRO:CD	2:I:479:ARG:HH21	2.10	0.65
2:H:1094:HIS:O	2:H:1098:LEU:HB2	1.97	0.65
1:E:1217:GLU:O	1:E:1299:ALA:HB1	1.97	0.65
2:G:197:VAL:HG21	2:G:263:ILE:HD11	1.78	0.65
2:J:1948:MET:HA	2:J:1948:MET:CE	2.27	0.65
1:E:1224:SER:HB2	1:E:1307:PHE:O	1.97	0.65
2:J:616:ASP:OD2	2:J:823:HIS:HE1	1.78	0.65
1:C:1330:GLU:HG2	1:C:1333:ARG:HH11	1.61	0.65
2:L:595:SER:HB3	2:L:602:PRO:CG	2.26	0.65
2:K:1468:ARG:CB	2:K:1468:ARG:HH11	2.09	0.65
2:H:788:THR:HG22	2:H:1094:HIS:HE1	1.61	0.65
2:H:865:ILE:HG21	2:H:867:LYS:HE3	1.79	0.65
2:H:903:ILE:HD11	2:H:914:TRP:CE2	2.32	0.65
1:F:997:THR:CG2	1:F:1361:VAL:HG22	2.27	0.65
1:D:1323:ALA:HB1	1:D:1351:PHE:HE2	1.62	0.65
2:G:771:CYS:HB3	2:G:774:ILE:HD12	1.78	0.65
1:A:967:PHE:CD2	1:A:1374:PRO:HG3	2.32	0.65
2:L:766:SER:O	2:L:770:LYS:HG3	1.97	0.65
1:D:1421:ARG:HD2	1:D:1489:PHE:O	1.97	0.65
2:I:1200:ARG:H	2:I:1200:ARG:HD3	1.61	0.65
2:G:875:PHE:CD1	2:G:905:LYS:HD3	2.32	0.65
1:C:1100:VAL:HG21	1:C:1150:ILE:HD12	1.79	0.65
1:C:427:ARG:NH1	1:C:492:ILE:CG1	2.59	0.65
2:H:2059:HIS:ND1	2:H:2067:ILE:HG22	2.11	0.65
2:G:1602:LEU:HD13	2:G:1606:ILE:HD12	1.78	0.65
2:K:327:PRO:O	2:L:1338:ARG:NH2	2.27	0.65
2:I:608:MET:H	2:I:612:THR:HB	1.61	0.65
1:B:997:THR:CG2	1:B:1361:VAL:HG22	2.27	0.65
1:E:1108:PRO:HG3	1:E:1141:ARG:NE	2.11	0.65
2:L:876:TRP:CH2	2:L:1043:LYS:HB2	2.32	0.65
1:D:29:ILE:HD11	2:J:1922:VAL:C	2.17	0.65
2:H:964:ARG:O	2:H:967:GLU:HB2	1.96	0.65
1:C:1032:MET:HE2	1:C:1165:PRO:HB3	1.79	0.65
1:D:1510:TRP:CZ3	1:D:1642:LEU:HA	2.32	0.65
1:E:1574:LEU:HD12	1:E:1622:VAL:HG11	1.77	0.65
1:D:669:VAL:O	1:D:673:LEU:HD12	1.97	0.65
2:J:1204:VAL:HG22	2:J:1219:VAL:HG22	1.79	0.65
2:K:325:ALA:HB2	2:K:447:ALA:HB2	1.78	0.65
1:B:1224:SER:HB2	1:B:1307:PHE:O	1.97	0.65
2:J:293:ALA:HA	2:J:469:VAL:HG21	1.79	0.65

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:D:1504:ARG:CG	1:D:1504:ARG:NH1	2.50	0.64
2:I:272:PRO:HD3	2:I:301:TRP:CE2	2.32	0.64
2:L:501:TRP:NE1	2:L:528:THR:HG22	2.06	0.64
2:I:1097:PHE:HD2	2:I:1100:ARG:HH12	1.45	0.64
2:J:582:LYS:HG3	2:J:1110:VAL:HG11	1.79	0.64
2:K:2059:HIS:ND1	2:K:2067:ILE:HG22	2.12	0.64
2:H:486:ILE:HG22	2:H:490:LEU:HG	1.78	0.64
2:G:1478:GLN:HG3	2:G:1479:HIS:N	2.13	0.64
1:A:1630:LYS:HD2	1:E:1273:ILE:HD11	1.78	0.64
2:H:1179:GLU:HA	2:H:1190:ASN:HB2	1.79	0.64
2:K:915:PHE:CD2	2:K:915:PHE:O	2.50	0.64
2:G:1351:VAL:HG23	2:G:1584:SER:HA	1.79	0.64
2:J:1223:SER:HB2	2:J:1226:ALA:HB3	1.79	0.64
2:J:594:MET:HB3	2:J:808:ASP:O	1.96	0.64
2:J:915:PHE:HB2	2:J:1030:PHE:CD1	2.32	0.64
2:H:875:PHE:CD1	2:H:905:LYS:HD3	2.32	0.64
1:F:1702:ARG:NH1	1:F:1702:ARG:CG	2.49	0.64
2:L:1468:ARG:HH11	2:L:1468:ARG:CB	2.10	0.64
2:K:1299:VAL:HG23	2:K:1301:PHE:HE2	1.61	0.64
2:K:752:HIS:CE1	2:K:847:TYR:HE2	2.16	0.64
1:B:833:TRP:HH2	1:B:839:ILE:HD11	1.62	0.64
2:J:865:ILE:HG21	2:J:867:LYS:HE3	1.79	0.64
1:A:1217:GLU:O	1:A:1299:ALA:HB1	1.96	0.64
1:E:487:TYR:CE2	1:E:881:LEU:HD13	2.32	0.64
1:D:1663:LYS:HG2	2:J:1007:LEU:HD11	1.78	0.64
2:I:663:ILE:HD12	2:I:663:ILE:H	1.63	0.64
2:L:197:VAL:HG21	2:L:263:ILE:HD11	1.79	0.64
1:D:1674:ILE:HD11	2:J:1011:GLN:HG3	1.77	0.64
2:J:1884:CYS:HB3	2:J:1936:LEU:HD12	1.78	0.64
2:K:1948:MET:HA	2:K:1948:MET:CE	2.26	0.64
2:H:1472:TRP:HB3	2:H:1530:TYR:HB2	1.79	0.64
2:G:1687:GLN:O	2:G:1828:GLN:NE2	2.31	0.64
1:B:1448:ALA:HA	1:B:1451:LYS:HD2	1.78	0.64
1:B:1183:VAL:HG11	1:B:1187:THR:HG21	1.78	0.64
1:D:43:ARG:NH1	2:J:1687:GLN:HE21	1.95	0.64
1:C:371:GLN:HG2	1:D:372:LEU:HD11	1.79	0.64
2:G:2005:PHE:CB	2:G:2010:LEU:HD11	2.26	0.64
1:E:1703:VAL:CG1	1:E:1711:LEU:HB3	2.24	0.64
2:I:76:VAL:O	2:I:80:ILE:HG13	1.97	0.64
2:J:1478:GLN:HG3	2:J:1479:HIS:N	2.13	0.64
2:H:1479:HIS:CD2	2:H:1481:ILE:HG12	2.31	0.64
2:I:915:PHE:O	2:I:915:PHE:CD2	2.50	0.64

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:F:406:ALA:HA	1:F:439:ARG:NH1	2.12	0.64
2:J:1361:ILE:HG22	2:J:1435:TYR:OH	1.97	0.64
1:A:890:ASN:OD1	2:L:1755:LYS:HE2	1.97	0.64
2:J:2044:THR:HG21	2:J:2054:TYR:CZ	2.32	0.64
2:G:1745:LEU:HB3	2:G:1799:LEU:CD2	2.27	0.64
2:K:1750:GLY:O	2:K:1755:LYS:HE3	1.97	0.64
1:D:1078:ILE:HB	1:D:1338:GLY:CA	2.27	0.64
1:A:565:GLN:HG3	1:F:551:LEU:HD11	1.80	0.64
2:L:81:ALA:HB2	2:L:139:ALA:HA	1.79	0.64
2:G:1061:VAL:CG1	2:G:1066:ILE:HD11	2.27	0.64
2:H:327:PRO:CD	2:I:1338:ARG:NH2	2.58	0.64
2:K:511:THR:CG2	2:K:512:HIS:HD2	2.09	0.64
1:F:855:ALA:HA	1:F:919:ARG:NH2	2.08	0.64
1:A:989:ASN:N	1:A:1491:ASN:HD21	1.82	0.64
2:L:1622:THR:HG23	2:L:1627:ASN:OD1	1.97	0.64
1:C:1443:LEU:CD1	1:C:1470:ARG:HB3	2.27	0.64
1:F:30:GLU:HB2	2:L:2045:ALA:HB1	1.78	0.64
2:G:1289:TYR:CB	2:G:1370:LEU:HD23	2.28	0.64
1:C:1094:LYS:HE3	1:C:1316:TYR:CD1	2.32	0.64
1:B:1510:TRP:HZ3	1:B:1642:LEU:HA	1.62	0.64
1:A:1364:THR:HG22	1:A:1366:GLN:H	1.62	0.64
2:J:635:TYR:CG	2:J:641:MET:HG3	2.33	0.64
1:B:811:ASP:HB3	1:B:814:TYR:HB3	1.80	0.64
1:A:1001:GLU:O	1:A:1007:ASN:HA	1.97	0.64
1:D:1640:LYS:HG3	1:D:1641:TYR:N	2.12	0.64
2:H:926:LEU:O	2:H:1008:ILE:HD11	1.98	0.64
2:J:21:LEU:HD22	2:J:36:LEU:HD22	1.78	0.64
2:H:305:ALA:O	2:H:309:LYS:HD3	1.98	0.64
2:G:600:VAL:HG22	2:G:601:PRO:HD2	1.80	0.64
2:J:1468:ARG:CB	2:J:1468:ARG:HH11	2.09	0.64
2:J:788:THR:HG22	2:J:1094:HIS:HE1	1.63	0.64
1:B:1213:VAL:HG22	1:B:1300:ARG:NH2	2.12	0.64
2:K:250:PHE:HA	2:K:287:GLN:NE2	2.12	0.64
1:F:907:PHE:O	1:F:909:PRO:HD3	1.98	0.64
2:L:1479:HIS:CD2	2:L:1481:ILE:HG12	2.32	0.64
2:J:193:TYR:HD2	2:J:263:ILE:HD13	1.63	0.64
1:C:1705:GLN:HE21	1:C:1709:GLY:HA2	1.63	0.64
1:B:1697:LEU:O	1:B:1699:PRO:HD3	1.97	0.64
1:C:1421:ARG:HD2	1:C:1489:PHE:O	1.97	0.64
2:I:1991:ARG:HG3	2:I:1996:ILE:HG12	1.78	0.64
1:E:1168:TRP:NE1	1:E:1173:TYR:HE1	1.96	0.64
1:C:2:ARG:HD2	1:C:5:VAL:HG21	1.79	0.64

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:D:557:ARG:CG	1:D:557:ARG:NH1	2.53	0.64
2:I:2005:PHE:CB	2:I:2010:LEU:HD11	2.28	0.64
2:L:2059:HIS:ND1	2:L:2067:ILE:HG22	2.12	0.64
1:D:1218:VAL:HG13	1:D:1301:VAL:CG1	2.28	0.64
1:A:1214:HIS:CD2	1:A:1216:SER:OG	2.47	0.64
2:H:1115:TYR:HB3	2:H:1267:PRO:HB3	1.79	0.64
1:A:1431:GLN:OE1	1:E:1431:GLN:HG2	1.97	0.64
1:C:1514:ILE:O	1:C:1547:ARG:NH1	2.31	0.64
2:K:67:ASP:HA	2:K:132:LYS:HE2	1.79	0.64
2:H:1551:ILE:HG12	2:H:1552:GLU:N	2.13	0.64
2:K:1551:ILE:HG12	2:K:1552:GLU:N	2.12	0.64
1:C:964:LYS:O	1:C:966:PRO:HD3	1.98	0.64
1:E:843:VAL:HG13	1:E:900:ASP:HA	1.80	0.64
1:F:741:ASP:OD1	1:F:793:ARG:HD3	1.98	0.64
2:K:1946:LEU:HD22	2:K:1951:ILE:HD13	1.78	0.64
2:G:584:SER:HB2	2:G:1114:GLU:HA	1.79	0.64
2:K:260:HIS:CE1	2:K:543:GLY:HA2	2.33	0.64
1:C:1462:ASP:HB2	1:C:1465:ALA:HB3	1.80	0.64
2:K:600:VAL:HG13	2:K:601:PRO:CD	2.26	0.64
1:B:1703:VAL:CG1	1:B:1711:LEU:HB3	2.27	0.64
1:A:532:ILE:CG2	1:A:907:PHE:HB3	2.26	0.64
2:H:468:PRO:CD	2:H:479:ARG:HH21	2.11	0.64
2:G:609:THR:OG1	2:G:610:PRO:HD3	1.97	0.64
1:A:1209:PHE:CE2	1:A:1301:VAL:HG21	2.32	0.64
1:B:422:LEU:HB3	1:B:429:ILE:HD11	1.79	0.64
2:I:1659:ILE:HG13	2:I:1664:ILE:HD11	1.79	0.64
2:G:1115:TYR:OH	2:G:1173:HIS:HD2	1.80	0.64
1:A:997:THR:CG2	1:A:1361:VAL:HG22	2.28	0.64
2:I:1361:ILE:HG22	2:I:1435:TYR:OH	1.98	0.64
2:L:1551:ILE:HG12	2:L:1552:GLU:N	2.13	0.64
1:E:1462:ASP:HB2	1:E:1465:ALA:HB3	1.80	0.64
1:C:1323:ALA:HB1	1:C:1351:PHE:CE2	2.32	0.64
1:F:474:ILE:O	1:F:478:LYS:HG3	1.98	0.64
2:I:158:LEU:HD22	2:I:169:ILE:HD11	1.79	0.64
2:L:635:TYR:CG	2:L:641:MET:HG3	2.33	0.64
2:G:1019:LEU:O	2:G:1022:ARG:HG2	1.97	0.64
2:G:937:ARG:NE	2:G:941:LEU:HD11	2.13	0.64
1:B:741:ASP:OD1	1:B:793:ARG:HD3	1.98	0.64
2:K:2019:SER:HA	2:K:2022:LEU:HD12	1.77	0.64
2:I:1299:VAL:HG23	2:I:1301:PHE:HE2	1.59	0.64
1:F:527:ALA:HB2	1:F:637:LEU:HD22	1.80	0.64
2:K:493:MET:HA	2:K:497:ASP:HB2	1.78	0.64

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:H:1478:GLN:HG3	2:H:1479:HIS:N	2.11	0.64
1:B:1107:GLU:HG3	1:B:1108:PRO:HD2	1.79	0.64
2:L:1093:ASP:O	2:L:1097:PHE:HD1	1.79	0.64
1:F:1510:TRP:CZ3	1:F:1642:LEU:HA	2.33	0.64
2:G:1551:ILE:HG12	2:G:1552:GLU:N	2.13	0.64
2:J:186:LEU:CD2	2:J:256:VAL:HG22	2.27	0.64
2:L:1692:TYR:HD1	2:L:1847:LEU:HD21	1.62	0.64
1:A:1310:PHE:CE1	1:A:1315:SER:HB2	2.33	0.64
1:B:554:ARG:O	1:B:555:GLN:HG3	1.98	0.64
1:D:1211:LYS:O	1:D:1702:ARG:HD3	1.98	0.64
2:G:595:SER:HB3	2:G:602:PRO:CG	2.25	0.64
2:I:1093:ASP:O	2:I:1097:PHE:HD1	1.79	0.64
1:B:1100:VAL:HG21	1:B:1150:ILE:HD12	1.79	0.64
1:D:1005:TRP:NE1	1:D:1561:LEU:CD2	2.61	0.64
1:C:1218:VAL:HG13	1:C:1301:VAL:CG1	2.28	0.64
2:H:193:TYR:CD2	2:H:263:ILE:HD13	2.33	0.64
2:G:1551:ILE:HG12	2:G:1552:GLU:H	1.61	0.64
2:J:462:ALA:HB2	2:J:481:LEU:HB2	1.80	0.64
1:F:1462:ASP:HB2	1:F:1465:ALA:HB3	1.80	0.64
2:I:726:GLN:O	2:I:730:ILE:HG12	1.98	0.64
2:L:827:GLN:H	2:L:827:GLN:NE2	1.96	0.64
1:D:1183:VAL:HG11	1:D:1187:THR:HG21	1.79	0.64
2:I:1946:LEU:HD22	2:I:1951:ILE:HD13	1.78	0.64
2:L:788:THR:HG22	2:L:1094:HIS:HE1	1.63	0.64
2:L:1641:GLY:HA3	2:L:1678:VAL:HA	1.79	0.64
2:I:1442:TYR:HA	2:I:1445:THR:HG22	1.78	0.64
2:G:930:THR:CG2	2:G:933:GLU:H	2.10	0.64
1:A:503:ARG:HA	1:A:933:ILE:HD11	1.79	0.64
2:H:193:TYR:HD2	2:H:263:ILE:HD13	1.62	0.64
1:A:1307:PHE:HB3	1:A:1357:CYS:HB2	1.79	0.64
1:A:1432:ILE:HD11	1:A:1481:GLN:HB3	1.80	0.64
2:H:1991:ARG:HG3	2:H:1996:ILE:HG12	1.80	0.64
2:L:1019:LEU:O	2:L:1022:ARG:HG2	1.98	0.64
2:L:1948:MET:HA	2:L:1948:MET:CE	2.28	0.64
2:G:1353:GLY:HA2	2:G:1397:THR:HG21	1.79	0.64
2:I:875:PHE:CD1	2:I:905:LYS:HD3	2.33	0.64
1:D:1462:ASP:HB2	1:D:1465:ALA:HB3	1.78	0.64
2:L:608:MET:H	2:L:612:THR:HB	1.61	0.64
1:E:18:LEU:HD21	2:K:1844:LEU:CD1	2.28	0.63
1:E:1005:TRP:NE1	1:E:1561:LEU:CD2	2.58	0.63
2:K:1299:VAL:CG2	2:K:1301:PHE:HE2	2.10	0.63
2:I:1299:VAL:CG2	2:I:1301:PHE:HE2	2.11	0.63

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:K:752:HIS:NE2	2:K:856:THR:CG2	2.61	0.63
2:L:521:VAL:CG1	2:L:549:ASN:HB2	2.28	0.63
2:J:549:ASN:HD22	2:J:550:THR:N	1.97	0.63
1:B:911:LEU:O	1:B:915:MET:HG3	1.98	0.63
2:I:1335:PHE:CE1	2:I:1629:ILE:HD11	2.34	0.63
2:L:663:ILE:HD12	2:L:663:ILE:H	1.63	0.63
2:J:1551:ILE:HG12	2:J:1552:GLU:N	2.14	0.63
1:F:1364:THR:HG22	1:F:1366:GLN:H	1.63	0.63
1:E:1018:GLY:HA2	1:E:1590:ARG:NH2	2.13	0.63
2:H:1848:ALA:HA	2:H:2034:LYS:HD3	1.79	0.63
1:B:1089:TYR:CE1	1:B:1312:GLU:HG3	2.32	0.63
1:A:1330:GLU:HG2	1:A:1333:ARG:NH1	2.13	0.63
2:L:792:LEU:HD23	2:L:1094:HIS:ND1	2.13	0.63
2:L:762:LEU:HD22	2:L:802:TYR:CD2	2.28	0.63
2:L:57:PRO:CG	2:L:68:GLU:HG3	2.27	0.63
2:I:57:PRO:CG	2:I:68:GLU:HG3	2.26	0.63
2:H:608:MET:H	2:H:612:THR:HB	1.62	0.63
2:G:616:ASP:OD2	2:G:823:HIS:CE1	2.51	0.63
2:I:1478:GLN:HG3	2:I:1479:HIS:N	2.12	0.63
1:B:1106:LEU:HD23	1:B:1107:GLU:H	1.62	0.63
2:K:854:VAL:CG2	2:K:1070:PRO:HA	2.28	0.63
1:D:973:TRP:NE1	1:D:1648:LYS:HB2	2.13	0.63
1:A:70:ALA:HB2	2:I:407:LYS:NZ	2.13	0.63
1:F:1448:ALA:HA	1:F:1451:LYS:HD2	1.79	0.63
1:A:365:GLN:HG3	1:F:365:GLN:HG3	1.80	0.63
2:L:1745:LEU:HB3	2:L:1799:LEU:CD2	2.28	0.63
1:F:1573:MET:HE2	1:F:1622:VAL:HG23	1.80	0.63
1:C:1534:GLU:HG2	1:C:1625:PHE:CE1	2.33	0.63
2:K:792:LEU:HD23	2:K:1094:HIS:ND1	2.14	0.63
2:L:1299:VAL:CG2	2:L:1301:PHE:HE2	2.11	0.63
1:D:689:ARG:NH1	1:D:1339:GLU:OE2	2.31	0.63
2:J:779:GLY:HA3	2:J:811:MET:HE3	1.80	0.63
1:D:605:ARG:HB3	1:D:606:PRO:HD3	1.78	0.63
1:C:1499:ARG:HD3	1:F:1476:ARG:NH1	2.13	0.63
1:B:1330:GLU:HG2	1:B:1333:ARG:HH11	1.62	0.63
2:G:486:ILE:HG22	2:G:490:LEU:HG	1.78	0.63
2:G:938:MET:HE2	2:G:959:THR:HG22	1.80	0.63
1:E:1323:ALA:HB1	1:E:1351:PHE:CE2	2.32	0.63
2:H:67:ASP:HA	2:H:132:LYS:HE2	1.81	0.63
2:G:1053:ILE:HD12	2:G:1061:VAL:HG22	1.80	0.63
1:D:930:GLN:HA	1:D:933:ILE:HD12	1.80	0.63
1:B:956:ILE:HA	2:H:977:PRO:HA	1.81	0.63

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:B:1432:ILE:HD11	1:B:1481:GLN:HB3	1.81	0.63
1:E:433:CYS:O	1:E:437:MET:HG3	1.99	0.63
2:G:2054:TYR:HA	2:G:2057:GLU:OE1	1.98	0.63
2:H:1200:ARG:H	2:H:1200:ARG:HD3	1.63	0.63
1:A:777:LEU:O	1:A:781:ILE:HG13	1.98	0.63
2:I:448:HIS:HD2	2:I:491:VAL:HG12	1.63	0.63
1:D:1330:GLU:HG2	1:D:1333:ARG:HH11	1.64	0.63
1:F:1702:ARG:HG3	1:F:1702:ARG:NH1	2.06	0.63
2:L:600:VAL:HG13	2:L:601:PRO:CD	2.28	0.63
2:I:1305:LEU:HD21	2:I:1365:LYS:HB2	1.79	0.63
1:D:580:ASN:ND2	1:D:582:SER:HB2	2.14	0.63
2:H:752:HIS:CE1	2:H:847:TYR:HE2	2.16	0.63
2:I:35:PHE:CZ	2:I:105:ILE:HD13	2.33	0.63
2:L:609:THR:OG1	2:L:610:PRO:HD3	1.99	0.63
2:I:2059:HIS:ND1	2:I:2067:ILE:HG22	2.14	0.63
2:G:608:MET:H	2:G:612:THR:HB	1.62	0.63
2:H:250:PHE:HA	2:H:287:GLN:NE2	2.14	0.63
1:A:422:LEU:HB3	1:A:429:ILE:HD11	1.80	0.63
2:H:876:TRP:CH2	2:H:1043:LYS:HB2	2.34	0.63
1:E:905:LEU:HD23	1:E:908:ILE:HD12	1.78	0.63
2:I:1224:GLN:HG3	2:I:1578:GLU:OE2	1.98	0.63
2:J:1593:SER:OG	2:J:1596:PHE:HB2	1.98	0.63
1:B:992:LYS:HE2	1:D:1495:ARG:NH1	2.14	0.63
1:A:551:LEU:HD21	1:F:562:SER:HB3	1.79	0.63
2:H:2057:GLU:HA	2:H:2060:ARG:NH1	2.13	0.63
1:C:12:THR:O	1:C:16:GLU:HG2	1.99	0.63
1:E:682:VAL:HG11	1:E:695:TYR:HE2	1.64	0.63
2:I:937:ARG:NE	2:I:941:LEU:HD11	2.13	0.63
1:A:427:ARG:HH12	1:A:492:ILE:HG12	1.62	0.63
1:B:18:LEU:HD21	2:H:1844:LEU:CD1	2.28	0.63
2:G:1094:HIS:O	2:G:1098:LEU:HB2	1.99	0.63
2:J:1918:VAL:CG1	2:J:2006:HIS:HB2	2.25	0.63
2:J:1094:HIS:O	2:J:1098:LEU:HB2	1.97	0.63
2:I:590:VAL:HG23	2:I:1091:HIS:CD2	2.33	0.63
1:A:533:SER:HA	1:F:579:MET:HE1	1.80	0.63
2:L:35:PHE:CZ	2:L:105:ILE:HD13	2.34	0.63
1:E:612:ILE:HG12	1:E:628:TYR:HE2	1.62	0.63
2:L:1371:LEU:O	2:L:1590:ILE:HD11	1.99	0.63
1:B:1505:GLY:O	1:B:1509:THR:HG23	1.99	0.63
1:F:15:VAL:HG11	2:L:2022:LEU:HD21	1.79	0.63
2:G:979:LEU:HD21	2:G:999:ALA:HB3	1.80	0.63
2:H:979:LEU:HD21	2:H:999:ALA:HB3	1.81	0.63

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:D:1310:PHE:CE1	1:D:1315:SER:HB2	2.33	0.63
1:C:1168:TRP:NE1	1:C:1173:TYR:HE1	1.96	0.63
1:C:811:ASP:HB3	1:C:814:TYR:HB3	1.80	0.63
2:L:186:LEU:CD2	2:L:256:VAL:HG22	2.28	0.63
2:K:272:PRO:HD3	2:K:301:TRP:CE2	2.33	0.63
2:L:580:LEU:HD21	2:L:1095:ILE:HA	1.80	0.63
2:J:1871:VAL:HG21	2:J:2003:VAL:HA	1.80	0.63
2:H:580:LEU:HD21	2:H:1095:ILE:HA	1.80	0.63
1:D:1463:GLU:O	1:D:1467:LEU:HB2	1.98	0.63
2:L:1370:LEU:HA	2:L:1435:TYR:HE2	1.64	0.63
2:I:1061:VAL:CG1	2:I:1066:ILE:HD11	2.28	0.63
1:F:440:SER:HB3	1:F:481:LEU:HD23	1.81	0.63
2:K:1318:ALA:HA	2:K:1391:VAL:HG21	1.80	0.63
2:G:81:ALA:HB2	2:G:139:ALA:HA	1.80	0.63
2:L:1299:VAL:HG23	2:L:1301:PHE:HE2	1.63	0.63
1:F:669:VAL:O	1:F:673:LEU:HD12	1.98	0.63
2:J:752:HIS:CE1	2:J:847:TYR:HE2	2.16	0.63
2:L:903:ILE:HD11	2:L:914:TRP:CE2	2.34	0.63
2:J:290:VAL:HG11	2:J:315:LEU:HD13	1.79	0.63
2:I:250:PHE:HA	2:I:287:GLN:NE2	2.13	0.63
2:I:955:LEU:HD21	2:I:1026:LYS:HB3	1.81	0.63
2:L:1097:PHE:HD2	2:L:1100:ARG:HH12	1.47	0.63
2:L:138:ARG:HB3	2:L:192:THR:HG23	1.81	0.63
1:E:1432:ILE:HD11	1:E:1481:GLN:HB3	1.81	0.63
2:I:1846:ALA:HB3	2:I:1847:LEU:HD12	1.81	0.63
2:J:1692:TYR:HD1	2:J:1847:LEU:HD21	1.64	0.63
1:A:1078:ILE:HB	1:A:1338:GLY:CA	2.29	0.63
2:I:1985:GLN:HG3	2:I:1986:PRO:CD	2.24	0.63
2:G:600:VAL:HG13	2:G:601:PRO:HD2	1.80	0.63
2:L:529:ASN:HD22	2:L:552:VAL:HG22	1.63	0.63
2:I:752:HIS:CE1	2:I:847:TYR:HE2	2.16	0.63
1:E:965:TYR:CZ	1:E:1199:LEU:CD2	2.82	0.63
2:K:609:THR:OG1	2:K:610:PRO:HD3	1.98	0.63
2:G:705:TYR:HA	2:G:709:LEU:HD21	1.79	0.63
2:I:251:PRO:HG3	2:I:316:PHE:CA	2.28	0.63
2:I:486:ILE:HG22	2:I:490:LEU:HG	1.79	0.63
1:E:30:GLU:HB2	2:K:2045:ALA:CB	2.28	0.63
1:F:973:TRP:NE1	1:F:1648:LYS:HB2	2.14	0.63
2:L:382:LEU:HG	2:L:390:VAL:HB	1.80	0.63
1:C:689:ARG:NE	1:C:1339:GLU:HG2	2.14	0.63
2:I:938:MET:HB3	2:I:959:THR:HG22	1.80	0.63
1:B:1323:ALA:HB1	1:B:1351:PHE:HE2	1.63	0.63

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:K:1848:ALA:HA	2:K:2034:LYS:HD3	1.81	0.63
2:K:448:HIS:HD2	2:K:491:VAL:HG12	1.64	0.63
1:D:619:LYS:HG2	1:D:620:LYS:H	1.64	0.63
2:G:1223:SER:HB2	2:G:1226:ALA:HB3	1.79	0.63
2:J:1848:ALA:HA	2:J:2034:LYS:HD3	1.81	0.63
2:G:272:PRO:HD3	2:G:301:TRP:CE2	2.34	0.63
2:G:583:THR:OG1	2:G:587:GLN:HB2	1.97	0.63
1:E:532:ILE:HG22	1:E:907:PHE:CB	2.29	0.63
2:L:818:THR:HA	2:L:829:LYS:HG2	1.80	0.63
2:J:610:PRO:CD	3:J:2101:FMN:H6	2.29	0.63
1:F:422:LEU:HB3	1:F:429:ILE:HD11	1.80	0.63
2:J:1896:THR:HG22	2:J:1897:GLU:N	2.13	0.63
2:J:1404:VAL:O	2:J:1445:THR:HA	1.99	0.63
2:G:1479:HIS:CD2	2:G:1481:ILE:HG12	2.34	0.63
2:G:250:PHE:HA	2:G:287:GLN:NE2	2.13	0.63
2:G:382:LEU:HG	2:G:390:VAL:HB	1.81	0.63
2:G:260:HIS:CE1	2:G:543:GLY:HA2	2.34	0.63
2:H:1622:THR:HG23	2:H:1627:ASN:OD1	1.99	0.63
2:L:2057:GLU:HA	2:L:2060:ARG:NH1	2.14	0.63
1:A:2:ARG:HD2	1:A:5:VAL:HG21	1.80	0.63
1:A:1610:ARG:CG	1:A:1610:ARG:HH11	1.91	0.62
2:H:595:SER:HB3	2:H:602:PRO:CG	2.25	0.62
2:K:788:THR:HG22	2:K:1094:HIS:CE1	2.33	0.62
1:B:1217:GLU:O	1:B:1299:ALA:HB1	1.99	0.62
2:L:814:SER:HB2	3:L:2101:FMN:O3P	1.99	0.62
1:C:422:LEU:HB3	1:C:429:ILE:HD11	1.79	0.62
2:I:930:THR:CG2	2:I:933:GLU:H	2.12	0.62
1:D:70:ALA:HB2	2:L:407:LYS:HZ1	1.64	0.62
2:J:1324:PHE:CA	2:J:1583:VAL:HG11	2.29	0.62
2:I:1356:ALA:HB3	2:I:1397:THR:HG22	1.81	0.62
2:L:1053:ILE:HD11	2:L:1061:VAL:HG13	1.81	0.62
2:I:1692:TYR:HD1	2:I:1847:LEU:HD21	1.63	0.62
2:L:448:HIS:HD2	2:L:491:VAL:HG12	1.64	0.62
1:A:1640:LYS:HG3	1:A:1641:TYR:N	2.14	0.62
2:K:979:LEU:HD21	2:K:999:ALA:HB3	1.80	0.62
2:K:1807:GLN:HB2	2:K:1808:PRO:HD3	1.81	0.62
2:H:623:ASN:OD1	2:H:653:PRO:HD3	2.00	0.62
2:K:1093:ASP:O	2:K:1097:PHE:HD1	1.81	0.62
2:H:855:ILE:HB	2:H:869:ALA:HB2	1.81	0.62
2:I:472:THR:H	2:I:493:MET:HE3	1.63	0.62
1:C:636:TYR:CZ	1:C:640:LEU:HD22	2.34	0.62
1:E:1078:ILE:HB	1:E:1338:GLY:CA	2.29	0.62

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:15:VAL:HG11	2:G:2022:LEU:HD21	1.80	0.62
2:J:915:PHE:O	2:J:915:PHE:CD2	2.52	0.62
1:F:1183:VAL:HG11	1:F:1187:THR:HG21	1.80	0.62
2:G:818:THR:HA	2:G:829:LYS:HG2	1.81	0.62
1:F:1018:GLY:HA2	1:F:1590:ARG:NH2	2.14	0.62
2:G:1200:ARG:HD3	2:G:1200:ARG:H	1.64	0.62
1:F:962:ASN:HD22	2:L:1006:GLN:HE22	1.45	0.62
2:K:352:SER:HB2	2:K:433:LEU:HD21	1.81	0.62
2:L:2005:PHE:CB	2:L:2010:LEU:HD11	2.29	0.62
1:E:689:ARG:NH2	1:E:1591:ASN:HD21	1.96	0.62
1:F:1005:TRP:NE1	1:F:1561:LEU:CD2	2.60	0.62
2:L:1866:THR:HA	2:L:1869:VAL:HG22	1.81	0.62
2:J:779:GLY:HA3	2:J:811:MET:CE	2.30	0.62
2:G:752:HIS:CE1	2:G:847:TYR:HE2	2.17	0.62
2:G:865:ILE:HG21	2:G:867:LYS:HE3	1.80	0.62
2:L:1375:HIS:HE1	2:L:1610:MET:SD	2.22	0.62
1:C:1108:PRO:HG3	1:C:1141:ARG:NE	2.15	0.62
2:G:1610:MET:CE	2:G:1610:MET:HA	2.29	0.62
1:B:1463:GLU:O	1:B:1467:LEU:HB2	1.98	0.62
2:G:1289:TYR:CG	2:G:1370:LEU:HD23	2.34	0.62
2:L:260:HIS:CE1	2:L:543:GLY:HA2	2.34	0.62
2:H:1361:ILE:HG22	2:H:1435:TYR:OH	1.99	0.62
2:G:1472:TRP:HB3	2:G:1530:TYR:HB2	1.80	0.62
2:L:915:PHE:CD2	2:L:915:PHE:O	2.52	0.62
1:D:533:SER:HB2	1:D:612:ILE:HB	1.81	0.62
2:G:792:LEU:HD23	2:G:1094:HIS:ND1	2.14	0.62
1:A:633:THR:HG22	1:A:637:LEU:HD12	1.82	0.62
2:K:1641:GLY:HA3	2:K:1678:VAL:HA	1.80	0.62
2:I:583:THR:OG1	2:I:587:GLN:HB2	1.98	0.62
2:J:489:GLU:O	2:J:493:MET:HG3	2.00	0.62
2:L:1610:MET:CE	2:L:1610:MET:HA	2.29	0.62
2:K:1115:TYR:CZ	2:K:1174:ALA:HB2	2.35	0.62
2:G:854:VAL:CG2	2:G:1070:PRO:HA	2.30	0.62
1:B:562:SER:OG	1:E:551:LEU:HD21	2.00	0.62
2:K:1289:TYR:CG	2:K:1370:LEU:HD23	2.34	0.62
2:K:305:ALA:O	2:K:309:LYS:HD3	2.00	0.62
1:A:397:ARG:HH11	1:A:692:THR:HG21	1.64	0.62
2:G:1299:VAL:HG23	2:G:1301:PHE:HE2	1.64	0.62
2:J:1641:GLY:HA3	2:J:1678:VAL:HA	1.81	0.62
2:I:779:GLY:HA3	2:I:811:MET:HE3	1.81	0.62
1:A:1213:VAL:HG22	1:A:1300:ARG:NH2	2.14	0.62
2:H:461:PRO:HD2	2:H:464:SER:OG	2.00	0.62

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:J:1750:GLY:O	2:J:1755:LYS:HE3	2.00	0.62
2:J:472:THR:H	2:J:493:MET:HE3	1.64	0.62
2:J:1436:ARG:HH22	2:J:1602:LEU:HD21	1.64	0.62
2:G:1375:HIS:ND1	2:G:1610:MET:HG2	2.15	0.62
2:H:1593:SER:OG	2:H:1596:PHE:HB2	1.99	0.62
2:K:196:PHE:CD2	2:K:266:LYS:HB3	2.34	0.62
2:G:1335:PHE:HE1	2:G:1629:ILE:CD1	2.13	0.62
1:C:504:GLY:O	1:C:926:SER:HB2	2.00	0.62
1:A:968:PRO:HD2	1:A:1374:PRO:HB3	1.79	0.62
2:G:766:SER:O	2:G:770:LYS:HG3	1.98	0.62
2:I:1868:GLN:HG2	2:I:1873:ARG:HH22	1.65	0.62
1:F:731:ASP:HB3	1:F:735:GLY:HA3	1.81	0.62
2:I:325:ALA:HB2	2:I:447:ALA:HB2	1.82	0.62
2:J:1175:MET:HA	2:J:1274:ILE:CD1	2.29	0.62
2:J:1200:ARG:H	2:J:1200:ARG:HD3	1.65	0.62
1:D:1186:VAL:HG23	1:D:1309:ASP:HB2	1.80	0.62
1:F:1421:ARG:HD2	1:F:1489:PHE:O	1.99	0.62
1:E:1448:ALA:HA	1:E:1451:LYS:HD2	1.80	0.62
1:E:1086:PHE:CE2	1:E:1310:PHE:HD2	2.17	0.62
1:C:1018:GLY:HA2	1:C:1590:ARG:NH2	2.14	0.62
2:L:325:ALA:HB2	2:L:447:ALA:HB2	1.80	0.62
2:H:43:PHE:CD2	2:I:22:ARG:CG	2.83	0.62
1:C:1504:ARG:NH1	1:C:1504:ARG:CG	2.47	0.62
1:C:1078:ILE:HB	1:C:1338:GLY:CA	2.29	0.62
2:G:2052:LYS:HD3	2:G:2074:TRP:HE1	1.65	0.62
2:L:1780:ILE:HG23	2:L:1869:VAL:HG11	1.81	0.62
2:G:1156:ASP:HB3	2:G:1158:ASP:H	1.64	0.62
2:H:1641:GLY:HA3	2:H:1678:VAL:HA	1.82	0.62
1:A:1505:GLY:O	1:A:1509:THR:HG23	1.99	0.62
1:C:997:THR:CG2	1:C:1361:VAL:HG22	2.30	0.62
2:G:915:PHE:O	2:G:915:PHE:CD2	2.53	0.62
2:L:77:ALA:O	2:L:139:ALA:HB1	2.00	0.62
1:B:1510:TRP:CZ3	1:B:1642:LEU:HA	2.34	0.62
2:L:623:ASN:OD1	2:L:653:PRO:HD3	2.00	0.62
2:G:1848:ALA:HA	2:G:2034:LYS:HD3	1.82	0.62
1:A:682:VAL:HG11	1:A:695:TYR:HE2	1.65	0.62
2:H:594:MET:HB3	2:H:808:ASP:O	1.99	0.62
2:I:1204:VAL:HG22	2:I:1219:VAL:HG22	1.80	0.62
2:J:2005:PHE:CB	2:J:2010:LEU:HD11	2.29	0.62
2:J:789:TYR:CE1	2:J:1097:PHE:HB3	2.35	0.62
2:G:2015:LYS:HB2	2:G:2016:PRO:HD3	1.81	0.62
2:G:1641:GLY:HA3	2:G:1678:VAL:HA	1.81	0.62

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:H:485:ASP:HB3	2:H:488:PRO:CD	2.29	0.62
2:J:486:ILE:HG22	2:J:490:LEU:HG	1.80	0.62
2:H:57:PRO:CG	2:H:68:GLU:HG3	2.28	0.62
1:B:905:LEU:HD23	1:B:908:ILE:HD12	1.79	0.62
2:I:448:HIS:HD2	2:I:491:VAL:CG1	2.13	0.62
1:B:1018:GLY:HA2	1:B:1590:ARG:NH2	2.14	0.62
1:F:1186:VAL:HG23	1:F:1309:ASP:HB2	1.81	0.62
2:J:1123:ALA:HB3	2:J:1126:GLU:HG3	1.82	0.62
1:A:811:ASP:HB3	1:A:814:TYR:HB3	1.81	0.62
1:A:911:LEU:O	1:A:915:MET:HG3	2.00	0.62
2:G:1288:PHE:O	2:G:1292:VAL:HG23	2.00	0.62
2:H:1687:GLN:O	2:H:1828:GLN:NE2	2.32	0.62
2:I:529:ASN:HD22	2:I:552:VAL:HG22	1.64	0.62
1:E:1364:THR:HG22	1:E:1366:GLN:H	1.64	0.62
1:B:1269:SER:O	1:D:1386:THR:HB	2.00	0.62
1:B:557:ARG:NH1	1:E:558:LEU:HA	2.15	0.62
1:B:1499:ARG:CD	1:D:1476:ARG:HH12	2.02	0.62
1:A:1078:ILE:HG21	1:A:1352:MET:HE2	1.82	0.62
2:K:501:TRP:NE1	2:K:528:THR:CG2	2.62	0.62
2:J:76:VAL:O	2:J:80:ILE:HG13	1.99	0.62
1:C:503:ARG:HA	1:C:933:ILE:HD11	1.81	0.62
2:I:857:VAL:HG13	2:I:876:TRP:NE1	2.14	0.62
1:C:535:TYR:CD1	1:C:610:GLU:N	2.67	0.62
1:D:682:VAL:HG11	1:D:695:TYR:CE2	2.34	0.62
1:D:1086:PHE:CE2	1:D:1310:PHE:HD2	2.18	0.62
2:K:462:ALA:HB2	2:K:481:LEU:HB2	1.80	0.62
2:H:1353:GLY:HA2	2:H:1397:THR:HG21	1.80	0.62
1:C:41:THR:HG21	2:I:1691:ALA:HB2	1.81	0.62
1:A:31:THR:HG23	2:G:2040:ILE:CG2	2.30	0.62
2:J:1946:LEU:HD22	2:J:1951:ILE:HD13	1.81	0.62
2:L:854:VAL:HG21	2:L:1070:PRO:HA	1.81	0.62
1:E:811:ASP:HB3	1:E:814:TYR:HB3	1.79	0.62
2:K:600:VAL:HG22	2:K:601:PRO:HD2	1.81	0.62
1:A:1005:TRP:NE1	1:A:1561:LEU:CD2	2.61	0.62
1:F:833:TRP:HH2	1:F:839:ILE:HD11	1.64	0.62
2:L:76:VAL:O	2:L:80:ILE:HG13	1.99	0.62
2:K:1067:LEU:HD12	2:K:1067:LEU:N	2.15	0.62
2:K:251:PRO:HG3	2:K:316:PHE:CA	2.28	0.62
2:J:382:LEU:HG	2:J:390:VAL:HB	1.80	0.62
2:L:251:PRO:HG3	2:L:316:PHE:CA	2.29	0.62
2:G:1339:GLY:HA2	2:I:376:ARG:NH2	2.15	0.62
2:L:789:TYR:CE1	2:L:1097:PHE:HB3	2.34	0.62

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:H:1356:ALA:HB3	2:H:1397:THR:HG22	1.82	0.62
2:G:158:LEU:HD22	2:G:169:ILE:HD11	1.80	0.62
2:I:1866:THR:HA	2:I:1869:VAL:HG22	1.82	0.62
1:A:1095:GLN:O	1:A:1096:LEU:HD23	1.99	0.62
2:L:930:THR:CG2	2:L:933:GLU:H	2.12	0.62
1:D:811:ASP:HB3	1:D:814:TYR:HB3	1.81	0.62
2:K:1692:TYR:HD1	2:K:1847:LEU:HD21	1.62	0.62
1:E:1421:ARG:HD2	1:E:1489:PHE:O	2.00	0.62
1:D:1095:GLN:O	1:D:1096:LEU:HD23	2.00	0.62
2:H:2052:LYS:HD3	2:H:2074:TRP:HE1	1.64	0.62
2:H:752:HIS:NE2	2:H:856:THR:HG21	2.15	0.62
2:G:521:VAL:CG1	2:G:549:ASN:HB2	2.30	0.62
2:J:461:PRO:HD2	2:J:464:SER:OG	1.99	0.62
2:G:215:TRP:CE3	2:G:216:ASP:N	2.66	0.62
1:F:905:LEU:HD23	1:F:908:ILE:HD12	1.81	0.62
1:C:612:ILE:HG23	1:C:628:TYR:CD2	2.35	0.62
2:L:1356:ALA:HB3	2:L:1397:THR:HG22	1.81	0.62
2:H:1871:VAL:HG21	2:H:2003:VAL:HA	1.81	0.62
1:F:1086:PHE:CE2	1:F:1310:PHE:HD2	2.18	0.62
1:B:433:CYS:O	1:B:437:MET:HG3	2.00	0.62
1:F:828:TRP:HE1	1:F:838:THR:HA	1.64	0.62
1:D:1094:LYS:HE3	1:D:1316:TYR:CD1	2.35	0.62
1:D:1697:LEU:O	1:D:1699:PRO:HD3	1.99	0.62
1:A:371:GLN:HG2	1:F:372:LEU:HD11	1.81	0.62
2:L:1946:LEU:HD22	2:L:1951:ILE:HD13	1.81	0.62
2:I:1475:LEU:HD23	2:I:1476:ASP:H	1.65	0.62
2:H:2005:PHE:CB	2:H:2010:LEU:HD11	2.29	0.61
2:L:583:THR:OG1	2:L:587:GLN:HB2	2.00	0.61
2:L:610:PRO:CD	3:L:2101:FMN:H6	2.30	0.61
2:L:865:ILE:HG21	2:L:867:LYS:HE3	1.82	0.61
1:D:605:ARG:HB3	1:D:606:PRO:HD2	1.80	0.61
1:B:689:ARG:CZ	1:B:1339:GLU:HG2	2.30	0.61
2:L:1061:VAL:CG1	2:L:1066:ILE:HD11	2.29	0.61
2:J:1888:PRO:HB3	2:J:1895:PHE:HD1	1.65	0.61
2:H:1239:ASP:OD1	2:H:1240:ASN:N	2.33	0.61
2:G:1622:THR:HG23	2:G:1627:ASN:OD1	2.00	0.61
1:A:1367:LEU:HD22	1:A:1371:MET:HG3	1.82	0.61
2:I:317:TRP:O	2:I:321:ARG:HG2	2.00	0.61
2:G:931:TYR:O	2:G:935:VAL:HG12	1.99	0.61
1:C:1224:SER:HB2	1:C:1307:PHE:O	2.00	0.61
1:C:565:GLN:O	1:C:569:LEU:HD12	2.00	0.61
1:E:715:ASN:HD22	1:E:717:GLY:H	1.48	0.61

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:K:1181:PHE:CE1	2:K:1191:PRO:HD2	2.35	0.61
1:C:434:ILE:HD11	1:C:490:VAL:HG21	1.82	0.61
2:G:2052:LYS:CE	2:G:2052:LYS:H	2.07	0.61
2:K:35:PHE:CZ	2:K:105:ILE:HD13	2.35	0.61
2:I:610:PRO:CD	3:I:2101:FMN:H6	2.29	0.61
2:K:1764:MET:CE	2:K:1865:LEU:HD12	2.30	0.61
2:L:914:TRP:HE1	2:L:916:GLY:HA3	1.66	0.61
2:K:1478:GLN:HG3	2:K:1479:HIS:N	2.15	0.61
2:K:440:HIS:CD2	2:K:497:ASP:O	2.53	0.61
2:L:411:PRO:HD2	2:L:414:LEU:CD1	2.31	0.61
1:A:47:ILE:HB	2:G:1694:PHE:HD1	1.65	0.61
1:A:1107:GLU:HG3	1:A:1108:PRO:HD2	1.82	0.61
1:E:1505:GLY:O	1:E:1509:THR:HG23	2.00	0.61
1:A:1443:LEU:O	1:A:1447:VAL:HG23	1.97	0.61
2:L:1888:PRO:HG3	2:L:1900:LEU:HD12	1.82	0.61
2:L:612:THR:HG22	2:L:612:THR:O	2.00	0.61
2:J:1019:LEU:O	2:J:1022:ARG:HG2	2.00	0.61
2:G:21:LEU:HD22	2:G:36:LEU:HD22	1.82	0.61
1:B:1032:MET:HE2	1:B:1165:PRO:HB3	1.82	0.61
1:D:967:PHE:CD2	1:D:1662:GLN:HB2	2.34	0.61
2:L:1116:PHE:O	2:L:1270:GLY:HA3	2.00	0.61
1:D:421:ARG:HH22	1:D:1613:LYS:HB3	1.65	0.61
2:H:462:ALA:HB2	2:H:481:LEU:HB2	1.82	0.61
2:K:1622:THR:HG23	2:K:1627:ASN:OD1	2.00	0.61
1:C:1078:ILE:HD13	1:C:1352:MET:HG2	1.82	0.61
2:K:515:ASP:HB3	2:K:541:LEU:HD23	1.82	0.61
2:K:623:ASN:OD1	2:K:653:PRO:HD3	1.99	0.61
2:G:580:LEU:HD21	2:G:1095:ILE:HA	1.81	0.61
2:J:792:LEU:HD23	2:J:1094:HIS:ND1	2.14	0.61
2:H:788:THR:HG22	2:H:1094:HIS:CE1	2.35	0.61
2:J:613:VAL:HG12	2:J:614:PRO:HD3	1.83	0.61
1:C:1209:PHE:CE2	1:C:1301:VAL:HG21	2.35	0.61
2:K:521:VAL:CG1	2:K:549:ASN:HB2	2.29	0.61
1:F:1209:PHE:CE2	1:F:1301:VAL:HG21	2.35	0.61
2:L:1478:GLN:HG3	2:L:1479:HIS:N	2.15	0.61
2:I:197:VAL:HG21	2:I:263:ILE:HD11	1.82	0.61
2:H:1871:VAL:HG21	2:H:2004:PRO:HD3	1.81	0.61
2:L:1362:PHE:N	2:L:1363:PRO:HD2	2.15	0.61
1:E:970:LEU:HD21	1:E:1658:VAL:HG11	1.81	0.61
1:F:1001:GLU:O	1:F:1007:ASN:HA	2.00	0.61
2:G:646:SER:HA	2:G:649:GLU:HG2	1.81	0.61
1:A:1018:GLY:HA2	1:A:1590:ARG:NH2	2.15	0.61

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:H:1362:PHE:N	2:H:1363:PRO:HD2	2.14	0.61
2:H:1692:TYR:HD1	2:H:1847:LEU:HD21	1.65	0.61
2:J:1991:ARG:HG3	2:J:1996:ILE:HG12	1.81	0.61
2:K:1976:CYS:O	2:K:1980:THR:HG23	2.00	0.61
2:I:1019:LEU:O	2:I:1022:ARG:HG2	2.00	0.61
2:L:1991:ARG:HG3	2:L:1996:ILE:HG12	1.81	0.61
1:F:1078:ILE:HB	1:F:1338:GLY:CA	2.29	0.61
2:G:325:ALA:HB2	2:G:447:ALA:HB2	1.81	0.61
2:K:2005:PHE:CB	2:K:2010:LEU:HD11	2.30	0.61
2:H:600:VAL:HG13	2:H:601:PRO:CD	2.30	0.61
2:J:583:THR:OG1	2:J:587:GLN:HB2	1.99	0.61
2:G:762:LEU:HD22	2:G:802:TYR:CD2	2.33	0.61
2:G:903:ILE:HD11	2:G:914:TRP:CE2	2.36	0.61
1:C:1149:LEU:HB2	1:F:1149:LEU:HB2	1.83	0.61
2:I:915:PHE:HB2	2:I:1030:PHE:CD1	2.35	0.61
1:B:1078:ILE:HB	1:B:1338:GLY:CA	2.30	0.61
2:J:193:TYR:CD2	2:J:263:ILE:HD13	2.34	0.61
2:H:789:TYR:CE1	2:H:1097:PHE:HB3	2.36	0.61
2:L:1846:ALA:HB3	2:L:1847:LEU:HD12	1.81	0.61
2:J:875:PHE:CD1	2:J:905:LYS:HD3	2.35	0.61
1:B:1095:GLN:O	1:B:1096:LEU:HD23	2.01	0.61
2:G:462:ALA:HB2	2:G:481:LEU:HB2	1.82	0.61
1:B:2:ARG:HD2	1:B:5:VAL:HG21	1.80	0.61
1:E:440:SER:HB3	1:E:481:LEU:HD23	1.80	0.61
1:D:1168:TRP:NE1	1:D:1173:TYR:HE1	1.98	0.61
2:K:317:TRP:O	2:K:321:ARG:HG2	2.00	0.61
2:K:1362:PHE:N	2:K:1363:PRO:HD2	2.15	0.61
1:D:1001:GLU:O	1:D:1007:ASN:HA	2.00	0.61
1:E:1367:LEU:HD22	1:E:1371:MET:HG3	1.80	0.61
1:C:1463:GLU:O	1:C:1467:LEU:HB2	1.99	0.61
1:E:1005:TRP:HE1	1:E:1561:LEU:HD22	1.62	0.61
2:I:580:LEU:HD21	2:I:1095:ILE:HA	1.83	0.61
2:K:612:THR:HG22	2:K:612:THR:O	2.00	0.61
2:I:461:PRO:HD2	2:I:464:SER:OG	2.01	0.61
2:K:382:LEU:HG	2:K:390:VAL:HB	1.82	0.61
2:K:930:THR:CG2	2:K:933:GLU:H	2.13	0.61
2:H:709:LEU:HD23	2:H:709:LEU:H	1.65	0.61
1:D:1107:GLU:HG3	1:D:1108:PRO:HD2	1.82	0.61
1:B:1161:ALA:O	1:B:1163:GLN:HG3	2.00	0.61
1:C:1142:LEU:HD12	1:C:1142:LEU:N	2.14	0.61
1:D:997:THR:CG2	1:D:1361:VAL:HG22	2.30	0.61
2:J:791:TYR:HA	2:J:796:TRP:CD1	2.35	0.61

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:E:1078:ILE:HD13	1:E:1352:MET:HG2	1.81	0.61
1:A:1106:LEU:HD23	1:A:1107:GLU:H	1.65	0.61
2:I:67:ASP:HA	2:I:132:LYS:HE2	1.82	0.61
2:I:600:VAL:HG13	2:I:601:PRO:CD	2.30	0.61
2:H:915:PHE:CD2	2:H:915:PHE:O	2.53	0.61
2:L:462:ALA:HB2	2:L:481:LEU:HB2	1.83	0.61
2:K:1353:GLY:HA2	2:K:1397:THR:HG21	1.82	0.61
2:J:884:PHE:HE2	2:J:1039:GLU:HA	1.65	0.61
2:J:1362:PHE:N	2:J:1363:PRO:HD2	2.14	0.61
2:G:1318:ALA:HA	2:G:1391:VAL:HG21	1.83	0.61
1:B:965:TYR:CZ	1:B:1199:LEU:HD22	2.35	0.61
1:D:1432:ILE:HD11	1:D:1481:GLN:HB3	1.83	0.61
1:C:1389:ILE:HG13	1:F:1268:SER:CB	2.08	0.61
2:G:1299:VAL:CG2	2:G:1301:PHE:HE2	2.14	0.61
2:J:2059:HIS:ND1	2:J:2067:ILE:HG22	2.15	0.61
2:K:818:THR:HA	2:K:829:LYS:HG2	1.81	0.61
2:I:865:ILE:HG21	2:I:867:LYS:HE3	1.83	0.61
2:G:752:HIS:NE2	2:G:856:THR:CG2	2.64	0.61
2:J:251:PRO:HG3	2:J:316:PHE:CA	2.30	0.61
2:H:489:GLU:O	2:H:493:MET:HG3	2.00	0.61
2:G:190:TYR:CD1	2:G:201:ILE:HD13	2.34	0.61
2:L:215:TRP:CE3	2:L:216:ASP:N	2.67	0.61
2:I:1114:GLU:HB3	2:I:1169:TYR:HB3	1.82	0.61
1:E:1463:GLU:O	1:E:1467:LEU:HB2	1.99	0.61
1:B:1032:MET:CE	1:B:1165:PRO:HB3	2.30	0.61
2:G:1123:ALA:HB3	2:G:1126:GLU:HG3	1.82	0.61
1:E:1640:LYS:HG3	1:E:1641:TYR:N	2.15	0.61
2:L:540:ILE:HD13	2:L:557:GLU:HB3	1.82	0.61
2:G:541:LEU:HG	2:G:552:VAL:HG11	1.83	0.61
2:J:1475:LEU:HD23	2:J:1476:ASP:H	1.65	0.61
1:C:1001:GLU:O	1:C:1007:ASN:HA	2.01	0.61
1:F:1078:ILE:HG21	1:F:1352:MET:HE2	1.83	0.61
1:F:1211:LYS:O	1:F:1702:ARG:HD3	1.99	0.61
1:B:989:ASN:N	1:B:1491:ASN:HD21	1.85	0.61
1:C:22:PHE:O	2:I:2010:LEU:HD12	2.00	0.61
2:I:792:LEU:HD23	2:I:1094:HIS:ND1	2.15	0.61
1:F:1005:TRP:HE1	1:F:1561:LEU:HD22	1.65	0.61
2:G:48:LEU:HD13	2:G:83:VAL:HG22	1.83	0.61
2:J:521:VAL:CG1	2:J:549:ASN:HB2	2.31	0.61
1:F:47:ILE:HB	2:L:1694:PHE:HD1	1.65	0.61
2:I:1593:SER:OG	2:I:1596:PHE:HB2	1.99	0.61
1:F:1032:MET:HE2	1:F:1165:PRO:HB3	1.82	0.61

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:J:1370:LEU:HA	2:J:1435:TYR:HE2	1.65	0.61
2:J:1259:LEU:HD23	2:J:1288:PHE:HB2	1.82	0.61
2:L:915:PHE:HB2	2:L:1030:PHE:CD1	2.35	0.61
1:A:31:THR:HG23	2:G:2040:ILE:HG21	1.82	0.61
2:G:594:MET:HB3	2:G:808:ASP:O	2.00	0.61
2:G:626:TYR:N	2:G:656:ARG:HH22	1.99	0.61
2:L:685:VAL:HG23	2:L:1186:ARG:NH1	2.15	0.61
1:C:731:ASP:HB3	1:C:735:GLY:HA3	1.81	0.61
2:H:646:SER:HA	2:H:649:GLU:HG2	1.82	0.61
2:G:459:LYS:HB3	2:G:485:ASP:OD1	2.01	0.61
2:I:521:VAL:CG1	2:I:549:ASN:HB2	2.30	0.61
2:G:674:ILE:HD13	2:G:705:TYR:HE2	1.66	0.61
2:L:705:TYR:HA	2:L:709:LEU:HD21	1.83	0.61
2:L:1519:THR:O	2:L:1520:LYS:HB2	2.01	0.61
2:I:1370:LEU:HA	2:I:1435:TYR:HE2	1.65	0.61
1:B:962:ASN:HD22	2:H:1006:GLN:NE2	1.99	0.61
2:K:783:GLY:HA3	2:K:1075:TYR:CB	2.30	0.61
1:A:926:SER:O	1:A:930:GLN:HG2	2.01	0.61
2:L:67:ASP:HA	2:L:132:LYS:HE2	1.81	0.61
2:K:646:SER:HA	2:K:649:GLU:HG2	1.83	0.61
2:J:766:SER:O	2:J:770:LYS:HG3	2.00	0.61
2:L:1175:MET:HE3	2:L:1192:LEU:HD11	1.82	0.61
2:L:196:PHE:CD2	2:L:266:LYS:HB3	2.35	0.61
2:H:1019:LEU:O	2:H:1022:ARG:HG2	2.00	0.61
2:H:1204:VAL:HG22	2:H:1219:VAL:HG22	1.81	0.61
2:I:2052:LYS:HD3	2:I:2074:TRP:HE1	1.66	0.61
2:L:1985:GLN:HG3	2:L:1986:PRO:CD	2.23	0.61
2:I:595:SER:HB3	2:I:602:PRO:CG	2.28	0.61
2:H:792:LEU:HD23	2:H:1094:HIS:ND1	2.15	0.61
2:G:1679:LEU:O	2:G:1680:GLN:HG3	2.01	0.61
2:H:1517:LEU:HB2	2:H:1521:GLU:HB2	1.81	0.61
2:K:1171:TRP:HB3	2:K:1265:TYR:CE1	2.36	0.61
1:E:999:LEU:HD11	1:E:1575:ASN:HB3	1.81	0.61
2:K:1114:GLU:HB3	2:K:1169:TYR:HB3	1.83	0.61
2:J:1289:TYR:CG	2:J:1370:LEU:HD23	2.35	0.61
2:J:1061:VAL:CG1	2:J:1066:ILE:HD11	2.31	0.61
2:G:2057:GLU:HA	2:G:2060:ARG:NH1	2.16	0.61
2:H:1610:MET:HA	2:H:1610:MET:CE	2.30	0.61
1:B:619:LYS:HG2	1:B:620:LYS:H	1.66	0.61
1:E:619:LYS:HG2	1:E:620:LYS:H	1.64	0.61
2:J:1286:LYS:HZ1	2:J:1367:ASP:HA	1.66	0.61
1:A:557:ARG:CG	1:A:557:ARG:NH1	2.54	0.61

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:I:788:THR:HG22	2:I:1094:HIS:CE1	2.36	0.61
2:H:48:LEU:HD13	2:H:83:VAL:HG22	1.83	0.61
1:E:833:TRP:HH2	1:E:839:ILE:HD11	1.66	0.61
2:I:609:THR:OG1	2:I:610:PRO:HD3	2.00	0.61
2:K:743:TRP:CE2	2:K:761:ILE:HD11	2.36	0.61
2:I:762:LEU:HD22	2:I:802:TYR:CD2	2.31	0.61
2:I:674:ILE:HD13	2:I:705:TYR:HE2	1.65	0.61
1:A:1280:CYS:HB2	1:A:1626:GLY:HA2	1.81	0.61
2:L:964:ARG:O	2:L:967:GLU:HB2	2.00	0.61
2:H:791:TYR:HA	2:H:796:TRP:CD1	2.36	0.61
1:A:1142:LEU:HD12	1:A:1142:LEU:H	1.66	0.61
2:K:1871:VAL:HG21	2:K:2003:VAL:HA	1.83	0.61
2:J:2057:GLU:HA	2:J:2060:ARG:NH1	2.16	0.61
1:D:1078:ILE:HB	1:D:1338:GLY:HA2	1.80	0.61
1:A:397:ARG:NH1	1:A:692:THR:HG21	2.15	0.61
1:E:828:TRP:HE1	1:E:838:THR:HA	1.66	0.61
1:D:767:HIS:NE2	1:D:771:LEU:HD23	2.16	0.61
1:D:1224:SER:HB2	1:D:1307:PHE:O	2.01	0.61
1:F:59:ARG:HD2	2:L:1926:GLN:HE21	1.65	0.61
2:K:937:ARG:NE	2:K:941:LEU:HD11	2.16	0.61
1:C:715:ASN:HD22	1:C:717:GLY:H	1.49	0.61
2:G:1946:LEU:HD22	2:G:1951:ILE:HD13	1.81	0.61
2:H:281:GLY:HA3	2:H:470:TYR:HE1	1.65	0.61
2:H:293:ALA:HA	2:H:469:VAL:HG21	1.83	0.61
2:K:719:GLY:O	2:K:755:GLU:HG3	2.01	0.61
1:C:383:TYR:O	1:C:387:ILE:HG23	2.00	0.61
2:I:1346:MET:HB2	2:I:1427:MET:HE3	1.83	0.60
2:K:1053:ILE:HD11	2:K:1061:VAL:HG13	1.83	0.60
2:G:76:VAL:O	2:G:80:ILE:HG13	2.01	0.60
2:L:613:VAL:HG12	2:L:614:PRO:HD3	1.83	0.60
2:K:743:TRP:CG	2:K:761:ILE:HD11	2.35	0.60
2:J:37:VAL:HG12	2:J:38:PRO:O	2.01	0.60
2:H:521:VAL:CG1	2:H:549:ASN:HB2	2.30	0.60
1:B:439:ARG:HA	1:B:705:ARG:HG2	1.83	0.60
2:I:290:VAL:HG11	2:I:315:LEU:HD13	1.83	0.60
1:E:422:LEU:HB3	1:E:429:ILE:HD11	1.82	0.60
2:J:663:ILE:H	2:J:663:ILE:HD12	1.64	0.60
1:E:1514:ILE:O	1:E:1547:ARG:NH1	2.34	0.60
2:H:884:PHE:HE2	2:H:1039:GLU:HA	1.64	0.60
1:D:1018:GLY:HA2	1:D:1590:ARG:NH2	2.16	0.60
2:L:281:GLY:HA3	2:L:470:TYR:HE1	1.66	0.60
1:A:440:SER:HB3	1:A:481:LEU:HD23	1.82	0.60

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:J:317:TRP:O	2:J:321:ARG:HG2	2.01	0.60
2:J:1619:LEU:O	2:J:1623:TRP:HB2	2.01	0.60
2:I:1362:PHE:N	2:I:1363:PRO:HD2	2.16	0.60
2:J:352:SER:HB2	2:J:433:LEU:HD21	1.83	0.60
2:J:646:SER:HA	2:J:649:GLU:HG2	1.82	0.60
2:G:788:THR:HG22	2:G:1094:HIS:CE1	2.35	0.60
1:C:1273:ILE:CD1	1:F:1630:LYS:HD2	2.30	0.60
1:E:1106:LEU:HD23	1:E:1107:GLU:H	1.66	0.60
2:K:521:VAL:O	2:K:526:VAL:HG21	2.01	0.60
2:K:461:PRO:HD2	2:K:464:SER:OG	2.01	0.60
2:H:251:PRO:HG3	2:H:316:PHE:CA	2.30	0.60
2:H:382:LEU:HG	2:H:390:VAL:HB	1.82	0.60
2:H:705:TYR:HA	2:H:709:LEU:HD21	1.83	0.60
2:H:610:PRO:CD	3:H:2101:FMN:H6	2.31	0.60
2:L:1259:LEU:HD23	2:L:1288:PHE:HB2	1.83	0.60
1:F:1107:GLU:HG3	1:F:1108:PRO:HD2	1.83	0.60
2:G:472:THR:H	2:G:493:MET:HE3	1.65	0.60
2:I:1479:HIS:CD2	2:I:1481:ILE:HG12	2.34	0.60
2:K:331:LEU:C	2:L:1627:ASN:HD21	2.04	0.60
1:E:1078:ILE:HB	1:E:1338:GLY:HA2	1.82	0.60
1:C:926:SER:O	1:C:930:GLN:HG2	2.01	0.60
1:F:1463:GLU:O	1:F:1467:LEU:HB2	2.00	0.60
2:K:281:GLY:HA3	2:K:470:TYR:HE1	1.66	0.60
2:G:1991:ARG:HG3	2:G:1996:ILE:HG12	1.82	0.60
2:H:1346:MET:HB2	2:H:1427:MET:HE3	1.84	0.60
1:A:715:ASN:HD22	1:A:717:GLY:H	1.48	0.60
2:I:979:LEU:HD21	2:I:999:ALA:HB3	1.83	0.60
2:H:352:SER:HB2	2:H:433:LEU:HD21	1.81	0.60
2:I:154:TYR:CE1	2:I:561:ARG:NH1	2.68	0.60
2:H:325:ALA:HB2	2:H:447:ALA:HB2	1.83	0.60
2:I:854:VAL:HG21	2:I:1070:PRO:HA	1.84	0.60
2:G:1008:ILE:HD12	2:G:1013:VAL:HG22	1.83	0.60
2:L:1250:ARG:NH1	2:L:1592:VAL:HG12	2.16	0.60
1:F:1697:LEU:O	1:F:1699:PRO:HD3	2.00	0.60
1:D:731:ASP:HB3	1:D:735:GLY:HA3	1.82	0.60
2:H:300:THR:H	2:H:303:GLU:HB3	1.67	0.60
2:I:789:TYR:CE1	2:I:1097:PHE:HB3	2.36	0.60
2:I:1346:MET:HB2	2:I:1427:MET:CE	2.32	0.60
2:H:1053:ILE:HD12	2:H:1061:VAL:HG22	1.83	0.60
2:I:1804:GLN:HG2	2:I:1865:LEU:HD23	1.83	0.60
2:G:1918:VAL:CG1	2:G:2006:HIS:HB2	2.27	0.60
2:J:752:HIS:NE2	2:J:856:THR:CG2	2.65	0.60

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:I:709:LEU:HD23	2:I:709:LEU:H	1.66	0.60
2:L:250:PHE:HA	2:L:287:GLN:NE2	2.16	0.60
1:B:1142:LEU:N	1:B:1142:LEU:HD12	2.15	0.60
2:I:964:ARG:O	2:I:967:GLU:HB2	2.01	0.60
1:D:905:LEU:HD22	1:D:911:LEU:HD21	1.82	0.60
1:D:905:LEU:HD23	1:D:908:ILE:HD12	1.82	0.60
2:K:1259:LEU:HD23	2:K:1288:PHE:HB2	1.82	0.60
2:L:685:VAL:HG23	2:L:1186:ARG:HH12	1.67	0.60
2:J:854:VAL:HG21	2:J:1070:PRO:HA	1.82	0.60
2:L:293:ALA:HA	2:L:469:VAL:HG21	1.83	0.60
1:C:1505:GLY:O	1:C:1509:THR:HG23	2.01	0.60
1:B:1168:TRP:NE1	1:B:1173:TYR:HE1	1.99	0.60
2:H:818:THR:HA	2:H:829:LYS:HG2	1.84	0.60
2:K:1887:ASN:H	2:K:1994:ALA:HB1	1.65	0.60
2:I:293:ALA:HA	2:I:469:VAL:HG21	1.83	0.60
1:E:553:ARG:NH2	1:E:567:ASN:HD21	1.99	0.60
1:E:1095:GLN:O	1:E:1096:LEU:HD23	2.01	0.60
1:D:553:ARG:NH2	1:D:567:ASN:HD21	1.99	0.60
1:A:1078:ILE:HB	1:A:1338:GLY:HA2	1.82	0.60
1:C:1005:TRP:NE1	1:C:1561:LEU:CD2	2.63	0.60
2:L:37:VAL:HG12	2:L:38:PRO:O	2.01	0.60
2:K:938:MET:HB3	2:K:959:THR:HG22	1.83	0.60
2:K:489:GLU:O	2:K:493:MET:HG3	2.01	0.60
2:I:1764:MET:HB3	2:I:1780:ILE:CD1	2.31	0.60
1:C:552:ILE:HG12	1:D:552:ILE:HD11	1.84	0.60
1:A:1032:MET:HE2	1:A:1165:PRO:HB3	1.82	0.60
2:G:67:ASP:HA	2:G:132:LYS:HE2	1.84	0.60
2:H:2054:TYR:HA	2:H:2057:GLU:OE1	2.01	0.60
1:C:1490:GLY:O	1:C:1509:THR:HB	2.01	0.60
2:G:1593:SER:OG	2:G:1596:PHE:HB2	2.02	0.60
2:H:938:MET:HE2	2:H:959:THR:HG22	1.82	0.60
2:G:1204:VAL:HG22	2:G:1219:VAL:HG22	1.83	0.60
2:G:448:HIS:HD2	2:G:491:VAL:HG12	1.65	0.60
2:I:2044:THR:HG21	2:I:2054:TYR:CZ	2.37	0.60
2:I:766:SER:O	2:I:770:LYS:HG3	2.01	0.60
2:J:1338:ARG:NH2	2:L:327:PRO:N	2.50	0.60
1:A:1211:LYS:O	1:A:1702:ARG:HD3	2.02	0.60
2:J:1097:PHE:HD2	2:J:1100:ARG:HH12	1.49	0.60
2:G:1802:ALA:HB1	2:G:1804:GLN:NE2	2.14	0.60
1:F:1100:VAL:HG21	1:F:1150:ILE:HD12	1.82	0.60
1:A:636:TYR:CZ	1:A:640:LEU:HD22	2.36	0.60
2:J:468:PRO:CD	2:J:479:ARG:HH21	2.13	0.60

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:L:743:TRP:CE2	2:L:761:ILE:HD11	2.36	0.60
2:K:472:THR:HG23	2:K:499:VAL:HA	1.83	0.60
2:L:674:ILE:HD13	2:L:705:TYR:HE2	1.66	0.60
2:I:1610:MET:CE	2:I:1610:MET:HA	2.30	0.60
2:J:608:MET:H	2:J:612:THR:CB	2.15	0.60
2:I:541:LEU:HG	2:I:552:VAL:HG11	1.83	0.60
2:H:1846:ALA:HB3	2:H:1847:LEU:HD12	1.83	0.60
2:K:1741:ASN:HD21	2:K:1798:GLY:HA3	1.65	0.60
1:E:2:ARG:HD2	1:E:5:VAL:HG21	1.82	0.60
2:J:1217:ILE:HD12	2:J:1234:ILE:HD12	1.83	0.60
2:L:938:MET:HE2	2:L:959:THR:HG22	1.81	0.60
1:C:1640:LYS:HG3	1:C:1641:TYR:N	2.17	0.60
1:D:551:LEU:C	1:D:551:LEU:HD23	2.22	0.60
1:E:427:ARG:NH1	1:E:492:ILE:HG12	2.17	0.60
2:J:626:TYR:N	2:J:656:ARG:HH22	1.98	0.60
2:J:1871:VAL:CG2	2:J:2004:PRO:HD3	2.31	0.60
2:H:583:THR:OG1	2:H:587:GLN:HB2	2.01	0.60
2:I:814:SER:HB2	3:I:2101:FMN:O3P	2.00	0.60
2:J:1499:LYS:HD3	2:J:1534:GLU:OE1	2.02	0.60
1:E:1106:LEU:HD13	1:E:1142:LEU:HD13	1.84	0.60
1:B:673:LEU:O	1:B:678:ALA:HB3	2.01	0.60
2:L:290:VAL:HG11	2:L:315:LEU:HD13	1.83	0.60
1:A:682:VAL:HG11	1:A:695:TYR:CE2	2.36	0.60
2:G:448:HIS:HD2	2:G:491:VAL:CG1	2.15	0.60
1:C:408:GLN:HE22	1:C:1609:SER:H	1.49	0.60
1:B:1534:GLU:HG2	1:B:1625:PHE:CE1	2.36	0.60
1:C:1186:VAL:HG23	1:C:1309:ASP:HB2	1.82	0.60
1:A:1113:LYS:O	1:A:1117:GLU:HG3	2.02	0.60
1:D:942:VAL:O	2:J:1536:HIS:HB2	2.02	0.60
2:J:2015:LYS:HB2	2:J:2016:PRO:HD3	1.84	0.60
2:I:1867:MET:O	2:I:2003:VAL:HG21	2.02	0.60
2:G:1468:ARG:NH1	2:G:1468:ARG:CG	2.51	0.60
1:A:487:TYR:CE2	1:A:881:LEU:HD13	2.36	0.60
2:K:1061:VAL:HG12	2:K:1066:ILE:HD11	1.82	0.60
2:L:752:HIS:NE2	2:L:856:THR:HG21	2.17	0.60
2:J:1610:MET:CE	2:J:1610:MET:HA	2.29	0.60
2:H:613:VAL:HG12	2:H:614:PRO:HD3	1.84	0.60
2:H:2032:PRO:C	2:H:2036:ILE:HG13	2.22	0.60
2:G:1694:PHE:HD2	2:G:1843:ALA:HB2	1.66	0.60
2:J:938:MET:HB3	2:J:959:THR:HG22	1.84	0.60
1:B:562:SER:HB3	1:E:551:LEU:CD2	2.31	0.60
1:B:1401:LEU:O	1:B:1401:LEU:HD22	2.01	0.60

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:I:1015:HIS:NE2	2:I:1019:LEU:HD11	2.17	0.60
1:C:1310:PHE:CE1	1:C:1315:SER:HB2	2.37	0.60
2:K:1991:ARG:HG3	2:K:1996:ILE:HG12	1.82	0.60
2:J:979:LEU:HD21	2:J:999:ALA:HB3	1.83	0.60
2:H:1286:LYS:HZ1	2:H:1367:ASP:HA	1.66	0.60
1:A:843:VAL:HG13	1:A:900:ASP:HA	1.83	0.60
2:G:1966:ARG:O	2:G:1970:VAL:HG23	2.01	0.60
1:A:1330:GLU:HG2	1:A:1333:ARG:HH11	1.65	0.60
1:F:1078:ILE:HB	1:F:1338:GLY:HA2	1.83	0.60
2:I:1094:HIS:O	2:I:1098:LEU:HB2	2.02	0.60
2:K:856:THR:HG23	2:K:866:HIS:CD2	2.37	0.60
2:L:911:GLN:NE2	2:L:1065:CYS:H	1.99	0.60
1:E:533:SER:HB2	1:E:612:ILE:HB	1.84	0.60
2:K:661:ASN:HD21	3:K:2101:FMN:HN3	1.49	0.60
2:K:1517:LEU:HB2	2:K:1521:GLU:HB2	1.84	0.60
2:H:1897:GLU:HG2	2:H:1901:GLN:NE2	2.17	0.60
2:G:709:LEU:H	2:G:709:LEU:HD23	1.66	0.60
2:I:382:LEU:HG	2:I:390:VAL:HB	1.83	0.60
2:K:791:TYR:HA	2:K:796:TRP:CD1	2.37	0.60
2:J:607:GLY:HA2	2:J:612:THR:HG21	1.83	0.60
1:E:682:VAL:HG11	1:E:695:TYR:CE2	2.36	0.60
1:C:777:LEU:O	1:C:781:ILE:HG13	2.02	0.60
2:G:352:SER:HB2	2:G:433:LEU:HD21	1.83	0.60
1:E:1483:ALA:HA	1:E:1486:GLN:HE21	1.66	0.60
1:C:433:CYS:O	1:C:437:MET:HG3	2.02	0.60
2:H:1175:MET:HA	2:H:1274:ILE:CD1	2.32	0.60
2:G:1561:ILE:HB	2:G:1655:HIS:HB3	1.82	0.60
2:L:317:TRP:O	2:L:321:ARG:HG2	2.02	0.60
2:L:1574:PRO:HD3	2:L:1611:TYR:CE2	2.37	0.60
2:H:1866:THR:HA	2:H:1869:VAL:HG22	1.84	0.60
2:G:317:TRP:O	2:G:321:ARG:HG2	2.01	0.60
1:F:12:THR:O	1:F:16:GLU:HG2	2.02	0.60
1:E:701:ARG:NH1	1:E:1610:ARG:NH2	2.50	0.60
1:D:430:VAL:O	1:D:434:ILE:HG13	2.01	0.60
2:I:752:HIS:NE2	2:I:856:THR:HG21	2.16	0.60
2:L:779:GLY:O	2:L:780:SER:CB	2.50	0.60
2:G:485:ASP:HB3	2:G:488:PRO:CD	2.31	0.60
2:H:493:MET:HA	2:H:497:ASP:HB2	1.83	0.60
2:H:1521:GLU:OE2	2:H:2028:THR:HG22	2.02	0.60
2:K:1499:LYS:HD3	2:K:1534:GLU:OE1	2.01	0.60
1:C:965:TYR:OH	1:C:1199:LEU:HD22	2.02	0.60
2:H:1499:LYS:HD3	2:H:1534:GLU:OE1	2.01	0.60

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:H:196:PHE:CD2	2:H:266:LYS:HB3	2.37	0.60
2:J:1289:TYR:HB2	2:J:1370:LEU:HD23	1.83	0.60
2:L:448:HIS:HD2	2:L:491:VAL:CG1	2.15	0.60
2:K:1475:LEU:HD23	2:K:1476:ASP:H	1.65	0.60
2:H:1938:THR:O	2:H:1942:VAL:HG23	2.02	0.60
1:A:1448:ALA:HA	1:A:1451:LYS:HD2	1.82	0.60
1:A:1183:VAL:HG11	1:A:1187:THR:HG21	1.83	0.60
2:K:2057:GLU:HA	2:K:2060:ARG:NH1	2.17	0.60
2:I:1848:ALA:HA	2:I:2034:LYS:HD3	1.83	0.60
1:A:29:ILE:HD11	2:G:1922:VAL:C	2.23	0.60
1:E:12:THR:O	1:E:16:GLU:HG2	2.02	0.60
2:I:926:LEU:O	2:I:1008:ILE:HD11	2.02	0.60
2:J:281:GLY:HA3	2:J:470:TYR:HE1	1.67	0.60
1:D:427:ARG:HH12	1:D:492:ILE:CG1	2.12	0.60
1:C:430:VAL:O	1:C:434:ILE:HG13	2.02	0.60
2:G:789:TYR:CE1	2:G:1097:PHE:HB3	2.37	0.60
2:L:1679:LEU:O	2:L:1680:GLN:HG3	2.02	0.60
1:B:1094:LYS:HB3	1:B:1154:LEU:HB2	1.83	0.60
2:L:549:ASN:HD22	2:L:550:THR:N	2.00	0.60
2:I:485:ASP:HB3	2:I:488:PRO:CD	2.30	0.60
2:J:705:TYR:HA	2:J:709:LEU:HD21	1.83	0.60
1:B:1078:ILE:HD13	1:B:1352:MET:HG2	1.84	0.60
2:G:290:VAL:HG11	2:G:315:LEU:HD13	1.83	0.60
1:B:1108:PRO:HG3	1:B:1141:ARG:NE	2.16	0.60
1:C:439:ARG:HA	1:C:705:ARG:HG2	1.84	0.60
1:E:1280:CYS:HB2	1:E:1626:GLY:HA2	1.83	0.60
2:J:857:VAL:HG13	2:J:876:TRP:NE1	2.17	0.60
1:B:767:HIS:NE2	1:B:771:LEU:HD23	2.16	0.60
2:L:1561:ILE:HB	2:L:1655:HIS:HB3	1.83	0.60
2:K:1593:SER:OG	2:K:1596:PHE:HB2	2.02	0.60
2:J:240:THR:O	2:J:244:VAL:HG23	2.02	0.60
1:C:619:LYS:HG2	1:C:620:LYS:H	1.67	0.60
2:G:1750:GLY:O	2:G:1755:LYS:HE3	2.01	0.60
2:H:117:ASN:OD1	2:H:561:ARG:HG3	2.02	0.60
1:E:1164:ILE:CD1	1:E:1355:GLN:HG3	2.32	0.60
1:E:1186:VAL:HG23	1:E:1309:ASP:HB2	1.84	0.60
1:E:1702:ARG:CG	1:E:1702:ARG:NH1	2.52	0.59
2:J:300:THR:H	2:J:303:GLU:HB3	1.66	0.59
2:J:298:ALA:CB	2:J:304:PHE:HA	2.31	0.59
2:L:1374:VAL:CG2	2:L:1436:ARG:HE	2.15	0.59
2:L:1659:ILE:HG13	2:L:1664:ILE:HD11	1.82	0.59
2:K:705:TYR:HA	2:K:709:LEU:HD21	1.84	0.59

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:J:930:THR:CG2	2:J:933:GLU:H	2.15	0.59
2:K:1361:ILE:HG22	2:K:1435:TYR:OH	2.02	0.59
2:H:1203:TYR:O	2:H:1219:VAL:HA	2.02	0.59
1:E:560:LYS:O	1:E:564:LEU:HB2	2.02	0.59
2:H:1475:LEU:HD23	2:H:1476:ASP:H	1.66	0.59
2:G:1362:PHE:N	2:G:1363:PRO:HD2	2.17	0.59
1:F:1432:ILE:HD11	1:F:1481:GLN:HB3	1.84	0.59
2:G:726:GLN:O	2:G:730:ILE:HG12	2.01	0.59
2:K:240:THR:O	2:K:244:VAL:HG23	2.02	0.59
1:F:1078:ILE:HD13	1:F:1352:MET:HG2	1.84	0.59
2:K:1985:GLN:HG3	2:K:1986:PRO:CD	2.27	0.59
2:K:1804:GLN:HG2	2:K:1865:LEU:HD23	1.83	0.59
1:D:1218:VAL:HG13	1:D:1301:VAL:HG13	1.85	0.59
2:K:610:PRO:CD	3:K:2101:FMN:H6	2.32	0.59
2:J:493:MET:HA	2:J:497:ASP:HB2	1.83	0.59
2:L:1223:SER:CB	2:L:1226:ALA:HB3	2.32	0.59
2:G:1833:PHE:CZ	2:G:2039:TYR:HB2	2.35	0.59
1:D:673:LEU:O	1:D:678:ALA:HB3	2.01	0.59
2:G:1370:LEU:HA	2:G:1435:TYR:HE2	1.67	0.59
2:G:1114:GLU:HB3	2:G:1169:TYR:HB3	1.83	0.59
1:F:1534:GLU:HG2	1:F:1625:PHE:CE1	2.38	0.59
2:H:228:LEU:O	2:H:232:HIS:HD2	1.85	0.59
2:L:884:PHE:HE2	2:L:1039:GLU:HA	1.66	0.59
1:E:383:TYR:O	1:E:387:ILE:HG23	2.02	0.59
1:A:535:TYR:CE1	1:F:580:ASN:HB3	2.37	0.59
1:B:907:PHE:O	1:B:909:PRO:HD3	2.02	0.59
2:G:713:HIS:CD2	2:G:740:ILE:HD13	2.37	0.59
2:G:1915:LEU:HD21	2:G:1939:LEU:HD22	1.84	0.59
2:J:529:ASN:HD22	2:J:552:VAL:HG22	1.67	0.59
1:D:1364:THR:HG22	1:D:1366:GLN:H	1.66	0.59
2:K:159:PHE:CZ	2:K:275:LEU:HD21	2.37	0.59
2:L:1887:ASN:H	2:L:1994:ALA:HB1	1.68	0.59
2:G:1239:ASP:OD1	2:G:1240:ASN:N	2.35	0.59
1:C:435:GLN:HG2	1:C:701:ARG:O	2.03	0.59
1:A:1504:ARG:NH1	1:A:1504:ARG:CG	2.52	0.59
1:C:1081:ILE:HA	1:C:1163:GLN:HE22	1.66	0.59
1:E:18:LEU:HD21	2:K:1844:LEU:HD11	1.84	0.59
2:G:172:ILE:HD11	2:G:501:TRP:CZ2	2.35	0.59
2:H:868:LEU:O	2:H:870:THR:HG23	2.03	0.59
2:J:1679:LEU:O	2:J:1680:GLN:HG3	2.02	0.59
1:F:1108:PRO:HG3	1:F:1141:ARG:NE	2.15	0.59
1:C:1107:GLU:HG3	1:C:1108:PRO:HD2	1.85	0.59

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:J:2032:PRO:C	2:J:2036:ILE:HG13	2.23	0.59
1:A:27:ARG:HG3	2:G:2045:ALA:HB2	1.83	0.59
2:H:1888:PRO:HG3	2:H:1900:LEU:HD12	1.83	0.59
2:L:2044:THR:HG21	2:L:2054:TYR:CZ	2.37	0.59
1:D:421:ARG:HH22	1:D:1613:LYS:CG	2.15	0.59
2:G:529:ASN:HD22	2:G:552:VAL:HG22	1.67	0.59
2:G:926:LEU:O	2:G:1008:ILE:HD11	2.03	0.59
2:I:2054:TYR:HA	2:I:2057:GLU:OE1	2.02	0.59
2:I:126:VAL:HG12	2:I:127:ALA:H	1.67	0.59
1:B:970:LEU:HD21	1:B:1658:VAL:HG11	1.84	0.59
2:J:1239:ASP:OD1	2:J:1240:ASN:N	2.35	0.59
1:F:1089:TYR:CE1	1:F:1312:GLU:HG3	2.38	0.59
2:J:2013:GLY:O	2:J:2016:PRO:HD2	2.02	0.59
1:F:22:PHE:HE2	2:L:2017:PHE:CG	2.21	0.59
1:E:532:ILE:HD11	1:E:866:LEU:O	2.01	0.59
2:L:752:HIS:CE1	2:L:847:TYR:HE2	2.19	0.59
2:H:1519:THR:O	2:H:1520:LYS:HB2	1.99	0.59
2:H:612:THR:HG22	2:H:612:THR:O	2.02	0.59
1:B:1081:ILE:HA	1:B:1163:GLN:HE22	1.67	0.59
2:I:1519:THR:O	2:I:1520:LYS:HB2	2.03	0.59
2:J:928:ASP:HA	2:J:1007:LEU:HD23	1.85	0.59
2:L:1499:LYS:HG3	2:L:1500:ASN:N	2.16	0.59
2:I:616:ASP:OD2	2:I:823:HIS:CE1	2.55	0.59
1:F:11:TYR:O	1:F:15:VAL:HG23	2.02	0.59
2:I:876:TRP:CD1	2:I:876:TRP:C	2.76	0.59
2:J:1356:ALA:HB3	2:J:1397:THR:HG22	1.83	0.59
2:G:1361:ILE:HG22	2:G:1435:TYR:OH	2.02	0.59
2:K:1846:ALA:HB3	2:K:1847:LEU:HD12	1.84	0.59
2:I:2057:GLU:HA	2:I:2060:ARG:NH1	2.17	0.59
2:J:1845:VAL:HG21	2:J:1856:LEU:HD22	1.82	0.59
1:F:843:VAL:HG13	1:F:900:ASP:HA	1.85	0.59
2:G:1286:LYS:HZ1	2:G:1367:ASP:HA	1.67	0.59
1:E:498:THR:HG22	1:E:508:TYR:HD1	1.67	0.59
1:A:553:ARG:NH2	1:A:567:ASN:HD21	2.00	0.59
2:I:1175:MET:HA	2:I:1274:ILE:CD1	2.31	0.59
2:H:766:SER:O	2:H:770:LYS:HG3	2.01	0.59
1:C:843:VAL:HG13	1:C:900:ASP:HA	1.84	0.59
1:F:18:LEU:HD21	2:L:1844:LEU:HD11	1.84	0.59
2:K:626:TYR:N	2:K:656:ARG:HH22	2.01	0.59
2:J:501:TRP:NE1	2:J:528:THR:HG22	2.10	0.59
2:J:788:THR:HG22	2:J:1094:HIS:CE1	2.37	0.59
2:I:779:GLY:O	2:I:780:SER:CB	2.49	0.59

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:J:674:ILE:HD13	2:J:705:TYR:HE2	1.65	0.59
2:K:1115:TYR:HB3	2:K:1267:PRO:HB3	1.83	0.59
1:C:47:ILE:HB	2:I:1694:PHE:CD1	2.38	0.59
2:I:1335:PHE:CE1	2:I:1629:ILE:CD1	2.85	0.59
1:B:926:SER:O	1:B:930:GLN:HG2	2.02	0.59
1:D:1161:ALA:O	1:D:1163:GLN:HG3	2.03	0.59
2:I:154:TYR:CZ	2:I:561:ARG:NH1	2.71	0.59
1:E:1183:VAL:HG11	1:E:1187:THR:HG21	1.83	0.59
2:H:854:VAL:HG21	2:H:1070:PRO:HA	1.83	0.59
2:L:1203:TYR:O	2:L:1219:VAL:HA	2.03	0.59
2:H:937:ARG:NE	2:H:941:LEU:HD11	2.18	0.59
1:E:421:ARG:HH22	1:E:1613:LYS:CG	2.14	0.59
2:I:646:SER:HA	2:I:649:GLU:HG2	1.84	0.59
2:L:979:LEU:HD21	2:L:999:ALA:HB3	1.83	0.59
2:K:300:THR:H	2:K:303:GLU:HB3	1.68	0.59
2:G:1290:TYR:CD1	2:G:1299:VAL:HG12	2.37	0.59
1:A:612:ILE:HD11	1:F:579:MET:HB3	1.84	0.59
2:I:856:THR:HA	2:I:865:ILE:O	2.02	0.59
1:D:1363:MET:HE1	1:D:1373:VAL:CG2	2.31	0.59
2:K:762:LEU:HD22	2:K:802:TYR:CD2	2.31	0.59
2:K:903:ILE:HD11	2:K:914:TRP:CE2	2.38	0.59
2:G:331:LEU:HD22	2:G:396:ILE:HG13	1.84	0.59
2:L:876:TRP:CD1	2:L:876:TRP:C	2.76	0.59
1:D:1280:CYS:HB2	1:D:1626:GLY:HA2	1.84	0.59
2:I:1259:LEU:HD23	2:I:1288:PHE:HB2	1.83	0.59
2:L:489:GLU:O	2:L:493:MET:HG3	2.02	0.59
2:G:196:PHE:CD2	2:G:266:LYS:HB3	2.38	0.59
1:B:973:TRP:NE1	1:B:1648:LYS:HB2	2.17	0.59
2:L:796:TRP:CH2	2:L:805:MET:HE1	2.37	0.59
1:E:1307:PHE:HA	1:E:1568:ALA:HB2	1.84	0.59
2:L:1745:LEU:HB3	2:L:1799:LEU:HD22	1.84	0.59
2:L:626:TYR:N	2:L:656:ARG:HH22	2.01	0.59
2:H:934:VAL:O	2:H:938:MET:HG3	2.02	0.59
2:L:938:MET:HB3	2:L:959:THR:HG22	1.84	0.59
2:I:1619:LEU:O	2:I:1623:TRP:HB2	2.03	0.59
1:F:1602:PHE:CD2	1:F:1602:PHE:N	2.70	0.59
2:K:583:THR:OG1	2:K:587:GLN:HB2	2.03	0.59
2:K:1764:MET:HB3	2:K:1780:ILE:CD1	2.32	0.59
2:H:190:TYR:CD1	2:H:201:ILE:HD13	2.33	0.59
2:J:411:PRO:HD2	2:J:414:LEU:CD1	2.32	0.59
2:H:942:MET:CE	2:H:955:LEU:HB3	2.33	0.59
1:E:1336:GLU:O	1:E:1340:MET:HG2	2.01	0.59

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:999:LEU:HD11	1:A:1575:ASN:HB3	1.85	0.59
2:H:77:ALA:O	2:H:139:ALA:HB1	2.02	0.59
1:B:1307:PHE:HA	1:B:1568:ALA:HB2	1.85	0.59
2:L:1833:PHE:CZ	2:L:2039:TYR:HB2	2.37	0.59
2:H:1289:TYR:CG	2:H:1370:LEU:HD23	2.38	0.59
1:C:1493:PHE:CE2	1:C:1509:THR:HG22	2.37	0.59
1:F:811:ASP:HB3	1:F:814:TYR:HB3	1.84	0.59
2:K:926:LEU:O	2:K:1008:ILE:HD11	2.03	0.59
1:B:383:TYR:O	1:B:387:ILE:HG23	2.03	0.59
2:G:228:LEU:O	2:G:232:HIS:HD2	1.84	0.59
2:J:926:LEU:O	2:J:1008:ILE:HD11	2.03	0.59
2:G:1985:GLN:HG3	2:G:1986:PRO:CD	2.25	0.59
2:L:300:THR:H	2:L:303:GLU:HB3	1.67	0.59
1:B:989:ASN:H	1:B:1491:ASN:ND2	1.86	0.59
2:L:515:ASP:HB3	2:L:541:LEU:HD23	1.85	0.59
2:G:1097:PHE:HD2	2:G:1100:ARG:HH12	1.49	0.59
1:D:18:LEU:HD21	2:J:1844:LEU:CD1	2.33	0.59
2:K:779:GLY:HA3	2:K:811:MET:CE	2.33	0.59
2:K:459:LYS:HB3	2:K:485:ASP:OD1	2.03	0.59
2:H:1659:ILE:HG13	2:H:1664:ILE:HD11	1.84	0.59
2:K:616:ASP:OD2	2:K:823:HIS:CE1	2.54	0.59
2:L:1305:LEU:HD12	2:L:1305:LEU:H	1.67	0.59
2:J:2054:TYR:HA	2:J:2057:GLU:OE1	2.02	0.59
2:J:1846:ALA:HB3	2:J:1847:LEU:HD12	1.84	0.59
2:H:1289:TYR:CB	2:H:1370:LEU:HD23	2.32	0.59
2:J:515:ASP:HB3	2:J:541:LEU:HD23	1.84	0.59
1:F:1638:HIS:ND1	1:F:1639:PRO:HD2	2.18	0.59
1:A:1186:VAL:HG23	1:A:1309:ASP:HB2	1.85	0.59
2:J:1976:CYS:O	2:J:1980:THR:HG23	2.03	0.59
1:F:767:HIS:NE2	1:F:771:LEU:HD23	2.17	0.59
1:F:1504:ARG:NH1	1:F:1504:ARG:CG	2.50	0.59
2:J:1594:ARG:NH1	2:J:1594:ARG:CG	2.58	0.59
1:B:435:GLN:HG2	1:B:701:ARG:O	2.02	0.59
2:L:1871:VAL:HG21	2:L:2003:VAL:HA	1.85	0.59
2:G:300:THR:H	2:G:303:GLU:HB3	1.66	0.59
2:G:298:ALA:CB	2:G:304:PHE:HA	2.33	0.59
2:G:580:LEU:HD12	2:G:1103:TYR:CE2	2.37	0.59
2:K:580:LEU:HD12	2:K:1103:TYR:CE2	2.38	0.59
2:H:1721:ARG:HH21	2:H:1853:ILE:HD12	1.67	0.59
2:H:459:LYS:HB3	2:H:485:ASP:OD1	2.02	0.59
2:H:1602:LEU:HD13	2:H:1606:ILE:CD1	2.33	0.59
2:I:251:PRO:CG	2:I:316:PHE:HA	2.31	0.59

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:L:215:TRP:O	2:L:218:VAL:HG22	2.03	0.59
2:J:1324:PHE:HA	2:J:1583:VAL:HG11	1.85	0.59
2:K:1610:MET:CE	2:K:1610:MET:HA	2.33	0.59
1:D:15:VAL:HG11	2:J:2022:LEU:HD21	1.84	0.59
2:I:1938:THR:O	2:I:1942:VAL:HG23	2.02	0.59
1:D:926:SER:O	1:D:930:GLN:HG2	2.03	0.59
2:H:2044:THR:HG21	2:H:2054:TYR:CZ	2.38	0.59
2:L:2054:TYR:HA	2:L:2057:GLU:OE1	2.03	0.59
2:I:1203:TYR:O	2:I:1219:VAL:HA	2.02	0.59
2:H:1833:PHE:CZ	2:H:2039:TYR:HB2	2.38	0.59
1:A:445:LEU:HD11	1:A:481:LEU:HD11	1.84	0.59
2:J:448:HIS:HD2	2:J:491:VAL:HG12	1.67	0.59
2:H:529:ASN:HD22	2:H:552:VAL:HG22	1.67	0.59
1:D:1505:GLY:O	1:D:1509:THR:HG23	2.03	0.59
1:A:1381:MET:HG2	1:A:1382:THR:N	2.15	0.59
1:F:1307:PHE:HA	1:F:1568:ALA:HB2	1.85	0.59
2:K:718:PRO:HG3	2:K:727:VAL:HG21	1.85	0.59
1:F:1703:VAL:HG22	1:F:1712:LYS:C	2.23	0.59
2:I:300:THR:H	2:I:303:GLU:HB3	1.67	0.59
2:L:788:THR:HG22	2:L:1094:HIS:CE1	2.37	0.59
1:D:22:PHE:O	2:J:2006:HIS:HA	2.03	0.59
1:B:1273:ILE:CD1	1:D:1630:LYS:HD2	2.33	0.59
1:A:1218:VAL:HG13	1:A:1301:VAL:HG13	1.84	0.59
2:H:1067:LEU:N	2:H:1067:LEU:HD12	2.18	0.59
1:F:999:LEU:HD21	1:F:1575:ASN:CG	2.24	0.59
1:E:1490:GLY:O	1:E:1509:THR:HB	2.03	0.59
2:L:791:TYR:HA	2:L:796:TRP:CD1	2.37	0.59
1:D:2:ARG:HB2	1:D:5:VAL:HB	1.84	0.59
1:B:30:GLU:HB2	2:H:2045:ALA:CB	2.33	0.59
1:B:445:LEU:HD11	1:B:481:LEU:HD11	1.85	0.59
2:K:1356:ALA:HB3	2:K:1397:THR:HG22	1.83	0.59
2:K:1475:LEU:HD11	2:K:1483:LEU:HD11	1.85	0.59
2:H:317:TRP:O	2:H:321:ARG:HG2	2.03	0.59
1:C:1047:TYR:CZ	1:C:1058:PRO:HB3	2.38	0.59
1:B:1364:THR:HG22	1:B:1366:GLN:H	1.67	0.59
2:G:1475:LEU:HD23	2:G:1476:ASP:H	1.68	0.59
1:B:1001:GLU:O	1:B:1007:ASN:HA	2.03	0.59
2:K:1729:ASN:O	2:K:1757:ILE:HG23	2.03	0.59
2:G:1093:ASP:O	2:G:1097:PHE:HD1	1.85	0.58
2:H:856:THR:HA	2:H:865:ILE:O	2.03	0.58
2:K:827:GLN:NE2	2:K:827:GLN:H	2.00	0.58
2:G:1897:GLU:HG2	2:G:1901:GLN:NE2	2.17	0.58

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:K:1679:LEU:O	2:K:1680:GLN:HG3	2.03	0.58
1:D:827:ARG:NH1	1:D:831:GLU:OE2	2.36	0.58
2:G:779:GLY:O	2:G:780:SER:CB	2.51	0.58
1:A:962:ASN:HB3	2:G:969:ARG:HD2	1.84	0.58
2:I:459:LYS:HB3	2:I:485:ASP:OD1	2.03	0.58
2:L:1466:VAL:O	2:L:1470:LYS:HG2	2.03	0.58
2:L:251:PRO:CG	2:L:316:PHE:HA	2.33	0.58
1:F:905:LEU:HD22	1:F:911:LEU:HD21	1.85	0.58
2:K:215:TRP:CE3	2:K:216:ASP:N	2.68	0.58
1:F:1106:LEU:HD23	1:F:1107:GLU:H	1.68	0.58
1:B:1493:PHE:CE2	1:B:1509:THR:HG22	2.38	0.58
2:I:31:LEU:HD13	2:I:75:LEU:HD21	1.85	0.58
1:A:1108:PRO:HG3	1:A:1141:ARG:NE	2.18	0.58
1:D:1081:ILE:HA	1:D:1163:GLN:HE22	1.68	0.58
2:L:854:VAL:CG2	2:L:1070:PRO:HA	2.33	0.58
2:K:540:ILE:HD13	2:K:557:GLU:HB3	1.85	0.58
2:L:1976:CYS:O	2:L:1980:THR:HG23	2.04	0.58
2:G:126:VAL:HG12	2:G:127:ALA:H	1.68	0.58
1:D:1020:PHE:CE2	1:D:1028:MET:HG3	2.38	0.58
1:F:968:PRO:HD2	1:F:1374:PRO:HB3	1.85	0.58
2:J:1866:THR:HA	2:J:1869:VAL:HG22	1.84	0.58
2:I:1239:ASP:OD1	2:I:1240:ASN:N	2.31	0.58
1:E:1113:LYS:O	1:E:1117:GLU:HG3	2.03	0.58
2:L:352:SER:HB2	2:L:433:LEU:HD21	1.84	0.58
1:F:433:CYS:O	1:F:437:MET:HG3	2.03	0.58
2:K:686:PRO:HG3	2:K:1185:HIS:O	2.02	0.58
2:I:298:ALA:CB	2:I:304:PHE:HA	2.32	0.58
2:K:876:TRP:C	2:K:876:TRP:CD1	2.75	0.58
2:I:1721:ARG:HH21	2:I:1853:ILE:HD12	1.66	0.58
2:J:818:THR:HA	2:J:829:LYS:HG2	1.85	0.58
2:G:1517:LEU:HB2	2:G:1521:GLU:HB2	1.85	0.58
2:I:1499:LYS:HD3	2:I:1534:GLU:OE1	2.03	0.58
2:I:1289:TYR:HB2	2:I:1370:LEU:HD23	1.85	0.58
2:L:472:THR:HG23	2:L:499:VAL:HA	1.85	0.58
2:K:1871:VAL:HG21	2:K:2004:PRO:HD3	1.84	0.58
1:D:43:ARG:NH1	2:J:1687:GLN:NE2	2.50	0.58
1:A:1086:PHE:CE2	1:A:1310:PHE:HD2	2.21	0.58
1:A:551:LEU:HD23	1:A:551:LEU:C	2.24	0.58
2:J:1938:THR:O	2:J:1942:VAL:HG23	2.02	0.58
1:D:1156:PHE:CZ	1:D:1316:TYR:HA	2.38	0.58
2:H:541:LEU:HG	2:H:552:VAL:HG11	1.85	0.58
2:L:1475:LEU:HD23	2:L:1476:ASP:H	1.67	0.58

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:G:1305:LEU:HD12	2:G:1305:LEU:H	1.68	0.58
1:D:970:LEU:HD21	1:D:1658:VAL:HG11	1.84	0.58
2:I:1537:GLY:O	2:I:1539:PRO:HD3	2.02	0.58
1:B:731:ASP:HB3	1:B:735:GLY:HA3	1.85	0.58
2:G:581:VAL:HG11	2:G:1113:ILE:HD11	1.85	0.58
1:C:942:VAL:O	2:I:1536:HIS:HB2	2.04	0.58
1:B:430:VAL:O	1:B:434:ILE:HG13	2.04	0.58
1:D:701:ARG:NH1	1:D:1610:ARG:NH2	2.51	0.58
1:D:435:GLN:HG2	1:D:701:ARG:O	2.03	0.58
1:A:1336:GLU:O	1:A:1340:MET:HG2	2.02	0.58
2:L:1770:ASN:HB2	2:L:1776:LYS:CE	2.30	0.58
2:K:48:LEU:HD13	2:K:83:VAL:HG22	1.85	0.58
2:J:856:THR:HA	2:J:865:ILE:O	2.04	0.58
2:H:779:GLY:HA3	2:H:811:MET:CE	2.34	0.58
2:I:549:ASN:HD22	2:I:550:THR:N	2.00	0.58
2:L:1115:TYR:HB3	2:L:1267:PRO:CB	2.33	0.58
1:F:628:TYR:CZ	1:F:630:LYS:HG2	2.38	0.58
1:C:628:TYR:CZ	1:C:630:LYS:HG2	2.38	0.58
2:G:2032:PRO:C	2:G:2036:ILE:HG13	2.24	0.58
2:K:1888:PRO:HG3	2:K:1900:LEU:HD12	1.85	0.58
2:G:1015:HIS:NE2	2:G:1019:LEU:HD11	2.17	0.58
2:H:1370:LEU:HA	2:H:1435:TYR:HE2	1.68	0.58
2:J:99:LEU:O	2:J:103:LYS:HG3	2.03	0.58
2:I:305:ALA:O	2:I:309:LYS:HD3	2.03	0.58
2:K:117:ASN:OD1	2:K:561:ARG:HG3	2.02	0.58
1:A:619:LYS:HG2	1:A:620:LYS:H	1.69	0.58
1:F:1647:ASP:HB2	1:F:1649:ALA:HB3	1.85	0.58
2:K:1116:PHE:O	2:K:1270:GLY:HA3	2.03	0.58
2:L:794:GLY:O	2:L:804:PRO:HA	2.03	0.58
2:I:1887:ASN:H	2:I:1994:ALA:HB1	1.66	0.58
1:D:12:THR:O	1:D:16:GLU:HG2	2.03	0.58
2:H:1750:GLY:O	2:H:1755:LYS:HE3	2.03	0.58
2:K:1305:LEU:HD23	2:K:1366:ILE:HD11	1.84	0.58
2:L:726:GLN:O	2:L:730:ILE:HG12	2.03	0.58
2:L:374:GLU:CA	2:L:377:HIS:HD2	2.09	0.58
1:B:1148:LEU:HD21	1:D:1150:ILE:HG12	1.85	0.58
2:I:867:LYS:HD3	2:I:1065:CYS:SG	2.43	0.58
2:J:1804:GLN:HG2	2:J:1865:LEU:HD23	1.85	0.58
2:K:1866:THR:HA	2:K:1869:VAL:HG22	1.85	0.58
2:G:856:THR:HG23	2:G:866:HIS:CD2	2.39	0.58
2:G:549:ASN:HD22	2:G:550:THR:N	2.01	0.58
2:H:674:ILE:HD13	2:H:705:TYR:HE2	1.67	0.58

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:E:1037:ASN:CG	1:E:1674:ILE:HG23	2.24	0.58
2:G:376:ARG:CB	2:G:394:PRO:HG2	2.33	0.58
2:H:215:TRP:O	2:H:218:VAL:HG22	2.03	0.58
1:D:1574:LEU:CD1	1:D:1622:VAL:HG11	2.33	0.58
1:D:1443:LEU:HD11	1:D:1470:ARG:HB3	1.84	0.58
2:G:1346:MET:HB2	2:G:1427:MET:CE	2.33	0.58
1:C:445:LEU:HD11	1:C:481:LEU:HD11	1.85	0.58
2:K:1204:VAL:HG22	2:K:1219:VAL:HG22	1.84	0.58
1:F:970:LEU:HD21	1:F:1658:VAL:HG11	1.84	0.58
1:B:715:ASN:HD22	1:B:717:GLY:H	1.51	0.58
1:A:450:TYR:CE1	1:A:1551:ASN:HB2	2.38	0.58
2:L:937:ARG:NE	2:L:941:LEU:HD11	2.18	0.58
2:K:962:PHE:O	2:K:966:VAL:HG23	2.03	0.58
2:H:726:GLN:O	2:H:730:ILE:HG12	2.03	0.58
2:J:1181:PHE:CE1	2:J:1191:PRO:HD2	2.38	0.58
1:C:365:GLN:HG3	1:D:365:GLN:HG3	1.84	0.58
2:L:240:THR:O	2:L:244:VAL:HG23	2.04	0.58
1:B:682:VAL:HG11	1:B:695:TYR:CE2	2.39	0.58
2:H:626:TYR:N	2:H:656:ARG:HH22	2.01	0.58
2:G:1721:ARG:HH21	2:G:1853:ILE:HD12	1.67	0.58
2:K:609:THR:O	2:K:613:VAL:HB	2.03	0.58
2:G:215:TRP:O	2:G:218:VAL:HG22	2.04	0.58
2:L:1361:ILE:HG22	2:L:1435:TYR:OH	2.03	0.58
2:G:1499:LYS:HD3	2:G:1534:GLU:OE1	2.03	0.58
1:A:70:ALA:O	2:I:403:LEU:HD12	2.04	0.58
2:H:1305:LEU:HD11	2:H:1365:LYS:HD2	1.84	0.58
2:J:1888:PRO:HG3	2:J:1900:LEU:HD12	1.84	0.58
1:C:767:HIS:HB2	1:C:813:LEU:HD12	1.85	0.58
2:L:723:ALA:O	2:L:726:GLN:HB2	2.04	0.58
2:J:937:ARG:NE	2:J:941:LEU:HD11	2.19	0.58
1:C:1432:ILE:HD11	1:C:1481:GLN:HB3	1.84	0.58
1:D:983:GLN:HB3	1:D:1418:ILE:HD13	1.85	0.58
2:H:713:HIS:CD2	2:H:740:ILE:HD13	2.38	0.58
1:A:767:HIS:HB2	1:A:813:LEU:HD12	1.84	0.58
1:A:1587:PRO:HA	1:A:1611:SER:OG	2.04	0.58
1:D:1142:LEU:HD12	1:D:1142:LEU:H	1.67	0.58
1:C:1495:ARG:NH1	1:F:992:LYS:HE2	2.17	0.58
2:J:600:VAL:HG22	2:J:601:PRO:HD2	1.84	0.58
2:K:595:SER:CB	2:K:602:PRO:HG3	2.26	0.58
1:B:1703:VAL:HG22	1:B:1712:LYS:C	2.24	0.58
2:G:1896:THR:HG22	2:G:1897:GLU:N	2.17	0.58
2:I:1802:ALA:HB1	2:I:1804:GLN:NE2	2.15	0.58

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:L:661:ASN:HD21	3:L:2101:FMN:HN3	1.50	0.58
2:L:459:LYS:HB3	2:L:485:ASP:OD1	2.04	0.58
2:H:1896:THR:HG22	2:H:1897:GLU:N	2.17	0.58
2:K:472:THR:H	2:K:493:MET:HE3	1.69	0.58
2:I:215:TRP:O	2:I:218:VAL:HG22	2.03	0.58
2:G:1521:GLU:OE2	2:G:2028:THR:CG2	2.51	0.58
2:L:1478:GLN:HG2	2:L:1523:ILE:HG21	1.85	0.58
2:K:331:LEU:HD22	2:K:396:ILE:HG13	1.85	0.58
2:I:1694:PHE:HD2	2:I:1843:ALA:HB2	1.69	0.58
1:E:1493:PHE:HE2	1:E:1509:THR:HG22	1.65	0.58
2:K:663:ILE:HD12	2:K:663:ILE:H	1.69	0.58
1:C:999:LEU:HD11	1:C:1575:ASN:HB3	1.86	0.58
2:I:857:VAL:CG1	2:I:876:TRP:NE1	2.67	0.58
2:J:857:VAL:CG1	2:J:876:TRP:NE1	2.67	0.58
2:I:1053:ILE:HD11	2:I:1061:VAL:HG13	1.85	0.58
1:F:1310:PHE:CE1	1:F:1315:SER:HB2	2.38	0.58
2:H:1015:HIS:NE2	2:H:1019:LEU:HD11	2.18	0.58
2:J:1008:ILE:HD12	2:J:1013:VAL:HG22	1.85	0.58
1:B:335:LEU:HD12	1:B:335:LEU:C	2.24	0.58
2:K:350:MET:HG3	2:K:435:ILE:CG2	2.33	0.58
2:G:1175:MET:HA	2:G:1274:ILE:CD1	2.33	0.58
2:H:384:ASN:HB3	2:H:527:LEU:HD11	1.85	0.58
1:B:1386:THR:HB	1:D:1269:SER:O	2.04	0.58
1:C:970:LEU:HD21	1:C:1658:VAL:HG11	1.85	0.58
1:E:716:GLN:HB3	1:E:769:ILE:HG23	1.85	0.58
2:L:1537:GLY:O	2:L:1539:PRO:HD3	2.03	0.58
2:I:1594:ARG:NH1	2:I:1594:ARG:CG	2.58	0.58
2:I:2052:LYS:HB3	2:I:2074:TRP:CD2	2.39	0.58
1:D:613:PRO:O	1:D:614:PHE:HB2	2.04	0.58
1:F:1081:ILE:HA	1:F:1163:GLN:HE22	1.68	0.58
2:L:298:ALA:CB	2:L:304:PHE:HA	2.33	0.58
2:L:1881:TYR:CB	2:L:2004:PRO:HG3	2.34	0.58
2:K:581:VAL:HG11	2:K:1113:ILE:HD11	1.86	0.58
2:K:857:VAL:CG1	2:K:876:TRP:CD1	2.86	0.58
2:I:705:TYR:HA	2:I:709:LEU:HD21	1.85	0.58
2:K:1519:THR:O	2:K:1520:LYS:HB2	2.04	0.58
1:B:1078:ILE:HB	1:B:1338:GLY:HA2	1.84	0.58
2:H:876:TRP:CD1	2:H:876:TRP:C	2.76	0.58
2:G:493:MET:HA	2:G:497:ASP:HB2	1.85	0.58
2:J:1764:MET:HB3	2:J:1780:ILE:CD1	2.33	0.58
2:I:663:ILE:CD1	2:I:663:ILE:H	2.17	0.58
2:K:1179:GLU:HA	2:K:1190:ASN:CB	2.33	0.58

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:D:445:LEU:HD11	1:D:481:LEU:HD11	1.86	0.58
2:J:1203:TYR:O	2:J:1219:VAL:HA	2.03	0.58
2:L:1750:GLY:O	2:L:1755:LYS:HE3	2.03	0.58
1:C:1323:ALA:HB1	1:C:1351:PHE:HE2	1.68	0.58
1:D:503:ARG:HA	1:D:933:ILE:HD11	1.85	0.58
2:K:2054:TYR:HA	2:K:2057:GLU:OE1	2.04	0.58
1:F:1307:PHE:HB3	1:F:1357:CYS:HB2	1.85	0.58
1:F:715:ASN:HD22	1:F:717:GLY:H	1.52	0.58
1:F:1367:LEU:HD22	1:F:1371:MET:HG3	1.85	0.58
1:E:959:PRO:HB3	2:K:972:SER:HA	1.85	0.58
2:K:228:LEU:O	2:K:232:HIS:HD2	1.87	0.58
1:D:356:LYS:NZ	1:F:1143:ARG:HH21	2.02	0.58
1:D:1647:ASP:HB2	1:D:1649:ALA:HB3	1.85	0.58
2:G:884:PHE:HE2	2:G:1039:GLU:HA	1.69	0.58
2:G:374:GLU:CA	2:G:377:HIS:HD2	2.09	0.58
2:I:1767:GLU:HB2	2:I:2016:PRO:CG	2.20	0.58
1:C:1078:ILE:HB	1:C:1338:GLY:HA2	1.83	0.58
2:L:1007:LEU:HD12	2:L:1007:LEU:N	2.17	0.58
2:I:1679:LEU:O	2:I:1680:GLN:HG3	2.04	0.58
1:E:1426:GLU:HA	1:E:1429:ARG:HB2	1.85	0.58
2:I:1466:VAL:O	2:I:1470:LYS:HG2	2.04	0.58
2:K:37:VAL:HG12	2:K:38:PRO:O	2.03	0.58
2:K:942:MET:HE1	2:K:955:LEU:HB3	1.85	0.58
2:K:942:MET:CE	2:K:955:LEU:HB3	2.33	0.58
2:K:251:PRO:CG	2:K:316:PHE:HA	2.32	0.58
2:L:1586:ASP:OD1	2:L:1588:ASN:HB2	2.03	0.58
2:K:376:ARG:CB	2:K:394:PRO:HG2	2.32	0.58
2:I:916:GLY:C	2:I:929:MET:HE2	2.24	0.58
2:K:709:LEU:H	2:K:709:LEU:HD23	1.68	0.58
1:B:827:ARG:NH1	1:B:831:GLU:OE2	2.37	0.58
1:B:999:LEU:HD11	1:B:1575:ASN:HB3	1.85	0.58
1:B:999:LEU:HD21	1:B:1575:ASN:CG	2.24	0.58
2:H:1259:LEU:HD23	2:H:1288:PHE:HB2	1.86	0.58
2:G:783:GLY:HA3	2:G:1075:TYR:CB	2.32	0.58
1:F:1323:ALA:HB1	1:F:1351:PHE:HE2	1.69	0.58
2:G:1938:THR:O	2:G:1942:VAL:HG23	2.03	0.58
1:A:342:ILE:HD11	1:D:342:ILE:HD11	1.86	0.58
2:I:81:ALA:HB2	2:I:139:ALA:HA	1.85	0.58
2:H:1883:MET:HB2	2:H:2001:ILE:HD12	1.84	0.58
2:J:196:PHE:CD2	2:J:266:LYS:HB3	2.39	0.58
2:I:626:TYR:N	2:I:656:ARG:HH22	2.01	0.58
2:I:462:ALA:HB2	2:I:481:LEU:HB2	1.85	0.58

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:I:37:VAL:HG12	2:I:38:PRO:O	2.03	0.58
2:I:1594:ARG:HH11	2:I:1594:ARG:CG	1.90	0.58
2:I:501:TRP:NE1	2:I:528:THR:CG2	2.64	0.58
2:H:600:VAL:HG22	2:H:601:PRO:HD2	1.85	0.58
2:L:1760:ASN:O	2:L:1764:MET:HG2	2.04	0.58
1:D:1108:PRO:HG3	1:D:1141:ARG:NE	2.16	0.58
2:H:1115:TYR:OH	2:H:1173:HIS:HD2	1.87	0.58
2:K:635:TYR:CB	2:K:641:MET:HG3	2.33	0.58
2:H:1760:ASN:O	2:H:1764:MET:HG2	2.04	0.58
2:H:663:ILE:H	2:H:663:ILE:HD12	1.69	0.58
2:G:2044:THR:HG21	2:G:2054:TYR:CZ	2.38	0.58
1:D:1307:PHE:HA	1:D:1568:ALA:HB2	1.85	0.58
2:L:1204:VAL:HG22	2:L:1219:VAL:HG22	1.85	0.58
2:G:1887:ASN:H	2:G:1994:ALA:HB1	1.68	0.58
2:K:931:TYR:O	2:K:935:VAL:HG12	2.03	0.58
1:A:1534:GLU:HG2	1:A:1625:PHE:CE1	2.38	0.58
2:J:305:ALA:O	2:J:309:LYS:HD3	2.04	0.58
1:B:623:PHE:N	1:B:623:PHE:CD2	2.72	0.58
2:I:540:ILE:HD13	2:I:557:GLU:HB3	1.85	0.58
1:D:524:LYS:HB3	1:D:528:GLU:OE2	2.03	0.58
2:G:876:TRP:CD1	2:G:876:TRP:C	2.77	0.58
1:C:1113:LYS:O	1:C:1117:GLU:HG3	2.04	0.58
2:H:374:GLU:CA	2:H:377:HIS:HD2	2.08	0.58
1:C:1081:ILE:HA	1:C:1163:GLN:NE2	2.19	0.58
2:J:600:VAL:HG13	2:J:601:PRO:CD	2.33	0.58
2:K:2052:LYS:HD3	2:K:2074:TRP:HE1	1.69	0.58
2:I:779:GLY:HA3	2:I:811:MET:CE	2.33	0.58
2:K:1897:GLU:HG2	2:K:1901:GLN:NE2	2.16	0.58
2:J:911:GLN:NE2	2:J:1065:CYS:H	2.02	0.58
2:G:420:PRO:HG3	2:G:847:TYR:CD1	2.38	0.58
1:E:1107:GLU:HG3	1:E:1108:PRO:HD2	1.86	0.58
2:L:1375:HIS:ND1	2:L:1610:MET:HG2	2.18	0.58
2:H:930:THR:HG22	2:H:933:GLU:CG	2.33	0.58
2:G:489:GLU:O	2:G:493:MET:HG3	2.03	0.58
2:G:1375:HIS:CE1	2:G:1610:MET:SD	2.94	0.58
1:E:1094:LYS:HB3	1:E:1154:LEU:HB2	1.86	0.58
2:G:1960:MET:HB3	2:G:1964:ASP:CB	2.34	0.58
1:A:905:LEU:HD23	1:A:908:ILE:HD12	1.85	0.58
2:G:1053:ILE:HD11	2:G:1061:VAL:HG13	1.86	0.58
1:F:1574:LEU:HD12	1:F:1622:VAL:HG11	1.84	0.58
1:E:1310:PHE:CE1	1:E:1315:SER:HB2	2.39	0.58
1:D:1094:LYS:HB3	1:D:1154:LEU:HB2	1.85	0.58

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:C:569:LEU:HD13	1:D:548:VAL:HG23	1.85	0.58
1:A:1179:ILE:O	1:A:1183:VAL:HG23	2.03	0.58
1:F:767:HIS:HB2	1:F:813:LEU:HD12	1.85	0.58
1:B:843:VAL:HG13	1:B:900:ASP:HA	1.84	0.58
2:J:794:GLY:O	2:J:804:PRO:HA	2.03	0.58
2:I:352:SER:HB2	2:I:433:LEU:HD21	1.86	0.58
1:A:961:ALA:HB2	1:A:1022:LEU:HD12	1.85	0.58
1:E:1602:PHE:CD2	1:E:1602:PHE:N	2.72	0.58
1:C:827:ARG:NH1	1:C:831:GLU:OE2	2.36	0.57
2:H:856:THR:HG23	2:H:866:HIS:CD2	2.39	0.57
1:D:1005:TRP:HE1	1:D:1561:LEU:HD22	1.68	0.57
2:G:856:THR:HA	2:G:865:ILE:O	2.04	0.57
2:J:1519:THR:O	2:J:1520:LYS:HB2	2.04	0.57
2:J:1751:GLY:O	2:J:1755:LYS:HG2	2.04	0.57
2:G:1442:TYR:HA	2:G:1445:THR:HG22	1.86	0.57
2:J:459:LYS:HB3	2:J:485:ASP:OD1	2.03	0.57
1:A:1565:PRO:HG3	1:A:1572:TRP:CH2	2.39	0.57
2:J:1171:TRP:HB3	2:J:1265:TYR:CE1	2.39	0.57
2:G:1499:LYS:HG3	2:G:1500:ASN:N	2.18	0.57
2:K:2032:PRO:C	2:K:2036:ILE:HG13	2.24	0.57
2:G:1617:ARG:HB2	2:G:1635:TYR:CZ	2.39	0.57
1:E:1307:PHE:HB3	1:E:1357:CYS:HB2	1.86	0.57
2:G:1289:TYR:HB2	2:G:1370:LEU:HD23	1.86	0.57
2:I:1833:PHE:CZ	2:I:2039:TYR:HB2	2.39	0.57
2:G:1259:LEU:HD23	2:G:1288:PHE:HB2	1.86	0.57
2:G:515:ASP:HB3	2:G:541:LEU:HD23	1.85	0.57
1:A:1421:ARG:HD2	1:A:1489:PHE:O	2.04	0.57
2:G:60:THR:HG22	2:G:62:GLU:H	1.70	0.57
2:K:529:ASN:HD22	2:K:552:VAL:CG2	2.16	0.57
2:H:298:ALA:CB	2:H:304:PHE:HA	2.34	0.57
2:K:298:ALA:CB	2:K:304:PHE:HA	2.33	0.57
1:A:339:GLN:O	1:A:343:ILE:HG13	2.04	0.57
2:L:48:LEU:HD13	2:L:83:VAL:HG22	1.84	0.57
2:H:290:VAL:HG11	2:H:315:LEU:HD13	1.85	0.57
2:K:215:TRP:O	2:K:218:VAL:HG22	2.04	0.57
1:B:1218:VAL:HG13	1:B:1301:VAL:CG1	2.34	0.57
1:B:1310:PHE:CE1	1:B:1315:SER:HB2	2.39	0.57
2:G:1888:PRO:HG3	2:G:1900:LEU:HD12	1.85	0.57
2:K:1370:LEU:HA	2:K:1435:TYR:HE2	1.68	0.57
2:L:930:THR:HG22	2:L:933:GLU:CG	2.34	0.57
2:J:541:LEU:HG	2:J:552:VAL:HG11	1.84	0.57
1:F:60:THR:HG23	2:L:1922:VAL:HG13	1.85	0.57

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:B:1602:PHE:CD2	1:B:1602:PHE:N	2.71	0.57
2:H:1887:ASN:H	2:H:1994:ALA:HB1	1.69	0.57
1:D:397:ARG:NH1	1:D:692:THR:HG21	2.18	0.57
1:A:560:LYS:O	1:A:564:LEU:HB2	2.03	0.57
2:H:134:ILE:HG12	2:H:545:ILE:CD1	2.34	0.57
1:D:383:TYR:O	1:D:387:ILE:HG23	2.04	0.57
2:I:384:ASN:O	2:I:527:LEU:HD21	2.03	0.57
1:A:1005:TRP:HE1	1:A:1561:LEU:HD22	1.69	0.57
2:I:609:THR:O	2:I:613:VAL:HB	2.04	0.57
2:J:1478:GLN:HG2	2:J:1523:ILE:HG21	1.86	0.57
2:K:290:VAL:HG11	2:K:315:LEU:HD13	1.86	0.57
2:H:609:THR:O	2:H:613:VAL:HB	2.04	0.57
2:H:930:THR:HG22	2:H:933:GLU:HG3	1.85	0.57
2:I:1478:GLN:HG2	2:I:1523:ILE:HG21	1.86	0.57
1:E:926:SER:O	1:E:930:GLN:HG2	2.04	0.57
1:B:617:LEU:HD11	1:B:636:TYR:HB2	1.86	0.57
1:A:1514:ILE:O	1:A:1547:ARG:NH1	2.37	0.57
2:J:1114:GLU:HB3	2:J:1169:TYR:HB3	1.84	0.57
2:K:1833:PHE:CZ	2:K:2039:TYR:HB2	2.38	0.57
2:J:854:VAL:CG2	2:J:1070:PRO:HA	2.34	0.57
2:L:1239:ASP:OD1	2:L:1240:ASN:N	2.35	0.57
2:G:775:VAL:O	2:G:777:VAL:HG23	2.04	0.57
2:I:240:THR:O	2:I:244:VAL:HG23	2.04	0.57
2:H:43:PHE:CD2	2:I:22:ARG:CD	2.87	0.57
2:K:2052:LYS:HB3	2:K:2074:TRP:CD2	2.40	0.57
2:H:752:HIS:NE2	2:H:856:THR:CG2	2.66	0.57
2:I:911:GLN:NE2	2:I:1065:CYS:H	2.02	0.57
2:K:1896:THR:HG22	2:K:1897:GLU:N	2.19	0.57
2:G:37:VAL:HG12	2:G:38:PRO:O	2.03	0.57
2:H:743:TRP:CE2	2:H:761:ILE:HD11	2.38	0.57
2:K:1466:VAL:O	2:K:1470:LYS:HG2	2.04	0.57
2:H:549:ASN:HD22	2:H:550:THR:N	2.01	0.57
2:L:709:LEU:HD23	2:L:709:LEU:H	1.69	0.57
2:J:190:TYR:CD1	2:J:201:ILE:HD13	2.35	0.57
1:D:1106:LEU:HD23	1:D:1107:GLU:H	1.68	0.57
2:I:621:THR:HG21	2:I:628:ILE:HD12	1.85	0.57
2:H:942:MET:HE1	2:H:955:LEU:HB3	1.87	0.57
1:B:1280:CYS:HB2	1:B:1626:GLY:HA2	1.85	0.57
2:K:765:TYR:CB	2:K:805:MET:HE3	2.34	0.57
2:K:1499:LYS:HG3	2:K:1500:ASN:N	2.19	0.57
2:G:930:THR:HG22	2:G:933:GLU:CG	2.34	0.57
2:H:1499:LYS:CG	2:H:1500:ASN:N	2.66	0.57

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:F:2:ARG:HB2	1:F:5:VAL:HB	1.86	0.57
2:G:1356:ALA:HB3	2:G:1397:THR:HG22	1.85	0.57
2:I:515:ASP:HB3	2:I:541:LEU:HD23	1.86	0.57
2:H:448:HIS:HD2	2:H:491:VAL:HG12	1.68	0.57
2:L:875:PHE:CD1	2:L:905:LYS:HD3	2.38	0.57
2:H:1976:CYS:O	2:H:1980:THR:HG23	2.04	0.57
1:D:1113:LYS:O	1:D:1117:GLU:HG3	2.04	0.57
1:A:828:TRP:HE1	1:A:838:THR:HA	1.68	0.57
2:L:305:ALA:O	2:L:309:LYS:HD3	2.05	0.57
1:C:340:LEU:HD21	1:D:340:LEU:HD21	1.86	0.57
2:K:884:PHE:HE2	2:K:1039:GLU:HA	1.69	0.57
2:J:1346:MET:HB2	2:J:1427:MET:CE	2.33	0.57
2:I:1178:THR:HG22	2:I:1180:VAL:H	1.70	0.57
2:G:1315:ILE:HD12	2:G:1315:ILE:H	1.69	0.57
2:G:305:ALA:O	2:G:309:LYS:HD3	2.03	0.57
2:K:1706:MET:O	2:K:1709:TYR:HB3	2.03	0.57
2:J:1881:TYR:CG	2:J:2004:PRO:HG3	2.39	0.57
2:H:1679:LEU:O	2:H:1680:GLN:HG3	2.03	0.57
2:G:613:VAL:CG1	2:G:614:PRO:HD3	2.35	0.57
2:K:914:TRP:HE1	2:K:916:GLY:HA3	1.68	0.57
2:H:779:GLY:HA3	2:H:811:MET:HE3	1.86	0.57
2:L:916:GLY:C	2:L:929:MET:HE1	2.25	0.57
1:B:22:PHE:O	2:H:2006:HIS:HA	2.04	0.57
2:G:743:TRP:CG	2:G:761:ILE:HD11	2.39	0.57
2:I:190:TYR:CD1	2:I:201:ILE:HD13	2.37	0.57
2:J:1659:ILE:HG13	2:J:1664:ILE:HD11	1.87	0.57
1:C:47:ILE:HB	2:I:1694:PHE:HD1	1.70	0.57
2:L:2032:PRO:C	2:L:2036:ILE:HG13	2.24	0.57
2:L:1745:LEU:HD12	2:L:1746:THR:N	2.19	0.57
1:A:2:ARG:HB2	1:A:5:VAL:HB	1.86	0.57
1:E:445:LEU:HD11	1:E:481:LEU:HD11	1.86	0.57
2:L:1175:MET:HA	2:L:1274:ILE:CD1	2.34	0.57
2:G:240:THR:O	2:G:244:VAL:HG23	2.04	0.57
1:E:731:ASP:HB3	1:E:735:GLY:HA3	1.87	0.57
1:D:843:VAL:HG13	1:D:900:ASP:HA	1.86	0.57
1:B:421:ARG:HH22	1:B:1613:LYS:HB3	1.70	0.57
1:C:23:ALA:HA	2:I:2007:SER:O	2.05	0.57
1:C:18:LEU:HD21	2:I:1844:LEU:CD1	2.35	0.57
2:I:1871:VAL:HG21	2:I:2003:VAL:HA	1.85	0.57
2:G:501:TRP:NE1	2:G:528:THR:CG2	2.65	0.57
2:H:76:VAL:O	2:H:80:ILE:HG13	2.03	0.57
2:K:76:VAL:O	2:K:80:ILE:HG13	2.05	0.57

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:H:1804:GLN:HG2	2:H:1865:LEU:HD23	1.87	0.57
2:I:661:ASN:HD21	3:I:2101:FMN:HN3	1.52	0.57
2:H:747:ARG:NH1	2:H:780:SER:O	2.37	0.57
2:L:1897:GLU:HG2	2:L:1901:GLN:NE2	2.19	0.57
2:L:1896:THR:HG22	2:L:1897:GLU:N	2.20	0.57
2:I:440:HIS:CD2	2:I:499:VAL:CG2	2.87	0.57
1:F:1565:PRO:HG3	1:F:1572:TRP:CH2	2.40	0.57
1:F:1142:LEU:HD12	1:F:1142:LEU:N	2.20	0.57
1:B:1704:THR:HG23	1:B:1714:PRO:HG3	1.85	0.57
2:H:765:TYR:CB	2:H:805:MET:HE3	2.34	0.57
1:E:1156:PHE:CZ	1:E:1316:TYR:HA	2.40	0.57
1:F:926:SER:O	1:F:930:GLN:HG2	2.03	0.57
1:E:1470:ARG:O	1:E:1474:ILE:HG13	2.05	0.57
2:H:1499:LYS:HG3	2:H:1500:ASN:N	2.17	0.57
2:H:1939:LEU:O	2:H:1943:LEU:HG	2.05	0.57
1:B:1573:MET:HE2	1:B:1622:VAL:HG23	1.86	0.57
1:A:1463:GLU:O	1:A:1467:LEU:HB2	2.04	0.57
1:D:999:LEU:HD11	1:D:1575:ASN:HB3	1.85	0.57
1:E:1032:MET:HE3	1:E:1165:PRO:HB3	1.85	0.57
2:G:1745:LEU:HB3	2:G:1799:LEU:HD22	1.87	0.57
2:K:448:HIS:HD2	2:K:491:VAL:CG1	2.18	0.57
2:I:1130:ILE:HG21	2:I:1155:PRO:HB3	1.86	0.57
2:J:1340:LYS:HE3	2:L:373:PRO:CG	2.34	0.57
1:B:12:THR:O	1:B:16:GLU:HG2	2.04	0.57
2:I:1944:ASN:HA	2:I:1993:PHE:CD1	2.39	0.57
2:H:1309:PHE:CE2	2:H:1360:PRO:HA	2.39	0.57
1:E:1052:ASP:HB3	1:E:1055:THR:O	2.04	0.57
1:B:17:LEU:HD22	2:H:2041:PRO:HB3	1.87	0.57
1:F:619:LYS:HG2	1:F:620:LYS:H	1.69	0.57
1:D:1381:MET:HG2	1:D:1382:THR:N	2.18	0.57
1:A:435:GLN:HG2	1:A:701:ARG:O	2.04	0.57
2:L:747:ARG:NH1	2:L:780:SER:O	2.37	0.57
2:G:610:PRO:CD	3:G:2101:FMN:H6	2.33	0.57
2:I:1764:MET:HG3	2:I:1781:PHE:HE1	1.70	0.57
2:I:489:GLU:O	2:I:493:MET:HG3	2.05	0.57
1:C:1573:MET:HE2	1:C:1622:VAL:HG23	1.85	0.57
2:K:1586:ASP:OD1	2:K:1588:ASN:HB2	2.04	0.57
2:K:726:GLN:O	2:K:730:ILE:HG12	2.04	0.57
2:H:718:PRO:HG3	2:H:727:VAL:HG21	1.87	0.57
1:C:1386:THR:HB	1:F:1269:SER:O	2.04	0.57
2:I:1966:ARG:O	2:I:1970:VAL:HG23	2.04	0.57
1:F:1113:LYS:O	1:F:1117:GLU:HG3	2.05	0.57

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:G:384:ASN:HB3	2:G:527:LEU:HD11	1.85	0.57
2:J:347:PRO:HA	2:J:432:PHE:CD1	2.39	0.57
1:C:1697:LEU:O	1:C:1699:PRO:HD3	2.04	0.57
1:B:1005:TRP:CD1	1:B:1561:LEU:HD22	2.40	0.57
1:E:689:ARG:NH2	1:E:1591:ASN:ND2	2.50	0.57
2:H:911:GLN:NE2	2:H:1065:CYS:H	2.02	0.57
2:G:914:TRP:HE1	2:G:916:GLY:HA3	1.67	0.57
1:F:570:TYR:CE1	1:F:574:ILE:HD11	2.40	0.57
2:I:1007:LEU:N	2:I:1007:LEU:HD12	2.19	0.57
2:G:1478:GLN:HG2	2:G:1523:ILE:HG21	1.87	0.57
1:B:1106:LEU:HD23	1:B:1107:GLU:N	2.20	0.57
2:J:215:TRP:O	2:J:218:VAL:HG22	2.04	0.57
2:G:1499:LYS:CG	2:G:1500:ASN:N	2.67	0.57
2:H:1305:LEU:H	2:H:1305:LEU:HD12	1.69	0.57
1:C:1307:PHE:HB3	1:C:1357:CYS:HB2	1.87	0.57
1:D:1307:PHE:HB3	1:D:1357:CYS:HB2	1.87	0.57
2:J:448:HIS:HD2	2:J:491:VAL:CG1	2.16	0.57
2:G:1192:LEU:HD22	2:G:1196:PHE:HE1	1.70	0.57
2:K:1194:ARG:HD2	2:K:1598:SER:O	2.04	0.57
2:I:794:GLY:O	2:I:804:PRO:HA	2.05	0.57
1:C:1367:LEU:HD22	1:C:1371:MET:HG3	1.86	0.57
2:J:740:ILE:H	2:J:740:ILE:HD12	1.70	0.57
2:J:1343:PHE:CE2	2:J:1388:PRO:HD2	2.38	0.57
1:D:1425:LEU:CD2	1:D:1429:ARG:HH21	2.14	0.57
2:K:68:GLU:HB3	2:K:69:PRO:CD	2.34	0.57
2:L:856:THR:HA	2:L:865:ILE:O	2.05	0.57
2:J:856:THR:HG23	2:J:866:HIS:CD2	2.40	0.57
1:F:628:TYR:CE1	1:F:630:LYS:HG2	2.40	0.57
1:D:70:ALA:HB2	2:L:407:LYS:HZ2	1.68	0.57
1:B:1214:HIS:CD2	1:B:1216:SER:OG	2.56	0.57
2:J:765:TYR:CB	2:J:805:MET:HE3	2.34	0.57
2:H:1694:PHE:HD2	2:H:1843:ALA:HB2	1.69	0.57
1:A:999:LEU:HD21	1:A:1575:ASN:CG	2.24	0.57
2:G:845:ASN:HD21	2:G:849:ARG:HH11	1.52	0.57
2:I:676:LEU:HD23	2:I:679:ARG:HH21	1.70	0.57
2:H:1867:MET:O	2:H:2003:VAL:HG21	2.05	0.57
1:D:1081:ILE:HG13	1:D:1159:LEU:O	2.04	0.57
2:J:1175:MET:HE3	2:J:1192:LEU:HD11	1.86	0.57
1:F:943:VAL:HG23	2:L:1539:PRO:HG3	1.86	0.57
1:C:457:THR:HG22	1:C:464:GLN:HA	1.87	0.57
1:B:968:PRO:HD2	1:B:1374:PRO:HB3	1.87	0.57
2:H:794:GLY:O	2:H:804:PRO:HA	2.04	0.57

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:J:117:ASN:OD1	2:J:561:ARG:HG3	2.05	0.57
2:J:962:PHE:O	2:J:966:VAL:HG23	2.05	0.57
2:J:1745:LEU:HB3	2:J:1799:LEU:CD2	2.35	0.57
1:D:1523:HIS:HB2	1:D:1624:SER:HA	1.85	0.57
2:L:1962:LEU:O	2:L:1966:ARG:HB3	2.05	0.57
2:G:1130:ILE:HG21	2:G:1155:PRO:HB3	1.87	0.57
1:E:1534:GLU:HG2	1:E:1625:PHE:CE1	2.39	0.57
2:L:1883:MET:HB2	2:L:2001:ILE:HD12	1.87	0.57
1:F:430:VAL:O	1:F:434:ILE:HG13	2.04	0.57
1:D:427:ARG:NH1	1:D:492:ILE:HG12	2.16	0.57
2:G:285:HIS:HD2	2:G:501:TRP:CE3	2.22	0.57
2:L:541:LEU:HG	2:L:552:VAL:HG11	1.87	0.57
1:C:1005:TRP:HE1	1:C:1561:LEU:HD22	1.66	0.57
2:K:1617:ARG:HB2	2:K:1635:TYR:CZ	2.40	0.57
2:G:68:GLU:HB3	2:G:69:PRO:CD	2.34	0.57
2:H:486:ILE:O	2:H:490:LEU:HG	2.04	0.57
2:G:440:HIS:HD2	2:G:497:ASP:O	1.87	0.57
1:D:1573:MET:HE2	1:D:1622:VAL:HG23	1.86	0.57
2:K:1223:SER:CB	2:K:1226:ALA:HB3	2.34	0.57
2:J:857:VAL:HG13	2:J:876:TRP:HE1	1.70	0.57
1:B:2:ARG:HB2	1:B:5:VAL:HB	1.85	0.57
1:C:88:ILE:HG21	2:I:1821:MET:HE1	1.87	0.57
1:F:383:TYR:O	1:F:387:ILE:HG23	2.04	0.57
1:A:731:ASP:HB3	1:A:735:GLY:HA3	1.87	0.57
2:H:540:ILE:HD13	2:H:557:GLU:HB3	1.87	0.57
2:J:1887:ASN:H	2:J:1994:ALA:HB1	1.69	0.57
1:D:408:GLN:HE22	1:D:1609:SER:H	1.51	0.57
2:L:1217:ILE:HD12	2:L:1234:ILE:HD12	1.87	0.57
1:C:1269:SER:O	1:F:1386:THR:HB	2.05	0.57
2:J:540:ILE:HD13	2:J:557:GLU:HB3	1.86	0.57
2:K:1845:VAL:HG21	2:K:1856:LEU:HD22	1.86	0.57
1:B:35:ILE:HD13	2:H:1691:ALA:HB1	1.87	0.57
2:K:1820:ASP:O	2:K:1823:SER:HB3	2.05	0.57
1:E:1079:ARG:CG	1:E:1079:ARG:NH1	2.66	0.56
1:E:1214:HIS:CD2	1:E:1216:SER:OG	2.57	0.56
2:K:1299:VAL:CG2	2:K:1301:PHE:CE2	2.87	0.56
2:L:1804:GLN:HG2	2:L:1865:LEU:HD23	1.85	0.56
2:I:608:MET:H	2:I:612:THR:CB	2.18	0.56
1:D:1367:LEU:HD22	1:D:1371:MET:HG3	1.87	0.56
2:J:661:ASN:HD21	3:J:2101:FMN:HN3	1.52	0.56
2:H:743:TRP:CG	2:H:761:ILE:HD11	2.40	0.56
2:K:485:ASP:HB3	2:K:488:PRO:CD	2.33	0.56

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:H:472:THR:H	2:H:493:MET:HE3	1.70	0.56
2:L:1288:PHE:CE2	2:L:1292:VAL:HG21	2.40	0.56
1:A:1565:PRO:O	1:A:1566:LYS:C	2.43	0.56
2:K:1659:ILE:HG13	2:K:1664:ILE:HD11	1.86	0.56
2:L:1499:LYS:CG	2:L:1500:ASN:N	2.67	0.56
2:J:934:VAL:O	2:J:938:MET:HG3	2.05	0.56
2:G:1061:VAL:HG12	2:G:1066:ILE:HD11	1.86	0.56
1:C:1156:PHE:CZ	1:C:1316:TYR:HA	2.39	0.56
2:K:1726:PHE:CZ	2:K:1857:VAL:HB	2.40	0.56
2:I:1475:LEU:HD11	2:I:1483:LEU:HD11	1.87	0.56
2:K:2044:THR:HG21	2:K:2054:TYR:CZ	2.39	0.56
2:H:515:ASP:HB3	2:H:541:LEU:HD23	1.87	0.56
1:E:1536:ASP:N	1:E:1602:PHE:HE1	2.02	0.56
2:I:884:PHE:HE2	2:I:1039:GLU:HA	1.70	0.56
1:F:332:GLN:O	1:F:335:LEU:HB3	2.05	0.56
2:J:158:LEU:HD22	2:J:169:ILE:HD11	1.87	0.56
1:C:1381:MET:HG2	1:C:1382:THR:N	2.19	0.56
2:J:917:ARG:HD3	2:J:921:GLY:O	2.05	0.56
1:E:1504:ARG:CG	1:E:1504:ARG:NH1	2.51	0.56
2:J:623:ASN:OD1	2:J:653:PRO:HD3	2.05	0.56
2:H:1985:GLN:HG3	2:H:1986:PRO:CD	2.30	0.56
2:J:580:LEU:HD12	2:J:1103:TYR:CE2	2.39	0.56
2:K:613:VAL:CG1	2:K:614:PRO:HD3	2.35	0.56
2:I:1602:LEU:HD13	2:I:1606:ILE:CD1	2.35	0.56
2:J:485:ASP:HB3	2:J:488:PRO:CD	2.32	0.56
2:I:250:PHE:CB	2:I:251:PRO:HD3	2.35	0.56
2:I:791:TYR:HA	2:I:796:TRP:CD1	2.40	0.56
2:I:440:HIS:CD2	2:I:499:VAL:HG23	2.40	0.56
1:A:1094:LYS:HB3	1:A:1154:LEU:HB2	1.86	0.56
2:J:663:ILE:CD1	2:J:663:ILE:H	2.18	0.56
1:E:1363:MET:HE3	1:E:1368:ALA:HA	1.87	0.56
2:L:1939:LEU:O	2:L:1943:LEU:HG	2.06	0.56
1:C:689:ARG:CZ	1:C:1339:GLU:HG2	2.35	0.56
2:K:1324:PHE:N	2:K:1583:VAL:HG11	2.21	0.56
2:L:1888:PRO:HB3	2:L:1895:PHE:CD1	2.38	0.56
2:G:1745:LEU:HD12	2:G:1746:THR:N	2.20	0.56
1:C:767:HIS:NE2	1:C:771:LEU:HD23	2.20	0.56
1:F:1224:SER:HB2	1:F:1307:PHE:O	2.05	0.56
1:F:1640:LYS:HG3	1:F:1641:TYR:N	2.20	0.56
1:F:965:TYR:CZ	1:F:1199:LEU:HD22	2.40	0.56
1:C:1602:PHE:CD2	1:C:1602:PHE:N	2.72	0.56
1:D:498:THR:HG22	1:D:508:TYR:HD1	1.70	0.56

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:H:1181:PHE:CE1	2:H:1191:PRO:HD2	2.39	0.56
2:L:1130:ILE:HG21	2:L:1155:PRO:HB3	1.87	0.56
2:J:726:GLN:O	2:J:730:ILE:HG12	2.04	0.56
2:H:126:VAL:HG12	2:H:127:ALA:H	1.70	0.56
2:L:1944:ASN:HA	2:L:1993:PHE:CD1	2.40	0.56
2:L:719:GLY:O	2:L:755:GLU:HG3	2.06	0.56
2:G:2052:LYS:HB3	2:G:2074:TRP:CD2	2.41	0.56
2:K:2052:LYS:H	2:K:2052:LYS:CE	2.09	0.56
2:G:600:VAL:HG13	2:G:601:PRO:CD	2.35	0.56
1:E:1005:TRP:CD1	1:E:1561:LEU:HD22	2.40	0.56
2:H:580:LEU:HD12	2:H:1103:TYR:CE2	2.41	0.56
2:K:190:TYR:HE1	2:K:201:ILE:HG21	1.70	0.56
1:F:487:TYR:CE2	1:F:881:LEU:HD13	2.39	0.56
2:H:24:LEU:HD11	2:H:45:ALA:HB1	1.87	0.56
2:K:934:VAL:O	2:K:938:MET:HG3	2.05	0.56
1:E:998:GLY:CA	1:E:1361:VAL:HG13	2.34	0.56
2:I:215:TRP:CE3	2:I:216:ASP:N	2.67	0.56
2:H:661:ASN:HD21	3:H:2101:FMN:HN3	1.52	0.56
1:C:1663:LYS:HG2	2:I:1007:LEU:HD11	1.88	0.56
1:A:1565:PRO:O	1:A:1567:GLY:N	2.37	0.56
2:G:1764:MET:HB3	2:G:1780:ILE:CD1	2.34	0.56
2:H:1335:PHE:CE1	2:H:1629:ILE:HD11	2.40	0.56
2:I:1179:GLU:HA	2:I:1190:ASN:CB	2.35	0.56
1:C:1565:PRO:HG3	1:C:1572:TRP:CH2	2.40	0.56
1:C:1444:GLN:OE1	1:C:1444:GLN:HA	2.05	0.56
2:L:493:MET:HA	2:L:497:ASP:HB2	1.87	0.56
2:H:1223:SER:CB	2:H:1226:ALA:HB3	2.34	0.56
1:E:47:ILE:HB	2:K:1694:PHE:CD1	2.40	0.56
1:A:1307:PHE:HA	1:A:1568:ALA:HB2	1.87	0.56
1:E:1218:VAL:HG13	1:E:1301:VAL:CG1	2.36	0.56
2:H:1008:ILE:HD12	2:H:1013:VAL:HG22	1.85	0.56
2:L:1977:ARG:HD2	2:L:1978:LYS:HG3	1.88	0.56
2:H:1475:LEU:HD11	2:H:1483:LEU:HD11	1.87	0.56
1:A:535:TYR:HB2	1:F:576:ALA:HA	1.87	0.56
2:I:1192:LEU:HD22	2:I:1196:PHE:HE1	1.71	0.56
2:J:144:ARG:HH21	2:J:151:PRO:HA	1.70	0.56
2:G:1393:ASP:HB3	2:G:1395:LEU:HD21	1.87	0.56
1:C:498:THR:HG21	1:C:858:LEU:O	2.05	0.56
2:L:21:LEU:HD22	2:L:36:LEU:HD22	1.87	0.56
2:I:931:TYR:O	2:I:935:VAL:HG12	2.05	0.56
2:I:1915:LEU:HB2	2:I:1935:ALA:HB1	1.85	0.56
1:C:726:VAL:HG21	1:C:780:ALA:HB3	1.87	0.56

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:C:1638:HIS:ND1	1:C:1639:PRO:HD2	2.19	0.56
1:B:498:THR:HG21	1:B:858:LEU:O	2.06	0.56
2:G:347:PRO:HA	2:G:432:PHE:CD1	2.40	0.56
2:H:1351:VAL:HG23	2:H:1584:SER:HA	1.87	0.56
2:G:281:GLY:HA3	2:G:470:TYR:HE1	1.71	0.56
2:H:1726:PHE:CZ	2:H:1857:VAL:HB	2.40	0.56
2:J:1622:THR:HG23	2:J:1627:ASN:OD1	2.04	0.56
1:F:1081:ILE:HG13	1:F:1159:LEU:O	2.05	0.56
1:D:962:ASN:HD22	2:J:1006:GLN:NE2	2.04	0.56
2:I:580:LEU:HD12	2:I:1103:TYR:CE2	2.41	0.56
2:L:1346:MET:HB2	2:L:1427:MET:CE	2.35	0.56
2:L:1866:THR:HA	2:L:1869:VAL:CG2	2.35	0.56
2:L:855:ILE:HB	2:L:869:ALA:HB2	1.87	0.56
2:L:68:GLU:HB3	2:L:69:PRO:CD	2.36	0.56
2:K:250:PHE:CB	2:K:251:PRO:HD3	2.35	0.56
1:E:935:GLU:HG3	2:K:1466:VAL:HG11	1.87	0.56
2:I:1374:VAL:CG2	2:I:1436:ARG:HE	2.18	0.56
2:H:1374:VAL:CG2	2:H:1436:ARG:HE	2.19	0.56
2:H:250:PHE:CB	2:H:251:PRO:HD3	2.36	0.56
2:H:472:THR:HG23	2:H:499:VAL:HA	1.87	0.56
1:D:1565:PRO:HG3	1:D:1572:TRP:CH2	2.40	0.56
1:B:1565:PRO:O	1:B:1567:GLY:N	2.38	0.56
2:I:1499:LYS:HG3	2:I:1500:ASN:N	2.20	0.56
1:C:1280:CYS:HB2	1:C:1626:GLY:HA2	1.87	0.56
2:I:1375:HIS:HE1	2:I:1610:MET:SD	2.28	0.56
1:D:47:ILE:HD12	2:J:1818:PHE:HD1	1.69	0.56
2:I:1171:TRP:HB3	2:I:1265:TYR:CE1	2.40	0.56
2:H:616:ASP:OD2	2:H:823:HIS:CE1	2.58	0.56
1:D:1078:ILE:HD13	1:D:1352:MET:HG2	1.86	0.56
2:I:1866:THR:HA	2:I:1869:VAL:CG2	2.36	0.56
2:G:652:ILE:HG23	2:G:653:PRO:HD2	1.87	0.56
2:G:718:PRO:HG3	2:G:727:VAL:HG21	1.87	0.56
1:A:767:HIS:NE2	1:A:771:LEU:HD23	2.21	0.56
1:B:1483:ALA:HA	1:B:1486:GLN:HE21	1.71	0.56
2:H:118:ASP:OD2	2:H:559:PHE:HB2	2.06	0.56
1:A:1480:ARG:NH2	1:E:1488:SER:O	2.39	0.56
2:J:931:TYR:O	2:J:935:VAL:HG12	2.05	0.56
1:C:623:PHE:CD2	1:C:623:PHE:N	2.73	0.56
1:B:365:GLN:HG3	1:E:365:GLN:HG3	1.88	0.56
2:L:2052:LYS:HD3	2:L:2074:TRP:HE1	1.67	0.56
2:I:501:TRP:HZ2	2:I:528:THR:HG21	1.71	0.56
2:L:580:LEU:HD12	2:L:1103:TYR:CE2	2.40	0.56

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:L:606:ALA:HB2	2:L:811:MET:CG	2.35	0.56
2:G:855:ILE:HB	2:G:869:ALA:HB2	1.87	0.56
2:J:1897:GLU:HG2	2:J:1901:GLN:NE2	2.18	0.56
1:E:1142:LEU:H	1:E:1142:LEU:HD12	1.70	0.56
2:G:938:MET:HB3	2:G:959:THR:HG22	1.88	0.56
2:G:1866:THR:HA	2:G:1869:VAL:HG22	1.86	0.56
2:L:1960:MET:HB3	2:L:1964:ASP:CB	2.35	0.56
2:K:845:ASN:HD21	2:K:849:ARG:HH11	1.53	0.56
2:K:1694:PHE:HD2	2:K:1843:ALA:HB2	1.70	0.56
1:E:999:LEU:HD21	1:E:1575:ASN:CG	2.25	0.56
1:C:999:LEU:HD21	1:C:1575:ASN:CG	2.25	0.56
2:I:857:VAL:HG13	2:I:876:TRP:HE1	1.70	0.56
2:J:783:GLY:HA3	2:J:1075:TYR:CB	2.36	0.56
1:E:551:LEU:C	1:E:551:LEU:HD23	2.25	0.56
2:K:1938:THR:O	2:K:1942:VAL:HG23	2.05	0.56
2:K:1977:ARG:HD2	2:K:1978:LYS:HG3	1.88	0.56
2:J:1586:ASP:OD1	2:J:1588:ASN:HB2	2.06	0.56
2:G:1203:TYR:O	2:G:1219:VAL:HA	2.05	0.56
2:K:1008:ILE:HD12	2:K:1013:VAL:HG22	1.87	0.56
1:F:621:ASP:CB	1:F:625:ASN:HB2	2.36	0.56
2:L:1181:PHE:CE1	2:L:1191:PRO:HD2	2.40	0.56
1:A:433:CYS:O	1:A:437:MET:HG3	2.06	0.56
2:H:186:LEU:HG	2:H:256:VAL:HG22	1.88	0.56
1:A:1388:LYS:HD3	1:E:1692:GLN:HE22	1.70	0.56
2:G:1402:ASN:ND2	2:G:1416:CYS:HB2	2.20	0.56
1:D:1336:GLU:O	1:D:1340:MET:HG2	2.05	0.56
1:A:18:LEU:HD21	2:G:1844:LEU:HD11	1.88	0.56
2:K:1097:PHE:HD2	2:K:1100:ARG:HH12	1.52	0.56
2:L:868:LEU:O	2:L:870:THR:HG23	2.06	0.56
2:H:37:VAL:HG12	2:H:38:PRO:O	2.05	0.56
2:G:661:ASN:HD21	3:G:2101:FMN:HN3	1.51	0.56
2:K:31:LEU:HD13	2:K:75:LEU:HD21	1.88	0.56
2:K:1328:VAL:HA	2:K:1611:TYR:CE1	2.38	0.56
1:C:1094:LYS:HB3	1:C:1154:LEU:HB2	1.87	0.56
2:H:854:VAL:CG2	2:H:1070:PRO:HA	2.35	0.56
1:D:1493:PHE:CE2	1:D:1509:THR:HG22	2.40	0.56
2:K:1305:LEU:H	2:K:1305:LEU:HD12	1.69	0.56
1:A:1523:HIS:HB2	1:A:1624:SER:HA	1.88	0.56
2:I:1217:ILE:HD12	2:I:1234:ILE:HD12	1.87	0.56
1:D:415:TYR:O	1:D:419:PHE:HD1	1.88	0.56
1:A:1483:ALA:HA	1:A:1486:GLN:HE21	1.69	0.56
1:A:1052:ASP:HB3	1:A:1055:THR:O	2.05	0.56

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:F:1168:TRP:NE1	1:F:1173:TYR:HE1	2.04	0.56
2:I:374:GLU:CA	2:I:377:HIS:HD2	2.08	0.56
2:H:285:HIS:HD2	2:H:501:TRP:CE3	2.24	0.56
2:L:1346:MET:HB2	2:L:1427:MET:HE3	1.88	0.56
1:C:1426:GLU:HA	1:C:1429:ARG:HB2	1.88	0.56
2:G:2059:HIS:ND1	2:G:2067:ILE:HG22	2.20	0.56
2:H:779:GLY:O	2:H:780:SER:CB	2.52	0.56
2:K:1516:GLU:HA	2:K:1521:GLU:O	2.06	0.56
1:C:1106:LEU:HD23	1:C:1107:GLU:H	1.68	0.56
2:G:251:PRO:HG3	2:G:316:PHE:CA	2.33	0.56
2:H:411:PRO:HD2	2:H:414:LEU:CD1	2.36	0.56
2:H:376:ARG:CB	2:H:394:PRO:HG2	2.35	0.56
2:K:186:LEU:HG	2:K:256:VAL:HG22	1.87	0.56
2:K:1436:ARG:HH22	2:K:1602:LEU:HD21	1.70	0.56
2:J:215:TRP:CE3	2:J:216:ASP:N	2.68	0.56
1:C:1230:SER:HA	1:C:1311:GLN:NE2	2.20	0.56
2:H:1093:ASP:O	2:H:1097:PHE:CD1	2.59	0.56
2:I:600:VAL:HG22	2:I:601:PRO:HD2	1.87	0.56
1:F:1443:LEU:HD11	1:F:1470:ARG:HB3	1.87	0.56
2:G:1475:LEU:HD11	2:G:1483:LEU:HD11	1.87	0.56
2:G:1217:ILE:HD12	2:G:1234:ILE:HD12	1.88	0.56
2:L:1309:PHE:CE2	2:L:1360:PRO:HA	2.40	0.56
2:I:962:PHE:O	2:I:966:VAL:HG23	2.06	0.56
2:I:1976:CYS:O	2:I:1980:THR:HG23	2.05	0.56
1:C:415:TYR:CD2	1:C:1614:THR:HA	2.40	0.56
2:L:713:HIS:CD2	2:L:740:ILE:HD13	2.41	0.56
2:H:1537:GLY:O	2:H:1539:PRO:HD3	2.06	0.56
2:I:924:VAL:HG12	2:I:925:ASP:H	1.70	0.56
1:D:1602:PHE:CD2	1:D:1602:PHE:N	2.74	0.56
1:F:682:VAL:HG11	1:F:695:TYR:CE2	2.40	0.56
2:G:1883:MET:HB2	2:G:2001:ILE:HD12	1.87	0.56
1:D:651:GLN:HA	1:D:677:GLY:HA3	1.87	0.56
1:E:701:ARG:NH1	1:E:1610:ARG:HH21	2.04	0.56
2:J:1299:VAL:CG2	2:J:1301:PHE:CE2	2.87	0.56
2:K:1290:TYR:CD1	2:K:1299:VAL:HG12	2.41	0.56
2:J:1721:ARG:HH21	2:J:1853:ILE:HD12	1.69	0.56
2:L:779:GLY:HA3	2:L:811:MET:HE3	1.87	0.56
2:G:606:ALA:HB2	2:G:811:MET:CG	2.36	0.56
1:D:855:ALA:HA	1:D:919:ARG:NH2	2.18	0.56
2:L:743:TRP:CG	2:L:761:ILE:HD11	2.40	0.56
2:J:709:LEU:HD23	2:J:709:LEU:H	1.71	0.56
2:G:1659:ILE:HG13	2:G:1664:ILE:HD11	1.88	0.56

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:C:1106:LEU:HD23	1:C:1107:GLU:N	2.21	0.56
2:G:1519:THR:O	2:G:1520:LYS:HB2	2.05	0.56
1:C:2:ARG:HB2	1:C:5:VAL:HB	1.88	0.56
2:G:935:VAL:HG11	2:G:997:LEU:HD21	1.87	0.56
2:H:1375:HIS:HE1	2:H:1610:MET:SD	2.28	0.56
2:K:1203:TYR:O	2:K:1219:VAL:HA	2.06	0.56
1:C:968:PRO:HD2	1:C:1374:PRO:HB3	1.88	0.56
2:G:540:ILE:HD13	2:G:557:GLU:HB3	1.87	0.56
2:K:2073:ASN:O	2:K:2076:LYS:HB3	2.05	0.56
1:A:994:VAL:HG21	1:A:1291:TYR:CD1	2.41	0.56
2:J:1706:MET:O	2:J:1709:TYR:HB3	2.06	0.56
2:L:636:TYR:HD1	2:L:636:TYR:N	2.04	0.56
1:B:1580:VAL:HG22	1:B:1585:ILE:O	2.06	0.56
2:G:1309:PHE:CE2	2:G:1360:PRO:HA	2.41	0.56
1:C:1610:ARG:HH11	1:C:1610:ARG:CG	1.97	0.56
2:J:595:SER:CB	2:J:602:PRO:HG3	2.27	0.56
2:G:327:PRO:CD	2:H:1338:ARG:NH2	2.64	0.56
1:B:1426:GLU:HA	1:B:1429:ARG:HB2	1.87	0.56
2:K:856:THR:HA	2:K:865:ILE:O	2.06	0.56
1:A:883:LEU:N	1:A:883:LEU:HD23	2.20	0.56
2:I:1896:THR:HG22	2:I:1897:GLU:N	2.21	0.56
2:J:1374:VAL:CG2	2:J:1436:ARG:HE	2.19	0.56
2:I:1586:ASP:OD1	2:I:1588:ASN:HB2	2.06	0.56
1:B:1470:ARG:O	1:B:1474:ILE:HG13	2.06	0.56
2:J:135:GLY:HA2	2:J:138:ARG:NH1	2.21	0.56
2:L:1179:GLU:HA	2:L:1190:ASN:CB	2.36	0.56
2:G:928:ASP:HA	2:G:1007:LEU:HD23	1.88	0.56
1:A:1470:ARG:O	1:A:1474:ILE:HG13	2.05	0.56
2:L:636:TYR:CD1	2:L:636:TYR:N	2.74	0.56
2:G:350:MET:CE	2:G:435:ILE:HD12	2.36	0.56
1:A:995:VAL:HG13	1:A:1375:ILE:HG23	1.87	0.56
1:C:397:ARG:NH1	1:C:692:THR:HG21	2.20	0.56
2:J:1411:LYS:O	2:J:1434:LEU:HD12	2.06	0.56
1:E:1523:HIS:HB2	1:E:1624:SER:HA	1.88	0.56
1:F:1483:ALA:HA	1:F:1486:GLN:HE21	1.70	0.56
2:J:1510:ILE:HA	2:J:1528:VAL:O	2.06	0.56
1:F:88:ILE:HG21	2:L:1821:MET:HE1	1.86	0.56
1:E:1161:ALA:O	1:E:1163:GLN:HG3	2.06	0.56
1:B:1113:LYS:O	1:B:1117:GLU:HG3	2.06	0.56
1:E:1394:PRO:HB3	1:E:1627:PHE:CE2	2.41	0.56
2:I:1393:ASP:HB3	2:I:1395:LEU:HD21	1.88	0.56
1:B:434:ILE:CD1	1:B:490:VAL:HG21	2.34	0.56

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:F:1161:ALA:O	1:F:1163:GLN:HG3	2.05	0.56
2:I:1301:PHE:CB	2:I:1364:ARG:NH1	2.69	0.56
2:K:606:ALA:HB2	2:K:811:MET:CG	2.36	0.56
1:A:1097:LEU:HD13	1:E:1149:LEU:HD12	1.88	0.56
2:J:914:TRP:HE1	2:J:916:GLY:HA3	1.69	0.56
2:L:621:THR:HG21	2:L:628:ILE:HD12	1.88	0.56
2:H:68:GLU:HB3	2:H:69:PRO:CD	2.36	0.56
2:H:331:LEU:HD22	2:H:396:ILE:HG13	1.86	0.56
2:H:1171:TRP:HB3	2:H:1265:TYR:CE1	2.41	0.56
2:G:1371:LEU:O	2:G:1590:ILE:HD11	2.05	0.56
2:I:1335:PHE:HE1	2:I:1629:ILE:HD13	1.70	0.56
2:L:1200:ARG:HD3	2:L:1200:ARG:N	2.20	0.56
1:F:1514:ILE:O	1:F:1547:ARG:NH1	2.38	0.56
2:I:2032:PRO:C	2:I:2036:ILE:HG13	2.26	0.56
1:E:11:TYR:O	1:E:15:VAL:HG23	2.06	0.56
2:I:623:ASN:OD1	2:I:653:PRO:HD3	2.05	0.56
2:H:719:GLY:O	2:H:755:GLU:HG3	2.06	0.56
1:F:1052:ASP:HB3	1:F:1055:THR:O	2.06	0.56
2:K:1962:LEU:O	2:K:1966:ARG:HB3	2.06	0.56
2:I:281:GLY:HA3	2:I:470:TYR:HE1	1.69	0.56
2:I:917:ARG:HD3	2:I:921:GLY:O	2.06	0.56
1:F:623:PHE:N	1:F:623:PHE:CD2	2.73	0.56
2:G:1440:THR:HG22	2:G:1440:THR:O	2.06	0.56
2:G:827:GLN:NE2	2:G:827:GLN:H	2.03	0.56
1:C:1336:GLU:O	1:C:1340:MET:HG2	2.06	0.55
2:L:501:TRP:NE1	2:L:528:THR:CG2	2.65	0.55
2:J:1985:GLN:HG3	2:J:1986:PRO:CD	2.27	0.55
2:J:1290:TYR:CD1	2:J:1299:VAL:HG12	2.41	0.55
2:I:752:HIS:NE2	2:I:856:THR:CG2	2.68	0.55
2:K:608:MET:H	2:K:612:THR:CB	2.19	0.55
2:J:621:THR:HG21	2:J:628:ILE:HD12	1.89	0.55
1:B:1565:PRO:O	1:B:1566:LYS:C	2.45	0.55
2:L:215:TRP:N	2:L:215:TRP:CE3	2.74	0.55
2:G:1760:ASN:O	2:G:1764:MET:HG2	2.06	0.55
2:G:663:ILE:H	2:G:663:ILE:HD12	1.70	0.55
2:G:1871:VAL:CG1	2:G:1872:GLU:N	2.69	0.55
1:A:1106:LEU:HD23	1:A:1107:GLU:N	2.21	0.55
1:F:1490:GLY:O	1:F:1509:THR:HB	2.06	0.55
2:J:876:TRP:C	2:J:876:TRP:CD1	2.79	0.55
1:A:1432:ILE:CD1	1:A:1481:GLN:HB3	2.36	0.55
2:H:1217:ILE:HD12	2:H:1234:ILE:HD12	1.87	0.55
2:L:1475:LEU:HD11	2:L:1483:LEU:HD11	1.88	0.55

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:I:1962:LEU:O	2:I:1966:ARG:HB3	2.05	0.55
1:D:1483:ALA:HA	1:D:1486:GLN:HE21	1.71	0.55
1:A:621:ASP:CB	1:A:625:ASN:HB2	2.37	0.55
2:G:159:PHE:CZ	2:G:275:LEU:HD21	2.40	0.55
1:A:383:TYR:O	1:A:387:ILE:HG23	2.06	0.55
2:J:1178:THR:HG22	2:J:1180:VAL:H	1.71	0.55
2:K:1883:MET:HB2	2:K:2001:ILE:HD12	1.88	0.55
2:I:827:GLN:NE2	2:I:827:GLN:H	2.03	0.55
2:K:21:LEU:HD22	2:K:36:LEU:HD22	1.88	0.55
1:C:427:ARG:CG	1:C:427:ARG:NH1	2.51	0.55
1:F:1157:ASP:O	1:F:1159:LEU:HD12	2.06	0.55
2:J:501:TRP:NE1	2:J:528:THR:CG2	2.67	0.55
2:J:609:THR:O	2:J:613:VAL:HB	2.05	0.55
2:I:68:GLU:HB3	2:I:69:PRO:CD	2.36	0.55
2:J:250:PHE:CB	2:J:251:PRO:HD3	2.36	0.55
2:G:791:TYR:HA	2:G:796:TRP:CD1	2.42	0.55
2:K:1288:PHE:CE2	2:K:1292:VAL:HG21	2.41	0.55
2:J:1915:LEU:HB2	2:J:1935:ALA:HB1	1.87	0.55
1:D:967:PHE:CE2	1:D:1662:GLN:HB2	2.41	0.55
2:H:938:MET:HB3	2:H:959:THR:HG22	1.88	0.55
1:A:450:TYR:CZ	1:A:1551:ASN:HB2	2.42	0.55
1:D:498:THR:HG21	1:D:858:LEU:O	2.06	0.55
1:B:1047:TYR:CZ	1:B:1058:PRO:HB3	2.41	0.55
2:L:924:VAL:HG12	2:L:925:ASP:H	1.72	0.55
2:J:1402:ASN:ND2	2:J:1416:CYS:HB2	2.22	0.55
2:I:1510:ILE:HA	2:I:1528:VAL:O	2.06	0.55
2:H:924:VAL:HG12	2:H:925:ASP:H	1.71	0.55
2:L:126:VAL:HG12	2:L:127:ALA:H	1.69	0.55
2:J:827:GLN:NE2	2:J:827:GLN:H	2.04	0.55
1:D:560:LYS:O	1:D:564:LEU:HB2	2.06	0.55
1:D:1426:GLU:HA	1:D:1429:ARG:HB2	1.88	0.55
2:I:856:THR:HG23	2:I:866:HIS:CD2	2.41	0.55
2:L:1067:LEU:HD12	2:L:1067:LEU:N	2.21	0.55
2:L:783:GLY:HA3	2:L:1075:TYR:CB	2.37	0.55
2:H:783:GLY:HA3	2:H:1075:TYR:CB	2.36	0.55
2:I:376:ARG:CB	2:I:394:PRO:HG2	2.34	0.55
2:I:928:ASP:HA	2:I:1007:LEU:HD23	1.88	0.55
2:I:1517:LEU:HB2	2:I:1521:GLU:HB2	1.87	0.55
1:C:617:LEU:HD11	1:C:636:TYR:HB2	1.88	0.55
1:F:15:VAL:HG11	2:L:2022:LEU:CD2	2.35	0.55
1:B:27:ARG:HG3	2:H:2045:ALA:HB2	1.86	0.55
2:G:77:ALA:O	2:G:139:ALA:HB1	2.04	0.55

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:E:421:ARG:HH22	1:E:1613:LYS:HB3	1.72	0.55
2:K:1902:TYR:OH	2:K:1966:ARG:HB2	2.07	0.55
1:A:1602:PHE:N	1:A:1602:PHE:CD2	2.74	0.55
1:F:457:THR:HG22	1:F:464:GLN:HA	1.88	0.55
2:H:1247:PHE:HB3	2:H:1256:VAL:CG1	2.36	0.55
1:B:573:VAL:O	1:B:577:LEU:HG	2.06	0.55
2:H:1262:ARG:NH2	2:H:1277:VAL:HG11	2.21	0.55
1:F:498:THR:HG22	1:F:508:TYR:HD1	1.71	0.55
2:L:775:VAL:O	2:L:777:VAL:HG23	2.06	0.55
1:B:457:THR:HG22	1:B:464:GLN:HA	1.88	0.55
2:I:1309:PHE:CE2	2:I:1360:PRO:HA	2.41	0.55
2:I:1286:LYS:HZ3	2:I:1367:ASP:HA	1.71	0.55
1:A:340:LEU:HD21	1:F:340:LEU:HD21	1.87	0.55
2:L:158:LEU:HD22	2:L:169:ILE:HD11	1.89	0.55
2:G:1976:CYS:O	2:G:1980:THR:HG23	2.07	0.55
1:E:1610:ARG:CG	1:E:1610:ARG:NH1	2.58	0.55
1:A:430:VAL:O	1:A:434:ILE:HG13	2.06	0.55
1:A:1081:ILE:HG13	1:A:1159:LEU:O	2.07	0.55
2:K:300:THR:HG22	2:K:302:ASP:H	1.72	0.55
2:H:501:TRP:NE1	2:H:528:THR:CG2	2.68	0.55
1:B:628:TYR:CZ	1:B:630:LYS:HG2	2.42	0.55
2:J:48:LEU:HD13	2:J:83:VAL:HG22	1.89	0.55
2:H:1061:VAL:HG12	2:H:1066:ILE:HD11	1.88	0.55
2:L:911:GLN:HE21	2:L:1065:CYS:H	1.54	0.55
1:C:755:GLU:CG	1:D:831:GLU:HG2	2.34	0.55
2:K:779:GLY:O	2:K:780:SER:CB	2.52	0.55
1:C:1218:VAL:HG13	1:C:1301:VAL:HG13	1.88	0.55
2:K:382:LEU:HB3	2:K:499:VAL:HB	1.89	0.55
2:H:1521:GLU:OE2	2:H:2028:THR:CG2	2.55	0.55
2:L:942:MET:CE	2:L:955:LEU:HB3	2.36	0.55
2:I:1964:ASP:O	2:I:1968:HIS:HB2	2.07	0.55
1:E:1323:ALA:HB1	1:E:1351:PHE:HE2	1.69	0.55
1:D:999:LEU:HD21	1:D:1575:ASN:CG	2.27	0.55
1:A:15:VAL:HG11	2:G:2022:LEU:CD2	2.36	0.55
2:I:1977:ARG:HD2	2:I:1978:LYS:HG3	1.88	0.55
1:D:1089:TYR:CE1	1:D:1312:GLU:HG3	2.41	0.55
2:L:1938:THR:O	2:L:1942:VAL:HG23	2.06	0.55
2:I:1475:LEU:HA	2:I:1526:ALA:HB2	1.89	0.55
2:H:1192:LEU:HD22	2:H:1196:PHE:HE1	1.71	0.55
2:I:1008:ILE:HD12	2:I:1013:VAL:HG22	1.88	0.55
2:J:1745:LEU:HD12	2:J:1746:THR:N	2.21	0.55
1:D:415:TYR:CD2	1:D:1614:THR:HA	2.42	0.55

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:E:1704:THR:HG23	1:E:1714:PRO:HG3	1.88	0.55
2:L:99:LEU:O	2:L:103:LYS:HG3	2.07	0.55
2:I:1138:ASP:HB2	2:I:1140:ASN:H	1.71	0.55
2:G:731:ALA:HA	2:G:739:ILE:CD1	2.37	0.55
2:L:60:THR:HG22	2:L:62:GLU:H	1.71	0.55
1:F:64:LYS:HE3	2:L:1923:ALA:HB1	1.88	0.55
1:B:1321:MET:HE1	1:D:1251:GLN:HG3	1.89	0.55
2:G:1726:PHE:CZ	2:G:1857:VAL:HB	2.41	0.55
1:A:498:THR:HG22	1:A:508:TYR:HD1	1.70	0.55
1:C:28:TRP:CZ2	1:C:53:LEU:HD22	2.41	0.55
1:E:430:VAL:O	1:E:434:ILE:HG13	2.06	0.55
2:I:1918:VAL:HG13	2:I:2006:HIS:CB	2.33	0.55
2:K:595:SER:HB2	2:K:600:VAL:O	2.06	0.55
2:H:1290:TYR:CD1	2:H:1299:VAL:HG12	2.41	0.55
1:E:967:PHE:HB3	1:E:968:PRO:HD2	1.88	0.55
1:E:532:ILE:HG22	1:E:907:PHE:HB2	1.83	0.55
2:K:1721:ARG:HH21	2:K:1853:ILE:HD12	1.68	0.55
1:F:1426:GLU:HA	1:F:1429:ARG:HB2	1.88	0.55
2:K:549:ASN:HD22	2:K:550:THR:N	2.03	0.55
2:H:251:PRO:CG	2:H:316:PHE:HA	2.34	0.55
2:L:1171:TRP:HB3	2:L:1265:TYR:CE1	2.41	0.55
2:L:1517:LEU:HB2	2:L:1521:GLU:HB2	1.87	0.55
2:L:1499:LYS:HD3	2:L:1534:GLU:OE1	2.06	0.55
1:A:1032:MET:HE3	1:A:1165:PRO:HB3	1.86	0.55
2:H:823:HIS:HB3	2:H:1051:GLU:HG3	1.89	0.55
2:K:1200:ARG:N	2:K:1200:ARG:HD3	2.21	0.55
1:B:1307:PHE:HB3	1:B:1357:CYS:HB2	1.88	0.55
1:D:332:GLN:O	1:D:335:LEU:HB3	2.05	0.55
2:G:1873:ARG:NH1	2:G:2002:ASP:HB3	2.22	0.55
2:J:1944:ASN:HA	2:J:1993:PHE:CD1	2.42	0.55
1:E:1381:MET:HG2	1:E:1382:THR:N	2.22	0.55
2:J:685:VAL:HG23	2:J:1186:ARG:NH1	2.21	0.55
2:K:126:VAL:HG12	2:K:127:ALA:H	1.71	0.55
2:K:1315:ILE:H	2:K:1315:ILE:HD12	1.71	0.55
2:K:1130:ILE:HB	2:K:1133:LEU:HD22	1.88	0.55
2:J:1154:LEU:HD13	2:J:1198:PRO:HB3	1.88	0.55
2:H:1561:ILE:HB	2:H:1655:HIS:HB3	1.87	0.55
1:D:434:ILE:HD11	1:D:490:VAL:HG21	1.87	0.55
2:J:1918:VAL:HG22	2:J:2006:HIS:O	2.06	0.55
1:F:1214:HIS:CD2	1:F:1216:SER:OG	2.58	0.55
1:A:689:ARG:HH21	1:A:1591:ASN:ND2	2.05	0.55
2:I:752:HIS:CE1	2:I:847:TYR:CE2	2.91	0.55

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:I:331:LEU:HD22	2:I:396:ILE:HG13	1.89	0.55
1:F:612:ILE:HD12	1:F:907:PHE:HZ	1.72	0.55
1:F:1565:PRO:O	1:F:1567:GLY:N	2.40	0.55
2:H:916:GLY:C	2:H:929:MET:HE1	2.27	0.55
2:G:411:PRO:HD2	2:G:414:LEU:CD1	2.37	0.55
1:B:987:MET:O	1:B:1490:GLY:HA3	2.07	0.55
2:G:621:THR:HG21	2:G:628:ILE:HD12	1.89	0.55
2:K:1499:LYS:CG	2:K:1500:ASN:N	2.69	0.55
2:K:1960:MET:HB3	2:K:1964:ASP:CB	2.37	0.55
2:H:1442:TYR:HA	2:H:1445:THR:HG22	1.87	0.55
2:I:783:GLY:HA3	2:I:1075:TYR:CB	2.36	0.55
2:I:1751:GLY:O	2:I:1755:LYS:HG2	2.06	0.55
1:E:1432:ILE:CD1	1:E:1481:GLN:HB3	2.36	0.55
2:J:1833:PHE:CZ	2:J:2039:TYR:HB2	2.41	0.55
2:I:854:VAL:CG2	2:I:1070:PRO:HA	2.35	0.55
1:B:332:GLN:O	1:B:335:LEU:HB3	2.07	0.55
1:D:397:ARG:HH11	1:D:692:THR:HG21	1.70	0.55
2:K:1175:MET:HA	2:K:1274:ILE:CD1	2.36	0.55
1:A:1420:TYR:OH	1:E:1473:HIS:HE1	1.89	0.55
1:F:1095:GLN:O	1:F:1096:LEU:HD23	2.07	0.55
1:B:1523:HIS:HB2	1:B:1624:SER:HA	1.87	0.55
2:K:1031:VAL:HG22	2:K:1041:TRP:HB3	1.87	0.55
2:H:1944:ASN:HA	2:H:1993:PHE:CD1	2.42	0.55
1:F:408:GLN:HE22	1:F:1609:SER:H	1.53	0.55
1:F:443:LEU:H	1:F:443:LEU:HD12	1.72	0.55
1:E:883:LEU:HD23	1:E:883:LEU:N	2.21	0.55
2:L:246:ALA:HB3	2:L:247:PRO:HD3	1.87	0.55
2:H:1962:LEU:O	2:H:1966:ARG:HB3	2.06	0.55
1:B:1389:ILE:CG1	1:D:1268:SER:HB3	2.12	0.55
2:J:374:GLU:CA	2:J:377:HIS:HD2	2.09	0.55
2:K:541:LEU:HG	2:K:552:VAL:HG11	1.88	0.55
2:K:465:LEU:HB2	2:K:479:ARG:HG2	1.88	0.55
1:C:833:TRP:CH2	1:C:839:ILE:HD11	2.41	0.55
1:B:1630:LYS:HD2	1:D:1273:ILE:CD1	2.33	0.55
2:K:1346:MET:HB2	2:K:1427:MET:CE	2.37	0.55
2:L:752:HIS:NE2	2:L:856:THR:CG2	2.70	0.55
2:J:1499:LYS:HG3	2:J:1500:ASN:N	2.21	0.55
2:K:1478:GLN:HG2	2:K:1523:ILE:HG21	1.88	0.55
2:G:521:VAL:O	2:G:526:VAL:HG21	2.07	0.55
1:D:29:ILE:HD11	2:J:1923:ALA:N	2.21	0.55
2:J:1466:VAL:O	2:J:1470:LYS:HG2	2.06	0.55
1:A:1490:GLY:O	1:A:1509:THR:HB	2.07	0.55

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:H:1179:GLU:HA	2:H:1190:ASN:CB	2.37	0.55
2:K:731:ALA:HA	2:K:739:ILE:CD1	2.37	0.55
1:B:883:LEU:N	1:B:883:LEU:HD23	2.22	0.55
1:A:1573:MET:HE2	1:A:1622:VAL:HG23	1.88	0.55
2:L:1356:ALA:CB	2:L:1397:THR:HG22	2.37	0.55
1:C:1307:PHE:HA	1:C:1568:ALA:HB2	1.86	0.55
2:H:1346:MET:HB2	2:H:1427:MET:CE	2.35	0.55
1:F:335:LEU:C	1:F:335:LEU:HD12	2.26	0.55
1:F:621:ASP:HB3	1:F:625:ASN:HB2	1.88	0.55
2:H:170:TYR:CE2	2:H:507:PHE:HB3	2.42	0.55
2:K:740:ILE:H	2:K:740:ILE:HD12	1.71	0.55
2:G:573:VAL:CG2	2:G:804:PRO:HB2	2.37	0.55
2:K:347:PRO:HA	2:K:432:PHE:CD1	2.42	0.55
1:D:968:PRO:HD2	1:D:1374:PRO:HB3	1.88	0.55
1:A:88:ILE:HG21	2:G:1821:MET:HE1	1.88	0.55
2:L:1845:VAL:HG21	2:L:1856:LEU:HD22	1.88	0.55
2:J:719:GLY:O	2:J:755:GLU:HG3	2.06	0.55
2:I:1181:PHE:CE1	2:I:1191:PRO:HD2	2.41	0.55
1:B:651:GLN:HA	1:B:677:GLY:HA3	1.88	0.55
2:H:1594:ARG:HH11	2:H:1594:ARG:CG	1.93	0.55
1:E:558:LEU:HB2	1:E:563:GLN:CG	2.34	0.55
1:C:1081:ILE:HG13	1:C:1159:LEU:O	2.07	0.55
2:K:190:TYR:CE1	2:K:201:ILE:HG21	2.41	0.55
2:K:101:VAL:O	2:K:105:ILE:HG12	2.07	0.55
2:J:747:ARG:NH1	2:J:780:SER:O	2.39	0.55
2:J:440:HIS:CD2	2:J:499:VAL:CG2	2.90	0.55
2:J:1602:LEU:HD13	2:J:1606:ILE:CD1	2.36	0.55
2:I:493:MET:HA	2:I:497:ASP:HB2	1.88	0.55
2:G:472:THR:HG23	2:G:499:VAL:HA	1.88	0.55
1:B:1444:GLN:HA	1:B:1444:GLN:OE1	2.07	0.55
2:J:1621:GLU:OE2	2:J:1629:ILE:HG23	2.07	0.55
1:C:11:TYR:O	1:C:15:VAL:HG23	2.06	0.55
2:K:1251:THR:HG22	2:K:1292:VAL:HG13	1.88	0.55
2:J:1964:ASP:O	2:J:1968:HIS:HB2	2.07	0.55
2:H:1097:PHE:CD2	2:H:1100:ARG:NH1	2.75	0.55
2:G:1846:ALA:HB3	2:G:1847:LEU:HD12	1.87	0.55
2:J:77:ALA:O	2:J:139:ALA:HB1	2.07	0.55
1:B:767:HIS:HB2	1:B:813:LEU:HD12	1.88	0.55
2:L:731:ALA:HA	2:L:739:ILE:CD1	2.37	0.55
1:C:1086:PHE:CE2	1:C:1310:PHE:HD2	2.24	0.55
1:B:682:VAL:HG11	1:B:695:TYR:HE2	1.71	0.55
2:H:186:LEU:CD2	2:H:256:VAL:HG22	2.36	0.55

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:K:1619:LEU:O	2:K:1623:TRP:HB2	2.06	0.55
2:L:917:ARG:HD3	2:L:921:GLY:O	2.07	0.55
2:L:646:SER:HA	2:L:649:GLU:HG2	1.88	0.55
1:A:1270:THR:HG21	1:E:1402:THR:CG2	2.37	0.55
2:G:1181:PHE:CE1	2:G:1191:PRO:HD2	2.42	0.55
2:J:1962:LEU:O	2:J:1966:ARG:HB3	2.06	0.55
1:E:415:TYR:O	1:E:419:PHE:HD1	1.90	0.55
1:E:335:LEU:C	1:E:335:LEU:HD12	2.27	0.55
2:G:1142:ILE:HG13	2:G:1209:PRO:HG3	1.88	0.55
2:L:962:PHE:O	2:L:966:VAL:HG23	2.07	0.55
2:I:505:THR:O	2:I:505:THR:HG22	2.06	0.55
2:L:895:LEU:HD13	2:L:1034:LEU:HB3	1.89	0.55
1:D:701:ARG:NH1	1:D:1610:ARG:HH21	2.05	0.55
1:A:1079:ARG:NH1	1:A:1079:ARG:CG	2.63	0.55
1:A:1702:ARG:NH1	1:A:1702:ARG:HG3	2.07	0.55
2:I:580:LEU:HD11	2:I:1098:LEU:HB3	1.87	0.55
2:J:101:VAL:O	2:J:105:ILE:HG12	2.07	0.55
2:H:827:GLN:NE2	2:H:827:GLN:H	2.05	0.55
1:A:628:TYR:CZ	1:A:630:LYS:HG2	2.42	0.55
2:I:613:VAL:HG12	2:I:614:PRO:HD3	1.89	0.55
1:C:679:LYS:HG2	1:C:708:GLN:CB	2.36	0.55
2:J:1517:LEU:HB2	2:J:1521:GLU:HB2	1.88	0.55
2:H:621:THR:HG21	2:H:628:ILE:HD12	1.88	0.55
2:J:290:VAL:HA	2:J:490:LEU:CD1	2.36	0.55
2:I:208:LEU:HD12	2:I:227:ILE:HD11	1.89	0.55
2:J:743:TRP:CG	2:J:761:ILE:HD11	2.42	0.55
1:B:1078:ILE:HG21	1:B:1352:MET:HE2	1.89	0.55
2:L:190:TYR:CD1	2:L:201:ILE:HD13	2.38	0.55
2:H:1964:ASP:O	2:H:1968:HIS:HB2	2.07	0.55
2:I:1223:SER:CB	2:I:1226:ALA:HB3	2.37	0.55
2:L:1061:VAL:HG12	2:L:1066:ILE:HD11	1.88	0.55
2:K:447:ALA:O	2:K:451:ILE:HG13	2.07	0.55
2:J:1915:LEU:HD21	2:J:1939:LEU:HD22	1.89	0.55
2:H:1866:THR:HA	2:H:1869:VAL:CG2	2.37	0.55
2:G:857:VAL:HG13	2:G:876:TRP:NE1	2.21	0.55
1:C:415:TYR:O	1:C:419:PHE:HD1	1.90	0.55
2:H:1902:TYR:OH	2:H:1966:ARG:HB2	2.07	0.55
2:G:573:VAL:HG22	2:G:804:PRO:HB2	1.88	0.55
1:A:332:GLN:O	1:A:335:LEU:HB3	2.06	0.55
2:J:1574:PRO:HD3	2:J:1611:TYR:CE2	2.42	0.55
2:I:1227:LYS:HG2	2:I:1228:LEU:N	2.22	0.55
2:I:144:ARG:HH21	2:I:151:PRO:HA	1.71	0.55

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:H:388:ASN:HD22	2:H:388:ASN:C	2.11	0.55
1:F:1047:TYR:CZ	1:F:1058:PRO:HB3	2.42	0.55
1:A:1041:PRO:HA	1:A:1046:PRO:HA	1.89	0.55
2:J:1561:ILE:HB	2:J:1655:HIS:HB3	1.88	0.55
2:H:962:PHE:O	2:H:966:VAL:HG23	2.07	0.55
2:I:285:HIS:HD2	2:I:501:TRP:CE3	2.25	0.55
1:D:573:VAL:O	1:D:577:LEU:HG	2.07	0.55
2:I:1290:TYR:CD1	2:I:1299:VAL:HG12	2.41	0.55
1:D:1005:TRP:CD1	1:D:1561:LEU:HD22	2.42	0.55
2:L:609:THR:O	2:L:613:VAL:HB	2.07	0.55
2:G:609:THR:O	2:G:613:VAL:HB	2.06	0.55
1:B:565:GLN:HG2	1:B:565:GLN:O	2.06	0.55
2:J:331:LEU:HD22	2:J:396:ILE:HG13	1.88	0.55
1:D:558:LEU:HB2	1:D:563:GLN:CG	2.36	0.55
2:L:1602:LEU:HD13	2:L:1606:ILE:CD1	2.37	0.55
1:D:683:THR:HB	1:D:714:PHE:CB	2.36	0.55
1:A:1303:LEU:HD23	1:A:1361:VAL:HB	1.89	0.55
2:J:930:THR:HG22	2:J:933:GLU:CG	2.36	0.55
2:J:1179:GLU:HA	2:J:1190:ASN:CB	2.36	0.55
2:L:472:THR:H	2:L:493:MET:HE3	1.72	0.55
1:A:504:GLY:O	1:A:926:SER:HB2	2.07	0.55
2:K:1871:VAL:CG2	2:K:2004:PRO:HD3	2.37	0.55
1:B:1432:ILE:CD1	1:B:1481:GLN:HB3	2.37	0.55
1:D:1432:ILE:CD1	1:D:1481:GLN:HB3	2.37	0.55
2:G:740:ILE:HD12	2:G:740:ILE:H	1.71	0.55
2:I:935:VAL:HG11	2:I:997:LEU:HD21	1.89	0.55
2:L:740:ILE:HD12	2:L:740:ILE:H	1.72	0.55
2:J:73:VAL:HA	2:J:113:PHE:CE2	2.42	0.55
2:J:126:VAL:HG12	2:J:127:ALA:H	1.72	0.55
1:B:621:ASP:CB	1:B:625:ASN:HB2	2.36	0.55
1:E:1041:PRO:HA	1:E:1046:PRO:HA	1.89	0.55
2:G:1845:VAL:HG21	2:G:1856:LEU:HD22	1.88	0.55
1:B:1640:LYS:HG3	1:B:1641:TYR:N	2.21	0.55
1:D:35:ILE:HD13	2:J:1691:ALA:HB1	1.89	0.55
2:G:1138:ASP:HB2	2:G:1140:ASN:H	1.72	0.55
2:L:1706:MET:O	2:L:1709:TYR:HB3	2.07	0.55
2:H:606:ALA:HB2	2:H:811:MET:CG	2.37	0.54
1:D:47:ILE:HB	2:J:1694:PHE:HD1	1.71	0.54
2:J:1694:PHE:HD2	2:J:1843:ALA:HB2	1.71	0.54
2:G:1586:ASP:OD1	2:G:1588:ASN:HB2	2.06	0.54
1:E:1078:ILE:HG21	1:E:1352:MET:HE2	1.90	0.54
1:D:1081:ILE:HA	1:D:1163:GLN:NE2	2.21	0.54

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:F:1536:ASP:N	1:F:1602:PHE:HE1	2.04	0.54
2:I:1939:LEU:O	2:I:1943:LEU:HG	2.07	0.54
2:K:1192:LEU:HD22	2:K:1196:PHE:HE1	1.72	0.54
1:A:1098:GLN:HB2	1:A:1152:LYS:HE2	1.89	0.54
2:J:645:ILE:HD13	2:J:687:ILE:HD11	1.89	0.54
2:K:1142:ILE:HD11	2:K:1209:PRO:HB3	1.89	0.54
1:D:1052:ASP:HB3	1:D:1055:THR:O	2.07	0.54
2:L:1142:ILE:HG13	2:L:1209:PRO:HG3	1.89	0.54
2:H:917:ARG:HD3	2:H:921:GLY:O	2.07	0.54
2:I:196:PHE:CD2	2:I:266:LYS:HB3	2.41	0.54
2:I:1561:ILE:HB	2:I:1655:HIS:HB3	1.89	0.54
2:L:144:ARG:HH21	2:L:151:PRO:HA	1.71	0.54
2:G:871:ARG:CZ	2:G:909:ASP:HB3	2.37	0.54
2:J:924:VAL:HG12	2:J:925:ASP:H	1.72	0.54
2:I:1097:PHE:CD2	2:I:1100:ARG:NH1	2.75	0.54
2:K:868:LEU:HD13	2:K:1068:GLN:HG3	1.88	0.54
2:K:1804:GLN:HG2	2:K:1865:LEU:CD2	2.38	0.54
2:L:1064:THR:HG22	2:L:1065:CYS:N	2.20	0.54
2:K:779:GLY:HA3	2:K:811:MET:HE3	1.88	0.54
2:J:606:ALA:HB2	2:J:811:MET:CG	2.37	0.54
1:F:1094:LYS:HB3	1:F:1154:LEU:HB2	1.89	0.54
1:E:1106:LEU:HD23	1:E:1107:GLU:N	2.22	0.54
1:B:855:ALA:HA	1:B:919:ARG:NH2	2.21	0.54
2:L:1115:TYR:CZ	2:L:1174:ALA:HB2	2.42	0.54
1:F:526:MET:O	1:F:613:PRO:O	2.25	0.54
2:I:765:TYR:CB	2:I:805:MET:HE3	2.35	0.54
2:H:1335:PHE:HE1	2:H:1629:ILE:HD13	1.71	0.54
2:H:1621:GLU:OE2	2:H:1629:ILE:HG23	2.08	0.54
1:D:1470:ARG:O	1:D:1474:ILE:HG13	2.07	0.54
2:K:1602:LEU:HD13	2:K:1606:ILE:CD1	2.37	0.54
2:I:1288:PHE:CE2	2:I:1292:VAL:HG21	2.43	0.54
2:L:289:ILE:HG22	2:L:490:LEU:HD22	1.89	0.54
2:J:1061:VAL:HG12	2:J:1066:ILE:HD11	1.88	0.54
2:K:1881:TYR:CB	2:K:2004:PRO:HG3	2.37	0.54
2:I:635:TYR:CB	2:I:641:MET:HG3	2.37	0.54
1:D:1179:ILE:O	1:D:1183:VAL:HG23	2.06	0.54
2:G:1334:ALA:O	2:G:1342:PHE:HA	2.07	0.54
1:D:1014:MET:O	1:D:1590:ARG:NH2	2.29	0.54
2:K:723:ALA:O	2:K:726:GLN:HB2	2.07	0.54
2:J:1866:THR:HA	2:J:1869:VAL:CG2	2.37	0.54
2:K:713:HIS:CD2	2:K:740:ILE:HD13	2.41	0.54
2:G:794:GLY:O	2:G:804:PRO:HA	2.08	0.54

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:432:GLN:O	1:A:436:ILE:HG13	2.06	0.54
2:H:895:LEU:HD13	2:H:1034:LEU:HB3	1.89	0.54
2:H:1142:ILE:HD11	2:H:1209:PRO:HB3	1.89	0.54
2:L:1402:ASN:ND2	2:L:1416:CYS:HB2	2.23	0.54
1:E:435:GLN:HG2	1:E:701:ARG:O	2.08	0.54
1:D:427:ARG:NH1	1:D:492:ILE:CG1	2.71	0.54
2:G:2052:LYS:HB3	2:G:2074:TRP:CZ2	2.42	0.54
1:F:1081:ILE:HA	1:F:1163:GLN:NE2	2.21	0.54
2:H:2052:LYS:HB3	2:H:2074:TRP:CD2	2.42	0.54
2:L:600:VAL:HG22	2:L:601:PRO:HD2	1.89	0.54
2:J:285:HIS:HD2	2:J:501:TRP:CE3	2.24	0.54
2:H:1053:ILE:HD11	2:H:1061:VAL:HG13	1.90	0.54
2:H:832:ILE:HA	2:H:868:LEU:HD21	1.89	0.54
2:K:24:LEU:HD11	2:K:45:ALA:CB	2.37	0.54
2:J:1499:LYS:CG	2:J:1500:ASN:N	2.70	0.54
1:F:628:TYR:HE1	1:F:630:LYS:HA	1.72	0.54
2:L:1259:LEU:HB2	2:L:1288:PHE:CE1	2.42	0.54
1:E:406:ALA:CA	1:E:439:ARG:HH11	2.20	0.54
1:E:439:ARG:O	1:E:444:LEU:HD12	2.07	0.54
1:F:1565:PRO:O	1:F:1566:LYS:C	2.46	0.54
1:C:628:TYR:CE1	1:C:630:LYS:HG2	2.43	0.54
2:L:31:LEU:HD13	2:L:75:LEU:HD21	1.89	0.54
2:I:49:LYS:HA	2:I:79:TYR:HE1	1.72	0.54
1:B:47:ILE:HB	2:H:1694:PHE:CD1	2.42	0.54
1:D:1230:SER:HA	1:D:1311:GLN:NE2	2.22	0.54
1:A:1574:LEU:CD1	1:A:1622:VAL:HG11	2.37	0.54
2:K:1939:LEU:O	2:K:1943:LEU:HG	2.07	0.54
2:I:723:ALA:O	2:I:726:GLN:HB2	2.07	0.54
1:F:962:ASN:HB3	2:L:969:ARG:HD2	1.88	0.54
2:H:1356:ALA:CB	2:H:1397:THR:HG22	2.37	0.54
1:E:890:ASN:OD1	2:H:1755:LYS:HE2	2.07	0.54
2:G:876:TRP:CH2	2:G:1043:LYS:HB2	2.42	0.54
1:C:1536:ASP:N	1:C:1602:PHE:HE1	2.06	0.54
2:H:99:LEU:O	2:H:103:LYS:HG3	2.07	0.54
1:C:955:VAL:HG23	2:I:981:GLN:OE1	2.07	0.54
2:J:1142:ILE:HD11	2:J:1209:PRO:HB3	1.88	0.54
1:F:397:ARG:NH1	1:F:692:THR:HG21	2.22	0.54
1:B:1638:HIS:ND1	1:B:1639:PRO:HD2	2.22	0.54
2:K:144:ARG:HH21	2:K:151:PRO:HA	1.71	0.54
2:H:731:ALA:HA	2:H:739:ILE:CD1	2.38	0.54
1:B:1143:ARG:HH21	1:C:356:LYS:NZ	2.06	0.54
2:L:1634:SER:HB3	2:L:1684:GLU:HB2	1.88	0.54

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:D:715:ASN:HD22	1:D:717:GLY:H	1.55	0.54
1:C:651:GLN:HA	1:C:677:GLY:HA3	1.88	0.54
2:I:636:TYR:N	2:I:636:TYR:CD1	2.76	0.54
1:E:621:ASP:CB	1:E:625:ASN:HB2	2.36	0.54
1:C:1647:ASP:HB2	1:C:1649:ALA:HB3	1.88	0.54
1:E:21:GLN:HE22	2:K:1841:TYR:HE1	1.55	0.54
2:I:1845:VAL:HG21	2:I:1856:LEU:HD22	1.89	0.54
1:C:1160:VAL:HG23	1:C:1327:ALA:HB2	1.88	0.54
1:E:434:ILE:HD11	1:E:490:VAL:HG21	1.89	0.54
1:F:18:LEU:HD21	2:L:1844:LEU:CD1	2.37	0.54
2:H:1299:VAL:CG2	2:H:1301:PHE:CE2	2.87	0.54
2:L:1290:TYR:CD1	2:L:1299:VAL:HG12	2.42	0.54
1:A:1426:GLU:HA	1:A:1429:ARG:HB2	1.90	0.54
2:H:752:HIS:CE1	2:H:847:TYR:CE2	2.92	0.54
2:H:1478:GLN:HG2	2:H:1523:ILE:HG21	1.90	0.54
2:L:942:MET:HE1	2:L:955:LEU:HB3	1.89	0.54
2:I:1519:THR:OG1	2:I:1521:GLU:HG2	2.07	0.54
2:L:1318:ALA:HA	2:L:1391:VAL:CG2	2.38	0.54
2:I:1960:MET:HB3	2:I:1964:ASP:CB	2.37	0.54
1:F:714:PHE:CE1	1:F:725:LEU:HD12	2.42	0.54
2:G:1871:VAL:HG21	2:G:2003:VAL:HA	1.89	0.54
1:C:1443:LEU:HD13	1:C:1470:ARG:HB3	1.90	0.54
2:L:1915:LEU:HD21	2:L:1939:LEU:HD22	1.90	0.54
1:F:617:LEU:HD11	1:F:636:TYR:HB2	1.89	0.54
2:K:1888:PRO:HB3	2:K:1895:PHE:CD1	2.41	0.54
2:J:1356:ALA:CB	2:J:1397:THR:HG22	2.38	0.54
2:L:1751:GLY:O	2:L:1755:LYS:HG2	2.08	0.54
2:L:608:MET:H	2:L:612:THR:CB	2.20	0.54
2:H:448:HIS:HD2	2:H:491:VAL:CG1	2.21	0.54
2:I:77:ALA:O	2:I:139:ALA:HB1	2.07	0.54
2:L:1966:ARG:O	2:L:1970:VAL:HG23	2.07	0.54
2:K:1393:ASP:HB3	2:K:1395:LEU:HD21	1.89	0.54
2:I:636:TYR:N	2:I:636:TYR:HD1	2.05	0.54
2:H:144:ARG:HH21	2:H:151:PRO:HA	1.72	0.54
1:D:965:TYR:CZ	1:D:1199:LEU:HD22	2.42	0.54
2:L:1603:PRO:HB2	2:L:1644:LEU:HD21	1.89	0.54
2:G:719:GLY:O	2:G:755:GLU:HG3	2.07	0.54
2:I:1142:ILE:HG13	2:I:1209:PRO:HG3	1.90	0.54
2:K:1247:PHE:HB3	2:K:1256:VAL:CG1	2.37	0.54
2:G:686:PRO:HB3	2:G:1187:PHE:CE1	2.43	0.54
1:B:716:GLN:HB3	1:B:769:ILE:HG23	1.90	0.54
2:I:713:HIS:CD2	2:I:740:ILE:HD13	2.42	0.54

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:C:537:ASN:HB3	1:C:585:MET:SD	2.48	0.54
2:H:1440:THR:HG22	2:H:1440:THR:O	2.07	0.54
2:H:1411:LYS:O	2:H:1434:LEU:HD12	2.08	0.54
2:H:1130:ILE:HB	2:H:1133:LEU:HD22	1.89	0.54
2:I:24:LEU:HD11	2:I:45:ALA:CB	2.37	0.54
2:K:578:PRO:HG3	2:K:792:LEU:O	2.08	0.54
2:H:578:PRO:HG3	2:H:792:LEU:O	2.07	0.54
2:G:1804:GLN:HG2	2:G:1865:LEU:HD23	1.90	0.54
2:I:612:THR:O	2:I:612:THR:HG22	2.08	0.54
2:K:1346:MET:HE3	2:K:1617:ARG:NH2	2.23	0.54
2:K:1760:ASN:O	2:K:1764:MET:HG2	2.07	0.54
2:K:1866:THR:HA	2:K:1869:VAL:CG2	2.38	0.54
2:H:24:LEU:HD11	2:H:45:ALA:CB	2.37	0.54
2:K:747:ARG:HD3	2:K:1071:VAL:HG11	1.87	0.54
2:G:832:ILE:HA	2:G:868:LEU:HD21	1.88	0.54
2:K:612:THR:HG21	2:K:629:GLU:O	2.08	0.54
1:A:1363:MET:HE1	1:A:1373:VAL:CG2	2.36	0.54
2:J:521:VAL:O	2:J:526:VAL:HG21	2.08	0.54
1:B:1081:ILE:HA	1:B:1163:GLN:NE2	2.22	0.54
2:I:1351:VAL:HG23	2:I:1584:SER:HA	1.90	0.54
2:L:49:LYS:HA	2:L:79:TYR:HE1	1.73	0.54
2:J:2033:SER:HA	2:J:2036:ILE:HD12	1.88	0.54
1:E:1443:LEU:HD11	1:E:1470:ARG:HB3	1.87	0.54
1:D:1603:ASP:HB2	1:D:1604:TYR:CD2	2.43	0.54
1:F:1493:PHE:CE2	1:F:1509:THR:HG22	2.43	0.54
2:I:1888:PRO:HB3	2:I:1895:PHE:CD1	2.41	0.54
1:A:1443:LEU:HD13	1:A:1470:ARG:HB3	1.89	0.54
2:K:1871:VAL:CG1	2:K:1872:GLU:N	2.71	0.54
2:I:1200:ARG:N	2:I:1200:ARG:HD3	2.22	0.54
2:J:635:TYR:CB	2:J:641:MET:HG3	2.37	0.54
2:G:1939:LEU:O	2:G:1943:LEU:HG	2.06	0.54
1:B:1001:GLU:O	1:B:1002:ILE:HD12	2.08	0.54
2:G:1192:LEU:HD22	2:G:1196:PHE:CE1	2.42	0.54
1:F:682:VAL:HG11	1:F:695:TYR:HE2	1.72	0.54
2:J:1902:TYR:OH	2:J:1966:ARG:HB2	2.08	0.54
1:B:726:VAL:HG21	1:B:780:ALA:HB3	1.88	0.54
1:A:415:TYR:O	1:A:419:PHE:HD1	1.91	0.54
2:K:1440:THR:HG22	2:K:1440:THR:O	2.07	0.54
1:A:701:ARG:NH1	1:A:1610:ARG:NH2	2.56	0.54
1:C:1702:ARG:CG	1:C:1702:ARG:NH1	2.51	0.54
1:D:689:ARG:HH21	1:D:1591:ASN:ND2	2.06	0.54
2:I:1804:GLN:HG2	2:I:1865:LEU:CD2	2.38	0.54

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:I:832:ILE:HA	2:I:868:LEU:HD21	1.90	0.54
2:L:856:THR:HG23	2:L:866:HIS:CD2	2.42	0.54
1:E:1099:GLU:HA	1:E:1149:LEU:HD23	1.89	0.54
1:A:1097:LEU:CD1	1:E:1149:LEU:HD12	2.38	0.54
2:J:24:LEU:HD11	2:J:45:ALA:HB1	1.90	0.54
1:B:1565:PRO:HG3	1:B:1572:TRP:CH2	2.43	0.54
2:I:1499:LYS:CG	2:I:1500:ASN:N	2.70	0.54
2:J:31:LEU:HD13	2:J:75:LEU:HD21	1.90	0.54
2:K:1259:LEU:HB2	2:K:1288:PHE:CE1	2.43	0.54
2:L:1120:ILE:HD13	2:L:1167:ASN:O	2.08	0.54
2:K:1964:ASP:O	2:K:1968:HIS:HB2	2.07	0.54
1:B:1574:LEU:CD1	1:B:1622:VAL:HG11	2.38	0.54
2:I:1888:PRO:HG3	2:I:1900:LEU:HD12	1.89	0.54
2:K:573:VAL:HG22	2:K:804:PRO:HB2	1.90	0.54
1:E:1574:LEU:CD1	1:E:1622:VAL:HG11	2.37	0.54
1:C:1534:GLU:HG2	1:C:1625:PHE:HE1	1.72	0.54
2:G:1977:ARG:HD2	2:G:1978:LYS:HG3	1.89	0.54
2:H:117:ASN:HA	2:H:561:ARG:HD2	1.88	0.54
1:F:1602:PHE:N	1:F:1602:PHE:HD2	2.05	0.54
2:G:1305:LEU:HD11	2:G:1365:LYS:HD2	1.89	0.54
2:J:775:VAL:O	2:J:777:VAL:HG23	2.07	0.54
1:E:1157:ASP:O	1:E:1159:LEU:HD12	2.08	0.54
2:G:1619:LEU:O	2:G:1623:TRP:HB2	2.07	0.54
2:H:1334:ALA:O	2:H:1342:PHE:HA	2.07	0.54
1:C:414:TYR:O	1:C:418:ILE:HG13	2.08	0.54
2:G:378:ILE:HG23	2:G:391:VAL:HG13	1.90	0.54
2:I:1622:THR:HG23	2:I:1627:ASN:OD1	2.06	0.54
1:F:950:ALA:HA	1:F:953:ARG:CZ	2.37	0.54
1:D:621:ASP:CB	1:D:625:ASN:HB2	2.38	0.54
1:D:623:PHE:N	1:D:623:PHE:CD2	2.74	0.54
1:B:408:GLN:HE22	1:B:1609:SER:H	1.54	0.54
2:L:300:THR:HG22	2:L:302:ASP:H	1.73	0.54
2:L:501:TRP:HZ2	2:L:528:THR:HG21	1.73	0.54
2:K:832:ILE:HA	2:K:868:LEU:HD21	1.90	0.54
2:K:868:LEU:O	2:K:870:THR:N	2.40	0.54
1:A:1005:TRP:CD1	1:A:1561:LEU:HD22	2.41	0.54
1:F:1218:VAL:HG13	1:F:1301:VAL:CG1	2.37	0.54
2:K:289:ILE:HG22	2:K:490:LEU:HD22	1.88	0.54
2:J:617:PHE:HD1	2:J:822:ALA:HA	1.73	0.54
2:G:250:PHE:CB	2:G:251:PRO:HD3	2.38	0.54
2:G:289:ILE:HG22	2:G:490:LEU:HD22	1.90	0.54
2:G:942:MET:CE	2:G:955:LEU:HB3	2.37	0.54

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:G:1871:VAL:HG21	2:G:2004:PRO:HD3	1.90	0.54
2:H:1960:MET:HB3	2:H:1964:ASP:CB	2.36	0.54
2:G:930:THR:HG22	2:G:933:GLU:HG3	1.89	0.54
2:I:934:VAL:O	2:I:938:MET:HG3	2.08	0.54
1:E:767:HIS:CB	1:E:813:LEU:HD12	2.36	0.54
1:B:1699:PRO:HG2	1:D:1406:GLU:HA	1.90	0.54
1:E:15:VAL:HG11	2:K:2022:LEU:HD21	1.89	0.54
2:G:623:ASN:OD1	2:G:653:PRO:HD3	2.07	0.54
1:C:621:ASP:CB	1:C:625:ASN:HB2	2.38	0.54
2:J:1142:ILE:HG13	2:J:1209:PRO:HG3	1.88	0.54
1:B:1052:ASP:HB3	1:B:1055:THR:O	2.07	0.54
2:G:186:LEU:HG	2:G:256:VAL:HG22	1.90	0.54
2:J:1138:ASP:HB2	2:J:1140:ASN:H	1.73	0.54
2:K:1123:ALA:HB3	2:K:1126:GLU:HG3	1.88	0.54
2:K:1239:ASP:OD1	2:K:1240:ASN:N	2.37	0.54
2:G:1944:ASN:HA	2:G:1993:PHE:CD1	2.43	0.54
2:K:636:TYR:HD1	2:K:636:TYR:N	2.05	0.54
1:A:623:PHE:CD2	1:A:623:PHE:N	2.76	0.54
2:K:1537:GLY:O	2:K:1539:PRO:HD3	2.07	0.54
2:G:144:ARG:HH21	2:G:151:PRO:HA	1.73	0.54
2:L:285:HIS:HD2	2:L:501:TRP:CE3	2.25	0.54
2:J:300:THR:HG22	2:J:302:ASP:H	1.72	0.54
2:H:1468:ARG:CG	2:H:1468:ARG:NH1	2.53	0.54
2:G:447:ALA:O	2:G:451:ILE:HG13	2.08	0.54
1:B:1148:LEU:CD2	1:D:1150:ILE:HG12	2.38	0.54
2:I:1299:VAL:CG2	2:I:1301:PHE:CE2	2.89	0.54
1:A:613:PRO:HG2	1:A:633:THR:HG21	1.90	0.54
2:G:582:LYS:HA	2:G:587:GLN:O	2.08	0.54
2:I:48:LEU:HD13	2:I:83:VAL:HG22	1.90	0.54
1:B:570:TYR:O	1:B:574:ILE:HG12	2.08	0.54
2:J:382:LEU:HB3	2:J:499:VAL:HB	1.90	0.54
1:C:1630:LYS:HD2	1:F:1273:ILE:CD1	2.37	0.54
2:J:743:TRP:CE2	2:J:761:ILE:HD11	2.42	0.54
1:D:1565:PRO:O	1:D:1566:LYS:C	2.46	0.54
1:D:439:ARG:O	1:D:444:LEU:HD12	2.07	0.54
2:J:1760:ASN:O	2:J:1764:MET:HG2	2.08	0.54
2:K:1374:VAL:CG2	2:K:1436:ARG:HE	2.21	0.54
2:J:731:ALA:HA	2:J:739:ILE:CD1	2.38	0.54
1:B:1230:SER:HA	1:B:1311:GLN:NE2	2.22	0.54
1:B:1209:PHE:CZ	1:B:1301:VAL:HG21	2.43	0.54
1:E:47:ILE:HB	2:K:1694:PHE:HD1	1.72	0.54
1:A:551:LEU:HD21	1:F:562:SER:CB	2.38	0.54

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:G:1175:MET:HE3	2:G:1192:LEU:HD11	1.90	0.54
1:F:1401:LEU:O	1:F:1401:LEU:HD22	2.07	0.54
2:G:1130:ILE:HB	2:G:1133:LEU:HD22	1.89	0.54
1:D:1536:ASP:N	1:D:1602:PHE:HE1	2.06	0.54
2:J:1966:ARG:O	2:J:1970:VAL:HG23	2.07	0.54
2:H:1142:ILE:HG13	2:H:1209:PRO:HG3	1.89	0.54
2:G:189:ILE:HD13	2:G:259:ALA:HB3	1.90	0.54
1:B:397:ARG:NH1	1:B:692:THR:HG21	2.23	0.54
2:G:388:ASN:HD22	2:G:388:ASN:C	2.11	0.54
2:H:699:ILE:HD12	2:H:699:ILE:N	2.23	0.54
2:K:1262:ARG:NH2	2:K:1277:VAL:HG11	2.22	0.54
1:C:554:ARG:O	1:C:555:GLN:HG3	2.08	0.54
2:K:501:TRP:NE1	2:K:528:THR:HG22	2.07	0.54
2:L:2052:LYS:HB3	2:L:2074:TRP:CD2	2.41	0.54
2:L:578:PRO:HG3	2:L:792:LEU:O	2.07	0.54
1:A:628:TYR:CE1	1:A:630:LYS:HG2	2.43	0.54
2:L:101:VAL:O	2:L:105:ILE:HG12	2.08	0.54
2:J:68:GLU:HB3	2:J:69:PRO:CD	2.36	0.54
2:K:607:GLY:HA2	2:K:612:THR:HG21	1.90	0.54
2:K:290:VAL:HA	2:K:490:LEU:CD1	2.37	0.54
2:K:416:GLN:HA	2:K:419:ILE:HG13	1.90	0.54
2:L:617:PHE:HD1	2:L:822:ALA:HA	1.73	0.54
1:C:628:TYR:HE1	1:C:630:LYS:HA	1.72	0.54
1:C:1565:PRO:O	1:C:1567:GLY:N	2.41	0.54
2:J:1305:LEU:HD12	2:J:1305:LEU:H	1.73	0.54
2:G:1179:GLU:HA	2:G:1190:ASN:CB	2.37	0.54
2:L:823:HIS:HB3	2:L:1051:GLU:HG3	1.90	0.54
1:E:767:HIS:NE2	1:E:771:LEU:HD23	2.22	0.54
2:H:635:TYR:CB	2:H:641:MET:HG3	2.38	0.54
1:E:1014:MET:O	1:E:1590:ARG:NH2	2.31	0.54
2:L:186:LEU:HG	2:L:256:VAL:HG22	1.89	0.54
2:L:934:VAL:O	2:L:938:MET:HG3	2.07	0.54
1:D:843:VAL:HG22	1:D:843:VAL:O	2.08	0.54
2:I:1315:ILE:HD12	2:I:1315:ILE:H	1.73	0.54
1:B:13:LEU:HG	2:H:2048:PHE:CE1	2.43	0.54
1:D:726:VAL:HG21	1:D:780:ALA:HB3	1.90	0.54
1:C:1095:GLN:O	1:C:1096:LEU:HD23	2.08	0.54
1:D:532:ILE:HD11	1:D:866:LEU:O	2.08	0.54
2:I:99:LEU:O	2:I:103:LYS:HG3	2.08	0.54
1:D:457:THR:HG22	1:D:464:GLN:HA	1.90	0.54
2:I:378:ILE:HG23	2:I:391:VAL:HG13	1.90	0.54
2:I:1871:VAL:CG1	2:I:1872:GLU:N	2.70	0.54

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:J:1099:LEU:HD12	2:J:1103:TYR:HB2	1.90	0.54
2:J:49:LYS:HA	2:J:79:TYR:HE1	1.72	0.54
2:J:467:ILE:CG2	2:J:468:PRO:HD2	2.37	0.54
2:I:747:ARG:NH1	2:I:780:SER:O	2.41	0.54
2:G:487:ILE:CB	2:G:488:PRO:HD3	2.36	0.54
1:D:1106:LEU:HD23	1:D:1107:GLU:N	2.23	0.54
2:G:1171:TRP:HB3	2:G:1265:TYR:CE1	2.41	0.54
2:L:1694:PHE:HD2	2:L:1843:ALA:HB2	1.72	0.54
1:B:1686:PRO:HB2	1:B:1713:PHE:HD2	1.73	0.54
2:G:617:PHE:HD1	2:G:822:ALA:HA	1.73	0.54
1:C:439:ARG:O	1:C:444:LEU:HD12	2.07	0.54
1:C:965:TYR:HE1	1:C:1669:PHE:CD1	2.25	0.54
1:B:962:ASN:HB3	2:H:969:ARG:HD2	1.90	0.54
2:L:382:LEU:HB3	2:L:499:VAL:HB	1.90	0.54
1:E:1443:LEU:HD13	1:E:1470:ARG:HB3	1.90	0.54
1:E:1032:MET:HE2	1:E:1165:PRO:HB3	1.89	0.54
2:J:1288:PHE:CE2	2:J:1292:VAL:HG21	2.43	0.54
2:L:607:GLY:HA2	2:L:612:THR:HG21	1.90	0.54
1:D:335:LEU:HD12	1:D:335:LEU:C	2.28	0.54
2:G:350:MET:HG3	2:G:435:ILE:CG2	2.38	0.54
2:K:1966:ARG:O	2:K:1970:VAL:HG23	2.06	0.54
2:H:1130:ILE:HG21	2:H:1155:PRO:HB3	1.89	0.54
1:E:457:THR:HG22	1:E:464:GLN:HA	1.88	0.54
1:B:1414:PRO:HD2	1:D:1473:HIS:CD2	2.42	0.54
1:B:540:LYS:HE2	1:B:610:GLU:HG3	1.89	0.54
2:I:119:VAL:HA	2:I:122:ILE:HG22	1.90	0.54
2:L:926:LEU:O	2:L:1008:ILE:HD11	2.08	0.54
1:A:918:LEU:O	1:A:921:GLU:HG3	2.08	0.54
2:J:1883:MET:HB2	2:J:2001:ILE:HD12	1.90	0.54
1:B:1647:ASP:HB2	1:B:1649:ALA:HB3	1.89	0.54
2:L:1334:ALA:O	2:L:1342:PHE:HA	2.07	0.54
1:A:726:VAL:HG21	1:A:780:ALA:HB3	1.89	0.54
2:L:347:PRO:HA	2:L:432:PHE:CD1	2.43	0.54
2:G:2052:LYS:HD3	2:G:2074:TRP:CE2	2.44	0.53
1:D:628:TYR:CE1	1:D:630:LYS:HG2	2.43	0.53
2:K:600:VAL:HG13	2:K:601:PRO:N	2.24	0.53
2:K:781:GLY:HA2	2:K:1071:VAL:CG1	2.35	0.53
1:E:613:PRO:O	1:E:614:PHE:HB2	2.07	0.53
2:G:24:LEU:HD11	2:G:45:ALA:CB	2.38	0.53
2:K:916:GLY:C	2:K:929:MET:HE1	2.28	0.53
2:H:215:TRP:CE3	2:H:215:TRP:N	2.76	0.53
2:K:1115:TYR:OH	2:K:1173:HIS:HD2	1.90	0.53

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:H:1888:PRO:HB3	2:H:1895:PHE:CD1	2.42	0.53
2:J:1977:ARG:HD2	2:J:1978:LYS:HG3	1.89	0.53
1:F:890:ASN:OD1	2:G:1755:LYS:HE2	2.08	0.53
2:G:1305:LEU:HD23	2:G:1366:ILE:HD11	1.90	0.53
1:C:397:ARG:HH11	1:C:692:THR:HG21	1.73	0.53
2:G:1868:GLN:HG2	2:G:1873:ARG:HH22	1.73	0.53
2:K:1142:ILE:HG13	2:K:1209:PRO:HG3	1.90	0.53
2:K:636:TYR:N	2:K:636:TYR:CD1	2.75	0.53
2:K:917:ARG:HD3	2:K:921:GLY:O	2.08	0.53
2:K:924:VAL:HG12	2:K:925:ASP:H	1.73	0.53
2:G:917:ARG:HD3	2:G:921:GLY:O	2.08	0.53
1:A:1390:GLY:O	1:E:1264:MET:HB3	2.08	0.53
1:B:950:ALA:HA	1:B:953:ARG:CZ	2.38	0.53
1:D:653:LYS:HD3	1:D:742:TYR:HE2	1.71	0.53
2:H:43:PHE:CZ	2:I:42:HIS:NE2	2.76	0.53
2:K:374:GLU:CA	2:K:377:HIS:HD2	2.10	0.53
2:H:501:TRP:NE1	2:H:528:THR:HG22	2.10	0.53
2:L:779:GLY:HA3	2:L:811:MET:CE	2.38	0.53
2:J:24:LEU:HD11	2:J:45:ALA:CB	2.38	0.53
2:J:1519:THR:OG1	2:J:1521:GLU:HG2	2.08	0.53
1:C:1213:VAL:HG22	1:C:1300:ARG:NH2	2.17	0.53
1:C:1606:VAL:O	1:C:1608:PRO:HD3	2.09	0.53
2:H:914:TRP:HE1	2:H:916:GLY:HA3	1.74	0.53
2:K:106:LEU:HD11	2:K:143:GLY:O	2.07	0.53
2:H:1335:PHE:CE1	2:H:1629:ILE:CD1	2.91	0.53
1:E:27:ARG:HG3	2:K:2045:ALA:HB2	1.90	0.53
2:J:1305:LEU:HD23	2:J:1366:ILE:HD11	1.89	0.53
2:K:957:LYS:HE2	2:K:1022:ARG:HH22	1.73	0.53
2:G:350:MET:HG3	2:G:435:ILE:HB	1.90	0.53
2:K:1130:ILE:HG21	2:K:1155:PRO:HB3	1.90	0.53
1:A:415:TYR:CE2	1:A:1614:THR:HB	2.43	0.53
1:E:1647:ASP:HB2	1:E:1649:ALA:HB3	1.90	0.53
2:H:1745:LEU:HD12	2:H:1746:THR:N	2.23	0.53
2:L:1286:LYS:HZ1	2:L:1367:ASP:HA	1.72	0.53
2:K:60:THR:HG22	2:K:62:GLU:H	1.74	0.53
1:D:950:ALA:HA	1:D:953:ARG:CZ	2.38	0.53
2:I:895:LEU:HD13	2:I:1034:LEU:HB3	1.90	0.53
1:C:918:LEU:O	1:C:921:GLU:HG3	2.08	0.53
1:E:623:PHE:N	1:E:623:PHE:CD2	2.75	0.53
1:F:555:GLN:HG2	1:F:557:ARG:NH2	2.23	0.53
2:G:1602:LEU:HD13	2:G:1606:ILE:CD1	2.39	0.53
1:D:1099:GLU:HA	1:D:1149:LEU:HD23	1.91	0.53

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:D:1565:PRO:O	1:D:1567:GLY:N	2.40	0.53
1:A:827:ARG:NH1	1:A:831:GLU:OE2	2.41	0.53
2:K:411:PRO:HD2	2:K:414:LEU:CD1	2.39	0.53
2:H:31:LEU:HD13	2:H:75:LEU:HD21	1.89	0.53
2:K:186:LEU:HD21	2:K:256:VAL:HG22	1.89	0.53
2:L:1964:ASP:O	2:L:1968:HIS:HB2	2.08	0.53
2:K:1335:PHE:HE1	2:K:1629:ILE:CD1	2.21	0.53
1:E:1565:PRO:O	1:E:1566:LYS:C	2.47	0.53
2:L:2033:SER:HA	2:L:2036:ILE:HD12	1.89	0.53
2:I:845:ASN:HD21	2:I:849:ARG:HH11	1.56	0.53
2:H:1289:TYR:HB2	2:H:1370:LEU:HD23	1.89	0.53
2:L:930:THR:HG22	2:L:933:GLU:HG3	1.89	0.53
2:J:1346:MET:HB2	2:J:1427:MET:HE3	1.90	0.53
2:J:685:VAL:HG23	2:J:1186:ARG:HH12	1.71	0.53
2:H:347:PRO:HA	2:H:432:PHE:CD1	2.44	0.53
1:F:1670:HIS:ND1	2:L:1009:ASN:ND2	2.57	0.53
2:H:1619:LEU:O	2:H:1623:TRP:HB2	2.08	0.53
2:I:1247:PHE:HB3	2:I:1256:VAL:CG1	2.39	0.53
2:L:1873:ARG:NH1	2:L:2002:ASP:HB3	2.23	0.53
2:I:818:THR:HA	2:I:829:LYS:HG2	1.90	0.53
2:J:268:LEU:HD12	2:J:275:LEU:CD1	2.38	0.53
1:A:1501:ALA:O	1:A:1504:ARG:HB2	2.09	0.53
2:J:1338:ARG:NH2	2:L:327:PRO:O	2.36	0.53
2:J:1091:HIS:O	2:J:1094:HIS:HB2	2.07	0.53
2:L:1764:MET:CE	2:L:1865:LEU:HD12	2.39	0.53
1:C:570:TYR:O	1:C:574:ILE:HG12	2.09	0.53
2:K:930:THR:HG22	2:K:933:GLU:CG	2.38	0.53
2:H:215:TRP:CE3	2:H:216:ASP:N	2.66	0.53
2:G:1964:ASP:O	2:G:1968:HIS:HB2	2.08	0.53
2:L:1726:PHE:CZ	2:L:1857:VAL:HB	2.44	0.53
2:H:845:ASN:HD21	2:H:849:ARG:HH11	1.55	0.53
1:D:1553:VAL:HG22	1:D:1604:TYR:O	2.07	0.53
1:A:421:ARG:HH22	1:A:1613:LYS:CG	2.21	0.53
1:D:1157:ASP:O	1:D:1159:LEU:HD12	2.08	0.53
1:E:549:TYR:O	1:E:553:ARG:HB3	2.09	0.53
2:I:1192:LEU:HD22	2:I:1196:PHE:CE1	2.43	0.53
1:F:29:ILE:HD11	2:L:1922:VAL:C	2.29	0.53
2:H:573:VAL:CG2	2:H:804:PRO:HB2	2.38	0.53
1:B:41:THR:HG22	2:H:1689:VAL:HG12	1.90	0.53
1:B:498:THR:HG22	1:B:508:TYR:HD1	1.73	0.53
1:A:415:TYR:CD2	1:A:1614:THR:HA	2.43	0.53
1:B:397:ARG:HH11	1:B:692:THR:HG21	1.74	0.53

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:H:240:THR:O	2:H:244:VAL:HG23	2.08	0.53
2:G:1537:GLY:O	2:G:1539:PRO:HD3	2.09	0.53
2:K:645:ILE:HD13	2:K:687:ILE:HD11	1.90	0.53
2:H:931:TYR:O	2:H:935:VAL:HG12	2.07	0.53
1:F:1020:PHE:CE2	1:F:1028:MET:HG3	2.43	0.53
1:E:397:ARG:NH1	1:E:692:THR:HG21	2.22	0.53
2:G:699:ILE:HD12	2:G:699:ILE:N	2.24	0.53
1:C:443:LEU:H	1:C:443:LEU:HD12	1.73	0.53
2:L:350:MET:HG3	2:L:435:ILE:CG2	2.38	0.53
2:H:2052:LYS:HB3	2:H:2074:TRP:CZ2	2.43	0.53
2:I:578:PRO:HG3	2:I:792:LEU:O	2.08	0.53
1:E:907:PHE:O	1:E:909:PRO:HD3	2.08	0.53
2:J:1802:ALA:HB1	2:J:1804:GLN:NE2	2.17	0.53
1:E:628:TYR:CZ	1:E:630:LYS:HG2	2.44	0.53
2:L:24:LEU:HD11	2:L:45:ALA:CB	2.38	0.53
2:J:487:ILE:CB	2:J:488:PRO:HD3	2.37	0.53
2:G:1466:VAL:O	2:G:1470:LYS:HG2	2.08	0.53
2:L:1519:THR:OG1	2:L:1521:GLU:HG2	2.08	0.53
2:K:1285:ILE:O	2:K:1288:PHE:HB3	2.08	0.53
2:L:1915:LEU:HB2	2:L:1935:ALA:HB1	1.90	0.53
2:J:612:THR:O	2:J:612:THR:HG22	2.09	0.53
1:A:421:ARG:HH22	1:A:1613:LYS:CB	2.21	0.53
1:E:332:GLN:O	1:E:335:LEU:HB3	2.09	0.53
1:B:621:ASP:HB3	1:B:625:ASN:H	1.72	0.53
2:K:378:ILE:HG23	2:K:391:VAL:HG13	1.90	0.53
2:G:1706:MET:O	2:G:1709:TYR:HB3	2.08	0.53
2:L:1178:THR:HG22	2:L:1180:VAL:H	1.74	0.53
2:J:119:VAL:HA	2:J:122:ILE:HG22	1.90	0.53
1:D:768:ARG:HA	1:D:772:THR:OG1	2.09	0.53
1:A:1488:SER:O	1:E:1480:ARG:NH2	2.41	0.53
1:A:950:ALA:HA	1:A:953:ARG:CZ	2.37	0.53
2:K:1944:ASN:HA	2:K:1993:PHE:CD1	2.44	0.53
2:I:246:ALA:HB3	2:I:247:PRO:HD3	1.89	0.53
1:C:332:GLN:O	1:C:335:LEU:HB3	2.09	0.53
2:G:924:VAL:HG12	2:G:925:ASP:H	1.73	0.53
1:E:432:GLN:O	1:E:436:ILE:HG13	2.08	0.53
2:I:268:LEU:HD12	2:I:275:LEU:CD1	2.39	0.53
2:L:1440:THR:HG22	2:L:1440:THR:O	2.08	0.53
2:G:314:LEU:HG	2:G:318:ILE:HD11	1.91	0.53
2:I:579:ARG:HB2	2:I:591:ASP:HB3	1.91	0.53
1:C:1483:ALA:HA	1:C:1486:GLN:HE21	1.72	0.53
2:K:580:LEU:HD11	2:K:1098:LEU:HB3	1.89	0.53

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:K:603:VAL:HG22	2:K:810:CYS:SG	2.49	0.53
1:A:628:TYR:HE1	1:A:630:LYS:HA	1.74	0.53
2:J:855:ILE:HD13	2:J:856:THR:N	2.23	0.53
2:K:1067:LEU:HB2	3:K:2101:FMN:HM71	1.89	0.53
1:D:29:ILE:HD11	2:J:1922:VAL:CA	2.38	0.53
2:I:1760:ASN:O	2:I:1764:MET:HG2	2.08	0.53
2:H:1586:ASP:OD1	2:H:1588:ASN:HB2	2.08	0.53
1:D:1214:HIS:CD2	1:D:1216:SER:OG	2.56	0.53
2:G:196:PHE:O	2:G:262:MET:HE1	2.09	0.53
1:B:1218:VAL:HG13	1:B:1301:VAL:HG13	1.91	0.53
2:J:1053:ILE:HD11	2:J:1061:VAL:HG13	1.89	0.53
1:D:1401:LEU:HD22	1:D:1401:LEU:O	2.08	0.53
2:G:1962:LEU:O	2:G:1966:ARG:HB3	2.08	0.53
1:A:29:ILE:HD11	2:G:1923:ALA:N	2.23	0.53
2:J:120:HIS:CD2	2:J:137:VAL:HG11	2.43	0.53
1:B:1602:PHE:HD2	1:B:1602:PHE:N	2.06	0.53
2:K:1206:ILE:O	2:K:1209:PRO:HG3	2.09	0.53
2:I:1194:ARG:HD2	2:I:1598:SER:O	2.09	0.53
2:K:1343:PHE:CE2	2:K:1388:PRO:HD2	2.43	0.53
2:I:228:LEU:O	2:I:232:HIS:HD2	1.91	0.53
1:C:1052:ASP:HB3	1:C:1055:THR:O	2.08	0.53
2:J:1130:ILE:HG21	2:J:1155:PRO:HB3	1.88	0.53
1:E:1587:PRO:HA	1:E:1611:SER:OG	2.09	0.53
2:L:931:TYR:O	2:L:935:VAL:HG12	2.09	0.53
1:D:1164:ILE:CD1	1:D:1355:GLN:HG3	2.38	0.53
2:J:636:TYR:HD1	2:J:636:TYR:N	2.07	0.53
2:G:636:TYR:N	2:G:636:TYR:HD1	2.07	0.53
1:A:1011:ARG:C	1:A:1011:ARG:HD2	2.28	0.53
2:L:1411:LYS:O	2:L:1434:LEU:HD12	2.09	0.53
2:K:179:ILE:O	2:K:179:ILE:HG23	2.08	0.53
1:A:1268:SER:CB	1:E:1389:ILE:HG13	2.14	0.53
2:K:1918:VAL:HG13	2:K:2006:HIS:CB	2.38	0.53
1:B:1150:ILE:HG12	1:D:1148:LEU:HD21	1.90	0.53
1:A:532:ILE:O	1:F:575:ARG:NH2	2.41	0.53
2:H:1802:ALA:HB1	2:H:1804:GLN:NE2	2.18	0.53
2:K:1346:MET:HB2	2:K:1427:MET:HE3	1.91	0.53
2:L:487:ILE:CB	2:L:488:PRO:HD3	2.37	0.53
2:G:911:GLN:NE2	2:G:1065:CYS:H	2.06	0.53
2:G:1405:ILE:HG22	2:G:1445:THR:OG1	2.09	0.53
1:E:827:ARG:NH1	1:E:831:GLU:OE2	2.41	0.53
1:D:1444:GLN:OE1	1:D:1444:GLN:HA	2.09	0.53
1:D:1443:LEU:HD13	1:D:1470:ARG:HB3	1.90	0.53

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:E:36:LEU:CD2	1:E:44:ILE:HD11	2.38	0.53
1:F:1505:GLY:O	1:F:1509:THR:HG23	2.08	0.53
1:A:1443:LEU:HD11	1:A:1470:ARG:HB3	1.90	0.53
2:J:1726:PHE:CZ	2:J:1857:VAL:HB	2.44	0.53
1:E:1164:ILE:HD13	1:E:1355:GLN:HG3	1.91	0.53
2:G:723:ALA:O	2:G:726:GLN:HB2	2.08	0.53
2:L:718:PRO:HG3	2:L:727:VAL:HG21	1.90	0.53
2:G:186:LEU:CD2	2:G:256:VAL:HG22	2.38	0.53
2:K:1603:PRO:HB2	2:K:1644:LEU:HD21	1.90	0.53
1:E:573:VAL:O	1:E:577:LEU:HG	2.08	0.53
2:K:833:VAL:HG13	2:K:1077:LYS:HA	1.91	0.53
1:C:992:LYS:HE2	1:F:1495:ARG:NH1	2.24	0.53
2:I:388:ASN:C	2:I:388:ASN:HD22	2.11	0.53
2:G:962:PHE:O	2:G:966:VAL:HG23	2.09	0.53
2:K:1594:ARG:NH1	2:K:1594:ARG:CG	2.63	0.53
1:C:427:ARG:HD2	1:C:490:VAL:HG12	1.90	0.53
2:I:2052:LYS:HB3	2:I:2074:TRP:CZ2	2.44	0.53
2:J:2052:LYS:HD3	2:J:2074:TRP:HE1	1.72	0.53
2:I:467:ILE:CG2	2:I:468:PRO:HD2	2.37	0.53
2:K:857:VAL:CG2	2:K:877:LYS:HB2	2.39	0.53
2:K:857:VAL:HG11	2:K:876:TRP:CD1	2.44	0.53
1:B:1425:LEU:CD2	1:B:1429:ARG:HH21	2.16	0.53
2:G:1299:VAL:CG2	2:G:1301:PHE:CE2	2.91	0.53
2:I:1305:LEU:H	2:I:1305:LEU:HD12	1.73	0.53
2:K:49:LYS:HA	2:K:79:TYR:HE1	1.73	0.53
2:G:1064:THR:HG22	2:G:1065:CYS:N	2.23	0.53
2:G:1067:LEU:HD12	2:G:1067:LEU:N	2.24	0.53
1:A:1099:GLU:HA	1:A:1149:LEU:HD23	1.90	0.53
2:G:396:ILE:H	2:G:396:ILE:CD1	2.20	0.53
2:K:487:ILE:CB	2:K:488:PRO:HD3	2.37	0.53
2:J:251:PRO:CG	2:J:316:PHE:HA	2.35	0.53
2:G:1404:VAL:O	2:G:1445:THR:HA	2.09	0.53
2:G:796:TRP:CH2	2:G:805:MET:HE1	2.43	0.53
2:H:1259:LEU:HB2	2:H:1288:PHE:CE1	2.44	0.53
2:K:663:ILE:H	2:K:663:ILE:CD1	2.21	0.53
2:J:783:GLY:HA2	2:J:815:ARG:HD3	1.91	0.53
2:L:1097:PHE:CD2	2:L:1100:ARG:NH1	2.77	0.53
2:K:979:LEU:HD21	2:K:999:ALA:CB	2.37	0.53
1:E:421:ARG:HH22	1:E:1613:LYS:HG3	1.72	0.53
2:H:723:ALA:O	2:H:726:GLN:HB2	2.09	0.53
2:J:713:HIS:CD2	2:J:740:ILE:HD13	2.44	0.53
1:F:64:LYS:HE3	2:L:1923:ALA:CB	2.39	0.53

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:E:621:ASP:HB3	1:E:625:ASN:HB2	1.91	0.53
2:I:740:ILE:H	2:I:740:ILE:HD12	1.73	0.53
2:J:1130:ILE:HB	2:J:1133:LEU:HD22	1.90	0.53
2:G:1154:LEU:HD13	2:G:1198:PRO:HB3	1.91	0.53
2:J:1031:VAL:HG22	2:J:1041:TRP:HB3	1.91	0.53
2:J:228:LEU:O	2:J:232:HIS:HD2	1.91	0.53
2:K:258:LEU:CD1	2:K:291:VAL:HG13	2.39	0.53
2:L:119:VAL:HA	2:L:122:ILE:HG22	1.91	0.53
2:I:719:GLY:O	2:I:755:GLU:HG3	2.08	0.53
2:L:784:GLY:HA3	2:L:786:GLU:OE2	2.09	0.53
2:H:73:VAL:HA	2:H:113:PHE:CE2	2.44	0.53
1:D:1534:GLU:HG2	1:D:1625:PHE:CE1	2.43	0.53
2:H:636:TYR:N	2:H:636:TYR:HD1	2.06	0.53
2:I:1835:GLY:HA3	2:I:1839:GLY:C	2.29	0.53
2:L:228:LEU:O	2:L:232:HIS:HD2	1.92	0.53
2:I:501:TRP:CZ2	2:I:528:THR:HG21	2.43	0.53
1:A:532:ILE:HG21	1:A:907:PHE:CB	2.34	0.53
1:E:628:TYR:CE1	1:E:630:LYS:HG2	2.44	0.53
1:A:36:LEU:CD2	1:A:44:ILE:HD11	2.39	0.53
2:H:1915:LEU:HB2	2:H:1935:ALA:HB1	1.90	0.53
2:J:1475:LEU:HA	2:J:1526:ALA:HB2	1.91	0.53
1:A:1388:LYS:HD3	1:E:1692:GLN:NE2	2.23	0.53
2:H:1966:ARG:O	2:H:1970:VAL:HG23	2.09	0.53
1:F:397:ARG:HH11	1:F:692:THR:HG21	1.73	0.53
2:K:480:GLU:O	2:K:480:GLU:HG2	2.08	0.53
2:K:778:ALA:HB2	2:K:807:PHE:CD2	2.44	0.53
1:D:961:ALA:O	2:J:969:ARG:NH1	2.42	0.53
2:H:600:VAL:HG13	2:H:601:PRO:N	2.24	0.53
2:G:578:PRO:HG3	2:G:792:LEU:O	2.08	0.53
2:I:101:VAL:O	2:I:105:ILE:HG12	2.09	0.53
2:K:327:PRO:CD	2:L:1338:ARG:NH2	2.68	0.53
2:G:24:LEU:HD11	2:G:45:ALA:HB1	1.91	0.53
2:G:867:LYS:HD3	2:G:1065:CYS:SG	2.49	0.53
2:J:416:GLN:HA	2:J:419:ILE:HG13	1.91	0.53
2:K:612:THR:CG2	2:K:629:GLU:O	2.57	0.53
1:F:1363:MET:HE1	1:F:1373:VAL:CG2	2.38	0.53
2:K:486:ILE:O	2:K:490:LEU:HG	2.09	0.53
2:J:472:THR:HG23	2:J:499:VAL:HA	1.90	0.53
2:L:227:ILE:HD13	2:L:252:LEU:HD13	1.91	0.53
2:I:289:ILE:HG22	2:I:490:LEU:HD22	1.90	0.53
2:L:1884:CYS:HB3	2:L:1936:LEU:CD1	2.39	0.53
2:G:2033:SER:HA	2:G:2036:ILE:HD12	1.89	0.53

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:K:1767:GLU:HB2	2:K:2016:PRO:HG3	1.91	0.53
2:G:635:TYR:CB	2:G:641:MET:HG3	2.38	0.53
2:I:1868:GLN:HG2	2:I:1873:ARG:NH2	2.24	0.53
2:I:447:ALA:O	2:I:451:ILE:HG13	2.09	0.53
2:J:1015:HIS:NE2	2:J:1019:LEU:HD11	2.23	0.53
2:K:268:LEU:HD12	2:K:275:LEU:CD1	2.39	0.53
1:A:549:TYR:O	1:A:553:ARG:HB3	2.08	0.53
2:I:1904:VAL:HG22	2:I:1939:LEU:HD22	1.92	0.53
1:E:397:ARG:HH11	1:E:692:THR:HG21	1.73	0.53
2:G:833:VAL:HG13	2:G:1077:LYS:HA	1.91	0.53
1:F:573:VAL:O	1:F:577:LEU:HG	2.09	0.53
2:K:1402:ASN:ND2	2:K:1416:CYS:HB2	2.23	0.53
2:J:1160:PHE:O	2:J:1164:ILE:HG13	2.09	0.53
2:I:22:ARG:CG	2:I:39:THR:HA	2.39	0.52
1:A:1157:ASP:O	1:A:1159:LEU:HD12	2.09	0.52
1:A:1081:ILE:HA	1:A:1163:GLN:HE22	1.74	0.52
1:A:18:LEU:HD21	2:G:1844:LEU:CD1	2.39	0.52
2:K:468:PRO:HD3	2:K:479:ARG:HH21	1.73	0.52
1:A:1150:ILE:HG12	1:E:1148:LEU:HD21	1.91	0.52
1:B:628:TYR:HE1	1:B:630:LYS:HA	1.74	0.52
2:H:581:VAL:HG11	2:H:1113:ILE:HD11	1.91	0.52
2:I:1064:THR:HG22	2:I:1065:CYS:N	2.24	0.52
2:I:1067:LEU:N	2:I:1067:LEU:HD12	2.24	0.52
2:L:250:PHE:CB	2:L:251:PRO:HD3	2.38	0.52
1:B:439:ARG:O	1:B:444:LEU:HD12	2.09	0.52
2:L:1516:GLU:HA	2:L:1521:GLU:O	2.09	0.52
1:C:636:TYR:HB2	1:C:888:ILE:HD11	1.91	0.52
2:J:930:THR:HG22	2:J:933:GLU:HG3	1.90	0.52
1:B:36:LEU:CD2	1:B:44:ILE:HD11	2.38	0.52
2:H:1764:MET:HB3	2:H:1780:ILE:CD1	2.39	0.52
1:A:1444:GLN:HA	1:A:1444:GLN:OE1	2.08	0.52
2:I:2033:SER:HA	2:I:2036:ILE:HD12	1.92	0.52
2:H:1871:VAL:CG1	2:H:1872:GLU:N	2.72	0.52
2:G:1285:ILE:O	2:G:1288:PHE:HB3	2.07	0.52
2:J:1475:LEU:HD11	2:J:1483:LEU:HD11	1.91	0.52
1:F:1432:ILE:CD1	1:F:1481:GLN:HB3	2.39	0.52
1:E:498:THR:HG21	1:E:858:LEU:O	2.10	0.52
2:G:1305:LEU:H	2:G:1305:LEU:CD1	2.23	0.52
1:C:1432:ILE:CD1	1:C:1481:GLN:HB3	2.39	0.52
2:J:573:VAL:HG22	2:J:804:PRO:HB2	1.91	0.52
2:G:155:ASP:HB3	2:G:270:ARG:HH21	1.74	0.52
2:J:1393:ASP:HB3	2:J:1395:LEU:HD21	1.90	0.52

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:C:950:ALA:HA	1:C:953:ARG:CZ	2.38	0.52
1:C:1685:ALA:HB1	1:C:1686:PRO:CD	2.39	0.52
1:A:1164:ILE:CD1	1:A:1355:GLN:HG3	2.39	0.52
1:A:28:TRP:CZ2	1:A:53:LEU:HD22	2.44	0.52
1:F:653:LYS:HD3	1:F:742:TYR:HE2	1.74	0.52
2:I:1334:ALA:O	2:I:1342:PHE:HA	2.09	0.52
1:A:1647:ASP:HB2	1:A:1649:ALA:HB3	1.90	0.52
2:L:108:GLU:HA	2:L:111:ARG:HD2	1.90	0.52
2:J:1334:ALA:O	2:J:1342:PHE:HA	2.08	0.52
2:K:1411:LYS:O	2:K:1434:LEU:HD12	2.08	0.52
1:C:907:PHE:O	1:C:909:PRO:HD3	2.09	0.52
2:L:699:ILE:N	2:L:699:ILE:HD12	2.24	0.52
1:C:1431:GLN:HG2	1:F:1431:GLN:OE1	2.09	0.52
2:H:1393:ASP:HB3	2:H:1395:LEU:HD21	1.91	0.52
2:L:1141:LYS:HE2	2:L:1143:SER:HB2	1.91	0.52
1:A:612:ILE:HG12	1:A:628:TYR:CD2	2.43	0.52
2:L:24:LEU:HD11	2:L:45:ALA:HB1	1.90	0.52
2:I:452:LEU:HD21	2:I:488:PRO:HA	1.91	0.52
1:B:527:ALA:HB2	1:B:637:LEU:HD22	1.91	0.52
1:C:406:ALA:CA	1:C:439:ARG:HH11	2.22	0.52
1:E:1444:GLN:OE1	1:E:1444:GLN:HA	2.08	0.52
1:D:883:LEU:N	1:D:883:LEU:HD23	2.24	0.52
2:I:411:PRO:HD2	2:I:414:LEU:CD1	2.38	0.52
2:I:1726:PHE:CZ	2:I:1857:VAL:HB	2.44	0.52
2:L:616:ASP:OD2	2:L:823:HIS:CE1	2.59	0.52
1:D:1078:ILE:HG21	1:D:1352:MET:HE2	1.91	0.52
2:J:186:LEU:HG	2:J:256:VAL:HG22	1.90	0.52
1:A:551:LEU:CD2	1:F:562:SER:HB3	2.39	0.52
2:L:189:ILE:HD12	2:L:256:VAL:HG13	1.92	0.52
1:D:1142:LEU:HD12	1:D:1142:LEU:N	2.23	0.52
2:L:126:VAL:HG12	2:L:127:ALA:N	2.25	0.52
2:L:935:VAL:HG11	2:L:997:LEU:HD21	1.92	0.52
2:K:1745:LEU:HD12	2:K:1746:THR:N	2.24	0.52
1:D:788:ARG:HB2	1:D:790:TYR:CD2	2.44	0.52
1:F:918:LEU:O	1:F:921:GLU:HG3	2.10	0.52
1:E:1047:TYR:CZ	1:E:1058:PRO:HB3	2.44	0.52
2:K:170:TYR:CE2	2:K:507:PHE:HB3	2.44	0.52
1:F:415:TYR:O	1:F:419:PHE:HD1	1.92	0.52
2:I:1154:LEU:HD13	2:I:1198:PRO:HB3	1.92	0.52
2:G:1194:ARG:NH2	2:G:1601:ASN:OD1	2.42	0.52
2:J:2052:LYS:H	2:J:2052:LYS:CE	2.09	0.52
1:B:1702:ARG:HG3	1:B:1702:ARG:NH1	2.05	0.52

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:I:1091:HIS:O	2:I:1094:HIS:HB2	2.09	0.52
2:K:1064:THR:HG22	2:K:1065:CYS:N	2.24	0.52
1:A:613:PRO:C	1:A:615:LEU:H	2.13	0.52
2:G:49:LYS:HA	2:G:79:TYR:HE1	1.73	0.52
2:J:1067:LEU:N	2:J:1067:LEU:HD12	2.24	0.52
2:G:779:GLY:HA3	2:G:811:MET:CE	2.39	0.52
2:K:24:LEU:HD11	2:K:45:ALA:HB1	1.89	0.52
1:C:1099:GLU:HA	1:C:1149:LEU:HD23	1.91	0.52
2:L:208:LEU:HA	2:L:211:LEU:HD12	1.92	0.52
2:G:31:LEU:HD13	2:G:75:LEU:HD21	1.91	0.52
2:H:930:THR:HG22	2:H:933:GLU:H	1.74	0.52
2:H:1031:VAL:HG22	2:H:1041:TRP:HB3	1.90	0.52
2:G:617:PHE:CE1	2:G:822:ALA:HB2	2.45	0.52
1:B:11:TYR:O	1:B:15:VAL:HG23	2.08	0.52
1:F:445:LEU:HD11	1:F:481:LEU:HD11	1.90	0.52
2:L:686:PRO:HB3	2:L:1187:PHE:CE1	2.44	0.52
1:F:619:LYS:HG2	1:F:620:LYS:N	2.25	0.52
2:I:1902:TYR:OH	2:I:1966:ARG:HB2	2.09	0.52
1:C:498:THR:HG22	1:C:508:TYR:HD1	1.73	0.52
1:F:498:THR:HG21	1:F:858:LEU:O	2.09	0.52
1:F:1523:HIS:HB2	1:F:1624:SER:HA	1.91	0.52
1:E:1475:GLU:HB3	1:E:1479:ARG:NH2	2.24	0.52
2:H:980:LEU:HB2	2:H:996:ILE:CD1	2.40	0.52
2:H:246:ALA:HB3	2:H:247:PRO:HD3	1.91	0.52
2:I:1402:ASN:ND2	2:I:1416:CYS:HB2	2.24	0.52
2:J:1227:LYS:HG2	2:J:1228:LEU:N	2.24	0.52
2:G:135:GLY:HA2	2:G:138:ARG:NH1	2.24	0.52
2:L:73:VAL:HA	2:L:113:PHE:CE2	2.45	0.52
1:A:573:VAL:O	1:A:577:LEU:HG	2.09	0.52
1:B:1381:MET:HG2	1:B:1382:THR:N	2.22	0.52
2:G:1555:VAL:O	2:G:1555:VAL:HG12	2.10	0.52
2:G:1031:VAL:HG22	2:G:1041:TRP:HB3	1.91	0.52
1:A:1692:GLN:HE22	1:E:1388:LYS:HD3	1.75	0.52
2:I:138:ARG:HB3	2:I:192:THR:HG23	1.90	0.52
2:H:645:ILE:HD13	2:H:687:ILE:HD11	1.91	0.52
2:L:1247:PHE:HB3	2:L:1256:VAL:CG1	2.39	0.52
2:I:24:LEU:HD11	2:I:45:ALA:HB1	1.90	0.52
2:L:580:LEU:HD11	2:L:1098:LEU:HB3	1.92	0.52
2:H:101:VAL:O	2:H:105:ILE:HG12	2.09	0.52
2:L:1721:ARG:HH21	2:L:1853:ILE:HD12	1.69	0.52
1:A:612:ILE:HD12	1:F:579:MET:HE2	1.91	0.52
2:J:465:LEU:HB2	2:J:479:ARG:HG2	1.91	0.52

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:G:1770:ASN:HB2	2:G:1776:LYS:CE	2.34	0.52
1:B:613:PRO:O	1:B:615:LEU:N	2.43	0.52
1:B:714:PHE:CE1	1:B:725:LEU:HD12	2.44	0.52
2:G:251:PRO:CG	2:G:316:PHE:HA	2.38	0.52
1:E:636:TYR:HB2	1:E:888:ILE:HD11	1.92	0.52
2:K:796:TRP:CH2	2:K:805:MET:HE1	2.44	0.52
1:C:998:GLY:CA	1:C:1361:VAL:HG13	2.37	0.52
2:I:1745:LEU:HB3	2:I:1799:LEU:HD22	1.90	0.52
2:G:1335:PHE:HE1	2:G:1629:ILE:HD13	1.73	0.52
1:A:1142:LEU:HD12	1:A:1142:LEU:N	2.24	0.52
1:E:1565:PRO:O	1:E:1567:GLY:N	2.42	0.52
2:H:1288:PHE:CE2	2:H:1292:VAL:HG21	2.45	0.52
1:C:1574:LEU:O	1:C:1578:LEU:HG	2.10	0.52
1:F:1443:LEU:HD13	1:F:1470:ARG:HB3	1.91	0.52
1:A:11:TYR:O	1:A:15:VAL:HG23	2.09	0.52
2:J:1939:LEU:O	2:J:1943:LEU:HG	2.08	0.52
2:H:979:LEU:HD21	2:H:999:ALA:CB	2.39	0.52
2:L:1192:LEU:HD22	2:L:1196:PHE:HE1	1.74	0.52
1:E:619:LYS:HG2	1:E:620:LYS:N	2.23	0.52
1:D:767:HIS:HB2	1:D:813:LEU:HD12	1.90	0.52
1:E:2:ARG:HB2	1:E:5:VAL:HB	1.91	0.52
2:K:1192:LEU:HD22	2:K:1196:PHE:CE1	2.44	0.52
2:I:1142:ILE:HD11	2:I:1209:PRO:HB3	1.90	0.52
2:L:1008:ILE:HD12	2:L:1013:VAL:HG22	1.91	0.52
2:H:119:VAL:HA	2:H:122:ILE:HG22	1.90	0.52
1:B:415:TYR:O	1:B:419:PHE:HD1	1.91	0.52
2:K:204:ILE:HG21	2:K:312:VAL:HG21	1.92	0.52
2:G:179:ILE:O	2:G:179:ILE:HG23	2.09	0.52
1:F:788:ARG:HB2	1:F:790:TYR:CD2	2.44	0.52
2:J:1741:ASN:HD21	2:J:1798:GLY:HA3	1.75	0.52
1:E:41:THR:HG21	2:K:1691:ALA:HB2	1.90	0.52
1:A:653:LYS:HD3	1:A:742:TYR:HE2	1.73	0.52
2:L:1315:ILE:H	2:L:1315:ILE:HD12	1.73	0.52
2:L:1138:ASP:HB2	2:L:1140:ASN:H	1.73	0.52
1:D:1610:ARG:NH1	1:D:1610:ARG:CG	2.61	0.52
2:L:1091:HIS:O	2:L:1094:HIS:HB2	2.10	0.52
2:J:1881:TYR:OH	2:J:2009:PHE:HE1	1.93	0.52
2:I:487:ILE:CB	2:I:488:PRO:HD3	2.38	0.52
1:C:1565:PRO:O	1:C:1566:LYS:C	2.48	0.52
2:H:2033:SER:HA	2:H:2036:ILE:HD12	1.91	0.52
1:B:1443:LEU:HD13	1:B:1470:ARG:HB3	1.90	0.52
2:G:1335:PHE:CE1	2:G:1629:ILE:HD11	2.44	0.52

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:1230:SER:HA	1:A:1311:GLN:NE2	2.21	0.52
2:J:1960:MET:HB3	2:J:1964:ASP:CB	2.38	0.52
1:F:1230:SER:HA	1:F:1311:GLN:NE2	2.23	0.52
2:H:663:ILE:H	2:H:663:ILE:CD1	2.23	0.52
1:E:1280:CYS:HA	1:E:1566:LYS:O	2.09	0.52
2:K:2013:GLY:O	2:K:2016:PRO:HD2	2.08	0.52
2:K:1915:LEU:HB2	2:K:1935:ALA:HB1	1.90	0.52
2:I:676:LEU:HD23	2:I:679:ARG:NH2	2.23	0.52
2:J:1192:LEU:HD22	2:J:1196:PHE:HE1	1.74	0.52
1:A:811:ASP:N	1:A:811:ASP:OD1	2.43	0.52
2:L:283:THR:HG23	2:L:470:TYR:O	2.09	0.52
2:I:652:ILE:HG23	2:I:653:PRO:HD2	1.90	0.52
1:C:28:TRP:CE2	1:C:53:LEU:HD22	2.45	0.52
1:C:335:LEU:HD12	1:C:335:LEU:C	2.30	0.52
1:F:918:LEU:HA	1:F:921:GLU:HG2	1.92	0.52
2:G:1247:PHE:HB3	2:G:1256:VAL:CG1	2.39	0.52
1:A:1446:GLU:HA	1:A:1449:ALA:HB3	1.91	0.52
2:H:350:MET:HG3	2:H:435:ILE:CG2	2.40	0.52
2:J:871:ARG:CZ	2:J:909:ASP:HB3	2.39	0.52
2:L:980:LEU:HB2	2:L:996:ILE:CD1	2.40	0.52
1:B:1672:GLY:HA3	1:B:1678:LEU:HD23	1.92	0.52
2:J:378:ILE:HG23	2:J:391:VAL:HG13	1.92	0.52
2:I:1574:PRO:HD3	2:I:1611:TYR:CE2	2.44	0.52
1:D:427:ARG:HD2	1:D:490:VAL:HG12	1.91	0.52
1:D:628:TYR:CZ	1:D:630:LYS:HG2	2.45	0.52
2:K:1468:ARG:NH1	2:K:1468:ARG:CG	2.52	0.52
2:I:606:ALA:HB2	2:I:811:MET:CG	2.38	0.52
2:I:613:VAL:N	2:I:614:PRO:HD3	2.25	0.52
1:E:653:LYS:HD3	1:E:742:TYR:HE2	1.74	0.52
2:I:472:THR:HG23	2:I:499:VAL:HA	1.91	0.52
2:G:440:HIS:CD2	2:G:497:ASP:O	2.63	0.52
2:J:376:ARG:CB	2:J:394:PRO:HG2	2.38	0.52
1:B:1179:ILE:O	1:B:1183:VAL:HG23	2.09	0.52
2:G:937:ARG:HG3	2:G:941:LEU:HD12	1.92	0.52
2:K:1305:LEU:HB3	2:K:1401:ILE:HD12	1.90	0.52
2:K:935:VAL:HG11	2:K:997:LEU:HD21	1.91	0.52
2:J:1617:ARG:HB2	2:J:1635:TYR:CZ	2.44	0.52
1:C:1602:PHE:N	1:C:1602:PHE:HD2	2.07	0.52
1:A:621:ASP:HB3	1:A:625:ASN:HB2	1.91	0.52
2:I:378:ILE:HG23	2:I:391:VAL:CG1	2.39	0.52
1:A:918:LEU:HA	1:A:921:GLU:HG2	1.92	0.52
1:D:655:ALA:HB3	1:D:680:VAL:HG12	1.92	0.52

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:H:636:TYR:N	2:H:636:TYR:CD1	2.77	0.52
1:B:476:ASN:O	1:B:480:VAL:HG23	2.10	0.52
2:L:1579:ASN:O	2:L:1583:VAL:HG23	2.10	0.52
2:J:718:PRO:HG3	2:J:727:VAL:HG21	1.90	0.52
2:I:60:THR:HG22	2:I:62:GLU:H	1.75	0.52
2:H:43:PHE:CB	2:I:22:ARG:HE	2.22	0.52
2:J:1097:PHE:CD2	2:J:1100:ARG:NH1	2.78	0.52
1:F:1005:TRP:CD1	1:F:1561:LEU:HD22	2.45	0.52
2:L:1804:GLN:HG2	2:L:1865:LEU:CD2	2.40	0.52
2:J:747:ARG:HD3	2:J:1071:VAL:HG11	1.91	0.52
2:G:747:ARG:NH1	2:G:780:SER:O	2.42	0.52
2:G:855:ILE:HD13	2:G:856:THR:N	2.23	0.52
2:K:460:ILE:HD13	2:K:487:ILE:HD11	1.92	0.52
2:K:617:PHE:CE1	2:K:822:ALA:HB2	2.45	0.52
2:H:1519:THR:OG1	2:H:1521:GLU:HG2	2.10	0.52
2:I:930:THR:HG22	2:I:933:GLU:CG	2.38	0.52
2:I:942:MET:CE	2:I:955:LEU:HB3	2.39	0.52
1:F:1106:LEU:HD23	1:F:1107:GLU:N	2.24	0.52
2:L:2013:GLY:O	2:L:2016:PRO:HD2	2.10	0.52
2:J:942:MET:HE1	2:J:955:LEU:HB3	1.92	0.52
2:G:1621:GLU:OE2	2:G:1629:ILE:HG23	2.10	0.52
2:K:1259:LEU:HB2	2:K:1288:PHE:CD1	2.44	0.52
1:C:36:LEU:CD2	1:C:44:ILE:HD11	2.38	0.52
2:I:600:VAL:HG13	2:I:601:PRO:N	2.25	0.52
2:G:1499:LYS:CG	2:G:1500:ASN:H	2.23	0.52
2:I:1061:VAL:HG12	2:I:1066:ILE:HD11	1.91	0.52
2:I:1873:ARG:NH1	2:I:2002:ASP:HB3	2.24	0.52
1:E:1179:ILE:O	1:E:1183:VAL:HG23	2.09	0.52
2:L:1142:ILE:HD11	2:L:1209:PRO:HB3	1.91	0.52
1:C:918:LEU:HA	1:C:921:GLU:HG2	1.92	0.52
2:H:935:VAL:HG11	2:H:997:LEU:HD21	1.90	0.52
2:K:378:ILE:HG23	2:K:391:VAL:CG1	2.40	0.52
2:H:1138:ASP:HB2	2:H:1140:ASN:H	1.73	0.52
2:L:1262:ARG:NH2	2:L:1277:VAL:HG11	2.24	0.52
2:I:2073:ASN:O	2:I:2076:LYS:HB3	2.08	0.52
2:J:1634:SER:HB3	2:J:1684:GLU:HB2	1.90	0.52
1:E:1580:VAL:HG22	1:E:1585:ILE:O	2.09	0.52
1:D:1047:TYR:CZ	1:D:1058:PRO:HB3	2.43	0.52
2:K:314:LEU:HG	2:K:318:ILE:HD11	1.91	0.52
2:K:1141:LYS:HE2	2:K:1143:SER:HB2	1.91	0.52
2:H:833:VAL:HG13	2:H:1077:LYS:HA	1.92	0.52
2:H:480:GLU:HG2	2:H:480:GLU:O	2.10	0.52

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:I:1343:PHE:CE2	2:I:1388:PRO:HD2	2.45	0.52
2:L:1899:ALA:O	2:L:1903:VAL:HG23	2.09	0.52
1:F:1067:LYS:HB3	1:F:1068:TYR:CD1	2.45	0.52
2:G:1229:VAL:HG12	2:G:1230:LYS:N	2.25	0.52
2:H:1868:GLN:HG2	2:H:1873:ARG:HH22	1.74	0.52
2:J:2052:LYS:HB3	2:J:2074:TRP:CD2	2.45	0.52
2:L:600:VAL:HG13	2:L:601:PRO:N	2.24	0.52
2:J:279:PHE:HB2	2:J:467:ILE:HD12	1.92	0.52
2:L:1802:ALA:HB1	2:L:1804:GLN:NE2	2.17	0.52
2:J:832:ILE:HA	2:J:868:LEU:HD21	1.90	0.52
2:J:855:ILE:HB	2:J:869:ALA:HB2	1.91	0.52
2:K:227:ILE:HD13	2:K:252:LEU:HD13	1.92	0.52
2:H:617:PHE:CE1	2:H:822:ALA:HB2	2.44	0.52
2:L:617:PHE:CE1	2:L:822:ALA:HB2	2.44	0.52
1:E:42:GLU:OE2	2:K:1631:ARG:NH2	2.41	0.52
1:B:1081:ILE:HG13	1:B:1159:LEU:O	2.09	0.52
1:B:1160:VAL:HB	1:B:1352:MET:HE1	1.92	0.52
1:E:1230:SER:HA	1:E:1311:GLN:NE2	2.23	0.52
1:F:339:GLN:O	1:F:343:ILE:HG13	2.09	0.52
2:L:1015:HIS:NE2	2:L:1019:LEU:HD11	2.25	0.52
2:L:135:GLY:HA2	2:L:138:ARG:NH1	2.25	0.52
1:B:1199:LEU:C	1:B:1201:SER:H	2.13	0.52
2:K:937:ARG:HG3	2:K:941:LEU:HD12	1.91	0.52
1:A:535:TYR:CE2	1:A:610:GLU:HB3	2.44	0.52
2:G:1475:LEU:HA	2:G:1526:ALA:HB2	1.92	0.52
1:E:1602:PHE:N	1:E:1602:PHE:HD2	2.08	0.52
2:L:1902:TYR:OH	2:L:1966:ARG:HB2	2.10	0.52
2:H:1316:VAL:HG13	2:H:1348:PHE:CE2	2.45	0.52
2:L:350:MET:HG3	2:L:435:ILE:HB	1.92	0.52
2:L:179:ILE:O	2:L:179:ILE:HG23	2.09	0.52
2:I:347:PRO:HA	2:I:432:PHE:CD1	2.44	0.52
1:C:1164:ILE:CD1	1:C:1355:GLN:HG3	2.40	0.52
2:J:980:LEU:HD21	2:J:986:LEU:HD21	1.92	0.52
2:G:1574:PRO:HD3	2:G:1611:TYR:CE2	2.45	0.52
1:D:81:TYR:CD1	2:J:1821:MET:HE3	2.45	0.52
2:L:1871:VAL:CG1	2:L:1872:GLU:N	2.73	0.52
1:B:585:MET:O	1:B:586:GLN:C	2.47	0.52
1:D:1213:VAL:CG1	1:D:1217:GLU:HB2	2.40	0.52
1:C:1273:ILE:HG13	1:C:1273:ILE:O	2.10	0.52
1:C:714:PHE:CE1	1:C:725:LEU:HD12	2.45	0.52
2:K:930:THR:HG22	2:K:933:GLU:HG3	1.92	0.52
2:J:289:ILE:HG22	2:J:490:LEU:HD22	1.92	0.52

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:998:GLY:CA	1:A:1361:VAL:HG13	2.36	0.52
1:B:1443:LEU:HD11	1:B:1470:ARG:HB3	1.90	0.52
2:K:189:ILE:HD13	2:K:259:ALA:HB3	1.92	0.52
1:C:1032:MET:HE3	1:C:1165:PRO:HB3	1.89	0.52
1:A:965:TYR:CE1	1:A:1199:LEU:HD22	2.45	0.52
2:H:1499:LYS:CG	2:H:1500:ASN:H	2.23	0.52
2:H:1871:VAL:HG23	2:H:2003:VAL:HG13	1.92	0.52
1:F:962:ASN:HD22	2:L:1006:GLN:NE2	2.08	0.52
2:G:1288:PHE:CE2	2:G:1292:VAL:HG21	2.44	0.52
1:A:843:VAL:O	1:A:843:VAL:HG22	2.10	0.52
2:H:134:ILE:HG12	2:H:545:ILE:HD12	1.92	0.52
2:J:1340:LYS:HE3	2:L:373:PRO:HG2	1.92	0.52
1:C:1212:TYR:CD2	1:C:1371:MET:HG2	2.44	0.52
2:K:120:HIS:CD2	2:K:137:VAL:HG11	2.45	0.52
2:G:378:ILE:HG23	2:G:391:VAL:CG1	2.40	0.52
1:C:342:ILE:HD11	1:E:342:ILE:HD11	1.92	0.52
2:J:636:TYR:CD1	2:J:636:TYR:N	2.78	0.52
2:G:1411:LYS:O	2:G:1434:LEU:HD12	2.09	0.52
2:L:910:PHE:HD2	2:L:912:LYS:H	1.57	0.52
2:K:99:LEU:O	2:K:103:LYS:HG3	2.10	0.52
2:J:179:ILE:O	2:J:179:ILE:HG23	2.09	0.52
2:L:384:ASN:HB3	2:L:527:LEU:HD11	1.91	0.52
2:G:820:LYS:HB3	2:G:1080:ASP:O	2.09	0.52
1:D:1143:ARG:HH21	1:E:356:LYS:NZ	2.08	0.52
1:F:651:GLN:HA	1:F:677:GLY:HA3	1.92	0.52
2:J:1247:PHE:HB3	2:J:1256:VAL:CG1	2.39	0.52
2:G:99:LEU:O	2:G:103:LYS:HG3	2.10	0.52
2:H:1466:VAL:O	2:H:1470:LYS:HG2	2.10	0.52
2:I:1706:MET:O	2:I:1709:TYR:HB3	2.09	0.52
2:H:1402:ASN:ND2	2:H:1416:CYS:HB2	2.24	0.52
1:C:1268:SER:HB3	1:F:1389:ILE:CG1	2.10	0.52
2:K:582:LYS:HA	2:K:587:GLN:O	2.10	0.52
2:J:1405:ILE:HA	2:J:1445:THR:OG1	2.10	0.52
2:K:621:THR:HG21	2:K:628:ILE:HD12	1.91	0.52
2:I:215:TRP:CE3	2:I:215:TRP:N	2.78	0.52
2:H:928:ASP:HA	2:H:1007:LEU:HD23	1.92	0.52
1:E:714:PHE:CE1	1:E:725:LEU:HD12	2.44	0.52
1:D:1032:MET:HE3	1:D:1165:PRO:HB3	1.92	0.52
2:I:1318:ALA:HA	2:I:1391:VAL:CG2	2.38	0.52
2:I:1884:CYS:HB3	2:I:1936:LEU:CD1	2.39	0.52
2:L:1289:TYR:CG	2:L:1370:LEU:HD23	2.44	0.52
2:K:2033:SER:HA	2:K:2036:ILE:HD12	1.91	0.52

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:B:15:VAL:HG11	2:H:2022:LEU:HD21	1.91	0.52
2:G:1888:PRO:HB3	2:G:1895:PHE:CD1	2.42	0.52
2:J:1223:SER:CB	2:J:1226:ALA:HB3	2.39	0.52
2:H:1977:ARG:HD2	2:H:1978:LYS:HG3	1.92	0.52
1:F:843:VAL:HG22	1:F:843:VAL:O	2.09	0.52
1:A:995:VAL:CG1	1:A:1375:ILE:HG23	2.41	0.52
1:B:577:LEU:HD23	1:B:584:ILE:HG21	1.92	0.52
2:I:910:PHE:HD2	2:I:912:LYS:H	1.58	0.52
1:A:1394:PRO:HB3	1:A:1627:PHE:CE2	2.45	0.52
2:H:179:ILE:HG23	2:H:179:ILE:O	2.10	0.52
1:A:648:LEU:HD12	1:A:649:THR:N	2.25	0.52
2:J:1537:GLY:O	2:J:1539:PRO:HD3	2.09	0.52
2:J:820:LYS:HB3	2:J:1080:ASP:O	2.10	0.52
2:H:1574:PRO:HD3	2:H:1611:TYR:CE2	2.45	0.52
1:D:613:PRO:HG2	1:D:633:THR:HG21	1.93	0.51
2:G:580:LEU:HD11	2:G:1098:LEU:HB3	1.91	0.51
2:J:581:VAL:HG11	2:J:1113:ILE:HD11	1.92	0.51
2:K:855:ILE:HD13	2:K:856:THR:N	2.22	0.51
2:I:607:GLY:HA2	2:I:612:THR:HG21	1.91	0.51
2:I:855:ILE:HD13	2:I:856:THR:N	2.23	0.51
1:D:1278:GLY:CA	1:D:1630:LYS:HE2	2.38	0.51
1:A:1213:VAL:CG1	1:A:1217:GLU:HB2	2.40	0.51
2:I:1897:GLU:HG2	2:I:1901:GLN:NE2	2.23	0.51
2:H:1543:TYR:HD2	2:H:1544:LEU:HD23	1.74	0.51
2:H:190:TYR:HE1	2:H:201:ILE:HG21	1.75	0.51
1:B:1157:ASP:O	1:B:1159:LEU:HD12	2.10	0.51
2:L:331:LEU:HD22	2:L:396:ILE:HG13	1.92	0.51
2:I:1261:PHE:HE2	2:I:1285:ILE:HD11	1.75	0.51
1:A:1574:LEU:O	1:A:1578:LEU:HG	2.09	0.51
1:C:1574:LEU:CD1	1:C:1622:VAL:HG11	2.39	0.51
1:F:1553:VAL:HG22	1:F:1604:TYR:O	2.09	0.51
2:H:1375:HIS:ND1	2:H:1610:MET:HG2	2.24	0.51
2:L:1475:LEU:HA	2:L:1526:ALA:HB2	1.91	0.51
1:A:621:ASP:HB3	1:A:625:ASN:H	1.75	0.51
2:G:636:TYR:N	2:G:636:TYR:CD1	2.78	0.51
2:I:73:VAL:HA	2:I:113:PHE:CE2	2.44	0.51
2:I:645:ILE:HD13	2:I:687:ILE:HD11	1.92	0.51
2:J:895:LEU:HD13	2:J:1034:LEU:HB3	1.92	0.51
2:K:1975:GLU:O	2:K:1979:GLN:HG3	2.10	0.51
1:C:653:LYS:HD3	1:C:742:TYR:HE2	1.75	0.51
2:G:1594:ARG:CG	2:G:1594:ARG:NH1	2.62	0.51
1:C:1078:ILE:HG21	1:C:1352:MET:HE2	1.91	0.51

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:G:501:TRP:HZ2	2:G:528:THR:HG21	1.75	0.51
2:J:1103:TYR:O	2:J:1106:LYS:HB2	2.11	0.51
2:I:1305:LEU:HD23	2:I:1366:ILE:CG1	2.41	0.51
1:D:1273:ILE:O	1:D:1273:ILE:HG13	2.10	0.51
2:I:1764:MET:O	2:I:1780:ILE:HG13	2.10	0.51
2:L:1621:GLU:OE2	2:L:1629:ILE:HG23	2.10	0.51
2:G:227:ILE:HD13	2:G:252:LEU:HD13	1.92	0.51
2:I:1375:HIS:ND1	2:I:1610:MET:HG2	2.25	0.51
2:I:1694:PHE:HD2	2:I:1843:ALA:CB	2.22	0.51
2:I:1259:LEU:HB2	2:I:1288:PHE:CE1	2.45	0.51
1:E:1378:ILE:HD11	1:E:1642:LEU:HB2	1.93	0.51
2:K:1334:ALA:O	2:K:1342:PHE:HA	2.10	0.51
2:G:930:THR:HG23	2:G:933:GLU:H	1.76	0.51
2:H:1915:LEU:HD21	2:H:1939:LEU:HD22	1.92	0.51
1:F:1444:GLN:OE1	1:F:1444:GLN:HA	2.10	0.51
1:A:893:GLN:OE1	2:L:1751:GLY:HA2	2.10	0.51
1:E:15:VAL:HG11	2:K:2022:LEU:CD2	2.41	0.51
1:A:1014:MET:O	1:A:1590:ARG:NH2	2.30	0.51
2:J:979:LEU:HD21	2:J:999:ALA:CB	2.41	0.51
2:G:1751:GLY:O	2:G:1755:LYS:HG2	2.11	0.51
2:H:1475:LEU:HA	2:H:1526:ALA:HB2	1.91	0.51
2:H:141:TYR:OH	2:H:267:THR:HG23	2.09	0.51
1:D:1199:LEU:C	1:D:1201:SER:H	2.12	0.51
2:J:1315:ILE:HD12	2:J:1315:ILE:H	1.76	0.51
1:B:1041:PRO:HA	1:B:1046:PRO:HA	1.92	0.51
2:J:1309:PHE:CE2	2:J:1360:PRO:HA	2.45	0.51
2:G:1723:ASP:OD1	2:G:1735:ILE:HG13	2.10	0.51
1:B:718:SER:HA	1:E:378:GLU:OE1	2.10	0.51
1:A:457:THR:HG22	1:A:464:GLN:HA	1.91	0.51
2:I:833:VAL:HG13	2:I:1077:LYS:HA	1.92	0.51
2:L:1510:ILE:HA	2:L:1528:VAL:O	2.10	0.51
1:B:653:LYS:HD3	1:B:742:TYR:HE2	1.75	0.51
2:J:1440:THR:HG22	2:J:1440:THR:O	2.10	0.51
1:C:1264:MET:HB3	1:F:1390:GLY:O	2.10	0.51
1:A:1161:ALA:O	1:A:1163:GLN:HG3	2.10	0.51
2:K:2052:LYS:HB3	2:K:2074:TRP:CZ2	2.45	0.51
2:L:279:PHE:HB2	2:L:467:ILE:HD12	1.92	0.51
2:G:1374:VAL:CG2	2:G:1436:ARG:HE	2.24	0.51
1:C:1005:TRP:CD1	1:C:1561:LEU:HD22	2.46	0.51
2:H:1156:ASP:CB	2:H:1159:SER:H	2.19	0.51
2:L:521:VAL:O	2:L:526:VAL:HG21	2.09	0.51
1:B:1363:MET:HE1	1:B:1373:VAL:CG2	2.36	0.51

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:J:916:GLY:C	2:J:929:MET:HE2	2.31	0.51
2:H:521:VAL:O	2:H:526:VAL:HG21	2.10	0.51
2:J:208:LEU:HD12	2:J:227:ILE:HD11	1.91	0.51
2:G:1516:GLU:HA	2:G:1521:GLU:O	2.09	0.51
1:E:616:HIS:C	1:E:617:LEU:HD23	2.30	0.51
1:D:11:TYR:O	1:D:15:VAL:HG23	2.10	0.51
2:G:979:LEU:HD21	2:G:999:ALA:CB	2.39	0.51
2:L:447:ALA:O	2:L:451:ILE:HG13	2.10	0.51
2:G:1259:LEU:HB2	2:G:1288:PHE:CE1	2.46	0.51
2:K:1356:ALA:CB	2:K:1397:THR:HG22	2.40	0.51
1:A:535:TYR:CE1	1:F:580:ASN:CB	2.93	0.51
2:G:1915:LEU:HB2	2:G:1935:ALA:HB1	1.93	0.51
2:L:937:ARG:HG3	2:L:941:LEU:HD12	1.92	0.51
1:A:767:HIS:CB	1:A:813:LEU:HD12	2.41	0.51
2:G:1887:ASN:ND2	2:G:1890:ARG:HG3	2.25	0.51
2:H:573:VAL:HG22	2:H:804:PRO:HB2	1.92	0.51
2:J:962:PHE:O	2:J:965:ARG:HB3	2.11	0.51
1:A:498:THR:HG21	1:A:858:LEU:O	2.09	0.51
2:G:1178:THR:HG22	2:G:1180:VAL:H	1.74	0.51
1:A:378:GLU:OE1	1:F:718:SER:HA	2.10	0.51
2:K:1330:ASN:HD22	2:K:1618:SER:HB2	1.76	0.51
1:A:12:THR:O	1:A:16:GLU:HG2	2.11	0.51
2:J:579:ARG:HB2	2:J:591:ASP:HB3	1.92	0.51
1:A:1264:MET:HB3	1:E:1390:GLY:O	2.10	0.51
2:K:108:GLU:HA	2:K:111:ARG:HD2	1.93	0.51
2:H:60:THR:HG22	2:H:62:GLU:H	1.75	0.51
2:J:949:ARG:HH22	2:J:1052:ASP:CG	2.14	0.51
2:I:1631:ARG:HA	2:I:1686:GLU:HB2	1.92	0.51
2:I:1634:SER:HB3	2:I:1684:GLU:HB2	1.92	0.51
2:G:2050:ILE:HG12	2:G:2050:ILE:O	2.09	0.51
2:G:1227:LYS:HG2	2:G:1228:LEU:N	2.26	0.51
1:E:1067:LYS:HB3	1:E:1068:TYR:CD1	2.45	0.51
2:L:1619:LEU:O	2:L:1623:TRP:HB2	2.09	0.51
1:D:476:ASN:O	1:D:480:VAL:HG23	2.10	0.51
1:C:1161:ALA:O	1:C:1163:GLN:HG3	2.09	0.51
2:I:1346:MET:HG2	2:I:1617:ARG:NH2	2.25	0.51
2:K:911:GLN:NE2	2:K:1065:CYS:H	2.08	0.51
1:A:816:GLU:OE2	1:F:827:ARG:NE	2.44	0.51
2:K:24:LEU:CD1	2:K:45:ALA:HB1	2.40	0.51
2:H:1516:GLU:HA	2:H:1521:GLU:O	2.11	0.51
1:B:1160:VAL:HG23	1:B:1327:ALA:HB2	1.91	0.51
2:I:290:VAL:HA	2:I:490:LEU:CD1	2.37	0.51

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:J:1818:PHE:HE2	2:J:1822:ARG:HH12	1.58	0.51
1:B:1444:GLN:O	1:B:1447:VAL:HB	2.10	0.51
2:H:1259:LEU:HB2	2:H:1288:PHE:CD1	2.46	0.51
2:H:1767:GLU:HB2	2:H:2016:PRO:HG3	1.91	0.51
2:J:616:ASP:OD2	2:J:823:HIS:CE1	2.62	0.51
2:H:1192:LEU:HD22	2:H:1196:PHE:CE1	2.44	0.51
2:H:775:VAL:O	2:H:777:VAL:HG23	2.11	0.51
1:A:342:ILE:HG22	1:D:335:LEU:HD13	1.93	0.51
2:K:170:TYR:CE1	2:K:510:ALA:HB2	2.46	0.51
2:L:820:LYS:HB3	2:L:1080:ASP:O	2.11	0.51
2:K:1510:ILE:HA	2:K:1528:VAL:O	2.10	0.51
2:H:1510:ILE:HA	2:H:1528:VAL:O	2.10	0.51
2:G:1343:PHE:CE2	2:G:1388:PRO:HD2	2.46	0.51
2:G:1492:LEU:HD22	2:G:1511:GLY:HA3	1.93	0.51
2:K:1154:LEU:HD13	2:K:1198:PRO:HB3	1.93	0.51
1:E:1401:LEU:O	1:E:1401:LEU:HD22	2.10	0.51
1:C:447:PHE:CE1	1:C:451:HIS:NE2	2.78	0.51
2:H:1178:THR:HG22	2:H:1180:VAL:H	1.74	0.51
2:I:108:GLU:HA	2:I:111:ARG:HD2	1.93	0.51
2:K:501:TRP:HZ2	2:K:528:THR:HG21	1.76	0.51
1:F:22:PHE:O	2:L:2010:LEU:HD12	2.10	0.51
2:I:1863:ARG:HB2	2:I:2017:PHE:HE1	1.74	0.51
2:L:501:TRP:CZ2	2:L:528:THR:HG21	2.45	0.51
2:G:792:LEU:HD12	2:G:792:LEU:O	2.09	0.51
1:B:628:TYR:CE1	1:B:630:LYS:HG2	2.45	0.51
2:G:1543:TYR:HD2	2:G:1544:LEU:HD23	1.74	0.51
1:E:1108:PRO:HA	1:E:1140:VAL:O	2.09	0.51
2:H:617:PHE:HD1	2:H:822:ALA:HA	1.76	0.51
2:H:608:MET:H	2:H:612:THR:CB	2.24	0.51
2:I:486:ILE:O	2:I:490:LEU:HG	2.10	0.51
2:G:1694:PHE:HD2	2:G:1843:ALA:CB	2.23	0.51
1:C:1547:ARG:HG2	1:C:1604:TYR:CD1	2.42	0.51
2:L:486:ILE:O	2:L:490:LEU:HG	2.10	0.51
1:D:15:VAL:HG11	2:J:2022:LEU:CD2	2.40	0.51
1:F:1470:ARG:O	1:F:1474:ILE:HG13	2.09	0.51
2:I:937:ARG:HG3	2:I:941:LEU:HD12	1.93	0.51
2:K:350:MET:HG3	2:K:435:ILE:HB	1.92	0.51
2:I:1315:ILE:HA	2:I:1393:ASP:O	2.10	0.51
2:L:1868:GLN:HG2	2:L:1873:ARG:NH2	2.26	0.51
2:K:182:TYR:CD1	2:K:183:PHE:N	2.79	0.51
2:L:699:ILE:HD12	2:L:699:ILE:H	1.75	0.51
1:C:655:ALA:HB3	1:C:680:VAL:HG12	1.92	0.51

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:J:350:MET:CE	2:J:435:ILE:HD12	2.41	0.51
2:K:1561:ILE:HB	2:K:1655:HIS:HB3	1.91	0.51
1:B:788:ARG:HB2	1:B:790:TYR:CD2	2.45	0.51
1:A:75:GLN:HE21	2:I:335:THR:HG23	1.76	0.51
2:K:119:VAL:HA	2:K:122:ILE:HG22	1.92	0.51
2:H:1634:SER:HB3	2:H:1684:GLU:HB2	1.92	0.51
1:C:17:LEU:HD22	2:I:2041:PRO:HB3	1.93	0.51
1:D:1079:ARG:CG	1:D:1079:ARG:NH1	2.64	0.51
1:F:833:TRP:CH2	1:F:839:ILE:HD11	2.45	0.51
2:J:752:HIS:CE1	2:J:847:TYR:CE2	2.92	0.51
1:B:673:LEU:HD21	1:B:884:MET:HE3	1.93	0.51
2:G:208:LEU:HA	2:G:211:LEU:HD12	1.93	0.51
1:F:999:LEU:HD11	1:F:1575:ASN:HB3	1.91	0.51
2:K:1873:ARG:NH1	2:K:2002:ASP:HB3	2.25	0.51
1:E:1553:VAL:HG22	1:E:1604:TYR:O	2.10	0.51
1:A:967:PHE:CE2	1:A:1374:PRO:HG3	2.46	0.51
2:H:1617:ARG:HB2	2:H:1635:TYR:CZ	2.45	0.51
2:H:1175:MET:HE3	2:H:1192:LEU:HD11	1.91	0.51
2:L:1515:LEU:HB3	2:L:1525:VAL:CG2	2.40	0.51
2:H:1887:ASN:ND2	2:H:1890:ARG:HG3	2.25	0.51
2:H:350:MET:HG3	2:H:435:ILE:HB	1.92	0.51
2:J:378:ILE:HG23	2:J:391:VAL:CG1	2.41	0.51
2:J:350:MET:HG3	2:J:435:ILE:HB	1.92	0.51
2:G:170:TYR:CE1	2:G:510:ALA:HB2	2.46	0.51
2:L:388:ASN:C	2:L:388:ASN:HD22	2.13	0.51
2:J:1874:ASP:OD1	2:J:1878:ARG:HB3	2.10	0.51
1:C:1067:LYS:HB3	1:C:1068:TYR:CD1	2.46	0.51
2:L:378:ILE:HG23	2:L:391:VAL:HG13	1.92	0.51
2:I:871:ARG:CZ	2:I:909:ASP:HB3	2.41	0.51
1:B:918:LEU:HA	1:B:921:GLU:HG2	1.93	0.51
2:L:268:LEU:HD12	2:L:275:LEU:CD1	2.41	0.51
1:A:1047:TYR:CZ	1:A:1058:PRO:HB3	2.46	0.51
1:A:1610:ARG:NH1	1:A:1610:ARG:CG	2.58	0.51
1:B:430:VAL:CG1	1:B:490:VAL:HG11	2.40	0.51
2:I:2013:GLY:O	2:I:2016:PRO:HD2	2.11	0.51
1:C:18:LEU:HD21	2:I:1844:LEU:HD11	1.92	0.51
2:G:1091:HIS:O	2:G:1094:HIS:HB2	2.11	0.51
2:H:1061:VAL:HG11	2:H:1066:ILE:HD11	1.91	0.51
1:F:575:ARG:HG2	1:F:579:MET:SD	2.51	0.51
2:G:1678:VAL:O	2:G:1679:LEU:HD23	2.11	0.51
2:J:1896:THR:CG2	2:J:1897:GLU:N	2.73	0.51
2:J:190:TYR:HE1	2:J:201:ILE:HG21	1.75	0.51

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:G:743:TRP:CE2	2:G:761:ILE:HD11	2.45	0.51
2:H:49:LYS:HA	2:H:79:TYR:HE1	1.76	0.51
2:L:1622:THR:O	2:L:1626:GLU:HA	2.11	0.51
1:E:1606:VAL:O	1:E:1608:PRO:HD3	2.10	0.51
1:C:1470:ARG:O	1:C:1474:ILE:HG13	2.11	0.51
2:K:174:GLY:H	2:K:517:GLY:CA	2.24	0.51
1:E:1004:PRO:HD3	1:E:1572:TRP:CH2	2.46	0.51
2:K:1884:CYS:HB3	2:K:1936:LEU:CD1	2.41	0.51
1:D:1705:GLN:NE2	1:D:1709:GLY:HA2	2.25	0.51
1:A:1512:LEU:HD21	1:A:1641:TYR:CE2	2.46	0.51
2:J:1200:ARG:HD3	2:J:1200:ARG:N	2.25	0.51
1:D:553:ARG:HH21	1:D:567:ASN:HD21	1.59	0.51
1:C:619:LYS:HG2	1:C:620:LYS:N	2.25	0.51
1:C:1692:GLN:HG3	1:C:1696:PHE:CE2	2.45	0.51
1:A:1602:PHE:N	1:A:1602:PHE:HD2	2.09	0.51
2:K:1137:ARG:HB3	2:K:1142:ILE:HG23	1.93	0.51
2:J:1492:LEU:HD22	2:J:1511:GLY:HA3	1.91	0.51
1:C:1041:PRO:HA	1:C:1046:PRO:HA	1.93	0.51
1:A:1638:HIS:ND1	1:A:1639:PRO:HD2	2.26	0.51
2:L:1492:LEU:HD22	2:L:1511:GLY:HA3	1.92	0.51
2:G:1566:LYS:O	2:G:1568:PRO:HD3	2.11	0.51
1:D:1071:TYR:C	1:D:1071:TYR:CD2	2.84	0.51
2:I:186:LEU:HG	2:I:256:VAL:HG22	1.92	0.51
2:I:455:VAL:HG12	2:I:455:VAL:O	2.10	0.51
2:J:145:ALA:CB	2:J:195:SER:HB3	2.40	0.51
2:G:1141:LYS:HE2	2:G:1143:SER:HB2	1.92	0.51
1:B:88:ILE:HG21	2:H:1821:MET:HE1	1.92	0.51
2:I:2052:LYS:CE	2:I:2052:LYS:H	2.10	0.51
1:E:339:GLN:O	1:E:343:ILE:HG13	2.11	0.51
2:J:327:PRO:CD	2:K:1338:ARG:NH2	2.68	0.51
2:G:2005:PHE:HA	2:G:2010:LEU:CD1	2.29	0.51
2:K:827:GLN:H	2:K:827:GLN:CD	2.14	0.51
2:K:752:HIS:CE1	2:K:847:TYR:CE2	2.92	0.51
2:G:1767:GLU:HB2	2:G:2016:PRO:CG	2.37	0.51
1:C:1425:LEU:CD2	1:C:1429:ARG:HH21	2.19	0.51
2:L:487:ILE:HB	2:L:488:PRO:CD	2.40	0.51
2:H:487:ILE:CB	2:H:488:PRO:HD3	2.38	0.51
1:B:1303:LEU:HD23	1:B:1361:VAL:HB	1.92	0.51
2:K:1519:THR:OG1	2:K:1521:GLU:HG2	2.10	0.51
2:I:914:TRP:HE1	2:I:916:GLY:HA3	1.72	0.51
2:L:1259:LEU:HB2	2:L:1288:PHE:CD1	2.44	0.51
2:J:1764:MET:HG3	2:J:1781:PHE:HE1	1.76	0.51

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:C:1199:LEU:C	1:C:1201:SER:H	2.14	0.51
1:B:43:ARG:NH1	2:H:1687:GLN:HE21	2.09	0.51
2:J:1475:LEU:HD23	2:J:1476:ASP:N	2.25	0.51
1:E:1704:THR:CG2	1:E:1714:PRO:HG3	2.41	0.51
1:E:415:TYR:CD2	1:E:1614:THR:HA	2.45	0.51
2:I:1137:ARG:HB3	2:I:1142:ILE:HG23	1.93	0.51
2:G:699:ILE:HD12	2:G:699:ILE:H	1.75	0.51
2:G:962:PHE:O	2:G:965:ARG:HB3	2.11	0.51
2:H:1706:MET:O	2:H:1709:TYR:HB3	2.11	0.51
2:H:108:GLU:HA	2:H:111:ARG:HD2	1.92	0.51
1:A:1672:GLY:HA3	1:A:1678:LEU:HD23	1.92	0.51
1:B:24:MET:HE2	2:H:2043:VAL:HG13	1.92	0.51
2:L:1154:LEU:HD13	2:L:1198:PRO:HB3	1.92	0.51
1:E:24:MET:HE2	2:K:2043:VAL:HG13	1.92	0.51
1:F:432:GLN:O	1:F:436:ILE:HG13	2.11	0.51
2:K:501:TRP:CZ2	2:K:528:THR:HG21	2.46	0.51
1:C:21:GLN:HE22	2:I:1841:TYR:HE1	1.58	0.51
2:L:581:VAL:HG11	2:L:1113:ILE:HD11	1.92	0.51
2:I:581:VAL:HG11	2:I:1113:ILE:HD11	1.93	0.51
1:D:574:ILE:HG23	1:D:584:ILE:HD12	1.92	0.51
2:L:855:ILE:HD13	2:L:856:THR:N	2.22	0.51
1:D:1209:PHE:CZ	1:D:1301:VAL:HG21	2.46	0.51
1:B:1097:LEU:CD1	1:D:1149:LEU:HD12	2.41	0.51
2:I:458:MET:C	2:I:459:LYS:HG3	2.31	0.51
2:G:215:TRP:CE3	2:G:215:TRP:N	2.79	0.51
2:L:1694:PHE:HD2	2:L:1843:ALA:CB	2.24	0.51
2:H:268:LEU:HD12	2:H:275:LEU:CD1	2.40	0.51
1:F:998:GLY:CA	1:F:1361:VAL:HG13	2.39	0.51
2:H:1694:PHE:HD2	2:H:1843:ALA:CB	2.24	0.51
1:B:1553:VAL:HG22	1:B:1604:TYR:O	2.11	0.51
2:K:1694:PHE:HD2	2:K:1843:ALA:CB	2.24	0.51
2:I:1353:GLY:CA	2:I:1397:THR:HG21	2.41	0.51
2:K:1348:PHE:O	2:K:1351:VAL:HG12	2.11	0.51
2:J:1904:VAL:HG22	2:J:1939:LEU:HD22	1.92	0.51
1:D:421:ARG:HH22	1:D:1613:LYS:CB	2.24	0.51
1:B:1534:GLU:HG2	1:B:1625:PHE:HE1	1.75	0.51
2:K:1475:LEU:HD23	2:K:1476:ASP:N	2.26	0.51
1:D:524:LYS:O	1:D:528:GLU:HG3	2.10	0.51
1:C:1270:THR:HA	1:F:1386:THR:O	2.09	0.51
2:J:1709:TYR:CE2	2:J:1716:LYS:HG2	2.46	0.51
2:K:1217:ILE:HD12	2:K:1234:ILE:HD12	1.93	0.51
2:L:649:GLU:HG3	2:L:650:LYS:HG3	1.92	0.51

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:F:1446:GLU:HA	1:F:1449:ALA:HB3	1.93	0.51
1:C:404:ASN:HD21	1:C:1607:TYR:H	1.56	0.51
2:L:1343:PHE:CE2	2:L:1388:PRO:HD2	2.46	0.51
1:B:1524:GLY:HA2	1:B:1531:ASP:OD1	2.11	0.51
2:K:980:LEU:HB2	2:K:996:ILE:CD1	2.41	0.51
2:L:170:TYR:CE2	2:L:507:PHE:HB3	2.45	0.51
2:K:871:ARG:CZ	2:K:909:ASP:HB3	2.41	0.51
2:G:2062:THR:HG22	2:G:2063:GLY:N	2.26	0.51
2:H:43:PHE:CD1	2:I:22:ARG:CZ	2.94	0.51
1:D:628:TYR:HE1	1:D:630:LYS:HA	1.76	0.51
2:H:24:LEU:HD12	2:H:37:VAL:CG2	2.37	0.51
2:J:452:LEU:HD21	2:J:488:PRO:HA	1.92	0.51
2:I:420:PRO:HB2	2:I:423:GLN:HB2	1.93	0.51
2:K:215:TRP:CE3	2:K:215:TRP:N	2.79	0.51
2:H:129:ILE:HG21	2:H:132:LYS:HG3	1.93	0.51
2:G:1884:CYS:HB3	2:G:1936:LEU:CD1	2.40	0.51
2:G:1200:ARG:N	2:G:1200:ARG:HD3	2.24	0.51
2:I:1175:MET:HE1	2:I:1192:LEU:HD11	1.92	0.51
2:I:649:GLU:HG3	2:I:650:LYS:HG3	1.93	0.51
1:C:1386:THR:O	1:F:1270:THR:HA	2.11	0.51
1:D:415:TYR:CE2	1:D:1614:THR:HB	2.46	0.51
2:G:1189:THR:O	2:G:1191:PRO:HD3	2.11	0.51
1:E:415:TYR:CE2	1:E:1614:THR:HB	2.46	0.51
2:H:962:PHE:O	2:H:965:ARG:HB3	2.11	0.51
1:B:621:ASP:HB3	1:B:625:ASN:HB2	1.93	0.51
2:K:1208:ASN:N	2:K:1209:PRO:HD3	2.26	0.51
2:K:664:TYR:CD1	2:K:670:MET:HE1	2.45	0.51
2:K:1309:PHE:CE2	2:K:1360:PRO:HA	2.46	0.51
2:J:170:TYR:CE1	2:J:510:ALA:HB2	2.46	0.51
1:E:788:ARG:HB2	1:E:790:TYR:CD2	2.45	0.51
1:D:995:VAL:HG13	1:D:1375:ILE:HG23	1.93	0.51
1:A:754:ARG:HH21	1:A:762:LYS:HD3	1.76	0.51
1:E:398:VAL:HG22	1:E:710:VAL:HG22	1.93	0.51
1:E:701:ARG:HH11	1:E:1610:ARG:NH2	2.09	0.50
2:L:1881:TYR:CG	2:L:2004:PRO:HG3	2.46	0.50
2:H:300:THR:HG22	2:H:302:ASP:H	1.75	0.50
1:E:962:ASN:HB3	2:K:969:ARG:HD2	1.92	0.50
1:E:965:TYR:CE1	1:E:1199:LEU:CD2	2.93	0.50
2:J:1442:TYR:CA	2:J:1445:THR:HG22	2.40	0.50
2:K:1067:LEU:HD12	2:K:1067:LEU:H	1.76	0.50
2:J:486:ILE:O	2:J:490:LEU:HG	2.11	0.50
1:F:1099:GLU:HA	1:F:1149:LEU:HD23	1.93	0.50

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:B:1106:LEU:HD13	1:B:1142:LEU:HD13	1.93	0.50
1:F:1303:LEU:HD23	1:F:1361:VAL:HB	1.92	0.50
1:B:1603:ASP:HB2	1:B:1604:TYR:CD2	2.46	0.50
2:L:845:ASN:HD21	2:L:849:ARG:HH11	1.59	0.50
2:L:1475:LEU:HD23	2:L:1476:ASP:N	2.26	0.50
1:E:1081:ILE:HA	1:E:1163:GLN:HE22	1.76	0.50
2:H:699:ILE:H	2:H:699:ILE:HD12	1.76	0.50
1:D:88:ILE:HG21	2:J:1821:MET:HE1	1.93	0.50
1:E:1068:TYR:O	1:E:1072:ILE:HG13	2.10	0.50
1:C:768:ARG:HA	1:C:772:THR:OG1	2.11	0.50
1:B:1067:LYS:HB3	1:B:1068:TYR:CD1	2.47	0.50
2:G:1634:SER:HB3	2:G:1684:GLU:HB2	1.92	0.50
2:G:664:TYR:CD1	2:G:670:MET:HE1	2.46	0.50
1:E:17:LEU:HD22	2:K:2041:PRO:HB3	1.92	0.50
2:J:833:VAL:HG13	2:J:1077:LYS:HA	1.93	0.50
1:A:1160:VAL:HG23	1:A:1327:ALA:HB2	1.92	0.50
1:E:22:PHE:O	2:K:2006:HIS:HA	2.11	0.50
1:E:22:PHE:HE2	2:K:2017:PHE:CG	2.28	0.50
2:L:603:VAL:HG22	2:L:810:CYS:SG	2.52	0.50
2:H:1099:LEU:HD12	2:H:1103:TYR:HB2	1.93	0.50
2:L:465:LEU:HB2	2:L:479:ARG:HG2	1.93	0.50
2:L:582:LYS:HA	2:L:587:GLN:O	2.11	0.50
2:G:2013:GLY:O	2:G:2016:PRO:HD2	2.11	0.50
2:L:832:ILE:HA	2:L:868:LEU:HD21	1.93	0.50
2:K:747:ARG:NH1	2:K:780:SER:O	2.44	0.50
2:J:613:VAL:CG1	2:J:614:PRO:HD3	2.42	0.50
2:G:474:THR:HB	2:G:476:GLN:HG2	1.92	0.50
2:L:857:VAL:CG1	2:L:876:TRP:CD1	2.94	0.50
1:A:1363:MET:HE3	1:A:1368:ALA:HA	1.94	0.50
1:F:570:TYR:O	1:F:574:ILE:HG12	2.11	0.50
2:H:227:ILE:HD13	2:H:252:LEU:HD13	1.93	0.50
2:H:289:ILE:HG22	2:H:490:LEU:HD22	1.92	0.50
2:G:1521:GLU:OE2	2:G:2028:THR:HG22	2.10	0.50
1:A:1168:TRP:HE1	1:A:1173:TYR:HE1	1.58	0.50
2:L:1722:ALA:HB2	2:L:1812:LEU:HD11	1.93	0.50
1:C:694:TYR:HD2	1:C:695:TYR:CD1	2.30	0.50
2:L:376:ARG:CB	2:L:394:PRO:HG2	2.40	0.50
1:B:636:TYR:HB2	1:B:888:ILE:HD11	1.91	0.50
2:K:1015:HIS:NE2	2:K:1019:LEU:HD11	2.26	0.50
2:K:1751:GLY:O	2:K:1755:LYS:HG2	2.11	0.50
2:I:1475:LEU:HD23	2:I:1476:ASP:N	2.26	0.50
2:L:979:LEU:HD21	2:L:999:ALA:CB	2.41	0.50

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:I:573:VAL:HG22	2:I:804:PRO:HB2	1.93	0.50
2:I:573:VAL:CG2	2:I:804:PRO:HB2	2.41	0.50
2:G:1722:ALA:HB2	2:G:1812:LEU:HD11	1.93	0.50
2:J:980:LEU:CD2	2:J:986:LEU:HD21	2.42	0.50
1:D:1446:GLU:HA	1:D:1449:ALA:HB3	1.92	0.50
1:C:1390:GLY:O	1:F:1264:MET:HB3	2.11	0.50
2:H:1343:PHE:CE2	2:H:1388:PRO:HD2	2.45	0.50
2:J:1631:ARG:HA	2:J:1686:GLU:HB2	1.93	0.50
1:A:1184:ASP:OD1	1:A:1185:PRO:HD2	2.11	0.50
1:E:726:VAL:HG21	1:E:780:ALA:HB3	1.92	0.50
1:C:1394:PRO:HB3	1:C:1627:PHE:CE2	2.46	0.50
2:L:1662:ARG:HG2	2:L:1686:GLU:HG2	1.94	0.50
2:H:1566:LYS:O	2:H:1568:PRO:HD3	2.11	0.50
2:G:108:GLU:HA	2:G:111:ARG:HD2	1.93	0.50
1:E:443:LEU:H	1:E:443:LEU:HD12	1.76	0.50
2:I:1440:THR:O	2:I:1440:THR:HG22	2.10	0.50
1:D:24:MET:HE2	2:J:2043:VAL:HG13	1.92	0.50
2:G:298:ALA:HB1	2:G:304:PHE:HA	1.94	0.50
1:A:1702:ARG:NH1	1:A:1702:ARG:CG	2.53	0.50
2:K:785:SER:CB	2:K:1094:HIS:CD2	2.94	0.50
2:G:1804:GLN:HG2	2:G:1865:LEU:CD2	2.42	0.50
2:L:1426:VAL:HG12	2:L:1427:MET:HG2	1.93	0.50
1:B:1213:VAL:CG1	1:B:1217:GLU:HB2	2.41	0.50
2:K:1650:THR:O	2:K:1669:ALA:HA	2.12	0.50
2:L:613:VAL:N	2:L:614:PRO:CD	2.75	0.50
2:H:208:LEU:HA	2:H:211:LEU:HD12	1.94	0.50
2:I:289:ILE:HD12	2:I:472:THR:OG1	2.11	0.50
1:F:1004:PRO:HD3	1:F:1572:TRP:CH2	2.47	0.50
2:G:1881:TYR:CB	2:G:2004:PRO:HG3	2.42	0.50
2:L:1499:LYS:CG	2:L:1500:ASN:H	2.24	0.50
1:C:1443:LEU:HD11	1:C:1470:ARG:HB3	1.93	0.50
1:B:29:ILE:HD11	2:H:1922:VAL:C	2.31	0.50
1:C:569:LEU:HD13	1:D:548:VAL:CG2	2.40	0.50
2:G:126:VAL:HG12	2:G:127:ALA:N	2.25	0.50
1:B:1402:THR:CG2	1:D:1270:THR:HG21	2.41	0.50
2:J:116:GLY:O	2:J:561:ARG:NH1	2.44	0.50
2:L:1130:ILE:HB	2:L:1133:LEU:HD22	1.94	0.50
2:H:1348:PHE:O	2:H:1351:VAL:HG12	2.12	0.50
2:G:918:ASN:HB3	2:G:924:VAL:HG21	1.93	0.50
1:D:1041:PRO:HA	1:D:1046:PRO:HA	1.94	0.50
1:A:744:VAL:HG12	1:A:746:PHE:CD1	2.46	0.50
1:A:34:VAL:HG11	2:G:2047:PRO:HD3	1.94	0.50

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:E:995:VAL:HG13	1:E:1375:ILE:HG23	1.92	0.50
1:A:756:ILE:HA	1:A:759:ILE:HD11	1.93	0.50
2:I:1818:PHE:HE2	2:I:1822:ARG:HH12	1.59	0.50
1:F:1071:TYR:CD2	1:F:1071:TYR:C	2.84	0.50
1:C:1401:LEU:HD22	1:C:1401:LEU:O	2.10	0.50
2:J:699:ILE:HD12	2:J:699:ILE:N	2.25	0.50
1:C:1473:HIS:HE1	1:F:1420:TYR:OH	1.93	0.50
1:A:1402:THR:CG2	1:E:1270:THR:HG21	2.40	0.50
2:H:579:ARG:HB2	2:H:591:ASP:HB3	1.92	0.50
2:L:1236:LEU:O	2:L:1237:VAL:HG23	2.12	0.50
2:H:1227:LYS:HG2	2:H:1228:LEU:N	2.26	0.50
1:A:701:ARG:NH1	1:A:1610:ARG:HH21	2.10	0.50
2:J:578:PRO:HG3	2:J:792:LEU:O	2.11	0.50
2:L:928:ASP:HA	2:L:1007:LEU:HD23	1.92	0.50
2:H:1064:THR:HG22	2:H:1065:CYS:N	2.26	0.50
2:L:1764:MET:HB3	2:L:1780:ILE:CD1	2.41	0.50
2:J:1804:GLN:HG2	2:J:1865:LEU:CD2	2.40	0.50
2:G:421:PHE:HB3	2:G:844:GLU:OE2	2.11	0.50
2:J:440:HIS:CD2	2:J:499:VAL:HG23	2.46	0.50
1:A:444:LEU:HD22	1:A:448:MET:CG	2.42	0.50
1:C:1674:ILE:HD12	2:I:1010:ALA:HB3	1.94	0.50
2:G:1866:THR:HA	2:G:1869:VAL:CG2	2.41	0.50
1:A:831:GLU:HG2	1:F:755:GLU:CG	2.41	0.50
1:C:613:PRO:HD3	1:C:628:TYR:CE2	2.47	0.50
1:A:973:TRP:CD1	1:A:1648:LYS:HD2	2.47	0.50
1:C:15:VAL:HG11	2:I:2022:LEU:HD21	1.92	0.50
1:D:998:GLY:CA	1:D:1361:VAL:HG13	2.39	0.50
2:J:506:VAL:HG22	2:J:506:VAL:O	2.12	0.50
1:E:1001:GLU:HG2	1:E:1008:ALA:HB2	1.94	0.50
2:L:1442:TYR:O	2:L:1445:THR:HG22	2.12	0.50
2:J:447:ALA:O	2:J:451:ILE:HG13	2.11	0.50
2:G:1324:PHE:HA	2:G:1583:VAL:HG11	1.93	0.50
1:D:1512:LEU:HD21	1:D:1641:TYR:CE2	2.46	0.50
2:H:1200:ARG:N	2:H:1200:ARG:HD3	2.24	0.50
2:L:189:ILE:HD13	2:L:259:ALA:HB3	1.92	0.50
2:K:462:ALA:HB3	2:K:481:LEU:O	2.12	0.50
2:H:937:ARG:HG3	2:H:941:LEU:HD12	1.92	0.50
2:L:573:VAL:HG22	2:L:804:PRO:HB2	1.92	0.50
2:H:1745:LEU:HB3	2:H:1799:LEU:CD2	2.41	0.50
1:F:655:ALA:HB3	1:F:680:VAL:HG12	1.93	0.50
1:E:41:THR:HG22	2:K:1689:VAL:HG12	1.94	0.50
2:L:1382:MET:CB	2:L:1633:ARG:HH11	2.25	0.50

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:K:1291:ARG:HD2	2:K:1297:LYS:HG2	1.93	0.50
2:G:1662:ARG:HG2	2:G:1686:GLU:HG2	1.91	0.50
2:L:1291:ARG:HD2	2:L:1297:LYS:HG2	1.94	0.50
2:I:980:LEU:HD21	2:I:986:LEU:HD21	1.93	0.50
2:K:1160:PHE:CE1	2:K:1164:ILE:HD11	2.47	0.50
1:C:718:SER:HB3	1:C:721:ASP:HB2	1.94	0.50
2:J:1441:ASP:C	2:J:1443:GLU:N	2.64	0.50
2:J:1555:VAL:HG12	2:J:1555:VAL:O	2.12	0.50
1:E:1011:ARG:C	1:E:1011:ARG:HD2	2.32	0.50
1:B:1071:TYR:C	1:B:1071:TYR:CD2	2.85	0.50
2:H:778:ALA:HB2	2:H:807:PHE:CD2	2.46	0.50
1:A:956:ILE:HA	2:G:977:PRO:HA	1.94	0.50
1:D:918:LEU:O	1:D:921:GLU:HG3	2.12	0.50
2:G:501:TRP:CZ2	2:G:528:THR:HG21	2.46	0.50
2:J:1871:VAL:CG1	2:J:1872:GLU:N	2.75	0.50
2:G:1290:TYR:CG	2:G:1299:VAL:CG1	2.90	0.50
2:H:465:LEU:HB2	2:H:479:ARG:HG2	1.92	0.50
1:A:689:ARG:NH1	1:A:1339:GLU:OE2	2.45	0.50
2:J:779:GLY:O	2:J:780:SER:CB	2.52	0.50
2:L:485:ASP:CB	2:L:488:PRO:CD	2.86	0.50
1:A:1301:VAL:HG23	1:A:1363:MET:HG3	1.93	0.50
1:F:1218:VAL:HG13	1:F:1301:VAL:HG13	1.94	0.50
2:K:289:ILE:HG21	2:K:493:MET:CE	2.42	0.50
2:G:486:ILE:O	2:G:490:LEU:HG	2.11	0.50
2:K:1265:TYR:CE2	2:K:1267:PRO:HG3	2.46	0.50
1:C:1250:LEU:HB2	1:F:1317:GLU:CG	2.41	0.50
2:J:1694:PHE:HD2	2:J:1843:ALA:CB	2.24	0.50
2:I:1259:LEU:HB2	2:I:1288:PHE:CD1	2.46	0.50
2:L:1904:VAL:HG22	2:L:1939:LEU:HD22	1.93	0.50
1:E:1565:PRO:HG3	1:E:1572:TRP:CH2	2.46	0.50
2:I:1728:GLU:O	2:I:1757:ILE:HD11	2.11	0.50
2:G:193:TYR:O	2:G:197:VAL:HG23	2.12	0.50
1:B:1606:VAL:O	1:B:1608:PRO:HD3	2.11	0.50
1:C:535:TYR:CG	1:C:610:GLU:N	2.79	0.50
2:G:957:LYS:HE2	2:G:1022:ARG:HH22	1.76	0.50
2:G:1223:SER:CB	2:G:1226:ALA:HB3	2.40	0.50
2:G:1251:THR:HG22	2:G:1292:VAL:HG13	1.93	0.50
2:I:1515:LEU:HB3	2:I:1525:VAL:CG2	2.42	0.50
2:J:1483:LEU:HD21	2:J:1525:VAL:HG11	1.94	0.50
1:D:1493:PHE:HE2	1:D:1509:THR:HG22	1.76	0.50
2:J:117:ASN:HA	2:J:561:ARG:HD2	1.92	0.50
2:H:1316:VAL:HG13	2:H:1348:PHE:HE2	1.76	0.50

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:1535:SER:HB3	1:A:1602:PHE:CD1	2.47	0.50
2:H:1873:ARG:NH1	2:H:2002:ASP:HB3	2.26	0.50
2:K:1359:LYS:N	2:K:1360:PRO:CD	2.75	0.50
1:F:716:GLN:HB3	1:F:769:ILE:HG23	1.94	0.50
2:K:746:GLY:HA3	2:K:843:TRP:CZ2	2.47	0.50
2:K:73:VAL:HA	2:K:113:PHE:CE2	2.46	0.50
1:E:1038:HIS:CE1	1:E:1042:LEU:HG	2.47	0.50
1:C:1523:HIS:HB2	1:C:1624:SER:HA	1.94	0.50
1:F:1672:GLY:HA3	1:F:1678:LEU:HD23	1.94	0.50
1:D:432:GLN:O	1:D:436:ILE:HG13	2.12	0.50
2:L:1227:LYS:HG2	2:L:1228:LEU:N	2.26	0.50
2:K:455:VAL:O	2:K:455:VAL:HG12	2.12	0.50
1:C:476:ASN:O	1:C:480:VAL:HG23	2.12	0.50
2:K:356:LEU:HB3	2:K:361:VAL:HG23	1.93	0.50
2:H:1631:ARG:HA	2:H:1686:GLU:HB2	1.93	0.50
2:J:1767:GLU:CB	2:J:2016:PRO:CG	2.72	0.50
2:G:1097:PHE:CD2	2:G:1100:ARG:NH1	2.80	0.50
1:E:1213:VAL:CG2	1:E:1300:ARG:HH21	2.15	0.50
1:F:1213:VAL:CG1	1:F:1217:GLU:HB2	2.41	0.50
2:I:855:ILE:HB	2:I:869:ALA:HB2	1.94	0.50
2:K:1766:PHE:CE2	2:K:1869:VAL:HG23	2.46	0.50
2:L:24:LEU:HD12	2:L:37:VAL:CG2	2.39	0.50
2:J:1442:TYR:CG	2:J:1499:LYS:O	2.65	0.50
2:H:1067:LEU:HB2	3:H:2101:FMN:HM71	1.93	0.50
1:B:1336:GLU:O	1:B:1340:MET:HG2	2.12	0.50
1:C:883:LEU:N	1:C:883:LEU:HD23	2.27	0.50
2:H:796:TRP:CH2	2:H:805:MET:HE1	2.47	0.50
2:L:289:ILE:HD12	2:L:472:THR:OG1	2.12	0.50
2:I:1356:ALA:CB	2:I:1397:THR:HG22	2.42	0.50
2:J:1259:LEU:HB2	2:J:1288:PHE:CE1	2.46	0.50
2:K:573:VAL:CG2	2:K:804:PRO:HB2	2.41	0.50
1:C:1179:ILE:O	1:C:1183:VAL:HG23	2.11	0.50
1:D:619:LYS:HG2	1:D:620:LYS:N	2.24	0.50
2:K:730:ILE:O	2:K:733:ALA:HB3	2.12	0.50
2:G:857:VAL:CG1	2:G:876:TRP:NE1	2.75	0.50
2:I:775:VAL:O	2:I:777:VAL:HG23	2.10	0.50
1:D:621:ASP:HB3	1:D:625:ASN:HB2	1.94	0.50
2:H:1315:ILE:H	2:H:1315:ILE:HD12	1.77	0.50
1:A:1071:TYR:CD2	1:A:1071:TYR:C	2.85	0.50
1:E:476:ASN:O	1:E:480:VAL:HG23	2.11	0.50
1:C:529:GLY:HA3	1:C:611:THR:CG2	2.41	0.50
2:I:170:TYR:CE1	2:I:510:ALA:HB2	2.46	0.50

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:E:13:LEU:HG	2:K:2048:PHE:CE1	2.47	0.50
2:L:871:ARG:CZ	2:L:909:ASP:HB3	2.42	0.50
1:F:726:VAL:HG21	1:F:780:ALA:HB3	1.94	0.50
2:G:73:VAL:HA	2:G:113:PHE:CE2	2.47	0.50
2:L:505:THR:O	2:L:505:THR:HG22	2.11	0.50
2:G:2073:ASN:O	2:G:2076:LYS:HB3	2.11	0.50
1:E:1446:GLU:HA	1:E:1449:ALA:HB3	1.94	0.50
2:L:2052:LYS:HB3	2:L:2074:TRP:CZ2	2.45	0.50
2:J:580:LEU:HD11	2:J:1098:LEU:HB3	1.93	0.50
1:B:628:TYR:CD1	1:B:629:SER:N	2.71	0.50
1:A:22:PHE:HE2	2:G:2017:PHE:CG	2.29	0.50
1:A:1592:ALA:O	1:A:1593:ASP:C	2.50	0.50
2:L:416:GLN:HA	2:L:419:ILE:HG13	1.92	0.50
1:B:998:GLY:CA	1:B:1361:VAL:HG13	2.39	0.50
1:B:1099:GLU:HA	1:B:1149:LEU:HD23	1.92	0.50
2:J:1516:GLU:HA	2:J:1521:GLU:O	2.11	0.50
1:B:1037:ASN:CG	1:B:1674:ILE:HG23	2.32	0.50
2:J:617:PHE:CD1	2:J:822:ALA:HA	2.46	0.50
1:C:612:ILE:HG23	1:C:628:TYR:CE2	2.46	0.50
2:K:1499:LYS:CG	2:K:1500:ASN:H	2.25	0.50
2:K:1574:PRO:HD3	2:K:1611:TYR:CE2	2.47	0.50
1:E:954:ARG:HD3	2:K:977:PRO:CG	2.41	0.50
2:J:129:ILE:HG21	2:J:132:LYS:HG3	1.93	0.50
1:F:439:ARG:O	1:F:444:LEU:HD12	2.12	0.50
2:I:718:PRO:HG3	2:I:727:VAL:HG21	1.92	0.50
2:H:1515:LEU:HB3	2:H:1525:VAL:CG2	2.42	0.50
1:F:967:PHE:CD2	1:F:1374:PRO:HG3	2.47	0.50
1:F:621:ASP:HB3	1:F:625:ASN:H	1.77	0.50
2:G:350:MET:HE2	2:G:435:ILE:HD12	1.92	0.50
2:G:1208:ASN:N	2:G:1209:PRO:HD3	2.27	0.50
1:A:648:LEU:HD12	1:A:649:THR:H	1.76	0.50
2:I:189:ILE:HD13	2:I:259:ALA:HB3	1.92	0.50
2:L:1631:ARG:HA	2:L:1686:GLU:HB2	1.93	0.50
2:I:1141:LYS:HE2	2:I:1143:SER:HB2	1.92	0.50
2:H:189:ILE:HD13	2:H:259:ALA:HB3	1.93	0.50
2:K:135:GLY:HA2	2:K:138:ARG:NH1	2.26	0.50
2:H:746:GLY:HA3	2:H:843:TRP:CZ2	2.47	0.50
2:K:949:ARG:HH22	2:K:1052:ASP:CG	2.14	0.50
2:I:179:ILE:HG23	2:I:179:ILE:O	2.11	0.50
2:H:1845:VAL:HG21	2:H:1856:LEU:HD22	1.92	0.50
2:L:1160:PHE:O	2:L:1164:ILE:HG13	2.11	0.50
2:G:1510:ILE:HA	2:G:1528:VAL:O	2.12	0.50

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:F:1159:LEU:HD12	1:F:1327:ALA:HB3	1.93	0.50
1:D:962:ASN:CB	2:J:969:ARG:HD2	2.41	0.50
1:A:533:SER:CB	1:A:612:ILE:HB	2.35	0.50
2:I:613:VAL:N	2:I:614:PRO:CD	2.75	0.50
1:A:755:GLU:CG	1:F:831:GLU:HG2	2.38	0.50
2:G:781:GLY:HA2	2:G:1071:VAL:CG1	2.37	0.50
1:E:935:GLU:HG3	2:K:1466:VAL:CG1	2.41	0.50
2:I:1764:MET:HG3	2:I:1781:PHE:CE1	2.46	0.50
2:L:1694:PHE:CD2	2:L:1843:ALA:CA	2.94	0.50
2:I:1371:LEU:O	2:I:1590:ILE:HD11	2.12	0.50
2:K:332:ALA:N	2:L:1627:ASN:HD21	2.09	0.50
2:H:1884:CYS:HB3	2:H:1936:LEU:CD1	2.42	0.50
2:I:1061:VAL:HG11	2:I:1066:ILE:HD11	1.92	0.50
2:H:1475:LEU:HD23	2:H:1476:ASP:N	2.27	0.50
2:G:1483:LEU:HD21	2:G:1525:VAL:HG11	1.93	0.50
1:F:859:VAL:HG22	1:F:918:LEU:HB3	1.92	0.50
2:L:170:TYR:CE1	2:L:510:ALA:HB2	2.47	0.50
2:J:505:THR:O	2:J:505:THR:HG22	2.12	0.50
2:I:120:HIS:CD2	2:I:137:VAL:HG11	2.47	0.50
2:I:786:GLU:H	2:I:786:GLU:CD	2.14	0.50
1:C:1098:GLN:HB2	1:C:1152:LYS:HE2	1.93	0.50
2:J:356:LEU:HB3	2:J:361:VAL:HG23	1.94	0.50
2:K:245:SER:HA	2:K:436:THR:HG21	1.94	0.50
1:F:1544:HIS:CG	1:F:1544:HIS:O	2.64	0.50
1:B:427:ARG:HD2	1:B:490:VAL:HG12	1.94	0.50
2:J:329:THR:OG1	2:K:1338:ARG:NH1	2.45	0.50
1:E:14:LEU:HD21	2:K:1844:LEU:HD21	1.93	0.50
2:I:1468:ARG:NH1	2:I:1468:ARG:CG	2.52	0.50
2:J:1468:ARG:CG	2:J:1468:ARG:NH1	2.51	0.50
1:D:961:ALA:CB	1:D:1022:LEU:HD12	2.30	0.50
2:H:501:TRP:HZ2	2:H:528:THR:HG21	1.77	0.50
2:K:785:SER:O	2:K:789:TYR:HB2	2.12	0.50
2:I:788:THR:HG21	2:I:810:CYS:SG	2.52	0.50
1:D:577:LEU:HB2	1:D:579:MET:HG3	1.94	0.50
1:A:612:ILE:HG12	1:A:628:TYR:HD2	1.76	0.50
2:I:911:GLN:HE21	2:I:1065:CYS:H	1.59	0.50
2:L:613:VAL:N	2:L:614:PRO:HD3	2.27	0.50
2:H:24:LEU:CD1	2:H:45:ALA:HB1	2.42	0.50
2:J:911:GLN:HE21	2:J:1065:CYS:H	1.59	0.50
2:G:752:HIS:CE1	2:G:847:TYR:CE2	2.93	0.50
1:B:1037:ASN:HD21	2:H:1011:GLN:HG2	1.77	0.50
2:K:617:PHE:HD1	2:K:822:ALA:HA	1.76	0.50

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:H:135:GLY:HA2	2:H:138:ARG:NH1	2.27	0.50
2:I:942:MET:HE1	2:I:955:LEU:HB3	1.94	0.50
2:I:743:TRP:CE2	2:I:761:ILE:HD11	2.46	0.50
2:I:743:TRP:CG	2:I:761:ILE:HD11	2.47	0.50
2:G:102:LEU:O	2:G:106:LEU:HG	2.12	0.50
2:I:174:GLY:H	2:I:517:GLY:CA	2.25	0.50
2:J:1318:ALA:HA	2:J:1391:VAL:CG2	2.40	0.50
2:L:290:VAL:HA	2:L:490:LEU:CD1	2.40	0.50
1:B:1014:MET:O	1:B:1590:ARG:NH2	2.30	0.50
1:B:619:LYS:HG2	1:B:620:LYS:N	2.26	0.50
2:I:979:LEU:HD21	2:I:999:ALA:CB	2.42	0.50
1:C:562:SER:HB3	1:D:551:LEU:HD21	1.94	0.50
2:J:937:ARG:HG3	2:J:941:LEU:HD12	1.92	0.50
1:C:1402:THR:CG2	1:F:1270:THR:HG21	2.41	0.50
1:A:335:LEU:C	1:A:335:LEU:HD12	2.31	0.50
1:C:1431:GLN:OE1	1:F:1431:GLN:HG2	2.12	0.50
2:K:170:TYR:CD2	2:K:507:PHE:HB3	2.47	0.50
2:L:1315:ILE:HA	2:L:1393:ASP:O	2.12	0.50
1:A:1068:TYR:O	1:A:1072:ILE:HG13	2.12	0.50
1:D:1580:VAL:HG22	1:D:1585:ILE:O	2.12	0.50
1:D:1638:HIS:ND1	1:D:1639:PRO:HD2	2.27	0.50
2:H:1154:LEU:HD13	2:H:1198:PRO:HB3	1.93	0.50
2:G:555:LYS:HB3	2:G:556:PRO:HD3	1.94	0.50
1:B:1164:ILE:CD1	1:B:1355:GLN:HG3	2.41	0.50
2:J:1229:VAL:HG12	2:J:1230:LYS:N	2.26	0.50
2:H:871:ARG:CZ	2:H:909:ASP:HB3	2.42	0.50
2:I:776:LEU:HG	2:I:807:PHE:CD2	2.47	0.50
1:A:768:ARG:HA	1:A:772:THR:OG1	2.12	0.50
2:G:480:GLU:O	2:G:480:GLU:HG2	2.12	0.50
1:C:339:GLN:O	1:C:343:ILE:HG13	2.12	0.49
2:G:300:THR:HG22	2:G:302:ASP:H	1.76	0.49
2:J:298:ALA:HB1	2:J:304:PHE:HA	1.93	0.49
2:H:1091:HIS:O	2:H:1094:HIS:HB2	2.11	0.49
1:D:833:TRP:CH2	1:D:839:ILE:HD11	2.42	0.49
1:A:962:ASN:ND2	2:G:1006:GLN:HE22	2.04	0.49
2:J:1896:THR:HG22	2:J:1898:GLN:N	2.22	0.49
2:H:458:MET:C	2:H:459:LYS:HG3	2.31	0.49
2:J:1543:TYR:HD2	2:J:1544:LEU:HD23	1.76	0.49
1:E:1142:LEU:HD12	1:E:1142:LEU:N	2.27	0.49
2:K:208:LEU:HD12	2:K:227:ILE:HD11	1.94	0.49
2:K:376:ARG:HH21	2:L:1339:GLY:HA2	1.77	0.49
2:K:1631:ARG:HA	2:K:1686:GLU:HB2	1.94	0.49

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:I:617:PHE:HD1	2:I:822:ALA:HA	1.76	0.49
2:G:290:VAL:HA	2:G:490:LEU:CD1	2.42	0.49
2:I:731:ALA:HA	2:I:739:ILE:CD1	2.42	0.49
1:A:1199:LEU:C	1:A:1201:SER:H	2.15	0.49
2:J:676:LEU:HD23	2:J:679:ARG:HH21	1.77	0.49
1:B:1692:GLN:HG3	1:B:1696:PHE:CE2	2.46	0.49
2:G:1626:GLU:O	2:G:1627:ASN:HB2	2.12	0.49
2:G:857:VAL:HG13	2:G:876:TRP:HE1	1.77	0.49
2:K:1566:LYS:O	2:K:1568:PRO:HD3	2.12	0.49
1:B:988:VAL:HG12	1:B:990:LEU:HD23	1.93	0.49
1:C:1420:TYR:OH	1:F:1473:HIS:HE1	1.95	0.49
1:B:1394:PRO:HB3	1:B:1627:PHE:CE2	2.47	0.49
2:K:1304:PRO:O	2:K:1307:ALA:HB3	2.11	0.49
1:F:476:ASN:O	1:F:480:VAL:HG23	2.11	0.49
2:I:1411:LYS:O	2:I:1434:LEU:HD12	2.11	0.49
2:I:1883:MET:HB2	2:I:2001:ILE:HD12	1.93	0.49
1:C:1251:GLN:HG3	1:F:1321:MET:HE1	1.93	0.49
1:F:1692:GLN:HG3	1:F:1696:PHE:CE2	2.46	0.49
1:E:1359:VAL:HG12	1:E:1360:GLN:N	2.27	0.49
2:I:300:THR:HG22	2:I:302:ASP:H	1.75	0.49
2:K:298:ALA:HB1	2:K:304:PHE:HA	1.93	0.49
2:L:529:ASN:HD22	2:L:552:VAL:CG2	2.25	0.49
1:E:1213:VAL:CG1	1:E:1217:GLU:HB2	2.42	0.49
2:G:44:GLN:HE21	2:G:48:LEU:HD21	1.76	0.49
2:I:44:GLN:HE21	2:I:48:LEU:HD21	1.77	0.49
2:K:1802:ALA:HB1	2:K:1804:GLN:NE2	2.18	0.49
2:L:752:HIS:CE1	2:L:847:TYR:CE2	2.95	0.49
2:L:1543:TYR:HD2	2:L:1544:LEU:HD23	1.77	0.49
2:I:930:THR:HG23	2:I:933:GLU:H	1.77	0.49
1:A:1037:ASN:CG	1:A:1674:ILE:HG23	2.33	0.49
1:B:406:ALA:CA	1:B:439:ARG:HH11	2.20	0.49
2:I:474:THR:HB	2:I:476:GLN:HG2	1.92	0.49
2:K:186:LEU:CG	2:K:256:VAL:HG22	2.42	0.49
2:K:1372:LYS:O	2:K:1436:ARG:HG2	2.12	0.49
2:G:1871:VAL:HG23	2:G:2003:VAL:HG13	1.94	0.49
1:E:503:ARG:HA	1:E:933:ILE:HD11	1.93	0.49
2:J:1579:ASN:O	2:J:1583:VAL:HG23	2.13	0.49
2:K:731:ALA:HA	2:K:739:ILE:HD12	1.93	0.49
1:F:1547:ARG:HG2	1:F:1604:TYR:CD1	2.44	0.49
2:H:47:GLN:HG3	2:I:23:PRO:HD2	1.94	0.49
1:B:811:ASP:OD1	1:B:811:ASP:N	2.44	0.49
1:C:1014:MET:O	1:C:1590:ARG:NH2	2.31	0.49

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:J:1888:PRO:HB3	2:J:1895:PHE:CD1	2.46	0.49
2:G:1902:TYR:OH	2:G:1966:ARG:HB2	2.12	0.49
2:I:126:VAL:HG12	2:I:127:ALA:N	2.26	0.49
2:I:1130:ILE:HB	2:I:1133:LEU:HD22	1.94	0.49
2:L:1851:MET:HE1	2:L:2024:LYS:HB3	1.95	0.49
2:I:1402:ASN:O	2:I:1403:ALA:HB2	2.12	0.49
1:E:651:GLN:HA	1:E:677:GLY:HA3	1.94	0.49
2:L:833:VAL:HG13	2:L:1077:LYS:HA	1.94	0.49
2:K:1236:LEU:O	2:K:1237:VAL:HG23	2.12	0.49
2:J:455:VAL:HG12	2:J:455:VAL:O	2.12	0.49
1:A:1321:MET:HE1	1:E:1251:GLN:HG3	1.93	0.49
2:I:2052:LYS:HD3	2:I:2074:TRP:CE2	2.47	0.49
2:H:298:ALA:HB1	2:H:304:PHE:HA	1.95	0.49
2:H:595:SER:HB2	2:H:600:VAL:O	2.12	0.49
2:J:1093:ASP:O	2:J:1097:PHE:CD1	2.61	0.49
2:I:580:LEU:O	2:I:581:VAL:HG23	2.12	0.49
1:F:1425:LEU:CD2	1:F:1429:ARG:HH21	2.17	0.49
2:K:1764:MET:HE3	2:K:1865:LEU:CD1	2.42	0.49
1:E:613:PRO:C	1:E:615:LEU:H	2.15	0.49
2:I:487:ILE:HB	2:I:488:PRO:CD	2.41	0.49
2:K:250:PHE:O	2:K:315:LEU:HD23	2.13	0.49
2:K:487:ILE:HB	2:K:488:PRO:CD	2.39	0.49
2:J:381:SER:HB2	2:J:440:HIS:HB2	1.94	0.49
2:J:460:ILE:HD13	2:J:487:ILE:HD11	1.93	0.49
2:L:617:PHE:CD1	2:L:822:ALA:HA	2.47	0.49
2:H:289:ILE:HD12	2:H:472:THR:OG1	2.12	0.49
2:J:1115:TYR:HB3	2:J:1267:PRO:HB3	1.92	0.49
1:A:987:MET:O	1:A:1490:GLY:HA3	2.12	0.49
2:K:1251:THR:CG2	2:K:1292:VAL:HG13	2.41	0.49
2:H:1764:MET:HG3	2:H:1781:PHE:HE1	1.78	0.49
1:A:408:GLN:NE2	1:A:1609:SER:H	2.10	0.49
2:L:1093:ASP:O	2:L:1097:PHE:CD1	2.62	0.49
2:L:957:LYS:HE2	2:L:1022:ARG:HH22	1.78	0.49
1:B:1270:THR:HA	1:D:1386:THR:O	2.12	0.49
1:B:1536:ASP:N	1:B:1602:PHE:HE1	2.09	0.49
1:C:1697:LEU:HD21	1:F:1401:LEU:HD22	1.93	0.49
2:H:126:VAL:HG12	2:H:127:ALA:N	2.26	0.49
1:D:1602:PHE:HD2	1:D:1602:PHE:N	2.09	0.49
2:J:1137:ARG:HB3	2:J:1142:ILE:HG23	1.95	0.49
2:L:119:VAL:HG21	2:L:140:TYR:CD2	2.47	0.49
2:I:170:TYR:CE2	2:I:507:PHE:HB3	2.47	0.49
2:I:1603:PRO:HB2	2:I:1644:LEU:HD21	1.94	0.49

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:B:453:ASP:HB2	1:B:454:HIS:HD2	1.77	0.49
1:D:1098:GLN:HB2	1:D:1152:LYS:HE2	1.94	0.49
2:H:1603:PRO:HB2	2:H:1644:LEU:HD21	1.93	0.49
1:F:1685:ALA:HB1	1:F:1686:PRO:CD	2.42	0.49
2:I:1452:VAL:O	2:I:1454:MET:HG3	2.11	0.49
1:E:404:ASN:HD21	1:E:1607:TYR:H	1.61	0.49
2:K:505:THR:O	2:K:505:THR:HG22	2.11	0.49
1:E:1050:TRP:CE3	1:E:1050:TRP:HA	2.48	0.49
2:K:1899:ALA:O	2:K:1903:VAL:HG23	2.12	0.49
1:E:536:SER:HB3	1:E:540:LYS:HD2	1.94	0.49
2:J:388:ASN:HD22	2:J:388:ASN:C	2.15	0.49
2:I:24:LEU:CD1	2:I:45:ALA:HB1	2.42	0.49
1:B:1682:LYS:HB3	1:D:1389:ILE:HD13	1.93	0.49
1:A:1081:ILE:HA	1:A:1163:GLN:NE2	2.26	0.49
1:A:1338:GLY:H	1:A:1340:MET:HG3	1.76	0.49
1:A:907:PHE:O	1:A:909:PRO:HD3	2.12	0.49
2:G:1918:VAL:HG22	2:G:2006:HIS:O	2.13	0.49
2:K:327:PRO:N	2:L:1338:ARG:NH2	2.60	0.49
2:J:1156:ASP:CB	2:J:1159:SER:H	2.18	0.49
2:J:1064:THR:HG22	2:J:1065:CYS:N	2.26	0.49
2:J:609:THR:HG23	3:J:2101:FMN:O4	2.12	0.49
2:G:608:MET:H	2:G:612:THR:CB	2.24	0.49
1:C:1363:MET:HE1	1:C:1373:VAL:CG2	2.38	0.49
1:B:1149:LEU:HD12	1:D:1097:LEU:HD13	1.94	0.49
2:K:928:ASP:HA	2:K:1007:LEU:HD23	1.93	0.49
2:H:1067:LEU:H	2:H:1067:LEU:HD12	1.75	0.49
2:G:942:MET:HE1	2:G:955:LEU:HB3	1.94	0.49
2:J:197:VAL:CG2	2:J:263:ILE:HD11	2.41	0.49
2:I:1745:LEU:HD12	2:I:1746:THR:N	2.28	0.49
2:J:845:ASN:HD21	2:J:849:ARG:HH11	1.59	0.49
2:H:2013:GLY:O	2:H:2016:PRO:HD2	2.12	0.49
1:E:1218:VAL:HG13	1:E:1301:VAL:HG13	1.94	0.49
1:D:1378:ILE:HD11	1:D:1642:LEU:HB2	1.93	0.49
2:J:186:LEU:HD21	2:J:256:VAL:HG22	1.94	0.49
1:A:374:LEU:HD11	1:F:389:PRO:HD3	1.93	0.49
2:L:1192:LEU:HD22	2:L:1196:PHE:CE1	2.47	0.49
1:C:767:HIS:CE1	1:D:767:HIS:CE1	3.00	0.49
1:F:1199:LEU:C	1:F:1201:SER:H	2.15	0.49
1:E:1159:LEU:HD12	1:E:1327:ALA:HB3	1.95	0.49
2:L:1137:ARG:HB3	2:L:1142:ILE:HG23	1.95	0.49
2:G:388:ASN:HD22	2:G:389:PHE:N	2.10	0.49
2:J:1359:LYS:N	2:J:1360:PRO:CD	2.75	0.49

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:L:378:ILE:HG23	2:L:391:VAL:CG1	2.42	0.49
2:G:246:ALA:HB3	2:G:247:PRO:HD3	1.94	0.49
1:A:1524:GLY:HA2	1:A:1531:ASP:OD1	2.13	0.49
1:A:539:THR:O	1:A:542:GLN:HG2	2.12	0.49
1:B:1359:VAL:HG12	1:B:1360:GLN:N	2.27	0.49
1:A:476:ASN:O	1:A:480:VAL:HG23	2.13	0.49
2:L:2073:ASN:O	2:L:2076:LYS:HB3	2.12	0.49
1:F:1041:PRO:HA	1:F:1046:PRO:HA	1.94	0.49
2:I:480:GLU:HG2	2:I:480:GLU:O	2.13	0.49
2:H:1708:LEU:O	2:H:1708:LEU:HD22	2.12	0.49
2:G:342:ASN:HB2	2:G:406:ARG:NH2	2.27	0.49
2:J:1566:LYS:O	2:J:1568:PRO:HD3	2.13	0.49
1:B:701:ARG:NH1	1:B:1610:ARG:NH2	2.60	0.49
2:H:2052:LYS:HD3	2:H:2074:TRP:CE2	2.47	0.49
1:D:339:GLN:O	1:D:343:ILE:HG13	2.12	0.49
2:K:785:SER:HB3	2:K:1094:HIS:CD2	2.47	0.49
2:I:1617:ARG:HB2	2:I:1635:TYR:CZ	2.47	0.49
1:A:833:TRP:CH2	1:A:839:ILE:HD11	2.42	0.49
1:E:628:TYR:HE1	1:E:630:LYS:HA	1.77	0.49
1:C:1214:HIS:CD2	1:C:1216:SER:OG	2.61	0.49
2:J:458:MET:C	2:J:459:LYS:HG3	2.31	0.49
2:H:930:THR:HG23	2:H:933:GLU:H	1.75	0.49
2:G:1265:TYR:CE2	2:G:1267:PRO:HG3	2.47	0.49
1:F:689:ARG:HH21	1:F:1591:ASN:ND2	2.10	0.49
1:C:628:TYR:OH	1:C:630:LYS:HG2	2.12	0.49
1:C:1565:PRO:CG	1:C:1572:TRP:CZ3	2.95	0.49
2:K:156:SER:HB3	2:K:558:LEU:O	2.13	0.49
2:L:1348:PHE:CE1	2:L:1351:VAL:HG11	2.48	0.49
2:I:1285:ILE:O	2:I:1288:PHE:HB3	2.13	0.49
1:E:470:GLY:O	1:E:474:ILE:HG13	2.13	0.49
2:G:1346:MET:HG2	2:G:1617:ARG:NH2	2.26	0.49
2:H:1120:ILE:HD11	2:H:1169:TYR:CE1	2.48	0.49
1:D:43:ARG:HH11	2:J:1687:GLN:HE21	1.60	0.49
1:D:1078:ILE:HB	1:D:1338:GLY:HA3	1.95	0.49
2:I:718:PRO:HG2	2:I:741:LEU:CD1	2.42	0.49
1:B:1270:THR:HG21	1:D:1402:THR:CG2	2.42	0.49
1:E:1512:LEU:HD21	1:E:1641:TYR:CE2	2.47	0.49
2:H:1426:VAL:HG12	2:H:1427:MET:HG2	1.95	0.49
1:F:1534:GLU:HG2	1:F:1625:PHE:HE1	1.76	0.49
1:B:335:LEU:HD12	1:B:335:LEU:O	2.12	0.49
2:J:141:TYR:OH	2:J:267:THR:HG23	2.11	0.49
2:L:1402:ASN:O	2:L:1403:ALA:HB2	2.13	0.49

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:I:1851:MET:SD	2:I:1856:LEU:HA	2.52	0.49
2:L:786:GLU:CD	2:L:786:GLU:H	2.14	0.49
1:B:655:ALA:HB2	1:B:742:TYR:HB2	1.95	0.49
2:J:350:MET:HG3	2:J:435:ILE:CG2	2.43	0.49
1:D:918:LEU:HA	1:D:921:GLU:HG2	1.95	0.49
1:E:29:ILE:HD11	2:K:1922:VAL:C	2.33	0.49
1:E:1386:THR:HG22	1:E:1387:ASP:N	2.28	0.49
2:L:664:TYR:CD1	2:L:670:MET:HE1	2.47	0.49
2:G:1708:LEU:HD22	2:G:1708:LEU:O	2.12	0.49
2:I:1291:ARG:HD2	2:I:1297:LYS:HG2	1.95	0.49
2:K:285:HIS:HD2	2:K:501:TRP:CE3	2.31	0.49
2:J:276:LEU:HD12	2:J:298:ALA:O	2.12	0.49
2:H:580:LEU:HD11	2:H:1098:LEU:HB3	1.93	0.49
2:H:580:LEU:CD2	2:H:1095:ILE:HG22	2.43	0.49
1:C:961:ALA:CB	1:C:1022:LEU:HD12	2.36	0.49
2:I:1770:ASN:HB2	2:I:1776:LYS:CE	2.34	0.49
1:A:1378:ILE:HD11	1:A:1642:LEU:HB2	1.94	0.49
1:C:534:GLN:HA	1:C:610:GLU:O	2.12	0.49
2:G:1316:VAL:HG13	2:G:1348:PHE:CE2	2.47	0.49
1:F:1574:LEU:O	1:F:1578:LEU:HG	2.13	0.49
2:L:186:LEU:HD21	2:L:256:VAL:HG22	1.93	0.49
2:J:1192:LEU:HD22	2:J:1196:PHE:CE1	2.48	0.49
2:H:649:GLU:HG3	2:H:650:LYS:HG3	1.94	0.49
2:L:573:VAL:CG2	2:L:804:PRO:HB2	2.43	0.49
1:B:1535:SER:HB3	1:B:1602:PHE:CD1	2.47	0.49
1:A:1536:ASP:N	1:A:1602:PHE:HE1	2.09	0.49
1:A:655:ALA:CB	1:A:742:TYR:HB2	2.42	0.49
1:E:988:VAL:HG12	1:E:990:LEU:HD23	1.95	0.49
1:E:744:VAL:HG12	1:E:746:PHE:CD1	2.47	0.49
2:I:1048:TRP:NE1	2:I:1049:GLN:HG2	2.28	0.49
2:G:910:PHE:HD2	2:G:912:LYS:H	1.58	0.49
2:K:1138:ASP:HB2	2:K:1140:ASN:H	1.77	0.49
2:I:1899:ALA:O	2:I:1903:VAL:HG23	2.12	0.49
2:I:712:ARG:O	2:I:738:PRO:HG2	2.12	0.49
2:L:1933:LEU:O	2:L:1989:LEU:HD11	2.13	0.49
2:G:949:ARG:HH22	2:G:1052:ASP:CG	2.15	0.49
2:I:1492:LEU:HD22	2:I:1511:GLY:HA3	1.94	0.49
1:E:427:ARG:HH21	1:E:518:LYS:HG2	1.77	0.49
1:D:613:PRO:C	1:D:615:LEU:H	2.16	0.49
2:H:652:ILE:HG23	2:H:653:PRO:HD2	1.94	0.49
2:L:792:LEU:O	2:L:792:LEU:HD12	2.13	0.49
2:J:792:LEU:O	2:J:792:LEU:HD12	2.12	0.49

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:B:541:VAL:HG21	1:B:585:MET:HE1	1.95	0.49
1:E:689:ARG:HD2	1:E:1339:GLU:CG	2.42	0.49
2:I:1637:VAL:CG1	2:I:1679:LEU:HD22	2.43	0.49
1:D:1213:VAL:HG13	1:D:1217:GLU:HB2	1.94	0.49
1:A:532:ILE:HG22	1:A:907:PHE:CG	2.48	0.49
2:J:613:VAL:N	2:J:614:PRO:HD3	2.28	0.49
2:J:24:LEU:CD1	2:J:45:ALA:HB1	2.42	0.49
2:L:621:THR:OG1	2:L:1083:ILE:HD13	2.13	0.49
2:J:190:TYR:CE1	2:J:201:ILE:HG21	2.48	0.49
2:I:227:ILE:HD13	2:I:252:LEU:HD13	1.94	0.49
1:F:905:LEU:HD22	1:F:911:LEU:CD2	2.42	0.49
1:D:1004:PRO:HD3	1:D:1572:TRP:CH2	2.47	0.49
2:I:1516:GLU:HA	2:I:1521:GLU:O	2.13	0.49
1:F:689:ARG:NH1	1:F:1339:GLU:OE2	2.45	0.49
2:J:1007:LEU:HD12	2:J:1007:LEU:N	2.25	0.49
1:F:883:LEU:HD23	1:F:883:LEU:N	2.26	0.49
1:F:973:TRP:CD1	1:F:1648:LYS:HD2	2.48	0.49
2:L:1305:LEU:HD23	2:L:1366:ILE:CD1	2.41	0.49
2:G:1324:PHE:CA	2:G:1583:VAL:HG11	2.43	0.49
1:E:991:ASP:HA	1:E:1364:THR:CG2	2.43	0.49
1:C:565:GLN:HG2	1:C:565:GLN:O	2.11	0.49
1:F:59:ARG:HD2	2:L:1926:GLN:NE2	2.27	0.49
2:G:1904:VAL:HG22	2:G:1939:LEU:HD22	1.95	0.49
2:K:350:MET:CE	2:K:435:ILE:HD12	2.42	0.49
2:J:573:VAL:CG2	2:J:804:PRO:HB2	2.42	0.49
1:E:1052:ASP:HB3	1:E:1055:THR:HG23	1.95	0.49
1:C:1535:SER:HB3	1:C:1602:PHE:CD1	2.48	0.49
1:C:415:TYR:CE2	1:C:1614:THR:HB	2.48	0.49
1:D:1535:SER:HB3	1:D:1602:PHE:CD1	2.48	0.49
1:A:1414:PRO:HG2	1:E:1473:HIS:CD2	2.48	0.49
2:H:170:TYR:CD2	2:H:507:PHE:HB3	2.48	0.49
2:G:1142:ILE:HD11	2:G:1209:PRO:HB3	1.93	0.49
1:B:655:ALA:CB	1:B:742:TYR:HB2	2.43	0.49
1:B:918:LEU:O	1:B:921:GLU:HG3	2.12	0.49
2:K:138:ARG:HB3	2:K:192:THR:HG23	1.94	0.49
2:G:1813:MET:HG3	2:G:1814:GLU:N	2.27	0.49
2:G:645:ILE:HD13	2:G:687:ILE:HD11	1.95	0.49
2:H:258:LEU:CD1	2:H:291:VAL:HG13	2.42	0.49
1:A:1685:ALA:HB1	1:A:1686:PRO:CD	2.43	0.49
1:C:1446:GLU:HA	1:C:1449:ALA:HB3	1.93	0.49
1:C:453:ASP:HB2	1:C:454:HIS:HD2	1.78	0.49
2:J:712:ARG:O	2:J:738:PRO:HG2	2.12	0.49

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:E:1071:TYR:C	1:E:1071:TYR:CD2	2.86	0.49
2:J:2050:ILE:HG12	2:J:2050:ILE:O	2.13	0.49
1:E:871:PHE:CD1	1:E:871:PHE:N	2.81	0.49
2:K:912:LYS:NZ	2:K:1044:LYS:O	2.44	0.49
2:H:784:GLY:HA3	2:H:786:GLU:OE2	2.12	0.49
1:E:1504:ARG:NH2	1:E:1545:LEU:O	2.46	0.49
1:F:434:ILE:CD1	1:F:490:VAL:HG21	2.40	0.49
1:E:427:ARG:CG	1:E:427:ARG:NH1	2.50	0.49
1:F:961:ALA:CB	1:F:1022:LEU:HD12	2.27	0.49
2:L:2052:LYS:HD3	2:L:2074:TRP:CE2	2.48	0.49
2:H:1468:ARG:NH1	2:H:1468:ARG:CB	2.76	0.49
2:I:1093:ASP:O	2:I:1097:PHE:CD1	2.63	0.49
2:K:1061:VAL:HG11	2:K:1066:ILE:HD11	1.94	0.49
2:L:613:VAL:H	2:L:614:PRO:HD3	1.77	0.49
1:E:533:SER:OG	1:E:611:THR:HB	2.13	0.49
2:G:607:GLY:HA2	2:G:612:THR:HG21	1.95	0.49
1:F:679:LYS:HG2	1:F:708:GLN:CB	2.39	0.49
2:J:227:ILE:HD13	2:J:252:LEU:HD13	1.93	0.49
2:H:320:LEU:O	2:H:324:GLN:HG3	2.13	0.49
2:J:1372:LYS:O	2:J:1436:ARG:HG2	2.13	0.49
1:E:43:ARG:HH11	2:K:1687:GLN:HE21	1.59	0.49
2:G:190:TYR:HE1	2:G:201:ILE:HG21	1.76	0.49
1:A:1004:PRO:HD3	1:A:1572:TRP:CH2	2.48	0.49
2:L:215:TRP:N	2:L:215:TRP:HE3	2.10	0.49
2:K:102:LEU:O	2:K:106:LEU:HG	2.12	0.49
2:J:220:GLN:NE2	2:J:324:GLN:HG2	2.28	0.49
2:L:1305:LEU:HD23	2:L:1366:ILE:CG1	2.42	0.49
1:A:1444:GLN:O	1:A:1447:VAL:HB	2.13	0.49
1:B:1378:ILE:HD11	1:B:1642:LEU:HB2	1.94	0.49
2:K:979:LEU:CD2	2:K:999:ALA:HB3	2.42	0.49
1:D:767:HIS:CB	1:D:813:LEU:HD12	2.43	0.49
1:D:549:TYR:O	1:D:553:ARG:HB3	2.13	0.49
2:K:1709:TYR:CE2	2:K:1716:LYS:HG2	2.47	0.49
2:H:1359:LYS:N	2:H:1360:PRO:CD	2.76	0.49
2:J:1626:GLU:O	2:J:1627:ASN:HB2	2.13	0.49
1:E:1081:ILE:HA	1:E:1163:GLN:NE2	2.28	0.49
2:I:135:GLY:HA2	2:I:138:ARG:NH1	2.28	0.49
2:K:910:PHE:O	2:K:1063:ARG:HD3	2.12	0.49
2:G:980:LEU:HD21	2:G:986:LEU:HD21	1.94	0.49
1:D:667:ALA:O	1:D:671:GLN:HG3	2.12	0.49
2:J:1762:MET:HG2	2:J:1779:LYS:NZ	2.28	0.49
1:F:1098:GLN:HB2	1:F:1152:LYS:HE2	1.94	0.49

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:J:603:VAL:HG22	2:J:810:CYS:SG	2.52	0.49
2:H:1160:PHE:CE1	2:H:1164:ILE:HD11	2.47	0.49
2:J:2073:ASN:O	2:J:2076:LYS:HB3	2.12	0.49
1:E:1670:HIS:ND1	2:K:1009:ASN:ND2	2.61	0.49
2:I:1248:GLU:HA	2:I:1248:GLU:OE1	2.13	0.49
2:I:350:MET:HG3	2:I:435:ILE:CG2	2.42	0.49
2:H:910:PHE:HD2	2:H:912:LYS:H	1.60	0.49
2:H:505:THR:O	2:H:505:THR:HG22	2.12	0.49
1:B:443:LEU:H	1:B:443:LEU:HD12	1.78	0.49
2:I:1708:LEU:HD22	2:I:1708:LEU:O	2.13	0.49
2:I:1146:LEU:O	2:I:1201:GLY:HA2	2.12	0.49
2:L:298:ALA:HB1	2:L:304:PHE:HA	1.95	0.49
2:G:1464:LEU:HD11	2:G:1468:ARG:HD2	1.94	0.49
2:K:857:VAL:HG13	2:K:876:TRP:CD1	2.45	0.49
2:J:1099:LEU:HD12	2:J:1103:TYR:CB	2.42	0.49
2:L:1678:VAL:O	2:L:1679:LEU:HD23	2.13	0.49
2:I:610:PRO:O	2:I:613:VAL:HG12	2.13	0.49
2:K:38:PRO:CD	2:K:104:LEU:HD11	2.41	0.49
2:I:1543:TYR:HD2	2:I:1544:LEU:HD23	1.77	0.49
1:B:1097:LEU:HD13	1:D:1149:LEU:HD12	1.95	0.49
2:H:1007:LEU:N	2:H:1007:LEU:HD12	2.20	0.49
2:G:440:HIS:CD2	2:G:499:VAL:HG23	2.48	0.49
2:L:1521:GLU:OE2	2:L:2028:THR:HG22	2.12	0.49
1:E:957:THR:HG21	2:K:967:GLU:HB3	1.95	0.49
2:H:771:CYS:HB3	2:H:774:ILE:CD1	2.42	0.49
1:A:408:GLN:HE22	1:A:1609:SER:N	2.09	0.49
2:G:979:LEU:CD2	2:G:999:ALA:HB3	2.43	0.49
2:H:1622:THR:O	2:H:1626:GLU:HA	2.13	0.49
2:G:1259:LEU:HB2	2:G:1288:PHE:CD1	2.47	0.49
2:K:1887:ASN:ND2	2:K:1890:ARG:HG3	2.28	0.49
2:K:1515:LEU:HB3	2:K:1525:VAL:CG2	2.43	0.49
2:I:1175:MET:HA	2:I:1274:ILE:HD11	1.95	0.49
2:L:962:PHE:O	2:L:965:ARG:HB3	2.13	0.49
1:C:921:GLU:HG3	1:C:922:ILE:H	1.78	0.49
2:K:1402:ASN:O	2:K:1403:ALA:HB2	2.13	0.49
2:H:1868:GLN:HG2	2:H:1873:ARG:NH2	2.28	0.49
1:C:1068:TYR:O	1:C:1072:ILE:HG13	2.13	0.49
2:L:1160:PHE:CE1	2:L:1164:ILE:HD11	2.48	0.49
1:E:1672:GLY:HA3	1:E:1678:LEU:HD23	1.94	0.49
1:E:859:VAL:HG22	1:E:918:LEU:HB3	1.94	0.49
1:C:995:VAL:HG13	1:C:1375:ILE:HG23	1.94	0.49
2:K:1229:VAL:HG12	2:K:1230:LYS:N	2.28	0.49

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:G:1932:ASP:OD2	2:G:1934:ARG:HD2	2.13	0.49
1:A:1020:PHE:CE2	1:A:1028:MET:HG3	2.47	0.49
2:J:1262:ARG:NH2	2:J:1277:VAL:HG11	2.28	0.49
1:A:1019:LYS:HB2	1:A:1019:LYS:HE3	1.66	0.49
1:D:994:VAL:HG21	1:D:1291:TYR:CD1	2.47	0.49
1:F:1160:VAL:HB	1:F:1352:MET:HE1	1.95	0.49
2:G:580:LEU:CD2	2:G:1095:ILE:HG22	2.43	0.49
2:L:1103:TYR:O	2:L:1106:LYS:HB2	2.12	0.49
2:H:80:ILE:HG12	2:H:105:ILE:HG22	1.95	0.49
2:H:279:PHE:HB2	2:H:467:ILE:HD12	1.95	0.49
2:K:1764:MET:HE1	2:K:1865:LEU:HD12	1.95	0.49
1:A:439:ARG:O	1:A:444:LEU:HD12	2.12	0.49
2:J:617:PHE:CE1	2:J:822:ALA:HB2	2.48	0.49
1:A:1565:PRO:CG	1:A:1572:TRP:CZ3	2.93	0.49
1:D:1280:CYS:HA	1:D:1566:LYS:O	2.13	0.49
1:B:983:GLN:HB3	1:B:1418:ILE:CD1	2.39	0.49
1:C:1280:CYS:HA	1:C:1566:LYS:O	2.13	0.49
2:H:474:THR:HB	2:H:476:GLN:HG2	1.94	0.49
2:L:190:TYR:HE1	2:L:201:ILE:HG21	1.77	0.49
1:F:1606:VAL:O	1:F:1608:PRO:HD3	2.12	0.49
2:I:1621:GLU:OE2	2:I:1629:ILE:HG23	2.13	0.49
2:H:506:VAL:HG22	2:H:506:VAL:O	2.12	0.49
2:H:1305:LEU:H	2:H:1305:LEU:CD1	2.24	0.49
2:H:676:LEU:HD23	2:H:679:ARG:HH21	1.77	0.49
1:E:811:ASP:N	1:E:811:ASP:OD1	2.44	0.49
2:K:649:GLU:HG3	2:K:650:LYS:HG3	1.94	0.49
2:J:1189:THR:O	2:J:1191:PRO:HD3	2.13	0.49
2:J:1622:THR:O	2:J:1626:GLU:HA	2.13	0.49
2:J:935:VAL:HG11	2:J:997:LEU:HD21	1.95	0.49
1:B:608:LYS:O	1:B:610:GLU:HG2	2.13	0.49
2:L:350:MET:CE	2:L:435:ILE:HD12	2.42	0.49
2:G:1709:TYR:CE2	2:G:1716:LYS:HG2	2.48	0.49
2:I:73:VAL:HG13	2:I:113:PHE:HD2	1.77	0.49
2:L:1229:VAL:HG12	2:L:1230:LYS:N	2.28	0.49
1:E:754:ARG:HH21	1:E:762:LYS:HD3	1.78	0.49
2:L:834:ASP:O	2:L:836:PRO:HD3	2.12	0.49
2:G:1820:ASP:O	2:G:1823:SER:HB3	2.13	0.49
1:C:358:PHE:C	1:C:358:PHE:CD2	2.86	0.49
1:C:450:TYR:CE1	1:C:1551:ASN:HB2	2.47	0.49
1:C:871:PHE:N	1:C:871:PHE:CD1	2.80	0.49
1:A:443:LEU:H	1:A:443:LEU:HD12	1.77	0.49
1:F:1705:GLN:NE2	1:F:1709:GLY:HA2	2.28	0.49

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:G:2052:LYS:N	2:G:2052:LYS:HE2	2.07	0.48
2:I:1468:ARG:NH1	2:I:1468:ARG:CB	2.74	0.48
2:K:1464:LEU:HD13	2:K:1464:LEU:C	2.33	0.48
2:I:1802:ALA:CB	2:I:1804:GLN:HE22	2.19	0.48
2:G:1372:LYS:O	2:G:1436:ARG:HG2	2.13	0.48
2:L:1764:MET:HE1	2:L:1865:LEU:HD12	1.95	0.48
2:H:1804:GLN:HG2	2:H:1865:LEU:CD2	2.43	0.48
2:H:485:ASP:HB2	2:H:488:PRO:HD2	1.93	0.48
2:K:1404:VAL:CG2	2:K:1413:VAL:HG22	2.38	0.48
1:A:326:ASP:HB3	1:A:333:ARG:NH1	2.22	0.48
1:A:714:PHE:CE1	1:A:725:LEU:HD12	2.48	0.48
1:B:1157:ASP:HB3	1:B:1326:ASN:OD1	2.13	0.48
1:D:1606:VAL:O	1:D:1608:PRO:HD3	2.13	0.48
1:A:1108:PRO:HA	1:A:1140:VAL:O	2.12	0.48
2:G:703:ASN:O	2:G:707:GLN:HG3	2.13	0.48
2:J:376:ARG:NH2	2:K:1339:GLY:HA2	2.27	0.48
1:C:1603:ASP:HB2	1:C:1604:TYR:CD2	2.48	0.48
2:K:712:ARG:O	2:K:738:PRO:HG2	2.13	0.48
1:C:929:ARG:O	1:C:933:ILE:HG13	2.12	0.48
2:H:676:LEU:HD23	2:H:679:ARG:NH2	2.28	0.48
2:J:2044:THR:HG21	2:J:2054:TYR:OH	2.12	0.48
2:L:635:TYR:CB	2:L:641:MET:HG3	2.42	0.48
1:C:621:ASP:HB3	1:C:625:ASN:HB2	1.95	0.48
1:D:1490:GLY:O	1:D:1509:THR:HB	2.12	0.48
2:G:1515:LEU:HB3	2:G:1525:VAL:CG2	2.43	0.48
2:G:1175:MET:HE1	2:G:1234:ILE:HG21	1.93	0.48
1:D:1692:GLN:HG3	1:D:1696:PHE:CE2	2.47	0.48
1:E:1535:SER:HB3	1:E:1602:PHE:CD1	2.47	0.48
2:J:1346:MET:HE3	2:J:1617:ARG:NH2	2.28	0.48
2:I:827:GLN:H	2:I:827:GLN:CD	2.15	0.48
2:H:1137:ARG:HB3	2:H:1142:ILE:HG23	1.94	0.48
2:J:1315:ILE:HA	2:J:1393:ASP:O	2.13	0.48
2:L:699:ILE:CD1	2:L:699:ILE:H	2.26	0.48
1:A:655:ALA:HB2	1:A:742:TYR:HB2	1.95	0.48
2:G:1249:GLY:HA2	2:G:1256:VAL:HG22	1.95	0.48
2:K:119:VAL:HG21	2:K:140:TYR:CD2	2.48	0.48
2:I:784:GLY:HA3	2:I:786:GLU:OE2	2.13	0.48
1:A:1067:LYS:HB3	1:A:1068:TYR:CD1	2.48	0.48
2:I:350:MET:CE	2:I:435:ILE:HD12	2.43	0.48
2:J:662:LEU:HD22	2:J:673:GLN:OE1	2.13	0.48
1:F:21:GLN:HE22	2:L:1841:TYR:HE1	1.61	0.48
2:J:60:THR:HG22	2:J:62:GLU:H	1.78	0.48

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:F:956:ILE:HA	2:L:977:PRO:HA	1.95	0.48
1:D:1560:TYR:CE2	1:D:1589:ASN:HA	2.48	0.48
2:H:712:ARG:O	2:H:738:PRO:HG2	2.13	0.48
2:L:1749:PHE:CG	2:L:1758:ARG:HB3	2.48	0.48
1:B:1446:GLU:HA	1:B:1449:ALA:HB3	1.94	0.48
2:K:1874:ASP:OD1	2:K:1878:ARG:HB3	2.13	0.48
2:H:1910:VAL:CG1	2:H:1973:ILE:HG21	2.42	0.48
2:I:1820:ASP:O	2:I:1823:SER:HB3	2.13	0.48
2:H:1672:LYS:O	2:H:1672:LYS:HG2	2.13	0.48
1:F:565:GLN:HG2	1:F:565:GLN:O	2.11	0.48
2:G:665:VAL:O	2:G:665:VAL:HG12	2.13	0.48
2:I:356:LEU:HA	2:I:356:LEU:HD23	1.66	0.48
2:G:1874:ASP:OD1	2:G:1878:ARG:HB3	2.13	0.48
2:K:2052:LYS:HD3	2:K:2074:TRP:CE2	2.47	0.48
2:J:501:TRP:HZ2	2:J:528:THR:HG21	1.77	0.48
2:H:80:ILE:HG12	2:H:105:ILE:CG2	2.43	0.48
1:A:22:PHE:O	2:G:2006:HIS:HA	2.12	0.48
2:K:1156:ASP:CB	2:K:1159:SER:H	2.19	0.48
2:L:1067:LEU:H	2:L:1067:LEU:HD12	1.78	0.48
2:L:610:PRO:O	2:L:613:VAL:HG12	2.13	0.48
2:G:485:ASP:CB	2:G:488:PRO:CD	2.90	0.48
2:G:1445:THR:HG23	2:G:1498:PHE:HB2	1.95	0.48
2:H:1918:VAL:HG13	2:H:2006:HIS:CB	2.39	0.48
1:B:1685:ALA:HB1	1:B:1686:PRO:CD	2.43	0.48
2:I:1442:TYR:CA	2:I:1445:THR:HG22	2.43	0.48
2:I:1115:TYR:OH	2:I:1173:HIS:CD2	2.62	0.48
2:K:189:ILE:HD12	2:K:256:VAL:HG13	1.94	0.48
1:D:1303:LEU:HD23	1:D:1361:VAL:HB	1.94	0.48
2:H:1694:PHE:CD2	2:H:1843:ALA:CA	2.96	0.48
2:H:1442:TYR:O	2:H:1445:THR:HG22	2.12	0.48
1:F:26:VAL:HG21	2:L:2006:HIS:CE1	2.48	0.48
1:D:1001:GLU:HG2	1:D:1008:ALA:HB2	1.93	0.48
2:K:1483:LEU:HD21	2:K:1525:VAL:HG11	1.95	0.48
1:F:767:HIS:CB	1:F:813:LEU:HD12	2.43	0.48
2:K:117:ASN:HA	2:K:561:ARG:HD2	1.95	0.48
2:K:350:MET:HE2	2:K:435:ILE:HD12	1.96	0.48
2:I:962:PHE:O	2:I:965:ARG:HB3	2.13	0.48
2:G:827:GLN:H	2:G:827:GLN:CD	2.15	0.48
2:J:1017:LEU:O	2:J:1021:GLN:HG3	2.12	0.48
2:H:1504:TYR:HD2	2:H:1507:VAL:HG11	1.78	0.48
2:H:1141:LYS:HE2	2:H:1143:SER:HB2	1.95	0.48
2:L:1820:ASP:O	2:L:1823:SER:HB3	2.13	0.48

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:K:1762:MET:HG2	2:K:1779:LYS:NZ	2.27	0.48
1:E:1586:VAL:CG2	1:E:1617:ILE:HD11	2.43	0.48
1:C:29:ILE:HD11	2:I:1922:VAL:C	2.32	0.48
2:L:579:ARG:HB2	2:L:591:ASP:HB3	1.95	0.48
1:C:1524:GLY:HA2	1:C:1531:ASP:OD1	2.13	0.48
2:L:1874:ASP:OD1	2:L:1878:ARG:HB3	2.12	0.48
2:J:480:GLU:HG2	2:J:480:GLU:O	2.13	0.48
2:H:455:VAL:O	2:H:455:VAL:HG12	2.13	0.48
1:B:1020:PHE:CE2	1:B:1028:MET:HG3	2.48	0.48
2:K:1350:ILE:O	2:K:1354:TRP:HB2	2.12	0.48
1:C:756:ILE:HA	1:C:759:ILE:HD11	1.94	0.48
2:J:746:GLY:HA3	2:J:843:TRP:CZ2	2.49	0.48
1:E:453:ASP:HB2	1:E:454:HIS:HD2	1.78	0.48
1:F:23:ALA:HA	2:L:2007:SER:O	2.13	0.48
1:C:26:VAL:CG2	2:I:2006:HIS:CE1	2.97	0.48
2:K:580:LEU:CD2	2:K:1095:ILE:HG22	2.42	0.48
2:G:468:PRO:HD3	2:G:479:ARG:HH21	1.76	0.48
2:G:1266:HIS:CE1	2:G:1275:ARG:CD	2.90	0.48
1:A:616:HIS:C	1:A:617:LEU:HD23	2.34	0.48
2:L:2062:THR:HG22	2:L:2063:GLY:N	2.29	0.48
1:F:1278:GLY:CA	1:F:1630:LYS:HE2	2.42	0.48
2:L:613:VAL:CG1	2:L:614:PRO:HD3	2.42	0.48
2:H:1770:ASN:HB2	2:H:1776:LYS:CE	2.36	0.48
2:I:460:ILE:HD13	2:I:487:ILE:HD11	1.94	0.48
2:H:613:VAL:CG1	2:H:614:PRO:HD3	2.44	0.48
1:D:444:LEU:HD22	1:D:448:MET:HG2	1.94	0.48
2:J:731:ALA:HA	2:J:739:ILE:HD12	1.95	0.48
2:J:1250:ARG:H	2:J:1250:ARG:CD	2.26	0.48
2:I:1229:VAL:HG12	2:I:1230:LYS:N	2.29	0.48
2:H:1483:LEU:HD21	2:H:1525:VAL:HG11	1.96	0.48
1:D:340:LEU:HD22	1:D:351:LEU:HD11	1.95	0.48
1:C:1386:THR:HG22	1:C:1387:ASP:N	2.28	0.48
1:F:1512:LEU:HD21	1:F:1641:TYR:CE2	2.49	0.48
2:H:1249:GLY:HA2	2:H:1256:VAL:HG22	1.94	0.48
2:K:1227:LYS:HG2	2:K:1228:LEU:N	2.27	0.48
1:C:872:SER:OG	1:C:874:GLN:HG3	2.14	0.48
2:G:603:VAL:HG22	2:G:810:CYS:SG	2.52	0.48
2:H:835:ALA:HB3	2:H:1073:ALA:HB1	1.95	0.48
2:J:1451:GLU:HG3	2:J:1541:ILE:HD11	1.95	0.48
2:G:258:LEU:CD1	2:G:291:VAL:HG13	2.43	0.48
2:K:690:LEU:HD22	2:K:691:THR:H	1.78	0.48
1:F:1294:ILE:HD11	1:F:1302:CYS:HB3	1.96	0.48

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:C:543:ASN:O	1:C:546:ARG:HB2	2.13	0.48
1:F:409:ASP:CG	1:F:701:ARG:NH1	2.67	0.48
1:D:1504:ARG:NH2	1:D:1545:LEU:O	2.46	0.48
1:C:1078:ILE:HB	1:C:1338:GLY:HA3	1.95	0.48
2:I:276:LEU:HD12	2:I:298:ALA:O	2.12	0.48
2:J:1468:ARG:CB	2:J:1468:ARG:NH1	2.75	0.48
1:F:827:ARG:NH1	1:F:831:GLU:OE2	2.46	0.48
2:K:1764:MET:HE3	2:K:1865:LEU:HD12	1.95	0.48
2:H:783:GLY:HA2	2:H:815:ARG:HD3	1.95	0.48
1:B:1149:LEU:HB2	1:D:1149:LEU:CB	2.43	0.48
1:D:1108:PRO:HA	1:D:1140:VAL:O	2.12	0.48
2:G:190:TYR:CE1	2:G:201:ILE:HG21	2.48	0.48
2:I:382:LEU:HB3	2:I:499:VAL:HB	1.95	0.48
1:C:1303:LEU:HD23	1:C:1361:VAL:HB	1.96	0.48
2:I:1694:PHE:CD2	2:I:1843:ALA:CA	2.94	0.48
2:L:193:TYR:O	2:L:197:VAL:HG23	2.13	0.48
2:J:134:ILE:HG12	2:J:545:ILE:CD1	2.43	0.48
2:K:875:PHE:HE2	2:K:906:LEU:CD2	2.26	0.48
2:K:1904:VAL:HG22	2:K:1939:LEU:HD22	1.95	0.48
2:L:741:LEU:HG	2:L:741:LEU:O	2.13	0.48
2:J:120:HIS:CD2	2:J:137:VAL:CG1	2.97	0.48
1:F:335:LEU:O	1:F:335:LEU:HD12	2.14	0.48
2:L:1868:GLN:HG2	2:L:1873:ARG:HH22	1.78	0.48
2:L:1141:LYS:CE	2:L:1143:SER:HB2	2.44	0.48
2:H:350:MET:CE	2:H:435:ILE:HD12	2.44	0.48
2:I:186:LEU:CD2	2:I:256:VAL:HG22	2.43	0.48
2:H:786:GLU:H	2:H:786:GLU:CD	2.17	0.48
1:F:358:PHE:C	1:F:358:PHE:CD2	2.87	0.48
2:H:1899:ALA:O	2:H:1903:VAL:HG23	2.13	0.48
1:D:453:ASP:HB2	1:D:454:HIS:HD2	1.77	0.48
2:L:1471:GLU:H	2:L:1471:GLU:HG3	1.44	0.48
2:H:662:LEU:HD22	2:H:673:GLN:OE1	2.13	0.48
2:I:662:LEU:HD22	2:I:673:GLN:OE1	2.13	0.48
2:H:2062:THR:HG22	2:H:2063:GLY:N	2.29	0.48
1:F:435:GLN:HG2	1:F:701:ARG:O	2.13	0.48
1:C:1157:ASP:O	1:C:1159:LEU:HD12	2.13	0.48
1:E:427:ARG:NH1	1:E:492:ILE:CG1	2.76	0.48
1:A:558:LEU:HB2	1:A:563:GLN:CG	2.41	0.48
1:B:1079:ARG:NH1	1:B:1079:ARG:CG	2.69	0.48
2:G:1266:HIS:HE1	2:G:1275:ARG:CD	2.17	0.48
2:H:911:GLN:HE21	2:H:1065:CYS:H	1.59	0.48
2:I:416:GLN:HA	2:I:419:ILE:HG13	1.96	0.48

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:B:833:TRP:CH2	1:B:839:ILE:HD11	2.45	0.48
2:K:1067:LEU:HB2	3:K:2101:FMN:C7M	2.44	0.48
2:G:916:GLY:C	2:G:929:MET:HE2	2.33	0.48
2:H:416:GLN:HA	2:H:419:ILE:HG13	1.94	0.48
2:K:211:LEU:HB3	2:K:316:PHE:CZ	2.49	0.48
2:G:376:ARG:HH21	2:H:1339:GLY:HA2	1.78	0.48
1:F:1280:CYS:HA	1:F:1566:LYS:O	2.14	0.48
1:A:1493:PHE:HE2	1:A:1509:THR:HG22	1.77	0.48
1:E:1273:ILE:HG13	1:E:1273:ILE:O	2.13	0.48
2:I:102:LEU:O	2:I:106:LEU:HG	2.13	0.48
2:I:1115:TYR:HB3	2:I:1267:PRO:HB3	1.96	0.48
2:J:942:MET:CE	2:J:955:LEU:HB3	2.44	0.48
2:G:1371:LEU:HG	2:G:1600:ALA:HB2	1.95	0.48
2:I:665:VAL:HG12	2:I:665:VAL:O	2.13	0.48
2:G:220:GLN:NE2	2:G:324:GLN:HG2	2.28	0.48
2:I:1251:THR:HG22	2:I:1292:VAL:HG13	1.95	0.48
1:B:339:GLN:O	1:B:343:ILE:HG13	2.13	0.48
1:F:406:ALA:CA	1:F:439:ARG:HH11	2.25	0.48
2:I:1722:ALA:HB2	2:I:1812:LEU:HD11	1.95	0.48
2:J:1873:ARG:NH1	2:J:2002:ASP:HB3	2.28	0.48
2:J:1259:LEU:HB2	2:J:1288:PHE:CD1	2.49	0.48
1:E:1603:ASP:HB2	1:E:1604:TYR:CD2	2.48	0.48
2:G:1316:VAL:HG13	2:G:1348:PHE:HE2	1.78	0.48
1:F:1179:ILE:O	1:F:1183:VAL:HG23	2.13	0.48
2:L:930:THR:HG23	2:L:933:GLU:H	1.76	0.48
1:F:1001:GLU:O	1:F:1002:ILE:HD12	2.13	0.48
1:C:1493:PHE:HE2	1:C:1509:THR:HG22	1.77	0.48
2:L:938:MET:HE2	2:L:959:THR:HA	1.95	0.48
1:C:621:ASP:HB3	1:C:625:ASN:H	1.78	0.48
1:F:811:ASP:N	1:F:811:ASP:OD1	2.47	0.48
1:B:1001:GLU:C	1:B:1002:ILE:HD12	2.34	0.48
2:J:872:GLY:HA2	2:J:909:ASP:O	2.14	0.48
2:K:1141:LYS:CE	2:K:1143:SER:HB2	2.43	0.48
2:H:378:ILE:HG23	2:H:391:VAL:HG13	1.96	0.48
2:J:108:GLU:HA	2:J:111:ARG:HD2	1.94	0.48
2:I:314:LEU:HG	2:I:318:ILE:HD11	1.95	0.48
2:J:1141:LYS:HE2	2:J:1143:SER:HB2	1.94	0.48
1:E:948:HIS:O	1:E:952:TYR:HD2	1.97	0.48
1:E:524:LYS:O	1:E:527:ALA:N	2.47	0.48
1:D:718:SER:HB3	1:D:721:ASP:HB2	1.96	0.48
2:H:1820:ASP:O	2:H:1823:SER:HB3	2.13	0.48
2:G:1017:LEU:O	2:G:1021:GLN:HG3	2.14	0.48

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:L:1636:HIS:O	2:L:1681:GLY:HA3	2.14	0.48
1:B:743:VAL:O	1:B:745:PRO:HD3	2.14	0.48
2:I:699:ILE:N	2:I:699:ILE:HD12	2.28	0.48
1:C:573:VAL:O	1:C:577:LEU:HG	2.13	0.48
1:A:788:ARG:HB2	1:A:790:TYR:CD2	2.47	0.48
1:C:1268:SER:CB	1:F:1389:ILE:HG13	2.10	0.48
2:I:298:ALA:HB1	2:I:304:PHE:HA	1.94	0.48
2:J:298:ALA:HB2	2:J:304:PHE:HA	1.95	0.48
2:K:1464:LEU:HD11	2:K:1468:ARG:HD2	1.95	0.48
2:L:590:VAL:CG2	2:L:1091:HIS:CD2	2.97	0.48
1:B:541:VAL:HG22	1:E:576:ALA:HB3	1.95	0.48
1:D:574:ILE:HG23	1:D:579:MET:HB2	1.95	0.48
2:H:467:ILE:CG2	2:H:468:PRO:HD2	2.39	0.48
2:G:101:VAL:O	2:G:105:ILE:HG12	2.12	0.48
1:C:755:GLU:HB2	1:C:757:ASP:HB2	1.96	0.48
2:J:1404:VAL:CG2	2:J:1413:VAL:HG22	2.37	0.48
2:L:1372:LYS:O	2:L:1436:ARG:HG2	2.14	0.48
2:G:487:ILE:HB	2:G:488:PRO:CD	2.39	0.48
2:I:521:VAL:O	2:I:526:VAL:HG21	2.13	0.48
2:L:1265:TYR:CE2	2:L:1267:PRO:HG3	2.49	0.48
2:H:1371:LEU:O	2:H:1590:ILE:HD11	2.13	0.48
2:K:167:VAL:HG23	2:K:169:ILE:HG13	1.96	0.48
2:L:220:GLN:NE2	2:L:324:GLN:HG2	2.28	0.48
1:F:636:TYR:HB2	1:F:888:ILE:HD11	1.94	0.48
2:H:197:VAL:HA	2:H:262:MET:HE1	1.95	0.48
1:E:767:HIS:CG	1:E:813:LEU:HD12	2.48	0.48
2:I:156:SER:HB3	2:I:558:LEU:O	2.13	0.48
2:J:1175:MET:HA	2:J:1274:ILE:HD11	1.96	0.48
1:D:811:ASP:N	1:D:811:ASP:OD1	2.46	0.48
2:G:1286:LYS:NZ	2:G:1367:ASP:HA	2.29	0.48
1:E:1534:GLU:HG2	1:E:1625:PHE:HE1	1.79	0.48
2:H:170:TYR:CE1	2:H:510:ALA:HB2	2.49	0.48
2:J:1160:PHE:CE1	2:J:1164:ILE:HD11	2.48	0.48
2:I:1048:TRP:CE2	2:I:1049:GLN:HG2	2.48	0.48
2:J:665:VAL:O	2:J:665:VAL:HG12	2.14	0.48
2:L:1451:GLU:HG3	2:L:1541:ILE:HD11	1.95	0.48
2:H:949:ARG:HH22	2:H:1052:ASP:CG	2.17	0.48
2:G:356:LEU:HB3	2:G:361:VAL:HG23	1.95	0.48
2:I:888:ARG:HD3	2:I:891:ARG:NH1	2.28	0.48
2:J:786:GLU:CD	2:J:786:GLU:H	2.17	0.48
2:L:1650:THR:O	2:L:1669:ALA:HA	2.13	0.48
2:H:1813:MET:HG3	2:H:1814:GLU:N	2.29	0.48

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:K:1910:VAL:CG1	2:K:1973:ILE:HG21	2.43	0.48
1:C:902:ASN:O	1:C:904:GLY:N	2.44	0.48
2:G:401:LEU:HD22	2:G:405:LEU:HG	1.95	0.48
2:L:480:GLU:O	2:L:480:GLU:HG2	2.13	0.48
2:I:821:GLU:H	2:I:821:GLU:HG2	1.43	0.48
1:C:398:VAL:HG22	1:C:710:VAL:HG22	1.96	0.48
2:I:949:ARG:HH22	2:I:1052:ASP:CG	2.17	0.48
2:H:1874:ASP:OD1	2:H:1878:ARG:HB3	2.12	0.48
2:H:1048:TRP:CD1	2:H:1049:GLN:HG2	2.48	0.48
2:H:1048:TRP:NE1	2:H:1049:GLN:HG2	2.28	0.48
2:L:1871:VAL:HG23	2:L:2003:VAL:HG13	1.96	0.48
2:H:271:GLU:HG2	2:H:301:TRP:NE1	2.29	0.48
2:L:467:ILE:CG2	2:L:468:PRO:HD2	2.43	0.48
1:B:1150:ILE:HG12	1:D:1148:LEU:CD2	2.44	0.48
2:G:1802:ALA:CB	2:G:1804:GLN:HE22	2.19	0.48
2:I:1156:ASP:HB2	2:I:1159:SER:N	2.19	0.48
1:A:40:ARG:HH21	1:A:74:VAL:CG2	2.20	0.48
2:L:458:MET:C	2:L:459:LYS:HG3	2.34	0.48
2:L:460:ILE:HD13	2:L:487:ILE:HD11	1.96	0.48
2:H:452:LEU:HD21	2:H:488:PRO:HA	1.96	0.48
2:H:460:ILE:HD13	2:H:487:ILE:HD11	1.95	0.48
2:H:485:ASP:CB	2:H:488:PRO:CD	2.87	0.48
2:L:24:LEU:CD1	2:L:45:ALA:HB1	2.43	0.48
2:L:1456:LEU:HD23	2:L:1457:HIS:N	2.28	0.48
2:L:208:LEU:HD12	2:L:227:ILE:HD11	1.96	0.48
1:B:1108:PRO:HA	1:B:1140:VAL:O	2.13	0.48
2:G:617:PHE:CD1	2:G:822:ALA:HA	2.48	0.48
2:J:1285:ILE:O	2:J:1288:PHE:HB3	2.13	0.48
1:E:843:VAL:HG22	1:E:843:VAL:O	2.12	0.48
1:E:694:TYR:HD2	1:E:695:TYR:CD1	2.32	0.48
2:I:1483:LEU:CD2	2:I:1525:VAL:HG11	2.44	0.48
1:C:843:VAL:O	1:C:843:VAL:HG22	2.13	0.48
1:C:1386:THR:HG22	1:C:1387:ASP:H	1.79	0.48
1:E:1081:ILE:HG13	1:E:1159:LEU:O	2.14	0.48
1:E:1381:MET:HE3	1:E:1403:THR:HB	1.96	0.48
2:J:73:VAL:HG13	2:J:113:PHE:HD2	1.77	0.48
2:J:170:TYR:CE2	2:J:507:PHE:HB3	2.48	0.48
2:L:1220:ARG:HA	2:L:1229:VAL:O	2.13	0.48
1:F:537:ASN:O	1:F:541:VAL:HG23	2.14	0.48
2:K:615:TRP:HA	2:K:618:VAL:CG1	2.43	0.48
1:C:869:ARG:O	1:C:903:GLY:HA3	2.13	0.48
2:G:1160:PHE:O	2:G:1164:ILE:HG13	2.14	0.48

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:D:1672:GLY:HA3	1:D:1678:LEU:HD23	1.96	0.48
1:A:716:GLN:HB3	1:A:769:ILE:HG23	1.94	0.48
2:H:27:THR:HG22	2:H:32:GLU:CD	2.34	0.48
1:E:950:ALA:HA	1:E:953:ARG:CZ	2.43	0.48
1:B:1251:GLN:HG3	1:D:1321:MET:HE1	1.95	0.48
2:H:1723:ASP:OD1	2:H:1735:ILE:HG13	2.14	0.48
2:J:246:ALA:HB3	2:J:247:PRO:HD3	1.95	0.48
1:D:1685:ALA:HB1	1:D:1686:PRO:CD	2.44	0.48
1:B:1050:TRP:HA	1:B:1050:TRP:CE3	2.49	0.48
1:A:874:GLN:HG2	1:A:874:GLN:H	1.39	0.48
2:G:1099:LEU:HD12	2:G:1103:TYR:HB2	1.95	0.48
2:L:1299:VAL:CG2	2:L:1301:PHE:CE2	2.90	0.48
2:G:1896:THR:CG2	2:G:1897:GLU:N	2.76	0.48
2:H:1972:ILE:HG13	2:H:1972:ILE:H	1.38	0.48
2:K:938:MET:CE	2:K:959:THR:HA	2.44	0.48
2:K:942:MET:O	2:K:951:ILE:HG13	2.13	0.48
2:J:485:ASP:CB	2:J:488:PRO:CD	2.90	0.48
2:J:485:ASP:HB2	2:J:488:PRO:HD2	1.95	0.48
2:K:474:THR:HB	2:K:476:GLN:HG2	1.96	0.48
2:K:674:ILE:HD13	2:K:705:TYR:HE2	1.74	0.48
2:K:783:GLY:HA2	2:K:815:ARG:HD3	1.96	0.48
1:E:956:ILE:HA	2:K:977:PRO:HA	1.95	0.48
1:F:36:LEU:CD2	1:F:44:ILE:HD11	2.41	0.48
1:A:421:ARG:NH2	1:A:1613:LYS:HB3	2.28	0.48
1:B:1574:LEU:O	1:B:1578:LEU:HG	2.14	0.48
1:E:996:VAL:HG11	1:E:1578:LEU:HD11	1.96	0.48
1:D:1160:VAL:HG23	1:D:1327:ALA:HB2	1.94	0.48
1:A:1212:TYR:CD2	1:A:1371:MET:HG2	2.49	0.48
2:G:1977:ARG:HD2	2:G:1978:LYS:HE3	1.96	0.48
2:L:884:PHE:CE2	2:L:1039:GLU:HA	2.47	0.48
2:G:1475:LEU:HD23	2:G:1476:ASP:N	2.27	0.48
1:A:767:HIS:CG	1:A:813:LEU:HD12	2.49	0.48
1:A:1055:THR:OG1	1:A:1057:GLU:HG2	2.14	0.48
2:G:170:TYR:CE2	2:G:507:PHE:HB3	2.48	0.48
2:L:356:LEU:HB3	2:L:361:VAL:HG23	1.95	0.48
1:F:1164:ILE:CD1	1:F:1355:GLN:HG3	2.44	0.48
1:D:869:ARG:O	1:D:903:GLY:HA3	2.14	0.48
2:L:455:VAL:HG12	2:L:455:VAL:O	2.14	0.48
2:H:1661:GLY:HA3	2:H:1827:VAL:O	2.14	0.48
2:G:690:LEU:HD22	2:G:691:THR:H	1.79	0.48
1:C:754:ARG:HH21	1:C:762:LYS:HD3	1.78	0.48
1:C:1580:VAL:HG22	1:C:1585:ILE:O	2.13	0.48

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:D:1610:ARG:HH11	1:D:1610:ARG:CG	1.94	0.48
1:B:1389:ILE:HG13	1:D:1268:SER:CB	2.13	0.48
1:C:427:ARG:NH1	1:C:492:ILE:HG13	2.29	0.48
1:F:1160:VAL:HG23	1:F:1327:ALA:HB2	1.95	0.48
2:H:35:PHE:CE1	2:H:105:ILE:HD13	2.49	0.48
1:E:1592:ALA:O	1:E:1593:ASP:C	2.52	0.48
2:G:1896:THR:HG22	2:G:1898:GLN:N	2.17	0.48
1:A:617:LEU:N	1:A:617:LEU:HD23	2.29	0.48
2:L:1617:ARG:HB2	2:L:1635:TYR:CZ	2.49	0.48
2:L:1764:MET:HG3	2:L:1781:PHE:HE1	1.78	0.48
2:L:781:GLY:HA2	2:L:1071:VAL:CG1	2.39	0.48
1:B:1365:ALA:O	1:B:1368:ALA:HB3	2.13	0.48
2:H:1404:VAL:CG2	2:H:1413:VAL:HG22	2.38	0.48
2:H:190:TYR:CE1	2:H:201:ILE:HG21	2.48	0.48
1:E:655:ALA:CB	1:E:742:TYR:HB2	2.43	0.48
2:L:1115:TYR:HB3	2:L:1267:PRO:CA	2.44	0.48
1:F:613:PRO:HD2	1:F:628:TYR:CE2	2.49	0.48
2:I:930:THR:HG22	2:I:933:GLU:HG3	1.96	0.48
2:L:411:PRO:HD2	2:L:414:LEU:HD11	1.95	0.48
1:E:444:LEU:HD22	1:E:448:MET:CG	2.44	0.48
1:D:1249:ILE:HD12	1:D:1250:LEU:N	2.28	0.48
1:C:998:GLY:HA3	1:C:1361:VAL:CG1	2.41	0.48
2:J:215:TRP:N	2:J:215:TRP:CE3	2.82	0.48
2:I:129:ILE:HG12	2:I:131:ALA:HB3	1.96	0.48
2:K:1621:GLU:OE2	2:K:1629:ILE:HG23	2.13	0.48
1:B:47:ILE:HB	2:H:1694:PHE:HD1	1.78	0.48
2:J:1348:PHE:CE1	2:J:1351:VAL:HG11	2.49	0.48
2:H:787:ASP:O	2:H:790:PRO:HD2	2.13	0.48
1:F:987:MET:O	1:F:1490:GLY:HA3	2.14	0.48
1:E:1638:HIS:CG	1:E:1639:PRO:HD2	2.49	0.48
2:G:676:LEU:HD23	2:G:679:ARG:HH21	1.78	0.48
2:J:884:PHE:CE2	2:J:1039:GLU:HA	2.47	0.48
2:L:1483:LEU:HD21	2:L:1525:VAL:HG11	1.95	0.48
1:C:1270:THR:HG21	1:F:1402:THR:CG2	2.44	0.48
2:J:723:ALA:O	2:J:726:GLN:HB2	2.13	0.48
2:G:1402:ASN:O	2:G:1403:ALA:HB2	2.14	0.48
2:L:1359:LYS:N	2:L:1360:PRO:CD	2.77	0.48
2:G:268:LEU:HD12	2:G:275:LEU:CD1	2.44	0.48
2:J:73:VAL:HA	2:J:113:PHE:HE2	1.78	0.48
1:E:943:VAL:HG23	2:K:1539:PRO:HG3	1.96	0.48
2:J:699:ILE:HD12	2:J:699:ILE:H	1.79	0.48
2:I:1048:TRP:CD1	2:I:1049:GLN:HG2	2.49	0.48

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:I:350:MET:HG3	2:I:435:ILE:HB	1.96	0.48
2:G:895:LEU:HD13	2:G:1034:LEU:HB3	1.96	0.48
2:K:835:ALA:HB3	2:K:1073:ALA:HB1	1.95	0.48
1:A:988:VAL:HG12	1:A:990:LEU:HD23	1.95	0.48
2:G:579:ARG:HB2	2:G:591:ASP:HB3	1.96	0.48
2:K:205:ALA:O	2:K:209:GLN:HG3	2.14	0.48
1:E:1685:ALA:HB1	1:E:1686:PRO:CD	2.44	0.48
1:F:942:VAL:O	2:L:1536:HIS:HB2	2.13	0.48
1:F:768:ARG:HA	1:F:772:THR:OG1	2.14	0.48
1:D:1067:LYS:HB3	1:D:1068:TYR:CD1	2.48	0.48
2:K:1504:TYR:HD2	2:K:1507:VAL:HG11	1.79	0.48
1:B:1390:GLY:O	1:D:1264:MET:HB3	2.14	0.48
2:J:1672:LYS:O	2:J:1672:LYS:HG2	2.14	0.48
2:H:1492:LEU:HD22	2:H:1511:GLY:HA3	1.95	0.48
2:J:1820:ASP:O	2:J:1823:SER:HB3	2.14	0.48
1:F:988:VAL:HG12	1:F:990:LEU:HD23	1.95	0.48
2:H:2073:ASN:O	2:H:2076:LYS:HB3	2.13	0.48
1:E:1098:GLN:HB2	1:E:1152:LYS:HE2	1.94	0.48
2:L:276:LEU:HD12	2:L:298:ALA:O	2.13	0.48
2:J:2052:LYS:HB3	2:J:2074:TRP:CZ2	2.49	0.48
2:I:271:GLU:HG2	2:I:301:TRP:NE1	2.29	0.48
2:G:1468:ARG:NH1	2:G:1468:ARG:CB	2.75	0.48
2:H:501:TRP:CZ2	2:H:528:THR:HG21	2.49	0.48
2:J:1881:TYR:HB2	2:J:2004:PRO:HG3	1.95	0.48
2:J:580:LEU:CD2	2:J:1095:ILE:HG22	2.44	0.48
2:H:1103:TYR:O	2:H:1106:LYS:HB2	2.14	0.48
1:A:689:ARG:NH2	1:A:1591:ASN:HD21	2.12	0.48
2:J:613:VAL:N	2:J:614:PRO:CD	2.76	0.48
2:J:781:GLY:HA2	2:J:1071:VAL:CG1	2.37	0.48
2:J:289:ILE:HD12	2:J:472:THR:OG1	2.13	0.48
1:E:1303:LEU:HD23	1:E:1361:VAL:HB	1.96	0.48
2:G:1694:PHE:CD2	2:G:1843:ALA:CA	2.96	0.48
2:H:106:LEU:HD11	2:H:143:GLY:O	2.14	0.48
2:G:765:TYR:CB	2:G:805:MET:HE3	2.41	0.48
1:E:1338:GLY:H	1:E:1340:MET:HG3	1.79	0.48
2:L:1812:LEU:HD21	2:L:1857:VAL:HG11	1.96	0.48
2:L:731:ALA:HA	2:L:739:ILE:HD12	1.95	0.48
1:F:1574:LEU:CD1	1:F:1622:VAL:HG11	2.43	0.48
2:J:1483:LEU:CD2	2:J:1525:VAL:HG11	2.44	0.48
1:C:767:HIS:CB	1:C:813:LEU:HD12	2.43	0.48
1:B:967:PHE:CD2	1:B:1374:PRO:HG3	2.49	0.48
2:G:1403:ALA:HB2	2:G:1447:GLN:HA	1.96	0.48

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:E:1160:VAL:HG23	1:E:1327:ALA:HB2	1.96	0.48
2:L:918:ASN:HB3	2:L:924:VAL:HG21	1.95	0.48
2:J:1690:THR:HG22	2:J:1691:ALA:N	2.29	0.48
2:L:1709:TYR:CE2	2:L:1716:LYS:HG2	2.48	0.48
2:H:73:VAL:HG13	2:H:113:PHE:HD2	1.78	0.48
2:L:182:TYR:CD1	2:L:183:PHE:N	2.82	0.48
1:E:743:VAL:O	1:E:745:PRO:HD3	2.14	0.48
2:J:2062:THR:HG22	2:J:2063:GLY:N	2.28	0.48
1:B:756:ILE:HA	1:B:759:ILE:HD11	1.96	0.48
2:K:579:ARG:HB2	2:K:591:ASP:HB3	1.96	0.48
2:L:1835:GLY:HA3	2:L:1839:GLY:C	2.34	0.48
2:L:776:LEU:HG	2:L:807:PHE:CD2	2.48	0.48
2:I:1451:GLU:HG3	2:I:1541:ILE:HD11	1.96	0.48
1:B:28:TRP:CZ2	1:B:53:LEU:HD22	2.49	0.48
1:D:1544:HIS:O	1:D:1544:HIS:CG	2.67	0.48
1:A:871:PHE:N	1:A:871:PHE:CD1	2.80	0.48
2:J:1603:PRO:HB2	2:J:1644:LEU:HD21	1.94	0.48
2:H:314:LEU:HG	2:H:318:ILE:HD11	1.95	0.48
1:F:1336:GLU:O	1:F:1340:MET:HG2	2.14	0.47
2:I:1871:VAL:HG21	2:I:2004:PRO:HD3	1.96	0.47
2:G:276:LEU:HD12	2:G:298:ALA:O	2.14	0.47
2:K:276:LEU:HD12	2:K:298:ALA:O	2.14	0.47
2:J:1871:VAL:HG23	2:J:2003:VAL:HG13	1.96	0.47
2:G:868:LEU:O	2:G:870:THR:HG23	2.14	0.47
2:L:857:VAL:HG11	2:L:876:TRP:CD1	2.49	0.47
1:B:613:PRO:C	1:B:615:LEU:H	2.17	0.47
2:K:676:LEU:HD23	2:K:679:ARG:HH21	1.79	0.47
1:E:617:LEU:N	1:E:617:LEU:HD23	2.28	0.47
1:E:1365:ALA:O	1:E:1368:ALA:HB3	2.14	0.47
1:C:15:VAL:HG11	2:I:2022:LEU:CD2	2.44	0.47
2:J:192:THR:O	2:J:194:PRO:HD3	2.14	0.47
2:I:1728:GLU:O	2:I:1757:ILE:CD1	2.63	0.47
1:D:1547:ARG:HG2	1:D:1604:TYR:CD1	2.47	0.47
2:K:1316:VAL:HG13	2:K:1348:PHE:CE2	2.49	0.47
1:D:694:TYR:HD2	1:D:695:TYR:CD1	2.32	0.47
2:G:1351:VAL:HG21	2:G:1583:VAL:O	2.14	0.47
2:H:884:PHE:CE2	2:H:1039:GLU:HA	2.47	0.47
2:J:676:LEU:HD23	2:J:679:ARG:NH2	2.28	0.47
2:J:1515:LEU:HB3	2:J:1525:VAL:CG2	2.44	0.47
2:K:116:GLY:O	2:K:561:ARG:NH1	2.47	0.47
1:A:619:LYS:HG2	1:A:620:LYS:N	2.28	0.47
1:D:335:LEU:HD12	1:D:335:LEU:O	2.14	0.47

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:L:1393:ASP:HB3	2:L:1395:LEU:HD21	1.95	0.47
2:J:179:ILE:HG12	2:J:182:TYR:HB3	1.95	0.47
2:G:505:THR:O	2:G:505:THR:HG22	2.14	0.47
2:K:980:LEU:HD21	2:K:986:LEU:HD21	1.95	0.47
1:F:1705:GLN:HE21	1:F:1709:GLY:HA2	1.78	0.47
2:I:1910:VAL:CG1	2:I:1973:ILE:HG21	2.44	0.47
2:K:1492:LEU:HD22	2:K:1511:GLY:HA3	1.95	0.47
1:F:28:TRP:CZ2	1:F:53:LEU:HD22	2.48	0.47
1:E:1287:LEU:HA	1:E:1304:VAL:HG11	1.96	0.47
1:E:408:GLN:HE22	1:E:1609:SER:H	1.62	0.47
2:G:455:VAL:HG12	2:G:455:VAL:O	2.14	0.47
1:B:1129:ILE:HA	1:B:1139:THR:O	2.14	0.47
2:H:401:LEU:HD22	2:H:405:LEU:HG	1.96	0.47
2:G:119:VAL:HA	2:G:122:ILE:HG22	1.95	0.47
1:C:22:PHE:HE2	2:I:2017:PHE:CG	2.32	0.47
2:G:600:VAL:HG13	2:G:601:PRO:N	2.29	0.47
2:K:2017:PHE:CE2	2:K:2021:LEU:HD11	2.50	0.47
1:B:586:GLN:C	1:E:538:ARG:NH2	2.65	0.47
2:I:1426:VAL:HG12	2:I:1427:MET:HG2	1.96	0.47
2:J:44:GLN:HE21	2:J:48:LEU:HD21	1.79	0.47
1:B:1213:VAL:HG13	1:B:1217:GLU:HB2	1.96	0.47
1:D:1301:VAL:HG23	1:D:1363:MET:HG3	1.96	0.47
2:L:1074:LYS:HE3	2:L:1075:TYR:CE1	2.49	0.47
2:L:783:GLY:HA2	2:L:815:ARG:HD3	1.96	0.47
2:G:416:GLN:HA	2:G:419:ILE:HG13	1.95	0.47
1:C:1363:MET:HE3	1:C:1368:ALA:HA	1.95	0.47
2:J:1405:ILE:HG22	2:J:1445:THR:OG1	2.14	0.47
1:B:1149:LEU:CB	1:D:1149:LEU:HB2	2.42	0.47
2:K:1007:LEU:HD12	2:K:1007:LEU:N	2.23	0.47
2:G:1404:VAL:CG2	2:G:1413:VAL:HG22	2.40	0.47
1:A:444:LEU:HD22	1:A:448:MET:HG2	1.94	0.47
2:I:208:LEU:HA	2:I:211:LEU:HD12	1.94	0.47
2:K:1662:ARG:HG2	2:K:1686:GLU:HG2	1.97	0.47
2:L:1767:GLU:HB2	2:L:2016:PRO:CG	2.42	0.47
2:J:474:THR:HB	2:J:476:GLN:HG2	1.95	0.47
2:L:190:TYR:CE1	2:L:201:ILE:HG21	2.49	0.47
2:I:1812:LEU:HD21	2:I:1857:VAL:HG11	1.96	0.47
2:H:193:TYR:O	2:H:197:VAL:HG23	2.14	0.47
2:L:1353:GLY:CA	2:L:1397:THR:HG21	2.42	0.47
1:C:828:TRP:NE1	1:C:838:THR:HA	2.29	0.47
2:H:1114:GLU:HB3	2:H:1169:TYR:HB3	1.96	0.47
2:J:36:LEU:HD23	2:J:36:LEU:HA	1.74	0.47

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:F:449:GLN:HG3	1:F:474:ILE:HD13	1.95	0.47
1:C:811:ASP:OD1	1:C:811:ASP:N	2.47	0.47
2:J:1977:ARG:CD	2:J:1978:LYS:HE3	2.45	0.47
1:C:1467:LEU:O	1:C:1471:THR:HG23	2.14	0.47
2:K:283:THR:HG23	2:K:470:TYR:O	2.13	0.47
1:F:1386:THR:HG22	1:F:1387:ASP:N	2.30	0.47
2:H:1709:TYR:CE2	2:H:1716:LYS:HG2	2.49	0.47
2:J:1975:GLU:O	2:J:1979:GLN:HG3	2.13	0.47
2:H:820:LYS:HB3	2:H:1080:ASP:O	2.14	0.47
1:E:1321:MET:HB3	1:E:1321:MET:HE2	1.82	0.47
2:I:1555:VAL:O	2:I:1555:VAL:HG12	2.14	0.47
2:H:1324:PHE:N	2:H:1583:VAL:HG11	2.28	0.47
2:I:1579:ASN:O	2:I:1583:VAL:HG23	2.14	0.47
1:D:613:PRO:HG2	1:D:616:HIS:HB3	1.95	0.47
2:J:2052:LYS:HD3	2:J:2074:TRP:CE2	2.49	0.47
1:E:1703:VAL:HG22	1:E:1712:LYS:C	2.35	0.47
2:L:747:ARG:HD3	2:L:1071:VAL:HG11	1.96	0.47
2:K:610:PRO:O	2:K:613:VAL:HG12	2.15	0.47
1:B:1591:ASN:C	1:B:1593:ASP:H	2.18	0.47
2:K:930:THR:HG23	2:K:933:GLU:H	1.79	0.47
2:G:452:LEU:HD21	2:G:488:PRO:HA	1.96	0.47
2:I:942:MET:HG2	2:I:1029:PRO:HG2	1.96	0.47
2:H:1265:TYR:CE2	2:H:1267:PRO:HG3	2.49	0.47
1:F:1108:PRO:HA	1:F:1140:VAL:O	2.15	0.47
1:F:1592:ALA:O	1:F:1593:ASP:C	2.53	0.47
2:L:1348:PHE:O	2:L:1351:VAL:HG12	2.14	0.47
1:D:41:THR:HA	2:J:1689:VAL:HB	1.96	0.47
2:I:1261:PHE:HA	2:I:1284:ARG:NH1	2.30	0.47
2:I:129:ILE:HG21	2:I:132:LYS:HG3	1.95	0.47
2:K:837:GLY:HA3	2:K:1074:LYS:HG2	1.96	0.47
1:F:439:ARG:HA	1:F:705:ARG:HG2	1.97	0.47
1:A:1606:VAL:O	1:A:1608:PRO:HD3	2.14	0.47
2:K:1579:ASN:O	2:K:1583:VAL:HG23	2.14	0.47
1:B:1586:VAL:CG2	1:B:1617:ILE:HD11	2.44	0.47
2:K:1915:LEU:HD21	2:K:1939:LEU:HD22	1.96	0.47
2:H:1948:MET:HE2	2:H:1948:MET:HA	1.96	0.47
2:H:47:GLN:HG3	2:I:23:PRO:CG	2.44	0.47
2:G:1061:VAL:HG11	2:G:1066:ILE:HD11	1.95	0.47
1:E:1372:GLY:O	1:E:1661:ARG:HD2	2.15	0.47
2:H:117:ASN:HA	2:H:561:ARG:CD	2.44	0.47
1:C:623:PHE:N	1:C:623:PHE:HD2	2.13	0.47
2:J:827:GLN:H	2:J:827:GLN:CD	2.17	0.47

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:J:126:VAL:HG12	2:J:127:ALA:N	2.29	0.47
1:F:655:ALA:HB2	1:F:742:TYR:HB2	1.97	0.47
2:I:980:LEU:CD2	2:I:986:LEU:HD21	2.44	0.47
2:K:1160:PHE:O	2:K:1164:ILE:HG13	2.13	0.47
2:I:1248:GLU:OE2	2:I:1250:ARG:HG2	2.15	0.47
2:I:356:LEU:HB3	2:I:361:VAL:HG23	1.95	0.47
2:H:1579:ASN:O	2:H:1583:VAL:HG23	2.14	0.47
2:K:388:ASN:HD22	2:K:388:ASN:C	2.17	0.47
2:G:1262:ARG:NH2	2:G:1277:VAL:HG11	2.29	0.47
2:G:778:ALA:HB2	2:G:807:PHE:CD2	2.49	0.47
2:J:859:SER:CB	2:J:863:GLU:HG3	2.44	0.47
2:J:778:ALA:HB2	2:J:807:PHE:CD2	2.49	0.47
2:G:1603:PRO:HB2	2:G:1644:LEU:HD21	1.96	0.47
2:L:665:VAL:O	2:L:665:VAL:HG12	2.14	0.47
1:F:756:ILE:HA	1:F:759:ILE:HD11	1.97	0.47
2:H:1451:GLU:HG3	2:H:1541:ILE:HD11	1.97	0.47
2:K:401:LEU:HD22	2:K:405:LEU:HG	1.96	0.47
2:H:1199:THR:HB	2:H:1202:MET:HB3	1.96	0.47
1:A:1050:TRP:HA	1:A:1050:TRP:CE3	2.49	0.47
2:K:1245:THR:HG23	2:K:1260:THR:OG1	2.14	0.47
2:I:1199:THR:HB	2:I:1202:MET:HB3	1.96	0.47
2:K:600:VAL:CG1	2:K:601:PRO:HD2	2.42	0.47
2:L:580:LEU:O	2:L:581:VAL:HG23	2.13	0.47
2:H:855:ILE:HD13	2:H:856:THR:N	2.23	0.47
2:J:582:LYS:HA	2:J:587:GLN:O	2.13	0.47
1:D:72:THR:O	1:D:73:SER:HB3	2.14	0.47
2:K:1521:GLU:OE2	2:K:2028:THR:CG2	2.58	0.47
2:K:253:ILE:HB	2:K:287:GLN:HE22	1.79	0.47
2:K:440:HIS:CD2	2:K:499:VAL:HG23	2.49	0.47
2:L:1375:HIS:CE1	2:L:1610:MET:SD	3.05	0.47
1:E:486:VAL:CG1	1:E:647:GLY:HA3	2.41	0.47
2:I:1009:ASN:HD22	2:I:1010:ALA:N	2.12	0.47
1:C:973:TRP:CD1	1:C:1648:LYS:HD2	2.50	0.47
2:I:617:PHE:CD1	2:I:822:ALA:HA	2.50	0.47
1:E:326:ASP:HB3	1:E:333:ARG:NH1	2.24	0.47
2:H:857:VAL:CG1	2:H:876:TRP:CD1	2.97	0.47
1:E:444:LEU:HD22	1:E:448:MET:HG2	1.96	0.47
2:J:1335:PHE:HE1	2:J:1629:ILE:CD1	2.26	0.47
2:L:1120:ILE:CD1	2:L:1169:TYR:CE1	2.97	0.47
1:C:27:ARG:HD3	2:I:2042:ASN:O	2.13	0.47
2:G:1348:PHE:CE1	2:G:1351:VAL:HG11	2.50	0.47
2:L:827:GLN:H	2:L:827:GLN:CD	2.15	0.47

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:K:1289:TYR:CB	2:K:1370:LEU:HD23	2.43	0.47
2:I:1483:LEU:HD21	2:I:1525:VAL:HG11	1.97	0.47
2:K:1588:ASN:OD1	2:K:1589:PRO:HD2	2.15	0.47
2:J:659:THR:HA	2:J:689:GLY:O	2.14	0.47
2:H:1189:THR:O	2:H:1191:PRO:HD3	2.14	0.47
2:H:1722:ALA:HB2	2:H:1812:LEU:HD11	1.94	0.47
2:K:126:VAL:HG12	2:K:127:ALA:N	2.29	0.47
2:K:1175:MET:HE3	2:K:1192:LEU:HD11	1.97	0.47
2:I:1189:THR:O	2:I:1191:PRO:HD3	2.13	0.47
1:A:1692:GLN:HG3	1:A:1696:PHE:CE2	2.50	0.47
1:A:1692:GLN:NE2	1:E:1388:LYS:HD3	2.29	0.47
2:G:182:TYR:CD1	2:G:183:PHE:N	2.82	0.47
2:K:314:LEU:O	2:K:318:ILE:HG13	2.14	0.47
2:L:912:LYS:NZ	2:L:1044:LYS:O	2.47	0.47
1:C:655:ALA:HB2	1:C:742:TYR:HB2	1.97	0.47
2:G:912:LYS:NZ	2:G:1044:LYS:O	2.47	0.47
2:H:1507:VAL:O	2:H:1531:GLU:HA	2.14	0.47
2:L:778:ALA:HB2	2:L:807:PHE:CD2	2.49	0.47
1:C:959:PRO:CD	2:I:974:GLU:HG2	2.44	0.47
1:D:872:SER:OG	1:D:874:GLN:HG3	2.14	0.47
1:A:651:GLN:HA	1:A:677:GLY:HA3	1.96	0.47
1:A:358:PHE:CD2	1:A:358:PHE:C	2.87	0.47
2:H:1925:MET:HB3	2:H:1925:MET:HE2	1.71	0.47
2:J:118:ASP:OD2	2:J:559:PHE:HB2	2.14	0.47
1:E:1170:ALA:HB3	1:E:1188:LEU:HD13	1.95	0.47
1:D:701:ARG:HH11	1:D:1610:ARG:NH2	2.12	0.47
1:C:427:ARG:O	1:C:430:VAL:HB	2.15	0.47
2:I:1871:VAL:CG2	2:I:2004:PRO:HD3	2.44	0.47
2:I:1863:ARG:HB2	2:I:2017:PHE:CE1	2.49	0.47
2:K:652:ILE:CG2	2:K:656:ARG:HB2	2.44	0.47
1:B:628:TYR:C	1:B:628:TYR:CD1	2.88	0.47
2:H:868:LEU:HD13	2:H:1068:GLN:HG3	1.95	0.47
2:K:1543:TYR:HD2	2:K:1544:LEU:HD23	1.78	0.47
2:J:1770:ASN:HB2	2:J:1776:LYS:CE	2.36	0.47
1:E:1199:LEU:C	1:E:1201:SER:H	2.17	0.47
2:G:747:ARG:HD3	2:G:1071:VAL:HG11	1.96	0.47
2:G:24:LEU:CD1	2:G:45:ALA:HB1	2.44	0.47
1:B:72:THR:O	1:B:73:SER:HB3	2.14	0.47
1:D:40:ARG:HH21	1:D:74:VAL:CG2	2.20	0.47
1:E:40:ARG:HH21	1:E:72:THR:HG22	1.80	0.47
1:C:683:THR:HB	1:C:714:PHE:CB	2.38	0.47
2:K:938:MET:HE2	2:K:959:THR:HA	1.95	0.47

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:K:605:VAL:HG22	2:K:816:MET:HG3	1.97	0.47
2:G:674:ILE:HB	2:G:675:PRO:HD3	1.96	0.47
1:B:22:PHE:HE2	2:H:2017:PHE:CG	2.32	0.47
2:I:1031:VAL:HA	2:I:1032:PRO:HD3	1.66	0.47
1:F:1565:PRO:CG	1:F:1572:TRP:CZ3	2.95	0.47
2:H:215:TRP:HE3	2:H:215:TRP:N	2.12	0.47
2:H:805:MET:HB3	2:H:805:MET:HE2	1.83	0.47
2:J:1694:PHE:CD2	2:J:1843:ALA:CA	2.95	0.47
2:G:506:VAL:HG22	2:G:506:VAL:O	2.15	0.47
2:K:129:ILE:HG21	2:K:132:LYS:HG3	1.95	0.47
1:A:548:VAL:CG2	1:F:569:LEU:HD13	2.42	0.47
1:F:983:GLN:O	1:F:1418:ILE:HD11	2.13	0.47
2:I:1947:LYS:HG3	2:I:1948:MET:HE2	1.96	0.47
1:B:15:VAL:HG11	2:H:2022:LEU:CD2	2.45	0.47
2:G:1348:PHE:O	2:G:1351:VAL:HG12	2.14	0.47
1:F:1622:VAL:HG13	1:F:1622:VAL:O	2.13	0.47
1:E:1640:LYS:HG3	1:E:1641:TYR:CD1	2.49	0.47
1:E:553:ARG:HH21	1:E:567:ASN:HD21	1.60	0.47
2:K:1475:LEU:HA	2:K:1526:ALA:HB2	1.97	0.47
1:C:88:ILE:HG21	2:I:1821:MET:CE	2.44	0.47
2:I:1915:LEU:HD21	2:I:1939:LEU:HD22	1.96	0.47
1:F:623:PHE:HD2	1:F:623:PHE:N	2.12	0.47
1:A:1270:THR:HG21	1:E:1402:THR:HG21	1.97	0.47
1:B:1512:LEU:HD21	1:B:1641:TYR:CE2	2.50	0.47
1:C:414:TYR:CD2	1:C:414:TYR:C	2.88	0.47
2:I:192:THR:O	2:I:194:PRO:HD3	2.14	0.47
2:L:1818:PHE:HE2	2:L:1822:ARG:HH12	1.63	0.47
2:G:1248:GLU:OE1	2:G:1248:GLU:HA	2.15	0.47
2:L:555:LYS:HB3	2:L:556:PRO:HD3	1.96	0.47
1:C:788:ARG:HB2	1:C:790:TYR:CD2	2.50	0.47
2:G:544:ALA:O	2:G:554:TYR:HB3	2.14	0.47
2:J:1048:TRP:CD1	2:J:1049:GLN:HG2	2.49	0.47
1:A:743:VAL:O	1:A:745:PRO:HD3	2.15	0.47
2:L:1031:VAL:HG22	2:L:1041:TRP:HB3	1.96	0.47
1:B:829:TYR:OH	1:B:896:PRO:HD2	2.15	0.47
1:B:648:LEU:HD12	1:B:649:THR:N	2.29	0.47
2:I:1382:MET:CB	2:I:1633:ARG:HH11	2.28	0.47
1:D:358:PHE:C	1:D:358:PHE:CD2	2.87	0.47
2:I:1749:PHE:CG	2:I:1758:ARG:HB3	2.49	0.47
1:F:427:ARG:NH1	1:F:492:ILE:HG13	2.28	0.47
1:B:557:ARG:HH11	1:E:558:LEU:HD23	1.80	0.47
1:D:1491:ASN:HD22	1:D:1491:ASN:N	2.12	0.47

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:L:595:SER:CB	2:L:602:PRO:HG3	2.30	0.47
2:J:501:TRP:CZ2	2:J:528:THR:HG21	2.49	0.47
2:J:580:LEU:HD12	2:J:1103:TYR:CD2	2.49	0.47
2:I:1678:VAL:O	2:I:1679:LEU:HD23	2.14	0.47
2:J:1637:VAL:CG1	2:J:1679:LEU:HD22	2.44	0.47
1:F:13:LEU:HD11	2:L:2058:VAL:HG21	1.95	0.47
1:B:1278:GLY:CA	1:B:1630:LYS:HE2	2.39	0.47
2:H:582:LYS:HA	2:H:587:GLN:O	2.14	0.47
2:L:1266:HIS:N	2:L:1266:HIS:CD2	2.83	0.47
2:L:1410:GLY:HA2	2:L:1437:GLY:O	2.14	0.47
1:C:326:ASP:HB3	1:C:333:ARG:NH1	2.23	0.47
1:E:655:ALA:HB2	1:E:742:TYR:HB2	1.97	0.47
2:H:674:ILE:HB	2:H:675:PRO:HD3	1.97	0.47
1:E:998:GLY:HA3	1:E:1361:VAL:CG1	2.38	0.47
1:F:486:VAL:CG1	1:F:647:GLY:HA3	2.40	0.47
2:L:1285:ILE:O	2:L:1288:PHE:HB3	2.15	0.47
2:I:915:PHE:CG	2:I:915:PHE:O	2.68	0.47
2:I:421:PHE:C	2:I:423:GLN:H	2.17	0.47
1:B:1280:CYS:HA	1:B:1566:LYS:O	2.14	0.47
2:G:208:LEU:HD12	2:G:227:ILE:HD11	1.96	0.47
2:J:1818:PHE:HE2	2:J:1822:ARG:NH1	2.13	0.47
2:K:854:VAL:HG21	2:K:1070:PRO:CA	2.44	0.47
2:L:1442:TYR:CA	2:L:1445:THR:HG22	2.43	0.47
1:A:1249:ILE:HD12	1:A:1250:LEU:N	2.30	0.47
2:J:1722:ALA:HB2	2:J:1812:LEU:HD11	1.95	0.47
1:A:1001:GLU:HG2	1:A:1008:ALA:HB2	1.96	0.47
2:G:1356:ALA:CB	2:G:1397:THR:HG22	2.45	0.47
2:I:529:ASN:HD22	2:I:552:VAL:CG2	2.28	0.47
2:L:930:THR:HG22	2:L:933:GLU:H	1.79	0.47
2:G:1238:GLY:O	2:G:1239:ASP:OD1	2.33	0.47
2:J:918:ASN:HB3	2:J:924:VAL:HG21	1.97	0.47
2:H:731:ALA:HA	2:H:739:ILE:HD12	1.97	0.47
1:E:621:ASP:HB3	1:E:625:ASN:H	1.79	0.47
2:I:1622:THR:O	2:I:1626:GLU:HA	2.14	0.47
2:L:350:MET:HE2	2:L:435:ILE:HD12	1.97	0.47
1:C:335:LEU:HD13	1:E:342:ILE:HG22	1.97	0.47
2:G:2062:THR:HG22	2:G:2064:SER:N	2.30	0.47
2:J:1441:ASP:C	2:J:1443:GLU:H	2.18	0.47
1:E:1386:THR:HG22	1:E:1387:ASP:H	1.80	0.47
1:F:453:ASP:HB2	1:F:454:HIS:HD2	1.79	0.47
2:J:205:ALA:O	2:J:209:GLN:HG3	2.14	0.47
1:E:768:ARG:HA	1:E:772:THR:OG1	2.14	0.47

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:E:414:TYR:C	1:E:414:TYR:CD2	2.88	0.47
2:L:314:LEU:HG	2:L:318:ILE:HD11	1.96	0.47
2:I:820:LYS:HB3	2:I:1080:ASP:O	2.15	0.47
2:J:2053:GLU:HG3	2:J:2053:GLU:H	1.44	0.47
1:E:358:PHE:C	1:E:358:PHE:CD2	2.87	0.47
1:C:667:ALA:O	1:C:671:GLN:HG3	2.14	0.47
2:J:652:ILE:HG23	2:J:653:PRO:HD2	1.97	0.47
1:E:14:LEU:HD21	2:K:1844:LEU:CD2	2.44	0.47
2:L:271:GLU:HG2	2:L:301:TRP:NE1	2.30	0.47
2:L:2017:PHE:CE2	2:L:2021:LEU:HD11	2.50	0.47
2:K:1093:ASP:O	2:K:1097:PHE:CD1	2.65	0.47
2:K:1097:PHE:CD2	2:K:1100:ARG:NH1	2.82	0.47
2:K:788:THR:CG2	2:K:1094:HIS:CE1	2.97	0.47
2:K:1103:TYR:O	2:K:1106:LYS:HB2	2.15	0.47
2:H:465:LEU:HA	2:H:465:LEU:HD23	1.73	0.47
2:G:35:PHE:CE1	2:G:105:ILE:HD13	2.49	0.47
2:L:1637:VAL:CG1	2:L:1679:LEU:HD22	2.44	0.47
2:H:582:LYS:HG3	2:H:1110:VAL:CG1	2.44	0.47
2:I:1067:LEU:HD12	2:I:1067:LEU:H	1.80	0.47
2:I:613:VAL:H	2:I:614:PRO:HD3	1.78	0.47
2:K:1678:VAL:O	2:K:1679:LEU:HD23	2.15	0.47
2:H:1678:VAL:O	2:H:1679:LEU:HD23	2.15	0.47
2:K:24:LEU:HD12	2:K:37:VAL:CG2	2.38	0.47
2:G:609:THR:CB	2:G:610:PRO:HD3	2.45	0.47
1:D:1149:LEU:HD23	1:D:1149:LEU:HA	1.74	0.47
2:H:1896:THR:CG2	2:H:1897:GLU:N	2.77	0.47
1:A:406:ALA:CA	1:A:439:ARG:HH11	2.24	0.47
2:H:220:GLN:NE2	2:H:324:GLN:HG2	2.30	0.47
2:J:621:THR:OG1	2:J:1083:ILE:HD13	2.15	0.47
1:F:628:TYR:CD1	1:F:629:SER:N	2.75	0.47
1:D:406:ALA:CA	1:D:439:ARG:HH11	2.23	0.47
2:K:158:LEU:HD12	2:K:558:LEU:HD23	1.96	0.47
2:I:1115:TYR:CZ	2:I:1174:ALA:HB2	2.50	0.47
2:G:1335:PHE:CE1	2:G:1629:ILE:CD1	2.96	0.47
2:H:1251:THR:HG22	2:H:1292:VAL:HG13	1.96	0.47
2:J:612:THR:CG2	2:J:629:GLU:O	2.62	0.47
1:C:983:GLN:O	1:C:1418:ILE:HD11	2.15	0.47
1:A:1547:ARG:HG2	1:A:1604:TYR:CD1	2.43	0.47
1:B:929:ARG:O	1:B:933:ILE:HG13	2.15	0.47
1:E:999:LEU:HD11	1:E:1575:ASN:CB	2.45	0.47
1:F:1603:ASP:HB2	1:F:1604:TYR:CD2	2.49	0.47
2:L:787:ASP:O	2:L:790:PRO:HD2	2.15	0.47

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:G:1886:VAL:CG1	2:G:1900:LEU:HD11	2.45	0.47
2:K:1199:THR:HB	2:K:1202:MET:HB3	1.96	0.47
1:E:1432:ILE:HD11	1:E:1481:GLN:CB	2.45	0.47
2:J:1977:ARG:HD2	2:J:1978:LYS:HE3	1.95	0.47
2:K:1622:THR:O	2:K:1626:GLU:HA	2.14	0.47
2:L:938:MET:CE	2:L:959:THR:HA	2.45	0.47
2:L:718:PRO:HG2	2:L:741:LEU:CD1	2.45	0.47
1:B:623:PHE:N	1:B:623:PHE:HD2	2.11	0.47
1:B:1522:PHE:HE2	1:B:1535:SER:HA	1.80	0.47
2:L:1238:GLY:O	2:L:1239:ASP:OD1	2.32	0.47
2:J:740:ILE:N	2:J:740:ILE:HD12	2.30	0.47
1:E:1692:GLN:HG3	1:E:1696:PHE:CE2	2.50	0.47
1:B:943:VAL:HG23	2:H:1539:PRO:HG3	1.95	0.47
2:G:159:PHE:CE1	2:G:268:LEU:HD11	2.50	0.47
2:J:685:VAL:HA	2:J:686:PRO:HD3	1.66	0.47
2:K:1315:ILE:HA	2:K:1393:ASP:O	2.14	0.47
2:K:1249:GLY:HA2	2:K:1256:VAL:HG22	1.95	0.47
2:I:1249:GLY:HA2	2:I:1256:VAL:HG22	1.97	0.47
1:A:1164:ILE:HD13	1:A:1355:GLN:HG3	1.96	0.47
2:L:73:VAL:HA	2:L:113:PHE:HE2	1.80	0.47
2:H:119:VAL:HG21	2:H:140:TYR:CD2	2.50	0.47
1:C:655:ALA:CB	1:C:742:TYR:HB2	2.45	0.47
2:J:1662:ARG:HG2	2:J:1686:GLU:HG2	1.96	0.47
1:A:744:VAL:HG13	1:A:746:PHE:CE1	2.50	0.47
1:E:744:VAL:HG13	1:E:746:PHE:CE1	2.50	0.47
2:J:1048:TRP:NE1	2:J:1049:GLN:HG2	2.29	0.47
1:F:1524:GLY:HA2	1:F:1531:ASP:OD1	2.15	0.47
2:H:205:ALA:O	2:H:209:GLN:HG3	2.14	0.47
1:B:1560:TYR:CE2	1:B:1589:ASN:HA	2.50	0.47
2:L:1048:TRP:NE1	2:L:1049:GLN:HG2	2.29	0.47
2:K:246:ALA:HB3	2:K:247:PRO:HD3	1.97	0.47
2:J:1245:THR:HG23	2:J:1260:THR:OG1	2.15	0.47
2:K:665:VAL:O	2:K:665:VAL:HG12	2.15	0.47
1:A:1544:HIS:O	1:A:1544:HIS:CG	2.67	0.47
2:L:1257:VAL:HA	2:L:1258:PRO:HD3	1.72	0.47
1:F:1394:PRO:HB3	1:F:1627:PHE:CE2	2.50	0.47
2:G:859:SER:HB3	2:G:863:GLU:HG3	1.97	0.47
1:F:447:PHE:CE1	1:F:451:HIS:NE2	2.83	0.47
1:F:543:ASN:O	1:F:546:ARG:HB2	2.15	0.47
2:J:664:TYR:CD1	2:J:670:MET:HE1	2.50	0.47
1:A:1287:LEU:HA	1:A:1304:VAL:HG11	1.97	0.47
2:J:401:LEU:HD22	2:J:405:LEU:HG	1.96	0.47

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:541:VAL:O	1:A:545:LEU:HG	2.14	0.47
2:H:356:LEU:HD23	2:H:356:LEU:HA	1.67	0.47
1:B:447:PHE:CE1	1:B:451:HIS:NE2	2.83	0.47
1:A:1386:THR:HB	1:E:1269:SER:O	2.14	0.47
2:H:204:ILE:HG21	2:H:312:VAL:HG21	1.95	0.47
2:I:2050:ILE:O	2:I:2050:ILE:HG12	2.14	0.47
1:C:1050:TRP:HA	1:C:1050:TRP:CE3	2.50	0.47
1:C:458:GLU:CD	1:C:458:GLU:H	2.18	0.47
1:C:1475:GLU:HB3	1:C:1479:ARG:NH2	2.30	0.47
1:C:716:GLN:HB3	1:C:769:ILE:HG23	1.97	0.47
2:L:1504:TYR:HD2	2:L:1507:VAL:HG11	1.79	0.47
1:F:398:VAL:HG22	1:F:710:VAL:HG22	1.96	0.47
2:L:1594:ARG:NH1	2:L:1594:ARG:CG	2.62	0.47
1:F:989:ASN:H	1:F:1491:ASN:ND2	1.88	0.47
2:L:1863:ARG:HB2	2:L:2017:PHE:HE1	1.80	0.47
2:K:1468:ARG:NH1	2:K:1468:ARG:CB	2.75	0.47
2:G:1093:ASP:O	2:G:1097:PHE:CD1	2.67	0.47
2:K:1099:LEU:HD12	2:K:1103:TYR:HB2	1.95	0.47
2:J:1093:ASP:O	2:J:1097:PHE:HB2	2.15	0.47
2:I:1093:ASP:O	2:I:1097:PHE:HB2	2.15	0.47
2:I:1305:LEU:HD11	2:I:1365:LYS:CD	2.37	0.47
2:I:1301:PHE:HB3	2:I:1364:ARG:HG3	1.97	0.47
2:K:911:GLN:HE21	2:K:1065:CYS:H	1.62	0.47
1:D:1220:ASN:HB3	1:D:1273:ILE:HG22	1.97	0.47
1:D:1212:TYR:CD2	1:D:1371:MET:HG2	2.50	0.47
2:J:1375:HIS:HE1	2:J:1610:MET:SD	2.38	0.47
2:G:613:VAL:N	2:G:614:PRO:CD	2.78	0.47
2:L:1593:SER:HG	2:L:1596:PHE:HB2	1.80	0.47
2:L:106:LEU:HD11	2:L:143:GLY:O	2.15	0.47
1:A:1118:GLU:OE2	1:E:1154:LEU:HD21	2.15	0.47
1:D:1574:LEU:O	1:D:1578:LEU:HG	2.15	0.47
2:H:129:ILE:HG12	2:H:131:ALA:HB3	1.96	0.47
1:D:36:LEU:CD2	1:D:44:ILE:HD11	2.44	0.47
2:L:676:LEU:HD23	2:L:679:ARG:HH21	1.80	0.47
2:G:1977:ARG:CD	2:G:1978:LYS:HE3	2.45	0.47
2:G:1483:LEU:CD2	2:G:1525:VAL:HG11	2.45	0.47
1:B:1386:THR:HG22	1:B:1387:ASP:N	2.30	0.47
1:A:340:LEU:HD22	1:A:351:LEU:HD11	1.97	0.47
2:G:1868:GLN:HG2	2:G:1873:ARG:NH2	2.29	0.47
2:K:1175:MET:HE1	2:K:1234:ILE:HG21	1.97	0.47
2:J:1328:VAL:HA	2:J:1611:TYR:HE1	1.80	0.47
1:D:655:ALA:O	1:D:680:VAL:HA	2.15	0.47

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:G:699:ILE:CD1	2:G:699:ILE:H	2.28	0.47
2:J:119:VAL:HG21	2:J:140:TYR:CD2	2.50	0.47
2:K:179:ILE:HG12	2:K:182:TYR:HB3	1.96	0.47
1:F:655:ALA:CB	1:F:742:TYR:HB2	2.45	0.47
2:H:179:ILE:HG12	2:H:182:TYR:HB3	1.95	0.47
1:C:1473:HIS:CD2	1:F:1414:PRO:HG2	2.50	0.47
1:E:1359:VAL:CG1	1:E:1360:GLN:N	2.78	0.47
2:H:1903:VAL:O	2:H:1907:ILE:HG13	2.15	0.47
1:B:389:PRO:HD3	1:E:374:LEU:HD11	1.96	0.47
1:D:712:VAL:HG13	1:D:713:PRO:HD2	1.97	0.47
2:K:662:LEU:HD22	2:K:673:GLN:OE1	2.15	0.47
1:B:1264:MET:HB3	1:D:1390:GLY:O	2.15	0.47
1:A:1473:HIS:CD2	1:E:1414:PRO:HD2	2.50	0.47
2:G:759:GLN:N	2:G:760:PRO:CD	2.78	0.47
1:D:1524:GLY:HA2	1:D:1531:ASP:OD1	2.15	0.47
2:H:1749:PHE:CG	2:H:1758:ARG:HB3	2.49	0.47
2:J:27:THR:HG22	2:J:32:GLU:CD	2.35	0.47
1:F:875:GLU:O	1:F:878:PHE:HB3	2.15	0.47
1:F:1050:TRP:HA	1:F:1050:TRP:CE3	2.49	0.47
2:L:2038:LYS:HA	2:L:2038:LYS:HD3	1.73	0.47
2:H:859:SER:CB	2:H:863:GLU:HG3	2.45	0.47
1:F:1586:VAL:CG2	1:F:1617:ILE:HD11	2.45	0.47
1:A:414:TYR:O	1:A:418:ILE:HG13	2.15	0.47
1:D:755:GLU:HB2	1:D:757:ASP:HB2	1.97	0.47
2:H:792:LEU:O	2:H:792:LEU:HD12	2.14	0.47
2:G:80:ILE:HG12	2:G:105:ILE:HG22	1.97	0.47
2:H:37:VAL:HG11	2:H:42:HIS:HA	1.97	0.47
2:G:610:PRO:O	2:G:613:VAL:HG12	2.15	0.47
2:H:605:VAL:HG22	2:H:816:MET:HG3	1.96	0.47
2:G:460:ILE:HD13	2:G:487:ILE:HD11	1.97	0.47
1:C:1149:LEU:HD12	1:F:1097:LEU:CD1	2.44	0.47
2:I:796:TRP:CH2	2:I:805:MET:HE1	2.49	0.47
2:I:489:GLU:HG2	2:I:492:ARG:CZ	2.45	0.47
2:G:1115:TYR:HB3	2:G:1267:PRO:HB3	1.97	0.47
1:D:47:ILE:CD1	2:J:1818:PHE:HD1	2.28	0.47
2:J:1305:LEU:HD23	2:J:1366:ILE:CG1	2.44	0.47
2:K:197:VAL:CG2	2:K:263:ILE:HD11	2.44	0.47
2:L:474:THR:HB	2:L:476:GLN:HG2	1.96	0.47
2:I:193:TYR:O	2:I:197:VAL:HG23	2.15	0.47
1:D:470:GLY:O	1:D:474:ILE:HG13	2.15	0.47
1:A:449:GLN:HG3	1:A:474:ILE:HD13	1.97	0.47
1:F:1493:PHE:HE2	1:F:1509:THR:HG22	1.80	0.47

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:F:26:VAL:CG2	2:L:2006:HIS:CE1	2.98	0.47
2:G:676:LEU:HD23	2:G:679:ARG:NH2	2.30	0.47
2:H:1305:LEU:HD23	2:H:1366:ILE:CD1	2.43	0.47
1:A:1640:LYS:HG3	1:A:1641:TYR:CD1	2.50	0.47
2:H:1346:MET:HG2	2:H:1617:ARG:NH2	2.30	0.47
1:A:29:ILE:HD11	2:G:1922:VAL:CA	2.45	0.47
2:L:979:LEU:CD2	2:L:999:ALA:HB3	2.45	0.47
2:J:932:ALA:O	2:J:935:VAL:HG13	2.14	0.47
1:D:621:ASP:HB3	1:D:625:ASN:H	1.79	0.47
2:H:699:ILE:H	2:H:699:ILE:CD1	2.28	0.47
1:C:555:GLN:HG2	1:C:557:ARG:NH2	2.29	0.47
2:H:73:VAL:HA	2:H:113:PHE:HE2	1.80	0.47
2:H:1315:ILE:HA	2:H:1393:ASP:O	2.15	0.47
2:L:388:ASN:HD22	2:L:389:PHE:N	2.13	0.47
2:K:356:LEU:HD23	2:K:356:LEU:HA	1.71	0.47
2:K:1903:VAL:O	2:K:1907:ILE:HG13	2.15	0.47
2:G:342:ASN:CB	2:G:406:ARG:NH2	2.77	0.47
1:E:918:LEU:HA	1:E:921:GLU:HG2	1.97	0.47
2:K:615:TRP:CE3	2:K:647:LYS:HB3	2.50	0.47
2:K:1507:VAL:O	2:K:1531:GLU:HA	2.14	0.47
2:L:1048:TRP:CE2	2:L:1049:GLN:HG2	2.50	0.47
1:A:1473:HIS:C	1:A:1473:HIS:ND1	2.68	0.47
2:L:949:ARG:HH22	2:L:1052:ASP:CG	2.18	0.47
1:F:902:ASN:O	1:F:904:GLY:N	2.44	0.47
1:C:1592:ALA:O	1:C:1593:ASP:C	2.53	0.47
2:K:834:ASP:O	2:K:836:PRO:HD3	2.15	0.47
1:E:994:VAL:HG21	1:E:1291:TYR:CD1	2.50	0.47
2:L:544:ALA:O	2:L:554:TYR:HB3	2.15	0.47
2:J:314:LEU:HG	2:J:318:ILE:HD11	1.97	0.47
1:A:453:ASP:HB2	1:A:454:HIS:HD2	1.80	0.47
2:G:1661:GLY:HA3	2:G:1827:VAL:O	2.15	0.47
2:J:544:ALA:O	2:J:554:TYR:HB3	2.15	0.47
2:J:1276:GLU:HB3	2:J:1278:MET:HE2	1.97	0.47
2:H:1146:LEU:O	2:H:1201:GLY:HA2	2.15	0.47
1:D:541:VAL:O	1:D:545:LEU:HG	2.14	0.47
2:I:274:GLU:O	2:I:278:ARG:HG2	2.15	0.47
2:G:70:SER:HB2	2:G:74:GLU:OE2	2.15	0.47
1:E:349:MET:HG3	1:E:349:MET:O	2.15	0.47
1:D:1457:GLU:H	1:D:1457:GLU:HG3	1.42	0.47
2:L:1555:VAL:O	2:L:1555:VAL:HG12	2.14	0.47
1:F:871:PHE:CD1	1:F:871:PHE:N	2.83	0.47
2:K:544:ALA:O	2:K:554:TYR:HB3	2.15	0.47

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:J:1749:PHE:CG	2:J:1758:ARG:HB3	2.49	0.47
2:H:1224:GLN:HG3	2:H:1578:GLU:OE2	2.15	0.47
1:B:427:ARG:O	1:B:430:VAL:HB	2.15	0.47
1:B:1501:ALA:O	1:B:1504:ARG:HB2	2.14	0.47
1:C:430:VAL:HG11	1:C:490:VAL:HG11	1.95	0.47
2:G:276:LEU:HD13	2:G:466:VAL:HG21	1.96	0.47
2:K:468:PRO:HB3	2:K:477:ASP:OD2	2.14	0.47
2:G:595:SER:CB	2:G:602:PRO:HG3	2.31	0.47
2:K:1091:HIS:O	2:K:1094:HIS:HB2	2.15	0.47
2:G:1266:HIS:N	2:G:1266:HIS:CD2	2.83	0.47
1:C:13:LEU:HD11	2:I:2058:VAL:HG21	1.97	0.47
1:E:72:THR:O	1:E:73:SER:HB3	2.15	0.47
2:H:747:ARG:HD3	2:H:1071:VAL:HG11	1.97	0.47
2:K:605:VAL:HG13	2:K:816:MET:HG3	1.96	0.47
2:J:106:LEU:HD11	2:J:143:GLY:O	2.15	0.47
1:E:447:PHE:HA	1:E:1550:GLY:O	2.15	0.47
2:J:703:ASN:O	2:J:707:GLN:HG3	2.15	0.47
2:K:1335:PHE:N	2:K:1335:PHE:CD1	2.83	0.47
2:L:1305:LEU:CD1	2:L:1305:LEU:H	2.25	0.47
1:A:36:LEU:O	1:A:76:ARG:NH2	2.46	0.47
1:E:1209:PHE:CZ	1:E:1301:VAL:HG21	2.50	0.47
1:B:1086:PHE:CZ	1:B:1310:PHE:HD2	2.33	0.47
1:B:767:HIS:CB	1:B:813:LEU:HD12	2.44	0.47
2:K:1722:ALA:HB2	2:K:1812:LEU:HD11	1.97	0.47
2:H:1361:ILE:HD11	2:H:1433:PHE:CD2	2.50	0.47
2:K:686:PRO:HB3	2:K:1187:PHE:CE1	2.49	0.47
2:K:884:PHE:CE2	2:K:1039:GLU:HA	2.50	0.47
2:G:1137:ARG:HB3	2:G:1142:ILE:HG23	1.96	0.47
2:G:179:ILE:HG12	2:G:182:TYR:HB3	1.97	0.47
1:A:1170:ALA:HB3	1:A:1188:LEU:HD13	1.97	0.47
2:K:192:THR:O	2:K:194:PRO:HD3	2.15	0.47
2:I:179:ILE:HG12	2:I:182:TYR:HB3	1.97	0.47
1:B:1359:VAL:CG1	1:B:1360:GLN:N	2.78	0.47
2:I:699:ILE:H	2:I:699:ILE:HD12	1.80	0.47
1:D:28:TRP:CZ2	1:D:53:LEU:HD22	2.50	0.47
1:F:1359:VAL:HG12	1:F:1360:GLN:N	2.30	0.47
1:E:1143:ARG:HH21	1:F:356:LYS:NZ	2.12	0.47
2:J:690:LEU:HD22	2:J:691:THR:H	1.80	0.47
2:J:1910:VAL:CG1	2:J:1973:ILE:HG21	2.44	0.47
1:B:902:ASN:O	1:B:904:GLY:N	2.47	0.47
1:C:432:GLN:O	1:C:436:ILE:HG13	2.15	0.47
2:I:1262:ARG:NH2	2:I:1277:VAL:HG11	2.29	0.47

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:L:645:ILE:HD13	2:L:687:ILE:HD11	1.95	0.47
2:K:604:MET:HG3	2:K:627:HIS:O	2.15	0.47
1:D:443:LEU:H	1:D:443:LEU:HD12	1.79	0.47
2:H:2050:ILE:O	2:H:2050:ILE:HG12	2.15	0.47
2:G:1048:TRP:CD1	2:G:1049:GLN:HG2	2.50	0.47
2:J:1835:GLY:HA3	2:J:1839:GLY:C	2.35	0.47
1:B:378:GLU:OE1	1:E:718:SER:HA	2.14	0.47
2:J:600:VAL:HG13	2:J:601:PRO:N	2.30	0.46
1:F:1330:GLU:OE2	1:F:1342:ARG:NH2	2.49	0.46
2:G:271:GLU:HG2	2:G:301:TRP:NE1	2.29	0.46
1:F:855:ALA:CA	1:F:919:ARG:HH21	2.13	0.46
1:E:1213:VAL:HG13	1:E:1217:GLU:OE1	2.15	0.46
2:H:825:SER:CB	2:H:1053:ILE:HG13	2.45	0.46
1:A:613:PRO:HD3	1:A:628:TYR:CE2	2.50	0.46
2:K:2058:VAL:CG1	2:K:2067:ILE:HD12	2.45	0.46
2:H:487:ILE:HB	2:H:488:PRO:CD	2.40	0.46
2:I:1410:GLY:HA2	2:I:1437:GLY:O	2.15	0.46
2:G:485:ASP:HB2	2:G:488:PRO:HD2	1.96	0.46
1:F:326:ASP:HB3	1:F:333:ARG:NH1	2.24	0.46
1:F:628:TYR:OH	1:F:630:LYS:HG2	2.15	0.46
2:G:382:LEU:HB3	2:G:499:VAL:HB	1.97	0.46
2:J:1462:GLN:O	2:J:1466:VAL:HG23	2.15	0.46
2:L:102:LEU:O	2:L:106:LEU:HG	2.15	0.46
2:J:796:TRP:CH2	2:J:805:MET:HE1	2.50	0.46
1:E:1078:ILE:HB	1:E:1338:GLY:HA3	1.96	0.46
2:H:1261:PHE:HA	2:H:1284:ARG:NH1	2.30	0.46
1:A:999:LEU:HD11	1:A:1575:ASN:CB	2.46	0.46
1:B:1547:ARG:HG2	1:B:1604:TYR:CD1	2.43	0.46
1:A:470:GLY:O	1:A:474:ILE:HG13	2.14	0.46
2:L:1061:VAL:HG11	2:L:1066:ILE:HD11	1.97	0.46
2:J:1812:LEU:HD21	2:J:1857:VAL:HG11	1.97	0.46
1:A:1432:ILE:HD11	1:A:1481:GLN:CB	2.45	0.46
2:I:541:LEU:HG	2:I:552:VAL:CG1	2.44	0.46
2:J:875:PHE:HE2	2:J:906:LEU:CD2	2.27	0.46
1:C:1512:LEU:HD21	1:C:1641:TYR:CE2	2.49	0.46
2:J:1346:MET:CE	2:J:1617:ARG:NH2	2.79	0.46
2:I:159:PHE:CZ	2:I:275:LEU:HD21	2.50	0.46
2:K:1406:ASN:HB3	2:K:1411:LYS:HG3	1.96	0.46
1:F:415:TYR:CD2	1:F:1614:THR:HA	2.50	0.46
1:A:655:ALA:HB3	1:A:680:VAL:HG12	1.97	0.46
1:D:995:VAL:CG1	1:D:1375:ILE:HG23	2.45	0.46
1:B:1068:TYR:O	1:B:1072:ILE:HG13	2.15	0.46

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:H:1160:PHE:O	2:H:1164:ILE:HG13	2.14	0.46
2:G:119:VAL:HG21	2:G:140:TYR:CD2	2.51	0.46
2:J:1207:THR:O	2:J:1215:THR:HA	2.15	0.46
1:B:995:VAL:HG13	1:B:1375:ILE:HG23	1.97	0.46
2:G:1851:MET:HE1	2:G:2024:LYS:HB3	1.97	0.46
1:B:398:VAL:HG22	1:B:710:VAL:HG22	1.97	0.46
1:B:1236:TYR:O	1:D:1237:LYS:HB2	2.15	0.46
2:I:1350:ILE:HD13	2:I:1350:ILE:HA	1.73	0.46
1:C:1359:VAL:HG12	1:C:1360:GLN:N	2.30	0.46
2:J:604:MET:HG3	2:J:627:HIS:O	2.15	0.46
1:E:1457:GLU:HG3	1:E:1457:GLU:H	1.41	0.46
2:L:2050:ILE:O	2:L:2050:ILE:HG12	2.14	0.46
2:H:664:TYR:CD1	2:H:670:MET:HE1	2.50	0.46
1:E:539:THR:O	1:E:542:GLN:HG2	2.15	0.46
2:K:818:THR:HG22	2:K:829:LYS:HB3	1.96	0.46
2:I:1156:ASP:CB	2:I:1159:SER:H	2.18	0.46
1:A:533:SER:HB3	1:A:907:PHE:CE2	2.51	0.46
2:G:1637:VAL:CG1	2:G:1679:LEU:HD22	2.45	0.46
2:K:458:MET:C	2:K:459:LYS:HG3	2.34	0.46
2:K:703:ASN:O	2:K:707:GLN:HG3	2.16	0.46
2:H:1863:ARG:HB2	2:H:2017:PHE:HE1	1.80	0.46
1:B:1159:LEU:HD12	1:B:1327:ALA:HB3	1.96	0.46
1:D:1565:PRO:CG	1:D:1572:TRP:CZ3	2.95	0.46
2:G:1519:THR:OG1	2:G:1521:GLU:HG2	2.14	0.46
1:B:1493:PHE:HE2	1:B:1509:THR:HG22	1.80	0.46
2:J:1764:MET:O	2:J:1780:ILE:HG13	2.16	0.46
2:J:1305:LEU:CD1	2:J:1305:LEU:H	2.28	0.46
2:J:1305:LEU:HD21	2:J:1365:LYS:HB2	1.98	0.46
1:D:998:GLY:HA3	1:D:1361:VAL:CG1	2.41	0.46
2:G:106:LEU:HD11	2:G:143:GLY:O	2.15	0.46
2:L:22:ARG:CG	2:L:39:THR:HA	2.42	0.46
1:A:965:TYR:CZ	1:A:1199:LEU:CD2	2.98	0.46
1:A:1553:VAL:HG22	1:A:1604:TYR:O	2.15	0.46
2:H:1904:VAL:HG22	2:H:1939:LEU:HD22	1.97	0.46
2:I:783:GLY:HA2	2:I:815:ARG:HD3	1.95	0.46
1:D:1037:ASN:CG	1:D:1674:ILE:HG23	2.35	0.46
2:G:932:ALA:O	2:G:935:VAL:HG13	2.14	0.46
2:H:1427:MET:O	2:H:1427:MET:HG3	2.15	0.46
2:H:740:ILE:HD12	2:H:740:ILE:H	1.80	0.46
2:G:347:PRO:HA	2:G:432:PHE:CE1	2.50	0.46
1:A:1052:ASP:HB3	1:A:1055:THR:HG23	1.96	0.46
1:D:653:LYS:HD3	1:D:742:TYR:CE2	2.49	0.46

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:H:1745:LEU:HB3	2:H:1799:LEU:HD22	1.96	0.46
2:I:778:ALA:HB2	2:I:807:PHE:CD2	2.51	0.46
2:J:388:ASN:HD22	2:J:389:PHE:N	2.12	0.46
2:L:1813:MET:HG3	2:L:1814:GLU:N	2.30	0.46
2:L:274:GLU:O	2:L:278:ARG:HG2	2.16	0.46
1:E:756:ILE:HA	1:E:759:ILE:HD11	1.97	0.46
1:F:1381:MET:HG2	1:F:1382:THR:N	2.29	0.46
2:K:1257:VAL:HA	2:K:1258:PRO:HD3	1.70	0.46
2:K:70:SER:HB2	2:K:74:GLU:OE2	2.16	0.46
1:C:994:VAL:HG21	1:C:1291:TYR:CD1	2.50	0.46
2:L:859:SER:CB	2:L:863:GLU:HG3	2.44	0.46
2:L:859:SER:HB3	2:L:863:GLU:HG3	1.97	0.46
1:D:988:VAL:HG12	1:D:990:LEU:HD23	1.98	0.46
2:G:1762:MET:HG2	2:G:1779:LYS:NZ	2.29	0.46
1:F:41:THR:HG21	2:L:1691:ALA:HB2	1.98	0.46
1:F:1129:ILE:HA	1:F:1139:THR:O	2.15	0.46
1:D:398:VAL:HG22	1:D:710:VAL:HG22	1.96	0.46
2:K:2050:ILE:O	2:K:2050:ILE:HG12	2.14	0.46
2:K:820:LYS:HB3	2:K:1080:ASP:O	2.15	0.46
1:F:701:ARG:NH1	1:F:1610:ARG:NH2	2.63	0.46
2:H:276:LEU:HD12	2:H:298:ALA:O	2.15	0.46
2:J:1863:ARG:HB2	2:J:2017:PHE:HE1	1.80	0.46
1:B:537:ASN:O	1:B:541:VAL:HG23	2.15	0.46
2:G:1301:PHE:HB3	2:G:1364:ARG:NH1	2.31	0.46
2:H:1156:ASP:HB2	2:H:1159:SER:N	2.20	0.46
2:K:1764:MET:HG3	2:K:1781:PHE:HE1	1.79	0.46
2:G:612:THR:HG22	2:G:612:THR:O	2.15	0.46
2:J:24:LEU:HD12	2:J:37:VAL:CG2	2.39	0.46
1:C:407:ARG:CZ	1:C:1606:VAL:HG23	2.44	0.46
2:H:290:VAL:HA	2:H:490:LEU:CD1	2.43	0.46
1:B:905:LEU:HD22	1:B:911:LEU:HD21	1.98	0.46
2:I:1445:THR:HG23	2:I:1498:PHE:HB2	1.97	0.46
1:D:552:ILE:HG21	1:D:566:PHE:CE2	2.50	0.46
1:E:973:TRP:CD1	1:E:1648:LYS:HD2	2.50	0.46
2:L:129:ILE:HG12	2:L:131:ALA:HB3	1.98	0.46
2:J:1361:ILE:HD11	2:J:1433:PHE:CD2	2.51	0.46
2:H:1305:LEU:HD23	2:H:1366:ILE:CG1	2.45	0.46
2:J:189:ILE:HD13	2:J:259:ALA:HB3	1.97	0.46
2:H:447:ALA:O	2:H:451:ILE:HG13	2.15	0.46
2:L:1887:ASN:ND2	2:L:1890:ARG:HG3	2.30	0.46
1:A:553:ARG:HH21	1:A:567:ASN:HD21	1.62	0.46
1:C:1696:PHE:O	1:F:1402:THR:HG22	2.15	0.46

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:G:283:THR:HG23	2:G:470:TYR:O	2.15	0.46
2:H:1812:LEU:HD21	2:H:1857:VAL:HG11	1.97	0.46
2:G:1359:LYS:N	2:G:1360:PRO:CD	2.77	0.46
1:E:335:LEU:O	1:E:335:LEU:HD12	2.15	0.46
2:H:388:ASN:HD22	2:H:389:PHE:N	2.13	0.46
2:K:120:HIS:CD2	2:K:137:VAL:CG1	2.97	0.46
2:J:718:PRO:HG2	2:J:741:LEU:CD1	2.45	0.46
2:K:980:LEU:CD2	2:K:986:LEU:HD21	2.45	0.46
2:G:1631:ARG:HA	2:G:1686:GLU:HB2	1.96	0.46
2:G:1160:PHE:CE1	2:G:1164:ILE:HD11	2.50	0.46
2:I:1324:PHE:HA	2:I:1583:VAL:HG11	1.96	0.46
2:L:1048:TRP:CD1	2:L:1049:GLN:HG2	2.50	0.46
1:F:1170:ALA:HB3	1:F:1188:LEU:HD13	1.98	0.46
1:F:799:LEU:HD12	1:F:821:LEU:HB3	1.98	0.46
2:K:1749:PHE:CG	2:K:1758:ARG:HB3	2.50	0.46
2:L:1566:LYS:O	2:L:1568:PRO:HD3	2.15	0.46
1:C:1480:ARG:NH2	1:F:1488:SER:O	2.49	0.46
2:G:205:ALA:O	2:G:209:GLN:HG3	2.14	0.46
2:K:699:ILE:HD12	2:K:699:ILE:N	2.30	0.46
1:E:1137:GLN:NE2	1:E:1137:GLN:HA	2.30	0.46
2:G:784:GLY:HA3	2:G:786:GLU:OE2	2.15	0.46
1:D:1176:PRO:O	1:D:1180:ILE:HG12	2.15	0.46
1:F:1504:ARG:NH2	1:F:1545:LEU:O	2.48	0.46
2:L:1468:ARG:CB	2:L:1468:ARG:NH1	2.76	0.46
2:H:1464:LEU:HD11	2:H:1468:ARG:HD2	1.98	0.46
2:G:788:THR:CG2	2:G:1094:HIS:CE1	2.98	0.46
2:G:279:PHE:HB2	2:G:467:ILE:HD12	1.97	0.46
2:L:468:PRO:HD3	2:L:479:ARG:HH21	1.77	0.46
2:G:1301:PHE:HD1	2:G:1364:ARG:HG2	1.81	0.46
1:D:574:ILE:HD13	1:D:584:ILE:HB	1.96	0.46
1:D:580:ASN:OD1	1:D:583:GLN:HB2	2.15	0.46
1:A:628:TYR:C	1:A:628:TYR:CD1	2.89	0.46
2:L:1346:MET:HG2	2:L:1617:ARG:NH2	2.30	0.46
1:D:679:LYS:HG2	1:D:708:GLN:CB	2.38	0.46
2:L:485:ASP:HB2	2:L:488:PRO:HD2	1.91	0.46
1:A:566:PHE:CE1	1:F:552:ILE:HD11	2.51	0.46
2:I:1017:LEU:HD21	2:I:1032:PRO:HB2	1.98	0.46
1:D:486:VAL:CG1	1:D:647:GLY:HA3	2.41	0.46
2:H:857:VAL:HG11	2:H:876:TRP:CD1	2.50	0.46
2:K:129:ILE:HG12	2:K:131:ALA:HB3	1.97	0.46
1:A:1603:ASP:HB2	1:A:1604:TYR:CD2	2.51	0.46
2:H:1445:THR:HG23	2:H:1498:PHE:HB2	1.97	0.46

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:K:1442:TYR:HA	2:K:1445:THR:HG22	1.97	0.46
1:B:340:LEU:HD22	1:B:351:LEU:HD11	1.98	0.46
2:I:1692:TYR:O	2:I:1833:PHE:HA	2.15	0.46
1:B:421:ARG:HH22	1:B:1613:LYS:CG	2.29	0.46
2:J:1402:ASN:O	2:J:1403:ALA:HB2	2.15	0.46
2:L:1208:ASN:N	2:L:1209:PRO:HD3	2.31	0.46
2:L:170:TYR:CD2	2:L:507:PHE:HB3	2.50	0.46
2:H:378:ILE:HG23	2:H:391:VAL:CG1	2.46	0.46
2:J:784:GLY:HA3	2:J:786:GLU:OE2	2.16	0.46
1:D:1394:PRO:HB3	1:D:1627:PHE:CE2	2.50	0.46
2:J:1851:MET:HE1	2:J:2024:LYS:HB3	1.97	0.46
2:G:27:THR:HG22	2:G:32:GLU:CD	2.36	0.46
1:B:414:TYR:O	1:B:418:ILE:HG13	2.16	0.46
1:E:1544:HIS:O	1:E:1544:HIS:CG	2.68	0.46
2:G:1672:LYS:O	2:G:1672:LYS:HG2	2.14	0.46
2:G:120:HIS:CD2	2:G:137:VAL:HG11	2.51	0.46
1:D:1262:VAL:HG12	1:D:1267:LEU:HD21	1.98	0.46
1:B:768:ARG:HA	1:B:772:THR:OG1	2.15	0.46
1:A:1038:HIS:CE1	1:A:1042:LEU:HG	2.50	0.46
1:F:1343:PRO:HA	1:F:1526:SER:HA	1.97	0.46
1:B:1610:ARG:CG	1:B:1610:ARG:NH1	2.58	0.46
2:K:857:VAL:HG11	2:K:876:TRP:NE1	2.26	0.46
2:J:2017:PHE:CE2	2:J:2021:LEU:HD11	2.50	0.46
2:H:788:THR:HG21	2:H:810:CYS:SG	2.55	0.46
1:F:1079:ARG:CG	1:F:1079:ARG:NH1	2.69	0.46
1:E:833:TRP:CH2	1:E:839:ILE:HD11	2.49	0.46
2:G:911:GLN:HE21	2:G:1065:CYS:H	1.62	0.46
2:J:1499:LYS:CG	2:J:1500:ASN:H	2.29	0.46
2:I:485:ASP:CB	2:I:488:PRO:CD	2.89	0.46
2:K:930:THR:HG22	2:K:933:GLU:H	1.79	0.46
2:K:617:PHE:CD1	2:K:822:ALA:HA	2.49	0.46
2:I:208:LEU:HB3	2:I:225:LEU:HD13	1.98	0.46
1:C:1004:PRO:HD3	1:C:1572:TRP:CH2	2.51	0.46
1:A:536:SER:HB3	1:A:540:LYS:HD2	1.97	0.46
2:H:703:ASN:O	2:H:707:GLN:HG3	2.15	0.46
1:E:447:PHE:CE1	1:E:451:HIS:NE2	2.84	0.46
1:E:1363:MET:HE2	1:E:1363:MET:HB2	1.57	0.46
2:K:193:TYR:O	2:K:197:VAL:HG23	2.16	0.46
1:C:1553:VAL:HG22	1:C:1604:TYR:O	2.14	0.46
2:J:1339:GLY:HA2	2:L:376:ARG:HE	1.81	0.46
2:J:1353:GLY:CA	2:J:1397:THR:HG21	2.42	0.46
1:B:1587:PRO:HA	1:B:1611:SER:OG	2.14	0.46

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:H:1353:GLY:CA	2:H:1397:THR:HG21	2.45	0.46
2:L:1977:ARG:HD2	2:L:1978:LYS:HE3	1.97	0.46
2:I:979:LEU:CD2	2:I:999:ALA:HB3	2.46	0.46
2:H:1751:GLY:O	2:H:1755:LYS:HG2	2.15	0.46
2:H:741:LEU:O	2:H:741:LEU:HG	2.16	0.46
1:C:726:VAL:HG21	1:C:780:ALA:CB	2.46	0.46
1:A:1414:PRO:HD2	1:E:1473:HIS:CD2	2.50	0.46
1:B:1640:LYS:HG3	1:B:1641:TYR:CD1	2.50	0.46
2:I:388:ASN:HD22	2:I:389:PHE:N	2.14	0.46
2:J:1141:LYS:CE	2:J:1143:SER:HB2	2.46	0.46
1:E:414:TYR:O	1:E:418:ILE:HG13	2.15	0.46
1:F:1525:THR:O	1:F:1526:SER:HB3	2.16	0.46
2:L:27:THR:HG22	2:L:32:GLU:CD	2.36	0.46
2:J:399:TYR:CE2	2:J:403:LEU:HD11	2.49	0.46
2:H:399:TYR:CE2	2:H:403:LEU:HD11	2.51	0.46
2:L:1740:ASN:O	2:L:1742:PRO:HD3	2.16	0.46
2:K:1708:LEU:HD22	2:K:1708:LEU:O	2.16	0.46
2:J:835:ALA:HB3	2:J:1073:ALA:HB1	1.96	0.46
1:C:1504:ARG:NH2	1:C:1545:LEU:O	2.48	0.46
1:D:1330:GLU:OE2	1:D:1342:ARG:NH2	2.48	0.46
2:K:279:PHE:HB2	2:K:467:ILE:HD12	1.98	0.46
2:L:172:ILE:HG22	2:L:514:VAL:O	2.16	0.46
2:H:827:GLN:CD	2:H:827:GLN:H	2.19	0.46
2:G:80:ILE:HG12	2:G:105:ILE:CG2	2.46	0.46
1:E:1425:LEU:CD2	1:E:1429:ARG:HH21	2.18	0.46
2:L:1266:HIS:CE1	2:L:1275:ARG:CD	2.94	0.46
2:L:609:THR:HG23	3:L:2101:FMN:O4	2.16	0.46
1:E:530:GLY:O	1:E:611:THR:HG21	2.14	0.46
2:J:867:LYS:HD3	2:J:1065:CYS:SG	2.56	0.46
1:A:552:ILE:HG21	1:A:566:PHE:CE2	2.50	0.46
1:F:1209:PHE:CZ	1:F:1301:VAL:HG21	2.51	0.46
1:B:673:LEU:HD21	1:B:884:MET:CE	2.45	0.46
2:I:1028:VAL:HA	2:I:1029:PRO:HD3	1.74	0.46
1:D:444:LEU:HD22	1:D:448:MET:CG	2.46	0.46
1:D:1467:LEU:O	1:D:1471:THR:HG23	2.16	0.46
2:J:320:LEU:O	2:J:324:GLN:HG3	2.15	0.46
2:G:1632:VAL:HB	2:G:1685:VAL:HG22	1.98	0.46
2:G:930:THR:HA	2:G:1007:LEU:HA	1.97	0.46
2:G:930:THR:HG22	2:G:933:GLU:H	1.77	0.46
1:A:1467:LEU:O	1:A:1471:THR:HG23	2.16	0.46
1:E:1581:LEU:HD13	1:E:1638:HIS:HA	1.97	0.46
1:A:1364:THR:CG2	1:A:1366:GLN:HB2	2.46	0.46

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:K:1938:THR:HG22	2:K:1977:ARG:HA	1.98	0.46
2:L:186:LEU:CG	2:L:256:VAL:HG22	2.45	0.46
2:H:1238:GLY:O	2:H:1239:ASP:OD1	2.33	0.46
2:J:1238:GLY:O	2:J:1239:ASP:OD1	2.34	0.46
2:H:918:ASN:HB3	2:H:924:VAL:HG21	1.97	0.46
2:G:1868:GLN:O	2:G:1873:ARG:NH2	2.49	0.46
1:D:670:LEU:CD1	1:D:680:VAL:HG21	2.46	0.46
2:K:1146:LEU:HD11	2:K:1160:PHE:CE2	2.51	0.46
2:H:291:VAL:O	2:H:295:ILE:HB	2.16	0.46
1:D:1321:MET:HB3	1:D:1321:MET:HE2	1.76	0.46
2:J:2062:THR:HG22	2:J:2064:SER:N	2.31	0.46
1:F:1587:PRO:HA	1:F:1611:SER:OG	2.15	0.46
2:G:1048:TRP:NE1	2:G:1049:GLN:HG2	2.31	0.46
2:K:1572:ARG:HG2	2:K:1647:ASP:O	2.16	0.46
1:D:716:GLN:HB3	1:D:769:ILE:HG23	1.97	0.46
2:K:1932:ASP:OD2	2:K:1934:ARG:HD2	2.15	0.46
2:K:1653:LEU:HD21	2:K:1667:VAL:HG13	1.97	0.46
2:J:421:PHE:C	2:J:423:GLN:H	2.19	0.46
2:L:960:GLY:O	2:L:963:ILE:HB	2.16	0.46
1:B:994:VAL:HG21	1:B:1291:TYR:CD1	2.51	0.46
2:G:1412:MET:HE3	2:G:1412:MET:HB3	1.75	0.46
1:D:871:PHE:N	1:D:871:PHE:CD1	2.82	0.46
1:A:501:ASP:HB2	1:A:505:ASN:HB2	1.96	0.46
1:C:1672:GLY:HA3	1:C:1678:LEU:HD23	1.97	0.46
1:A:1078:ILE:HB	1:A:1338:GLY:HA3	1.97	0.46
2:L:298:ALA:HB2	2:L:304:PHE:HA	1.97	0.46
2:I:2005:PHE:HA	2:I:2010:LEU:CD1	2.31	0.46
2:K:276:LEU:HD13	2:K:466:VAL:HG21	1.97	0.46
2:J:271:GLU:HG2	2:J:301:TRP:NE1	2.30	0.46
2:G:590:VAL:CG2	2:G:1091:HIS:CD2	2.98	0.46
2:I:1103:TYR:O	2:I:1106:LYS:HB2	2.14	0.46
2:I:1301:PHE:HB3	2:I:1364:ARG:HH11	1.77	0.46
2:H:868:LEU:HD23	2:H:1066:ILE:HD12	1.97	0.46
1:A:636:TYR:HB2	1:A:888:ILE:HD11	1.96	0.46
2:I:35:PHE:CE1	2:I:105:ILE:HD13	2.50	0.46
2:I:582:LYS:HA	2:I:587:GLN:O	2.15	0.46
2:K:1764:MET:O	2:K:1780:ILE:HG13	2.16	0.46
2:I:1896:THR:HG22	2:I:1898:GLN:N	2.23	0.46
1:C:683:THR:HG21	1:C:725:LEU:HD11	1.97	0.46
1:A:566:PHE:HE1	1:F:552:ILE:HD11	1.80	0.46
2:H:617:PHE:CD1	2:H:822:ALA:HA	2.50	0.46
1:F:1149:LEU:HA	1:F:1149:LEU:HD23	1.71	0.46

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:I:930:THR:HG22	2:I:933:GLU:H	1.79	0.46
2:G:1009:ASN:HD22	2:G:1010:ALA:N	2.14	0.46
1:A:1273:ILE:HG13	1:A:1273:ILE:O	2.16	0.46
1:C:406:ALA:HB2	1:C:439:ARG:HD2	1.98	0.46
1:D:617:LEU:HD11	1:D:636:TYR:HB2	1.98	0.46
1:D:636:TYR:HB2	1:D:888:ILE:HD11	1.96	0.46
1:C:27:ARG:HG3	2:I:2045:ALA:HB2	1.97	0.46
2:L:663:ILE:CD1	2:L:663:ILE:H	2.18	0.46
1:D:1514:ILE:HG13	1:D:1514:ILE:H	1.20	0.46
2:H:1442:TYR:CG	2:H:1499:LYS:O	2.68	0.46
2:L:1918:VAL:HG13	2:L:2006:HIS:CB	2.42	0.46
2:K:1812:LEU:HD21	2:K:1857:VAL:HG11	1.97	0.46
2:L:652:ILE:HG23	2:L:653:PRO:HD2	1.97	0.46
2:I:1204:VAL:HA	2:I:1218:SER:O	2.16	0.46
2:L:196:PHE:HD2	2:L:266:LYS:CB	2.28	0.46
1:F:767:HIS:CG	1:F:813:LEU:HD12	2.51	0.46
2:K:741:LEU:O	2:K:741:LEU:HG	2.15	0.46
2:I:1238:GLY:O	2:I:1239:ASP:OD1	2.33	0.46
2:L:1709:TYR:C	2:L:1709:TYR:CD2	2.89	0.46
2:I:1626:GLU:O	2:I:1627:ASN:HB2	2.15	0.46
1:D:623:PHE:HD2	1:D:623:PHE:N	2.14	0.46
2:G:113:PHE:N	2:G:113:PHE:CD1	2.84	0.46
2:H:1910:VAL:HG11	2:H:1973:ILE:HG21	1.97	0.46
2:H:1048:TRP:CE2	2:H:1049:GLN:HG2	2.50	0.46
1:B:501:ASP:HB2	1:B:505:ASN:HB2	1.96	0.46
2:J:1146:LEU:O	2:J:1201:GLY:HA2	2.16	0.46
2:H:421:PHE:C	2:H:423:GLN:H	2.19	0.46
2:L:746:GLY:HA3	2:L:843:TRP:CZ2	2.51	0.46
2:K:1207:THR:O	2:K:1215:THR:HA	2.16	0.46
2:G:657:GLY:HA3	2:G:688:GLU:HG2	1.98	0.46
1:C:421:ARG:HH22	1:C:1613:LYS:HB3	1.81	0.46
2:L:1932:ASP:OD2	2:L:1934:ARG:HD2	2.15	0.46
2:K:2062:THR:HG22	2:K:2063:GLY:N	2.30	0.46
2:I:1160:PHE:O	2:I:1164:ILE:HG13	2.15	0.46
2:H:1740:ASN:O	2:H:1742:PRO:HD3	2.16	0.46
2:H:1933:LEU:O	2:H:1989:LEU:HD11	2.16	0.46
2:H:2053:GLU:H	2:H:2053:GLU:HG3	1.47	0.46
1:C:349:MET:O	1:C:349:MET:HG3	2.16	0.46
1:B:458:GLU:CD	1:B:458:GLU:H	2.19	0.46
2:G:1507:VAL:O	2:G:1531:GLU:HA	2.16	0.46
1:B:1294:ILE:HD11	1:B:1302:CYS:HB3	1.98	0.46
1:A:427:ARG:HH21	1:A:518:LYS:HG2	1.81	0.46

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:E:557:ARG:NH1	1:E:557:ARG:HG3	1.99	0.46
1:D:427:ARG:CG	1:D:427:ARG:NH1	2.50	0.46
1:A:1703:VAL:HG23	1:A:1713:PHE:CE1	2.51	0.46
1:B:1005:TRP:HE1	1:B:1561:LEU:CD2	2.22	0.46
2:I:279:PHE:HB2	2:I:467:ILE:HD12	1.97	0.46
2:L:1156:ASP:CB	2:L:1159:SER:H	2.20	0.46
2:J:1067:LEU:HB2	3:J:2101:FMN:HM71	1.98	0.46
1:B:1156:PHE:CZ	1:B:1316:TYR:HA	2.51	0.46
1:A:1280:CYS:HA	1:A:1566:LYS:O	2.16	0.46
1:A:1220:ASN:HB3	1:A:1273:ILE:HG22	1.97	0.46
2:G:942:MET:O	2:G:951:ILE:HG13	2.16	0.46
2:I:26:LEU:HD23	2:I:26:LEU:HA	1.83	0.46
2:L:1626:GLU:O	2:L:1627:ASN:HB2	2.15	0.46
1:D:999:LEU:HD11	1:D:1575:ASN:CB	2.45	0.46
2:J:1261:PHE:HA	2:J:1284:ARG:NH1	2.31	0.46
1:D:1640:LYS:HG3	1:D:1641:TYR:CD1	2.51	0.46
2:K:1805:PHE:O	2:K:1808:PRO:HD2	2.16	0.46
2:K:1483:LEU:CD2	2:K:1525:VAL:HG11	2.45	0.46
1:E:421:ARG:HH22	1:E:1613:LYS:CB	2.28	0.46
2:J:730:ILE:O	2:J:733:ALA:HB3	2.16	0.46
1:A:329:THR:O	1:A:332:GLN:HB2	2.16	0.46
2:I:119:VAL:HG21	2:I:140:TYR:CD2	2.51	0.46
2:L:1249:GLY:HA2	2:L:1256:VAL:HG22	1.97	0.46
1:E:35:ILE:HD13	2:K:1691:ALA:HB1	1.97	0.46
2:G:1141:LYS:CE	2:G:1143:SER:HB2	2.46	0.46
1:C:1473:HIS:ND1	1:C:1473:HIS:C	2.69	0.46
2:H:910:PHE:O	2:H:1063:ARG:HD3	2.16	0.46
1:E:921:GLU:HG3	1:E:922:ILE:H	1.81	0.46
2:K:1832:THR:HG21	2:K:2040:ILE:HD11	1.98	0.46
2:I:1504:TYR:HD2	2:I:1507:VAL:HG11	1.81	0.46
1:D:875:GLU:O	1:D:878:PHE:HB3	2.15	0.46
2:H:1452:VAL:O	2:H:1454:MET:HG3	2.16	0.46
2:L:205:ALA:O	2:L:209:GLN:HG3	2.16	0.46
1:A:59:ARG:NH1	2:G:1925:MET:HE2	2.31	0.46
1:F:874:GLN:H	1:F:874:GLN:HG2	1.40	0.46
2:K:1452:VAL:O	2:K:1454:MET:HG3	2.16	0.46
2:K:274:GLU:O	2:K:278:ARG:HG2	2.15	0.46
2:H:1464:LEU:HD13	2:H:1464:LEU:C	2.35	0.46
1:D:1592:ALA:O	1:D:1593:ASP:C	2.55	0.46
2:J:866:HIS:HB3	2:J:1068:GLN:O	2.16	0.46
2:J:1442:TYR:HA	2:J:1445:THR:CG2	2.39	0.46
2:H:1074:LYS:HE3	2:H:1075:TYR:CE1	2.51	0.46

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:B:998:GLY:HA3	1:B:1361:VAL:CG1	2.43	0.46
2:K:320:LEU:O	2:K:324:GLN:HG3	2.16	0.46
1:F:535:TYR:HD2	1:F:540:LYS:CG	2.28	0.46
2:G:934:VAL:O	2:G:938:MET:HG3	2.16	0.46
2:G:1764:MET:HG3	2:G:1781:PHE:HE1	1.80	0.46
1:A:998:GLY:HA3	1:A:1361:VAL:CG1	2.41	0.46
2:H:1261:PHE:HE2	2:H:1285:ILE:HD11	1.81	0.46
1:B:883:LEU:HA	1:B:888:ILE:HD12	1.98	0.46
2:L:616:ASP:OD1	2:L:616:ASP:N	2.48	0.46
2:H:1318:ALA:HA	2:H:1391:VAL:CG2	2.44	0.46
2:J:1692:TYR:O	2:J:1833:PHE:HA	2.16	0.46
1:F:962:ASN:HB3	2:L:969:ARG:CD	2.46	0.46
2:K:1189:THR:O	2:K:1191:PRO:HD3	2.16	0.46
1:C:1640:LYS:HG3	1:C:1641:TYR:CD1	2.50	0.46
1:B:843:VAL:HG22	1:B:843:VAL:O	2.15	0.46
2:I:879:LEU:HB3	2:I:884:PHE:CE1	2.51	0.46
2:I:1208:ASN:N	2:I:1209:PRO:HD3	2.31	0.46
2:G:333:PRO:HB3	2:H:1623:TRP:CH2	2.50	0.46
2:H:182:TYR:CD1	2:H:183:PHE:N	2.84	0.46
2:G:980:LEU:CD2	2:G:986:LEU:HD21	2.46	0.46
2:J:859:SER:HB3	2:J:863:GLU:HG3	1.97	0.46
1:B:648:LEU:HD12	1:B:649:THR:H	1.81	0.46
2:H:859:SER:HB3	2:H:863:GLU:HG3	1.98	0.46
2:L:357:THR:HG22	2:L:359:SER:H	1.80	0.46
2:J:1729:ASN:O	2:J:1757:ILE:HG23	2.16	0.46
1:B:959:PRO:HB3	2:H:972:SER:HA	1.97	0.46
2:G:1257:VAL:HA	2:G:1258:PRO:HD3	1.73	0.46
2:I:690:LEU:HD22	2:I:691:THR:H	1.80	0.46
1:F:17:LEU:HD22	2:L:2041:PRO:HB3	1.98	0.46
2:H:544:ALA:O	2:H:554:TYR:HB3	2.16	0.46
1:C:1176:PRO:O	1:C:1180:ILE:HG12	2.15	0.46
2:K:888:ARG:HD3	2:K:891:ARG:NH1	2.31	0.46
1:C:538:ARG:HD2	1:C:542:GLN:NE2	2.30	0.46
2:K:2053:GLU:HG3	2:K:2053:GLU:H	1.49	0.46
1:A:875:GLU:O	1:A:878:PHE:HB3	2.15	0.46
2:G:1424:LYS:HA	2:G:1425:PRO:HD3	1.85	0.46
1:D:612:ILE:HG23	1:D:613:PRO:HD2	1.98	0.46
1:A:1159:LEU:HD12	1:A:1327:ALA:HB3	1.98	0.46
2:K:2017:PHE:HE2	2:K:2021:LEU:HD11	1.80	0.46
2:G:465:LEU:HB2	2:G:479:ARG:HG2	1.97	0.46
2:I:1616:VAL:O	2:I:1620:VAL:HG23	2.15	0.46
2:I:1305:LEU:CD1	2:I:1305:LEU:H	2.29	0.46

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:K:856:THR:HG22	2:K:865:ILE:O	2.15	0.46
2:I:1266:HIS:CE1	2:I:1275:ARG:CD	2.94	0.46
1:D:605:ARG:CB	1:D:606:PRO:CD	2.87	0.46
1:A:1149:LEU:CB	1:E:1149:LEU:HB2	2.44	0.46
2:G:798:THR:HA	2:G:802:TYR:O	2.16	0.46
2:K:608:MET:HE1	2:K:817:MET:HG2	1.98	0.46
2:I:1602:LEU:HD22	2:I:1606:ILE:HD11	1.98	0.46
2:H:605:VAL:HB	2:H:628:ILE:CG1	2.41	0.46
1:B:21:GLN:HE22	2:H:1841:TYR:HE1	1.64	0.46
2:H:613:VAL:N	2:H:614:PRO:CD	2.79	0.46
1:A:1670:HIS:ND1	2:G:1009:ASN:ND2	2.64	0.46
2:K:676:LEU:HD23	2:K:679:ARG:NH2	2.30	0.46
2:G:1375:HIS:CE1	2:G:1610:MET:HG2	2.51	0.46
2:I:1442:TYR:O	2:I:1445:THR:HG22	2.16	0.46
2:J:942:MET:O	2:J:951:ILE:HG13	2.16	0.46
2:I:1316:VAL:HG13	2:I:1348:PHE:HE2	1.81	0.46
2:J:1261:PHE:HE2	2:J:1285:ILE:HD11	1.81	0.46
2:J:1251:THR:HG22	2:J:1292:VAL:HG13	1.97	0.46
2:J:783:GLY:CA	2:J:815:ARG:HD3	2.46	0.46
2:K:1977:ARG:HD2	2:K:1978:LYS:HE3	1.98	0.46
2:J:186:LEU:CG	2:J:256:VAL:HG22	2.46	0.46
1:B:43:ARG:NH1	2:H:1687:GLN:NE2	2.65	0.46
1:D:1386:THR:HG22	1:D:1387:ASP:N	2.31	0.46
2:K:478:LEU:HD22	2:K:481:LEU:HD11	1.99	0.46
2:J:884:PHE:HE2	2:J:1039:GLU:CA	2.29	0.46
2:G:541:LEU:HG	2:G:552:VAL:CG1	2.45	0.46
2:G:718:PRO:HG2	2:G:741:LEU:CD1	2.46	0.46
1:F:901:LEU:HD23	1:F:901:LEU:N	2.31	0.46
1:A:450:TYR:CD1	1:A:1551:ASN:HB2	2.51	0.46
1:C:340:LEU:HD22	1:C:351:LEU:HD11	1.97	0.46
2:G:731:ALA:CB	2:G:739:ILE:HD12	2.46	0.46
2:G:314:LEU:O	2:G:318:ILE:HG13	2.16	0.46
2:K:1330:ASN:HD22	2:K:1618:SER:CB	2.29	0.46
2:K:356:LEU:O	2:K:387:ARG:HA	2.16	0.46
1:A:1321:MET:HB3	1:A:1321:MET:HE2	1.86	0.46
2:I:1903:VAL:O	2:I:1907:ILE:HG13	2.16	0.46
2:H:737:PHE:HA	2:H:738:PRO:HD3	1.79	0.46
1:F:28:TRP:CE2	1:F:53:LEU:HD22	2.51	0.46
1:A:1386:THR:HG22	1:A:1387:ASP:N	2.31	0.46
1:C:749:ILE:CD1	1:C:769:ILE:HD12	2.46	0.46
1:B:1288:ASP:O	1:B:1291:TYR:HB3	2.16	0.46
2:H:1975:GLU:O	2:H:1979:GLN:HG3	2.16	0.46

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:J:204:ILE:HG21	2:J:312:VAL:HG21	1.98	0.46
2:I:1314:GLU:O	2:I:1394:VAL:HA	2.16	0.46
1:D:1287:LEU:HA	1:D:1304:VAL:HG11	1.97	0.46
2:K:995:ARG:O	2:K:998:ALA:HB3	2.15	0.46
1:E:869:ARG:O	1:E:903:GLY:HA3	2.15	0.46
2:G:1835:GLY:HA3	2:G:1839:GLY:C	2.37	0.46
1:A:24:MET:HE2	2:G:2043:VAL:HG13	1.98	0.46
2:I:27:THR:HG22	2:I:32:GLU:CD	2.37	0.46
2:K:420:PRO:HB2	2:K:423:GLN:HB2	1.97	0.46
1:C:1090:ASP:OD1	1:C:1092:ASN:HB2	2.16	0.46
1:A:1401:LEU:O	1:A:1401:LEU:HD22	2.16	0.46
1:F:349:MET:HG3	1:F:349:MET:O	2.16	0.46
1:D:1137:GLN:HA	1:D:1137:GLN:NE2	2.30	0.46
1:F:1137:GLN:NE2	1:F:1137:GLN:HA	2.31	0.46
1:D:1359:VAL:HG12	1:D:1360:GLN:N	2.30	0.46
1:B:754:ARG:HH21	1:B:762:LYS:HD3	1.81	0.46
2:L:342:ASN:HB2	2:L:406:ARG:NH2	2.31	0.46
2:G:1910:VAL:CG1	2:G:1973:ILE:HG21	2.46	0.46
2:I:205:ALA:O	2:I:209:GLN:HG3	2.16	0.46
2:J:595:SER:HB2	2:J:600:VAL:O	2.16	0.45
2:J:652:ILE:CG2	2:J:656:ARG:HB2	2.46	0.45
2:L:1123:ALA:O	2:L:1126:GLU:OE2	2.33	0.45
2:I:276:LEU:HD11	2:I:296:ALA:HA	1.98	0.45
1:E:689:ARG:CD	1:E:1339:GLU:HG2	2.47	0.45
2:G:2017:PHE:CE2	2:G:2021:LEU:HD11	2.51	0.45
1:E:1426:GLU:HA	1:E:1429:ARG:HG3	1.99	0.45
2:K:798:THR:HA	2:K:802:TYR:O	2.15	0.45
2:L:37:VAL:HG11	2:L:42:HIS:HA	1.98	0.45
2:K:617:PHE:HE2	2:K:628:ILE:HD11	1.81	0.45
1:F:628:TYR:CD1	1:F:628:TYR:C	2.89	0.45
1:F:1591:ASN:C	1:F:1593:ASP:H	2.20	0.45
2:G:605:VAL:HB	2:G:628:ILE:CG1	2.43	0.45
2:J:930:THR:HA	2:J:1007:LEU:HA	1.97	0.45
1:A:47:ILE:HD12	2:G:1818:PHE:HD1	1.81	0.45
2:K:506:VAL:O	2:K:506:VAL:HG22	2.16	0.45
2:J:771:CYS:HB3	2:J:774:ILE:CD1	2.44	0.45
2:L:1120:ILE:HD11	2:L:1167:ASN:O	2.15	0.45
1:E:1638:HIS:ND1	1:E:1639:PRO:CD	2.79	0.45
2:G:652:ILE:CG2	2:G:656:ARG:HB2	2.46	0.45
2:K:1178:THR:HG22	2:K:1180:VAL:H	1.81	0.45
2:K:350:MET:SD	2:K:392:THR:CG2	3.04	0.45
1:A:1534:GLU:HG2	1:A:1625:PHE:HE1	1.80	0.45

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:K:1851:MET:HB3	2:K:1851:MET:HE2	1.85	0.45
2:J:1130:ILE:HD12	2:J:1133:LEU:HD22	1.98	0.45
2:J:1017:LEU:HD21	2:J:1032:PRO:HB2	1.97	0.45
2:I:73:VAL:HA	2:I:113:PHE:HE2	1.80	0.45
2:I:1662:ARG:HG2	2:I:1686:GLU:HG2	1.98	0.45
2:J:776:LEU:HG	2:J:807:PHE:CD2	2.51	0.45
2:H:421:PHE:HB3	2:H:844:GLU:OE2	2.16	0.45
2:G:1903:VAL:O	2:G:1907:ILE:HG13	2.16	0.45
2:G:1451:GLU:HG3	2:G:1541:ILE:HD11	1.96	0.45
1:F:1475:GLU:HB3	1:F:1479:ARG:NH2	2.31	0.45
1:F:24:MET:HE2	2:L:2043:VAL:HG13	1.99	0.45
1:C:1525:THR:O	1:C:1526:SER:HB3	2.16	0.45
1:C:1706:GLU:HB2	1:C:1710:GLU:O	2.15	0.45
2:G:1749:PHE:CG	2:G:1758:ARG:HB3	2.51	0.45
2:I:2038:LYS:HD3	2:I:2038:LYS:HA	1.74	0.45
1:D:458:GLU:CD	1:D:458:GLU:H	2.19	0.45
1:D:1313:GLU:H	1:D:1313:GLU:HG2	1.48	0.45
1:E:23:ALA:HA	2:K:2007:SER:O	2.15	0.45
1:B:427:ARG:NH1	1:B:427:ARG:CG	2.48	0.45
1:F:427:ARG:O	1:F:430:VAL:HB	2.15	0.45
1:B:557:ARG:HH11	1:E:558:LEU:HA	1.80	0.45
2:I:1871:VAL:HG23	2:I:2003:VAL:HG13	1.97	0.45
2:K:792:LEU:O	2:K:792:LEU:HD12	2.16	0.45
1:B:1426:GLU:HA	1:B:1429:ARG:HG3	1.98	0.45
2:J:80:ILE:HG12	2:J:105:ILE:HG22	1.97	0.45
2:J:1266:HIS:CD2	2:J:1266:HIS:N	2.84	0.45
2:K:1426:VAL:HG12	2:K:1427:MET:HG2	1.98	0.45
2:G:608:MET:HA	3:G:2101:FMN:N5	2.31	0.45
1:E:1107:GLU:HA	1:E:1108:PRO:HD3	1.77	0.45
2:G:460:ILE:HA	2:G:461:PRO:HD3	1.80	0.45
1:E:655:ALA:O	1:E:680:VAL:HA	2.16	0.45
1:E:655:ALA:HB3	1:E:680:VAL:HG12	1.97	0.45
2:H:610:PRO:O	2:H:613:VAL:HG12	2.17	0.45
2:H:1017:LEU:O	2:H:1021:GLN:HG3	2.15	0.45
1:F:998:GLY:HA3	1:F:1361:VAL:CG1	2.43	0.45
1:A:1106:LEU:HD13	1:A:1142:LEU:HD13	1.98	0.45
2:K:1316:VAL:HG13	2:K:1348:PHE:HE2	1.81	0.45
2:J:1904:VAL:HG22	2:J:1939:LEU:CD2	2.46	0.45
2:J:1588:ASN:OD1	2:J:1589:PRO:HD2	2.16	0.45
1:C:35:ILE:HD13	2:I:1691:ALA:HB1	1.97	0.45
2:G:1622:THR:O	2:G:1626:GLU:HA	2.16	0.45
1:C:1001:GLU:O	1:C:1002:ILE:HD12	2.16	0.45

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:H:957:LYS:HE2	2:H:1022:ARG:HH22	1.82	0.45
2:L:1250:ARG:H	2:L:1250:ARG:CD	2.29	0.45
2:K:350:MET:HG3	2:K:435:ILE:HG21	1.99	0.45
2:I:1286:LYS:HZ1	2:I:1367:ASP:HB2	1.81	0.45
1:F:340:LEU:HD22	1:F:351:LEU:HD11	1.98	0.45
2:G:731:ALA:HA	2:G:739:ILE:HD12	1.97	0.45
1:F:653:LYS:HD3	1:F:742:TYR:CE2	2.52	0.45
2:H:980:LEU:HD21	2:H:986:LEU:HD21	1.97	0.45
2:G:1406:ASN:HB3	2:G:1411:LYS:HG3	1.98	0.45
2:H:685:VAL:HA	2:H:686:PRO:HD3	1.65	0.45
2:G:910:PHE:O	2:G:1063:ARG:HD3	2.16	0.45
2:I:1250:ARG:CD	2:I:1250:ARG:H	2.28	0.45
2:K:2062:THR:HG22	2:K:2064:SER:N	2.31	0.45
1:C:1287:LEU:HA	1:C:1304:VAL:HG11	1.99	0.45
1:C:948:HIS:O	1:C:952:TYR:HD2	1.99	0.45
2:L:1975:GLU:O	2:L:1979:GLN:HG3	2.16	0.45
2:J:1199:THR:HB	2:J:1202:MET:HB3	1.98	0.45
1:C:501:ASP:HB2	1:C:505:ASN:HB2	1.98	0.45
2:G:746:GLY:HA3	2:G:843:TRP:CZ2	2.51	0.45
2:H:665:VAL:HG12	2:H:665:VAL:O	2.17	0.45
1:C:743:VAL:HG12	1:C:745:PRO:HG3	1.99	0.45
1:E:1019:LYS:HB2	1:E:1019:LYS:HE3	1.70	0.45
1:D:743:VAL:O	1:D:745:PRO:HD3	2.16	0.45
2:I:37:VAL:HG11	2:I:42:HIS:HA	1.98	0.45
1:B:1504:ARG:NH2	1:B:1545:LEU:O	2.49	0.45
1:C:1330:GLU:CG	1:C:1333:ARG:NH1	2.80	0.45
2:K:652:ILE:HG23	2:K:653:PRO:HD2	1.99	0.45
2:J:276:LEU:HD13	2:J:466:VAL:HG21	1.99	0.45
2:G:1099:LEU:HD12	2:G:1103:TYR:CB	2.47	0.45
2:I:580:LEU:CD2	2:I:1095:ILE:HG22	2.46	0.45
2:K:825:SER:CB	2:K:1053:ILE:HG13	2.46	0.45
2:K:866:HIS:HB3	2:K:1068:GLN:O	2.16	0.45
1:D:689:ARG:NH2	1:D:1591:ASN:HD21	2.13	0.45
2:I:911:GLN:HE21	2:I:1064:THR:HG23	1.81	0.45
2:K:1896:THR:CG2	2:K:1897:GLU:N	2.78	0.45
2:J:609:THR:CB	2:J:610:PRO:HD3	2.47	0.45
1:C:1301:VAL:HG23	1:C:1363:MET:HG3	1.99	0.45
2:H:613:VAL:N	2:H:614:PRO:HD3	2.32	0.45
1:E:617:LEU:HD11	1:E:636:TYR:HB2	1.98	0.45
1:A:827:ARG:NE	1:F:816:GLU:OE2	2.46	0.45
2:I:1499:LYS:CG	2:I:1500:ASN:H	2.28	0.45
2:J:930:THR:HG22	2:J:933:GLU:H	1.80	0.45

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:G:1588:ASN:OD1	2:G:1589:PRO:HD2	2.16	0.45
2:K:197:VAL:O	2:K:200:LEU:HD23	2.16	0.45
2:K:1410:GLY:HA2	2:K:1437:GLY:O	2.17	0.45
2:J:174:GLY:H	2:J:517:GLY:CA	2.24	0.45
1:F:929:ARG:O	1:F:933:ILE:HG13	2.16	0.45
2:J:1348:PHE:O	2:J:1351:VAL:HG12	2.15	0.45
1:A:30:GLU:HG3	1:A:30:GLU:H	1.51	0.45
2:L:663:ILE:N	2:L:663:ILE:HD12	2.30	0.45
2:K:1445:THR:HG23	2:K:1498:PHE:HB2	1.98	0.45
2:J:1074:LYS:HE3	2:J:1075:TYR:CE1	2.51	0.45
1:E:1514:ILE:H	1:E:1514:ILE:HG13	1.23	0.45
2:L:1445:THR:HG23	2:L:1498:PHE:HB2	1.98	0.45
2:K:1977:ARG:CD	2:K:1978:LYS:HE3	2.46	0.45
2:J:321:ARG:HE	2:J:450:HIS:HB3	1.81	0.45
2:I:1944:ASN:HA	2:I:1993:PHE:CE1	2.52	0.45
2:I:1851:MET:HE1	2:I:2024:LYS:HB3	1.98	0.45
1:C:859:VAL:HG22	1:C:918:LEU:HB3	1.99	0.45
2:G:1709:TYR:CD2	2:G:1709:TYR:C	2.90	0.45
1:F:921:GLU:HG3	1:F:922:ILE:H	1.81	0.45
1:C:447:PHE:HE1	1:C:451:HIS:HE2	1.63	0.45
1:D:1177:GLU:O	1:D:1180:ILE:HB	2.16	0.45
2:G:1504:TYR:HD2	2:G:1507:VAL:HG11	1.81	0.45
1:F:1560:TYR:CE2	1:F:1589:ASN:HA	2.51	0.45
2:K:725:GLN:HG2	2:K:764:MET:CE	2.47	0.45
2:H:274:GLU:O	2:H:278:ARG:HG2	2.16	0.45
2:L:336:LEU:HD23	2:L:336:LEU:C	2.37	0.45
1:C:1031:MET:HB3	1:C:1031:MET:HE2	1.76	0.45
1:E:626:TRP:CZ3	1:E:898:PHE:HB2	2.51	0.45
2:I:746:GLY:HA3	2:I:843:TRP:CZ2	2.52	0.45
1:D:427:ARG:O	1:D:430:VAL:HB	2.17	0.45
1:D:490:VAL:O	1:D:490:VAL:HG12	2.17	0.45
2:J:1290:TYR:CG	2:J:1299:VAL:CG1	2.91	0.45
2:G:1767:GLU:CB	2:G:2016:PRO:HG3	2.38	0.45
1:E:612:ILE:HG12	1:E:628:TYR:HD2	1.77	0.45
2:J:610:PRO:O	2:J:613:VAL:HG12	2.16	0.45
1:A:1149:LEU:HD12	1:E:1097:LEU:CD1	2.47	0.45
2:L:914:TRP:CD1	2:L:916:GLY:CA	2.97	0.45
2:J:37:VAL:HG11	2:J:42:HIS:HA	1.97	0.45
2:J:487:ILE:HB	2:J:488:PRO:CD	2.40	0.45
1:E:653:LYS:HD3	1:E:742:TYR:CE2	2.51	0.45
1:E:1037:ASN:CB	1:E:1674:ILE:HG23	2.47	0.45
1:C:1037:ASN:HD21	2:I:1011:GLN:HG2	1.80	0.45

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:B:444:LEU:HD22	1:B:448:MET:HG2	1.97	0.45
2:I:190:TYR:HE1	2:I:201:ILE:HG21	1.80	0.45
2:H:159:PHE:CZ	2:H:275:LEU:HD21	2.52	0.45
1:B:1317:GLU:CG	1:D:1250:LEU:HB2	2.41	0.45
2:H:1588:ASN:OD1	2:H:1589:PRO:HD2	2.15	0.45
2:I:1593:SER:HG	2:I:1596:PHE:HB2	1.80	0.45
2:J:1764:MET:HG3	2:J:1781:PHE:CE1	2.52	0.45
2:G:1588:ASN:HD21	2:G:1590:ILE:HD12	1.81	0.45
2:L:174:GLY:H	2:L:517:GLY:CA	2.24	0.45
2:I:1348:PHE:CE1	2:I:1351:VAL:HG11	2.51	0.45
2:I:1348:PHE:O	2:I:1351:VAL:HG12	2.16	0.45
1:C:36:LEU:O	1:C:76:ARG:NH2	2.49	0.45
2:J:1316:VAL:HG13	2:J:1348:PHE:CE2	2.51	0.45
2:J:612:THR:HG21	2:J:629:GLU:O	2.16	0.45
2:H:1093:ASP:O	2:H:1097:PHE:HB2	2.16	0.45
1:A:449:GLN:O	1:A:452:ILE:HG22	2.17	0.45
1:A:1496:ARG:NH2	1:E:1297:GLY:HA2	2.30	0.45
2:J:1947:LYS:HG3	2:J:1948:MET:HE2	1.97	0.45
1:F:470:GLY:O	1:F:474:ILE:HG13	2.16	0.45
2:I:718:PRO:HG2	2:I:741:LEU:HD11	1.98	0.45
1:D:1086:PHE:CZ	1:D:1310:PHE:HD2	2.34	0.45
2:L:321:ARG:HE	2:L:450:HIS:HB3	1.81	0.45
2:I:1887:ASN:ND2	2:I:1890:ARG:HG3	2.32	0.45
2:G:1175:MET:HA	2:G:1274:ILE:HD11	1.99	0.45
2:J:1426:VAL:HG12	2:J:1427:MET:HG2	1.98	0.45
1:A:498:THR:HG22	1:A:508:TYR:CD1	2.51	0.45
2:K:1238:GLY:O	2:K:1239:ASP:OD1	2.33	0.45
1:C:1055:THR:OG1	1:C:1057:GLU:HG2	2.17	0.45
2:K:291:VAL:O	2:K:295:ILE:HB	2.15	0.45
2:H:350:MET:HE2	2:H:435:ILE:HD12	1.98	0.45
2:J:741:LEU:O	2:J:741:LEU:HG	2.15	0.45
1:B:653:LYS:HD3	1:B:742:TYR:CE2	2.51	0.45
1:B:28:TRP:CE2	1:B:53:LEU:HD22	2.52	0.45
2:K:388:ASN:HD22	2:K:389:PHE:N	2.14	0.45
2:G:776:LEU:HG	2:G:807:PHE:CD2	2.51	0.45
1:D:1586:VAL:CG2	1:D:1617:ILE:HD11	2.46	0.45
1:F:994:VAL:HG21	1:F:1291:TYR:CD1	2.52	0.45
2:G:1558:GLU:O	2:G:1560:PRO:HD3	2.17	0.45
2:K:859:SER:CB	2:K:863:GLU:HG3	2.46	0.45
1:C:626:TRP:CZ3	1:C:898:PHE:HB2	2.52	0.45
2:J:555:LYS:HB3	2:J:556:PRO:HD3	1.98	0.45
1:B:1042:LEU:HD23	1:B:1042:LEU:HA	1.76	0.45

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:E:631:LYS:O	1:E:635:ILE:HG13	2.15	0.45
2:I:859:SER:HB3	2:I:863:GLU:HG3	1.98	0.45
1:D:613:PRO:HD3	1:D:628:TYR:CE2	2.52	0.45
2:L:1464:LEU:HD11	2:L:1468:ARG:HD2	1.98	0.45
2:G:1093:ASP:O	2:G:1097:PHE:HB2	2.16	0.45
2:J:2017:PHE:HE2	2:J:2021:LEU:HD11	1.81	0.45
1:E:968:PRO:CD	1:E:1374:PRO:HB3	2.46	0.45
2:J:1301:PHE:HB3	2:J:1364:ARG:NH1	2.30	0.45
1:A:1425:LEU:HD21	1:A:1429:ARG:NH2	2.17	0.45
2:G:1972:ILE:HG13	2:G:1972:ILE:H	1.37	0.45
2:J:2058:VAL:CG1	2:J:2067:ILE:HD12	2.47	0.45
2:H:468:PRO:HD3	2:H:479:ARG:HH21	1.77	0.45
1:F:1213:VAL:CG1	1:F:1214:HIS:N	2.79	0.45
2:I:1462:GLN:O	2:I:1466:VAL:HG23	2.17	0.45
2:L:80:ILE:HG12	2:L:105:ILE:HG22	1.99	0.45
2:K:1896:THR:HG22	2:K:1898:GLN:N	2.20	0.45
2:K:1770:ASN:HB2	2:K:1776:LYS:CE	2.38	0.45
2:K:289:ILE:HD12	2:K:472:THR:OG1	2.16	0.45
2:K:220:GLN:NE2	2:K:324:GLN:HG2	2.31	0.45
1:D:422:LEU:HB3	1:D:429:ILE:CD1	2.46	0.45
1:D:30:GLU:HG3	1:D:30:GLU:H	1.52	0.45
2:L:1589:PRO:HB2	2:L:1596:PHE:HB3	1.97	0.45
2:I:1028:VAL:HG22	2:I:1030:PHE:CE2	2.52	0.45
1:B:1078:ILE:HB	1:B:1338:GLY:HA3	1.97	0.45
2:I:617:PHE:CE1	2:I:822:ALA:HB2	2.51	0.45
2:K:805:MET:HE2	2:K:805:MET:HB3	1.77	0.45
2:I:663:ILE:HD12	2:I:663:ILE:N	2.30	0.45
2:L:204:ILE:HG21	2:L:312:VAL:HG21	1.98	0.45
2:I:1316:VAL:HG13	2:I:1348:PHE:CE2	2.51	0.45
2:I:1316:VAL:HB	2:I:1391:VAL:O	2.17	0.45
2:K:1335:PHE:CE1	2:K:1629:ILE:HD11	2.51	0.45
1:E:1294:ILE:HD11	1:E:1302:CYS:HB3	1.99	0.45
1:E:1307:PHE:CA	1:E:1568:ALA:HB2	2.47	0.45
2:G:1324:PHE:N	2:G:1583:VAL:HG11	2.31	0.45
1:B:1699:PRO:HG3	1:D:1405:ARG:C	2.37	0.45
2:G:818:THR:HG22	2:G:829:LYS:HB3	1.98	0.45
2:K:321:ARG:HE	2:K:450:HIS:HB3	1.82	0.45
2:J:649:GLU:HG3	2:J:650:LYS:HG3	1.97	0.45
1:C:562:SER:CB	1:D:551:LEU:HD21	2.46	0.45
2:J:979:LEU:CD2	2:J:999:ALA:HB3	2.45	0.45
2:I:1175:MET:CE	2:I:1192:LEU:HD11	2.46	0.45
1:F:1535:SER:HB3	1:F:1602:PHE:CD1	2.52	0.45

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:J:347:PRO:HA	2:J:432:PHE:CE1	2.51	0.45
2:I:884:PHE:CE2	2:I:1039:GLU:HA	2.51	0.45
2:G:1722:ALA:CB	2:G:1812:LEU:HD11	2.46	0.45
1:D:1055:THR:OG1	1:D:1057:GLU:HG2	2.16	0.45
2:J:980:LEU:HB2	2:J:996:ILE:CD1	2.46	0.45
2:H:1141:LYS:CE	2:H:1143:SER:HB2	2.47	0.45
1:A:1251:GLN:HG3	1:E:1321:MET:HE1	1.98	0.45
1:C:1343:PRO:HA	1:C:1526:SER:HA	1.99	0.45
2:K:1835:GLY:HA3	2:K:1839:GLY:C	2.36	0.45
2:H:1248:GLU:OE1	2:H:1248:GLU:HA	2.16	0.45
1:A:626:TRP:CZ3	1:A:898:PHE:HB2	2.52	0.45
2:H:342:ASN:HB2	2:H:406:ARG:NH2	2.32	0.45
1:E:1020:PHE:CE2	1:E:1028:MET:HG3	2.51	0.45
2:G:1281:ARG:HH22	2:G:1599:TYR:HE2	1.63	0.45
2:K:1634:SER:HB3	2:K:1684:GLU:HB2	1.99	0.45
1:B:1185:PRO:O	1:B:1188:LEU:HB2	2.17	0.45
2:J:615:TRP:HA	2:J:618:VAL:CG1	2.46	0.45
1:E:413:MET:O	1:E:416:ASP:HB2	2.16	0.45
2:K:353:ILE:O	2:K:353:ILE:HG22	2.16	0.45
2:I:1412:MET:HB3	2:I:1412:MET:HE3	1.84	0.45
1:F:1011:ARG:C	1:F:1011:ARG:HD2	2.37	0.45
2:L:2053:GLU:HG3	2:L:2053:GLU:H	1.47	0.45
2:L:420:PRO:HB2	2:L:423:GLN:HB2	1.98	0.45
2:H:759:GLN:N	2:H:760:PRO:CD	2.80	0.45
2:H:1650:THR:O	2:H:1669:ALA:HA	2.16	0.45
1:A:1504:ARG:NH2	1:A:1545:LEU:O	2.50	0.45
1:A:1160:VAL:HB	1:A:1352:MET:HE1	1.99	0.45
2:L:2017:PHE:HE2	2:L:2021:LEU:HD11	1.81	0.45
2:I:276:LEU:HD13	2:I:466:VAL:HG21	1.98	0.45
2:H:788:THR:CG2	2:H:1094:HIS:CE1	2.99	0.45
2:L:1299:VAL:O	2:L:1301:PHE:HD2	2.00	0.45
2:I:1637:VAL:HG11	2:I:1679:LEU:HD22	1.98	0.45
2:K:867:LYS:CD	2:K:1065:CYS:SG	3.02	0.45
1:A:628:TYR:C	1:A:628:TYR:HD1	2.20	0.45
2:I:1804:GLN:O	2:I:1861:PHE:HD1	1.99	0.45
2:G:1156:ASP:CB	2:G:1159:SER:H	2.22	0.45
2:L:868:LEU:HA	2:L:868:LEU:HD12	1.71	0.45
2:J:868:LEU:HD13	2:J:1068:GLN:HG3	1.97	0.45
2:L:460:ILE:O	2:L:485:ASP:HA	2.17	0.45
1:A:1213:VAL:HG13	1:A:1217:GLU:HB2	1.98	0.45
2:L:38:PRO:CD	2:L:104:LEU:HD11	2.42	0.45
2:H:1456:LEU:HD23	2:H:1457:HIS:N	2.31	0.45

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:J:674:ILE:HB	2:J:675:PRO:HD3	1.99	0.45
2:J:250:PHE:CD2	2:J:287:GLN:HG3	2.52	0.45
2:H:1410:GLY:HA2	2:H:1437:GLY:O	2.17	0.45
2:L:253:ILE:HB	2:L:287:GLN:HE22	1.80	0.45
2:J:411:PRO:HD2	2:J:414:LEU:HD11	1.98	0.45
2:G:289:ILE:HG21	2:G:493:MET:CE	2.47	0.45
1:C:883:LEU:HA	1:C:888:ILE:HD12	1.98	0.45
1:F:689:ARG:NH2	1:F:1591:ASN:HD21	2.15	0.45
1:B:983:GLN:O	1:B:1418:ILE:HD11	2.17	0.45
2:H:102:LEU:O	2:H:106:LEU:HG	2.17	0.45
2:I:1361:ILE:HD11	2:I:1433:PHE:CD2	2.52	0.45
1:B:999:LEU:HD11	1:B:1575:ASN:CB	2.46	0.45
2:I:731:ALA:HA	2:I:739:ILE:HD12	1.98	0.45
1:E:1467:LEU:O	1:E:1471:THR:HG23	2.17	0.45
2:J:1000:TYR:HA	2:J:1001:PRO:HD2	1.79	0.45
1:C:1378:ILE:HD11	1:C:1642:LEU:HB2	1.98	0.45
1:D:1037:ASN:HD21	2:J:1011:GLN:HG2	1.82	0.45
1:C:1154:LEU:HD23	1:C:1154:LEU:HA	1.79	0.45
2:K:1318:ALA:HA	2:K:1391:VAL:CG2	2.45	0.45
2:K:1362:PHE:N	2:K:1363:PRO:CD	2.80	0.45
2:G:529:ASN:HD22	2:G:552:VAL:CG2	2.29	0.45
2:L:1250:ARG:CZ	2:L:1592:VAL:HG12	2.46	0.45
2:H:529:ASN:HD22	2:H:552:VAL:CG2	2.30	0.45
2:L:1483:LEU:CD2	2:L:1525:VAL:HG11	2.47	0.45
1:C:1522:PHE:HE2	1:C:1535:SER:HA	1.82	0.45
2:L:740:ILE:HD12	2:L:740:ILE:N	2.32	0.45
1:D:1522:PHE:HE2	1:D:1535:SER:HA	1.82	0.45
2:K:740:ILE:N	2:K:740:ILE:HD12	2.31	0.45
1:A:28:TRP:CE2	1:A:53:LEU:HD22	2.52	0.45
2:G:192:THR:O	2:G:194:PRO:HD3	2.17	0.45
1:A:670:LEU:CD1	1:A:680:VAL:HG21	2.47	0.45
2:J:350:MET:HE3	2:J:435:ILE:HD12	1.99	0.45
2:I:170:TYR:CD2	2:I:507:PHE:HB3	2.51	0.45
2:I:1141:LYS:CE	2:I:1143:SER:HB2	2.47	0.45
1:D:1068:TYR:O	1:D:1072:ILE:HG13	2.17	0.45
2:G:786:GLU:CD	2:G:786:GLU:H	2.18	0.45
2:I:70:SER:HB2	2:I:74:GLU:OE2	2.16	0.45
2:I:2062:THR:HG22	2:I:2063:GLY:N	2.30	0.45
2:I:401:LEU:HD22	2:I:405:LEU:HG	1.98	0.45
1:D:501:ASP:HB2	1:D:505:ASN:HB2	1.99	0.45
2:J:888:ARG:HD3	2:J:891:ARG:NH1	2.32	0.45
1:D:414:TYR:C	1:D:414:TYR:CD2	2.90	0.45

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:L:737:PHE:O	2:L:773:ASN:HB3	2.17	0.45
1:B:1475:GLU:HB3	1:B:1479:ARG:NH2	2.32	0.45
1:C:1019:LYS:HE3	1:C:1019:LYS:HB2	1.69	0.45
2:L:353:ILE:HG22	2:L:353:ILE:O	2.16	0.45
1:F:1673:LEU:HD23	1:F:1673:LEU:HA	1.82	0.45
1:E:1524:GLY:HA2	1:E:1531:ASP:OD1	2.16	0.45
2:G:1146:LEU:O	2:G:1201:GLY:HA2	2.17	0.45
2:K:1183:GLN:HB2	2:K:1278:MET:CE	2.46	0.45
1:D:1475:GLU:HB3	1:D:1479:ARG:NH2	2.32	0.45
1:C:1586:VAL:CG2	1:C:1617:ILE:HD11	2.46	0.45
1:C:1682:LYS:HB3	1:F:1389:ILE:HD13	1.98	0.45
1:F:430:VAL:HG11	1:F:490:VAL:HG11	1.98	0.45
1:C:1159:LEU:HD12	1:C:1327:ALA:HB3	1.98	0.45
1:A:558:LEU:HA	1:F:557:ARG:NH1	2.31	0.45
2:G:580:LEU:HD12	2:G:1103:TYR:CD2	2.51	0.45
2:I:465:LEU:HB2	2:I:479:ARG:HG2	1.97	0.45
2:I:792:LEU:O	2:I:792:LEU:HD12	2.16	0.45
1:F:1213:VAL:HG13	1:F:1217:GLU:OE1	2.17	0.45
1:A:40:ARG:HH21	1:A:72:THR:HG22	1.81	0.45
1:A:1149:LEU:HD12	1:E:1097:LEU:HD13	1.97	0.45
2:L:1896:THR:CG2	2:L:1897:GLU:N	2.80	0.45
2:G:458:MET:C	2:G:459:LYS:HG3	2.37	0.45
2:J:208:LEU:HA	2:J:211:LEU:HD12	1.97	0.45
2:J:102:LEU:O	2:J:106:LEU:HG	2.16	0.45
1:A:47:ILE:HD12	2:G:1694:PHE:HE1	1.81	0.45
2:G:1335:PHE:N	2:G:1335:PHE:CD1	2.84	0.45
2:K:1334:ALA:HB3	2:K:1629:ILE:HD11	1.98	0.45
1:F:883:LEU:HA	1:F:888:ILE:HD12	1.98	0.45
2:G:837:GLY:HA3	2:G:1074:LYS:HG2	1.98	0.45
1:B:1212:TYR:CD2	1:B:1371:MET:HG2	2.52	0.45
1:E:1547:ARG:HG2	1:E:1604:TYR:CD1	2.45	0.45
2:H:1120:ILE:CD1	2:H:1169:TYR:CE1	2.98	0.45
2:J:823:HIS:HB3	2:J:1051:GLU:HG3	1.99	0.45
2:J:641:MET:CE	2:J:676:LEU:HD12	2.47	0.45
2:J:1175:MET:CE	2:J:1192:LEU:HD11	2.45	0.45
1:E:1640:LYS:CG	1:E:1641:TYR:CD1	3.00	0.45
2:G:1084:LYS:O	2:G:1088:ASP:HB2	2.16	0.45
2:H:1175:MET:HE1	2:H:1234:ILE:HG21	1.99	0.45
2:G:321:ARG:HE	2:G:450:HIS:HB3	1.80	0.45
1:F:29:ILE:N	2:L:1920:TYR:O	2.50	0.45
2:H:1348:PHE:CE1	2:H:1351:VAL:HG11	2.52	0.45
2:H:1208:ASN:N	2:H:1209:PRO:HD3	2.31	0.45

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:D:1473:HIS:ND1	1:D:1473:HIS:C	2.70	0.45
1:A:653:LYS:HD3	1:A:742:TYR:CE2	2.52	0.45
2:L:980:LEU:HD21	2:L:986:LEU:HD21	1.99	0.45
1:B:655:ALA:HB3	1:B:680:VAL:HG12	1.98	0.45
1:B:921:GLU:HG3	1:B:922:ILE:H	1.82	0.45
2:J:699:ILE:H	2:J:699:ILE:CD1	2.30	0.45
2:H:1229:VAL:HG12	2:H:1230:LYS:N	2.32	0.45
1:F:1544:HIS:CD2	1:F:1544:HIS:O	2.70	0.45
2:I:1507:VAL:O	2:I:1531:GLU:HA	2.16	0.45
1:D:484:PRO:HA	1:D:485:PRO:HD3	1.64	0.45
2:L:1452:VAL:O	2:L:1454:MET:HG3	2.16	0.45
1:F:631:LYS:O	1:F:635:ILE:HG13	2.17	0.45
1:E:28:TRP:CZ2	1:E:53:LEU:HD22	2.51	0.45
1:F:995:VAL:HG13	1:F:1375:ILE:HG23	1.99	0.45
1:C:988:VAL:HG12	1:C:990:LEU:HD23	1.98	0.45
2:H:555:LYS:HB3	2:H:556:PRO:HD3	1.99	0.45
2:G:1650:THR:O	2:G:1669:ALA:HA	2.16	0.45
1:C:631:LYS:O	1:C:635:ILE:HG13	2.17	0.45
1:E:458:GLU:H	1:E:458:GLU:CD	2.20	0.45
2:L:444:LEU:HD23	2:L:444:LEU:HA	1.71	0.45
1:B:358:PHE:C	1:B:358:PHE:CD2	2.90	0.45
1:D:1050:TRP:CE3	1:D:1050:TRP:HA	2.52	0.45
2:J:912:LYS:NZ	2:J:1044:LYS:O	2.49	0.45
2:K:1451:GLU:HG3	2:K:1541:ILE:HD11	1.98	0.45
1:C:1264:MET:O	1:F:1389:ILE:HG23	2.16	0.45
1:A:1406:GLU:OE2	1:A:1504:ARG:NH1	2.49	0.45
2:J:1338:ARG:HH22	2:L:327:PRO:N	2.13	0.45
1:C:1160:VAL:HB	1:C:1352:MET:HE1	1.99	0.45
1:A:557:ARG:O	1:F:557:ARG:HD2	2.17	0.45
2:I:298:ALA:HB2	2:I:304:PHE:HA	1.98	0.45
2:G:1103:TYR:O	2:G:1106:LYS:HB2	2.17	0.45
2:K:788:THR:HG21	2:K:810:CYS:SG	2.57	0.45
2:L:1106:LYS:HB2	2:L:1109:ASN:ND2	2.31	0.45
2:J:1106:LYS:HB2	2:J:1109:ASN:ND2	2.32	0.45
1:E:1560:TYR:CE2	1:E:1589:ASN:HA	2.52	0.45
2:J:80:ILE:HG12	2:J:105:ILE:CG2	2.47	0.45
2:G:1410:GLY:HA2	2:G:1437:GLY:O	2.17	0.45
2:J:911:GLN:HE21	2:J:1064:THR:HG23	1.82	0.45
2:G:612:THR:CG2	2:G:629:GLU:O	2.65	0.45
1:A:1213:VAL:HG13	1:A:1217:GLU:OE1	2.17	0.45
2:K:208:LEU:HA	2:K:211:LEU:HD12	1.98	0.45
2:J:211:LEU:HB3	2:J:316:PHE:CZ	2.51	0.45

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:C:1108:PRO:HA	1:C:1140:VAL:O	2.16	0.45
2:G:1521:GLU:OE1	2:G:1521:GLU:HA	2.17	0.45
2:H:159:PHE:CD2	2:H:169:ILE:HD12	2.52	0.45
1:A:1154:LEU:HD21	1:E:1118:GLU:OE2	2.16	0.45
1:E:957:THR:HG22	2:K:968:GLU:HG3	1.98	0.45
2:L:440:HIS:CD2	2:L:499:VAL:CG2	2.99	0.45
2:L:381:SER:HB2	2:L:440:HIS:HB2	1.99	0.45
2:K:771:CYS:HB3	2:K:774:ILE:CD1	2.43	0.45
1:F:1444:GLN:O	1:F:1447:VAL:HB	2.17	0.45
1:F:991:ASP:HA	1:F:1364:THR:CG2	2.47	0.45
1:B:1401:LEU:HD22	1:D:1697:LEU:HD21	1.98	0.45
2:G:649:GLU:HG3	2:G:650:LYS:HG3	1.99	0.45
2:J:541:LEU:HG	2:J:552:VAL:CG1	2.47	0.45
2:G:228:LEU:O	2:G:232:HIS:CD2	2.69	0.45
1:F:1386:THR:HG22	1:F:1387:ASP:H	1.82	0.45
2:I:1359:LYS:N	2:I:1360:PRO:CD	2.80	0.45
2:G:1206:ILE:O	2:G:1209:PRO:HG3	2.17	0.45
2:K:141:TYR:HA	2:K:144:ARG:HB3	1.98	0.45
1:D:532:ILE:CD1	1:D:866:LEU:O	2.64	0.45
1:D:655:ALA:CB	1:D:742:TYR:HB2	2.47	0.45
2:J:737:PHE:O	2:J:773:ASN:HB3	2.17	0.45
1:E:918:LEU:O	1:E:921:GLU:HG3	2.17	0.45
2:I:2062:THR:HG22	2:I:2064:SER:N	2.32	0.45
1:F:869:ARG:O	1:F:903:GLY:HA3	2.17	0.45
1:F:501:ASP:HB2	1:F:505:ASN:HB2	1.98	0.45
2:K:1017:LEU:O	2:K:1021:GLN:HG3	2.17	0.45
2:J:1127:GLU:HA	2:J:1128:PRO:HD3	1.75	0.45
1:F:744:VAL:HG12	1:F:746:PHE:CD1	2.52	0.45
1:C:511:VAL:HG12	1:C:512:PRO:HD2	1.99	0.45
1:F:1580:VAL:HG22	1:F:1585:ILE:O	2.16	0.45
1:D:536:SER:HB3	1:D:540:LYS:HD2	1.98	0.45
2:H:1835:GLY:HA3	2:H:1839:GLY:C	2.37	0.45
1:B:31:THR:HG23	2:H:2040:ILE:CG2	2.47	0.45
2:G:444:LEU:HD23	2:G:444:LEU:HA	1.77	0.45
2:K:1108:GLU:HG3	2:K:1108:GLU:H	1.58	0.45
2:H:2038:LYS:HD3	2:H:2038:LYS:HA	1.74	0.45
1:E:427:ARG:O	1:E:430:VAL:HB	2.17	0.45
2:G:298:ALA:HB2	2:G:304:PHE:HA	1.99	0.45
2:J:1464:LEU:C	2:J:1464:LEU:HD13	2.37	0.45
2:J:1678:VAL:O	2:J:1679:LEU:HD23	2.16	0.45
2:K:868:LEU:HD23	2:K:1066:ILE:HD12	1.99	0.45
2:L:1766:PHE:CE1	2:L:1869:VAL:HB	2.52	0.45

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:G:2058:VAL:CG1	2:G:2067:ILE:HD12	2.47	0.45
2:L:868:LEU:HD13	2:L:1068:GLN:HG3	1.98	0.45
2:L:914:TRP:CH2	2:L:1033:ALA:HA	2.52	0.45
1:A:1209:PHE:CZ	1:A:1301:VAL:HG21	2.51	0.45
1:A:438:ASN:O	1:A:705:ARG:HG2	2.17	0.45
2:H:607:GLY:HA2	2:H:612:THR:HG21	1.97	0.45
2:H:612:THR:HG21	2:H:629:GLU:O	2.17	0.45
2:I:1179:GLU:CD	2:I:1179:GLU:N	2.62	0.45
2:G:663:ILE:H	2:G:663:ILE:CD1	2.23	0.45
2:J:663:ILE:N	2:J:663:ILE:HD12	2.31	0.45
2:G:1587:TYR:O	2:G:1588:ASN:C	2.54	0.45
2:K:196:PHE:HD2	2:K:266:LYS:CB	2.29	0.45
1:D:883:LEU:HA	1:D:888:ILE:HD12	1.98	0.45
2:G:1028:VAL:HG22	2:G:1030:PHE:CE2	2.51	0.45
1:B:1622:VAL:O	1:B:1622:VAL:HG13	2.17	0.45
1:E:1083:PRO:HB3	1:E:1089:TYR:O	2.17	0.45
2:J:1884:CYS:HB3	2:J:1936:LEU:CD1	2.44	0.45
1:F:1014:MET:O	1:F:1590:ARG:NH2	2.32	0.45
2:K:1362:PHE:O	2:K:1363:PRO:O	2.35	0.45
2:J:1362:PHE:N	2:J:1363:PRO:CD	2.79	0.45
1:F:967:PHE:HB3	1:F:968:PRO:HD2	1.99	0.45
1:A:1586:VAL:CG2	1:A:1617:ILE:HD11	2.47	0.45
1:B:1388:LYS:HD3	1:D:1692:GLN:HE22	1.82	0.45
1:B:41:THR:HG21	2:H:1691:ALA:HB2	1.99	0.45
2:I:918:ASN:HB3	2:I:924:VAL:HG21	1.99	0.45
1:A:1522:PHE:HE2	1:A:1535:SER:HA	1.81	0.45
2:L:179:ILE:HG12	2:L:182:TYR:HB3	1.98	0.45
2:H:1402:ASN:O	2:H:1403:ALA:HB2	2.17	0.45
2:L:1631:ARG:NH2	2:L:1688:PRO:HA	2.32	0.45
2:I:1818:PHE:HE2	2:I:1822:ARG:NH1	2.13	0.45
1:E:29:ILE:HD11	2:K:1922:VAL:CA	2.47	0.45
2:K:910:PHE:HD2	2:K:912:LYS:H	1.64	0.45
2:L:356:LEU:HA	2:L:356:LEU:HD23	1.65	0.45
1:B:414:TYR:CD2	1:B:414:TYR:C	2.91	0.45
2:H:420:PRO:HB2	2:H:423:GLN:HB2	1.99	0.45
2:I:859:SER:CB	2:I:863:GLU:HG3	2.47	0.45
1:B:1170:ALA:HB3	1:B:1188:LEU:HD13	1.98	0.45
2:L:1910:VAL:CG1	2:L:1973:ILE:HG21	2.46	0.45
2:L:712:ARG:O	2:L:738:PRO:HG2	2.16	0.45
2:L:888:ARG:HD3	2:L:891:ARG:NH1	2.31	0.45
1:C:411:LEU:HD22	1:C:1612:ILE:HD13	1.99	0.45
2:L:662:LEU:HD22	2:L:673:GLN:OE1	2.17	0.45

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:1580:VAL:HG22	1:A:1585:ILE:O	2.17	0.45
1:C:1071:TYR:C	1:C:1071:TYR:CD2	2.90	0.45
2:H:1555:VAL:O	2:H:1555:VAL:HG12	2.16	0.45
2:K:336:LEU:C	2:K:336:LEU:HD23	2.36	0.45
2:K:358:ARG:HH21	2:K:383:VAL:HG21	1.81	0.45
1:D:648:LEU:HD12	1:D:649:THR:N	2.32	0.45
2:G:1236:LEU:O	2:G:1237:VAL:HG23	2.16	0.45
1:E:541:VAL:O	1:E:545:LEU:HG	2.16	0.45
2:K:27:THR:HG22	2:K:32:GLU:CD	2.37	0.45
2:I:664:TYR:CD1	2:I:670:MET:HE1	2.52	0.45
2:G:785:SER:O	2:G:789:TYR:HB2	2.17	0.45
2:K:580:LEU:HD12	2:K:1103:TYR:CD2	2.52	0.45
1:A:1148:LEU:HD21	1:E:1150:ILE:HG12	1.99	0.45
2:G:1266:HIS:C	2:G:1268:GLU:H	2.20	0.45
2:I:613:VAL:CG1	2:I:614:PRO:HD3	2.47	0.45
2:G:1067:LEU:HB2	3:G:2101:FMN:HM71	1.98	0.45
1:B:574:ILE:H	1:B:574:ILE:HG12	1.58	0.45
2:H:781:GLY:HA2	2:H:1071:VAL:CG1	2.38	0.45
2:L:857:VAL:HG11	2:L:876:TRP:NE1	2.30	0.45
1:F:1037:ASN:CG	1:F:1674:ILE:HG23	2.36	0.45
2:H:1372:LYS:O	2:H:1436:ARG:HG2	2.17	0.45
2:H:1067:LEU:HB2	3:H:2101:FMN:C7M	2.47	0.45
2:J:617:PHE:HE2	2:J:628:ILE:HD11	1.81	0.45
1:A:683:THR:HB	1:A:714:PHE:CB	2.42	0.45
2:I:1031:VAL:HG22	2:I:1041:TRP:HB3	1.98	0.45
2:L:1261:PHE:HA	2:L:1284:ARG:NH1	2.32	0.45
2:I:621:THR:OG1	2:I:1083:ILE:HD13	2.17	0.45
2:L:942:MET:HG2	2:L:1029:PRO:HG2	1.98	0.45
1:B:1565:PRO:CG	1:B:1572:TRP:CZ3	2.95	0.45
2:G:489:GLU:HG2	2:G:492:ARG:CZ	2.47	0.45
1:D:905:LEU:HD22	1:D:911:LEU:CD2	2.47	0.45
1:C:1317:GLU:CG	1:F:1250:LEU:HB2	2.43	0.45
2:I:506:VAL:O	2:I:506:VAL:HG22	2.16	0.45
2:L:1904:VAL:HG22	2:L:1939:LEU:CD2	2.46	0.45
2:I:320:LEU:O	2:I:324:GLN:HG3	2.17	0.45
2:J:1316:VAL:HG13	2:J:1348:PHE:HE2	1.82	0.45
1:D:973:TRP:CD1	1:D:1648:LYS:HD2	2.52	0.45
2:G:1692:TYR:O	2:G:1833:PHE:HA	2.17	0.45
1:B:1432:ILE:HD11	1:B:1481:GLN:CB	2.46	0.45
2:K:1692:TYR:O	2:K:1833:PHE:HA	2.16	0.45
1:F:1001:GLU:C	1:F:1002:ILE:HD12	2.38	0.45
1:F:433:CYS:SG	1:F:473:LEU:HD13	2.57	0.45

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:F:1640:LYS:HG3	1:F:1641:TYR:CD1	2.52	0.45
2:G:1309:PHE:N	2:G:1309:PHE:CD1	2.85	0.45
2:K:776:LEU:HG	2:K:807:PHE:CD2	2.52	0.45
1:D:88:ILE:HG21	2:J:1821:MET:CE	2.47	0.45
2:G:170:TYR:CD2	2:G:507:PHE:HB3	2.52	0.45
2:G:73:VAL:HG13	2:G:113:PHE:HD2	1.82	0.45
2:G:980:LEU:HB2	2:G:996:ILE:CD1	2.47	0.45
2:H:912:LYS:NZ	2:H:1044:LYS:O	2.50	0.45
2:H:2062:THR:HG22	2:H:2064:SER:N	2.32	0.45
1:C:1359:VAL:CG1	1:C:1360:GLN:N	2.80	0.45
2:I:1160:PHE:CE1	2:I:1164:ILE:HD11	2.52	0.45
2:I:691:THR:OG1	2:I:715:SER:HB3	2.17	0.45
2:J:1084:LYS:O	2:J:1088:ASP:HB2	2.17	0.45
2:J:342:ASN:CB	2:J:406:ARG:NH2	2.80	0.45
2:L:1762:MET:HG2	2:L:1779:LYS:NZ	2.32	0.45
2:K:1047:LEU:O	2:K:1049:GLN:N	2.50	0.45
1:E:961:ALA:HB2	1:E:1022:LEU:HD12	1.99	0.45
2:I:1566:LYS:O	2:I:1568:PRO:HD3	2.17	0.45
1:B:1457:GLU:HG3	1:B:1457:GLU:H	1.41	0.45
1:B:948:HIS:O	1:B:952:TYR:HD2	2.00	0.45
1:F:421:ARG:HH22	1:F:1613:LYS:HB3	1.82	0.45
2:H:657:GLY:HA3	2:H:688:GLU:HG2	1.99	0.45
2:H:1594:ARG:NH1	2:H:1594:ARG:CG	2.61	0.44
1:F:427:ARG:CG	1:F:427:ARG:NH1	2.48	0.44
2:I:1464:LEU:HD11	2:I:1468:ARG:HD2	1.98	0.44
2:L:580:LEU:HD12	2:L:1103:TYR:CD2	2.52	0.44
2:H:1099:LEU:HD12	2:H:1103:TYR:CB	2.46	0.44
2:H:603:VAL:HG22	2:H:810:CYS:SG	2.57	0.44
2:G:2017:PHE:HE2	2:G:2021:LEU:HD11	1.82	0.44
2:J:468:PRO:HD3	2:J:479:ARG:HH21	1.82	0.44
1:F:673:LEU:HD21	1:F:884:MET:CE	2.47	0.44
2:K:44:GLN:HE21	2:K:48:LEU:HD21	1.82	0.44
1:E:532:ILE:HG22	1:E:907:PHE:CG	2.52	0.44
1:B:1363:MET:HB2	1:B:1363:MET:HE2	1.77	0.44
2:J:1521:GLU:HA	2:J:1521:GLU:OE1	2.17	0.44
2:G:705:TYR:HA	2:G:709:LEU:CD2	2.47	0.44
3:H:2101:FMN:O4'	3:H:2101:FMN:H1'2	2.16	0.44
1:F:612:ILE:HA	1:F:613:PRO:HD2	1.42	0.44
1:F:535:TYR:OH	1:F:630:LYS:HE3	2.17	0.44
2:L:1261:PHE:HE2	2:L:1285:ILE:HD11	1.83	0.44
2:K:215:TRP:HE3	2:K:215:TRP:N	2.15	0.44
1:E:1278:GLY:CA	1:E:1630:LYS:HE2	2.43	0.44

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:L:703:ASN:O	2:L:707:GLN:HG3	2.17	0.44
1:D:1444:GLN:O	1:D:1447:VAL:HB	2.18	0.44
1:E:1330:GLU:CG	1:E:1333:ARG:NH1	2.78	0.44
2:L:1808:PRO:O	2:L:1812:LEU:HD23	2.17	0.44
2:H:1285:ILE:O	2:H:1288:PHE:HB3	2.17	0.44
2:L:805:MET:HE2	2:L:805:MET:HB3	1.80	0.44
2:L:731:ALA:CB	2:L:739:ILE:HD12	2.47	0.44
1:E:340:LEU:HD22	1:E:351:LEU:HD11	1.98	0.44
1:D:929:ARG:O	1:D:933:ILE:HG13	2.17	0.44
2:K:1626:GLU:O	2:K:1627:ASN:HB2	2.16	0.44
1:F:1052:ASP:HB3	1:F:1055:THR:HG23	1.98	0.44
2:G:1873:ARG:NH1	2:G:2002:ASP:CB	2.80	0.44
1:D:1052:ASP:HB3	1:D:1055:THR:HG23	1.99	0.44
1:E:623:PHE:N	1:E:623:PHE:HD2	2.15	0.44
1:E:995:VAL:CG1	1:E:1375:ILE:HG23	2.47	0.44
1:E:1042:LEU:HD23	1:E:1042:LEU:HA	1.73	0.44
1:C:902:ASN:C	1:C:904:GLY:H	2.19	0.44
2:G:1250:ARG:CD	2:G:1250:ARG:H	2.30	0.44
2:J:1650:THR:O	2:J:1669:ALA:HA	2.17	0.44
1:A:1343:PRO:HA	1:A:1526:SER:HA	1.99	0.44
1:B:1158:ARG:HD2	1:B:1324:THR:HB	1.99	0.44
2:K:1314:GLU:O	2:K:1394:VAL:HA	2.17	0.44
1:A:902:ASN:O	1:A:904:GLY:N	2.46	0.44
2:K:990:TYR:N	2:K:991:PRO:CD	2.80	0.44
1:A:1129:ILE:HA	1:A:1139:THR:O	2.18	0.44
2:K:784:GLY:HA3	2:K:786:GLU:OE2	2.17	0.44
2:L:1127:GLU:HA	2:L:1128:PRO:HD3	1.76	0.44
2:J:821:GLU:HG2	2:J:821:GLU:H	1.43	0.44
1:A:1137:GLN:NE2	1:A:1137:GLN:HA	2.32	0.44
2:I:286:SER:O	2:I:494:ILE:HD11	2.17	0.44
2:K:1723:ASP:OD1	2:K:1735:ILE:HG13	2.17	0.44
2:I:22:ARG:CD	2:I:39:THR:HA	2.48	0.44
2:H:276:LEU:HD11	2:H:296:ALA:HA	1.99	0.44
2:I:1067:LEU:HB2	3:I:2101:FMN:HM71	1.98	0.44
2:J:613:VAL:H	2:J:614:PRO:HD3	1.80	0.44
1:A:1301:VAL:HG23	1:A:1363:MET:CG	2.47	0.44
2:K:1521:GLU:OE1	2:K:1521:GLU:HA	2.17	0.44
1:E:679:LYS:HG2	1:E:708:GLN:CB	2.42	0.44
2:H:192:THR:O	2:H:194:PRO:HD3	2.16	0.44
2:H:208:LEU:HD12	2:H:227:ILE:HD11	1.98	0.44
2:I:215:TRP:HE3	2:I:215:TRP:N	2.14	0.44
1:B:1004:PRO:HD3	1:B:1572:TRP:CH2	2.51	0.44

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:I:1521:GLU:OE1	2:I:1521:GLU:HA	2.18	0.44
1:B:755:GLU:CG	1:E:831:GLU:HG2	2.45	0.44
2:G:1930:ALA:HB1	2:G:2004:PRO:HB3	1.99	0.44
2:G:1871:VAL:CG2	2:G:2004:PRO:HD3	2.47	0.44
2:I:1259:LEU:HD11	2:I:1285:ILE:HG12	1.99	0.44
2:L:440:HIS:HD2	2:L:497:ASP:O	2.01	0.44
2:I:1793:TYR:CD2	2:I:1805:PHE:CZ	3.04	0.44
1:C:1622:VAL:O	1:C:1622:VAL:HG13	2.17	0.44
2:L:129:ILE:HG21	2:L:132:LYS:HG3	1.99	0.44
2:J:1204:VAL:HA	2:J:1218:SER:O	2.18	0.44
2:G:1579:ASN:O	2:G:1583:VAL:HG23	2.17	0.44
2:I:1977:ARG:CD	2:I:1978:LYS:HE3	2.47	0.44
2:L:192:THR:O	2:L:194:PRO:HD3	2.16	0.44
1:D:1168:TRP:HZ2	1:D:1192:VAL:HG11	1.83	0.44
2:L:1250:ARG:NH1	2:L:1592:VAL:CG1	2.80	0.44
2:H:541:LEU:HG	2:H:552:VAL:CG1	2.46	0.44
2:J:1346:MET:HB2	2:J:1427:MET:HE1	1.99	0.44
1:E:1055:THR:OG1	1:E:1057:GLU:HG2	2.17	0.44
1:A:1601:GLN:HB2	1:A:1602:PHE:CD2	2.53	0.44
1:E:1473:HIS:C	1:E:1473:HIS:ND1	2.70	0.44
2:K:120:HIS:HD2	2:K:137:VAL:HG21	1.83	0.44
2:H:113:PHE:CD1	2:H:113:PHE:N	2.85	0.44
1:C:450:TYR:CD1	1:C:1551:ASN:HB2	2.52	0.44
1:C:874:GLN:H	1:C:874:GLN:HG2	1.35	0.44
2:H:356:LEU:HB3	2:H:361:VAL:HG23	1.99	0.44
1:C:1591:ASN:C	1:C:1593:ASP:H	2.20	0.44
2:J:342:ASN:HB2	2:J:406:ARG:NH2	2.31	0.44
1:A:902:ASN:C	1:A:904:GLY:H	2.20	0.44
1:C:1587:PRO:HA	1:C:1611:SER:OG	2.18	0.44
1:F:1175:VAL:HA	1:F:1176:PRO:HD3	1.82	0.44
2:I:1636:HIS:O	2:I:1681:GLY:HA3	2.17	0.44
1:A:21:GLN:HE22	2:G:1841:TYR:HE1	1.64	0.44
2:K:759:GLN:N	2:K:760:PRO:CD	2.80	0.44
1:B:484:PRO:HA	1:B:485:PRO:HD3	1.64	0.44
2:J:1507:VAL:O	2:J:1531:GLU:HA	2.16	0.44
1:E:1129:ILE:HA	1:E:1139:THR:O	2.17	0.44
2:H:1194:ARG:HD2	2:H:1598:SER:O	2.17	0.44
2:G:1489:VAL:HB	2:G:1514:LEU:HB2	2.00	0.44
1:B:1313:GLU:H	1:B:1313:GLU:HG2	1.54	0.44
2:I:336:LEU:HD23	2:I:336:LEU:C	2.38	0.44
2:L:1245:THR:HG23	2:L:1260:THR:OG1	2.17	0.44
1:B:14:LEU:HD21	2:H:1844:LEU:HD21	1.99	0.44

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:I:2017:PHE:CE2	2:I:2021:LEU:HD11	2.52	0.44
1:D:755:GLU:C	1:D:757:ASP:N	2.71	0.44
1:A:1150:ILE:HG12	1:E:1148:LEU:CD2	2.48	0.44
1:C:1491:ASN:N	1:C:1491:ASN:HD22	2.15	0.44
1:E:1213:VAL:HG13	1:E:1217:GLU:HB2	2.00	0.44
1:C:1148:LEU:HD21	1:F:1150:ILE:HG12	2.00	0.44
2:K:26:LEU:HA	2:K:26:LEU:HD23	1.85	0.44
2:I:868:LEU:HA	2:I:868:LEU:HD12	1.78	0.44
2:J:870:THR:HG21	2:J:1064:THR:O	2.18	0.44
1:C:1209:PHE:CZ	1:C:1301:VAL:HG21	2.52	0.44
2:J:1445:THR:HG23	2:J:1498:PHE:HB2	1.99	0.44
1:F:1301:VAL:HG23	1:F:1363:MET:HG3	1.98	0.44
2:K:440:HIS:CD2	2:K:499:VAL:CG2	3.01	0.44
1:E:1223:GLY:CA	1:E:1276:PRO:HD2	2.43	0.44
2:L:1404:VAL:CG2	2:L:1413:VAL:HG22	2.42	0.44
2:H:215:TRP:HE3	2:H:216:ASP:N	2.09	0.44
2:I:1589:PRO:HB2	2:I:1596:PHE:HB3	1.99	0.44
2:H:376:ARG:HH21	2:I:1339:GLY:HA2	1.82	0.44
2:J:1115:TYR:CZ	2:J:1174:ALA:HB2	2.52	0.44
2:K:197:VAL:HA	2:K:262:MET:HE1	2.00	0.44
1:B:36:LEU:O	1:B:76:ARG:NH2	2.49	0.44
2:K:737:PHE:O	2:K:773:ASN:HB3	2.17	0.44
1:A:929:ARG:O	1:A:933:ILE:HG13	2.16	0.44
2:J:938:MET:CE	2:J:959:THR:HA	2.47	0.44
2:K:1694:PHE:CD2	2:K:1843:ALA:CA	2.98	0.44
1:B:973:TRP:CD1	1:B:1648:LYS:HD2	2.52	0.44
1:F:1470:ARG:HA	1:F:1470:ARG:HD3	1.87	0.44
1:D:1275:THR:HA	1:D:1276:PRO:HD3	1.67	0.44
2:I:1977:ARG:HD2	2:I:1978:LYS:HE3	1.99	0.44
2:H:1977:ARG:HD2	2:H:1978:LYS:HE3	1.99	0.44
2:K:1248:GLU:HA	2:K:1248:GLU:OE1	2.16	0.44
2:G:740:ILE:N	2:G:740:ILE:HD12	2.33	0.44
1:B:1364:THR:CG2	1:B:1366:GLN:HB2	2.47	0.44
2:G:1812:LEU:HD21	2:G:1857:VAL:HG11	1.99	0.44
2:H:1130:ILE:HD12	2:H:1133:LEU:HD22	1.98	0.44
1:B:655:ALA:O	1:B:680:VAL:HA	2.17	0.44
2:K:1146:LEU:O	2:K:1201:GLY:HA2	2.18	0.44
2:I:1998:LEU:HB2	2:I:2001:ILE:HD12	1.99	0.44
1:F:1686:PRO:HB2	1:F:1713:PHE:CD2	2.51	0.44
2:G:291:VAL:O	2:G:295:ILE:HB	2.18	0.44
1:C:577:LEU:HD23	1:C:584:ILE:HG21	1.99	0.44
2:K:1910:VAL:HG11	2:K:1973:ILE:HG21	2.00	0.44

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:K:270:ARG:HG3	2:K:274:GLU:OE1	2.17	0.44
2:K:421:PHE:C	2:K:423:GLN:H	2.20	0.44
1:F:533:SER:OG	1:F:611:THR:HB	2.17	0.44
2:H:888:ARG:HD3	2:H:891:ARG:NH1	2.32	0.44
2:J:1899:ALA:O	2:J:1903:VAL:HG23	2.17	0.44
1:B:635:ILE:HG13	1:B:635:ILE:H	1.58	0.44
2:G:1207:THR:O	2:G:1215:THR:HA	2.17	0.44
1:C:1185:PRO:O	1:C:1188:LEU:HB2	2.18	0.44
1:A:46:GLU:HB3	1:A:80:CYS:HA	2.00	0.44
2:I:644:ALA:O	2:I:648:ILE:HG13	2.18	0.44
1:C:1321:MET:HB3	1:C:1321:MET:HE2	1.68	0.44
1:E:490:VAL:O	1:E:490:VAL:HG12	2.17	0.44
2:L:580:LEU:CD2	2:L:1095:ILE:HG22	2.47	0.44
2:J:1086:ILE:O	2:J:1090:ILE:HG13	2.17	0.44
2:I:1099:LEU:HD12	2:I:1103:TYR:HB2	1.98	0.44
2:I:1301:PHE:HD1	2:I:1364:ARG:HG2	1.83	0.44
2:H:911:GLN:HE21	2:H:1064:THR:HG23	1.83	0.44
2:J:1637:VAL:HG11	2:J:1679:LEU:HD22	2.00	0.44
1:A:617:LEU:HD11	1:A:636:TYR:HB2	1.99	0.44
2:I:1266:HIS:CD2	2:I:1266:HIS:N	2.86	0.44
2:I:866:HIS:HB3	2:I:1068:GLN:O	2.17	0.44
2:K:1346:MET:HG2	2:K:1617:ARG:NH2	2.33	0.44
2:L:35:PHE:CE1	2:L:105:ILE:HD13	2.51	0.44
2:L:837:GLY:HA3	2:L:1074:LYS:HG2	1.99	0.44
2:G:476:GLN:HG2	2:G:476:GLN:H	1.64	0.44
2:K:381:SER:HB2	2:K:440:HIS:HB2	1.99	0.44
1:A:728:TYR:CE2	1:A:736:LEU:HD13	2.52	0.44
2:H:1521:GLU:OE1	2:H:1521:GLU:HA	2.18	0.44
1:B:1338:GLY:H	1:B:1340:MET:HG3	1.83	0.44
2:J:930:THR:HG23	2:J:933:GLU:H	1.80	0.44
2:I:1265:TYR:CE2	2:I:1267:PRO:HG3	2.52	0.44
2:K:1261:PHE:HA	2:K:1284:ARG:NH1	2.33	0.44
1:B:831:GLU:HG2	1:E:755:GLU:CG	2.44	0.44
2:L:440:HIS:CD2	2:L:499:VAL:HG23	2.52	0.44
2:G:196:PHE:HD2	2:G:266:LYS:CB	2.30	0.44
2:H:196:PHE:O	2:H:262:MET:HE1	2.17	0.44
1:E:1574:LEU:O	1:E:1578:LEU:HG	2.18	0.44
2:H:1886:VAL:CG1	2:H:1900:LEU:HD11	2.46	0.44
1:B:767:HIS:CG	1:B:813:LEU:HD12	2.52	0.44
2:J:1248:GLU:HB2	2:J:1596:PHE:CE1	2.52	0.44
2:H:2057:GLU:HA	2:H:2060:ARG:HH12	1.80	0.44
2:J:957:LYS:HE2	2:J:1022:ARG:HH22	1.81	0.44

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:G:1938:THR:HG22	2:G:1977:ARG:HA	2.00	0.44
2:G:1130:ILE:HD12	2:G:1133:LEU:HD22	1.99	0.44
1:B:1052:ASP:HB3	1:B:1055:THR:HG23	2.00	0.44
1:D:655:ALA:HB2	1:D:742:TYR:HB2	2.00	0.44
1:E:1472:GLU:O	1:E:1475:GLU:HB2	2.18	0.44
2:L:1382:MET:HB3	2:L:1633:ARG:NH1	2.32	0.44
2:K:113:PHE:N	2:K:113:PHE:CD1	2.84	0.44
1:C:995:VAL:CG1	1:C:1375:ILE:HG23	2.48	0.44
2:K:1496:VAL:HG23	2:K:1507:VAL:HG12	2.00	0.44
1:A:414:TYR:C	1:A:414:TYR:CD2	2.91	0.44
2:I:2063:GLY:O	2:I:2065:PRO:HD3	2.16	0.44
1:C:1038:HIS:CE1	1:C:1042:LEU:HG	2.53	0.44
1:A:398:VAL:HG22	1:A:710:VAL:HG22	1.99	0.44
2:G:274:GLU:O	2:G:278:ARG:HG2	2.18	0.44
2:L:399:TYR:CE2	2:L:403:LEU:HD11	2.52	0.44
2:I:161:ALA:HA	2:I:164:GLU:HB2	2.00	0.44
2:I:357:THR:HG22	2:I:359:SER:H	1.83	0.44
1:C:24:MET:HE2	2:I:2043:VAL:HG13	1.99	0.44
2:H:834:ASP:O	2:H:836:PRO:HD3	2.18	0.44
1:E:1158:ARG:HD2	1:E:1324:THR:HB	1.99	0.44
2:H:1932:ASP:OD2	2:H:1934:ARG:HD2	2.17	0.44
2:H:1412:MET:HB3	2:H:1412:MET:HE3	1.80	0.44
1:F:1457:GLU:HG3	1:F:1457:GLU:H	1.41	0.44
1:B:1544:HIS:CG	1:B:1544:HIS:O	2.70	0.44
2:H:1572:ARG:HG2	2:H:1647:ASP:O	2.17	0.44
2:K:1818:PHE:HE2	2:K:1822:ARG:HH12	1.63	0.44
2:L:1881:TYR:HB2	2:L:2004:PRO:HG3	2.00	0.44
2:K:601:PRO:HA	2:K:602:PRO:HD3	1.87	0.44
1:E:1148:LEU:HD23	1:E:1148:LEU:HA	1.77	0.44
2:J:785:SER:O	2:J:789:TYR:HB2	2.16	0.44
2:H:590:VAL:CG2	2:H:1091:HIS:CD2	3.00	0.44
1:D:539:THR:O	1:D:542:GLN:HG2	2.18	0.44
2:K:1290:TYR:CG	2:K:1299:VAL:CG1	2.92	0.44
2:J:762:LEU:HD11	2:J:800:PHE:CB	2.48	0.44
2:L:1637:VAL:HG11	2:L:1679:LEU:HD22	1.98	0.44
2:H:1266:HIS:CE1	2:H:1275:ARG:CD	2.92	0.44
2:I:582:LYS:HG3	2:I:1110:VAL:CG1	2.47	0.44
1:B:1273:ILE:HG13	1:B:1273:ILE:O	2.17	0.44
1:E:628:TYR:CD1	1:E:628:TYR:C	2.90	0.44
2:G:38:PRO:CD	2:G:104:LEU:HD11	2.43	0.44
2:I:1896:THR:CG2	2:I:1897:GLU:N	2.80	0.44
2:J:22:ARG:HD2	2:J:42:HIS:CB	2.48	0.44

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:C:1213:VAL:CG1	1:C:1217:GLU:HB2	2.47	0.44
1:C:1149:LEU:HD12	1:F:1097:LEU:HD13	1.98	0.44
2:L:605:VAL:HB	2:L:628:ILE:CG1	2.41	0.44
2:H:381:SER:HB2	2:H:440:HIS:HB2	1.98	0.44
2:L:211:LEU:HB3	2:L:316:PHE:CZ	2.51	0.44
2:H:609:THR:CB	2:H:610:PRO:HD3	2.47	0.44
2:G:440:HIS:CD2	2:G:499:VAL:CG2	3.00	0.44
2:H:791:TYR:HA	2:H:796:TRP:HD1	1.80	0.44
2:H:1335:PHE:CD1	2:H:1335:PHE:N	2.85	0.44
1:A:537:ASN:HB2	1:A:608:LYS:HB2	1.98	0.44
2:J:928:ASP:C	2:J:1007:LEU:HD23	2.38	0.44
2:J:1325:VAL:HG22	2:J:1335:PHE:CD2	2.52	0.44
1:E:1004:PRO:HD3	1:E:1572:TRP:HH2	1.81	0.44
2:J:1351:VAL:HG21	2:J:1583:VAL:O	2.18	0.44
1:D:36:LEU:O	1:D:76:ARG:NH2	2.49	0.44
1:A:1447:VAL:HG21	1:A:1467:LEU:HD11	2.00	0.44
1:A:1001:GLU:O	1:A:1002:ILE:HD12	2.18	0.44
1:A:1086:PHE:CZ	1:A:1310:PHE:HD2	2.35	0.44
2:H:979:LEU:CD2	2:H:999:ALA:HB3	2.44	0.44
1:F:1001:GLU:HG2	1:F:1008:ALA:HB2	1.98	0.44
1:C:1001:GLU:HG2	1:C:1008:ALA:HB2	2.00	0.44
2:K:1248:GLU:HB2	2:K:1596:PHE:CE1	2.53	0.44
2:H:321:ARG:HE	2:H:450:HIS:HB3	1.82	0.44
1:F:967:PHE:CE2	1:F:1374:PRO:HG3	2.52	0.44
1:B:1388:LYS:HD3	1:D:1692:GLN:NE2	2.33	0.44
2:I:1904:VAL:HG22	2:I:1939:LEU:CD2	2.47	0.44
2:L:1189:THR:O	2:L:1191:PRO:HD3	2.18	0.44
1:B:577:LEU:CD2	1:B:584:ILE:HG21	2.47	0.44
2:J:1249:GLY:HA2	2:J:1256:VAL:HG22	1.98	0.44
2:J:505:THR:O	2:J:507:PHE:N	2.47	0.44
2:J:1048:TRP:CE2	2:J:1049:GLN:HG2	2.52	0.44
1:A:1544:HIS:O	1:A:1544:HIS:CD2	2.71	0.44
2:L:1246:LEU:O	2:L:1258:PRO:HA	2.17	0.44
1:A:414:TYR:CE2	1:A:418:ILE:CD1	3.00	0.44
2:I:1350:ILE:O	2:I:1354:TRP:HB2	2.17	0.44
2:K:1818:PHE:HE2	2:K:1822:ARG:NH1	2.16	0.44
2:L:1084:LYS:O	2:L:1088:ASP:HB2	2.17	0.44
2:J:1811:THR:HG23	2:J:1842:SER:HB3	2.00	0.44
2:G:615:TRP:HA	2:G:618:VAL:CG1	2.47	0.44
2:G:357:THR:HG22	2:G:359:SER:H	1.83	0.44
1:D:1294:ILE:HD11	1:D:1302:CYS:HB3	1.99	0.44
2:L:422:THR:HG23	2:L:844:GLU:OE2	2.18	0.44

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:J:1157:VAL:O	2:J:1161:MET:HG3	2.17	0.44
2:J:894:GLU:O	2:J:897:LYS:HG2	2.17	0.44
1:A:751:GLU:OE1	1:A:770:MET:HE1	2.18	0.44
2:I:1558:GLU:O	2:I:1560:PRO:HD3	2.17	0.44
1:F:1491:ASN:N	1:F:1491:ASN:HD22	2.15	0.44
1:F:1338:GLY:H	1:F:1340:MET:HG3	1.83	0.44
2:K:1863:ARG:HB2	2:K:2017:PHE:HE1	1.83	0.44
2:K:1099:LEU:HD12	2:K:1103:TYR:CB	2.47	0.44
2:K:787:ASP:O	2:K:790:PRO:HD2	2.18	0.44
2:G:465:LEU:HA	2:G:465:LEU:HD23	1.73	0.44
1:B:612:ILE:HA	1:B:628:TYR:HE2	1.83	0.44
2:L:468:PRO:HB3	2:L:477:ASP:OD2	2.17	0.44
2:J:48:LEU:HB2	2:J:79:TYR:OH	2.18	0.44
2:K:68:GLU:HB3	2:K:69:PRO:HD2	2.00	0.44
2:K:1456:LEU:HD23	2:K:1457:HIS:N	2.32	0.44
2:K:1266:HIS:CD2	2:K:1266:HIS:N	2.85	0.44
1:A:40:ARG:NH2	1:A:72:THR:HG22	2.32	0.44
2:K:1637:VAL:CG1	2:K:1679:LEU:HD22	2.48	0.44
2:H:1637:VAL:CG1	2:H:1679:LEU:HD22	2.48	0.44
2:K:22:ARG:HD2	2:K:42:HIS:CB	2.48	0.44
1:E:40:ARG:NH2	1:E:72:THR:HG22	2.32	0.44
1:C:1363:MET:HB2	1:C:1363:MET:HE2	1.72	0.44
2:J:914:TRP:CD1	2:J:916:GLY:CA	2.95	0.44
2:L:674:ILE:HB	2:L:675:PRO:HD3	2.00	0.44
1:E:1249:ILE:HD12	1:E:1250:LEU:N	2.32	0.44
2:I:1588:ASN:HD21	2:I:1590:ILE:HD12	1.83	0.44
1:C:612:ILE:HA	1:C:613:PRO:HD3	1.84	0.44
2:L:1316:VAL:HG13	2:L:1348:PHE:CE2	2.52	0.44
2:G:1269:ALA:HB1	2:G:1271:TYR:CE2	2.53	0.44
1:E:929:ARG:O	1:E:933:ILE:HG13	2.18	0.44
2:J:1323:ASP:C	2:J:1583:VAL:HG11	2.38	0.44
1:C:1275:THR:HA	1:C:1276:PRO:HD3	1.70	0.44
2:G:783:GLY:HA2	2:G:815:ARG:HD3	1.98	0.44
2:G:854:VAL:HG21	2:G:1070:PRO:CA	2.45	0.44
2:L:1093:ASP:O	2:L:1097:PHE:HB2	2.17	0.44
1:F:1378:ILE:HD11	1:F:1642:LEU:HB2	1.99	0.44
2:K:1947:LYS:HG3	2:K:1948:MET:HE2	1.98	0.44
2:J:189:ILE:HD12	2:J:256:VAL:HG13	1.99	0.44
1:D:767:HIS:CG	1:D:813:LEU:HD12	2.52	0.44
2:K:1250:ARG:H	2:K:1250:ARG:CD	2.29	0.44
1:B:1386:THR:O	1:D:1270:THR:HA	2.17	0.44
2:K:1851:MET:HE1	2:K:2024:LYS:HB3	2.00	0.44

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:I:196:PHE:O	2:I:262:MET:HE1	2.18	0.44
2:H:1206:ILE:O	2:H:1209:PRO:HG3	2.18	0.44
2:L:932:ALA:O	2:L:935:VAL:HG13	2.17	0.44
2:J:1031:VAL:HA	2:J:1032:PRO:HD3	1.65	0.44
2:K:1690:THR:HG22	2:K:1691:ALA:N	2.32	0.44
2:J:718:PRO:HG2	2:J:741:LEU:HD11	2.00	0.44
1:C:447:PHE:HA	1:C:1550:GLY:O	2.17	0.44
2:K:871:ARG:HB2	2:K:909:ASP:HB2	1.99	0.44
2:H:776:LEU:HG	2:H:807:PHE:CD2	2.52	0.44
2:J:737:PHE:HA	2:J:738:PRO:HD3	1.83	0.44
1:D:1288:ASP:O	1:D:1291:TYR:HB3	2.17	0.44
2:I:1382:MET:HB3	2:I:1633:ARG:NH1	2.33	0.44
2:L:1507:VAL:O	2:L:1531:GLU:HA	2.18	0.44
1:B:31:THR:HG23	2:H:2040:ILE:HG21	2.00	0.44
1:B:631:LYS:O	1:B:635:ILE:HG13	2.17	0.44
2:I:1874:ASP:OD1	2:I:1878:ARG:HB3	2.17	0.44
1:A:718:SER:HB3	1:A:721:ASP:HB2	2.00	0.44
2:K:1953:ILE:O	2:K:1957:MET:HG2	2.17	0.44
2:I:990:TYR:N	2:I:991:PRO:CD	2.81	0.44
1:D:447:PHE:CE1	1:D:451:HIS:NE2	2.86	0.44
2:I:835:ALA:HB3	2:I:1073:ALA:HB1	1.99	0.44
2:L:70:SER:HB2	2:L:74:GLU:OE2	2.18	0.44
2:G:117:ASN:OD1	2:G:561:ARG:HG3	2.18	0.44
2:K:1700:GLN:O	2:K:1700:GLN:HG2	2.18	0.44
2:L:821:GLU:H	2:L:821:GLU:HG2	1.43	0.44
1:B:349:MET:HG3	1:B:349:MET:O	2.18	0.44
2:G:821:GLU:H	2:G:821:GLU:HG2	1.39	0.44
1:E:1175:VAL:HA	1:E:1176:PRO:HD3	1.83	0.44
2:I:22:ARG:HD2	2:I:42:HIS:CB	2.47	0.44
2:H:43:PHE:HD2	2:I:22:ARG:HG2	1.75	0.44
2:H:43:PHE:CD2	2:I:22:ARG:NE	2.85	0.44
2:K:271:GLU:HG2	2:K:301:TRP:NE1	2.33	0.44
1:E:22:PHE:O	2:K:2010:LEU:HD12	2.18	0.44
1:A:1491:ASN:HD22	1:A:1491:ASN:N	2.16	0.44
2:L:788:THR:CG2	2:L:1094:HIS:CE1	3.01	0.44
1:C:72:THR:O	1:C:73:SER:HB3	2.18	0.44
2:L:80:ILE:HG12	2:L:105:ILE:CG2	2.47	0.44
2:L:452:LEU:HD21	2:L:488:PRO:HA	1.98	0.44
2:I:485:ASP:HB2	2:I:488:PRO:HD2	1.93	0.44
2:K:251:PRO:HG3	2:K:316:PHE:N	2.32	0.44
1:B:689:ARG:HH21	1:B:1591:ASN:ND2	2.16	0.44
2:K:485:ASP:HB2	2:K:488:PRO:HD2	1.95	0.44

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:679:LYS:HG2	1:A:708:GLN:CB	2.42	0.44
1:C:1097:LEU:HD13	1:F:1149:LEU:HD12	1.99	0.44
2:I:605:VAL:HG22	2:I:816:MET:HG3	1.98	0.44
2:I:190:TYR:CE1	2:I:201:ILE:HG21	2.52	0.44
2:L:215:TRP:HE3	2:L:216:ASP:N	2.09	0.44
1:A:1541:GLN:HE22	1:A:1633:GLN:HE22	1.65	0.44
2:H:1588:ASN:HD21	2:H:1590:ILE:HD12	1.83	0.44
2:G:1333:GLU:HG3	2:G:1338:ARG:HD2	1.99	0.44
1:B:1467:LEU:O	1:B:1471:THR:HG23	2.18	0.44
1:E:36:LEU:O	1:E:76:ARG:NH2	2.49	0.44
2:K:1335:PHE:N	2:K:1335:PHE:HD1	2.15	0.44
2:L:1915:LEU:HD13	2:L:1936:LEU:HD22	1.99	0.44
1:E:1565:PRO:CG	1:E:1572:TRP:CZ3	2.99	0.44
1:B:343:ILE:O	1:B:347:LEU:HG	2.18	0.44
2:I:938:MET:CE	2:I:959:THR:HA	2.48	0.44
1:F:30:GLU:HG3	1:F:30:GLU:H	1.53	0.44
2:G:1426:VAL:HG12	2:G:1427:MET:HG2	1.99	0.44
2:G:1886:VAL:HG11	2:G:1900:LEU:HD11	2.00	0.44
1:D:1674:ILE:HD12	2:J:1010:ALA:HB3	2.00	0.44
1:D:1154:LEU:HD23	1:D:1154:LEU:HA	1.77	0.44
2:K:589:PHE:CD1	2:K:1116:PHE:CD2	3.06	0.44
2:H:718:PRO:HG2	2:H:741:LEU:CD1	2.47	0.44
1:F:1055:THR:OG1	1:F:1057:GLU:HG2	2.17	0.44
2:K:36:LEU:HD23	2:K:36:LEU:HA	1.77	0.44
2:K:137:VAL:O	2:K:141:TYR:HD1	2.00	0.44
1:A:921:GLU:HG3	1:A:922:ILE:H	1.83	0.44
2:L:1903:VAL:O	2:L:1907:ILE:HG13	2.17	0.44
1:F:718:SER:HB3	1:F:721:ASP:HB2	1.98	0.44
2:I:980:LEU:HB2	2:I:996:ILE:CD1	2.48	0.44
2:H:1047:LEU:O	2:H:1049:GLN:N	2.51	0.44
2:G:1496:VAL:HG23	2:G:1507:VAL:HG12	2.00	0.44
2:H:1250:ARG:CD	2:H:1250:ARG:H	2.31	0.44
2:K:118:ASP:OD2	2:K:559:PHE:HB2	2.18	0.44
2:J:759:GLN:N	2:J:760:PRO:CD	2.81	0.44
1:B:1232:LEU:HD21	1:D:1232:LEU:HD11	2.00	0.44
1:A:992:LYS:HE2	1:E:1495:ARG:NH1	2.32	0.44
2:I:1236:LEU:O	2:I:1237:VAL:HG23	2.18	0.44
2:I:1975:GLU:O	2:I:1979:GLN:HG3	2.16	0.44
1:A:1175:VAL:HA	1:A:1176:PRO:HD3	1.82	0.44
1:D:1129:ILE:HA	1:D:1139:THR:O	2.18	0.44
1:F:667:ALA:O	1:F:670:LEU:HB3	2.18	0.44
1:A:869:ARG:O	1:A:903:GLY:HA3	2.17	0.44

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:K:342:ASN:HB2	2:K:406:ARG:NH2	2.32	0.44
1:F:75:GLN:NE2	2:K:335:THR:HG23	2.33	0.44
2:K:895:LEU:HD13	2:K:1034:LEU:HB3	2.00	0.44
2:L:1412:MET:HE3	2:L:1412:MET:HB3	1.83	0.44
1:C:1137:GLN:NE2	1:C:1137:GLN:HA	2.33	0.44
1:A:1457:GLU:HG3	1:A:1457:GLU:H	1.37	0.44
2:I:1933:LEU:O	2:I:1989:LEU:HD11	2.18	0.44
2:H:120:HIS:CD2	2:H:137:VAL:HG11	2.52	0.44
2:J:1383:VAL:HG13	2:J:1384:PRO:HD2	2.00	0.44
2:I:38:PRO:CD	2:I:104:LEU:HD11	2.41	0.44
1:C:26:VAL:HG21	2:I:2006:HIS:CE1	2.52	0.44
1:C:21:GLN:O	2:I:2006:HIS:HD2	2.00	0.44
2:H:595:SER:CB	2:H:602:PRO:HG3	2.32	0.44
2:J:590:VAL:CG2	2:J:1091:HIS:CD2	2.99	0.44
2:I:1106:LYS:HB2	2:I:1109:ASN:ND2	2.33	0.44
1:E:689:ARG:NH1	1:E:1339:GLU:OE2	2.50	0.44
2:I:1305:LEU:HD23	2:I:1366:ILE:HD11	2.00	0.44
2:K:870:THR:HG21	2:K:1064:THR:O	2.18	0.44
2:L:2058:VAL:CG1	2:L:2067:ILE:HD12	2.48	0.44
2:K:1901:GLN:HB3	2:K:1905:GLU:OE2	2.18	0.44
2:L:911:GLN:HE21	2:L:1064:THR:HG23	1.82	0.44
2:G:779:GLY:HA3	2:G:811:MET:HE3	1.99	0.44
2:K:762:LEU:HD11	2:K:800:PHE:CB	2.48	0.44
2:G:613:VAL:N	2:G:614:PRO:HD3	2.32	0.44
3:K:2101:FMN:H1'2	3:K:2101:FMN:H9	1.80	0.44
2:L:1374:VAL:CG2	2:L:1436:ARG:NE	2.80	0.44
2:K:253:ILE:HB	2:K:287:GLN:NE2	2.33	0.44
2:I:1372:LYS:O	2:I:1436:ARG:HG2	2.18	0.44
1:D:714:PHE:CE1	1:D:725:LEU:HD12	2.52	0.44
2:H:2017:PHE:HE2	2:H:2021:LEU:HD11	1.83	0.44
2:I:914:TRP:O	2:I:916:GLY:N	2.45	0.44
1:B:1107:GLU:HA	1:B:1108:PRO:HD3	1.74	0.44
1:A:486:VAL:CG1	1:A:647:GLY:HA3	2.43	0.44
1:C:444:LEU:HD22	1:C:448:MET:HG2	1.99	0.44
2:H:196:PHE:HD2	2:H:266:LYS:CB	2.30	0.44
2:K:1886:VAL:CG1	2:K:1900:LEU:HD11	2.48	0.44
2:I:36:LEU:HA	2:I:36:LEU:HD23	1.76	0.44
2:L:2057:GLU:HA	2:L:2060:ARG:HH12	1.81	0.44
2:G:1199:THR:HB	2:G:1202:MET:HB3	1.99	0.44
2:K:433:LEU:HA	2:K:434:PRO:HD3	1.85	0.44
2:L:1977:ARG:CD	2:L:1978:LYS:HE3	2.47	0.44
1:D:421:ARG:HH22	1:D:1613:LYS:HG3	1.81	0.44

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:I:957:LYS:HE2	2:I:1022:ARG:HH22	1.82	0.44
1:D:1001:GLU:O	1:D:1002:ILE:HD12	2.18	0.44
2:L:196:PHE:O	2:L:262:MET:HE1	2.17	0.44
1:F:1647:ASP:C	1:F:1649:ALA:N	2.68	0.44
2:L:128:GLY:HA2	2:L:133:LYS:NZ	2.33	0.44
1:B:1581:LEU:HD13	1:B:1638:HIS:HA	1.99	0.44
2:I:740:ILE:N	2:I:740:ILE:HD12	2.32	0.44
1:F:859:VAL:O	1:F:863:VAL:HG23	2.18	0.44
2:J:182:TYR:CD1	2:J:183:PHE:N	2.85	0.44
2:K:872:GLY:HA2	2:K:909:ASP:O	2.18	0.44
2:J:170:TYR:CD2	2:J:507:PHE:HB3	2.53	0.44
1:A:1185:PRO:O	1:A:1188:LEU:HB2	2.18	0.44
2:H:1851:MET:HE1	2:H:2024:LYS:HB3	1.98	0.44
1:B:759:ILE:O	1:E:776:ARG:NH1	2.48	0.44
2:G:1910:VAL:HG11	2:G:1973:ILE:HG21	2.00	0.44
2:J:615:TRP:CE3	2:J:647:LYS:HB3	2.53	0.44
2:K:1558:GLU:O	2:K:1560:PRO:HD3	2.18	0.44
2:I:1953:ILE:O	2:I:1957:MET:HG2	2.17	0.44
1:D:792:THR:HB	2:I:1748:HIS:O	2.17	0.44
2:L:120:HIS:CD2	2:L:137:VAL:HG11	2.53	0.44
1:B:1287:LEU:HA	1:B:1304:VAL:HG11	1.99	0.44
2:J:291:VAL:O	2:J:295:ILE:HB	2.16	0.44
2:L:401:LEU:HD22	2:L:405:LEU:HG	1.99	0.44
2:K:444:LEU:HA	2:K:444:LEU:HD23	1.73	0.44
1:B:871:PHE:N	1:B:871:PHE:CD1	2.86	0.44
2:H:26:LEU:HD23	2:H:26:LEU:HA	1.86	0.44
1:C:1544:HIS:O	1:C:1544:HIS:CG	2.69	0.44
2:H:1123:ALA:HB3	2:H:1126:GLU:HG3	1.99	0.44
1:F:1078:ILE:HB	1:F:1338:GLY:HA3	1.96	0.44
2:I:580:LEU:HD12	2:I:1103:TYR:CD2	2.53	0.44
2:K:752:HIS:CD2	2:K:866:HIS:ND1	2.86	0.44
1:D:1591:ASN:C	1:D:1593:ASP:H	2.20	0.44
2:L:2062:THR:HG22	2:L:2064:SER:N	2.33	0.44
2:H:1637:VAL:HG11	2:H:1679:LEU:HD22	2.00	0.44
2:L:1017:LEU:O	2:L:1021:GLN:HG3	2.18	0.44
1:A:1363:MET:HB2	1:A:1363:MET:HE2	1.65	0.44
2:K:452:LEU:HD21	2:K:488:PRO:HA	1.99	0.44
2:J:286:SER:OG	2:J:440:HIS:NE2	2.50	0.44
2:H:289:ILE:HG21	2:H:493:MET:CE	2.48	0.44
2:L:1587:TYR:O	2:L:1588:ASN:C	2.55	0.44
2:K:376:ARG:NH2	2:L:1339:GLY:HA2	2.33	0.44
1:F:72:THR:O	1:F:73:SER:HB3	2.18	0.44

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:I:796:TRP:CG	2:I:797:SER:N	2.85	0.44
2:I:1404:VAL:CG2	2:I:1413:VAL:HG22	2.44	0.44
2:J:1265:TYR:CE2	2:J:1267:PRO:HG3	2.51	0.44
2:G:1338:ARG:NH1	2:I:326:TYR:CE2	2.86	0.44
2:J:1325:VAL:HG22	2:J:1335:PHE:HD2	1.82	0.44
2:G:1335:PHE:N	2:G:1335:PHE:HD1	2.16	0.44
1:F:1467:LEU:O	1:F:1471:THR:HG23	2.18	0.44
2:K:1199:THR:HG22	2:K:1200:ARG:N	2.33	0.44
2:G:1353:GLY:CA	2:G:1397:THR:HG21	2.44	0.44
2:J:1588:ASN:HA	2:J:1589:PRO:HD3	1.87	0.44
2:K:1181:PHE:CD1	2:K:1191:PRO:HD2	2.53	0.44
2:L:1362:PHE:O	2:L:1363:PRO:O	2.36	0.44
2:L:1175:MET:CE	2:L:1192:LEU:HD11	2.46	0.44
2:H:1175:MET:CE	2:H:1192:LEU:HD11	2.48	0.44
1:E:1186:VAL:HG12	1:E:1187:THR:N	2.33	0.44
1:C:901:LEU:N	1:C:901:LEU:HD23	2.33	0.44
1:B:991:ASP:HA	1:B:1364:THR:CG2	2.48	0.44
1:D:1601:GLN:HB2	1:D:1602:PHE:CD2	2.53	0.44
1:C:967:PHE:CD2	1:C:1662:GLN:HB2	2.53	0.44
2:L:1851:MET:HE2	2:L:1851:MET:HB3	1.91	0.44
2:I:505:THR:O	2:I:505:THR:CG2	2.66	0.44
1:F:655:ALA:O	1:F:680:VAL:HA	2.18	0.44
2:L:872:GLY:HA2	2:L:909:ASP:O	2.18	0.44
1:B:454:HIS:CD2	1:B:454:HIS:N	2.86	0.44
1:F:1185:PRO:O	1:F:1188:LEU:HB2	2.18	0.44
2:G:27:THR:HG22	2:G:32:GLU:HG2	2.00	0.44
1:D:414:TYR:O	1:D:418:ILE:HG13	2.17	0.44
1:A:21:GLN:HB3	1:A:21:GLN:HE21	1.57	0.44
2:I:1207:THR:O	2:I:1215:THR:HA	2.18	0.44
2:I:657:GLY:HA3	2:I:688:GLU:HG2	2.00	0.44
1:F:1158:ARG:HD2	1:F:1324:THR:HB	1.99	0.44
2:H:894:GLU:O	2:H:897:LYS:HG2	2.17	0.44
2:J:657:GLY:HA3	2:J:688:GLU:HG2	2.00	0.44
2:L:258:LEU:CD1	2:L:291:VAL:HG13	2.47	0.44
2:K:858:LEU:HD23	2:K:864:PRO:HA	2.00	0.44
1:A:1143:ARG:HH21	1:B:356:LYS:NZ	2.16	0.44
2:G:943:TYR:OH	2:G:948:LYS:HA	2.18	0.44
1:D:626:TRP:CZ3	1:D:898:PHE:HB2	2.53	0.44
1:B:1389:ILE:HD13	1:D:1682:LYS:HB3	1.98	0.43
1:C:490:VAL:HG12	1:C:490:VAL:O	2.18	0.43
2:I:172:ILE:HG22	2:I:514:VAL:O	2.18	0.43
1:A:1695:VAL:HG11	1:A:1713:PHE:CE2	2.53	0.43

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:H:580:LEU:HD12	2:H:1103:TYR:CD2	2.52	0.43
1:D:1148:LEU:HA	1:D:1148:LEU:HD23	1.78	0.43
2:H:1266:HIS:CD2	2:H:1266:HIS:N	2.86	0.43
1:B:40:ARG:HH21	1:B:72:THR:HG22	1.82	0.43
2:G:868:LEU:HD13	2:G:1068:GLN:HG3	1.99	0.43
1:B:1592:ALA:O	1:B:1593:ASP:C	2.55	0.43
2:J:306:THR:O	2:J:310:ARG:HG3	2.17	0.43
2:K:617:PHE:CZ	2:K:1083:ILE:HD12	2.53	0.43
2:I:251:PRO:HG3	2:I:316:PHE:N	2.32	0.43
2:H:2017:PHE:CE2	2:H:2021:LEU:HD11	2.53	0.43
2:G:208:LEU:HB3	2:G:225:LEU:HD13	1.99	0.43
2:G:289:ILE:HD12	2:G:472:THR:OG1	2.17	0.43
2:G:381:SER:HB2	2:G:440:HIS:HB2	2.00	0.43
2:H:1587:TYR:O	2:H:1588:ASN:C	2.56	0.43
2:H:476:GLN:H	2:H:476:GLN:HG2	1.63	0.43
2:K:196:PHE:CD2	2:K:266:LYS:CB	3.01	0.43
2:I:1729:ASN:HA	2:I:1757:ILE:HD13	2.00	0.43
1:F:444:LEU:HD22	1:F:448:MET:HG2	1.99	0.43
1:E:1301:VAL:HG22	1:E:1302:CYS:H	1.83	0.43
2:G:129:ILE:HG12	2:G:131:ALA:HB3	2.00	0.43
2:K:1915:LEU:HD13	2:K:1936:LEU:HD22	2.00	0.43
2:K:1881:TYR:CG	2:K:2004:PRO:HG3	2.52	0.43
2:H:641:MET:CE	2:H:676:LEU:HD12	2.48	0.43
2:I:730:ILE:O	2:I:733:ALA:HB3	2.17	0.43
2:J:1248:GLU:OE2	2:J:1250:ARG:HG2	2.18	0.43
2:G:1318:ALA:HA	2:G:1391:VAL:CG2	2.47	0.43
2:L:1248:GLU:HA	2:L:1248:GLU:OE1	2.16	0.43
1:E:1183:VAL:HG13	1:E:1252:GLU:OE1	2.17	0.43
1:F:1307:PHE:CA	1:F:1568:ALA:HB2	2.48	0.43
2:J:1887:ASN:ND2	2:J:1890:ARG:HG3	2.32	0.43
2:J:113:PHE:CD1	2:J:113:PHE:N	2.86	0.43
2:K:258:LEU:HD12	2:K:291:VAL:HG13	2.00	0.43
2:G:138:ARG:HB3	2:G:192:THR:HG23	1.99	0.43
2:I:1709:TYR:CE2	2:I:1716:LYS:HG2	2.53	0.43
2:H:686:PRO:HB3	2:H:1187:PHE:CE1	2.53	0.43
2:G:505:THR:O	2:G:507:PHE:N	2.46	0.43
2:G:2063:GLY:O	2:G:2065:PRO:HD3	2.18	0.43
2:I:120:HIS:CD2	2:I:137:VAL:CG1	3.01	0.43
2:H:1496:VAL:HG23	2:H:1507:VAL:HG12	2.00	0.43
1:A:739:ASP:OD2	1:A:790:TYR:CG	2.71	0.43
1:F:1359:VAL:CG1	1:F:1360:GLN:N	2.81	0.43
1:A:511:VAL:HG12	1:A:512:PRO:HD2	2.00	0.43

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:D:943:VAL:HG12	1:D:944:ASN:OD1	2.18	0.43
1:F:414:TYR:CD2	1:F:414:TYR:C	2.90	0.43
2:H:990:TYR:N	2:H:991:PRO:CD	2.81	0.43
1:F:743:VAL:O	1:F:745:PRO:HD3	2.18	0.43
2:G:1183:GLN:HB2	2:G:1278:MET:CE	2.47	0.43
2:I:988:GLU:HA	2:I:989:PRO:HD3	1.74	0.43
1:B:350:ASP:HB3	1:B:353:ALA:HB2	2.00	0.43
1:F:484:PRO:HA	1:F:485:PRO:HD3	1.62	0.43
2:J:990:TYR:N	2:J:991:PRO:CD	2.81	0.43
1:B:874:GLN:HG2	1:B:874:GLN:H	1.39	0.43
2:H:1081:GLU:H	2:H:1081:GLU:HG3	1.65	0.43
2:L:769:ARG:HA	2:L:769:ARG:HD3	1.79	0.43
2:J:890:LYS:HB2	2:J:890:LYS:HE3	1.81	0.43
2:K:1084:LYS:O	2:K:1088:ASP:HB2	2.18	0.43
1:F:829:TYR:OH	1:F:896:PRO:HD2	2.18	0.43
2:L:615:TRP:HA	2:L:618:VAL:CG1	2.47	0.43
2:L:161:ALA:HB1	2:L:166:ASN:HD22	1.83	0.43
1:C:409:ASP:CG	1:C:701:ARG:NH1	2.71	0.43
1:B:409:ASP:CG	1:B:701:ARG:NH1	2.72	0.43
1:C:21:GLN:HB3	1:C:21:GLN:HE21	1.60	0.43
2:H:300:THR:O	2:H:304:PHE:HB2	2.18	0.43
2:H:652:ILE:CG2	2:H:656:ARG:HB2	2.47	0.43
1:D:22:PHE:HE2	2:J:2017:PHE:CG	2.36	0.43
1:A:1425:LEU:CD2	1:A:1429:ARG:HH21	2.16	0.43
2:K:48:LEU:HB2	2:K:79:TYR:OH	2.19	0.43
2:G:1637:VAL:HG11	2:G:1679:LEU:HD22	1.99	0.43
2:K:779:GLY:HA3	2:K:811:MET:HE2	1.99	0.43
2:K:37:VAL:HG11	2:K:42:HIS:HA	1.99	0.43
2:G:37:VAL:HG11	2:G:42:HIS:HA	2.00	0.43
1:D:40:ARG:HH21	1:D:72:THR:HG22	1.83	0.43
2:G:1456:LEU:HD11	2:G:1543:TYR:HE2	1.83	0.43
2:K:221:TYR:CE2	2:K:225:LEU:HD12	2.53	0.43
2:G:215:TRP:N	2:G:215:TRP:HE3	2.16	0.43
2:H:253:ILE:HB	2:H:287:GLN:HE22	1.83	0.43
1:E:983:GLN:O	1:E:1418:ILE:HD11	2.19	0.43
1:F:1106:LEU:HD13	1:F:1142:LEU:HD13	2.00	0.43
2:I:1442:TYR:HA	2:I:1445:THR:CG2	2.47	0.43
2:I:1445:THR:CG2	2:I:1498:PHE:HB2	2.48	0.43
1:C:628:TYR:C	1:C:628:TYR:CD1	2.91	0.43
1:B:1250:LEU:HB2	1:D:1317:GLU:CG	2.44	0.43
2:H:1818:PHE:HE2	2:H:1822:ARG:HH12	1.65	0.43
2:L:1722:ALA:CB	2:L:1812:LEU:HD11	2.48	0.43

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:C:470:GLY:O	1:C:474:ILE:HG13	2.18	0.43
2:K:731:ALA:CB	2:K:739:ILE:HD12	2.48	0.43
1:A:1083:PRO:HB3	1:A:1089:TYR:O	2.18	0.43
2:K:1351:VAL:HG21	2:K:1583:VAL:O	2.18	0.43
2:G:1259:LEU:HD11	2:G:1285:ILE:HG12	2.00	0.43
1:D:1386:THR:HG22	1:D:1387:ASP:H	1.84	0.43
2:H:462:ALA:HB3	2:H:481:LEU:O	2.18	0.43
2:L:1362:PHE:N	2:L:1363:PRO:CD	2.81	0.43
2:L:879:LEU:HB3	2:L:884:PHE:CE1	2.53	0.43
2:K:1709:TYR:CD2	2:K:1709:TYR:C	2.92	0.43
2:I:1181:PHE:CD1	2:I:1191:PRO:HD2	2.54	0.43
1:B:726:VAL:HG21	1:B:780:ALA:CB	2.47	0.43
2:K:114:MET:HG2	2:K:122:ILE:HG21	2.00	0.43
1:F:565:GLN:CG	1:F:565:GLN:O	2.66	0.43
2:H:27:THR:HG22	2:H:32:GLU:HG2	2.00	0.43
1:B:759:ILE:HD12	1:B:759:ILE:N	2.33	0.43
2:H:1324:PHE:HA	2:H:1583:VAL:HG11	2.00	0.43
2:K:270:ARG:HB3	2:K:274:GLU:HB2	2.00	0.43
2:L:342:ASN:HD22	2:L:342:ASN:N	2.15	0.43
1:C:743:VAL:O	1:C:745:PRO:HD3	2.17	0.43
1:A:954:ARG:HA	2:G:981:GLN:OE1	2.18	0.43
1:D:46:GLU:HB3	1:D:80:CYS:HA	2.00	0.43
1:C:1687:TYR:OH	1:F:1388:LYS:HB3	2.18	0.43
2:H:691:THR:OG1	2:H:715:SER:HB3	2.18	0.43
1:B:869:ARG:O	1:B:903:GLY:HA3	2.18	0.43
2:L:759:GLN:N	2:L:760:PRO:CD	2.80	0.43
2:J:161:ALA:HA	2:J:164:GLU:HB2	1.99	0.43
1:B:1137:GLN:NE2	1:B:1137:GLN:HA	2.32	0.43
1:E:837:LEU:HD12	1:E:837:LEU:HA	1.85	0.43
2:K:1672:LYS:HG2	2:K:1672:LYS:O	2.18	0.43
2:L:154:TYR:CE1	2:L:561:ARG:NH1	2.86	0.43
2:H:70:SER:HB2	2:H:74:GLU:OE2	2.17	0.43
2:K:1813:MET:HG3	2:K:1814:GLU:N	2.32	0.43
2:I:200:LEU:O	2:I:204:ILE:HG13	2.18	0.43
2:L:604:MET:HG3	2:L:627:HIS:O	2.18	0.43
1:E:88:ILE:HG21	2:K:1821:MET:HE1	2.00	0.43
2:L:541:LEU:HG	2:L:552:VAL:CG1	2.47	0.43
2:G:1266:HIS:C	2:G:1268:GLU:N	2.71	0.43
1:D:1210:TYR:HA	1:D:1213:VAL:O	2.18	0.43
1:A:612:ILE:CD1	1:F:579:MET:HE3	2.45	0.43
2:H:1266:HIS:C	2:H:1268:GLU:N	2.72	0.43
1:A:72:THR:O	1:A:73:SER:HB3	2.18	0.43

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:B:1149:LEU:HD12	1:D:1097:LEU:CD1	2.48	0.43
2:K:621:THR:OG1	2:K:1083:ILE:HD13	2.18	0.43
2:L:1588:ASN:HA	2:L:1589:PRO:HD3	1.89	0.43
2:J:1410:GLY:HA2	2:J:1437:GLY:O	2.18	0.43
1:C:1037:ASN:CG	1:C:1674:ILE:HG23	2.38	0.43
1:B:444:LEU:HD22	1:B:448:MET:CG	2.49	0.43
2:H:857:VAL:HG11	2:H:876:TRP:NE1	2.30	0.43
2:G:28:HIS:O	2:G:31:LEU:HD12	2.18	0.43
2:I:471:ASP:OD1	2:I:493:MET:HE3	2.19	0.43
2:H:914:TRP:CZ3	2:H:1033:ALA:HA	2.53	0.43
2:I:823:HIS:HB3	2:I:1051:GLU:HG3	2.01	0.43
2:K:1261:PHE:HE2	2:K:1285:ILE:HD11	1.83	0.43
2:H:1764:MET:HG3	2:H:1781:PHE:CE1	2.53	0.43
1:C:444:LEU:HD22	1:C:448:MET:CG	2.47	0.43
1:B:47:ILE:HD12	2:H:1818:PHE:HD1	1.83	0.43
2:L:289:ILE:HG21	2:L:493:MET:CE	2.48	0.43
1:A:389:PRO:HD3	1:F:374:LEU:HD11	2.00	0.43
1:C:960:ARG:HH12	2:I:968:GLU:CD	2.17	0.43
2:H:1904:VAL:HG13	2:H:1915:LEU:HG	2.00	0.43
2:L:1472:TRP:CD2	2:L:1540:VAL:HG22	2.53	0.43
2:J:837:GLY:HA3	2:J:1074:LYS:HG2	2.00	0.43
1:E:996:VAL:HG11	1:E:1578:LEU:CD1	2.48	0.43
2:G:462:ALA:HB3	2:G:481:LEU:O	2.17	0.43
2:G:727:VAL:HA	2:G:730:ILE:HG12	1.99	0.43
2:H:551:GLU:HG3	2:H:770:LYS:NZ	2.34	0.43
1:B:1386:THR:HG22	1:B:1387:ASP:H	1.83	0.43
2:J:196:PHE:O	2:J:262:MET:HE1	2.18	0.43
2:I:433:LEU:HA	2:I:434:PRO:HD3	1.88	0.43
2:K:1309:PHE:N	2:K:1309:PHE:CD1	2.87	0.43
2:J:1910:VAL:HG11	2:J:1973:ILE:HG21	2.01	0.43
1:B:1038:HIS:CE1	1:B:1042:LEU:HG	2.53	0.43
1:C:1170:ALA:HB3	1:C:1188:LEU:HD13	1.99	0.43
2:L:618:VAL:HG13	2:L:619:ALA:N	2.33	0.43
1:B:1419:LYS:HA	1:B:1422:ARG:HB2	2.00	0.43
2:H:1157:VAL:HG13	2:H:1197:ALA:HA	2.00	0.43
1:B:1254:PHE:HB2	1:B:1257:THR:OG1	2.18	0.43
1:E:875:GLU:O	1:E:878:PHE:HB3	2.18	0.43
2:L:1317:ASN:OD1	2:L:1319:GLN:HB3	2.19	0.43
1:B:744:VAL:HG12	1:B:746:PHE:CD1	2.53	0.43
2:I:2053:GLU:HG3	2:I:2053:GLU:H	1.51	0.43
2:L:1036:GLU:HG3	2:L:1036:GLU:H	1.47	0.43
2:G:960:GLY:O	2:G:963:ILE:HB	2.18	0.43

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:I:1932:ASP:OD2	2:I:1934:ARG:HD2	2.18	0.43
2:H:1762:MET:HG2	2:H:1779:LYS:NZ	2.33	0.43
1:B:427:ARG:NH2	1:B:517:ARG:O	2.51	0.43
2:J:601:PRO:HA	2:J:602:PRO:HD3	1.82	0.43
2:L:1125:ASP:HB2	2:L:1126:GLU:H	1.55	0.43
2:L:1464:LEU:C	2:L:1464:LEU:HD13	2.37	0.43
1:F:22:PHE:CE2	2:L:2017:PHE:CG	3.04	0.43
1:C:18:LEU:HD13	2:I:1841:TYR:CE2	2.53	0.43
2:I:788:THR:CG2	2:I:1094:HIS:CE1	3.01	0.43
2:H:750:GLY:O	2:H:865:ILE:HA	2.19	0.43
2:L:2059:HIS:HB2	2:L:2067:ILE:HG21	1.99	0.43
2:J:1156:ASP:HB2	2:J:1159:SER:N	2.18	0.43
1:D:1015:GLU:HA	1:D:1561:LEU:HD12	2.00	0.43
2:I:609:THR:HG23	3:I:2101:FMN:O4	2.19	0.43
2:K:1804:GLN:CG	2:K:1865:LEU:HD23	2.48	0.43
2:L:866:HIS:HB3	2:L:1068:GLN:O	2.19	0.43
2:L:1067:LEU:HB2	3:L:2101:FMN:HM71	1.99	0.43
2:J:868:LEU:HD12	2:J:868:LEU:HA	1.80	0.43
2:G:866:HIS:HB3	2:G:1068:GLN:O	2.18	0.43
2:G:421:PHE:C	2:G:423:GLN:H	2.21	0.43
2:I:1901:GLN:HB3	2:I:1905:GLU:OE2	2.17	0.43
2:K:609:THR:HG23	3:K:2101:FMN:O4	2.18	0.43
2:K:613:VAL:N	2:K:614:PRO:CD	2.80	0.43
1:F:574:ILE:H	1:F:574:ILE:HG12	1.69	0.43
2:L:208:LEU:HB3	2:L:225:LEU:HD13	1.99	0.43
1:A:1037:ASN:HD21	2:G:1011:GLN:HG2	1.83	0.43
1:E:728:TYR:CE2	1:E:736:LEU:HD13	2.54	0.43
1:F:47:ILE:HD12	2:L:1694:PHE:HE1	1.83	0.43
2:G:253:ILE:HB	2:G:287:GLN:HE22	1.82	0.43
2:K:674:ILE:HB	2:K:675:PRO:HD3	2.01	0.43
1:C:1249:ILE:HD12	1:C:1250:LEU:N	2.33	0.43
2:L:197:VAL:CG2	2:L:263:ILE:HD11	2.48	0.43
1:B:962:ASN:HB3	2:H:969:ARG:CD	2.48	0.43
2:G:1179:GLU:N	2:G:1179:GLU:CD	2.70	0.43
1:F:983:GLN:HB3	1:F:1418:ILE:CD1	2.48	0.43
2:K:1348:PHE:CE1	2:K:1351:VAL:HG11	2.54	0.43
1:F:27:ARG:HG3	2:L:2045:ALA:HB2	1.99	0.43
2:H:884:PHE:HE2	2:H:1039:GLU:CA	2.30	0.43
2:L:676:LEU:HD23	2:L:679:ARG:NH2	2.33	0.43
2:I:741:LEU:O	2:I:741:LEU:HG	2.19	0.43
2:J:1589:PRO:HB2	2:J:1596:PHE:HB3	2.01	0.43
1:E:1086:PHE:CZ	1:E:1310:PHE:HD2	2.36	0.43

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:I:1515:LEU:HB3	2:I:1525:VAL:HG21	2.01	0.43
1:D:991:ASP:HA	1:D:1364:THR:CG2	2.48	0.43
1:F:1522:PHE:HE2	1:F:1535:SER:HA	1.82	0.43
1:C:1581:LEU:HD13	1:C:1638:HIS:HA	2.00	0.43
2:H:186:LEU:CG	2:H:256:VAL:HG22	2.48	0.43
1:A:1288:ASP:O	1:A:1291:TYR:HB3	2.18	0.43
1:A:1420:TYR:OH	1:E:1473:HIS:CE1	2.69	0.43
2:L:1324:PHE:HA	2:L:1583:VAL:HG11	2.00	0.43
1:C:1473:HIS:CE1	1:F:1420:TYR:OH	2.71	0.43
2:H:1662:ARG:HG2	2:H:1686:GLU:HG2	2.00	0.43
2:I:182:TYR:CD1	2:I:183:PHE:N	2.86	0.43
2:G:342:ASN:HD22	2:G:342:ASN:N	2.16	0.43
2:I:1910:VAL:HG11	2:I:1973:ILE:HG21	2.00	0.43
2:I:1324:PHE:CA	2:I:1583:VAL:HG11	2.48	0.43
1:D:1359:VAL:CG1	1:D:1360:GLN:N	2.80	0.43
2:L:342:ASN:CB	2:L:406:ARG:NH2	2.81	0.43
2:J:910:PHE:HD2	2:J:912:LYS:H	1.63	0.43
2:G:1276:GLU:HB3	2:G:1278:MET:HE2	1.99	0.43
2:H:92:GLU:C	2:H:94:ALA:H	2.21	0.43
2:I:555:LYS:HB3	2:I:556:PRO:HD3	2.00	0.43
2:H:1325:VAL:HG13	2:H:1330:ASN:O	2.17	0.43
2:L:1653:LEU:HD21	2:L:1667:VAL:HG13	2.00	0.43
1:B:1708:ASN:OD1	1:B:1710:GLU:HB2	2.17	0.43
2:J:1376:LEU:O	2:J:1639:MET:HG2	2.17	0.43
1:F:1484:GLU:O	1:F:1487:THR:HB	2.19	0.43
2:I:615:TRP:HA	2:I:618:VAL:CG1	2.48	0.43
1:E:1343:PRO:HA	1:E:1526:SER:HA	1.99	0.43
1:D:631:LYS:O	1:D:635:ILE:HG13	2.18	0.43
2:J:1350:ILE:O	2:J:1354:TRP:HB2	2.17	0.43
2:H:769:ARG:HA	2:H:769:ARG:HD3	1.81	0.43
2:L:890:LYS:HE3	2:L:890:LYS:HB2	1.82	0.43
2:G:2038:LYS:HD3	2:G:2038:LYS:HA	1.75	0.43
2:G:92:GLU:C	2:G:94:ALA:H	2.22	0.43
2:L:690:LEU:HD22	2:L:691:THR:H	1.82	0.43
2:K:172:ILE:HG23	2:K:515:ASP:HA	2.01	0.43
2:J:788:THR:CG2	2:J:1094:HIS:CE1	3.01	0.43
1:C:1079:ARG:NH1	1:C:1079:ARG:CG	2.66	0.43
1:A:883:LEU:HA	1:A:888:ILE:HD12	2.01	0.43
2:G:1863:ARG:HH11	2:G:1863:ARG:HG2	1.83	0.43
2:L:1333:GLU:HG3	2:L:1338:ARG:HD2	2.01	0.43
1:D:1301:VAL:HG23	1:D:1363:MET:CG	2.48	0.43
1:C:673:LEU:HD21	1:C:884:MET:CE	2.48	0.43

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:G:2101:FMN:H1'2	3:G:2101:FMN:H9	1.82	0.43
1:A:1149:LEU:HD23	1:A:1149:LEU:HA	1.72	0.43
1:F:548:VAL:HG12	1:F:552:ILE:HD12	2.00	0.43
2:K:1478:GLN:CG	2:K:1479:HIS:N	2.80	0.43
2:H:250:PHE:O	2:H:315:LEU:HD23	2.18	0.43
2:I:253:ILE:HB	2:I:287:GLN:HE22	1.83	0.43
2:L:1259:LEU:HD11	2:L:1285:ILE:HG12	2.00	0.43
2:G:250:PHE:O	2:G:315:LEU:HD23	2.19	0.43
1:D:996:VAL:HG11	1:D:1578:LEU:HD11	2.01	0.43
1:C:997:THR:HG22	1:C:1361:VAL:HG22	2.01	0.43
1:F:997:THR:HG22	1:F:1361:VAL:HG22	1.98	0.43
2:J:791:TYR:HA	2:J:796:TRP:HD1	1.79	0.43
2:I:1335:PHE:CD1	2:I:1335:PHE:N	2.86	0.43
2:K:1335:PHE:CE1	2:K:1629:ILE:CD1	3.00	0.43
1:D:449:GLN:O	1:D:452:ILE:HG22	2.19	0.43
1:B:449:GLN:HG3	1:B:474:ILE:HD13	2.00	0.43
2:H:875:PHE:HE2	2:H:906:LEU:CD2	2.32	0.43
2:G:1261:PHE:HE2	2:G:1285:ILE:HD11	1.84	0.43
1:F:828:TRP:NE1	1:F:838:THR:HA	2.33	0.43
2:L:478:LEU:HD22	2:L:481:LEU:HD11	2.00	0.43
1:D:1432:ILE:HD11	1:D:1481:GLN:CB	2.47	0.43
2:H:1977:ARG:CD	2:H:1978:LYS:HE3	2.48	0.43
1:F:1432:ILE:HD11	1:F:1481:GLN:CB	2.49	0.43
1:F:859:VAL:HG13	1:F:918:LEU:HD13	1.98	0.43
2:H:114:MET:HG2	2:H:122:ILE:HG21	2.00	0.43
2:H:1324:PHE:CA	2:H:1583:VAL:HG11	2.48	0.43
1:E:1185:PRO:O	1:E:1188:LEU:HB2	2.18	0.43
2:G:859:SER:CB	2:G:863:GLU:HG3	2.48	0.43
2:L:27:THR:HG22	2:L:32:GLU:HG2	2.01	0.43
1:C:1177:GLU:O	1:C:1180:ILE:HB	2.19	0.43
1:C:1525:THR:OG1	1:C:1527:THR:HG23	2.18	0.43
2:J:1504:TYR:HD2	2:J:1507:VAL:HG11	1.82	0.43
1:C:1687:TYR:CD2	1:C:1687:TYR:N	2.86	0.43
2:H:1350:ILE:O	2:H:1354:TRP:HB2	2.19	0.43
2:L:1687:GLN:O	2:L:1828:GLN:NE2	2.51	0.43
2:G:200:LEU:O	2:G:204:ILE:HG13	2.18	0.43
2:H:1036:GLU:H	2:H:1036:GLU:HG3	1.45	0.43
1:A:458:GLU:H	1:A:458:GLU:CD	2.21	0.43
2:I:1081:GLU:H	2:I:1081:GLU:HG3	1.64	0.43
2:K:1419:LEU:HA	2:K:1419:LEU:HD23	1.86	0.43
1:F:405:TRP:HA	1:F:405:TRP:CE3	2.53	0.43
1:D:1090:ASP:OD1	1:D:1092:ASN:HB2	2.19	0.43

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:I:24:LEU:HD12	2:I:37:VAL:CG2	2.43	0.43
1:A:1081:ILE:HD12	1:A:1091:PRO:CG	2.48	0.43
1:F:1157:ASP:HB3	1:F:1326:ASN:OD1	2.18	0.43
2:H:298:ALA:HB2	2:H:304:PHE:HA	2.00	0.43
2:G:1106:LYS:HB2	2:G:1109:ASN:ND2	2.34	0.43
2:I:465:LEU:HA	2:I:465:LEU:HD23	1.70	0.43
1:D:538:ARG:O	1:D:579:MET:HE1	2.18	0.43
1:E:1210:TYR:HA	1:E:1213:VAL:O	2.17	0.43
2:K:582:LYS:HG3	2:K:1110:VAL:CG1	2.47	0.43
2:K:1299:VAL:HG23	2:K:1301:PHE:CD2	2.54	0.43
2:I:1290:TYR:CG	2:I:1299:VAL:CG1	2.92	0.43
1:B:1213:VAL:HG22	1:B:1300:ARG:HE	1.84	0.43
2:K:35:PHE:CE1	2:K:105:ILE:HD13	2.54	0.43
2:K:326:TYR:CE2	2:L:1338:ARG:NH1	2.87	0.43
2:L:1766:PHE:CE2	2:L:1869:VAL:HG23	2.53	0.43
2:K:1637:VAL:HG11	2:K:1679:LEU:HD22	2.00	0.43
2:K:1766:PHE:CE1	2:K:1869:VAL:HB	2.53	0.43
1:E:628:TYR:HD1	1:E:628:TYR:C	2.21	0.43
2:K:914:TRP:CZ3	2:K:1033:ALA:HA	2.54	0.43
1:A:1213:VAL:CG1	1:A:1214:HIS:N	2.79	0.43
2:G:1456:LEU:HD23	2:G:1457:HIS:N	2.34	0.43
2:I:674:ILE:HB	2:I:675:PRO:HD3	2.01	0.43
2:K:1460:THR:HB	2:K:1463:ASP:OD1	2.18	0.43
1:E:552:ILE:HG21	1:E:566:PHE:CE2	2.52	0.43
2:G:1554:PRO:CG	2:G:1659:ILE:HD11	2.41	0.43
2:K:605:VAL:HB	2:K:628:ILE:CG1	2.42	0.43
2:L:605:VAL:HG22	2:L:816:MET:HG3	1.99	0.43
2:I:617:PHE:HE2	2:I:628:ILE:HD11	1.82	0.43
2:L:1335:PHE:CD1	2:L:1629:ILE:HD11	2.52	0.43
2:H:1335:PHE:HD1	2:H:1335:PHE:N	2.16	0.43
2:J:1335:PHE:N	2:J:1335:PHE:CD1	2.85	0.43
2:L:320:LEU:O	2:L:324:GLN:HG3	2.19	0.43
1:E:1447:VAL:HG21	1:E:1467:LEU:HD11	1.99	0.43
2:J:129:ILE:HG12	2:J:131:ALA:HB3	1.99	0.43
2:H:197:VAL:CG2	2:H:263:ILE:HD11	2.46	0.43
1:B:11:TYR:HD1	2:H:2030:ILE:HD12	1.82	0.43
2:G:875:PHE:HE2	2:G:906:LEU:CD2	2.32	0.43
1:C:374:LEU:HD11	1:D:389:PRO:HD3	2.01	0.43
2:I:1942:VAL:O	2:I:1946:LEU:HG	2.18	0.43
1:C:1168:TRP:HE1	1:C:1173:TYR:HE1	1.64	0.43
2:L:915:PHE:CG	2:L:915:PHE:O	2.72	0.43
1:E:1364:THR:HG22	1:E:1366:GLN:N	2.33	0.43

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:H:1175:MET:HA	2:H:1274:ILE:HD11	2.00	0.43
2:K:350:MET:HG3	2:K:435:ILE:CB	2.48	0.43
2:G:1315:ILE:HA	2:G:1393:ASP:O	2.19	0.43
2:I:932:ALA:O	2:I:935:VAL:HG13	2.19	0.43
1:D:1055:THR:C	1:D:1057:GLU:H	2.22	0.43
2:I:113:PHE:CD1	2:I:113:PHE:N	2.85	0.43
2:H:1851:MET:SD	2:H:1856:LEU:HA	2.58	0.43
1:A:749:ILE:CD1	1:A:769:ILE:HD12	2.49	0.43
1:D:1686:PRO:HB2	1:D:1713:PHE:CD2	2.53	0.43
2:J:2063:GLY:O	2:J:2065:PRO:HD3	2.18	0.43
2:G:1899:ALA:O	2:G:1903:VAL:HG23	2.18	0.43
1:D:648:LEU:HD12	1:D:649:THR:H	1.84	0.43
1:D:1219:GLY:O	1:D:1302:CYS:HA	2.19	0.43
2:K:342:ASN:CB	2:K:406:ARG:NH2	2.82	0.43
2:J:1933:LEU:O	2:J:1989:LEU:HD11	2.18	0.43
1:D:13:LEU:HG	2:J:2048:PHE:CE1	2.53	0.43
1:F:1620:PHE:CE2	1:F:1636:GLY:HA3	2.54	0.43
2:L:1832:THR:HG21	2:L:2040:ILE:HD11	2.00	0.43
1:A:1503:LEU:HD21	1:A:1635:ILE:HD11	2.00	0.43
2:I:1245:THR:HG23	2:I:1260:THR:OG1	2.18	0.43
1:D:902:ASN:C	1:D:904:GLY:H	2.22	0.43
2:J:274:GLU:O	2:J:278:ARG:HG2	2.18	0.43
1:F:1038:HIS:CE1	1:F:1042:LEU:HG	2.54	0.43
2:I:1832:THR:HG21	2:I:2040:ILE:HD11	2.00	0.43
2:K:988:GLU:HA	2:K:989:PRO:HD3	1.70	0.43
1:C:1542:LEU:HD23	1:C:1542:LEU:HA	1.82	0.43
1:D:1185:PRO:O	1:D:1188:LEU:HB2	2.18	0.43
1:E:1503:LEU:HD21	1:E:1635:ILE:HD11	2.00	0.43
1:A:1330:GLU:OE2	1:A:1342:ARG:NH2	2.52	0.43
2:I:2017:PHE:HE2	2:I:2021:LEU:HD11	1.84	0.43
2:J:1464:LEU:HD11	2:J:1468:ARG:HD2	2.00	0.43
2:K:1106:LYS:HB2	2:K:1109:ASN:ND2	2.33	0.43
2:I:468:PRO:HD3	2:I:479:ARG:HH21	1.80	0.43
2:L:1086:ILE:O	2:L:1090:ILE:HG13	2.19	0.43
1:E:1491:ASN:N	1:E:1491:ASN:HD22	2.15	0.43
2:L:1007:LEU:H	2:L:1007:LEU:CD1	2.22	0.43
2:I:1804:GLN:CG	2:I:1865:LEU:HD23	2.48	0.43
2:J:465:LEU:HD23	2:J:465:LEU:HA	1.73	0.43
2:I:80:ILE:HG12	2:I:105:ILE:CG2	2.49	0.43
2:I:747:ARG:HD3	2:I:1071:VAL:HG11	2.00	0.43
2:H:583:THR:HG1	2:H:587:GLN:HB2	1.83	0.43
2:I:608:MET:HE2	2:I:608:MET:HB3	1.94	0.43

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:J:1802:ALA:CB	2:J:1804:GLN:HE22	2.22	0.43
1:E:612:ILE:HA	1:E:613:PRO:HD3	1.62	0.43
1:B:565:GLN:CG	1:B:565:GLN:O	2.67	0.43
1:F:1301:VAL:HG23	1:F:1363:MET:CG	2.49	0.43
2:J:253:ILE:HB	2:J:287:GLN:HE22	1.84	0.43
2:G:1445:THR:CG2	2:G:1498:PHE:HB2	2.49	0.43
2:I:253:ILE:HB	2:I:287:GLN:NE2	2.34	0.43
2:I:605:VAL:HB	2:I:628:ILE:CG1	2.42	0.43
1:C:616:HIS:C	1:C:617:LEU:HD23	2.39	0.43
2:I:1442:TYR:CG	2:I:1499:LYS:O	2.72	0.43
1:B:1317:GLU:HB3	1:D:1250:LEU:HD22	2.01	0.43
2:I:1588:ASN:OD1	2:I:1589:PRO:HD2	2.19	0.43
2:G:617:PHE:HE2	2:G:628:ILE:HD11	1.84	0.43
2:J:1325:VAL:HG13	2:J:1330:ASN:O	2.18	0.43
2:G:1818:PHE:HE2	2:G:1822:ARG:HH12	1.66	0.43
2:I:616:ASP:N	2:I:616:ASP:OD1	2.51	0.43
2:L:1904:VAL:HG13	2:L:1915:LEU:HG	2.01	0.43
2:J:1179:GLU:HB3	2:J:1193:LYS:HE3	1.99	0.43
1:C:965:TYR:CZ	1:C:1199:LEU:CD2	2.98	0.43
2:J:1316:VAL:HB	2:J:1391:VAL:O	2.18	0.43
1:B:1554:LEU:HD22	1:B:1608:PRO:HG3	2.00	0.43
2:J:462:ALA:HB3	2:J:481:LEU:O	2.18	0.43
2:G:1261:PHE:HA	2:G:1284:ARG:NH1	2.33	0.43
2:J:1942:VAL:O	2:J:1946:LEU:HG	2.17	0.43
2:G:1942:VAL:O	2:G:1946:LEU:HG	2.18	0.43
2:H:1766:PHE:CZ	2:H:1869:VAL:HB	2.54	0.43
1:E:498:THR:HG22	1:E:508:TYR:CD1	2.49	0.43
2:K:1175:MET:CE	2:K:1192:LEU:HD11	2.48	0.43
2:H:1406:ASN:HB3	2:H:1411:LYS:HG3	2.00	0.43
1:A:918:LEU:HD23	1:A:921:GLU:OE2	2.19	0.43
2:L:113:PHE:CD1	2:L:113:PHE:N	2.86	0.43
2:J:871:ARG:HB2	2:J:909:ASP:HB2	2.01	0.43
1:A:1581:LEU:HD23	1:A:1581:LEU:HA	1.84	0.43
1:C:739:ASP:OD2	1:C:790:TYR:CG	2.72	0.43
1:F:1472:GLU:O	1:F:1475:GLU:HB2	2.19	0.43
2:L:1762:MET:HG2	2:L:1779:LYS:HZ1	1.83	0.43
2:H:332:ALA:HB3	2:H:335:THR:OG1	2.19	0.43
2:J:1813:MET:HG3	2:J:1814:GLU:N	2.33	0.43
2:L:835:ALA:HB3	2:L:1073:ALA:HB1	1.99	0.43
2:H:357:THR:HG22	2:H:359:SER:H	1.82	0.43
1:B:819:LEU:HD23	1:E:820:ALA:HA	2.00	0.43
1:F:850:THR:C	1:F:852:LEU:H	2.22	0.43

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:B:61:LEU:HA	1:B:65:TYR:HB2	2.01	0.43
2:L:1672:LYS:O	2:L:1672:LYS:HG2	2.18	0.43
1:B:1564:HIS:C	1:B:1564:HIS:ND1	2.72	0.43
2:I:943:TYR:OH	2:I:948:LYS:HA	2.19	0.43
1:A:701:ARG:HH11	1:A:1610:ARG:NH2	2.16	0.43
1:F:1022:LEU:O	1:F:1022:LEU:HD13	2.18	0.43
2:K:590:VAL:CG2	2:K:1091:HIS:CD2	3.00	0.43
2:H:2059:HIS:HB2	2:H:2067:ILE:HG21	2.00	0.43
2:I:787:ASP:O	2:I:790:PRO:HD2	2.19	0.43
2:I:1346:MET:HE3	2:I:1617:ARG:NH2	2.34	0.43
2:J:35:PHE:CE1	2:J:105:ILE:HD13	2.53	0.43
1:A:612:ILE:HA	1:A:613:PRO:HD3	1.64	0.43
1:C:755:GLU:C	1:C:757:ASP:N	2.71	0.43
2:G:24:LEU:HD12	2:G:37:VAL:CG2	2.40	0.43
2:G:22:ARG:HD2	2:G:42:HIS:CB	2.49	0.43
2:J:208:LEU:HB3	2:J:225:LEU:HD13	2.00	0.43
2:J:227:ILE:HG13	2:J:227:ILE:H	1.65	0.43
2:L:617:PHE:HE2	2:L:628:ILE:HD11	1.84	0.43
1:E:1037:ASN:ND2	1:E:1674:ILE:HG12	2.33	0.43
1:F:40:ARG:HH21	1:F:72:THR:HG22	1.83	0.43
2:L:1251:THR:HG22	2:L:1292:VAL:HG13	2.01	0.43
2:L:1316:VAL:HB	2:L:1391:VAL:O	2.19	0.43
1:E:1220:ASN:HB3	1:E:1273:ILE:HG22	1.99	0.43
1:C:548:VAL:HG12	1:C:552:ILE:HD12	2.00	0.43
1:F:1607:TYR:HA	1:F:1608:PRO:HD3	1.83	0.43
2:I:1884:CYS:CB	2:I:1936:LEU:HD12	2.47	0.43
2:L:506:VAL:O	2:L:506:VAL:HG22	2.18	0.43
1:C:999:LEU:HD11	1:C:1575:ASN:CB	2.47	0.43
2:L:791:TYR:HA	2:L:796:TRP:HD1	1.82	0.43
2:J:616:ASP:OD1	2:J:616:ASP:N	2.51	0.43
2:G:1799:LEU:C	2:G:1801:SER:H	2.21	0.43
1:E:1168:TRP:HE1	1:E:1173:TYR:HE1	1.66	0.43
1:A:1640:LYS:CG	1:A:1641:TYR:CD1	3.02	0.43
2:I:1690:THR:HG22	2:I:1691:ALA:N	2.34	0.43
2:I:1362:PHE:N	2:I:1363:PRO:CD	2.82	0.43
1:F:900:ASP:C	1:F:901:LEU:HD23	2.39	0.43
2:L:1204:VAL:HA	2:L:1218:SER:O	2.19	0.43
2:J:1181:PHE:CD1	2:J:1191:PRO:HD2	2.53	0.43
1:E:1522:PHE:HE2	1:E:1535:SER:HA	1.83	0.43
1:C:1601:GLN:HB2	1:C:1602:PHE:CD2	2.54	0.43
1:C:1052:ASP:HB3	1:C:1055:THR:HG23	2.01	0.43
1:A:28:TRP:HE1	1:A:32:GLN:NE2	2.17	0.43

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:L:73:VAL:HG13	2:L:113:PHE:HD2	1.83	0.43
1:C:1164:ILE:HD13	1:C:1355:GLN:HG3	2.01	0.43
2:L:910:PHE:O	2:L:1063:ARG:HD3	2.17	0.43
1:C:670:LEU:CD1	1:C:680:VAL:HG21	2.49	0.43
1:A:744:VAL:CG1	1:A:746:PHE:CE1	3.02	0.43
1:D:28:TRP:CE2	1:D:53:LEU:HD22	2.54	0.43
2:H:1194:ARG:NH2	2:H:1601:ASN:OD1	2.52	0.43
2:J:1903:VAL:O	2:J:1907:ILE:HG13	2.19	0.43
2:G:615:TRP:CE3	2:G:647:LYS:HB3	2.54	0.43
2:L:291:VAL:O	2:L:295:ILE:HB	2.19	0.43
1:F:418:ILE:HA	1:F:462:THR:HB	2.01	0.43
2:K:555:LYS:HB3	2:K:556:PRO:HD3	1.99	0.43
1:E:938:ILE:HG21	2:K:1546:ARG:NH2	2.34	0.43
2:K:399:TYR:CE2	2:K:403:LEU:HD11	2.53	0.43
2:L:1474:LYS:HE3	2:L:1529:ASP:HB3	2.01	0.43
2:L:1014:GLN:O	2:L:1018:LEU:HG	2.18	0.43
1:B:1177:GLU:O	1:B:1180:ILE:HB	2.18	0.43
2:L:1953:ILE:O	2:L:1957:MET:HG2	2.19	0.43
2:G:1014:GLN:O	2:G:1018:LEU:HG	2.19	0.43
2:L:657:GLY:HA3	2:L:688:GLU:HG2	2.00	0.43
2:G:725:GLN:HE21	2:G:767:ARG:HH11	1.67	0.43
1:D:1011:ARG:C	1:D:1011:ARG:HD2	2.39	0.43
1:C:1134:GLU:HG3	1:C:1134:GLU:H	1.68	0.43
2:G:1108:GLU:H	2:G:1108:GLU:HG3	1.57	0.43
2:J:1700:GLN:HG2	2:J:1700:GLN:O	2.19	0.43
2:H:1211:ASP:HA	2:H:1212:PRO:HD2	1.83	0.43
2:J:1653:LEU:HD21	2:J:1667:VAL:HG13	2.01	0.43
1:E:1177:GLU:O	1:E:1180:ILE:HB	2.18	0.43
2:L:600:VAL:CG1	2:L:601:PRO:HD2	2.46	0.43
1:A:1079:ARG:NH1	1:A:1079:ARG:HG2	2.10	0.43
2:K:298:ALA:HB2	2:K:304:PHE:HA	1.99	0.43
2:K:465:LEU:HA	2:K:465:LEU:HD23	1.73	0.43
2:K:467:ILE:CG2	2:K:468:PRO:HD2	2.48	0.43
2:H:866:HIS:HB3	2:H:1068:GLN:O	2.18	0.43
2:J:1616:VAL:O	2:J:1620:VAL:HG23	2.18	0.43
1:A:534:GLN:O	1:F:575:ARG:HD3	2.18	0.43
2:G:582:LYS:HG3	2:G:1110:VAL:CG1	2.46	0.43
2:K:2059:HIS:HB2	2:K:2067:ILE:HG21	2.00	0.43
1:A:755:GLU:HB2	1:A:757:ASP:HB2	2.00	0.43
2:G:1067:LEU:HD12	2:G:1067:LEU:H	1.83	0.43
2:G:752:HIS:NE2	2:G:856:THR:HG22	2.34	0.43
1:B:679:LYS:HG2	1:B:708:GLN:CB	2.38	0.43

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:H:747:ARG:HG3	2:H:747:ARG:H	1.54	0.43
2:I:68:GLU:HB3	2:I:69:PRO:HD2	2.00	0.43
1:C:1213:VAL:HG13	1:C:1217:GLU:HB2	2.01	0.43
2:L:208:LEU:HD23	2:L:211:LEU:HD12	2.00	0.43
2:L:253:ILE:HB	2:L:287:GLN:NE2	2.33	0.43
2:H:608:MET:HA	3:H:2101:FMN:N5	2.34	0.43
2:J:605:VAL:HG22	2:J:816:MET:HG3	2.00	0.43
2:I:914:TRP:CZ3	2:I:1033:ALA:HA	2.54	0.43
1:F:535:TYR:HD2	1:F:540:LYS:HG2	1.84	0.43
2:H:942:MET:HG2	2:H:1029:PRO:HG2	2.01	0.43
2:I:1404:VAL:O	2:I:1445:THR:HA	2.19	0.43
1:C:628:TYR:OH	1:C:630:LYS:HE2	2.18	0.43
1:A:987:MET:SD	1:A:1422:ARG:HG2	2.59	0.43
2:J:134:ILE:HG12	2:J:545:ILE:HD12	2.01	0.43
2:K:1960:MET:SD	2:K:1965:VAL:HG13	2.59	0.43
2:I:220:GLN:NE2	2:I:324:GLN:HG2	2.34	0.43
2:K:1871:VAL:HG23	2:K:2003:VAL:HG13	2.01	0.43
2:K:1028:VAL:HG22	2:K:1030:PHE:CE2	2.53	0.43
1:E:1224:SER:HB3	1:E:1307:PHE:CE2	2.54	0.43
2:L:641:MET:CE	2:L:676:LEU:HD12	2.49	0.43
2:I:626:TYR:OH	2:I:1088:ASP:HA	2.19	0.43
2:K:879:LEU:HB3	2:K:884:PHE:CE1	2.53	0.43
2:I:1205:GLU:O	2:I:1217:ILE:HA	2.19	0.43
2:J:1709:TYR:C	2:J:1709:TYR:CD2	2.92	0.43
1:B:1581:LEU:HA	1:B:1581:LEU:HD23	1.86	0.43
2:K:120:HIS:NE2	2:K:137:VAL:HG11	2.34	0.43
1:B:408:GLN:O	1:B:412:SER:HB2	2.19	0.43
2:I:114:MET:HG2	2:I:122:ILE:HG21	2.00	0.43
1:A:1170:ALA:CB	1:A:1188:LEU:HD13	2.49	0.43
1:E:1022:LEU:HD13	1:E:1022:LEU:O	2.19	0.43
2:K:406:ARG:HA	2:K:409:LYS:HG2	2.01	0.43
1:B:1176:PRO:O	1:B:1180:ILE:HG12	2.18	0.43
1:A:1158:ARG:HD2	1:A:1324:THR:HB	2.01	0.43
2:J:1308:VAL:CG1	2:J:1398:THR:HG23	2.48	0.43
2:L:1276:GLU:HB3	2:L:1278:MET:HE2	2.00	0.43
2:L:644:ALA:O	2:L:648:ILE:HG13	2.19	0.43
2:I:1607:THR:HG22	2:I:1608:HIS:N	2.34	0.43
2:G:1224:GLN:HG3	2:G:1578:GLU:OE2	2.19	0.43
1:A:1030:TRP:CE2	1:A:1673:LEU:HD22	2.54	0.43
2:L:92:GLU:C	2:L:94:ALA:H	2.22	0.43
1:B:1019:LYS:HB2	1:B:1019:LYS:HE3	1.67	0.43
2:I:759:GLN:N	2:I:760:PRO:CD	2.81	0.43

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:C:1389:ILE:HD13	1:F:1682:LYS:HB3	2.00	0.43
2:J:327:PRO:N	2:K:1338:ARG:NH2	2.67	0.43
2:I:1863:ARG:O	2:I:1867:MET:HG3	2.19	0.43
2:H:276:LEU:HD13	2:H:466:VAL:HG21	2.01	0.43
2:H:1106:LYS:HB2	2:H:1109:ASN:ND2	2.34	0.43
2:J:798:THR:HA	2:J:802:TYR:O	2.19	0.43
1:D:689:ARG:NE	1:D:1339:GLU:CG	2.76	0.43
2:J:1972:ILE:HG13	2:J:1972:ILE:H	1.38	0.43
2:G:1863:ARG:HB2	2:G:2017:PHE:HE1	1.84	0.43
2:I:747:ARG:H	2:I:747:ARG:HG3	1.57	0.43
2:L:1067:LEU:O	2:L:1068:GLN:HG2	2.19	0.43
3:L:2101:FMN:H1'2	3:L:2101:FMN:H9	1.82	0.43
1:D:605:ARG:O	1:D:607:GLY:N	2.52	0.43
1:C:714:PHE:CD1	1:C:725:LEU:HD12	2.53	0.43
2:K:938:MET:O	2:K:942:MET:HG3	2.19	0.43
1:B:613:PRO:C	1:B:615:LEU:N	2.73	0.43
1:C:486:VAL:CG1	1:C:647:GLY:HA3	2.41	0.43
2:H:930:THR:HA	2:H:1007:LEU:HA	2.01	0.43
1:A:1278:GLY:CA	1:A:1630:LYS:HE2	2.43	0.43
1:D:1447:VAL:HG21	1:D:1467:LEU:HD11	2.00	0.43
1:F:1249:ILE:HD12	1:F:1250:LEU:N	2.34	0.43
1:B:470:GLY:O	1:B:474:ILE:HG13	2.18	0.43
2:H:1259:LEU:HD11	2:H:1285:ILE:HG12	2.00	0.43
2:L:289:ILE:HG21	2:L:493:MET:HE2	2.01	0.43
2:L:1305:LEU:HB3	2:L:1401:ILE:HD12	2.01	0.43
2:I:1722:ALA:CB	2:I:1812:LEU:HD11	2.49	0.43
2:H:1915:LEU:HD13	2:H:1936:LEU:HD22	2.00	0.43
2:K:1871:VAL:HG12	2:K:1872:GLU:N	2.34	0.43
2:J:1808:PRO:O	2:J:1812:LEU:HD23	2.18	0.43
1:B:1697:LEU:HD21	1:D:1401:LEU:HD22	2.00	0.43
2:L:540:ILE:CD1	2:L:557:GLU:HB3	2.48	0.43
1:C:408:GLN:HE22	1:C:1609:SER:N	2.14	0.43
2:H:727:VAL:HA	2:H:730:ILE:HG12	2.01	0.43
1:C:1432:ILE:HD11	1:C:1481:GLN:CB	2.49	0.43
2:J:740:ILE:HA	2:J:775:VAL:HB	2.01	0.43
1:B:967:PHE:HB3	1:B:968:PRO:HD2	2.01	0.43
1:D:408:GLN:O	1:D:412:SER:HB2	2.19	0.43
2:L:1944:ASN:HA	2:L:1993:PHE:HD1	1.83	0.43
2:I:1904:VAL:HG13	2:I:1915:LEU:HG	2.00	0.43
2:I:283:THR:HG23	2:I:470:TYR:O	2.19	0.43
2:G:871:ARG:HB2	2:G:909:ASP:HB2	2.01	0.43
2:L:347:PRO:HA	2:L:432:PHE:CE1	2.53	0.43

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:D:1071:TYR:CE2	1:D:1075:HIS:HB2	2.54	0.43
2:L:871:ARG:HB2	2:L:909:ASP:HB2	2.01	0.43
2:I:737:PHE:O	2:I:773:ASN:HB3	2.19	0.43
2:I:737:PHE:HA	2:I:738:PRO:HD3	1.78	0.43
1:D:874:GLN:HG2	1:D:874:GLN:H	1.34	0.43
2:J:604:MET:HG3	2:J:627:HIS:HD2	1.83	0.43
1:A:1042:LEU:HA	1:A:1042:LEU:HD23	1.77	0.43
1:F:1288:ASP:O	1:F:1291:TYR:HB3	2.19	0.43
1:B:1419:LYS:O	1:B:1422:ARG:HB2	2.18	0.43
2:K:1157:VAL:HG13	2:K:1197:ALA:HA	2.00	0.43
1:B:821:LEU:HD23	1:B:821:LEU:HA	1.89	0.43
1:E:1651:TYR:CE2	1:E:1655:CYS:SG	3.12	0.43
2:L:1645:PRO:O	2:L:1646:ASN:HB2	2.19	0.43
2:G:1350:ILE:O	2:G:1354:TRP:HB2	2.18	0.43
2:H:615:TRP:CE3	2:H:647:LYS:HB3	2.53	0.43
2:G:1452:VAL:O	2:G:1454:MET:HG3	2.19	0.43
2:H:358:ARG:HH21	2:H:383:VAL:HG21	1.84	0.43
2:L:1572:ARG:HG2	2:L:1647:ASP:O	2.19	0.43
1:D:1419:LYS:O	1:D:1422:ARG:HB2	2.19	0.43
1:F:958:GLU:HA	1:F:959:PRO:HD3	1.93	0.43
1:E:450:TYR:C	1:E:450:TYR:CD2	2.91	0.43
2:K:2038:LYS:HD3	2:K:2038:LYS:HA	1.77	0.43
1:F:1031:MET:HB3	1:F:1031:MET:HE2	1.76	0.43
2:J:1558:GLU:O	2:J:1560:PRO:HD3	2.19	0.43
2:L:2003:VAL:HA	2:L:2004:PRO:HD3	1.82	0.42
2:G:785:SER:CB	2:G:1094:HIS:CD2	3.01	0.42
1:F:827:ARG:HB3	1:F:833:TRP:HZ2	1.84	0.42
2:G:420:PRO:HB2	2:G:423:GLN:HB2	2.01	0.42
2:G:868:LEU:HD12	2:G:868:LEU:HA	1.80	0.42
1:B:997:THR:HB	1:B:1363:MET:HE2	2.01	0.42
2:G:914:TRP:CZ3	2:G:1033:ALA:HA	2.54	0.42
2:H:211:LEU:HB3	2:H:316:PHE:CZ	2.53	0.42
2:H:221:TYR:CE2	2:H:225:LEU:HD12	2.54	0.42
1:D:326:ASP:HB3	1:D:333:ARG:NH1	2.23	0.42
2:K:1631:ARG:NH2	2:K:1688:PRO:HA	2.34	0.42
2:H:914:TRP:O	2:H:916:GLY:N	2.46	0.42
2:G:211:LEU:HB3	2:G:316:PHE:CZ	2.54	0.42
1:F:404:ASN:HD21	1:F:1607:TYR:H	1.66	0.42
2:L:26:LEU:HD23	2:L:26:LEU:HA	1.78	0.42
1:D:449:GLN:HG3	1:D:474:ILE:HD13	2.01	0.42
1:A:1168:TRP:NE1	1:A:1173:TYR:CE1	2.79	0.42
1:B:29:ILE:HD11	2:H:1923:ALA:N	2.34	0.42

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:I:641:MET:CE	2:I:676:LEU:HD12	2.48	0.42
1:D:421:ARG:NH2	1:D:1613:LYS:HB3	2.33	0.42
2:H:478:LEU:HD22	2:H:481:LEU:HD11	2.01	0.42
2:G:1362:PHE:N	2:G:1363:PRO:CD	2.82	0.42
2:J:529:ASN:HD22	2:J:552:VAL:CG2	2.32	0.42
2:H:1181:PHE:CD1	2:H:1191:PRO:HD2	2.54	0.42
2:L:1944:ASN:HA	2:L:1993:PHE:CE1	2.53	0.42
2:H:141:TYR:HA	2:H:144:ARG:HB3	2.01	0.42
2:J:1741:ASN:ND2	2:J:1798:GLY:HA3	2.32	0.42
1:A:75:GLN:NE2	2:I:335:THR:HG23	2.34	0.42
1:F:1071:TYR:HD2	1:F:1071:TYR:C	2.23	0.42
1:F:1321:MET:HB3	1:F:1321:MET:HE2	1.73	0.42
1:C:450:TYR:CD2	1:C:450:TYR:C	2.92	0.42
2:J:665:VAL:C	2:J:667:PRO:HD3	2.39	0.42
2:L:1818:PHE:HE2	2:L:1822:ARG:NH1	2.17	0.42
2:G:1048:TRP:CE2	2:G:1049:GLN:HG2	2.54	0.42
1:F:1184:ASP:OD1	1:F:1185:PRO:HD2	2.19	0.42
1:D:743:VAL:HG12	1:D:745:PRO:HG3	2.01	0.42
1:F:414:TYR:O	1:F:418:ILE:HG13	2.18	0.42
1:B:1098:GLN:HB2	1:B:1152:LYS:HE2	2.01	0.42
2:L:1157:VAL:HG13	2:L:1197:ALA:HA	2.01	0.42
1:F:648:LEU:HD12	1:F:649:THR:N	2.34	0.42
2:K:943:TYR:OH	2:K:948:LYS:HA	2.19	0.42
2:K:306:THR:O	2:K:310:ARG:HG3	2.19	0.42
1:B:23:ALA:HA	2:H:2007:SER:O	2.19	0.42
1:F:948:HIS:O	1:F:952:TYR:HD2	2.02	0.42
2:H:943:TYR:OH	2:H:948:LYS:HA	2.19	0.42
1:F:1342:ARG:HB3	1:F:1345:SER:HB2	2.01	0.42
2:G:601:PRO:HA	2:G:602:PRO:HD3	1.83	0.42
2:L:1099:LEU:HD12	2:L:1103:TYR:HB2	1.99	0.42
1:D:1363:MET:HE3	1:D:1368:ALA:HB2	2.01	0.42
1:E:628:TYR:CD1	1:E:629:SER:N	2.76	0.42
2:J:1067:LEU:O	2:J:1068:GLN:HG2	2.19	0.42
2:G:779:GLY:HA3	2:G:811:MET:HE2	2.00	0.42
2:J:68:GLU:HB3	2:J:69:PRO:HD2	2.01	0.42
2:I:1456:LEU:HD23	2:I:1457:HIS:N	2.34	0.42
1:C:1365:ALA:O	1:C:1368:ALA:HB3	2.20	0.42
1:C:1213:VAL:CG1	1:C:1214:HIS:N	2.81	0.42
2:L:1462:GLN:O	2:L:1466:VAL:HG23	2.19	0.42
1:B:552:ILE:HD11	1:E:566:PHE:CE1	2.53	0.42
1:E:648:LEU:HD12	1:E:649:THR:N	2.34	0.42
2:L:1589:PRO:CB	2:L:1596:PHE:CG	3.02	0.42

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:K:1687:GLN:HA	2:K:1688:PRO:HD3	1.76	0.42
2:G:938:MET:HE2	2:G:959:THR:HA	2.01	0.42
2:H:1589:PRO:HB2	2:H:1596:PHE:HB3	2.01	0.42
2:I:1179:GLU:HB3	2:I:1193:LYS:HE3	2.02	0.42
2:K:823:HIS:HB3	2:K:1051:GLU:HG3	2.01	0.42
1:B:1470:ARG:HD3	1:B:1470:ARG:HA	1.90	0.42
2:J:731:ALA:HB1	2:J:771:CYS:SG	2.59	0.42
2:G:1871:VAL:HG12	2:G:1872:GLU:N	2.33	0.42
2:I:1744:GLU:N	2:I:1799:LEU:HD13	2.34	0.42
1:C:1444:GLN:O	1:C:1447:VAL:HB	2.19	0.42
1:F:11:TYR:HD1	2:L:2030:ILE:HD12	1.83	0.42
2:K:976:GLN:HA	2:K:977:PRO:HD3	1.89	0.42
2:H:174:GLY:H	2:H:517:GLY:CA	2.29	0.42
2:J:1805:PHE:O	2:J:1808:PRO:HD2	2.19	0.42
2:K:1289:TYR:CD2	2:K:1370:LEU:HD23	2.54	0.42
2:L:1913:TRP:HZ3	2:L:1938:THR:HG21	1.84	0.42
2:H:1938:THR:HG22	2:H:1977:ARG:HA	2.00	0.42
2:K:1587:TYR:O	2:K:1588:ASN:C	2.57	0.42
2:K:932:ALA:O	2:K:935:VAL:HG13	2.19	0.42
1:A:498:THR:HG21	1:A:858:LEU:HA	2.02	0.42
1:C:859:VAL:O	1:C:863:VAL:HG23	2.18	0.42
2:H:932:ALA:O	2:H:935:VAL:HG13	2.19	0.42
1:C:329:THR:O	1:C:332:GLN:HB2	2.19	0.42
1:F:584:ILE:H	1:F:584:ILE:HG12	1.65	0.42
2:H:980:LEU:CD2	2:H:986:LEU:HD21	2.50	0.42
1:A:1446:GLU:O	1:A:1450:ILE:HG13	2.19	0.42
1:C:358:PHE:HD2	1:C:359:VAL:N	2.16	0.42
1:D:1713:PHE:HA	1:D:1714:PRO:HD3	1.80	0.42
1:C:749:ILE:HA	1:C:750:PRO:HD3	1.85	0.42
1:F:34:VAL:HG11	2:L:2047:PRO:HD3	2.00	0.42
1:A:23:ALA:HA	2:G:2007:SER:O	2.19	0.42
2:K:1127:GLU:HA	2:K:1128:PRO:HD3	1.74	0.42
2:J:1452:VAL:O	2:J:1454:MET:HG3	2.18	0.42
2:I:342:ASN:HB2	2:I:406:ARG:NH2	2.33	0.42
1:A:1475:GLU:HB3	1:A:1479:ARG:NH2	2.33	0.42
2:L:1308:VAL:CG1	2:L:1398:THR:HG23	2.50	0.42
1:B:1461:PHE:CE2	1:D:1411:PHE:CE1	3.07	0.42
2:G:399:TYR:CE2	2:G:403:LEU:HD11	2.55	0.42
1:C:34:VAL:HG11	2:I:2047:PRO:HD3	2.00	0.42
2:K:894:GLU:O	2:K:897:LYS:HG2	2.19	0.42
2:H:444:LEU:HD23	2:H:444:LEU:HA	1.72	0.42
2:L:894:GLU:O	2:L:897:LYS:HG2	2.18	0.42

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:G:1303:THR:HA	2:G:1304:PRO:HD3	1.92	0.42
1:E:350:ASP:HB3	1:E:353:ALA:HB2	2.01	0.42
1:B:490:VAL:HG12	1:B:490:VAL:O	2.19	0.42
1:A:490:VAL:O	1:A:490:VAL:HG12	2.20	0.42
1:D:628:TYR:C	1:D:628:TYR:CD1	2.92	0.42
2:J:601:PRO:HB2	2:J:626:TYR:CE2	2.54	0.42
2:K:515:ASP:CB	2:K:541:LEU:HD23	2.48	0.42
2:L:2005:PHE:HA	2:L:2010:LEU:CD1	2.32	0.42
1:A:1695:VAL:HG11	1:A:1713:PHE:CD2	2.55	0.42
2:G:467:ILE:CG2	2:G:468:PRO:HD2	2.45	0.42
2:I:785:SER:O	2:I:789:TYR:HB2	2.19	0.42
2:J:2059:HIS:HB2	2:J:2067:ILE:HG21	2.00	0.42
2:L:1972:ILE:H	2:L:1972:ILE:HG13	1.43	0.42
2:K:606:ALA:HB2	2:K:811:MET:HG3	2.01	0.42
2:H:762:LEU:HD11	2:H:800:PHE:CB	2.49	0.42
2:K:914:TRP:CD1	2:K:916:GLY:CA	2.96	0.42
2:I:289:ILE:CG2	2:I:490:LEU:HD22	2.50	0.42
2:I:489:GLU:HG2	2:I:492:ARG:NH1	2.34	0.42
2:G:1780:ILE:HG23	2:G:1869:VAL:HG11	2.01	0.42
2:J:193:TYR:O	2:J:197:VAL:HG23	2.19	0.42
1:A:1168:TRP:CE2	1:A:1173:TYR:HE1	2.38	0.42
2:I:1728:GLU:C	2:I:1757:ILE:HD11	2.40	0.42
1:A:1307:PHE:CA	1:A:1568:ALA:HB2	2.50	0.42
1:F:1467:LEU:HD23	1:F:1467:LEU:HA	1.91	0.42
2:J:1832:THR:HG21	2:J:2040:ILE:HD11	2.01	0.42
2:I:399:TYR:CE2	2:I:403:LEU:HD11	2.54	0.42
2:H:1626:GLU:O	2:H:1627:ASN:HB2	2.19	0.42
2:J:1886:VAL:CG1	2:J:1900:LEU:HD11	2.50	0.42
2:H:1362:PHE:N	2:H:1363:PRO:CD	2.79	0.42
2:L:1175:MET:HA	2:L:1274:ILE:HD11	2.00	0.42
2:L:884:PHE:HE2	2:L:1039:GLU:CA	2.29	0.42
1:F:329:THR:O	1:F:332:GLN:HB2	2.19	0.42
2:K:918:ASN:HB3	2:K:924:VAL:HG21	2.00	0.42
1:C:335:LEU:O	1:C:335:LEU:HD12	2.20	0.42
2:K:73:VAL:HA	2:K:113:PHE:HE2	1.84	0.42
1:C:529:GLY:HA3	1:C:611:THR:HG21	2.01	0.42
2:G:73:VAL:HA	2:G:113:PHE:HE2	1.83	0.42
2:H:872:GLY:HA2	2:H:909:ASP:O	2.19	0.42
2:H:2063:GLY:O	2:H:2065:PRO:HD3	2.20	0.42
2:I:1324:PHE:N	2:I:1583:VAL:HG11	2.34	0.42
1:F:1393:VAL:N	1:F:1394:PRO:CD	2.82	0.42
2:J:910:PHE:O	2:J:1063:ARG:HD3	2.19	0.42

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:E:1525:THR:O	1:E:1526:SER:HB3	2.19	0.42
1:A:1472:GLU:O	1:A:1475:GLU:HB2	2.19	0.42
1:E:829:TYR:OH	1:E:896:PRO:HD2	2.20	0.42
1:C:776:ARG:NH1	1:D:759:ILE:O	2.50	0.42
2:G:358:ARG:HH21	2:G:383:VAL:HG21	1.85	0.42
1:A:447:PHE:CE1	1:A:451:HIS:NE2	2.87	0.42
1:C:1419:LYS:O	1:C:1422:ARG:HB2	2.19	0.42
2:L:1146:LEU:O	2:L:1201:GLY:HA2	2.18	0.42
1:B:374:LEU:HD11	1:E:389:PRO:HD3	2.01	0.42
1:C:1011:ARG:HD2	1:C:1011:ARG:C	2.40	0.42
2:J:336:LEU:C	2:J:336:LEU:HD23	2.40	0.42
1:D:349:MET:O	1:D:349:MET:HG3	2.19	0.42
1:B:1673:LEU:HD23	1:B:1673:LEU:HA	1.80	0.42
2:I:571:ASP:HB3	2:I:574:LYS:HB2	2.02	0.42
2:L:1350:ILE:O	2:L:1354:TRP:HB2	2.18	0.42
2:K:300:THR:HG22	2:K:301:TRP:N	2.35	0.42
2:J:785:SER:CB	2:J:1094:HIS:CD2	3.02	0.42
2:I:785:SER:HB3	2:I:1094:HIS:CD2	2.55	0.42
2:I:603:VAL:HG22	2:I:810:CYS:SG	2.59	0.42
1:E:1589:ASN:ND2	1:E:1592:ALA:HB2	2.34	0.42
2:L:582:LYS:HG3	2:L:1110:VAL:CG1	2.46	0.42
2:J:582:LYS:HG3	2:J:1110:VAL:CG1	2.47	0.42
2:K:1972:ILE:H	2:K:1972:ILE:HG13	1.42	0.42
2:L:1637:VAL:HG11	2:L:1679:LEU:CD1	2.38	0.42
3:I:2101:FMN:H1'2	3:I:2101:FMN:O4'	2.20	0.42
2:L:1064:THR:CG2	2:L:1065:CYS:N	2.81	0.42
2:L:856:THR:HG22	2:L:865:ILE:O	2.19	0.42
2:H:460:ILE:HA	2:H:461:PRO:HD3	1.81	0.42
2:J:1456:LEU:HD23	2:J:1457:HIS:N	2.35	0.42
2:K:227:ILE:H	2:K:227:ILE:HG13	1.69	0.42
2:H:208:LEU:HB3	2:H:225:LEU:HD13	2.02	0.42
2:L:1588:ASN:HD21	2:L:1590:ILE:HD12	1.83	0.42
3:H:2101:FMN:H9	3:H:2101:FMN:H1'2	1.81	0.42
2:H:612:THR:CG2	2:H:629:GLU:O	2.67	0.42
2:L:1325:VAL:HG22	2:L:1335:PHE:CD2	2.54	0.42
2:G:1115:TYR:CZ	2:G:1174:ALA:HB2	2.54	0.42
2:L:1521:GLU:OE1	2:L:1521:GLU:HA	2.19	0.42
2:J:928:ASP:CA	2:J:1007:LEU:HD23	2.48	0.42
2:J:731:ALA:CB	2:J:739:ILE:HD12	2.50	0.42
2:H:1764:MET:O	2:H:1780:ILE:HG13	2.19	0.42
2:K:1335:PHE:HE1	2:K:1629:ILE:HD13	1.84	0.42
2:J:376:ARG:HH21	2:K:1339:GLY:HA2	1.83	0.42

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:G:1007:LEU:HD12	2:G:1007:LEU:N	2.30	0.42
2:K:731:ALA:HB1	2:K:771:CYS:SG	2.59	0.42
2:K:1767:GLU:HB2	2:K:2016:PRO:CG	2.49	0.42
2:H:1881:TYR:CB	2:H:2004:PRO:HG3	2.50	0.42
1:D:1160:VAL:HB	1:D:1352:MET:HE1	2.02	0.42
2:I:875:PHE:HE2	2:I:906:LEU:CD2	2.32	0.42
2:J:1248:GLU:OE1	2:J:1248:GLU:HA	2.19	0.42
1:E:1364:THR:CG2	1:E:1366:GLN:HB2	2.49	0.42
2:J:879:LEU:HB3	2:J:884:PHE:CE1	2.54	0.42
2:H:1610:MET:HE3	2:H:1610:MET:HA	2.00	0.42
2:H:938:MET:HE2	2:H:959:THR:HA	2.01	0.42
2:K:1248:GLU:OE2	2:K:1250:ARG:HG2	2.20	0.42
1:A:450:TYR:C	1:A:450:TYR:CD2	2.93	0.42
2:H:917:ARG:NH1	2:H:1057:TYR:OH	2.52	0.42
2:H:1873:ARG:HB3	2:H:1879:SER:HA	2.01	0.42
1:B:718:SER:HB3	1:B:721:ASP:HB2	2.01	0.42
2:K:1236:LEU:O	2:K:1237:VAL:CG2	2.68	0.42
1:F:902:ASN:C	1:F:904:GLY:H	2.21	0.42
2:J:314:LEU:O	2:J:318:ILE:HG13	2.20	0.42
1:A:454:HIS:N	1:A:454:HIS:CD2	2.87	0.42
2:J:604:MET:HG3	2:J:627:HIS:CD2	2.54	0.42
2:G:120:HIS:CD2	2:G:137:VAL:CG1	3.02	0.42
2:K:1048:TRP:CD1	2:K:1049:GLN:HG2	2.55	0.42
1:C:31:THR:HG23	2:I:2040:ILE:CG2	2.50	0.42
1:B:1175:VAL:HA	1:B:1176:PRO:HD3	1.82	0.42
2:I:342:ASN:N	2:I:342:ASN:HD22	2.17	0.42
2:H:877:LYS:O	2:H:880:ASP:HB2	2.19	0.42
1:D:1587:PRO:HA	1:D:1611:SER:OG	2.18	0.42
1:A:948:HIS:O	1:A:952:TYR:HD2	2.02	0.42
2:J:692:ILE:HD13	2:J:697:PRO:HG2	2.01	0.42
1:D:821:LEU:HD23	1:D:821:LEU:HA	1.82	0.42
2:K:1424:LYS:HA	2:K:1425:PRO:HD3	1.89	0.42
2:K:1983:LYS:HB3	2:K:1984:PRO:HD2	2.02	0.42
2:L:1708:LEU:O	2:L:1708:LEU:HD22	2.19	0.42
1:B:1031:MET:HE2	1:B:1031:MET:HB3	1.82	0.42
1:E:1564:HIS:C	1:E:1564:HIS:ND1	2.73	0.42
2:I:444:LEU:HA	2:I:444:LEU:HD23	1.72	0.42
1:A:403:TRP:CZ3	1:A:404:ASN:HB2	2.55	0.42
1:F:1254:PHE:HB2	1:F:1257:THR:OG1	2.19	0.42
1:D:612:ILE:HA	1:D:613:PRO:HD3	1.64	0.42
2:L:300:THR:O	2:L:304:PHE:HB2	2.19	0.42
1:C:14:LEU:HD21	2:I:1844:LEU:HD21	2.01	0.42

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:J:785:SER:HB3	2:J:1094:HIS:CD2	2.55	0.42
2:G:1301:PHE:HB3	2:G:1364:ARG:HG3	2.01	0.42
2:H:870:THR:HG21	2:H:1064:THR:O	2.19	0.42
1:F:1213:VAL:HG13	1:F:1217:GLU:HB2	2.01	0.42
2:H:1266:HIS:C	2:H:1268:GLU:H	2.22	0.42
2:K:1669:ALA:HB3	2:K:1679:LEU:HB2	2.01	0.42
2:J:752:HIS:CD2	2:J:866:HIS:ND1	2.88	0.42
1:A:1149:LEU:HB2	1:E:1149:LEU:CB	2.45	0.42
3:K:2101:FMN:O4'	3:K:2101:FMN:H1'2	2.20	0.42
2:H:1009:ASN:HD22	2:H:1010:ALA:N	2.18	0.42
2:L:1456:LEU:HD11	2:L:1543:TYR:HE2	1.85	0.42
2:H:914:TRP:CH2	2:H:1033:ALA:HA	2.54	0.42
2:K:1269:ALA:HB1	2:K:1271:TYR:CE2	2.55	0.42
1:E:1363:MET:CE	1:E:1373:VAL:HG21	2.45	0.42
2:G:196:PHE:CD2	2:G:266:LYS:CB	3.03	0.42
1:E:740:LEU:HA	1:E:740:LEU:HD23	1.84	0.42
1:E:740:LEU:HD12	1:E:781:ILE:HD13	2.00	0.42
1:D:1159:LEU:HD12	1:D:1327:ALA:HB3	2.01	0.42
2:I:158:LEU:HD12	2:I:558:LEU:HD23	2.00	0.42
2:L:1692:TYR:O	2:L:1833:PHE:HA	2.19	0.42
2:I:1913:TRP:HZ3	2:I:1938:THR:HG21	1.83	0.42
1:A:694:TYR:HD2	1:A:695:TYR:CD1	2.37	0.42
2:L:1938:THR:HG22	2:L:1977:ARG:HA	2.01	0.42
2:G:1084:LYS:HE3	2:G:1088:ASP:OD2	2.19	0.42
2:H:283:THR:HG23	2:H:470:TYR:O	2.19	0.42
2:K:741:LEU:O	2:K:741:LEU:CG	2.68	0.42
2:J:137:VAL:O	2:J:141:TYR:HD1	2.03	0.42
2:K:1130:ILE:HD12	2:K:1133:LEU:HD22	2.01	0.42
2:L:1851:MET:SD	2:L:1856:LEU:HA	2.59	0.42
1:E:329:THR:O	1:E:332:GLN:HB2	2.19	0.42
2:H:731:ALA:CB	2:H:739:ILE:HD12	2.50	0.42
2:G:186:LEU:HA	2:G:186:LEU:HD23	1.82	0.42
2:L:1009:ASN:HD22	2:L:1010:ALA:N	2.18	0.42
1:C:653:LYS:HD3	1:C:742:TYR:CE2	2.52	0.42
1:C:655:ALA:O	1:C:680:VAL:HA	2.20	0.42
2:H:685:VAL:HG23	2:H:1186:ARG:HH12	1.85	0.42
2:I:189:ILE:HD12	2:I:256:VAL:HG13	2.02	0.42
1:A:1071:TYR:CE2	1:A:1075:HIS:HB2	2.54	0.42
2:G:1017:LEU:HD21	2:G:1032:PRO:HB2	2.02	0.42
2:H:342:ASN:N	2:H:342:ASN:HD22	2.17	0.42
1:F:350:ASP:HB3	1:F:353:ALA:HB2	2.00	0.42
1:B:1237:LYS:HB2	1:D:1236:TYR:O	2.19	0.42

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:G:712:ARG:O	2:G:738:PRO:HG2	2.18	0.42
2:J:1723:ASP:OD1	2:J:1735:ILE:HG13	2.19	0.42
2:K:657:GLY:HA3	2:K:688:GLU:HG2	2.02	0.42
2:H:1382:MET:CB	2:H:1633:ARG:HH11	2.32	0.42
1:B:548:VAL:HG22	1:E:569:LEU:HB2	2.01	0.42
2:L:1207:THR:O	2:L:1215:THR:HA	2.20	0.42
1:E:501:ASP:HB2	1:E:505:ASN:HB2	2.00	0.42
1:A:859:VAL:O	1:A:863:VAL:HG23	2.19	0.42
2:K:1555:VAL:O	2:K:1555:VAL:HG12	2.19	0.42
1:F:1542:LEU:HA	1:F:1542:LEU:HD23	1.87	0.42
2:G:1380:TYR:N	2:G:1380:TYR:CD2	2.87	0.42
2:H:725:GLN:HE21	2:H:767:ARG:HH11	1.68	0.42
2:G:1211:ASP:HA	2:G:1212:PRO:HD2	1.85	0.42
1:C:61:LEU:HA	1:C:65:TYR:HB2	2.02	0.42
1:E:343:ILE:O	1:E:347:LEU:HG	2.20	0.42
1:A:1148:LEU:HD23	1:A:1148:LEU:HA	1.74	0.42
2:H:1290:TYR:CD2	2:H:1299:VAL:HG12	2.52	0.42
2:J:26:LEU:HD22	2:J:53:LEU:HD21	2.00	0.42
2:I:1299:VAL:HA	2:I:1300:PRO:HD3	1.83	0.42
2:G:1804:GLN:O	2:G:1861:PHE:HD1	2.02	0.42
2:L:1804:GLN:O	2:L:1861:PHE:HD1	2.03	0.42
2:L:1266:HIS:C	2:L:1268:GLU:H	2.23	0.42
2:I:608:MET:HA	3:I:2101:FMN:N5	2.34	0.42
1:A:755:GLU:C	1:A:757:ASP:N	2.73	0.42
2:J:1804:GLN:O	2:J:1861:PHE:HD1	2.03	0.42
2:K:1635:TYR:CE2	2:K:1637:VAL:HG23	2.55	0.42
2:K:747:ARG:HG3	2:K:747:ARG:H	1.59	0.42
2:J:780:SER:HA	3:J:2101:FMN:O5'	2.19	0.42
2:J:829:LYS:O	2:J:832:ILE:HB	2.20	0.42
2:I:1456:LEU:HD11	2:I:1543:TYR:HE2	1.84	0.42
2:K:609:THR:CB	2:K:610:PRO:HD3	2.50	0.42
1:B:1674:ILE:HD12	2:H:1010:ALA:HB3	2.02	0.42
1:B:552:ILE:HD11	1:E:566:PHE:HE1	1.84	0.42
2:L:705:TYR:HA	2:L:709:LEU:CD2	2.49	0.42
2:I:1017:LEU:O	2:I:1021:GLN:HG3	2.20	0.42
2:K:641:MET:CE	2:K:676:LEU:HD12	2.49	0.42
2:H:1371:LEU:HG	2:H:1600:ALA:HB2	2.00	0.42
2:L:1351:VAL:HG23	2:L:1584:SER:HA	2.01	0.42
2:K:791:TYR:HA	2:K:796:TRP:HD1	1.82	0.42
2:J:1335:PHE:HD1	2:J:1335:PHE:N	2.17	0.42
2:J:129:ILE:HG21	2:J:132:LYS:CG	2.50	0.42
1:F:983:GLN:O	1:F:987:MET:HG3	2.20	0.42

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:D:371:GLN:O	1:D:374:LEU:HB3	2.19	0.42
1:F:740:LEU:HD12	1:F:781:ILE:HD13	2.02	0.42
1:E:1082:GLU:HA	1:E:1083:PRO:HD3	1.85	0.42
2:K:1942:VAL:O	2:K:1946:LEU:HG	2.20	0.42
2:I:1873:ARG:HB3	2:I:1879:SER:HA	2.01	0.42
1:C:1307:PHE:CA	1:C:1568:ALA:HB2	2.50	0.42
2:K:649:GLU:HG3	2:K:650:LYS:N	2.34	0.42
2:L:1248:GLU:OE2	2:L:1250:ARG:HG2	2.20	0.42
1:C:562:SER:HB3	1:D:551:LEU:CD2	2.50	0.42
1:F:1581:LEU:HD13	1:F:1638:HIS:HA	2.01	0.42
2:K:718:PRO:HG2	2:K:741:LEU:CD1	2.49	0.42
2:K:962:PHE:O	2:K:965:ARG:HB3	2.20	0.42
2:G:879:LEU:HB3	2:G:884:PHE:CE1	2.55	0.42
1:C:498:THR:HG21	1:C:858:LEU:HA	2.01	0.42
2:J:1944:ASN:HA	2:J:1993:PHE:HD1	1.83	0.42
2:I:1851:MET:HE2	2:I:1851:MET:HB3	1.96	0.42
2:G:186:LEU:CG	2:G:256:VAL:HG22	2.49	0.42
2:L:1873:ARG:HB3	2:L:1879:SER:HA	2.00	0.42
2:L:1873:ARG:NH1	2:L:2002:ASP:CB	2.82	0.42
1:D:1164:ILE:HD13	1:D:1355:GLN:HG3	2.01	0.42
2:J:1220:ARG:HB3	2:J:1228:LEU:HB2	2.01	0.42
2:L:980:LEU:CD2	2:L:986:LEU:HD21	2.49	0.42
1:E:859:VAL:O	1:E:863:VAL:HG23	2.19	0.42
1:D:454:HIS:N	1:D:454:HIS:CD2	2.88	0.42
1:C:959:PRO:HD3	2:I:974:GLU:HG2	2.01	0.42
2:H:356:LEU:O	2:H:387:ARG:HA	2.20	0.42
1:B:1461:PHE:HE2	1:D:1411:PHE:CE1	2.38	0.42
2:G:894:GLU:O	2:G:897:LYS:HG2	2.20	0.42
2:I:1308:VAL:CG1	2:I:1398:THR:HG23	2.49	0.42
1:B:511:VAL:HG12	1:B:512:PRO:HD2	2.02	0.42
2:L:922:GLU:HA	2:L:923:PRO:HD3	1.89	0.42
1:B:1343:PRO:HA	1:B:1526:SER:HA	2.00	0.42
1:A:1359:VAL:HG12	1:A:1360:GLN:N	2.34	0.42
2:K:952:ASP:OD1	2:K:953:PRO:HD2	2.19	0.42
1:C:59:ARG:NH1	2:I:1925:MET:HE2	2.34	0.42
2:G:835:ALA:HB3	2:G:1073:ALA:HB1	2.01	0.42
1:B:1011:ARG:HD2	1:B:1011:ARG:C	2.40	0.42
2:I:1471:GLU:H	2:I:1471:GLU:HG3	1.44	0.42
2:I:1036:GLU:HG3	2:I:1036:GLU:H	1.46	0.42
1:F:458:GLU:H	1:F:458:GLU:CD	2.22	0.42
2:G:1690:THR:HG22	2:G:1691:ALA:N	2.33	0.42
1:D:744:VAL:HG12	1:D:746:PHE:CD1	2.55	0.42

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:K:369:ASN:HB3	2:K:377:HIS:ND1	2.35	0.42
1:D:527:ALA:CB	1:D:637:LEU:HD13	2.49	0.42
2:L:595:SER:HB2	2:L:600:VAL:O	2.20	0.42
2:G:1464:LEU:HD13	2:G:1464:LEU:C	2.40	0.42
2:G:595:SER:HB2	2:G:600:VAL:O	2.20	0.42
2:K:601:PRO:HB2	2:K:626:TYR:CE2	2.55	0.42
2:J:276:LEU:HD11	2:J:296:ALA:HA	2.00	0.42
1:D:343:ILE:O	1:D:347:LEU:HG	2.19	0.42
2:H:580:LEU:O	2:H:581:VAL:HG23	2.20	0.42
1:E:1591:ASN:C	1:E:1593:ASP:H	2.23	0.42
1:A:1015:GLU:HA	1:A:1561:LEU:HD12	2.01	0.42
2:I:80:ILE:HG12	2:I:105:ILE:HG22	2.01	0.42
2:I:2058:VAL:CG1	2:I:2067:ILE:HD12	2.49	0.42
1:A:1213:VAL:HG22	1:A:1300:ARG:HE	1.84	0.42
1:F:1156:PHE:CZ	1:F:1316:TYR:HA	2.54	0.42
2:K:460:ILE:HA	2:K:461:PRO:HD3	1.82	0.42
2:K:485:ASP:CB	2:K:488:PRO:CD	2.91	0.42
2:H:227:ILE:HG13	2:H:227:ILE:H	1.65	0.42
1:E:997:THR:HG22	1:E:1361:VAL:HG22	2.02	0.42
2:I:211:LEU:HB3	2:I:316:PHE:CZ	2.55	0.42
2:G:253:ILE:HB	2:G:287:GLN:NE2	2.35	0.42
2:G:1375:HIS:CE1	2:G:1610:MET:CG	3.03	0.42
2:J:1330:ASN:HD22	2:J:1618:SER:HB2	1.84	0.42
2:J:1621:GLU:HG2	2:J:1632:VAL:HG11	2.01	0.42
2:L:197:VAL:O	2:L:200:LEU:HD23	2.20	0.42
2:K:196:PHE:O	2:K:262:MET:HE1	2.20	0.42
2:H:663:ILE:N	2:H:663:ILE:HD12	2.35	0.42
2:I:771:CYS:HB3	2:I:774:ILE:CD1	2.45	0.42
2:I:1728:GLU:C	2:I:1757:ILE:CD1	2.88	0.42
1:B:828:TRP:NE1	1:B:838:THR:HA	2.30	0.42
2:G:1947:LYS:HG3	2:G:1948:MET:HE3	2.01	0.42
2:H:47:GLN:NE2	2:I:23:PRO:HB2	2.33	0.42
2:L:1442:TYR:HA	2:L:1445:THR:CG2	2.45	0.42
2:G:818:THR:HG22	2:G:829:LYS:CB	2.50	0.42
2:G:1199:THR:HG22	2:G:1200:ARG:N	2.35	0.42
1:B:1696:PHE:O	1:D:1402:THR:HG22	2.20	0.42
2:K:1515:LEU:HB3	2:K:1525:VAL:HG21	2.02	0.42
2:H:116:GLY:O	2:H:561:ARG:NH1	2.52	0.42
2:L:741:LEU:O	2:L:741:LEU:CG	2.67	0.42
2:G:1205:GLU:O	2:G:1217:ILE:HA	2.19	0.42
1:B:1402:THR:HG22	1:D:1696:PHE:O	2.20	0.42
1:D:329:THR:O	1:D:332:GLN:HB2	2.20	0.42

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:G:876:TRP:HD1	2:G:876:TRP:C	2.22	0.42
1:E:1601:GLN:HB2	1:E:1602:PHE:CD2	2.54	0.42
2:L:875:PHE:HE2	2:L:906:LEU:CD2	2.32	0.42
2:G:540:ILE:CD1	2:G:557:GLU:HB3	2.50	0.42
2:G:350:MET:HE3	2:G:435:ILE:HD12	2.01	0.42
2:H:1944:ASN:HA	2:H:1993:PHE:HD1	1.84	0.42
2:L:917:ARG:NH1	2:L:1057:TYR:OH	2.53	0.42
1:E:21:GLN:HE21	1:E:21:GLN:HB3	1.59	0.42
2:I:740:ILE:HA	2:I:775:VAL:HB	2.01	0.42
1:B:415:TYR:CD2	1:B:1614:THR:HA	2.54	0.42
1:F:1068:TYR:O	1:F:1072:ILE:HG13	2.20	0.42
1:A:1638:HIS:CG	1:A:1639:PRO:HD2	2.55	0.42
2:H:1631:ARG:NH2	2:H:1688:PRO:HA	2.34	0.42
2:I:350:MET:SD	2:I:392:THR:CG2	3.08	0.42
2:K:690:LEU:HD22	2:K:691:THR:N	2.34	0.42
1:E:718:SER:HB3	1:E:721:ASP:HB2	2.01	0.42
1:B:418:ILE:HA	1:B:462:THR:HB	2.02	0.42
2:H:1248:GLU:OE2	2:H:1250:ARG:HG2	2.19	0.42
1:D:418:ILE:HA	1:D:462:THR:HB	2.01	0.42
1:C:1184:ASP:OD1	1:C:1185:PRO:HD2	2.19	0.42
1:B:1232:LEU:HD11	1:D:1232:LEU:HD21	2.02	0.42
2:J:258:LEU:CD1	2:J:291:VAL:HG13	2.50	0.42
2:G:988:GLU:HA	2:G:989:PRO:HD3	1.69	0.42
2:G:437:ALA:HA	2:G:438:PRO:HD3	1.85	0.42
1:F:1177:GLU:O	1:F:1180:ILE:HB	2.20	0.42
1:D:948:HIS:O	1:D:952:TYR:HD2	2.02	0.42
1:F:553:ARG:HH22	1:F:563:GLN:HB3	1.84	0.42
1:B:432:GLN:O	1:B:436:ILE:HG13	2.19	0.42
2:H:604:MET:HG3	2:H:627:HIS:HD2	1.84	0.42
1:A:959:PRO:HB3	2:G:972:SER:HA	2.00	0.42
1:E:1254:PHE:HB2	1:E:1257:THR:OG1	2.19	0.42
1:C:350:ASP:HB3	1:C:353:ALA:HB2	2.00	0.42
2:K:1607:THR:HG22	2:K:1608:HIS:N	2.33	0.42
2:I:1730:TYR:HA	2:I:1761:TYR:HE1	1.83	0.42
2:I:1672:LYS:HG2	2:I:1672:LYS:O	2.20	0.42
1:B:400:ASP:OD1	1:B:400:ASP:C	2.58	0.42
2:I:1153:ASN:HD22	2:I:1153:ASN:HA	1.57	0.42
1:E:405:TRP:CE3	1:E:405:TRP:HA	2.55	0.42
2:I:1650:THR:O	2:I:1669:ALA:HA	2.19	0.42
1:B:555:GLN:HG2	1:B:557:ARG:NH2	2.35	0.42
1:C:1338:GLY:H	1:C:1340:MET:HG3	1.84	0.42
1:C:1330:GLU:OE2	1:C:1342:ARG:NH2	2.53	0.42

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:D:612:ILE:HG23	1:D:613:PRO:CD	2.49	0.42
2:K:652:ILE:HG23	2:K:656:ARG:HB2	2.01	0.42
2:J:300:THR:O	2:J:304:PHE:HB2	2.20	0.42
2:G:468:PRO:HB3	2:G:477:ASP:OD2	2.19	0.42
1:D:1425:LEU:HD21	1:D:1429:ARG:NH2	2.15	0.42
2:K:818:THR:HG22	2:K:829:LYS:CB	2.49	0.42
2:K:827:GLN:C	2:K:1061:VAL:HG21	2.41	0.42
1:D:689:ARG:CZ	1:D:1339:GLU:CG	2.90	0.42
2:I:608:MET:HE1	2:I:817:MET:HG2	2.02	0.42
2:K:1427:MET:O	2:K:1427:MET:HG3	2.20	0.42
2:L:609:THR:CB	2:L:610:PRO:HD3	2.49	0.42
2:G:870:THR:HG21	2:G:1064:THR:O	2.20	0.42
2:K:914:TRP:CH2	2:K:1033:ALA:HA	2.54	0.42
2:L:68:GLU:HB3	2:L:69:PRO:HD2	2.01	0.42
2:K:208:LEU:HB3	2:K:225:LEU:HD13	2.02	0.42
2:K:930:THR:HA	2:K:1007:LEU:HA	2.02	0.42
2:H:621:THR:OG1	2:H:1083:ILE:HD13	2.19	0.42
1:C:1278:GLY:CA	1:C:1630:LYS:HE2	2.43	0.42
2:G:411:PRO:HD2	2:G:414:LEU:HD11	2.02	0.42
2:I:1405:ILE:HG22	2:I:1445:THR:OG1	2.19	0.42
1:D:47:ILE:HB	2:J:1694:PHE:CE1	2.54	0.42
2:I:665:VAL:C	2:I:667:PRO:HD3	2.40	0.42
1:E:1363:MET:HE3	1:E:1368:ALA:CA	2.50	0.42
1:C:689:ARG:NH1	1:C:1339:GLU:OE2	2.53	0.42
2:H:785:SER:O	2:H:789:TYR:HB2	2.19	0.42
2:K:737:PHE:HA	2:K:738:PRO:HD3	1.80	0.42
2:H:1028:VAL:HG22	2:H:1030:PHE:CE2	2.55	0.42
2:G:1807:GLN:HB3	2:G:1860:VAL:CG1	2.49	0.42
2:G:1847:LEU:N	2:G:1847:LEU:HD12	2.34	0.42
2:H:1947:LYS:HG3	2:H:1948:MET:HE2	2.02	0.42
2:K:1361:ILE:HD11	2:K:1433:PHE:CD2	2.54	0.42
2:H:1610:MET:HA	2:H:1610:MET:HE2	1.99	0.42
1:F:893:GLN:OE1	2:G:1751:GLY:HA2	2.19	0.42
1:C:900:ASP:C	1:C:901:LEU:HD23	2.39	0.42
2:K:349:PRO:O	2:K:392:THR:HG22	2.20	0.42
2:G:883:ILE:HG22	2:G:884:PHE:N	2.35	0.42
2:J:141:TYR:CD2	2:J:196:PHE:CZ	3.07	0.42
2:H:347:PRO:HA	2:H:432:PHE:CE1	2.54	0.42
2:L:114:MET:HG2	2:L:122:ILE:HG21	2.02	0.42
2:I:120:HIS:HD2	2:I:137:VAL:HG21	1.83	0.42
1:B:1164:ILE:HD12	1:B:1355:GLN:HG3	2.02	0.42
2:H:871:ARG:HB2	2:H:909:ASP:HB2	2.02	0.42

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:K:1303:THR:HA	2:K:1304:PRO:HD3	1.92	0.42
2:L:314:LEU:O	2:L:318:ILE:HG13	2.20	0.42
2:L:1690:THR:HG22	2:L:1691:ALA:N	2.34	0.42
1:D:749:ILE:CD1	1:D:769:ILE:HD12	2.50	0.42
2:H:618:VAL:HG13	2:H:619:ALA:N	2.34	0.42
1:D:799:LEU:HD12	1:D:821:LEU:HB3	2.01	0.42
2:H:604:MET:HG3	2:H:627:HIS:CD2	2.54	0.42
2:I:692:ILE:HD13	2:I:697:PRO:HG2	2.02	0.42
2:K:1933:LEU:O	2:K:1989:LEU:HD11	2.20	0.42
2:J:1953:ILE:O	2:J:1957:MET:HG2	2.20	0.42
2:L:1199:THR:HB	2:L:1202:MET:HB3	2.01	0.42
2:J:1636:HIS:O	2:J:1681:GLY:HA3	2.19	0.42
1:A:631:LYS:O	1:A:635:ILE:HG13	2.19	0.42
1:F:754:ARG:HH21	1:F:762:LYS:HD3	1.84	0.42
1:A:1651:TYR:CE2	1:A:1655:CYS:SG	3.13	0.42
1:D:511:VAL:HG12	1:D:512:PRO:HD2	2.02	0.42
1:E:874:GLN:HG2	1:E:874:GLN:H	1.35	0.42
2:J:988:GLU:HA	2:J:989:PRO:HD3	1.77	0.42
1:D:23:ALA:HA	2:J:2007:SER:O	2.19	0.42
2:H:1380:TYR:CD2	2:H:1380:TYR:N	2.87	0.42
2:I:291:VAL:O	2:I:295:ILE:HB	2.20	0.42
1:D:34:VAL:HG11	2:J:2047:PRO:HD3	2.01	0.42
2:H:1207:THR:O	2:H:1215:THR:HA	2.19	0.42
2:J:834:ASP:O	2:J:836:PRO:HD3	2.20	0.42
2:K:1658:MET:HE2	2:K:1826:LEU:HD23	2.01	0.42
1:A:558:LEU:HA	1:F:557:ARG:HH11	1.85	0.42
2:L:1863:ARG:O	2:L:1867:MET:HG3	2.19	0.42
2:J:580:LEU:O	2:J:581:VAL:HG23	2.20	0.42
2:H:1290:TYR:CG	2:H:1299:VAL:CG1	2.89	0.42
1:D:689:ARG:CD	1:D:1339:GLU:CD	2.79	0.42
2:L:1635:TYR:CE2	2:L:1637:VAL:HG23	2.54	0.42
2:L:1802:ALA:CB	2:L:1804:GLN:HE22	2.22	0.42
2:J:779:GLY:HA3	2:J:811:MET:HE2	2.02	0.42
1:B:40:ARG:NH2	1:B:72:THR:HG22	2.35	0.42
1:A:962:ASN:HB3	2:G:969:ARG:CD	2.48	0.42
2:L:876:TRP:HD1	2:L:876:TRP:C	2.22	0.42
1:F:1363:MET:HE3	1:F:1368:ALA:HB2	2.02	0.42
1:E:855:ALA:HA	1:E:919:ARG:NH2	2.25	0.42
1:C:422:LEU:HB3	1:C:429:ILE:CD1	2.49	0.42
2:H:942:MET:O	2:H:951:ILE:HG13	2.20	0.42
2:L:1316:VAL:HG13	2:L:1348:PHE:HE2	1.85	0.42
2:I:703:ASN:O	2:I:707:GLN:HG3	2.19	0.42

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:I:106:LEU:HD11	2:I:143:GLY:O	2.19	0.42
2:G:805:MET:HB3	2:G:805:MET:HE2	1.84	0.42
2:J:1269:ALA:HB1	2:J:1271:TYR:CE2	2.55	0.42
1:E:1509:THR:OG1	1:E:1510:TRP:CD1	2.72	0.42
2:J:1960:MET:SD	2:J:1965:VAL:HG13	2.60	0.42
2:L:489:GLU:HG2	2:L:492:ARG:CZ	2.50	0.42
2:H:616:ASP:N	2:H:616:ASP:OD1	2.51	0.42
2:K:1351:VAL:CG1	2:K:1352:VAL:N	2.83	0.42
2:L:1886:VAL:CG1	2:L:1900:LEU:HD11	2.50	0.42
2:K:1904:VAL:HG13	2:K:1915:LEU:HG	2.02	0.42
2:J:1904:VAL:HG13	2:J:1915:LEU:HG	2.02	0.42
1:D:1640:LYS:CG	1:D:1641:TYR:N	2.82	0.42
2:J:186:LEU:HD11	2:J:255:LEU:HD23	2.02	0.42
2:J:1588:ASN:HD21	2:J:1590:ILE:HD12	1.84	0.42
2:I:321:ARG:HE	2:I:450:HIS:HB3	1.84	0.42
2:I:1022:ARG:HG2	2:I:1022:ARG:H	1.70	0.42
2:L:462:ALA:HB3	2:L:481:LEU:O	2.19	0.42
2:G:1913:TRP:HZ3	2:G:1938:THR:HG21	1.84	0.42
2:K:727:VAL:HA	2:K:730:ILE:CG1	2.50	0.42
2:I:1130:ILE:HD12	2:I:1133:LEU:HD22	2.01	0.42
2:J:159:PHE:CD2	2:J:169:ILE:HD12	2.54	0.42
2:L:126:VAL:O	2:L:133:LYS:HE3	2.20	0.42
2:J:1154:LEU:HD13	2:J:1198:PRO:CB	2.50	0.42
2:K:347:PRO:HA	2:K:432:PHE:CE1	2.55	0.42
2:G:189:ILE:HD12	2:G:256:VAL:HG13	2.01	0.42
1:A:726:VAL:HG21	1:A:780:ALA:CB	2.50	0.42
2:K:1304:PRO:O	2:K:1307:ALA:CB	2.67	0.42
2:I:349:PRO:O	2:I:392:THR:HG22	2.20	0.42
2:I:699:ILE:H	2:I:699:ILE:CD1	2.32	0.42
1:A:1386:THR:HG22	1:A:1387:ASP:H	1.84	0.42
1:B:776:ARG:NH1	1:E:759:ILE:O	2.52	0.42
2:K:1048:TRP:NE1	2:K:1049:GLN:HG2	2.35	0.42
1:A:1176:PRO:O	1:A:1180:ILE:HG12	2.20	0.42
2:I:92:GLU:C	2:I:94:ALA:H	2.22	0.42
1:B:1705:GLN:HE21	1:B:1709:GLY:HA2	1.84	0.42
1:E:64:LYS:HE3	2:K:1923:ALA:CB	2.50	0.42
2:H:1245:THR:HG23	2:H:1260:THR:OG1	2.19	0.42
2:J:1236:LEU:O	2:J:1237:VAL:HG23	2.19	0.42
1:C:1254:PHE:HB2	1:C:1257:THR:OG1	2.20	0.42
2:L:306:THR:O	2:L:310:ARG:HG3	2.19	0.42
1:D:1564:HIS:C	1:D:1564:HIS:ND1	2.73	0.42
2:I:1700:GLN:O	2:I:1700:GLN:HG2	2.19	0.42

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:H:734:ASN:N	2:H:734:ASN:ND2	2.68	0.42
1:C:1020:PHE:CE2	1:C:1028:MET:HG3	2.54	0.42
1:C:701:ARG:NH1	1:C:1610:ARG:NH2	2.68	0.42
1:F:1329:GLU:O	1:F:1333:ARG:HG3	2.20	0.42
1:C:22:PHE:O	2:I:2006:HIS:HA	2.20	0.42
1:A:1703:VAL:HG23	1:A:1713:PHE:CD1	2.55	0.42
2:K:580:LEU:O	2:K:581:VAL:HG23	2.19	0.42
1:E:1100:VAL:HG21	1:E:1150:ILE:CD1	2.47	0.42
2:J:1863:ARG:HB2	2:J:2017:PHE:CE1	2.55	0.42
2:H:1301:PHE:HD1	2:H:1364:ARG:HG2	1.85	0.42
1:A:1591:ASN:C	1:A:1593:ASP:H	2.24	0.42
2:K:1349:ALA:HB2	2:K:1427:MET:SD	2.60	0.42
2:G:609:THR:HG23	3:G:2101:FMN:O4	2.20	0.42
2:H:1456:LEU:HD11	2:H:1543:TYR:HE2	1.84	0.42
2:H:747:ARG:HD2	2:H:780:SER:OG	2.20	0.42
1:B:1670:HIS:ND1	2:H:1009:ASN:ND2	2.68	0.42
2:K:211:LEU:HD21	2:K:313:GLU:HG3	2.02	0.42
1:F:1273:ILE:O	1:F:1273:ILE:HG13	2.19	0.42
2:K:376:ARG:HA	2:K:443:TYR:OH	2.19	0.42
2:G:938:MET:CE	2:G:959:THR:HA	2.50	0.42
1:F:1275:THR:HA	1:F:1276:PRO:HD3	1.72	0.42
2:G:1338:ARG:HH21	2:I:327:PRO:CD	2.24	0.42
2:G:1588:ASN:HA	2:G:1589:PRO:HD3	1.88	0.42
2:G:320:LEU:O	2:G:324:GLN:HG3	2.20	0.42
1:F:500:ILE:HG22	1:F:929:ARG:NH1	2.34	0.42
2:H:129:ILE:HG21	2:H:132:LYS:CG	2.50	0.42
1:B:1586:VAL:HA	1:B:1587:PRO:HD3	1.82	0.42
2:G:641:MET:CE	2:G:676:LEU:HD12	2.50	0.42
2:I:1938:THR:HG22	2:I:1977:ARG:HA	2.01	0.42
1:A:371:GLN:O	1:A:374:LEU:HB3	2.20	0.42
1:E:1640:LYS:CG	1:E:1641:TYR:N	2.83	0.42
2:L:281:GLY:HA3	2:L:470:TYR:CE1	2.52	0.42
1:C:562:SER:OG	1:D:551:LEU:HD21	2.20	0.42
1:F:1601:GLN:HB2	1:F:1602:PHE:CD2	2.55	0.42
1:F:967:PHE:HB3	1:F:968:PRO:CD	2.50	0.42
2:I:1944:ASN:HA	2:I:1993:PHE:HD1	1.82	0.42
2:L:36:LEU:HA	2:L:36:LEU:HD23	1.73	0.42
1:F:88:ILE:HG21	2:L:1821:MET:CE	2.48	0.42
1:F:498:THR:HG22	1:F:508:TYR:CD1	2.53	0.42
2:K:1176:PHE:CZ	2:K:1192:LEU:HD13	2.55	0.42
2:I:507:PHE:HA	2:I:508:PRO:HD3	1.90	0.42
1:D:1581:LEU:HD13	1:D:1638:HIS:HA	2.02	0.42

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:H:258:LEU:HD12	2:H:291:VAL:HG13	2.01	0.42
2:I:356:LEU:O	2:I:387:ARG:HA	2.20	0.42
2:K:1350:ILE:HA	2:K:1350:ILE:HD13	1.71	0.42
2:L:356:LEU:O	2:L:387:ARG:HA	2.20	0.42
2:G:691:THR:OG1	2:G:715:SER:HB3	2.20	0.42
1:F:744:VAL:HG13	1:F:746:PHE:CE1	2.54	0.42
1:C:1321:MET:HE1	1:F:1251:GLN:HG3	2.01	0.42
1:D:1184:ASP:OD1	1:D:1185:PRO:HD2	2.20	0.42
2:H:1183:GLN:HB2	2:H:1278:MET:CE	2.50	0.42
1:E:1419:LYS:O	1:E:1422:ARG:HB2	2.19	0.42
2:J:1257:VAL:HA	2:J:1258:PRO:HD3	1.72	0.42
2:K:1336:VAL:HG12	2:K:1337:ASP:N	2.35	0.42
1:A:1564:HIS:C	1:A:1564:HIS:ND1	2.73	0.42
1:C:744:VAL:HG12	1:C:746:PHE:CD1	2.54	0.42
2:I:353:ILE:HG22	2:I:353:ILE:O	2.20	0.42
1:E:1232:LEU:HA	1:E:1232:LEU:HD23	1.83	0.42
2:H:1953:ILE:O	2:H:1957:MET:HG2	2.19	0.42
1:B:557:ARG:NH1	1:E:558:LEU:HD23	2.35	0.41
2:K:2005:PHE:HA	2:K:2010:LEU:CD1	2.34	0.41
2:G:1097:PHE:HD2	2:G:1100:ARG:NH1	2.16	0.41
1:D:14:LEU:HD23	2:J:2035:LEU:HD13	2.02	0.41
2:L:788:THR:HG21	2:L:810:CYS:SG	2.59	0.41
1:B:628:TYR:OH	1:B:630:LYS:HG2	2.19	0.41
2:K:825:SER:HB2	2:K:1053:ILE:HG13	2.02	0.41
1:C:1220:ASN:HB3	1:C:1273:ILE:HG22	2.02	0.41
2:H:1266:HIS:HE1	2:H:1275:ARG:CD	2.20	0.41
2:L:1764:MET:HG3	2:L:1781:PHE:CE1	2.54	0.41
2:I:2059:HIS:HB2	2:I:2067:ILE:HG21	2.01	0.41
2:G:612:THR:HG21	2:G:629:GLU:O	2.20	0.41
1:A:1210:TYR:HA	1:A:1213:VAL:O	2.20	0.41
1:B:422:LEU:HB3	1:B:429:ILE:CD1	2.48	0.41
2:J:705:TYR:HA	2:J:709:LEU:CD2	2.49	0.41
2:J:460:ILE:HA	2:J:461:PRO:HD3	1.80	0.41
1:E:673:LEU:HD21	1:E:884:MET:CE	2.50	0.41
2:L:250:PHE:CD2	2:L:287:GLN:HG3	2.54	0.41
2:L:251:PRO:HG3	2:L:316:PHE:N	2.35	0.41
2:H:1863:ARG:HB2	2:H:2017:PHE:CE1	2.55	0.41
1:F:1107:GLU:HA	1:F:1108:PRO:HD3	1.74	0.41
2:J:192:THR:C	2:J:194:PRO:HD3	2.40	0.41
2:I:197:VAL:CG2	2:I:263:ILE:HD11	2.50	0.41
2:G:197:VAL:CG2	2:G:263:ILE:HD11	2.48	0.41
2:G:1833:PHE:CE1	2:G:2039:TYR:HB2	2.55	0.41

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:K:1881:TYR:OH	2:K:2009:PHE:HE1	2.03	0.41
1:F:740:LEU:HD23	1:F:740:LEU:HA	1.84	0.41
2:L:1053:ILE:CD1	2:L:1061:VAL:HG13	2.49	0.41
2:H:875:PHE:CZ	2:H:879:LEU:HD11	2.55	0.41
1:C:371:GLN:O	1:C:374:LEU:HB3	2.20	0.41
1:C:964:LYS:H	1:C:964:LYS:HG3	1.70	0.41
2:G:1015:HIS:CD2	2:G:1019:LEU:HD11	2.55	0.41
2:J:1587:TYR:O	2:J:1588:ASN:C	2.58	0.41
2:K:1358:THR:O	2:K:1361:ILE:HG13	2.20	0.41
2:L:1942:VAL:O	2:L:1946:LEU:HG	2.21	0.41
2:K:1588:ASN:HD21	2:K:1590:ILE:HD12	1.85	0.41
2:L:727:VAL:HA	2:L:730:ILE:HG12	2.01	0.41
1:A:1586:VAL:HA	1:A:1587:PRO:HD3	1.85	0.41
2:J:120:HIS:HD2	2:J:137:VAL:HG21	1.85	0.41
2:L:649:GLU:HG3	2:L:650:LYS:N	2.34	0.41
2:G:1944:ASN:HA	2:G:1993:PHE:HD1	1.85	0.41
1:C:1446:GLU:O	1:C:1450:ILE:HG13	2.20	0.41
2:I:176:GLN:HB3	2:I:435:ILE:HG12	2.02	0.41
1:B:902:ASN:C	1:B:904:GLY:H	2.23	0.41
2:K:1183:GLN:CB	2:K:1278:MET:HE3	2.50	0.41
1:E:28:TRP:CE2	1:E:53:LEU:HD22	2.54	0.41
2:K:1017:LEU:HD21	2:K:1032:PRO:HB2	2.01	0.41
2:K:786:GLU:CD	2:K:786:GLU:H	2.23	0.41
2:H:690:LEU:HD22	2:H:691:THR:H	1.85	0.41
1:D:1419:LYS:HA	1:D:1422:ARG:HB2	2.02	0.41
2:I:258:LEU:CD1	2:I:291:VAL:HG13	2.49	0.41
1:C:1294:ILE:HD11	1:C:1302:CYS:HB3	2.02	0.41
2:I:1762:MET:HG2	2:I:1779:LYS:NZ	2.35	0.41
2:J:1704:MET:SD	2:J:1810:LEU:HD23	2.60	0.41
2:J:858:LEU:HD23	2:J:864:PRO:HA	2.02	0.41
2:I:1741:ASN:ND2	2:I:1798:GLY:HA3	2.35	0.41
2:H:437:ALA:HA	2:H:438:PRO:HD3	1.86	0.41
1:C:1236:TYR:O	1:F:1237:LYS:HB2	2.20	0.41
2:L:1314:GLU:O	2:L:1394:VAL:HA	2.20	0.41
1:B:1082:GLU:HA	1:B:1083:PRO:HD3	1.88	0.41
2:J:357:THR:HG22	2:J:359:SER:H	1.85	0.41
2:J:358:ARG:HH21	2:J:383:VAL:HG21	1.84	0.41
2:H:858:LEU:HA	2:H:858:LEU:HD23	1.89	0.41
1:F:1564:HIS:C	1:F:1564:HIS:ND1	2.73	0.41
1:D:1427:LEU:HD13	1:D:1427:LEU:C	2.41	0.41
2:J:353:ILE:O	2:J:353:ILE:HG22	2.20	0.41
2:I:534:GLY:HA2	2:I:572:TRP:CZ3	2.55	0.41

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:427:ARG:O	1:A:430:VAL:HB	2.20	0.41
1:F:427:ARG:HD2	1:F:490:VAL:HG12	2.02	0.41
2:L:1863:ARG:HB2	2:L:2017:PHE:CE1	2.55	0.41
2:K:1093:ASP:O	2:K:1097:PHE:HB2	2.20	0.41
2:I:785:SER:CB	2:I:1094:HIS:CD2	3.03	0.41
1:A:13:LEU:HD11	2:G:2058:VAL:HG21	2.02	0.41
2:G:1616:VAL:O	2:G:1620:VAL:HG23	2.20	0.41
2:G:911:GLN:HE21	2:G:1064:THR:HG23	1.85	0.41
1:D:40:ARG:NH2	1:D:72:THR:HG22	2.35	0.41
2:K:749:GLY:HA3	3:K:2101:FMN:HM81	2.02	0.41
2:K:605:VAL:CB	2:K:628:ILE:HG13	2.44	0.41
2:I:725:GLN:HG2	2:I:764:MET:CE	2.50	0.41
2:I:381:SER:HB2	2:I:440:HIS:HB2	2.03	0.41
2:L:1335:PHE:CD1	2:L:1335:PHE:N	2.87	0.41
1:F:728:TYR:CE2	1:F:736:LEU:HD13	2.56	0.41
1:F:683:THR:HB	1:F:714:PHE:CB	2.46	0.41
2:I:1335:PHE:N	2:I:1335:PHE:HD1	2.18	0.41
2:H:1179:GLU:HB3	2:H:1193:LYS:HE3	2.02	0.41
2:I:1805:PHE:O	2:I:1808:PRO:HD2	2.20	0.41
2:J:1873:ARG:HB3	2:J:1879:SER:HA	2.02	0.41
2:J:1061:VAL:HG11	2:J:1066:ILE:HD11	2.01	0.41
2:H:1881:TYR:CG	2:H:2004:PRO:HG3	2.54	0.41
2:G:1361:ILE:HD11	2:G:1433:PHE:CD2	2.55	0.41
2:L:1947:LYS:HG3	2:L:1948:MET:HE2	2.02	0.41
2:L:612:THR:CG2	2:L:629:GLU:O	2.68	0.41
2:I:1220:ARG:HA	2:I:1229:VAL:O	2.20	0.41
2:H:1692:TYR:O	2:H:1833:PHE:HA	2.19	0.41
1:A:715:ASN:C	1:A:715:ASN:HD22	2.24	0.41
2:I:652:ILE:CG2	2:I:656:ARG:HB2	2.50	0.41
2:I:917:ARG:NH1	2:I:1057:TYR:OH	2.53	0.41
1:A:89:TYR:CE1	2:G:1821:MET:HG2	2.54	0.41
1:A:335:LEU:HD12	1:A:335:LEU:O	2.20	0.41
2:I:141:TYR:HA	2:I:144:ARG:HB3	2.01	0.41
1:B:1414:PRO:HD2	1:D:1473:HIS:HD2	1.86	0.41
1:F:577:LEU:HD23	1:F:584:ILE:HG21	2.02	0.41
1:A:655:ALA:O	1:A:680:VAL:HA	2.20	0.41
1:A:667:ALA:O	1:A:670:LEU:HB3	2.20	0.41
2:L:159:PHE:CZ	2:L:275:LEU:HD21	2.54	0.41
2:H:1709:TYR:C	2:H:1709:TYR:CD2	2.93	0.41
2:H:1220:ARG:HB3	2:H:1228:LEU:HB2	2.01	0.41
2:I:1406:ASN:HB3	2:I:1411:LYS:HG3	2.01	0.41
1:A:1207:TYR:CE1	1:A:1686:PRO:HG3	2.55	0.41

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:C:358:PHE:CD2	1:C:359:VAL:N	2.88	0.41
1:A:414:TYR:CE2	1:A:418:ILE:HD11	2.55	0.41
2:K:725:GLN:HE21	2:K:767:ARG:HH11	1.67	0.41
1:E:635:ILE:HG13	1:E:635:ILE:H	1.58	0.41
2:G:1578:GLU:O	2:G:1582:ARG:HD2	2.20	0.41
1:B:1525:THR:O	1:B:1526:SER:HB3	2.20	0.41
1:A:1359:VAL:CG1	1:A:1360:GLN:N	2.83	0.41
1:E:872:SER:OG	1:E:874:GLN:HG3	2.19	0.41
2:L:1793:TYR:CD2	2:L:1805:PHE:CZ	3.08	0.41
1:D:754:ARG:HH21	1:D:762:LYS:HD3	1.85	0.41
2:I:1430:THR:HG22	2:I:1431:SER:N	2.35	0.41
1:D:1525:THR:O	1:D:1526:SER:HB3	2.19	0.41
2:H:659:THR:HA	2:H:689:GLY:O	2.20	0.41
1:A:850:THR:C	1:A:852:LEU:H	2.22	0.41
1:E:1420:TYR:O	1:E:1424:GLN:HG2	2.20	0.41
2:H:1700:GLN:O	2:H:1700:GLN:HG2	2.20	0.41
1:D:400:ASP:OD1	1:D:400:ASP:C	2.59	0.41
2:J:1081:GLU:HG3	2:J:1081:GLU:H	1.67	0.41
2:H:1653:LEU:HD21	2:H:1667:VAL:HG13	2.01	0.41
2:J:1291:ARG:HD2	2:J:1297:LYS:HG2	2.02	0.41
1:F:1501:ALA:O	1:F:1504:ARG:HB2	2.19	0.41
2:I:1464:LEU:C	2:I:1464:LEU:HD13	2.40	0.41
2:K:300:THR:O	2:K:304:PHE:HB2	2.20	0.41
1:D:14:LEU:HD13	1:D:18:LEU:HG	2.03	0.41
2:J:1299:VAL:HA	2:J:1300:PRO:HD3	1.83	0.41
2:I:1349:ALA:HB2	2:I:1427:MET:SD	2.60	0.41
2:K:1456:LEU:HD11	2:K:1543:TYR:HE2	1.85	0.41
2:H:22:ARG:HD2	2:H:42:HIS:CB	2.50	0.41
2:L:1606:ILE:HG22	2:L:1607:THR:O	2.20	0.41
2:H:613:VAL:H	2:H:614:PRO:HD3	1.84	0.41
2:I:914:TRP:CH2	2:I:1033:ALA:HA	2.55	0.41
2:L:1318:ALA:HB2	2:L:1391:VAL:HG11	2.02	0.41
2:K:616:ASP:N	2:K:616:ASP:OD1	2.52	0.41
2:I:1123:ALA:HB1	2:I:1126:GLU:H	1.86	0.41
1:E:1351:PHE:HD1	1:E:1352:MET:N	2.19	0.41
2:G:174:GLY:H	2:G:517:GLY:CA	2.28	0.41
2:K:1351:VAL:CG2	2:K:1584:SER:HA	2.45	0.41
2:K:1808:PRO:O	2:K:1812:LEU:HD23	2.20	0.41
2:H:1362:PHE:O	2:H:1363:PRO:O	2.38	0.41
1:C:1001:GLU:C	1:C:1002:ILE:HD12	2.40	0.41
2:L:979:LEU:N	2:L:979:LEU:CD1	2.83	0.41
2:K:727:VAL:HA	2:K:730:ILE:HG12	2.03	0.41

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:B:329:THR:O	1:B:332:GLN:HB2	2.20	0.41
1:D:408:GLN:HE22	1:D:1609:SER:N	2.18	0.41
2:H:1690:THR:HG22	2:H:1691:ALA:N	2.35	0.41
2:G:350:MET:HG3	2:G:435:ILE:CB	2.50	0.41
2:J:1406:ASN:HB3	2:J:1411:LYS:HG3	2.02	0.41
1:F:1055:THR:C	1:F:1057:GLU:H	2.24	0.41
2:K:1131:ASP:C	2:K:1133:LEU:H	2.23	0.41
1:C:921:GLU:HG3	1:C:922:ILE:N	2.35	0.41
2:L:1868:GLN:O	2:L:1873:ARG:NH2	2.53	0.41
2:I:912:LYS:NZ	2:I:1044:LYS:O	2.53	0.41
1:A:1581:LEU:HD13	1:A:1638:HIS:HA	2.03	0.41
1:A:1269:SER:O	1:E:1386:THR:HB	2.20	0.41
2:H:737:PHE:O	2:H:773:ASN:HB3	2.20	0.41
1:A:418:ILE:HA	1:A:462:THR:HB	2.02	0.41
1:C:1288:ASP:O	1:C:1291:TYR:HB3	2.20	0.41
2:K:2063:GLY:O	2:K:2065:PRO:HD3	2.20	0.41
2:I:27:THR:HG22	2:I:32:GLU:HG2	2.03	0.41
2:L:421:PHE:C	2:L:423:GLN:H	2.23	0.41
1:F:43:ARG:NH1	2:L:1687:GLN:HE21	2.18	0.41
2:I:1244:LEU:O	2:I:1260:THR:HA	2.20	0.41
2:H:615:TRP:HA	2:H:618:VAL:CG1	2.49	0.41
1:E:874:GLN:HE21	1:E:874:GLN:HB3	1.66	0.41
1:C:821:LEU:HD23	1:C:821:LEU:HA	1.90	0.41
1:D:850:THR:C	1:D:852:LEU:H	2.24	0.41
2:G:737:PHE:O	2:G:773:ASN:HB3	2.21	0.41
2:H:988:GLU:HA	2:H:989:PRO:HD3	1.72	0.41
2:J:1194:ARG:HD2	2:J:1598:SER:O	2.20	0.41
1:D:1038:HIS:CE1	1:D:1042:LEU:HG	2.54	0.41
1:B:626:TRP:CZ3	1:B:898:PHE:HB2	2.54	0.41
2:I:793:THR:O	2:I:806:PRO:HA	2.20	0.41
2:I:604:MET:HG3	2:I:627:HIS:O	2.20	0.41
1:A:484:PRO:HA	1:A:485:PRO:HD3	1.65	0.41
2:I:544:ALA:O	2:I:554:TYR:HB3	2.20	0.41
2:J:1380:TYR:CD2	2:J:1380:TYR:N	2.88	0.41
2:H:1308:VAL:CG1	2:H:1398:THR:HG23	2.51	0.41
1:A:413:MET:O	1:A:416:ASP:HB2	2.20	0.41
1:B:960:ARG:NH1	2:H:968:GLU:OE1	2.47	0.41
2:G:332:ALA:HB3	2:G:335:THR:OG1	2.21	0.41
1:C:434:ILE:CD1	1:C:490:VAL:HG21	2.48	0.41
2:J:625:GLY:C	2:J:656:ARG:NH2	2.74	0.41
2:L:276:LEU:HD23	2:L:276:LEU:O	2.21	0.41
2:K:600:VAL:HG22	2:K:601:PRO:CD	2.50	0.41

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:K:600:VAL:CG2	2:K:601:PRO:HD2	2.49	0.41
2:G:325:ALA:O	2:G:327:PRO:HD3	2.20	0.41
2:I:590:VAL:CG2	2:I:1091:HIS:CD2	3.03	0.41
1:E:1213:VAL:CG1	1:E:1214:HIS:N	2.81	0.41
2:K:752:HIS:NE2	2:K:856:THR:HG22	2.33	0.41
2:K:750:GLY:O	2:K:865:ILE:HA	2.21	0.41
2:I:747:ARG:HD2	2:I:780:SER:OG	2.20	0.41
2:K:1156:ASP:HB2	2:K:1159:SER:N	2.21	0.41
2:K:757:PHE:HE2	2:K:779:GLY:O	2.02	0.41
2:J:865:ILE:HG22	2:J:867:LYS:HG3	2.02	0.41
2:J:1375:HIS:ND1	2:J:1610:MET:HG2	2.35	0.41
2:I:762:LEU:HD11	2:I:800:PHE:CB	2.51	0.41
2:J:396:ILE:H	2:J:396:ILE:CD1	2.18	0.41
2:J:253:ILE:HB	2:J:287:GLN:NE2	2.36	0.41
2:I:791:TYR:HA	2:I:796:TRP:HD1	1.85	0.41
2:G:616:ASP:OD1	2:G:616:ASP:N	2.53	0.41
1:A:1154:LEU:HA	1:A:1154:LEU:HD23	1.75	0.41
1:B:486:VAL:CG1	1:B:647:GLY:HA3	2.44	0.41
2:G:663:ILE:HD12	2:G:663:ILE:N	2.35	0.41
1:A:983:GLN:O	1:A:987:MET:HG3	2.20	0.41
1:B:1250:LEU:HD22	1:D:1317:GLU:HB3	2.03	0.41
2:G:1338:ARG:NH2	2:I:327:PRO:CD	2.80	0.41
2:J:138:ARG:CB	2:J:192:THR:HA	2.50	0.41
2:J:215:TRP:HE3	2:J:215:TRP:N	2.18	0.41
1:F:999:LEU:HD22	1:F:999:LEU:HA	1.82	0.41
2:G:1074:LYS:HE3	2:G:1075:TYR:CE1	2.55	0.41
2:J:527:LEU:O	2:J:530:ARG:HB2	2.20	0.41
2:I:1472:TRP:CD2	2:I:1540:VAL:HG22	2.56	0.41
2:H:197:VAL:O	2:H:200:LEU:HD23	2.21	0.41
1:B:771:LEU:HD23	1:E:767:HIS:HE1	1.85	0.41
2:G:1019:LEU:HA	2:G:1022:ARG:CD	2.50	0.41
2:G:2057:GLU:HA	2:G:2060:ARG:HH12	1.85	0.41
1:A:399:TYR:OH	1:A:692:THR:HG23	2.20	0.41
2:J:1938:THR:HG22	2:J:1977:ARG:HA	2.01	0.41
1:B:1405:ARG:HB2	1:D:1699:PRO:HG3	2.02	0.41
2:L:685:VAL:HA	2:L:686:PRO:HD3	1.67	0.41
1:D:1224:SER:HB3	1:D:1307:PHE:CE2	2.56	0.41
2:H:451:ILE:HD12	2:H:491:VAL:HG13	2.01	0.41
2:K:1588:ASN:HA	2:K:1589:PRO:HD3	1.88	0.41
1:F:1371:MET:O	1:F:1661:ARG:NH1	2.54	0.41
2:J:120:HIS:NE2	2:J:137:VAL:HG11	2.36	0.41
1:B:1601:GLN:HB2	1:B:1602:PHE:CD2	2.56	0.41

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:K:883:ILE:HG22	2:K:884:PHE:N	2.36	0.41
2:G:1873:ARG:HB3	2:G:1879:SER:HA	2.03	0.41
1:B:1055:THR:OG1	1:B:1057:GLU:HG2	2.19	0.41
1:B:1414:PRO:HG2	1:D:1473:HIS:CD2	2.55	0.41
1:C:859:VAL:HG13	1:C:918:LEU:HD13	2.01	0.41
2:J:1309:PHE:CD1	2:J:1309:PHE:N	2.88	0.41
1:A:872:SER:OG	1:A:874:GLN:HG3	2.20	0.41
2:L:665:VAL:C	2:L:667:PRO:HD3	2.41	0.41
2:H:342:ASN:CB	2:H:406:ARG:NH2	2.83	0.41
1:D:1170:ALA:HB3	1:D:1188:LEU:HD13	2.01	0.41
1:D:1343:PRO:HA	1:D:1526:SER:HA	2.02	0.41
1:C:1560:TYR:CE2	1:C:1589:ASN:HA	2.55	0.41
2:H:1236:LEU:O	2:H:1237:VAL:HG23	2.19	0.41
2:L:882:LYS:HB3	2:L:898:ARG:NH1	2.36	0.41
2:I:960:GLY:O	2:I:963:ILE:HB	2.20	0.41
2:J:725:GLN:HE21	2:J:767:ARG:HH11	1.69	0.41
2:J:725:GLN:HG2	2:J:764:MET:CE	2.50	0.41
1:D:403:TRP:CZ3	1:D:404:ASN:HB2	2.55	0.41
1:C:829:TYR:OH	1:C:896:PRO:HD2	2.20	0.41
1:D:450:TYR:CE1	1:D:1551:ASN:HB2	2.55	0.41
1:C:1651:TYR:CE2	1:C:1655:CYS:SG	3.14	0.41
2:K:1380:TYR:N	2:K:1380:TYR:CD2	2.89	0.41
2:J:769:ARG:HA	2:J:769:ARG:HD3	1.79	0.41
2:J:2070:ILE:CG2	2:J:2070:ILE:O	2.68	0.41
2:L:858:LEU:HA	2:L:858:LEU:HD23	1.85	0.41
1:B:1491:ASN:N	1:B:1491:ASN:HD22	2.18	0.41
2:H:2005:PHE:HA	2:H:2010:LEU:CD1	2.31	0.41
2:J:296:ALA:O	2:J:466:VAL:HG23	2.21	0.41
2:G:1086:ILE:O	2:G:1090:ILE:HG13	2.20	0.41
1:E:1213:VAL:HG22	1:E:1300:ARG:HE	1.86	0.41
2:H:827:GLN:C	2:H:1061:VAL:HG21	2.40	0.41
1:C:40:ARG:HH21	1:C:72:THR:HG22	1.85	0.41
2:L:2063:GLY:O	2:L:2065:PRO:HD3	2.21	0.41
1:C:1426:GLU:HA	1:C:1429:ARG:HG3	2.02	0.41
2:J:1266:HIS:C	2:J:1268:GLU:N	2.74	0.41
2:K:1266:HIS:CE1	2:K:1275:ARG:CD	2.95	0.41
2:I:870:THR:HG21	2:I:1064:THR:O	2.20	0.41
2:I:1067:LEU:O	2:I:1068:GLN:HG2	2.21	0.41
2:H:1460:THR:HB	2:H:1463:ASP:OD1	2.21	0.41
1:B:1154:LEU:HD23	1:B:1154:LEU:HA	1.77	0.41
2:L:914:TRP:CZ3	2:L:1033:ALA:HA	2.55	0.41
1:B:1363:MET:HE3	1:B:1368:ALA:HB2	2.03	0.41

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:L:1607:THR:HG22	2:L:1608:HIS:N	2.36	0.41
2:J:914:TRP:CH2	2:J:1033:ALA:HA	2.55	0.41
2:L:1901:GLN:HB3	2:L:1905:GLU:OE2	2.20	0.41
1:D:683:THR:HG21	1:D:725:LEU:HD11	2.01	0.41
1:B:21:GLN:O	2:H:2006:HIS:HD2	2.02	0.41
1:C:1670:HIS:ND1	2:I:1009:ASN:ND2	2.69	0.41
1:D:1554:LEU:HD23	1:D:1606:VAL:HG12	2.01	0.41
1:E:406:ALA:HB2	1:E:439:ARG:HD2	2.01	0.41
2:L:1335:PHE:N	2:L:1335:PHE:HD1	2.19	0.41
2:H:1017:LEU:HD21	2:H:1032:PRO:HB2	2.00	0.41
2:H:1032:PRO:O	2:H:1033:ALA:HB2	2.21	0.41
2:K:1259:LEU:HD11	2:K:1285:ILE:HG12	2.03	0.41
2:L:22:ARG:CD	2:L:39:THR:HA	2.51	0.41
2:G:197:VAL:HA	2:G:262:MET:HE1	2.01	0.41
1:A:1082:GLU:HA	1:A:1083:PRO:HD3	1.89	0.41
2:G:1884:CYS:CB	2:G:1936:LEU:HD12	2.49	0.41
2:J:1259:LEU:HD11	2:J:1285:ILE:HG12	2.01	0.41
2:G:641:MET:HE1	2:G:676:LEU:HD12	2.02	0.41
2:J:915:PHE:O	2:J:915:PHE:CG	2.74	0.41
2:L:612:THR:HG21	2:L:629:GLU:O	2.21	0.41
2:I:1873:ARG:NH1	2:I:2002:ASP:CB	2.84	0.41
2:L:652:ILE:CG2	2:L:656:ARG:HB2	2.51	0.41
1:F:1086:PHE:CZ	1:F:1310:PHE:HD2	2.38	0.41
1:C:569:LEU:HD22	1:D:544:ASP:HB3	2.01	0.41
1:E:1212:TYR:CD2	1:E:1371:MET:HG2	2.55	0.41
2:K:1353:GLY:CA	2:K:1397:THR:HG21	2.48	0.41
1:D:553:ARG:C	1:D:555:GLN:H	2.22	0.41
1:C:1640:LYS:CG	1:C:1641:TYR:CD1	3.04	0.41
2:H:1974:GLN:HG3	2:H:1977:ARG:HE	1.85	0.41
2:K:268:LEU:HD12	2:K:275:LEU:HD12	2.03	0.41
1:E:943:VAL:HG12	1:E:944:ASN:OD1	2.19	0.41
2:I:192:THR:C	2:I:194:PRO:HD3	2.40	0.41
2:I:347:PRO:HA	2:I:432:PHE:CE1	2.54	0.41
2:H:1220:ARG:HA	2:H:1229:VAL:O	2.20	0.41
2:K:1220:ARG:HA	2:K:1229:VAL:O	2.20	0.41
1:F:454:HIS:N	1:F:454:HIS:CD2	2.88	0.41
1:D:1393:VAL:N	1:D:1394:PRO:CD	2.83	0.41
1:F:635:ILE:H	1:F:635:ILE:HG13	1.58	0.41
2:I:161:ALA:HB1	2:I:166:ASN:HD22	1.85	0.41
1:A:1177:GLU:O	1:A:1180:ILE:HB	2.21	0.41
2:J:161:ALA:HB1	2:J:166:ASN:HD22	1.85	0.41
2:G:1953:ILE:O	2:G:1957:MET:HG2	2.20	0.41

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:H:1489:VAL:HB	2:H:1514:LEU:HB2	2.03	0.41
2:J:1116:PHE:O	2:J:1270:GLY:HA3	2.20	0.41
1:C:956:ILE:HG23	2:I:975:GLY:C	2.41	0.41
2:H:1430:THR:HG22	2:H:1431:SER:N	2.36	0.41
2:L:1558:GLU:O	2:L:1560:PRO:HD3	2.20	0.41
2:G:1376:LEU:O	2:G:1639:MET:HG2	2.20	0.41
1:D:413:MET:O	1:D:416:ASP:HB2	2.21	0.41
1:E:799:LEU:HD12	1:E:821:LEU:HB3	2.03	0.41
2:G:2070:ILE:O	2:G:2070:ILE:CG2	2.67	0.41
1:B:405:TRP:CE3	1:B:405:TRP:HA	2.55	0.41
1:D:1031:MET:HB3	1:D:1031:MET:HE2	1.75	0.41
1:D:405:TRP:HA	1:D:405:TRP:CE3	2.56	0.41
2:H:821:GLU:H	2:H:821:GLU:HG2	1.44	0.41
1:B:850:THR:C	1:B:852:LEU:H	2.24	0.41
2:H:952:ASP:OD1	2:H:953:PRO:HD2	2.20	0.41
2:L:990:TYR:N	2:L:991:PRO:CD	2.83	0.41
1:B:46:GLU:HB3	1:B:80:CYS:HA	2.02	0.41
1:D:628:TYR:OH	1:D:630:LYS:HE2	2.21	0.41
1:A:1157:ASP:HB3	1:A:1326:ASN:OD1	2.21	0.41
2:L:172:ILE:HG23	2:L:515:ASP:HA	2.01	0.41
2:H:1084:LYS:O	2:H:1088:ASP:HB2	2.20	0.41
2:G:787:ASP:O	2:G:790:PRO:HD2	2.20	0.41
1:F:1210:TYR:HA	1:F:1213:VAL:O	2.21	0.41
1:E:1425:LEU:HD21	1:E:1429:ARG:NH2	2.20	0.41
2:L:1346:MET:HB3	2:L:1346:MET:HE3	1.87	0.41
2:K:80:ILE:HG12	2:K:105:ILE:HG22	2.03	0.41
2:L:1866:THR:CA	2:L:1869:VAL:HG22	2.50	0.41
3:L:2101:FMN:HO2'	3:L:2101:FMN:C10	2.34	0.41
2:L:829:LYS:O	2:L:832:ILE:HB	2.20	0.41
2:H:38:PRO:CD	2:H:104:LEU:HD11	2.44	0.41
1:D:1363:MET:SD	1:D:1367:LEU:HD13	2.60	0.41
2:H:798:THR:HA	2:H:802:TYR:O	2.21	0.41
2:G:1067:LEU:O	2:G:1068:GLN:HG2	2.20	0.41
2:H:306:THR:O	2:H:310:ARG:HG3	2.20	0.41
2:J:1456:LEU:HD11	2:J:1543:TYR:HE2	1.84	0.41
2:K:613:VAL:N	2:K:614:PRO:HD3	2.35	0.41
2:H:779:GLY:HA3	2:H:811:MET:HB3	2.03	0.41
2:H:757:PHE:HE2	2:H:779:GLY:O	2.04	0.41
1:B:1473:HIS:HD2	1:D:1499:ARG:NH2	2.18	0.41
2:K:250:PHE:CZ	2:K:439:PHE:CZ	3.08	0.41
1:C:1149:LEU:HD23	1:C:1149:LEU:HA	1.73	0.41
1:D:29:ILE:HG22	1:D:30:GLU:N	2.35	0.41

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:E:486:VAL:HG22	1:E:648:LEU:C	2.40	0.41
1:E:648:LEU:HD12	1:E:649:THR:H	1.86	0.41
2:H:253:ILE:HB	2:H:287:GLN:NE2	2.35	0.41
2:I:1028:VAL:HG13	2:I:1030:PHE:H	1.86	0.41
2:G:376:ARG:HA	2:G:443:TYR:OH	2.20	0.41
2:L:942:MET:O	2:L:951:ILE:HG13	2.20	0.41
1:B:1142:LEU:H	1:B:1142:LEU:CD1	2.29	0.41
1:B:983:GLN:O	1:B:987:MET:HG3	2.20	0.41
1:A:1419:LYS:O	1:A:1422:ARG:HB2	2.20	0.41
2:H:28:HIS:O	2:H:31:LEU:HD12	2.21	0.41
1:B:827:ARG:NE	1:E:816:GLU:OE2	2.53	0.41
1:C:504:GLY:HA2	1:C:929:ARG:HB3	2.03	0.41
1:F:371:GLN:O	1:F:374:LEU:HB3	2.21	0.41
1:C:1364:THR:HG22	1:C:1366:GLN:N	2.32	0.41
1:A:1001:GLU:C	1:A:1002:ILE:HD12	2.41	0.41
1:F:449:GLN:O	1:F:452:ILE:HG22	2.20	0.41
1:D:1001:GLU:C	1:D:1002:ILE:HD12	2.41	0.41
1:E:1371:MET:O	1:E:1661:ARG:NH1	2.54	0.41
2:H:1483:LEU:CD2	2:H:1525:VAL:HG11	2.49	0.41
2:K:718:PRO:HG3	2:K:727:VAL:CG2	2.49	0.41
2:J:196:PHE:HD2	2:J:266:LYS:CB	2.32	0.41
2:L:1131:ASP:C	2:L:1133:LEU:H	2.24	0.41
2:J:1403:ALA:HB2	2:J:1447:GLN:HA	2.02	0.41
1:A:623:PHE:HD2	1:A:623:PHE:N	2.16	0.41
2:I:379:GLY:O	2:I:391:VAL:HG13	2.21	0.41
1:E:1647:ASP:C	1:E:1649:ALA:N	2.74	0.41
1:C:1055:THR:C	1:C:1057:GLU:H	2.23	0.41
2:I:1835:GLY:HA3	2:I:1840:GLU:N	2.35	0.41
1:B:447:PHE:HE1	1:B:451:HIS:HE2	1.68	0.41
2:J:27:THR:HG22	2:J:32:GLU:HG2	2.02	0.41
1:E:1288:ASP:O	1:E:1291:TYR:HB3	2.19	0.41
1:D:902:ASN:O	1:D:904:GLY:N	2.46	0.41
1:D:756:ILE:HA	1:D:759:ILE:HD11	2.03	0.41
2:J:1246:LEU:O	2:J:1258:PRO:HA	2.20	0.41
2:I:604:MET:HG3	2:I:627:HIS:CD2	2.55	0.41
1:D:404:ASN:HD21	1:D:1607:TYR:H	1.67	0.41
2:H:1741:ASN:HD21	2:H:1798:GLY:HA3	1.83	0.41
1:C:46:GLU:HB3	1:C:80:CYS:HA	2.02	0.41
1:C:962:ASN:HB3	2:I:969:ARG:CD	2.51	0.41
1:A:350:ASP:HB3	1:A:353:ALA:HB2	2.01	0.41
2:K:958:LEU:HD13	2:K:1025:GLN:OE1	2.20	0.41
1:B:543:ASN:O	1:B:546:ARG:HB2	2.21	0.41

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:K:692:ILE:HD13	2:K:697:PRO:HG2	2.03	0.41
1:B:1372:GLY:O	1:B:1661:ARG:HD2	2.20	0.41
2:G:1308:VAL:CG1	2:G:1398:THR:HG23	2.51	0.41
2:H:1108:GLU:H	2:H:1108:GLU:HG3	1.59	0.41
1:F:837:LEU:HA	1:F:837:LEU:HD12	1.86	0.41
2:J:444:LEU:HA	2:J:444:LEU:HD23	1.71	0.41
2:G:1975:GLU:O	2:G:1979:GLN:HG3	2.20	0.41
2:I:2055:PHE:HB2	2:I:2071:LEU:HD21	2.03	0.41
2:J:58:GLN:HA	2:J:59:PRO:HD3	1.94	0.41
1:A:1501:ALA:HA	1:A:1502:PRO:HD3	1.96	0.41
2:L:276:LEU:HD11	2:L:296:ALA:HA	2.02	0.41
1:C:22:PHE:CE1	2:I:1867:MET:HG2	2.56	0.41
2:I:1918:VAL:CG1	2:I:2006:HIS:HB2	2.40	0.41
2:K:876:TRP:C	2:K:876:TRP:HD1	2.22	0.41
2:L:1290:TYR:CG	2:L:1299:VAL:CG1	2.91	0.41
2:K:1769:VAL:HG22	2:K:1775:ILE:CA	2.38	0.41
2:K:867:LYS:NZ	2:K:1065:CYS:SG	2.85	0.41
1:A:612:ILE:HG23	1:A:613:PRO:HD2	2.02	0.41
2:K:26:LEU:HD22	2:K:53:LEU:HD21	2.03	0.41
2:I:868:LEU:O	2:I:870:THR:HG23	2.20	0.41
2:K:1346:MET:CE	2:K:1617:ARG:NH2	2.83	0.41
2:K:1764:MET:HG3	2:K:1781:PHE:CE1	2.55	0.41
2:K:1766:PHE:CZ	2:K:1869:VAL:HB	2.55	0.41
2:G:865:ILE:HG22	2:G:867:LYS:HG3	2.02	0.41
2:H:617:PHE:HE2	2:H:628:ILE:HD11	1.84	0.41
1:B:372:LEU:CD1	1:E:371:GLN:HG2	2.45	0.41
2:H:489:GLU:HG2	2:H:492:ARG:CZ	2.50	0.41
1:B:1713:PHE:HA	1:B:1714:PRO:HD3	1.89	0.41
2:G:489:GLU:HG2	2:G:492:ARG:NH1	2.35	0.41
2:G:621:THR:OG1	2:G:1083:ILE:HD13	2.21	0.41
2:K:396:ILE:CD1	2:K:396:ILE:H	2.29	0.41
2:J:608:MET:HE1	2:J:817:MET:HG2	2.02	0.41
2:J:67:ASP:CA	2:J:132:LYS:HE2	2.48	0.41
1:E:1622:VAL:O	1:E:1622:VAL:HG13	2.21	0.41
2:I:727:VAL:HA	2:I:730:ILE:HG12	2.03	0.41
2:L:1948:MET:HE1	2:L:1948:MET:HA	2.01	0.41
2:H:1847:LEU:N	2:H:1847:LEU:HD12	2.36	0.41
2:G:625:GLY:C	2:G:656:ARG:NH2	2.74	0.41
2:G:1904:VAL:HG22	2:G:1939:LEU:CD2	2.49	0.41
1:D:1647:ASP:C	1:D:1649:ALA:N	2.72	0.41
2:G:884:PHE:CE2	2:G:1039:GLU:HA	2.51	0.41
2:H:1309:PHE:CD1	2:H:1309:PHE:N	2.87	0.41

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:B:967:PHE:HB3	1:B:968:PRO:CD	2.50	0.41
2:J:117:ASN:HA	2:J:561:ARG:CD	2.50	0.41
2:L:1181:PHE:CD1	2:L:1191:PRO:HD2	2.56	0.41
1:D:726:VAL:HG21	1:D:780:ALA:CB	2.51	0.41
2:I:1706:MET:HE1	2:I:1735:ILE:HG23	2.02	0.41
2:I:872:GLY:HA2	2:I:909:ASP:O	2.21	0.41
1:C:768:ARG:NH1	1:D:764:GLU:OE1	2.46	0.41
2:G:113:PHE:HD1	2:G:113:PHE:N	2.19	0.41
1:E:418:ILE:HA	1:E:462:THR:HB	2.03	0.41
1:D:391:PHE:HA	1:D:713:PRO:O	2.19	0.41
2:H:1578:GLU:O	2:H:1582:ARG:HD2	2.21	0.41
1:C:948:HIS:O	1:C:952:TYR:CD2	2.74	0.41
2:H:270:ARG:HG3	2:H:274:GLU:OE1	2.21	0.41
2:K:342:ASN:HD22	2:K:342:ASN:N	2.18	0.41
2:H:120:HIS:HD2	2:H:137:VAL:HG21	1.85	0.41
2:L:604:MET:HG3	2:L:627:HIS:CD2	2.56	0.41
1:F:31:THR:HG23	2:L:2040:ILE:CG2	2.51	0.41
1:F:538:ARG:HD2	1:F:542:GLN:NE2	2.36	0.41
2:K:1211:ASP:HA	2:K:1212:PRO:HD2	1.83	0.41
1:A:41:THR:HG22	2:G:1689:VAL:HG12	2.01	0.41
2:G:834:ASP:O	2:G:836:PRO:HD3	2.20	0.41
1:C:575:ARG:HD3	1:D:534:GLN:O	2.21	0.41
1:C:465:LEU:HD12	1:C:465:LEU:O	2.20	0.41
1:E:1662:GLN:HB3	1:E:1662:GLN:HE21	1.70	0.41
2:L:1424:LYS:HA	2:L:1425:PRO:HD3	1.84	0.41
1:E:1031:MET:HE2	1:E:1031:MET:HB3	1.70	0.41
2:K:357:THR:HG22	2:K:359:SER:H	1.85	0.41
2:G:1325:VAL:HG13	2:G:1330:ASN:O	2.21	0.41
1:F:14:LEU:HD21	2:L:1844:LEU:HD21	2.01	0.41
2:I:1871:VAL:HG12	2:I:1872:GLU:N	2.35	0.41
2:H:276:LEU:O	2:H:276:LEU:HD23	2.21	0.41
2:H:1299:VAL:HG23	2:H:1301:PHE:CD2	2.55	0.41
2:J:1299:VAL:HG23	2:J:1301:PHE:CD2	2.55	0.41
2:I:1301:PHE:CD1	2:I:1364:ARG:CZ	3.04	0.41
2:L:2064:SER:OG	2:L:2067:ILE:HB	2.19	0.41
2:I:609:THR:CB	2:I:610:PRO:HD3	2.51	0.41
2:I:612:THR:CG2	2:I:629:GLU:O	2.69	0.41
1:B:569:LEU:HD13	1:E:548:VAL:CG2	2.51	0.41
2:L:1032:PRO:O	2:L:1033:ALA:HB2	2.20	0.41
2:G:914:TRP:CH2	2:G:1033:ALA:HA	2.56	0.41
2:H:1896:THR:HG22	2:H:1898:GLN:N	2.23	0.41
2:H:1901:GLN:HB3	2:H:1905:GLU:OE2	2.20	0.41

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:J:208:LEU:HD23	2:J:211:LEU:HD12	2.02	0.41
1:E:1275:THR:HA	1:E:1276:PRO:HD3	1.73	0.41
2:J:1374:VAL:CG2	2:J:1436:ARG:NE	2.84	0.41
1:F:526:MET:CE	1:F:614:PHE:HB3	2.50	0.41
1:A:1674:ILE:HD12	2:G:1010:ALA:HB3	2.03	0.41
2:J:1115:TYR:OH	2:J:1173:HIS:CD2	2.69	0.41
2:I:1123:ALA:CB	2:I:1126:GLU:HG3	2.46	0.41
2:I:1269:ALA:HB1	2:I:1271:TYR:CE2	2.56	0.41
2:J:376:ARG:HA	2:J:443:TYR:OH	2.21	0.41
1:E:449:GLN:HG3	1:E:474:ILE:HD13	2.02	0.41
2:I:1947:LYS:HE3	2:I:1948:MET:CE	2.51	0.41
2:L:785:SER:O	2:L:789:TYR:HB2	2.20	0.41
2:I:167:VAL:HG23	2:I:169:ILE:HG13	2.02	0.41
2:L:1847:LEU:N	2:L:1847:LEU:HD12	2.36	0.41
2:G:1472:TRP:CD2	2:G:1540:VAL:HG22	2.55	0.41
1:D:1094:LYS:HE2	1:D:1312:GLU:HG2	2.03	0.41
2:H:281:GLY:HA3	2:H:470:TYR:CE1	2.51	0.41
1:C:408:GLN:NE2	1:C:1609:SER:H	2.16	0.41
2:K:2057:GLU:HA	2:K:2060:ARG:HH12	1.84	0.41
2:H:1515:LEU:HB3	2:H:1525:VAL:HG21	2.02	0.41
1:D:983:GLN:O	1:D:987:MET:HG3	2.20	0.41
1:F:1212:TYR:CD2	1:F:1371:MET:HG2	2.55	0.41
2:J:1349:ALA:HB2	2:J:1427:MET:SD	2.60	0.41
2:J:917:ARG:NH1	2:J:1057:TYR:OH	2.54	0.41
2:H:1722:ALA:CB	2:H:1812:LEU:HD11	2.51	0.41
2:G:1944:ASN:HA	2:G:1993:PHE:CE1	2.55	0.41
2:G:1723:ASP:CG	2:G:1735:ILE:HG13	2.41	0.41
2:L:1382:MET:HB2	2:L:1633:ARG:HH11	1.86	0.41
1:C:1420:TYR:O	1:C:1424:GLN:HG2	2.21	0.41
1:E:454:HIS:CD2	1:E:454:HIS:N	2.88	0.41
1:E:948:HIS:O	1:E:952:TYR:CD2	2.74	0.41
2:G:690:LEU:HD22	2:G:691:THR:N	2.36	0.41
1:D:1393:VAL:N	1:D:1394:PRO:HD3	2.35	0.41
2:K:859:SER:HB3	2:K:863:GLU:HG3	2.01	0.41
2:J:1496:VAL:HG23	2:J:1507:VAL:HG12	2.02	0.41
2:K:1084:LYS:HE3	2:K:1088:ASP:OD2	2.21	0.41
2:G:1127:GLU:HA	2:G:1128:PRO:HD3	1.74	0.41
2:J:1211:ASP:HA	2:J:1212:PRO:HD2	1.84	0.41
2:J:960:GLY:O	2:J:963:ILE:HB	2.21	0.41
2:K:1317:ASN:OD1	2:K:1319:GLN:HB3	2.21	0.41
1:C:802:SER:HA	1:C:803:PRO:HD3	1.89	0.41
2:H:890:LYS:HE3	2:H:890:LYS:HB2	1.85	0.41

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:G:26:LEU:HD23	2:G:26:LEU:HA	1.83	0.41
2:G:306:THR:O	2:G:310:ARG:HG3	2.20	0.41
2:K:1624:ALA:CB	2:K:1665:ILE:HD13	2.51	0.41
2:H:960:GLY:O	2:H:963:ILE:HB	2.21	0.41
2:I:22:ARG:HD2	2:I:42:HIS:HB2	2.02	0.41
2:I:1767:GLU:CB	2:I:2016:PRO:CG	2.91	0.41
1:D:628:TYR:C	1:D:628:TYR:HD1	2.23	0.41
1:D:1342:ARG:HB3	1:D:1345:SER:HB2	2.03	0.41
2:J:2005:PHE:HA	2:J:2010:LEU:CD1	2.30	0.41
2:G:300:THR:HG22	2:G:301:TRP:N	2.36	0.41
2:K:785:SER:HB3	2:K:1094:HIS:HD2	1.83	0.41
2:I:384:ASN:HB3	2:I:527:LEU:CD1	2.36	0.41
2:H:1299:VAL:HA	2:H:1300:PRO:HD3	1.85	0.41
1:B:1425:LEU:HD21	1:B:1429:ARG:NH2	2.17	0.41
2:H:865:ILE:HG22	2:H:867:LYS:HG3	2.03	0.41
2:H:868:LEU:HD12	2:H:868:LEU:HA	1.73	0.41
1:F:1015:GLU:HA	1:F:1561:LEU:HD12	2.02	0.41
1:A:628:TYR:OH	1:A:630:LYS:HG2	2.20	0.41
1:A:628:TYR:OH	1:A:630:LYS:HE2	2.21	0.41
2:I:612:THR:HG21	2:I:629:GLU:O	2.21	0.41
2:I:865:ILE:HG22	2:I:867:LYS:HG3	2.03	0.41
1:A:72:THR:O	1:A:72:THR:HG22	2.20	0.41
2:L:783:GLY:CA	2:L:815:ARG:HD3	2.51	0.41
1:E:1199:LEU:HD23	1:E:1199:LEU:O	2.21	0.41
2:J:856:THR:HG22	2:J:865:ILE:O	2.21	0.41
3:J:2101:FMN:O4'	3:J:2101:FMN:H1'2	2.20	0.41
2:L:798:THR:HA	2:L:802:TYR:O	2.21	0.41
2:G:747:ARG:HD2	2:G:780:SER:OG	2.21	0.41
2:L:762:LEU:HD11	2:L:800:PHE:CB	2.51	0.41
2:L:1017:LEU:HD21	2:L:1032:PRO:HB2	2.03	0.41
1:F:1400:VAL:HG11	1:F:1633:GLN:HB2	2.03	0.41
1:B:527:ALA:HA	1:B:613:PRO:HB3	2.03	0.41
2:J:250:PHE:O	2:J:315:LEU:HD23	2.21	0.41
2:J:310:ARG:HH11	2:J:460:ILE:CD1	2.34	0.41
1:F:1220:ASN:HB3	1:F:1273:ILE:HG22	2.03	0.41
2:H:1602:LEU:HB3	2:H:1606:ILE:HD11	2.02	0.41
2:H:705:TYR:HA	2:H:709:LEU:CD2	2.51	0.41
2:L:1293:TRP:NE1	2:L:1586:ASP:OD1	2.47	0.41
1:A:683:THR:HG21	1:A:725:LEU:HD11	2.02	0.41
1:F:612:ILE:CG2	1:F:628:TYR:CD2	2.98	0.41
2:I:764:MET:O	2:I:768:ILE:HG13	2.21	0.41
2:I:930:THR:HA	2:I:1007:LEU:HA	2.01	0.41

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:I:1587:TYR:O	2:I:1588:ASN:C	2.59	0.41
2:I:1589:PRO:CB	2:I:1596:PHE:CG	3.03	0.41
1:E:407:ARG:HB3	1:E:447:PHE:CE2	2.56	0.41
2:H:1269:ALA:HB1	2:H:1271:TYR:CE1	2.55	0.41
2:J:134:ILE:HG22	2:J:138:ARG:HH11	1.86	0.41
2:H:1000:TYR:HA	2:H:1001:PRO:HD2	1.77	0.41
1:B:1275:THR:HA	1:B:1276:PRO:HD3	1.73	0.41
2:L:26:LEU:HD22	2:L:53:LEU:HD21	2.03	0.41
2:I:1325:VAL:HG22	2:I:1335:PHE:CD2	2.55	0.41
2:I:1335:PHE:CD1	2:I:1629:ILE:HD11	2.55	0.41
2:I:1261:PHE:CE2	2:I:1285:ILE:HD11	2.54	0.41
2:I:129:ILE:O	2:I:129:ILE:HG13	2.21	0.41
1:B:449:GLN:O	1:B:452:ILE:HG22	2.20	0.41
2:K:1074:LYS:HE3	2:K:1075:TYR:CE1	2.56	0.41
1:C:449:GLN:HG3	1:C:474:ILE:HD13	2.02	0.41
1:C:449:GLN:O	1:C:452:ILE:HG22	2.20	0.41
1:B:1604:TYR:CD2	1:B:1604:TYR:N	2.89	0.41
1:E:1444:GLN:O	1:E:1447:VAL:HB	2.21	0.41
1:A:407:ARG:CZ	1:A:1606:VAL:HG23	2.50	0.41
1:D:1604:TYR:N	1:D:1604:TYR:CD2	2.89	0.41
2:I:1808:PRO:O	2:I:1812:LEU:HD23	2.21	0.41
2:G:1179:GLU:HB3	2:G:1193:LYS:HE3	2.03	0.41
2:H:1807:GLN:HB3	2:H:1860:VAL:CG1	2.51	0.41
2:L:129:ILE:CG1	2:L:129:ILE:O	2.69	0.41
2:L:796:TRP:CG	2:L:797:SER:N	2.88	0.41
1:B:1554:LEU:HB3	1:B:1586:VAL:HG11	2.03	0.41
1:D:828:TRP:NE1	1:D:838:THR:HA	2.30	0.41
2:K:1028:VAL:HA	2:K:1029:PRO:HD3	1.76	0.41
2:K:1028:VAL:HG13	2:K:1030:PHE:H	1.86	0.41
1:A:991:ASP:HA	1:A:1364:THR:CG2	2.50	0.41
1:D:1640:LYS:CG	1:D:1641:TYR:CD1	3.04	0.41
2:L:192:THR:C	2:L:194:PRO:HD3	2.41	0.41
2:I:1203:TYR:HB3	2:I:1220:ARG:HB2	2.03	0.41
1:D:1083:PRO:HB3	1:D:1089:TYR:O	2.20	0.41
2:G:1342:PHE:HE2	2:G:1391:VAL:CG2	2.34	0.41
1:C:715:ASN:C	1:C:715:ASN:HD22	2.24	0.41
2:J:649:GLU:HG3	2:J:650:LYS:N	2.35	0.41
1:C:1407:LYS:HB2	1:F:1699:PRO:HD2	2.03	0.41
2:J:854:VAL:HG21	2:J:1070:PRO:CA	2.50	0.41
2:H:1913:TRP:HZ3	2:H:1938:THR:HG21	1.86	0.41
1:E:498:THR:HG21	1:E:858:LEU:HA	2.02	0.41
2:K:1180:VAL:HG11	2:K:1187:PHE:CD2	2.55	0.41

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:L:1515:LEU:HB3	2:L:1525:VAL:HG21	2.01	0.41
1:E:958:GLU:HA	1:E:959:PRO:HD3	1.92	0.41
2:I:478:LEU:HD22	2:I:481:LEU:HD11	2.02	0.41
1:B:622:GLU:HB2	1:B:623:PHE:CD2	2.56	0.41
1:E:1055:THR:C	1:E:1057:GLU:H	2.25	0.41
1:D:498:THR:HG22	1:D:508:TYR:CD1	2.52	0.41
2:I:1891:ILE:HD11	2:I:1943:LEU:HD22	2.03	0.41
1:C:1638:HIS:HA	1:C:1639:PRO:HD3	1.98	0.41
1:A:1055:THR:C	1:A:1057:GLU:H	2.23	0.41
2:L:1309:PHE:N	2:L:1309:PHE:CD1	2.89	0.41
1:C:967:PHE:CD2	1:C:1374:PRO:HG3	2.55	0.41
1:C:967:PHE:HB3	1:C:968:PRO:CD	2.51	0.41
2:G:265:CYS:HA	2:G:275:LEU:HD12	2.03	0.41
2:I:1309:PHE:CD1	2:I:1309:PHE:N	2.88	0.41
1:B:408:GLN:HE22	1:B:1609:SER:N	2.19	0.41
2:L:349:PRO:O	2:L:392:THR:HG22	2.20	0.41
2:J:1131:ASP:C	2:J:1133:LEU:H	2.24	0.41
2:K:182:TYR:CD1	2:K:182:TYR:C	2.95	0.41
1:C:1685:ALA:HB1	1:C:1686:PRO:HD2	2.03	0.41
1:F:918:LEU:HD23	1:F:921:GLU:OE2	2.21	0.41
1:C:1045:LYS:HA	1:C:1046:PRO:HD3	1.90	0.41
2:I:186:LEU:HD11	2:I:255:LEU:HD23	2.03	0.41
2:K:1355:LYS:O	2:K:1359:LYS:HG3	2.21	0.41
2:K:1220:ARG:HB3	2:K:1228:LEU:HB2	2.03	0.41
1:C:759:ILE:N	1:C:759:ILE:HD12	2.36	0.41
1:C:874:GLN:HB3	1:C:874:GLN:HE21	1.67	0.41
2:G:114:MET:HG2	2:G:122:ILE:HG21	2.03	0.41
1:F:1586:VAL:HA	1:F:1587:PRO:HD3	1.80	0.41
2:H:120:HIS:CD2	2:H:137:VAL:CG1	3.04	0.41
2:L:615:TRP:CE3	2:L:647:LYS:HB3	2.55	0.41
2:H:92:GLU:O	2:H:93:ASP:HB2	2.21	0.41
2:L:691:THR:OG1	2:L:715:SER:HB3	2.21	0.41
1:B:799:LEU:HD12	1:B:821:LEU:HB3	2.03	0.41
2:I:342:ASN:CB	2:I:406:ARG:NH2	2.83	0.41
2:L:1350:ILE:HD13	2:L:1350:ILE:HA	1.72	0.41
1:A:846:TRP:CH2	1:A:863:VAL:HG21	2.56	0.41
2:H:604:MET:HG3	2:H:627:HIS:O	2.20	0.41
1:B:663:GLY:O	1:B:852:LEU:HD11	2.21	0.41
2:G:152:LYS:HA	2:G:153:PRO:HD3	1.91	0.41
1:F:450:TYR:CE1	1:F:1551:ASN:HB2	2.56	0.41
2:G:662:LEU:HD22	2:G:673:GLN:OE1	2.20	0.41
1:C:1082:GLU:HA	1:C:1083:PRO:HD3	1.85	0.41

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:H:1558:GLU:O	2:H:1560:PRO:HD3	2.20	0.41
2:H:1291:ARG:HD2	2:H:1297:LYS:HG2	2.03	0.41
1:C:1564:HIS:ND1	1:C:1564:HIS:C	2.73	0.41
2:I:1429:VAL:O	2:I:1429:VAL:HG12	2.20	0.41
2:G:1471:GLU:HG3	2:G:1471:GLU:H	1.44	0.41
1:A:1017:TYR:N	1:A:1017:TYR:CD1	2.89	0.41
1:D:1000:ALA:HB3	1:D:1197:ALA:HB2	2.03	0.41
2:I:306:THR:O	2:I:310:ARG:HG3	2.20	0.41
2:I:858:LEU:HD23	2:I:864:PRO:HA	2.02	0.41
2:L:725:GLN:HE21	2:L:767:ARG:HH11	1.69	0.41
1:B:413:MET:O	1:B:416:ASP:HB2	2.21	0.41
2:L:58:GLN:HA	2:L:59:PRO:HD3	1.95	0.41
1:A:1202:GLY:HA3	1:A:1661:ARG:HD3	2.02	0.41
2:I:1704:MET:SD	2:I:1810:LEU:HD23	2.60	0.41
2:I:1383:VAL:HA	2:I:1384:PRO:HD3	1.96	0.41
1:B:1662:GLN:HB3	1:B:1662:GLN:HE21	1.69	0.41
2:G:1153:ASN:HD22	2:G:1153:ASN:HA	1.58	0.41
1:C:400:ASP:OD1	1:C:400:ASP:C	2.59	0.41
1:D:829:TYR:OH	1:D:896:PRO:HD2	2.21	0.41
1:C:22:PHE:HE1	2:I:1867:MET:HG2	1.85	0.41
2:H:625:GLY:C	2:H:656:ARG:NH2	2.75	0.41
2:H:44:GLN:HE21	2:H:48:LEU:HD21	1.86	0.41
2:I:1346:MET:HB2	2:I:1427:MET:HE1	2.03	0.41
2:G:1602:LEU:HD22	2:G:1606:ILE:HD11	2.03	0.41
2:I:1266:HIS:C	2:I:1268:GLU:N	2.75	0.41
2:L:1071:VAL:HG23	2:L:1074:LYS:HE2	2.03	0.41
2:J:1067:LEU:H	2:J:1067:LEU:HD12	1.85	0.41
2:G:68:GLU:HB3	2:G:69:PRO:HD2	2.03	0.41
2:H:310:ARG:HH11	2:H:460:ILE:CD1	2.34	0.41
2:I:460:ILE:HA	2:I:461:PRO:HD3	1.79	0.41
2:K:1462:GLN:O	2:K:1466:VAL:HG23	2.21	0.41
2:G:215:TRP:HE3	2:G:216:ASP:N	2.07	0.41
2:L:1589:PRO:HB3	2:L:1596:PHE:CD1	2.56	0.41
2:H:717:LYS:HD2	3:H:2101:FMN:O2	2.21	0.41
1:A:1037:ASN:CB	1:A:1674:ILE:HG23	2.51	0.41
1:D:1400:VAL:HG11	1:D:1633:GLN:HB2	2.03	0.41
2:G:955:LEU:O	2:G:959:THR:HG23	2.22	0.41
1:B:1447:VAL:HG21	1:B:1467:LEU:HD11	2.02	0.41
1:B:1467:LEU:HD23	1:B:1467:LEU:HA	1.93	0.41
1:E:1078:ILE:CB	1:E:1338:GLY:HA2	2.50	0.41
2:G:1621:GLU:HG2	2:G:1632:VAL:HG11	2.02	0.41
2:K:783:GLY:HA3	2:K:1075:TYR:CG	2.56	0.41

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:C:996:VAL:HG11	1:C:1578:LEU:HD11	2.03	0.41
2:H:196:PHE:CD2	2:H:266:LYS:CB	3.03	0.41
1:B:1699:PRO:HD2	1:D:1407:LYS:HB2	2.02	0.41
2:L:1022:ARG:HG2	2:L:1022:ARG:H	1.67	0.41
2:G:713:HIS:HD2	2:G:740:ILE:HD13	1.85	0.41
1:B:421:ARG:HH22	1:B:1613:LYS:CB	2.33	0.41
2:L:1998:LEU:HB2	2:L:2001:ILE:HD12	2.02	0.41
1:C:1638:HIS:CG	1:C:1639:PRO:HD2	2.56	0.41
2:J:741:LEU:CG	2:J:741:LEU:O	2.68	0.41
2:J:350:MET:SD	2:J:392:THR:CG2	3.09	0.41
1:C:1388:LYS:HD3	1:F:1692:GLN:NE2	2.36	0.41
2:G:1248:GLU:OE2	2:G:1250:ARG:HG2	2.21	0.41
1:B:995:VAL:CG1	1:B:1375:ILE:HG23	2.51	0.41
2:H:153:PRO:HB3	2:H:270:ARG:HH11	1.86	0.41
2:K:759:GLN:O	2:K:763:LEU:HB2	2.21	0.41
2:K:1465:ALA:O	2:K:1469:SER:HB3	2.21	0.41
2:G:990:TYR:N	2:G:991:PRO:CD	2.84	0.41
1:A:1254:PHE:HB2	1:A:1257:THR:OG1	2.21	0.41
1:E:667:ALA:O	1:E:670:LEU:HB3	2.20	0.41
2:K:161:ALA:HA	2:K:164:GLU:HB2	2.03	0.41
1:B:450:TYR:C	1:B:450:TYR:CD2	2.94	0.41
2:G:659:THR:HA	2:G:689:GLY:O	2.21	0.41
2:J:1607:THR:HG22	2:J:1608:HIS:N	2.35	0.41
2:I:1712:SER:HA	2:I:1713:PRO:HD3	1.90	0.41
2:K:1473:PHE:HE1	2:K:1513:VAL:HG21	1.86	0.41
1:A:349:MET:O	1:A:349:MET:HG3	2.21	0.41
1:B:564:LEU:HD13	1:B:564:LEU:O	2.20	0.41
2:I:1653:LEU:HD21	2:I:1667:VAL:HG13	2.03	0.41
2:K:134:ILE:HG12	2:K:545:ILE:CD1	2.51	0.41
2:H:369:ASN:HB3	2:H:377:HIS:ND1	2.36	0.40
2:H:2052:LYS:CE	2:H:2052:LYS:H	2.11	0.40
1:E:26:VAL:CG2	2:K:2006:HIS:CE1	3.05	0.40
2:H:626:TYR:OH	2:H:1088:ASP:HA	2.20	0.40
2:G:785:SER:HB3	2:G:1094:HIS:CD2	2.56	0.40
2:J:1863:ARG:O	2:J:1867:MET:HG3	2.20	0.40
1:E:1015:GLU:HA	1:E:1561:LEU:HD12	2.03	0.40
1:C:1079:ARG:HG2	1:C:1079:ARG:NH1	2.13	0.40
2:I:1099:LEU:HD12	2:I:1103:TYR:CB	2.51	0.40
1:E:967:PHE:HB3	1:E:968:PRO:CD	2.50	0.40
1:A:1499:ARG:CD	1:E:1476:ARG:HH12	2.20	0.40
2:H:828:ALA:HA	2:H:1061:VAL:HG11	2.03	0.40
2:K:1053:ILE:CD1	2:K:1061:VAL:HG13	2.50	0.40

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:F:1150:ILE:HA	1:F:1151:PRO:HD3	1.92	0.40
2:G:1901:GLN:HB3	2:G:1905:GLU:OE2	2.21	0.40
2:G:48:LEU:HB2	2:G:79:TYR:OH	2.21	0.40
1:A:689:ARG:NH2	1:A:1591:ASN:ND2	2.68	0.40
2:H:1804:GLN:O	2:H:1861:PHE:HD1	2.04	0.40
2:I:1460:THR:HB	2:I:1463:ASP:OD1	2.21	0.40
2:L:717:LYS:HD2	3:L:2101:FMN:O2	2.20	0.40
1:B:1220:ASN:HB3	1:B:1273:ILE:HG22	2.03	0.40
2:G:608:MET:HA	3:G:2101:FMN:C5A	2.51	0.40
2:G:613:VAL:H	2:G:614:PRO:HD3	1.86	0.40
2:H:1071:VAL:HG23	2:H:1074:LYS:HE2	2.04	0.40
1:B:689:ARG:NH1	1:B:1339:GLU:OE2	2.54	0.40
2:J:251:PRO:HG3	2:J:316:PHE:N	2.36	0.40
1:A:422:LEU:HB3	1:A:429:ILE:CD1	2.49	0.40
2:H:376:ARG:HA	2:H:443:TYR:OH	2.21	0.40
2:I:1610:MET:HE2	2:I:1613:SER:HB3	2.03	0.40
2:I:1799:LEU:C	2:I:1801:SER:H	2.23	0.40
1:B:452:ILE:HD11	1:B:470:GLY:HA3	2.02	0.40
2:H:915:PHE:O	2:H:915:PHE:CG	2.74	0.40
1:B:407:ARG:HG3	1:B:407:ARG:H	1.62	0.40
1:C:991:ASP:HA	1:C:1364:THR:CG2	2.52	0.40
2:L:731:ALA:HB1	2:L:771:CYS:SG	2.61	0.40
2:G:771:CYS:HB3	2:G:774:ILE:CD1	2.48	0.40
1:A:967:PHE:HB3	1:A:968:PRO:HD2	2.03	0.40
2:H:879:LEU:HB3	2:H:884:PHE:CE1	2.56	0.40
2:H:1375:HIS:CE1	2:H:1610:MET:SD	3.13	0.40
2:J:1205:GLU:O	2:J:1217:ILE:HA	2.21	0.40
2:K:540:ILE:CD1	2:K:557:GLU:HB3	2.48	0.40
1:D:1381:MET:HE3	1:D:1403:THR:HB	2.03	0.40
2:K:1851:MET:SD	2:K:1856:LEU:HA	2.61	0.40
2:G:1181:PHE:CD1	2:G:1191:PRO:HD2	2.55	0.40
2:I:1227:LYS:HG2	2:I:1228:LEU:HG	2.02	0.40
1:A:918:LEU:HA	1:A:921:GLU:CG	2.51	0.40
1:D:670:LEU:HD11	1:D:680:VAL:HG21	2.03	0.40
1:D:1446:GLU:O	1:D:1450:ILE:HG13	2.22	0.40
2:L:1220:ARG:HB3	2:L:1228:LEU:HB2	2.03	0.40
1:E:484:PRO:HG3	1:E:651:GLN:OE1	2.22	0.40
1:E:1050:TRP:HE3	1:E:1050:TRP:HA	1.84	0.40
2:I:350:MET:HE3	2:I:435:ILE:HD12	2.02	0.40
1:F:28:TRP:HE1	1:F:32:GLN:NE2	2.19	0.40
1:D:358:PHE:HD2	1:D:359:VAL:N	2.19	0.40
1:B:357:ALA:HB1	1:E:358:PHE:CE1	2.56	0.40

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:D:1472:GLU:O	1:D:1475:GLU:HB2	2.21	0.40
2:L:120:HIS:HD2	2:L:137:VAL:HG21	1.86	0.40
2:L:161:ALA:HA	2:L:164:GLU:HB2	2.03	0.40
2:K:1658:MET:CE	2:K:1826:LEU:HD23	2.51	0.40
2:G:1245:THR:HG23	2:G:1260:THR:OG1	2.21	0.40
2:J:1224:GLN:HG3	2:J:1578:GLU:OE2	2.20	0.40
1:D:1202:GLY:HA3	1:D:1661:ARG:HD3	2.04	0.40
2:G:995:ARG:O	2:G:998:ALA:HB3	2.21	0.40
2:G:604:MET:HG3	2:G:627:HIS:HD2	1.86	0.40
2:J:92:GLU:C	2:J:94:ALA:H	2.25	0.40
1:A:1297:GLY:HA2	1:E:1496:ARG:CZ	2.51	0.40
1:D:1254:PHE:HB2	1:D:1257:THR:OG1	2.21	0.40
1:A:943:VAL:HG12	1:A:944:ASN:OD1	2.21	0.40
1:A:405:TRP:HA	1:A:405:TRP:CE3	2.56	0.40
2:G:1419:LEU:HA	2:G:1419:LEU:HD23	1.89	0.40
2:H:336:LEU:C	2:H:336:LEU:HD23	2.41	0.40
2:G:585:VAL:HG12	2:G:585:VAL:O	2.21	0.40
1:A:1232:LEU:HD23	1:A:1232:LEU:HA	1.84	0.40
2:J:369:ASN:HB3	2:J:377:HIS:ND1	2.37	0.40
2:I:300:THR:O	2:I:304:PHE:HB2	2.21	0.40
2:K:276:LEU:HD22	2:K:466:VAL:CG1	2.51	0.40
2:I:595:SER:CB	2:I:602:PRO:HG3	2.33	0.40
2:L:1098:LEU:HD12	2:L:1098:LEU:HA	1.91	0.40
2:L:1099:LEU:HD12	2:L:1103:TYR:CB	2.51	0.40
2:J:1871:VAL:HG12	2:J:1872:GLU:N	2.36	0.40
2:I:1086:ILE:O	2:I:1090:ILE:HG13	2.22	0.40
1:A:1426:GLU:HA	1:A:1429:ARG:HG3	2.03	0.40
2:J:1637:VAL:HG11	2:J:1679:LEU:CD1	2.39	0.40
1:C:1015:GLU:HA	1:C:1561:LEU:HD12	2.04	0.40
2:J:1266:HIS:CE1	2:J:1275:ARG:CD	2.93	0.40
2:J:1804:GLN:HB3	2:J:1861:PHE:CE1	2.56	0.40
2:L:44:GLN:HE21	2:L:48:LEU:HD21	1.85	0.40
2:K:1764:MET:CE	2:K:1865:LEU:CD1	2.98	0.40
2:J:781:GLY:CA	2:J:1071:VAL:HG13	2.41	0.40
1:E:1149:LEU:HD23	1:E:1149:LEU:HA	1.73	0.40
1:B:1094:LYS:HE3	1:B:1316:TYR:CG	2.54	0.40
2:L:1588:ASN:OD1	2:L:1589:PRO:HD2	2.21	0.40
2:I:1032:PRO:O	2:I:1033:ALA:HB2	2.22	0.40
2:I:441:SER:C	2:I:443:TYR:H	2.25	0.40
2:K:332:ALA:N	2:L:1627:ASN:ND2	2.70	0.40
2:I:129:ILE:CG1	2:I:129:ILE:O	2.68	0.40
1:E:504:GLY:O	1:E:926:SER:HB2	2.21	0.40

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:K:1179:GLU:HB3	2:K:1193:LYS:HE3	2.03	0.40
2:K:1179:GLU:O	2:K:1190:ASN:N	2.53	0.40
2:G:1692:TYR:CD1	2:G:1847:LEU:HD21	2.49	0.40
1:C:1364:THR:CG2	1:C:1366:GLN:HB2	2.51	0.40
2:H:47:GLN:HG3	2:I:23:PRO:CD	2.50	0.40
2:I:1224:GLN:CG	2:I:1578:GLU:OE2	2.67	0.40
2:G:1251:THR:CG2	2:G:1292:VAL:HG13	2.50	0.40
2:J:1913:TRP:HZ3	2:J:1938:THR:HG21	1.85	0.40
2:I:1866:THR:CA	2:I:1869:VAL:HG22	2.50	0.40
1:C:565:GLN:CG	1:C:565:GLN:O	2.69	0.40
1:D:767:HIS:NE2	1:D:771:LEU:CD2	2.82	0.40
2:G:718:PRO:HG2	2:G:741:LEU:HD11	2.03	0.40
2:L:883:ILE:HG22	2:L:884:PHE:N	2.35	0.40
1:F:1638:HIS:ND1	1:F:1639:PRO:CD	2.84	0.40
2:L:727:VAL:HA	2:L:730:ILE:CG1	2.51	0.40
2:J:141:TYR:HA	2:J:144:ARG:HB3	2.03	0.40
2:J:196:PHE:CD2	2:J:266:LYS:CB	3.05	0.40
2:I:462:ALA:HB3	2:I:481:LEU:O	2.21	0.40
2:I:1180:VAL:HG11	2:I:1187:PHE:CD2	2.57	0.40
2:J:689:GLY:HA3	2:J:713:HIS:CE1	2.56	0.40
2:I:883:ILE:HG22	2:I:884:PHE:N	2.36	0.40
2:G:1403:ALA:CB	2:G:1447:GLN:HA	2.51	0.40
2:G:1355:LYS:O	2:G:1359:LYS:HG3	2.22	0.40
2:J:1180:VAL:HG11	2:J:1187:PHE:CD2	2.56	0.40
2:L:1206:ILE:O	2:L:1209:PRO:HG3	2.21	0.40
2:J:1208:ASN:N	2:J:1209:PRO:HD3	2.35	0.40
1:D:622:GLU:HB2	1:D:623:PHE:CD2	2.56	0.40
2:G:917:ARG:NH1	2:G:1057:TYR:OH	2.54	0.40
1:D:739:ASP:OD2	1:D:790:TYR:CG	2.74	0.40
2:G:1220:ARG:HB3	2:G:1228:LEU:HB2	2.03	0.40
1:D:918:LEU:HD23	1:D:921:GLU:OE2	2.22	0.40
2:K:113:PHE:N	2:K:113:PHE:HD1	2.19	0.40
2:G:555:LYS:HG2	2:G:559:PHE:HE1	1.86	0.40
1:F:358:PHE:HD2	1:F:359:VAL:N	2.19	0.40
1:C:626:TRP:CE3	1:C:898:PHE:HB2	2.57	0.40
1:B:948:HIS:O	1:B:952:TYR:CD2	2.74	0.40
1:F:1042:LEU:HA	1:F:1042:LEU:HD23	1.76	0.40
1:B:450:TYR:CZ	1:B:1551:ASN:HB2	2.56	0.40
1:C:1000:ALA:HB3	1:C:1197:ALA:HB2	2.03	0.40
1:E:61:LEU:HA	1:E:65:TYR:HB2	2.03	0.40
2:J:1317:ASN:OD1	2:J:1319:GLN:HB3	2.20	0.40
2:J:944:VAL:HG11	2:J:1055:ALA:HA	2.01	0.40

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:E:1400:VAL:H	1:E:1400:VAL:HG23	1.66	0.40
2:J:1708:LEU:HD22	2:J:1708:LEU:O	2.21	0.40
1:B:740:LEU:HD23	1:B:740:LEU:HA	1.81	0.40
2:L:988:GLU:HA	2:L:989:PRO:HD3	1.74	0.40
2:L:437:ALA:HA	2:L:438:PRO:HD3	1.88	0.40
1:B:1687:TYR:OH	1:D:1388:LYS:HB3	2.21	0.40
1:C:1342:ARG:NH1	1:C:1347:THR:CB	2.65	0.40
2:G:172:ILE:HG22	2:G:514:VAL:O	2.21	0.40
2:K:625:GLY:C	2:K:656:ARG:NH2	2.75	0.40
2:H:601:PRO:HB2	2:H:626:TYR:CE2	2.56	0.40
2:J:1097:PHE:HD2	2:J:1100:ARG:NH1	2.15	0.40
2:H:1299:VAL:O	2:H:1301:PHE:HD2	2.03	0.40
2:J:752:HIS:NE2	2:J:856:THR:HG22	2.35	0.40
1:C:1097:LEU:CD1	1:F:1149:LEU:HD12	2.50	0.40
2:K:1631:ARG:CZ	2:K:1688:PRO:HA	2.51	0.40
1:B:1160:VAL:HB	1:B:1352:MET:CE	2.51	0.40
1:C:1400:VAL:HG11	1:C:1633:GLN:HB2	2.03	0.40
2:H:1031:VAL:HA	2:H:1032:PRO:HD3	1.63	0.40
2:G:1764:MET:O	2:G:1780:ILE:HG13	2.21	0.40
2:I:26:LEU:HD22	2:I:53:LEU:HD21	2.03	0.40
2:L:200:LEU:O	2:L:204:ILE:HG13	2.21	0.40
2:L:1179:GLU:HB3	2:L:1193:LYS:HE3	2.02	0.40
2:I:1325:VAL:HG22	2:I:1335:PHE:HD2	1.87	0.40
2:K:129:ILE:HG21	2:K:132:LYS:CG	2.51	0.40
2:K:739:ILE:HG13	2:K:773:ASN:HB3	2.03	0.40
1:D:740:LEU:HD12	1:D:781:ILE:HD13	2.02	0.40
2:H:906:LEU:HA	2:H:906:LEU:HD22	1.85	0.40
2:K:1948:MET:HE1	2:K:1948:MET:HA	2.02	0.40
2:I:727:VAL:HA	2:I:730:ILE:CG1	2.51	0.40
2:G:2044:THR:HG21	2:G:2054:TYR:OH	2.21	0.40
1:E:567:ASN:O	1:E:571:LYS:HG3	2.20	0.40
2:K:1589:PRO:HB2	2:K:1596:PHE:HB3	2.03	0.40
2:I:126:VAL:O	2:I:133:LYS:HE3	2.22	0.40
2:H:740:ILE:HA	2:H:775:VAL:HB	2.03	0.40
2:I:1084:LYS:O	2:I:1088:ASP:HB2	2.21	0.40
1:E:1081:ILE:HD12	1:E:1091:PRO:CG	2.52	0.40
2:J:1944:ASN:HA	2:J:1993:PHE:CE1	2.55	0.40
2:K:1175:MET:HA	2:K:1274:ILE:HD11	2.02	0.40
2:G:1227:LYS:HG2	2:G:1228:LEU:HG	2.02	0.40
2:H:685:VAL:HG23	2:H:1186:ARG:NH1	2.36	0.40
2:I:871:ARG:HB2	2:I:909:ASP:HB2	2.03	0.40
1:D:921:GLU:HG3	1:D:922:ILE:H	1.85	0.40

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:1685:ALA:HB1	1:A:1686:PRO:HD2	2.03	0.40
1:E:859:VAL:HG13	1:E:918:LEU:HD13	2.02	0.40
2:L:976:GLN:HA	2:L:977:PRO:HD3	1.87	0.40
2:H:314:LEU:O	2:H:318:ILE:HG13	2.20	0.40
1:E:358:PHE:HD2	1:E:359:VAL:N	2.19	0.40
1:F:447:PHE:HE1	1:F:451:HIS:HE2	1.70	0.40
2:K:699:ILE:HD12	2:K:699:ILE:H	1.85	0.40
2:J:420:PRO:HB2	2:J:423:GLN:HB2	2.04	0.40
2:J:618:VAL:HG13	2:J:619:ALA:N	2.36	0.40
1:A:447:PHE:HA	1:A:1550:GLY:O	2.22	0.40
1:A:958:GLU:HA	1:A:959:PRO:HD3	1.92	0.40
2:K:922:GLU:HA	2:K:923:PRO:HD3	1.90	0.40
1:B:538:ARG:HD2	1:B:542:GLN:NE2	2.36	0.40
2:I:995:ARG:O	2:I:998:ALA:HB3	2.20	0.40
2:K:233:ASN:HA	2:K:234:PRO:HD3	1.88	0.40
1:A:1313:GLU:HG2	1:A:1313:GLU:H	1.48	0.40
2:K:277:GLU:HA	2:K:277:GLU:OE2	2.21	0.40
2:G:1700:GLN:HG2	2:G:1700:GLN:O	2.21	0.40
1:A:740:LEU:HA	1:A:740:LEU:HD23	1.94	0.40
1:F:626:TRP:CZ3	1:F:898:PHE:HB2	2.56	0.40
1:E:1162:GLY:O	1:E:1354:SER:HA	2.21	0.40
2:G:1741:ASN:HD21	2:G:1798:GLY:HA3	1.86	0.40
2:H:1314:GLU:O	2:H:1394:VAL:HA	2.20	0.40
1:F:490:VAL:O	1:F:490:VAL:HG12	2.21	0.40
2:J:1333:GLU:HG3	2:J:1338:ARG:HD2	2.03	0.40
2:J:652:ILE:HG23	2:J:656:ARG:HB2	2.03	0.40
1:E:14:LEU:HD13	1:E:18:LEU:HG	2.02	0.40
2:H:601:PRO:HA	2:H:602:PRO:HD3	1.82	0.40
2:H:1092:ASN:HA	2:H:1095:ILE:CG1	2.46	0.40
2:I:1635:TYR:CE2	2:I:1637:VAL:HG23	2.56	0.40
1:D:538:ARG:CG	1:D:579:MET:HE3	2.51	0.40
2:K:1064:THR:CG2	2:K:1065:CYS:N	2.84	0.40
2:K:865:ILE:HG22	2:K:867:LYS:HG3	2.03	0.40
2:K:57:PRO:HG3	2:K:68:GLU:CG	2.41	0.40
2:G:1768:THR:O	2:G:1776:LYS:HB2	2.22	0.40
2:I:779:GLY:HA3	2:I:811:MET:HB3	2.04	0.40
2:K:1616:VAL:O	2:K:1620:VAL:HG23	2.21	0.40
2:L:867:LYS:NZ	2:L:1065:CYS:SG	2.90	0.40
2:K:1523:ILE:N	2:K:1523:ILE:HD12	2.36	0.40
1:B:1037:ASN:ND2	2:H:1011:GLN:HG2	2.35	0.40
1:C:1554:LEU:HD23	1:C:1606:VAL:HG12	2.02	0.40
2:H:489:GLU:HG2	2:H:492:ARG:NH1	2.37	0.40

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:I:764:MET:O	2:I:765:TYR:C	2.59	0.40
1:C:486:VAL:HG22	1:C:648:LEU:C	2.41	0.40
2:H:928:ASP:C	2:H:1007:LEU:HD23	2.42	0.40
1:B:683:THR:HB	1:B:714:PHE:CB	2.44	0.40
1:A:1400:VAL:HG11	1:A:1633:GLN:HB2	2.02	0.40
1:C:1106:LEU:HD13	1:C:1142:LEU:HD13	2.03	0.40
2:G:1462:GLN:O	2:G:1466:VAL:HG23	2.21	0.40
1:C:617:LEU:N	1:C:617:LEU:HD23	2.37	0.40
2:H:411:PRO:HD2	2:H:414:LEU:HD11	2.01	0.40
2:G:617:PHE:HD1	2:G:822:ALA:CA	2.35	0.40
1:E:683:THR:HG21	1:E:725:LEU:HD11	2.04	0.40
2:K:197:VAL:HG11	2:K:259:ALA:HB1	2.03	0.40
2:K:1374:VAL:CG2	2:K:1436:ARG:NE	2.85	0.40
2:I:1318:ALA:HB2	2:I:1391:VAL:HG11	2.03	0.40
1:F:444:LEU:HD22	1:F:448:MET:CG	2.52	0.40
1:C:983:GLN:O	1:C:987:MET:HG3	2.21	0.40
1:F:36:LEU:O	1:F:76:ARG:NH2	2.53	0.40
2:K:1375:HIS:HE1	2:K:1610:MET:SD	2.44	0.40
2:G:129:ILE:HG21	2:G:132:LYS:HG3	2.03	0.40
1:E:1581:LEU:HD23	1:E:1581:LEU:HA	1.90	0.40
2:L:2044:THR:HG21	2:L:2054:TYR:OH	2.21	0.40
2:K:1722:ALA:CB	2:K:1812:LEU:HD11	2.52	0.40
2:I:1015:HIS:CD2	2:I:1019:LEU:HD11	2.56	0.40
2:H:1204:VAL:HA	2:H:1218:SER:O	2.21	0.40
1:C:767:HIS:CG	1:C:813:LEU:HD12	2.55	0.40
2:G:730:ILE:O	2:G:733:ALA:HB3	2.21	0.40
2:J:448:HIS:CD2	2:J:491:VAL:HG12	2.53	0.40
2:H:741:LEU:O	2:H:741:LEU:CG	2.69	0.40
1:F:943:VAL:HG12	1:F:944:ASN:OD1	2.22	0.40
1:A:828:TRP:NE1	1:A:838:THR:HA	2.35	0.40
2:G:1142:ILE:HG13	2:G:1209:PRO:CG	2.52	0.40
2:G:1180:VAL:HG11	2:G:1187:PHE:CD2	2.57	0.40
2:K:917:ARG:NH1	2:K:1057:TYR:OH	2.55	0.40
2:L:350:MET:SD	2:L:392:THR:CG2	3.10	0.40
2:J:356:LEU:HA	2:J:356:LEU:HD23	1.66	0.40
1:C:1420:TYR:OH	1:F:1473:HIS:CE1	2.74	0.40
2:K:1009:ASN:HD22	2:K:1010:ALA:N	2.19	0.40
1:E:1685:ALA:HB1	1:E:1686:PRO:HD2	2.04	0.40
2:J:1276:GLU:HB3	2:J:1278:MET:CE	2.51	0.40
2:J:1084:LYS:HE3	2:J:1088:ASP:OD2	2.22	0.40
2:H:1157:VAL:O	2:H:1161:MET:HG3	2.21	0.40
1:D:799:LEU:HD11	1:D:821:LEU:HD22	2.02	0.40

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:B:1229:THR:HG23	1:D:1236:TYR:OH	2.22	0.40
1:A:635:ILE:H	1:A:635:ILE:HG13	1.58	0.40
1:D:17:LEU:HD22	2:J:2041:PRO:HB3	2.02	0.40
1:F:1262:VAL:HG12	1:F:1267:LEU:HD21	2.03	0.40
2:J:1028:VAL:HA	2:J:1029:PRO:HD3	1.76	0.40
2:I:976:GLN:HA	2:I:977:PRO:HD3	1.92	0.40
1:C:1232:LEU:HD21	1:F:1232:LEU:HD11	2.03	0.40
2:L:1489:VAL:HB	2:L:1514:LEU:HB2	2.03	0.40
1:B:391:PHE:CZ	1:B:728:TYR:HB2	2.57	0.40
2:I:834:ASP:O	2:I:836:PRO:HD3	2.20	0.40
1:F:1615:ASP:OD1	1:F:1615:ASP:N	2.55	0.40
2:I:769:ARG:HA	2:I:769:ARG:HD3	1.81	0.40
2:L:1380:TYR:N	2:L:1380:TYR:CD2	2.89	0.40
2:K:769:ARG:HD3	2:K:769:ARG:HA	1.78	0.40
1:A:1191:LEU:HD23	1:A:1191:LEU:HA	1.94	0.40
2:K:1153:ASN:HA	2:K:1153:ASN:HD22	1.58	0.40
1:F:511:VAL:HG12	1:F:512:PRO:HD2	2.02	0.40
2:J:644:ALA:O	2:J:648:ILE:HG13	2.21	0.40
2:H:1632:VAL:HB	2:H:1685:VAL:HG22	2.02	0.40
1:B:701:ARG:NH1	1:B:1610:ARG:HH21	2.19	0.40
2:J:625:GLY:C	2:J:656:ARG:HH22	2.25	0.40
2:K:276:LEU:HD23	2:K:276:LEU:O	2.21	0.40
2:J:787:ASP:O	2:J:790:PRO:HD2	2.22	0.40
1:E:1210:TYR:CE1	1:E:1215:LEU:HD23	2.57	0.40
2:I:1299:VAL:O	2:I:1301:PHE:HD2	2.05	0.40
2:K:829:LYS:O	2:K:832:ILE:HB	2.22	0.40
2:J:1266:HIS:C	2:J:1268:GLU:H	2.24	0.40
1:F:1426:GLU:HA	1:F:1429:ARG:HG3	2.03	0.40
2:K:1804:GLN:O	2:K:1861:PHE:HD1	2.05	0.40
2:L:606:ALA:HB2	2:L:811:MET:HG3	2.04	0.40
2:G:1064:THR:CG2	2:G:1065:CYS:N	2.84	0.40
1:C:1301:VAL:HG23	1:C:1363:MET:CG	2.51	0.40
2:K:608:MET:HA	3:K:2101:FMN:N5	2.36	0.40
2:L:1374:VAL:HG22	2:L:1436:ARG:HE	1.85	0.40
2:J:549:ASN:C	2:J:549:ASN:HD22	2.25	0.40
2:H:440:HIS:HD2	2:H:497:ASP:O	2.03	0.40
1:E:742:TYR:CE1	1:E:884:MET:HB3	2.57	0.40
2:I:376:ARG:HA	2:I:443:TYR:OH	2.20	0.40
2:G:1764:MET:HG3	2:G:1781:PHE:CE1	2.56	0.40
2:I:1000:TYR:HA	2:I:1001:PRO:HD2	1.79	0.40
1:B:755:GLU:C	1:B:757:ASP:N	2.75	0.40
1:D:1447:VAL:CG2	1:D:1467:LEU:HD21	2.52	0.40

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:J:1305:LEU:HD23	2:J:1366:ILE:CD1	2.52	0.40
2:I:666:ASN:N	2:I:667:PRO:HD3	2.37	0.40
2:L:221:TYR:HE1	2:L:320:LEU:CD1	2.29	0.40
2:I:731:ALA:HB1	2:I:771:CYS:SG	2.62	0.40
2:J:608:MET:HE2	2:J:608:MET:HB3	1.93	0.40
2:I:1807:GLN:HB3	2:I:1860:VAL:CG1	2.52	0.40
2:I:1947:LYS:HE3	2:I:1948:MET:HE3	2.02	0.40
2:L:764:MET:O	2:L:765:TYR:C	2.60	0.40
1:F:1447:VAL:HG21	1:F:1467:LEU:HD11	2.02	0.40
1:B:29:ILE:HG22	1:B:30:GLU:N	2.37	0.40
2:K:1199:THR:CG2	2:K:1200:ARG:N	2.85	0.40
2:J:1915:LEU:HD13	2:J:1936:LEU:HD22	2.03	0.40
2:G:626:TYR:OH	2:G:1088:ASP:HA	2.22	0.40
2:H:1217:ILE:H	2:H:1217:ILE:HG13	1.76	0.40
2:K:1250:ARG:NH1	2:K:1592:VAL:HG12	2.37	0.40
1:C:620:LYS:HA	1:C:625:ASN:O	2.21	0.40
1:F:1638:HIS:CG	1:F:1639:PRO:HD2	2.56	0.40
1:F:767:HIS:NE2	1:F:771:LEU:CD2	2.85	0.40
2:K:1366:ILE:O	2:K:1366:ILE:HG22	2.21	0.40
1:C:1638:HIS:ND1	1:C:1639:PRO:CD	2.84	0.40
2:H:1944:ASN:HA	2:H:1993:PHE:CE1	2.56	0.40
1:B:1638:HIS:CG	1:B:1639:PRO:HD2	2.55	0.40
1:D:1199:LEU:C	1:D:1201:SER:N	2.75	0.40
2:I:689:GLY:HA3	2:I:713:HIS:CE1	2.56	0.40
1:B:1055:THR:C	1:B:1057:GLU:H	2.25	0.40
2:L:1406:ASN:HB3	2:L:1411:LYS:HG3	2.03	0.40
2:H:1180:VAL:HG11	2:H:1187:PHE:CD2	2.56	0.40
2:I:186:LEU:HD23	2:I:186:LEU:HA	1.79	0.40
1:C:454:HIS:CD2	1:C:454:HIS:N	2.89	0.40
1:E:921:GLU:HG3	1:E:922:ILE:N	2.37	0.40
2:L:270:ARG:HB3	2:L:274:GLU:HB2	2.03	0.40
2:G:1835:GLY:HA3	2:G:1840:GLU:N	2.37	0.40
1:C:511:VAL:CG1	1:C:512:PRO:HD2	2.51	0.40
1:B:1030:TRP:CE2	1:B:1673:LEU:HD22	2.57	0.40
2:I:1741:ASN:HD21	2:I:1798:GLY:HA3	1.86	0.40
1:C:799:LEU:HD11	1:C:821:LEU:HD22	2.03	0.40
1:C:1589:ASN:OD1	1:C:1589:ASN:C	2.60	0.40
1:A:1228:GLY:O	1:A:1232:LEU:HB2	2.22	0.40
2:H:1795:SER:HA	2:H:1796:PRO:HD3	1.95	0.40
1:A:942:VAL:O	2:G:1536:HIS:HB2	2.21	0.40
2:H:1712:SER:HA	2:H:1713:PRO:HD3	1.91	0.40
2:J:882:LYS:HB3	2:J:898:ARG:NH1	2.36	0.40

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:K:92:GLU:C	2:K:94:ALA:H	2.24	0.40
1:F:46:GLU:HB3	1:F:80:CYS:HA	2.02	0.40
2:G:353:ILE:O	2:G:353:ILE:HG22	2.22	0.40

All (2) symmetry-related close contacts are listed below. The label for Atom-2 includes the symmetry operator and encoded unit-cell translations to be applied.

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:H:1527:SER:O	2:K:19:GLN:NE2[2_646]	2.09	0.11
1:B:1452:SER:O	2:G:1092:ASN:ND2[1_556]	2.15	0.05

## 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	1451/1878 (77%)	1291 (89%)	148 (10%)	12 (1%)	27	74
1	B	1458/1878 (78%)	1295 (89%)	151 (10%)	12 (1%)	27	74
1	C	1456/1878 (78%)	1293 (89%)	151 (10%)	12 (1%)	27	74
1	D	1461/1878 (78%)	1290 (88%)	155 (11%)	16 (1%)	21	65
1	E	1450/1878 (77%)	1292 (89%)	146 (10%)	12 (1%)	27	74
1	F	1455/1878 (78%)	1300 (89%)	140 (10%)	15 (1%)	22	68
2	G	2058/2060 (100%)	1792 (87%)	240 (12%)	26 (1%)	18	60
2	H	2058/2060 (100%)	1786 (87%)	244 (12%)	28 (1%)	16	58
2	I	2058/2060 (100%)	1799 (87%)	233 (11%)	26 (1%)	18	60
2	J	2058/2060 (100%)	1792 (87%)	240 (12%)	26 (1%)	18	60
2	K	2058/2060 (100%)	1772 (86%)	258 (12%)	28 (1%)	16	58
2	L	2058/2060 (100%)	1777 (86%)	253 (12%)	28 (1%)	16	58
All	All	21079/23628 (89%)	18479 (88%)	2359 (11%)	241 (1%)	21	65

All (241) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	A	1227	GLY
1	A	1566	LYS
1	A	1593	ASP
1	B	614	PHE
1	B	1566	LYS
1	B	1593	ASP
1	C	1566	LYS
1	C	1593	ASP
1	D	606	PRO
1	D	1566	LYS
1	D	1593	ASP
1	E	1227	GLY
1	E	1566	LYS
1	E	1593	ASP
1	F	613	PRO
1	F	1566	LYS
1	F	1593	ASP
2	G	1363	PRO
2	G	1478	GLN
2	H	1363	PRO
2	H	1478	GLN
2	I	1363	PRO
2	I	1478	GLN
2	J	1363	PRO
2	J	1478	GLN
2	K	1048	TRP
2	K	1363	PRO
2	K	1478	GLN
2	L	1363	PRO
2	L	1478	GLN
1	A	852	LEU
1	B	609	VAL
1	B	852	LEU
1	B	1227	GLY
1	C	425	VAL
1	C	614	PHE
1	C	852	LEU
1	C	1227	GLY
1	C	1524	GLY
1	D	425	VAL
1	D	527	ALA
1	D	582	SER
1	D	852	LEU

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Mol	Chain	Res	Type
1	D	1227	GLY
1	E	852	LEU
1	F	535	TYR
1	F	852	LEU
1	F	1227	GLY
1	F	1524	GLY
2	G	29	GLY
2	G	520	GLY
2	G	780	SER
2	G	915	PHE
2	G	1048	TRP
2	G	2076	LYS
2	H	29	GLY
2	H	520	GLY
2	H	780	SER
2	H	915	PHE
2	H	989	PRO
2	H	1048	TRP
2	H	1632	VAL
2	H	2076	LYS
2	I	29	GLY
2	I	520	GLY
2	I	551	GLU
2	I	780	SER
2	I	989	PRO
2	I	1048	TRP
2	I	2076	LYS
2	J	29	GLY
2	J	520	GLY
2	J	780	SER
2	J	915	PHE
2	J	1048	TRP
2	J	1632	VAL
2	J	2076	LYS
2	K	29	GLY
2	K	520	GLY
2	K	780	SER
2	K	915	PHE
2	K	1688	PRO
2	K	2076	LYS
2	L	29	GLY
2	L	520	GLY

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Mol	Chain	Res	Type
2	L	551	GLU
2	L	780	SER
2	L	989	PRO
2	L	1048	TRP
2	L	1739	LYS
2	L	2076	LYS
1	A	425	VAL
1	B	425	VAL
1	D	1524	GLY
1	E	1524	GLY
1	F	425	VAL
2	G	551	GLU
2	G	989	PRO
2	G	1632	VAL
2	G	1739	LYS
2	H	506	VAL
2	H	551	GLU
2	H	1739	LYS
2	I	915	PHE
2	I	1632	VAL
2	I	1739	LYS
2	J	551	GLU
2	J	989	PRO
2	J	1739	LYS
2	K	286	SER
2	K	551	GLU
2	K	869	ALA
2	K	989	PRO
2	K	1739	LYS
2	L	915	PHE
1	A	614	PHE
1	A	1524	GLY
1	B	1524	GLY
1	D	526	MET
1	D	614	PHE
1	D	1462	ASP
1	E	425	VAL
1	E	1462	ASP
2	G	286	SER
2	G	694	ALA
2	G	841	ASP
2	G	1239	ASP

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Mol	Chain	Res	Type
2	G	1567	THR
2	G	1878	ARG
2	H	286	SER
2	H	841	ASP
2	H	1125	ASP
2	H	1239	ASP
2	H	1567	THR
2	H	1878	ARG
2	I	286	SER
2	I	841	ASP
2	I	1567	THR
2	I	1878	ARG
2	J	286	SER
2	J	841	ASP
2	J	1239	ASP
2	J	1567	THR
2	J	1878	ARG
2	K	506	VAL
2	K	694	ALA
2	K	841	ASP
2	K	1239	ASP
2	K	1567	THR
2	K	1878	ARG
2	L	286	SER
2	L	506	VAL
2	L	694	ALA
2	L	841	ASP
2	L	1239	ASP
2	L	1632	VAL
2	L	1878	ARG
1	B	1366	GLN
1	B	1462	ASP
1	C	1462	ASP
1	D	1366	GLN
1	E	1366	GLN
1	F	1056	GLY
1	F	1105	ASP
1	F	1366	GLN
1	F	1462	ASP
2	G	506	VAL
2	H	694	ALA
2	I	694	ALA

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Mol	Chain	Res	Type
2	I	958	LEU
2	I	1239	ASP
2	K	466	VAL
2	L	1267	PRO
2	L	1567	THR
2	L	1588	ASN
1	A	1366	GLN
1	A	1462	ASP
2	G	1267	PRO
2	G	1750	GLY
2	H	1267	PRO
2	I	506	VAL
2	I	1267	PRO
2	I	1588	ASN
2	J	466	VAL
2	J	506	VAL
2	J	653	PRO
2	J	694	ALA
2	J	1588	ASN
2	J	1750	GLY
2	K	1632	VAL
2	L	466	VAL
2	L	653	PRO
2	L	958	LEU
2	L	1249	GLY
2	L	1750	GLY
1	B	812	GLY
1	B	1409	GLY
1	D	812	GLY
1	F	1409	GLY
2	G	466	VAL
2	G	1588	ASN
2	H	466	VAL
2	H	653	PRO
2	H	1688	PRO
2	H	1750	GLY
2	I	466	VAL
2	I	653	PRO
2	I	1750	GLY
2	J	1267	PRO
2	K	434	PRO
2	K	653	PRO

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Mol	Chain	Res	Type
2	K	1267	PRO
1	C	1409	GLY
1	D	1124	GLY
1	D	1409	GLY
1	E	1056	GLY
1	E	1505	GLY
2	G	434	PRO
2	H	1249	GLY
2	J	1249	GLY
2	K	1249	GLY
2	K	1588	ASN
2	K	1750	GLY
1	A	812	GLY
1	A	1124	GLY
1	C	1124	GLY
1	E	812	GLY
1	E	1409	GLY
2	H	1588	ASN
2	I	1249	GLY
2	L	434	PRO
1	A	1409	GLY
1	C	484	PRO
1	C	812	GLY
2	G	1249	GLY
2	H	434	PRO
1	F	812	GLY
1	F	903	GLY
2	G	1056	VAL
2	J	434	PRO
2	L	151	PRO

### 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	1220/1527 (80%)	1101 (90%)	119 (10%)	12	40
1	B	1227/1527 (80%)	1111 (90%)	116 (10%)	12	42

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
1	C	1225/1527 (80%)	1102 (90%)	123 (10%)	11	38
1	D	1229/1527 (80%)	1110 (90%)	119 (10%)	12	41
1	E	1219/1527 (80%)	1101 (90%)	118 (10%)	12	41
1	F	1224/1527 (80%)	1109 (91%)	115 (9%)	13	43
2	G	1752/1752 (100%)	1571 (90%)	181 (10%)	10	36
2	H	1752/1752 (100%)	1579 (90%)	173 (10%)	11	39
2	I	1752/1752 (100%)	1571 (90%)	181 (10%)	10	36
2	J	1752/1752 (100%)	1573 (90%)	179 (10%)	11	37
2	K	1752/1752 (100%)	1575 (90%)	177 (10%)	11	38
2	L	1752/1752 (100%)	1576 (90%)	176 (10%)	11	38
All	All	17856/19674 (91%)	16079 (90%)	1777 (10%)	11	38

All (1777) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	A	12	THR
1	A	14	LEU
1	A	21	GLN
1	A	27	ARG
1	A	33	ASP
1	A	60	THR
1	A	335	LEU
1	A	361	SER
1	A	365	GLN
1	A	382	ILE
1	A	387	ILE
1	A	414	TYR
1	A	424	VAL
1	A	427	ARG
1	A	443	LEU
1	A	444	LEU
1	A	448	MET
1	A	457	THR
1	A	486	VAL
1	A	494	THR
1	A	517	ARG
1	A	536	SER
1	A	537	ASN

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Mol	Chain	Res	Type
1	A	552	ILE
1	A	557	ARG
1	A	562	SER
1	A	570	TYR
1	A	623	PHE
1	A	628	TYR
1	A	680	VAL
1	A	684	THR
1	A	709	LEU
1	A	715	ASN
1	A	725	LEU
1	A	732	THR
1	A	736	LEU
1	A	751	GLU
1	A	754	ARG
1	A	770	MET
1	A	772	THR
1	A	783	THR
1	A	793	ARG
1	A	799	LEU
1	A	811	ASP
1	A	813	LEU
1	A	815	SER
1	A	817	SER
1	A	837	LEU
1	A	843	VAL
1	A	848	ARG
1	A	856	ASN
1	A	874	GLN
1	A	883	LEU
1	A	919	ARG
1	A	921	GLU
1	A	946	GLU
1	A	970	LEU
1	A	995	VAL
1	A	999	LEU
1	A	1011	ARG
1	A	1039	ASN
1	A	1042	LEU
1	A	1055	THR
1	A	1061	ASP
1	A	1071	TYR

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Mol	Chain	Res	Type
1	A	1079	ARG
1	A	1093	ARG
1	A	1131	GLU
1	A	1160	VAL
1	A	1183	VAL
1	A	1186	VAL
1	A	1220	ASN
1	A	1226	VAL
1	A	1232	LEU
1	A	1258	MET
1	A	1267	LEU
1	A	1308	ASP
1	A	1313	GLU
1	A	1324	THR
1	A	1340	MET
1	A	1342	ARG
1	A	1344	THR
1	A	1347	THR
1	A	1352	MET
1	A	1353	GLU
1	A	1357	CYS
1	A	1360	GLN
1	A	1361	VAL
1	A	1367	LEU
1	A	1381	MET
1	A	1401	LEU
1	A	1422	ARG
1	A	1426	GLU
1	A	1432	ILE
1	A	1437	GLU
1	A	1441	LEU
1	A	1455	SER
1	A	1456	GLU
1	A	1457	GLU
1	A	1482	GLU
1	A	1491	ASN
1	A	1504	ARG
1	A	1514	ILE
1	A	1527	THR
1	A	1534	GLU
1	A	1538	ILE
1	A	1539	CYS

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Mol	Chain	Res	Type
1	A	1561	LEU
1	A	1564	HIS
1	A	1602	PHE
1	A	1606	VAL
1	A	1610	ARG
1	A	1613	LYS
1	A	1623	THR
1	A	1646	LEU
1	A	1662	GLN
1	A	1673	LEU
1	A	1678	LEU
1	A	1702	ARG
1	B	12	THR
1	B	14	LEU
1	B	21	GLN
1	B	27	ARG
1	B	33	ASP
1	B	60	THR
1	B	335	LEU
1	B	361	SER
1	B	365	GLN
1	B	382	ILE
1	B	387	ILE
1	B	414	TYR
1	B	424	VAL
1	B	427	ARG
1	B	444	LEU
1	B	448	MET
1	B	449	GLN
1	B	457	THR
1	B	486	VAL
1	B	494	THR
1	B	499	THR
1	B	517	ARG
1	B	536	SER
1	B	547	SER
1	B	551	LEU
1	B	557	ARG
1	B	567	ASN
1	B	574	ILE
1	B	586	GLN
1	B	623	PHE

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Mol	Chain	Res	Type
1	B	628	TYR
1	B	680	VAL
1	B	688	SER
1	B	709	LEU
1	B	715	ASN
1	B	725	LEU
1	B	732	THR
1	B	736	LEU
1	B	751	GLU
1	B	754	ARG
1	B	770	MET
1	B	772	THR
1	B	783	THR
1	B	793	ARG
1	B	799	LEU
1	B	811	ASP
1	B	813	LEU
1	B	815	SER
1	B	817	SER
1	B	837	LEU
1	B	843	VAL
1	B	848	ARG
1	B	856	ASN
1	B	874	GLN
1	B	883	LEU
1	B	919	ARG
1	B	921	GLU
1	B	946	GLU
1	B	970	LEU
1	B	988	VAL
1	B	995	VAL
1	B	999	LEU
1	B	1039	ASN
1	B	1042	LEU
1	B	1061	ASP
1	B	1071	TYR
1	B	1079	ARG
1	B	1093	ARG
1	B	1131	GLU
1	B	1160	VAL
1	B	1183	VAL
1	B	1186	VAL

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Mol	Chain	Res	Type
1	B	1220	ASN
1	B	1226	VAL
1	B	1232	LEU
1	B	1258	MET
1	B	1267	LEU
1	B	1308	ASP
1	B	1313	GLU
1	B	1324	THR
1	B	1340	MET
1	B	1342	ARG
1	B	1344	THR
1	B	1347	THR
1	B	1352	MET
1	B	1353	GLU
1	B	1360	GLN
1	B	1361	VAL
1	B	1367	LEU
1	B	1381	MET
1	B	1401	LEU
1	B	1422	ARG
1	B	1426	GLU
1	B	1432	ILE
1	B	1437	GLU
1	B	1441	LEU
1	B	1455	SER
1	B	1456	GLU
1	B	1457	GLU
1	B	1482	GLU
1	B	1491	ASN
1	B	1504	ARG
1	B	1514	ILE
1	B	1534	GLU
1	B	1538	ILE
1	B	1539	CYS
1	B	1561	LEU
1	B	1564	HIS
1	B	1602	PHE
1	B	1606	VAL
1	B	1610	ARG
1	B	1613	LYS
1	B	1646	LEU
1	B	1662	GLN

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Mol	Chain	Res	Type
1	B	1678	LEU
1	B	1702	ARG
1	C	12	THR
1	C	14	LEU
1	C	21	GLN
1	C	27	ARG
1	C	33	ASP
1	C	82	CYS
1	C	335	LEU
1	C	342	ILE
1	C	361	SER
1	C	365	GLN
1	C	382	ILE
1	C	387	ILE
1	C	414	TYR
1	C	424	VAL
1	C	427	ARG
1	C	443	LEU
1	C	444	LEU
1	C	448	MET
1	C	449	GLN
1	C	457	THR
1	C	486	VAL
1	C	494	THR
1	C	517	ARG
1	C	536	SER
1	C	547	SER
1	C	551	LEU
1	C	557	ARG
1	C	567	ASN
1	C	574	ILE
1	C	623	PHE
1	C	628	TYR
1	C	680	VAL
1	C	688	SER
1	C	709	LEU
1	C	715	ASN
1	C	725	LEU
1	C	732	THR
1	C	736	LEU
1	C	751	GLU
1	C	754	ARG

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Mol	Chain	Res	Type
1	C	770	MET
1	C	772	THR
1	C	783	THR
1	C	793	ARG
1	C	799	LEU
1	C	811	ASP
1	C	813	LEU
1	C	815	SER
1	C	817	SER
1	C	837	LEU
1	C	843	VAL
1	C	848	ARG
1	C	856	ASN
1	C	874	GLN
1	C	883	LEU
1	C	919	ARG
1	C	921	GLU
1	C	946	GLU
1	C	970	LEU
1	C	988	VAL
1	C	995	VAL
1	C	999	LEU
1	C	1039	ASN
1	C	1042	LEU
1	C	1055	THR
1	C	1061	ASP
1	C	1071	TYR
1	C	1079	ARG
1	C	1093	ARG
1	C	1131	GLU
1	C	1147	THR
1	C	1160	VAL
1	C	1183	VAL
1	C	1186	VAL
1	C	1220	ASN
1	C	1226	VAL
1	C	1232	LEU
1	C	1258	MET
1	C	1267	LEU
1	C	1308	ASP
1	C	1313	GLU
1	C	1324	THR

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Mol	Chain	Res	Type
1	C	1340	MET
1	C	1342	ARG
1	C	1344	THR
1	C	1347	THR
1	C	1352	MET
1	C	1353	GLU
1	C	1360	GLN
1	C	1361	VAL
1	C	1367	LEU
1	C	1381	MET
1	C	1401	LEU
1	C	1422	ARG
1	C	1426	GLU
1	C	1432	ILE
1	C	1437	GLU
1	C	1441	LEU
1	C	1455	SER
1	C	1456	GLU
1	C	1457	GLU
1	C	1482	GLU
1	C	1491	ASN
1	C	1504	ARG
1	C	1514	ILE
1	C	1527	THR
1	C	1534	GLU
1	C	1538	ILE
1	C	1539	CYS
1	C	1561	LEU
1	C	1564	HIS
1	C	1602	PHE
1	C	1606	VAL
1	C	1610	ARG
1	C	1613	LYS
1	C	1623	THR
1	C	1646	LEU
1	C	1662	GLN
1	C	1673	LEU
1	C	1678	LEU
1	C	1702	ARG
1	C	1703	VAL
1	C	1707	SER
1	D	12	THR

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Mol	Chain	Res	Type
1	D	14	LEU
1	D	21	GLN
1	D	27	ARG
1	D	33	ASP
1	D	335	LEU
1	D	361	SER
1	D	365	GLN
1	D	382	ILE
1	D	387	ILE
1	D	414	TYR
1	D	424	VAL
1	D	427	ARG
1	D	444	LEU
1	D	448	MET
1	D	449	GLN
1	D	457	THR
1	D	486	VAL
1	D	494	THR
1	D	517	ARG
1	D	532	ILE
1	D	536	SER
1	D	537	ASN
1	D	552	ILE
1	D	557	ARG
1	D	562	SER
1	D	570	TYR
1	D	579	MET
1	D	581	GLU
1	D	584	ILE
1	D	605	ARG
1	D	623	PHE
1	D	628	TYR
1	D	680	VAL
1	D	688	SER
1	D	709	LEU
1	D	715	ASN
1	D	725	LEU
1	D	732	THR
1	D	736	LEU
1	D	751	GLU
1	D	754	ARG
1	D	770	MET

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Mol	Chain	Res	Type
1	D	772	THR
1	D	783	THR
1	D	793	ARG
1	D	811	ASP
1	D	813	LEU
1	D	815	SER
1	D	837	LEU
1	D	843	VAL
1	D	848	ARG
1	D	856	ASN
1	D	874	GLN
1	D	883	LEU
1	D	919	ARG
1	D	921	GLU
1	D	946	GLU
1	D	970	LEU
1	D	995	VAL
1	D	999	LEU
1	D	1039	ASN
1	D	1042	LEU
1	D	1061	ASP
1	D	1071	TYR
1	D	1079	ARG
1	D	1093	ARG
1	D	1131	GLU
1	D	1160	VAL
1	D	1183	VAL
1	D	1186	VAL
1	D	1220	ASN
1	D	1226	VAL
1	D	1232	LEU
1	D	1258	MET
1	D	1267	LEU
1	D	1308	ASP
1	D	1313	GLU
1	D	1324	THR
1	D	1340	MET
1	D	1342	ARG
1	D	1344	THR
1	D	1347	THR
1	D	1352	MET
1	D	1353	GLU

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Mol	Chain	Res	Type
1	D	1357	CYS
1	D	1360	GLN
1	D	1361	VAL
1	D	1367	LEU
1	D	1381	MET
1	D	1401	LEU
1	D	1422	ARG
1	D	1426	GLU
1	D	1432	ILE
1	D	1437	GLU
1	D	1441	LEU
1	D	1455	SER
1	D	1456	GLU
1	D	1457	GLU
1	D	1482	GLU
1	D	1491	ASN
1	D	1504	ARG
1	D	1514	ILE
1	D	1534	GLU
1	D	1538	ILE
1	D	1539	CYS
1	D	1561	LEU
1	D	1564	HIS
1	D	1602	PHE
1	D	1606	VAL
1	D	1610	ARG
1	D	1613	LYS
1	D	1623	THR
1	D	1646	LEU
1	D	1662	GLN
1	D	1673	LEU
1	D	1678	LEU
1	D	1702	ARG
1	D	1708	ASN
1	E	12	THR
1	E	14	LEU
1	E	21	GLN
1	E	27	ARG
1	E	33	ASP
1	E	60	THR
1	E	335	LEU
1	E	361	SER

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Mol	Chain	Res	Type
1	E	365	GLN
1	E	382	ILE
1	E	387	ILE
1	E	414	TYR
1	E	424	VAL
1	E	427	ARG
1	E	443	LEU
1	E	444	LEU
1	E	448	MET
1	E	449	GLN
1	E	457	THR
1	E	486	VAL
1	E	494	THR
1	E	499	THR
1	E	517	ARG
1	E	537	ASN
1	E	552	ILE
1	E	557	ARG
1	E	562	SER
1	E	570	TYR
1	E	623	PHE
1	E	628	TYR
1	E	680	VAL
1	E	688	SER
1	E	705	ARG
1	E	709	LEU
1	E	715	ASN
1	E	725	LEU
1	E	732	THR
1	E	736	LEU
1	E	751	GLU
1	E	754	ARG
1	E	770	MET
1	E	772	THR
1	E	783	THR
1	E	793	ARG
1	E	799	LEU
1	E	811	ASP
1	E	813	LEU
1	E	815	SER
1	E	817	SER
1	E	837	LEU

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Mol	Chain	Res	Type
1	E	843	VAL
1	E	848	ARG
1	E	856	ASN
1	E	874	GLN
1	E	883	LEU
1	E	919	ARG
1	E	921	GLU
1	E	946	GLU
1	E	970	LEU
1	E	995	VAL
1	E	999	LEU
1	E	1011	ARG
1	E	1039	ASN
1	E	1042	LEU
1	E	1061	ASP
1	E	1071	TYR
1	E	1079	ARG
1	E	1093	ARG
1	E	1131	GLU
1	E	1160	VAL
1	E	1183	VAL
1	E	1186	VAL
1	E	1220	ASN
1	E	1226	VAL
1	E	1232	LEU
1	E	1258	MET
1	E	1267	LEU
1	E	1308	ASP
1	E	1313	GLU
1	E	1324	THR
1	E	1340	MET
1	E	1342	ARG
1	E	1344	THR
1	E	1347	THR
1	E	1352	MET
1	E	1353	GLU
1	E	1357	CYS
1	E	1360	GLN
1	E	1361	VAL
1	E	1367	LEU
1	E	1381	MET
1	E	1401	LEU

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Mol	Chain	Res	Type
1	E	1422	ARG
1	E	1426	GLU
1	E	1432	ILE
1	E	1437	GLU
1	E	1441	LEU
1	E	1455	SER
1	E	1456	GLU
1	E	1457	GLU
1	E	1482	GLU
1	E	1491	ASN
1	E	1504	ARG
1	E	1514	ILE
1	E	1534	GLU
1	E	1538	ILE
1	E	1539	CYS
1	E	1561	LEU
1	E	1564	HIS
1	E	1602	PHE
1	E	1606	VAL
1	E	1610	ARG
1	E	1613	LYS
1	E	1646	LEU
1	E	1662	GLN
1	E	1678	LEU
1	E	1702	ARG
1	E	1708	ASN
1	F	12	THR
1	F	14	LEU
1	F	21	GLN
1	F	27	ARG
1	F	33	ASP
1	F	82	CYS
1	F	335	LEU
1	F	361	SER
1	F	365	GLN
1	F	382	ILE
1	F	387	ILE
1	F	414	TYR
1	F	424	VAL
1	F	427	ARG
1	F	444	LEU
1	F	448	MET

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Mol	Chain	Res	Type
1	F	457	THR
1	F	486	VAL
1	F	494	THR
1	F	517	ARG
1	F	535	TYR
1	F	547	SER
1	F	551	LEU
1	F	557	ARG
1	F	567	ASN
1	F	612	ILE
1	F	613	PRO
1	F	623	PHE
1	F	628	TYR
1	F	680	VAL
1	F	688	SER
1	F	709	LEU
1	F	715	ASN
1	F	725	LEU
1	F	732	THR
1	F	736	LEU
1	F	751	GLU
1	F	754	ARG
1	F	770	MET
1	F	772	THR
1	F	783	THR
1	F	793	ARG
1	F	799	LEU
1	F	811	ASP
1	F	813	LEU
1	F	815	SER
1	F	817	SER
1	F	837	LEU
1	F	843	VAL
1	F	848	ARG
1	F	856	ASN
1	F	874	GLN
1	F	883	LEU
1	F	919	ARG
1	F	921	GLU
1	F	946	GLU
1	F	970	LEU
1	F	988	VAL

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Mol	Chain	Res	Type
1	F	995	VAL
1	F	999	LEU
1	F	1039	ASN
1	F	1042	LEU
1	F	1061	ASP
1	F	1071	TYR
1	F	1079	ARG
1	F	1093	ARG
1	F	1131	GLU
1	F	1160	VAL
1	F	1183	VAL
1	F	1186	VAL
1	F	1220	ASN
1	F	1226	VAL
1	F	1232	LEU
1	F	1258	MET
1	F	1267	LEU
1	F	1308	ASP
1	F	1313	GLU
1	F	1324	THR
1	F	1340	MET
1	F	1342	ARG
1	F	1344	THR
1	F	1347	THR
1	F	1352	MET
1	F	1353	GLU
1	F	1357	CYS
1	F	1360	GLN
1	F	1361	VAL
1	F	1367	LEU
1	F	1381	MET
1	F	1401	LEU
1	F	1422	ARG
1	F	1426	GLU
1	F	1432	ILE
1	F	1437	GLU
1	F	1441	LEU
1	F	1455	SER
1	F	1456	GLU
1	F	1457	GLU
1	F	1482	GLU
1	F	1491	ASN

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Mol	Chain	Res	Type
1	F	1504	ARG
1	F	1514	ILE
1	F	1534	GLU
1	F	1538	ILE
1	F	1539	CYS
1	F	1561	LEU
1	F	1564	HIS
1	F	1602	PHE
1	F	1606	VAL
1	F	1610	ARG
1	F	1613	LYS
1	F	1662	GLN
1	F	1678	LEU
1	F	1702	ARG
1	F	1707	SER
2	G	25	VAL
2	G	27	THR
2	G	30	SER
2	G	31	LEU
2	G	70	SER
2	G	102	LEU
2	G	119	VAL
2	G	122	ILE
2	G	158	LEU
2	G	167	VAL
2	G	168	LYS
2	G	171	SER
2	G	215	TRP
2	G	220	GLN
2	G	225	LEU
2	G	252	LEU
2	G	262	MET
2	G	264	THR
2	G	275	LEU
2	G	289	ILE
2	G	297	THR
2	G	331	LEU
2	G	334	SER
2	G	339	SER
2	G	340	VAL
2	G	346	THR
2	G	382	LEU

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Mol	Chain	Res	Type
2	G	388	ASN
2	G	401	LEU
2	G	436	THR
2	G	451	ILE
2	G	457	ASP
2	G	459	LYS
2	G	472	THR
2	G	474	THR
2	G	522	SER
2	G	549	ASN
2	G	583	THR
2	G	600	VAL
2	G	604	MET
2	G	609	THR
2	G	616	ASP
2	G	636	TYR
2	G	663	ILE
2	G	709	LEU
2	G	734	ASN
2	G	739	ILE
2	G	747	ARG
2	G	792	LEU
2	G	814	SER
2	G	820	LYS
2	G	821	GLU
2	G	827	GLN
2	G	839	ASP
2	G	842	GLN
2	G	843	TRP
2	G	845	ASN
2	G	846	THR
2	G	855	ILE
2	G	856	THR
2	G	861	MET
2	G	868	LEU
2	G	876	TRP
2	G	881	ASP
2	G	903	ILE
2	G	906	LEU
2	G	913	VAL
2	G	918	ASN
2	G	935	VAL

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Mol	Chain	Res	Type
2	G	939	VAL
2	G	944	VAL
2	G	964	ARG
2	G	971	THR
2	G	979	LEU
2	G	985	ASP
2	G	988	GLU
2	G	1002	GLU
2	G	1004	SER
2	G	1005	THR
2	G	1007	LEU
2	G	1008	ILE
2	G	1009	ASN
2	G	1017	LEU
2	G	1022	ARG
2	G	1028	VAL
2	G	1036	GLU
2	G	1049	GLN
2	G	1050	SER
2	G	1051	GLU
2	G	1063	ARG
2	G	1065	CYS
2	G	1100	ARG
2	G	1104	ASP
2	G	1108	GLU
2	G	1113	ILE
2	G	1133	LEU
2	G	1138	ASP
2	G	1153	ASN
2	G	1172	ARG
2	G	1179	GLU
2	G	1200	ARG
2	G	1207	THR
2	G	1216	VAL
2	G	1217	ILE
2	G	1223	SER
2	G	1228	LEU
2	G	1239	ASP
2	G	1250	ARG
2	G	1258	PRO
2	G	1259	LEU
2	G	1266	HIS

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Mol	Chain	Res	Type
2	G	1294	PHE
2	G	1305	LEU
2	G	1309	PHE
2	G	1313	ARG
2	G	1315	ILE
2	G	1338	ARG
2	G	1348	PHE
2	G	1350	ILE
2	G	1351	VAL
2	G	1364	ARG
2	G	1380	TYR
2	G	1391	VAL
2	G	1400	GLN
2	G	1405	ILE
2	G	1409	SER
2	G	1418	THR
2	G	1421	ARG
2	G	1426	VAL
2	G	1438	VAL
2	G	1452	VAL
2	G	1463	ASP
2	G	1467	LEU
2	G	1468	ARG
2	G	1471	GLU
2	G	1477	ASP
2	G	1499	LYS
2	G	1546	ARG
2	G	1557	PHE
2	G	1563	LEU
2	G	1583	VAL
2	G	1593	SER
2	G	1594	ARG
2	G	1605	THR
2	G	1616	VAL
2	G	1622	THR
2	G	1639	MET
2	G	1640	VAL
2	G	1649	ILE
2	G	1655	HIS
2	G	1675	ASP
2	G	1708	LEU
2	G	1717	GLU

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Mol	Chain	Res	Type
2	G	1740	ASN
2	G	1745	LEU
2	G	1746	THR
2	G	1767	GLU
2	G	1777	THR
2	G	1785	ASP
2	G	1804	GLN
2	G	1829	ARG
2	G	1832	THR
2	G	1854	GLU
2	G	1866	THR
2	G	1873	ARG
2	G	1900	LEU
2	G	1962	LEU
2	G	1965	VAL
2	G	1966	ARG
2	G	1972	ILE
2	G	1977	ARG
2	G	1999	ARG
2	G	2031	ASP
2	G	2035	LEU
2	G	2039	TYR
2	G	2052	LYS
2	G	2053	GLU
2	G	2062	THR
2	G	2064	SER
2	G	2067	ILE
2	G	2069	ASN
2	H	27	THR
2	H	30	SER
2	H	31	LEU
2	H	70	SER
2	H	86	GLU
2	H	102	LEU
2	H	122	ILE
2	H	158	LEU
2	H	167	VAL
2	H	168	LYS
2	H	171	SER
2	H	215	TRP
2	H	220	GLN
2	H	225	LEU

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Mol	Chain	Res	Type
2	H	252	LEU
2	H	262	MET
2	H	264	THR
2	H	275	LEU
2	H	289	ILE
2	H	297	THR
2	H	331	LEU
2	H	334	SER
2	H	339	SER
2	H	346	THR
2	H	382	LEU
2	H	388	ASN
2	H	401	LEU
2	H	419	ILE
2	H	436	THR
2	H	451	ILE
2	H	457	ASP
2	H	459	LYS
2	H	472	THR
2	H	474	THR
2	H	522	SER
2	H	549	ASN
2	H	583	THR
2	H	600	VAL
2	H	604	MET
2	H	609	THR
2	H	616	ASP
2	H	636	TYR
2	H	663	ILE
2	H	709	LEU
2	H	734	ASN
2	H	739	ILE
2	H	747	ARG
2	H	792	LEU
2	H	820	LYS
2	H	821	GLU
2	H	827	GLN
2	H	839	ASP
2	H	842	GLN
2	H	843	TRP
2	H	845	ASN
2	H	846	THR

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Mol	Chain	Res	Type
2	H	855	ILE
2	H	856	THR
2	H	861	MET
2	H	876	TRP
2	H	881	ASP
2	H	903	ILE
2	H	906	LEU
2	H	913	VAL
2	H	918	ASN
2	H	935	VAL
2	H	939	VAL
2	H	944	VAL
2	H	964	ARG
2	H	971	THR
2	H	979	LEU
2	H	985	ASP
2	H	1002	GLU
2	H	1007	LEU
2	H	1008	ILE
2	H	1009	ASN
2	H	1017	LEU
2	H	1022	ARG
2	H	1028	VAL
2	H	1036	GLU
2	H	1049	GLN
2	H	1050	SER
2	H	1051	GLU
2	H	1063	ARG
2	H	1065	CYS
2	H	1100	ARG
2	H	1104	ASP
2	H	1108	GLU
2	H	1113	ILE
2	H	1119	ARG
2	H	1133	LEU
2	H	1138	ASP
2	H	1153	ASN
2	H	1172	ARG
2	H	1179	GLU
2	H	1200	ARG
2	H	1207	THR
2	H	1217	ILE

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Mol	Chain	Res	Type
2	H	1223	SER
2	H	1228	LEU
2	H	1239	ASP
2	H	1250	ARG
2	H	1259	LEU
2	H	1266	HIS
2	H	1294	PHE
2	H	1305	LEU
2	H	1309	PHE
2	H	1313	ARG
2	H	1315	ILE
2	H	1338	ARG
2	H	1348	PHE
2	H	1350	ILE
2	H	1351	VAL
2	H	1364	ARG
2	H	1380	TYR
2	H	1391	VAL
2	H	1400	GLN
2	H	1405	ILE
2	H	1409	SER
2	H	1418	THR
2	H	1421	ARG
2	H	1426	VAL
2	H	1438	VAL
2	H	1452	VAL
2	H	1463	ASP
2	H	1467	LEU
2	H	1468	ARG
2	H	1471	GLU
2	H	1477	ASP
2	H	1487	THR
2	H	1499	LYS
2	H	1546	ARG
2	H	1557	PHE
2	H	1563	LEU
2	H	1583	VAL
2	H	1593	SER
2	H	1594	ARG
2	H	1605	THR
2	H	1616	VAL
2	H	1622	THR

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Mol	Chain	Res	Type
2	H	1639	MET
2	H	1640	VAL
2	H	1649	ILE
2	H	1655	HIS
2	H	1675	ASP
2	H	1708	LEU
2	H	1740	ASN
2	H	1746	THR
2	H	1767	GLU
2	H	1777	THR
2	H	1785	ASP
2	H	1804	GLN
2	H	1829	ARG
2	H	1832	THR
2	H	1854	GLU
2	H	1866	THR
2	H	1873	ARG
2	H	1900	LEU
2	H	1962	LEU
2	H	1965	VAL
2	H	1966	ARG
2	H	1972	ILE
2	H	1977	ARG
2	H	1999	ARG
2	H	2031	ASP
2	H	2035	LEU
2	H	2039	TYR
2	H	2052	LYS
2	H	2053	GLU
2	H	2062	THR
2	H	2064	SER
2	H	2067	ILE
2	H	2069	ASN
2	I	27	THR
2	I	30	SER
2	I	31	LEU
2	I	70	SER
2	I	102	LEU
2	I	122	ILE
2	I	158	LEU
2	I	167	VAL
2	I	168	LYS

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Mol	Chain	Res	Type
2	I	171	SER
2	I	215	TRP
2	I	220	GLN
2	I	225	LEU
2	I	239	ASP
2	I	252	LEU
2	I	262	MET
2	I	264	THR
2	I	275	LEU
2	I	289	ILE
2	I	297	THR
2	I	331	LEU
2	I	334	SER
2	I	339	SER
2	I	340	VAL
2	I	346	THR
2	I	382	LEU
2	I	388	ASN
2	I	401	LEU
2	I	419	ILE
2	I	436	THR
2	I	451	ILE
2	I	457	ASP
2	I	459	LYS
2	I	472	THR
2	I	474	THR
2	I	522	SER
2	I	549	ASN
2	I	583	THR
2	I	597	LEU
2	I	600	VAL
2	I	604	MET
2	I	609	THR
2	I	616	ASP
2	I	636	TYR
2	I	663	ILE
2	I	709	LEU
2	I	734	ASN
2	I	739	ILE
2	I	747	ARG
2	I	792	LEU
2	I	820	LYS

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Mol	Chain	Res	Type
2	I	821	GLU
2	I	827	GLN
2	I	839	ASP
2	I	842	GLN
2	I	845	ASN
2	I	846	THR
2	I	855	ILE
2	I	856	THR
2	I	861	MET
2	I	870	THR
2	I	876	TRP
2	I	881	ASP
2	I	903	ILE
2	I	906	LEU
2	I	913	VAL
2	I	918	ASN
2	I	935	VAL
2	I	939	VAL
2	I	944	VAL
2	I	964	ARG
2	I	971	THR
2	I	979	LEU
2	I	985	ASP
2	I	988	GLU
2	I	1002	GLU
2	I	1004	SER
2	I	1005	THR
2	I	1007	LEU
2	I	1008	ILE
2	I	1009	ASN
2	I	1017	LEU
2	I	1022	ARG
2	I	1028	VAL
2	I	1036	GLU
2	I	1049	GLN
2	I	1050	SER
2	I	1051	GLU
2	I	1053	ILE
2	I	1063	ARG
2	I	1065	CYS
2	I	1081	GLU
2	I	1100	ARG

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Mol	Chain	Res	Type
2	I	1104	ASP
2	I	1108	GLU
2	I	1113	ILE
2	I	1133	LEU
2	I	1138	ASP
2	I	1153	ASN
2	I	1172	ARG
2	I	1179	GLU
2	I	1200	ARG
2	I	1207	THR
2	I	1216	VAL
2	I	1217	ILE
2	I	1223	SER
2	I	1228	LEU
2	I	1239	ASP
2	I	1250	ARG
2	I	1266	HIS
2	I	1294	PHE
2	I	1305	LEU
2	I	1309	PHE
2	I	1313	ARG
2	I	1315	ILE
2	I	1338	ARG
2	I	1348	PHE
2	I	1350	ILE
2	I	1351	VAL
2	I	1364	ARG
2	I	1391	VAL
2	I	1400	GLN
2	I	1405	ILE
2	I	1409	SER
2	I	1418	THR
2	I	1421	ARG
2	I	1426	VAL
2	I	1438	VAL
2	I	1452	VAL
2	I	1463	ASP
2	I	1467	LEU
2	I	1468	ARG
2	I	1471	GLU
2	I	1477	ASP
2	I	1483	LEU

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Mol	Chain	Res	Type
2	I	1499	LYS
2	I	1546	ARG
2	I	1556	ASN
2	I	1557	PHE
2	I	1563	LEU
2	I	1583	VAL
2	I	1593	SER
2	I	1594	ARG
2	I	1605	THR
2	I	1616	VAL
2	I	1622	THR
2	I	1639	MET
2	I	1640	VAL
2	I	1649	ILE
2	I	1655	HIS
2	I	1675	ASP
2	I	1708	LEU
2	I	1740	ASN
2	I	1745	LEU
2	I	1746	THR
2	I	1767	GLU
2	I	1777	THR
2	I	1785	ASP
2	I	1804	GLN
2	I	1829	ARG
2	I	1832	THR
2	I	1854	GLU
2	I	1866	THR
2	I	1873	ARG
2	I	1900	LEU
2	I	1962	LEU
2	I	1965	VAL
2	I	1966	ARG
2	I	1972	ILE
2	I	1977	ARG
2	I	1999	ARG
2	I	2010	LEU
2	I	2031	ASP
2	I	2035	LEU
2	I	2039	TYR
2	I	2052	LYS
2	I	2053	GLU

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Mol	Chain	Res	Type
2	I	2062	THR
2	I	2064	SER
2	I	2067	ILE
2	I	2069	ASN
2	J	27	THR
2	J	30	SER
2	J	31	LEU
2	J	70	SER
2	J	86	GLU
2	J	102	LEU
2	J	122	ILE
2	J	158	LEU
2	J	167	VAL
2	J	168	LYS
2	J	171	SER
2	J	215	TRP
2	J	220	GLN
2	J	225	LEU
2	J	239	ASP
2	J	252	LEU
2	J	262	MET
2	J	264	THR
2	J	275	LEU
2	J	289	ILE
2	J	297	THR
2	J	331	LEU
2	J	339	SER
2	J	340	VAL
2	J	346	THR
2	J	382	LEU
2	J	388	ASN
2	J	401	LEU
2	J	419	ILE
2	J	436	THR
2	J	451	ILE
2	J	457	ASP
2	J	459	LYS
2	J	472	THR
2	J	474	THR
2	J	522	SER
2	J	549	ASN
2	J	559	PHE

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Mol	Chain	Res	Type
2	J	583	THR
2	J	600	VAL
2	J	604	MET
2	J	609	THR
2	J	616	ASP
2	J	636	TYR
2	J	663	ILE
2	J	709	LEU
2	J	734	ASN
2	J	739	ILE
2	J	747	ARG
2	J	792	LEU
2	J	820	LYS
2	J	821	GLU
2	J	827	GLN
2	J	839	ASP
2	J	842	GLN
2	J	843	TRP
2	J	845	ASN
2	J	846	THR
2	J	855	ILE
2	J	856	THR
2	J	857	VAL
2	J	861	MET
2	J	870	THR
2	J	876	TRP
2	J	881	ASP
2	J	903	ILE
2	J	906	LEU
2	J	913	VAL
2	J	918	ASN
2	J	935	VAL
2	J	939	VAL
2	J	944	VAL
2	J	964	ARG
2	J	971	THR
2	J	979	LEU
2	J	985	ASP
2	J	988	GLU
2	J	1002	GLU
2	J	1004	SER
2	J	1005	THR

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Mol	Chain	Res	Type
2	J	1007	LEU
2	J	1008	ILE
2	J	1009	ASN
2	J	1017	LEU
2	J	1022	ARG
2	J	1028	VAL
2	J	1036	GLU
2	J	1049	GLN
2	J	1050	SER
2	J	1051	GLU
2	J	1063	ARG
2	J	1065	CYS
2	J	1081	GLU
2	J	1100	ARG
2	J	1104	ASP
2	J	1108	GLU
2	J	1113	ILE
2	J	1133	LEU
2	J	1138	ASP
2	J	1153	ASN
2	J	1172	ARG
2	J	1179	GLU
2	J	1200	ARG
2	J	1207	THR
2	J	1217	ILE
2	J	1223	SER
2	J	1228	LEU
2	J	1239	ASP
2	J	1250	ARG
2	J	1259	LEU
2	J	1266	HIS
2	J	1294	PHE
2	J	1305	LEU
2	J	1309	PHE
2	J	1313	ARG
2	J	1315	ILE
2	J	1338	ARG
2	J	1348	PHE
2	J	1350	ILE
2	J	1351	VAL
2	J	1364	ARG
2	J	1391	VAL

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Mol	Chain	Res	Type
2	J	1400	GLN
2	J	1405	ILE
2	J	1409	SER
2	J	1418	THR
2	J	1421	ARG
2	J	1426	VAL
2	J	1438	VAL
2	J	1452	VAL
2	J	1463	ASP
2	J	1467	LEU
2	J	1468	ARG
2	J	1471	GLU
2	J	1483	LEU
2	J	1499	LYS
2	J	1557	PHE
2	J	1563	LEU
2	J	1583	VAL
2	J	1593	SER
2	J	1594	ARG
2	J	1605	THR
2	J	1616	VAL
2	J	1622	THR
2	J	1639	MET
2	J	1640	VAL
2	J	1649	ILE
2	J	1655	HIS
2	J	1675	ASP
2	J	1708	LEU
2	J	1740	ASN
2	J	1745	LEU
2	J	1746	THR
2	J	1767	GLU
2	J	1777	THR
2	J	1785	ASP
2	J	1804	GLN
2	J	1829	ARG
2	J	1832	THR
2	J	1854	GLU
2	J	1866	THR
2	J	1873	ARG
2	J	1900	LEU
2	J	1962	LEU

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Mol	Chain	Res	Type
2	J	1965	VAL
2	J	1966	ARG
2	J	1972	ILE
2	J	1977	ARG
2	J	1999	ARG
2	J	2010	LEU
2	J	2031	ASP
2	J	2035	LEU
2	J	2039	TYR
2	J	2052	LYS
2	J	2053	GLU
2	J	2062	THR
2	J	2064	SER
2	J	2067	ILE
2	J	2069	ASN
2	K	27	THR
2	K	30	SER
2	K	31	LEU
2	K	70	SER
2	K	102	LEU
2	K	119	VAL
2	K	122	ILE
2	K	158	LEU
2	K	167	VAL
2	K	171	SER
2	K	215	TRP
2	K	220	GLN
2	K	225	LEU
2	K	252	LEU
2	K	262	MET
2	K	264	THR
2	K	275	LEU
2	K	289	ILE
2	K	297	THR
2	K	331	LEU
2	K	339	SER
2	K	340	VAL
2	K	346	THR
2	K	382	LEU
2	K	388	ASN
2	K	401	LEU
2	K	419	ILE

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Mol	Chain	Res	Type
2	K	436	THR
2	K	451	ILE
2	K	457	ASP
2	K	459	LYS
2	K	467	ILE
2	K	472	THR
2	K	474	THR
2	K	522	SER
2	K	549	ASN
2	K	559	PHE
2	K	583	THR
2	K	600	VAL
2	K	604	MET
2	K	609	THR
2	K	616	ASP
2	K	636	TYR
2	K	663	ILE
2	K	709	LEU
2	K	734	ASN
2	K	739	ILE
2	K	747	ARG
2	K	792	LEU
2	K	814	SER
2	K	820	LYS
2	K	821	GLU
2	K	827	GLN
2	K	839	ASP
2	K	842	GLN
2	K	843	TRP
2	K	845	ASN
2	K	846	THR
2	K	855	ILE
2	K	856	THR
2	K	861	MET
2	K	868	LEU
2	K	876	TRP
2	K	881	ASP
2	K	903	ILE
2	K	906	LEU
2	K	913	VAL
2	K	918	ASN
2	K	935	VAL

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Mol	Chain	Res	Type
2	K	939	VAL
2	K	944	VAL
2	K	964	ARG
2	K	971	THR
2	K	979	LEU
2	K	985	ASP
2	K	988	GLU
2	K	1002	GLU
2	K	1005	THR
2	K	1007	LEU
2	K	1008	ILE
2	K	1009	ASN
2	K	1017	LEU
2	K	1022	ARG
2	K	1028	VAL
2	K	1036	GLU
2	K	1049	GLN
2	K	1050	SER
2	K	1051	GLU
2	K	1063	ARG
2	K	1065	CYS
2	K	1100	ARG
2	K	1104	ASP
2	K	1108	GLU
2	K	1113	ILE
2	K	1133	LEU
2	K	1138	ASP
2	K	1153	ASN
2	K	1172	ARG
2	K	1179	GLU
2	K	1200	ARG
2	K	1207	THR
2	K	1217	ILE
2	K	1223	SER
2	K	1228	LEU
2	K	1239	ASP
2	K	1250	ARG
2	K	1259	LEU
2	K	1266	HIS
2	K	1294	PHE
2	K	1305	LEU
2	K	1309	PHE

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Mol	Chain	Res	Type
2	K	1313	ARG
2	K	1315	ILE
2	K	1338	ARG
2	K	1348	PHE
2	K	1350	ILE
2	K	1351	VAL
2	K	1364	ARG
2	K	1380	TYR
2	K	1391	VAL
2	K	1400	GLN
2	K	1405	ILE
2	K	1409	SER
2	K	1418	THR
2	K	1421	ARG
2	K	1426	VAL
2	K	1438	VAL
2	K	1452	VAL
2	K	1463	ASP
2	K	1467	LEU
2	K	1468	ARG
2	K	1471	GLU
2	K	1477	ASP
2	K	1499	LYS
2	K	1546	ARG
2	K	1557	PHE
2	K	1563	LEU
2	K	1583	VAL
2	K	1593	SER
2	K	1594	ARG
2	K	1605	THR
2	K	1616	VAL
2	K	1622	THR
2	K	1639	MET
2	K	1640	VAL
2	K	1649	ILE
2	K	1655	HIS
2	K	1708	LEU
2	K	1717	GLU
2	K	1740	ASN
2	K	1746	THR
2	K	1767	GLU
2	K	1777	THR

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Mol	Chain	Res	Type
2	K	1785	ASP
2	K	1804	GLN
2	K	1829	ARG
2	K	1832	THR
2	K	1854	GLU
2	K	1866	THR
2	K	1873	ARG
2	K	1900	LEU
2	K	1962	LEU
2	K	1965	VAL
2	K	1966	ARG
2	K	1972	ILE
2	K	1977	ARG
2	K	1999	ARG
2	K	2010	LEU
2	K	2031	ASP
2	K	2035	LEU
2	K	2039	TYR
2	K	2052	LYS
2	K	2053	GLU
2	K	2062	THR
2	K	2064	SER
2	K	2067	ILE
2	K	2069	ASN
2	L	25	VAL
2	L	27	THR
2	L	30	SER
2	L	31	LEU
2	L	70	SER
2	L	102	LEU
2	L	122	ILE
2	L	158	LEU
2	L	167	VAL
2	L	168	LYS
2	L	171	SER
2	L	215	TRP
2	L	220	GLN
2	L	225	LEU
2	L	252	LEU
2	L	262	MET
2	L	264	THR
2	L	275	LEU

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Mol	Chain	Res	Type
2	L	289	ILE
2	L	297	THR
2	L	331	LEU
2	L	334	SER
2	L	339	SER
2	L	340	VAL
2	L	346	THR
2	L	382	LEU
2	L	388	ASN
2	L	401	LEU
2	L	412	THR
2	L	436	THR
2	L	451	ILE
2	L	457	ASP
2	L	459	LYS
2	L	472	THR
2	L	474	THR
2	L	522	SER
2	L	549	ASN
2	L	583	THR
2	L	597	LEU
2	L	600	VAL
2	L	604	MET
2	L	609	THR
2	L	616	ASP
2	L	636	TYR
2	L	663	ILE
2	L	709	LEU
2	L	734	ASN
2	L	739	ILE
2	L	747	ARG
2	L	792	LEU
2	L	820	LYS
2	L	821	GLU
2	L	827	GLN
2	L	839	ASP
2	L	842	GLN
2	L	843	TRP
2	L	845	ASN
2	L	846	THR
2	L	855	ILE
2	L	856	THR

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Mol	Chain	Res	Type
2	L	861	MET
2	L	876	TRP
2	L	881	ASP
2	L	903	ILE
2	L	906	LEU
2	L	913	VAL
2	L	918	ASN
2	L	935	VAL
2	L	939	VAL
2	L	944	VAL
2	L	964	ARG
2	L	971	THR
2	L	979	LEU
2	L	985	ASP
2	L	988	GLU
2	L	1002	GLU
2	L	1005	THR
2	L	1007	LEU
2	L	1008	ILE
2	L	1009	ASN
2	L	1017	LEU
2	L	1022	ARG
2	L	1028	VAL
2	L	1036	GLU
2	L	1049	GLN
2	L	1050	SER
2	L	1051	GLU
2	L	1063	ARG
2	L	1065	CYS
2	L	1100	ARG
2	L	1104	ASP
2	L	1108	GLU
2	L	1113	ILE
2	L	1133	LEU
2	L	1138	ASP
2	L	1153	ASN
2	L	1172	ARG
2	L	1179	GLU
2	L	1200	ARG
2	L	1207	THR
2	L	1217	ILE
2	L	1223	SER

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Mol	Chain	Res	Type
2	L	1228	LEU
2	L	1239	ASP
2	L	1250	ARG
2	L	1259	LEU
2	L	1266	HIS
2	L	1294	PHE
2	L	1305	LEU
2	L	1309	PHE
2	L	1313	ARG
2	L	1315	ILE
2	L	1338	ARG
2	L	1348	PHE
2	L	1350	ILE
2	L	1351	VAL
2	L	1364	ARG
2	L	1391	VAL
2	L	1400	GLN
2	L	1405	ILE
2	L	1409	SER
2	L	1418	THR
2	L	1421	ARG
2	L	1426	VAL
2	L	1438	VAL
2	L	1452	VAL
2	L	1463	ASP
2	L	1467	LEU
2	L	1468	ARG
2	L	1471	GLU
2	L	1477	ASP
2	L	1499	LYS
2	L	1522	ILE
2	L	1546	ARG
2	L	1557	PHE
2	L	1563	LEU
2	L	1583	VAL
2	L	1593	SER
2	L	1594	ARG
2	L	1605	THR
2	L	1616	VAL
2	L	1622	THR
2	L	1639	MET
2	L	1640	VAL

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Mol	Chain	Res	Type
2	L	1649	ILE
2	L	1655	HIS
2	L	1675	ASP
2	L	1708	LEU
2	L	1740	ASN
2	L	1745	LEU
2	L	1746	THR
2	L	1767	GLU
2	L	1777	THR
2	L	1785	ASP
2	L	1804	GLN
2	L	1829	ARG
2	L	1832	THR
2	L	1854	GLU
2	L	1866	THR
2	L	1873	ARG
2	L	1900	LEU
2	L	1962	LEU
2	L	1965	VAL
2	L	1966	ARG
2	L	1972	ILE
2	L	1977	ARG
2	L	1999	ARG
2	L	2031	ASP
2	L	2035	LEU
2	L	2039	TYR
2	L	2052	LYS
2	L	2053	GLU
2	L	2062	THR
2	L	2064	SER
2	L	2067	ILE
2	L	2069	ASN

Some sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (470) such sidechains are listed below:

Mol	Chain	Res	Type
1	A	21	GLN
1	A	75	GLN
1	A	339	GLN
1	A	404	ASN
1	A	408	GLN
1	A	435	GLN

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Mol	Chain	Res	Type
1	A	454	HIS
1	A	565	GLN
1	A	567	ASN
1	A	671	GLN
1	A	708	GLN
1	A	715	ASN
1	A	873	GLN
1	A	874	GLN
1	A	1037	ASN
1	A	1075	HIS
1	A	1137	GLN
1	A	1214	HIS
1	A	1220	ASN
1	A	1263	ASN
1	A	1311	GLN
1	A	1320	ASN
1	A	1410	ASN
1	A	1473	HIS
1	A	1486	GLN
1	A	1491	ASN
1	A	1558	GLN
1	A	1591	ASN
1	A	1633	GLN
1	A	1662	GLN
1	A	1692	GLN
1	B	21	GLN
1	B	338	GLN
1	B	404	ASN
1	B	408	GLN
1	B	435	GLN
1	B	449	GLN
1	B	454	HIS
1	B	471	GLN
1	B	542	GLN
1	B	671	GLN
1	B	715	ASN
1	B	873	GLN
1	B	874	GLN
1	B	1037	ASN
1	B	1075	HIS
1	B	1137	GLN
1	B	1214	HIS

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Mol	Chain	Res	Type
1	B	1220	ASN
1	B	1251	GLN
1	B	1263	ASN
1	B	1311	GLN
1	B	1320	ASN
1	B	1410	ASN
1	B	1486	GLN
1	B	1491	ASN
1	B	1544	HIS
1	B	1558	GLN
1	B	1591	ASN
1	B	1633	GLN
1	B	1662	GLN
1	B	1692	GLN
1	B	1705	GLN
1	C	21	GLN
1	C	339	GLN
1	C	404	ASN
1	C	408	GLN
1	C	435	GLN
1	C	449	GLN
1	C	454	HIS
1	C	542	GLN
1	C	671	GLN
1	C	715	ASN
1	C	873	GLN
1	C	874	GLN
1	C	1037	ASN
1	C	1137	GLN
1	C	1214	HIS
1	C	1220	ASN
1	C	1263	ASN
1	C	1311	GLN
1	C	1320	ASN
1	C	1410	ASN
1	C	1473	HIS
1	C	1486	GLN
1	C	1491	ASN
1	C	1544	HIS
1	C	1558	GLN
1	C	1591	ASN
1	C	1633	GLN

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Mol	Chain	Res	Type
1	C	1662	GLN
1	C	1692	GLN
1	D	21	GLN
1	D	404	ASN
1	D	408	GLN
1	D	435	GLN
1	D	454	HIS
1	D	565	GLN
1	D	567	ASN
1	D	671	GLN
1	D	708	GLN
1	D	715	ASN
1	D	873	GLN
1	D	874	GLN
1	D	1037	ASN
1	D	1075	HIS
1	D	1137	GLN
1	D	1214	HIS
1	D	1220	ASN
1	D	1263	ASN
1	D	1311	GLN
1	D	1320	ASN
1	D	1410	ASN
1	D	1473	HIS
1	D	1486	GLN
1	D	1491	ASN
1	D	1544	HIS
1	D	1558	GLN
1	D	1591	ASN
1	D	1633	GLN
1	D	1662	GLN
1	D	1692	GLN
1	D	1705	GLN
1	E	21	GLN
1	E	404	ASN
1	E	408	GLN
1	E	435	GLN
1	E	454	HIS
1	E	471	GLN
1	E	567	ASN
1	E	671	GLN
1	E	715	ASN

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Mol	Chain	Res	Type
1	E	873	GLN
1	E	874	GLN
1	E	1037	ASN
1	E	1039	ASN
1	E	1137	GLN
1	E	1214	HIS
1	E	1220	ASN
1	E	1263	ASN
1	E	1311	GLN
1	E	1320	ASN
1	E	1410	ASN
1	E	1473	HIS
1	E	1486	GLN
1	E	1491	ASN
1	E	1558	GLN
1	E	1591	ASN
1	E	1633	GLN
1	E	1662	GLN
1	E	1676	ASN
1	E	1692	GLN
1	F	21	GLN
1	F	75	GLN
1	F	339	GLN
1	F	404	ASN
1	F	408	GLN
1	F	449	GLN
1	F	454	HIS
1	F	542	GLN
1	F	583	GLN
1	F	671	GLN
1	F	715	ASN
1	F	873	GLN
1	F	874	GLN
1	F	1037	ASN
1	F	1075	HIS
1	F	1137	GLN
1	F	1214	HIS
1	F	1220	ASN
1	F	1263	ASN
1	F	1311	GLN
1	F	1320	ASN
1	F	1410	ASN

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Mol	Chain	Res	Type
1	F	1473	HIS
1	F	1486	GLN
1	F	1491	ASN
1	F	1558	GLN
1	F	1591	ASN
1	F	1633	GLN
1	F	1662	GLN
1	F	1692	GLN
2	G	28	HIS
2	G	44	GLN
2	G	166	ASN
2	G	232	HIS
2	G	260	HIS
2	G	285	HIS
2	G	287	GLN
2	G	388	ASN
2	G	416	GLN
2	G	448	HIS
2	G	500	ASN
2	G	512	HIS
2	G	529	ASN
2	G	549	ASN
2	G	627	HIS
2	G	661	ASN
2	G	713	HIS
2	G	725	GLN
2	G	729	ASN
2	G	734	ASN
2	G	758	HIS
2	G	823	HIS
2	G	827	GLN
2	G	845	ASN
2	G	911	GLN
2	G	1006	GLN
2	G	1009	ASN
2	G	1094	HIS
2	G	1153	ASN
2	G	1173	HIS
2	G	1375	HIS
2	G	1378	ASN
2	G	1400	GLN
2	G	1455	GLN

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Mol	Chain	Res	Type
2	G	1462	GLN
2	G	1479	HIS
2	G	1608	HIS
2	G	1628	ASN
2	G	1638	ASN
2	G	1646	ASN
2	G	1697	GLN
2	G	1702	GLN
2	G	1725	HIS
2	G	1804	GLN
2	G	1901	GLN
2	G	1919	ASN
2	G	2006	HIS
2	H	28	HIS
2	H	44	GLN
2	H	47	GLN
2	H	166	ASN
2	H	232	HIS
2	H	260	HIS
2	H	285	HIS
2	H	287	GLN
2	H	388	ASN
2	H	416	GLN
2	H	448	HIS
2	H	500	ASN
2	H	512	HIS
2	H	529	ASN
2	H	549	ASN
2	H	627	HIS
2	H	661	ASN
2	H	713	HIS
2	H	725	GLN
2	H	729	ASN
2	H	734	ASN
2	H	758	HIS
2	H	823	HIS
2	H	827	GLN
2	H	845	ASN
2	H	911	GLN
2	H	1006	GLN
2	H	1009	ASN
2	H	1094	HIS

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Mol	Chain	Res	Type
2	H	1153	ASN
2	H	1173	HIS
2	H	1378	ASN
2	H	1400	GLN
2	H	1455	GLN
2	H	1462	GLN
2	H	1479	HIS
2	H	1608	HIS
2	H	1628	ASN
2	H	1638	ASN
2	H	1646	ASN
2	H	1687	GLN
2	H	1697	GLN
2	H	1702	GLN
2	H	1725	HIS
2	H	1804	GLN
2	H	1901	GLN
2	H	1919	ASN
2	H	1968	HIS
2	H	2006	HIS
2	I	28	HIS
2	I	44	GLN
2	I	166	ASN
2	I	232	HIS
2	I	260	HIS
2	I	285	HIS
2	I	287	GLN
2	I	388	ASN
2	I	416	GLN
2	I	448	HIS
2	I	500	ASN
2	I	512	HIS
2	I	529	ASN
2	I	549	ASN
2	I	627	HIS
2	I	661	ASN
2	I	713	HIS
2	I	725	GLN
2	I	729	ASN
2	I	734	ASN
2	I	752	HIS
2	I	758	HIS

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Mol	Chain	Res	Type
2	I	823	HIS
2	I	827	GLN
2	I	845	ASN
2	I	911	GLN
2	I	1006	GLN
2	I	1009	ASN
2	I	1094	HIS
2	I	1153	ASN
2	I	1173	HIS
2	I	1378	ASN
2	I	1400	GLN
2	I	1455	GLN
2	I	1462	GLN
2	I	1479	HIS
2	I	1608	HIS
2	I	1628	ASN
2	I	1638	ASN
2	I	1646	ASN
2	I	1697	GLN
2	I	1702	GLN
2	I	1725	HIS
2	I	1804	GLN
2	I	1901	GLN
2	I	1919	ASN
2	I	2006	HIS
2	J	28	HIS
2	J	44	GLN
2	J	166	ASN
2	J	232	HIS
2	J	260	HIS
2	J	285	HIS
2	J	287	GLN
2	J	371	HIS
2	J	388	ASN
2	J	416	GLN
2	J	448	HIS
2	J	500	ASN
2	J	512	HIS
2	J	529	ASN
2	J	549	ASN
2	J	627	HIS
2	J	661	ASN

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Mol	Chain	Res	Type
2	J	713	HIS
2	J	725	GLN
2	J	729	ASN
2	J	734	ASN
2	J	752	HIS
2	J	758	HIS
2	J	823	HIS
2	J	827	GLN
2	J	845	ASN
2	J	911	GLN
2	J	1006	GLN
2	J	1009	ASN
2	J	1094	HIS
2	J	1153	ASN
2	J	1173	HIS
2	J	1378	ASN
2	J	1400	GLN
2	J	1455	GLN
2	J	1462	GLN
2	J	1479	HIS
2	J	1608	HIS
2	J	1628	ASN
2	J	1638	ASN
2	J	1646	ASN
2	J	1687	GLN
2	J	1697	GLN
2	J	1702	GLN
2	J	1725	HIS
2	J	1804	GLN
2	J	1901	GLN
2	J	1919	ASN
2	J	2006	HIS
2	J	2042	ASN
2	K	28	HIS
2	K	44	GLN
2	K	166	ASN
2	K	232	HIS
2	K	260	HIS
2	K	285	HIS
2	K	287	GLN
2	K	388	ASN
2	K	416	GLN

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Mol	Chain	Res	Type
2	K	448	HIS
2	K	500	ASN
2	K	512	HIS
2	K	529	ASN
2	K	549	ASN
2	K	627	HIS
2	K	661	ASN
2	K	713	HIS
2	K	725	GLN
2	K	729	ASN
2	K	734	ASN
2	K	758	HIS
2	K	823	HIS
2	K	827	GLN
2	K	845	ASN
2	K	911	GLN
2	K	1006	GLN
2	K	1094	HIS
2	K	1153	ASN
2	K	1173	HIS
2	K	1330	ASN
2	K	1378	ASN
2	K	1400	GLN
2	K	1455	GLN
2	K	1462	GLN
2	K	1479	HIS
2	K	1608	HIS
2	K	1628	ASN
2	K	1638	ASN
2	K	1646	ASN
2	K	1687	GLN
2	K	1697	GLN
2	K	1702	GLN
2	K	1725	HIS
2	K	1804	GLN
2	K	1901	GLN
2	K	1919	ASN
2	K	2006	HIS
2	L	28	HIS
2	L	44	GLN
2	L	166	ASN
2	L	232	HIS

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Mol	Chain	Res	Type
2	L	260	HIS
2	L	285	HIS
2	L	287	GLN
2	L	371	HIS
2	L	388	ASN
2	L	416	GLN
2	L	448	HIS
2	L	500	ASN
2	L	512	HIS
2	L	529	ASN
2	L	549	ASN
2	L	627	HIS
2	L	661	ASN
2	L	713	HIS
2	L	725	GLN
2	L	729	ASN
2	L	734	ASN
2	L	758	HIS
2	L	823	HIS
2	L	827	GLN
2	L	845	ASN
2	L	911	GLN
2	L	1006	GLN
2	L	1009	ASN
2	L	1094	HIS
2	L	1153	ASN
2	L	1378	ASN
2	L	1400	GLN
2	L	1455	GLN
2	L	1462	GLN
2	L	1479	HIS
2	L	1608	HIS
2	L	1627	ASN
2	L	1628	ASN
2	L	1638	ASN
2	L	1646	ASN
2	L	1687	GLN
2	L	1697	GLN
2	L	1702	GLN
2	L	1725	HIS
2	L	1804	GLN
2	L	1901	GLN

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Mol	Chain	Res	Type
2	L	1919	ASN
2	L	2006	HIS

### 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 ⓘ

6 ligands are modelled in this entry.

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$
3	FMN	G	2101	-	33,33,33	6.27	23 (69%)	46,50,50	1.84	9 (19%)
3	FMN	H	2101	-	33,33,33	6.22	22 (66%)	46,50,50	1.78	10 (21%)
3	FMN	I	2101	-	33,33,33	6.24	21 (63%)	46,50,50	1.85	10 (21%)
3	FMN	J	2101	-	33,33,33	6.41	23 (69%)	46,50,50	1.83	11 (23%)
3	FMN	K	2101	-	33,33,33	6.47	24 (72%)	46,50,50	1.93	13 (28%)
3	FMN	L	2101	-	33,33,33	6.21	20 (60%)	46,50,50	1.78	10 (21%)

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
3	FMN	G	2101	-	-	0/18/18/18	0/3/3/3
3	FMN	H	2101	-	-	0/18/18/18	0/3/3/3
3	FMN	I	2101	-	-	0/18/18/18	0/3/3/3
3	FMN	J	2101	-	-	0/18/18/18	0/3/3/3
3	FMN	K	2101	-	-	0/18/18/18	0/3/3/3
3	FMN	L	2101	-	-	0/18/18/18	0/3/3/3

All (133) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	G	2101	FMN	O2-C2	15.43	1.41	1.21
3	K	2101	FMN	O2-C2	15.41	1.41	1.21
3	L	2101	FMN	O2-C2	14.92	1.41	1.21
3	J	2101	FMN	O2-C2	14.86	1.40	1.21
3	I	2101	FMN	O2-C2	14.81	1.40	1.21
3	H	2101	FMN	O2-C2	14.64	1.40	1.21
3	J	2101	FMN	C6-C5A	12.77	1.59	1.41
3	K	2101	FMN	C6-C5A	12.73	1.59	1.41
3	I	2101	FMN	C6-C5A	12.48	1.58	1.41
3	H	2101	FMN	C6-C5A	12.41	1.58	1.41
3	G	2101	FMN	C6-C5A	12.27	1.58	1.41
3	L	2101	FMN	C6-C5A	12.25	1.58	1.41
3	K	2101	FMN	C4A-N5	11.06	1.51	1.33
3	J	2101	FMN	C4A-N5	10.97	1.51	1.33
3	L	2101	FMN	C4A-N5	10.76	1.51	1.33
3	H	2101	FMN	C4A-N5	10.72	1.51	1.33
3	G	2101	FMN	C4A-N5	10.62	1.51	1.33
3	I	2101	FMN	C4A-N5	10.42	1.50	1.33
3	K	2101	FMN	C10-N10	9.78	1.53	1.39
3	K	2101	FMN	C5A-N5	9.77	1.51	1.35
3	J	2101	FMN	C5A-N5	9.68	1.51	1.35
3	H	2101	FMN	C5A-N5	9.57	1.51	1.35
3	I	2101	FMN	C5A-N5	9.53	1.51	1.35
3	L	2101	FMN	C5A-N5	9.43	1.51	1.35
3	J	2101	FMN	C4-N3	9.42	1.50	1.36
3	G	2101	FMN	C5A-N5	9.41	1.50	1.35
3	K	2101	FMN	C4-N3	9.30	1.50	1.36
3	J	2101	FMN	C10-N10	9.24	1.53	1.39
3	I	2101	FMN	C4-N3	9.15	1.49	1.36
3	L	2101	FMN	C4-N3	9.12	1.49	1.36
3	G	2101	FMN	C10-N10	9.09	1.52	1.39
3	I	2101	FMN	C10-N10	9.07	1.52	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	G	2101	FMN	C4-N3	9.06	1.49	1.36
3	H	2101	FMN	C4-N3	8.99	1.49	1.36
3	L	2101	FMN	C10-N10	8.96	1.52	1.39
3	K	2101	FMN	C9-C9A	8.91	1.60	1.40
3	H	2101	FMN	C10-N10	8.90	1.52	1.39
3	J	2101	FMN	C9-C9A	8.88	1.60	1.40
3	I	2101	FMN	C9-C9A	8.78	1.60	1.40
3	H	2101	FMN	C9-C9A	8.70	1.60	1.40
3	L	2101	FMN	C9-C9A	8.68	1.59	1.40
3	G	2101	FMN	C9-C9A	8.50	1.59	1.40
3	K	2101	FMN	C10-N1	7.95	1.49	1.35
3	I	2101	FMN	C9A-N10	7.75	1.50	1.38
3	L	2101	FMN	C9A-N10	7.71	1.50	1.38
3	H	2101	FMN	C9A-N10	7.66	1.50	1.38
3	G	2101	FMN	C10-N1	7.63	1.49	1.35
3	J	2101	FMN	C9A-N10	7.52	1.50	1.38
3	K	2101	FMN	C9A-N10	7.52	1.50	1.38
3	J	2101	FMN	O4-C4	7.46	1.42	1.24
3	J	2101	FMN	C10-N1	7.44	1.48	1.35
3	I	2101	FMN	C10-N1	7.43	1.48	1.35
3	G	2101	FMN	C9A-N10	7.37	1.49	1.38
3	J	2101	FMN	C4A-C10	7.34	1.55	1.41
3	H	2101	FMN	C10-N1	7.28	1.48	1.35
3	L	2101	FMN	C10-N1	7.21	1.48	1.35
3	L	2101	FMN	O4-C4	7.21	1.41	1.24
3	K	2101	FMN	C6-C7	7.14	1.58	1.37
3	K	2101	FMN	O4-C4	7.09	1.41	1.24
3	K	2101	FMN	C4A-C10	7.04	1.54	1.41
3	J	2101	FMN	C6-C7	7.03	1.57	1.37
3	H	2101	FMN	C6-C7	7.01	1.57	1.37
3	I	2101	FMN	O4-C4	7.00	1.40	1.24
3	H	2101	FMN	O4-C4	6.99	1.40	1.24
3	G	2101	FMN	C6-C7	6.95	1.57	1.37
3	I	2101	FMN	C4A-C10	6.94	1.54	1.41
3	G	2101	FMN	O4-C4	6.94	1.40	1.24
3	G	2101	FMN	C4A-C10	6.91	1.54	1.41
3	I	2101	FMN	C6-C7	6.80	1.57	1.37
3	L	2101	FMN	C4A-C10	6.80	1.54	1.41
3	L	2101	FMN	C6-C7	6.74	1.57	1.37
3	H	2101	FMN	C4A-C10	6.73	1.53	1.41
3	K	2101	FMN	C9-C8	6.60	1.56	1.37
3	J	2101	FMN	C9-C8	6.58	1.56	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	I	2101	FMN	C9-C8	6.48	1.56	1.37
3	J	2101	FMN	C8-C7	6.48	1.59	1.41
3	J	2101	FMN	C9A-C5A	6.43	1.55	1.42
3	H	2101	FMN	C9-C8	6.38	1.56	1.37
3	G	2101	FMN	C9-C8	6.37	1.56	1.37
3	K	2101	FMN	C8-C7	6.28	1.58	1.41
3	L	2101	FMN	C9-C8	6.16	1.55	1.37
3	K	2101	FMN	C9A-C5A	6.04	1.54	1.42
3	I	2101	FMN	C8-C7	5.98	1.57	1.41
3	K	2101	FMN	C2-N1	5.98	1.55	1.35
3	I	2101	FMN	C9A-C5A	5.97	1.54	1.42
3	L	2101	FMN	C9A-C5A	5.95	1.54	1.42
3	H	2101	FMN	C9A-C5A	5.90	1.54	1.42
3	G	2101	FMN	C2-N1	5.89	1.55	1.35
3	H	2101	FMN	C8-C7	5.87	1.57	1.41
3	L	2101	FMN	C8-C7	5.85	1.57	1.41
3	G	2101	FMN	C9A-C5A	5.83	1.54	1.42
3	G	2101	FMN	C8-C7	5.76	1.57	1.41
3	J	2101	FMN	C2-N1	5.70	1.54	1.35
3	L	2101	FMN	C2-N1	5.66	1.54	1.35
3	I	2101	FMN	C2-N1	5.63	1.54	1.35
3	H	2101	FMN	C2-N1	5.51	1.53	1.35
3	J	2101	FMN	C2-N3	4.62	1.52	1.36
3	G	2101	FMN	C2-N3	4.54	1.52	1.36
3	I	2101	FMN	C2-N3	4.54	1.52	1.36
3	L	2101	FMN	C2-N3	4.53	1.51	1.36
3	K	2101	FMN	C2-N3	4.53	1.51	1.36
3	H	2101	FMN	C2-N3	4.46	1.51	1.36
3	G	2101	FMN	P-O2P	3.30	1.66	1.54
3	J	2101	FMN	P-O3P	3.29	1.66	1.54
3	K	2101	FMN	P-O3P	3.22	1.66	1.54
3	K	2101	FMN	P-O2P	3.19	1.66	1.54
3	H	2101	FMN	P-O2P	3.19	1.66	1.54
3	L	2101	FMN	P-O2P	3.11	1.66	1.54
3	J	2101	FMN	P-O2P	2.97	1.65	1.54
3	I	2101	FMN	P-O2P	2.96	1.65	1.54
3	G	2101	FMN	P-O3P	2.94	1.65	1.54
3	H	2101	FMN	P-O3P	2.93	1.65	1.54
3	I	2101	FMN	P-O3P	2.90	1.65	1.54
3	J	2101	FMN	C5'-C4'	2.88	1.56	1.51
3	L	2101	FMN	P-O3P	2.76	1.64	1.54
3	H	2101	FMN	C5'-C4'	2.68	1.55	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	K	2101	FMN	C5'-C4'	2.52	1.55	1.51
3	K	2101	FMN	C4-C4A	2.45	1.53	1.42
3	J	2101	FMN	C4-C4A	2.39	1.53	1.42
3	K	2101	FMN	C7M-C7	2.30	1.55	1.51
3	G	2101	FMN	C4-C4A	2.30	1.53	1.42
3	L	2101	FMN	C4-C4A	2.29	1.53	1.42
3	K	2101	FMN	P-O5'	2.23	1.67	1.60
3	I	2101	FMN	C4-C4A	2.23	1.52	1.42
3	H	2101	FMN	C7M-C7	2.21	1.55	1.51
3	G	2101	FMN	C5'-C4'	2.15	1.55	1.51
3	I	2101	FMN	C8M-C8	2.14	1.55	1.51
3	J	2101	FMN	C8M-C8	2.12	1.55	1.51
3	J	2101	FMN	C7M-C7	2.12	1.55	1.51
3	H	2101	FMN	C4-C4A	2.12	1.52	1.42
3	G	2101	FMN	C8M-C8	2.10	1.55	1.51
3	G	2101	FMN	C7M-C7	2.07	1.55	1.51
3	K	2101	FMN	C8M-C8	2.01	1.55	1.51

All (63) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	K	2101	FMN	C2-N1-C10	6.64	121.35	114.95
3	G	2101	FMN	C2-N1-C10	6.41	121.12	114.95
3	I	2101	FMN	C2-N1-C10	5.59	120.33	114.95
3	L	2101	FMN	C2-N1-C10	5.59	120.33	114.95
3	H	2101	FMN	C2-N1-C10	5.52	120.27	114.95
3	J	2101	FMN	C2-N1-C10	5.34	120.09	114.95
3	J	2101	FMN	C1'-N10-C10	4.51	123.74	118.82
3	I	2101	FMN	C5A-C9A-N10	4.50	120.95	117.63
3	I	2101	FMN	C1'-N10-C10	4.33	123.53	118.82
3	J	2101	FMN	C5A-C9A-N10	4.13	120.68	117.63
3	G	2101	FMN	C5A-C9A-N10	4.05	120.62	117.63
3	H	2101	FMN	C5A-C9A-N10	3.93	120.53	117.63
3	K	2101	FMN	C1'-N10-C10	3.91	123.08	118.82
3	L	2101	FMN	C5A-C9A-N10	3.88	120.49	117.63
3	L	2101	FMN	C1'-N10-C10	3.88	123.05	118.82
3	H	2101	FMN	C1'-N10-C10	3.81	122.97	118.82
3	G	2101	FMN	C1'-N10-C10	3.80	122.96	118.82
3	K	2101	FMN	C4A-N5-C5A	3.75	121.05	116.68
3	H	2101	FMN	C2'-C1'-N10	-3.51	107.80	112.60
3	G	2101	FMN	C2'-C1'-N10	-3.51	107.80	112.60
3	I	2101	FMN	C2'-C1'-N10	-3.49	107.82	112.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	K	2101	FMN	C5A-C9A-N10	3.46	120.18	117.63
3	J	2101	FMN	C2'-C1'-N10	-3.43	107.91	112.60
3	L	2101	FMN	C4A-N5-C5A	3.38	120.62	116.68
3	L	2101	FMN	C2'-C1'-N10	-3.35	108.01	112.60
3	H	2101	FMN	C4A-C10-N10	-3.35	118.50	120.53
3	K	2101	FMN	C2'-C1'-N10	-3.33	108.04	112.60
3	H	2101	FMN	C4A-N5-C5A	3.29	120.52	116.68
3	J	2101	FMN	C4A-N5-C5A	3.19	120.40	116.68
3	I	2101	FMN	C4A-N5-C5A	3.14	120.34	116.68
3	G	2101	FMN	C4A-N5-C5A	3.11	120.31	116.68
3	K	2101	FMN	C4A-C10-N1	-3.08	118.66	123.00
3	J	2101	FMN	C4A-C10-N10	-2.82	118.82	120.53
3	G	2101	FMN	C4A-C10-N1	-2.80	119.04	123.00
3	J	2101	FMN	C1'-N10-C9A	-2.77	115.76	118.67
3	L	2101	FMN	C4A-C10-N10	-2.77	118.85	120.53
3	K	2101	FMN	C4A-C10-N10	-2.76	118.86	120.53
3	K	2101	FMN	C4-N3-C2	-2.68	119.90	125.39
3	G	2101	FMN	C4-N3-C2	-2.61	120.03	125.39
3	I	2101	FMN	C4A-C10-N10	-2.59	118.96	120.53
3	K	2101	FMN	C10-C4A-N5	-2.55	119.82	122.57
3	J	2101	FMN	C4A-C10-N1	-2.53	119.43	123.00
3	K	2101	FMN	C1'-N10-C9A	-2.53	116.01	118.67
3	I	2101	FMN	C4A-C10-N1	-2.52	119.44	123.00
3	L	2101	FMN	C4-N3-C2	-2.52	120.22	125.39
3	I	2101	FMN	C4-N3-C2	-2.51	120.25	125.39
3	L	2101	FMN	C4A-C10-N1	-2.44	119.55	123.00
3	H	2101	FMN	C4-N3-C2	-2.42	120.42	125.39
3	H	2101	FMN	C9A-C5A-N5	-2.34	118.93	122.39
3	J	2101	FMN	C4-N3-C2	-2.32	120.64	125.39
3	H	2101	FMN	C4A-C10-N1	-2.31	119.75	123.00
3	H	2101	FMN	C1'-N10-C9A	-2.28	116.27	118.67
3	I	2101	FMN	C9A-C5A-N5	-2.26	119.05	122.39
3	L	2101	FMN	C9A-C5A-N5	-2.24	119.08	122.39
3	J	2101	FMN	C9A-C5A-N5	-2.22	119.11	122.39
3	K	2101	FMN	C9A-C5A-N5	-2.16	119.19	122.39
3	G	2101	FMN	C4A-C10-N10	-2.16	119.22	120.53
3	G	2101	FMN	C10-C4A-N5	-2.14	120.27	122.57
3	L	2101	FMN	C1'-N10-C9A	-2.13	116.43	118.67
3	K	2101	FMN	O5'-P-O1P	2.13	113.20	106.72
3	J	2101	FMN	C4-C4A-C10	2.08	120.65	117.18
3	K	2101	FMN	N1-C10-N10	2.02	122.46	115.76
3	I	2101	FMN	C1'-N10-C9A	-2.01	116.55	118.67

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, 95<sup>th</sup> 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 <sup>2</sup> )	Q < 0.9
1	A	1457/1878 (77%)	-0.12	2 (0%)	93 70	17, 54, 105, 150	0
1	B	1464/1878 (77%)	-0.13	3 (0%)	93 61	16, 52, 111, 158	0
1	C	1462/1878 (77%)	-0.11	3 (0%)	93 61	15, 51, 111, 159	0
1	D	1467/1878 (78%)	-0.14	2 (0%)	93 70	17, 54, 108, 158	0
1	E	1456/1878 (77%)	-0.12	2 (0%)	93 70	15, 54, 110, 157	0
1	F	1461/1878 (77%)	-0.12	2 (0%)	93 70	16, 51, 108, 159	0
2	G	2060/2060 (100%)	0.00	9 (0%)	90 45	27, 83, 129, 169	0
2	H	2060/2060 (100%)	0.06	19 (0%)	81 25	24, 86, 132, 167	0
2	I	2060/2060 (100%)	0.06	22 (1%)	77 22	23, 86, 132, 167	0
2	J	2060/2060 (100%)	0.08	25 (1%)	75 20	28, 89, 133, 172	0
2	K	2060/2060 (100%)	0.19	43 (2%)	60 11	27, 91, 136, 172	0
2	L	2060/2060 (100%)	0.08	13 (0%)	86 36	23, 87, 133, 172	0
All	All	21127/23628 (89%)	-0.00	145 (0%)	84 32	15, 75, 127, 172	0

All (145) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
2	J	93	ASP	7.4
2	K	27	THR	4.7
2	I	1773	GLY	4.6
2	K	26	LEU	4.4
2	I	1123	ALA	4.3
2	I	19	GLN	4.1
2	I	1122	LYS	3.9
2	H	19	GLN	3.9
2	H	1122	LYS	3.7
1	E	326	ASP	3.7
2	H	175	GLY	3.7

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Mol	Chain	Res	Type	RSRZ
2	K	56	LEU	3.7
1	A	853	MET	3.6
2	G	1954	GLN	3.5
2	I	1939	LEU	3.5
2	K	40	SER	3.4
2	H	1953	ILE	3.3
2	I	61	GLU	3.3
2	K	435	ILE	3.3
2	K	176	GLN	3.2
2	I	1850	VAL	3.2
2	H	1943	LEU	3.2
2	K	93	ASP	3.2
2	H	1965	VAL	3.1
2	K	69	PRO	3.1
2	K	281	GLY	3.1
2	G	1121	LEU	3.1
2	J	24	LEU	3.0
2	K	294	ALA	3.0
2	L	1124	THR	3.0
2	G	39	THR	3.0
2	H	1123	ALA	3.0
2	I	146	ALA	3.0
2	K	212	ALA	2.9
2	K	296	ALA	2.8
2	H	1954	GLN	2.8
2	J	75	LEU	2.8
2	I	1192	LEU	2.8
2	I	1951	ILE	2.8
2	G	427	ARG	2.8
2	I	62	GLU	2.8
2	L	43	PHE	2.8
1	C	1457	GLU	2.8
2	K	1999	ARG	2.8
2	I	1954	GLN	2.7
2	K	123	ALA	2.7
2	J	1989	LEU	2.7
2	H	35	PHE	2.7
2	K	92	GLU	2.7
2	G	44	GLN	2.7
2	I	1906	ASN	2.6
2	J	275	LEU	2.6
2	K	817	MET	2.6

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Mol	Chain	Res	Type	RSRZ
2	H	59	PRO	2.6
2	H	1124	THR	2.6
2	H	155	ASP	2.6
2	L	2036	ILE	2.6
2	L	208	LEU	2.6
2	J	25	VAL	2.5
2	J	76	VAL	2.5
2	H	76	VAL	2.5
2	J	186	LEU	2.5
2	K	105	ILE	2.5
2	K	1965	VAL	2.5
2	I	1124	THR	2.5
1	B	14	LEU	2.5
2	J	2078	GLU	2.5
2	I	27	THR	2.5
1	D	853	MET	2.5
2	I	2056	GLU	2.5
2	K	284	GLY	2.5
2	J	1945	ILE	2.4
2	K	279	PHE	2.4
2	L	1969	LEU	2.4
2	K	557	GLU	2.4
1	F	853	MET	2.4
2	K	67	ASP	2.4
2	J	1933	LEU	2.4
2	K	1958	GLN	2.4
1	B	853	MET	2.3
2	I	1128	PRO	2.3
2	H	1966	ARG	2.3
2	H	1988	GLN	2.3
2	J	133	LYS	2.3
2	J	68	GLU	2.3
2	H	208	LEU	2.3
2	K	109	PHE	2.3
2	K	111	ARG	2.3
2	J	1954	GLN	2.3
2	K	64	ALA	2.3
2	L	275	LEU	2.2
2	G	1973	ILE	2.2
2	I	26	LEU	2.2
2	J	1392	GLY	2.2
2	L	1123	ALA	2.2

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Mol	Chain	Res	Type	RSRZ
2	K	1950	LYS	2.2
1	A	553	ARG	2.2
2	L	309	LYS	2.2
2	L	56	LEU	2.2
2	L	1948	MET	2.2
2	K	140	TYR	2.2
2	G	1124	THR	2.2
1	D	1456	GLU	2.2
2	J	1252	ALA	2.1
2	H	201	ILE	2.1
2	K	258	LEU	2.1
2	K	1988	GLN	2.1
1	E	545	LEU	2.1
2	H	227	ILE	2.1
2	K	458	MET	2.1
2	L	1900	LEU	2.1
2	J	81	ALA	2.1
2	J	80	ILE	2.1
2	J	35	PHE	2.1
2	I	1901	GLN	2.1
2	L	1575	ALA	2.1
2	J	175	GLY	2.1
2	K	486	ILE	2.1
2	I	44	GLN	2.1
1	C	5	VAL	2.1
2	K	516	PHE	2.1
2	K	32	GLU	2.1
2	K	224	GLY	2.1
2	G	258	LEU	2.1
1	C	1454	ARG	2.1
1	F	18	LEU	2.1
2	K	19	GLN	2.1
2	J	139	ALA	2.1
1	B	1	MET	2.1
2	L	61	GLU	2.1
2	I	1126	GLU	2.1
2	J	1999	ARG	2.1
2	H	413	GLY	2.1
2	K	186	LEU	2.1
2	K	784	GLY	2.1
2	J	265	CYS	2.0
2	K	107	ASN	2.0

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Mol	Chain	Res	Type	RSRZ
2	J	1566	LYS	2.0
2	K	1775	ILE	2.0
2	J	252	LEU	2.0
2	G	255	LEU	2.0
2	I	1982	ALA	2.0
2	K	65	GLN	2.0
2	K	694	ALA	2.0
2	K	1717	GLU	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, 95<sup>th</sup> 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 <sup>2</sup> )	Q<0.9
3	FMN	G	2101	31/31	0.28	0.50	19,64,105,124	0
3	FMN	H	2101	31/31	0.25	0.03	21,53,91,110	0
3	FMN	I	2101	31/31	0.22	-0.25	23,54,85,115	0
3	FMN	L	2101	31/31	0.23	-0.26	15,51,89,119	0
3	FMN	J	2101	31/31	0.18	-0.64	19,56,106,122	0
3	FMN	K	2101	31/31	0.17	-1.07	24,63,111,122	0

## 6.5 Other polymers ⓘ

There are no such residues in this entry.