



Full wwPDB X-ray Structure Validation Report ⓘ

Jun 16, 2014 – 08:46 PM BST

PDB ID : 4V59
Title : Crystal structure of fatty acid synthase complexed with nadp+ from thermomyces lanuginosus at 3.1 angstrom resolution.
Authors : JENNI, S.; LEIBUNDGUT, M.; BOEHRINGER, D.; FRICK, C.; MIKOLASEK, 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
A user guide is available at <http://wwpdb.org/ValidationPDFNotes.html>

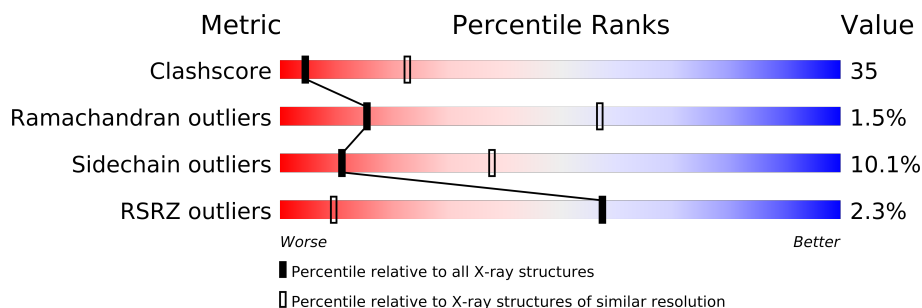
The following versions of software and data (see [references](#)) were used in the production of this report:

MolProbity : 4.02b-467
Mogul : 1.16 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 ≥ 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 4 unique types of molecules in this entry. The entry contains 167247 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.

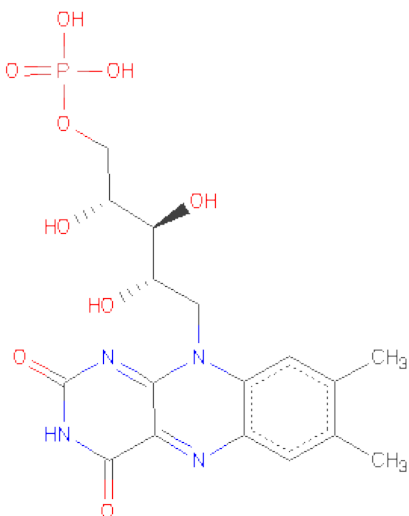
Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
2	G	2060	Total	C	N	O	S	0	0	0
			16200	10314	2781	3051	54			
2	H	2060	Total	C	N	O	S	0	0	0
			16200	10314	2781	3051	54			
2	I	2060	Total	C	N	O	S	0	0	0
			16200	10314	2781	3051	54			
2	J	2060	Total	C	N	O	S	0	0	0
			16200	10314	2781	3051	54			
2	K	2060	Total	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 NADP NICOTINAMIDE-ADENINE-DINUCLEOTIDEPHOSPHATE (three-letter code: NAP) (formula: C₂₁H₂₈N₇O₁₇P₃).



Mol	Chain	Residues	Atoms					ZeroOcc	AltConf
3	A	1	Total	C	N	O	P	0	0
			48	21	7	17	3		
3	B	1	Total	C	N	O	P	0	0
			48	21	7	17	3		
3	C	1	Total	C	N	O	P	0	0
			48	21	7	17	3		
3	D	1	Total	C	N	O	P	0	0
			48	21	7	17	3		
3	E	1	Total	C	N	O	P	0	0
			48	21	7	17	3		
3	F	1	Total	C	N	O	P	0	0
			48	21	7	17	3		
3	G	1	Total	C	N	O	P	0	0
			48	21	7	17	3		
3	H	1	Total	C	N	O	P	0	0
			48	21	7	17	3		
3	I	1	Total	C	N	O	P	0	0
			48	21	7	17	3		
3	J	1	Total	C	N	O	P	0	0
			48	21	7	17	3		
3	K	1	Total	C	N	O	P	0	0
			48	21	7	17	3		
3	L	1	Total	C	N	O	P	0	0
			48	21	7	17	3		

- Molecule 4 is FLAVIN MONONUCLEOTIDE (three-letter code: FMN) (formula: C₁₇H₂₁N₄O₉P).



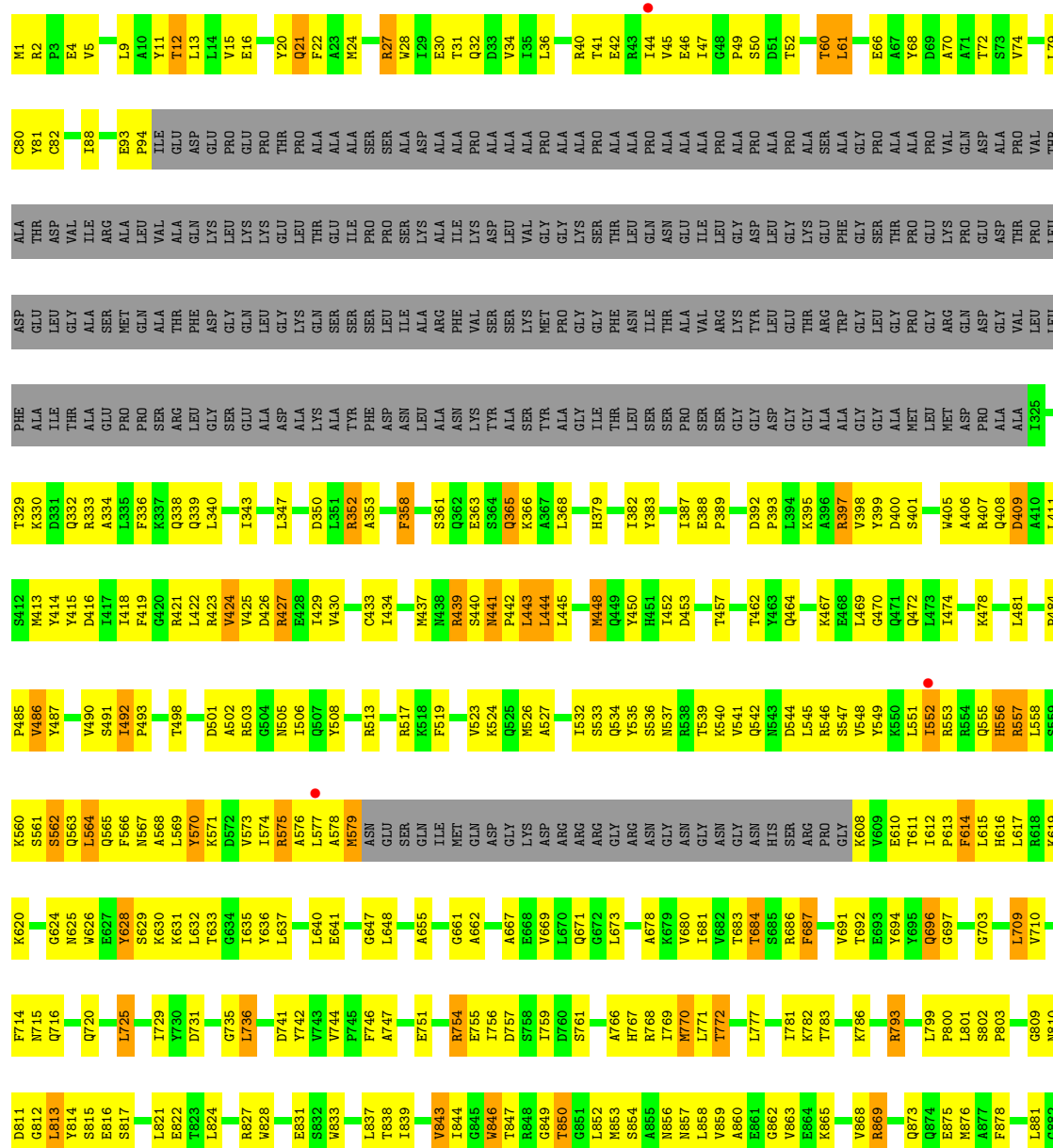
Mol	Chain	Residues	Atoms					ZeroOcc	AltConf
4	G	1	Total	C	N	O	P	0	0
			31	17	4	9	1		
4	H	1	Total	C	N	O	P	0	0
			31	17	4	9	1		
4	I	1	Total	C	N	O	P	0	0
			31	17	4	9	1		
4	J	1	Total	C	N	O	P	0	0
			31	17	4	9	1		
4	K	1	Total	C	N	O	P	0	0
			31	17	4	9	1		
4	L	1	Total	C	N	O	P	0	0
			31	17	4	9	1		

3 Residue-property plots

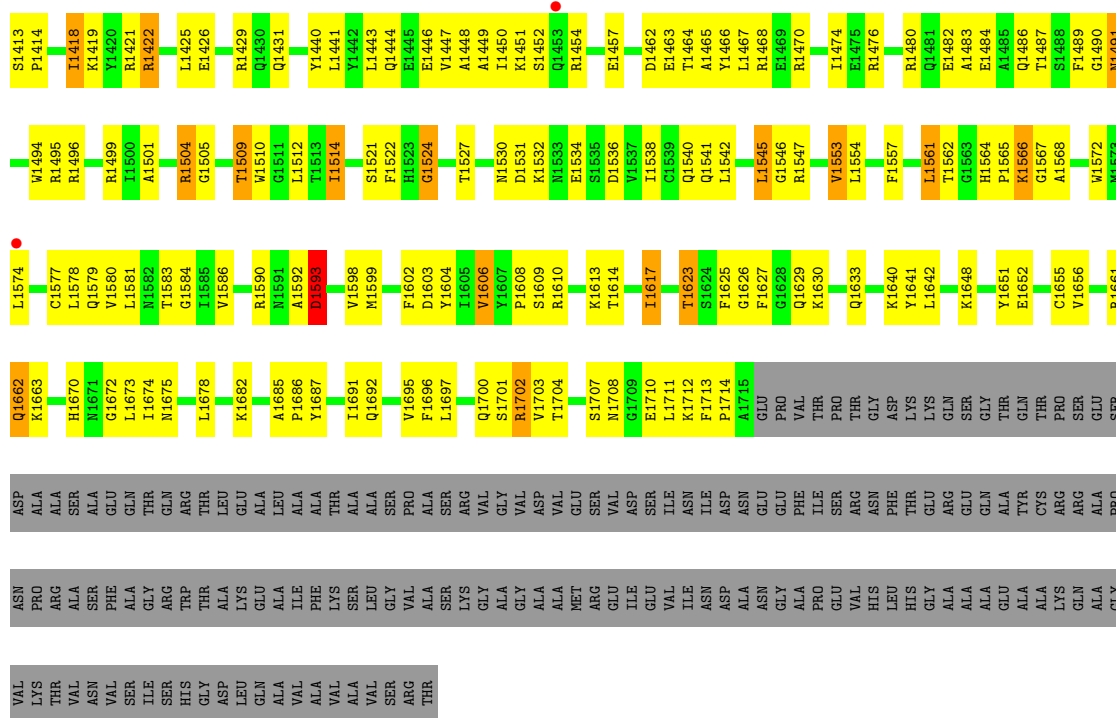
These plots are drawn for all protein, RNA and DNA chains in the entry. The first graphic for a chain summarises the proportions of errors displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and electron density. Residues are color-coded according 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: 

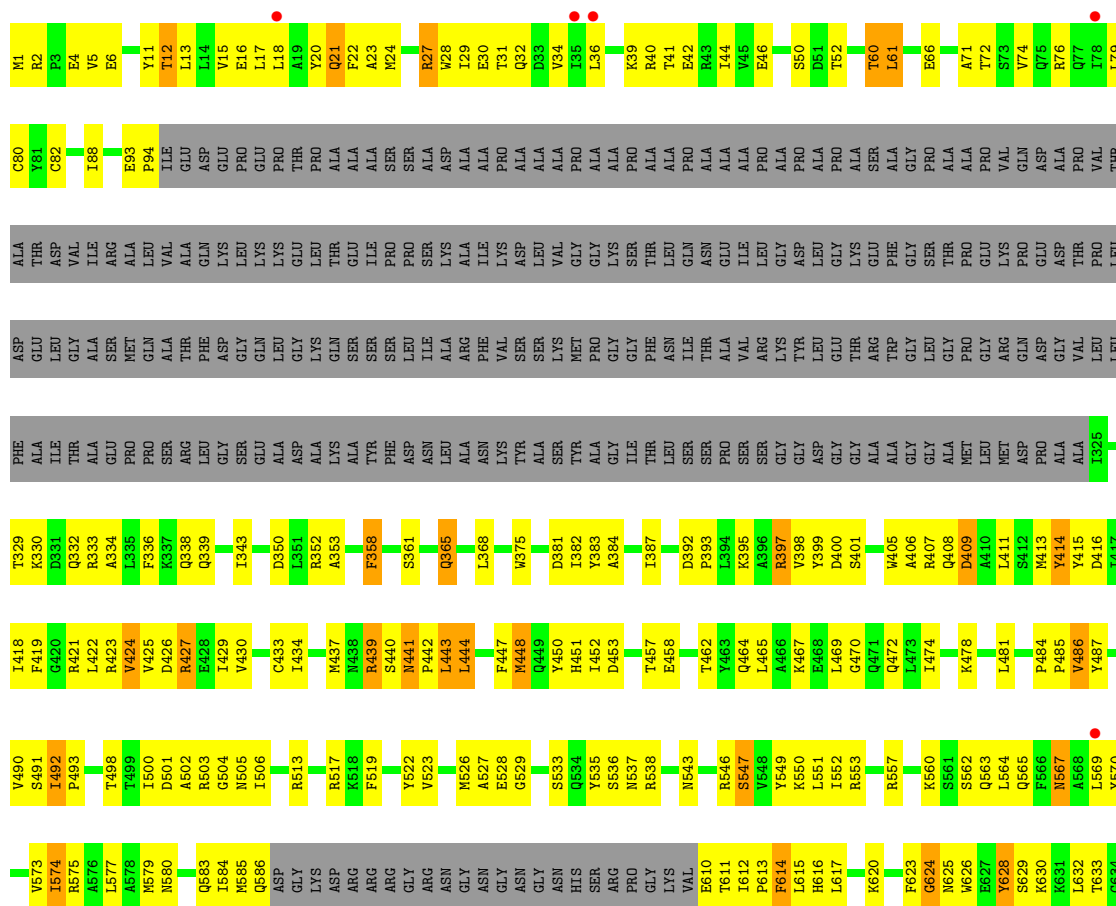


A1323	I1249	F1156	H1075	N989	Q906	N935	D741	G647	I574	S491	T418	K330	THR
A1327	L1250	D1157	I1078	L990	F907	T836	Y742	L648	R575	I492	F419	D931	ASP
E1330	Q1251	R1158	R1079	V994	P908	L837	F746	A655	A576	P493	G420	Q332	VAL
R1333	S1253	V1160	L1080	V995	P909	T838	A747	A655	M579	T498	R421	R333	ILE
G1334	F1254	A1161	L1081	V996	D910	I839	A747	A655	M579	T498	L422	A334	ARG
R1335	T1257	G1162	E1082	T997	K912	V843	R754	G661	T584	D501	R423	L345	ALA
R1336	M1258	Q1163	P1083	G998	G913	W846	E755	A662	M585	A502	V424	F336	PRO
E1337	A1259	L1164	P1084	L999	L914	T847	I756	A667	M586	R503	V425	K337	LEU
G1338	I1260	P1165	L1085	E1000	N915	E868	D757	E668	ASP	A502	R426	Q338	VAL
R1339	G1167	L1166	F1086	E1001	T916	R848	S758	V669	GLY	N505	R427	Q339	ALA
M1340	M1168	G1167	F1086	E1001	K917	R849	I759	V669	LYS	N505	E428	L340	LYS
S1341	L1265	W1168	Y1089	P1004	L918	T850	D760	G671	ASP	O507	V430	E341	LEU
R1342	L1266	R1171	D1090	W1005	R919	G851	S761	G672	ARG	Y508	V430	E342	LYS
P1343	L1267	R1172	P1091	G1006	R919	L852	A766	L673	ARG	R513	C433	I343	LEU
T1344	S1268	Y1173	M1007	M1007	I922	M853	H767	L673	ARG	R513	L347	I343	GLY
S1345	S1269	G1174	K1094	A1008	S926	S854	H767	A678	GLY	R517	T434	L347	LEU
T1346	T1270	V1175	Q1095	R1011	S926	A855	R768	K679	ARG	R517	M437	D350	GLU
T1347	T1273	P1176	L1096	W1012	R929	N857	M770	V680	ASN	K518	M438	L351	ILE
F1351	I1274	E1177	W1100	M1014	Q930	N857	M770	V680	GLY	F519	R439	R352	SER
M1352	K1275	D1178	V1101	M1014	Q930	N858	T772	T683	ASN	Y522	M441	A353	PRO
E1353	P1276	I1179	I1102	M1017	I933	V859	T772	T683	GLY	Y522	P442	K356	SER
S1354	P1277	I1180	E1103	Y1017	I933	E861	L777	S885	GLY	Y522	P442	K356	LYS
S1355	G1278	Q1104	F1103	L1022	N940	G862	A780	R686	ASN	M526	L444	F358	ALA
G1356	A1279	D1105	E1103	E1023	V943	E864	I781	F687	HIS	A527	L445	V359	ILE
C1357	C1280	L1186	L1106	E1023	V943	E864	K782	F687	SER	S533	E446	A360	LYS
T1358	T1282	T1187	E1107	M1031	D947	V868	T783	T692	ARG	Q534	M448	S361	VAL
Q1360	I1283	L1191	P1108	M1032	H948	R869	K786	E893	GLY	Y535	Q449	Q365	GLY
I1361	D1288	K1113	K1113	N1037	E950	R869	R793	Y895	K608	R538	Y450	L368	LYS
T1362	Y1291	E1117	E1117	H1038	L951	Q873	R793	Y895	G609	R538	H451	L368	GLY
M1363	T1292	Y1207	E1118	M1039	Y952	Q874	L799	G697	E610	R538	H451	L368	SER
A1365	T1293	E1208	F1119	L1042	I956	E875	P800	G697	T611	N543	I452	I382	THR
Q1366	Q1296	F1209	K1120	L1042	I956	M876	L801	G703	I612	N543	H454	Y383	ASN
L1367	G1297	V1213	R1121	S1048	P859	A877	S802	G703	P614	R546	C455	I387	ILE
A1368	K1298	H1214	T1129	G1049	R960	F878	S802	Q708	L615	R546	P456	I387	ASN
M1371	A1299	H1215	T1130	W1050	A961	L880	P803	L709	H616	Y549	T462	D392	GLU
G1372	L1299	S1216	F1131	V1051	N962	L881	F808	V710	L617	K550	T462	P393	ILE
V1373	V1301	E1217	I1132	D1052	L963	G882	G809	V712	L551	L551	Y463	L394	GLY
P1374	C1302	V1218	Q1137	T1055	K964	L883	N810	F713	L551	L551	Y463	L394	TYR
I1375	L1303	G1223	Q1137	G1056	Y965	N884	D811	F713	R564	R564	K467	R397	LEU
Y1376	G1306	S1224	Y1138	E1057	P966	T888	G812	N715	Q555	Q555	E468	V398	GLY
T1386	F1307	G1225	T1139	P1058	P967	V889	L813	Q716	W626	W626	L469	Y399	GLY
I1389	D1308	V1226	Y1140	V1059	P968	N890	Y814	G717	E627	E627	G470	TRP	ALA
V1393	F1309	T1229	L1141	D1060	W973	L891	S815	S718	Y628	Y628	Q471	S401	GLY
P1394	Q1311	T1229	L1142	D1063	K978	C892	S817	L725	S629	S629	Q472	S401	GLY
A1395	E1312	L1232	A1146	V1064	P979	Q893	L821	V726	K630	K630	L473	W405	THR
P1396	E1313	L1233	T1147	K1065	L980	F898	E822	V726	K631	K631	L474	W405	PRO
P1396	G1234	L1148	L1148	L1065	L980	F898	E822	V726	K631	K631	L474	W405	PRO
L1401	Y1316	M1235	L1149	Y1068	Q983	D900	T823	I729	G634	F566	L481	D409	GLN
E1317	Y1317	M1235	L1150	Y1069	Q983	D900	T823	I729	G634	F566	L481	D409	GLN
R1405	E1317	Y1236	L1151	K1070	L984	L901	L824	D731	G634	F566	L481	D409	GLN
		D1237	A1153	Y1071	R985	N302	W828	G735	G636	A568	P485	M413	ASP
		D1238	L1154	Y1072	G986	G903	L736	G735	Y636	A568	P485	M413	THR
			Q1155	I1072	N987	G904	W833	L740	L640	Y570	Y487	Y415	PRO
												I325	LEU
												I417	ASP



• Molecule 1: FATTY ACID SYNTHASE ALPHA SUBUNITS

Chain C:



- Molecule 1: FATTY ACID SYNTHASE ALPHA SUBUNITS

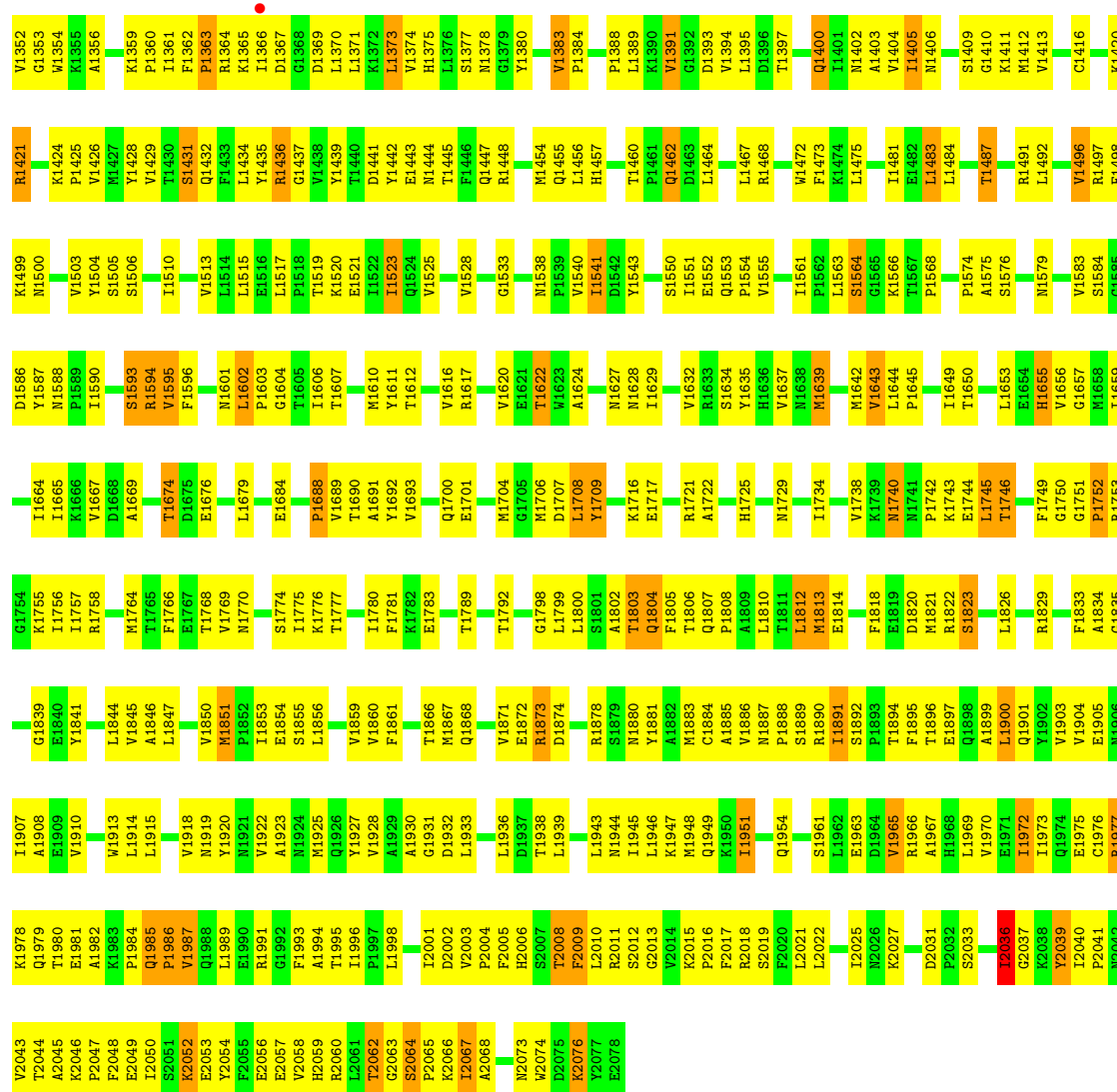
Chain D:

Q137	Y138	T139	V140	R141	L142	A146	T147	L148	L149	I150	A153	L154	Q155	D156	F157	L158	L159	V160	A161	G162	Q163	Q164	Q165	T166	L167	D168	L169	V170	R171	L172	L173	V174	L175	L176	L177	D178	I179	L180	V183	D184	F185	V186	T187	L188	L191	L199	Y207	F208	F209	Y210	L211	Y212	V213
K964	Y965	P966	P967	P968	Y973	K978	P979	L980	Q983	L984	M987	N988	N989	N990	L991	Y995	Y996	T997	G998	A1000	E1001	P1004	P1005	P1006	P1007	A1008	R1011	W1012	F1013	W1014	Y1017	I1101	I1102	E1103	Q1104	L1105	L1106	E1107	P1108	K1113	E1117	E1118	F1119	K1120	R1121	S1048	F1049	W1050	V1051	A961	D1052	L963	
T1055	G1056	E1057	P1058	D1061	K1062	D1063	Y1064	Y1068	I1072	H1075	I1078	N1079	L1080	L1081	E1082	P1083	E1084	Q1085	F1086	Y1089	D1090	P1091	P1092	L1093	K1094	Q1095	L1096	L1097	Q1098	E1099	F1101	V1100	I1101	I1102	E1103	Q1104	L1105	L1106	E1107	P1108	K1113	E1117	E1118	F1119	K1120	R1121	S1048	F1049	W1050	V1051	A961	D1052	L963
K964	Y965	P966	P967	P968	Y973	K978	P979	L980	Q983	L984	M987	N988	N989	N990	L991	Y995	Y996	T997	G998	A1000	E1001	P1004	P1005	P1006	P1007	A1008	R1011	W1012	F1013	W1014	Y1017	I1101	I1102	E1103	Q1104	L1105	L1106	E1107	P1108	K1113	E1117	E1118	F1119	K1120	R1121	S1048	F1049	W1050	V1051	A961	D1052	L963	
S815	E816	S817	G834	L835	L836	L840	G847	L848	F850	Q851	A862	A867	E868	L870	Q871	L873	A878	K879	V880	L881	V882	T883	S885	F887	V891	T892	Y894	Y895	Q896	G897	G703	Q708	L709	V710	G809	N810	D811	G812	L813	M884													
S815	E816	S817	G834	L835	L836	L840	G847	L848	F850	Q851	A862	A867	E868	L870	Q871	L873	A878	K879	V880	L881	V882	T883	S885	F887	V891	T892	Y894	Y895	Q896	G897	G703	Q708	L709	V710	G809	N810	D811	G812	L813	M884													
A885	P886	A887	V889	N890	L891	C892	Q893	F898	A899	D900	L901	G903	G904	L905	Q906	F907	L908	Y996	T997	G998	A1000	E1001	P1004	P1005	P1006	P1007	A1008	R1011	W1012	F1013	W1014	Y1017	I1101	I1102	E1103	Q1104	L1105	L1106	E1107	P1108	K1113	E1117	E1118	F1119	K1120	R1121	S1048	F1049	W1050	V1051	A961	D1052	L963
A885	P886	A887	V889	N890	L891	C892	Q893	F898	A899	D900	L901	G903	G904	L905	Q906	F907	L908	Y996	T997	G998	A1000	E1001	P1004	P1005	P1006	P1007	A1008	R1011	W1012	F1013	W1014	Y1017	I1101	I1102	E1103	Q1104	L1105	L1106	E1107	P1108	K1113	E1117	E1118	F1119	K1120	R1121	S1048	F1049	W1050	V1051	A961	D1052	L963
T1055	G1056	E1057	P1058	D1061	K1062	D1063	Y1064	Y1068	I1072	H1075	I1078	N1079	L1080	L1081	E1082	P1083	E1084	Q1085	F1086	Y1089	D1090	P1091	P1092	L1093	K1094	Q1095	L1096	L1097	Q1098	E1099	F1101	V1100	I1101	I1102	E1103	Q1104	L1105	L1106	E1107	P1108	K1113	E1117	E1118	F1119	K1120	R1121	S1048	F1049	W1050	V1051	A961	D1052	L963
Q137	Y138	T139	V140	R141	L142	A146	T147	L148	L149	I150	A153	L154	Q155	D156	F157	L158	L159	V160	A161	G162	Q163	Q164	Q165	T166	L167	D168	L169	V170	R171	L172	L173	V174	L175	L176	L177	D178	I179	L180	V183	D184	F185	V186	T187	L188	L191	L199	Y207	F208	F209	Y210	L211	Y212	V213



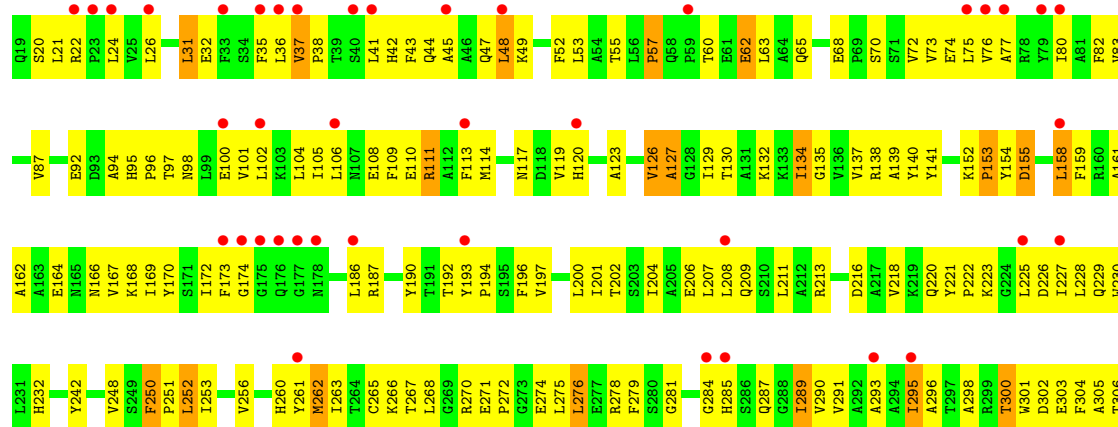


K1286	D1210	F1116	I1053	S978	L906	G837	N703	V618	V469	T392	F316	S249
E1287	D1211	R1119	Y1057	L979	N907	V838	E704	T621	Y470	G393	W317	F250
F1288	P1212	I1120	G1058	L980	D909	D839	Y705	M622	D471	P394	I318	L251
Y1289	T1215	I1202	Q1059	Q981	F910	D841	Y777	N623	K473	P395	R321	L252
E1291	V1216	A1123	D1060	L986	Q911	Q842	L708	Y626	K474	I396	A325	G254
V1292	I1217	T1124	V1061	D987	K912	R843	G710	R627	G475	S397	Y326	L255
V1293	S1218	P1128	G1062	E988	V913	E844	G781	M628	Q476	L398	P327	V256
V1294	L1219	A1135	R1063	P989	W915	R845	R711	L628	L478	L401	R328	H260
	R1220		T1064	Y990	F915	F782	R712	V551	L479	R406	T329	Y261
			C1065	P991	G916	G783	H713	A631	R478	S330	S330	M262
			C1065	A992	R917	G784	H713	G632	L481	L386	L386	L263
			I1066			S785	K717	G633	E480	K409	S339	L268
			L1067			E786	P718	G634	L481	A410		L269
			Q1068			D787	G719	Y635	G482	P411		T264
			G1069			R788	S720	Y636	E484			C265
			P1070			T788		N637	E484			
			Y1071			Y789	A723	M637	D485			L268
			A1072			P790	I724	N638	I486			G269
			I1073			Y791	I724	Q639	I487			R270
			K1074			L792	Q725	K640	I487			E271
			Y1075			T793	Q726	M641	P488			P271
			S1076			G794	V727		R418			T346
			K1077			S795	I728	S646	I419			G273
			I1078			E862	I729	K647	L490			E274
			V1079			G863	I730	I648	P349			L275
			L1079			P864	I731	E649	M492			L276
			D1080			R799	K732		M493			
			E1081			L865			D497			G281
			P1082			H866			P498			T282
			A1083			G801	P735		F432			T283
			K1084			Y802	L736		F432			G284
			D1085			P803	T737		N500			G284
			I1086			R804	P738		T357			H285
			L1087			R805	I739		I435			S286
			T1087			P806	I740		T436			Q287
			G1088			W876	L741		A437			G288
			I1090			F875	Q742		V506			L289
			L1018			K877	W743		F439			V290
			V1019			E878	T744		H440			V291
			G1020				G745		S441			L292
			Q1021			K882	G746		P442			A293
			R1022			I883	R747		Y443			A294
			I1026			F884	G748		L444			I296
			P1027			D887	G749		A447			A296
			V1028			R888	Q750		H448			T297
			P1029			S889	H751		P373			A298
			F1030			R891	H752		E374			R299
			P1032			R891	H753		D375			T300
			A1033			E894	F754		R376			W301
			E1036			K897	D755		H377			D302
			K1044			R898	D756		G379			F304
			D1045			E967	F757		I380			A305
			S1046			D900	L761		S381			T306
			L1047			Y901	L763		L382			K309
			W1048			I902	W764		V310			R310
			Q1049			I903	Y765		S463			A311
			S1050			K904	I768		S464			R387
			P977			K905			L465			N388
									V466			F389
									D616			V390
									D533			L314
									G534			L315

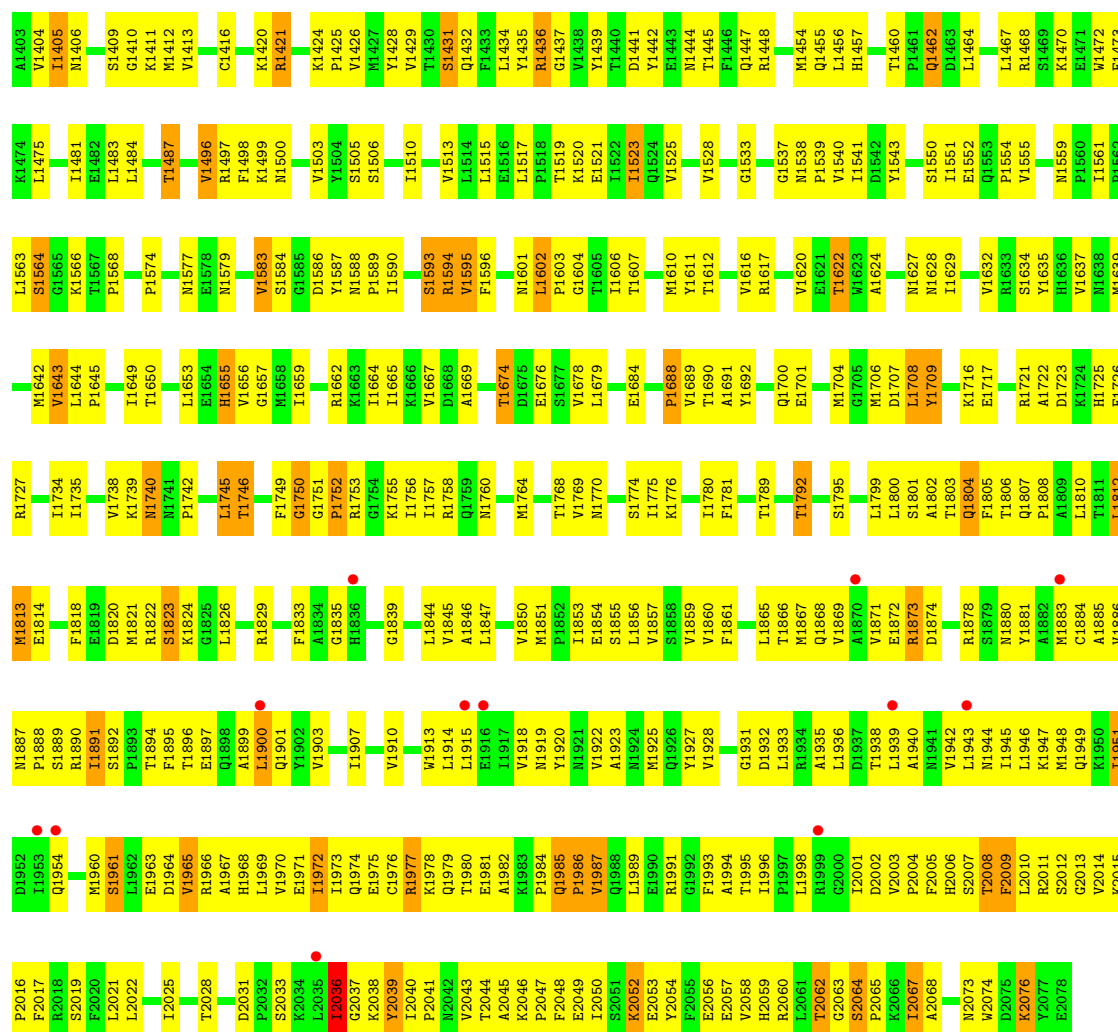


• Molecule 2: FATTY ACID SYNTHASE BETA SUBUNITS

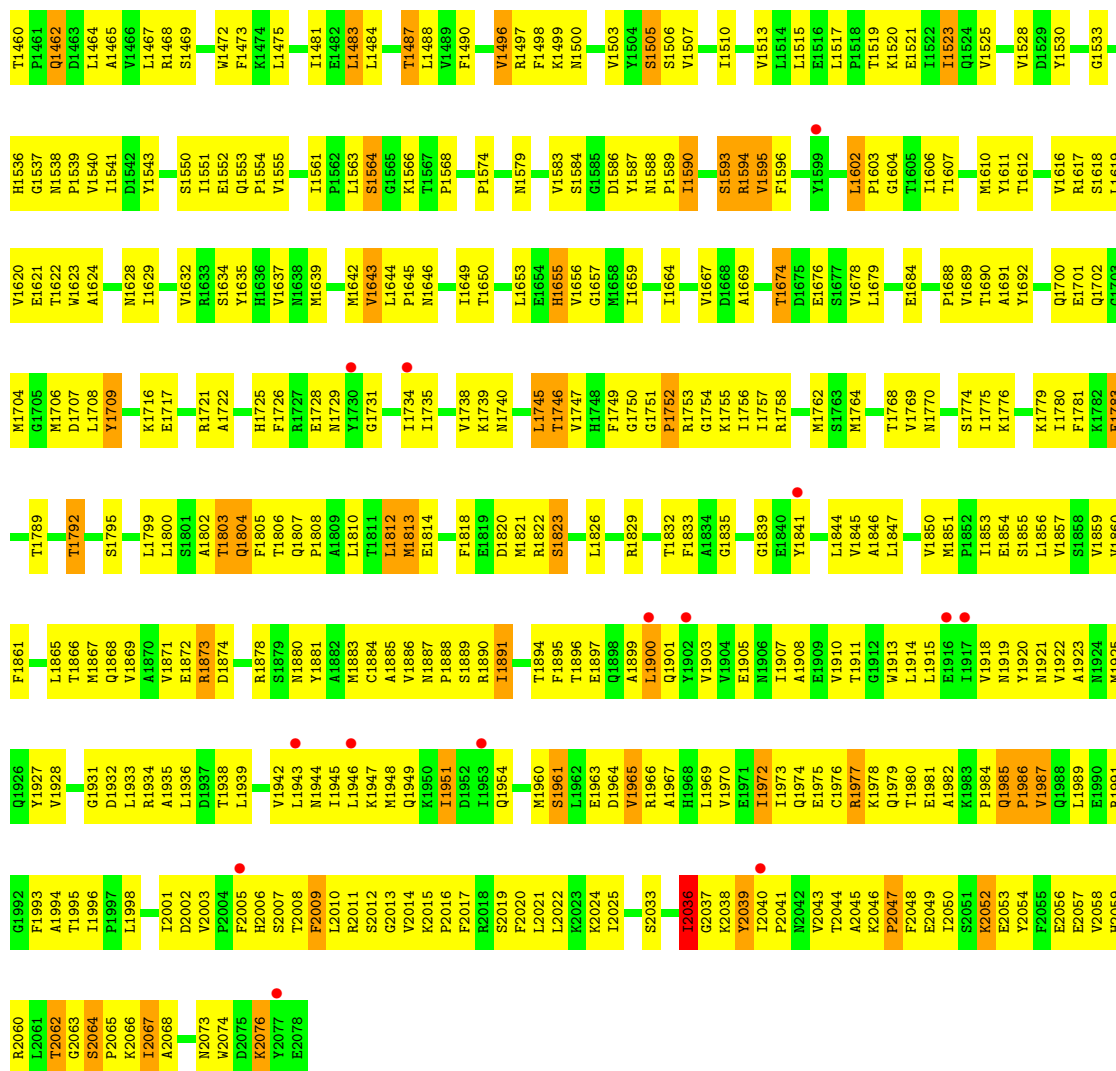
Chain H:





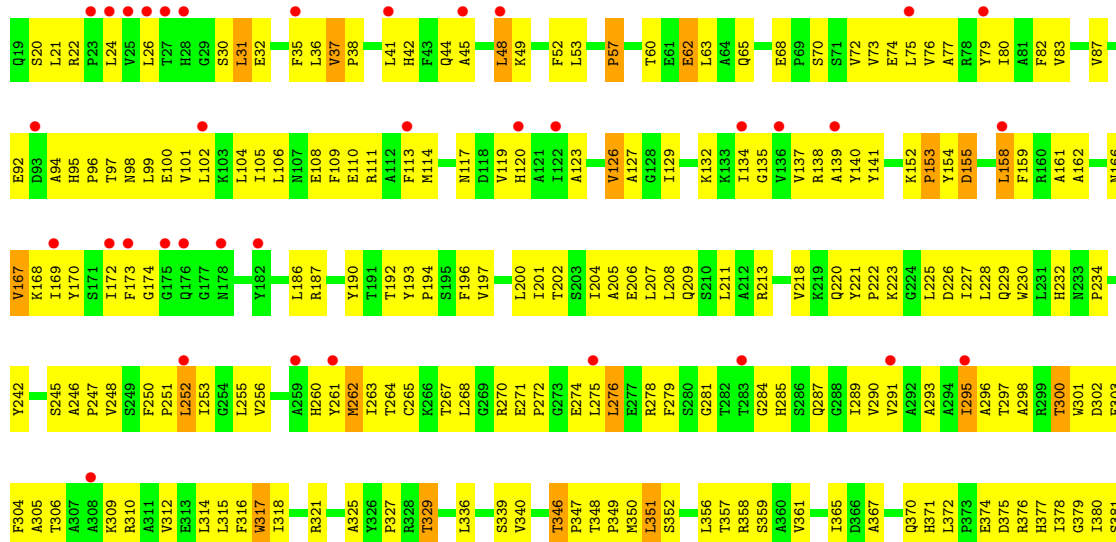


V1391	G1392	D1393	V1394	N1395	D1396	T1397	A1398	F1399	G1400	N1401	N1402	A1403	V1404	I1405	N1406	S1409	G1410	N1411	K1412	V1413	C1416	G1417	T1418	L1419	R1420	R1421	K1424	P1425	V1426	M1427	V1428	T1430	S1431	F1433	Q1432	R1434	N1435	G1436	D1437	V1438	Y1439	T1440	D1441	Y1442	E1443	N1444	T1445	F1446	R1448	M1454	Q1455	L1456	H1457				
V1391	G1392	D1393	V1394	N1395	D1396	T1397	A1398	F1399	G1400	N1401	N1402	A1403	V1404	I1405	N1406	S1409	G1410	N1411	K1412	V1413	C1416	G1417	T1418	L1419	R1420	R1421	K1424	P1425	V1426	M1427	V1428	T1430	S1431	F1433	Q1432	R1434	N1435	G1436	D1437	V1438	Y1439	T1440	D1441	Y1442	E1443	N1444	T1445	F1446	R1448	M1454	Q1455	L1456	H1457				
V1180	F1181	R1250	T1251	V1257	P1258	L1259	T1260	F1261	R1262	F1263	T1264	V1265	H1266	P1267	E1268	G1269	F1270	V1271	A1272	P1273	I1274	E1205	I1206	T1207	N1208	P1209	P1212	T1215	V1216	R1291	V1292	F1293	F1294	V1299	P1300	F1301	D1302	T1303	P1304	L1305	F1309	D1310	G1311	G1312	G1313	E1314	I1315	V1316	N1317	A1318	Q1319	G1320	V1321	A1322	D1323	E1248	G1249
V1180	F1181	R1250	T1251	V1257	P1258	L1259	T1260	F1261	R1262	F1263	T1264	V1265	H1266	P1267	E1268	G1269	F1270	V1271	A1272	P1273	I1274	E1205	I1206	T1207	N1208	P1209	P1212	T1215	V1216	R1291	V1292	F1293	F1294	V1299	P1300	F1301	D1302	T1303	P1304	L1305	F1309	D1310	G1311	G1312	G1313	E1314	I1315	V1316	N1317	A1318	Q1319	G1320	V1321	A1322	D1323	E1248	G1249
I1095	K1096	F1097	L1098	L1099	R1100	D1101	L1102	P1191	D1104	G1105	K1106	E1107	V1110	P1111	V1112	I1113	E1114	V1115	F1116	I1120	K1121	A1123	T1124	D1125	E1126	E1127	P1128	A1135	K1141	I1142	S1143	Y1144	D1156	V1157	D1158	S1159	F1160	M1161	Q1162	L1163	I1164	Y1169	S1170	W1171	H1172	H1173	A1174	M1175	F1176	T1177	L1178	E1179					
K1026	P1027	V1028	L1029	F1030	V1031	P1032	A1033	E1036	K1044	D1045	S1046	L1047	G1048	Q1049	S1050	E1051	L1052	Y1057	Q1058	D1059	V1061	R1063	T1064	G1065	I1066	L1067	Q1068	A1070	A1071	A1072	A1073	K1074	T1075	E1076	K1077	L1078	I1079	D1080	E1081	P1082	I1083	K1084	D1085	L1086	D1088	G1089	L1090	H1091	N1092	D1093	H1094						
R888	S889	R890	R891	E894	K897	R898	R899	D900	Y901	I902	R903	K904	G905	L906	P907	S908	D909	F910	Q911	K912	V913	F915	G916	N918	G921	V924	D925	L926	E927	D928	M929	T930	Y931	A932	E933	V934	Y935	H936	R937	M938	L941	M942	Y943	V944	Y950	I951	D952	P953	S954	R955	K956						
A819	K820	E821	A822	H823	R824	S825	K826	Q827	A828	K829	Q830	A831	I832	V833	D834	A835	P836	G837	V838	D839	L840	Q841	W842	E844	N845	T846	Y847	T851	V854	T855	L856	V857	S859	E860	N861	G862	E863	P864	I865	H866	K867	L868	A869	T870	R871	Q872	F875	W876	K877	E878	K882	Y883					
H752	S753	F754	E755	D756	F757	I761	L762	L763	W764	Y765	I768	N773	I774	Y775	L776	L777	W778	A778	G779	S780	G781	F782	G783	G784	S785	E786	D787	Y788	T789	F790	Y791	L792	I793	G794	S795	W796	S797	T798	P803	P804	N805	P806	F807	D808	G809	C810	N811	S814	R815	N816	W817	I883					
L676	A606	G607	T609	G610	T611	T612	V613	P614	D615	W616	F617	V618	T621	N622	N623	Y626	H627	I628	A631	G632	G633	E634	V635	N637	A638	Q639	F640	M641	S646	K647	L648	E649	T652	P653	P654	G655	R656	N661	L662	L663	Y664	V665	M666	P667	R668	A669	M670	G671	W672	Q673	L674	P675					
N529	K532	D533	G534	V537	R538	V539	L541	L542	G543	A544	I545	N549	E551	V552	K555	D560	B561	A565	V566	N570	D571	V572	K574	P578	R579	W501	E502	T505	V506	F507	T511	H512	I513	F514	D515	V516	G517	F518	G519	V521	S522	G523	I524	V600	P601	P602	V603	W604	V605								
A462	S463	S464	L465	V466	L467	P468	V469	Y470	D471	T472	K473	T474	D477	L478	N480	A631	G632	G633	E634	V635	N637	A638	Q639	F640	M641	S646	K647	L648	E649	T652	P653	P654	G655	R656	N661	L662	L663	Y664	V665	M666	P667	R668	A669	M670	G671	W672	Q673	L674	P675								

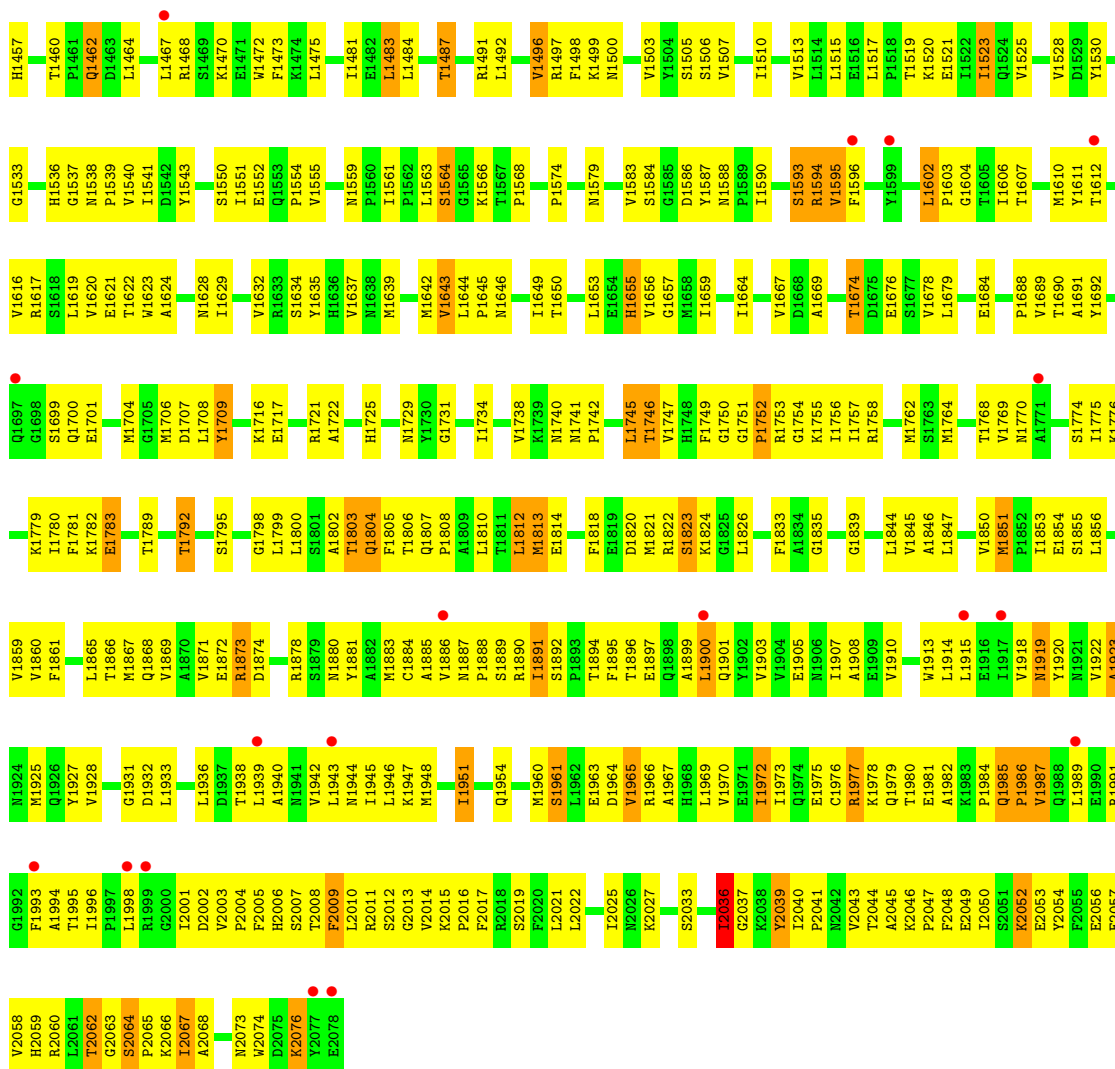


• Molecule 2: FATTY ACID SYNTHASE BETA SUBUNITS

Chain J:

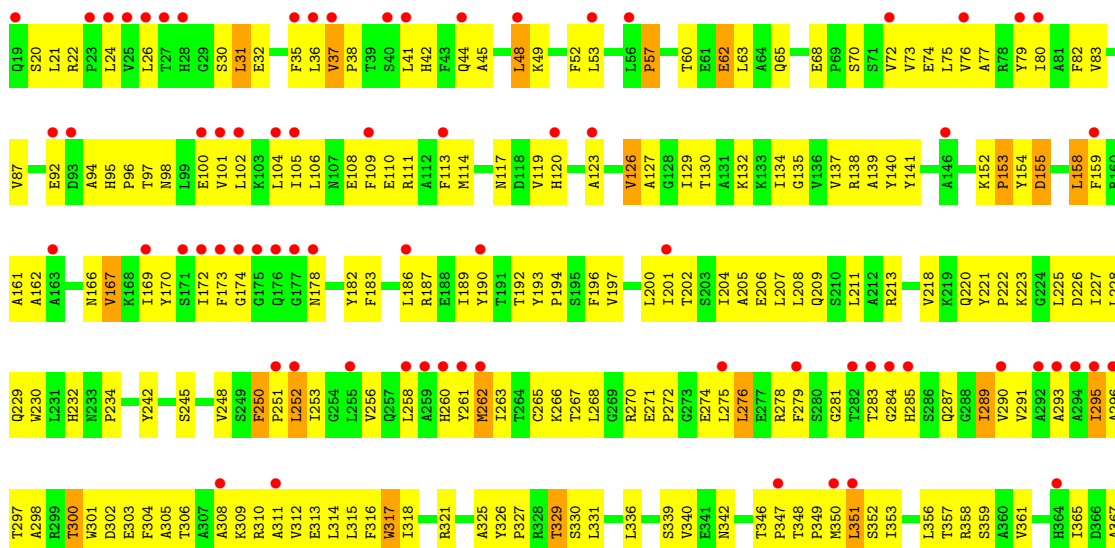


V1383	A1318	L1244	R1172	D1088	Q1021	P952	W876	G509	R747	Q673	V600	T528	P461	L382
Q1319	Q1319	T1245	H1173	G1089	R1022	P953	R877	C810	G748	I674	P601	N529	A462	V383
A1320	A1174	L1246	A1174	I1090	R1022	S954	E878	M811	G749	P675	P602	R530	S463	R387
D1323	M1175	E1247	M1175	H1091	K1026	L955	K882	S814	G750	L676	M504	K532	L465	N388
K1324	T1177	G1248	F1177	D1092	P1027	K956	R883	R815	H751	G678	V605	D533	I467	F389
R1250	L1178	G1249	T1178	H1094	P1029	T959	R888	M816	H752	G679	A606	G534	I468	V390
V1325	E1179	R1250	E1179	I1095	F1030	F962	R889	M817	S753	R679	G607	T535	P486	V391
V1328	V1180	V1257	V1180	K1096	V1031	P962	S889	T818	E755	V685	M608	G536	V469	T392
G1329	F1181	T1258	F1181	L1097	P1032	R963	R890	K820	D756	P686	T609	V537	V470	G393
L1395	L1098	L1259	L1098	L1099	A1033	R964	R891	K820	F757	I687	P610	P394	D471	P394
T1397	R1100	T1260	R1186	R1100	E1036	R965	E884	E821	H758	L690	T611	T472	T473	P395
Q1400	Y1103	F1261	Q1188	Y1103	Y1040	E967	E884	A822	G759	L690	T612	A542	K473	I396
I1401	D1104	Y1265	T1189	D1104	Y1040	E968	R897	H823	P760	S698	V613	G543	T474	S397
N1402	Y1103	H1266	N1190	Y1103	Y1040	R969	R898	T824	L761	S698	P614	G544	T474	S397
A1403	D1104	P1267	P1191	F1042	F1042	F970	R899	S825	L762	I699	W615	I545	D477	L398
V1404	E1107	K1192	L1192	K1043	K1043	T971	D900	K826	E700	D816	F617	N549	R478	G400
I1405	E1107	K1193	K1193	K1044	K1044	E974	Y901	A828	H764	V701	V618	T550	R479	L401
N1406	V1110	R1194	R1194	D1045	D1045	E975	Y901	A828	Y765	W703	V618	T550	R479	N402
G1410	V1110	L1195	L1195	D1046	D1046	G976	Y901	A828	I768	W703	T621	E551	L481	L403
K1411	F1112	F1196	F1196	V1112	V1112	Q976	Y901	A828	C771	Y705	M622	K555	D483	K409
F1342	I1113	A1197	A1197	L1047	L1047	P977	K905	I832	C771	Y705	M622	K555	D483	K409
F1343	I1113	A1197	A1197	L1047	L1047	P977	K905	I832	C771	Y705	M622	K555	D483	K409
A1344	E1114	P1198	P1198	Q1049	Q1049	S978	N906	V833	H772	Q707	N623	K555	D483	K409
P1345	Y1115	T1199	T1199	S1050	S1050	N979	N907	D834	H772	Q707	N623	K555	D483	K409
M1412	F1116	F1116	F1116	D1051	D1051	L980	R906	A835	I774	L708	H627	L558	I486	P411
V1413	F1116	F1116	F1116	D1051	D1051	L980	R906	A835	I774	L708	H627	L558	I486	P411
C1416	Y1203	M1278	Y1203	I1053	I1053	Q981	D909	P836	L776	G710	I628	F559	I487	L414
K1420	V1204	E1279	V1204	I1053	I1053	L986	F910	G837	L776	G710	I628	F559	I487	L414
G1421	T1207	G1280	T1207	L1121	L1121	P989	Q912	G842	L777	R712	A631	D560	P488	P415
K1424	N1208	N1208	N1208	K1122	K1122	P990	Y913	G842	L777	R712	A631	D560	P488	P415
P1425	P1209	P1209	P1209	A1123	A1123	P991	Y914	K843	L777	R712	A631	D560	P488	P415
V1426	L1285	L1285	L1285	T1124	T1124	A992	Y916	E944	L777	R712	A631	D560	P488	P415
M1427	F1288	F1288	F1288	D1125	D1125	A992	Y916	E944	L777	R712	A631	D560	P488	P415
Y1428	P1212	P1212	P1212	E1126	E1126	R995	R917	T846	L777	R712	A631	D560	P488	P415
Y1289	E1127	E1127	E1127	P1063	P1063	R995	N918	Y847	L777	R712	A631	D560	P488	P415
Y1290	P1128	P1128	P1128	T1064	T1064	L996	N918	Y847	L777	R712	A631	D560	P488	P415
R1291	T1215	T1215	T1215	G1065	G1065	L997	Y924	T851	L786	E786	K640	K574	N500	F428
V1292	V1216	V1216	V1216	I1066	I1066	L997	Y924	T851	L786	E786	K640	K574	N500	F428
W1293	I1217	I1217	I1217	L1067	L1067	Y1000	P925	V854	L788	Q726	I648	G577	E502	F432
F1294	S1218	S1218	S1218	Q1068	Q1068	P1001	E927	V854	L788	Q726	I648	G577	E502	F432
F1294	V1219	V1219	V1219	G1069	G1069	E1002	D928	T856	L788	Q726	I648	G577	E502	F432
K1297	R1220	R1220	R1220	P1070	P1070	A1003	N929	V857	L791	I728	I652	V681	F507	T436
E1298	Q1224	Q1224	Q1224	S1143	S1143	T1005	T930	L858	L792	N729	P653	K582	T511	A437
V1299	S1225	S1225	S1225	L1142	L1142	T1005	T930	L858	L792	N729	P653	K582	T511	A437
P1300	V1229	V1229	V1229	I1071	I1071	Q1006	Y931	S859	L793	I730	P654	K582	T511	A437
D1302	K1230	K1230	K1230	A1072	A1072	L1007	E932	S860	L793	I730	P654	K582	T511	A437
L1306	T1231	T1231	T1231	Y1075	Y1075	E933	Y934	M861	L793	I730	P654	K582	T511	A437
F1309	D1156	D1156	D1156	S1076	S1076	T1009	Y935	E862	L793	I730	P654	K582	T511	A437
D1310	V1157	V1157	V1157	K1077	K1077	A1010	R937	P864	L793	I730	P654	K582	T511	A437
G1311	D1158	D1158	D1158	Y1078	Y1078	Q1011	R937	P864	L793	I730	P654	K582	T511	A437
G1312	F1160	F1160	F1160	I1079	I1079	D1012	M938	I865	L793	I730	P654	K582	T511	A437
G1313	L1163	L1163	L1163	D1080	D1080	V1013	Q801	I866	L793	I730	P654	K582	T511	A437
R1443	I1164	I1164	I1164	E1081	E1081	Q1014	L941	L868	L793	I730	P654	K582	T511	A437
M1454	D1239	D1239	D1239	F1016	F1016	H1015	N942	A869	L793	I730	P654	K582	T511	A437
Q1455	N1240	N1240	N1240	L1017	L1017	L1017	Y944	R871	L793	I730	P654	K582	T511	A437
L1456	E1241	E1241	E1241	L1018	L1018	L1018	Y944	R871	L793	I730	P654	K582	T511	A437
M1382	I1242	I1242	I1242	L1019	L1019	L1019	Y944	R871	L793	I730	P654	K582	T511	A437
	Y1380	Y1380	Y1380	L1087	L1087	C1020	Y950	G872	L793	I730	P654	K582	T511	A437
	M1382	M1382	M1382	L1087	L1087	C1020	Y950	G872	L793	I730	P654	K582	T511	A437



● Molecule 2: FATTY ACID SYNTHASE BETA SUBUNITS

Chain K:



W1354	F1288	V1216	K1141	I1066	E925	T855	L792	V727	E649	K582	H512	S441	Q370
K1355	Y1289	I1217	K1141	L1067	L926	T856	T793	I728	K650	T883	I513	P442	H371
A1356	Y1290	S1218	S1142	Q1088	E927	H857	G794	H729	A651	S584	D515	Y443	L372
I1357	R1291	V1219	S1143	G1089	E928	L858	S795	T730	T652	G795	F516	A447	P373
T1358	P1292	R1220	L1146	V1071	M929	S859	S796	A731	P653	Q586	F517	H448	E374
K1359	W1293			E1070	T930	E860	S797	K732	P654	Q587	G518	D375	D376
P1360	F1294			A1072	Y931	H861	T798		G655	T588	P518		
I1361		Q1224	A1149	A1073	E932	G662	K799	P735	R656	F589	G519	I451	
F1362	V1299	S1225	P1150	K1074	E933	H862	F800	T736	V660	V590	G520	D454	H377
P1363	P1300	K1227	T1105	Q1075	E934	T865	G801	F737	D591	D455	S521	V455	
R1364	F1301	D1228	D1156	S1076	V935	R866	Y802	F738	N661	K594	S522	K378	Q379
K1365	D1302	V1229	D1157	K1077	H936	H866	P803	T739	T663	M594	G523	K458	I380
I1366		T1230	D1158	V1078	R937	K867	P804	I740	T664	R596	G524	K459	L382
	L1306	T1231	S1159	I1079	M938	L868	M805	L741	V665	L597	G525	L460	V383
D1369		V1232	F1160	D1080		A869	P806	Q742	N666	L598	V526	P461	N384
F1370	F1309	E1233		E1081	L941	T870	F807	W743		G599	T528	A462	A385
L1371	D1310	D1234	L1163	I1082	M942	G872	G808	T744		V600	G529	K463	S386
L1372	G1311	K1235	L1164	T1083	Y943	H873	C810	G746	M670	P601	R530	S464	A386
L1373	G1312	L1236	K1084	K1085	V944	E874	C811	R747	G671	R602	R531	S465	R387
V1374	R1313	V1237	Y1169	D1086	K945	L874	F812		H672	P603	K532	L466	N388
H1375	E1314	G1238	S1170	L1087	R946	T875	G813	G748	Q673	M604	D533	T467	F389
L1376	I1315	D1239	W1171	L1018	W950	H876	S814	G750	P675	V605	G534	P468	V390
S1377	V1316	H1240	R1172	D1088	R951	K877	R815	H751	L676	A606	T535	V469	T392
M1378	N1317	E1241	H1173	G1089	D952	E878	M816	H752		G507	G536	Y470	G393
G1379	A1318	I1242	A1174	I1090	P953		M817	S753	V685	M608	V537	D471	P394
Y1380	Q1319	A1243	M1175	H1091	S954	K882	T818	S754	P686	T609	L541	T472	P395
	A1320	T1244	T1176	N1092	L955	L883	A819	E755	P687	P610	K475	T474	L396
V1383	F1321	T1245	T1177	D1093	K956	D887	K820	T756		T611	G543		L397
P1384	A1322	L1246	T1178	H1094		R888	E821	F757	L690	T612	G544	D477	L401
	D1323	F1247	E1179	I1095	T959	K889	A822	H758	T691	G691	I545	R479	
P1388	F1324	E1248	V1180	K1096	F962	K890	H823	Q759	T692	P614	D546	E480	
L1389	H1325	G1249	F1181	P1097	R963	R891	T824	T760	G693	W615	D545	L481	R406
L1390	H1326	R1250		L1098	R964		K825	L762		F617	N549	D482	K409
V1391	A1327	T1251	H1185	L1099	R965	E894	S826	L763	E700	V618	E551	E484	A410
G1392	V1328		K1186	L1102	R966	K897	Q827	M764	V701		K555	D485	P411
D1393	G1329	V1257	Q1187	Y1103	E967	R898	K829	Y765		T621	K556	D486	L414
V1394	Q1330	P1258	Q1188	D1104	E968	R899	Q830			M622	L588	L487	D415
L1395	T1331	L1259	T1189	G1105	R969	D900	I832	N773	E704	N623	F589	P488	Q416
D1396	G1332	T1260	M1190	E1107	F970	Y901	V833	T774	T706	Y626	D560	E489	N417
T1397	E1333	F1261	K1191	K1106	T971	I902	D834	V775	Q707	I628	R561	L490	R418
	A1334		K1192	K1043	S972	X904	A835	L776	T708	E629	V566	V491	I419
Q1400	F1335	Y1265	K1193	D1045	Q976	K905	P836	A778	G710	A631	A565	R492	P420
L1401	F1336	H1266	R1194	S1046	P977	I906	G837	V777	L709	G632	A566	M493	K425
N1402	D1337	P1267	L1195	L1047	L979	D908	D839	G779	I711	G633	A567	D497	F428
A1403	R1338	E1268	F1196	L1047	L980	F910	D841	G781	H713	G634	A569	P498	
V1404	G1339	A1269	A1197	W1048	Q981	Q911	Q842	F782		Y635	V570	V499	F432
I1405	K1340	G1270	P1198	E1114	P977	K912	W843	G783	F716	A638	V571	N500	L433
	D1341	Y1271	T1199	S1050	S978	N914	N845	G784	K717	W501	V572	E502	P434
F1342	F1342	A1272	Y1115	E1051	P989	F915	T846	S785	P718	V573	K574		I435
F1343	F1343	P1273	F1116	D1052	L980	G916	Y847	E786	G719	M641	T505	T506	A437
A1344	A1344	R1274	R1200	D1052	Q981	R917	Y851	D787	S720	D843	V506	F507	P438
P1345	M1346	I1274	Y1203	I1053	L986	N919	T851	T788	A723	A644	V507		F439
T1346	T1347	R1275	V1204	Y1057	P987	Q912	W843	G783		I648	V578		H440
	M1278		T1207	G1058	E988	V913	E844	G784					
F1348	E1279		N1208	Q1059	P989	N914	N845	S785					
A1349	G1280		P1209	F915	Y900	G916	Y847	E786					
I1350	R1281		P1212	Y1061	P991	R917		D787					
V1351	K1420		P1212	Y1061	A992	N919		T788					
R1421		K1286	T1215	C1065	R995	Y924		V790					
		E1287						Y791					

P1388	V1316	N1240	Y1169	D1088	G1020	I951	E878	G748	G671	V600	L527	P461	L382
L1389	N1317	E1241	S1170	G1089	Q1021	D952	K852	G749	W672	P601	L527	A462	V383
K1390	A1318	I1242	W1171	I1090	R1022	P953	K853	G750	Q673	P602	N529	S463	R387
G1392	Q1319	A1243	R1172	N1091	R1023	S954	M816	G751	L674	V603	N529	S464	K388
D1393	A1320	L1244	H1173	N1092	K956	K955	M817	H752	P675	N604	R530	L465	F389
V1394	F1324	T1245	A1174	D1093	K1026	K956	T818	H753	L676	V605	N531	V466	V390
L1395	F1324	L1246	M1175	H1094	P1027	K956	A819	H754	L676	A606	K532	L467	V391
D1396	T1331	F1247	F1176	I1095	V1028	T959	K890	H755	V685	G607	D533	P468	T392
T1397	T1331	E1248	T1177	K1096	P1029	F962	R891	H756	P686	M608	T535	V469	T392
A1400	A1334	R1249	E1178	F1097	V1030	F962	A822	H757	L687	P610	T535	D471	P394
I1401	F1335	G1250	L1179	N1098	F1031	R964	H823	H758	L690	T612	G536	D470	P394
N1402	V1336	T1251	V1180	L1099	P1032	R965	H824	Q759	V685	T611	G537	T472	P395
N1402	D1337	V1257	F1181	R1100	A1033	V966	S825	P760	S898	T612	V637	T473	T396
A1403	R1388	V1258	R1186	Y1103	E1036	E967	K898	P761	S898	T613	I540	T474	S397
V1404	L1258	P1259	F1187	D1104	E1036	E967	R899	L762	Q475	P614	L541	Q475	L398
I1405	P1345	L1260	Q1188	G1105	W1041	E968	D900	L763	Q476	N615	A542	Q476	V399
N1406	D1340	T1261	T1189	K1106	W1041	R969	Y901	M764	V701	D616	G543	D477	G400
S1409	F1342	R1262	N1190	E1107	K1044	T971	I903	M765	A702	V618	N549	L478	L401
G1410	F1343	T1263	P1191	Y1110	D1045	E974	K904	T768	N703	V618	T550	R479	N402
K1411	P1345	L1264	L1192	P1111	S1046	E974	K905	T768	E704	V618	T550	E480	N403
M1412	M1346	H1266	R1194	V1112	L1047	P977	L906	N773	Y705	T621	T551	L481	R406
V1413	P1267	H1266	R1194	V1112	L1047	P977	L906	N773	Y705	T621	T551	L481	R406
G1416	D1347	L1195	T1189	K1106	W1041	E968	D900	L763	Q476	N623	G553	D483	K409
G1416	F1348	E1268	F1196	Y1115	E1051	L980	Y902	M766	V701	D616	G543	D477	G400
G1416	A1349	A1269	A1197	Y1115	E1051	L980	I903	M766	V701	D616	G543	D477	G400
K1420	V1350	G1270	P1198	F1116	D1052	Q951	I903	M766	V701	D616	G543	D477	G400
R1421	V1352	Y1271	T1199	F1116	D1052	Q951	I903	M766	V701	D616	G543	D477	G400
K1424	G1353	P1273	R1200	Y1120	Y1067	L986	K904	T768	E704	V618	T550	R479	N402
P1425	V1354	L1274	Y1203	L1120	Y1067	L986	K904	T768	E704	V618	T550	R479	N402
V1426	K1356	R1275	V1204	K1122	G1058	E988	F915	G782	F716	G632	A565	E489	L414
M1427	T1357	M1278	T1207	A1123	Q1059	P989	G916	G783	F717	G633	A565	E489	L414
V1429	T1358	E1279	D1125	A1123	D1060	Y990	N845	G784	F718	G633	A565	E489	L414
V1430	K1359	G1280	E1126	A1123	Y1061	P991	N918	G785	F719	G635	A569	E491	L490
S1431	P1360	R1281	E1127	A1127	G1062	A992	N918	G786	S720	Y635	A569	E491	L490
Q1432	F1362	P1212	P1128	P1128	T1064	R955	V924	G787	D571	A638	A572	D497	K425
L1434	Y1289	T1215	L1133	L1133	L1066	I996	L926	G788	A723	A641	A572	D497	K425
Y1435	Y1290	I1216	L1134	L1134	L1066	I996	L926	G788	A723	A641	A572	D497	K425
R1436	R1291	V1217	A1135	A1135	Q1068	Y1000	D928	G789	T724	M641	A572	D497	K425
G1437	V1292	S1218	V1218	V1218	G1069	P1001	M929	G790	Q725	S646	A572	D497	K425
V1438	V1293	V1219	K1141	K1141	P1070	E1002	Y931	G791	T728	R647	A572	D497	K425
Y1439	F1294	R1220	I1142	I1142	V1071	A1003	A932	G792	T730	E649	A572	D497	K425
D1441	Q1224	S1225	S1143	S1143	A1072	S1004	E933	G793	A731	P653	A572	D497	K425
Y1442	V1299	S1225	L1146	L1146	Y1075	Q1006	V934	G794	K732	P654	A572	D497	K425
E1443	F1301	D1302	D1156	D1156	K1077	I1008	R937	G795	T735	G655	A572	D497	K425
N1444	D1302	V1229	V1157	V1157	K1077	I1008	R937	G796	T735	G655	A572	D497	K425
L1445	L1305	K1230	D1158	D1158	V1078	A1010	M938	G797	T736	B656	A572	D497	K425
F1446	F1309	V1232	S1159	S1159	D1080	D1012	L941	G798	F737	T588	A572	D497	K425
R1448	D1310	I1235	F1160	F1160	E1081	V1013	M942	G799	F738	T588	A572	D497	K425
M1454	G1311	L1236	M1161	M1161	P1082	Q1014	V944	G800	P738	T588	A572	D497	K425
Q1455	G1312	L1237	I1164	I1164	I1083	H1015	K945	G801	F739	T588	A572	D497	K425
L1456	E1313	V1237	M1167	M1167	K1084	F1016	H946	G802	P739	T588	A572	D497	K425
H1457	I1315	D1239	S1168	S1168	L1087	L1018	E947	G803	P739	T588	A572	D497	K425

A2045	E1981	L1915	D1849	G1774	Y1892	V1616	G1537	T1460
K2046	A1982	E1916	V1850	S1774	Q1700	R1617	M1538	P1461
P2047	K1983	I1917	M1851	I1775	K1776		P1539	Q1462
F2048	P1984	V1918	P1852	K1779	M1704	V1620	V1540	D1463
E2049	Q1985	N1919	I1853	I1780	G1705	T1622	I1541	L1464
I2050	P1986	Y1920	E1854	I1780	M1706	M1623	A1465	L1466
S2051	V1987	N1921	S1855	F1761	D1707	A1624	D1542	V1467
K2052	Q1988	V1922	L1856	K1782	L1708		Y1543	L1468
E2053	L1989	A1923	V1857	E1783	Y1709	N1627	S1550	R1468
F2054	E1990	N1924	S1858	K1789	K1716	N1628	I1551	S1469
Y2055	R1991	M1925	V1860	T1792	E1717	I1629	E1552	W1472
E2056	G1992	Q1926	F1861			V1632	Q1553	F1473
E2057	F1993	V1927	L1866	S1795	R1721	A1633	P1564	K1474
V2058	A1994	V1928	L1866		A1722	S1634	V1565	L1475
H2059	T1995	G1931	M1867	G1798	D1723	Y1635	P1560	I1481
R2060	I1996	D1932	Q1868	L1799	H1724	H1636	P1562	E1482
L2061	P1997	L1933	V1869	L1800	H1725	V1637	L1563	L1483
G2063	L1998	R1934	A1870	S1801	F1726	M1638	S1564	L1484
S2064	I2001	A1935	V1871	T1802	R1727	M1639	G1565	T1487
P2065	D2002	R1873	E1872	Q1804	E1728	M1642	K1566	R1491
K2066	V2003	D1936	R1873	F1805	N1729	V1643	T1567	L1492
I2067	P2004	G1937	D1874	T1806	I1734	L1644	P1568	
A2068	F2005	L1938	L1874	Q1807	I1735	P1645		
H2069	H2006	L1939	R1878	Q1807		M1646	P1574	
I2070	S2007	A1940	S1879	N1880	V1738			
	T2008	L1943	Y1881	A1809	K1739	I1649	V1496	
N2073	F2009	N1944	Y1881	L1810	H1740	T1650	R1497	
W2074	R2010	I1945	A1882	T1811	L1741	E1578	F1498	
D2075	R2011	L1946	M1883	L1812	P1742	G1585	K1499	
K2076	S2012	K1947	C1884	L1812	E1744	V1656	N1500	
Y2077	G2013	M1948	A1885	E1814	L1745	G1657	S1505	
E2078	V2014	Q1950	N1887	F1818	T1746	M1658	S1506	
	K2015	I1951	S1889	E1819		I1659	V1507	
P2016	P2016	Q1949	R1890	D1820	F1749	R1662		
P2017	R2017	I1951	T1891	M1821	G1750	I1590	I1510	
R2018	S2019	Q1954		R1822	G1751	H1591	V1513	
F2020	F2020	M1960	T1894	S1823	P1752	V1592	L1514	
L2021	L2021	S1961	F1895	K1824	R1753	S1593	L1515	
L2022		E1963	T1896	G1825	K1755	R1594	E1516	
I2025	I2025	D1964	E1897	L1826	L1756	V1596	L1517	
W2026	W2026	V1965	Q1898	R1829	I1757	F1597	T1518	
K2027	K2027	A1966	A1899		R1758		K1520	
I2030	I2030	R1966	L1900	F1833	Q1759	D1674	E1521	
		H1968	Q1901	A1834	M1760	E1676	I1522	
S2033	S2033	L1969	Y1902	G1835	Y1761	S1677	I1523	
K2034	K2034	V1970	V1903		M1762	V1678	Q1524	
L2035	L2035	E1971	V1904	G1839	S1763	L1679	V1525	
G2037	G2037	I1972	E1905	E1840	M1764		T1606	
K2038	K2038	Q1974	L1907	Y1841	T1765	E1684	T1607	
Y2039	Y2039	E1975	A1908	L1844	F1766		V1528	
I2040	I2040	C1976	F1909	V1845	E1767	P1688	D1529	
P2041	P2041	R1977	V1910	L1846	T1768	V1689	Y1530	
N2042	N2042	K1978	Q1979	L1847	T1690	T1612		
V2043	V2043	T1980	L1914	A1848	M1770		G1533	

4 Data and refinement statistics

Property	Value	Source
Space group	P 1 21 1	Depositor
Cell constants a, b, c, α , β , γ	215.78Å 412.67Å 220.90Å 90.00° 111.57° 90.00°	Depositor
Resolution (Å)	12.00 – 3.10 96.48 – 3.10	Depositor EDS
% Data completeness (in resolution range)	99.7 (12.00-3.10) 92.6 (96.48-3.10)	Depositor EDS
R_{merge}	0.24	Depositor
R_{sym}	(Not available)	Depositor
$\langle I/\sigma(I) \rangle$ ¹	1.89 (at 3.13Å)	Xtriage
Refinement program	PHENIX.REFINE	Depositor
R, R_{free}	0.270 , 0.300 0.254 , (Not available)	Depositor DCC
R_{free} test set	No test flags present.	DCC
Wilson B-factor (Å ²)	66.0	Xtriage
Anisotropy	0.182	Xtriage
Bulk solvent k_{sol} (e/Å ³), B_{sol} (Å ²)	0.33 , 59.1	EDS
Estimated twinning fraction	0.078 for l,-k,h	Xtriage
L-test for twinning	$\langle L \rangle = 0.39$, $\langle L^2 \rangle = 0.21$	Xtriage
Outliers	0 of 645017 reflections	Xtriage
F_o, F_c correlation	0.89	EDS
Total number of atoms	167247	wwPDB-VP
Average B, all atoms (Å ²)	75.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 1.40% of the height of the origin peak. No significant pseudotranslation is detected.*

¹Intensities estimated from amplitudes.

5 Model quality

5.1 Standard geometry

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

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	0.43	0/11744	0.60	1/15873 (0.0%)
1	B	0.43	0/11801	0.60	1/15949 (0.0%)
1	C	0.44	0/11785	0.59	0/15928
1	D	0.43	0/11824	0.60	0/15980
1	E	0.42	0/11736	0.59	0/15863
1	F	0.44	0/11776	0.60	5/15916 (0.0%)
2	G	0.36	0/16573	0.53	0/22516
2	H	0.35	0/16573	0.53	0/22516
2	I	0.35	0/16573	0.53	0/22516
2	J	0.36	0/16573	0.54	0/22516
2	K	0.39	0/16573	0.55	0/22516
2	L	0.36	0/16573	0.54	0/22516
All	All	0.39	0/170104	0.56	7/230605 (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 (7) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	F	585	MET	N-CA-C	9.44	136.48	111.00
1	B	608	LYS	N-CA-C	-8.94	86.85	111.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	F	614	PHE	N-CA-C	6.04	127.30	111.00
1	F	613	PRO	CA-C-N	5.57	129.46	117.20
1	A	579	MET	N-CA-C	5.39	125.55	111.00
1	F	613	PRO	C-N-CA	5.04	134.30	121.70
1	F	585	MET	CB-CA-C	-5.02	100.36	110.40

There are no chirality outliers.

All (2) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
1	A	578	ALA	Peptide
1	F	613	PRO	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	746	1
1	B	11571	0	11529	708	1
1	C	11555	0	11507	717	0
1	D	11593	0	11552	725	0
1	E	11506	0	11467	754	0
1	F	11546	0	11499	701	0
2	G	16200	0	16081	1290	1
2	H	16200	0	16081	1326	1
2	I	16200	0	16081	1344	0
2	J	16200	0	16081	1326	0
2	K	16200	0	16081	1391	0
2	L	16200	0	16081	1366	0
3	A	48	0	25	5	0
3	B	48	0	25	5	0
3	C	48	0	25	4	0
3	D	48	0	25	6	0
3	E	48	0	25	4	0
3	F	48	0	25	4	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
3	G	48	0	25	4	0
3	H	48	0	25	5	0
3	I	48	0	25	4	0
3	J	48	0	25	4	0
3	K	48	0	25	4	0
3	L	48	0	25	4	0
4	G	31	0	19	17	0
4	H	31	0	19	16	0
4	I	31	0	19	16	0
4	J	31	0	19	15	0
4	K	31	0	19	15	0
4	L	31	0	19	15	0
All	All	167247	0	165930	11767	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 35.

All (11767) close contacts within the same asymmetric unit are listed below.

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:D:542:GLN:HB3	1:D:579:MET:HE2	1.25	1.17
1:F:1443:LEU:HD21	1:F:1470:ARG:HB3	1.18	1.17
1:B:1268:SER:HB3	1:D:1389:ILE:HG13	1.23	1.16
1:F:1504:ARG:HH11	1:F:1504:ARG:HG3	1.04	1.15
1:D:1504:ARG:HH11	1:D:1504:ARG:HG3	1.02	1.15
1:C:1443:LEU:HD21	1:C:1470:ARG:HB3	1.18	1.14
1:E:1278:GLY:H	1:E:1282:THR:HG22	1.13	1.14
1:B:1443:LEU:HD21	1:B:1470:ARG:HB3	1.16	1.13
2:H:1594:ARG:HH11	2:H:1594:ARG:HG2	1.13	1.12
1:B:397:ARG:HH11	1:B:397:ARG:HG2	1.14	1.12
1:B:1504:ARG:HH11	1:B:1504:ARG:HG3	1.03	1.12
1:A:1443:LEU:HD21	1:A:1470:ARG:HB3	1.14	1.11
2:L:1594:ARG:HG2	2:L:1594:ARG:HH11	1.15	1.11
1:A:1278:GLY:H	1:A:1282:THR:HG22	1.11	1.11
1:E:1443:LEU:HD21	1:E:1470:ARG:HB3	1.14	1.11
2:I:1594:ARG:HH11	2:I:1594:ARG:HG2	1.08	1.11
1:A:1389:ILE:HG13	1:E:1268:SER:HB3	1.29	1.10
1:B:1389:ILE:HG13	1:D:1268:SER:HB3	1.27	1.10
2:J:1594:ARG:HG2	2:J:1594:ARG:HH11	1.09	1.10
1:C:1268:SER:HB3	1:F:1389:ILE:HG13	1.29	1.10
1:E:1504:ARG:HG3	1:E:1504:ARG:HH11	1.06	1.10
1:D:397:ARG:HG2	1:D:397:ARG:HH11	1.13	1.09
1:E:397:ARG:HG2	1:E:397:ARG:HH11	1.15	1.09

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:1504:ARG:HH11	1:A:1504:ARG:HG3	1.04	1.09
1:C:1389:ILE:HG13	1:F:1268:SER:HB3	1.28	1.09
1:C:1278:GLY:H	1:C:1282:THR:HG22	1.11	1.08
1:A:1268:SER:HB3	1:E:1389:ILE:HG13	1.35	1.08
1:D:1342:ARG:NH1	1:D:1347:THR:HB	1.68	1.08
1:F:397:ARG:HG2	1:F:397:ARG:HH11	1.16	1.08
1:F:1278:GLY:H	1:F:1282:THR:HG22	1.15	1.08
1:D:1443:LEU:HD21	1:D:1470:ARG:HB3	1.16	1.08
1:C:397:ARG:HH11	1:C:397:ARG:HG2	1.14	1.08
2:H:374:GLU:HA	2:H:377:HIS:CD2	1.89	1.07
1:B:427:ARG:HH12	1:B:492:ILE:HG23	1.18	1.07
1:B:1342:ARG:NH1	1:B:1347:THR:HB	1.69	1.07
2:I:610:PRO:HD2	4:I:2101:FMN:H6	1.35	1.07
1:C:1342:ARG:NH1	1:C:1347:THR:HB	1.68	1.06
2:K:1594:ARG:HG2	2:K:1594:ARG:HH11	1.18	1.06
2:G:511:THR:HG22	2:G:512:HIS:CD2	1.89	1.06
2:K:1194:ARG:HG3	2:K:1194:ARG:HH11	0.90	1.06
1:F:427:ARG:HH12	1:F:492:ILE:HG23	1.15	1.06
2:L:374:GLU:HA	2:L:377:HIS:CD2	1.90	1.06
2:H:846:THR:HG21	2:H:866:HIS:CD2	1.90	1.06
2:K:846:THR:HG21	2:K:866:HIS:CD2	1.90	1.06
2:I:511:THR:HG22	2:I:512:HIS:CD2	1.89	1.06
1:C:1504:ARG:HG3	1:C:1504:ARG:HH11	0.99	1.06
2:L:511:THR:HG22	2:L:512:HIS:CD2	1.91	1.06
1:A:397:ARG:HH11	1:A:397:ARG:HG2	1.16	1.06
1:E:1342:ARG:NH1	1:E:1347:THR:HB	1.71	1.05
2:H:511:THR:HG22	2:H:512:HIS:CD2	1.91	1.05
2:I:374:GLU:HA	2:I:377:HIS:CD2	1.90	1.05
1:F:1342:ARG:NH1	1:F:1347:THR:HB	1.69	1.05
1:E:965:TYR:CZ	1:E:1199:LEU:HD22	1.91	1.05
2:I:1194:ARG:HG3	2:I:1194:ARG:HH11	0.94	1.05
1:E:557:ARG:HH11	1:E:557:ARG:HG3	1.19	1.05
2:J:1194:ARG:HH11	2:J:1194:ARG:HG3	0.89	1.05
2:J:374:GLU:HA	2:J:377:HIS:CD2	1.92	1.05
1:A:1342:ARG:NH1	1:A:1347:THR:HB	1.71	1.05
2:L:846:THR:HG21	2:L:866:HIS:CD2	1.92	1.05
1:B:1278:GLY:H	1:B:1282:THR:HG22	1.15	1.05
1:C:365:GLN:HG3	1:D:365:GLN:HG3	1.36	1.05
2:K:610:PRO:HD2	4:K:2101:FMN:H6	1.36	1.04
2:H:610:PRO:HD2	4:H:2101:FMN:H6	1.36	1.04
2:L:1194:ARG:HG3	2:L:1194:ARG:HH11	0.93	1.04
1:B:1148:LEU:HD13	1:D:1148:LEU:HD13	1.39	1.04

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:G:1594:ARG:HH11	2:G:1594:ARG:HG2	1.15	1.04
2:J:511:THR:HG22	2:J:512:HIS:CD2	1.93	1.04
2:G:846:THR:HG21	2:G:866:HIS:CD2	1.92	1.04
2:K:374:GLU:HA	2:K:377:HIS:CD2	1.91	1.04
1:D:1702:ARG:HH11	1:D:1702:ARG:CG	1.69	1.04
2:H:1194:ARG:HH11	2:H:1194:ARG:HG3	0.93	1.04
2:L:595:SER:HB3	2:L:602:PRO:HG3	1.39	1.04
2:J:610:PRO:HD2	4:J:2101:FMN:H6	1.36	1.03
1:C:1702:ARG:HH11	1:C:1702:ARG:CG	1.70	1.03
2:H:2052:LYS:HD3	2:H:2074:TRP:NE1	1.72	1.03
1:A:557:ARG:HG3	1:A:557:ARG:HH11	1.21	1.03
2:L:610:PRO:HD2	4:L:2101:FMN:H6	1.35	1.03
1:B:1702:ARG:CG	1:B:1702:ARG:HH11	1.69	1.03
1:A:365:GLN:HG3	1:F:365:GLN:HG3	1.39	1.03
2:J:2052:LYS:HD3	2:J:2074:TRP:NE1	1.73	1.03
1:B:535:TYR:OH	1:B:630:LYS:HE3	1.58	1.03
2:L:2052:LYS:HD3	2:L:2074:TRP:NE1	1.73	1.02
1:D:1278:GLY:H	1:D:1282:THR:HG22	1.23	1.02
2:J:846:THR:HG21	2:J:866:HIS:CD2	1.94	1.02
2:L:1115:TYR:HB3	2:L:1267:PRO:HB3	1.38	1.02
1:D:557:ARG:HG3	1:D:557:ARG:HH11	1.19	1.02
2:G:374:GLU:HA	2:G:377:HIS:CD2	1.93	1.02
1:E:427:ARG:HG3	1:E:427:ARG:HH11	1.21	1.02
1:B:1499:ARG:HD3	1:D:1476:ARG:HH12	1.19	1.02
2:J:1194:ARG:NH1	2:J:1194:ARG:HG3	1.68	1.02
2:I:846:THR:HG21	2:I:866:HIS:CD2	1.94	1.02
1:E:1702:ARG:HH11	1:E:1702:ARG:CG	1.72	1.01
2:K:685:VAL:HG23	2:K:1186:ARG:HH12	1.17	1.01
1:F:427:ARG:HG3	1:F:427:ARG:HH11	1.21	1.01
1:B:365:GLN:HG3	1:E:365:GLN:HG3	1.42	1.01
1:D:427:ARG:HH11	1:D:427:ARG:HG3	1.24	1.01
2:L:917:ARG:HH11	2:L:917:ARG:CG	1.74	1.01
2:G:1194:ARG:HG3	2:G:1194:ARG:HH11	0.89	1.01
2:G:1194:ARG:HG3	2:G:1194:ARG:NH1	1.67	1.01
2:I:2052:LYS:HD3	2:I:2074:TRP:NE1	1.75	1.01
2:G:2052:LYS:HD3	2:G:2074:TRP:NE1	1.76	1.01
1:F:1079:ARG:HH11	1:F:1079:ARG:HG2	1.26	1.01
2:K:1200:ARG:H	2:K:1200:ARG:HD3	1.25	1.01
1:B:427:ARG:HH11	1:B:427:ARG:HG3	1.23	1.01
1:E:1672:GLY:HA3	1:E:1678:LEU:HD23	1.42	1.01
2:J:595:SER:HB3	2:J:602:PRO:HG3	1.42	1.01
2:K:2052:LYS:HD3	2:K:2074:TRP:NE1	1.76	1.01

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:G:752:HIS:HE1	2:G:847:TYR:HE2	1.04	1.00
1:A:1672:GLY:HA3	1:A:1678:LEU:HD23	1.41	1.00
2:G:610:PRO:HD2	4:G:2101:FMN:H6	1.38	1.00
2:G:595:SER:HB3	2:G:602:PRO:HG3	1.39	1.00
1:A:1476:ARG:HH12	1:E:1499:ARG:HD3	1.26	1.00
2:L:1200:ARG:H	2:L:1200:ARG:HD3	1.26	1.00
1:F:1702:ARG:HH11	1:F:1702:ARG:CG	1.74	1.00
1:A:427:ARG:HG3	1:A:427:ARG:HH11	1.25	1.00
2:H:917:ARG:HH11	2:H:917:ARG:CG	1.75	1.00
2:I:917:ARG:CG	2:I:917:ARG:HH11	1.75	1.00
2:J:752:HIS:HE1	2:J:847:TYR:HE2	1.07	1.00
2:I:595:SER:HB3	2:I:602:PRO:HG3	1.43	1.00
2:K:1194:ARG:HG3	2:K:1194:ARG:NH1	1.69	1.00
1:D:527:ALA:HB2	1:D:637:LEU:HD22	1.42	1.00
1:C:1504:ARG:HH11	1:C:1504:ARG:CG	1.75	1.00
1:D:1079:ARG:HG2	1:D:1079:ARG:HH11	1.26	1.00
2:H:595:SER:HB3	2:H:602:PRO:HG3	1.42	0.99
1:F:397:ARG:HH11	1:F:397:ARG:CG	1.75	0.99
2:K:595:SER:HB3	2:K:602:PRO:HG3	1.40	0.99
2:H:1194:ARG:NH1	2:H:1194:ARG:HG3	1.72	0.98
2:J:1610:MET:HA	2:J:1610:MET:HE2	1.43	0.98
2:K:511:THR:HG22	2:K:512:HIS:CD2	1.97	0.98
2:J:1200:ARG:HD3	2:J:1200:ARG:H	1.28	0.98
2:G:2033:SER:HA	2:G:2036:ILE:HG13	1.46	0.98
1:A:1702:ARG:HH11	1:A:1702:ARG:CG	1.75	0.98
1:E:989:ASN:H	1:E:1491:ASN:HD21	1.10	0.98
2:L:917:ARG:HG3	2:L:917:ARG:HH11	1.29	0.98
1:E:998:GLY:HA3	1:E:1361:VAL:HG13	1.43	0.97
1:B:397:ARG:HH11	1:B:397:ARG:CG	1.77	0.97
1:C:427:ARG:HG3	1:C:427:ARG:HH11	1.26	0.97
2:I:1200:ARG:HD3	2:I:1200:ARG:H	1.28	0.97
2:H:2033:SER:HA	2:H:2036:ILE:HG13	1.47	0.97
1:C:397:ARG:HH11	1:C:397:ARG:CG	1.77	0.97
2:K:917:ARG:HH11	2:K:917:ARG:CG	1.77	0.97
1:D:406:ALA:HA	1:D:439:ARG:HH11	1.30	0.97
1:B:1079:ARG:HG2	1:B:1079:ARG:HH11	1.30	0.97
2:L:752:HIS:HE1	2:L:847:TYR:HE2	1.06	0.97
1:F:1504:ARG:HH11	1:F:1504:ARG:CG	1.78	0.96
1:B:989:ASN:H	1:B:1491:ASN:HD21	1.07	0.96
2:G:1200:ARG:HD3	2:G:1200:ARG:H	1.28	0.96
1:F:1703:VAL:HG11	1:F:1711:LEU:HB3	1.43	0.96
1:E:532:ILE:CG2	1:E:907:PHE:HB2	1.95	0.96

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:K:846:THR:HG21	2:K:866:HIS:HD2	1.28	0.96
2:I:1048:TRP:CE2	2:I:1049:GLN:HG2	2.00	0.96
2:H:1200:ARG:H	2:H:1200:ARG:HD3	1.28	0.96
1:A:998:GLY:HA3	1:A:1361:VAL:HG13	1.45	0.96
2:L:1637:VAL:HG11	2:L:1679:LEU:HD13	1.48	0.96
2:I:2033:SER:HA	2:I:2036:ILE:HG13	1.46	0.96
1:A:1278:GLY:N	1:A:1282:THR:HG22	1.81	0.96
2:I:917:ARG:HG3	2:I:917:ARG:HH11	1.28	0.96
1:C:881:LEU:HA	1:C:884:MET:HG3	1.47	0.96
1:E:397:ARG:HH11	1:E:397:ARG:CG	1.79	0.95
2:L:1610:MET:HE2	2:L:1610:MET:HA	1.47	0.95
1:D:998:GLY:HA3	1:D:1361:VAL:HG13	1.46	0.95
1:A:1079:ARG:HH11	1:A:1079:ARG:HG2	1.29	0.95
2:L:1048:TRP:CE2	2:L:1049:GLN:HG2	2.01	0.95
1:A:1504:ARG:HH11	1:A:1504:ARG:CG	1.79	0.95
2:G:750:GLY:HA2	2:G:865:ILE:HG23	1.47	0.95
2:K:501:TRP:HE1	2:K:528:THR:HG22	1.28	0.95
2:G:917:ARG:HH11	2:G:917:ARG:CG	1.78	0.95
2:J:917:ARG:CG	2:J:917:ARG:HH11	1.79	0.95
2:J:1008:ILE:HD12	2:J:1013:VAL:HG22	1.48	0.95
1:A:397:ARG:HH11	1:A:397:ARG:CG	1.80	0.95
1:C:427:ARG:HH12	1:C:492:ILE:HG23	1.30	0.95
1:C:1079:ARG:HG2	1:C:1079:ARG:HH11	1.31	0.95
1:B:998:GLY:HA3	1:B:1361:VAL:HG13	1.44	0.95
2:J:1868:GLN:HG2	2:J:1873:ARG:NH2	1.81	0.95
2:J:1048:TRP:CE2	2:J:1049:GLN:HG2	2.02	0.95
2:J:2033:SER:HA	2:J:2036:ILE:HG13	1.48	0.95
1:E:1504:ARG:CG	1:E:1504:ARG:HH11	1.80	0.94
2:I:501:TRP:HE1	2:I:528:THR:HG22	1.32	0.94
2:K:582:LYS:HB2	2:K:1112:VAL:HG22	1.45	0.94
1:C:1278:GLY:N	1:C:1282:THR:HG22	1.81	0.94
2:L:846:THR:HG21	2:L:866:HIS:HD2	1.30	0.94
2:L:158:LEU:HA	2:L:566:VAL:HG21	1.47	0.94
1:F:1663:LYS:HG2	2:L:1007:LEU:HD11	1.49	0.94
1:A:1148:LEU:HD13	1:E:1148:LEU:HD13	1.48	0.94
2:K:1769:VAL:HG22	2:K:1775:ILE:HA	1.49	0.94
1:D:397:ARG:CG	1:D:397:ARG:HH11	1.78	0.94
1:D:427:ARG:HH12	1:D:492:ILE:HG23	1.29	0.94
1:D:1504:ARG:CG	1:D:1504:ARG:HH11	1.78	0.94
2:H:752:HIS:HE1	2:H:847:TYR:HE2	1.07	0.94
2:K:2033:SER:HA	2:K:2036:ILE:HG13	1.46	0.94
2:K:1610:MET:HE2	2:K:1610:MET:HA	1.48	0.94

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:K:917:ARG:HH11	2:K:917:ARG:HG3	1.32	0.94
1:E:570:TYR:O	1:E:574:ILE:HG13	1.66	0.94
2:L:2033:SER:HA	2:L:2036:ILE:HG13	1.47	0.94
1:A:989:ASN:H	1:A:1491:ASN:HD21	1.11	0.93
2:L:1180:VAL:HG11	2:L:1187:PHE:CD2	2.04	0.93
1:C:612:ILE:HG23	1:C:628:TYR:CD2	2.04	0.93
1:B:586:GLN:O	1:E:538:ARG:NH2	2.00	0.93
1:E:406:ALA:HA	1:E:439:ARG:HH11	1.31	0.93
2:H:1048:TRP:CE2	2:H:1049:GLN:HG2	2.02	0.93
2:H:501:TRP:HE1	2:H:528:THR:HG22	1.34	0.93
1:B:824:LEU:HB3	1:B:839:ILE:HD13	1.50	0.93
2:G:938:MET:HB3	2:G:959:THR:HG22	1.51	0.93
1:A:406:ALA:HA	1:A:439:ARG:HH11	1.32	0.93
2:G:846:THR:HG21	2:G:866:HIS:HD2	1.31	0.93
1:F:998:GLY:HA3	1:F:1361:VAL:HG13	1.47	0.93
2:L:501:TRP:HE1	2:L:528:THR:HG22	1.30	0.93
2:H:750:GLY:HA2	2:H:865:ILE:HG23	1.48	0.93
1:B:406:ALA:HA	1:B:439:ARG:HH11	1.32	0.93
2:H:1008:ILE:HD12	2:H:1013:VAL:HG22	1.48	0.93
2:J:1868:GLN:HG2	2:J:1873:ARG:HH22	1.32	0.93
2:H:117:ASN:HA	2:H:561:ARG:HG3	1.51	0.93
2:L:1007:LEU:HD12	2:L:1007:LEU:H	1.34	0.92
2:I:752:HIS:HE1	2:I:847:TYR:HE2	1.05	0.92
1:E:1278:GLY:N	1:E:1282:THR:HG22	1.83	0.92
2:J:501:TRP:HE1	2:J:528:THR:HG22	1.32	0.92
2:K:750:GLY:HA2	2:K:865:ILE:HG23	1.52	0.92
2:K:814:SER:HB2	4:K:2101:FMN:O3P	1.70	0.92
1:D:1672:GLY:HA3	1:D:1678:LEU:HD23	1.52	0.92
1:F:1672:GLY:HA3	1:F:1678:LEU:HD23	1.51	0.92
1:E:1079:ARG:HG2	1:E:1079:ARG:HH11	1.33	0.92
1:B:1672:GLY:HA3	1:B:1678:LEU:HD23	1.50	0.92
2:H:846:THR:HG21	2:H:866:HIS:HD2	1.29	0.92
2:G:1637:VAL:HG11	2:G:1679:LEU:HD13	1.52	0.92
1:F:811:ASP:HB3	1:F:814:TYR:HB3	1.52	0.92
2:H:1007:LEU:H	2:H:1007:LEU:HD12	1.33	0.92
2:K:1180:VAL:HG11	2:K:1187:PHE:CD2	2.03	0.92
1:F:989:ASN:H	1:F:1491:ASN:HD21	1.16	0.92
1:B:1278:GLY:N	1:B:1282:THR:HG22	1.84	0.92
2:G:917:ARG:HH11	2:G:917:ARG:HG3	1.34	0.92
2:J:917:ARG:HH11	2:J:917:ARG:HG3	1.34	0.92
1:A:533:SER:HB2	1:A:612:ILE:HB	1.50	0.92
1:A:574:ILE:CG2	1:A:579:MET:HB2	2.00	0.92

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:811:ASP:HB3	1:A:814:TYR:HB3	1.50	0.92
2:H:1868:GLN:HG2	2:H:1873:ARG:NH2	1.85	0.92
1:A:570:TYR:O	1:A:574:ILE:HG13	1.68	0.91
1:C:406:ALA:HA	1:C:439:ARG:HH11	1.33	0.91
2:L:1265:TYR:CE1	2:L:1267:PRO:HG3	2.05	0.91
1:D:824:LEU:HB3	1:D:839:ILE:HD13	1.51	0.91
1:C:1148:LEU:HD13	1:F:1148:LEU:HD13	1.53	0.91
2:J:791:TYR:HA	2:J:796:TRP:CD1	2.05	0.91
1:D:811:ASP:HB3	1:D:814:TYR:HB3	1.52	0.91
2:G:1769:VAL:HG22	2:G:1775:ILE:HA	1.52	0.91
2:I:750:GLY:HA2	2:I:865:ILE:HG23	1.52	0.91
2:K:635:TYR:CG	2:K:641:MET:HG3	2.06	0.91
2:K:1265:TYR:CE1	2:K:1267:PRO:HG3	2.04	0.91
1:E:612:ILE:HG12	1:E:628:TYR:CD2	2.06	0.91
1:E:962:ASN:HD22	2:K:1006:GLN:NE2	1.68	0.91
2:I:1180:VAL:HG11	2:I:1187:PHE:CD2	2.05	0.91
2:H:917:ARG:HH11	2:H:917:ARG:HG3	1.30	0.91
2:H:1919:ASN:HB2	2:H:1928:VAL:HB	1.53	0.91
1:F:427:ARG:CG	1:F:427:ARG:HH11	1.83	0.91
1:E:427:ARG:CG	1:E:427:ARG:HH11	1.84	0.91
2:L:1008:ILE:HD12	2:L:1013:VAL:HG22	1.50	0.91
1:A:824:LEU:HB3	1:A:839:ILE:HD13	1.52	0.91
1:B:427:ARG:HH11	1:B:427:ARG:CG	1.84	0.91
2:K:1868:GLN:HG2	2:K:1873:ARG:NH2	1.86	0.91
1:C:824:LEU:HB3	1:C:839:ILE:HD13	1.51	0.91
2:K:1048:TRP:CE2	2:K:1049:GLN:HG2	2.04	0.90
2:K:1919:ASN:HB2	2:K:1928:VAL:HB	1.53	0.90
1:B:1504:ARG:HH11	1:B:1504:ARG:CG	1.83	0.90
2:K:752:HIS:HE1	2:K:847:TYR:HE2	1.02	0.90
1:A:574:ILE:HG23	1:A:579:MET:HB2	1.52	0.90
2:G:582:LYS:HB2	2:G:1112:VAL:HG22	1.53	0.90
2:K:791:TYR:HA	2:K:796:TRP:CD1	2.07	0.90
2:G:1048:TRP:CE2	2:G:1049:GLN:HG2	2.07	0.90
2:K:376:ARG:HB3	2:K:394:PRO:HG2	1.54	0.90
2:K:1008:ILE:HD12	2:K:1013:VAL:HG22	1.52	0.90
2:J:1180:VAL:HG11	2:J:1187:PHE:CD2	2.06	0.90
1:C:1448:ALA:HA	1:C:1451:LYS:HE3	1.54	0.90
1:E:824:LEU:HB3	1:E:839:ILE:HD13	1.53	0.90
2:K:289:ILE:HG12	2:K:493:MET:HE1	1.51	0.90
1:C:811:ASP:HB3	1:C:814:TYR:HB3	1.52	0.90
2:I:846:THR:HG21	2:I:866:HIS:HD2	1.33	0.90
1:A:1703:VAL:HG11	1:A:1711:LEU:HB3	1.53	0.90

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:I:1610:MET:HE2	2:I:1610:MET:HA	1.51	0.90
1:F:406:ALA:HA	1:F:439:ARG:HH11	1.35	0.90
1:D:1504:ARG:NH1	1:D:1504:ARG:HG3	1.84	0.90
1:D:570:TYR:O	1:D:574:ILE:HG13	1.71	0.90
2:I:938:MET:HB3	2:I:959:THR:HG22	1.52	0.90
2:I:1194:ARG:HG3	2:I:1194:ARG:NH1	1.73	0.90
2:L:938:MET:HB3	2:L:959:THR:HG22	1.53	0.90
2:K:2059:HIS:HE1	2:K:2068:ALA:HB2	1.37	0.90
2:I:1007:LEU:HD12	2:I:1007:LEU:H	1.35	0.90
1:C:72:THR:HB	1:C:74:VAL:HG23	1.54	0.90
1:F:824:LEU:HB3	1:F:839:ILE:HD13	1.52	0.90
1:B:811:ASP:HB3	1:B:814:TYR:HB3	1.54	0.90
1:E:427:ARG:HH12	1:E:492:ILE:HG23	1.36	0.90
2:H:938:MET:HB3	2:H:959:THR:HG22	1.52	0.90
2:H:1868:GLN:HG2	2:H:1873:ARG:HH22	1.35	0.90
1:F:613:PRO:HG2	1:F:633:THR:HG21	1.53	0.90
2:J:1007:LEU:H	2:J:1007:LEU:HD12	1.38	0.89
1:D:1448:ALA:HA	1:D:1451:LYS:HE3	1.54	0.89
2:K:1442:TYR:O	2:K:1445:THR:HG22	1.72	0.89
1:E:881:LEU:HA	1:E:884:MET:HG3	1.55	0.89
2:G:854:VAL:HG21	2:G:1070:PRO:HA	1.54	0.89
2:H:582:LYS:HB2	2:H:1112:VAL:HG22	1.54	0.89
1:A:1504:ARG:NH1	1:A:1504:ARG:HG3	1.85	0.89
2:L:1616:VAL:HG11	2:L:1679:LEU:HD12	1.53	0.89
2:H:327:PRO:HD2	2:I:1338:ARG:HH21	1.36	0.89
2:G:1180:VAL:HG11	2:G:1187:PHE:CD2	2.06	0.89
2:H:1180:VAL:HG11	2:H:1187:PHE:CD2	2.08	0.89
2:K:752:HIS:HE1	2:K:847:TYR:CE2	1.90	0.89
2:K:752:HIS:CE1	2:K:847:TYR:HE2	1.89	0.89
1:C:1672:GLY:HA3	1:C:1678:LEU:HD23	1.55	0.89
2:H:610:PRO:HG3	2:H:1047:LEU:HD22	1.54	0.89
2:G:1919:ASN:HB2	2:G:1928:VAL:HB	1.52	0.89
1:A:965:TYR:CZ	1:A:1199:LEU:HD22	2.08	0.89
2:J:750:GLY:HA2	2:J:865:ILE:HG23	1.55	0.89
1:C:397:ARG:HG2	1:C:397:ARG:NH1	1.82	0.89
1:D:72:THR:HB	1:D:74:VAL:HG23	1.55	0.89
1:F:1107:GLU:HG3	1:F:1108:PRO:HD2	1.55	0.89
2:J:938:MET:HB3	2:J:959:THR:HG22	1.53	0.89
2:J:582:LYS:HB2	2:J:1112:VAL:HG22	1.54	0.89
1:B:1005:TRP:NE1	1:B:1561:LEU:HD22	1.89	0.89
2:I:582:LYS:HB2	2:I:1112:VAL:HG22	1.54	0.89
2:G:1194:ARG:CG	2:G:1194:ARG:HH11	1.82	0.88

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:H:791:TYR:HA	2:H:796:TRP:CD1	2.08	0.88
2:I:1637:VAL:HG11	2:I:1679:LEU:HD13	1.52	0.88
2:I:791:TYR:HA	2:I:796:TRP:CD1	2.07	0.88
2:H:1265:TYR:CE1	2:H:1267:PRO:HG3	2.07	0.88
2:G:501:TRP:HE1	2:G:528:THR:HG22	1.35	0.88
1:E:811:ASP:HB3	1:E:814:TYR:HB3	1.54	0.88
1:B:1448:ALA:HA	1:B:1451:LYS:HE3	1.54	0.88
1:E:1504:ARG:HG3	1:E:1504:ARG:NH1	1.87	0.88
2:K:117:ASN:HA	2:K:561:ARG:HG3	1.55	0.88
1:A:881:LEU:HA	1:A:884:MET:HG3	1.55	0.88
1:D:427:ARG:CG	1:D:427:ARG:HH11	1.86	0.88
2:G:685:VAL:HG23	2:G:1186:ARG:HH12	1.35	0.88
1:E:1448:ALA:HA	1:E:1451:LYS:HE3	1.56	0.88
2:K:938:MET:HB3	2:K:959:THR:HG22	1.53	0.88
2:I:1602:LEU:HG	2:I:1606:ILE:HD11	1.55	0.88
2:H:1616:VAL:HG11	2:H:1679:LEU:HD12	1.54	0.88
2:G:1265:TYR:CE1	2:G:1267:PRO:HG3	2.09	0.88
2:G:635:TYR:CG	2:G:641:MET:HG3	2.09	0.88
1:E:962:ASN:HD22	2:K:1006:GLN:HE22	0.89	0.88
2:H:1637:VAL:HG11	2:H:1679:LEU:HD13	1.55	0.88
2:I:1919:ASN:HB2	2:I:1928:VAL:HB	1.53	0.88
2:L:582:LYS:HB2	2:L:1112:VAL:HG22	1.55	0.88
1:C:1476:ARG:HH12	1:F:1499:ARG:HD3	1.38	0.88
2:J:605:VAL:HB	2:J:628:ILE:HG13	1.56	0.88
2:K:857:VAL:HG13	2:K:876:TRP:NE1	1.88	0.88
2:J:1616:VAL:HG11	2:J:1679:LEU:HD12	1.56	0.88
1:A:72:THR:HB	1:A:74:VAL:HG23	1.56	0.88
2:G:1008:ILE:HD12	2:G:1013:VAL:HG22	1.53	0.88
2:L:750:GLY:HA2	2:L:865:ILE:HG23	1.56	0.88
1:F:1278:GLY:N	1:F:1282:THR:HG22	1.87	0.87
1:A:1663:LYS:HG2	2:G:1007:LEU:HD11	1.56	0.87
1:E:72:THR:HB	1:E:74:VAL:HG23	1.54	0.87
1:A:1499:ARG:HD3	1:E:1476:ARG:HH12	1.39	0.87
2:I:1008:ILE:HD12	2:I:1013:VAL:HG22	1.55	0.87
2:I:752:HIS:HE1	2:I:847:TYR:CE2	1.93	0.87
2:L:1769:VAL:HG22	2:L:1775:ILE:HA	1.53	0.87
2:H:1769:VAL:HG22	2:H:1775:ILE:HA	1.53	0.87
1:F:430:VAL:HG11	1:F:490:VAL:HG11	1.56	0.87
2:I:511:THR:HG22	2:I:512:HIS:HD2	1.36	0.87
1:C:1504:ARG:NH1	1:C:1504:ARG:HG3	1.81	0.87
2:J:846:THR:HG21	2:J:866:HIS:HD2	1.32	0.87
2:K:1616:VAL:HG11	2:K:1679:LEU:HD12	1.55	0.87

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:J:1288:PHE:O	2:J:1292:VAL:HG23	1.73	0.87
1:E:1447:VAL:HG21	1:E:1467:LEU:HD21	1.55	0.87
2:L:1194:ARG:NH1	2:L:1194:ARG:HG3	1.71	0.87
1:C:1702:ARG:HH11	1:C:1702:ARG:HG2	1.36	0.87
2:L:1123:ALA:O	2:L:1126:GLU:HG3	1.73	0.87
2:K:158:LEU:HD22	2:K:169:ILE:HD11	1.56	0.87
1:E:967:PHE:CD2	1:E:1374:PRO:HG3	2.10	0.87
2:K:1499:LYS:HB3	2:K:1505:SER:HB2	1.56	0.87
1:F:72:THR:HB	1:F:74:VAL:HG23	1.57	0.87
2:H:2059:HIS:HE1	2:H:2068:ALA:HB2	1.40	0.87
1:C:965:TYR:CZ	1:C:1199:LEU:HD22	2.09	0.87
2:G:752:HIS:CE1	2:G:847:TYR:HE2	1.92	0.87
2:I:1616:VAL:HG11	2:I:1679:LEU:HD12	1.56	0.87
2:G:1890:ARG:HH22	2:G:1996:ILE:HD11	1.37	0.87
2:I:1594:ARG:NH1	2:I:1594:ARG:HG2	1.85	0.87
2:G:1616:VAL:HG11	2:G:1679:LEU:HD12	1.55	0.87
2:J:1637:VAL:HG11	2:J:1679:LEU:HD13	1.55	0.87
2:J:1769:VAL:HG22	2:J:1775:ILE:HA	1.55	0.87
1:C:1499:ARG:HD3	1:F:1476:ARG:HH12	1.38	0.87
2:H:605:VAL:HB	2:H:628:ILE:HG13	1.57	0.87
2:G:1007:LEU:H	2:G:1007:LEU:HD12	1.40	0.87
2:J:1265:TYR:CE1	2:J:1267:PRO:HG3	2.09	0.87
2:L:791:TYR:HA	2:L:796:TRP:CD1	2.09	0.87
1:B:72:THR:HB	1:B:74:VAL:HG23	1.56	0.87
1:D:684:THR:HG23	1:D:686:ARG:H	1.39	0.87
2:H:814:SER:HB2	4:H:2101:FMN:O3P	1.75	0.86
1:B:1702:ARG:HG3	1:B:1702:ARG:HH11	1.40	0.86
1:A:427:ARG:CG	1:A:427:ARG:HH11	1.87	0.86
1:D:881:LEU:HA	1:D:884:MET:HG3	1.55	0.86
2:K:854:VAL:HG21	2:K:1070:PRO:HA	1.57	0.86
1:D:605:ARG:HB3	1:D:606:PRO:CD	2.05	0.86
2:J:1918:VAL:HG13	2:J:2006:HIS:HB2	1.57	0.86
1:B:612:ILE:HG23	1:B:628:TYR:CD2	2.10	0.86
2:L:1919:ASN:HB2	2:L:1928:VAL:HB	1.55	0.86
2:K:1007:LEU:HD12	2:K:1007:LEU:H	1.40	0.86
1:A:962:ASN:HD22	2:G:1006:GLN:HE22	1.16	0.86
2:H:511:THR:HG22	2:H:512:HIS:HD2	1.38	0.86
2:L:1288:PHE:O	2:L:1292:VAL:HG23	1.74	0.86
1:F:397:ARG:HG2	1:F:397:ARG:NH1	1.84	0.86
2:H:1194:ARG:HH11	2:H:1194:ARG:CG	1.86	0.86
1:F:1448:ALA:HA	1:F:1451:LYS:HE3	1.56	0.86
1:D:1702:ARG:HH11	1:D:1702:ARG:HG2	1.40	0.86

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:612:ILE:HD12	1:F:579:MET:CE	2.06	0.86
2:G:1868:GLN:HG2	2:G:1873:ARG:HH22	1.38	0.86
1:C:998:GLY:HA3	1:C:1361:VAL:HG13	1.56	0.86
1:E:1663:LYS:HG2	2:K:1007:LEU:HD11	1.56	0.86
1:E:557:ARG:HH11	1:E:557:ARG:CG	1.89	0.86
1:F:526:MET:O	1:F:613:PRO:O	1.93	0.86
2:L:854:VAL:HG21	2:L:1070:PRO:HA	1.58	0.86
2:L:605:VAL:HB	2:L:628:ILE:HG13	1.56	0.86
2:H:1231:THR:HG23	2:H:1595:VAL:HG21	1.55	0.86
1:D:397:ARG:HG2	1:D:397:ARG:NH1	1.82	0.86
2:H:1602:LEU:HG	2:H:1606:ILE:HD11	1.57	0.86
1:B:1504:ARG:NH1	1:B:1504:ARG:HG3	1.84	0.86
1:E:962:ASN:ND2	2:K:1006:GLN:HE22	1.73	0.86
2:I:1454:MET:HE2	2:I:1550:SER:HA	1.58	0.86
1:B:1102:ILE:HD12	1:B:1146:ALA:HB3	1.58	0.85
1:D:741:ASP:OD1	1:D:793:ARG:HD3	1.75	0.85
2:L:2059:HIS:HE1	2:L:2068:ALA:HB2	1.40	0.85
2:G:752:HIS:HE1	2:G:847:TYR:CE2	1.92	0.85
1:D:989:ASN:H	1:D:1491:ASN:HD21	1.22	0.85
1:F:881:LEU:HA	1:F:884:MET:HG3	1.58	0.85
2:G:376:ARG:HB3	2:G:394:PRO:HG2	1.58	0.85
2:I:1868:GLN:HG2	2:I:1873:ARG:HH22	1.39	0.85
2:H:43:PHE:CD2	2:I:22:ARG:HG2	2.11	0.85
1:F:1504:ARG:HG3	1:F:1504:ARG:NH1	1.86	0.85
2:I:1769:VAL:HG22	2:I:1775:ILE:HA	1.56	0.85
2:L:814:SER:HB2	4:L:2101:FMN:O3P	1.76	0.85
2:L:752:HIS:CE1	2:L:847:TYR:HE2	1.94	0.85
1:C:427:ARG:HH11	1:C:427:ARG:CG	1.88	0.85
2:G:1868:GLN:HG2	2:G:1873:ARG:NH2	1.91	0.85
2:J:1340:LYS:HG3	2:L:376:ARG:NH2	1.92	0.85
1:A:1448:ALA:HA	1:A:1451:LYS:HE3	1.56	0.85
2:J:1499:LYS:HB3	2:J:1505:SER:HB2	1.56	0.85
1:A:1443:LEU:HD21	1:A:1470:ARG:CB	2.03	0.85
1:D:1443:LEU:HD21	1:D:1470:ARG:CB	2.05	0.85
2:I:1868:GLN:HG2	2:I:1873:ARG:NH2	1.91	0.85
2:H:752:HIS:CE1	2:H:847:TYR:HE2	1.95	0.85
1:E:1702:ARG:HH11	1:E:1702:ARG:HG2	1.42	0.85
2:J:117:ASN:HA	2:J:561:ARG:HG3	1.57	0.85
2:G:1602:LEU:HG	2:G:1606:ILE:HD11	1.58	0.85
2:J:752:HIS:HE1	2:J:847:TYR:CE2	1.95	0.85
2:H:1499:LYS:HB3	2:H:1505:SER:HB2	1.59	0.85
1:B:868:VAL:HG11	1:B:908:ILE:HD11	1.57	0.85

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:J:2059:HIS:HE1	2:J:2068:ALA:HB2	1.40	0.85
1:C:868:VAL:HG11	1:C:908:ILE:HD11	1.58	0.85
1:C:398:VAL:HG22	1:C:710:VAL:HG22	1.57	0.85
1:B:1663:LYS:HG2	2:H:1007:LEU:HD11	1.58	0.84
1:F:868:VAL:HG11	1:F:908:ILE:HD11	1.58	0.84
2:I:448:HIS:HD2	2:I:491:VAL:HG12	1.40	0.84
2:J:1919:ASN:HB2	2:J:1928:VAL:HB	1.55	0.84
2:K:1602:LEU:HG	2:K:1606:ILE:HD11	1.58	0.84
2:L:511:THR:HG22	2:L:512:HIS:HD2	1.38	0.84
2:L:1499:LYS:HB3	2:L:1505:SER:HB2	1.59	0.84
1:D:558:LEU:HB2	1:D:563:GLN:HG3	1.60	0.84
1:B:430:VAL:HG11	1:B:490:VAL:HG11	1.59	0.84
2:I:752:HIS:CE1	2:I:847:TYR:HE2	1.94	0.84
2:G:511:THR:HG22	2:G:512:HIS:HD2	1.34	0.84
2:K:1194:ARG:HH11	2:K:1194:ARG:CG	1.83	0.84
2:J:511:THR:HG22	2:J:512:HIS:HD2	1.39	0.84
1:C:989:ASN:H	1:C:1491:ASN:HD21	1.22	0.84
2:H:2057:GLU:HA	2:H:2060:ARG:NH1	1.93	0.84
2:J:635:TYR:CG	2:J:641:MET:HG3	2.12	0.84
2:H:854:VAL:HG21	2:H:1070:PRO:HA	1.60	0.84
2:L:635:TYR:CG	2:L:641:MET:HG3	2.12	0.84
2:J:752:HIS:CE1	2:J:847:TYR:HE2	1.94	0.84
1:D:1278:GLY:N	1:D:1282:THR:HG22	1.91	0.84
1:D:868:VAL:HG11	1:D:908:ILE:HD11	1.58	0.84
2:G:448:HIS:HD2	2:G:491:VAL:HG12	1.42	0.84
1:E:398:VAL:HG22	1:E:710:VAL:HG22	1.58	0.84
2:L:1231:THR:HG23	2:L:1595:VAL:HG21	1.58	0.84
2:L:610:PRO:HG3	2:L:1047:LEU:HD22	1.59	0.84
1:F:1005:TRP:NE1	1:F:1561:LEU:HD22	1.93	0.84
2:G:818:THR:HG22	2:G:829:LYS:HB2	1.58	0.84
1:B:684:THR:HG23	1:B:686:ARG:H	1.42	0.84
1:C:498:THR:HG21	1:C:858:LEU:HA	1.57	0.84
2:L:1594:ARG:NH1	2:L:1594:ARG:HG2	1.92	0.84
2:L:752:HIS:HE1	2:L:847:TYR:CE2	1.94	0.84
1:C:741:ASP:OD1	1:C:793:ARG:HD3	1.78	0.84
2:L:448:HIS:HD2	2:L:491:VAL:HG12	1.43	0.84
1:C:1363:MET:HE1	1:C:1373:VAL:HG21	1.60	0.84
1:D:1107:GLU:HG3	1:D:1108:PRO:HD2	1.60	0.83
2:I:1499:LYS:HB3	2:I:1505:SER:HB2	1.58	0.83
2:J:448:HIS:HD2	2:J:491:VAL:HG12	1.43	0.83
2:J:814:SER:HB2	4:J:2101:FMN:O3P	1.78	0.83
2:I:1265:TYR:CE1	2:I:1267:PRO:HG3	2.12	0.83

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:J:1594:ARG:HG2	2:J:1594:ARG:NH1	1.87	0.83
1:D:557:ARG:HH11	1:D:557:ARG:CG	1.90	0.83
2:G:610:PRO:HG3	2:G:1047:LEU:HD22	1.59	0.83
1:E:1102:ILE:HD12	1:E:1146:ALA:HB3	1.60	0.83
2:I:1301:PHE:HB3	2:I:1364:ARG:HG3	1.59	0.83
2:I:2059:HIS:HE1	2:I:2068:ALA:HB2	1.41	0.83
2:L:1602:LEU:HG	2:L:1606:ILE:HD11	1.60	0.83
1:B:961:ALA:HB2	1:B:1022:LEU:HD12	1.60	0.83
2:I:814:SER:HB2	4:I:2101:FMN:O3P	1.78	0.83
1:D:961:ALA:HB2	1:D:1022:LEU:HD12	1.60	0.83
2:G:1301:PHE:HB3	2:G:1364:ARG:HG3	1.59	0.83
1:F:1278:GLY:HA2	1:F:1630:LYS:HE2	1.58	0.83
1:E:741:ASP:OD1	1:E:793:ARG:HD3	1.77	0.83
1:E:1005:TRP:NE1	1:E:1561:LEU:HD22	1.92	0.83
2:H:1700:GLN:HA	2:H:1704:MET:HE1	1.59	0.83
2:K:685:VAL:HG23	2:K:1186:ARG:NH1	1.92	0.83
1:C:669:VAL:O	1:C:673:LEU:HD12	1.78	0.83
2:K:1637:VAL:HG11	2:K:1679:LEU:HD13	1.60	0.83
2:L:1454:MET:HE2	2:L:1550:SER:HA	1.61	0.83
1:A:557:ARG:CG	1:A:557:ARG:HH11	1.90	0.83
2:J:327:PRO:O	2:K:1338:ARG:NH2	2.11	0.83
2:G:791:TYR:HA	2:G:796:TRP:CD1	2.14	0.83
2:K:610:PRO:HG3	2:K:1047:LEU:HD22	1.59	0.83
1:E:532:ILE:HG21	1:E:907:PHE:HB2	1.60	0.83
2:K:511:THR:HG22	2:K:512:HIS:HD2	1.42	0.83
2:G:2059:HIS:HE1	2:G:2068:ALA:HB2	1.43	0.83
1:F:398:VAL:HG22	1:F:710:VAL:HG22	1.60	0.83
1:D:1447:VAL:HG21	1:D:1467:LEU:HD21	1.61	0.82
2:G:814:SER:HB2	4:G:2101:FMN:O3P	1.79	0.82
1:E:967:PHE:CG	1:E:1374:PRO:HG3	2.14	0.82
2:K:605:VAL:HB	2:K:628:ILE:HG13	1.59	0.82
1:A:741:ASP:OD1	1:A:793:ARG:HD3	1.79	0.82
1:A:1447:VAL:HG21	1:A:1467:LEU:HD21	1.60	0.82
1:A:1565:PRO:HG3	1:A:1572:TRP:CZ3	2.14	0.82
1:E:612:ILE:HG12	1:E:628:TYR:CE2	2.13	0.82
1:C:1565:PRO:HG3	1:C:1572:TRP:CZ3	2.14	0.82
2:H:1594:ARG:NH1	2:H:1594:ARG:HG2	1.89	0.82
2:J:610:PRO:HG3	2:J:1047:LEU:HD22	1.59	0.82
2:H:327:PRO:HD2	2:I:1338:ARG:NH2	1.95	0.82
2:G:1915:LEU:HD21	2:G:1939:LEU:HD22	1.61	0.82
2:G:471:ASP:HB3	2:G:474:THR:O	1.79	0.82
2:K:818:THR:HG22	2:K:829:LYS:HB2	1.59	0.82

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:D:406:ALA:HA	1:D:439:ARG:NH1	1.93	0.82
1:A:398:VAL:HG22	1:A:710:VAL:HG22	1.60	0.82
1:B:397:ARG:HG2	1:B:397:ARG:NH1	1.82	0.82
2:J:300:THR:HB	2:J:303:GLU:H	1.45	0.82
2:H:600:VAL:HG13	2:H:601:PRO:HD2	1.60	0.82
1:E:532:ILE:CG2	1:E:907:PHE:CB	2.58	0.82
1:F:535:TYR:OH	1:F:630:LYS:HE3	1.79	0.82
1:F:1447:VAL:HG21	1:F:1467:LEU:HD21	1.60	0.82
2:L:600:VAL:HG13	2:L:601:PRO:HD2	1.60	0.82
1:E:1702:ARG:HH11	1:E:1702:ARG:HG3	1.45	0.82
2:I:903:ILE:HD11	2:I:914:TRP:CE2	2.15	0.82
2:L:2052:LYS:HD3	2:L:2074:TRP:HE1	1.44	0.82
2:H:43:PHE:HB2	2:I:22:ARG:NH2	1.95	0.82
2:K:783:GLY:HA3	2:K:1075:TYR:HB3	1.60	0.82
2:I:1890:ARG:HH22	2:I:1996:ILE:HD11	1.43	0.82
2:H:1454:MET:HE2	2:H:1550:SER:HA	1.61	0.82
1:C:1443:LEU:HD21	1:C:1470:ARG:CB	2.06	0.82
1:A:729:ILE:HA	1:A:736:LEU:CD2	2.10	0.82
1:A:498:THR:HG21	1:A:858:LEU:HA	1.62	0.82
1:D:1565:PRO:HG3	1:D:1572:TRP:CZ3	2.15	0.82
2:H:917:ARG:HG3	2:H:917:ARG:NH1	1.89	0.82
1:A:1702:ARG:HH11	1:A:1702:ARG:HG3	1.45	0.82
1:B:777:LEU:O	1:B:781:ILE:HG13	1.80	0.82
1:B:1702:ARG:HG2	1:B:1702:ARG:HH11	1.42	0.81
1:A:1102:ILE:HD12	1:A:1146:ALA:HB3	1.61	0.81
1:A:406:ALA:HA	1:A:439:ARG:NH1	1.93	0.81
1:F:824:LEU:HB3	1:F:839:ILE:CD1	2.09	0.81
2:L:857:VAL:HG13	2:L:876:TRP:NE1	1.94	0.81
2:K:1231:THR:HG23	2:K:1595:VAL:HG21	1.60	0.81
2:K:448:HIS:HD2	2:K:491:VAL:HG12	1.44	0.81
1:D:1702:ARG:HH11	1:D:1702:ARG:HG3	1.41	0.81
1:D:498:THR:HG21	1:D:858:LEU:HA	1.62	0.81
2:J:1454:MET:HE2	2:J:1550:SER:HA	1.62	0.81
1:A:558:LEU:HB2	1:A:563:GLN:HG3	1.62	0.81
2:L:917:ARG:HG3	2:L:917:ARG:NH1	1.88	0.81
1:B:406:ALA:HA	1:B:439:ARG:NH1	1.93	0.81
1:C:1107:GLU:HG3	1:C:1108:PRO:HD2	1.61	0.81
2:J:327:PRO:HD2	2:K:1338:ARG:HH21	1.45	0.81
2:G:459:LYS:HA	2:G:485:ASP:OD1	1.80	0.81
1:B:1094:LYS:HE3	1:B:1316:TYR:CD1	2.14	0.81
2:J:1915:LEU:HD21	2:J:1939:LEU:HD22	1.63	0.81
1:A:1363:MET:HE1	1:A:1373:VAL:HG21	1.61	0.81

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:408:GLN:HG2	1:A:1610:ARG:HH12	1.44	0.81
2:K:1454:MET:HE2	2:K:1550:SER:HA	1.62	0.81
1:E:558:LEU:HB2	1:E:563:GLN:HG3	1.61	0.81
2:I:1289:TYR:CG	2:I:1370:LEU:HD23	2.14	0.81
1:D:605:ARG:HB3	1:D:606:PRO:HD3	1.62	0.81
1:E:1703:VAL:HG11	1:E:1711:LEU:HB3	1.59	0.81
1:F:1565:PRO:HG3	1:F:1572:TRP:CZ3	2.16	0.81
2:H:448:HIS:HD2	2:H:491:VAL:HG12	1.46	0.81
1:C:1447:VAL:HG21	1:C:1467:LEU:HD21	1.62	0.81
2:I:635:TYR:CG	2:I:641:MET:HG3	2.16	0.81
2:H:635:TYR:CG	2:H:641:MET:HG3	2.14	0.81
1:A:397:ARG:NH1	1:A:397:ARG:HG2	1.85	0.81
2:I:917:ARG:NH1	2:I:917:ARG:HG3	1.88	0.81
2:J:685:VAL:HG23	2:J:1186:ARG:HH12	1.46	0.81
2:J:854:VAL:HG21	2:J:1070:PRO:HA	1.61	0.81
1:F:961:ALA:HB2	1:F:1022:LEU:HD12	1.61	0.81
1:B:452:ILE:HD11	1:B:470:GLY:HA3	1.62	0.81
2:I:1288:PHE:O	2:I:1292:VAL:HG23	1.79	0.81
2:J:1746:THR:HB	2:J:1792:THR:HG23	1.62	0.81
1:B:1443:LEU:HD21	1:B:1470:ARG:CB	2.05	0.81
2:H:374:GLU:HA	2:H:377:HIS:HD2	1.41	0.81
1:C:365:GLN:CG	1:D:365:GLN:HG3	2.11	0.81
1:B:1107:GLU:HG3	1:B:1108:PRO:HD2	1.61	0.81
1:C:1102:ILE:HD12	1:C:1146:ALA:HB3	1.63	0.81
2:L:376:ARG:HB3	2:L:394:PRO:HG2	1.63	0.81
1:E:1443:LEU:HD21	1:E:1470:ARG:CB	2.03	0.81
1:C:365:GLN:HG3	1:D:365:GLN:CG	2.11	0.81
2:H:818:THR:HG22	2:H:829:LYS:HB2	1.62	0.81
2:H:752:HIS:HE1	2:H:847:TYR:CE2	1.95	0.81
2:I:1194:ARG:CG	2:I:1194:ARG:HH11	1.87	0.81
2:L:2057:GLU:HA	2:L:2060:ARG:NH1	1.95	0.81
1:B:1447:VAL:HG21	1:B:1467:LEU:HD21	1.63	0.81
2:K:600:VAL:HG13	2:K:601:PRO:HD2	1.63	0.81
1:C:406:ALA:HA	1:C:439:ARG:NH1	1.95	0.81
1:C:1005:TRP:NE1	1:C:1561:LEU:HD22	1.96	0.81
2:H:158:LEU:HA	2:H:566:VAL:HG21	1.62	0.81
2:I:374:GLU:HA	2:I:377:HIS:HD2	1.44	0.81
1:D:1102:ILE:HD12	1:D:1146:ALA:HB3	1.63	0.81
2:G:917:ARG:HG3	2:G:917:ARG:NH1	1.92	0.81
2:L:685:VAL:HG23	2:L:1186:ARG:HH12	1.46	0.81
2:K:1868:GLN:HG2	2:K:1873:ARG:HH22	1.46	0.81
2:J:2057:GLU:HA	2:J:2060:ARG:NH1	1.95	0.81

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:E:1565:PRO:HG3	1:E:1572:TRP:CZ3	2.16	0.81
1:C:506:ILE:HD13	1:C:922:ILE:HG22	1.63	0.81
2:I:605:VAL:HB	2:I:628:ILE:HG13	1.63	0.81
1:F:684:THR:HG23	1:F:686:ARG:H	1.46	0.81
2:L:1868:GLN:HG2	2:L:1873:ARG:HH22	1.45	0.81
2:K:1700:GLN:HA	2:K:1704:MET:HE1	1.62	0.81
1:A:1443:LEU:CD2	1:A:1470:ARG:HB3	2.06	0.80
1:E:397:ARG:NH1	1:E:397:ARG:HG2	1.83	0.80
2:H:43:PHE:CG	2:I:22:ARG:NE	2.49	0.80
1:F:1363:MET:HE1	1:F:1373:VAL:HG21	1.61	0.80
2:G:1499:LYS:HB3	2:G:1505:SER:HB2	1.63	0.80
1:E:498:THR:HG21	1:E:858:LEU:HA	1.63	0.80
1:A:1005:TRP:NE1	1:A:1561:LEU:HD22	1.96	0.80
1:C:729:ILE:HA	1:C:736:LEU:CD2	2.11	0.80
2:J:2052:LYS:HD3	2:J:2074:TRP:HE1	1.46	0.80
2:J:459:LYS:HA	2:J:485:ASP:OD1	1.81	0.80
1:A:973:TRP:CE2	1:A:1648:LYS:HB2	2.17	0.80
1:E:684:THR:HG23	1:E:686:ARG:H	1.44	0.80
2:I:911:GLN:HE21	2:I:1064:THR:HG23	1.46	0.80
1:C:1702:ARG:HH11	1:C:1702:ARG:HG3	1.46	0.80
1:F:1702:ARG:HG3	1:F:1702:ARG:HH11	1.44	0.80
1:E:1107:GLU:HG3	1:E:1108:PRO:HD2	1.61	0.80
1:B:440:SER:HB3	1:B:481:LEU:HD23	1.61	0.80
1:F:538:ARG:HA	1:F:585:MET:HE1	1.61	0.80
2:I:1231:THR:HG23	2:I:1595:VAL:HG21	1.64	0.80
2:K:374:GLU:HA	2:K:377:HIS:HD2	1.46	0.80
2:H:1115:TYR:HB3	2:H:1267:PRO:HB3	1.62	0.80
2:J:208:LEU:HD12	2:J:227:ILE:HD11	1.63	0.80
1:B:1104:GLN:OE1	1:D:1107:GLU:HB2	1.80	0.80
1:D:1278:GLY:HA2	1:D:1630:LYS:HE2	1.62	0.80
1:F:1702:ARG:HH11	1:F:1702:ARG:HG2	1.45	0.80
1:A:1702:ARG:HG2	1:A:1702:ARG:HH11	1.45	0.80
1:F:1102:ILE:HD12	1:F:1146:ALA:HB3	1.61	0.80
2:K:1288:PHE:O	2:K:1292:VAL:HG23	1.81	0.80
1:C:1617:ILE:HD13	1:C:1617:ILE:H	1.47	0.80
2:I:685:VAL:HG12	2:I:687:ILE:HG13	1.64	0.80
2:L:747:ARG:HH11	2:L:780:SER:HB3	1.46	0.80
2:I:1746:THR:HB	2:I:1792:THR:HG23	1.63	0.80
2:L:1918:VAL:HG13	2:L:2006:HIS:HB2	1.63	0.80
2:L:459:LYS:HA	2:L:485:ASP:OD1	1.80	0.80
2:G:856:THR:HG23	2:G:866:HIS:CD2	2.17	0.80
1:E:406:ALA:HA	1:E:439:ARG:NH1	1.96	0.80

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:J:579:ARG:HB2	2:J:591:ASP:HB3	1.63	0.80
2:I:1700:GLN:HA	2:I:1704:MET:HE1	1.64	0.80
2:I:208:LEU:HD12	2:I:227:ILE:HD11	1.64	0.80
1:D:1005:TRP:NE1	1:D:1561:LEU:HD22	1.97	0.80
2:J:600:VAL:HG13	2:J:601:PRO:HD2	1.64	0.80
1:B:1617:ILE:HD13	1:B:1617:ILE:H	1.46	0.80
2:L:374:GLU:HA	2:L:377:HIS:HD2	1.45	0.80
2:G:605:VAL:HB	2:G:628:ILE:HG13	1.64	0.80
1:A:31:THR:HG23	2:G:2040:ILE:HG21	1.62	0.80
1:C:440:SER:HB3	1:C:481:LEU:HD23	1.64	0.80
2:H:1288:PHE:O	2:H:1292:VAL:HG23	1.81	0.80
2:J:1700:GLN:HA	2:J:1704:MET:HE1	1.63	0.80
1:B:1443:LEU:O	1:B:1447:VAL:HG23	1.82	0.79
1:D:613:PRO:HG2	1:D:633:THR:HG21	1.64	0.79
1:D:527:ALA:HB2	1:D:637:LEU:CD2	2.12	0.79
2:K:747:ARG:HH11	2:K:780:SER:HB3	1.47	0.79
2:K:595:SER:HB3	2:K:602:PRO:CG	2.13	0.79
2:K:917:ARG:NH1	2:K:917:ARG:HG3	1.92	0.79
2:K:1746:THR:HB	2:K:1792:THR:HG23	1.63	0.79
1:B:729:ILE:HA	1:B:736:LEU:CD2	2.12	0.79
2:I:459:LYS:HA	2:I:485:ASP:OD1	1.80	0.79
1:B:824:LEU:HB3	1:B:839:ILE:CD1	2.11	0.79
2:H:2052:LYS:HD3	2:H:2074:TRP:HE1	1.43	0.79
1:E:960:ARG:HB3	2:K:969:ARG:NH1	1.98	0.79
1:D:1363:MET:HE1	1:D:1373:VAL:HG21	1.65	0.79
2:H:2015:LYS:HB2	2:H:2016:PRO:HD3	1.63	0.79
1:E:868:VAL:HG11	1:E:908:ILE:HD11	1.63	0.79
2:H:685:VAL:HG12	2:H:687:ILE:HG13	1.65	0.79
2:L:2015:LYS:HB2	2:L:2016:PRO:HD3	1.63	0.79
2:G:783:GLY:HA3	2:G:1075:TYR:HB3	1.63	0.79
2:G:1918:VAL:HG13	2:G:2006:HIS:HB2	1.63	0.79
1:F:1674:ILE:HD11	2:L:1011:GLN:HG3	1.65	0.79
2:H:903:ILE:HD11	2:H:914:TRP:CE2	2.17	0.79
2:G:300:THR:HB	2:G:303:GLU:H	1.48	0.79
2:K:903:ILE:HD11	2:K:914:TRP:CE2	2.18	0.79
1:D:965:TYR:CZ	1:D:1199:LEU:HD22	2.17	0.79
1:F:406:ALA:HA	1:F:439:ARG:NH1	1.98	0.79
1:F:612:ILE:HD12	1:F:907:PHE:HZ	1.47	0.79
2:J:590:VAL:HG23	2:J:1091:HIS:NE2	1.96	0.79
1:B:1686:PRO:HB2	1:B:1713:PHE:CD1	2.18	0.79
2:G:374:GLU:HA	2:G:377:HIS:HD2	1.48	0.79
1:C:612:ILE:HG23	1:C:628:TYR:CE2	2.18	0.79

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:868:VAL:HG11	1:A:908:ILE:HD11	1.61	0.79
2:I:2057:GLU:HA	2:I:2060:ARG:NH1	1.98	0.79
1:B:1674:ILE:HD11	2:H:1011:GLN:HG3	1.63	0.79
1:C:1342:ARG:HH11	1:C:1347:THR:HB	1.47	0.79
1:B:552:ILE:HG12	1:E:552:ILE:HD11	1.65	0.79
2:H:1890:ARG:HH22	2:H:1996:ILE:HD11	1.46	0.79
1:D:440:SER:HB3	1:D:481:LEU:HD23	1.64	0.79
1:B:498:THR:HG21	1:B:858:LEU:HA	1.64	0.79
2:J:1231:THR:HG23	2:J:1595:VAL:HG21	1.65	0.79
2:I:622:MET:SD	2:I:652:ILE:HD11	2.23	0.79
2:K:685:VAL:HG12	2:K:687:ILE:HG13	1.64	0.79
2:L:1721:ARG:NH2	2:L:1853:ILE:HD12	1.97	0.79
2:J:856:THR:HG23	2:J:866:HIS:CD2	2.18	0.78
1:D:905:LEU:HD22	1:D:911:LEU:HD21	1.65	0.78
2:I:300:THR:HB	2:I:303:GLU:H	1.48	0.78
1:F:964:LYS:O	1:F:966:PRO:HD3	1.83	0.78
1:B:881:LEU:HA	1:B:884:MET:HG3	1.63	0.78
1:F:1443:LEU:HD21	1:F:1470:ARG:CB	2.07	0.78
2:L:493:MET:HA	2:L:497:ASP:HB2	1.66	0.78
2:K:358:ARG:HH21	2:K:383:VAL:HG21	1.48	0.78
2:I:1764:MET:HB3	2:I:1780:ILE:HD12	1.65	0.78
2:L:1915:LEU:HD21	2:L:1939:LEU:HD22	1.64	0.78
2:I:579:ARG:HB2	2:I:591:ASP:HB3	1.64	0.78
1:A:574:ILE:HG23	1:A:579:MET:CB	2.12	0.78
2:L:1442:TYR:O	2:L:1445:THR:HG22	1.83	0.78
1:E:1363:MET:HE1	1:E:1373:VAL:HG21	1.65	0.78
2:I:158:LEU:HD22	2:I:169:ILE:HD11	1.65	0.78
2:J:903:ILE:HD11	2:J:914:TRP:CE2	2.19	0.78
2:K:1120:ILE:HD13	2:K:1173:HIS:CE1	2.17	0.78
2:G:1454:MET:HE2	2:G:1550:SER:HA	1.65	0.78
2:I:854:VAL:HG21	2:I:1070:PRO:HA	1.65	0.78
2:G:2052:LYS:HD3	2:G:2074:TRP:HE1	1.46	0.78
1:D:669:VAL:O	1:D:673:LEU:HD12	1.84	0.78
2:K:2057:GLU:HA	2:K:2060:ARG:NH1	1.98	0.78
2:H:1442:TYR:O	2:H:1445:THR:HG22	1.83	0.78
1:E:824:LEU:HB3	1:E:839:ILE:CD1	2.12	0.78
2:K:493:MET:HA	2:K:497:ASP:HB2	1.64	0.78
1:F:616:HIS:HA	1:F:633:THR:HG23	1.66	0.78
1:F:777:LEU:O	1:F:781:ILE:HG13	1.84	0.78
2:G:595:SER:HB3	2:G:602:PRO:CG	2.13	0.78
2:K:2059:HIS:CE1	2:K:2068:ALA:HB2	2.18	0.78
1:E:973:TRP:CE2	1:E:1648:LYS:HB2	2.19	0.78

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:F:60:THR:HG23	2:L:1922:VAL:HG13	1.64	0.78
1:B:741:ASP:OD1	1:B:793:ARG:HD3	1.84	0.78
2:J:1706:MET:O	2:J:1709:TYR:HB3	1.84	0.78
1:E:430:VAL:HG11	1:E:490:VAL:HG11	1.66	0.78
1:B:1499:ARG:CD	1:D:1476:ARG:HH12	1.96	0.78
2:L:685:VAL:HG12	2:L:687:ILE:HG13	1.66	0.78
2:J:911:GLN:HE21	2:J:1064:THR:HG23	1.49	0.78
2:K:471:ASP:HB3	2:K:474:THR:O	1.83	0.78
2:H:300:THR:HB	2:H:303:GLU:H	1.49	0.78
2:K:1594:ARG:HG2	2:K:1594:ARG:NH1	1.93	0.77
2:G:1594:ARG:NH1	2:G:1594:ARG:HG2	1.90	0.77
1:A:669:VAL:O	1:A:673:LEU:HD12	1.83	0.77
2:L:903:ILE:HD11	2:L:914:TRP:CE2	2.18	0.77
1:F:22:PHE:HE2	2:L:2017:PHE:CG	2.01	0.77
2:L:590:VAL:HG23	2:L:1091:HIS:NE2	1.99	0.77
1:C:613:PRO:HG2	1:C:633:THR:HG21	1.65	0.77
2:K:718:PRO:HG2	2:K:727:VAL:HG21	1.64	0.77
2:K:856:THR:HG23	2:K:866:HIS:CD2	2.18	0.77
1:C:430:VAL:HG11	1:C:490:VAL:HG11	1.66	0.77
2:J:917:ARG:HG3	2:J:917:ARG:NH1	1.92	0.77
2:K:1890:ARG:HH22	2:K:1996:ILE:HD11	1.48	0.77
2:K:208:LEU:HD12	2:K:227:ILE:HD11	1.67	0.77
1:D:408:GLN:HG2	1:D:1610:ARG:HH12	1.50	0.77
1:D:31:THR:HG23	2:J:2040:ILE:HG21	1.66	0.77
2:L:1890:ARG:HH22	2:L:1996:ILE:HD11	1.48	0.77
2:K:855:ILE:HD13	2:K:856:THR:H	1.49	0.77
1:E:965:TYR:CE1	1:E:1199:LEU:HD22	2.20	0.77
2:G:493:MET:HA	2:G:497:ASP:HB2	1.66	0.77
1:F:729:ILE:HA	1:F:736:LEU:CD2	2.14	0.77
1:F:498:THR:HG21	1:F:858:LEU:HA	1.64	0.77
1:D:729:ILE:HA	1:D:736:LEU:CD2	2.14	0.77
2:H:747:ARG:HH11	2:H:780:SER:HB3	1.48	0.77
2:H:622:MET:SD	2:H:652:ILE:HD11	2.23	0.77
2:I:2052:LYS:HD3	2:I:2074:TRP:HE1	1.46	0.77
2:K:2052:LYS:HD3	2:K:2074:TRP:HE1	1.46	0.77
1:E:1032:MET:CE	1:E:1165:PRO:HB3	2.13	0.77
2:H:1460:THR:HG22	2:H:1462:GLN:H	1.47	0.77
1:D:1342:ARG:HH12	1:D:1347:THR:HB	1.48	0.77
1:B:1278:GLY:HA2	1:B:1630:LYS:HE2	1.66	0.77
2:J:855:ILE:HD13	2:J:856:THR:H	1.50	0.77
2:H:595:SER:HB3	2:H:602:PRO:CG	2.15	0.77
2:J:284:GLY:H	2:J:289:ILE:HD12	1.49	0.77

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:J:747:ARG:HH11	2:J:780:SER:HB3	1.49	0.77
2:L:783:GLY:HA3	2:L:1075:TYR:HB3	1.66	0.77
2:G:1288:PHE:O	2:G:1292:VAL:HG23	1.84	0.77
2:G:1746:THR:HB	2:G:1792:THR:HG23	1.65	0.77
2:L:930:THR:HG22	2:L:933:GLU:HG3	1.66	0.77
2:J:685:VAL:HG12	2:J:687:ILE:HG13	1.65	0.77
2:K:289:ILE:HG23	2:K:490:LEU:HD22	1.66	0.77
2:I:1602:LEU:HG	2:I:1606:ILE:CD1	2.14	0.77
2:H:1602:LEU:HG	2:H:1606:ILE:CD1	2.14	0.77
1:B:1342:ARG:HH12	1:B:1347:THR:HB	1.49	0.77
2:I:856:THR:HG23	2:I:866:HIS:CD2	2.19	0.77
2:H:856:THR:HG23	2:H:866:HIS:CD2	2.18	0.77
2:H:459:LYS:HA	2:H:485:ASP:OD1	1.84	0.77
2:J:376:ARG:HB3	2:J:394:PRO:HG2	1.64	0.77
2:H:579:ARG:HB2	2:H:591:ASP:HB3	1.66	0.77
1:D:1342:ARG:HH11	1:D:1347:THR:HB	1.48	0.77
1:B:1279:ALA:O	1:B:1282:THR:HG23	1.85	0.77
2:I:487:ILE:HB	2:I:488:PRO:HD3	1.66	0.77
2:J:2015:LYS:HB2	2:J:2016:PRO:HD3	1.67	0.77
1:A:777:LEU:O	1:A:781:ILE:HG13	1.85	0.77
2:G:1231:THR:HG23	2:G:1595:VAL:HG21	1.64	0.77
2:G:855:ILE:HD13	2:G:856:THR:H	1.50	0.77
2:G:1700:GLN:HA	2:G:1704:MET:HE1	1.64	0.77
1:D:1617:ILE:H	1:D:1617:ILE:HD13	1.50	0.77
2:L:300:THR:HB	2:L:303:GLU:H	1.49	0.77
1:E:1224:SER:HB2	1:E:1307:PHE:O	1.85	0.77
2:H:855:ILE:HD13	2:H:856:THR:H	1.49	0.77
2:L:2036:ILE:HG22	2:L:2037:GLY:N	2.00	0.77
2:K:358:ARG:NH2	2:K:383:VAL:HG21	2.00	0.77
2:K:579:ARG:HB2	2:K:591:ASP:HB3	1.65	0.77
1:E:964:LYS:O	1:E:966:PRO:HD3	1.85	0.77
2:L:1460:THR:HG22	2:L:1462:GLN:H	1.50	0.76
1:D:973:TRP:CE2	1:D:1648:LYS:HB2	2.20	0.76
1:A:684:THR:HG23	1:A:686:ARG:H	1.48	0.76
1:A:1278:GLY:HA2	1:A:1630:LYS:HE2	1.67	0.76
2:J:818:THR:HG22	2:J:829:LYS:HB2	1.67	0.76
2:J:493:MET:HA	2:J:497:ASP:HB2	1.67	0.76
2:I:284:GLY:H	2:I:289:ILE:HD12	1.50	0.76
2:J:1764:MET:HB3	2:J:1780:ILE:HD12	1.66	0.76
1:E:440:SER:HB3	1:E:481:LEU:HD23	1.66	0.76
1:C:973:TRP:CE2	1:C:1648:LYS:HB2	2.20	0.76
2:I:747:ARG:HH11	2:I:780:SER:HB3	1.50	0.76

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:H:1915:LEU:HD21	2:H:1939:LEU:HD22	1.66	0.76
2:I:1460:THR:HG22	2:I:1462:GLN:H	1.50	0.76
2:H:487:ILE:HB	2:H:488:PRO:HD3	1.66	0.76
2:K:1181:PHE:CE1	2:K:1191:PRO:HD2	2.20	0.76
1:D:824:LEU:HB3	1:D:839:ILE:CD1	2.14	0.76
2:L:818:THR:HG22	2:L:829:LYS:HB2	1.64	0.76
2:J:1339:GLY:HA2	2:L:376:ARG:HE	1.50	0.76
2:J:914:TRP:NE1	2:J:916:GLY:HA3	2.00	0.76
1:B:1490:GLY:O	1:B:1509:THR:HB	1.84	0.76
2:G:207:LEU:O	2:G:211:LEU:HG	1.85	0.76
2:L:284:GLY:H	2:L:289:ILE:HD12	1.49	0.76
2:L:2059:HIS:CE1	2:L:2068:ALA:HB2	2.21	0.76
2:H:336:LEU:O	2:H:340:VAL:HG23	1.86	0.76
2:G:2057:GLU:HA	2:G:2060:ARG:NH1	2.00	0.76
1:D:1443:LEU:CD2	1:D:1470:ARG:HB3	2.08	0.76
2:H:376:ARG:HB3	2:H:394:PRO:HG2	1.65	0.76
1:D:777:LEU:O	1:D:781:ILE:HG13	1.85	0.76
2:J:1289:TYR:CG	2:J:1370:LEU:HD23	2.20	0.76
1:E:955:VAL:HG21	2:K:964:ARG:HH21	1.49	0.76
2:L:674:ILE:HD13	2:L:705:TYR:CE2	2.20	0.76
1:B:973:TRP:CE2	1:B:1648:LYS:HB2	2.20	0.76
2:I:2015:LYS:HB2	2:I:2016:PRO:HD3	1.68	0.76
2:L:1700:GLN:HA	2:L:1704:MET:HE1	1.65	0.76
1:C:392:ASP:HB3	1:C:395:LYS:HD2	1.65	0.76
1:C:1674:ILE:HD12	2:I:1010:ALA:HB3	1.68	0.76
2:G:420:PRO:HG3	2:G:847:TYR:CD1	2.21	0.76
1:A:365:GLN:HG3	1:F:365:GLN:CG	2.16	0.76
2:G:487:ILE:HB	2:G:488:PRO:HD3	1.68	0.76
1:E:1617:ILE:HD13	1:E:1617:ILE:H	1.50	0.76
1:A:565:GLN:HG3	1:F:551:LEU:HD11	1.66	0.76
1:B:965:TYR:CZ	1:B:1199:LEU:HD22	2.21	0.76
2:K:622:MET:SD	2:K:652:ILE:HD11	2.26	0.76
1:B:1107:GLU:HB2	1:D:1104:GLN:OE1	1.85	0.76
2:K:459:LYS:HA	2:K:485:ASP:OD1	1.85	0.76
2:J:2059:HIS:CE1	2:J:2068:ALA:HB2	2.21	0.76
2:J:1602:LEU:HG	2:J:1606:ILE:HD11	1.66	0.76
1:B:1565:PRO:HG3	1:B:1572:TRP:CZ3	2.20	0.76
2:H:471:ASP:HB3	2:H:474:THR:O	1.86	0.76
1:B:562:SER:HB3	1:E:551:LEU:HD21	1.66	0.76
1:B:1342:ARG:HH11	1:B:1347:THR:HB	1.49	0.76
2:L:1194:ARG:CG	2:L:1194:ARG:HH11	1.86	0.76
2:K:2037:GLY:HA2	2:K:2048:PHE:O	1.86	0.76

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:H:2059:HIS:CE1	2:H:2068:ALA:HB2	2.20	0.76
2:J:1340:LYS:CE	2:L:376:ARG:HH22	1.98	0.76
2:G:1867:MET:O	2:G:2003:VAL:HG21	1.86	0.76
1:E:1213:VAL:HG22	1:E:1300:ARG:NH2	2.01	0.76
1:B:1149:LEU:HB2	1:D:1149:LEU:HB2	1.68	0.76
2:H:571:ASP:OD1	2:H:573:VAL:HG23	1.85	0.76
1:E:632:LEU:HA	1:E:635:ILE:HG22	1.68	0.76
2:J:487:ILE:HB	2:J:488:PRO:HD3	1.67	0.76
2:G:1764:MET:HB3	2:G:1780:ILE:HD12	1.68	0.76
1:C:1443:LEU:O	1:C:1447:VAL:HG23	1.85	0.76
2:K:1617:ARG:HB2	2:K:1635:TYR:CZ	2.20	0.76
2:L:911:GLN:HE21	2:L:1064:THR:HG23	1.50	0.76
2:I:440:HIS:CD2	2:I:499:VAL:HG23	2.21	0.76
2:J:1770:ASN:HB2	2:J:1776:LYS:HE2	1.67	0.76
2:L:579:ARG:HB2	2:L:591:ASP:HB3	1.66	0.76
2:I:783:GLY:HA3	2:I:1075:TYR:HB3	1.67	0.75
2:J:1890:ARG:HH22	2:J:1996:ILE:HD11	1.49	0.75
2:K:2015:LYS:HB2	2:K:2016:PRO:HD3	1.66	0.75
1:E:1279:ALA:O	1:E:1282:THR:HG23	1.86	0.75
1:C:1342:ARG:HH12	1:C:1347:THR:HB	1.49	0.75
2:I:779:GLY:O	2:I:780:SER:HB2	1.85	0.75
1:A:1425:LEU:HD21	1:A:1429:ARG:HH21	1.51	0.75
1:A:440:SER:HB3	1:A:481:LEU:HD23	1.68	0.75
1:F:440:SER:HB3	1:F:481:LEU:HD23	1.67	0.75
2:K:1884:CYS:HB3	2:K:1936:LEU:HD12	1.67	0.75
2:K:265:CYS:SG	2:K:275:LEU:HD12	2.26	0.75
2:H:590:VAL:HG23	2:H:1091:HIS:NE2	2.01	0.75
1:C:824:LEU:HB3	1:C:839:ILE:CD1	2.15	0.75
2:J:1115:TYR:HB3	2:J:1267:PRO:HB3	1.68	0.75
2:K:1460:THR:HG22	2:K:1462:GLN:H	1.51	0.75
2:L:1884:CYS:HB3	2:L:1936:LEU:HD12	1.68	0.75
2:I:1468:ARG:HH12	2:I:1475:LEU:HB2	1.51	0.75
2:H:709:LEU:H	2:H:709:LEU:HD23	1.51	0.75
1:F:1342:ARG:HH12	1:F:1347:THR:HB	1.50	0.75
2:L:856:THR:HG23	2:L:866:HIS:CD2	2.22	0.75
2:J:595:SER:HB3	2:J:602:PRO:CG	2.15	0.75
1:D:1079:ARG:HH11	1:D:1079:ARG:CG	1.97	0.75
2:K:487:ILE:HB	2:K:488:PRO:HD3	1.67	0.75
2:G:1602:LEU:HG	2:G:1606:ILE:CD1	2.15	0.75
2:K:1602:LEU:HG	2:K:1606:ILE:CD1	2.15	0.75
1:E:1032:MET:HE3	1:E:1165:PRO:HB3	1.66	0.75
2:I:1305:LEU:HD11	2:I:1365:LYS:HD2	1.68	0.75

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:F:973:TRP:CE2	1:F:1648:LYS:HB2	2.22	0.75
2:I:1420:LYS:HG2	2:I:1425:PRO:HA	1.69	0.75
2:H:208:LEU:HD12	2:H:227:ILE:HD11	1.68	0.75
2:I:709:LEU:HD23	2:I:709:LEU:H	1.52	0.75
2:J:374:GLU:HA	2:J:377:HIS:HD2	1.47	0.75
2:H:2052:LYS:HD3	2:H:2074:TRP:CE2	2.21	0.75
1:F:1703:VAL:CG1	1:F:1711:LEU:HB3	2.16	0.75
2:G:685:VAL:HG12	2:G:687:ILE:HG13	1.66	0.75
2:J:674:ILE:HD13	2:J:705:TYR:CE2	2.22	0.75
1:C:1089:TYR:CE1	1:C:1312:GLU:HG3	2.21	0.75
1:B:1183:VAL:HG11	1:B:1187:THR:HG21	1.68	0.75
1:A:392:ASP:HB3	1:A:395:LYS:HD2	1.68	0.75
1:C:767:HIS:CE1	1:D:767:HIS:HE1	2.05	0.75
2:J:2005:PHE:CB	2:J:2010:LEU:HD11	2.17	0.75
2:L:2005:PHE:CB	2:L:2010:LEU:HD11	2.17	0.75
1:D:486:VAL:HG11	1:D:647:GLY:HA3	1.69	0.75
1:E:777:LEU:O	1:E:781:ILE:HG13	1.86	0.75
1:F:1617:ILE:H	1:F:1617:ILE:HD13	1.52	0.75
2:I:376:ARG:HB3	2:I:394:PRO:HG2	1.67	0.75
1:E:452:ILE:HD11	1:E:470:GLY:HA3	1.68	0.75
2:H:493:MET:HA	2:H:497:ASP:HB2	1.67	0.75
1:F:1342:ARG:HH11	1:F:1347:THR:HB	1.51	0.75
1:F:1079:ARG:HH11	1:F:1079:ARG:CG	1.97	0.75
2:H:911:GLN:HE21	2:H:1064:THR:HG23	1.50	0.75
1:A:824:LEU:HB3	1:A:839:ILE:CD1	2.16	0.75
1:E:729:ILE:HA	1:E:736:LEU:CD2	2.16	0.75
2:J:1985:GLN:O	2:J:1987:VAL:N	2.19	0.75
2:I:663:ILE:HD12	2:I:663:ILE:H	1.52	0.75
1:B:1443:LEU:CD2	1:B:1470:ARG:HB3	2.08	0.75
2:G:1339:GLY:HA2	2:I:376:ARG:HE	1.52	0.75
1:A:1431:GLN:HG2	1:E:1431:GLN:OE1	1.87	0.75
1:C:1279:ALA:O	1:C:1282:THR:HG23	1.87	0.75
1:D:1443:LEU:O	1:D:1447:VAL:HG23	1.85	0.75
1:D:1279:ALA:O	1:D:1282:THR:HG23	1.86	0.75
2:G:1053:ILE:HD12	2:G:1061:VAL:HG22	1.68	0.75
2:G:1770:ASN:HB2	2:G:1776:LYS:HE2	1.68	0.75
2:H:1985:GLN:O	2:H:1987:VAL:N	2.19	0.75
1:B:616:HIS:HA	1:B:633:THR:HG23	1.68	0.75
2:H:1468:ARG:HH12	2:H:1475:LEU:HB2	1.51	0.75
2:J:471:ASP:HB3	2:J:474:THR:O	1.87	0.75
2:K:709:LEU:H	2:K:709:LEU:HD23	1.52	0.74
2:L:487:ILE:HB	2:L:488:PRO:HD3	1.67	0.74

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:L:2052:LYS:HB3	2:L:2074:TRP:CE2	2.22	0.74
2:J:1867:MET:O	2:J:2003:VAL:HG21	1.87	0.74
2:L:855:ILE:HD13	2:L:856:THR:H	1.51	0.74
2:H:2052:LYS:HB3	2:H:2074:TRP:CE2	2.22	0.74
2:L:1602:LEU:HG	2:L:1606:ILE:CD1	2.17	0.74
1:C:452:ILE:HD11	1:C:470:GLY:HA3	1.69	0.74
1:E:1094:LYS:HE3	1:E:1316:TYR:CD1	2.21	0.74
1:E:560:LYS:O	1:E:564:LEU:HB2	1.86	0.74
2:K:420:PRO:HG3	2:K:847:TYR:HD1	1.53	0.74
2:I:2037:GLY:HA2	2:I:2048:PHE:O	1.87	0.74
2:J:1340:LYS:HE3	2:L:376:ARG:HH22	1.51	0.74
2:L:1746:THR:HB	2:L:1792:THR:HG23	1.67	0.74
1:F:452:ILE:HD11	1:F:470:GLY:HA3	1.68	0.74
2:K:1706:MET:O	2:K:1709:TYR:HB3	1.87	0.74
2:L:663:ILE:HD12	2:L:663:ILE:H	1.51	0.74
2:G:208:LEU:HD12	2:G:227:ILE:HD11	1.68	0.74
1:D:423:ARG:O	1:D:429:ILE:HD11	1.88	0.74
2:I:2005:PHE:CB	2:I:2010:LEU:HD11	2.17	0.74
1:B:1476:ARG:HH12	1:D:1499:ARG:HD3	1.52	0.74
2:H:1721:ARG:NH2	2:H:1853:ILE:HD12	2.02	0.74
2:I:855:ILE:HD13	2:I:856:THR:H	1.52	0.74
2:K:1289:TYR:CG	2:K:1370:LEU:HD23	2.20	0.74
2:H:1803:THR:HA	2:H:1806:THR:HB	1.68	0.74
2:L:208:LEU:HD12	2:L:227:ILE:HD11	1.68	0.74
2:K:1499:LYS:HG3	2:K:1500:ASN:H	1.53	0.74
1:A:1617:ILE:H	1:A:1617:ILE:HD13	1.53	0.74
1:F:741:ASP:OD1	1:F:793:ARG:HD3	1.86	0.74
2:G:265:CYS:SG	2:G:275:LEU:HD12	2.28	0.74
2:H:2005:PHE:CB	2:H:2010:LEU:HD11	2.18	0.74
2:I:610:PRO:HG3	2:I:1047:LEU:HD22	1.69	0.74
1:A:1342:ARG:HH11	1:A:1347:THR:HB	1.51	0.74
1:B:365:GLN:HG3	1:E:365:GLN:CG	2.17	0.74
1:C:41:THR:HG21	2:I:1691:ALA:HB2	1.70	0.74
1:A:560:LYS:O	1:A:564:LEU:HB2	1.87	0.74
1:E:1052:ASP:OD2	1:E:1055:THR:HG22	1.88	0.74
1:E:1223:GLY:HA3	1:E:1276:PRO:HD2	1.70	0.74
2:H:382:LEU:HB3	2:H:499:VAL:HB	1.68	0.74
2:G:1442:TYR:O	2:G:1445:THR:HG22	1.88	0.74
2:K:1468:ARG:HH12	2:K:1475:LEU:HB2	1.52	0.74
2:K:1845:VAL:HG21	2:K:1856:LEU:HD22	1.69	0.74
2:K:501:TRP:NE1	2:K:528:THR:HG22	2.02	0.74
1:C:528:GLU:O	1:C:611:THR:HG21	1.88	0.74

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:B:486:VAL:HG11	1:B:647:GLY:HA3	1.69	0.74
2:K:1764:MET:HB3	2:K:1780:ILE:HD12	1.70	0.74
2:J:1420:LYS:HG2	2:J:1425:PRO:HA	1.69	0.74
2:G:1844:LEU:HB3	2:G:1850:VAL:HG21	1.70	0.74
1:D:524:LYS:HB3	1:D:528:GLU:OE2	1.88	0.74
2:G:506:VAL:O	2:G:506:VAL:HG12	1.86	0.74
2:G:158:LEU:HD22	2:G:169:ILE:HD11	1.68	0.74
1:E:669:VAL:O	1:E:673:LEU:HD12	1.88	0.74
1:C:767:HIS:HE1	1:D:767:HIS:CE1	2.05	0.74
2:J:1845:VAL:HG21	2:J:1856:LEU:HD22	1.69	0.74
2:H:857:VAL:HG13	2:H:876:TRP:NE1	2.01	0.74
2:I:1770:ASN:HB2	2:I:1776:LYS:HE2	1.70	0.74
2:G:2059:HIS:CE1	2:G:2068:ALA:HB2	2.23	0.73
2:H:1746:THR:HB	2:H:1792:THR:HG23	1.69	0.73
1:F:1032:MET:CE	1:F:1165:PRO:HB3	2.18	0.73
2:G:1985:GLN:O	2:G:1987:VAL:N	2.19	0.73
1:B:608:LYS:O	1:B:610:GLU:HG2	1.88	0.73
2:G:622:MET:SD	2:G:652:ILE:HD11	2.28	0.73
2:I:600:VAL:HG13	2:I:601:PRO:HD2	1.69	0.73
1:A:1107:GLU:HG3	1:A:1108:PRO:HD2	1.68	0.73
2:L:686:PRO:HB3	2:L:1187:PHE:CE1	2.23	0.73
2:K:718:PRO:CG	2:K:727:VAL:HG21	2.18	0.73
2:K:1803:THR:HA	2:K:1806:THR:HB	1.69	0.73
2:L:336:LEU:O	2:L:340:VAL:HG23	1.89	0.73
1:B:1213:VAL:HG22	1:B:1300:ARG:NH2	2.02	0.73
2:K:440:HIS:HD2	2:K:497:ASP:O	1.70	0.73
2:I:779:GLY:HA3	2:I:811:MET:HE3	1.69	0.73
2:H:674:ILE:HD13	2:H:705:TYR:CE2	2.23	0.73
2:G:2015:LYS:HB2	2:G:2016:PRO:HD3	1.69	0.73
2:K:1915:LEU:HD21	2:K:1939:LEU:HD22	1.68	0.73
1:C:1421:ARG:HD2	1:C:1489:PHE:O	1.89	0.73
2:G:1460:THR:HG22	2:G:1462:GLN:H	1.52	0.73
2:I:1891:ILE:HD11	2:I:1943:LEU:HB3	1.69	0.73
2:L:1706:MET:O	2:L:1709:TYR:HB3	1.88	0.73
1:E:1278:GLY:HA2	1:E:1630:LYS:HE2	1.70	0.73
1:A:1443:LEU:O	1:A:1447:VAL:HG23	1.89	0.73
2:G:2052:LYS:HB3	2:G:2074:TRP:CE2	2.22	0.73
2:G:685:VAL:HG23	2:G:1186:ARG:NH1	2.04	0.73
2:H:1499:LYS:HG3	2:H:1500:ASN:H	1.53	0.73
1:C:616:HIS:HA	1:C:633:THR:HG23	1.69	0.73
2:G:1706:MET:O	2:G:1709:TYR:HB3	1.88	0.73
1:A:756:ILE:HA	1:A:759:ILE:HD11	1.69	0.73

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:F:1279:ALA:O	1:F:1282:THR:HG23	1.88	0.73
1:E:1342:ARG:HH11	1:E:1347:THR:HB	1.53	0.73
2:L:595:SER:HB3	2:L:602:PRO:CG	2.15	0.73
2:K:743:TRP:CG	2:K:761:ILE:HD11	2.24	0.73
2:J:783:GLY:HA3	2:J:1075:TYR:HB3	1.68	0.73
1:A:1504:ARG:NH1	1:A:1504:ARG:CG	2.45	0.73
2:G:420:PRO:HG3	2:G:847:TYR:HD1	1.53	0.73
2:J:2037:GLY:HA2	2:J:2048:PHE:O	1.88	0.73
2:H:43:PHE:HB2	2:I:22:ARG:HH21	1.52	0.73
1:B:633:THR:HG22	1:B:637:LEU:HD12	1.69	0.73
1:D:392:ASP:HB3	1:D:395:LYS:HD2	1.70	0.73
1:A:1213:VAL:HG22	1:A:1300:ARG:NH2	2.04	0.73
2:G:903:ILE:HD11	2:G:914:TRP:CE2	2.24	0.73
2:J:1460:THR:HG22	2:J:1462:GLN:H	1.52	0.73
2:K:930:THR:HG22	2:K:933:GLU:HG3	1.70	0.73
2:L:622:MET:SD	2:L:652:ILE:HD11	2.29	0.73
2:J:158:LEU:HD22	2:J:169:ILE:HD11	1.71	0.73
2:G:1617:ARG:HB2	2:G:1635:TYR:CZ	2.23	0.73
2:I:1499:LYS:HG3	2:I:1500:ASN:H	1.54	0.73
2:L:709:LEU:HD23	2:L:709:LEU:H	1.54	0.73
1:B:1052:ASP:OD2	1:B:1055:THR:HG22	1.89	0.73
1:B:423:ARG:O	1:B:429:ILE:HD11	1.88	0.73
1:A:1094:LYS:HE3	1:A:1316:TYR:CD1	2.24	0.73
1:D:1703:VAL:HG11	1:D:1711:LEU:HB3	1.71	0.73
1:E:532:ILE:HG22	1:E:907:PHE:CG	2.24	0.73
2:K:779:GLY:O	2:K:780:SER:HB2	1.87	0.73
2:L:1868:GLN:HG2	2:L:1873:ARG:NH2	2.03	0.73
1:C:632:LEU:HA	1:C:635:ILE:HG22	1.69	0.73
1:B:632:LEU:HA	1:B:635:ILE:HG22	1.68	0.73
2:J:365:ILE:HG23	2:J:378:ILE:HG22	1.71	0.73
2:L:1770:ASN:HB2	2:L:1776:LYS:HE2	1.70	0.73
1:D:452:ILE:HD11	1:D:470:GLY:HA3	1.69	0.73
2:I:590:VAL:HG23	2:I:1091:HIS:NE2	2.04	0.73
1:F:1443:LEU:O	1:F:1447:VAL:HG23	1.88	0.73
2:K:300:THR:HB	2:K:303:GLU:H	1.52	0.73
1:A:452:ILE:HD11	1:A:470:GLY:HA3	1.70	0.73
2:I:1918:VAL:HG13	2:I:2006:HIS:HB2	1.69	0.73
2:I:1721:ARG:NH2	2:I:1853:ILE:HD12	2.04	0.73
1:E:1443:LEU:O	1:E:1447:VAL:HG23	1.88	0.73
2:I:420:PRO:HG3	2:I:847:TYR:CD1	2.24	0.73
2:J:622:MET:SD	2:J:652:ILE:HD11	2.29	0.73
2:I:2052:LYS:HB3	2:I:2074:TRP:CE2	2.24	0.73

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:1107:GLU:HB2	1:E:1104:GLN:OE1	1.89	0.73
1:C:1107:GLU:HB2	1:F:1104:GLN:OE1	1.89	0.73
2:J:791:TYR:HA	2:J:796:TRP:HD1	1.53	0.73
2:K:1420:LYS:HG2	2:K:1425:PRO:HA	1.71	0.73
2:K:461:PRO:HA	2:K:484:GLU:O	1.89	0.72
2:I:818:THR:HG22	2:I:829:LYS:HB2	1.69	0.72
1:E:1443:LEU:CD2	1:E:1470:ARG:HB3	2.07	0.72
2:L:461:PRO:HA	2:L:484:GLU:O	1.89	0.72
2:L:501:TRP:NE1	2:L:528:THR:HG22	2.03	0.72
2:G:1890:ARG:HH22	2:G:1996:ILE:CD1	2.01	0.72
2:K:1053:ILE:HD12	2:K:1061:VAL:HG22	1.70	0.72
2:L:471:ASP:HB3	2:L:474:THR:O	1.89	0.72
1:B:1363:MET:HE1	1:B:1373:VAL:HG21	1.71	0.72
2:K:1721:ARG:NH2	2:K:1853:ILE:HD12	2.05	0.72
1:A:1052:ASP:OD2	1:A:1055:THR:HG22	1.88	0.72
2:I:609:THR:OG1	2:I:610:PRO:HD3	1.89	0.72
1:A:427:ARG:HH12	1:A:492:ILE:HG23	1.54	0.72
2:H:930:THR:HG22	2:H:933:GLU:HG3	1.70	0.72
2:L:1499:LYS:HG3	2:L:1500:ASN:H	1.55	0.72
1:E:392:ASP:HB3	1:E:395:LYS:HD2	1.71	0.72
1:D:1052:ASP:OD2	1:D:1055:THR:HG22	1.89	0.72
1:E:978:LYS:HB3	1:E:979:PRO:HD3	1.70	0.72
2:I:471:ASP:HB3	2:I:474:THR:O	1.89	0.72
2:H:1301:PHE:HB3	2:H:1364:ARG:HG3	1.70	0.72
1:C:1443:LEU:CD2	1:C:1470:ARG:HB3	2.10	0.72
2:J:158:LEU:HA	2:J:566:VAL:HG21	1.70	0.72
2:K:2052:LYS:HB3	2:K:2074:TRP:CE2	2.25	0.72
1:E:613:PRO:O	1:E:615:LEU:N	2.22	0.72
2:H:1053:ILE:HD12	2:H:1061:VAL:HG22	1.72	0.72
2:H:942:MET:CE	2:H:955:LEU:HB3	2.20	0.72
2:K:2005:PHE:CB	2:K:2010:LEU:HD11	2.18	0.72
1:B:964:LYS:O	1:B:966:PRO:HD3	1.89	0.72
2:J:1178:THR:HG22	2:J:1180:VAL:H	1.55	0.72
2:J:1053:ILE:HD12	2:J:1061:VAL:HG22	1.70	0.72
2:J:489:GLU:HA	2:J:492:ARG:NH1	2.04	0.72
1:B:669:VAL:O	1:B:673:LEU:HD12	1.90	0.72
2:G:590:VAL:HG23	2:G:1091:HIS:NE2	2.04	0.72
2:L:1845:VAL:HG21	2:L:1856:LEU:HD22	1.71	0.72
1:F:41:THR:HG21	2:L:1691:ALA:HB2	1.71	0.72
2:H:1833:PHE:CZ	2:H:2039:TYR:HB2	2.24	0.72
2:H:1764:MET:HB3	2:H:1780:ILE:HD12	1.71	0.72
2:G:314:LEU:HG	2:G:318:ILE:HD11	1.71	0.72

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:K:1114:GLU:HB3	2:K:1169:TYR:HB3	1.71	0.72
2:L:1764:MET:HB3	2:L:1780:ILE:HD12	1.71	0.72
2:G:358:ARG:NH2	2:G:383:VAL:HG21	2.05	0.72
2:H:1074:LYS:HE3	2:H:1075:TYR:HE1	1.54	0.72
1:B:408:GLN:HG2	1:B:1610:ARG:HH12	1.55	0.72
1:A:1104:GLN:OE1	1:E:1107:GLU:HB2	1.89	0.72
2:K:791:TYR:HA	2:K:796:TRP:HD1	1.54	0.72
1:C:1674:ILE:HD11	2:I:1011:GLN:HG3	1.70	0.72
1:C:684:THR:HG23	1:C:686:ARG:H	1.53	0.72
2:G:1331:THR:HG22	2:I:329:THR:HA	1.71	0.72
2:K:1985:GLN:O	2:K:1987:VAL:N	2.20	0.72
2:K:911:GLN:HE21	2:K:1064:THR:HG23	1.53	0.72
2:L:930:THR:HG23	2:L:933:GLU:H	1.55	0.72
2:K:190:TYR:HD1	2:K:201:ILE:HD13	1.55	0.72
2:K:590:VAL:HG23	2:K:1091:HIS:NE2	2.04	0.72
2:H:251:PRO:HG3	2:H:316:PHE:HA	1.71	0.72
2:K:314:LEU:HG	2:K:318:ILE:HD11	1.72	0.72
2:G:289:ILE:HG12	2:G:493:MET:HE1	1.71	0.72
1:C:767:HIS:HB2	1:C:813:LEU:HD12	1.72	0.72
1:D:30:GLU:HB2	2:J:2045:ALA:HB1	1.69	0.72
2:L:358:ARG:HH21	2:L:383:VAL:HG21	1.54	0.72
2:L:1181:PHE:CE1	2:L:1191:PRO:HD2	2.24	0.72
2:J:1181:PHE:CE1	2:J:1191:PRO:HD2	2.25	0.72
2:H:327:PRO:CD	2:I:1338:ARG:HH21	2.02	0.72
2:K:914:TRP:NE1	2:K:916:GLY:HA3	2.05	0.72
2:H:783:GLY:HA3	2:H:1075:TYR:HB3	1.70	0.72
1:D:1674:ILE:HD11	2:J:1011:GLN:HG3	1.71	0.72
2:G:2005:PHE:CB	2:G:2010:LEU:HD11	2.19	0.72
1:E:539:THR:O	1:E:542:GLN:HG2	1.90	0.72
2:J:2052:LYS:HD3	2:J:2074:TRP:CE2	2.24	0.71
2:G:289:ILE:HG23	2:G:490:LEU:HD22	1.72	0.71
2:J:1891:ILE:HD11	2:J:1943:LEU:HB3	1.72	0.71
2:I:493:MET:HA	2:I:497:ASP:HB2	1.71	0.71
2:I:1884:CYS:HB3	2:I:1936:LEU:HD12	1.70	0.71
1:F:1213:VAL:HG22	1:F:1300:ARG:NH2	2.04	0.71
1:A:617:LEU:N	1:A:617:LEU:HD23	2.05	0.71
2:L:506:VAL:O	2:L:506:VAL:HG12	1.90	0.71
1:C:486:VAL:HG11	1:C:647:GLY:HA3	1.70	0.71
1:B:427:ARG:NH1	1:B:492:ILE:HG23	1.99	0.71
2:J:1194:ARG:HH11	2:J:1194:ARG:CG	1.82	0.71
1:A:365:GLN:CG	1:F:365:GLN:HG3	2.19	0.71
2:K:2036:ILE:HG22	2:K:2037:GLY:N	2.05	0.71

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:L:448:HIS:CD2	2:L:491:VAL:HG12	2.26	0.71
2:G:918:ASN:HB3	2:G:924:VAL:HG21	1.71	0.71
2:J:663:ILE:H	2:J:663:ILE:HD12	1.56	0.71
1:F:553:ARG:HH22	1:F:563:GLN:HB3	1.55	0.71
1:E:1674:ILE:HD11	2:K:1011:GLN:HG3	1.72	0.71
1:E:633:THR:HG22	1:E:637:LEU:HD12	1.72	0.71
2:G:2052:LYS:HD3	2:G:2074:TRP:CE2	2.25	0.71
2:G:600:VAL:HG13	2:G:601:PRO:HD2	1.72	0.71
1:C:535:TYR:CD1	1:C:610:GLU:N	2.58	0.71
2:K:857:VAL:CG1	2:K:876:TRP:NE1	2.53	0.71
1:B:905:LEU:HD22	1:B:911:LEU:HD21	1.73	0.71
2:I:251:PRO:HG3	2:I:316:PHE:HA	1.72	0.71
1:D:632:LEU:HA	1:D:635:ILE:HG22	1.71	0.71
2:J:347:PRO:HA	2:J:432:PHE:CD1	2.25	0.71
1:F:965:TYR:CZ	1:F:1199:LEU:HD22	2.24	0.71
2:I:1915:LEU:HD21	2:I:1939:LEU:HD22	1.70	0.71
2:I:1706:MET:O	2:I:1709:TYR:HB3	1.89	0.71
1:B:365:GLN:CG	1:E:365:GLN:HG3	2.18	0.71
2:L:917:ARG:HG2	2:L:937:ARG:NH1	2.06	0.71
2:K:1499:LYS:HG3	2:K:1500:ASN:N	2.05	0.71
2:J:1340:LYS:CG	2:L:376:ARG:NH2	2.53	0.71
2:H:1499:LYS:HG3	2:H:1500:ASN:N	2.06	0.71
2:J:327:PRO:CD	2:K:1338:ARG:HH21	2.04	0.71
2:G:1499:LYS:HG3	2:G:1500:ASN:N	2.06	0.71
2:J:743:TRP:CG	2:J:761:ILE:HD11	2.25	0.71
2:J:779:GLY:O	2:J:780:SER:HB2	1.90	0.71
1:E:955:VAL:HG11	2:K:964:ARG:HE	1.54	0.71
1:D:767:HIS:HB2	1:D:813:LEU:HD12	1.71	0.71
1:F:486:VAL:HG11	1:F:647:GLY:HA3	1.73	0.71
2:I:336:LEU:O	2:I:340:VAL:HG23	1.91	0.71
1:D:964:LYS:O	1:D:966:PRO:HD3	1.89	0.71
1:F:1094:LYS:HE3	1:F:1316:TYR:CD1	2.24	0.71
1:A:964:LYS:O	1:A:966:PRO:HD3	1.91	0.71
1:D:560:LYS:O	1:D:564:LEU:HB2	1.89	0.71
2:K:656:ARG:HH11	2:K:656:ARG:HG2	1.55	0.71
2:J:2052:LYS:HB3	2:J:2074:TRP:CE2	2.25	0.71
2:L:2052:LYS:HD3	2:L:2074:TRP:CE2	2.24	0.71
1:F:632:LEU:HA	1:F:635:ILE:HG22	1.73	0.71
1:B:961:ALA:CB	1:B:1022:LEU:HD12	2.20	0.71
2:G:1499:LYS:HG3	2:G:1500:ASN:H	1.54	0.71
2:G:1289:TYR:CG	2:G:1370:LEU:HD23	2.25	0.71
2:I:506:VAL:HG12	2:I:506:VAL:O	1.90	0.71

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:J:609:THR:OG1	2:J:610:PRO:HD3	1.91	0.71
2:G:2036:ILE:HG22	2:G:2037:GLY:N	2.05	0.71
1:C:1079:ARG:HH11	1:C:1079:ARG:CG	2.02	0.71
2:H:1617:ARG:HB2	2:H:1635:TYR:CZ	2.24	0.71
2:L:1053:ILE:HD12	2:L:1061:VAL:HG22	1.71	0.71
2:I:2059:HIS:CE1	2:I:2068:ALA:HB2	2.24	0.71
2:K:448:HIS:CD2	2:K:491:VAL:HG12	2.26	0.71
2:J:1074:LYS:HE3	2:J:1075:TYR:HE1	1.56	0.71
1:C:890:ASN:OD1	2:J:1755:LYS:HE2	1.90	0.71
1:A:339:GLN:O	1:A:343:ILE:HG13	1.90	0.71
2:H:1420:LYS:HG2	2:H:1425:PRO:HA	1.72	0.71
2:H:358:ARG:HH21	2:H:383:VAL:HG21	1.55	0.71
2:L:1803:THR:HA	2:L:1806:THR:HB	1.71	0.71
1:C:538:ARG:HA	1:C:585:MET:HE1	1.73	0.71
2:G:613:VAL:CG1	2:G:614:PRO:HD3	2.20	0.71
2:L:1007:LEU:HD12	2:L:1007:LEU:N	2.06	0.71
2:L:930:THR:HG22	2:L:933:GLU:CG	2.20	0.71
1:B:567:ASN:HA	1:B:570:TYR:HB3	1.72	0.71
1:B:767:HIS:HB2	1:B:813:LEU:HD12	1.73	0.71
2:H:1610:MET:HA	2:H:1610:MET:HE2	1.70	0.71
1:C:1081:ILE:HA	1:C:1163:GLN:HE22	1.55	0.71
1:D:1421:ARG:HD2	1:D:1489:PHE:O	1.90	0.71
1:D:1081:ILE:HA	1:D:1163:GLN:HE22	1.53	0.71
1:C:1270:THR:HA	1:F:1386:THR:O	1.90	0.71
2:G:638:ALA:HA	2:G:672:TRP:CZ3	2.26	0.71
2:J:1506:SER:HA	2:J:1533:GLY:HA2	1.72	0.71
1:A:859:VAL:HG12	1:A:863:VAL:HG23	1.72	0.71
1:A:1317:GLU:HG3	1:E:1250:LEU:HB2	1.73	0.71
1:A:978:LYS:HB3	1:A:979:PRO:HD3	1.71	0.71
1:F:427:ARG:NH1	1:F:492:ILE:HG23	1.98	0.71
2:K:942:MET:CE	2:K:955:LEU:HB3	2.20	0.71
1:D:616:HIS:HA	1:D:633:THR:HG23	1.70	0.71
2:G:930:THR:HG22	2:G:933:GLU:HG3	1.72	0.71
2:L:1499:LYS:HG3	2:L:1500:ASN:N	2.06	0.71
2:L:1891:ILE:HD11	2:L:1943:LEU:HB3	1.72	0.71
1:A:423:ARG:O	1:A:429:ILE:HD11	1.91	0.71
2:I:1833:PHE:CZ	2:I:2039:TYR:HB2	2.26	0.71
2:G:1833:PHE:CZ	2:G:2039:TYR:HB2	2.25	0.71
1:E:423:ARG:O	1:E:429:ILE:HD11	1.90	0.71
2:J:358:ARG:HH21	2:J:383:VAL:HG21	1.55	0.71
1:F:1443:LEU:CD2	1:F:1470:ARG:HB3	2.11	0.71
2:H:461:PRO:HA	2:H:484:GLU:O	1.90	0.71

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:C:1104:GLN:OE1	1:F:1107:GLU:HB2	1.91	0.71
2:H:779:GLY:O	2:H:780:SER:HB2	1.90	0.71
2:J:1370:LEU:HD12	2:J:1373:LEU:HD13	1.73	0.71
1:B:1386:THR:O	1:D:1270:THR:HA	1.90	0.71
1:C:1278:GLY:HA2	1:C:1630:LYS:HE2	1.71	0.71
2:H:917:ARG:HG2	2:H:937:ARG:NH1	2.06	0.71
2:K:162:ALA:HA	2:K:167:VAL:HG22	1.73	0.71
2:H:2037:GLY:HA2	2:H:2048:PHE:O	1.91	0.71
2:I:472:THR:H	2:I:493:MET:HE3	1.55	0.71
2:L:1074:LYS:HE3	2:L:1075:TYR:HE1	1.55	0.71
2:I:1053:ILE:HD12	2:I:1061:VAL:HG22	1.73	0.71
2:H:358:ARG:NH2	2:H:383:VAL:HG21	2.05	0.71
2:K:1348:PHE:O	2:K:1351:VAL:HG12	1.89	0.71
2:L:1420:LYS:HG2	2:L:1425:PRO:HA	1.71	0.71
1:B:1223:GLY:HA3	1:B:1276:PRO:HD2	1.73	0.71
2:L:314:LEU:HG	2:L:318:ILE:HD11	1.73	0.70
2:L:489:GLU:HA	2:L:492:ARG:NH1	2.04	0.70
2:G:447:ALA:O	2:G:451:ILE:HG13	1.91	0.70
2:G:1232:VAL:HG12	2:G:1246:LEU:HD23	1.73	0.70
1:A:1431:GLN:OE1	1:E:1431:GLN:HG2	1.90	0.70
1:E:424:VAL:HG13	1:E:469:LEU:HD11	1.71	0.70
2:G:579:ARG:HB2	2:G:591:ASP:HB3	1.73	0.70
2:L:1833:PHE:CZ	2:L:2039:TYR:HB2	2.25	0.70
2:H:1706:MET:O	2:H:1709:TYR:HB3	1.91	0.70
2:H:609:THR:OG1	2:H:610:PRO:HD3	1.90	0.70
2:L:610:PRO:CD	4:L:2101:FMN:H6	2.17	0.70
2:H:930:THR:HG23	2:H:933:GLU:H	1.55	0.70
2:K:1074:LYS:HE3	2:K:1075:TYR:HE1	1.56	0.70
2:K:358:ARG:HB2	2:K:389:PHE:CZ	2.26	0.70
2:H:48:LEU:CD1	2:H:101:VAL:HG11	2.21	0.70
2:G:347:PRO:HA	2:G:432:PHE:CD1	2.26	0.70
2:J:48:LEU:CD1	2:J:101:VAL:HG11	2.21	0.70
2:I:1845:VAL:HG21	2:I:1856:LEU:HD22	1.73	0.70
1:F:1081:ILE:HA	1:F:1163:GLN:HE22	1.56	0.70
1:D:1342:ARG:HB2	1:D:1345:SER:HB2	1.74	0.70
1:A:616:HIS:HA	1:A:633:THR:HG23	1.72	0.70
2:K:250:PHE:HB2	2:K:251:PRO:HD3	1.73	0.70
2:K:251:PRO:HG3	2:K:316:PHE:HA	1.71	0.70
2:I:1612:THR:O	2:I:1616:VAL:HG12	1.91	0.70
1:A:962:ASN:HB3	2:G:969:ARG:HD2	1.73	0.70
2:L:779:GLY:O	2:L:780:SER:HB2	1.89	0.70
2:I:314:LEU:HG	2:I:318:ILE:HD11	1.73	0.70

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:I:289:ILE:HG23	2:I:490:LEU:HD22	1.73	0.70
1:E:1617:ILE:N	1:E:1617:ILE:HD13	2.06	0.70
2:J:709:LEU:HD23	2:J:709:LEU:H	1.55	0.70
2:H:1802:ALA:HB1	2:H:1804:GLN:HE22	1.56	0.70
1:A:1342:ARG:HH12	1:A:1347:THR:HB	1.55	0.70
2:I:501:TRP:NE1	2:I:528:THR:HG22	2.04	0.70
1:B:501:ASP:HB3	1:B:505:ASN:HB2	1.74	0.70
1:B:1421:ARG:HD2	1:B:1489:PHE:O	1.91	0.70
1:A:1224:SER:HB2	1:A:1307:PHE:O	1.92	0.70
1:A:541:VAL:O	1:A:545:LEU:HG	1.91	0.70
2:J:1803:THR:HA	2:J:1806:THR:HB	1.73	0.70
2:I:1594:ARG:HH11	2:I:1594:ARG:CG	1.95	0.70
2:J:656:ARG:HH11	2:J:656:ARG:HG2	1.56	0.70
1:C:1617:ILE:N	1:C:1617:ILE:HD13	2.05	0.70
1:B:1617:ILE:N	1:B:1617:ILE:HD13	2.06	0.70
2:G:1074:LYS:HE3	2:G:1075:TYR:HE1	1.57	0.70
2:G:1803:THR:HA	2:G:1806:THR:HB	1.72	0.70
2:G:573:VAL:HG22	2:G:804:PRO:HB2	1.73	0.70
2:G:709:LEU:H	2:G:709:LEU:HD23	1.55	0.70
2:H:600:VAL:HG13	2:H:601:PRO:CD	2.22	0.70
1:F:633:THR:HG22	1:F:637:LEU:HD12	1.74	0.70
2:L:854:VAL:CG2	2:L:1070:PRO:HA	2.21	0.70
2:I:448:HIS:CD2	2:I:491:VAL:HG12	2.23	0.70
1:C:1425:LEU:HD21	1:C:1429:ARG:HH21	1.57	0.70
1:C:423:ARG:O	1:C:429:ILE:HD11	1.91	0.70
2:L:638:ALA:HA	2:L:672:TRP:CZ3	2.27	0.70
2:K:609:THR:OG1	2:K:610:PRO:HD3	1.92	0.70
2:I:2036:ILE:HG22	2:I:2037:GLY:N	2.06	0.70
2:K:293:ALA:HA	2:K:469:VAL:HG21	1.74	0.70
1:B:1214:HIS:HD2	1:B:1216:SER:OG	1.75	0.70
1:E:1068:TYR:O	1:E:1072:ILE:HG13	1.91	0.70
2:H:1888:PRO:HG3	2:H:1900:LEU:HD12	1.73	0.70
1:F:392:ASP:HB3	1:F:395:LYS:HD2	1.73	0.70
1:E:1089:TYR:CE1	1:E:1312:GLU:HG3	2.27	0.70
1:C:567:ASN:HA	1:C:570:TYR:HB3	1.74	0.70
1:C:1697:LEU:HD21	1:F:1401:LEU:HD22	1.74	0.70
2:K:1833:PHE:CZ	2:K:2039:TYR:HB2	2.26	0.70
2:L:251:PRO:HG3	2:L:316:PHE:HA	1.72	0.70
1:D:633:THR:HG22	1:D:637:LEU:HD12	1.73	0.70
2:K:172:ILE:HD11	2:K:501:TRP:CZ2	2.26	0.70
2:I:524:ILE:HG22	2:I:528:THR:HG23	1.73	0.70
2:I:914:TRP:NE1	2:I:916:GLY:HA3	2.07	0.70

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:G:914:TRP:NE1	2:G:916:GLY:HA3	2.07	0.70
2:G:1084:LYS:O	2:G:1088:ASP:HB2	1.91	0.70
2:I:1985:GLN:O	2:I:1987:VAL:N	2.22	0.70
2:H:1867:MET:O	2:H:2003:VAL:HG21	1.92	0.70
1:A:1089:TYR:CE1	1:A:1312:GLU:HG3	2.25	0.70
1:B:1270:THR:HA	1:D:1386:THR:O	1.92	0.70
1:E:1702:ARG:CG	1:E:1702:ARG:NH1	2.44	0.70
2:G:917:ARG:HG2	2:G:937:ARG:NH1	2.06	0.70
2:J:501:TRP:NE1	2:J:528:THR:HG22	2.04	0.70
2:G:854:VAL:CG2	2:G:1070:PRO:HA	2.21	0.70
2:J:1499:LYS:HG3	2:J:1500:ASN:H	1.57	0.70
1:C:964:LYS:O	1:C:966:PRO:HD3	1.91	0.70
2:I:1421:ARG:HD2	2:I:1426:VAL:HG21	1.74	0.70
2:J:638:ALA:HA	2:J:672:TRP:CZ3	2.27	0.70
2:J:336:LEU:O	2:J:340:VAL:HG23	1.92	0.70
2:H:718:PRO:HG2	2:H:727:VAL:HG21	1.72	0.70
2:I:656:ARG:HH11	2:I:656:ARG:HG2	1.55	0.70
2:H:284:GLY:H	2:H:289:ILE:HD12	1.57	0.70
2:J:448:HIS:CD2	2:J:491:VAL:HG12	2.26	0.70
1:D:961:ALA:CB	1:D:1022:LEU:HD12	2.22	0.70
2:I:158:LEU:HA	2:I:566:VAL:HG21	1.74	0.70
1:A:767:HIS:HB2	1:A:813:LEU:HD12	1.73	0.70
1:A:424:VAL:HG13	1:A:469:LEU:HD11	1.72	0.70
2:G:911:GLN:HE21	2:G:1064:THR:HG23	1.57	0.70
1:E:1342:ARG:HH12	1:E:1347:THR:HB	1.52	0.69
2:H:158:LEU:HD22	2:H:169:ILE:HD11	1.74	0.69
2:K:1084:LYS:O	2:K:1088:ASP:HB2	1.92	0.69
1:E:628:TYR:CZ	1:E:630:LYS:HG2	2.27	0.69
2:I:938:MET:HE1	2:I:959:THR:HA	1.74	0.69
2:J:930:THR:HG22	2:J:933:GLU:HG3	1.72	0.69
2:L:867:LYS:HD3	2:L:1065:CYS:SG	2.31	0.69
2:I:1442:TYR:O	2:I:1445:THR:HG22	1.92	0.69
1:F:756:ILE:HA	1:F:759:ILE:HD11	1.74	0.69
1:F:767:HIS:HB2	1:F:813:LEU:HD12	1.72	0.69
2:L:358:ARG:NH2	2:L:383:VAL:HG21	2.06	0.69
1:E:486:VAL:HG11	1:E:647:GLY:HA3	1.74	0.69
1:C:1183:VAL:HG11	1:C:1187:THR:HG21	1.74	0.69
2:J:718:PRO:CG	2:J:727:VAL:HG21	2.21	0.69
2:H:1770:ASN:HB2	2:H:1776:LYS:HE2	1.72	0.69
1:A:405:TRP:CZ3	1:A:1609:SER:HB3	2.27	0.69
2:L:289:ILE:HG23	2:L:490:LEU:HD22	1.72	0.69
2:G:610:PRO:O	2:G:613:VAL:HG12	1.91	0.69

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:H:930:THR:HG22	2:H:933:GLU:CG	2.22	0.69
1:A:613:PRO:HG2	1:A:633:THR:HG21	1.73	0.69
2:I:1181:PHE:CE1	2:I:1191:PRO:HD2	2.27	0.69
2:I:930:THR:HG23	2:I:933:GLU:H	1.56	0.69
2:J:461:PRO:HA	2:J:484:GLU:O	1.92	0.69
1:D:486:VAL:CG1	1:D:647:GLY:HA3	2.22	0.69
2:J:1985:GLN:C	2:J:1987:VAL:H	1.96	0.69
2:G:358:ARG:HH21	2:G:383:VAL:HG21	1.55	0.69
1:C:1703:VAL:HG11	1:C:1711:LEU:HB3	1.74	0.69
1:C:1224:SER:HB2	1:C:1307:PHE:O	1.93	0.69
2:I:1803:THR:HA	2:I:1806:THR:HB	1.73	0.69
1:C:562:SER:HB3	1:D:551:LEU:HD21	1.73	0.69
2:J:1468:ARG:HH12	2:J:1475:LEU:HB2	1.56	0.69
2:L:917:ARG:HD3	2:L:937:ARG:NH2	2.07	0.69
1:E:1079:ARG:HH11	1:E:1079:ARG:CG	2.04	0.69
2:H:663:ILE:H	2:H:663:ILE:HD12	1.57	0.69
1:D:1663:LYS:HG2	2:J:1007:LEU:HD11	1.74	0.69
2:H:1189:THR:O	2:H:1191:PRO:HD3	1.93	0.69
2:J:1602:LEU:HG	2:J:1606:ILE:CD1	2.22	0.69
2:J:741:LEU:O	2:J:741:LEU:HG	1.92	0.69
2:K:1795:SER:HB3	2:K:1799:LEU:HD12	1.75	0.69
2:I:718:PRO:HG2	2:I:727:VAL:HG21	1.74	0.69
2:L:289:ILE:HG12	2:L:493:MET:HE1	1.73	0.69
2:I:2052:LYS:HD3	2:I:2074:TRP:CE2	2.26	0.69
2:K:2052:LYS:HD3	2:K:2074:TRP:CE2	2.26	0.69
2:H:2036:ILE:HG22	2:H:2037:GLY:N	2.07	0.69
1:A:542:GLN:HB3	1:A:579:MET:SD	2.33	0.69
2:I:918:ASN:HB3	2:I:924:VAL:HG21	1.75	0.69
2:J:718:PRO:HG2	2:J:727:VAL:HG21	1.73	0.69
2:H:1090:ILE:O	2:H:1094:HIS:HD2	1.75	0.69
2:G:336:LEU:O	2:G:340:VAL:HG23	1.93	0.69
1:D:330:LYS:HG3	1:D:333:ARG:NH1	2.07	0.69
2:K:336:LEU:O	2:K:340:VAL:HG23	1.91	0.69
2:G:1506:SER:HA	2:G:1533:GLY:HA2	1.74	0.69
1:B:1470:ARG:O	1:B:1474:ILE:HG13	1.93	0.69
2:L:609:THR:OG1	2:L:610:PRO:HD3	1.92	0.69
2:L:600:VAL:HG13	2:L:601:PRO:CD	2.22	0.69
1:C:1702:ARG:CG	1:C:1702:ARG:NH1	2.41	0.69
1:C:1413:SER:HA	1:C:1499:ARG:HH22	1.58	0.69
2:L:857:VAL:CG1	2:L:876:TRP:NE1	2.54	0.69
1:C:959:PRO:HG2	2:I:974:GLU:HG3	1.75	0.69
2:L:1468:ARG:HH12	2:L:1475:LEU:HB2	1.56	0.69

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:K:1770:ASN:HB2	2:K:1776:LYS:HE2	1.74	0.69
1:D:1425:LEU:HD21	1:D:1429:ARG:HH21	1.57	0.69
1:E:617:LEU:N	1:E:617:LEU:HD23	2.07	0.69
2:L:1506:SER:HA	2:L:1533:GLY:HA2	1.74	0.69
1:F:15:VAL:HG11	2:L:2022:LEU:HD21	1.74	0.69
1:C:853:MET:HG2	1:C:856:ASN:HD22	1.57	0.69
1:D:1089:TYR:CE1	1:D:1312:GLU:HG3	2.28	0.69
2:K:1384:PRO:CB	2:K:1829:ARG:HH12	2.05	0.69
1:B:1079:ARG:HH11	1:B:1079:ARG:CG	2.04	0.69
2:L:685:VAL:HG23	2:L:1186:ARG:NH1	2.06	0.69
2:H:501:TRP:NE1	2:H:528:THR:HG22	2.06	0.69
2:G:501:TRP:NE1	2:G:528:THR:HG22	2.07	0.69
2:J:251:PRO:HG3	2:J:316:PHE:HA	1.73	0.69
2:L:207:LEU:O	2:L:211:LEU:HG	1.92	0.69
1:F:501:ASP:HB3	1:F:505:ASN:HB2	1.75	0.69
2:J:1721:ARG:NH2	2:J:1853:ILE:HD12	2.07	0.69
1:D:962:ASN:HB3	2:J:969:ARG:HD2	1.74	0.69
2:G:779:GLY:O	2:G:780:SER:HB2	1.91	0.69
2:G:1845:VAL:HG21	2:G:1856:LEU:HD22	1.72	0.69
1:B:1267:LEU:HD11	1:B:1303:LEU:HD12	1.75	0.69
2:K:613:VAL:CG1	2:K:614:PRO:HD3	2.22	0.69
2:H:489:GLU:HA	2:H:492:ARG:NH1	2.07	0.69
2:L:2037:GLY:HA2	2:L:2048:PHE:O	1.91	0.69
2:K:854:VAL:CG2	2:K:1070:PRO:HA	2.22	0.69
2:K:207:LEU:O	2:K:211:LEU:HG	1.92	0.69
2:H:1891:ILE:HD11	2:H:1943:LEU:HB3	1.73	0.69
2:H:358:ARG:HB2	2:H:389:PHE:CZ	2.28	0.69
2:G:747:ARG:HH11	2:G:780:SER:HB3	1.56	0.69
2:L:1084:LYS:O	2:L:1088:ASP:HB2	1.93	0.69
2:H:1884:CYS:HB3	2:H:1936:LEU:HD12	1.73	0.69
1:D:1213:VAL:HG22	1:D:1300:ARG:NH2	2.07	0.69
2:G:1456:LEU:HD11	2:G:1543:TYR:HE2	1.58	0.69
2:I:117:ASN:HA	2:I:561:ARG:HG3	1.74	0.69
2:L:1985:GLN:O	2:L:1987:VAL:N	2.22	0.69
1:A:1279:ALA:O	1:A:1282:THR:HG23	1.92	0.69
2:L:306:THR:O	2:L:310:ARG:HG3	1.93	0.69
2:J:610:PRO:CD	4:J:2101:FMN:H6	2.17	0.69
1:E:1672:GLY:HA3	1:E:1678:LEU:CD2	2.21	0.69
2:I:917:ARG:HD3	2:I:937:ARG:NH2	2.08	0.69
2:I:595:SER:HB3	2:I:602:PRO:CG	2.21	0.69
2:G:2037:GLY:HA2	2:G:2048:PHE:O	1.93	0.69
2:H:1007:LEU:N	2:H:1007:LEU:HD12	2.07	0.69

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:L:791:TYR:HA	2:L:796:TRP:HD1	1.58	0.69
2:J:1405:ILE:HA	2:J:1445:THR:OG1	1.92	0.69
2:I:1499:LYS:HG3	2:I:1500:ASN:N	2.07	0.69
2:H:207:LEU:O	2:H:211:LEU:HG	1.93	0.69
1:C:767:HIS:CE1	1:D:767:HIS:CE1	2.80	0.69
1:D:1674:ILE:HD12	2:J:1010:ALA:HB3	1.75	0.69
2:H:741:LEU:O	2:H:741:LEU:HG	1.91	0.69
2:K:1384:PRO:HB3	2:K:1829:ARG:NH1	2.08	0.69
2:K:347:PRO:HA	2:K:432:PHE:CD1	2.28	0.69
2:J:857:VAL:HG13	2:J:876:TRP:NE1	2.07	0.69
1:E:859:VAL:HG12	1:E:863:VAL:HG23	1.73	0.69
2:K:950:TRP:CD1	2:K:956:LYS:HD3	2.28	0.69
2:G:48:LEU:CD1	2:G:101:VAL:HG11	2.23	0.69
1:F:859:VAL:HG12	1:F:863:VAL:HG23	1.75	0.69
2:J:1318:ALA:HA	2:J:1391:VAL:HG21	1.75	0.69
1:C:553:ARG:HH22	1:C:563:GLN:HB3	1.56	0.69
1:B:1250:LEU:HB2	1:D:1317:GLU:HG3	1.75	0.69
1:A:1462:ASP:HB2	1:A:1465:ALA:HB3	1.75	0.69
2:K:1976:CYS:O	2:K:1980:THR:HG23	1.93	0.69
2:L:1120:ILE:HD12	2:L:1167:ASN:O	1.93	0.69
2:H:1084:LYS:O	2:H:1088:ASP:HB2	1.93	0.69
2:K:489:GLU:HA	2:K:492:ARG:NH1	2.08	0.69
1:A:1617:ILE:N	1:A:1617:ILE:HD13	2.08	0.69
2:H:506:VAL:HG12	2:H:506:VAL:O	1.92	0.69
2:L:718:PRO:CG	2:L:727:VAL:HG21	2.23	0.69
2:G:1468:ARG:HH12	2:G:1475:LEU:HB2	1.56	0.69
2:J:1884:CYS:HB3	2:J:1936:LEU:HD12	1.74	0.69
2:K:506:VAL:HG12	2:K:506:VAL:O	1.93	0.69
2:H:135:GLY:HA2	2:H:138:ARG:NH1	2.08	0.69
2:K:1421:ARG:HD2	2:K:1426:VAL:HG21	1.74	0.69
1:F:1223:GLY:HA3	1:F:1276:PRO:HD2	1.75	0.69
1:F:423:ARG:O	1:F:429:ILE:HD11	1.93	0.69
2:H:917:ARG:HD3	2:H:937:ARG:NH2	2.08	0.69
1:A:539:THR:O	1:A:542:GLN:HG2	1.93	0.69
2:J:1918:VAL:HG13	2:J:2006:HIS:CB	2.23	0.69
2:L:914:TRP:NE1	2:L:916:GLY:HA3	2.08	0.69
1:A:470:GLY:O	1:A:474:ILE:HG13	1.92	0.69
1:B:716:GLN:HB3	1:B:769:ILE:HG23	1.75	0.69
1:C:60:THR:HG23	2:I:1922:VAL:HG13	1.75	0.69
1:C:408:GLN:HG2	1:C:1610:ARG:HH12	1.58	0.69
2:I:1506:SER:HA	2:I:1533:GLY:HA2	1.75	0.69
1:B:1462:ASP:HB2	1:B:1465:ALA:HB3	1.74	0.69

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:1480:ARG:O	1:A:1484:GLU:HG3	1.93	0.69
2:K:329:THR:HA	2:L:1331:THR:HG22	1.75	0.69
1:D:1462:ASP:HB2	1:D:1465:ALA:HB3	1.74	0.69
2:I:571:ASP:HB3	2:I:574:LYS:HB2	1.73	0.69
1:D:42:GLU:OE1	2:J:1688:PRO:HB3	1.93	0.69
2:G:1884:CYS:HB3	2:G:1936:LEU:HD12	1.74	0.69
1:F:1183:VAL:HG11	1:F:1187:THR:HG21	1.73	0.69
2:H:465:LEU:HD11	2:H:486:ILE:HD11	1.74	0.68
1:D:1702:ARG:HG3	1:D:1702:ARG:NH1	2.05	0.68
2:J:608:MET:H	2:J:612:THR:HB	1.57	0.68
2:G:917:ARG:HD3	2:G:937:ARG:NH2	2.08	0.68
1:A:632:LEU:HA	1:A:635:ILE:HG22	1.76	0.68
2:I:930:THR:HG22	2:I:933:GLU:HG3	1.76	0.68
1:A:729:ILE:HA	1:A:736:LEU:HD21	1.74	0.68
1:E:1640:LYS:HG3	1:E:1641:TYR:CD1	2.28	0.68
1:A:1032:MET:CE	1:A:1165:PRO:HB3	2.22	0.68
1:D:405:TRP:CZ3	1:D:1609:SER:HB3	2.27	0.68
1:A:1183:VAL:HG11	1:A:1187:THR:HG21	1.75	0.68
2:K:306:THR:O	2:K:310:ARG:HG3	1.93	0.68
2:J:918:ASN:HB3	2:J:924:VAL:HG21	1.75	0.68
2:G:1421:ARG:HD2	2:G:1426:VAL:HG21	1.75	0.68
2:I:674:ILE:HD13	2:I:705:TYR:CE2	2.28	0.68
1:D:406:ALA:CA	1:D:439:ARG:HH11	2.05	0.68
2:I:501:TRP:HZ2	2:I:528:THR:HG21	1.58	0.68
1:A:628:TYR:CZ	1:A:630:LYS:HG2	2.29	0.68
2:H:1181:PHE:CE1	2:H:1191:PRO:HD2	2.28	0.68
2:H:914:TRP:NE1	2:H:916:GLY:HA3	2.07	0.68
2:G:674:ILE:HD13	2:G:705:TYR:CE2	2.28	0.68
1:B:1032:MET:CE	1:B:1165:PRO:HB3	2.23	0.68
2:J:129:ILE:HD13	2:J:132:LYS:HE3	1.75	0.68
1:C:1032:MET:CE	1:C:1165:PRO:HB3	2.23	0.68
2:G:1383:VAL:HG23	2:G:1428:TYR:HE1	1.58	0.68
2:J:186:LEU:CD2	2:J:256:VAL:HG22	2.23	0.68
2:L:786:GLU:CD	2:L:786:GLU:H	1.96	0.68
1:F:330:LYS:HG3	1:F:333:ARG:NH1	2.08	0.68
2:L:1289:TYR:CG	2:L:1370:LEU:HD23	2.27	0.68
2:G:1375:HIS:HE1	2:G:1610:MET:SD	2.17	0.68
2:K:290:VAL:HG22	2:K:490:LEU:HD13	1.76	0.68
2:G:854:VAL:HG21	2:G:1070:PRO:CA	2.23	0.68
1:B:1005:TRP:CD1	1:B:1561:LEU:HD22	2.29	0.68
1:C:633:THR:HG22	1:C:637:LEU:HD12	1.74	0.68
1:A:22:PHE:HE2	2:G:2017:PHE:CG	2.11	0.68

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:H:1985:GLN:C	2:H:1987:VAL:H	1.97	0.68
2:G:1985:GLN:C	2:G:1987:VAL:H	1.96	0.68
2:L:718:PRO:HG2	2:L:727:VAL:HG21	1.74	0.68
1:A:1490:GLY:O	1:A:1509:THR:HB	1.93	0.68
1:D:859:VAL:HG12	1:D:863:VAL:HG23	1.75	0.68
1:C:330:LYS:HG3	1:C:333:ARG:NH1	2.08	0.68
1:F:1052:ASP:OD2	1:F:1055:THR:HG22	1.94	0.68
1:D:398:VAL:HG22	1:D:710:VAL:HG22	1.74	0.68
2:I:1348:PHE:O	2:I:1351:VAL:HG12	1.93	0.68
1:F:1704:THR:HG23	1:F:1714:PRO:HG3	1.76	0.68
2:H:289:ILE:HG12	2:H:493:MET:HE1	1.75	0.68
2:K:584:SER:HB3	2:K:1114:GLU:O	1.93	0.68
1:B:756:ILE:HA	1:B:759:ILE:HD11	1.74	0.68
1:D:1214:HIS:HD2	1:D:1216:SER:OG	1.76	0.68
2:K:253:ILE:HB	2:K:287:GLN:HE22	1.58	0.68
2:K:48:LEU:CD1	2:K:101:VAL:HG11	2.22	0.68
1:F:1541:GLN:HE22	1:F:1633:GLN:HE22	1.40	0.68
1:B:1081:ILE:HA	1:B:1163:GLN:HE22	1.58	0.68
2:J:1084:LYS:O	2:J:1088:ASP:HB2	1.93	0.68
2:I:1356:ALA:HB3	2:I:1397:THR:HG22	1.74	0.68
2:I:1456:LEU:HD11	2:I:1543:TYR:HE2	1.59	0.68
2:J:1833:PHE:CZ	2:J:2039:TYR:HB2	2.29	0.68
2:G:609:THR:OG1	2:G:610:PRO:HD3	1.93	0.68
1:A:1476:ARG:HH12	1:E:1499:ARG:CD	2.05	0.68
2:L:1617:ARG:HB2	2:L:1635:TYR:CZ	2.28	0.68
2:J:1499:LYS:HG3	2:J:1500:ASN:N	2.08	0.68
2:J:289:ILE:HG23	2:J:490:LEU:HD22	1.75	0.68
1:B:486:VAL:CG1	1:B:647:GLY:HA3	2.24	0.68
2:K:44:GLN:HG3	2:K:101:VAL:HG21	1.73	0.68
1:B:956:ILE:HA	2:H:977:PRO:HA	1.75	0.68
1:D:580:ASN:OD1	1:D:583:GLN:HB2	1.92	0.68
1:E:655:ALA:HB3	1:E:680:VAL:HG12	1.76	0.68
2:G:117:ASN:HA	2:G:561:ARG:HG3	1.76	0.68
2:K:623:ASN:OD1	2:K:653:PRO:HD3	1.94	0.68
1:D:430:VAL:HG11	1:D:490:VAL:HG11	1.75	0.68
2:L:1026:LYS:HG3	3:L:2102:NAP:N7A	2.09	0.68
2:J:1180:VAL:HG12	2:J:1188:GLN:H	1.59	0.68
2:I:942:MET:HE1	2:I:955:LEU:HB3	1.74	0.68
1:B:1005:TRP:NE1	1:B:1561:LEU:CD2	2.55	0.68
2:G:448:HIS:CD2	2:G:491:VAL:HG12	2.26	0.68
2:L:1871:VAL:HB	2:L:2003:VAL:HG22	1.74	0.68
2:H:1871:VAL:HB	2:H:2003:VAL:HG22	1.75	0.68

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:15:VAL:HG11	2:G:2022:LEU:HD21	1.74	0.68
2:H:1289:TYR:CG	2:H:1370:LEU:HD23	2.28	0.68
2:H:1370:LEU:HD12	2:H:1373:LEU:HD13	1.76	0.68
1:D:967:PHE:CD2	1:D:1662:GLN:HB2	2.29	0.68
2:J:506:VAL:HG12	2:J:506:VAL:O	1.93	0.68
2:K:135:GLY:HA2	2:K:138:ARG:NH1	2.08	0.68
2:K:1455:GLN:HB2	2:K:1551:ILE:HD11	1.73	0.68
2:L:172:ILE:HD11	2:L:501:TRP:CZ2	2.28	0.68
2:I:1178:THR:HG22	2:I:1180:VAL:H	1.59	0.68
2:I:930:THR:HG22	2:I:933:GLU:CG	2.24	0.68
2:H:791:TYR:HA	2:H:796:TRP:HD1	1.56	0.68
2:H:43:PHE:CE2	2:I:22:ARG:HB3	2.28	0.68
2:K:964:ARG:O	2:K:967:GLU:HB2	1.94	0.68
2:H:718:PRO:CG	2:H:727:VAL:HG21	2.23	0.68
1:E:1218:VAL:HG13	1:E:1301:VAL:HG13	1.75	0.68
1:E:408:GLN:HG2	1:E:1610:ARG:HH12	1.59	0.68
1:A:1079:ARG:CG	1:A:1079:ARG:HH11	2.04	0.68
2:I:172:ILE:HD11	2:I:501:TRP:CZ2	2.28	0.68
2:H:172:ILE:HD11	2:H:501:TRP:CZ2	2.28	0.68
2:H:926:LEU:O	2:H:1008:ILE:HD11	1.94	0.68
1:C:1102:ILE:HG22	1:C:1104:GLN:HG2	1.75	0.68
2:K:376:ARG:CB	2:K:394:PRO:HG2	2.22	0.68
1:C:729:ILE:HA	1:C:736:LEU:HD21	1.75	0.68
2:L:1370:LEU:HD12	2:L:1373:LEU:HD13	1.75	0.68
1:A:983:GLN:HB3	1:A:1418:ILE:HG21	1.76	0.68
2:J:265:CYS:SG	2:J:275:LEU:HD12	2.34	0.68
2:L:699:ILE:HD12	2:L:699:ILE:H	1.58	0.68
2:K:1867:MET:O	2:K:2003:VAL:HG21	1.94	0.68
2:K:930:THR:HG22	2:K:933:GLU:CG	2.24	0.68
2:H:306:THR:O	2:H:310:ARG:HG3	1.94	0.68
2:L:1178:THR:HG22	2:L:1180:VAL:H	1.59	0.68
2:G:930:THR:HG23	2:G:933:GLU:H	1.57	0.68
2:I:791:TYR:HA	2:I:796:TRP:HD1	1.54	0.68
2:I:1890:ARG:HH22	2:I:1996:ILE:CD1	2.07	0.68
2:H:1874:ASP:OD1	2:H:1878:ARG:HB3	1.94	0.68
1:B:392:ASP:HB3	1:B:395:LYS:HD2	1.76	0.68
1:F:1702:ARG:NH1	1:F:1702:ARG:CG	2.45	0.68
2:K:1350:ILE:O	2:K:1354:TRP:HB2	1.93	0.68
1:F:628:TYR:CZ	1:F:630:LYS:HG2	2.29	0.68
1:A:962:ASN:HD22	2:G:1006:GLN:NE2	1.90	0.68
2:G:251:PRO:HG3	2:G:316:PHE:HA	1.76	0.68
1:E:928:ILE:HG12	2:K:1462:GLN:HA	1.76	0.68

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:B:767:HIS:HE1	1:E:767:HIS:CE1	2.12	0.68
1:A:486:VAL:HG11	1:A:647:GLY:HA3	1.75	0.68
2:G:718:PRO:CG	2:G:727:VAL:HG21	2.24	0.68
1:A:1674:ILE:HD11	2:G:1011:GLN:HG3	1.76	0.68
2:G:1888:PRO:HG3	2:G:1900:LEU:HD12	1.75	0.68
2:H:1318:ALA:HA	2:H:1391:VAL:HG21	1.76	0.68
2:H:656:ARG:HG2	2:H:656:ARG:HH11	1.59	0.67
2:L:172:ILE:HD11	2:L:501:TRP:HZ2	1.59	0.67
2:J:306:THR:O	2:J:310:ARG:HG3	1.94	0.67
1:F:1617:ILE:HD13	1:F:1617:ILE:N	2.09	0.67
2:J:358:ARG:NH2	2:J:383:VAL:HG21	2.08	0.67
1:D:582:SER:O	1:D:586:GLN:HB2	1.94	0.67
1:B:1425:LEU:HD21	1:B:1429:ARG:HH21	1.59	0.67
2:J:1305:LEU:HD11	2:J:1365:LYS:HD2	1.76	0.67
1:D:1223:GLY:HA3	1:D:1276:PRO:HD2	1.76	0.67
2:G:1099:LEU:HD21	2:G:1107:GLU:HG2	1.76	0.67
1:C:1462:ASP:HB2	1:C:1465:ALA:HB3	1.75	0.67
2:K:942:MET:HE1	2:K:955:LEU:HB3	1.76	0.67
1:C:628:TYR:CZ	1:C:630:LYS:HG2	2.29	0.67
1:B:406:ALA:CA	1:B:439:ARG:HH11	2.06	0.67
2:I:1007:LEU:HD12	2:I:1007:LEU:N	2.08	0.67
2:K:190:TYR:CD1	2:K:201:ILE:HD13	2.28	0.67
2:J:698:SER:HB3	2:J:701:VAL:HG23	1.74	0.67
2:H:1506:SER:HA	2:H:1533:GLY:HA2	1.75	0.67
1:D:853:MET:HG2	1:D:856:ASN:HD22	1.58	0.67
2:I:786:GLU:H	2:I:786:GLU:CD	1.98	0.67
2:I:1976:CYS:O	2:I:1980:THR:HG23	1.94	0.67
2:H:20:SER:O	2:H:38:PRO:HA	1.94	0.67
2:I:1318:ALA:HA	2:I:1391:VAL:HG21	1.75	0.67
1:E:541:VAL:O	1:E:545:LEU:HG	1.94	0.67
2:J:1383:VAL:HG23	2:J:1428:TYR:HE1	1.59	0.67
2:L:1802:ALA:HB1	2:L:1804:GLN:HE22	1.59	0.67
2:K:827:GLN:NE2	2:K:827:GLN:H	1.92	0.67
1:B:1413:SER:HA	1:B:1499:ARG:HH22	1.59	0.67
2:I:1454:MET:CE	2:I:1550:SER:HA	2.24	0.67
2:J:465:LEU:HD11	2:J:486:ILE:HD11	1.76	0.67
2:H:743:TRP:CG	2:H:761:ILE:HD11	2.30	0.67
1:E:1209:PHE:CE2	1:E:1301:VAL:HG21	2.29	0.67
2:J:756:ASP:HA	2:J:843:TRP:CH2	2.30	0.67
2:G:698:SER:HB3	2:G:701:VAL:HG23	1.76	0.67
2:L:1099:LEU:HD21	2:L:1107:GLU:HG2	1.76	0.67
2:L:38:PRO:HD2	2:L:104:LEU:HD11	1.76	0.67

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:K:129:ILE:HD13	2:K:132:LYS:HE3	1.75	0.67
2:I:1802:ALA:HB1	2:I:1804:GLN:HE22	1.59	0.67
1:A:967:PHE:CD2	1:A:1374:PRO:HG3	2.29	0.67
1:D:1183:VAL:HG11	1:D:1187:THR:HG21	1.75	0.67
2:G:158:LEU:HA	2:G:566:VAL:HG21	1.76	0.67
2:K:930:THR:HG23	2:K:933:GLU:H	1.60	0.67
2:L:854:VAL:HG21	2:L:1070:PRO:CA	2.25	0.67
2:J:314:LEU:HG	2:J:318:ILE:HD11	1.76	0.67
1:D:1224:SER:HB2	1:D:1307:PHE:O	1.94	0.67
1:C:1052:ASP:OD2	1:C:1055:THR:HG22	1.94	0.67
1:B:1480:ARG:O	1:B:1484:GLU:HG3	1.94	0.67
1:B:398:VAL:HG22	1:B:710:VAL:HG22	1.75	0.67
2:K:875:PHE:CD1	2:K:905:LYS:HD3	2.30	0.67
1:D:683:THR:HB	1:D:714:PHE:HB3	1.77	0.67
1:E:501:ASP:HB3	1:E:505:ASN:HB2	1.76	0.67
2:G:1721:ARG:NH2	2:G:1853:ILE:HD12	2.10	0.67
1:E:1336:GLU:O	1:E:1340:MET:HG2	1.95	0.67
2:J:1231:THR:HG22	2:J:1232:VAL:HG13	1.76	0.67
1:D:1102:ILE:HG22	1:D:1104:GLN:HG2	1.75	0.67
2:G:930:THR:HG22	2:G:933:GLU:CG	2.24	0.67
2:K:465:LEU:HD11	2:K:486:ILE:HD11	1.76	0.67
2:G:1181:PHE:CE1	2:G:1191:PRO:HD2	2.29	0.67
2:G:461:PRO:HA	2:G:484:GLU:O	1.94	0.67
2:I:605:VAL:HG22	2:I:816:MET:HG3	1.75	0.67
2:H:376:ARG:HH22	2:I:1340:LYS:HE3	1.58	0.67
2:J:1348:PHE:O	2:J:1351:VAL:HG12	1.95	0.67
2:L:1383:VAL:HG23	2:L:1428:TYR:HE1	1.59	0.67
2:H:638:ALA:HA	2:H:672:TRP:CZ3	2.29	0.67
2:J:1331:THR:HG22	2:L:329:THR:HA	1.77	0.67
2:L:1421:ARG:HD2	2:L:1426:VAL:HG21	1.76	0.67
2:I:253:ILE:HB	2:I:287:GLN:HE22	1.59	0.67
2:G:1976:CYS:O	2:G:1980:THR:HG23	1.95	0.67
2:L:440:HIS:CD2	2:L:499:VAL:HG23	2.29	0.67
2:I:1181:PHE:O	2:I:1188:GLN:HB3	1.95	0.67
1:C:1413:SER:HA	1:C:1499:ARG:NH2	2.09	0.67
2:H:854:VAL:CG2	2:H:1070:PRO:HA	2.24	0.67
2:G:440:HIS:CD2	2:G:499:VAL:HG23	2.29	0.67
1:E:729:ILE:HA	1:E:736:LEU:HD21	1.76	0.67
2:K:1891:ILE:HD11	2:K:1943:LEU:HB3	1.74	0.67
2:L:1888:PRO:HG3	2:L:1900:LEU:HD12	1.75	0.67
1:C:831:GLU:HG2	1:D:755:GLU:HG2	1.76	0.67
2:L:1456:LEU:HD11	2:L:1543:TYR:HE2	1.60	0.67

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:444:LEU:HD22	1:A:448:MET:HG2	1.75	0.67
1:D:1541:GLN:HE22	1:D:1633:GLN:HE22	1.43	0.67
2:L:1348:PHE:O	2:L:1351:VAL:HG12	1.95	0.67
2:L:967:GLU:HG2	2:L:1000:TYR:CE1	2.30	0.67
2:J:1171:TRP:CD1	2:J:1171:TRP:C	2.68	0.67
2:J:396:ILE:H	2:J:396:ILE:HD12	1.59	0.67
1:F:427:ARG:HH11	1:F:492:ILE:HG12	1.59	0.67
2:I:917:ARG:HG2	2:I:937:ARG:NH1	2.10	0.67
2:H:1026:LYS:HG3	3:H:2102:NAP:N7A	2.09	0.67
2:H:796:TRP:CH2	2:H:805:MET:HE1	2.30	0.67
2:G:284:GLY:H	2:G:289:ILE:HD12	1.58	0.67
2:I:1867:MET:O	2:I:2003:VAL:HG21	1.94	0.67
2:K:1874:ASP:OD1	2:K:1878:ARG:HB3	1.95	0.67
2:K:1985:GLN:C	2:K:1987:VAL:H	1.97	0.67
1:E:22:PHE:HE1	2:K:1867:MET:HG3	1.60	0.67
2:H:698:SER:HB3	2:H:701:VAL:HG23	1.77	0.67
1:B:433:CYS:O	1:B:437:MET:HG3	1.95	0.67
2:K:638:ALA:HA	2:K:672:TRP:CZ3	2.30	0.67
2:L:365:ILE:HG23	2:L:378:ILE:HG22	1.77	0.67
2:H:190:TYR:HD1	2:H:201:ILE:HD13	1.60	0.67
2:I:265:CYS:SG	2:I:275:LEU:HD12	2.35	0.67
1:F:408:GLN:HG2	1:F:1610:ARG:HH12	1.60	0.67
1:F:1425:LEU:HD21	1:F:1429:ARG:HH21	1.60	0.67
2:J:135:GLY:HA2	2:J:138:ARG:NH1	2.09	0.67
1:B:962:ASN:HD22	2:H:1006:GLN:HE22	1.42	0.67
1:F:1470:ARG:O	1:F:1474:ILE:HG13	1.94	0.67
2:G:656:ARG:HH11	2:G:656:ARG:HG2	1.59	0.67
1:E:998:GLY:HA3	1:E:1361:VAL:CG1	2.20	0.67
1:C:427:ARG:HG3	1:C:427:ARG:NH1	2.07	0.67
2:J:2036:ILE:HG22	2:J:2037:GLY:N	2.08	0.67
2:H:172:ILE:HD11	2:H:501:TRP:HZ2	1.60	0.67
2:G:489:GLU:HA	2:G:492:ARG:NH1	2.10	0.67
2:K:918:ASN:HB3	2:K:924:VAL:HG21	1.77	0.67
1:C:756:ILE:HA	1:C:759:ILE:HD11	1.76	0.67
1:E:767:HIS:HB2	1:E:813:LEU:HD12	1.76	0.67
2:H:1375:HIS:HE1	2:H:1610:MET:SD	2.18	0.67
2:K:367:ALA:O	2:K:370:GLN:HB3	1.94	0.67
2:J:1356:ALA:HB3	2:J:1397:THR:HG22	1.76	0.67
2:H:1976:CYS:O	2:H:1980:THR:HG23	1.95	0.67
2:I:220:GLN:C	2:I:222:PRO:HD3	2.15	0.67
2:G:329:THR:HA	2:H:1331:THR:HG22	1.76	0.67
1:A:442:PRO:HD2	1:A:443:LEU:HD12	1.76	0.67

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:E:947:ASP:O	1:E:951:LEU:HG	1.95	0.67
2:J:1802:ALA:HB1	2:J:1804:GLN:HE22	1.59	0.67
1:E:1510:TRP:HZ3	1:E:1642:LEU:HA	1.60	0.67
2:J:967:GLU:HG2	2:J:1000:TYR:CE1	2.30	0.67
2:G:663:ILE:H	2:G:663:ILE:HD12	1.60	0.67
2:K:926:LEU:O	2:K:1008:ILE:HD11	1.94	0.67
2:K:447:ALA:O	2:K:451:ILE:HG13	1.94	0.67
2:I:1617:ARG:HB2	2:I:1635:TYR:CZ	2.29	0.67
1:A:1218:VAL:HG13	1:A:1301:VAL:HG13	1.77	0.67
2:K:1468:ARG:NH1	2:K:1475:LEU:HB2	2.09	0.67
1:C:486:VAL:CG1	1:C:647:GLY:HA3	2.25	0.67
1:A:421:ARG:HH22	1:A:1613:LYS:HB3	1.60	0.67
1:C:1156:PHE:CZ	1:C:1316:TYR:HA	2.29	0.67
1:E:1207:TYR:CZ	1:E:1682:LYS:HD2	2.30	0.67
1:D:15:VAL:HG11	2:J:2022:LEU:HD21	1.77	0.67
2:K:186:LEU:CD2	2:K:256:VAL:HG22	2.24	0.67
2:L:1171:TRP:CD1	2:L:1171:TRP:C	2.68	0.67
1:B:1317:GLU:HG3	1:D:1250:LEU:HB2	1.77	0.67
1:C:1686:PRO:HB2	1:C:1713:PHE:CD1	2.30	0.67
1:E:1413:SER:HA	1:E:1499:ARG:HH22	1.60	0.67
2:K:524:ILE:HG22	2:K:528:THR:HG23	1.77	0.67
1:E:962:ASN:HB3	2:K:969:ARG:HD2	1.75	0.67
2:I:465:LEU:HD11	2:I:486:ILE:HD11	1.75	0.67
2:J:358:ARG:HB2	2:J:389:PHE:CZ	2.29	0.67
2:H:1918:VAL:HG13	2:H:2006:HIS:HB2	1.75	0.67
2:H:265:CYS:SG	2:H:275:LEU:HD12	2.34	0.67
1:C:501:ASP:HB3	1:C:505:ASN:HB2	1.77	0.67
1:A:1223:GLY:HA3	1:A:1276:PRO:HD2	1.76	0.67
1:D:501:ASP:HB3	1:D:505:ASN:HB2	1.77	0.67
2:H:1455:GLN:HB2	2:H:1551:ILE:HD11	1.76	0.67
1:C:1541:GLN:HE22	1:C:1633:GLN:HE22	1.41	0.67
1:C:683:THR:HB	1:C:714:PHE:HB3	1.76	0.67
2:L:611:THR:HG21	2:L:817:MET:HE2	1.76	0.67
2:H:1232:VAL:HG12	2:H:1246:LEU:HD23	1.75	0.66
1:D:557:ARG:CG	1:D:557:ARG:NH1	2.55	0.66
1:A:1672:GLY:HA3	1:A:1678:LEU:CD2	2.22	0.66
2:L:942:MET:CE	2:L:955:LEU:HB3	2.25	0.66
2:H:942:MET:HE1	2:H:955:LEU:HB3	1.75	0.66
2:G:524:ILE:HG22	2:G:528:THR:HG23	1.77	0.66
2:G:926:LEU:O	2:G:1008:ILE:HD11	1.95	0.66
2:L:1125:ASP:O	2:L:1126:GLU:HB2	1.95	0.66
2:K:605:VAL:HG22	2:K:816:MET:HG3	1.76	0.66

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:B:1674:ILE:HD12	2:H:1010:ALA:HB3	1.76	0.66
2:I:1468:ARG:NH1	2:I:1475:LEU:HB2	2.09	0.66
2:J:1874:ASP:OD1	2:J:1878:ARG:HB3	1.95	0.66
2:G:718:PRO:HG2	2:G:727:VAL:HG21	1.77	0.66
2:I:950:TRP:CD1	2:I:956:LYS:HD3	2.30	0.66
2:L:270:ARG:HG3	2:L:274:GLU:OE1	1.95	0.66
2:K:1383:VAL:HG23	2:K:1428:TYR:HE1	1.59	0.66
2:K:768:ILE:O	2:K:774:ILE:HD12	1.95	0.66
2:L:698:SER:HB3	2:L:701:VAL:HG23	1.76	0.66
1:C:961:ALA:HB2	1:C:1022:LEU:HD12	1.77	0.66
2:L:1356:ALA:HB3	2:L:1397:THR:HG22	1.76	0.66
2:G:162:ALA:HA	2:G:167:VAL:HG22	1.77	0.66
2:H:314:LEU:HG	2:H:318:ILE:HD11	1.77	0.66
2:J:524:ILE:HG22	2:J:528:THR:HG23	1.78	0.66
1:C:859:VAL:HG12	1:C:863:VAL:HG23	1.75	0.66
1:B:562:SER:CB	1:E:551:LEU:HD21	2.25	0.66
2:I:1985:GLN:C	2:I:1987:VAL:H	1.98	0.66
2:J:110:GLU:HA	2:J:114:MET:HB2	1.76	0.66
2:K:1290:TYR:CD2	2:K:1299:VAL:HB	2.30	0.66
1:A:1270:THR:HA	1:E:1386:THR:O	1.94	0.66
1:C:12:THR:O	1:C:16:GLU:HG2	1.95	0.66
2:G:1114:GLU:HB3	2:G:1169:TYR:HB3	1.76	0.66
2:K:1888:PRO:HG3	2:K:1900:LEU:HD12	1.77	0.66
2:I:207:LEU:O	2:I:211:LEU:HG	1.95	0.66
1:F:1504:ARG:NH1	1:F:1504:ARG:CG	2.45	0.66
2:K:868:LEU:O	2:K:870:THR:HG23	1.95	0.66
1:F:575:ARG:O	1:F:579:MET:HG3	1.95	0.66
1:A:1413:SER:HA	1:A:1499:ARG:HH22	1.60	0.66
2:G:465:LEU:HD11	2:G:486:ILE:HD11	1.75	0.66
1:D:756:ILE:HA	1:D:759:ILE:HD11	1.78	0.66
2:G:1610:MET:HA	2:G:1610:MET:HE2	1.76	0.66
2:H:1348:PHE:O	2:H:1351:VAL:HG12	1.94	0.66
2:G:1455:GLN:HB2	2:G:1551:ILE:HD11	1.78	0.66
1:F:962:ASN:HD22	2:L:1006:GLN:HE22	1.43	0.66
1:B:859:VAL:HG12	1:B:863:VAL:HG23	1.77	0.66
2:K:1026:LYS:HG3	3:K:2102:NAP:N7A	2.10	0.66
1:B:575:ARG:O	1:B:579:MET:HG3	1.95	0.66
2:G:1178:THR:HG22	2:G:1180:VAL:H	1.59	0.66
2:J:327:PRO:HD2	2:K:1338:ARG:NH2	2.11	0.66
2:H:1454:MET:CE	2:H:1550:SER:HA	2.25	0.66
1:A:1005:TRP:CD1	1:A:1561:LEU:HD22	2.30	0.66
1:F:1032:MET:HE2	1:F:1165:PRO:HB3	1.77	0.66

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:1214:HIS:HD2	1:A:1216:SER:OG	1.78	0.66
2:J:1331:THR:O	2:L:329:THR:HG22	1.95	0.66
2:L:1976:CYS:O	2:L:1980:THR:HG23	1.94	0.66
2:H:1421:ARG:HD2	2:H:1426:VAL:HG21	1.77	0.66
1:F:1462:ASP:HB2	1:F:1465:ALA:HB3	1.75	0.66
1:F:506:ILE:HD11	1:F:926:SER:HB3	1.75	0.66
2:L:48:LEU:CD1	2:L:101:VAL:HG11	2.25	0.66
2:K:1099:LEU:HD12	2:K:1103:TYR:HB2	1.78	0.66
1:F:1421:ARG:HD2	1:F:1489:PHE:O	1.96	0.66
1:A:503:ARG:HA	1:A:933:ILE:HD11	1.77	0.66
2:K:420:PRO:HG3	2:K:847:TYR:CD1	2.29	0.66
2:G:1046:SER:O	2:G:1049:GLN:HG3	1.96	0.66
2:K:117:ASN:OD1	2:K:561:ARG:HB2	1.95	0.66
2:H:1701:GLU:H	2:H:1704:MET:HE3	1.60	0.66
1:A:408:GLN:HG2	1:A:1610:ARG:NH1	2.10	0.66
1:B:729:ILE:HA	1:B:736:LEU:HD21	1.76	0.66
1:A:1307:PHE:HB3	1:A:1357:CYS:CB	2.26	0.66
2:I:270:ARG:HG3	2:I:274:GLU:OE1	1.95	0.66
2:L:44:GLN:HG3	2:L:101:VAL:HG21	1.78	0.66
2:J:1888:PRO:HG3	2:J:1900:LEU:HD12	1.77	0.66
2:L:918:ASN:HB3	2:L:924:VAL:HG21	1.77	0.66
1:F:567:ASN:HA	1:F:570:TYR:HB3	1.76	0.66
2:K:663:ILE:HD12	2:K:663:ILE:H	1.59	0.66
2:L:656:ARG:HH11	2:L:656:ARG:HG2	1.60	0.66
1:E:533:SER:O	1:E:611:THR:HA	1.95	0.66
2:K:796:TRP:CH2	2:K:805:MET:HE1	2.29	0.66
2:I:1115:TYR:HB3	2:I:1267:PRO:HB3	1.76	0.66
2:G:306:THR:O	2:G:310:ARG:HG3	1.95	0.66
1:D:729:ILE:HA	1:D:736:LEU:HD21	1.77	0.66
2:G:1802:ALA:HB1	2:G:1804:GLN:HE22	1.59	0.66
1:D:1032:MET:CE	1:D:1165:PRO:HB3	2.24	0.66
2:I:1888:PRO:HG3	2:I:1900:LEU:HD12	1.75	0.66
1:D:978:LYS:HB3	1:D:979:PRO:HD3	1.77	0.66
2:K:1506:SER:HA	2:K:1533:GLY:HA2	1.77	0.66
2:L:1318:ALA:HA	2:L:1391:VAL:HG21	1.75	0.66
1:F:433:CYS:O	1:F:437:MET:HG3	1.95	0.66
2:H:610:PRO:CD	4:H:2101:FMN:H6	2.21	0.66
2:H:472:THR:H	2:H:493:MET:HE3	1.61	0.66
2:G:172:ILE:HD11	2:G:501:TRP:CZ2	2.31	0.66
1:F:1005:TRP:CD1	1:F:1561:LEU:HD22	2.30	0.66
2:J:382:LEU:HB3	2:J:499:VAL:HB	1.76	0.66
1:D:1617:ILE:HD13	1:D:1617:ILE:N	2.10	0.66

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:I:779:GLY:O	2:I:780:SER:CB	2.43	0.66
2:G:743:TRP:CG	2:G:761:ILE:HD11	2.31	0.66
2:L:1874:ASP:OD1	2:L:1878:ARG:HB3	1.96	0.66
2:L:1985:GLN:C	2:L:1987:VAL:H	1.98	0.66
2:K:845:ASN:HB3	2:K:851:THR:OG1	1.95	0.66
2:J:950:TRP:CD1	2:J:956:LYS:HD3	2.30	0.66
1:A:1541:GLN:HE22	1:A:1633:GLN:HE22	1.44	0.66
1:C:1490:GLY:O	1:C:1509:THR:HB	1.96	0.66
1:A:1640:LYS:HG3	1:A:1641:TYR:CD1	2.31	0.66
1:B:1086:PHE:CE2	1:B:1310:PHE:HD2	2.14	0.66
2:H:1456:LEU:HD11	2:H:1543:TYR:HE2	1.61	0.66
2:K:220:GLN:C	2:K:222:PRO:HD3	2.16	0.66
2:G:1420:LYS:HG2	2:G:1425:PRO:HA	1.76	0.66
2:H:467:ILE:HG23	2:H:468:PRO:HD2	1.78	0.66
2:K:600:VAL:HG13	2:K:601:PRO:CD	2.26	0.66
1:A:406:ALA:CA	1:A:439:ARG:HH11	2.05	0.66
2:J:930:THR:HG23	2:J:933:GLU:H	1.61	0.66
2:K:743:TRP:HZ2	2:K:757:PHE:HA	1.61	0.66
1:F:1005:TRP:NE1	1:F:1561:LEU:CD2	2.58	0.66
2:H:1701:GLU:H	2:H:1704:MET:CE	2.09	0.66
2:L:670:MET:HA	2:L:673:GLN:HB2	1.78	0.66
2:G:1340:LYS:HG3	2:I:376:ARG:NH2	2.11	0.66
1:D:1413:SER:HA	1:D:1499:ARG:HH22	1.61	0.66
2:L:358:ARG:HB2	2:L:389:PHE:CZ	2.31	0.66
1:A:330:LYS:HG3	1:A:333:ARG:NH1	2.11	0.66
2:I:48:LEU:CD1	2:I:101:VAL:HG11	2.26	0.66
1:C:405:TRP:CZ3	1:C:1609:SER:HB3	2.31	0.66
2:G:1171:TRP:C	2:G:1171:TRP:CD1	2.68	0.66
2:G:964:ARG:O	2:G:967:GLU:HB2	1.96	0.66
1:B:1541:GLN:HE22	1:B:1633:GLN:HE22	1.41	0.66
2:I:358:ARG:HH21	2:I:383:VAL:HG21	1.60	0.66
2:H:950:TRP:CD1	2:H:956:LYS:HD3	2.31	0.66
2:K:867:LYS:HD3	2:K:1065:CYS:SG	2.36	0.66
2:K:1181:PHE:O	2:K:1188:GLN:HB3	1.96	0.66
2:L:2036:ILE:HG22	2:L:2037:GLY:H	1.61	0.66
2:G:942:MET:CE	2:G:955:LEU:HB3	2.26	0.66
2:G:1048:TRP:HE1	2:G:1049:GLN:HE21	1.44	0.66
1:D:746:PHE:CE1	1:D:800:PRO:HG3	2.31	0.66
2:G:1891:ILE:HD11	2:G:1943:LEU:HB3	1.76	0.66
2:L:743:TRP:CG	2:L:761:ILE:HD11	2.31	0.66
2:H:894:GLU:O	2:H:897:LYS:HG2	1.96	0.66
1:F:1640:LYS:HG3	1:F:1641:TYR:CD1	2.31	0.66

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:K:57:PRO:HG2	2:K:68:GLU:HG3	1.77	0.66
1:E:1490:GLY:O	1:E:1509:THR:HB	1.96	0.66
2:L:1579:ASN:O	2:L:1583:VAL:HG23	1.96	0.66
2:J:549:ASN:ND2	2:J:551:GLU:H	1.93	0.66
2:G:293:ALA:HA	2:G:469:VAL:HG21	1.78	0.66
1:B:1640:LYS:HG3	1:B:1641:TYR:CD1	2.31	0.66
2:G:1692:TYR:HD1	2:G:1847:LEU:HD21	1.61	0.66
2:I:367:ALA:O	2:I:370:GLN:HB3	1.96	0.66
1:C:1090:ASP:OD1	1:C:1092:ASN:HB2	1.96	0.66
2:H:623:ASN:OD1	2:H:653:PRO:HD3	1.96	0.66
2:H:289:ILE:HG23	2:H:490:LEU:HD22	1.78	0.66
1:A:430:VAL:HG11	1:A:490:VAL:HG11	1.76	0.66
2:H:1048:TRP:HE1	2:H:1049:GLN:HE21	1.44	0.66
1:F:729:ILE:HA	1:F:736:LEU:HD21	1.77	0.66
1:E:632:LEU:HA	1:E:635:ILE:CG2	2.25	0.66
1:E:616:HIS:HA	1:E:633:THR:HG23	1.76	0.66
2:L:964:ARG:O	2:L:967:GLU:HB2	1.96	0.66
2:J:549:ASN:HD22	2:J:551:GLU:H	1.44	0.66
1:C:978:LYS:HB3	1:C:979:PRO:HD3	1.77	0.66
2:K:1802:ALA:HB1	2:K:1804:GLN:HE22	1.60	0.66
1:A:552:ILE:HD11	1:F:552:ILE:HG12	1.78	0.66
1:C:1386:THR:O	1:F:1270:THR:HA	1.96	0.66
2:L:584:SER:HB3	2:L:1114:GLU:O	1.96	0.66
1:E:926:SER:O	1:E:930:GLN:HG2	1.96	0.66
2:H:756:ASP:HA	2:H:843:TRP:CH2	2.31	0.66
2:L:894:GLU:O	2:L:897:LYS:HG2	1.94	0.66
2:H:129:ILE:HD13	2:H:132:LYS:HE3	1.77	0.66
1:B:1089:TYR:CE1	1:B:1312:GLU:HG3	2.31	0.66
1:B:427:ARG:NH1	1:B:427:ARG:HG3	2.03	0.65
2:I:610:PRO:CD	4:I:2101:FMN:H6	2.20	0.65
2:K:674:ILE:HD13	2:K:705:TYR:CE2	2.31	0.65
1:B:628:TYR:CZ	1:B:630:LYS:HG2	2.30	0.65
1:B:1413:SER:HA	1:B:1499:ARG:NH2	2.11	0.65
2:K:284:GLY:H	2:K:289:ILE:HD12	1.59	0.65
2:J:930:THR:HG22	2:J:933:GLU:CG	2.25	0.65
1:F:1581:LEU:HD23	1:F:1617:ILE:HG12	1.78	0.65
2:H:1468:ARG:NH1	2:H:1475:LEU:HB2	2.10	0.65
1:D:1413:SER:HA	1:D:1499:ARG:NH2	2.12	0.65
2:G:1874:ASP:OD1	2:G:1878:ARG:HB3	1.96	0.65
1:C:684:THR:HG21	1:C:691:VAL:HG11	1.77	0.65
1:A:501:ASP:HB3	1:A:505:ASN:HB2	1.78	0.65
2:K:1851:MET:HE2	2:K:1855:SER:HB3	1.78	0.65

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:655:ALA:HB3	1:A:680:VAL:HG12	1.77	0.65
1:C:442:PRO:HD2	1:C:443:LEU:HD12	1.77	0.65
2:H:1171:TRP:CD1	2:H:1171:TRP:C	2.69	0.65
1:B:41:THR:HG21	2:H:1691:ALA:HB2	1.78	0.65
2:H:220:GLN:C	2:H:222:PRO:HD3	2.16	0.65
1:E:1504:ARG:CG	1:E:1504:ARG:NH1	2.47	0.65
2:I:718:PRO:CG	2:I:727:VAL:HG21	2.26	0.65
2:L:382:LEU:HB3	2:L:499:VAL:HB	1.78	0.65
2:J:600:VAL:HG13	2:J:601:PRO:CD	2.27	0.65
2:K:172:ILE:HD11	2:K:501:TRP:HZ2	1.60	0.65
2:I:172:ILE:HD11	2:I:501:TRP:HZ2	1.61	0.65
2:J:1181:PHE:O	2:J:1188:GLN:HB3	1.95	0.65
2:G:501:TRP:HZ2	2:G:528:THR:HG21	1.61	0.65
1:C:1476:ARG:HH12	1:F:1499:ARG:CD	2.07	0.65
2:J:1612:THR:O	2:J:1616:VAL:HG12	1.97	0.65
2:I:38:PRO:HD2	2:I:104:LEU:HD11	1.77	0.65
2:G:1745:LEU:HB3	2:G:1799:LEU:CD2	2.26	0.65
1:D:30:GLU:HB2	2:J:2045:ALA:CB	2.26	0.65
1:E:1674:ILE:HD12	2:K:1010:ALA:HB3	1.78	0.65
1:C:1081:ILE:HA	1:C:1163:GLN:NE2	2.11	0.65
1:F:962:ASN:HB3	2:L:969:ARG:HD2	1.78	0.65
1:E:442:PRO:HD2	1:E:443:LEU:HD12	1.77	0.65
2:I:110:GLU:HA	2:I:114:MET:HB2	1.79	0.65
2:J:1290:TYR:CD2	2:J:1299:VAL:HB	2.30	0.65
2:K:501:TRP:HZ2	2:K:528:THR:HG21	1.59	0.65
2:H:117:ASN:OD1	2:H:561:ARG:HB2	1.97	0.65
2:K:289:ILE:HG12	2:K:493:MET:CE	2.25	0.65
1:C:1663:LYS:HG2	2:I:1007:LEU:HD11	1.79	0.65
2:I:306:THR:O	2:I:310:ARG:HG3	1.96	0.65
2:J:670:MET:HA	2:J:673:GLN:HB2	1.77	0.65
2:K:1692:TYR:HD1	2:K:1847:LEU:HD21	1.61	0.65
1:D:962:ASN:HD22	2:J:1006:GLN:HE22	1.43	0.65
1:A:1336:GLU:O	1:A:1340:MET:HG2	1.96	0.65
2:H:882:LYS:HB3	2:H:898:ARG:HH12	1.61	0.65
2:L:186:LEU:CD2	2:L:256:VAL:HG22	2.27	0.65
1:E:421:ARG:HH22	1:E:1613:LYS:HB3	1.61	0.65
2:K:270:ARG:HG3	2:K:274:GLU:OE1	1.95	0.65
2:I:1220:ARG:HA	2:I:1229:VAL:O	1.96	0.65
1:C:1342:ARG:HB2	1:C:1345:SER:HB2	1.78	0.65
2:K:1067:LEU:HB2	4:K:2101:FMN:C7M	2.27	0.65
1:D:628:TYR:CZ	1:D:630:LYS:HG2	2.32	0.65
1:A:1702:ARG:NH1	1:A:1702:ARG:HG3	2.09	0.65

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:K:917:ARG:HG2	2:K:937:ARG:NH1	2.10	0.65
1:E:1102:ILE:HG22	1:E:1104:GLN:HG2	1.77	0.65
1:A:1413:SER:HA	1:A:1499:ARG:NH2	2.11	0.65
1:D:1209:PHE:CE2	1:D:1301:VAL:HG21	2.32	0.65
1:C:22:PHE:HE1	2:I:1867:MET:HG3	1.61	0.65
1:C:1094:LYS:HE3	1:C:1316:TYR:CD1	2.30	0.65
1:A:1081:ILE:HA	1:A:1163:GLN:HE22	1.60	0.65
1:C:777:LEU:O	1:C:781:ILE:HG13	1.96	0.65
2:J:1722:ALA:CB	2:J:1812:LEU:HD21	2.26	0.65
1:E:1483:ALA:HA	1:E:1486:GLN:HE21	1.61	0.65
1:D:444:LEU:HD22	1:D:448:MET:HG2	1.76	0.65
2:G:549:ASN:HD22	2:G:550:THR:N	1.95	0.65
1:C:620:LYS:HA	1:C:625:ASN:O	1.97	0.65
2:I:1455:GLN:HB2	2:I:1551:ILE:HD11	1.77	0.65
2:I:549:ASN:HD22	2:I:551:GLU:H	1.44	0.65
1:B:1342:ARG:HB2	1:B:1345:SER:HB2	1.78	0.65
1:B:538:ARG:HA	1:B:585:MET:HE1	1.77	0.65
2:H:501:TRP:HZ2	2:H:528:THR:HG21	1.62	0.65
1:F:905:LEU:HD22	1:F:911:LEU:HD21	1.77	0.65
1:C:1363:MET:HE3	1:C:1368:ALA:HB2	1.79	0.65
2:J:1351:VAL:HG23	2:J:1584:SER:HA	1.79	0.65
2:K:810:CYS:HG	2:K:812:PHE:HE1	1.44	0.65
2:H:365:ILE:HG23	2:H:378:ILE:HG22	1.78	0.65
1:B:1524:GLY:HA2	1:B:1531:ASP:OD1	1.96	0.65
2:I:833:VAL:HG13	2:I:1077:LYS:HA	1.79	0.65
1:D:1640:LYS:HG3	1:D:1641:TYR:CD1	2.32	0.65
2:L:135:GLY:HA2	2:L:138:ARG:NH1	2.11	0.65
2:L:1692:TYR:HD1	2:L:1847:LEU:HD21	1.60	0.65
2:J:253:ILE:HB	2:J:287:GLN:HE22	1.62	0.65
2:K:20:SER:O	2:K:38:PRO:HA	1.96	0.65
1:A:1510:TRP:HZ3	1:A:1642:LEU:HA	1.60	0.65
1:E:1470:ARG:O	1:E:1474:ILE:HG13	1.97	0.65
2:G:613:VAL:HG13	2:G:614:PRO:HD3	1.79	0.65
1:E:989:ASN:H	1:E:1491:ASN:ND2	1.91	0.65
2:J:1009:ASN:O	2:J:1013:VAL:HG23	1.96	0.65
1:E:406:ALA:CA	1:E:439:ARG:HH11	2.08	0.65
2:L:501:TRP:HZ2	2:L:528:THR:HG21	1.60	0.65
1:F:612:ILE:CD1	1:F:907:PHE:HZ	2.10	0.65
2:J:854:VAL:CG2	2:J:1070:PRO:HA	2.24	0.65
2:J:1617:ARG:HB2	2:J:1635:TYR:CZ	2.30	0.65
1:C:965:TYR:OH	1:C:1199:LEU:HD22	1.96	0.65
2:K:854:VAL:HG21	2:K:1070:PRO:CA	2.26	0.65

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:G:376:ARG:CB	2:G:394:PRO:HG2	2.26	0.65
2:K:1701:GLU:H	2:K:1704:MET:CE	2.10	0.65
2:G:358:ARG:HB2	2:G:389:PHE:CZ	2.31	0.65
1:E:756:ILE:HA	1:E:759:ILE:HD11	1.78	0.65
2:I:1933:LEU:O	2:I:1989:LEU:HD21	1.97	0.65
1:A:890:ASN:OD1	2:L:1755:LYS:HE2	1.97	0.65
2:G:365:ILE:HG23	2:G:378:ILE:HG22	1.79	0.65
2:K:1579:ASN:O	2:K:1583:VAL:HG23	1.96	0.65
2:K:833:VAL:HG13	2:K:1077:LYS:HA	1.79	0.65
1:E:1425:LEU:HD21	1:E:1429:ARG:HH21	1.61	0.65
2:I:1692:TYR:HD1	2:I:1847:LEU:HD21	1.62	0.65
2:L:1231:THR:HG22	2:L:1232:VAL:HG13	1.79	0.65
1:B:557:ARG:HD2	1:E:557:ARG:O	1.96	0.65
1:B:1150:ILE:HG12	1:D:1148:LEU:HD21	1.77	0.65
1:B:1702:ARG:HG3	1:B:1702:ARG:NH1	2.04	0.65
2:L:524:ILE:HG22	2:L:528:THR:HG23	1.79	0.65
2:H:825:SER:HB2	2:H:1053:ILE:HG13	1.79	0.65
2:J:172:ILE:HD11	2:J:501:TRP:CZ2	2.32	0.65
1:F:1674:ILE:HD12	2:L:1010:ALA:HB3	1.79	0.65
1:B:1686:PRO:HB2	1:B:1713:PHE:HD1	1.61	0.65
1:B:1209:PHE:CE2	1:B:1301:VAL:HG21	2.31	0.65
2:I:358:ARG:HB2	2:I:389:PHE:CZ	2.32	0.65
1:C:655:ALA:HB3	1:C:680:VAL:HG12	1.79	0.65
2:G:781:GLY:HA2	2:G:1071:VAL:HG13	1.79	0.65
1:F:1483:ALA:HA	1:F:1486:GLN:HE21	1.61	0.65
1:F:961:ALA:CB	1:F:1022:LEU:HD12	2.26	0.65
2:G:1231:THR:HG22	2:G:1232:VAL:HG13	1.79	0.65
2:I:1305:LEU:HD21	2:I:1365:LYS:HB2	1.79	0.65
2:G:270:ARG:HG3	2:G:274:GLU:OE1	1.97	0.65
1:E:853:MET:HG2	1:E:856:ASN:HD22	1.61	0.65
2:G:845:ASN:HB3	2:G:851:THR:OG1	1.97	0.65
2:L:220:GLN:C	2:L:222:PRO:HD3	2.17	0.65
1:E:330:LYS:HG3	1:E:333:ARG:NH1	2.11	0.65
2:H:1305:LEU:H	2:H:1305:LEU:HD12	1.62	0.65
2:J:1338:ARG:HH21	2:L:327:PRO:HD2	1.62	0.65
2:H:786:GLU:H	2:H:786:GLU:CD	2.00	0.65
2:K:752:HIS:NE2	2:K:856:THR:CG2	2.60	0.65
2:L:1375:HIS:HE1	2:L:1610:MET:SD	2.19	0.65
2:L:1007:LEU:H	2:L:1007:LEU:CD1	2.09	0.65
2:H:524:ILE:HG22	2:H:528:THR:HG23	1.77	0.65
2:K:1115:TYR:HB3	2:K:1267:PRO:HB3	1.78	0.65
2:I:638:ALA:HA	2:I:672:TRP:CZ3	2.32	0.65

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:C:1640:LYS:HG3	1:C:1641:TYR:CD1	2.32	0.65
2:I:584:SER:HB3	2:I:1114:GLU:O	1.95	0.65
2:I:741:LEU:O	2:I:741:LEU:HG	1.97	0.65
2:I:1603:PRO:HG2	2:I:1642:MET:HE3	1.79	0.65
2:J:1454:MET:CE	2:J:1550:SER:HA	2.27	0.65
2:G:1404:VAL:HG22	2:G:1413:VAL:HG22	1.78	0.65
2:G:605:VAL:HG22	2:G:816:MET:HG3	1.79	0.65
2:H:918:ASN:HB3	2:H:924:VAL:HG21	1.77	0.65
2:L:741:LEU:HG	2:L:741:LEU:O	1.96	0.65
1:A:1250:LEU:HB2	1:E:1317:GLU:HG3	1.78	0.65
2:I:1171:TRP:C	2:I:1171:TRP:CD1	2.70	0.65
2:K:1220:ARG:HA	2:K:1229:VAL:O	1.96	0.65
1:C:444:LEU:HD22	1:C:448:MET:HG2	1.79	0.65
2:L:129:ILE:HD13	2:L:132:LYS:HE3	1.78	0.65
2:G:135:GLY:HA2	2:G:138:ARG:NH1	2.13	0.65
1:D:60:THR:HG23	2:J:1922:VAL:HG13	1.79	0.65
1:E:1183:VAL:HG11	1:E:1187:THR:HG21	1.79	0.65
1:A:1451:LYS:HG2	1:A:1454:ARG:NH2	2.12	0.64
2:I:854:VAL:CG2	2:I:1070:PRO:HA	2.27	0.64
2:L:1048:TRP:CD2	2:L:1049:GLN:HG2	2.32	0.64
2:J:172:ILE:HD11	2:J:501:TRP:HZ2	1.61	0.64
2:G:686:PRO:HB3	2:G:1187:PHE:CE1	2.32	0.64
2:G:1189:THR:O	2:G:1191:PRO:HD3	1.96	0.64
1:F:1413:SER:HA	1:F:1499:ARG:NH2	2.12	0.64
2:J:440:HIS:CD2	2:J:499:VAL:HG23	2.32	0.64
2:G:1918:VAL:HG13	2:G:2006:HIS:CB	2.27	0.64
2:H:1890:ARG:HH22	2:H:1996:ILE:CD1	2.10	0.64
2:J:779:GLY:HA3	2:J:811:MET:HE3	1.77	0.64
2:J:1603:PRO:HG2	2:J:1642:MET:HE3	1.78	0.64
2:G:87:VAL:HG22	2:G:98:ASN:HB3	1.79	0.64
2:I:358:ARG:NH2	2:I:383:VAL:HG21	2.12	0.64
2:J:1338:ARG:NH2	2:L:327:PRO:HD2	2.11	0.64
1:B:330:LYS:HG3	1:B:333:ARG:NH1	2.12	0.64
2:J:786:GLU:CD	2:J:786:GLU:H	1.99	0.64
1:E:444:LEU:HD22	1:E:448:MET:HG2	1.78	0.64
1:E:1541:GLN:HE22	1:E:1633:GLN:HE22	1.45	0.64
2:H:87:VAL:HG22	2:H:98:ASN:HB3	1.78	0.64
2:H:661:ASN:HD21	4:H:2101:FMN:HN3	1.44	0.64
2:L:661:ASN:HD21	4:L:2101:FMN:HN3	1.44	0.64
2:L:2036:ILE:CG2	2:L:2037:GLY:N	2.60	0.64
2:H:43:PHE:CD2	2:I:22:ARG:CG	2.79	0.64
2:K:1231:THR:HG22	2:K:1232:VAL:HG13	1.79	0.64

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:J:1090:ILE:O	2:J:1094:HIS:HD2	1.80	0.64
2:K:967:GLU:HG2	2:K:1000:TYR:CE1	2.32	0.64
2:I:549:ASN:ND2	2:I:551:GLU:H	1.94	0.64
1:B:553:ARG:HH22	1:B:563:GLN:HB3	1.62	0.64
1:C:852:LEU:HD12	3:C:1901:NAP:O2A	1.97	0.64
2:G:1220:ARG:HA	2:G:1229:VAL:O	1.97	0.64
2:K:610:PRO:CD	4:K:2101:FMN:H6	2.23	0.64
1:A:1342:ARG:HB2	1:A:1345:SER:HB2	1.79	0.64
2:K:1650:THR:O	2:K:1669:ALA:HA	1.96	0.64
2:L:605:VAL:HG22	2:L:816:MET:HG3	1.79	0.64
2:J:1099:LEU:HD12	2:J:1103:TYR:HB2	1.79	0.64
2:H:1290:TYR:CD2	2:H:1299:VAL:HB	2.30	0.64
2:L:1171:TRP:CZ3	2:L:1236:LEU:HB2	2.33	0.64
1:C:1149:LEU:HB2	1:F:1149:LEU:HB2	1.79	0.64
2:K:781:GLY:HA2	2:K:1071:VAL:HG13	1.78	0.64
1:C:1480:ARG:O	1:C:1484:GLU:HG3	1.97	0.64
2:G:756:ASP:HA	2:G:843:TRP:CH2	2.32	0.64
1:A:956:ILE:HA	2:G:977:PRO:HA	1.79	0.64
2:L:465:LEU:HD11	2:L:486:ILE:HD11	1.78	0.64
1:C:1702:ARG:HG3	1:C:1702:ARG:NH1	2.08	0.64
2:G:1067:LEU:HB2	4:G:2101:FMN:C7M	2.27	0.64
2:I:1048:TRP:CD2	2:I:1049:GLN:HG2	2.32	0.64
2:K:462:ALA:H	2:K:483:ASP:HA	1.61	0.64
1:F:1413:SER:HA	1:F:1499:ARG:HH22	1.61	0.64
1:D:852:LEU:HD12	3:D:1901:NAP:O2A	1.96	0.64
1:C:632:LEU:HA	1:C:635:ILE:CG2	2.27	0.64
2:J:1890:ARG:HH22	2:J:1996:ILE:CD1	2.10	0.64
2:I:1026:LYS:HG3	3:I:2102:NAP:N7A	2.11	0.64
2:J:270:ARG:HG3	2:J:274:GLU:OE1	1.98	0.64
2:K:789:TYR:HB3	2:K:790:PRO:HD3	1.80	0.64
1:E:421:ARG:NH2	1:E:1613:LYS:HB3	2.13	0.64
2:K:35:PHE:CE1	2:K:108:GLU:HG3	2.31	0.64
1:B:888:ILE:HA	1:B:891:LEU:HD12	1.79	0.64
1:E:1480:ARG:O	1:E:1484:GLU:HG3	1.98	0.64
2:H:347:PRO:HA	2:H:432:PHE:CD1	2.32	0.64
2:J:1220:ARG:HA	2:J:1229:VAL:O	1.97	0.64
2:J:1324:PHE:N	2:J:1583:VAL:HG11	2.12	0.64
2:J:1976:CYS:O	2:J:1980:THR:HG23	1.97	0.64
1:C:11:TYR:O	1:C:15:VAL:HG23	1.97	0.64
2:G:1324:PHE:HA	2:G:1583:VAL:HG11	1.79	0.64
1:B:31:THR:HG23	2:H:2040:ILE:HG21	1.78	0.64
2:G:220:GLN:C	2:G:222:PRO:HD3	2.17	0.64

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:J:1551:ILE:HG22	2:J:1552:GLU:HG3	1.79	0.64
2:I:756:ASP:HA	2:I:843:TRP:CH2	2.33	0.64
2:I:135:GLY:HA2	2:I:138:ARG:NH1	2.12	0.64
2:L:347:PRO:HA	2:L:432:PHE:CD1	2.32	0.64
2:H:781:GLY:HA2	2:H:1071:VAL:HG13	1.79	0.64
1:F:1342:ARG:HB2	1:F:1345:SER:HB2	1.78	0.64
1:D:998:GLY:HA3	1:D:1361:VAL:CG1	2.25	0.64
2:I:501:TRP:CZ2	2:I:528:THR:HG21	2.33	0.64
1:F:1081:ILE:HA	1:F:1163:GLN:NE2	2.13	0.64
2:H:1099:LEU:HD21	2:H:1107:GLU:HG2	1.80	0.64
2:J:549:ASN:HD22	2:J:550:THR:N	1.95	0.64
2:L:367:ALA:O	2:L:370:GLN:HB3	1.98	0.64
1:A:1068:TYR:O	1:A:1072:ILE:HG13	1.98	0.64
1:F:424:VAL:HG13	1:F:469:LEU:HD11	1.78	0.64
1:F:852:LEU:HD12	3:F:1901:NAP:O2A	1.96	0.64
2:H:584:SER:HB3	2:H:1114:GLU:O	1.97	0.64
2:H:1383:VAL:HG23	2:H:1428:TYR:HE1	1.62	0.64
1:A:70:ALA:O	2:I:403:LEU:HD12	1.97	0.64
2:G:950:TRP:CD1	2:G:956:LYS:HD3	2.33	0.64
1:D:828:TRP:HE1	1:D:838:THR:HA	1.62	0.64
2:I:1231:THR:HG22	2:I:1232:VAL:HG13	1.79	0.64
2:K:501:TRP:CZ2	2:K:528:THR:HG21	2.33	0.64
1:A:533:SER:CB	1:A:612:ILE:HB	2.27	0.64
1:A:612:ILE:HD12	1:F:579:MET:HE2	1.78	0.64
2:K:376:ARG:HE	2:L:1339:GLY:HA2	1.61	0.64
2:K:382:LEU:HB3	2:K:499:VAL:HB	1.80	0.64
2:I:467:ILE:HG23	2:I:468:PRO:HD2	1.80	0.64
2:L:1721:ARG:HH21	2:L:1853:ILE:HD12	1.62	0.64
2:I:1764:MET:HB3	2:I:1780:ILE:CD1	2.27	0.64
2:J:1370:LEU:HA	2:J:1435:TYR:HE2	1.63	0.64
1:B:767:HIS:CE1	1:E:767:HIS:CE1	2.85	0.64
1:B:767:HIS:CE1	1:E:767:HIS:HE1	2.15	0.64
2:L:35:PHE:CE1	2:L:108:GLU:HG3	2.32	0.64
1:D:843:VAL:HG13	1:D:900:ASP:HA	1.79	0.64
2:H:1356:ALA:HB3	2:H:1397:THR:HG22	1.78	0.64
1:C:424:VAL:HG13	1:C:469:LEU:HD11	1.79	0.64
2:I:293:ALA:HA	2:I:469:VAL:HG21	1.80	0.64
1:D:424:VAL:HG13	1:D:469:LEU:HD11	1.78	0.64
2:K:855:ILE:HD13	2:K:856:THR:N	2.13	0.64
2:I:600:VAL:HG13	2:I:601:PRO:CD	2.28	0.64
2:K:440:HIS:CD2	2:K:499:VAL:HG23	2.32	0.64
2:K:1232:VAL:HG12	2:K:1246:LEU:HD23	1.79	0.64

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:H:448:HIS:CD2	2:H:491:VAL:HG12	2.29	0.64
2:I:489:GLU:HA	2:I:492:ARG:NH1	2.12	0.64
2:I:1074:LYS:HE3	2:I:1075:TYR:HE1	1.61	0.64
1:F:486:VAL:CG1	1:F:647:GLY:HA3	2.27	0.64
1:F:1156:PHE:CZ	1:F:1316:TYR:HA	2.33	0.64
1:F:1081:ILE:HG13	1:F:1159:LEU:O	1.98	0.64
2:H:1099:LEU:HD12	2:H:1103:TYR:HB2	1.80	0.64
2:G:1092:ASN:HA	2:G:1095:ILE:HG12	1.80	0.64
2:J:1301:PHE:HB3	2:J:1364:ARG:HG3	1.80	0.64
2:K:38:PRO:HD2	2:K:104:LEU:HD11	1.78	0.64
2:L:1551:ILE:HG22	2:L:1552:GLU:HG3	1.78	0.64
2:G:20:SER:O	2:G:38:PRO:HA	1.98	0.64
2:L:1220:ARG:HA	2:L:1229:VAL:O	1.97	0.64
2:H:655:GLY:HA3	2:H:1272:ALA:CB	2.28	0.64
1:E:852:LEU:HD12	3:E:1901:NAP:O2A	1.97	0.64
2:H:752:HIS:NE2	2:H:856:THR:CG2	2.61	0.64
2:L:447:ALA:O	2:L:451:ILE:HG13	1.98	0.64
1:D:907:PHE:O	1:D:909:PRO:HD3	1.98	0.64
2:K:1890:ARG:HH22	2:K:1996:ILE:CD1	2.10	0.64
1:D:408:GLN:HG2	1:D:1610:ARG:NH1	2.12	0.64
1:E:1214:HIS:HD2	1:E:1216:SER:OG	1.79	0.64
1:E:1156:PHE:CZ	1:E:1316:TYR:HA	2.33	0.64
1:F:1214:HIS:HD2	1:F:1216:SER:OG	1.80	0.64
2:K:1099:LEU:HD21	2:K:1107:GLU:HG2	1.80	0.64
2:J:584:SER:HB3	2:J:1114:GLU:O	1.97	0.64
2:J:1456:LEU:HD11	2:J:1543:TYR:HE2	1.62	0.64
2:J:367:ALA:O	2:J:370:GLN:HB3	1.98	0.64
2:L:950:TRP:CD1	2:L:956:LYS:HD3	2.32	0.64
1:C:1250:LEU:HB2	1:F:1317:GLU:HG3	1.80	0.64
2:H:845:ASN:HB3	2:H:851:THR:OG1	1.98	0.64
1:D:539:THR:O	1:D:542:GLN:HG2	1.97	0.64
2:H:374:GLU:CA	2:H:377:HIS:HD2	2.10	0.64
2:L:608:MET:H	2:L:612:THR:HB	1.62	0.64
2:L:612:THR:HG22	2:L:612:THR:O	1.98	0.64
2:G:250:PHE:HB2	2:G:251:PRO:HD3	1.80	0.64
1:B:1581:LEU:HD23	1:B:1617:ILE:HG12	1.80	0.64
2:I:1351:VAL:HG23	2:I:1584:SER:HA	1.79	0.64
2:J:1455:GLN:HB2	2:J:1551:ILE:HD11	1.79	0.64
1:E:41:THR:HG21	2:K:1691:ALA:HB2	1.80	0.64
2:G:1348:PHE:O	2:G:1351:VAL:HG12	1.98	0.64
1:D:421:ARG:HH22	1:D:1613:LYS:HB3	1.63	0.64
2:H:1692:TYR:HD1	2:H:1847:LEU:HD21	1.63	0.64

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:G:786:GLU:CD	2:G:786:GLU:H	2.01	0.64
1:B:1401:LEU:HD22	1:D:1697:LEU:HD21	1.80	0.64
2:L:265:CYS:SG	2:L:275:LEU:HD12	2.37	0.64
2:I:1232:VAL:HG12	2:I:1246:LEU:HD23	1.79	0.64
1:E:1413:SER:HA	1:E:1499:ARG:NH2	2.12	0.64
1:A:1102:ILE:HG22	1:A:1104:GLN:HG2	1.80	0.64
2:L:501:TRP:CZ2	2:L:528:THR:HG21	2.33	0.64
2:H:1181:PHE:O	2:H:1188:GLN:HB3	1.98	0.64
2:H:1180:VAL:HG12	2:H:1188:GLN:H	1.61	0.64
1:B:40:ARG:NH2	1:B:72:THR:HG22	2.13	0.64
2:I:1290:TYR:CD2	2:I:1299:VAL:HB	2.32	0.64
2:J:779:GLY:O	2:J:780:SER:CB	2.45	0.64
2:H:153:PRO:HB3	2:H:270:ARG:NH1	2.13	0.64
1:F:442:PRO:HD2	1:F:443:LEU:HD12	1.78	0.64
1:C:696:GLN:HG3	1:C:697:GLY:N	2.13	0.64
1:A:1386:THR:O	1:E:1270:THR:HA	1.97	0.64
2:G:367:ALA:O	2:G:370:GLN:HB3	1.98	0.64
2:I:698:SER:HB3	2:I:701:VAL:HG23	1.79	0.64
2:H:253:ILE:HB	2:H:287:GLN:HE22	1.61	0.64
1:F:1089:TYR:CE1	1:F:1312:GLU:HG3	2.33	0.64
2:L:253:ILE:HB	2:L:287:GLN:HE22	1.62	0.64
2:K:1456:LEU:HD11	2:K:1543:TYR:HE2	1.63	0.64
2:K:49:LYS:O	2:K:53:LEU:HG	1.98	0.64
1:D:655:ALA:HB3	1:D:680:VAL:HG12	1.80	0.64
1:F:808:PHE:HA	1:F:912:LYS:HD3	1.79	0.64
2:I:670:MET:HA	2:I:673:GLN:HB2	1.80	0.63
2:K:661:ASN:HD21	4:K:2101:FMN:HN3	1.44	0.63
2:H:162:ALA:HA	2:H:167:VAL:HG22	1.79	0.63
1:D:427:ARG:NH1	1:D:427:ARG:HG3	2.04	0.63
1:F:998:GLY:HA3	1:F:1361:VAL:CG1	2.25	0.63
2:G:172:ILE:HD11	2:G:501:TRP:HZ2	1.62	0.63
2:J:472:THR:H	2:J:493:MET:HE3	1.63	0.63
2:K:305:ALA:O	2:K:309:LYS:HD3	1.98	0.63
2:J:44:GLN:HG3	2:J:101:VAL:HG21	1.78	0.63
2:G:670:MET:HA	2:G:673:GLN:HB2	1.80	0.63
2:K:785:SER:HA	2:K:788:THR:HB	1.81	0.63
2:L:549:ASN:HD22	2:L:551:GLU:H	1.45	0.63
1:F:34:VAL:HG21	2:L:2045:ALA:O	1.97	0.63
2:K:110:GLU:HA	2:K:114:MET:HB2	1.80	0.63
2:J:220:GLN:C	2:J:222:PRO:HD3	2.18	0.63
1:F:1524:GLY:HA2	1:F:1531:ASP:OD1	1.98	0.63
1:F:1278:GLY:CA	1:F:1630:LYS:HE2	2.28	0.63

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:H:1067:LEU:HB2	4:H:2101:FMN:C7M	2.28	0.63
2:H:608:MET:H	2:H:612:THR:HB	1.63	0.63
2:L:1115:TYR:HB3	2:L:1267:PRO:CB	2.21	0.63
2:L:1046:SER:O	2:L:1049:GLN:HG3	1.98	0.63
2:G:937:ARG:NE	2:G:941:LEU:HD11	2.13	0.63
1:A:1425:LEU:HD21	1:A:1429:ARG:NH2	2.13	0.63
1:B:632:LEU:HA	1:B:635:ILE:CG2	2.27	0.63
1:C:470:GLY:O	1:C:474:ILE:HG13	1.96	0.63
1:A:1156:PHE:CZ	1:A:1316:TYR:HA	2.33	0.63
2:G:779:GLY:O	2:G:780:SER:CB	2.46	0.63
2:K:1090:ILE:O	2:K:1094:HIS:HD2	1.81	0.63
1:D:862:GLY:O	1:D:865:LYS:HB2	1.97	0.63
2:G:1266:HIS:NE2	2:G:1275:ARG:HD2	2.13	0.63
2:K:94:ALA:HB1	2:K:97:THR:OG1	1.98	0.63
1:D:12:THR:O	1:D:16:GLU:HG2	1.98	0.63
2:K:894:GLU:O	2:K:897:LYS:HG2	1.98	0.63
2:L:1807:GLN:HB2	2:L:1808:PRO:HD3	1.80	0.63
2:K:610:PRO:O	2:K:613:VAL:HG12	1.99	0.63
2:L:250:PHE:HB2	2:L:251:PRO:HD3	1.80	0.63
2:J:501:TRP:HZ2	2:J:528:THR:HG21	1.63	0.63
2:K:1265:TYR:O	2:K:1267:PRO:HD3	1.98	0.63
1:A:1363:MET:HE1	1:A:1373:VAL:CG2	2.28	0.63
2:J:207:LEU:O	2:J:211:LEU:HG	1.98	0.63
2:I:162:ALA:HA	2:I:167:VAL:HG22	1.79	0.63
1:D:1081:ILE:HA	1:D:1163:GLN:NE2	2.12	0.63
2:J:1846:ALA:HB3	2:J:1847:LEU:HD12	1.80	0.63
1:C:1213:VAL:HG22	1:C:1300:ARG:NH2	2.13	0.63
1:A:30:GLU:HB2	2:G:2045:ALA:HB1	1.81	0.63
1:E:12:THR:O	1:E:16:GLU:HG2	1.99	0.63
1:D:1094:LYS:HE3	1:D:1316:TYR:CD1	2.33	0.63
2:H:1231:THR:HG22	2:H:1232:VAL:HG13	1.79	0.63
1:B:1504:ARG:NH1	1:B:1504:ARG:CG	2.48	0.63
2:L:1232:VAL:HG12	2:L:1246:LEU:HD23	1.79	0.63
2:H:250:PHE:HB2	2:H:251:PRO:HD3	1.79	0.63
1:A:557:ARG:HG3	1:A:557:ARG:NH1	2.03	0.63
2:L:1181:PHE:O	2:L:1188:GLN:HB3	1.98	0.63
2:G:1331:THR:O	2:I:329:THR:HG22	1.98	0.63
2:K:1351:VAL:HG23	2:K:1584:SER:HA	1.80	0.63
2:J:1692:TYR:HD1	2:J:1847:LEU:HD21	1.63	0.63
1:C:1214:HIS:HD2	1:C:1216:SER:OG	1.80	0.63
2:I:1123:ALA:O	2:I:1126:GLU:HG3	1.98	0.63
2:L:655:GLY:HA3	2:L:1272:ALA:CB	2.29	0.63

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:L:827:GLN:H	2:L:827:GLN:NE2	1.96	0.63
1:F:1234:GLY:HA2	1:F:1238:ASP:HB2	1.81	0.63
2:G:253:ILE:HB	2:G:287:GLN:HE22	1.62	0.63
2:K:1404:VAL:HG22	2:K:1413:VAL:HG22	1.81	0.63
1:B:424:VAL:HG13	1:B:469:LEU:HD11	1.78	0.63
1:B:852:LEU:HD12	3:B:1901:NAP:O2A	1.99	0.63
2:K:1844:LEU:HB3	2:K:1850:VAL:HG21	1.81	0.63
1:F:339:GLN:O	1:F:343:ILE:HG13	1.98	0.63
2:J:276:LEU:HD12	2:J:298:ALA:O	1.97	0.63
2:I:1084:LYS:O	2:I:1088:ASP:HB2	1.99	0.63
2:H:1007:LEU:H	2:H:1007:LEU:CD1	2.11	0.63
1:F:1102:ILE:HG22	1:F:1104:GLN:HG2	1.81	0.63
2:H:580:LEU:HD12	2:H:1103:TYR:CE2	2.33	0.63
2:H:24:LEU:HD12	2:H:37:VAL:HG21	1.79	0.63
2:I:549:ASN:HD22	2:I:550:THR:N	1.97	0.63
2:K:22:ARG:O	2:K:37:VAL:HG23	1.99	0.63
2:J:1324:PHE:HA	2:J:1583:VAL:HG11	1.81	0.63
2:L:1455:GLN:HB2	2:L:1551:ILE:HD11	1.80	0.63
1:F:1086:PHE:CE2	1:F:1310:PHE:HD2	2.15	0.63
2:J:845:ASN:HB3	2:J:851:THR:OG1	1.97	0.63
1:D:442:PRO:HD2	1:D:443:LEU:HD12	1.81	0.63
2:K:1356:ALA:HB3	2:K:1397:THR:HG22	1.79	0.63
1:C:1336:GLU:O	1:C:1340:MET:HG2	1.99	0.63
2:I:967:GLU:HG2	2:I:1000:TYR:CE1	2.33	0.63
1:C:1168:TRP:NE1	1:C:1173:TYR:HE1	1.95	0.63
1:A:1483:ALA:HA	1:A:1486:GLN:HE21	1.64	0.63
2:I:655:GLY:HA3	2:I:1272:ALA:CB	2.28	0.63
2:J:22:ARG:O	2:J:37:VAL:HG23	1.98	0.63
2:G:396:ILE:HD12	2:G:396:ILE:H	1.63	0.63
2:K:573:VAL:HG22	2:K:804:PRO:HB2	1.80	0.63
2:G:857:VAL:HG13	2:G:876:TRP:NE1	2.13	0.63
2:G:752:HIS:CE1	2:G:847:TYR:CE2	2.78	0.63
1:E:1700:GLN:O	1:E:1702:ARG:HG3	1.98	0.63
2:L:942:MET:HE2	2:L:955:LEU:HD13	1.81	0.63
2:K:276:LEU:HD12	2:K:298:ALA:O	1.98	0.63
2:G:1181:PHE:O	2:G:1188:GLN:HB3	1.99	0.63
2:G:1232:VAL:CG1	2:G:1246:LEU:HD23	2.27	0.63
1:D:1581:LEU:HD23	1:D:1617:ILE:HG12	1.80	0.63
2:J:186:LEU:HG	2:J:256:VAL:HG22	1.80	0.63
2:L:1370:LEU:HA	2:L:1435:TYR:HE2	1.63	0.63
2:K:1551:ILE:HG22	2:K:1552:GLU:HG3	1.80	0.63
2:G:580:LEU:HD12	2:G:1103:TYR:CE2	2.33	0.63

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:H:1551:ILE:HG22	2:H:1552:GLU:HG3	1.81	0.63
2:K:788:THR:HG22	2:K:1094:HIS:CE1	2.33	0.63
2:J:38:PRO:HD2	2:J:104:LEU:HD11	1.80	0.63
2:G:833:VAL:HG13	2:G:1077:LYS:HA	1.81	0.63
2:K:756:ASP:HA	2:K:843:TRP:CH2	2.33	0.63
2:H:367:ALA:O	2:H:370:GLN:HB3	1.99	0.63
2:H:110:GLU:HA	2:H:114:MET:HB2	1.81	0.63
2:G:875:PHE:CD1	2:G:905:LYS:HD3	2.34	0.63
2:L:1637:VAL:CG1	2:L:1679:LEU:HD22	2.28	0.63
1:F:632:LEU:HA	1:F:635:ILE:CG2	2.29	0.63
2:L:1890:ARG:HH22	2:L:1996:ILE:CD1	2.10	0.63
2:G:1370:LEU:HD12	2:G:1373:LEU:HD13	1.80	0.63
2:J:1318:ALA:HA	2:J:1391:VAL:CG2	2.29	0.63
1:D:41:THR:HG21	2:J:1691:ALA:HB2	1.81	0.63
1:E:1510:TRP:CZ3	1:E:1642:LEU:HA	2.34	0.63
2:J:1324:PHE:CA	2:J:1583:VAL:HG11	2.29	0.63
2:G:38:PRO:HD2	2:G:104:LEU:HD11	1.81	0.63
2:J:35:PHE:CE1	2:J:108:GLU:HG3	2.34	0.63
2:I:857:VAL:HG13	2:I:876:TRP:NE1	2.13	0.63
2:J:768:ILE:O	2:J:774:ILE:HD12	1.99	0.63
2:L:571:ASP:HB3	2:L:574:LYS:HB2	1.81	0.63
1:B:1260:ALA:O	1:B:1264:MET:HG3	1.98	0.63
2:H:827:GLN:NE2	2:H:827:GLN:H	1.96	0.63
2:I:276:LEU:HD12	2:I:298:ALA:O	1.99	0.63
2:J:827:GLN:NE2	2:J:827:GLN:H	1.97	0.63
2:I:1015:HIS:NE2	2:I:1019:LEU:HD11	2.13	0.63
2:H:613:VAL:CG1	2:H:614:PRO:HD3	2.28	0.63
2:L:1067:LEU:HB2	4:L:2101:FMN:C7M	2.29	0.63
1:C:430:VAL:O	1:C:434:ILE:HG13	1.99	0.63
2:J:1669:ALA:HB3	2:J:1679:LEU:HB2	1.81	0.63
2:G:1701:GLU:H	2:G:1704:MET:CE	2.12	0.63
2:J:1764:MET:HB3	2:J:1780:ILE:CD1	2.29	0.63
2:J:1436:ARG:HH22	2:J:1602:LEU:HD13	1.64	0.63
2:H:573:VAL:HG22	2:H:804:PRO:HB2	1.81	0.63
2:H:670:MET:HA	2:H:673:GLN:HB2	1.79	0.63
2:H:1090:ILE:O	2:H:1094:HIS:CD2	2.51	0.63
1:A:1032:MET:HE3	1:A:1165:PRO:HB3	1.80	0.63
2:J:1922:VAL:HB	2:J:1925:MET:HB2	1.80	0.63
2:H:141:TYR:OH	2:H:267:THR:HG23	1.98	0.63
1:A:852:LEU:HD12	3:A:1901:NAP:O2A	1.99	0.63
2:I:95:HIS:HB2	2:I:96:PRO:HD3	1.81	0.63
2:L:87:VAL:HG22	2:L:98:ASN:HB3	1.81	0.63

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:B:926:SER:O	1:B:930:GLN:HG2	1.98	0.63
2:L:1538:ASN:HB3	2:L:1541:ILE:HG22	1.81	0.63
1:F:683:THR:HB	1:F:714:PHE:HB3	1.81	0.63
2:K:934:VAL:O	2:K:938:MET:HG3	1.98	0.63
2:L:613:VAL:HG23	2:L:635:TYR:CE1	2.34	0.63
1:B:1102:ILE:HG22	1:B:1104:GLN:HG2	1.80	0.63
2:H:934:VAL:O	2:H:938:MET:HG3	1.98	0.63
2:K:1046:SER:O	2:K:1049:GLN:HG3	1.99	0.63
2:I:24:LEU:HD12	2:I:37:VAL:HG21	1.81	0.63
2:I:743:TRP:CG	2:I:761:ILE:HD11	2.33	0.63
2:L:1933:LEU:O	2:L:1989:LEU:HD21	1.99	0.63
2:G:1380:TYR:CD2	2:G:1429:VAL:HG22	2.34	0.63
2:K:1455:GLN:HB2	2:K:1551:ILE:CD1	2.28	0.63
2:H:38:PRO:HD2	2:H:104:LEU:HD11	1.80	0.63
2:G:967:GLU:HG2	2:G:1000:TYR:CE1	2.34	0.63
2:G:549:ASN:HD22	2:G:551:GLU:H	1.46	0.63
2:G:894:GLU:O	2:G:897:LYS:HG2	1.99	0.63
1:D:926:SER:O	1:D:930:GLN:HG2	1.99	0.63
2:L:193:TYR:CD1	2:L:263:ILE:HD13	2.33	0.63
2:L:372:LEU:HD11	2:L:397:SER:HB2	1.81	0.63
2:K:1171:TRP:C	2:K:1171:TRP:CD1	2.71	0.63
2:L:374:GLU:CA	2:L:377:HIS:HD2	2.12	0.62
1:A:574:ILE:HG22	1:A:579:MET:HB2	1.78	0.62
1:C:406:ALA:CA	1:C:439:ARG:HH11	2.07	0.62
2:K:462:ALA:N	2:K:483:ASP:HA	2.14	0.62
2:I:1436:ARG:HH22	2:I:1602:LEU:HD13	1.64	0.62
2:H:605:VAL:HG22	2:H:816:MET:HG3	1.81	0.62
1:B:40:ARG:HH21	1:B:72:THR:HG22	1.64	0.62
1:A:1363:MET:HE3	1:A:1368:ALA:HB2	1.81	0.62
2:J:250:PHE:HB2	2:J:251:PRO:HD3	1.80	0.62
2:L:747:ARG:NH1	2:L:780:SER:HB3	2.14	0.62
2:J:1099:LEU:HD21	2:J:1107:GLU:HG2	1.80	0.62
2:H:779:GLY:O	2:H:780:SER:CB	2.46	0.62
2:G:1871:VAL:HB	2:G:2003:VAL:HG22	1.81	0.62
1:F:506:ILE:HD13	1:F:922:ILE:HG22	1.81	0.62
2:K:1092:ASN:HA	2:K:1095:ILE:HG12	1.79	0.62
2:I:1455:GLN:HB2	2:I:1551:ILE:CD1	2.29	0.62
2:I:1551:ILE:HG22	2:I:1552:GLU:HG3	1.80	0.62
2:I:1383:VAL:HG23	2:I:1428:TYR:HE1	1.64	0.62
2:L:756:ASP:HA	2:L:843:TRP:CH2	2.34	0.62
2:H:1722:ALA:CB	2:H:1812:LEU:HD21	2.29	0.62
2:J:1421:ARG:HD2	2:J:1426:VAL:HG21	1.80	0.62

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:G:1318:ALA:HA	2:G:1391:VAL:HG21	1.80	0.62
1:B:565:GLN:O	1:B:569:LEU:HD12	1.99	0.62
1:C:755:GLU:HG2	1:D:831:GLU:HG2	1.81	0.62
1:D:1504:ARG:CG	1:D:1504:ARG:NH1	2.45	0.62
2:K:917:ARG:N	2:K:917:ARG:HD2	2.14	0.62
2:L:1650:THR:O	2:L:1669:ALA:HA	1.98	0.62
2:L:663:ILE:CD1	2:L:663:ILE:H	2.10	0.62
2:G:501:TRP:CZ2	2:G:528:THR:HG21	2.34	0.62
2:H:1650:THR:O	2:H:1669:ALA:HA	1.99	0.62
2:I:20:SER:O	2:I:38:PRO:HA	1.98	0.62
2:L:779:GLY:O	2:L:780:SER:CB	2.46	0.62
2:J:1933:LEU:O	2:J:1989:LEU:HD21	1.99	0.62
1:C:22:PHE:HE2	2:I:2017:PHE:CG	2.16	0.62
2:I:824:THR:HB	2:I:829:LYS:HE3	1.81	0.62
2:K:193:TYR:CD1	2:K:263:ILE:HD13	2.33	0.62
2:G:788:THR:HG22	2:G:1094:HIS:CE1	2.33	0.62
2:L:186:LEU:HG	2:L:256:VAL:HG22	1.81	0.62
2:J:20:SER:O	2:J:38:PRO:HA	1.97	0.62
2:G:372:LEU:HD11	2:G:397:SER:HB2	1.80	0.62
2:H:1579:ASN:O	2:H:1583:VAL:HG23	1.98	0.62
1:E:683:THR:HB	1:E:714:PHE:HB3	1.80	0.62
1:F:12:THR:O	1:F:16:GLU:HG2	1.99	0.62
1:C:1451:LYS:HG2	1:C:1454:ARG:NH2	2.15	0.62
1:D:1470:ARG:O	1:D:1474:ILE:HG13	1.98	0.62
2:H:612:THR:HG22	2:H:612:THR:O	1.98	0.62
2:L:623:ASN:OD1	2:L:653:PRO:HD3	1.98	0.62
2:L:926:LEU:O	2:L:1008:ILE:HD11	1.99	0.62
2:H:1178:THR:HG22	2:H:1180:VAL:H	1.62	0.62
2:G:796:TRP:CH2	2:G:805:MET:HE1	2.34	0.62
1:A:1209:PHE:CE2	1:A:1301:VAL:HG21	2.33	0.62
1:B:1081:ILE:HA	1:B:1163:GLN:NE2	2.14	0.62
1:A:1510:TRP:CZ3	1:A:1642:LEU:HA	2.35	0.62
1:C:1480:ARG:NH2	1:F:1488:SER:O	2.30	0.62
2:K:698:SER:HB3	2:K:701:VAL:HG23	1.80	0.62
2:G:193:TYR:CD1	2:G:263:ILE:HD13	2.33	0.62
2:H:549:ASN:HD22	2:H:550:THR:N	1.97	0.62
1:D:636:TYR:CZ	1:D:640:LEU:HD22	2.34	0.62
1:E:1086:PHE:CE2	1:E:1310:PHE:HD2	2.16	0.62
2:H:964:ARG:O	2:H:967:GLU:HB2	1.99	0.62
2:L:276:LEU:HD12	2:L:298:ALA:O	1.98	0.62
2:H:440:HIS:CD2	2:H:499:VAL:HG23	2.33	0.62
2:J:1200:ARG:HD3	2:J:1200:ARG:N	2.09	0.62

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:K:917:ARG:HD3	2:K:937:ARG:NH2	2.14	0.62
2:J:685:VAL:HG23	2:J:1186:ARG:NH1	2.14	0.62
2:L:376:ARG:CB	2:L:394:PRO:HG2	2.29	0.62
2:L:1922:VAL:HB	2:L:1925:MET:HB2	1.81	0.62
2:G:1231:THR:CG2	2:G:1595:VAL:HG11	2.29	0.62
1:B:562:SER:HB3	1:E:551:LEU:CD2	2.30	0.62
2:L:20:SER:O	2:L:38:PRO:HA	1.99	0.62
2:K:706:ILE:HG22	2:K:707:GLN:HG2	1.80	0.62
1:E:1462:ASP:HB2	1:E:1465:ALA:HB3	1.80	0.62
2:J:571:ASP:HB3	2:J:574:LYS:HB2	1.82	0.62
2:K:1922:VAL:HB	2:K:1925:MET:HB2	1.82	0.62
1:B:1234:GLY:HA2	1:B:1238:ASP:HB2	1.81	0.62
1:B:1704:THR:HG23	1:B:1714:PRO:HG3	1.80	0.62
2:H:396:ILE:HD12	2:H:396:ILE:H	1.64	0.62
1:F:617:LEU:N	1:F:617:LEU:HD23	2.13	0.62
2:H:1404:VAL:HG22	2:H:1413:VAL:HG22	1.81	0.62
2:K:608:MET:H	2:K:612:THR:HB	1.65	0.62
2:K:670:MET:HA	2:K:673:GLN:HB2	1.81	0.62
1:D:1702:ARG:NH1	1:D:1702:ARG:CG	2.40	0.62
1:A:632:LEU:HA	1:A:635:ILE:CG2	2.29	0.62
2:K:272:PRO:O	2:K:276:LEU:HB2	1.99	0.62
2:K:779:GLY:HA3	2:K:811:MET:HE3	1.80	0.62
2:J:1442:TYR:O	2:J:1445:THR:HG22	1.98	0.62
1:E:1005:TRP:NE1	1:E:1561:LEU:CD2	2.62	0.62
1:E:1005:TRP:CD1	1:E:1561:LEU:HD22	2.35	0.62
2:J:789:TYR:HB3	2:J:790:PRO:HD3	1.81	0.62
2:H:1933:LEU:O	2:H:1989:LEU:HD21	1.99	0.62
2:G:743:TRP:HZ2	2:G:757:PHE:HA	1.63	0.62
2:H:190:TYR:CD1	2:H:201:ILE:HD13	2.34	0.62
1:C:503:ARG:HA	1:C:933:ILE:HD11	1.81	0.62
2:L:190:TYR:HD1	2:L:201:ILE:HD13	1.63	0.62
2:H:549:ASN:HD22	2:H:551:GLU:H	1.46	0.62
2:J:1729:ASN:O	2:J:1757:ILE:HG23	1.99	0.62
2:G:1515:LEU:O	2:G:1523:ILE:HD12	2.00	0.62
2:J:95:HIS:HB2	2:J:96:PRO:HD3	1.81	0.62
1:A:60:THR:HG23	2:G:1922:VAL:HG13	1.82	0.62
2:L:781:GLY:HA2	2:L:1071:VAL:HG13	1.81	0.62
2:H:293:ALA:HA	2:H:469:VAL:HG21	1.80	0.62
1:D:1514:ILE:O	1:D:1547:ARG:NH1	2.33	0.62
2:J:1007:LEU:HD12	2:J:1007:LEU:N	2.12	0.62
2:J:1871:VAL:HB	2:J:2003:VAL:HG22	1.80	0.62
2:G:472:THR:H	2:G:493:MET:HE3	1.64	0.62

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:J:447:ALA:O	2:J:451:ILE:HG13	1.99	0.62
2:I:461:PRO:HA	2:I:484:GLU:O	2.00	0.62
2:J:743:TRP:HZ2	2:J:757:PHE:HA	1.65	0.62
2:G:1099:LEU:HD12	2:G:1103:TYR:HB2	1.80	0.62
1:A:620:LYS:HA	1:A:625:ASN:O	1.98	0.62
1:D:1113:LYS:HG3	1:D:1138:TYR:CE2	2.35	0.62
1:E:1267:LEU:HD11	1:E:1303:LEU:HD12	1.81	0.62
2:H:49:LYS:O	2:H:53:LEU:HG	1.99	0.62
2:G:380:ILE:O	2:G:380:ILE:HG13	1.98	0.62
2:K:618:VAL:O	2:K:622:MET:HG3	1.99	0.62
2:L:846:THR:HG22	2:L:856:THR:N	2.15	0.62
2:J:1404:VAL:HG22	2:J:1413:VAL:HG22	1.82	0.62
2:H:276:LEU:HD12	2:H:298:ALA:O	2.00	0.62
2:I:1874:ASP:OD1	2:I:1878:ARG:HB3	2.00	0.62
2:J:1468:ARG:NH1	2:J:1475:LEU:HB2	2.14	0.62
2:I:573:VAL:HG22	2:I:804:PRO:HB2	1.81	0.62
2:I:1318:ALA:HA	2:I:1391:VAL:CG2	2.29	0.62
2:L:1318:ALA:HA	2:L:1391:VAL:CG2	2.30	0.62
1:D:766:ALA:HA	1:D:769:ILE:HD12	1.80	0.62
1:D:1606:VAL:O	1:D:1608:PRO:HD3	2.00	0.62
1:F:843:VAL:HG13	1:F:900:ASP:HA	1.82	0.62
1:A:551:LEU:HD21	1:F:562:SER:HB3	1.80	0.62
1:F:978:LYS:HB3	1:F:979:PRO:HD3	1.82	0.62
2:G:1015:HIS:NE2	2:G:1019:LEU:HD11	2.14	0.62
2:K:1328:VAL:HA	2:K:1611:TYR:HE1	1.64	0.62
1:D:433:CYS:O	1:D:437:MET:HG3	1.99	0.62
2:H:699:ILE:H	2:H:699:ILE:HD12	1.64	0.62
2:J:293:ALA:HA	2:J:469:VAL:HG21	1.81	0.62
2:I:610:PRO:O	2:I:613:VAL:HG12	2.00	0.62
2:K:612:THR:HG22	2:K:612:THR:O	1.98	0.62
1:A:399:TYR:OH	1:A:692:THR:HG23	1.99	0.62
2:L:855:ILE:HD13	2:L:856:THR:N	2.15	0.62
1:B:1100:VAL:HG21	1:B:1150:ILE:HD12	1.82	0.62
2:G:855:ILE:HD13	2:G:856:THR:N	2.13	0.62
2:K:937:ARG:NE	2:K:941:LEU:HD11	2.15	0.62
2:L:1180:VAL:HG12	2:L:1188:GLN:H	1.65	0.62
2:G:1612:THR:O	2:G:1616:VAL:HG12	1.99	0.62
1:A:532:ILE:HG21	1:A:907:PHE:HB2	1.82	0.62
2:J:796:TRP:CH2	2:J:805:MET:HE1	2.34	0.62
2:I:1350:ILE:O	2:I:1354:TRP:HB2	1.99	0.62
2:H:854:VAL:HG21	2:H:1070:PRO:CA	2.27	0.62
2:G:1290:TYR:CD2	2:G:1299:VAL:HB	2.34	0.62

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:L:743:TRP:HZ2	2:L:757:PHE:HA	1.64	0.62
2:G:1340:LYS:HE3	2:I:376:ARG:HH22	1.65	0.62
2:G:1468:ARG:NH1	2:G:1475:LEU:HB2	2.14	0.62
2:I:1922:VAL:HB	2:I:1925:MET:HB2	1.82	0.62
1:C:746:PHE:CE1	1:C:800:PRO:HG3	2.35	0.62
2:H:967:GLU:HG2	2:H:1000:TYR:CE1	2.34	0.62
1:C:1317:GLU:HG3	1:F:1250:LEU:HB2	1.81	0.62
2:H:186:LEU:HG	2:H:256:VAL:HG22	1.82	0.62
1:E:11:TYR:O	1:E:15:VAL:HG23	1.99	0.62
2:J:49:LYS:O	2:J:53:LEU:HG	1.99	0.62
2:I:699:ILE:HD12	2:I:699:ILE:H	1.63	0.62
1:E:1524:GLY:HA2	1:E:1531:ASP:OD1	2.00	0.62
2:J:1232:VAL:HG12	2:J:1246:LEU:HD23	1.80	0.62
2:H:855:ILE:HD13	2:H:856:THR:N	2.15	0.62
2:K:374:GLU:CA	2:K:377:HIS:CD2	2.78	0.62
2:G:1637:VAL:CG1	2:G:1679:LEU:HD22	2.30	0.62
2:I:1189:THR:O	2:I:1191:PRO:HD3	1.99	0.62
2:K:779:GLY:O	2:K:780:SER:CB	2.47	0.62
1:C:911:LEU:O	1:C:915:MET:HG3	2.00	0.62
1:A:1005:TRP:NE1	1:A:1561:LEU:CD2	2.63	0.62
1:C:1581:LEU:HD23	1:C:1617:ILE:HG12	1.82	0.62
2:G:1454:MET:CE	2:G:1550:SER:HA	2.28	0.62
2:H:388:ASN:HD22	2:H:388:ASN:C	2.03	0.62
2:H:44:GLN:HG3	2:H:101:VAL:HG21	1.81	0.62
2:G:1351:VAL:HG23	2:G:1584:SER:HA	1.82	0.62
1:D:1156:PHE:CZ	1:D:1316:TYR:HA	2.34	0.62
2:I:964:ARG:O	2:I:967:GLU:HB2	1.99	0.62
2:K:549:ASN:HD22	2:K:550:THR:N	1.98	0.62
1:C:862:GLY:O	1:C:865:LYS:HB2	1.99	0.62
1:D:947:ASP:O	1:D:951:LEU:HG	1.99	0.62
2:L:845:ASN:HB3	2:L:851:THR:OG1	1.99	0.62
1:B:550:LYS:NZ	1:B:631:LYS:HE2	2.15	0.62
1:E:433:CYS:O	1:E:437:MET:HG3	2.00	0.62
2:H:47:GLN:NE2	2:I:23:PRO:HB2	2.14	0.62
2:G:1356:ALA:HB3	2:G:1397:THR:HG22	1.81	0.62
1:D:1524:GLY:HA2	1:D:1531:ASP:OD1	2.00	0.62
1:F:620:LYS:HA	1:F:625:ASN:O	2.00	0.62
2:K:365:ILE:HG23	2:K:378:ILE:HG22	1.81	0.62
2:I:190:TYR:HD1	2:I:201:ILE:HD13	1.65	0.62
1:F:1702:ARG:HG3	1:F:1702:ARG:NH1	2.10	0.62
2:I:1048:TRP:HE1	2:I:1049:GLN:HE21	1.48	0.62
2:L:1048:TRP:HE1	2:L:1049:GLN:HE21	1.47	0.62

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:G:1650:THR:O	2:G:1669:ALA:HA	1.99	0.62
1:F:1670:HIS:CE1	2:L:1009:ASN:ND2	2.68	0.62
1:F:406:ALA:CA	1:F:439:ARG:HH11	2.10	0.62
2:J:934:VAL:O	2:J:938:MET:HG3	2.00	0.62
2:J:854:VAL:HG21	2:J:1070:PRO:CA	2.28	0.62
2:L:1436:ARG:NH2	2:L:1602:LEU:HD11	2.15	0.62
1:B:1156:PHE:CZ	1:B:1316:TYR:HA	2.35	0.62
1:D:1081:ILE:HG13	1:D:1159:LEU:O	2.00	0.62
2:K:1393:ASP:HB3	2:K:1395:LEU:HD21	1.81	0.62
2:G:1090:ILE:O	2:G:1094:HIS:HD2	1.83	0.62
2:G:1324:PHE:CA	2:G:1583:VAL:HG11	2.30	0.62
2:K:549:ASN:HD22	2:K:551:GLU:H	1.46	0.62
2:K:549:ASN:ND2	2:K:551:GLU:H	1.97	0.62
2:K:1318:ALA:HA	2:K:1391:VAL:HG21	1.81	0.62
2:G:1722:ALA:CB	2:G:1812:LEU:HD21	2.30	0.62
2:G:902:ILE:O	2:G:906:LEU:HB2	1.99	0.62
2:H:1844:LEU:HB3	2:H:1850:VAL:HG21	1.80	0.62
1:C:31:THR:HG23	2:I:2040:ILE:HG21	1.82	0.62
2:G:827:GLN:H	2:G:827:GLN:NE2	1.97	0.62
2:I:1579:ASN:O	2:I:1583:VAL:HG23	1.99	0.62
1:B:1107:GLU:HG3	1:B:1108:PRO:CD	2.30	0.61
2:K:1180:VAL:HG12	2:K:1188:GLN:H	1.64	0.61
2:J:917:ARG:HD2	2:J:917:ARG:N	2.16	0.61
2:J:937:ARG:NE	2:J:941:LEU:HD11	2.14	0.61
2:I:1375:HIS:HE1	2:I:1610:MET:SD	2.22	0.61
2:J:1650:THR:O	2:J:1669:ALA:HA	2.00	0.61
1:B:911:LEU:O	1:B:915:MET:HG3	1.99	0.61
1:D:1005:TRP:CD1	1:D:1561:LEU:HD22	2.35	0.61
2:J:1700:GLN:HA	2:J:1704:MET:CE	2.30	0.61
2:I:1871:VAL:HB	2:I:2003:VAL:HG22	1.79	0.61
2:L:388:ASN:C	2:L:388:ASN:HD22	2.02	0.61
2:K:1871:VAL:HB	2:K:2003:VAL:HG22	1.81	0.61
2:L:22:ARG:O	2:L:37:VAL:HG23	1.99	0.61
1:A:1081:ILE:HA	1:A:1163:GLN:NE2	2.14	0.61
2:I:49:LYS:O	2:I:53:LEU:HG	2.00	0.61
1:E:843:VAL:HG13	1:E:900:ASP:HA	1.81	0.61
2:L:1290:TYR:CD2	2:L:1299:VAL:HB	2.35	0.61
1:B:1090:ASP:OD1	1:B:1092:ASN:HB2	2.00	0.61
2:J:1897:GLU:HG2	2:J:1901:GLN:HE21	1.65	0.61
2:H:833:VAL:HG13	2:H:1077:LYS:HA	1.82	0.61
2:I:1099:LEU:HD21	2:I:1107:GLU:HG2	1.80	0.61
2:I:832:ILE:HA	2:I:868:LEU:HD11	1.82	0.61

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:L:272:PRO:O	2:L:276:LEU:HB2	2.00	0.61
2:G:2036:ILE:CG2	2:G:2037:GLY:N	2.63	0.61
1:F:883:LEU:HA	1:F:888:ILE:HD12	1.81	0.61
2:H:376:ARG:HH22	2:I:1340:LYS:CE	2.12	0.61
2:L:1455:GLN:HB2	2:L:1551:ILE:CD1	2.30	0.61
1:A:30:GLU:HB2	2:G:2045:ALA:CB	2.30	0.61
1:B:746:PHE:CE1	1:B:800:PRO:HG3	2.34	0.61
2:G:190:TYR:HD1	2:G:201:ILE:HD13	1.64	0.61
2:I:193:TYR:CD1	2:I:263:ILE:HD13	2.36	0.61
1:B:978:LYS:HB3	1:B:979:PRO:HD3	1.83	0.61
1:D:68:TYR:HD1	2:L:371:HIS:CD2	2.17	0.61
2:J:141:TYR:OH	2:J:267:THR:HG23	2.01	0.61
1:E:1234:GLY:HA2	1:E:1238:ASP:HB2	1.80	0.61
2:G:110:GLU:HA	2:G:114:MET:HB2	1.80	0.61
1:A:696:GLN:HG3	1:A:697:GLY:N	2.14	0.61
2:L:1574:PRO:HD3	2:L:1611:TYR:CE2	2.35	0.61
1:C:843:VAL:HG13	1:C:900:ASP:HA	1.82	0.61
1:B:1448:ALA:HA	1:B:1451:LYS:CE	2.30	0.61
2:K:752:HIS:CE1	2:K:847:TYR:CE2	2.76	0.61
1:A:557:ARG:CG	1:A:557:ARG:NH1	2.55	0.61
2:K:2036:ILE:CG2	2:K:2037:GLY:N	2.63	0.61
2:J:501:TRP:CZ2	2:J:528:THR:HG21	2.35	0.61
2:I:1370:LEU:HD12	2:I:1373:LEU:HD13	1.81	0.61
2:K:876:TRP:C	2:K:876:TRP:CD1	2.72	0.61
2:G:931:TYR:O	2:G:935:VAL:HG12	2.00	0.61
2:L:1603:PRO:HG2	2:L:1642:MET:HE3	1.82	0.61
2:K:1700:GLN:HA	2:K:1704:MET:CE	2.31	0.61
2:H:857:VAL:CG1	2:H:876:TRP:NE1	2.62	0.61
2:K:902:ILE:O	2:K:906:LEU:HB2	1.99	0.61
2:H:596:ARG:HH22	2:H:1113:ILE:CD1	2.12	0.61
1:C:926:SER:O	1:C:930:GLN:HG2	1.99	0.61
1:D:696:GLN:HG3	1:D:697:GLY:N	2.15	0.61
2:I:1538:ASN:HB3	2:I:1541:ILE:HG22	1.82	0.61
2:H:1922:VAL:HB	2:H:1925:MET:HB2	1.83	0.61
2:H:1845:VAL:HG21	2:H:1856:LEU:HD22	1.81	0.61
2:K:1305:LEU:HD12	2:K:1305:LEU:H	1.65	0.61
1:C:1448:ALA:HA	1:C:1451:LYS:CE	2.29	0.61
2:K:832:ILE:HA	2:K:868:LEU:HD11	1.81	0.61
1:E:557:ARG:NH1	1:E:557:ARG:HG3	2.02	0.61
2:J:855:ILE:HD13	2:J:856:THR:N	2.14	0.61
1:D:430:VAL:O	1:D:434:ILE:HG13	2.00	0.61
2:G:608:MET:H	2:G:612:THR:HB	1.65	0.61

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:L:1200:ARG:HD3	2:L:1200:ARG:N	2.07	0.61
1:F:1700:GLN:O	1:F:1702:ARG:HG3	2.01	0.61
2:J:926:LEU:O	2:J:1008:ILE:HD11	2.00	0.61
2:I:174:GLY:H	2:I:517:GLY:HA3	1.65	0.61
2:J:867:LYS:HD3	2:J:1065:CYS:SG	2.40	0.61
2:K:857:VAL:HG13	2:K:876:TRP:HE1	1.65	0.61
2:J:289:ILE:HG12	2:J:493:MET:HE1	1.82	0.61
2:I:447:ALA:O	2:I:451:ILE:HG13	2.01	0.61
1:A:1581:LEU:HD23	1:A:1617:ILE:HG12	1.82	0.61
2:H:1455:GLN:HB2	2:H:1551:ILE:CD1	2.30	0.61
1:F:926:SER:O	1:F:930:GLN:HG2	2.00	0.61
2:J:596:ARG:HH22	2:J:1113:ILE:CD1	2.13	0.61
2:H:1846:ALA:HB3	2:H:1847:LEU:HD12	1.81	0.61
2:J:24:LEU:HD12	2:J:37:VAL:HG21	1.82	0.61
1:B:1697:LEU:HD21	1:D:1401:LEU:HD22	1.83	0.61
2:L:95:HIS:HB2	2:L:96:PRO:HD3	1.82	0.61
2:I:1966:ARG:O	2:I:1970:VAL:HG23	2.00	0.61
2:L:49:LYS:O	2:L:53:LEU:HG	2.00	0.61
2:G:1897:GLU:HG2	2:G:1901:GLN:HE21	1.64	0.61
2:J:87:VAL:HG22	2:J:98:ASN:HB3	1.83	0.61
1:B:1483:ALA:HA	1:B:1486:GLN:HE21	1.65	0.61
2:L:110:GLU:HA	2:L:114:MET:HB2	1.82	0.61
2:L:1305:LEU:HD11	2:L:1365:LYS:HD2	1.82	0.61
2:G:1400:GLN:HG3	2:G:1448:ARG:HH12	1.65	0.61
2:I:845:ASN:HB3	2:I:851:THR:OG1	2.00	0.61
1:E:1451:LYS:HG2	1:E:1454:ARG:NH2	2.14	0.61
2:I:612:THR:O	2:I:612:THR:HG22	2.00	0.61
1:A:562:SER:HB3	1:F:555:GLN:OE1	1.99	0.61
2:K:1178:THR:HG22	2:K:1180:VAL:H	1.64	0.61
1:A:427:ARG:HD2	1:A:490:VAL:HG12	1.81	0.61
2:J:1048:TRP:HE1	2:J:1049:GLN:HE21	1.46	0.61
1:A:1100:VAL:HG21	1:A:1150:ILE:HD12	1.82	0.61
2:J:605:VAL:HG22	2:J:816:MET:HG3	1.82	0.61
2:K:747:ARG:NH2	2:K:757:PHE:CE1	2.69	0.61
2:G:1436:ARG:HH22	2:G:1602:LEU:HD13	1.65	0.61
2:I:1764:MET:HG3	2:I:1781:PHE:CE1	2.36	0.61
1:A:767:HIS:HE1	1:F:767:HIS:CE1	2.18	0.61
2:J:756:ASP:HA	2:J:843:TRP:HH2	1.65	0.61
2:G:549:ASN:ND2	2:G:551:GLU:H	1.97	0.61
1:F:444:LEU:HD22	1:F:448:MET:HG2	1.80	0.61
2:K:348:THR:HB	2:K:349:PRO:CD	2.31	0.61
1:A:843:VAL:HG13	1:A:900:ASP:HA	1.83	0.61

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:J:699:ILE:HD12	2:J:699:ILE:H	1.65	0.61
2:J:190:TYR:HD1	2:J:201:ILE:HD13	1.64	0.61
2:I:1232:VAL:CG1	2:I:1246:LEU:HD23	2.31	0.61
2:G:661:ASN:HD21	4:G:2101:FMN:HN3	1.48	0.61
2:J:1048:TRP:CD2	2:J:1049:GLN:HG2	2.35	0.61
2:J:1046:SER:O	2:J:1049:GLN:HG3	2.00	0.61
2:K:2036:ILE:HG22	2:K:2037:GLY:H	1.64	0.61
2:J:501:TRP:HE1	2:J:528:THR:CG2	2.11	0.61
2:H:942:MET:HE2	2:H:955:LEU:HD13	1.82	0.61
2:I:942:MET:CE	2:I:955:LEU:HB3	2.30	0.61
2:L:832:ILE:HA	2:L:868:LEU:HD11	1.82	0.61
2:L:868:LEU:O	2:L:870:THR:HG23	2.01	0.61
1:F:13:LEU:HD11	2:L:2058:VAL:HG21	1.83	0.61
2:K:741:LEU:HG	2:K:741:LEU:O	2.00	0.61
2:H:2005:PHE:HB3	2:H:2010:LEU:HD11	1.82	0.61
2:H:1092:ASN:HA	2:H:1095:ILE:HG12	1.81	0.61
2:G:44:GLN:HG3	2:G:101:VAL:HG21	1.81	0.61
2:K:87:VAL:HG22	2:K:98:ASN:HB3	1.81	0.61
1:A:486:VAL:CG1	1:A:647:GLY:HA3	2.30	0.61
2:G:580:LEU:HD11	2:G:1098:LEU:HB3	1.82	0.61
2:K:794:GLY:O	2:K:804:PRO:HA	2.01	0.61
2:H:95:HIS:HB2	2:H:96:PRO:HD3	1.83	0.61
2:J:962:PHE:O	2:J:966:VAL:HG23	2.01	0.61
2:L:57:PRO:HG2	2:L:68:GLU:HG3	1.83	0.61
1:C:339:GLN:O	1:C:343:ILE:HG13	2.01	0.61
2:G:49:LYS:O	2:G:53:LEU:HG	2.01	0.61
2:L:209:GLN:O	2:L:213:ARG:HG3	2.00	0.61
1:C:533:SER:HA	1:C:907:PHE:CE1	2.35	0.61
1:B:655:ALA:HB3	1:B:680:VAL:HG12	1.83	0.61
1:D:1323:ALA:HB1	1:D:1351:PHE:HE2	1.65	0.61
2:K:1457:HIS:ND1	2:K:1487:THR:HG22	2.16	0.61
1:A:1470:ARG:O	1:A:1474:ILE:HG13	1.99	0.61
2:G:618:VAL:O	2:G:622:MET:HG3	2.01	0.61
2:K:167:VAL:CG2	2:K:169:ILE:HG13	2.29	0.61
2:I:1180:VAL:HG12	2:I:1188:GLN:H	1.65	0.61
2:H:686:PRO:HB3	2:H:1187:PHE:CE1	2.35	0.61
2:I:1650:THR:O	2:I:1669:ALA:HA	2.01	0.61
2:G:1873:ARG:NH1	2:G:2002:ASP:HB3	2.16	0.61
1:D:911:LEU:O	1:D:915:MET:HG3	2.00	0.61
1:C:1218:VAL:HG13	1:C:1301:VAL:HG13	1.81	0.61
1:D:1363:MET:HE3	1:D:1368:ALA:HB2	1.81	0.61
2:H:305:ALA:O	2:H:309:LYS:HD3	2.01	0.61

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:H:1721:ARG:HH21	2:H:1853:ILE:HD12	1.65	0.61
2:L:117:ASN:HA	2:L:561:ARG:HG3	1.82	0.61
2:J:1674:THR:HB	2:J:1676:GLU:HG3	1.83	0.61
1:B:405:TRP:CZ3	1:B:1609:SER:HB3	2.35	0.61
1:F:947:ASP:O	1:F:951:LEU:HG	1.99	0.61
2:J:351:LEU:HD22	2:J:352:SER:N	2.15	0.61
1:A:853:MET:HG2	1:A:856:ASN:HD22	1.65	0.61
1:F:1490:GLY:O	1:F:1509:THR:HB	2.01	0.61
1:E:620:LYS:HA	1:E:625:ASN:O	2.00	0.61
2:I:1851:MET:HE1	2:I:1855:SER:HB3	1.83	0.61
1:C:947:ASP:O	1:C:951:LEU:HG	2.00	0.61
2:L:532:LYS:HD3	2:L:537:VAL:HG21	1.82	0.61
1:F:1451:LYS:HG2	1:F:1454:ARG:NH2	2.16	0.61
2:H:1232:VAL:CG1	2:H:1246:LEU:HD23	2.30	0.61
2:I:608:MET:H	2:I:612:THR:HB	1.66	0.61
2:G:752:HIS:NE2	2:G:856:THR:CG2	2.64	0.61
1:E:1702:ARG:HG3	1:E:1702:ARG:NH1	2.09	0.61
1:A:1100:VAL:HG21	1:A:1150:ILE:CD1	2.30	0.61
2:K:462:ALA:HB2	2:K:481:LEU:HB2	1.82	0.61
1:F:669:VAL:O	1:F:673:LEU:HD12	2.01	0.61
1:F:1363:MET:HE3	1:F:1368:ALA:HB2	1.82	0.61
2:J:580:LEU:HD12	2:J:1103:TYR:CE2	2.35	0.61
2:L:1468:ARG:NH1	2:L:1475:LEU:HB2	2.14	0.61
1:E:1640:LYS:HG3	1:E:1641:TYR:HD1	1.65	0.61
2:K:186:LEU:HG	2:K:256:VAL:HG22	1.82	0.61
2:I:388:ASN:HD22	2:I:388:ASN:C	2.03	0.61
2:I:1092:ASN:HA	2:I:1095:ILE:HG12	1.83	0.61
1:F:1090:ASP:OD1	1:F:1092:ASN:HB2	2.00	0.61
2:I:706:ILE:HG22	2:I:707:GLN:HG2	1.83	0.61
1:E:405:TRP:CZ3	1:E:1609:SER:HB3	2.36	0.61
2:I:902:ILE:O	2:I:906:LEU:HB2	2.01	0.61
1:B:617:LEU:HD23	1:B:617:LEU:N	2.15	0.61
1:F:427:ARG:CG	1:F:427:ARG:NH1	2.53	0.61
2:L:467:ILE:HG23	2:L:468:PRO:HD2	1.83	0.61
2:J:653:PRO:O	2:J:656:ARG:HB2	2.01	0.61
2:L:1669:ALA:HB3	2:L:1679:LEU:HB2	1.82	0.61
2:L:942:MET:HE1	2:L:955:LEU:HB3	1.82	0.61
2:K:1616:VAL:HG11	2:K:1679:LEU:CD1	2.27	0.61
1:F:1100:VAL:HG21	1:F:1150:ILE:HD12	1.83	0.61
2:J:832:ILE:HA	2:J:868:LEU:HD11	1.83	0.61
1:C:905:LEU:HD22	1:C:911:LEU:HD21	1.83	0.61
2:G:791:TYR:HA	2:G:796:TRP:HD1	1.64	0.61

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:G:276:LEU:HD12	2:G:298:ALA:O	2.00	0.61
1:B:1094:LYS:HB3	1:B:1154:LEU:HB2	1.83	0.61
2:I:250:PHE:HB2	2:I:251:PRO:HD3	1.81	0.61
2:I:382:LEU:HB3	2:I:499:VAL:HB	1.82	0.61
2:K:2005:PHE:HB3	2:K:2010:LEU:HD11	1.83	0.61
1:B:22:PHE:HE1	2:H:1867:MET:HG3	1.66	0.61
2:H:270:ARG:HG3	2:H:274:GLU:OE1	1.99	0.61
2:I:789:TYR:HB3	2:I:790:PRO:HD3	1.82	0.61
2:H:1807:GLN:HB2	2:H:1808:PRO:HD3	1.80	0.61
1:C:1068:TYR:O	1:C:1072:ILE:HG13	2.01	0.61
2:I:365:ILE:HG23	2:I:378:ILE:HG22	1.83	0.61
2:G:1309:PHE:CE2	2:G:1360:PRO:HA	2.36	0.61
1:B:427:ARG:HH11	1:B:492:ILE:HG12	1.65	0.61
1:B:1148:LEU:HD21	1:D:1150:ILE:HG12	1.83	0.61
2:J:162:ALA:HA	2:J:167:VAL:HG22	1.81	0.61
2:H:1046:SER:O	2:H:1049:GLN:HG3	2.01	0.61
1:B:1670:HIS:CE1	2:H:1009:ASN:ND2	2.69	0.61
2:G:1180:VAL:HG12	2:G:1188:GLN:H	1.66	0.61
2:J:1637:VAL:CG1	2:J:1679:LEU:HD22	2.31	0.61
2:I:1405:ILE:HA	2:I:1445:THR:OG1	1.99	0.61
2:J:290:VAL:HG22	2:J:490:LEU:HD13	1.81	0.61
1:D:1218:VAL:HG13	1:D:1301:VAL:HG13	1.83	0.61
2:I:2021:LEU:O	2:I:2025:ILE:HG13	2.01	0.61
2:H:22:ARG:O	2:H:37:VAL:HG23	2.01	0.61
2:J:1579:ASN:O	2:J:1583:VAL:HG23	1.99	0.61
2:K:529:ASN:HD22	2:K:552:VAL:CG2	2.14	0.61
2:H:410:ALA:HB1	2:H:414:LEU:HD12	1.82	0.61
1:A:1524:GLY:HA2	1:A:1531:ASP:OD1	2.01	0.61
1:B:1431:GLN:OE1	1:D:1431:GLN:HG2	2.01	0.61
2:H:875:PHE:CD1	2:H:905:LYS:HD3	2.35	0.61
2:I:57:PRO:HG2	2:I:68:GLU:HG3	1.83	0.61
1:C:575:ARG:O	1:C:579:MET:HG3	2.01	0.61
1:D:1448:ALA:HA	1:D:1451:LYS:CE	2.29	0.60
2:J:298:ALA:CB	2:J:304:PHE:HA	2.31	0.60
2:I:2036:ILE:HG22	2:I:2037:GLY:H	1.65	0.60
2:G:750:GLY:O	2:G:865:ILE:HA	2.01	0.60
2:L:1189:THR:O	2:L:1191:PRO:HD3	2.01	0.60
1:A:570:TYR:HD2	1:A:574:ILE:HD11	1.65	0.60
2:I:1370:LEU:HA	2:I:1435:TYR:HE2	1.65	0.60
2:G:1115:TYR:HB3	2:G:1267:PRO:HB3	1.83	0.60
2:L:796:TRP:CH2	2:L:805:MET:HE1	2.35	0.60
2:G:1700:GLN:HA	2:G:1704:MET:CE	2.31	0.60

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:E:486:VAL:CG1	1:E:647:GLY:HA3	2.29	0.60
2:H:1318:ALA:HA	2:H:1391:VAL:CG2	2.31	0.60
2:H:35:PHE:CE1	2:H:108:GLU:HG3	2.36	0.60
2:G:1455:GLN:HB2	2:G:1551:ILE:CD1	2.31	0.60
2:J:410:ALA:HB1	2:J:414:LEU:HD12	1.83	0.60
1:D:620:LYS:HA	1:D:625:ASN:O	2.00	0.60
2:L:94:ALA:HB1	2:L:97:THR:OG1	2.01	0.60
1:B:1113:LYS:HG3	1:B:1138:TYR:CE2	2.36	0.60
2:L:119:VAL:HG21	2:L:140:TYR:CD2	2.36	0.60
1:F:1443:LEU:HD11	1:F:1470:ARG:HD2	1.83	0.60
1:B:1451:LYS:HG2	1:B:1454:ARG:NH2	2.16	0.60
2:I:670:MET:HB2	2:I:674:ILE:HD12	1.83	0.60
2:L:158:LEU:HA	2:L:566:VAL:CG2	2.26	0.60
1:A:612:ILE:HD12	1:F:579:MET:HE3	1.82	0.60
1:A:613:PRO:C	1:A:615:LEU:H	2.04	0.60
2:H:685:VAL:HG23	2:H:1186:ARG:HH12	1.66	0.60
2:H:1603:PRO:HG2	2:H:1642:MET:HE3	1.83	0.60
2:J:305:ALA:O	2:J:309:LYS:HD3	2.01	0.60
2:I:290:VAL:HG22	2:I:490:LEU:HD13	1.83	0.60
2:H:743:TRP:HZ2	2:H:757:PHE:HA	1.66	0.60
2:J:376:ARG:CB	2:J:394:PRO:HG2	2.30	0.60
2:K:119:VAL:HG21	2:K:140:TYR:CD2	2.37	0.60
2:J:1538:ASN:HB3	2:J:1541:ILE:HG22	1.84	0.60
1:B:683:THR:HB	1:B:714:PHE:HB3	1.83	0.60
1:B:1164:ILE:HD12	1:B:1355:GLN:HG3	1.83	0.60
2:J:781:GLY:HA2	2:J:1071:VAL:HG13	1.82	0.60
1:B:382:ILE:HD12	1:B:761:SER:HB3	1.83	0.60
2:L:162:ALA:HA	2:L:167:VAL:HG22	1.82	0.60
2:K:120:HIS:HD2	2:K:137:VAL:HG21	1.66	0.60
2:J:833:VAL:HG13	2:J:1077:LYS:HA	1.82	0.60
2:I:1067:LEU:HB2	4:I:2101:FMN:C7M	2.31	0.60
1:A:1330:GLU:OE2	1:A:1342:ARG:NH2	2.35	0.60
1:A:1702:ARG:NH1	1:A:1702:ARG:CG	2.45	0.60
2:L:930:THR:CG2	2:L:933:GLU:HG3	2.32	0.60
2:H:1048:TRP:CD2	2:H:1049:GLN:HG2	2.36	0.60
2:L:174:GLY:H	2:L:517:GLY:HA3	1.65	0.60
2:G:285:HIS:HD2	2:G:501:TRP:CE3	2.19	0.60
2:H:1612:THR:O	2:H:1616:VAL:HG12	2.01	0.60
2:L:1445:THR:HG23	2:L:1498:PHE:HB2	1.83	0.60
2:I:1700:GLN:HA	2:I:1704:MET:CE	2.30	0.60
2:I:1701:GLU:H	2:I:1704:MET:CE	2.15	0.60
2:H:376:ARG:CB	2:H:394:PRO:HG2	2.31	0.60

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:J:1991:ARG:HG3	2:J:1996:ILE:HG12	1.83	0.60
2:J:2005:PHE:HB3	2:J:2010:LEU:HD11	1.84	0.60
2:I:152:LYS:HB2	2:I:154:TYR:CE1	2.36	0.60
1:D:41:THR:HA	2:J:1689:VAL:HB	1.83	0.60
2:J:918:ASN:HB3	2:J:924:VAL:CG2	2.30	0.60
2:I:1804:GLN:HB3	2:I:1861:PHE:CE1	2.36	0.60
2:K:1094:HIS:O	2:K:1098:LEU:HB2	2.01	0.60
1:E:983:GLN:HB3	1:E:1418:ILE:HG21	1.81	0.60
2:L:573:VAL:HG22	2:L:804:PRO:HB2	1.83	0.60
2:I:197:VAL:HG12	2:I:201:ILE:HG13	1.82	0.60
2:I:580:LEU:HD11	2:I:1098:LEU:HB3	1.84	0.60
2:H:902:ILE:O	2:H:906:LEU:HB2	2.02	0.60
2:L:875:PHE:CD1	2:L:905:LYS:HD3	2.36	0.60
1:F:655:ALA:HB3	1:F:680:VAL:HG12	1.81	0.60
2:J:94:ALA:HB1	2:J:97:THR:OG1	2.02	0.60
2:I:1515:LEU:O	2:I:1523:ILE:HD12	2.01	0.60
2:H:447:ALA:O	2:H:451:ILE:HG13	2.01	0.60
1:C:1446:GLU:O	1:C:1450:ILE:HG13	2.01	0.60
2:H:209:GLN:O	2:H:213:ARG:HG3	2.01	0.60
2:L:396:ILE:H	2:L:396:ILE:HD12	1.66	0.60
2:L:170:TYR:CZ	2:L:507:PHE:HB3	2.35	0.60
2:H:1220:ARG:HA	2:H:1229:VAL:O	2.00	0.60
1:C:552:ILE:HG12	1:D:552:ILE:HD11	1.83	0.60
2:L:351:LEU:HD22	2:L:352:SER:N	2.16	0.60
1:F:427:ARG:NH1	1:F:492:ILE:HG12	2.17	0.60
2:G:2054:TYR:HA	2:G:2057:GLU:OE1	2.02	0.60
1:F:1260:ALA:O	1:F:1264:MET:HG3	2.00	0.60
2:I:781:GLY:HA2	2:I:1071:VAL:HG13	1.82	0.60
2:H:1897:GLU:HG2	2:H:1901:GLN:HE21	1.66	0.60
2:I:1944:ASN:HA	2:I:1993:PHE:CD2	2.36	0.60
1:B:907:PHE:O	1:B:909:PRO:HD3	2.02	0.60
2:J:1481:ILE:HD12	2:J:1515:LEU:HD23	1.83	0.60
1:E:339:GLN:O	1:E:343:ILE:HG13	2.01	0.60
2:K:170:TYR:CZ	2:K:507:PHE:HB3	2.36	0.60
2:K:670:MET:HB2	2:K:674:ILE:HD12	1.83	0.60
2:J:1350:ILE:O	2:J:1354:TRP:HB2	2.02	0.60
2:I:285:HIS:HD2	2:I:501:TRP:CE3	2.19	0.60
1:E:1100:VAL:HG21	1:E:1150:ILE:CD1	2.31	0.60
1:E:570:TYR:HD2	1:E:574:ILE:HD11	1.66	0.60
2:H:285:HIS:HD2	2:H:501:TRP:CE3	2.20	0.60
2:G:467:ILE:HG23	2:G:468:PRO:HD2	1.83	0.60
1:F:11:TYR:O	1:F:15:VAL:HG23	2.02	0.60

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:L:1094:HIS:O	2:L:1098:LEU:HB2	2.02	0.60
2:L:549:ASN:ND2	2:L:551:GLU:H	1.99	0.60
2:G:1922:VAL:HB	2:G:1925:MET:HB2	1.84	0.60
2:K:261:TYR:CD1	2:K:295:ILE:HG12	2.36	0.60
2:G:186:LEU:CD2	2:G:256:VAL:HG22	2.32	0.60
1:D:1267:LEU:HD11	1:D:1303:LEU:HD12	1.82	0.60
1:F:1480:ARG:O	1:F:1484:GLU:HG3	2.01	0.60
2:L:1593:SER:OG	2:L:1596:PHE:HB2	2.01	0.60
1:E:1421:ARG:HD2	1:E:1489:PHE:O	2.01	0.60
2:K:882:LYS:HB3	2:K:898:ARG:HH12	1.65	0.60
1:D:1095:GLN:O	1:D:1096:LEU:HD23	2.00	0.60
2:J:1564:SER:HB2	2:J:1653:LEU:H	1.65	0.60
1:E:557:ARG:NH1	1:E:557:ARG:CG	2.55	0.60
2:L:1637:VAL:HG11	2:L:1679:LEU:CD1	2.28	0.60
2:K:174:GLY:H	2:K:517:GLY:HA3	1.67	0.60
2:J:917:ARG:HG2	2:J:937:ARG:NH1	2.16	0.60
2:H:501:TRP:CZ2	2:H:528:THR:HG21	2.37	0.60
2:J:930:THR:HA	2:J:1007:LEU:HA	1.83	0.60
2:K:1374:VAL:CG2	2:K:1436:ARG:HE	2.15	0.60
2:K:1061:VAL:CG1	2:K:1066:ILE:HD11	2.31	0.60
1:B:987:MET:O	1:B:1490:GLY:HA3	2.00	0.60
2:L:2005:PHE:HB3	2:L:2010:LEU:HD11	1.83	0.60
2:G:918:ASN:HB3	2:G:924:VAL:CG2	2.31	0.60
1:E:22:PHE:HE2	2:K:2017:PHE:CG	2.20	0.60
2:L:1092:ASN:HA	2:L:1095:ILE:HG12	1.82	0.60
2:H:1171:TRP:CZ3	2:H:1236:LEU:HB2	2.37	0.60
2:J:193:TYR:CD1	2:J:263:ILE:HD13	2.37	0.60
2:I:1944:ASN:HA	2:I:1993:PHE:HD2	1.66	0.60
2:J:209:GLN:O	2:J:213:ARG:HG3	2.01	0.60
2:I:1564:SER:HB2	2:I:1653:LEU:H	1.67	0.60
2:G:348:THR:HB	2:G:349:PRO:CD	2.31	0.60
1:E:636:TYR:CZ	1:E:640:LEU:HD22	2.36	0.60
2:G:209:GLN:O	2:G:213:ARG:HG3	2.02	0.60
2:K:1266:HIS:NE2	2:K:1275:ARG:HD2	2.17	0.60
2:I:855:ILE:HD13	2:I:856:THR:N	2.17	0.60
2:H:846:THR:HG22	2:H:856:THR:N	2.17	0.60
2:L:440:HIS:HD2	2:L:497:ASP:O	1.84	0.60
2:H:917:ARG:HD2	2:H:917:ARG:N	2.16	0.60
2:J:174:GLY:H	2:J:517:GLY:HA3	1.66	0.60
1:A:633:THR:HG22	1:A:637:LEU:HD12	1.83	0.60
2:I:685:VAL:HG23	2:I:1186:ARG:HH12	1.67	0.60
2:J:1189:THR:O	2:J:1191:PRO:HD3	2.02	0.60

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:F:612:ILE:HG23	1:F:628:TYR:CD2	2.37	0.60
1:E:673:LEU:O	1:E:678:ALA:HB3	2.00	0.60
2:J:1090:ILE:O	2:J:1094:HIS:CD2	2.55	0.60
2:J:914:TRP:HE1	2:J:916:GLY:HA3	1.64	0.60
1:D:524:LYS:O	1:D:528:GLU:HG3	2.01	0.60
2:I:1721:ARG:HH21	2:I:1853:ILE:HD12	1.66	0.60
2:G:1370:LEU:HA	2:G:1435:TYR:HE2	1.66	0.60
1:C:1425:LEU:HD21	1:C:1429:ARG:NH2	2.16	0.60
2:G:832:ILE:HA	2:G:868:LEU:HD11	1.84	0.60
2:L:24:LEU:HD12	2:L:37:VAL:HG21	1.82	0.60
2:G:1171:TRP:CZ3	2:G:1236:LEU:HB2	2.37	0.60
2:J:1515:LEU:O	2:J:1523:ILE:HD12	2.01	0.60
1:E:935:GLU:HG3	2:K:1466:VAL:HG11	1.84	0.60
2:I:1593:SER:OG	2:I:1596:PHE:HB2	2.02	0.60
2:J:1944:ASN:HA	2:J:1993:PHE:HD2	1.67	0.60
2:G:170:TYR:CE2	2:G:507:PHE:HB3	2.37	0.60
1:C:1323:ALA:HB1	1:C:1351:PHE:HE2	1.67	0.60
2:K:1207:THR:O	2:K:1215:THR:HA	2.01	0.60
2:L:102:LEU:O	2:L:106:LEU:HG	2.02	0.60
1:D:1490:GLY:O	1:D:1509:THR:HB	2.02	0.60
1:F:853:MET:HG2	1:F:856:ASN:HD22	1.65	0.60
2:H:57:PRO:HG2	2:H:68:GLU:HG3	1.83	0.60
2:L:1515:LEU:O	2:L:1523:ILE:HD12	2.02	0.60
2:I:396:ILE:H	2:I:396:ILE:HD12	1.66	0.60
2:K:380:ILE:O	2:K:380:ILE:HG13	2.02	0.60
1:C:1113:LYS:HG3	1:C:1138:TYR:CE2	2.35	0.60
1:F:716:GLN:HB3	1:F:769:ILE:HG23	1.83	0.60
2:J:272:PRO:O	2:J:276:LEU:HB2	2.01	0.60
2:J:846:THR:HG22	2:J:856:THR:N	2.16	0.60
2:G:930:THR:HA	2:G:1007:LEU:HA	1.83	0.60
2:L:172:ILE:HG22	2:L:514:VAL:O	2.02	0.60
1:D:22:PHE:HE2	2:J:2017:PHE:CG	2.20	0.60
2:I:35:PHE:CE1	2:I:108:GLU:HG3	2.37	0.60
2:K:1232:VAL:CG1	2:K:1246:LEU:HD23	2.32	0.60
2:G:290:VAL:HG22	2:G:490:LEU:HD13	1.83	0.60
1:C:1005:TRP:CD1	1:C:1561:LEU:HD22	2.37	0.60
2:L:1873:ARG:NH1	2:L:2002:ASP:HB3	2.17	0.60
1:D:1363:MET:HE1	1:D:1373:VAL:CG2	2.32	0.60
2:I:1421:ARG:O	2:I:1421:ARG:HG2	2.02	0.60
2:H:788:THR:HG22	2:H:1094:HIS:CE1	2.37	0.60
2:K:1918:VAL:HG13	2:K:2006:HIS:HB2	1.84	0.60
1:C:502:ALA:HA	1:C:929:ARG:HD3	1.83	0.60

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:D:1032:MET:HE2	1:D:1165:PRO:HB3	1.84	0.60
2:L:1846:ALA:HB3	2:L:1847:LEU:HD12	1.84	0.60
2:H:549:ASN:ND2	2:H:551:GLU:H	1.98	0.60
2:J:197:VAL:HG12	2:J:201:ILE:HG13	1.84	0.60
1:D:1480:ARG:O	1:D:1484:GLU:HG3	2.01	0.60
2:G:1403:ALA:HB2	2:G:1447:GLN:HG3	1.82	0.60
2:L:833:VAL:HG13	2:L:1077:LYS:HA	1.84	0.60
1:E:1120:LYS:HD3	1:E:1129:ILE:HG12	1.83	0.60
2:K:95:HIS:HB2	2:K:96:PRO:HD3	1.84	0.60
2:K:410:ALA:HB1	2:K:414:LEU:HD12	1.83	0.60
2:L:1404:VAL:HG22	2:L:1413:VAL:HG22	1.83	0.60
1:A:1113:LYS:HG3	1:A:1138:TYR:CE2	2.37	0.60
2:L:1317:ASN:HB3	2:L:1320:ALA:HB3	1.84	0.60
2:H:778:ALA:HB2	2:H:807:PHE:CD2	2.37	0.60
1:C:1470:ARG:O	1:C:1474:ILE:HG13	2.01	0.60
2:K:846:THR:HG22	2:K:856:THR:N	2.17	0.60
2:L:290:VAL:HG22	2:L:490:LEU:HD13	1.83	0.60
2:L:752:HIS:NE2	2:L:856:THR:CG2	2.65	0.60
2:J:623:ASN:OD1	2:J:653:PRO:HD3	2.02	0.60
2:H:174:GLY:H	2:H:517:GLY:HA3	1.67	0.60
2:H:750:GLY:O	2:H:865:ILE:HA	2.00	0.60
2:H:663:ILE:HG21	3:H:2102:NAP:H1D	1.82	0.60
1:D:40:ARG:NH2	1:D:72:THR:HG22	2.17	0.60
1:A:673:LEU:O	1:A:678:ALA:HB3	2.02	0.60
2:K:606:ALA:HB2	2:K:811:MET:HG3	1.83	0.60
2:L:857:VAL:HG13	2:L:876:TRP:HE1	1.65	0.60
2:G:298:ALA:CB	2:G:304:PHE:HA	2.32	0.60
2:J:1795:SER:HB3	2:J:1799:LEU:HD12	1.81	0.60
2:H:272:PRO:O	2:H:276:LEU:HB2	2.01	0.60
2:J:964:ARG:O	2:J:967:GLU:HB2	2.00	0.60
2:G:35:PHE:CE1	2:G:108:GLU:HG3	2.37	0.60
2:I:580:LEU:HD12	2:I:1103:TYR:CE2	2.36	0.60
2:K:1564:SER:HB2	2:K:1653:LEU:H	1.67	0.60
1:B:11:TYR:O	1:B:15:VAL:HG23	2.02	0.60
1:B:1224:SER:HB2	1:B:1307:PHE:O	2.01	0.60
2:G:655:GLY:HA3	2:G:1272:ALA:CB	2.32	0.60
2:I:1722:ALA:CB	2:I:1812:LEU:HD21	2.32	0.60
2:I:380:ILE:HG13	2:I:380:ILE:O	2.02	0.60
1:C:399:TYR:OH	1:C:692:THR:HG23	2.01	0.60
2:I:613:VAL:HG23	2:I:635:TYR:CE1	2.37	0.60
2:I:661:ASN:HD21	4:I:2101:FMN:HN3	1.48	0.60
2:I:854:VAL:HG21	2:I:1070:PRO:CA	2.31	0.60

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:K:855:ILE:HB	2:K:869:ALA:HB2	1.84	0.60
1:E:1342:ARG:HB2	1:E:1345:SER:HB2	1.84	0.60
2:J:298:ALA:HB2	2:J:304:PHE:HA	1.83	0.60
2:J:467:ILE:HG23	2:J:468:PRO:HD2	1.83	0.60
2:H:2036:ILE:HG22	2:H:2037:GLY:H	1.65	0.60
1:E:1100:VAL:HG21	1:E:1150:ILE:HD12	1.84	0.60
2:H:824:THR:HB	2:H:829:LYS:HE3	1.83	0.60
2:G:1669:ALA:HB3	2:G:1679:LEU:HB2	1.84	0.60
2:J:117:ASN:OD1	2:J:561:ARG:HB2	2.02	0.60
1:C:1081:ILE:HG13	1:C:1159:LEU:O	2.00	0.60
2:G:584:SER:HB3	2:G:1114:GLU:O	2.01	0.60
2:I:2019:SER:HA	2:I:2022:LEU:HD12	1.84	0.60
1:D:1094:LYS:HB3	1:D:1154:LEU:HB2	1.84	0.60
2:J:794:GLY:O	2:J:804:PRO:HA	2.02	0.60
2:I:1090:ILE:O	2:I:1094:HIS:HD2	1.84	0.60
2:G:129:ILE:HD13	2:G:132:LYS:HE3	1.83	0.60
1:A:1168:TRP:NE1	1:A:1173:TYR:HE1	1.99	0.60
1:A:862:GLY:O	1:A:865:LYS:HB2	2.02	0.60
2:G:1564:SER:HB2	2:G:1653:LEU:H	1.67	0.60
2:G:1554:PRO:HG3	2:G:1659:ILE:HD11	1.84	0.60
1:D:1532:LYS:HE2	1:D:1598:VAL:HG11	1.84	0.60
2:L:1232:VAL:CG1	2:L:1246:LEU:HD23	2.31	0.59
1:D:1451:LYS:HG2	1:D:1454:ARG:NH2	2.16	0.59
2:K:942:MET:HE2	2:K:955:LEU:HD13	1.82	0.59
2:I:374:GLU:CA	2:I:377:HIS:HD2	2.13	0.59
2:L:1612:THR:O	2:L:1616:VAL:HG12	2.02	0.59
2:I:2036:ILE:CG2	2:I:2037:GLY:N	2.64	0.59
2:J:285:HIS:HD2	2:J:501:TRP:CE3	2.19	0.59
2:L:825:SER:HB2	2:L:1053:ILE:HG13	1.83	0.59
1:C:1363:MET:HE1	1:C:1373:VAL:CG2	2.31	0.59
1:E:1307:PHE:HB3	1:E:1357:CYS:CB	2.32	0.59
2:H:1094:HIS:O	2:H:1098:LEU:HB2	2.02	0.59
2:K:1421:ARG:HG2	2:K:1421:ARG:O	2.01	0.59
2:L:1171:TRP:CE3	2:L:1236:LEU:HD22	2.37	0.59
2:L:596:ARG:HH22	2:L:1113:ILE:CD1	2.15	0.59
2:G:1393:ASP:HB3	2:G:1395:LEU:HD21	1.84	0.59
2:G:170:TYR:CZ	2:G:507:PHE:HB3	2.37	0.59
2:L:882:LYS:HB3	2:L:898:ARG:HH12	1.67	0.59
2:J:1593:SER:OG	2:J:1596:PHE:HB2	2.02	0.59
2:K:1674:THR:HB	2:K:1676:GLU:HG3	1.84	0.59
1:B:1446:GLU:O	1:B:1450:ILE:HG13	2.01	0.59
2:I:347:PRO:HA	2:I:432:PHE:CD1	2.37	0.59

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:K:204:ILE:HG23	2:K:312:VAL:HG11	1.83	0.59
2:K:1515:LEU:O	2:K:1523:ILE:HD12	2.01	0.59
1:E:1081:ILE:HA	1:E:1163:GLN:HE22	1.67	0.59
2:L:410:ALA:HB1	2:L:414:LEU:HD12	1.83	0.59
1:E:1095:GLN:O	1:E:1096:LEU:HD23	2.02	0.59
2:K:752:HIS:NE2	2:K:856:THR:HG22	2.17	0.59
1:F:1330:GLU:HG2	1:F:1333:ARG:NH1	2.17	0.59
2:J:1375:HIS:HE1	2:J:1610:MET:SD	2.25	0.59
2:K:501:TRP:HE1	2:K:528:THR:CG2	2.09	0.59
2:G:938:MET:HE1	2:G:959:THR:HA	1.82	0.59
2:I:22:ARG:O	2:I:37:VAL:HG23	2.02	0.59
2:G:440:HIS:HD2	2:G:497:ASP:O	1.85	0.59
1:B:1032:MET:HE3	1:B:1165:PRO:HB3	1.83	0.59
1:A:1674:ILE:HD12	2:G:1010:ALA:HB3	1.84	0.59
2:K:57:PRO:CG	2:K:68:GLU:HG3	2.32	0.59
2:H:1305:LEU:HD11	2:H:1365:LYS:HD2	1.83	0.59
1:C:15:VAL:HG11	2:I:2022:LEU:HD21	1.84	0.59
2:K:350:MET:HG3	2:K:435:ILE:HB	1.83	0.59
2:L:1722:ALA:CB	2:L:1812:LEU:HD21	2.32	0.59
2:I:87:VAL:HG22	2:I:98:ASN:HB3	1.85	0.59
2:J:902:ILE:O	2:J:906:LEU:HB2	2.02	0.59
2:G:327:PRO:HD2	2:H:1338:ARG:NH2	2.17	0.59
1:A:683:THR:HB	1:A:714:PHE:HB3	1.84	0.59
2:J:1207:THR:O	2:J:1215:THR:HA	2.01	0.59
2:K:731:ALA:HA	2:K:739:ILE:HD13	1.84	0.59
2:J:1966:ARG:O	2:J:1970:VAL:HG23	2.01	0.59
1:F:943:VAL:CG2	2:L:1539:PRO:HG3	2.32	0.59
1:A:571:LYS:O	1:A:575:ARG:HG2	2.02	0.59
2:K:1818:PHE:HE2	2:K:1822:ARG:HH12	1.49	0.59
1:B:1547:ARG:HG2	1:B:1604:TYR:HD1	1.68	0.59
1:A:1443:LEU:HD11	1:A:1470:ARG:HD2	1.84	0.59
1:B:557:ARG:NH1	1:E:558:LEU:HA	2.17	0.59
1:B:1491:ASN:H	1:B:1491:ASN:HD22	1.50	0.59
1:A:998:GLY:HA3	1:A:1361:VAL:CG1	2.27	0.59
2:K:472:THR:H	2:K:493:MET:HE3	1.66	0.59
1:F:612:ILE:CG2	1:F:628:TYR:CD2	2.86	0.59
1:E:1686:PRO:HB2	1:E:1713:PHE:CD1	2.37	0.59
2:J:1092:ASN:HA	2:J:1095:ILE:HG12	1.83	0.59
2:H:747:ARG:NH1	2:H:780:SER:HB3	2.17	0.59
1:D:11:TYR:O	1:D:15:VAL:HG23	2.02	0.59
2:K:24:LEU:HD12	2:K:37:VAL:HG21	1.84	0.59
2:G:24:LEU:HD12	2:G:37:VAL:HG21	1.83	0.59

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:I:1517:LEU:HG	2:I:1523:ILE:HD11	1.84	0.59
2:G:1305:LEU:HD12	2:G:1305:LEU:H	1.67	0.59
1:F:569:LEU:O	1:F:573:VAL:HG23	2.02	0.59
2:L:768:ILE:O	2:L:774:ILE:HD12	2.01	0.59
2:I:1805:PHE:O	2:I:1808:PRO:HD2	2.03	0.59
1:B:30:GLU:HB2	2:H:2045:ALA:HB1	1.83	0.59
1:B:42:GLU:OE1	2:H:1688:PRO:HB3	2.03	0.59
2:G:1966:ARG:O	2:G:1970:VAL:HG23	2.01	0.59
1:B:853:MET:HG2	1:B:856:ASN:HD22	1.67	0.59
2:K:685:VAL:CG2	2:K:1186:ARG:HH12	2.04	0.59
2:L:937:ARG:NE	2:L:941:LEU:HD11	2.17	0.59
1:B:989:ASN:H	1:B:1491:ASN:ND2	1.89	0.59
2:J:935:VAL:HG11	2:J:997:LEU:HD21	1.85	0.59
1:A:532:ILE:CG2	1:A:907:PHE:CB	2.80	0.59
2:J:1061:VAL:CG1	2:J:1066:ILE:HD11	2.32	0.59
1:D:22:PHE:HE1	2:J:1867:MET:HG3	1.67	0.59
2:I:1991:ARG:HG3	2:I:1996:ILE:HG12	1.85	0.59
1:B:1269:SER:O	1:D:1386:THR:HB	2.02	0.59
2:G:606:ALA:HB2	2:G:811:MET:HG3	1.84	0.59
2:G:741:LEU:HG	2:G:741:LEU:O	2.02	0.59
1:D:552:ILE:HG21	1:D:566:PHE:CZ	2.38	0.59
2:H:94:ALA:HB1	2:H:97:THR:OG1	2.02	0.59
1:F:1095:GLN:O	1:F:1096:LEU:HD23	2.03	0.59
1:C:1234:GLY:HA2	1:C:1238:ASP:HB2	1.84	0.59
2:J:1400:GLN:HG3	2:J:1448:ARG:HH12	1.68	0.59
2:K:70:SER:HB2	2:K:74:GLU:OE2	2.01	0.59
1:E:42:GLU:OE1	2:K:1688:PRO:HB3	2.02	0.59
1:E:862:GLY:O	1:E:865:LYS:HB2	2.01	0.59
2:J:348:THR:HB	2:J:349:PRO:CD	2.32	0.59
1:A:636:TYR:CD1	1:A:888:ILE:HD11	2.37	0.59
2:L:349:PRO:O	2:L:392:THR:HG22	2.02	0.59
2:J:661:ASN:HD21	4:J:2101:FMN:HN3	1.50	0.59
2:J:752:HIS:NE2	2:J:856:THR:CG2	2.66	0.59
2:I:917:ARG:HD2	2:I:917:ARG:N	2.17	0.59
2:H:2036:ILE:CG2	2:H:2037:GLY:N	2.64	0.59
2:G:663:ILE:HG21	3:G:2102:NAP:H1D	1.84	0.59
2:I:686:PRO:HB3	2:I:1187:PHE:CE1	2.36	0.59
1:F:434:ILE:HD11	1:F:490:VAL:HG21	1.83	0.59
2:G:1603:PRO:HG2	2:G:1642:MET:HE3	1.83	0.59
2:L:1374:VAL:CG2	2:L:1436:ARG:HE	2.16	0.59
2:L:779:GLY:HA3	2:L:811:MET:HE3	1.85	0.59
2:H:272:PRO:HD3	2:H:301:TRP:CE2	2.37	0.59

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:L:1701:GLU:H	2:L:1704:MET:CE	2.15	0.59
1:E:1581:LEU:HD23	1:E:1617:ILE:HG12	1.84	0.59
1:E:470:GLY:O	1:E:474:ILE:HG13	2.02	0.59
1:B:570:TYR:CE1	1:B:574:ILE:HD11	2.38	0.59
1:C:1307:PHE:HB3	1:C:1357:CYS:CB	2.32	0.59
2:G:779:GLY:HA3	2:G:811:MET:HE3	1.85	0.59
2:J:1455:GLN:HB2	2:J:1551:ILE:CD1	2.32	0.59
1:B:1323:ALA:HB1	1:B:1351:PHE:HE2	1.68	0.59
2:H:706:ILE:HG22	2:H:707:GLN:HG2	1.84	0.59
1:A:1547:ARG:HG2	1:A:1604:TYR:CD1	2.38	0.59
2:I:1266:HIS:NE2	2:I:1275:ARG:HD2	2.17	0.59
2:L:962:PHE:O	2:L:966:VAL:HG23	2.03	0.59
1:D:617:LEU:N	1:D:617:LEU:HD23	2.17	0.59
1:B:947:ASP:O	1:B:951:LEU:HG	2.02	0.59
2:G:95:HIS:HB2	2:G:96:PRO:HD3	1.84	0.59
2:H:228:LEU:O	2:H:232:HIS:HD2	1.86	0.59
1:C:766:ALA:HA	1:C:769:ILE:HD12	1.83	0.59
2:H:374:GLU:CA	2:H:377:HIS:CD2	2.77	0.59
2:L:293:ALA:HA	2:L:469:VAL:HG21	1.84	0.59
2:L:613:VAL:CG1	2:L:614:PRO:HD3	2.32	0.59
1:B:1700:GLN:O	1:B:1702:ARG:HG3	2.02	0.59
1:E:427:ARG:HD2	1:E:490:VAL:HG12	1.85	0.59
2:I:1637:VAL:CG1	2:I:1679:LEU:HD22	2.33	0.59
2:K:747:ARG:NH1	2:K:780:SER:HB3	2.17	0.59
2:J:1404:VAL:O	2:J:1445:THR:HA	2.02	0.59
2:H:1700:GLN:HA	2:H:1704:MET:CE	2.30	0.59
2:J:788:THR:HG22	2:J:1094:HIS:CE1	2.37	0.59
1:A:1154:LEU:HD21	1:E:1118:GLU:OE2	2.02	0.59
2:K:580:LEU:HD12	2:K:1103:TYR:CE2	2.37	0.59
1:E:1183:VAL:HG13	1:E:1252:GLU:OE1	2.02	0.59
2:G:186:LEU:HG	2:G:256:VAL:HG22	1.84	0.59
1:B:696:GLN:HG3	1:B:697:GLY:N	2.16	0.59
2:I:129:ILE:HD13	2:I:132:LYS:HE3	1.84	0.59
2:J:1851:MET:HE2	2:J:1855:SER:HB3	1.85	0.59
1:C:960:ARG:HH12	2:I:968:GLU:CD	2.05	0.59
2:H:1377:SER:HB3	2:H:1432:GLN:HB2	1.84	0.59
1:A:716:GLN:HB3	1:A:769:ILE:HG23	1.85	0.59
2:I:1620:VAL:O	2:I:1624:ALA:HB3	2.03	0.59
2:H:1740:ASN:O	2:H:1742:PRO:HD3	2.01	0.59
1:A:1207:TYR:CZ	1:A:1682:LYS:HD2	2.37	0.59
1:A:947:ASP:O	1:A:951:LEU:HG	2.01	0.59
1:B:1120:LYS:HD3	1:B:1129:ILE:HG12	1.84	0.59

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:L:1067:LEU:HB2	4:L:2101:FMN:HM71	1.85	0.59
2:L:752:HIS:CE1	2:L:847:TYR:CE2	2.80	0.59
2:J:635:TYR:CB	2:J:641:MET:HG3	2.32	0.59
2:J:2036:ILE:HG22	2:J:2037:GLY:H	1.67	0.59
2:K:351:LEU:HD22	2:K:352:SER:N	2.17	0.59
2:K:467:ILE:HG23	2:K:468:PRO:HD2	1.84	0.59
2:J:942:MET:HE1	2:J:955:LEU:HB3	1.84	0.59
2:H:327:PRO:CD	2:I:1338:ARG:NH2	2.62	0.59
2:H:298:ALA:CB	2:H:304:PHE:HA	2.32	0.59
1:B:1186:VAL:HG23	1:B:1309:ASP:HB2	1.85	0.59
2:L:1090:ILE:O	2:L:1094:HIS:HD2	1.84	0.59
2:H:186:LEU:CD2	2:H:256:VAL:HG22	2.33	0.59
2:I:788:THR:HG22	2:I:1094:HIS:CE1	2.37	0.59
2:L:1305:LEU:HD12	2:L:1305:LEU:H	1.65	0.59
1:F:1446:GLU:O	1:F:1450:ILE:HG13	2.03	0.59
1:D:1483:ALA:HA	1:D:1486:GLN:HE21	1.68	0.59
1:B:1510:TRP:CZ3	1:B:1642:LEU:HA	2.38	0.59
1:D:1086:PHE:CE2	1:D:1310:PHE:HD2	2.20	0.59
1:A:1095:GLN:O	1:A:1096:LEU:HD23	2.02	0.59
2:H:1266:HIS:NE2	2:H:1275:ARG:HD2	2.18	0.59
1:F:862:GLY:O	1:F:865:LYS:HB2	2.02	0.59
2:J:350:MET:HG3	2:J:435:ILE:HB	1.85	0.59
1:F:849:GLY:HA3	1:F:873:GLN:CG	2.33	0.59
2:K:1933:LEU:O	2:K:1989:LEU:HD21	2.03	0.59
2:J:380:ILE:HG13	2:J:380:ILE:O	2.03	0.59
2:H:70:SER:HB2	2:H:74:GLU:OE2	2.02	0.59
2:I:420:PRO:HG3	2:I:847:TYR:CE1	2.38	0.59
1:D:1700:GLN:O	1:D:1702:ARG:HG3	2.02	0.59
1:A:427:ARG:NH1	1:A:427:ARG:CG	2.57	0.59
1:A:1079:ARG:NH1	1:A:1079:ARG:HG2	2.09	0.59
2:G:1007:LEU:N	2:G:1007:LEU:HD12	2.15	0.59
2:L:1454:MET:CE	2:L:1550:SER:HA	2.33	0.59
2:K:1454:MET:CE	2:K:1550:SER:HA	2.29	0.59
2:I:351:LEU:HD22	2:I:352:SER:N	2.18	0.59
2:L:1903:VAL:O	2:L:1907:ILE:HG13	2.03	0.59
2:L:1851:MET:HE2	2:L:1855:SER:HB3	1.85	0.59
1:A:767:HIS:CE1	1:F:767:HIS:HE1	2.20	0.59
2:H:1093:ASP:O	2:H:1097:PHE:HD1	1.85	0.59
2:L:580:LEU:HD11	2:L:1098:LEU:HB3	1.85	0.59
2:L:1099:LEU:HD12	2:L:1103:TYR:HB2	1.83	0.59
2:G:1551:ILE:HG22	2:G:1552:GLU:HG3	1.84	0.59
2:L:918:ASN:HB3	2:L:924:VAL:CG2	2.33	0.59

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:E:1505:GLY:O	1:E:1509:THR:HG23	2.03	0.59
2:G:1324:PHE:N	2:G:1583:VAL:HG11	2.18	0.59
2:I:298:ALA:CB	2:I:304:PHE:HA	2.33	0.59
2:K:1342:PHE:HE2	2:K:1391:VAL:CG2	2.14	0.59
2:K:170:TYR:CE2	2:K:507:PHE:HB3	2.37	0.59
2:G:1554:PRO:HA	2:G:1659:ILE:HG12	1.85	0.59
2:I:875:PHE:CD1	2:I:905:LYS:HD3	2.37	0.59
1:A:1446:GLU:O	1:A:1450:ILE:HG13	2.01	0.59
2:I:186:LEU:HG	2:I:256:VAL:HG22	1.85	0.59
2:G:57:PRO:HG2	2:G:68:GLU:HG3	1.83	0.59
2:L:1966:ARG:O	2:L:1970:VAL:HG23	2.02	0.59
2:G:699:ILE:H	2:G:699:ILE:HD12	1.67	0.59
2:I:752:HIS:NE2	2:I:856:THR:CG2	2.65	0.59
2:K:613:VAL:HG13	2:K:614:PRO:HD3	1.84	0.59
2:K:653:PRO:O	2:K:656:ARG:HB2	2.03	0.59
1:C:1504:ARG:NH1	1:C:1504:ARG:CG	2.41	0.59
2:G:612:THR:HG22	2:G:612:THR:O	2.03	0.59
2:J:1380:TYR:CD2	2:J:1429:VAL:HG22	2.37	0.59
1:C:427:ARG:NH1	1:C:492:ILE:HG23	2.10	0.59
2:L:501:TRP:HE1	2:L:528:THR:CG2	2.09	0.59
1:D:1672:GLY:HA3	1:D:1678:LEU:CD2	2.31	0.59
2:K:962:PHE:O	2:K:966:VAL:HG23	2.03	0.59
2:I:1007:LEU:CD1	2:I:1007:LEU:H	2.13	0.59
2:J:1881:TYR:CZ	2:J:2009:PHE:HE1	2.21	0.59
2:K:824:THR:HB	2:K:829:LYS:HE3	1.83	0.59
2:K:1991:ARG:HG3	2:K:1996:ILE:HG12	1.85	0.59
2:I:747:ARG:NH1	2:I:780:SER:HB3	2.18	0.59
1:B:1004:PRO:HD3	1:B:1572:TRP:CH2	2.38	0.59
2:H:794:GLY:O	2:H:804:PRO:HA	2.03	0.59
2:L:1120:ILE:HD13	2:L:1173:HIS:CE1	2.37	0.59
1:A:987:MET:O	1:A:1490:GLY:HA3	2.03	0.59
1:A:552:ILE:HG21	1:A:566:PHE:CZ	2.38	0.59
2:G:22:ARG:O	2:G:37:VAL:HG23	2.03	0.59
1:D:68:TYR:CD1	2:L:371:HIS:CD2	2.90	0.59
2:I:1481:ILE:HD12	2:I:1515:LEU:HD23	1.84	0.59
2:I:1807:GLN:HB2	2:I:1808:PRO:HD3	1.85	0.59
1:B:1510:TRP:HZ3	1:B:1642:LEU:HA	1.67	0.59
1:B:415:TYR:O	1:B:419:PHE:HD1	1.85	0.59
1:B:339:GLN:O	1:B:343:ILE:HG13	2.02	0.59
1:A:926:SER:O	1:A:930:GLN:HG2	2.02	0.59
1:E:1168:TRP:NE1	1:E:1173:TYR:HE1	2.01	0.59
1:C:883:LEU:HA	1:C:888:ILE:HD12	1.84	0.59

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:G:228:LEU:O	2:G:232:HIS:HD2	1.86	0.59
1:C:1223:GLY:HA3	1:C:1276:PRO:HD2	1.84	0.59
2:H:768:ILE:O	2:H:774:ILE:HD12	2.02	0.59
1:A:849:GLY:HA3	1:A:873:GLN:CG	2.32	0.59
1:A:418:ILE:HA	1:A:462:THR:HB	1.84	0.59
2:I:1674:THR:HB	2:I:1676:GLU:HG3	1.85	0.59
1:B:1547:ARG:HG2	1:B:1604:TYR:CD1	2.37	0.59
2:I:752:HIS:CE1	2:I:847:TYR:CE2	2.79	0.59
2:G:167:VAL:CG2	2:G:169:ILE:HG13	2.32	0.59
2:K:635:TYR:CB	2:K:641:MET:HG3	2.33	0.59
2:L:472:THR:H	2:L:493:MET:HE3	1.66	0.59
2:G:623:ASN:OD1	2:G:653:PRO:HD3	2.03	0.59
2:H:1061:VAL:CG1	2:H:1066:ILE:HD11	2.33	0.59
2:H:663:ILE:H	2:H:663:ILE:CD1	2.15	0.59
2:K:372:LEU:HD11	2:K:397:SER:HB2	1.83	0.59
2:G:1009:ASN:O	2:G:1013:VAL:HG23	2.02	0.59
1:F:430:VAL:O	1:F:434:ILE:HG13	2.03	0.59
1:F:40:ARG:NH2	1:F:72:THR:HG22	2.18	0.59
2:J:590:VAL:HG23	2:J:1091:HIS:CD2	2.37	0.59
2:L:1899:ALA:O	2:L:1903:VAL:HG23	2.02	0.59
2:J:606:ALA:HB2	2:J:811:MET:HG3	1.84	0.59
2:H:1899:ALA:O	2:H:1903:VAL:HG23	2.03	0.59
1:E:957:THR:HG21	2:K:967:GLU:HB3	1.84	0.59
2:K:1721:ARG:HH21	2:K:1853:ILE:HD12	1.66	0.59
1:C:1269:SER:O	1:F:1386:THR:HB	2.02	0.59
2:H:1851:MET:HE2	2:H:1855:SER:HB3	1.84	0.59
1:D:755:GLU:HB2	1:D:757:ASP:HB2	1.84	0.59
1:D:503:ARG:HA	1:D:933:ILE:HD11	1.85	0.59
1:C:1484:GLU:OE1	1:F:1488:SER:HB3	2.03	0.59
1:A:883:LEU:HA	1:A:888:ILE:HD12	1.84	0.59
1:A:414:TYR:CE2	1:A:418:ILE:HD11	2.37	0.59
1:B:1691:ILE:HG22	1:B:1695:VAL:HG23	1.84	0.59
1:B:1703:VAL:HG11	1:B:1711:LEU:HB3	1.85	0.59
1:D:415:TYR:O	1:D:419:PHE:HD1	1.86	0.59
1:B:399:TYR:OH	1:B:692:THR:HG23	2.02	0.59
1:F:1207:TYR:CZ	1:F:1682:LYS:HD2	2.37	0.59
1:D:541:VAL:O	1:D:545:LEU:HG	2.03	0.59
1:A:1121:ARG:NH1	1:E:1153:ALA:O	2.36	0.59
2:G:70:SER:HB2	2:G:74:GLU:OE2	2.03	0.59
2:I:1844:LEU:HB3	2:I:1850:VAL:HG21	1.84	0.59
2:K:915:PHE:HB2	2:K:1030:PHE:CD1	2.38	0.59
1:E:1443:LEU:HD11	1:E:1470:ARG:HD2	1.85	0.58

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:G:846:THR:HG22	2:G:856:THR:N	2.18	0.58
2:I:1380:TYR:CD2	2:I:1429:VAL:HG22	2.38	0.58
2:I:930:THR:HA	2:I:1007:LEU:HA	1.85	0.58
2:J:942:MET:CE	2:J:955:LEU:HB3	2.32	0.58
1:C:905:LEU:HD23	1:C:908:ILE:HD12	1.85	0.58
2:G:462:ALA:HB2	2:G:481:LEU:HB2	1.85	0.58
1:F:1363:MET:HE1	1:F:1373:VAL:CG2	2.31	0.58
2:L:606:ALA:HB2	2:L:811:MET:HG3	1.83	0.58
1:D:1005:TRP:NE1	1:D:1561:LEU:CD2	2.65	0.58
2:J:1709:TYR:C	2:J:1709:TYR:HD2	2.06	0.58
2:L:1867:MET:O	2:L:2003:VAL:HG21	2.02	0.58
2:H:779:GLY:HA3	2:H:811:MET:HE3	1.85	0.58
2:I:743:TRP:HZ2	2:I:757:PHE:HA	1.68	0.58
2:K:1764:MET:HB3	2:K:1780:ILE:CD1	2.33	0.58
2:J:1750:GLY:O	2:J:1755:LYS:HE3	2.02	0.58
1:A:1307:PHE:HB3	1:A:1357:CYS:HB2	1.85	0.58
2:G:1350:ILE:O	2:G:1354:TRP:HB2	2.03	0.58
2:H:1370:LEU:HA	2:H:1435:TYR:HE2	1.68	0.58
2:G:1094:HIS:O	2:G:1098:LEU:HB2	2.03	0.58
2:L:580:LEU:HD12	2:L:1103:TYR:CE2	2.38	0.58
1:E:501:ASP:OD2	1:E:503:ARG:HB2	2.03	0.58
2:G:1318:ALA:HA	2:G:1391:VAL:CG2	2.33	0.58
2:J:1944:ASN:HA	2:J:1993:PHE:CD2	2.37	0.58
2:I:120:HIS:HD2	2:I:137:VAL:HG21	1.66	0.58
2:I:1880:ASN:HB3	2:I:1881:TYR:CD1	2.38	0.58
2:H:992:ALA:O	2:H:995:ARG:HB3	2.02	0.58
2:G:731:ALA:HA	2:G:739:ILE:HD13	1.85	0.58
1:B:620:LYS:HA	1:B:625:ASN:O	2.02	0.58
1:B:442:PRO:HD2	1:B:443:LEU:HD12	1.85	0.58
1:F:6:GLU:HA	2:L:2050:ILE:HD11	1.85	0.58
2:H:1309:PHE:CE2	2:H:1360:PRO:HA	2.38	0.58
1:B:1367:LEU:HD22	1:B:1371:MET:HG3	1.84	0.58
1:A:1401:LEU:HD22	1:E:1697:LEU:HD21	1.85	0.58
1:F:696:GLN:HG3	1:F:697:GLY:N	2.17	0.58
2:L:616:ASP:N	2:L:616:ASP:OD1	2.35	0.58
1:A:41:THR:HG21	2:G:1691:ALA:HB2	1.85	0.58
1:E:1446:GLU:O	1:E:1450:ILE:HG13	2.03	0.58
1:B:434:ILE:HD11	1:B:490:VAL:HG21	1.85	0.58
1:E:1330:GLU:HG2	1:E:1333:ARG:NH1	2.18	0.58
2:L:610:PRO:HD2	4:L:2101:FMN:C6	2.24	0.58
2:K:374:GLU:CA	2:K:377:HIS:HD2	2.13	0.58
2:L:1265:TYR:O	2:L:1267:PRO:HD3	2.03	0.58

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:K:917:ARG:HH11	2:K:917:ARG:HG2	1.66	0.58
2:K:1612:THR:O	2:K:1616:VAL:HG12	2.03	0.58
2:K:1669:ALA:HB3	2:K:1679:LEU:HB2	1.84	0.58
2:L:876:TRP:C	2:L:876:TRP:CD1	2.77	0.58
1:D:1580:VAL:O	1:D:1617:ILE:HD11	2.02	0.58
2:J:1436:ARG:NH2	2:J:1602:LEU:CD1	2.67	0.58
2:G:1709:TYR:C	2:G:1709:TYR:HD2	2.06	0.58
2:I:1171:TRP:CZ3	2:I:1236:LEU:HB2	2.38	0.58
1:C:755:GLU:HB2	1:C:757:ASP:HB2	1.85	0.58
2:J:875:PHE:CD1	2:J:905:LYS:HD3	2.38	0.58
1:C:636:TYR:CZ	1:C:640:LEU:HD22	2.38	0.58
1:B:1703:VAL:HG22	1:B:1712:LYS:C	2.23	0.58
2:G:706:ILE:HG22	2:G:707:GLN:HG2	1.84	0.58
1:C:1120:LYS:HD3	1:C:1129:ILE:HG12	1.85	0.58
2:G:351:LEU:HD22	2:G:352:SER:N	2.17	0.58
2:G:1538:ASN:HB3	2:G:1541:ILE:HG22	1.85	0.58
1:E:1038:HIS:O	1:E:1048:SER:HA	2.03	0.58
2:L:952:ASP:OD1	2:L:953:PRO:HD2	2.04	0.58
2:J:1620:VAL:O	2:J:1624:ALA:HB3	2.03	0.58
1:E:1606:VAL:O	1:E:1608:PRO:HD3	2.03	0.58
2:I:1913:TRP:HZ3	2:I:1938:THR:HG21	1.68	0.58
2:I:348:THR:HB	2:I:349:PRO:CD	2.33	0.58
2:K:1722:ALA:CB	2:K:1812:LEU:HD21	2.33	0.58
2:G:600:VAL:HG13	2:G:601:PRO:CD	2.34	0.58
2:G:2036:ILE:HG22	2:G:2037:GLY:H	1.67	0.58
2:K:298:ALA:CB	2:K:304:PHE:HA	2.32	0.58
2:L:1436:ARG:NH2	2:L:1602:LEU:CD1	2.66	0.58
2:J:1094:HIS:O	2:J:1098:LEU:HB2	2.02	0.58
2:I:2005:PHE:HB3	2:I:2010:LEU:HD11	1.83	0.58
2:G:1421:ARG:HG2	2:G:1421:ARG:O	2.02	0.58
1:F:1218:VAL:HG13	1:F:1301:VAL:HG13	1.85	0.58
1:C:828:TRP:HE1	1:C:838:THR:HA	1.67	0.58
2:H:380:ILE:HG13	2:H:380:ILE:O	2.03	0.58
2:G:94:ALA:HB1	2:G:97:THR:OG1	2.03	0.58
2:G:410:ALA:HB1	2:G:414:LEU:HD12	1.85	0.58
2:J:57:PRO:HG2	2:J:68:GLU:HG3	1.84	0.58
2:H:290:VAL:HG22	2:H:490:LEU:HD13	1.85	0.58
2:H:867:LYS:HD3	2:H:1065:CYS:SG	2.43	0.58
1:F:1107:GLU:HG3	1:F:1108:PRO:CD	2.29	0.58
2:H:43:PHE:HZ	2:I:42:HIS:NE2	2.01	0.58
2:J:2044:THR:HG22	2:J:2046:LYS:H	1.68	0.58
2:J:462:ALA:H	2:J:483:ASP:HA	1.68	0.58

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:G:1764:MET:HB3	2:G:1780:ILE:CD1	2.33	0.58
1:F:470:GLY:O	1:F:474:ILE:HG13	2.04	0.58
2:K:1370:LEU:HD12	2:K:1373:LEU:HD13	1.85	0.58
2:L:1709:TYR:C	2:L:1709:TYR:HD2	2.07	0.58
2:L:794:GLY:O	2:L:804:PRO:HA	2.03	0.58
2:J:573:VAL:HG22	2:J:804:PRO:HB2	1.85	0.58
2:G:327:PRO:HD2	2:H:1338:ARG:HH21	1.69	0.58
2:K:228:LEU:O	2:K:232:HIS:HD2	1.86	0.58
2:J:1317:ASN:HB3	2:J:1320:ALA:HB3	1.85	0.58
2:I:1309:PHE:CE2	2:I:1360:PRO:HA	2.38	0.58
2:G:596:ARG:HH22	2:G:1113:ILE:CD1	2.16	0.58
2:J:1807:GLN:HB2	2:J:1808:PRO:HD3	1.85	0.58
1:C:628:TYR:OH	1:C:630:LYS:HE2	2.03	0.58
2:G:1637:VAL:HG11	2:G:1679:LEU:CD1	2.32	0.58
1:D:40:ARG:HH21	1:D:72:THR:HG22	1.69	0.58
1:F:911:LEU:O	1:F:915:MET:HG3	2.04	0.58
2:G:289:ILE:HG12	2:G:493:MET:CE	2.32	0.58
2:J:485:ASP:O	2:J:488:PRO:HD2	2.03	0.58
2:L:1991:ARG:HG3	2:L:1996:ILE:HG12	1.85	0.58
2:L:1701:GLU:H	2:L:1704:MET:HE3	1.68	0.58
2:J:670:MET:HB2	2:J:674:ILE:HD12	1.86	0.58
2:L:305:ALA:O	2:L:309:LYS:HD3	2.04	0.58
1:D:470:GLY:O	1:D:474:ILE:HG13	2.03	0.58
1:D:632:LEU:HA	1:D:635:ILE:CG2	2.33	0.58
2:G:670:MET:HB2	2:G:674:ILE:HD12	1.84	0.58
2:L:1120:ILE:HG21	2:L:1167:ASN:HA	1.85	0.58
2:I:756:ASP:HA	2:I:843:TRP:HH2	1.69	0.58
2:K:349:PRO:O	2:K:392:THR:HG22	2.03	0.58
2:K:529:ASN:HD22	2:K:552:VAL:HG23	1.68	0.58
1:C:1488:SER:HB3	1:F:1484:GLU:OE1	2.03	0.58
2:L:1517:LEU:HG	2:L:1523:ILE:HD11	1.85	0.58
2:L:348:THR:HB	2:L:349:PRO:CD	2.34	0.58
2:G:882:LYS:HB3	2:G:898:ARG:HH12	1.69	0.58
1:B:843:VAL:HG13	1:B:900:ASP:HA	1.86	0.58
1:B:1336:GLU:O	1:B:1340:MET:HG2	2.03	0.58
2:J:1309:PHE:CE2	2:J:1360:PRO:HA	2.39	0.58
2:L:1659:ILE:HG13	2:L:1664:ILE:HD11	1.86	0.58
1:B:12:THR:O	1:B:16:GLU:HG2	2.03	0.58
2:H:351:LEU:HD22	2:H:352:SER:N	2.18	0.58
1:B:350:ASP:HB3	1:B:353:ALA:HB2	1.84	0.58
1:D:1234:GLY:HA2	1:D:1238:ASP:HB2	1.84	0.58
2:K:798:THR:HA	2:K:802:TYR:O	2.02	0.58

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:D:70:ALA:O	2:L:403:LEU:HD12	2.03	0.58
1:C:569:LEU:O	1:C:573:VAL:HG23	2.03	0.58
2:I:613:VAL:CG1	2:I:614:PRO:HD3	2.33	0.58
2:H:1194:ARG:HH21	2:H:1601:ASN:CG	2.05	0.58
1:D:1278:GLY:CA	1:D:1630:LYS:HE2	2.33	0.58
2:K:1189:THR:O	2:K:1191:PRO:HD3	2.03	0.58
1:D:427:ARG:NH1	1:D:492:ILE:HG23	2.11	0.58
2:G:635:TYR:CB	2:G:641:MET:HG3	2.33	0.58
2:I:917:ARG:HH11	2:I:917:ARG:HG2	1.67	0.58
2:L:1637:VAL:HG11	2:L:1679:LEU:HD22	1.86	0.58
2:G:917:ARG:HD2	2:G:917:ARG:N	2.17	0.58
2:I:926:LEU:O	2:I:1008:ILE:HD11	2.04	0.58
1:D:1004:PRO:HD3	1:D:1572:TRP:CH2	2.38	0.58
2:J:462:ALA:HB2	2:J:481:LEU:HB2	1.86	0.58
2:J:440:HIS:HD2	2:J:497:ASP:O	1.87	0.58
2:K:918:ASN:HB3	2:K:924:VAL:CG2	2.33	0.58
2:L:2021:LEU:O	2:L:2025:ILE:HG13	2.03	0.58
2:K:580:LEU:HD11	2:K:1098:LEU:HB3	1.85	0.58
2:L:549:ASN:HD22	2:L:550:THR:N	2.02	0.58
2:I:272:PRO:HD3	2:I:301:TRP:CE2	2.38	0.58
1:D:716:GLN:HB3	1:D:769:ILE:HG23	1.85	0.58
2:H:1515:LEU:O	2:H:1523:ILE:HD12	2.03	0.58
2:K:102:LEU:O	2:K:106:LEU:HG	2.03	0.58
1:D:418:ILE:HA	1:D:462:THR:HB	1.85	0.58
2:L:1116:PHE:O	2:L:1270:GLY:HA3	2.03	0.58
2:K:786:GLU:CD	2:K:786:GLU:H	2.06	0.58
1:D:339:GLN:O	1:D:343:ILE:HG13	2.04	0.58
1:E:890:ASN:OD1	2:H:1755:LYS:HE2	2.04	0.58
2:H:1674:THR:HB	2:H:1676:GLU:HG3	1.84	0.58
2:L:1897:GLU:HG2	2:L:1901:GLN:HE21	1.68	0.58
2:K:1538:ASN:HB3	2:K:1541:ILE:HG22	1.85	0.58
2:J:713:HIS:CD2	2:J:740:ILE:HD13	2.38	0.58
2:G:978:SER:O	2:G:981:GLN:HG2	2.03	0.58
1:B:1443:LEU:HD11	1:B:1470:ARG:HD2	1.85	0.58
2:I:623:ASN:OD1	2:I:653:PRO:HD3	2.02	0.58
2:I:846:THR:HG22	2:I:856:THR:N	2.19	0.58
2:K:1007:LEU:H	2:K:1007:LEU:CD1	2.15	0.58
2:K:1067:LEU:HB2	4:K:2101:FMN:HM71	1.85	0.58
2:L:289:ILE:HG12	2:L:493:MET:CE	2.32	0.58
2:L:420:PRO:HG3	2:L:847:TYR:CD1	2.38	0.58
2:H:917:ARG:HG2	2:H:917:ARG:HH11	1.65	0.58
2:K:1375:HIS:HE1	2:K:1610:MET:SD	2.26	0.58

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:1491:ASN:HD22	1:A:1491:ASN:H	1.52	0.58
2:K:1048:TRP:HE1	2:K:1049:GLN:HE21	1.50	0.58
2:I:934:VAL:O	2:I:938:MET:HG3	2.04	0.58
2:I:1616:VAL:HG11	2:I:1679:LEU:CD1	2.33	0.58
1:C:859:VAL:HG11	1:C:915:MET:HA	1.84	0.58
2:G:272:PRO:O	2:G:276:LEU:HB2	2.03	0.58
2:G:2005:PHE:HB3	2:G:2010:LEU:HD11	1.85	0.58
2:G:868:LEU:O	2:G:870:THR:HG23	2.03	0.58
2:H:789:TYR:HB3	2:H:790:PRO:HD3	1.85	0.58
1:D:1425:LEU:HD21	1:D:1429:ARG:NH2	2.17	0.58
1:B:1081:ILE:HG13	1:B:1159:LEU:O	2.02	0.58
2:L:35:PHE:HZ	2:L:104:LEU:HB3	1.69	0.58
1:B:1317:GLU:HB3	1:D:1250:LEU:HD22	1.84	0.58
2:G:1579:ASN:O	2:G:1583:VAL:HG23	2.04	0.58
2:I:1099:LEU:HD12	2:I:1103:TYR:HB2	1.85	0.58
2:L:1481:ILE:HD12	2:L:1515:LEU:HD23	1.85	0.58
2:I:70:SER:HB2	2:I:74:GLU:OE2	2.03	0.58
2:J:1844:LEU:HB3	2:J:1850:VAL:HG21	1.85	0.58
1:D:679:LYS:HG2	1:D:708:GLN:HB3	1.86	0.58
2:G:350:MET:HG3	2:G:435:ILE:HB	1.84	0.58
1:A:1001:GLU:O	1:A:1007:ASN:HA	2.04	0.58
2:I:871:ARG:CZ	2:I:909:ASP:HB3	2.33	0.58
2:G:1674:THR:HB	2:G:1676:GLU:HG3	1.85	0.58
1:C:1448:ALA:CA	1:C:1451:LYS:HE3	2.32	0.58
1:F:427:ARG:HG3	1:F:427:ARG:NH1	2.01	0.58
2:K:609:THR:HG22	2:K:633:GLY:HA3	1.85	0.58
2:K:1200:ARG:HD3	2:K:1200:ARG:N	2.06	0.58
2:K:158:LEU:HA	2:K:566:VAL:HG21	1.85	0.58
1:E:613:PRO:C	1:E:615:LEU:H	2.05	0.58
2:K:1637:VAL:CG1	2:K:1679:LEU:HD22	2.34	0.58
1:A:628:TYR:CD1	1:A:628:TYR:C	2.77	0.58
2:I:1374:VAL:CG2	2:I:1436:ARG:HE	2.17	0.58
2:H:876:TRP:C	2:H:876:TRP:CD1	2.76	0.58
2:I:1903:VAL:O	2:I:1907:ILE:HG13	2.04	0.58
2:K:596:ARG:HH22	2:K:1113:ILE:CD1	2.16	0.58
2:H:785:SER:HA	2:H:788:THR:HB	1.86	0.58
1:B:1425:LEU:HD21	1:B:1429:ARG:NH2	2.18	0.58
2:G:1083:ILE:O	2:G:1086:ILE:HG13	2.04	0.58
2:I:1846:ALA:HB3	2:I:1847:LEU:HD12	1.84	0.58
1:B:636:TYR:CD1	1:B:888:ILE:HD11	2.39	0.58
2:L:268:LEU:HD12	2:L:275:LEU:HD11	1.86	0.58
2:L:190:TYR:CD1	2:L:201:ILE:HD13	2.38	0.58

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:K:1318:ALA:HA	2:K:1391:VAL:CG2	2.34	0.58
1:E:1001:GLU:HG2	1:E:1008:ALA:HB2	1.86	0.58
2:J:119:VAL:HG21	2:J:140:TYR:CD2	2.39	0.58
2:L:789:TYR:HB3	2:L:790:PRO:HD3	1.84	0.58
1:A:1532:LYS:HE2	1:A:1598:VAL:HG11	1.85	0.58
2:J:859:SER:CB	2:J:863:GLU:HG3	2.34	0.58
1:C:433:CYS:O	1:C:437:MET:HG3	2.03	0.58
1:C:1524:GLY:HA2	1:C:1531:ASP:OD1	2.04	0.58
2:G:119:VAL:HG21	2:G:140:TYR:CD2	2.39	0.58
2:L:1944:ASN:HA	2:L:1993:PHE:CD2	2.38	0.58
2:J:1232:VAL:CG1	2:J:1246:LEU:HD23	2.34	0.58
2:H:653:PRO:O	2:H:656:ARG:HB2	2.04	0.58
2:H:752:HIS:CE1	2:H:847:TYR:CE2	2.80	0.58
2:L:272:PRO:HD3	2:L:301:TRP:CE2	2.38	0.58
2:J:613:VAL:HG23	2:J:635:TYR:CE1	2.39	0.58
1:C:1079:ARG:HG2	1:C:1079:ARG:NH1	2.13	0.58
2:H:868:LEU:O	2:H:870:THR:HG23	2.04	0.58
2:J:1616:VAL:HG11	2:J:1679:LEU:CD1	2.32	0.58
1:E:1711:LEU:O	1:E:1712:LYS:HG3	2.04	0.58
2:K:1384:PRO:HB3	2:K:1829:ARG:HH12	1.67	0.58
2:L:788:THR:HG22	2:L:1094:HIS:CE1	2.38	0.58
2:G:876:TRP:CD1	2:G:876:TRP:C	2.77	0.58
1:D:883:LEU:HA	1:D:888:ILE:HD12	1.85	0.58
2:L:170:TYR:CE2	2:L:507:PHE:HB3	2.38	0.58
1:A:1542:LEU:HD22	1:A:1547:ARG:HD3	1.84	0.58
1:E:924:GLU:OE1	2:K:1461:PRO:HG2	2.04	0.58
2:G:1248:GLU:OE1	2:G:1248:GLU:HA	2.04	0.58
1:E:30:GLU:HB2	2:K:2045:ALA:HB1	1.85	0.58
2:J:1818:PHE:HE2	2:J:1822:ARG:HH12	1.51	0.58
1:E:399:TYR:OH	1:E:692:THR:HG23	2.03	0.58
2:G:1457:HIS:ND1	2:G:1487:THR:HG22	2.19	0.58
1:B:444:LEU:HD22	1:B:448:MET:HG2	1.85	0.58
2:J:152:LYS:HB2	2:J:154:TYR:CE1	2.39	0.58
1:E:847:THR:OG1	1:E:876:MET:HG3	2.03	0.58
2:G:1933:LEU:O	2:G:1989:LEU:HD21	2.03	0.58
2:J:616:ASP:OD1	2:J:616:ASP:N	2.36	0.58
2:L:1334:ALA:HA	2:L:1341:ASP:HB2	1.84	0.58
2:L:1350:ILE:O	2:L:1354:TRP:HB2	2.03	0.58
1:B:1514:ILE:O	1:B:1547:ARG:NH1	2.36	0.58
2:H:486:ILE:HG23	2:H:490:LEU:HG	1.86	0.58
2:L:610:PRO:O	2:L:613:VAL:HG12	2.04	0.58
2:H:1200:ARG:N	2:H:1200:ARG:HD3	2.10	0.58

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:H:832:ILE:HA	2:H:868:LEU:HD11	1.85	0.58
2:I:796:TRP:CH2	2:I:805:MET:HE1	2.39	0.58
2:H:1374:VAL:CG2	2:H:1436:ARG:HE	2.17	0.58
2:L:1436:ARG:HH22	2:L:1602:LEU:HD13	1.67	0.58
2:K:1246:LEU:HD11	2:K:1261:PHE:HE1	1.69	0.58
2:J:1093:ASP:O	2:J:1097:PHE:HD1	1.87	0.58
2:I:1899:ALA:O	2:I:1903:VAL:HG23	2.03	0.58
2:J:1305:LEU:HD12	2:J:1305:LEU:H	1.69	0.58
2:K:789:TYR:CE1	2:K:1097:PHE:HB3	2.39	0.58
2:G:1818:PHE:HE2	2:G:1822:ARG:HH12	1.51	0.58
2:L:1844:LEU:HB3	2:L:1850:VAL:HG21	1.86	0.58
2:I:827:GLN:H	2:I:827:GLN:NE2	2.01	0.58
1:D:1164:ILE:HD12	1:D:1355:GLN:HG3	1.85	0.58
2:G:1142:ILE:HG13	2:G:1209:PRO:CG	2.34	0.58
2:G:871:ARG:CZ	2:G:909:ASP:HB3	2.34	0.58
1:A:1149:LEU:HB2	1:E:1149:LEU:HB2	1.85	0.58
2:I:867:LYS:HD3	2:I:1065:CYS:SG	2.44	0.57
2:H:1067:LEU:HB2	4:H:2101:FMN:HM71	1.85	0.57
1:D:533:SER:HB2	1:D:612:ILE:HB	1.86	0.57
2:J:2036:ILE:CG2	2:J:2037:GLY:N	2.66	0.57
2:K:1380:TYR:CD2	2:K:1429:VAL:HG22	2.39	0.57
1:F:613:PRO:CG	1:F:633:THR:HG21	2.29	0.57
2:J:824:THR:HB	2:J:829:LYS:HE3	1.86	0.57
2:H:1669:ALA:HB3	2:H:1679:LEU:HB2	1.86	0.57
2:I:1445:THR:HG23	2:I:1498:PHE:HB2	1.86	0.57
2:I:485:ASP:O	2:I:488:PRO:HD2	2.02	0.57
2:G:1340:LYS:CE	2:I:376:ARG:HH22	2.17	0.57
2:H:1380:TYR:CD2	2:H:1429:VAL:HG22	2.39	0.57
2:K:616:ASP:OD1	2:K:616:ASP:N	2.36	0.57
2:H:882:LYS:HB3	2:H:898:ARG:NH1	2.19	0.57
1:B:1118:GLU:OE2	1:D:1154:LEU:HD21	2.03	0.57
2:I:272:PRO:O	2:I:276:LEU:HB2	2.03	0.57
1:A:746:PHE:HB3	3:A:1901:NAP:H52N	1.86	0.57
2:L:1947:LYS:HG2	2:L:1993:PHE:CD1	2.39	0.57
1:F:1224:SER:HB2	1:F:1307:PHE:O	2.04	0.57
2:G:532:LYS:HD3	2:G:537:VAL:HG21	1.86	0.57
1:A:535:TYR:CE2	1:A:610:GLU:HB3	2.38	0.57
2:I:170:TYR:CZ	2:I:507:PHE:HB3	2.39	0.57
2:K:1015:HIS:NE2	2:K:1019:LEU:HD11	2.19	0.57
2:K:2073:ASN:O	2:K:2076:LYS:HB3	2.04	0.57
1:B:418:ILE:HA	1:B:462:THR:HB	1.85	0.57
2:H:204:ILE:HG23	2:H:312:VAL:HG11	1.85	0.57

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:B:1142:LEU:N	1:B:1142:LEU:HD12	2.18	0.57
1:E:1083:PRO:HD2	1:E:1084:GLU:OE2	2.03	0.57
1:F:397:ARG:CG	1:F:397:ARG:NH1	2.46	0.57
2:L:374:GLU:CA	2:L:377:HIS:CD2	2.77	0.57
2:H:618:VAL:O	2:H:622:MET:HG3	2.04	0.57
1:C:1547:ARG:HG2	1:C:1604:TYR:CD1	2.39	0.57
1:B:1100:VAL:HG21	1:B:1150:ILE:CD1	2.34	0.57
2:J:618:VAL:O	2:J:622:MET:HG3	2.05	0.57
2:G:374:GLU:CA	2:G:377:HIS:HD2	2.16	0.57
1:E:427:ARG:CG	1:E:427:ARG:NH1	2.53	0.57
2:J:917:ARG:HD3	2:J:937:ARG:NH2	2.19	0.57
2:K:2062:THR:HG22	2:K:2064:SER:N	2.19	0.57
1:B:586:GLN:C	1:E:538:ARG:NH2	2.57	0.57
2:J:1007:LEU:CD1	2:J:1007:LEU:H	2.15	0.57
2:G:174:GLY:H	2:G:517:GLY:HA3	1.69	0.57
2:L:582:LYS:HG3	2:L:1110:VAL:HG11	1.87	0.57
2:I:486:ILE:HG23	2:I:490:LEU:HG	1.86	0.57
1:A:767:HIS:CE1	1:F:767:HIS:CE1	2.92	0.57
2:J:1751:GLY:O	2:J:1755:LYS:HG2	2.03	0.57
1:D:1213:VAL:HG13	1:D:1217:GLU:HB2	1.87	0.57
1:B:1250:LEU:HD22	1:D:1317:GLU:HB3	1.85	0.57
2:G:789:TYR:HB3	2:G:790:PRO:HD3	1.85	0.57
2:K:875:PHE:O	2:K:878:GLU:HB2	2.03	0.57
2:I:305:ALA:O	2:I:309:LYS:HD3	2.04	0.57
1:B:883:LEU:HA	1:B:888:ILE:HD12	1.86	0.57
2:L:843:TRP:C	2:L:843:TRP:CD1	2.77	0.57
2:G:190:TYR:CD1	2:G:201:ILE:HD13	2.39	0.57
2:J:26:LEU:O	2:J:32:GLU:HA	2.04	0.57
2:J:204:ILE:HG23	2:J:312:VAL:HG11	1.85	0.57
1:D:1446:GLU:O	1:D:1450:ILE:HG13	2.03	0.57
2:L:871:ARG:CZ	2:L:909:ASP:HB3	2.34	0.57
2:K:1248:GLU:OE1	2:K:1248:GLU:HA	2.04	0.57
1:F:1038:HIS:O	1:F:1048:SER:HA	2.04	0.57
2:H:1593:SER:OG	2:H:1596:PHE:HB2	2.04	0.57
1:A:1234:GLY:HA2	1:A:1238:ASP:HB2	1.85	0.57
2:J:1659:ILE:HG13	2:J:1664:ILE:HD11	1.86	0.57
1:D:1547:ARG:HG2	1:D:1604:TYR:CD1	2.40	0.57
2:L:1246:LEU:HD11	2:L:1261:PHE:HE1	1.70	0.57
1:E:1448:ALA:HA	1:E:1451:LYS:CE	2.32	0.57
1:A:1330:GLU:HG2	1:A:1333:ARG:NH1	2.19	0.57
2:G:1067:LEU:HB2	4:G:2101:FMN:HM71	1.85	0.57
1:C:427:ARG:HH11	1:C:492:ILE:HG12	1.69	0.57

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:L:663:ILE:HG21	3:L:2102:NAP:H1D	1.86	0.57
2:H:915:PHE:HB2	2:H:1030:PHE:CD1	2.39	0.57
2:I:1669:ALA:HB3	2:I:1679:LEU:HB2	1.86	0.57
2:I:1436:ARG:NH2	2:I:1602:LEU:CD1	2.67	0.57
2:H:2054:TYR:HA	2:H:2057:GLU:OE1	2.03	0.57
2:I:1265:TYR:O	2:I:1267:PRO:HD3	2.05	0.57
2:I:918:ASN:HB3	2:I:924:VAL:CG2	2.34	0.57
2:J:789:TYR:CE1	2:J:1097:PHE:HB3	2.39	0.57
2:J:580:LEU:HD11	2:J:1098:LEU:HB3	1.85	0.57
2:H:606:ALA:HB2	2:H:811:MET:HG3	1.86	0.57
2:K:1709:TYR:C	2:K:1709:TYR:HD2	2.08	0.57
2:K:197:VAL:HG21	2:K:263:ILE:HD11	1.85	0.57
1:C:562:SER:CB	1:D:551:LEU:HD21	2.32	0.57
2:H:193:TYR:CD1	2:H:263:ILE:HD13	2.39	0.57
1:A:1337:PRO:HA	1:A:1340:MET:HG3	1.87	0.57
2:G:756:ASP:HA	2:G:843:TRP:HH2	1.69	0.57
2:L:1380:TYR:CD2	2:L:1429:VAL:HG22	2.39	0.57
2:L:1880:ASN:HB3	2:L:1881:TYR:CD1	2.39	0.57
1:D:869:ARG:O	1:D:903:GLY:HA3	2.04	0.57
2:K:1142:ILE:HG13	2:K:1209:PRO:CG	2.33	0.57
1:F:948:HIS:O	1:F:952:TYR:HD2	1.86	0.57
1:E:696:GLN:HG3	1:E:697:GLY:N	2.18	0.57
1:D:1336:GLU:O	1:D:1340:MET:HG2	2.03	0.57
1:B:828:TRP:HE1	1:B:838:THR:HA	1.69	0.57
2:H:1659:ILE:HG13	2:H:1664:ILE:HD11	1.86	0.57
2:I:596:ARG:HH22	2:I:1113:ILE:CD1	2.17	0.57
2:H:610:PRO:O	2:H:613:VAL:HG12	2.03	0.57
2:L:298:ALA:CB	2:L:304:PHE:HA	2.34	0.57
2:J:374:GLU:CA	2:J:377:HIS:HD2	2.15	0.57
2:L:524:ILE:HA	2:L:527:LEU:HD12	1.86	0.57
1:F:40:ARG:HH21	1:F:72:THR:HG22	1.69	0.57
2:L:713:HIS:CD2	2:L:740:ILE:HD13	2.39	0.57
1:E:552:ILE:HG21	1:E:566:PHE:CZ	2.40	0.57
2:K:1120:ILE:CD1	2:K:1173:HIS:CE1	2.86	0.57
1:D:967:PHE:CE2	1:D:1662:GLN:HB2	2.40	0.57
2:L:361:VAL:O	2:L:365:ILE:HG13	2.03	0.57
1:F:405:TRP:CZ3	1:F:1609:SER:HB3	2.39	0.57
2:H:1351:VAL:HG23	2:H:1584:SER:HA	1.85	0.57
1:E:506:ILE:HD13	1:E:922:ILE:HG22	1.85	0.57
2:H:1334:ALA:HA	2:H:1341:ASP:HB2	1.87	0.57
1:F:418:ILE:HA	1:F:462:THR:HB	1.85	0.57
2:L:1674:THR:HB	2:L:1676:GLU:HG3	1.86	0.57

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:J:894:GLU:O	2:J:897:LYS:HG2	2.03	0.57
2:H:616:ASP:OD1	2:H:616:ASP:N	2.37	0.57
2:K:152:LYS:HB2	2:K:154:TYR:CE1	2.40	0.57
2:J:1266:HIS:NE2	2:J:1275:ARG:HD2	2.19	0.57
2:K:1897:GLU:HG2	2:K:1901:GLN:HE21	1.68	0.57
1:A:1323:ALA:HB1	1:A:1351:PHE:HE2	1.68	0.57
1:C:1148:LEU:HD21	1:F:1150:ILE:HG12	1.85	0.57
2:K:745:GLY:HA3	2:K:757:PHE:HB3	1.85	0.57
2:K:825:SER:HB2	2:K:1053:ILE:HG13	1.86	0.57
2:J:914:TRP:CD1	2:J:916:GLY:HA3	2.40	0.57
2:K:978:SER:O	2:K:981:GLN:HG2	2.04	0.57
2:G:388:ASN:HD22	2:G:388:ASN:C	2.06	0.57
2:G:1383:VAL:HG23	2:G:1428:TYR:CE1	2.40	0.57
2:G:1171:TRP:CD1	2:G:1172:ARG:N	2.72	0.57
2:J:1203:TYR:HB3	2:J:1220:ARG:HB2	1.87	0.57
2:L:197:VAL:HG12	2:L:201:ILE:HG13	1.86	0.57
2:I:361:VAL:O	2:I:365:ILE:HG13	2.05	0.57
1:B:1307:PHE:HA	1:B:1568:ALA:HB2	1.87	0.57
2:K:834:ASP:O	2:K:836:PRO:HD3	2.04	0.57
1:A:433:CYS:O	1:A:437:MET:HG3	2.04	0.57
2:H:1538:ASN:HB3	2:H:1541:ILE:HG22	1.86	0.57
1:E:948:HIS:O	1:E:952:TYR:HD2	1.87	0.57
1:E:959:PRO:HB3	2:K:972:SER:HA	1.87	0.57
1:E:524:LYS:O	1:E:527:ALA:N	2.37	0.57
2:J:706:ILE:HG22	2:J:707:GLN:HG2	1.87	0.57
1:C:1510:TRP:CZ3	1:C:1642:LEU:HA	2.40	0.57
1:E:350:ASP:HB3	1:E:353:ALA:HB2	1.85	0.57
1:A:1421:ARG:HD2	1:A:1489:PHE:O	2.05	0.57
1:F:612:ILE:HG23	1:F:628:TYR:HD2	1.68	0.57
2:J:2054:TYR:HA	2:J:2057:GLU:OE1	2.04	0.57
1:D:452:ILE:HD12	1:D:467:LYS:HA	1.87	0.57
2:I:794:GLY:O	2:I:804:PRO:HA	2.04	0.57
2:L:1370:LEU:HA	2:L:1435:TYR:CE2	2.40	0.57
2:J:1171:TRP:CZ3	2:J:1236:LEU:HB2	2.40	0.57
2:K:1090:ILE:O	2:K:1094:HIS:CD2	2.57	0.57
1:A:501:ASP:OD2	1:A:503:ARG:HB2	2.03	0.57
2:H:756:ASP:HA	2:H:843:TRP:HH2	1.67	0.57
2:J:875:PHE:O	2:J:878:GLU:HB2	2.04	0.57
2:L:902:ILE:O	2:L:906:LEU:HB2	2.03	0.57
1:C:42:GLU:OE1	2:I:1688:PRO:HB3	2.04	0.57
2:L:261:TYR:CD1	2:L:295:ILE:HG12	2.39	0.57
2:I:894:GLU:O	2:I:897:LYS:HG2	2.05	0.57

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:K:209:GLN:O	2:K:213:ARG:HG3	2.05	0.57
1:C:1267:LEU:HD11	1:C:1303:LEU:HD12	1.85	0.57
2:H:834:ASP:O	2:H:836:PRO:HD3	2.04	0.57
2:I:616:ASP:N	2:I:616:ASP:OD1	2.38	0.57
1:D:1448:ALA:CA	1:D:1451:LYS:HE3	2.32	0.57
1:A:557:ARG:O	1:F:557:ARG:HD2	2.05	0.57
2:H:911:GLN:HG3	2:H:1064:THR:HA	1.87	0.57
2:H:1009:ASN:O	2:H:1013:VAL:HG23	2.04	0.57
1:C:1107:GLU:HG3	1:C:1108:PRO:CD	2.31	0.57
2:I:942:MET:HE2	2:I:955:LEU:HD13	1.86	0.57
2:L:2059:HIS:HB2	2:L:2067:ILE:HG21	1.86	0.57
2:K:1701:GLU:H	2:K:1704:MET:HE3	1.68	0.57
2:J:1374:VAL:CG2	2:J:1436:ARG:HE	2.18	0.57
1:E:1223:GLY:CA	1:E:1276:PRO:HD2	2.35	0.57
2:K:1899:ALA:O	2:K:1903:VAL:HG23	2.03	0.57
1:B:1386:THR:HB	1:D:1269:SER:O	2.04	0.57
1:F:501:ASP:OD2	1:F:503:ARG:HB2	2.04	0.57
2:L:1393:ASP:HB3	2:L:1395:LEU:HD21	1.87	0.57
2:K:580:LEU:HD21	2:K:1095:ILE:HA	1.87	0.57
2:K:221:TYR:CE2	2:K:225:LEU:HD22	2.39	0.57
2:G:1342:PHE:HE2	2:G:1391:VAL:CG2	2.18	0.57
2:G:1481:ILE:HD12	2:G:1515:LEU:HD23	1.87	0.57
2:H:47:GLN:HG3	2:I:23:PRO:HD2	1.85	0.57
2:J:190:TYR:CD1	2:J:201:ILE:HD13	2.39	0.57
1:C:569:LEU:HD22	1:D:544:ASP:HB3	1.87	0.57
2:H:119:VAL:HG21	2:H:140:TYR:CD2	2.40	0.57
2:K:1944:ASN:HA	2:K:1993:PHE:CD2	2.40	0.57
2:H:532:LYS:HD3	2:H:537:VAL:HG21	1.86	0.57
2:K:1317:ASN:HB3	2:K:1320:ALA:HB3	1.86	0.57
2:H:731:ALA:HA	2:H:739:ILE:HD13	1.87	0.57
1:B:963:LEU:HD23	1:B:1023:GLU:HB3	1.86	0.57
2:H:871:ARG:CZ	2:H:909:ASP:HB3	2.35	0.57
1:C:1330:GLU:HG2	1:C:1333:ARG:NH1	2.20	0.57
2:L:618:VAL:O	2:L:622:MET:HG3	2.05	0.57
2:H:1194:ARG:NH1	2:H:1194:ARG:CG	2.54	0.57
1:A:532:ILE:HG22	1:A:907:PHE:CG	2.40	0.57
2:K:1009:ASN:O	2:K:1013:VAL:HG23	2.05	0.57
2:J:2059:HIS:HB2	2:J:2067:ILE:HG21	1.87	0.57
1:A:684:THR:HG21	1:A:691:VAL:HG11	1.86	0.57
2:H:138:ARG:HB3	2:H:192:THR:HG23	1.87	0.57
2:J:1015:HIS:NE2	2:J:1019:LEU:HD11	2.20	0.57
2:H:170:TYR:CZ	2:H:507:PHE:HB3	2.39	0.57

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:E:1014:MET:O	1:E:1590:ARG:NH2	2.35	0.57
2:J:120:HIS:HD2	2:J:137:VAL:HG21	1.69	0.57
2:L:70:SER:HB2	2:L:74:GLU:OE2	2.04	0.57
2:H:1564:SER:HB2	2:H:1653:LEU:H	1.69	0.57
2:K:1176:PHE:CE1	2:K:1192:LEU:HD13	2.40	0.57
1:A:875:GLU:O	1:A:878:PHE:HB3	2.04	0.57
1:E:31:THR:HG23	2:K:2040:ILE:HG21	1.86	0.57
2:H:2073:ASN:O	2:H:2076:LYS:HB3	2.04	0.57
2:K:250:PHE:CB	2:K:251:PRO:HD3	2.35	0.57
1:F:628:TYR:OH	1:F:630:LYS:HE2	2.05	0.57
1:E:1307:PHE:HB3	1:E:1357:CYS:HB3	1.85	0.57
2:H:670:MET:HB2	2:H:674:ILE:HD12	1.86	0.57
2:I:376:ARG:CB	2:I:394:PRO:HG2	2.33	0.57
2:I:825:SER:HB2	2:I:1053:ILE:HG13	1.86	0.57
1:E:469:LEU:O	1:E:472:GLN:HB3	2.05	0.57
1:C:1032:MET:HE3	1:C:1165:PRO:HB3	1.86	0.57
2:J:1804:GLN:HB3	2:J:1861:PHE:CE1	2.39	0.57
2:L:1324:PHE:HA	2:L:1583:VAL:HG11	1.86	0.57
2:H:843:TRP:CD1	2:H:843:TRP:C	2.78	0.57
1:E:746:PHE:CE1	1:E:800:PRO:HG3	2.40	0.57
1:A:551:LEU:HD23	1:A:551:LEU:C	2.25	0.57
1:B:847:THR:OG1	1:B:876:MET:HG3	2.04	0.57
2:J:1142:ILE:HG13	2:J:1209:PRO:CG	2.35	0.57
1:D:948:HIS:O	1:D:952:TYR:HD2	1.88	0.57
2:K:396:ILE:HD12	2:K:396:ILE:H	1.68	0.57
2:I:882:LYS:HB3	2:I:898:ARG:HH12	1.70	0.57
2:H:349:PRO:O	2:H:392:THR:HG22	2.05	0.57
1:A:948:HIS:O	1:A:952:TYR:HD2	1.88	0.57
2:G:915:PHE:HB2	2:G:1030:PHE:CD1	2.40	0.57
2:L:1913:TRP:HZ3	2:L:1938:THR:HG21	1.70	0.57
2:J:170:TYR:CZ	2:J:507:PHE:HB3	2.40	0.57
2:K:1593:SER:OG	2:K:1596:PHE:HB2	2.05	0.57
2:I:1334:ALA:HA	2:I:1341:ASP:HB2	1.87	0.57
1:F:399:TYR:OH	1:F:692:THR:HG23	2.04	0.57
1:B:9:LEU:HB2	2:H:2050:ILE:HD11	1.86	0.57
2:H:1944:ASN:HA	2:H:1993:PHE:CD2	2.40	0.57
1:E:1260:ALA:O	1:E:1264:MET:HG3	2.05	0.57
2:G:1880:ASN:HB3	2:G:1881:TYR:CD1	2.40	0.57
1:B:1207:TYR:CZ	1:B:1682:LYS:HD2	2.39	0.57
2:H:1231:THR:CG2	2:H:1595:VAL:HG11	2.35	0.57
2:H:752:HIS:NE2	2:H:856:THR:HG22	2.19	0.57
1:C:1514:ILE:O	1:C:1547:ARG:NH1	2.38	0.57

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:H:462:ALA:HB2	2:H:481:LEU:HB2	1.87	0.57
1:E:965:TYR:CZ	1:E:1199:LEU:CD2	2.78	0.57
2:H:937:ARG:NE	2:H:941:LEU:HD11	2.18	0.57
2:K:1048:TRP:CD2	2:K:1049:GLN:HG2	2.40	0.57
2:K:935:VAL:HG11	2:K:997:LEU:HD21	1.86	0.57
2:G:1405:ILE:HA	2:G:1445:THR:OG1	2.04	0.57
2:I:460:ILE:HD13	2:I:487:ILE:HD11	1.87	0.57
2:K:1807:GLN:HB2	2:K:1808:PRO:HD3	1.87	0.57
2:G:1709:TYR:C	2:G:1709:TYR:CD2	2.77	0.57
2:J:663:ILE:HG21	3:J:2102:NAP:H1D	1.86	0.57
1:D:962:ASN:HB3	2:J:969:ARG:CD	2.35	0.57
2:H:1411:LYS:HE3	2:H:1441:ASP:OD2	2.05	0.57
1:E:1425:LEU:HD21	1:E:1429:ARG:NH2	2.19	0.57
2:J:1517:LEU:HG	2:J:1523:ILE:HD11	1.87	0.57
1:B:15:VAL:HG11	2:H:2022:LEU:HD21	1.87	0.57
2:H:1481:ILE:HD12	2:H:1515:LEU:HD23	1.86	0.57
2:H:348:THR:HB	2:H:349:PRO:CD	2.35	0.57
2:J:1574:PRO:HD3	2:J:1611:TYR:CE2	2.40	0.57
1:C:869:ARG:O	1:C:903:GLY:HA3	2.05	0.57
2:L:834:ASP:O	2:L:836:PRO:HD3	2.05	0.57
1:B:94:PRO:HD3	2:H:1559:ASN:ND2	2.19	0.57
1:F:1547:ARG:HG2	1:F:1604:TYR:CD1	2.40	0.57
2:I:608:MET:HE3	4:I:2101:FMN:C8	2.35	0.56
2:I:911:GLN:HG3	2:I:1064:THR:HA	1.85	0.56
2:G:167:VAL:HG23	2:G:169:ILE:HG13	1.88	0.56
2:L:485:ASP:O	2:L:488:PRO:HD2	2.04	0.56
2:H:485:ASP:O	2:H:488:PRO:HD2	2.05	0.56
2:L:635:TYR:CB	2:L:641:MET:HG3	2.34	0.56
2:J:610:PRO:HD2	4:J:2101:FMN:C6	2.24	0.56
2:L:917:ARG:HD2	2:L:917:ARG:N	2.19	0.56
1:B:998:GLY:HA3	1:B:1361:VAL:CG1	2.26	0.56
2:J:524:ILE:HA	2:J:527:LEU:HD12	1.87	0.56
2:J:1445:THR:HG23	2:J:1498:PHE:HB2	1.87	0.56
1:C:1005:TRP:NE1	1:C:1561:LEU:CD2	2.67	0.56
2:H:918:ASN:HB3	2:H:924:VAL:CG2	2.35	0.56
2:K:2054:TYR:HA	2:K:2057:GLU:OE1	2.05	0.56
2:K:1370:LEU:HA	2:K:1435:TYR:HE2	1.69	0.56
2:L:1709:TYR:C	2:L:1709:TYR:CD2	2.78	0.56
2:I:1114:GLU:HB3	2:I:1169:TYR:HB3	1.85	0.56
2:I:298:ALA:HB2	2:I:304:PHE:HA	1.87	0.56
2:K:350:MET:HG3	2:K:435:ILE:CG2	2.34	0.56
1:C:636:TYR:CD1	1:C:888:ILE:HD11	2.40	0.56

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:F:799:LEU:HD12	1:F:821:LEU:HB3	1.87	0.56
2:K:1309:PHE:CE2	2:K:1360:PRO:HA	2.40	0.56
1:E:418:ILE:HA	1:E:462:THR:HB	1.86	0.56
2:K:409:LYS:HB3	2:K:428:PHE:CZ	2.40	0.56
2:K:1157:VAL:HG22	2:K:1198:PRO:HD2	1.87	0.56
1:F:1606:VAL:O	1:F:1608:PRO:HD3	2.05	0.56
2:K:663:ILE:HG21	3:K:2102:NAP:H1D	1.86	0.56
2:K:750:GLY:O	2:K:865:ILE:HA	2.06	0.56
2:L:462:ALA:HB2	2:L:481:LEU:HB2	1.88	0.56
1:D:1107:GLU:HG3	1:D:1108:PRO:CD	2.33	0.56
2:G:608:MET:HE3	4:G:2101:FMN:C8	2.35	0.56
1:D:613:PRO:C	1:D:615:LEU:H	2.07	0.56
2:H:930:THR:HA	2:H:1007:LEU:HA	1.85	0.56
1:E:40:ARG:NH2	1:E:72:THR:HG22	2.19	0.56
2:K:388:ASN:C	2:K:388:ASN:HD22	2.09	0.56
2:H:1903:VAL:O	2:H:1907:ILE:HG13	2.04	0.56
2:G:305:ALA:O	2:G:309:LYS:HD3	2.04	0.56
2:L:1764:MET:HG3	2:L:1781:PHE:CE1	2.40	0.56
2:J:915:PHE:HB2	2:J:1030:PHE:CD1	2.40	0.56
1:A:1307:PHE:HA	1:A:1568:ALA:HB2	1.87	0.56
1:B:22:PHE:HE2	2:H:2017:PHE:CG	2.24	0.56
1:A:1640:LYS:HG3	1:A:1641:TYR:N	2.20	0.56
2:I:44:GLN:HG3	2:I:101:VAL:HG21	1.87	0.56
2:H:83:VAL:O	2:H:87:VAL:HG23	2.05	0.56
1:F:714:PHE:CE1	1:F:725:LEU:HD12	2.40	0.56
2:L:204:ILE:HG23	2:L:312:VAL:HG11	1.86	0.56
1:E:849:GLY:HA3	1:E:873:GLN:CG	2.34	0.56
1:C:350:ASP:HB3	1:C:353:ALA:HB2	1.87	0.56
2:L:706:ILE:HG22	2:L:707:GLN:HG2	1.87	0.56
1:C:1427:LEU:HD11	1:F:1435:TRP:HD1	1.69	0.56
2:I:1203:TYR:HB3	2:I:1220:ARG:HB2	1.87	0.56
2:I:1594:ARG:NH1	2:I:1594:ARG:CG	2.60	0.56
1:D:1330:GLU:HG2	1:D:1333:ARG:NH1	2.20	0.56
1:D:1443:LEU:HD11	1:D:1470:ARG:HD2	1.87	0.56
2:I:635:TYR:CB	2:I:641:MET:HG3	2.34	0.56
2:L:290:VAL:HG13	2:L:314:LEU:HD23	1.87	0.56
2:J:612:THR:O	2:J:612:THR:HG22	2.05	0.56
2:J:613:VAL:CG1	2:J:614:PRO:HD3	2.35	0.56
2:I:937:ARG:NE	2:I:941:LEU:HD11	2.20	0.56
1:F:1672:GLY:HA3	1:F:1678:LEU:CD2	2.31	0.56
2:H:1873:ARG:NH1	2:H:2002:ASP:HB3	2.20	0.56
2:K:1873:ARG:NH1	2:K:2002:ASP:HB3	2.20	0.56

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:G:1991:ARG:HG3	2:G:1996:ILE:HG12	1.88	0.56
1:D:746:PHE:HB3	3:D:1901:NAP:H52N	1.87	0.56
2:H:43:PHE:CE2	2:I:22:ARG:CB	2.87	0.56
1:C:868:VAL:HG11	1:C:908:ILE:CD1	2.34	0.56
1:D:905:LEU:HD22	1:D:911:LEU:CD2	2.35	0.56
2:G:2062:THR:HG22	2:G:2063:GLY:N	2.20	0.56
2:G:462:ALA:H	2:G:483:ASP:HA	1.69	0.56
2:J:486:ILE:HG23	2:J:490:LEU:HG	1.87	0.56
2:L:590:VAL:HG23	2:L:1091:HIS:CD2	2.40	0.56
2:H:713:HIS:CD2	2:H:740:ILE:HD13	2.40	0.56
2:I:606:ALA:HB2	2:I:811:MET:HG3	1.85	0.56
2:K:268:LEU:HD12	2:K:275:LEU:HD11	1.87	0.56
2:G:1878:ARG:HE	2:G:1986:PRO:HG3	1.70	0.56
1:B:422:LEU:HD13	1:B:429:ILE:HG12	1.87	0.56
2:J:378:ILE:HD11	2:J:398:LEU:HA	1.86	0.56
2:H:1350:ILE:O	2:H:1354:TRP:HB2	2.05	0.56
2:G:911:GLN:HG3	2:G:1064:THR:HA	1.87	0.56
2:G:785:SER:HA	2:G:788:THR:HB	1.87	0.56
1:B:962:ASN:HB3	2:H:969:ARG:HD2	1.86	0.56
1:C:961:ALA:CB	1:C:1022:LEU:HD12	2.35	0.56
2:G:1171:TRP:CE3	2:G:1236:LEU:HD22	2.39	0.56
2:K:1804:GLN:HB3	2:K:1861:PHE:CE1	2.40	0.56
2:H:1171:TRP:CE3	2:H:1236:LEU:HD22	2.39	0.56
1:F:469:LEU:O	1:F:472:GLN:HB3	2.05	0.56
1:F:746:PHE:HB3	3:F:1901:NAP:H52N	1.87	0.56
2:L:756:ASP:HA	2:L:843:TRP:HH2	1.70	0.56
2:L:57:PRO:CG	2:L:68:GLU:HG3	2.35	0.56
1:B:1431:GLN:HG2	1:D:1431:GLN:OE1	2.04	0.56
2:K:882:LYS:HB3	2:K:898:ARG:NH1	2.21	0.56
2:G:349:PRO:O	2:G:392:THR:HG22	2.04	0.56
2:K:204:ILE:HG21	2:K:312:VAL:HG21	1.87	0.56
1:A:548:VAL:HG23	1:F:569:LEU:HD13	1.86	0.56
2:J:859:SER:HB3	2:J:863:GLU:HG3	1.88	0.56
2:L:1944:ASN:HA	2:L:1993:PHE:HD2	1.69	0.56
2:G:768:ILE:O	2:G:774:ILE:HD12	2.05	0.56
1:B:904:GLY:HA2	1:B:906:GLN:OE1	2.06	0.56
2:H:1818:PHE:HE2	2:H:1822:ARG:HH12	1.53	0.56
2:J:1334:ALA:HA	2:J:1341:ASP:HB2	1.87	0.56
1:F:847:THR:OG1	1:F:876:MET:HG3	2.06	0.56
2:L:380:ILE:O	2:L:380:ILE:HG13	2.05	0.56
1:D:1168:TRP:NE1	1:D:1173:TYR:HE1	2.03	0.56
1:C:849:GLY:HA3	1:C:873:GLN:CG	2.36	0.56

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:L:196:PHE:HD2	2:L:196:PHE:H	1.53	0.56
1:D:24:MET:HB3	2:J:2043:VAL:HG12	1.86	0.56
2:L:731:ALA:HA	2:L:739:ILE:HD13	1.88	0.56
2:K:871:ARG:CZ	2:K:909:ASP:HB3	2.35	0.56
2:I:1659:ILE:HG13	2:I:1664:ILE:HD11	1.86	0.56
2:H:1963:GLU:HA	2:H:1966:ARG:HB3	1.88	0.56
1:E:1448:ALA:CA	1:E:1451:LYS:HE3	2.34	0.56
2:H:635:TYR:CB	2:H:641:MET:HG3	2.35	0.56
2:G:613:VAL:HG13	2:G:614:PRO:CD	2.35	0.56
1:C:427:ARG:CG	1:C:427:ARG:NH1	2.58	0.56
1:E:532:ILE:HG22	1:E:907:PHE:CB	2.36	0.56
2:K:524:ILE:HA	2:K:527:LEU:HD12	1.86	0.56
2:K:451:ILE:O	2:K:455:VAL:HG23	2.05	0.56
1:A:911:LEU:O	1:A:915:MET:HG3	2.06	0.56
1:B:408:GLN:HG2	1:B:1610:ARG:NH1	2.19	0.56
2:K:590:VAL:HG23	2:K:1091:HIS:CD2	2.41	0.56
2:G:1610:MET:CE	2:G:1610:MET:HA	2.34	0.56
2:G:843:TRP:CD1	2:G:843:TRP:C	2.77	0.56
1:B:636:TYR:CZ	1:B:640:LEU:HD22	2.40	0.56
2:K:1171:TRP:CZ3	2:K:1236:LEU:HB2	2.40	0.56
2:K:378:ILE:HD11	2:K:398:LEU:HA	1.88	0.56
2:H:1203:TYR:HB3	2:H:1220:ARG:HB2	1.88	0.56
2:L:1554:PRO:HA	2:L:1659:ILE:HG12	1.88	0.56
1:F:1307:PHE:HB3	1:F:1357:CYS:CB	2.36	0.56
2:H:372:LEU:HD11	2:H:397:SER:HB2	1.87	0.56
1:B:1068:TYR:O	1:B:1072:ILE:HG13	2.06	0.56
2:G:1607:THR:HB	2:G:1643:VAL:O	2.05	0.56
2:K:992:ALA:O	2:K:995:ARG:HB3	2.05	0.56
2:L:1207:THR:O	2:L:1215:THR:HA	2.05	0.56
2:K:1880:ASN:HB3	2:K:1881:TYR:CD1	2.40	0.56
2:H:1207:THR:O	2:H:1215:THR:HA	2.04	0.56
2:H:1566:LYS:O	2:H:1568:PRO:HD3	2.05	0.56
2:J:731:ALA:HA	2:J:739:ILE:HD13	1.88	0.56
2:H:952:ASP:OD1	2:H:953:PRO:HD2	2.05	0.56
1:B:862:GLY:O	1:B:865:LYS:HB2	2.06	0.56
2:I:209:GLN:O	2:I:213:ARG:HG3	2.05	0.56
2:K:700:GLU:H	2:K:700:GLU:CD	2.08	0.56
2:H:1246:LEU:HD11	2:H:1261:PHE:HE1	1.70	0.56
2:K:752:HIS:CE1	2:K:856:THR:HG21	2.40	0.56
2:L:653:PRO:O	2:L:656:ARG:HB2	2.05	0.56
2:J:855:ILE:HB	2:J:869:ALA:HB2	1.86	0.56
1:E:998:GLY:CA	1:E:1361:VAL:HG13	2.27	0.56

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:K:460:ILE:HD13	2:K:487:ILE:HD11	1.85	0.56
1:A:40:ARG:NH2	1:A:72:THR:HG22	2.20	0.56
2:L:1053:ILE:HD11	2:L:1061:VAL:HG13	1.86	0.56
1:D:1565:PRO:O	1:D:1567:GLY:N	2.39	0.56
2:G:382:LEU:HB3	2:G:499:VAL:HB	1.87	0.56
1:E:1004:PRO:HD3	1:E:1572:TRP:CH2	2.40	0.56
2:J:1083:ILE:O	2:J:1086:ILE:HG13	2.05	0.56
2:G:1701:GLU:H	2:G:1704:MET:HE3	1.68	0.56
2:J:1764:MET:HG3	2:J:1781:PHE:CE1	2.39	0.56
2:J:663:ILE:CD1	2:J:663:ILE:H	2.12	0.56
1:C:408:GLN:HG2	1:C:1610:ARG:NH1	2.20	0.56
2:L:699:ILE:CD1	2:L:699:ILE:H	2.19	0.56
2:H:221:TYR:CE2	2:H:225:LEU:HD22	2.40	0.56
2:I:1171:TRP:CE3	2:I:1236:LEU:HD22	2.40	0.56
1:A:1386:THR:HG22	1:A:1629:GLN:HE21	1.70	0.56
2:I:876:TRP:CD1	2:I:876:TRP:C	2.79	0.56
2:G:1897:GLU:HG2	2:G:1901:GLN:NE2	2.20	0.56
1:A:843:VAL:O	1:A:843:VAL:HG22	2.05	0.56
2:L:789:TYR:CE1	2:L:1097:PHE:HB3	2.40	0.56
2:L:1266:HIS:NE2	2:L:1275:ARG:HD2	2.20	0.56
2:H:1607:THR:HB	2:H:1643:VAL:O	2.05	0.56
2:J:611:THR:HG21	2:J:817:MET:HE2	1.86	0.56
2:J:871:ARG:CZ	2:J:909:ASP:HB3	2.36	0.56
1:C:1534:GLU:HG2	1:C:1625:PHE:CE1	2.40	0.56
1:A:1132:ILE:HD12	1:A:1137:GLN:HB2	1.87	0.56
2:K:1194:ARG:NH1	2:K:1194:ARG:CG	2.52	0.56
2:L:462:ALA:H	2:L:483:ASP:HA	1.69	0.56
2:J:159:PHE:HA	2:J:162:ALA:HB3	1.87	0.56
2:G:1637:VAL:HG11	2:G:1679:LEU:HD22	1.87	0.56
2:K:290:VAL:HG13	2:K:314:LEU:HD23	1.88	0.56
1:F:888:ILE:HA	1:F:891:LEU:HD12	1.87	0.56
2:G:1265:TYR:O	2:G:1267:PRO:HD3	2.05	0.56
1:B:20:TYR:CE2	2:H:2062:THR:HG23	2.41	0.56
2:G:272:PRO:HD3	2:G:301:TRP:CE2	2.40	0.56
1:B:470:GLY:O	1:B:474:ILE:HG13	2.05	0.56
2:I:440:HIS:HD2	2:I:497:ASP:O	1.87	0.56
1:A:1307:PHE:HB3	1:A:1357:CYS:HB3	1.86	0.56
2:G:1090:ILE:O	2:G:1094:HIS:CD2	2.58	0.56
2:J:138:ARG:HB2	2:J:192:THR:HA	1.87	0.56
2:K:843:TRP:C	2:K:843:TRP:CD1	2.79	0.56
2:J:1897:GLU:HG2	2:J:1901:GLN:NE2	2.21	0.56
2:I:1094:HIS:O	2:I:1098:LEU:HB2	2.06	0.56

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:C:504:GLY:O	1:C:926:SER:HB2	2.06	0.56
2:J:861:MET:HB2	2:J:863:GLU:HG2	1.87	0.56
1:C:1510:TRP:HZ3	1:C:1642:LEU:HA	1.70	0.56
1:E:911:LEU:O	1:E:915:MET:HG3	2.06	0.56
1:D:571:LYS:O	1:D:575:ARG:HG2	2.05	0.56
2:H:1880:ASN:HB3	2:H:1881:TYR:CD1	2.40	0.56
2:G:616:ASP:N	2:G:616:ASP:OD1	2.37	0.56
2:L:1818:PHE:HE2	2:L:1822:ARG:HH12	1.52	0.56
2:I:532:LYS:HD3	2:I:537:VAL:HG21	1.88	0.56
2:I:1607:THR:HB	2:I:1643:VAL:O	2.06	0.56
2:I:735:PRO:HA	2:I:773:ASN:OD1	2.06	0.56
2:I:261:TYR:CD1	2:I:295:ILE:HG12	2.41	0.56
1:D:88:ILE:HG21	2:J:1821:MET:CE	2.35	0.56
2:H:859:SER:CB	2:H:863:GLU:HG3	2.36	0.56
2:G:1207:THR:O	2:G:1215:THR:HA	2.05	0.56
1:B:1443:LEU:HD22	1:B:1474:ILE:HD11	1.88	0.56
2:H:613:VAL:HG23	2:H:635:TYR:CE1	2.41	0.56
2:K:1181:PHE:CD1	2:K:1191:PRO:HD2	2.40	0.56
1:C:673:LEU:O	1:C:678:ALA:HB3	2.06	0.56
1:F:1100:VAL:HG21	1:F:1150:ILE:CD1	2.36	0.56
2:H:1678:VAL:O	2:H:1679:LEU:HD23	2.06	0.56
1:C:498:THR:HG21	1:C:858:LEU:CA	2.31	0.56
2:J:489:GLU:O	2:J:493:MET:HG3	2.05	0.56
2:I:2054:TYR:HA	2:I:2057:GLU:OE1	2.05	0.56
2:J:1420:LYS:HG2	2:J:1425:PRO:CA	2.35	0.56
2:H:1764:MET:HB3	2:H:1780:ILE:CD1	2.35	0.56
1:C:570:TYR:CE1	1:C:574:ILE:HD11	2.41	0.56
2:J:1342:PHE:HE2	2:J:1391:VAL:CG2	2.19	0.56
2:L:1421:ARG:O	2:L:1421:ARG:HG2	2.04	0.56
2:H:197:VAL:HG21	2:H:263:ILE:HD11	1.87	0.56
1:E:1207:TYR:CE2	1:E:1682:LYS:HD2	2.41	0.56
2:K:35:PHE:HZ	2:K:104:LEU:HB3	1.70	0.56
1:A:714:PHE:CE1	1:A:725:LEU:HD12	2.41	0.56
2:H:170:TYR:CE2	2:H:507:PHE:HB3	2.40	0.56
2:I:768:ILE:O	2:I:774:ILE:HD12	2.05	0.56
2:I:2073:ASN:O	2:I:2076:LYS:HB3	2.05	0.56
1:A:12:THR:O	1:A:16:GLU:HG2	2.06	0.56
2:L:1176:PHE:CE1	2:L:1192:LEU:HD13	2.41	0.56
1:A:1534:GLU:HG2	1:A:1625:PHE:CE1	2.40	0.56
2:I:1142:ILE:HG13	2:I:1209:PRO:CG	2.36	0.56
2:I:611:THR:HG21	2:I:817:MET:HE2	1.88	0.56
1:B:1254:PHE:HB2	1:B:1257:THR:OG1	2.06	0.56

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:I:350:MET:HG3	2:I:435:ILE:HB	1.88	0.56
1:A:755:GLU:HB2	1:A:757:ASP:HB2	1.88	0.56
2:H:1142:ILE:HG13	2:H:1209:PRO:CG	2.35	0.56
2:I:1729:ASN:O	2:I:1757:ILE:HG23	2.06	0.56
1:B:948:HIS:O	1:B:952:TYR:HD2	1.89	0.56
2:L:992:ALA:O	2:L:995:ARG:HB3	2.05	0.56
1:D:1330:GLU:OE2	1:D:1342:ARG:NH2	2.39	0.56
2:L:917:ARG:HD3	2:L:937:ARG:CZ	2.36	0.56
2:K:595:SER:HB3	2:K:602:PRO:CD	2.35	0.56
1:E:628:TYR:CD1	1:E:628:TYR:C	2.78	0.56
1:A:989:ASN:H	1:A:1491:ASN:ND2	1.94	0.56
1:F:628:TYR:CD1	1:F:628:TYR:C	2.79	0.56
2:J:582:LYS:HG3	2:J:1110:VAL:HG11	1.87	0.56
2:L:1061:VAL:CG1	2:L:1066:ILE:HD11	2.36	0.56
2:H:1497:ARG:O	2:H:1505:SER:HB3	2.05	0.56
2:H:1991:ARG:HG3	2:H:1996:ILE:HG12	1.88	0.56
1:B:983:GLN:HB3	1:B:1418:ILE:HG21	1.86	0.56
2:J:1370:LEU:HA	2:J:1435:TYR:CE2	2.41	0.56
2:K:1903:VAL:O	2:K:1907:ILE:HG13	2.05	0.56
2:G:914:TRP:HE1	2:G:916:GLY:HA3	1.69	0.56
2:H:1709:TYR:HD2	2:H:1709:TYR:C	2.08	0.56
2:I:1393:ASP:HB3	2:I:1395:LEU:HD21	1.87	0.56
2:J:843:TRP:C	2:J:843:TRP:CD1	2.78	0.56
1:C:1386:THR:HB	1:F:1269:SER:O	2.05	0.56
1:C:1337:PRO:HA	1:C:1340:MET:HG3	1.88	0.56
2:K:756:ASP:HA	2:K:843:TRP:HH2	1.71	0.56
2:G:197:VAL:HG12	2:G:201:ILE:HG13	1.87	0.56
2:G:1653:LEU:CD2	2:G:1667:VAL:HG13	2.36	0.56
1:E:1081:ILE:HA	1:E:1163:GLN:NE2	2.19	0.56
2:K:1944:ASN:HA	2:K:1993:PHE:HD2	1.71	0.56
2:H:350:MET:HG3	2:H:435:ILE:HB	1.88	0.56
2:I:1207:THR:O	2:I:1215:THR:HA	2.06	0.56
1:C:847:THR:OG1	1:C:876:MET:HG3	2.06	0.56
1:F:967:PHE:CD2	1:F:1374:PRO:HG3	2.41	0.56
1:E:1367:LEU:HD22	1:E:1371:MET:HG3	1.88	0.56
2:K:1946:LEU:HB3	2:K:1951:ILE:HD11	1.88	0.56
1:C:1420:TYR:OH	1:F:1473:HIS:HE1	1.88	0.56
1:A:1153:ALA:O	1:E:1121:ARG:NH1	2.39	0.56
2:I:1897:GLU:HG2	2:I:1901:GLN:HE21	1.71	0.56
2:L:120:HIS:HD2	2:L:137:VAL:HG21	1.68	0.56
1:F:421:ARG:HH22	1:F:1613:LYS:HB3	1.71	0.56
2:K:1362:PHE:N	2:K:1363:PRO:HD2	2.21	0.56

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:C:1207:TYR:CZ	1:C:1682:LYS:HD2	2.41	0.56
2:G:663:ILE:H	2:G:663:ILE:CD1	2.14	0.56
2:J:911:GLN:HG3	2:J:1064:THR:HA	1.87	0.56
1:B:1005:TRP:HE1	1:B:1561:LEU:HD22	1.66	0.56
2:I:1637:VAL:HG11	2:I:1679:LEU:HD22	1.88	0.56
2:H:1265:TYR:O	2:H:1267:PRO:HD3	2.05	0.56
2:I:1009:ASN:O	2:I:1013:VAL:HG23	2.05	0.56
2:K:604:MET:HE1	2:K:811:MET:HB2	1.87	0.56
2:J:1880:ASN:HB3	2:J:1881:TYR:CD1	2.40	0.56
2:J:1918:VAL:CG1	2:J:2006:HIS:HB2	2.33	0.56
2:J:2062:THR:HG22	2:J:2063:GLY:N	2.21	0.56
2:K:1436:ARG:HH22	2:K:1602:LEU:HD13	1.70	0.56
2:I:1445:THR:CG2	2:I:1498:PHE:HB2	2.36	0.56
2:I:914:TRP:HE1	2:I:916:GLY:HA3	1.71	0.56
1:A:498:THR:HG21	1:A:858:LEU:CA	2.34	0.56
2:L:745:GLY:HA3	2:L:757:PHE:HB3	1.87	0.56
2:G:1918:VAL:HG22	2:G:2006:HIS:O	2.06	0.56
1:B:673:LEU:O	1:B:678:ALA:HB3	2.06	0.56
2:H:298:ALA:HB2	2:H:304:PHE:HA	1.88	0.56
2:H:745:GLY:HA3	2:H:757:PHE:HB3	1.86	0.56
2:J:745:GLY:HA3	2:J:757:PHE:HB3	1.86	0.56
1:F:1032:MET:HE3	1:F:1165:PRO:HB3	1.86	0.56
2:L:699:ILE:HD12	2:L:699:ILE:N	2.19	0.56
1:F:1425:LEU:HD21	1:F:1429:ARG:NH2	2.20	0.56
2:K:1383:VAL:HG23	2:K:1428:TYR:CE1	2.40	0.56
2:L:1356:ALA:CB	2:L:1397:THR:HG22	2.35	0.56
2:G:1517:LEU:HG	2:G:1523:ILE:HD11	1.86	0.56
2:L:875:PHE:O	2:L:878:GLU:HB2	2.06	0.56
2:G:57:PRO:CG	2:G:68:GLU:HG3	2.36	0.56
2:H:1944:ASN:HA	2:H:1993:PHE:HD2	1.70	0.56
2:L:1234:ILE:HG12	2:L:1244:LEU:HD13	1.87	0.56
1:E:828:TRP:HE1	1:E:838:THR:HA	1.71	0.56
2:K:589:PHE:CD1	2:K:1116:PHE:CD2	2.94	0.56
1:D:1120:LYS:HD3	1:D:1129:ILE:HG12	1.87	0.56
1:C:421:ARG:HH22	1:C:1613:LYS:HB3	1.71	0.56
1:A:88:ILE:HG21	2:G:1821:MET:CE	2.36	0.56
2:H:1813:MET:HG3	2:H:1814:GLU:N	2.21	0.56
1:C:1017:TYR:HD1	1:C:1017:TYR:N	2.04	0.56
2:L:228:LEU:O	2:L:232:HIS:HD2	1.88	0.56
1:C:1443:LEU:HD11	1:C:1470:ARG:HD2	1.88	0.56
1:D:613:PRO:O	1:D:615:LEU:N	2.37	0.56
1:A:1700:GLN:O	1:A:1702:ARG:HG3	2.06	0.56

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:F:527:ALA:HB2	1:F:637:LEU:HD22	1.86	0.56
2:K:1445:THR:HG23	2:K:1498:PHE:HB2	1.87	0.56
1:A:1565:PRO:O	1:A:1567:GLY:N	2.38	0.56
2:J:1701:GLU:H	2:J:1704:MET:HE3	1.70	0.56
2:H:914:TRP:HE1	2:H:916:GLY:HA3	1.71	0.56
2:H:590:VAL:HG23	2:H:1091:HIS:CD2	2.41	0.56
2:K:1846:ALA:HB3	2:K:1847:LEU:HD12	1.87	0.56
1:E:22:PHE:O	2:K:2006:HIS:HA	2.06	0.56
1:D:1307:PHE:HB3	1:D:1357:CYS:CB	2.36	0.56
2:H:197:VAL:HG12	2:H:201:ILE:HG13	1.87	0.56
2:L:1342:PHE:HE2	2:L:1391:VAL:CG2	2.19	0.56
2:I:1090:ILE:O	2:I:1094:HIS:CD2	2.58	0.56
2:I:785:SER:HA	2:I:788:THR:HB	1.88	0.56
2:I:83:VAL:O	2:I:87:VAL:HG23	2.05	0.56
2:H:1517:LEU:HG	2:H:1523:ILE:HD11	1.88	0.56
2:I:1554:PRO:HG3	2:I:1659:ILE:HD11	1.88	0.56
1:C:948:HIS:O	1:C:952:TYR:HD2	1.89	0.56
2:L:1309:PHE:CE2	2:L:1360:PRO:HA	2.41	0.56
2:I:731:ALA:HA	2:I:739:ILE:HD13	1.88	0.56
2:L:505:THR:HG22	2:L:505:THR:O	2.06	0.56
1:C:1483:ALA:HA	1:C:1486:GLN:HE21	1.70	0.56
2:H:1574:PRO:HD3	2:H:1611:TYR:CE2	2.41	0.56
1:A:1451:LYS:HE2	1:A:1463:GLU:OE2	2.06	0.55
2:K:663:ILE:H	2:K:663:ILE:CD1	2.13	0.55
2:J:1067:LEU:HB2	4:J:2101:FMN:C7M	2.35	0.55
2:H:818:THR:HG22	2:H:829:LYS:CB	2.35	0.55
2:K:796:TRP:HH2	2:K:805:MET:HE1	1.69	0.55
2:J:605:VAL:CB	2:J:628:ILE:HG13	2.33	0.55
2:J:1637:VAL:HG11	2:J:1679:LEU:HD22	1.88	0.55
2:H:1436:ARG:NH2	2:H:1602:LEU:HD11	2.22	0.55
1:C:13:LEU:HD11	2:I:2058:VAL:HG21	1.88	0.55
2:J:1086:ILE:O	2:J:1090:ILE:HG13	2.06	0.55
2:G:1851:MET:HE2	2:G:1855:SER:HB3	1.87	0.55
1:A:1118:GLU:OE2	1:E:1154:LEU:HD21	2.05	0.55
2:I:1061:VAL:CG1	2:I:1066:ILE:HD11	2.36	0.55
2:G:867:LYS:HD3	2:G:1065:CYS:SG	2.46	0.55
2:H:1083:ILE:O	2:H:1086:ILE:HG13	2.06	0.55
2:H:820:LYS:HG3	2:H:821:GLU:HG2	1.88	0.55
2:L:1411:LYS:HE3	2:L:1441:ASP:OD2	2.06	0.55
2:H:21:LEU:HA	2:H:37:VAL:O	2.05	0.55
2:L:1090:ILE:O	2:L:1094:HIS:CD2	2.59	0.55
2:G:1721:ARG:HH21	2:G:1853:ILE:HD12	1.70	0.55

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:G:329:THR:HG22	2:H:1331:THR:O	2.05	0.55
2:L:152:LYS:HB2	2:L:154:TYR:CE1	2.41	0.55
1:A:1078:ILE:HG23	1:A:1352:MET:HE3	1.88	0.55
2:H:1114:GLU:HB3	2:H:1169:TYR:HB3	1.88	0.55
2:H:1966:ARG:O	2:H:1970:VAL:HG23	2.05	0.55
2:G:859:SER:HB3	2:G:863:GLU:HG3	1.87	0.55
1:D:959:PRO:HG2	2:J:974:GLU:HG3	1.88	0.55
1:B:421:ARG:HH22	1:B:1613:LYS:HB3	1.70	0.55
1:D:1260:ALA:O	1:D:1264:MET:HG3	2.06	0.55
1:A:1448:ALA:HA	1:A:1451:LYS:CE	2.34	0.55
1:A:1447:VAL:CG2	1:A:1467:LEU:HD21	2.35	0.55
2:K:656:ARG:NH1	2:K:656:ARG:HG2	2.21	0.55
2:L:462:ALA:N	2:L:483:ASP:HA	2.21	0.55
2:H:289:ILE:HG12	2:H:493:MET:CE	2.35	0.55
2:L:618:VAL:HG11	2:L:648:ILE:HD11	1.87	0.55
2:I:1046:SER:O	2:I:1049:GLN:HG3	2.06	0.55
2:K:172:ILE:HG22	2:K:514:VAL:O	2.07	0.55
1:B:1672:GLY:HA3	1:B:1678:LEU:CD2	2.29	0.55
2:H:930:THR:CG2	2:H:933:GLU:HG3	2.35	0.55
2:L:1009:ASN:O	2:L:1013:VAL:HG23	2.07	0.55
2:G:1048:TRP:CD2	2:G:1049:GLN:HG2	2.39	0.55
2:G:524:ILE:HA	2:G:527:LEU:HD12	1.87	0.55
2:J:1265:TYR:O	2:J:1267:PRO:HD3	2.05	0.55
2:G:1374:VAL:CG2	2:G:1436:ARG:HE	2.20	0.55
1:C:1491:ASN:HD22	1:C:1491:ASN:H	1.54	0.55
1:D:498:THR:HG21	1:D:858:LEU:CA	2.34	0.55
2:L:914:TRP:HE1	2:L:916:GLY:HA3	1.72	0.55
2:K:1764:MET:HG3	2:K:1781:PHE:CE1	2.41	0.55
1:A:452:ILE:HD12	1:A:467:LYS:HA	1.87	0.55
2:G:590:VAL:HG23	2:G:1091:HIS:CD2	2.42	0.55
1:B:501:ASP:OD2	1:B:503:ARG:HB2	2.07	0.55
1:D:1307:PHE:HA	1:D:1568:ALA:HB2	1.89	0.55
2:K:1897:GLU:HG2	2:K:1901:GLN:NE2	2.22	0.55
1:B:1168:TRP:NE1	1:B:1173:TYR:HE1	2.04	0.55
1:D:399:TYR:OH	1:D:692:THR:HG23	2.06	0.55
2:K:952:ASP:OD1	2:K:953:PRO:HD2	2.06	0.55
1:C:1532:LYS:HE2	1:C:1598:VAL:HG11	1.88	0.55
2:I:102:LEU:O	2:I:106:LEU:HG	2.06	0.55
2:J:372:LEU:HD11	2:J:397:SER:HB2	1.88	0.55
2:I:372:LEU:HD11	2:I:397:SER:HB2	1.88	0.55
2:H:460:ILE:O	2:H:486:ILE:HB	2.07	0.55
1:C:1700:GLN:O	1:C:1702:ARG:HG3	2.06	0.55

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:D:628:TYR:OH	1:D:630:LYS:HE2	2.06	0.55
2:L:1181:PHE:CD1	2:L:1191:PRO:HD2	2.41	0.55
1:C:535:TYR:OH	1:C:630:LYS:HE3	2.06	0.55
2:H:825:SER:CB	2:H:1053:ILE:HG13	2.35	0.55
2:K:251:PRO:HG3	2:K:316:PHE:CA	2.36	0.55
1:E:40:ARG:HH21	1:E:72:THR:HG22	1.71	0.55
2:H:43:PHE:CZ	2:I:42:HIS:NE2	2.74	0.55
2:J:451:ILE:O	2:J:455:VAL:HG23	2.06	0.55
2:L:1890:ARG:HB3	2:L:1994:ALA:HB2	1.88	0.55
1:B:985:ARG:HB3	1:B:1422:ARG:HH22	1.71	0.55
2:H:1074:LYS:HE3	2:H:1075:TYR:CE1	2.38	0.55
2:G:1411:LYS:HE3	2:G:1441:ASP:OD2	2.07	0.55
1:C:1307:PHE:HB3	1:C:1357:CYS:HB2	1.88	0.55
2:L:2019:SER:HA	2:L:2022:LEU:HD12	1.87	0.55
2:I:1342:PHE:HE2	2:I:1391:VAL:CG2	2.20	0.55
2:J:1171:TRP:CE3	2:J:1236:LEU:HD22	2.41	0.55
1:D:888:ILE:HA	1:D:891:LEU:HD12	1.88	0.55
2:I:26:LEU:O	2:I:32:GLU:HA	2.06	0.55
1:C:336:PHE:O	1:C:339:GLN:HB2	2.05	0.55
1:C:716:GLN:HB3	1:C:769:ILE:HG23	1.87	0.55
2:J:57:PRO:CG	2:J:68:GLU:HG3	2.37	0.55
2:H:861:MET:HB2	2:H:863:GLU:HG2	1.89	0.55
2:K:1566:LYS:O	2:K:1568:PRO:HD3	2.06	0.55
2:I:119:VAL:HG21	2:I:140:TYR:CD2	2.41	0.55
2:I:1248:GLU:OE1	2:I:1248:GLU:HA	2.06	0.55
1:D:875:GLU:O	1:D:878:PHE:HB3	2.06	0.55
2:H:611:THR:HG21	2:H:817:MET:HE2	1.87	0.55
2:I:1885:ALA:HB2	2:I:1998:LEU:HD21	1.87	0.55
1:B:1095:GLN:O	1:B:1096:LEU:HD23	2.06	0.55
1:F:1267:LEU:HD11	1:F:1303:LEU:HD12	1.88	0.55
2:K:1334:ALA:HA	2:K:1341:ASP:HB2	1.89	0.55
2:H:261:TYR:CD1	2:H:295:ILE:HG12	2.41	0.55
2:H:462:ALA:N	2:H:483:ASP:HA	2.21	0.55
1:E:558:LEU:HB2	1:E:563:GLN:CG	2.34	0.55
2:J:1194:ARG:NH1	2:J:1194:ARG:CG	2.51	0.55
2:L:928:ASP:HA	2:L:1007:LEU:HD23	1.89	0.55
1:C:628:TYR:OH	1:C:630:LYS:HG2	2.07	0.55
2:J:928:ASP:HA	2:J:1007:LEU:HD23	1.88	0.55
1:C:1672:GLY:HA3	1:C:1678:LEU:CD2	2.33	0.55
2:L:1288:PHE:CE2	2:L:1292:VAL:HG21	2.41	0.55
2:L:1445:THR:CG2	2:L:1498:PHE:HB2	2.37	0.55
1:D:868:VAL:CG1	1:D:908:ILE:HD11	2.35	0.55

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:B:498:THR:HG21	1:B:858:LEU:CA	2.35	0.55
1:E:1363:MET:HE1	1:E:1373:VAL:CG2	2.34	0.55
2:J:1709:TYR:C	2:J:1709:TYR:CD2	2.78	0.55
2:I:1420:LYS:HG2	2:I:1425:PRO:CA	2.35	0.55
2:K:1709:TYR:CD2	2:K:1709:TYR:C	2.79	0.55
2:I:1918:VAL:HG13	2:I:2006:HIS:CB	2.37	0.55
2:L:1764:MET:HB3	2:L:1780:ILE:CD1	2.37	0.55
2:G:604:MET:HE1	2:G:811:MET:HB2	1.89	0.55
1:A:1183:VAL:HG13	1:A:1252:GLU:OE1	2.07	0.55
2:J:1383:VAL:HG23	2:J:1428:TYR:CE1	2.39	0.55
1:E:987:MET:O	1:E:1490:GLY:HA3	2.07	0.55
1:F:843:VAL:HG22	1:F:843:VAL:O	2.05	0.55
1:C:1317:GLU:HB3	1:F:1250:LEU:HD22	1.89	0.55
2:I:349:PRO:O	2:I:392:THR:HG22	2.05	0.55
2:I:1028:VAL:HG13	2:I:1030:PHE:CD2	2.42	0.55
1:A:1164:ILE:HD12	1:A:1355:GLN:HG3	1.87	0.55
2:L:529:ASN:HD22	2:L:552:VAL:HG23	1.72	0.55
1:E:1113:LYS:HG3	1:E:1138:TYR:CE2	2.41	0.55
2:I:1574:PRO:HD3	2:I:1611:TYR:CE2	2.42	0.55
2:G:102:LEU:O	2:G:106:LEU:HG	2.07	0.55
1:E:1323:ALA:HB1	1:E:1351:PHE:HE2	1.71	0.55
1:B:1001:GLU:HG2	1:B:1008:ALA:HB2	1.89	0.55
2:L:1224:GLN:HA	2:L:1224:GLN:OE1	2.07	0.55
2:K:532:LYS:HD3	2:K:537:VAL:HG21	1.87	0.55
1:B:1495:ARG:HG2	1:B:1495:ARG:HH11	1.71	0.55
2:J:261:TYR:CD1	2:J:295:ILE:HG12	2.42	0.55
2:H:120:HIS:HD2	2:H:137:VAL:HG21	1.70	0.55
1:E:1447:VAL:CG2	1:E:1467:LEU:HD21	2.32	0.55
1:B:1330:GLU:HG2	1:B:1333:ARG:NH1	2.22	0.55
2:K:609:THR:CG2	2:K:633:GLY:HA3	2.36	0.55
1:F:1330:GLU:OE2	1:F:1342:ARG:NH2	2.39	0.55
2:I:1436:ARG:NH2	2:I:1602:LEU:HD11	2.22	0.55
2:H:1637:VAL:CG1	2:H:1679:LEU:HD22	2.37	0.55
1:C:1499:ARG:CD	1:F:1476:ARG:HH12	2.11	0.55
1:B:868:VAL:HG11	1:B:908:ILE:CD1	2.35	0.55
2:J:2062:THR:HG22	2:J:2064:SER:N	2.20	0.55
2:G:818:THR:HG22	2:G:829:LYS:CB	2.32	0.55
2:J:290:VAL:HG13	2:J:314:LEU:HD23	1.87	0.55
2:I:462:ALA:HB2	2:I:481:LEU:HB2	1.88	0.55
1:C:527:ALA:HB2	1:C:637:LEU:HD22	1.89	0.55
2:I:745:GLY:HA3	2:I:757:PHE:HB3	1.88	0.55
1:B:1213:VAL:HG13	1:B:1217:GLU:HB2	1.89	0.55

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:I:590:VAL:HG23	2:I:1091:HIS:CD2	2.41	0.55
2:H:24:LEU:HD12	2:H:37:VAL:CG2	2.36	0.55
2:L:378:ILE:HD11	2:L:398:LEU:HA	1.89	0.55
2:K:186:LEU:HD21	2:K:256:VAL:HG22	1.88	0.55
2:J:1338:ARG:HH21	2:L:327:PRO:CD	2.19	0.55
2:I:57:PRO:CG	2:I:68:GLU:HG3	2.37	0.55
2:H:57:PRO:CG	2:H:68:GLU:HG3	2.37	0.55
2:L:411:PRO:HD2	2:L:414:LEU:CD1	2.36	0.55
1:D:1207:TYR:CZ	1:D:1682:LYS:HD2	2.41	0.55
1:F:1120:LYS:HD3	1:F:1129:ILE:HG12	1.88	0.55
2:L:776:LEU:HG	2:L:807:PHE:CE2	2.42	0.55
1:A:1086:PHE:CE2	1:A:1310:PHE:HD2	2.25	0.55
1:B:1451:LYS:HA	1:B:1454:ARG:NH2	2.20	0.55
2:L:917:ARG:HG2	2:L:917:ARG:HH11	1.65	0.55
2:K:465:LEU:HB2	2:K:479:ARG:HG3	1.89	0.55
2:H:1445:THR:HG23	2:H:1498:PHE:HB2	1.87	0.55
2:G:462:ALA:N	2:G:483:ASP:HA	2.21	0.55
2:G:1445:THR:HG23	2:G:1498:PHE:HB2	1.89	0.55
2:J:462:ALA:N	2:J:483:ASP:HA	2.20	0.55
1:E:1363:MET:HE3	1:E:1368:ALA:HB2	1.88	0.55
2:J:1393:ASP:HB3	2:J:1395:LEU:HD21	1.88	0.55
2:H:361:VAL:O	2:H:365:ILE:HG13	2.07	0.55
2:K:1324:PHE:N	2:K:1583:VAL:HG11	2.22	0.55
1:E:1129:ILE:HA	1:E:1139:THR:O	2.07	0.55
2:G:1593:SER:OG	2:G:1596:PHE:HB2	2.07	0.55
1:D:768:ARG:HA	1:D:772:THR:OG1	2.07	0.55
1:C:1164:ILE:HD12	1:C:1355:GLN:HG3	1.88	0.55
2:J:1982:ALA:O	2:J:1984:PRO:HD3	2.07	0.55
2:H:935:VAL:HG11	2:H:997:LEU:HD21	1.88	0.55
1:F:1113:LYS:HG3	1:F:1138:TYR:CE2	2.41	0.55
1:F:565:GLN:HG2	1:F:565:GLN:O	2.07	0.55
2:J:1913:TRP:HZ3	2:J:1938:THR:HG21	1.72	0.55
2:L:315:LEU:HA	2:L:318:ILE:HD12	1.89	0.55
2:H:462:ALA:H	2:H:483:ASP:HA	1.72	0.55
2:J:1873:ARG:NH1	2:J:2002:ASP:HB3	2.22	0.55
2:K:931:TYR:O	2:K:935:VAL:HG12	2.06	0.55
2:J:1181:PHE:CD1	2:J:1191:PRO:HD2	2.42	0.55
2:K:486:ILE:HG23	2:K:490:LEU:HG	1.89	0.55
2:I:930:THR:CG2	2:I:933:GLU:HG3	2.37	0.55
1:D:965:TYR:OH	1:D:1199:LEU:HD22	2.06	0.55
1:B:1494:TRP:CG	1:B:1505:GLY:HA3	2.42	0.55
2:I:783:GLY:HA3	2:I:1075:TYR:CB	2.37	0.55

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:G:268:LEU:HD12	2:G:275:LEU:HD11	1.89	0.55
2:K:1468:ARG:NH1	2:K:1475:LEU:HD22	2.22	0.55
2:J:388:ASN:HD22	2:J:388:ASN:C	2.09	0.55
2:K:271:GLU:H	2:K:274:GLU:HG3	1.71	0.55
2:I:843:TRP:CD1	2:I:843:TRP:C	2.79	0.55
2:G:21:LEU:HD22	2:G:36:LEU:HG	1.87	0.55
2:G:35:PHE:HD2	2:G:37:VAL:HG22	1.72	0.55
2:L:26:LEU:O	2:L:32:GLU:HA	2.07	0.55
1:C:1606:VAL:O	1:C:1608:PRO:HD3	2.06	0.55
2:G:1903:VAL:O	2:G:1907:ILE:HG13	2.05	0.55
2:H:1885:ALA:HB2	2:H:1998:LEU:HD21	1.88	0.55
1:B:1160:VAL:C	1:B:1352:MET:HE1	2.27	0.55
2:G:261:TYR:CD1	2:G:295:ILE:HG12	2.40	0.55
1:B:36:LEU:HD22	1:B:61:LEU:HD21	1.89	0.55
2:H:1015:HIS:NE2	2:H:1019:LEU:HD11	2.21	0.55
2:K:1982:ALA:O	2:K:1984:PRO:HD3	2.07	0.55
1:C:1473:HIS:HE1	1:F:1420:TYR:OH	1.90	0.55
2:J:1566:LYS:O	2:J:1568:PRO:HD3	2.06	0.55
1:F:1447:VAL:CG2	1:F:1467:LEU:HD21	2.35	0.55
1:F:427:ARG:HH12	1:F:492:ILE:CG2	2.04	0.55
2:J:272:PRO:HD3	2:J:301:TRP:CE2	2.42	0.55
2:G:1061:VAL:CG1	2:G:1066:ILE:HD11	2.37	0.55
2:L:1410:GLY:HA3	2:L:1436:ARG:HA	1.89	0.55
1:A:1004:PRO:HD3	1:A:1572:TRP:CH2	2.42	0.55
1:B:1580:VAL:O	1:B:1617:ILE:HD11	2.07	0.55
1:E:1032:MET:HE2	1:E:1165:PRO:HB3	1.88	0.55
2:J:604:MET:HE1	2:J:811:MET:HB2	1.89	0.55
2:J:1845:VAL:CG2	2:J:1856:LEU:HD22	2.37	0.55
2:K:1805:PHE:O	2:K:1808:PRO:HD2	2.06	0.55
2:H:1610:MET:HA	2:H:1610:MET:CE	2.37	0.55
1:F:1386:THR:HG22	1:F:1629:GLN:HE21	1.71	0.55
1:E:1640:LYS:HG3	1:E:1641:TYR:N	2.22	0.55
1:D:401:SER:O	1:D:405:TRP:CD1	2.60	0.55
1:A:11:TYR:O	1:A:15:VAL:HG23	2.06	0.55
2:L:1083:ILE:O	2:L:1086:ILE:HG13	2.06	0.55
1:E:1337:PRO:HA	1:E:1340:MET:HG3	1.89	0.55
2:L:256:VAL:O	2:L:260:HIS:CD2	2.60	0.55
2:L:197:VAL:HA	2:L:262:MET:HE1	1.89	0.55
2:I:789:TYR:CE1	2:I:1097:PHE:HB3	2.41	0.55
2:J:349:PRO:O	2:J:392:THR:HG22	2.07	0.55
2:L:350:MET:HG3	2:L:435:ILE:HB	1.87	0.55
2:H:859:SER:HB3	2:H:863:GLU:HG3	1.89	0.55

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:L:778:ALA:HB2	2:L:807:PHE:CD2	2.42	0.55
1:F:350:ASP:HB3	1:F:353:ALA:HB2	1.87	0.55
1:E:716:GLN:HB3	1:E:769:ILE:HG23	1.88	0.55
2:J:778:ALA:HB2	2:J:807:PHE:CD2	2.42	0.55
1:C:526:MET:HE3	1:C:614:PHE:HB2	1.87	0.55
2:I:1818:PHE:HE2	2:I:1822:ARG:HH12	1.53	0.55
2:H:102:LEU:O	2:H:106:LEU:HG	2.07	0.55
2:I:1750:GLY:O	2:I:1755:LYS:HE3	2.06	0.55
2:L:1885:ALA:HB2	2:L:1998:LEU:HD21	1.89	0.55
2:J:1246:LEU:HD11	2:J:1261:PHE:HE1	1.70	0.55
2:L:1180:VAL:HG11	2:L:1187:PHE:CG	2.42	0.55
1:B:799:LEU:HD12	1:B:821:LEU:HB3	1.89	0.55
2:G:942:MET:HE1	2:G:955:LEU:HB3	1.87	0.55
2:L:2054:TYR:HA	2:L:2057:GLU:OE1	2.07	0.55
2:K:1603:PRO:HG2	2:K:1642:MET:HE3	1.88	0.55
2:I:1404:VAL:HG22	2:I:1413:VAL:HG22	1.89	0.55
2:I:1301:PHE:HB3	2:I:1364:ARG:NH1	2.22	0.55
2:J:327:PRO:N	2:K:1338:ARG:NH2	2.55	0.55
2:H:1890:ARG:HB3	2:H:1994:ALA:HB2	1.89	0.55
1:F:759:ILE:HG12	1:F:813:LEU:HD23	1.89	0.55
2:K:1420:LYS:HG2	2:K:1425:PRO:CA	2.37	0.55
2:H:1709:TYR:CD2	2:H:1709:TYR:C	2.80	0.55
1:C:562:SER:HB3	1:D:551:LEU:CD2	2.35	0.55
1:C:1032:MET:HE2	1:C:1165:PRO:HB3	1.87	0.55
2:K:83:VAL:O	2:K:87:VAL:HG23	2.07	0.55
1:E:21:GLN:O	2:K:2006:HIS:HD2	1.90	0.55
2:I:268:LEU:HD12	2:I:275:LEU:HD11	1.89	0.55
1:E:1386:THR:HG22	1:E:1629:GLN:HE21	1.70	0.55
1:A:1640:LYS:HG3	1:A:1641:TYR:HD1	1.70	0.55
2:H:1356:ALA:CB	2:H:1397:THR:HG22	2.37	0.55
2:I:1083:ILE:O	2:I:1086:ILE:HG13	2.06	0.55
2:J:411:PRO:HD2	2:J:414:LEU:CD1	2.37	0.55
2:L:882:LYS:HB3	2:L:898:ARG:NH1	2.22	0.55
2:J:775:VAL:HG12	2:J:777:VAL:HG23	1.89	0.55
1:A:985:ARG:HB3	1:A:1422:ARG:HH22	1.72	0.55
2:L:1457:HIS:ND1	2:L:1487:THR:HG22	2.22	0.55
2:K:1729:ASN:O	2:K:1757:ILE:HG23	2.06	0.55
1:A:1260:ALA:O	1:A:1264:MET:HG3	2.06	0.55
2:I:1335:PHE:CZ	2:I:1629:ILE:HD13	2.42	0.55
2:I:529:ASN:HD22	2:I:552:VAL:CG2	2.19	0.55
2:L:221:TYR:CE2	2:L:225:LEU:HD22	2.42	0.55
2:I:1586:ASP:OD1	2:I:1588:ASN:HB2	2.07	0.55

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:L:486:ILE:HG23	2:L:490:LEU:HG	1.89	0.55
2:H:917:ARG:HD3	2:H:937:ARG:CZ	2.37	0.55
2:I:501:TRP:HE1	2:I:528:THR:CG2	2.14	0.55
1:E:1107:GLU:HG3	1:E:1108:PRO:CD	2.33	0.55
2:K:966:VAL:O	2:K:970:PHE:HD1	1.90	0.55
2:I:2062:THR:HG22	2:I:2064:SER:N	2.22	0.55
2:G:298:ALA:HB2	2:G:304:PHE:HA	1.87	0.55
2:J:1899:ALA:O	2:J:1903:VAL:HG23	2.06	0.55
2:G:1246:LEU:HD11	2:G:1261:PHE:HE1	1.72	0.55
1:E:551:LEU:C	1:E:551:LEU:HD23	2.27	0.55
2:I:1725:HIS:CD2	2:I:1854:GLU:HB3	2.42	0.55
2:G:1175:MET:HE1	2:G:1234:ILE:HG21	1.88	0.55
2:G:378:ILE:HG23	2:G:391:VAL:CG1	2.37	0.55
1:A:1250:LEU:HD22	1:E:1317:GLU:HB3	1.88	0.55
2:G:1517:LEU:HD12	2:G:1521:GLU:HB2	1.89	0.55
2:H:1897:GLU:HG2	2:H:1901:GLN:NE2	2.22	0.55
2:K:1517:LEU:HG	2:K:1523:ILE:HD11	1.88	0.55
1:B:1142:LEU:H	1:B:1142:LEU:HD12	1.72	0.55
2:J:1554:PRO:HA	2:J:1659:ILE:HG12	1.89	0.55
1:A:1164:ILE:CD1	1:A:1355:GLN:HG3	2.37	0.55
2:G:713:HIS:CD2	2:G:740:ILE:HD13	2.42	0.55
2:I:992:ALA:O	2:I:995:ARG:HB3	2.06	0.55
2:I:776:LEU:HG	2:I:807:PHE:CE2	2.41	0.55
2:J:700:GLU:CD	2:J:700:GLU:H	2.10	0.55
1:F:88:ILE:HG21	2:L:1821:MET:CE	2.37	0.55
2:K:1224:GLN:OE1	2:K:1224:GLN:HA	2.07	0.55
2:G:2073:ASN:O	2:G:2076:LYS:HB3	2.07	0.55
2:L:1248:GLU:HA	2:L:1248:GLU:OE1	2.06	0.55
2:H:1393:ASP:HB3	2:H:1395:LEU:HD21	1.88	0.55
1:D:1547:ARG:HG2	1:D:1604:TYR:HD1	1.71	0.54
2:J:618:VAL:HG11	2:J:648:ILE:HD11	1.89	0.54
2:G:613:VAL:HG23	2:G:635:TYR:CE1	2.42	0.54
2:K:1293:TRP:NE1	2:K:1354:TRP:HZ2	2.05	0.54
1:C:628:TYR:C	1:C:628:TYR:CD1	2.79	0.54
2:G:1616:VAL:HG11	2:G:1679:LEU:CD1	2.33	0.54
2:K:325:ALA:HB2	2:K:447:ALA:HB2	1.88	0.54
1:C:40:ARG:NH2	1:C:72:THR:HG22	2.21	0.54
2:J:750:GLY:O	2:J:865:ILE:HA	2.07	0.54
2:H:2059:HIS:HB2	2:H:2067:ILE:HG21	1.88	0.54
2:I:1442:TYR:CG	2:I:1499:LYS:O	2.60	0.54
1:E:1703:VAL:HG22	1:E:1713:PHE:N	2.22	0.54
1:D:767:HIS:CB	1:D:813:LEU:HD12	2.37	0.54

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:1094:LYS:HB3	1:A:1154:LEU:HB2	1.89	0.54
2:K:1878:ARG:HE	2:K:1986:PRO:HG3	1.73	0.54
1:E:24:MET:HB3	2:K:2043:VAL:HG12	1.89	0.54
2:J:1721:ARG:HH21	2:J:1853:ILE:HD12	1.70	0.54
2:L:35:PHE:HD2	2:L:37:VAL:HG22	1.72	0.54
2:J:192:THR:C	2:J:194:PRO:HD3	2.27	0.54
1:A:746:PHE:CD2	3:A:1901:NAP:H4D	2.43	0.54
2:K:379:GLY:O	2:K:391:VAL:HG13	2.07	0.54
2:K:378:ILE:HG23	2:K:391:VAL:CG1	2.37	0.54
2:J:197:VAL:HG21	2:J:263:ILE:HD11	1.88	0.54
2:K:1481:ILE:HD12	2:K:1515:LEU:HD23	1.88	0.54
2:G:1944:ASN:HA	2:G:1993:PHE:CD2	2.42	0.54
1:D:36:LEU:HD22	1:D:61:LEU:HD21	1.89	0.54
1:E:875:GLU:O	1:E:878:PHE:HB3	2.06	0.54
2:L:126:VAL:HG12	2:L:127:ALA:H	1.73	0.54
1:E:415:TYR:O	1:E:419:PHE:HD1	1.89	0.54
1:C:617:LEU:N	1:C:617:LEU:HD23	2.21	0.54
1:F:1068:TYR:O	1:F:1072:ILE:HG13	2.08	0.54
2:L:1344:ALA:N	2:L:1389:LEU:O	2.36	0.54
1:D:1447:VAL:CG2	1:D:1467:LEU:HD21	2.34	0.54
2:K:285:HIS:HD2	2:K:501:TRP:CE3	2.24	0.54
2:L:285:HIS:HD2	2:L:501:TRP:CE3	2.24	0.54
2:H:1028:VAL:HG13	2:H:1030:PHE:CD2	2.43	0.54
2:J:762:LEU:HD11	2:J:800:PHE:CD2	2.42	0.54
2:I:1181:PHE:CD1	2:I:1191:PRO:HD2	2.42	0.54
2:G:172:ILE:HG22	2:G:514:VAL:O	2.06	0.54
1:F:673:LEU:O	1:F:678:ALA:HB3	2.07	0.54
2:J:1746:THR:CB	2:J:1792:THR:HG23	2.35	0.54
2:L:1918:VAL:HG13	2:L:2006:HIS:CB	2.33	0.54
1:F:498:THR:HG21	1:F:858:LEU:CA	2.37	0.54
2:I:1026:LYS:HE2	2:I:1045:ASP:OD2	2.08	0.54
2:H:857:VAL:HG13	2:H:876:TRP:HE1	1.72	0.54
2:G:83:VAL:O	2:G:87:VAL:HG23	2.08	0.54
2:K:192:THR:C	2:K:194:PRO:HD3	2.27	0.54
2:L:1804:GLN:HB3	2:L:1861:PHE:CE1	2.43	0.54
2:L:785:SER:HA	2:L:788:THR:HB	1.87	0.54
2:K:1574:PRO:HD3	2:K:1611:TYR:CE2	2.43	0.54
2:K:361:VAL:O	2:K:365:ILE:HG13	2.07	0.54
2:H:92:GLU:HB3	2:H:95:HIS:NE2	2.21	0.54
1:F:983:GLN:HB3	1:F:1418:ILE:HG21	1.88	0.54
2:H:451:ILE:O	2:H:455:VAL:HG23	2.06	0.54
2:L:1897:GLU:HG2	2:L:1901:GLN:NE2	2.23	0.54

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:H:611:THR:HA	2:H:1051:GLU:OE2	2.06	0.54
1:E:1113:LYS:O	1:E:1117:GLU:HG3	2.07	0.54
1:E:415:TYR:CD2	1:E:1614:THR:HA	2.42	0.54
2:H:888:ARG:O	2:H:891:ARG:HB2	2.07	0.54
1:A:1267:LEU:HD11	1:A:1303:LEU:HD12	1.87	0.54
2:J:882:LYS:HB3	2:J:898:ARG:HH12	1.73	0.54
2:I:1457:HIS:ND1	2:I:1487:THR:HG22	2.23	0.54
2:L:1607:THR:HB	2:L:1643:VAL:O	2.07	0.54
1:D:1686:PRO:HB2	1:D:1713:PHE:CD1	2.42	0.54
2:K:719:GLY:O	2:K:755:GLU:HG3	2.08	0.54
1:A:1697:LEU:HD21	1:E:1401:LEU:HD22	1.88	0.54
1:F:1534:GLU:HG2	1:F:1625:PHE:CE1	2.43	0.54
1:F:427:ARG:HG3	1:F:492:ILE:HG12	1.89	0.54
1:F:1079:ARG:NH1	1:F:1079:ARG:HG2	2.07	0.54
2:G:653:PRO:O	2:G:656:ARG:HB2	2.07	0.54
2:K:159:PHE:HA	2:K:162:ALA:HB3	1.89	0.54
2:L:938:MET:HE2	2:L:959:THR:HG22	1.90	0.54
1:A:613:PRO:O	1:A:615:LEU:N	2.35	0.54
2:K:272:PRO:HD3	2:K:301:TRP:CE2	2.43	0.54
1:F:526:MET:HE3	1:F:614:PHE:HB2	1.89	0.54
2:I:582:LYS:HG3	2:I:1110:VAL:HG11	1.88	0.54
2:K:1053:ILE:HD11	2:K:1061:VAL:HG13	1.88	0.54
2:K:783:GLY:HA3	2:K:1075:TYR:CB	2.34	0.54
2:J:465:LEU:HB2	2:J:479:ARG:HG3	1.90	0.54
2:G:837:GLY:HA3	2:G:1074:LYS:HG2	1.89	0.54
2:G:783:GLY:HA3	2:G:1075:TYR:CB	2.34	0.54
1:E:1584:GLY:HA2	1:E:1617:ILE:CD1	2.38	0.54
2:H:1299:VAL:HG22	2:H:1301:PHE:CD1	2.43	0.54
1:B:549:TYR:HE1	1:B:567:ASN:HB3	1.73	0.54
2:H:1086:ILE:O	2:H:1090:ILE:HG13	2.07	0.54
2:G:745:GLY:HA3	2:G:757:PHE:HB3	1.88	0.54
2:J:876:TRP:C	2:J:876:TRP:CD1	2.81	0.54
1:A:968:PRO:HD2	1:A:1374:PRO:HB3	1.90	0.54
2:K:2019:SER:HA	2:K:2022:LEU:HD12	1.89	0.54
2:H:1554:PRO:HA	2:H:1659:ILE:HG12	1.88	0.54
2:H:1653:LEU:CD2	2:H:1667:VAL:HG13	2.38	0.54
1:C:1401:LEU:HD22	1:F:1697:LEU:HD21	1.89	0.54
1:F:1510:TRP:CZ3	1:F:1642:LEU:HA	2.42	0.54
2:L:1564:SER:HB2	2:L:1653:LEU:H	1.73	0.54
2:L:1566:LYS:O	2:L:1568:PRO:HD3	2.08	0.54
2:K:762:LEU:HD11	2:K:800:PHE:CD2	2.43	0.54
2:I:422:THR:HG23	2:I:844:GLU:CD	2.28	0.54

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:H:26:LEU:O	2:H:32:GLU:HA	2.08	0.54
2:K:859:SER:CB	2:K:863:GLU:HG3	2.36	0.54
2:I:1377:SER:HB3	2:I:1432:GLN:HB2	1.90	0.54
2:G:1913:TRP:HZ3	2:G:1938:THR:HG21	1.73	0.54
2:J:1885:ALA:HB2	2:J:1998:LEU:HD21	1.89	0.54
1:A:36:LEU:HD22	1:A:61:LEU:HD21	1.90	0.54
1:C:1431:GLN:HG2	1:F:1431:GLN:OE1	2.08	0.54
2:H:251:PRO:HG3	2:H:316:PHE:CA	2.37	0.54
1:A:1211:LYS:HE3	1:A:1711:LEU:HD21	1.89	0.54
1:C:868:VAL:CG1	1:C:908:ILE:HD11	2.33	0.54
1:F:904:GLY:HA2	1:F:906:GLN:OE1	2.08	0.54
2:G:824:THR:HB	2:G:829:LYS:HE3	1.89	0.54
2:J:325:ALA:HB2	2:J:447:ALA:HB2	1.89	0.54
2:J:460:ILE:HD13	2:J:487:ILE:HD11	1.89	0.54
2:I:663:ILE:HG21	3:I:2102:NAP:H1D	1.89	0.54
1:D:1703:VAL:HG12	1:D:1711:LEU:HD22	1.90	0.54
2:G:1411:LYS:O	2:G:1434:LEU:HD12	2.07	0.54
2:J:268:LEU:HD12	2:J:275:LEU:HD11	1.90	0.54
2:L:580:LEU:HD21	2:L:1095:ILE:HA	1.89	0.54
2:L:38:PRO:HG2	2:L:41:LEU:HD12	1.90	0.54
1:A:421:ARG:NH2	1:A:1613:LYS:HB3	2.21	0.54
2:H:152:LYS:HB2	2:H:154:TYR:CE1	2.42	0.54
2:K:617:PHE:CE1	2:K:822:ALA:HB2	2.42	0.54
2:G:35:PHE:CD2	2:G:37:VAL:HG22	2.42	0.54
1:D:88:ILE:HG21	2:J:1821:MET:HE2	1.90	0.54
2:G:1899:ALA:O	2:G:1903:VAL:HG23	2.08	0.54
2:H:1317:ASN:HB3	2:H:1320:ALA:HB3	1.90	0.54
1:C:768:ARG:HA	1:C:772:THR:OG1	2.08	0.54
1:B:1237:LYS:HB2	1:D:1236:TYR:O	2.08	0.54
2:I:228:LEU:O	2:I:232:HIS:HD2	1.90	0.54
2:G:1807:GLN:HB2	2:G:1808:PRO:HD3	1.88	0.54
2:J:70:SER:HB2	2:J:74:GLU:OE2	2.08	0.54
2:J:409:LYS:HB3	2:J:428:PHE:CZ	2.42	0.54
1:B:1532:LYS:HE2	1:B:1598:VAL:HG11	1.89	0.54
2:J:980:LEU:HD22	2:J:986:LEU:HD21	1.89	0.54
2:I:505:THR:HG22	2:I:505:THR:O	2.08	0.54
2:J:1607:THR:HB	2:J:1643:VAL:O	2.06	0.54
1:E:1451:LYS:HA	1:E:1454:ARG:NH2	2.22	0.54
2:I:618:VAL:O	2:I:622:MET:HG3	2.08	0.54
1:D:1100:VAL:HG21	1:D:1150:ILE:HD12	1.89	0.54
2:G:752:HIS:NE2	2:G:856:THR:HG22	2.21	0.54
2:I:1289:TYR:CB	2:I:1370:LEU:HD23	2.38	0.54

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:H:582:LYS:HG3	2:H:1110:VAL:HG11	1.89	0.54
2:L:762:LEU:HD11	2:L:800:PHE:CD2	2.42	0.54
2:J:1918:VAL:HG22	2:J:2006:HIS:O	2.08	0.54
2:I:1873:ARG:NH1	2:I:2002:ASP:HB3	2.23	0.54
2:G:1436:ARG:NH2	2:G:1602:LEU:CD1	2.71	0.54
1:F:905:LEU:HD23	1:F:908:ILE:HD12	1.90	0.54
2:G:1053:ILE:HD11	2:G:1061:VAL:HG13	1.89	0.54
1:C:1565:PRO:O	1:C:1567:GLY:N	2.41	0.54
2:K:1231:THR:CG2	2:K:1595:VAL:HG11	2.37	0.54
2:G:485:ASP:O	2:G:488:PRO:HD2	2.06	0.54
2:L:747:ARG:NH1	2:L:780:SER:O	2.40	0.54
2:J:1701:GLU:H	2:J:1704:MET:CE	2.19	0.54
1:C:1118:GLU:OE2	1:F:1154:LEU:HD21	2.06	0.54
1:C:1186:VAL:HG23	1:C:1309:ASP:HB2	1.88	0.54
2:L:1878:ARG:HE	2:L:1986:PRO:HG3	1.71	0.54
2:J:186:LEU:CG	2:J:256:VAL:HG22	2.37	0.54
2:H:197:VAL:HA	2:H:262:MET:HE1	1.90	0.54
1:A:1081:ILE:HG13	1:A:1159:LEU:O	2.07	0.54
1:E:746:PHE:HB3	3:E:1901:NAP:H52N	1.89	0.54
1:B:469:LEU:O	1:B:472:GLN:HB3	2.08	0.54
2:I:1947:LYS:HG2	2:I:1993:PHE:CD1	2.42	0.54
2:I:186:LEU:CD2	2:I:256:VAL:HG22	2.38	0.54
1:C:1017:TYR:N	1:C:1017:TYR:CD1	2.75	0.54
2:I:529:ASN:HD22	2:I:552:VAL:HG23	1.72	0.54
2:L:978:SER:O	2:L:981:GLN:HG2	2.08	0.54
1:C:414:TYR:CE2	1:C:418:ILE:HD11	2.43	0.54
2:I:1156:ASP:HB2	2:I:1159:SER:H	1.73	0.54
2:K:1885:ALA:HB2	2:K:1998:LEU:HD21	1.89	0.54
2:K:980:LEU:HD22	2:K:986:LEU:HD21	1.90	0.54
2:I:700:GLU:CD	2:I:700:GLU:H	2.11	0.54
1:D:1186:VAL:HG23	1:D:1309:ASP:HB2	1.90	0.54
1:E:1534:GLU:HG2	1:E:1625:PHE:CE1	2.42	0.54
2:G:1317:ASN:HB3	2:G:1320:ALA:HB3	1.89	0.54
2:L:1335:PHE:CZ	2:L:1629:ILE:HD13	2.42	0.54
1:E:1443:LEU:HD22	1:E:1474:ILE:HD11	1.89	0.54
2:L:251:PRO:HG3	2:L:316:PHE:CA	2.36	0.54
1:F:907:PHE:O	1:F:909:PRO:HD3	2.08	0.54
2:J:825:SER:HB2	2:J:1053:ILE:HG13	1.88	0.54
2:H:2062:THR:HG22	2:H:2064:SER:N	2.22	0.54
2:J:2021:LEU:O	2:J:2025:ILE:HG13	2.08	0.54
2:G:460:ILE:HD13	2:G:487:ILE:HD11	1.89	0.54
2:I:251:PRO:HG3	2:I:316:PHE:CA	2.37	0.54

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:J:1436:ARG:NH2	2:J:1602:LEU:HD11	2.23	0.54
1:E:452:ILE:HD12	1:E:467:LYS:HA	1.88	0.54
2:J:857:VAL:CG1	2:J:876:TRP:NE1	2.69	0.54
2:K:1083:ILE:O	2:K:1086:ILE:HG13	2.08	0.54
2:G:35:PHE:CE1	2:G:105:ILE:HD13	2.43	0.54
2:J:38:PRO:HG2	2:J:41:LEU:HD12	1.89	0.54
1:B:550:LYS:HZ1	1:B:631:LYS:HE2	1.70	0.54
2:L:1366:ILE:HG22	2:L:1366:ILE:O	2.08	0.54
2:H:2019:SER:HA	2:H:2022:LEU:HD12	1.90	0.54
2:K:1234:ILE:HG12	2:K:1244:LEU:HD13	1.90	0.54
2:L:1175:MET:O	2:L:1192:LEU:HD12	2.08	0.54
2:G:859:SER:CB	2:G:863:GLU:HG3	2.38	0.54
2:I:962:PHE:O	2:I:966:VAL:HG23	2.05	0.54
2:K:571:ASP:HB3	2:K:574:LYS:HB2	1.89	0.54
1:A:350:ASP:HB3	1:A:353:ALA:HB2	1.89	0.54
1:F:1142:LEU:HD12	1:F:1142:LEU:N	2.23	0.54
1:F:828:TRP:HE1	1:F:838:THR:HA	1.71	0.54
1:D:849:GLY:HA3	1:D:873:GLN:CG	2.38	0.54
2:I:245:SER:HA	2:I:436:THR:OG1	2.08	0.54
2:L:1142:ILE:HG13	2:L:1209:PRO:CG	2.38	0.54
2:J:617:PHE:CE1	2:J:822:ALA:HB2	2.42	0.54
2:L:1128:PRO:HG2	2:L:1135:ALA:CB	2.36	0.54
1:E:1547:ARG:HG2	1:E:1604:TYR:CD1	2.42	0.54
2:H:505:THR:O	2:H:505:THR:HG22	2.06	0.54
1:C:1142:LEU:HD12	1:C:1142:LEU:N	2.23	0.54
2:K:1620:VAL:O	2:K:1624:ALA:HB3	2.07	0.54
1:F:1164:ILE:HD12	1:F:1355:GLN:HG3	1.90	0.54
1:B:430:VAL:O	1:B:434:ILE:HG13	2.06	0.54
2:I:752:HIS:NE2	2:I:856:THR:HG22	2.23	0.54
2:H:609:THR:HG22	2:H:633:GLY:HA3	1.90	0.54
2:G:656:ARG:HG2	2:G:656:ARG:NH1	2.22	0.54
2:H:825:SER:O	2:H:828:ALA:HB3	2.08	0.54
1:F:628:TYR:OH	1:F:630:LYS:HG2	2.08	0.54
2:J:930:THR:CG2	2:J:933:GLU:HG3	2.38	0.54
1:D:881:LEU:O	1:D:884:MET:HB2	2.08	0.54
2:I:35:PHE:HZ	2:I:104:LEU:HB3	1.73	0.54
1:B:868:VAL:CG1	1:B:908:ILE:HD11	2.34	0.54
1:C:1209:PHE:CE2	1:C:1301:VAL:HG21	2.42	0.54
2:G:451:ILE:O	2:G:455:VAL:HG23	2.08	0.54
2:I:462:ALA:N	2:I:483:ASP:HA	2.22	0.54
1:A:1213:VAL:HG13	1:A:1217:GLU:HB2	1.88	0.54
1:B:1218:VAL:HG13	1:B:1301:VAL:HG13	1.90	0.54

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:D:1042:LEU:HD12	1:D:1058:PRO:HG3	1.89	0.54
2:L:1420:LYS:HG2	2:L:1425:PRO:CA	2.38	0.54
1:B:22:PHE:O	2:H:2006:HIS:HA	2.07	0.54
2:K:330:SER:N	2:L:1331:THR:HG22	2.22	0.54
2:I:1234:ILE:HG12	2:I:1244:LEU:HD13	1.89	0.54
2:G:38:PRO:HG2	2:G:41:LEU:HD12	1.89	0.54
2:K:1305:LEU:HB3	2:K:1401:ILE:HD12	1.90	0.54
2:L:1305:LEU:HB3	2:L:1401:ILE:HD12	1.89	0.54
2:J:966:VAL:O	2:J:970:PHE:HD1	1.90	0.54
1:B:714:PHE:CE1	1:B:725:LEU:HD12	2.42	0.54
1:C:1488:SER:O	1:F:1480:ARG:NH2	2.38	0.54
1:E:1001:GLU:O	1:E:1007:ASN:HA	2.07	0.54
1:F:1307:PHE:HA	1:F:1568:ALA:HB2	1.89	0.54
2:G:888:ARG:O	2:G:891:ARG:HB2	2.07	0.54
2:H:1519:THR:O	2:H:1520:LYS:HB2	2.08	0.54
1:C:415:TYR:O	1:C:419:PHE:HD1	1.91	0.54
1:D:350:ASP:HB3	1:D:353:ALA:HB2	1.90	0.54
2:J:1377:SER:HB3	2:J:1432:GLN:HB2	1.88	0.54
2:J:728:ILE:HG22	2:J:732:LYS:HE3	1.90	0.54
2:G:120:HIS:HD2	2:G:137:VAL:HG21	1.71	0.54
1:F:1448:ALA:HA	1:F:1451:LYS:CE	2.34	0.54
2:I:750:GLY:O	2:I:865:ILE:HA	2.07	0.54
2:H:608:MET:H	2:H:612:THR:CB	2.21	0.54
2:J:610:PRO:O	2:J:613:VAL:HG12	2.08	0.54
2:H:595:SER:HB3	2:H:602:PRO:CD	2.36	0.54
2:K:1346:MET:CE	2:K:1617:ARG:HH21	2.21	0.54
2:K:1637:VAL:HG11	2:K:1679:LEU:HD22	1.89	0.54
2:I:21:LEU:HD22	2:I:36:LEU:HG	1.89	0.54
2:I:1890:ARG:HB3	2:I:1994:ALA:HB2	1.90	0.54
2:J:1903:VAL:O	2:J:1907:ILE:HG13	2.07	0.54
2:I:1746:THR:CB	2:I:1792:THR:HG23	2.36	0.54
2:K:1289:TYR:CD2	2:K:1370:LEU:HD23	2.43	0.54
1:B:1363:MET:HE3	1:B:1368:ALA:HB2	1.88	0.54
2:H:1764:MET:HG3	2:H:1781:PHE:CE1	2.42	0.54
1:C:1307:PHE:HA	1:C:1568:ALA:HB2	1.89	0.54
1:E:859:VAL:HG13	1:E:918:LEU:HD13	1.90	0.54
2:K:1421:ARG:HD2	2:K:1426:VAL:CG2	2.37	0.54
2:J:2019:SER:HA	2:J:2022:LEU:HD12	1.90	0.54
1:E:41:THR:HA	2:K:1689:VAL:HB	1.90	0.54
2:G:1305:LEU:HD11	2:G:1365:LYS:HD2	1.90	0.54
1:D:1404:ALA:HA	1:D:1501:ALA:HB1	1.89	0.54
1:A:1367:LEU:HD22	1:A:1371:MET:HG3	1.89	0.54

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:L:859:SER:CB	2:L:863:GLU:HG3	2.37	0.54
2:L:859:SER:HB3	2:L:863:GLU:HG3	1.90	0.54
2:G:1334:ALA:HA	2:G:1341:ASP:HB2	1.90	0.54
1:F:1532:LYS:HE2	1:F:1598:VAL:HG11	1.89	0.54
1:F:1451:LYS:HE2	1:F:1463:GLU:OE2	2.08	0.54
1:B:1447:VAL:CG2	1:B:1467:LEU:HD21	2.36	0.54
2:K:1594:ARG:NH1	2:K:1594:ARG:CG	2.68	0.54
2:H:460:ILE:HD13	2:H:487:ILE:HD11	1.90	0.54
2:L:1194:ARG:NH1	2:L:1194:ARG:CG	2.54	0.54
2:J:752:HIS:CE1	2:J:847:TYR:CE2	2.81	0.54
1:E:1491:ASN:H	1:E:1491:ASN:HD22	1.54	0.54
1:C:1100:VAL:HG21	1:C:1150:ILE:HD12	1.89	0.54
2:G:501:TRP:HE1	2:G:528:THR:CG2	2.15	0.54
2:J:1637:VAL:HG11	2:J:1679:LEU:CD1	2.34	0.54
2:H:1445:THR:CG2	2:H:1498:PHE:HB2	2.38	0.54
2:J:327:PRO:CD	2:K:1338:ARG:NH2	2.70	0.54
2:K:914:TRP:HE1	2:K:916:GLY:HA3	1.72	0.54
1:A:905:LEU:HD22	1:A:911:LEU:HD21	1.88	0.54
2:I:2044:THR:HG21	2:I:2054:TYR:CZ	2.43	0.54
2:I:1764:MET:HG3	2:I:1781:PHE:HE1	1.72	0.54
2:J:1411:LYS:HB3	2:J:1435:TYR:HB2	1.90	0.54
1:E:767:HIS:CG	1:E:813:LEU:HD12	2.43	0.54
2:H:1804:GLN:HB3	2:H:1861:PHE:CE1	2.42	0.54
2:J:1932:ASP:O	2:J:1936:LEU:HD23	2.08	0.54
1:A:1179:ILE:O	1:A:1183:VAL:HG23	2.07	0.54
1:D:501:ASP:OD2	1:D:503:ARG:HB2	2.08	0.54
2:K:26:LEU:O	2:K:32:GLU:HA	2.07	0.54
1:D:636:TYR:CD1	1:D:888:ILE:HD11	2.43	0.54
1:E:1514:ILE:O	1:E:1547:ARG:NH1	2.41	0.54
2:K:713:HIS:CD2	2:K:740:ILE:HD13	2.43	0.54
1:B:24:MET:HB3	2:H:2043:VAL:HG12	1.90	0.54
2:K:778:ALA:HB2	2:K:807:PHE:CD2	2.42	0.54
1:F:1336:GLU:O	1:F:1340:MET:HG2	2.08	0.54
1:E:1532:LYS:HE2	1:E:1598:VAL:HG11	1.88	0.54
2:L:1377:SER:HB3	2:L:1432:GLN:HB2	1.89	0.54
1:D:1451:LYS:HA	1:D:1454:ARG:NH2	2.23	0.54
2:H:855:ILE:HB	2:H:869:ALA:HB2	1.90	0.54
1:B:628:TYR:OH	1:B:630:LYS:HG2	2.08	0.54
1:A:430:VAL:O	1:A:434:ILE:HG13	2.08	0.54
2:I:1200:ARG:N	2:I:1200:ARG:HD3	2.10	0.54
2:H:524:ILE:HA	2:H:527:LEU:HD12	1.90	0.54
1:A:628:TYR:OH	1:A:630:LYS:HG2	2.07	0.54

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:I:928:ASP:HA	2:I:1007:LEU:HD23	1.90	0.54
1:A:40:ARG:HH21	1:A:72:THR:HG22	1.71	0.54
1:A:1670:HIS:CE1	2:G:1009:ASN:ND2	2.76	0.54
2:I:35:PHE:CD2	2:I:37:VAL:HG22	2.43	0.54
1:E:1280:CYS:HA	1:E:1566:LYS:O	2.08	0.54
2:L:1700:GLN:HA	2:L:1704:MET:CE	2.35	0.54
1:A:1317:GLU:HB3	1:E:1250:LEU:HD22	1.88	0.54
1:A:1306:GLY:O	1:A:1357:CYS:HB2	2.08	0.54
2:J:138:ARG:CB	2:J:192:THR:HA	2.38	0.54
2:J:1338:ARG:HH21	2:L:326:TYR:HA	1.73	0.54
1:C:1250:LEU:HD22	1:F:1317:GLU:HB3	1.90	0.54
1:B:746:PHE:HB3	3:B:1901:NAP:H52N	1.90	0.54
1:B:569:LEU:O	1:B:573:VAL:HG23	2.08	0.54
2:I:1963:GLU:HA	2:I:1966:ARG:HB3	1.89	0.54
2:L:1963:GLU:HA	2:L:1966:ARG:HB3	1.90	0.54
1:A:1001:GLU:HG2	1:A:1008:ALA:HB2	1.90	0.54
1:F:967:PHE:HB3	1:F:968:PRO:CD	2.38	0.54
2:G:1944:ASN:HA	2:G:1993:PHE:HD2	1.73	0.54
2:L:861:MET:HB2	2:L:863:GLU:HG2	1.89	0.54
2:I:126:VAL:HG12	2:I:127:ALA:H	1.73	0.54
1:F:31:THR:HG23	2:L:2040:ILE:HG21	1.90	0.54
1:B:849:GLY:HA3	1:B:873:GLN:CG	2.38	0.54
1:D:1229:THR:HB	1:D:1311:GLN:HG3	1.90	0.54
2:K:1217:ILE:O	2:K:1233:GLU:HA	2.08	0.54
2:G:204:ILE:HG23	2:G:312:VAL:HG11	1.90	0.54
1:D:1510:TRP:CZ3	1:D:1642:LEU:HA	2.43	0.54
2:K:911:GLN:HG3	2:K:1064:THR:HA	1.89	0.53
2:K:622:MET:O	2:K:656:ARG:NH1	2.40	0.53
2:H:489:GLU:O	2:H:493:MET:HG3	2.09	0.53
2:G:917:ARG:CG	2:G:917:ARG:NH1	2.47	0.53
2:G:917:ARG:HD3	2:G:937:ARG:CZ	2.38	0.53
2:I:172:ILE:HG22	2:I:514:VAL:O	2.08	0.53
2:K:298:ALA:HB2	2:K:304:PHE:HA	1.89	0.53
2:I:1411:LYS:HB3	2:I:1435:TYR:HB2	1.90	0.53
2:I:1410:GLY:HA3	2:I:1436:ARG:HA	1.90	0.53
2:L:824:THR:HG22	2:L:828:ALA:HB3	1.90	0.53
2:L:605:VAL:CB	2:L:628:ILE:HG13	2.32	0.53
2:I:2059:HIS:HB2	2:I:2067:ILE:HG21	1.89	0.53
2:L:1603:PRO:HD2	2:L:1606:ILE:HD11	1.90	0.53
2:G:1445:THR:CG2	2:G:1498:PHE:HB2	2.38	0.53
1:F:25:PRO:HA	2:L:2006:HIS:HB3	1.90	0.53
2:I:451:ILE:O	2:I:455:VAL:HG23	2.07	0.53

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:E:905:LEU:HD23	1:E:908:ILE:HD12	1.89	0.53
2:J:785:SER:HA	2:J:788:THR:HB	1.89	0.53
1:A:767:HIS:CB	1:A:813:LEU:HD12	2.38	0.53
2:J:2039:TYR:O	2:J:2041:PRO:HD3	2.08	0.53
2:G:727:VAL:HA	2:G:730:ILE:HG12	1.90	0.53
2:H:38:PRO:HG2	2:H:41:LEU:HD12	1.90	0.53
2:H:1234:ILE:HG12	2:H:1244:LEU:HD13	1.91	0.53
1:C:1640:LYS:HG3	1:C:1641:TYR:HD1	1.72	0.53
1:D:469:LEU:O	1:D:472:GLN:HB3	2.07	0.53
2:I:197:VAL:HA	2:I:262:MET:HE1	1.91	0.53
1:B:1001:GLU:O	1:B:1007:ASN:HA	2.07	0.53
1:B:1038:HIS:O	1:B:1048:SER:HA	2.08	0.53
1:A:415:TYR:O	1:A:419:PHE:HD1	1.91	0.53
2:G:192:THR:C	2:G:194:PRO:HD3	2.29	0.53
2:K:161:ALA:HB1	2:K:166:ASN:HB2	1.90	0.53
1:D:1090:ASP:OD1	1:D:1092:ASN:HB2	2.08	0.53
2:K:1821:MET:HA	2:K:1826:LEU:HD12	1.90	0.53
1:B:427:ARG:NH1	1:B:492:ILE:HG12	2.23	0.53
1:B:628:TYR:C	1:B:628:TYR:CD1	2.81	0.53
1:E:427:ARG:HG3	1:E:427:ARG:NH1	2.01	0.53
1:E:427:ARG:NH1	1:E:492:ILE:HG23	2.16	0.53
2:K:1586:ASP:OD1	2:K:1588:ASN:HB2	2.08	0.53
1:C:535:TYR:CG	1:C:610:GLU:N	2.76	0.53
2:K:376:ARG:NH2	2:L:1340:LYS:HG3	2.24	0.53
2:K:460:ILE:O	2:K:486:ILE:HB	2.08	0.53
2:K:1445:THR:CG2	2:K:1498:PHE:HB2	2.39	0.53
2:L:824:THR:HB	2:L:829:LYS:HE3	1.90	0.53
2:L:911:GLN:HG3	2:L:1064:THR:HA	1.89	0.53
2:H:1436:ARG:HH22	2:H:1602:LEU:HD13	1.72	0.53
2:I:35:PHE:HD2	2:I:37:VAL:HG22	1.72	0.53
2:L:1436:ARG:HH22	2:L:1602:LEU:CD1	2.21	0.53
1:A:13:LEU:HD11	2:G:2058:VAL:HG21	1.90	0.53
2:G:486:ILE:HG23	2:G:490:LEU:HG	1.91	0.53
1:E:1704:THR:HG23	1:E:1714:PRO:HG3	1.89	0.53
2:K:1251:THR:HG22	2:K:1292:VAL:HG13	1.89	0.53
2:I:289:ILE:HG12	2:I:493:MET:HE1	1.91	0.53
2:I:1421:ARG:HD2	2:I:1426:VAL:CG2	2.38	0.53
2:H:727:VAL:HA	2:H:730:ILE:HG12	1.90	0.53
2:J:256:VAL:O	2:J:260:HIS:CD2	2.61	0.53
2:H:22:ARG:HD2	2:H:42:HIS:HB3	1.90	0.53
2:J:1356:ALA:CB	2:J:1397:THR:HG22	2.38	0.53
1:E:983:GLN:O	1:E:987:MET:HG3	2.08	0.53

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:L:186:LEU:CG	2:L:256:VAL:HG22	2.38	0.53
1:E:1514:ILE:HD13	1:E:1545:LEU:HB3	1.90	0.53
1:A:1254:PHE:HB2	1:A:1257:THR:OG1	2.08	0.53
1:F:1323:ALA:HB1	1:F:1351:PHE:HE2	1.72	0.53
2:K:1966:ARG:O	2:K:1970:VAL:HG23	2.08	0.53
2:J:329:THR:HG21	2:K:1333:GLU:CG	2.39	0.53
2:I:1821:MET:HA	2:I:1826:LEU:HD12	1.90	0.53
2:L:617:PHE:CE1	2:L:822:ALA:HB2	2.43	0.53
1:C:1686:PRO:HB2	1:C:1713:PHE:CE1	2.43	0.53
2:I:609:THR:HG22	2:I:633:GLY:HA3	1.88	0.53
2:I:656:ARG:NH1	2:I:656:ARG:HG2	2.20	0.53
1:C:1330:GLU:OE2	1:C:1342:ARG:NH2	2.41	0.53
1:C:1547:ARG:HG2	1:C:1604:TYR:HD1	1.71	0.53
2:J:595:SER:HB3	2:J:602:PRO:CD	2.38	0.53
2:L:1616:VAL:HG11	2:L:1679:LEU:CD1	2.31	0.53
1:E:1108:PRO:HA	1:E:1140:VAL:O	2.08	0.53
2:K:2059:HIS:HB2	2:K:2067:ILE:HG21	1.90	0.53
2:I:1370:LEU:HA	2:I:1435:TYR:CE2	2.42	0.53
2:J:938:MET:HE2	2:J:959:THR:HG22	1.89	0.53
2:I:762:LEU:HD11	2:I:800:PHE:CD2	2.44	0.53
2:I:903:ILE:HD11	2:I:914:TRP:CZ2	2.43	0.53
2:K:1746:THR:CB	2:K:1792:THR:HG23	2.35	0.53
2:J:747:ARG:NH1	2:J:780:SER:HB3	2.20	0.53
2:L:1074:LYS:HE3	2:L:1075:TYR:CE1	2.40	0.53
1:D:486:VAL:HG13	1:D:648:LEU:H	1.73	0.53
1:F:452:ILE:HD12	1:F:467:LYS:HA	1.89	0.53
2:I:2005:PHE:HA	2:I:2010:LEU:HD11	1.91	0.53
1:B:486:VAL:HG13	1:B:648:LEU:H	1.74	0.53
2:G:506:VAL:CG1	2:G:506:VAL:O	2.57	0.53
2:I:1709:TYR:HD2	2:I:1709:TYR:C	2.11	0.53
2:I:1986:PRO:O	2:I:1987:VAL:HB	2.08	0.53
1:A:1505:GLY:O	1:A:1509:THR:HG23	2.08	0.53
2:H:1342:PHE:HE2	2:H:1391:VAL:CG2	2.21	0.53
1:C:1094:LYS:HB3	1:C:1154:LEU:HB2	1.90	0.53
2:L:1203:TYR:HB3	2:L:1220:ARG:HB2	1.89	0.53
2:H:1324:PHE:N	2:H:1583:VAL:HG11	2.23	0.53
1:E:382:ILE:HD12	1:E:761:SER:HB3	1.90	0.53
2:J:228:LEU:O	2:J:232:HIS:HD2	1.90	0.53
1:A:1120:LYS:HD3	1:A:1129:ILE:HG12	1.90	0.53
1:C:904:GLY:HA2	1:C:906:GLN:OE1	2.07	0.53
1:B:1014:MET:O	1:B:1590:ARG:NH2	2.37	0.53
1:D:1001:GLU:HG2	1:D:1008:ALA:HB2	1.90	0.53

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:D:542:GLN:HB3	1:D:579:MET:CE	2.18	0.53
2:I:1067:LEU:HB2	4:I:2101:FMN:HM71	1.88	0.53
2:I:609:THR:CG2	2:I:633:GLY:HA3	2.39	0.53
2:H:490:LEU:HA	2:H:493:MET:SD	2.49	0.53
2:J:752:HIS:NE2	2:J:856:THR:HG22	2.23	0.53
2:G:614:PRO:O	2:G:618:VAL:HG12	2.08	0.53
1:E:628:TYR:HD1	1:E:629:SER:N	2.06	0.53
2:J:931:TYR:O	2:J:935:VAL:HG12	2.09	0.53
2:I:1411:LYS:HE3	2:I:1441:ASP:OD2	2.09	0.53
2:L:1064:THR:HG22	2:L:1065:CYS:N	2.22	0.53
1:B:13:LEU:HD11	2:H:2058:VAL:HG21	1.90	0.53
2:H:605:VAL:CB	2:H:628:ILE:HG13	2.33	0.53
2:L:2062:THR:HG22	2:L:2064:SER:N	2.23	0.53
2:I:290:VAL:HG13	2:I:314:LEU:HD23	1.91	0.53
2:G:300:THR:H	2:G:303:GLU:HB3	1.73	0.53
2:I:1464:LEU:HD13	2:I:1468:ARG:HG3	1.91	0.53
2:J:1878:ARG:HE	2:J:1986:PRO:HG3	1.73	0.53
2:L:1845:VAL:CG2	2:L:1856:LEU:HD22	2.39	0.53
2:H:48:LEU:HD13	2:H:101:VAL:HG11	1.90	0.53
2:G:2019:SER:HA	2:G:2022:LEU:HD12	1.89	0.53
2:K:186:LEU:CG	2:K:256:VAL:HG22	2.37	0.53
2:K:256:VAL:O	2:K:260:HIS:CD2	2.62	0.53
1:B:1307:PHE:HB3	1:B:1357:CYS:HB3	1.90	0.53
1:A:636:TYR:CZ	1:A:640:LEU:HD22	2.42	0.53
2:L:1093:ASP:O	2:L:1097:PHE:HD1	1.91	0.53
1:E:565:GLN:O	1:E:569:LEU:HG	2.07	0.53
2:G:776:LEU:HG	2:G:807:PHE:CE2	2.43	0.53
2:L:157:ALA:HB3	2:L:565:ALA:HB3	1.90	0.53
1:F:382:ILE:HD12	1:F:761:SER:HB3	1.90	0.53
2:G:1224:GLN:HA	2:G:1224:GLN:OE1	2.09	0.53
1:A:1017:TYR:N	1:A:1017:TYR:HD1	2.05	0.53
1:C:1435:TRP:HD1	1:F:1427:LEU:HD11	1.72	0.53
2:J:1555:VAL:HG21	2:J:1824:LYS:HA	1.90	0.53
1:C:30:GLU:HB2	2:I:2045:ALA:HB1	1.90	0.53
2:L:161:ALA:HB1	2:L:166:ASN:HB2	1.89	0.53
2:H:610:PRO:HD2	4:H:2101:FMN:C6	2.25	0.53
2:H:752:HIS:CE1	2:H:856:THR:HG21	2.43	0.53
2:K:613:VAL:HG13	2:K:614:PRO:CD	2.38	0.53
2:H:250:PHE:CB	2:H:251:PRO:HD3	2.39	0.53
2:L:609:THR:HG22	2:L:633:GLY:HA3	1.91	0.53
1:C:1100:VAL:HG21	1:C:1150:ILE:CD1	2.38	0.53
2:J:798:THR:HA	2:J:802:TYR:O	2.08	0.53

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:E:1670:HIS:CE1	2:K:1009:ASN:ND2	2.77	0.53
2:K:485:ASP:O	2:K:488:PRO:HD2	2.09	0.53
1:C:40:ARG:HH21	1:C:72:THR:HG22	1.73	0.53
1:F:628:TYR:HD1	1:F:629:SER:N	2.06	0.53
2:H:1616:VAL:HG11	2:H:1679:LEU:CD1	2.32	0.53
2:J:1288:PHE:CE2	2:J:1292:VAL:HG21	2.43	0.53
2:H:2057:GLU:HA	2:H:2060:ARG:HH12	1.70	0.53
2:G:2062:THR:HG22	2:G:2064:SER:N	2.24	0.53
1:F:1565:PRO:O	1:F:1567:GLY:N	2.42	0.53
2:I:1745:LEU:HB3	2:I:1799:LEU:CD2	2.38	0.53
2:G:1764:MET:HG3	2:G:1781:PHE:CE1	2.44	0.53
2:J:2005:PHE:HA	2:J:2010:LEU:HD11	1.90	0.53
1:F:767:HIS:CG	1:F:813:LEU:HD12	2.44	0.53
1:C:1179:ILE:O	1:C:1183:VAL:HG23	2.08	0.53
2:I:1356:ALA:CB	2:I:1397:THR:HG22	2.38	0.53
2:K:1099:LEU:HD12	2:K:1103:TYR:CB	2.38	0.53
2:I:192:THR:C	2:I:194:PRO:HD3	2.28	0.53
1:D:421:ARG:NH2	1:D:1613:LYS:HB3	2.23	0.53
2:I:1643:VAL:CG1	2:I:1649:ILE:HD11	2.38	0.53
1:A:415:TYR:CD2	1:A:1614:THR:HA	2.43	0.53
1:A:42:GLU:OE1	2:G:1688:PRO:HB3	2.08	0.53
1:D:1038:HIS:O	1:D:1048:SER:HA	2.08	0.53
2:G:26:LEU:O	2:G:32:GLU:HA	2.09	0.53
2:K:1607:THR:HB	2:K:1643:VAL:O	2.08	0.53
1:C:844:ILE:N	1:C:844:ILE:HD12	2.23	0.53
2:H:1224:GLN:HA	2:H:1224:GLN:OE1	2.08	0.53
1:C:731:ASP:HB3	1:C:735:GLY:HA3	1.91	0.53
2:H:613:VAL:HG13	2:H:614:PRO:HD3	1.89	0.53
2:K:1007:LEU:HD12	2:K:1007:LEU:N	2.17	0.53
2:L:460:ILE:HD13	2:L:487:ILE:HD11	1.90	0.53
2:H:440:HIS:HD2	2:H:497:ASP:O	1.90	0.53
1:E:960:ARG:HG3	1:E:960:ARG:HH11	1.73	0.53
2:H:685:VAL:CG1	2:H:687:ILE:HG13	2.38	0.53
2:K:1074:LYS:HE3	2:K:1075:TYR:CE1	2.41	0.53
2:I:1305:LEU:H	2:I:1305:LEU:HD12	1.72	0.53
2:H:2021:LEU:O	2:H:2025:ILE:HG13	2.09	0.53
2:G:604:MET:CE	2:G:811:MET:HB2	2.39	0.53
2:L:784:GLY:HA3	2:L:786:GLU:OE2	2.09	0.53
2:L:21:LEU:HA	2:L:37:VAL:O	2.08	0.53
2:H:268:LEU:HD12	2:H:275:LEU:HD11	1.90	0.53
1:B:41:THR:HA	2:H:1689:VAL:HB	1.90	0.53
1:A:1337:PRO:HA	1:A:1340:MET:CG	2.38	0.53

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:L:92:GLU:HB3	2:L:95:HIS:NE2	2.24	0.53
2:K:141:TYR:OH	2:K:267:THR:HG23	2.08	0.53
2:L:1207:THR:O	2:L:1215:THR:HG23	2.09	0.53
1:A:1017:TYR:N	1:A:1017:TYR:CD1	2.76	0.53
1:B:1692:GLN:HG3	1:B:1696:PHE:CE2	2.44	0.53
1:C:1038:HIS:O	1:C:1048:SER:HA	2.08	0.53
2:I:94:ALA:HB1	2:I:97:THR:OG1	2.07	0.53
2:J:952:ASP:OD1	2:J:953:PRO:HD2	2.08	0.53
2:H:762:LEU:HD11	2:H:800:PHE:CD2	2.43	0.53
2:J:1362:PHE:N	2:J:1363:PRO:HD2	2.24	0.53
2:G:152:LYS:HB2	2:G:154:TYR:CE1	2.43	0.53
2:L:298:ALA:HB2	2:L:304:PHE:HA	1.90	0.53
2:J:276:LEU:HD21	2:J:296:ALA:HA	1.91	0.53
1:C:1702:ARG:HG2	1:C:1702:ARG:NH1	2.12	0.53
1:D:427:ARG:CG	1:D:427:ARG:NH1	2.56	0.53
2:H:501:TRP:HE1	2:H:528:THR:CG2	2.15	0.53
1:F:575:ARG:HG2	1:F:579:MET:SD	2.49	0.53
1:C:965:TYR:HE1	1:C:1669:PHE:CD1	2.25	0.53
2:H:1410:GLY:HA3	2:H:1436:ARG:HA	1.90	0.53
2:J:580:LEU:HD21	2:J:1095:ILE:HA	1.89	0.53
2:G:1770:ASN:HB2	2:G:1776:LYS:CE	2.37	0.53
2:L:1795:SER:HB3	2:L:1799:LEU:HD12	1.91	0.53
2:H:2039:TYR:O	2:H:2041:PRO:HD3	2.09	0.53
1:E:503:ARG:HA	1:E:933:ILE:HD11	1.91	0.53
2:J:1175:MET:HA	2:J:1274:ILE:CD1	2.39	0.53
1:C:469:LEU:O	1:C:472:GLN:HB3	2.08	0.53
2:I:820:LYS:HG3	2:I:821:GLU:HG2	1.91	0.53
2:H:875:PHE:O	2:H:878:GLU:HB2	2.09	0.53
1:C:1113:LYS:O	1:C:1117:GLU:HG3	2.08	0.53
2:G:1963:GLU:HA	2:G:1966:ARG:HB3	1.91	0.53
2:I:256:VAL:O	2:I:260:HIS:CD2	2.61	0.53
1:F:1547:ARG:HG2	1:F:1604:TYR:HD1	1.72	0.53
2:I:912:LYS:HB3	2:I:1030:PHE:HA	1.91	0.53
2:K:861:MET:HB2	2:K:863:GLU:HG2	1.90	0.53
1:C:1260:ALA:O	1:C:1264:MET:HG3	2.08	0.53
2:H:962:PHE:O	2:H:966:VAL:HG23	2.09	0.53
2:G:1982:ALA:O	2:G:1984:PRO:HD3	2.08	0.53
1:C:1451:LYS:HA	1:C:1454:ARG:NH2	2.23	0.53
2:I:653:PRO:O	2:I:656:ARG:HB2	2.09	0.53
1:B:612:ILE:HA	1:B:628:TYR:CE2	2.44	0.53
1:E:628:TYR:OH	1:E:630:LYS:HG2	2.09	0.53
2:H:2062:THR:HG22	2:H:2063:GLY:N	2.23	0.53

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:D:684:THR:HG21	1:D:691:VAL:HG11	1.90	0.53
1:D:22:PHE:O	2:J:2006:HIS:HA	2.09	0.53
1:A:962:ASN:ND2	2:G:1006:GLN:HE22	1.97	0.53
1:B:905:LEU:HD23	1:B:908:ILE:HD12	1.91	0.53
2:I:462:ALA:H	2:I:483:ASP:HA	1.72	0.53
2:G:1918:VAL:CG1	2:G:2006:HIS:HB2	2.37	0.53
2:J:747:ARG:NH2	2:J:757:PHE:CE1	2.77	0.53
1:B:1505:GLY:O	1:B:1509:THR:HG23	2.08	0.53
2:G:2044:THR:HG22	2:G:2046:LYS:H	1.73	0.53
2:K:197:VAL:HG12	2:K:201:ILE:HG13	1.91	0.53
2:G:788:THR:HG22	2:G:1094:HIS:HE1	1.73	0.53
2:H:21:LEU:HD22	2:H:36:LEU:HG	1.89	0.53
2:K:792:LEU:HD23	2:K:1094:HIS:ND1	2.24	0.53
2:L:1750:GLY:O	2:L:1755:LYS:HE3	2.08	0.53
2:H:1305:LEU:H	2:H:1305:LEU:CD1	2.20	0.53
2:K:1356:ALA:CB	2:K:1397:THR:HG22	2.38	0.53
2:G:197:VAL:HG21	2:G:263:ILE:HD11	1.91	0.53
1:A:551:LEU:CD2	1:F:562:SER:HB3	2.38	0.53
2:G:1653:LEU:HD21	2:G:1667:VAL:HG13	1.90	0.53
2:G:882:LYS:HB3	2:G:898:ARG:NH1	2.24	0.53
1:C:1431:GLN:OE1	1:F:1431:GLN:HG2	2.09	0.53
2:L:192:THR:C	2:L:194:PRO:HD3	2.28	0.53
1:D:1132:ILE:HD12	1:D:1137:GLN:HB2	1.90	0.53
2:K:1128:PRO:HG2	2:K:1135:ALA:CB	2.39	0.53
1:E:689:ARG:NH2	1:E:1591:ASN:OD1	2.41	0.53
2:G:1750:GLY:O	2:G:1755:LYS:HE3	2.08	0.53
2:J:161:ALA:HB1	2:J:166:ASN:HB2	1.90	0.53
1:F:1132:ILE:HD12	1:F:1137:GLN:HB2	1.90	0.53
1:F:415:TYR:O	1:F:419:PHE:HD1	1.92	0.53
2:I:859:SER:CB	2:I:863:GLU:HG3	2.38	0.53
1:B:1606:VAL:O	1:B:1608:PRO:HD3	2.09	0.53
2:K:613:VAL:HG23	2:K:635:TYR:CE1	2.44	0.53
2:J:609:THR:HG23	4:J:2101:FMN:O4	2.08	0.53
2:J:608:MET:H	2:J:612:THR:CB	2.20	0.53
2:G:595:SER:HB3	2:G:602:PRO:CD	2.38	0.53
1:F:1491:ASN:H	1:F:1491:ASN:HD22	1.56	0.53
1:A:628:TYR:HD1	1:A:629:SER:N	2.06	0.53
2:I:1678:VAL:O	2:I:1679:LEU:HD23	2.09	0.53
1:E:968:PRO:HD2	1:E:1374:PRO:HB3	1.90	0.53
2:H:1436:ARG:NH2	2:H:1602:LEU:CD1	2.72	0.53
2:J:376:ARG:HH22	2:K:1340:LYS:CE	2.22	0.53
1:E:1307:PHE:HA	1:E:1568:ALA:HB2	1.90	0.53

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:C:452:ILE:HD12	1:C:467:LYS:HA	1.91	0.53
1:E:1094:LYS:HB3	1:E:1154:LEU:HB2	1.91	0.53
1:E:1052:ASP:O	1:E:1055:THR:O	2.26	0.53
2:I:825:SER:CB	2:I:1053:ILE:HG13	2.39	0.53
2:H:580:LEU:HD11	2:H:1098:LEU:HB3	1.91	0.53
1:A:1269:SER:O	1:E:1386:THR:HB	2.09	0.53
1:F:746:PHE:CE1	1:F:800:PRO:HG3	2.43	0.53
2:J:21:LEU:HD22	2:J:36:LEU:HG	1.91	0.53
2:H:699:ILE:N	2:H:699:ILE:HD12	2.24	0.53
2:I:379:GLY:O	2:I:391:VAL:HG13	2.09	0.53
1:E:636:TYR:CD1	1:E:888:ILE:HD11	2.44	0.53
1:D:1505:GLY:O	1:D:1509:THR:HG23	2.09	0.53
2:G:1142:ILE:HG13	2:G:1209:PRO:HG3	1.91	0.53
2:I:170:TYR:CE2	2:I:507:PHE:HB3	2.44	0.53
2:I:915:PHE:CD2	2:I:915:PHE:O	2.62	0.53
2:L:529:ASN:HD22	2:L:552:VAL:CG2	2.22	0.53
2:G:1805:PHE:O	2:G:1808:PRO:HD2	2.09	0.53
2:H:1156:ASP:HB2	2:H:1159:SER:H	1.73	0.53
2:I:1317:ASN:HB3	2:I:1320:ALA:HB3	1.90	0.53
2:K:327:PRO:HD2	2:L:1338:ARG:NH2	2.24	0.53
2:L:1982:ALA:O	2:L:1984:PRO:HD3	2.09	0.53
1:E:1451:LYS:HE2	1:E:1463:GLU:OE2	2.09	0.53
1:B:1330:GLU:OE2	1:B:1342:ARG:NH2	2.41	0.53
2:I:613:VAL:HG13	2:I:614:PRO:HD3	1.91	0.53
2:K:618:VAL:HG11	2:K:648:ILE:HD11	1.91	0.53
2:G:610:PRO:CD	4:G:2101:FMN:H6	2.26	0.53
1:D:628:TYR:CD1	1:D:628:TYR:C	2.81	0.53
2:G:1007:LEU:H	2:G:1007:LEU:CD1	2.15	0.53
2:G:930:THR:O	2:G:934:VAL:HG23	2.08	0.53
2:G:942:MET:HE2	2:G:955:LEU:HD13	1.90	0.53
2:I:1180:VAL:HG11	2:I:1187:PHE:CG	2.43	0.53
2:J:1180:VAL:HG11	2:J:1187:PHE:CG	2.43	0.53
1:D:570:TYR:HD2	1:D:574:ILE:HD11	1.73	0.53
2:K:743:TRP:CD2	2:K:761:ILE:HD11	2.44	0.53
2:J:1871:VAL:HG21	2:J:2003:VAL:HA	1.91	0.53
1:A:960:ARG:HH11	1:A:960:ARG:HG3	1.74	0.53
1:F:22:PHE:CE2	2:L:2017:PHE:CG	2.91	0.53
1:E:1306:GLY:O	1:E:1357:CYS:HB2	2.08	0.53
1:E:486:VAL:HG13	1:E:648:LEU:H	1.74	0.53
1:E:1512:LEU:HD21	1:E:1641:TYR:CE2	2.43	0.53
2:G:820:LYS:HG3	2:G:821:GLU:HG2	1.90	0.53
2:L:1171:TRP:CD1	2:L:1172:ARG:N	2.77	0.53

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:C:501:ASP:OD2	1:C:503:ARG:HB2	2.09	0.53
2:G:379:GLY:O	2:G:391:VAL:HG13	2.09	0.53
2:I:1176:PHE:CE1	2:I:1192:LEU:HD13	2.44	0.53
2:I:92:GLU:HB3	2:I:95:HIS:NE2	2.24	0.53
2:L:1317:ASN:HB3	2:L:1320:ALA:CB	2.39	0.53
1:D:415:TYR:CD2	1:D:1614:THR:HA	2.44	0.53
2:L:1554:PRO:HG3	2:L:1659:ILE:HD11	1.90	0.53
2:G:778:ALA:HB2	2:G:807:PHE:CD2	2.45	0.53
1:E:59:ARG:NH1	2:K:1926:GLN:HE21	2.07	0.53
2:I:980:LEU:HD22	2:I:986:LEU:HD21	1.91	0.53
1:E:1254:PHE:HB2	1:E:1257:THR:OG1	2.09	0.53
2:I:1566:LYS:O	2:I:1568:PRO:HD3	2.09	0.53
2:L:1620:VAL:O	2:L:1624:ALA:HB3	2.09	0.53
2:H:613:VAL:N	2:H:614:PRO:CD	2.72	0.52
2:H:752:HIS:NE2	2:H:856:THR:HG21	2.24	0.52
2:K:930:THR:HA	2:K:1007:LEU:HA	1.91	0.52
2:K:929:MET:HE1	2:K:934:VAL:HG22	1.91	0.52
2:L:1067:LEU:O	2:L:1068:GLN:HG2	2.10	0.52
2:L:613:VAL:N	2:L:614:PRO:CD	2.72	0.52
1:A:558:LEU:HA	1:F:557:ARG:HH11	1.73	0.52
2:K:1346:MET:CE	2:K:1617:ARG:NH2	2.72	0.52
1:F:998:GLY:CA	1:F:1361:VAL:HG13	2.31	0.52
2:H:1053:ILE:HD11	2:H:1061:VAL:HG13	1.91	0.52
2:K:440:HIS:NE2	2:K:499:VAL:HG23	2.25	0.52
2:I:1293:TRP:CZ3	2:I:1370:LEU:HD21	2.44	0.52
1:D:673:LEU:O	1:D:678:ALA:HB3	2.10	0.52
2:K:775:VAL:HG12	2:K:777:VAL:HG23	1.90	0.52
1:D:1491:ASN:H	1:D:1491:ASN:HD22	1.56	0.52
2:L:1500:ASN:HB2	2:L:1503:VAL:H	1.74	0.52
2:G:325:ALA:HB2	2:G:447:ALA:HB2	1.90	0.52
2:G:1288:PHE:CE2	2:G:1292:VAL:HG21	2.43	0.52
1:B:1494:TRP:HE1	1:B:1509:THR:HG21	1.74	0.52
2:J:1411:LYS:HE3	2:J:1441:ASP:OD2	2.09	0.52
1:E:1213:VAL:HG22	1:E:1300:ARG:CZ	2.39	0.52
1:E:1213:VAL:HG13	1:E:1217:GLU:HB2	1.91	0.52
2:J:1890:ARG:HB3	2:J:1994:ALA:HB2	1.92	0.52
2:H:1878:ARG:HE	2:H:1986:PRO:HG3	1.73	0.52
1:F:859:VAL:HG13	1:F:918:LEU:HD13	1.91	0.52
1:B:1032:MET:HE2	1:B:1165:PRO:HB3	1.91	0.52
2:H:1370:LEU:HA	2:H:1435:TYR:CE2	2.43	0.52
1:A:967:PHE:CG	1:A:1374:PRO:HG3	2.44	0.52
2:J:1176:PHE:CE1	2:J:1192:LEU:HD13	2.44	0.52

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:J:1234:ILE:HG12	2:J:1244:LEU:HD13	1.91	0.52
1:C:929:ARG:O	1:C:933:ILE:HG13	2.09	0.52
1:E:714:PHE:CE1	1:E:725:LEU:HD12	2.44	0.52
2:J:196:PHE:H	2:J:196:PHE:HD2	1.56	0.52
2:K:1653:LEU:CD2	2:K:1667:VAL:HG13	2.38	0.52
1:A:766:ALA:HA	1:A:769:ILE:HD12	1.91	0.52
2:J:1821:MET:HA	2:J:1826:LEU:HD12	1.91	0.52
1:F:967:PHE:HB3	1:F:968:PRO:HD2	1.91	0.52
2:K:1946:LEU:HD22	2:K:1951:ILE:HG12	1.92	0.52
2:G:992:ALA:O	2:G:995:ARG:HB3	2.09	0.52
2:G:1620:VAL:O	2:G:1624:ALA:HB3	2.09	0.52
2:I:410:ALA:HB1	2:I:414:LEU:HD12	1.90	0.52
2:J:655:GLY:HA3	2:J:1272:ALA:CB	2.39	0.52
2:H:1913:TRP:HZ3	2:H:1938:THR:HG21	1.73	0.52
1:D:988:VAL:HG12	1:D:990:LEU:HD23	1.90	0.52
2:L:1279:GLU:H	2:L:1279:GLU:CD	2.12	0.52
2:K:1813:MET:HG3	2:K:1814:GLU:N	2.24	0.52
2:G:1885:ALA:HB2	2:G:1998:LEU:HD21	1.90	0.52
2:I:727:VAL:HA	2:I:730:ILE:HG12	1.90	0.52
2:L:490:LEU:HA	2:L:493:MET:SD	2.50	0.52
1:B:1702:ARG:HG2	1:B:1702:ARG:NH1	2.16	0.52
2:K:1180:VAL:HG11	2:K:1187:PHE:CG	2.41	0.52
1:C:881:LEU:O	1:C:884:MET:HB2	2.09	0.52
2:G:930:THR:CG2	2:G:933:GLU:HG3	2.38	0.52
1:E:487:TYR:CE2	1:E:881:LEU:HD13	2.45	0.52
2:I:21:LEU:HD13	2:I:36:LEU:HD21	1.92	0.52
1:F:868:VAL:HG11	1:F:908:ILE:CD1	2.35	0.52
2:L:837:GLY:HA3	2:L:1074:LYS:HG2	1.91	0.52
2:L:1745:LEU:HD12	2:L:1746:THR:N	2.23	0.52
2:K:1464:LEU:HD13	2:K:1468:ARG:HG3	1.90	0.52
2:J:260:HIS:CE1	2:J:543:GLY:HA2	2.44	0.52
2:H:378:ILE:HD11	2:H:398:LEU:HA	1.92	0.52
1:C:1337:PRO:HA	1:C:1340:MET:CG	2.39	0.52
2:I:378:ILE:HD11	2:I:398:LEU:HA	1.90	0.52
2:H:411:PRO:HD2	2:H:414:LEU:CD1	2.39	0.52
1:B:1307:PHE:HB3	1:B:1357:CYS:CB	2.39	0.52
2:J:1207:THR:O	2:J:1215:THR:HG23	2.09	0.52
1:B:30:GLU:HB2	2:H:2045:ALA:CB	2.39	0.52
1:A:414:TYR:CE2	1:A:418:ILE:CD1	2.92	0.52
2:K:1157:VAL:HG13	2:K:1197:ALA:HA	1.90	0.52
2:J:882:LYS:HB3	2:J:898:ARG:NH1	2.24	0.52
2:I:422:THR:HG23	2:I:844:GLU:OE2	2.09	0.52

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:H:1457:HIS:ND1	2:H:1487:THR:HG22	2.24	0.52
2:H:1248:GLU:OE1	2:H:1248:GLU:HA	2.08	0.52
1:D:904:GLY:HA2	1:D:906:GLN:OE1	2.08	0.52
1:A:1297:GLY:HA2	1:E:1496:ARG:NH2	2.23	0.52
2:J:992:ALA:O	2:J:995:ARG:HB3	2.10	0.52
2:G:221:TYR:CE2	2:G:225:LEU:HD22	2.44	0.52
2:I:1064:THR:HG22	2:I:1065:CYS:N	2.24	0.52
2:K:752:HIS:NE2	2:K:856:THR:HG21	2.24	0.52
2:J:1350:ILE:HG22	2:J:1429:VAL:HG11	1.91	0.52
2:L:934:VAL:O	2:L:938:MET:HG3	2.08	0.52
1:F:636:TYR:CD1	1:F:888:ILE:HD11	2.44	0.52
2:K:857:VAL:CG1	2:K:876:TRP:CD1	2.92	0.52
1:D:487:TYR:CE2	1:D:881:LEU:HD13	2.45	0.52
1:D:558:LEU:HB2	1:D:563:GLN:CG	2.35	0.52
1:E:1703:VAL:CG1	1:E:1711:LEU:HB3	2.36	0.52
2:J:779:GLY:HA3	2:J:811:MET:CE	2.40	0.52
2:H:1468:ARG:NH1	2:H:1475:LEU:HD22	2.24	0.52
2:I:1770:ASN:HB2	2:I:1776:LYS:CE	2.39	0.52
2:J:391:VAL:HG12	2:J:398:LEU:HD21	1.91	0.52
2:J:48:LEU:HD13	2:J:101:VAL:HG11	1.91	0.52
2:G:794:GLY:O	2:G:804:PRO:HA	2.09	0.52
2:H:1411:LYS:HB3	2:H:1435:TYR:HB2	1.90	0.52
2:G:718:PRO:HG3	2:G:727:VAL:HG21	1.91	0.52
2:H:35:PHE:CE1	2:H:105:ILE:HD13	2.44	0.52
2:H:35:PHE:HZ	2:H:104:LEU:HB3	1.74	0.52
2:L:1383:VAL:HG23	2:L:1428:TYR:CE1	2.42	0.52
1:C:983:GLN:HB3	1:C:1418:ILE:HG21	1.91	0.52
2:H:1176:PHE:CE1	2:H:1192:LEU:HD13	2.45	0.52
1:A:1078:ILE:HG23	1:A:1352:MET:CE	2.40	0.52
2:H:1383:VAL:HG23	2:H:1428:TYR:CE1	2.43	0.52
1:F:336:PHE:O	1:F:339:GLN:HB2	2.09	0.52
2:I:1383:VAL:HG23	2:I:1428:TYR:CE1	2.43	0.52
2:J:962:PHE:O	2:J:965:ARG:HB3	2.08	0.52
1:D:1323:ALA:HB1	1:D:1351:PHE:CE2	2.44	0.52
1:A:1514:ILE:HD13	1:A:1545:LEU:HB3	1.90	0.52
1:D:1510:TRP:HZ3	1:D:1642:LEU:HA	1.74	0.52
2:K:196:PHE:H	2:K:196:PHE:HD2	1.58	0.52
2:H:979:LEU:HB2	2:H:996:ILE:HG23	1.91	0.52
1:F:985:ARG:HB3	1:F:1422:ARG:HH22	1.75	0.52
2:G:1813:MET:HG3	2:G:1814:GLU:N	2.23	0.52
1:B:679:LYS:HG2	1:B:708:GLN:HB3	1.91	0.52
1:D:983:GLN:O	1:D:987:MET:HG3	2.10	0.52

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:L:915:PHE:HB2	2:L:1030:PHE:CD1	2.44	0.52
2:K:1913:TRP:HZ3	2:K:1938:THR:HG21	1.74	0.52
1:F:1335:ARG:HH11	1:F:1339:GLU:HG2	1.73	0.52
1:D:1169:ASP:OD2	1:D:1171:ARG:HB2	2.10	0.52
1:D:382:ILE:HD12	1:D:761:SER:HB3	1.91	0.52
1:B:1448:ALA:CA	1:B:1451:LYS:HE3	2.33	0.52
1:D:427:ARG:HH11	1:D:492:ILE:HG12	1.75	0.52
2:H:1181:PHE:CD1	2:H:1191:PRO:HD2	2.43	0.52
2:H:1637:VAL:HG11	2:H:1679:LEU:HD22	1.90	0.52
1:E:1005:TRP:HE1	1:E:1561:LEU:HD22	1.71	0.52
2:K:837:GLY:HA3	2:K:1074:LYS:HG2	1.91	0.52
2:G:290:VAL:HG13	2:G:314:LEU:HD23	1.92	0.52
1:E:498:THR:HG21	1:E:858:LEU:CA	2.35	0.52
2:H:903:ILE:HD11	2:H:914:TRP:CZ2	2.45	0.52
2:L:674:ILE:HD13	2:L:705:TYR:HE2	1.72	0.52
1:F:767:HIS:CB	1:F:813:LEU:HD12	2.38	0.52
1:F:486:VAL:HG13	1:F:648:LEU:H	1.75	0.52
2:H:580:LEU:HD21	2:H:1095:ILE:HA	1.92	0.52
1:A:1480:ARG:NH2	1:E:1488:SER:O	2.37	0.52
2:L:1369:ASP:OD1	2:L:1371:LEU:HB3	2.09	0.52
1:D:929:ARG:O	1:D:933:ILE:HG13	2.10	0.52
2:H:1421:ARG:HG2	2:H:1421:ARG:O	2.08	0.52
1:B:1640:LYS:HG3	1:B:1641:TYR:N	2.23	0.52
2:G:378:ILE:HD11	2:G:398:LEU:HA	1.91	0.52
2:I:1175:MET:O	2:I:1192:LEU:HD12	2.10	0.52
1:A:746:PHE:CE1	1:A:800:PRO:HG3	2.44	0.52
1:D:407:ARG:NH1	1:D:1606:VAL:HG23	2.24	0.52
2:H:256:VAL:O	2:H:260:HIS:CD2	2.62	0.52
1:C:960:ARG:HG3	1:C:960:ARG:HH11	1.75	0.52
1:B:336:PHE:O	1:B:339:GLN:HB2	2.09	0.52
2:I:1554:PRO:HA	2:I:1659:ILE:HG12	1.90	0.52
2:I:1897:GLU:HG2	2:I:1901:GLN:NE2	2.25	0.52
1:C:1254:PHE:HB2	1:C:1257:THR:OG1	2.10	0.52
1:F:963:LEU:HD23	1:F:1023:GLU:HB3	1.90	0.52
1:F:1691:ILE:HG22	1:F:1695:VAL:HG23	1.91	0.52
2:G:952:ASP:OD1	2:G:953:PRO:HD2	2.09	0.52
2:J:656:ARG:HG2	2:J:656:ARG:NH1	2.23	0.52
2:L:930:THR:CG2	2:L:933:GLU:H	2.22	0.52
1:E:20:TYR:CE2	2:K:2062:THR:HG23	2.44	0.52
1:E:1079:ARG:CG	1:E:1079:ARG:NH1	2.70	0.52
1:F:1004:PRO:HD3	1:F:1572:TRP:CH2	2.44	0.52
2:G:1500:ASN:HB2	2:G:1503:VAL:H	1.74	0.52

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:K:1890:ARG:HB3	2:K:1994:ALA:HB2	1.92	0.52
2:J:1411:LYS:HB2	2:J:1439:TYR:CD1	2.44	0.52
1:C:767:HIS:CB	1:C:813:LEU:HD12	2.39	0.52
2:H:1725:HIS:CD2	2:H:1854:GLU:HB3	2.45	0.52
2:I:1053:ILE:HD11	2:I:1061:VAL:HG13	1.91	0.52
2:H:1074:LYS:HG3	2:H:1075:TYR:CD1	2.45	0.52
2:H:792:LEU:HD23	2:H:1094:HIS:CE1	2.44	0.52
2:L:35:PHE:CD2	2:L:37:VAL:HG22	2.44	0.52
1:F:1640:LYS:HG3	1:F:1641:TYR:HD1	1.73	0.52
2:G:1846:ALA:HB3	2:G:1847:LEU:HD12	1.91	0.52
2:J:1421:ARG:O	2:J:1421:ARG:HG2	2.06	0.52
1:B:546:ARG:HH11	1:B:631:LYS:HZ1	1.57	0.52
2:I:1324:PHE:N	2:I:1583:VAL:HG11	2.25	0.52
2:H:92:GLU:HA	2:H:95:HIS:CE1	2.45	0.52
2:J:1142:ILE:HG13	2:J:1209:PRO:HG3	1.92	0.52
1:F:1510:TRP:HZ3	1:F:1642:LEU:HA	1.74	0.52
1:C:418:ILE:HA	1:C:462:THR:HB	1.91	0.52
2:K:1643:VAL:CG1	2:K:1649:ILE:HD11	2.39	0.52
2:K:1377:SER:HB3	2:K:1432:GLN:HB2	1.91	0.52
2:K:1554:PRO:HA	2:K:1659:ILE:HG12	1.90	0.52
2:J:1017:LEU:HD21	2:J:1032:PRO:HB2	1.92	0.52
2:I:1403:ALA:HB2	2:I:1447:GLN:HG3	1.91	0.52
2:H:1157:VAL:HG13	2:H:1197:ALA:HA	1.90	0.52
2:H:728:ILE:HG22	2:H:732:LYS:HE3	1.90	0.52
2:I:834:ASP:O	2:I:836:PRO:HD3	2.10	0.52
1:D:1534:GLU:HG2	1:D:1625:PHE:CE1	2.45	0.52
2:J:1872:GLU:HA	2:J:1872:GLU:OE1	2.08	0.52
2:H:1279:GLU:H	2:H:1279:GLU:CD	2.12	0.52
1:B:88:ILE:HG21	2:H:1821:MET:CE	2.40	0.52
1:B:1451:LYS:HE2	1:B:1463:GLU:OE2	2.10	0.52
1:C:1686:PRO:HB2	1:C:1713:PHE:HD1	1.72	0.52
2:G:159:PHE:HA	2:G:162:ALA:HB3	1.92	0.52
2:K:1064:THR:HG22	2:K:1065:CYS:N	2.25	0.52
1:C:799:LEU:HD12	1:C:821:LEU:HB3	1.91	0.52
2:J:868:LEU:O	2:J:870:THR:HG23	2.09	0.52
2:J:1340:LYS:HE3	2:L:376:ARG:NH2	2.23	0.52
2:G:1410:GLY:HA3	2:G:1436:ARG:HA	1.92	0.52
2:I:1120:ILE:HD13	2:I:1173:HIS:CE1	2.45	0.52
1:B:452:ILE:HD12	1:B:467:LYS:HA	1.92	0.52
1:E:868:VAL:CG1	1:E:908:ILE:HD11	2.37	0.52
2:H:1464:LEU:HD13	2:H:1468:ARG:HG3	1.92	0.52
1:E:1037:ASN:CG	1:E:1674:ILE:HG23	2.30	0.52

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:H:388:ASN:HD22	2:H:389:PHE:N	2.07	0.52
1:D:551:LEU:C	1:D:551:LEU:HD23	2.29	0.52
2:H:789:TYR:CE1	2:H:1097:PHE:HB3	2.45	0.52
2:G:747:ARG:NH1	2:G:780:SER:HB3	2.24	0.52
1:D:405:TRP:CH2	1:D:1609:SER:HB3	2.43	0.52
2:G:792:LEU:HD12	2:G:792:LEU:O	2.09	0.52
2:J:138:ARG:HB3	2:J:192:THR:HG23	1.90	0.52
2:L:271:GLU:H	2:L:274:GLU:HG3	1.74	0.52
2:L:186:LEU:HD21	2:L:256:VAL:HG22	1.92	0.52
2:K:38:PRO:HG2	2:K:41:LEU:HD12	1.90	0.52
2:J:1653:LEU:CD2	2:J:1667:VAL:HG13	2.40	0.52
2:H:1554:PRO:HG3	2:H:1659:ILE:HD11	1.90	0.52
2:L:1653:LEU:CD2	2:L:1667:VAL:HG13	2.39	0.52
1:D:1001:GLU:O	1:D:1007:ASN:HA	2.10	0.52
2:L:1362:PHE:N	2:L:1363:PRO:HD2	2.24	0.52
2:I:1400:GLN:HG3	2:I:1448:ARG:HH12	1.74	0.52
2:J:1403:ALA:HB2	2:J:1447:GLN:HG3	1.92	0.52
1:C:1086:PHE:CE2	1:C:1310:PHE:HD2	2.27	0.52
2:J:2073:ASN:O	2:J:2076:LYS:HB3	2.09	0.52
2:H:1555:VAL:HG21	2:H:1824:LYS:HA	1.92	0.52
1:C:1095:GLN:O	1:C:1096:LEU:HD23	2.09	0.52
2:K:888:ARG:O	2:K:891:ARG:HB2	2.10	0.52
1:A:1691:ILE:HG22	1:A:1695:VAL:HG23	1.91	0.52
2:H:409:LYS:HB3	2:H:428:PHE:CZ	2.43	0.52
2:H:1231:THR:HG23	2:H:1595:VAL:CG2	2.34	0.52
2:H:1194:ARG:NH2	2:H:1601:ASN:CG	2.62	0.52
1:F:1079:ARG:CG	1:F:1079:ARG:NH1	2.63	0.52
1:A:427:ARG:NH1	1:A:427:ARG:HG3	2.06	0.52
2:K:917:ARG:HD3	2:K:937:ARG:CZ	2.40	0.52
2:I:524:ILE:HA	2:I:527:LEU:HD12	1.92	0.52
2:G:934:VAL:O	2:G:938:MET:HG3	2.09	0.52
1:A:631:LYS:O	1:A:635:ILE:HG22	2.09	0.52
2:H:1180:VAL:HG11	2:H:1187:PHE:CG	2.45	0.52
2:G:1009:ASN:HB2	2:G:1012:ASP:OD2	2.10	0.52
2:L:825:SER:CB	2:L:1053:ILE:HG13	2.40	0.52
2:I:931:TYR:O	2:I:935:VAL:HG12	2.09	0.52
2:J:1445:THR:CG2	2:J:1498:PHE:HB2	2.40	0.52
2:G:2059:HIS:HB2	2:G:2067:ILE:HG21	1.92	0.52
2:K:2044:THR:HG22	2:K:2046:LYS:H	1.73	0.52
1:B:1213:VAL:CG1	1:B:1214:HIS:N	2.72	0.52
1:B:1223:GLY:CA	1:B:1276:PRO:HD2	2.40	0.52
2:J:727:VAL:HA	2:J:730:ILE:HG12	1.90	0.52

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:H:788:THR:HG22	2:H:1094:HIS:HE1	1.75	0.52
2:H:192:THR:O	2:H:194:PRO:HD3	2.10	0.52
2:L:1083:ILE:HA	2:L:1086:ILE:HG13	1.92	0.52
2:K:186:LEU:HD23	2:K:256:VAL:HG13	1.92	0.52
1:D:1032:MET:HE3	1:D:1165:PRO:HB3	1.92	0.52
2:I:388:ASN:HD22	2:I:389:PHE:N	2.08	0.52
2:K:271:GLU:HB2	2:K:274:GLU:HG3	1.92	0.52
1:D:1640:LYS:HG3	1:D:1641:TYR:HD1	1.72	0.52
2:L:83:VAL:O	2:L:87:VAL:HG23	2.10	0.52
2:K:1171:TRP:CD1	2:K:1172:ARG:N	2.78	0.52
2:J:571:ASP:OD1	2:J:573:VAL:HG23	2.09	0.52
2:I:190:TYR:CD1	2:I:201:ILE:HD13	2.43	0.52
1:C:843:VAL:O	1:C:843:VAL:HG22	2.09	0.52
1:C:888:ILE:HA	1:C:891:LEU:HD12	1.91	0.52
2:K:1750:GLY:O	2:K:1755:LYS:HE3	2.09	0.52
2:K:1751:GLY:O	2:K:1755:LYS:HG2	2.10	0.52
2:G:1947:LYS:HG2	2:G:1993:PHE:CD1	2.45	0.52
2:H:161:ALA:HB1	2:H:166:ASN:HB2	1.90	0.52
2:K:31:LEU:HB2	2:K:72:VAL:HG22	1.92	0.52
2:K:77:ALA:O	2:K:139:ALA:HB1	2.09	0.52
2:J:979:LEU:HB2	2:J:996:ILE:HG23	1.90	0.52
2:J:1224:GLN:OE1	2:J:1224:GLN:HA	2.09	0.52
2:L:1156:ASP:HB2	2:L:1159:SER:H	1.74	0.52
1:A:1038:HIS:O	1:A:1048:SER:HA	2.09	0.52
1:E:358:PHE:C	1:E:358:PHE:CD2	2.82	0.52
1:A:1501:ALA:O	1:A:1504:ARG:HB2	2.10	0.52
2:L:460:ILE:O	2:L:486:ILE:HB	2.09	0.52
1:B:1278:GLY:CA	1:B:1630:LYS:HE2	2.37	0.52
1:A:558:LEU:HB2	1:A:563:GLN:CG	2.36	0.52
2:G:374:GLU:CA	2:G:377:HIS:CD2	2.81	0.52
2:I:600:VAL:HG13	2:I:601:PRO:N	2.24	0.52
2:K:2062:THR:HG22	2:K:2063:GLY:N	2.24	0.52
2:H:172:ILE:HG22	2:H:514:VAL:O	2.09	0.52
2:H:938:MET:O	2:H:942:MET:HG3	2.10	0.52
2:I:1610:MET:CA	2:I:1610:MET:HE2	2.33	0.52
1:F:636:TYR:CZ	1:F:640:LEU:HD22	2.44	0.52
1:C:1670:HIS:CE1	2:I:1009:ASN:ND2	2.77	0.52
2:L:2044:THR:HG22	2:L:2046:LYS:H	1.74	0.52
2:G:376:ARG:HE	2:H:1339:GLY:HA2	1.74	0.52
1:B:905:LEU:HD22	1:B:911:LEU:CD2	2.38	0.52
2:K:825:SER:CB	2:K:1053:ILE:HG13	2.39	0.52
2:H:747:ARG:NH1	2:H:780:SER:O	2.43	0.52

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:I:663:ILE:HD12	2:I:663:ILE:N	2.22	0.52
2:J:1074:LYS:HE3	2:J:1075:TYR:CE1	2.41	0.52
2:J:1074:LYS:HG3	2:J:1075:TYR:CD1	2.45	0.52
1:A:1052:ASP:O	1:A:1055:THR:O	2.28	0.52
2:H:741:LEU:O	2:H:741:LEU:CG	2.58	0.52
1:C:1183:VAL:HG13	1:C:1252:GLU:OE1	2.10	0.52
2:J:186:LEU:HD21	2:J:256:VAL:HG22	1.89	0.52
1:E:1218:VAL:HG22	1:E:1301:VAL:CG1	2.40	0.52
2:G:789:TYR:CE1	2:G:1097:PHE:HB3	2.45	0.52
2:L:820:LYS:HG3	2:L:821:GLU:HG2	1.92	0.52
2:L:378:ILE:HG23	2:L:391:VAL:CG1	2.39	0.52
2:K:1229:VAL:HG12	2:K:1230:LYS:N	2.25	0.52
2:G:21:LEU:HD13	2:G:36:LEU:HD21	1.91	0.52
1:A:1386:THR:HB	1:E:1269:SER:O	2.09	0.52
2:G:875:PHE:O	2:G:878:GLU:HB2	2.09	0.52
1:E:15:VAL:HG11	2:K:2022:LEU:HD21	1.91	0.52
2:I:378:ILE:HG23	2:I:391:VAL:CG1	2.40	0.52
1:B:1113:LYS:O	1:B:1117:GLU:HG3	2.10	0.52
2:K:1517:LEU:HD12	2:K:1521:GLU:HB2	1.90	0.52
1:B:1337:PRO:HA	1:B:1340:MET:HG3	1.92	0.52
2:I:1207:THR:O	2:I:1215:THR:HG23	2.09	0.52
1:C:1164:ILE:CD1	1:C:1355:GLN:HG3	2.39	0.52
2:K:1963:GLU:HA	2:K:1966:ARG:HB3	1.90	0.52
2:J:1753:ARG:HG3	2:J:1756:ILE:CD1	2.40	0.52
2:G:161:ALA:HB1	2:G:166:ASN:HB2	1.92	0.52
1:E:662:ALA:HA	1:E:694:TYR:CZ	2.44	0.52
1:C:411:LEU:HD22	1:C:1612:ILE:HD13	1.91	0.52
1:C:565:GLN:HG2	1:C:565:GLN:O	2.09	0.52
2:K:699:ILE:HD12	2:K:699:ILE:H	1.74	0.52
2:L:1157:VAL:HG22	2:L:1198:PRO:HD2	1.92	0.52
1:A:799:LEU:HD12	1:A:821:LEU:HB3	1.91	0.52
1:F:1451:LYS:HA	1:F:1454:ARG:NH2	2.25	0.52
2:K:930:THR:O	2:K:934:VAL:HG23	2.09	0.52
2:L:158:LEU:HD22	2:L:169:ILE:HD11	1.92	0.52
2:L:907:ASN:OD1	2:L:913:VAL:HG12	2.09	0.52
2:G:582:LYS:HG3	2:G:1110:VAL:HG11	1.92	0.52
2:K:250:PHE:O	2:K:315:LEU:HD23	2.10	0.52
2:J:911:GLN:NE2	2:J:1065:CYS:H	2.08	0.52
2:I:1115:TYR:OH	2:I:1173:HIS:HD2	1.93	0.52
2:G:1299:VAL:HG13	2:G:1301:PHE:CE1	2.45	0.52
1:A:1565:PRO:O	1:A:1566:LYS:C	2.47	0.52
2:G:460:ILE:O	2:G:486:ILE:HB	2.08	0.52

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:J:251:PRO:HG3	2:J:316:PHE:CA	2.39	0.52
2:H:1288:PHE:CE2	2:H:1292:VAL:HG21	2.45	0.52
2:J:820:LYS:HB3	2:J:1080:ASP:O	2.10	0.52
2:H:662:LEU:HD22	2:H:673:GLN:OE1	2.10	0.52
1:A:767:HIS:CG	1:A:813:LEU:HD12	2.45	0.52
1:A:1213:VAL:HG22	1:A:1300:ARG:CZ	2.40	0.52
1:D:1211:LYS:HE3	1:D:1711:LEU:HD21	1.92	0.52
1:D:962:ASN:CB	2:J:969:ARG:HD2	2.40	0.52
2:J:1171:TRP:CD1	2:J:1172:ARG:N	2.78	0.52
2:H:271:GLU:H	2:H:274:GLU:HG3	1.75	0.52
2:K:792:LEU:HD23	2:K:1094:HIS:CE1	2.45	0.52
2:G:1804:GLN:HB3	2:G:1861:PHE:CE1	2.45	0.52
1:A:1512:LEU:HD21	1:A:1641:TYR:CE2	2.45	0.52
2:K:24:LEU:HD12	2:K:37:VAL:CG2	2.40	0.52
2:L:1229:VAL:HG12	2:L:1230:LYS:N	2.23	0.52
2:J:35:PHE:HZ	2:J:104:LEU:HB3	1.75	0.52
1:A:551:LEU:HD21	1:F:562:SER:CB	2.39	0.52
2:K:1653:LEU:HD21	2:K:1667:VAL:HG13	1.92	0.52
1:A:1323:ALA:HB1	1:A:1351:PHE:CE2	2.45	0.52
1:E:766:ALA:HA	1:E:769:ILE:HD12	1.92	0.52
1:F:1084:GLU:H	1:F:1084:GLU:CD	2.13	0.52
2:L:935:VAL:HG11	2:L:997:LEU:HD21	1.92	0.52
1:C:519:PHE:O	1:C:523:VAL:HG23	2.09	0.52
2:J:1248:GLU:HA	2:J:1248:GLU:OE1	2.10	0.52
2:L:735:PRO:HA	2:L:773:ASN:OD1	2.10	0.52
2:G:979:LEU:HB2	2:G:996:ILE:HG23	1.92	0.52
2:H:656:ARG:HG2	2:H:656:ARG:NH1	2.24	0.52
2:K:938:MET:HE2	2:K:959:THR:HG22	1.91	0.52
2:J:752:HIS:CE1	2:J:856:THR:HG21	2.45	0.52
1:E:997:THR:CG2	1:E:1361:VAL:HG22	2.40	0.52
1:A:997:THR:CG2	1:A:1361:VAL:HG22	2.40	0.52
1:C:529:GLY:HA3	1:C:611:THR:CG2	2.40	0.52
2:J:285:HIS:CD2	2:J:501:TRP:CE3	2.98	0.52
2:K:1500:ASN:HB2	2:K:1503:VAL:H	1.76	0.52
2:G:250:PHE:CB	2:G:251:PRO:HD3	2.40	0.52
1:F:26:VAL:CG2	2:L:2006:HIS:CE1	2.93	0.52
1:F:22:PHE:HE2	2:L:2017:PHE:CB	2.22	0.52
1:F:1580:VAL:O	1:F:1617:ILE:HD11	2.09	0.52
2:H:2005:PHE:HA	2:H:2010:LEU:HD11	1.92	0.52
2:H:1795:SER:HB3	2:H:1799:LEU:HD12	1.92	0.52
2:I:1725:HIS:CD2	2:I:1854:GLU:CB	2.93	0.52
1:A:1032:MET:HE2	1:A:1165:PRO:HB3	1.92	0.52

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:983:GLN:O	1:A:987:MET:HG3	2.10	0.52
1:E:408:GLN:HG2	1:E:1610:ARG:NH1	2.25	0.52
2:L:1171:TRP:CH2	2:L:1236:LEU:HB2	2.44	0.52
2:L:271:GLU:HB2	2:L:274:GLU:HG3	1.92	0.52
1:C:983:GLN:O	1:C:987:MET:HG3	2.10	0.52
2:H:1305:LEU:HD23	2:H:1366:ILE:HD11	1.92	0.52
2:J:22:ARG:HD2	2:J:42:HIS:HB3	1.92	0.52
2:J:699:ILE:HD12	2:J:699:ILE:N	2.24	0.52
1:B:1323:ALA:HB1	1:B:1351:PHE:CE2	2.45	0.52
2:K:979:LEU:HB2	2:K:996:ILE:HG23	1.92	0.52
2:K:776:LEU:HG	2:K:807:PHE:CE2	2.45	0.52
1:E:799:LEU:HD12	1:E:821:LEU:HB3	1.91	0.52
2:I:713:HIS:CD2	2:I:740:ILE:HD13	2.45	0.52
2:I:204:ILE:HG23	2:I:312:VAL:HG11	1.91	0.52
2:I:161:ALA:HB1	2:I:166:ASN:HB2	1.91	0.52
1:A:1014:MET:O	1:A:1590:ARG:NH2	2.37	0.52
2:L:1231:THR:CG2	2:L:1595:VAL:HG11	2.39	0.51
2:L:1232:VAL:HA	2:L:1245:THR:O	2.10	0.51
2:I:726:GLN:O	2:I:730:ILE:HG12	2.10	0.51
2:K:1026:LYS:HE2	2:K:1045:ASP:OD2	2.10	0.51
2:K:608:MET:HA	4:K:2101:FMN:N5	2.25	0.51
2:L:600:VAL:HG13	2:L:601:PRO:N	2.25	0.51
2:L:930:THR:HA	2:L:1007:LEU:HA	1.90	0.51
1:A:907:PHE:O	1:A:909:PRO:HD3	2.10	0.51
2:L:825:SER:O	2:L:828:ALA:HB3	2.10	0.51
2:H:43:PHE:CD1	2:I:22:ARG:CZ	2.92	0.51
2:H:2044:THR:HG22	2:H:2046:LYS:H	1.75	0.51
1:D:911:LEU:HD12	1:D:911:LEU:O	2.09	0.51
2:J:289:ILE:HG12	2:J:493:MET:CE	2.40	0.51
2:J:1370:LEU:CD1	2:J:1373:LEU:HD13	2.38	0.51
2:G:1986:PRO:O	2:G:1987:VAL:HB	2.11	0.51
1:A:469:LEU:O	1:A:472:GLN:HB3	2.09	0.51
2:K:44:GLN:HG3	2:K:101:VAL:CG2	2.39	0.51
1:D:1179:ILE:O	1:D:1183:VAL:HG23	2.10	0.51
2:G:1203:TYR:HB3	2:G:1220:ARG:HB2	1.91	0.51
1:C:1213:VAL:HG13	1:C:1217:GLU:HB2	1.92	0.51
2:J:21:LEU:HA	2:J:37:VAL:O	2.10	0.51
2:I:1324:PHE:HA	2:I:1583:VAL:HG11	1.92	0.51
2:J:1643:VAL:CG1	2:J:1649:ILE:HD11	2.40	0.51
2:K:1369:ASP:OD1	2:K:1371:LEU:HB3	2.10	0.51
2:K:1740:ASN:O	2:K:1742:PRO:HD3	2.10	0.51
2:J:1128:PRO:HG2	2:J:1135:ALA:CB	2.41	0.51

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:K:2053:GLU:HA	2:K:2056:GLU:OE1	2.10	0.51
1:A:1090:ASP:OD1	1:A:1092:ASN:HB2	2.10	0.51
1:F:1014:MET:O	1:F:1590:ARG:NH2	2.37	0.51
1:A:1606:VAL:O	1:A:1608:PRO:HD3	2.10	0.51
1:F:36:LEU:HD21	1:F:44:ILE:HD11	1.92	0.51
2:H:1017:LEU:O	2:H:1021:GLN:HG3	2.10	0.51
2:G:505:THR:HG22	2:G:505:THR:O	2.09	0.51
2:J:834:ASP:O	2:J:836:PRO:HD3	2.10	0.51
1:F:1168:TRP:NE1	1:F:1173:TYR:HE1	2.07	0.51
1:D:1514:ILE:HD13	1:D:1545:LEU:HB3	1.91	0.51
2:L:325:ALA:HB2	2:L:447:ALA:HB2	1.93	0.51
2:H:290:VAL:HG13	2:H:314:LEU:HD23	1.92	0.51
2:L:752:HIS:NE2	2:L:856:THR:HG22	2.25	0.51
2:H:818:THR:HA	2:H:829:LYS:HE2	1.93	0.51
2:H:928:ASP:HA	2:H:1007:LEU:HD23	1.92	0.51
2:G:285:HIS:CD2	2:G:501:TRP:CE3	2.99	0.51
2:G:1890:ARG:HB3	2:G:1994:ALA:HB2	1.93	0.51
2:L:2057:GLU:HA	2:L:2060:ARG:HH12	1.74	0.51
2:I:38:PRO:HG2	2:I:41:LEU:HD12	1.91	0.51
2:K:824:THR:HG22	2:K:828:ALA:HB3	1.92	0.51
1:A:408:GLN:HE22	1:A:1610:ARG:H	1.58	0.51
1:C:1580:VAL:O	1:C:1617:ILE:HD11	2.09	0.51
2:L:1074:LYS:HG3	2:L:1075:TYR:CD1	2.45	0.51
1:C:1674:ILE:HD12	2:I:1010:ALA:CB	2.40	0.51
2:I:1468:ARG:NH1	2:I:1475:LEU:HD22	2.25	0.51
2:K:1411:LYS:HB3	2:K:1435:TYR:HB2	1.90	0.51
1:C:21:GLN:O	2:I:2006:HIS:HD2	1.93	0.51
2:L:388:ASN:HD22	2:L:389:PHE:N	2.09	0.51
1:B:759:ILE:HG12	1:B:813:LEU:HD23	1.93	0.51
2:H:192:THR:C	2:H:194:PRO:HD3	2.29	0.51
1:E:1337:PRO:HA	1:E:1340:MET:CG	2.40	0.51
2:H:271:GLU:HB2	2:H:274:GLU:HG3	1.92	0.51
2:J:76:VAL:O	2:J:80:ILE:HG13	2.11	0.51
2:G:256:VAL:O	2:G:260:HIS:CD2	2.63	0.51
2:K:411:PRO:HD2	2:K:414:LEU:CD1	2.39	0.51
2:J:1963:GLU:HA	2:J:1966:ARG:HB3	1.92	0.51
2:L:966:VAL:O	2:L:970:PHE:HD1	1.94	0.51
1:F:1307:PHE:HB3	1:F:1357:CYS:HB2	1.92	0.51
2:G:616:ASP:OD2	2:G:823:HIS:NE2	2.44	0.51
2:H:1142:ILE:HG13	2:H:1209:PRO:HG3	1.92	0.51
2:G:861:MET:HB2	2:G:863:GLU:HG2	1.91	0.51
2:H:962:PHE:O	2:H:965:ARG:HB3	2.10	0.51

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:L:931:TYR:O	2:L:935:VAL:HG12	2.10	0.51
1:B:754:ARG:N	1:B:810:ASN:HB3	2.25	0.51
2:L:1729:ASN:O	2:L:1757:ILE:HG23	2.10	0.51
1:A:828:TRP:HE1	1:A:838:THR:HA	1.74	0.51
1:F:1393:VAL:N	1:F:1394:PRO:CD	2.73	0.51
1:C:687:PHE:CD2	1:C:687:PHE:C	2.84	0.51
2:K:155:ASP:HB3	2:K:278:ARG:NH1	2.25	0.51
2:J:1232:VAL:HA	2:J:1245:THR:O	2.11	0.51
2:I:613:VAL:N	2:I:614:PRO:CD	2.73	0.51
2:K:928:ASP:HA	2:K:1007:LEU:HD23	1.92	0.51
2:L:752:HIS:CE1	2:L:856:THR:HG21	2.45	0.51
2:K:489:GLU:O	2:K:493:MET:HG3	2.11	0.51
2:I:1411:LYS:HB2	2:I:1439:TYR:CD1	2.45	0.51
1:F:673:LEU:HD21	1:F:884:MET:CE	2.41	0.51
2:J:460:ILE:O	2:J:486:ILE:HB	2.10	0.51
2:K:1288:PHE:CE2	2:K:1292:VAL:HG21	2.44	0.51
2:I:208:LEU:HD12	2:I:227:ILE:CD1	2.38	0.51
2:G:1872:GLU:OE1	2:G:1872:GLU:HA	2.09	0.51
2:G:1421:ARG:HD2	2:G:1426:VAL:CG2	2.40	0.51
1:E:1218:VAL:O	1:E:1271:GLY:HA3	2.09	0.51
2:G:580:LEU:HD21	2:G:1095:ILE:HA	1.91	0.51
2:K:1299:VAL:HG22	2:K:1301:PHE:CD1	2.46	0.51
2:G:1175:MET:HA	2:G:1274:ILE:CD1	2.40	0.51
1:D:843:VAL:O	1:D:843:VAL:HG22	2.10	0.51
2:G:1266:HIS:CD2	2:G:1275:ARG:CZ	2.94	0.51
2:J:92:GLU:HB3	2:J:95:HIS:NE2	2.26	0.51
2:I:699:ILE:HD12	2:I:699:ILE:N	2.26	0.51
2:I:580:LEU:HD21	2:I:1095:ILE:HA	1.91	0.51
2:H:325:ALA:HB2	2:H:447:ALA:HB2	1.92	0.51
1:B:448:MET:HA	1:B:448:MET:HE3	1.92	0.51
2:L:1028:VAL:HG13	2:L:1030:PHE:CD2	2.46	0.51
1:A:995:VAL:HG13	1:A:1375:ILE:HG23	1.92	0.51
2:J:1473:PHE:HE1	2:J:1513:VAL:HG21	1.75	0.51
2:J:1369:ASP:OD1	2:J:1371:LEU:HB3	2.10	0.51
2:G:1402:ASN:ND2	2:G:1416:CYS:HB2	2.25	0.51
1:B:943:VAL:CG2	2:H:1539:PRO:HG3	2.40	0.51
2:L:1217:ILE:O	2:L:1233:GLU:HA	2.10	0.51
1:F:1254:PHE:HB2	1:F:1257:THR:OG1	2.10	0.51
2:H:1594:ARG:CG	2:H:1594:ARG:NH1	2.64	0.51
2:J:1047:LEU:H	2:J:1047:LEU:HD12	1.76	0.51
2:I:917:ARG:HD3	2:I:937:ARG:CZ	2.39	0.51
1:C:427:ARG:NH1	1:C:492:ILE:HG12	2.25	0.51

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:D:1670:HIS:CE1	2:J:1009:ASN:ND2	2.79	0.51
2:I:285:HIS:CD2	2:I:501:TRP:CE3	2.98	0.51
2:H:285:HIS:CD2	2:H:501:TRP:CE3	2.98	0.51
1:D:833:TRP:HH2	1:D:839:ILE:HD11	1.76	0.51
2:I:2062:THR:HG22	2:I:2063:GLY:N	2.24	0.51
1:D:498:THR:HG21	1:D:858:LEU:O	2.11	0.51
1:B:1565:PRO:O	1:B:1567:GLY:N	2.43	0.51
2:K:2013:GLY:C	2:K:2016:PRO:HD2	2.31	0.51
1:A:1584:GLY:HA2	1:A:1617:ILE:CD1	2.41	0.51
2:H:837:GLY:HA3	2:H:1074:LYS:HG2	1.91	0.51
2:K:1986:PRO:O	2:K:1987:VAL:HB	2.10	0.51
1:B:1386:THR:HG22	1:B:1629:GLN:HE21	1.74	0.51
1:A:1494:TRP:HE1	1:A:1509:THR:HG21	1.74	0.51
2:K:1551:ILE:CG2	2:K:1552:GLU:N	2.73	0.51
2:H:21:LEU:HD13	2:H:36:LEU:HD21	1.93	0.51
2:K:1093:ASP:O	2:K:1097:PHE:HD1	1.93	0.51
1:F:570:TYR:CE1	1:F:574:ILE:HD11	2.45	0.51
1:C:1386:THR:HG22	1:C:1629:GLN:HE21	1.76	0.51
2:H:1171:TRP:CH2	2:H:1236:LEU:HB2	2.45	0.51
2:I:1104:ASP:N	2:I:1104:ASP:OD1	2.44	0.51
1:C:1323:ALA:HB1	1:C:1351:PHE:CE2	2.45	0.51
1:A:1113:LYS:O	1:A:1117:GLU:HG3	2.10	0.51
1:F:1131:GLU:HG2	1:F:1138:TYR:CE2	2.46	0.51
1:C:1473:HIS:CD2	1:F:1414:PRO:HG2	2.45	0.51
1:F:1186:VAL:HG23	1:F:1309:ASP:HB2	1.92	0.51
2:J:1725:HIS:CD2	2:J:1854:GLU:HB3	2.46	0.51
1:E:956:ILE:HA	2:K:977:PRO:HA	1.93	0.51
2:I:1753:ARG:HG3	2:I:1756:ILE:HD11	1.93	0.51
1:E:904:GLY:HA2	1:E:906:GLN:OE1	2.11	0.51
1:E:1090:ASP:OD1	1:E:1092:ASN:HB2	2.10	0.51
1:A:1448:ALA:CA	1:A:1451:LYS:HE3	2.35	0.51
1:D:1451:LYS:HE2	1:D:1463:GLU:OE2	2.10	0.51
2:I:752:HIS:CE1	2:I:856:THR:HG21	2.46	0.51
2:H:459:LYS:O	2:H:461:PRO:HD3	2.11	0.51
1:B:1108:PRO:HA	1:B:1140:VAL:O	2.09	0.51
1:A:558:LEU:HA	1:F:557:ARG:NH1	2.25	0.51
2:J:1610:MET:CA	2:J:1610:MET:HE2	2.28	0.51
1:E:628:TYR:OH	1:E:630:LYS:HE2	2.10	0.51
2:K:376:ARG:HH22	2:L:1340:LYS:HE3	1.75	0.51
1:A:965:TYR:OH	1:A:1199:LEU:HD22	2.09	0.51
2:J:1064:THR:HG22	2:J:1065:CYS:N	2.25	0.51
1:A:1218:VAL:O	1:A:1271:GLY:HA3	2.11	0.51

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:868:VAL:CG1	1:A:908:ILE:HD11	2.36	0.51
1:B:498:THR:HG21	1:B:858:LEU:O	2.11	0.51
2:K:718:PRO:HG3	2:K:727:VAL:HG21	1.92	0.51
2:H:1891:ILE:HD12	2:H:1895:PHE:CE2	2.45	0.51
2:G:1411:LYS:HB3	2:G:1435:TYR:HB2	1.91	0.51
2:G:1350:ILE:HG22	2:G:1429:VAL:HG11	1.93	0.51
1:F:1042:LEU:HD12	1:F:1058:PRO:HG3	1.92	0.51
1:C:1505:GLY:O	1:C:1509:THR:HG23	2.10	0.51
1:B:1640:LYS:HG3	1:B:1641:TYR:HD1	1.73	0.51
1:C:1213:VAL:CG1	1:C:1214:HIS:N	2.74	0.51
2:G:857:VAL:CG1	2:G:876:TRP:NE1	2.74	0.51
2:J:350:MET:HG3	2:J:435:ILE:CG2	2.41	0.51
2:G:350:MET:HG3	2:G:435:ILE:CG2	2.40	0.51
2:I:1982:ALA:O	2:I:1984:PRO:HD3	2.10	0.51
1:D:782:LYS:NZ	1:D:786:LYS:HD2	2.26	0.51
2:J:1217:ILE:O	2:J:1233:GLU:HA	2.10	0.51
1:C:24:MET:HE2	2:I:2043:VAL:HG12	1.93	0.51
1:A:450:TYR:C	1:A:450:TYR:CD2	2.84	0.51
2:G:196:PHE:H	2:G:196:PHE:HD2	1.56	0.51
1:E:1050:TRP:HA	1:E:1050:TRP:CE3	2.46	0.51
2:J:272:PRO:HG2	2:J:300:THR:O	2.10	0.51
2:G:752:HIS:NE2	2:G:856:THR:HG21	2.26	0.51
2:G:613:VAL:N	2:G:614:PRO:CD	2.73	0.51
1:B:579:MET:HE2	1:E:612:ILE:HD12	1.91	0.51
2:L:751:HIS:HB2	3:L:2102:NAP:N7N	2.24	0.51
2:L:501:TRP:NE1	2:L:528:THR:CG2	2.72	0.51
1:A:628:TYR:OH	1:A:630:LYS:HE2	2.09	0.51
2:I:1637:VAL:HG11	2:I:1679:LEU:CD1	2.33	0.51
2:G:376:ARG:HH22	2:H:1340:LYS:HE3	1.75	0.51
1:E:1565:PRO:O	1:E:1567:GLY:N	2.44	0.51
1:F:684:THR:HG21	1:F:691:VAL:HG11	1.93	0.51
2:J:250:PHE:CB	2:J:251:PRO:HD3	2.41	0.51
2:L:1932:ASP:O	2:L:1936:LEU:HD23	2.10	0.51
1:B:1213:VAL:HG22	1:B:1300:ARG:CZ	2.40	0.51
1:C:1306:GLY:O	1:C:1357:CYS:HB2	2.10	0.51
1:D:853:MET:HG2	1:D:856:ASN:ND2	2.26	0.51
2:K:21:LEU:HD13	2:K:36:LEU:HD21	1.92	0.51
2:H:1324:PHE:HA	2:H:1583:VAL:HG11	1.93	0.51
1:D:1113:LYS:O	1:D:1117:GLU:HG3	2.10	0.51
2:H:699:ILE:H	2:H:699:ILE:CD1	2.24	0.51
1:E:336:PHE:O	1:E:339:GLN:HB2	2.10	0.51
2:K:1142:ILE:HG13	2:K:1209:PRO:HG3	1.92	0.51

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:F:1514:ILE:O	1:F:1547:ARG:NH1	2.43	0.51
1:C:418:ILE:O	1:C:418:ILE:HG22	2.11	0.51
1:F:890:ASN:OD1	2:G:1755:LYS:HE2	2.09	0.51
1:A:988:VAL:HG12	1:A:990:LEU:HD23	1.92	0.51
2:L:1384:PRO:HB3	2:L:1829:ARG:NH1	2.26	0.51
2:L:1384:PRO:CB	2:L:1829:ARG:HH12	2.24	0.51
2:L:1887:ASN:OD1	2:L:1889:SER:HB2	2.11	0.51
1:C:1132:ILE:HD12	1:C:1137:GLN:HB2	1.90	0.51
2:L:283:THR:HG23	2:L:470:TYR:O	2.11	0.51
2:J:1123:ALA:O	2:J:1126:GLU:HG3	2.11	0.51
1:A:1083:PRO:HD2	1:A:1084:GLU:OE2	2.10	0.51
1:D:857:ASN:HA	1:D:860:ALA:HB2	1.92	0.51
2:G:187:ARG:NH2	2:G:230:TRP:O	2.44	0.51
2:J:735:PRO:HA	2:J:773:ASN:OD1	2.10	0.51
2:L:700:GLU:CD	2:L:700:GLU:H	2.14	0.51
1:C:1014:MET:O	1:C:1590:ARG:NH2	2.38	0.51
1:E:36:LEU:HD22	1:E:61:LEU:HD21	1.93	0.51
1:B:1542:LEU:HD22	1:B:1547:ARG:HD3	1.92	0.51
1:A:1451:LYS:HA	1:A:1454:ARG:NH2	2.26	0.51
2:I:1246:LEU:HD11	2:I:1261:PHE:HE1	1.75	0.51
2:L:608:MET:H	2:L:612:THR:CB	2.23	0.51
2:H:600:VAL:HG13	2:H:601:PRO:N	2.26	0.51
2:G:751:HIS:HB2	3:G:2102:NAP:N7N	2.26	0.51
2:I:24:LEU:HD12	2:I:37:VAL:CG2	2.40	0.51
2:H:43:PHE:CE1	2:I:42:HIS:CE1	2.98	0.51
1:C:1367:LEU:HD22	1:C:1371:MET:HG3	1.92	0.51
2:K:605:VAL:CB	2:K:628:ILE:HG13	2.36	0.51
2:K:914:TRP:CD1	2:K:916:GLY:HA3	2.45	0.51
2:L:903:ILE:HD11	2:L:914:TRP:CZ2	2.45	0.51
2:L:783:GLY:HA3	2:L:1075:TYR:CB	2.37	0.51
2:J:1370:LEU:CA	2:J:1435:TYR:HE2	2.24	0.51
2:J:1436:ARG:HH22	2:J:1602:LEU:CD1	2.24	0.51
2:L:1770:ASN:HB2	2:L:1776:LYS:CE	2.39	0.51
2:J:1028:VAL:HG13	2:J:1030:PHE:CD2	2.46	0.51
2:J:718:PRO:HG3	2:J:727:VAL:HG21	1.90	0.51
2:K:2021:LEU:O	2:K:2025:ILE:HG13	2.09	0.51
2:H:1175:MET:HA	2:H:1274:ILE:CD1	2.41	0.51
2:H:1175:MET:HE1	2:H:1234:ILE:HG21	1.91	0.51
2:K:1203:TYR:HB3	2:K:1220:ARG:HB2	1.91	0.51
2:J:35:PHE:CE1	2:J:105:ILE:HD13	2.46	0.51
2:H:1229:VAL:HG12	2:H:1230:LYS:N	2.25	0.51
2:K:912:LYS:HB3	2:K:1030:PHE:HA	1.93	0.51

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:J:1805:PHE:O	2:J:1808:PRO:HD2	2.11	0.51
1:B:441:ASN:HB2	1:B:444:LEU:H	1.76	0.51
2:L:1175:MET:HA	2:L:1274:ILE:CD1	2.40	0.51
2:G:1157:VAL:HG13	2:G:1197:ALA:HA	1.92	0.51
1:E:571:LYS:O	1:E:575:ARG:HG2	2.11	0.51
1:D:1691:ILE:HG22	1:D:1695:VAL:HG23	1.92	0.51
1:E:329:THR:O	1:E:332:GLN:HB2	2.10	0.51
1:F:875:GLU:O	1:F:878:PHE:HB3	2.11	0.51
1:F:960:ARG:HH11	1:F:960:ARG:HG3	1.76	0.51
1:F:988:VAL:HG12	1:F:990:LEU:HD23	1.92	0.51
1:E:536:SER:HB3	1:E:540:LYS:HD2	1.92	0.51
1:C:6:GLU:HA	2:I:2050:ILE:HD11	1.92	0.51
2:J:1067:LEU:HB2	4:J:2101:FMN:HM71	1.92	0.51
2:H:911:GLN:NE2	2:H:1065:CYS:H	2.09	0.51
2:J:825:SER:O	2:J:828:ALA:HB3	2.10	0.51
1:D:673:LEU:HD21	1:D:884:MET:CE	2.41	0.51
1:B:911:LEU:O	1:B:911:LEU:HD12	2.11	0.51
1:F:868:VAL:CG1	1:F:908:ILE:HD11	2.34	0.51
2:L:1405:ILE:HA	2:L:1445:THR:OG1	2.11	0.51
2:J:1099:LEU:HD12	2:J:1103:TYR:CB	2.40	0.51
2:L:1930:ALA:HB1	2:L:2004:PRO:HB3	1.93	0.51
2:J:1764:MET:HG3	2:J:1781:PHE:HE1	1.76	0.51
2:K:1411:LYS:HE3	2:K:1441:ASP:OD2	2.11	0.51
2:K:1725:HIS:CD2	2:K:1854:GLU:HB3	2.46	0.51
2:I:1709:TYR:CD2	2:I:1709:TYR:C	2.83	0.51
1:C:846:TRP:HZ2	1:C:856:ASN:O	1.93	0.51
2:J:271:GLU:HB2	2:J:274:GLU:HG3	1.93	0.51
1:F:506:ILE:HD11	1:F:926:SER:CB	2.38	0.51
2:K:788:THR:HG22	2:K:1094:HIS:HE1	1.74	0.51
2:H:1171:TRP:CD1	2:H:1172:ARG:N	2.78	0.51
2:H:379:GLY:O	2:H:391:VAL:HG13	2.11	0.51
2:H:784:GLY:HA3	2:H:786:GLU:OE2	2.10	0.51
2:I:1083:ILE:HA	2:I:1086:ILE:HG13	1.92	0.51
1:F:987:MET:O	1:F:1490:GLY:HA3	2.11	0.51
2:L:159:PHE:HA	2:L:162:ALA:HB3	1.91	0.51
2:K:1521:GLU:OE2	2:K:2028:THR:HG21	2.11	0.51
2:H:1947:LYS:HG2	2:H:1993:PHE:CD1	2.46	0.51
2:J:202:THR:O	2:J:206:GLU:HG3	2.11	0.51
2:I:861:MET:HB2	2:I:863:GLU:HG2	1.91	0.51
2:K:327:PRO:HD2	2:L:1338:ARG:HH21	1.75	0.51
2:H:980:LEU:HD22	2:H:986:LEU:HD21	1.93	0.51
1:F:537:ASN:O	1:F:541:VAL:HG23	2.10	0.51

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:J:1586:ASP:OD1	2:J:1588:ASN:HB2	2.11	0.51
2:I:1217:ILE:O	2:I:1233:GLU:HA	2.11	0.51
1:F:1001:GLU:HG2	1:F:1008:ALA:HB2	1.92	0.51
2:G:1362:PHE:N	2:G:1363:PRO:HD2	2.25	0.51
1:F:929:ARG:O	1:F:933:ILE:HG13	2.11	0.51
1:F:751:GLU:OE1	1:F:770:MET:HE1	2.11	0.51
2:J:1156:ASP:HB2	2:J:1159:SER:H	1.74	0.51
2:H:281:GLY:HA3	2:H:470:TYR:HE1	1.76	0.51
2:G:1574:PRO:HD3	2:G:1611:TYR:CE2	2.46	0.51
1:D:1068:TYR:O	1:D:1072:ILE:HG13	2.11	0.51
2:G:1555:VAL:O	2:G:1555:VAL:HG12	2.10	0.51
1:A:1229:THR:HB	1:A:1311:GLN:HG3	1.92	0.51
2:H:735:PRO:HA	2:H:773:ASN:OD1	2.10	0.51
2:L:1375:HIS:CE1	2:L:1610:MET:SD	3.03	0.51
1:A:1107:GLU:HG3	1:A:1108:PRO:CD	2.37	0.51
1:A:1108:PRO:HA	1:A:1140:VAL:O	2.09	0.51
2:I:929:MET:HE1	2:I:934:VAL:HG22	1.92	0.51
1:A:881:LEU:O	1:A:884:MET:HB2	2.11	0.51
1:E:1708:ASN:OD1	1:E:1708:ASN:N	2.40	0.51
2:I:1251:THR:HG22	2:I:1292:VAL:HG13	1.93	0.51
1:A:973:TRP:NE1	1:A:1648:LYS:HB2	2.25	0.51
2:L:1725:HIS:CD2	2:L:1854:GLU:HB3	2.45	0.51
2:I:159:PHE:HA	2:I:162:ALA:HB3	1.92	0.51
2:I:779:GLY:HA3	2:I:811:MET:CE	2.38	0.51
2:J:1410:GLY:HA3	2:J:1436:ARG:HA	1.93	0.51
2:J:1986:PRO:O	2:J:1987:VAL:HB	2.11	0.51
2:L:2039:TYR:O	2:L:2041:PRO:HD3	2.10	0.51
2:G:1375:HIS:CE1	2:G:1610:MET:SD	3.02	0.51
2:J:756:ASP:CA	2:J:843:TRP:HH2	2.24	0.51
2:K:788:THR:CG2	2:K:1094:HIS:CE1	2.94	0.51
2:K:35:PHE:HD2	2:K:37:VAL:HG22	1.76	0.51
2:I:1192:LEU:HD22	2:I:1196:PHE:HE1	1.76	0.51
2:K:781:GLY:CA	2:K:1071:VAL:HG13	2.41	0.51
2:J:1947:LYS:HG2	2:J:1993:PHE:CD1	2.46	0.51
2:K:912:LYS:NZ	2:K:1044:LYS:O	2.44	0.51
2:G:731:ALA:HA	2:G:739:ILE:CD1	2.40	0.51
2:K:1175:MET:O	2:K:1192:LEU:HD12	2.11	0.51
2:J:170:TYR:CE2	2:J:507:PHE:HB3	2.45	0.51
2:I:778:ALA:HB2	2:I:807:PHE:CD2	2.46	0.51
2:K:283:THR:HG23	2:K:470:TYR:O	2.11	0.51
1:D:1393:VAL:N	1:D:1394:PRO:CD	2.73	0.51
1:D:682:VAL:HG11	1:D:695:TYR:CE2	2.46	0.51

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:E:1229:THR:HB	1:E:1311:GLN:HG3	1.92	0.51
1:A:961:ALA:HB2	1:A:1022:LEU:HD12	1.91	0.51
1:F:1050:TRP:CE3	1:F:1050:TRP:HA	2.46	0.51
1:D:1367:LEU:HD22	1:D:1371:MET:HG3	1.92	0.51
2:H:585:VAL:O	2:H:585:VAL:HG12	2.11	0.51
1:D:1017:TYR:HD1	1:D:1017:TYR:N	2.09	0.51
1:A:847:THR:OG1	1:A:876:MET:HG3	2.11	0.51
1:D:731:ASP:HB3	1:D:735:GLY:HA3	1.92	0.51
2:K:728:ILE:HG22	2:K:732:LYS:HE3	1.93	0.51
1:F:1448:ALA:CA	1:F:1451:LYS:HE3	2.36	0.51
1:F:1443:LEU:HD22	1:F:1474:ILE:HD11	1.92	0.51
1:D:1443:LEU:HD22	1:D:1474:ILE:HD11	1.92	0.51
1:A:1335:ARG:HH11	1:A:1339:GLU:HG2	1.75	0.51
2:J:1047:LEU:HD12	2:J:1047:LEU:N	2.26	0.51
1:C:434:ILE:HD11	1:C:490:VAL:HG21	1.91	0.51
2:G:930:THR:CG2	2:G:933:GLU:H	2.23	0.51
2:G:1180:VAL:HG11	2:G:1187:PHE:CG	2.45	0.51
2:L:911:GLN:NE2	2:L:1065:CYS:H	2.09	0.51
1:D:868:VAL:HG11	1:D:908:ILE:CD1	2.36	0.51
2:G:798:THR:HA	2:G:802:TYR:O	2.11	0.51
2:G:315:LEU:HA	2:G:318:ILE:HD12	1.94	0.51
2:J:743:TRP:CD2	2:J:761:ILE:HD11	2.45	0.51
1:C:767:HIS:CG	1:C:813:LEU:HD12	2.46	0.51
2:H:783:GLY:HA3	2:H:1075:TYR:CB	2.39	0.51
2:K:329:THR:HG22	2:L:1331:THR:O	2.11	0.51
1:D:967:PHE:CE2	1:D:1662:GLN:CA	2.94	0.51
2:L:611:THR:HA	2:L:1051:GLU:OE2	2.11	0.51
2:G:1551:ILE:CG2	2:G:1552:GLU:N	2.74	0.51
1:A:955:VAL:HG11	2:G:964:ARG:HE	1.76	0.51
2:G:35:PHE:HZ	2:G:104:LEU:HB3	1.75	0.51
2:L:1538:ASN:HB3	2:L:1541:ILE:CG2	2.41	0.51
2:L:197:VAL:HG21	2:L:263:ILE:HD11	1.93	0.51
1:D:716:GLN:NE2	1:D:747:ALA:HB3	2.26	0.51
2:G:92:GLU:HB3	2:G:95:HIS:NE2	2.26	0.51
2:K:1019:LEU:HA	2:K:1022:ARG:HD2	1.92	0.51
1:B:36:LEU:HD21	1:B:44:ILE:HD11	1.93	0.51
1:A:1129:ILE:HA	1:A:1139:THR:O	2.11	0.51
2:I:859:SER:HB3	2:I:863:GLU:HG3	1.92	0.51
2:J:1017:LEU:O	2:J:1021:GLN:HG3	2.11	0.51
1:B:755:GLU:HB2	1:B:757:ASP:HB2	1.92	0.51
2:I:979:LEU:HB2	2:I:996:ILE:HG23	1.91	0.51
1:E:768:ARG:HA	1:E:772:THR:OG1	2.11	0.51

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:C:334:ALA:O	1:C:338:GLN:HG3	2.11	0.51
1:D:1419:LYS:O	1:D:1422:ARG:HB2	2.10	0.51
2:I:1362:PHE:N	2:I:1363:PRO:HD2	2.26	0.51
2:L:409:LYS:HB3	2:L:428:PHE:CZ	2.45	0.51
1:F:1017:TYR:HD1	1:F:1017:TYR:N	2.09	0.51
1:C:1495:ARG:HG2	1:C:1495:ARG:HH11	1.76	0.51
2:K:614:PRO:O	2:K:618:VAL:HG12	2.11	0.50
1:C:1514:ILE:HD13	1:C:1545:LEU:HB3	1.93	0.50
2:G:608:MET:HA	4:G:2101:FMN:N5	2.25	0.50
1:A:533:SER:O	1:A:611:THR:HA	2.11	0.50
2:L:2062:THR:HG22	2:L:2063:GLY:N	2.25	0.50
1:D:905:LEU:HD23	1:D:908:ILE:HD12	1.92	0.50
1:C:498:THR:CG2	1:C:858:LEU:HA	2.36	0.50
2:J:2057:GLU:HA	2:J:2060:ARG:HH12	1.74	0.50
2:J:290:VAL:CG1	2:J:314:LEU:HD23	2.41	0.50
2:L:604:MET:CE	2:L:811:MET:HB2	2.41	0.50
1:A:911:LEU:O	1:A:911:LEU:HD12	2.11	0.50
2:I:167:VAL:CG2	2:I:169:ILE:HG13	2.40	0.50
1:F:22:PHE:HE1	2:L:1867:MET:HG3	1.76	0.50
2:G:1289:TYR:CB	2:G:1370:LEU:HD23	2.41	0.50
1:B:767:HIS:CB	1:B:813:LEU:HD12	2.40	0.50
2:L:727:VAL:HA	2:L:730:ILE:HG12	1.93	0.50
2:L:1370:LEU:CD1	2:L:1373:LEU:HD13	2.40	0.50
2:L:1411:LYS:HB3	2:L:1435:TYR:HB2	1.92	0.50
2:L:1411:LYS:O	2:L:1434:LEU:HD12	2.11	0.50
2:L:1315:ILE:HA	2:L:1393:ASP:O	2.11	0.50
2:H:950:TRP:CE2	2:H:956:LYS:HG3	2.46	0.50
1:E:421:ARG:HH22	1:E:1613:LYS:CB	2.24	0.50
1:D:1640:LYS:HG3	1:D:1641:TYR:N	2.26	0.50
2:J:1551:ILE:CG2	2:J:1552:GLU:N	2.74	0.50
2:K:1171:TRP:CE3	2:K:1236:LEU:HD22	2.46	0.50
2:G:1553:GLN:HB3	2:G:1554:PRO:CD	2.41	0.50
2:L:204:ILE:HG21	2:L:312:VAL:HG21	1.92	0.50
2:I:1248:GLU:OE2	2:I:1250:ARG:NE	2.43	0.50
2:K:859:SER:HB3	2:K:863:GLU:HG3	1.92	0.50
2:H:728:ILE:O	2:H:732:LYS:HG3	2.11	0.50
2:K:281:GLY:HA3	2:K:470:TYR:HE1	1.76	0.50
2:G:980:LEU:CD2	2:G:986:LEU:HD21	2.41	0.50
1:A:524:LYS:O	1:A:527:ALA:N	2.44	0.50
1:B:988:VAL:HG12	1:B:990:LEU:HD23	1.93	0.50
1:F:755:GLU:HB2	1:F:757:ASP:HB2	1.92	0.50
1:B:1084:GLU:H	1:B:1084:GLU:CD	2.14	0.50

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:K:1975:GLU:O	2:K:1979:GLN:HG3	2.10	0.50
2:L:1519:THR:O	2:L:1520:LYS:HB2	2.11	0.50
1:C:382:ILE:HD12	1:C:761:SER:HB3	1.92	0.50
2:K:611:THR:HA	2:K:1051:GLU:OE2	2.11	0.50
2:I:1232:VAL:HA	2:I:1245:THR:O	2.11	0.50
2:L:168:LYS:H	2:L:511:THR:HB	1.76	0.50
2:H:167:VAL:C	2:H:168:LYS:HD2	2.32	0.50
2:L:609:THR:HG23	4:L:2101:FMN:O4	2.11	0.50
1:A:1079:ARG:CG	1:A:1079:ARG:NH1	2.68	0.50
2:H:824:THR:HG22	2:H:828:ALA:HB3	1.93	0.50
2:I:76:VAL:O	2:I:80:ILE:HG13	2.10	0.50
1:F:905:LEU:HD22	1:F:911:LEU:CD2	2.40	0.50
1:C:1565:PRO:O	1:C:1566:LYS:C	2.50	0.50
2:G:251:PRO:HG3	2:G:316:PHE:CA	2.40	0.50
2:G:490:LEU:HA	2:G:493:MET:SD	2.51	0.50
1:C:1584:GLY:HA2	1:C:1617:ILE:CD1	2.41	0.50
2:J:788:THR:HG22	2:J:1094:HIS:HE1	1.77	0.50
2:K:2057:GLU:HA	2:K:2060:ARG:HH12	1.76	0.50
2:L:2021:LEU:HD22	2:L:2025:ILE:HD11	1.93	0.50
2:K:1845:VAL:CG2	2:K:1856:LEU:HD22	2.39	0.50
2:J:837:GLY:HA3	2:J:1074:LYS:HG2	1.92	0.50
2:K:2005:PHE:HA	2:K:2010:LEU:HD11	1.93	0.50
2:G:580:LEU:HG	2:G:1098:LEU:HD23	1.93	0.50
2:L:21:LEU:HD22	2:L:36:LEU:HG	1.91	0.50
2:H:1421:ARG:HD2	2:H:1426:VAL:CG2	2.41	0.50
1:E:1494:TRP:HE1	1:E:1509:THR:HG21	1.75	0.50
2:H:378:ILE:HG23	2:H:391:VAL:CG1	2.40	0.50
2:K:21:LEU:HD22	2:K:36:LEU:HG	1.93	0.50
1:A:893:GLN:OE1	2:L:1751:GLY:HA2	2.11	0.50
1:E:1426:GLU:HA	1:E:1429:ARG:HB2	1.94	0.50
2:I:1171:TRP:CH2	2:I:1236:LEU:HB2	2.46	0.50
2:J:24:LEU:HD12	2:J:37:VAL:CG2	2.40	0.50
2:L:589:PHE:CD1	2:L:1116:PHE:CD2	2.99	0.50
1:D:1164:ILE:CD1	1:D:1355:GLN:HG3	2.41	0.50
2:G:1028:VAL:HG13	2:G:1030:PHE:CD2	2.45	0.50
2:K:1881:TYR:CZ	2:K:2009:PHE:HE1	2.29	0.50
2:I:1751:GLY:O	2:I:1755:LYS:HG2	2.10	0.50
2:H:966:VAL:O	2:H:970:PHE:HD1	1.94	0.50
1:F:383:TYR:O	1:F:387:ILE:HG12	2.11	0.50
1:F:1229:THR:HB	1:F:1311:GLN:HG3	1.94	0.50
2:K:1194:ARG:HH21	2:K:1601:ASN:CG	2.15	0.50
2:K:663:ILE:HD12	2:K:663:ILE:N	2.26	0.50

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:L:465:LEU:HB2	2:L:479:ARG:HG3	1.93	0.50
2:K:1180:VAL:HA	2:K:1188:GLN:O	2.11	0.50
1:F:1280:CYS:HA	1:F:1566:LYS:O	2.11	0.50
2:I:250:PHE:CB	2:I:251:PRO:HD3	2.41	0.50
2:I:459:LYS:O	2:I:461:PRO:HD3	2.10	0.50
2:I:489:GLU:O	2:I:493:MET:HG3	2.11	0.50
2:G:1074:LYS:HG3	2:G:1075:TYR:CD1	2.47	0.50
2:K:914:TRP:CH2	2:K:1033:ALA:HA	2.46	0.50
2:K:727:VAL:HA	2:K:730:ILE:HG12	1.92	0.50
2:J:1603:PRO:HD2	2:J:1606:ILE:HD11	1.93	0.50
2:J:1770:ASN:HB2	2:J:1776:LYS:CE	2.38	0.50
2:I:1074:LYS:HG3	2:I:1075:TYR:CD1	2.46	0.50
2:G:1340:LYS:CG	2:I:376:ARG:NH2	2.73	0.50
2:K:1738:VAL:HA	2:K:1800:LEU:HD13	1.93	0.50
1:D:1213:VAL:CG1	1:D:1217:GLU:HB2	2.41	0.50
1:B:766:ALA:HA	1:B:769:ILE:HD12	1.94	0.50
2:G:1378:ASN:HB3	2:G:1610:MET:HE3	1.93	0.50
2:G:1099:LEU:HD12	2:G:1103:TYR:CB	2.41	0.50
2:H:35:PHE:HD2	2:H:37:VAL:HG22	1.76	0.50
1:D:1307:PHE:HB3	1:D:1357:CYS:HB3	1.92	0.50
2:J:192:THR:O	2:J:194:PRO:HD3	2.11	0.50
2:H:1192:LEU:HD22	2:H:1196:PHE:HE1	1.76	0.50
2:G:361:VAL:O	2:G:365:ILE:HG13	2.12	0.50
2:G:1229:VAL:HG12	2:G:1230:LYS:N	2.27	0.50
2:G:197:VAL:HA	2:G:262:MET:HE1	1.93	0.50
2:H:186:LEU:CG	2:H:256:VAL:HG22	2.41	0.50
2:I:197:VAL:HG21	2:I:263:ILE:HD11	1.93	0.50
1:A:883:LEU:HD23	1:A:883:LEU:N	2.27	0.50
2:H:1515:LEU:HB3	2:H:1525:VAL:CG2	2.42	0.50
2:H:1750:GLY:O	2:H:1755:LYS:HE3	2.11	0.50
2:J:204:ILE:HG21	2:J:312:VAL:HG21	1.93	0.50
2:I:882:LYS:HB3	2:I:898:ARG:NH1	2.26	0.50
2:K:980:LEU:CD2	2:K:986:LEU:HD21	2.42	0.50
2:G:1328:VAL:HA	2:G:1611:TYR:HE1	1.76	0.50
1:D:2:ARG:HB2	1:D:5:VAL:HB	1.94	0.50
2:G:1156:ASP:HB2	2:G:1159:SER:H	1.77	0.50
2:K:1555:VAL:HG21	2:K:1824:LYS:HA	1.94	0.50
2:H:700:GLU:H	2:H:700:GLU:CD	2.14	0.50
2:I:1141:LYS:HE2	2:I:1143:SER:HB2	1.94	0.50
2:I:1910:VAL:HG11	2:I:1973:ILE:HG21	1.94	0.50
2:L:1586:ASP:OD1	2:L:1588:ASN:HB2	2.11	0.50
1:E:801:LEU:HD13	1:E:822:GLU:HG2	1.93	0.50

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:C:754:ARG:N	1:C:810:ASN:HB3	2.26	0.50
2:G:1338:ARG:NH2	2:I:327:PRO:HD2	2.25	0.50
2:I:1067:LEU:O	2:I:1068:GLN:HG2	2.11	0.50
2:K:610:PRO:HD2	4:K:2101:FMN:C6	2.26	0.50
2:L:656:ARG:NH1	2:L:656:ARG:HG2	2.26	0.50
1:D:1108:PRO:HA	1:D:1140:VAL:O	2.12	0.50
2:G:752:HIS:CE1	2:G:856:THR:HG21	2.46	0.50
2:J:1067:LEU:O	2:J:1068:GLN:HG2	2.11	0.50
1:D:434:ILE:HD11	1:D:490:VAL:HG21	1.94	0.50
2:G:622:MET:O	2:G:656:ARG:NH1	2.44	0.50
1:F:989:ASN:H	1:F:1491:ASN:ND2	1.97	0.50
2:G:962:PHE:O	2:G:965:ARG:HB3	2.11	0.50
2:K:1232:VAL:HA	2:K:1245:THR:O	2.12	0.50
2:H:2013:GLY:C	2:H:2016:PRO:HD2	2.32	0.50
2:J:662:LEU:HD22	2:J:673:GLN:OE1	2.12	0.50
1:A:405:TRP:CH2	1:A:1609:SER:HB3	2.47	0.50
2:L:1468:ARG:NH1	2:L:1475:LEU:HD22	2.27	0.50
2:K:1768:THR:O	2:K:1776:LYS:HB2	2.12	0.50
2:L:718:PRO:HG3	2:L:727:VAL:HG21	1.93	0.50
1:B:1161:ALA:O	1:B:1163:GLN:HG3	2.12	0.50
1:F:408:GLN:HG2	1:F:1610:ARG:NH1	2.25	0.50
2:I:950:TRP:CE2	2:I:956:LYS:HG3	2.47	0.50
1:C:626:TRP:CE3	1:C:898:PHE:HB2	2.47	0.50
2:K:35:PHE:CE1	2:K:105:ILE:HD13	2.46	0.50
2:J:784:GLY:HA3	2:J:786:GLU:OE2	2.11	0.50
1:C:746:PHE:HB3	3:C:1901:NAP:H52N	1.92	0.50
2:I:1324:PHE:CA	2:I:1583:VAL:HG11	2.41	0.50
2:J:83:VAL:O	2:J:87:VAL:HG23	2.11	0.50
1:E:414:TYR:CE2	1:E:418:ILE:HD11	2.47	0.50
2:L:1643:VAL:HG13	2:L:1649:ILE:HD11	1.93	0.50
2:I:1753:ARG:HG3	2:I:1756:ILE:CD1	2.42	0.50
1:A:1241:LEU:HD23	1:E:1097:LEU:HD12	1.93	0.50
1:A:519:PHE:O	1:A:523:VAL:HG23	2.12	0.50
1:E:940:ASN:HB3	1:E:949:GLU:OE2	2.12	0.50
2:H:196:PHE:H	2:H:196:PHE:HD2	1.59	0.50
1:B:879:ASN:HB3	1:B:901:LEU:HD13	1.93	0.50
1:D:799:LEU:HD12	1:D:821:LEU:HB3	1.93	0.50
2:K:317:TRP:O	2:K:321:ARG:HG2	2.11	0.50
2:K:1156:ASP:HB2	2:K:1159:SER:H	1.76	0.50
2:L:250:PHE:CB	2:L:251:PRO:HD3	2.40	0.50
2:H:159:PHE:HA	2:H:162:ALA:HB3	1.92	0.50
2:L:855:ILE:HB	2:L:869:ALA:HB2	1.94	0.50

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:J:613:VAL:N	2:J:614:PRO:CD	2.75	0.50
2:J:601:PRO:HB2	2:J:626:TYR:CE2	2.46	0.50
2:G:1047:LEU:N	2:G:1047:LEU:HD12	2.26	0.50
2:K:917:ARG:HB2	2:K:937:ARG:HD3	1.93	0.50
2:J:685:VAL:CG1	2:J:687:ILE:HG13	2.40	0.50
2:J:930:THR:O	2:J:934:VAL:HG23	2.11	0.50
2:J:825:SER:CB	2:J:1053:ILE:HG13	2.41	0.50
2:H:1603:PRO:HD2	2:H:1606:ILE:HD11	1.92	0.50
2:K:1410:GLY:HA3	2:K:1436:ARG:HA	1.92	0.50
2:I:1301:PHE:CB	2:I:1364:ARG:NH1	2.75	0.50
2:K:825:SER:O	2:K:828:ALA:HB3	2.10	0.50
1:E:684:THR:HG21	1:E:691:VAL:HG11	1.93	0.50
2:I:604:MET:HE1	2:I:811:MET:HB2	1.93	0.50
1:F:1213:VAL:HG22	1:F:1300:ARG:CZ	2.42	0.50
1:C:549:TYR:HE1	1:C:567:ASN:HB3	1.76	0.50
2:J:1468:ARG:NH1	2:J:1475:LEU:HD22	2.25	0.50
2:H:1083:ILE:HA	2:H:1086:ILE:HG13	1.94	0.50
2:H:35:PHE:CD2	2:H:37:VAL:HG22	2.47	0.50
2:L:792:LEU:HD23	2:L:1094:HIS:CE1	2.46	0.50
1:E:1078:ILE:HG23	1:E:1352:MET:CE	2.41	0.50
1:F:549:TYR:HE1	1:F:567:ASN:HB3	1.77	0.50
1:F:746:PHE:CD2	3:F:1901:NAP:H4D	2.47	0.50
1:A:716:GLN:NE2	1:A:747:ALA:HB3	2.27	0.50
2:H:291:VAL:O	2:H:295:ILE:HB	2.12	0.50
2:I:966:VAL:O	2:I:970:PHE:HD1	1.95	0.50
2:G:700:GLU:H	2:G:700:GLU:CD	2.15	0.50
2:L:728:ILE:HG22	2:L:732:LYS:HE3	1.93	0.50
1:F:956:ILE:HA	2:L:977:PRO:HA	1.93	0.50
1:F:2:ARG:HB2	1:F:5:VAL:HB	1.94	0.50
1:E:1335:ARG:HH11	1:E:1339:GLU:HG2	1.76	0.50
1:E:1164:ILE:CD1	1:E:1355:GLN:HG3	2.41	0.50
2:H:1128:PRO:HG2	2:H:1135:ALA:CB	2.41	0.50
2:L:1594:ARG:NH1	2:L:1594:ARG:CG	2.67	0.50
2:K:930:THR:CG2	2:K:933:GLU:HG3	2.38	0.50
2:K:938:MET:O	2:K:942:MET:HG3	2.11	0.50
2:K:686:PRO:HB3	2:K:1187:PHE:CE1	2.46	0.50
2:K:1769:VAL:HG13	2:K:1774:SER:C	2.32	0.50
1:B:585:MET:HG2	1:E:577:LEU:HD23	1.93	0.50
2:G:1769:VAL:HG22	2:G:1775:ILE:CA	2.35	0.50
2:K:376:ARG:HH22	2:L:1340:LYS:CE	2.24	0.50
2:H:1436:ARG:HH22	2:H:1602:LEU:CD1	2.24	0.50
2:J:1497:ARG:O	2:J:1505:SER:HB3	2.11	0.50

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:I:605:VAL:CB	2:I:628:ILE:HG13	2.38	0.50
2:H:914:TRP:CD1	2:H:916:GLY:HA3	2.46	0.50
2:J:376:ARG:HE	2:K:1339:GLY:HA2	1.76	0.50
2:L:2005:PHE:HA	2:L:2010:LEU:HD11	1.92	0.50
2:I:824:THR:HG22	2:I:828:ALA:HB3	1.93	0.50
1:F:1213:VAL:CG1	1:F:1214:HIS:N	2.74	0.50
2:I:2039:TYR:O	2:I:2041:PRO:HD3	2.11	0.50
2:I:1845:VAL:CG2	2:I:1856:LEU:HD22	2.41	0.50
2:J:741:LEU:O	2:J:741:LEU:CG	2.60	0.50
2:G:1464:LEU:HD13	2:G:1468:ARG:HG3	1.93	0.50
1:D:714:PHE:CE1	1:D:725:LEU:HD12	2.47	0.50
1:E:1160:VAL:HB	1:E:1352:MET:HE1	1.93	0.50
2:J:1114:GLU:HB3	2:J:1169:TYR:HB3	1.92	0.50
2:J:21:LEU:HD13	2:J:36:LEU:HD21	1.93	0.50
1:E:883:LEU:HA	1:E:888:ILE:HD12	1.93	0.50
2:K:204:ILE:CG2	2:K:312:VAL:HG11	2.41	0.50
1:F:1209:PHE:CE2	1:F:1301:VAL:HG21	2.45	0.50
2:J:1317:ASN:HB3	2:J:1320:ALA:CB	2.40	0.50
1:E:1131:GLU:HG2	1:E:1138:TYR:CE2	2.47	0.50
2:J:980:LEU:CD2	2:J:986:LEU:HD21	2.41	0.50
2:J:1643:VAL:HG13	2:J:1649:ILE:HD11	1.93	0.50
2:L:192:THR:O	2:L:194:PRO:HD3	2.11	0.50
2:J:1725:HIS:CD2	2:J:1854:GLU:CB	2.94	0.50
1:B:875:GLU:O	1:B:878:PHE:HB3	2.11	0.50
1:A:329:THR:O	1:A:332:GLN:HB2	2.12	0.50
2:H:187:ARG:NH2	2:H:230:TRP:O	2.45	0.50
2:J:1969:LEU:HA	2:J:1972:ILE:HD12	1.93	0.50
1:C:1599:MET:HA	1:C:1602:PHE:CD2	2.46	0.50
2:K:126:VAL:HG12	2:K:127:ALA:H	1.77	0.50
2:G:1566:LYS:O	2:G:1568:PRO:HD3	2.10	0.50
1:D:1599:MET:HA	1:D:1602:PHE:CD2	2.47	0.50
2:J:187:ARG:NH2	2:J:230:TRP:O	2.44	0.50
2:I:1224:GLN:OE1	2:I:1224:GLN:HA	2.11	0.50
2:G:409:LYS:HB3	2:G:428:PHE:CZ	2.46	0.50
2:H:613:VAL:HG13	2:H:614:PRO:CD	2.42	0.50
2:L:451:ILE:O	2:L:455:VAL:HG23	2.11	0.50
2:H:250:PHE:O	2:H:315:LEU:HD23	2.11	0.50
2:I:374:GLU:CA	2:I:377:HIS:CD2	2.78	0.50
2:G:917:ARG:HG2	2:G:917:ARG:HH11	1.67	0.50
2:J:937:ARG:NE	2:J:941:LEU:CD1	2.75	0.50
2:H:1064:THR:HG22	2:H:1065:CYS:N	2.26	0.50
2:H:1026:LYS:HE2	2:H:1045:ASP:OD2	2.12	0.50

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:G:1181:PHE:CD1	2:G:1191:PRO:HD2	2.47	0.50
2:J:824:THR:HG22	2:J:828:ALA:HB3	1.93	0.50
2:I:22:ARG:HD2	2:I:42:HIS:HB3	1.93	0.50
2:G:1603:PRO:HD2	2:G:1606:ILE:HD11	1.94	0.50
1:B:684:THR:HG21	1:B:691:VAL:HG11	1.94	0.50
2:G:605:VAL:CB	2:G:628:ILE:HG13	2.38	0.50
2:L:2013:GLY:C	2:L:2016:PRO:HD2	2.32	0.50
2:J:1083:ILE:HA	2:J:1086:ILE:HG13	1.92	0.50
2:H:276:LEU:HD21	2:H:296:ALA:HA	1.93	0.50
2:L:670:MET:HB2	2:L:674:ILE:HD12	1.94	0.50
2:K:1411:LYS:HB2	2:K:1439:TYR:CD1	2.47	0.50
2:I:818:THR:HG22	2:I:829:LYS:CB	2.41	0.50
2:G:388:ASN:HD22	2:G:389:PHE:N	2.10	0.50
2:J:1026:LYS:HG3	3:J:2102:NAP:N7A	2.26	0.50
1:F:1094:LYS:HB3	1:F:1154:LEU:HB2	1.93	0.50
1:B:767:HIS:CG	1:B:813:LEU:HD12	2.46	0.50
2:G:1064:THR:HG22	2:G:1065:CYS:N	2.26	0.50
2:H:785:SER:HB3	2:H:1090:ILE:HG23	1.94	0.50
2:G:1456:LEU:HD11	2:G:1543:TYR:CE2	2.45	0.50
1:F:1183:VAL:HG13	1:F:1252:GLU:OE1	2.11	0.50
2:L:21:LEU:HD13	2:L:36:LEU:HD21	1.93	0.50
2:I:271:GLU:HB2	2:I:274:GLU:HG3	1.94	0.50
2:J:1299:VAL:HG22	2:J:1301:PHE:CD1	2.47	0.50
1:A:1160:VAL:HB	1:A:1352:MET:HE1	1.94	0.50
1:A:889:VAL:O	1:A:893:GLN:HG3	2.12	0.50
2:K:731:ALA:HA	2:K:739:ILE:CD1	2.40	0.50
1:A:1207:TYR:CE2	1:A:1682:LYS:HD2	2.47	0.50
2:H:1266:HIS:CD2	2:H:1275:ARG:CZ	2.95	0.50
2:J:1328:VAL:HA	2:J:1611:TYR:HE1	1.76	0.50
2:I:962:PHE:O	2:I:965:ARG:HB3	2.10	0.50
1:F:1338:GLY:C	1:F:1340:MET:H	2.15	0.50
1:D:1177:GLU:O	1:D:1180:ILE:HB	2.11	0.50
1:D:1017:TYR:CD1	1:D:1017:TYR:N	2.80	0.50
2:I:952:ASP:OD1	2:I:953:PRO:HD2	2.12	0.50
2:H:1982:ALA:O	2:H:1984:PRO:HD3	2.11	0.50
2:J:1813:MET:HG3	2:J:1814:GLU:N	2.26	0.50
1:D:847:THR:OG1	1:D:876:MET:HG3	2.11	0.50
2:G:571:ASP:HB3	2:G:574:LYS:HB2	1.93	0.50
1:B:2:ARG:HB2	1:B:5:VAL:HB	1.93	0.50
2:K:505:THR:HG22	2:K:505:THR:O	2.11	0.50
2:I:1749:PHE:CG	2:I:1758:ARG:HB3	2.47	0.50
2:K:2008:THR:HG22	2:K:2011:ARG:HE	1.76	0.50

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:G:317:TRP:O	2:G:321:ARG:HG2	2.12	0.50
2:H:1232:VAL:HA	2:H:1245:THR:O	2.12	0.50
2:H:511:THR:CG2	2:H:512:HIS:HD2	2.18	0.50
2:L:613:VAL:HG13	2:L:614:PRO:HD3	1.94	0.50
2:L:752:HIS:NE2	2:L:856:THR:HG21	2.27	0.50
1:B:628:TYR:HD1	1:B:629:SER:N	2.10	0.50
1:E:430:VAL:O	1:E:434:ILE:HG13	2.12	0.50
2:L:1180:VAL:HA	2:L:1188:GLN:O	2.11	0.50
2:I:1180:VAL:HA	2:I:1188:GLN:O	2.11	0.50
2:K:1442:TYR:CG	2:K:1499:LYS:O	2.65	0.50
2:G:825:SER:O	2:G:828:ALA:HB3	2.12	0.50
2:G:762:LEU:HD11	2:G:800:PHE:CD2	2.46	0.50
2:L:857:VAL:CG1	2:L:876:TRP:CD1	2.95	0.50
1:E:1708:ASN:HD21	1:E:1712:LYS:NZ	2.10	0.50
2:I:325:ALA:HB2	2:I:447:ALA:HB2	1.93	0.50
1:A:904:GLY:HA2	1:A:906:GLN:OE1	2.12	0.50
2:J:2013:GLY:C	2:J:2016:PRO:HD2	2.33	0.50
1:D:330:LYS:HG3	1:D:333:ARG:HH12	1.74	0.50
2:J:502:GLU:O	2:J:506:VAL:HG23	2.12	0.50
2:H:80:ILE:HG12	2:H:105:ILE:CG2	2.42	0.50
2:G:1725:HIS:CD2	2:G:1854:GLU:HB3	2.45	0.50
2:J:1315:ILE:HA	2:J:1393:ASP:O	2.12	0.50
2:I:271:GLU:H	2:I:274:GLU:HG3	1.76	0.50
2:I:1551:ILE:CG2	2:I:1552:GLU:N	2.75	0.50
1:E:1623:THR:HG22	1:E:1633:GLN:HB2	1.94	0.50
2:J:35:PHE:HD2	2:J:37:VAL:HG22	1.77	0.50
2:K:1236:LEU:HD12	2:K:1241:GLU:O	2.12	0.50
2:I:788:THR:HG22	2:I:1094:HIS:HE1	1.76	0.50
2:J:1653:LEU:HD21	2:J:1667:VAL:HG13	1.94	0.50
2:H:731:ALA:HA	2:H:739:ILE:CD1	2.41	0.50
2:J:731:ALA:HA	2:J:739:ILE:CD1	2.42	0.50
2:I:915:PHE:HB2	2:I:1030:PHE:CD1	2.47	0.50
2:G:1753:ARG:HG3	2:G:1756:ILE:HD11	1.94	0.50
2:I:980:LEU:CD2	2:I:986:LEU:HD21	2.42	0.50
2:J:1120:ILE:HD13	2:J:1173:HIS:CE1	2.47	0.50
2:L:1015:HIS:NE2	2:L:1019:LEU:HD11	2.27	0.50
1:C:988:VAL:HG12	1:C:990:LEU:HD23	1.93	0.50
2:K:1887:ASN:OD1	2:K:1889:SER:HB2	2.12	0.50
1:D:1254:PHE:HB2	1:D:1257:THR:OG1	2.12	0.50
2:H:1946:LEU:HD22	2:H:1951:ILE:HG12	1.94	0.50
2:I:1872:GLU:HA	2:I:1872:GLU:OE1	2.11	0.50
1:C:1451:LYS:HE2	1:C:1463:GLU:OE2	2.11	0.50

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:I:614:PRO:O	2:I:618:VAL:HG12	2.11	0.50
2:I:618:VAL:HG11	2:I:648:ILE:HD11	1.93	0.50
2:H:1047:LEU:N	2:H:1047:LEU:HD12	2.27	0.50
2:H:609:THR:CG2	2:H:633:GLY:HA3	2.42	0.50
2:K:1769:VAL:HG22	2:K:1775:ILE:CA	2.32	0.50
2:K:178:ASN:HA	2:K:434:PRO:HG2	1.94	0.50
2:K:465:LEU:HB2	2:K:479:ARG:CG	2.42	0.50
2:H:796:TRP:HH2	2:H:805:MET:HE1	1.73	0.50
2:I:21:LEU:HA	2:I:37:VAL:O	2.12	0.50
2:I:914:TRP:CD1	2:I:916:GLY:HA3	2.47	0.50
1:B:1584:GLY:HA2	1:B:1617:ILE:CD1	2.41	0.50
1:F:1037:ASN:CG	1:F:1674:ILE:HG23	2.32	0.50
1:B:552:ILE:HG12	1:E:552:ILE:CD1	2.39	0.50
2:J:1411:LYS:O	2:J:1434:LEU:HD12	2.10	0.50
1:B:1183:VAL:HG11	1:B:1187:THR:CG2	2.41	0.50
2:J:1026:LYS:HE2	2:J:1045:ASP:OD2	2.12	0.50
1:C:1705:GLN:HA	1:C:1711:LEU:HD23	1.94	0.50
2:L:1370:LEU:CA	2:L:1435:TYR:HE2	2.24	0.50
2:G:1083:ILE:HA	2:G:1086:ILE:HG13	1.92	0.50
1:C:1042:LEU:HD12	1:C:1058:PRO:HG3	1.94	0.50
2:H:1551:ILE:CG2	2:H:1552:GLU:N	2.74	0.50
1:C:626:TRP:CZ3	1:C:898:PHE:HB2	2.47	0.50
2:K:21:LEU:HA	2:K:37:VAL:O	2.11	0.50
1:B:569:LEU:HD22	1:E:544:ASP:HB3	1.94	0.50
2:H:1324:PHE:CA	2:H:1583:VAL:HG11	2.42	0.50
1:C:960:ARG:HH11	2:I:968:GLU:HB3	1.75	0.50
1:C:960:ARG:NH1	2:I:968:GLU:CD	2.64	0.50
2:H:204:ILE:HG21	2:H:312:VAL:HG21	1.93	0.50
2:L:123:ALA:O	2:L:126:VAL:HG23	2.11	0.50
2:H:1821:MET:HA	2:H:1826:LEU:HD12	1.93	0.50
1:F:36:LEU:HD22	1:F:61:LEU:HD21	1.94	0.50
2:I:1128:PRO:HG2	2:I:1135:ALA:CB	2.42	0.50
2:L:31:LEU:HB2	2:L:72:VAL:HG22	1.94	0.50
2:I:409:LYS:HB3	2:I:428:PHE:CZ	2.46	0.50
2:J:73:VAL:HA	2:J:113:PHE:CE2	2.47	0.50
1:A:1082:GLU:HB2	1:A:1085:LEU:HD12	1.93	0.50
2:H:1362:PHE:N	2:H:1363:PRO:HD2	2.26	0.50
1:F:768:ARG:HA	1:F:772:THR:OG1	2.12	0.50
2:I:357:THR:HG22	2:I:359:SER:H	1.77	0.50
2:L:2073:ASN:O	2:L:2076:LYS:HB3	2.12	0.50
2:G:1946:LEU:HD22	2:G:1951:ILE:HG12	1.94	0.50
1:E:985:ARG:HB3	1:E:1422:ARG:HH22	1.76	0.50

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:C:1121:ARG:NH1	1:F:1153:ALA:O	2.45	0.50
2:J:1157:VAL:HG13	2:J:1197:ALA:HA	1.93	0.50
2:J:1594:ARG:NH1	2:J:1594:ARG:CG	2.62	0.49
2:H:420:PRO:HG3	2:H:847:TYR:CD1	2.46	0.49
2:J:607:GLY:HA2	2:J:612:THR:HG21	1.94	0.49
2:G:609:THR:HG22	2:G:633:GLY:HA3	1.94	0.49
2:H:937:ARG:HG3	2:H:941:LEU:HD12	1.93	0.49
1:C:487:TYR:CE2	1:C:881:LEU:HD13	2.47	0.49
2:I:1436:ARG:HH22	2:I:1602:LEU:CD1	2.22	0.49
2:K:604:MET:CE	2:K:811:MET:HB2	2.41	0.49
2:K:1436:ARG:NH2	2:K:1602:LEU:CD1	2.75	0.49
1:C:498:THR:HG21	1:C:858:LEU:O	2.12	0.49
1:A:20:TYR:CE2	2:G:2062:THR:HG23	2.47	0.49
2:G:1891:ILE:HD12	2:G:1895:PHE:CE2	2.47	0.49
1:E:1705:GLN:HA	1:E:1711:LEU:HD23	1.94	0.49
2:H:604:MET:HE1	2:H:811:MET:HB2	1.93	0.49
1:D:767:HIS:CG	1:D:813:LEU:HD12	2.47	0.49
2:G:2005:PHE:HA	2:G:2010:LEU:HD11	1.93	0.49
2:J:44:GLN:HG3	2:J:101:VAL:CG2	2.41	0.49
2:H:1099:LEU:HD12	2:H:1103:TYR:CB	2.42	0.49
2:L:1464:LEU:HD13	2:L:1468:ARG:HG3	1.93	0.49
2:L:1411:LYS:HB2	2:L:1439:TYR:CD1	2.47	0.49
2:I:1456:LEU:HD11	2:I:1543:TYR:CE2	2.43	0.49
2:K:2021:LEU:HD22	2:K:2025:ILE:HD11	1.94	0.49
1:E:929:ARG:O	1:E:933:ILE:HG13	2.11	0.49
1:A:1223:GLY:CA	1:A:1276:PRO:HD2	2.42	0.49
2:G:1234:ILE:HG12	2:G:1244:LEU:HD13	1.94	0.49
1:E:1186:VAL:HG23	1:E:1309:ASP:HB2	1.92	0.49
1:F:472:GLN:HE21	1:F:472:GLN:HA	1.77	0.49
2:G:21:LEU:HA	2:G:37:VAL:O	2.11	0.49
2:I:857:VAL:CG1	2:I:876:TRP:NE1	2.74	0.49
2:L:1299:VAL:HG22	2:L:1301:PHE:CD1	2.46	0.49
2:I:1093:ASP:O	2:I:1097:PHE:HD1	1.93	0.49
2:G:186:LEU:CG	2:G:256:VAL:HG22	2.42	0.49
1:F:943:VAL:HG23	2:L:1539:PRO:HG3	1.94	0.49
2:G:1208:ASN:N	2:G:1209:PRO:HD3	2.27	0.49
2:L:1821:MET:HA	2:L:1826:LEU:HD12	1.93	0.49
1:F:1160:VAL:C	1:F:1352:MET:HE1	2.32	0.49
1:E:536:SER:HB3	1:E:540:LYS:HB3	1.94	0.49
1:E:1164:ILE:HD12	1:E:1355:GLN:HG3	1.92	0.49
2:J:102:LEU:O	2:J:106:LEU:HG	2.12	0.49
1:F:329:THR:O	1:F:332:GLN:HB2	2.12	0.49

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:L:77:ALA:O	2:L:139:ALA:HB1	2.12	0.49
2:G:690:LEU:HD22	2:G:691:THR:N	2.27	0.49
2:L:520:GLY:C	2:L:522:SER:H	2.15	0.49
2:G:1141:LYS:HE2	2:G:1143:SER:HB2	1.94	0.49
1:F:679:LYS:HG2	1:F:708:GLN:HB3	1.92	0.49
2:I:1157:VAL:HG13	2:I:1197:ALA:HA	1.94	0.49
2:I:1946:LEU:HD22	2:I:1951:ILE:HG12	1.94	0.49
1:C:1079:ARG:CG	1:C:1079:ARG:NH1	2.68	0.49
2:L:929:MET:CE	2:L:934:VAL:HA	2.41	0.49
1:C:1150:ILE:HG12	1:F:1148:LEU:HD21	1.94	0.49
2:H:1637:VAL:HG11	2:H:1679:LEU:CD1	2.36	0.49
2:L:1251:THR:HG22	2:L:1292:VAL:HG13	1.94	0.49
2:I:1500:ASN:HB2	2:I:1503:VAL:H	1.77	0.49
2:G:489:GLU:O	2:G:493:MET:HG3	2.12	0.49
2:L:604:MET:HE1	2:L:811:MET:HB2	1.94	0.49
2:G:2017:PHE:CE2	2:G:2021:LEU:HD11	2.47	0.49
2:H:1986:PRO:O	2:H:1987:VAL:HB	2.12	0.49
1:A:1213:VAL:CG1	1:A:1217:GLU:HB2	2.43	0.49
1:A:1055:THR:OG1	1:A:1057:GLU:HG2	2.13	0.49
2:L:1986:PRO:O	2:L:1987:VAL:HB	2.11	0.49
2:K:330:SER:H	2:L:1331:THR:HG22	1.77	0.49
2:L:1086:ILE:O	2:L:1090:ILE:HG13	2.12	0.49
2:J:1338:ARG:NH2	2:L:327:PRO:CD	2.73	0.49
2:K:1305:LEU:H	2:K:1305:LEU:CD1	2.22	0.49
2:G:1659:ILE:HG13	2:G:1664:ILE:HD11	1.94	0.49
1:E:1081:ILE:HG13	1:E:1159:LEU:O	2.12	0.49
1:D:414:TYR:CE2	1:D:418:ILE:HD11	2.47	0.49
1:C:1142:LEU:H	1:C:1142:LEU:HD12	1.76	0.49
1:C:415:TYR:CD2	1:C:1614:THR:HA	2.47	0.49
2:K:1643:VAL:HG13	2:K:1649:ILE:HD11	1.94	0.49
2:H:1157:VAL:HG22	2:H:1198:PRO:HD2	1.94	0.49
2:H:1141:LYS:HE2	2:H:1143:SER:HB2	1.94	0.49
1:E:755:GLU:HB2	1:E:757:ASP:HB2	1.94	0.49
2:G:728:ILE:HG22	2:G:732:LYS:HE3	1.94	0.49
1:A:731:ASP:HB3	1:A:735:GLY:HA3	1.94	0.49
1:F:754:ARG:N	1:F:810:ASN:HB3	2.26	0.49
2:J:1457:HIS:ND1	2:J:1487:THR:HG22	2.27	0.49
2:G:1561:ILE:HB	2:G:1655:HIS:HB3	1.94	0.49
2:H:1910:VAL:HG11	2:H:1973:ILE:HG21	1.93	0.49
1:A:1011:ARG:NH1	1:A:1012:TRP:HA	2.27	0.49
1:A:768:ARG:HA	1:A:772:THR:OG1	2.12	0.49
1:E:1017:TYR:N	1:E:1017:TYR:HD1	2.10	0.49

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:L:317:TRP:O	2:L:321:ARG:HG2	2.13	0.49
2:I:1229:VAL:HG12	2:I:1230:LYS:N	2.27	0.49
2:H:465:LEU:HB2	2:H:479:ARG:HG3	1.94	0.49
2:K:601:PRO:HB2	2:K:626:TYR:CE2	2.47	0.49
2:K:167:VAL:HG23	2:K:169:ILE:HG13	1.93	0.49
1:E:612:ILE:HG12	1:E:628:TYR:HD2	1.69	0.49
2:I:935:VAL:HG11	2:I:997:LEU:HD21	1.95	0.49
2:H:1725:HIS:CD2	2:H:1854:GLU:CB	2.96	0.49
2:L:208:LEU:HD12	2:L:227:ILE:CD1	2.41	0.49
1:F:1213:VAL:HG13	1:F:1217:GLU:HB2	1.94	0.49
1:C:486:VAL:HG13	1:C:648:LEU:H	1.77	0.49
1:D:1183:VAL:HG13	1:D:1252:GLU:OE1	2.12	0.49
2:L:44:GLN:HG3	2:L:101:VAL:CG2	2.42	0.49
2:G:756:ASP:CA	2:G:843:TRP:HH2	2.25	0.49
2:J:92:GLU:HA	2:J:95:HIS:CE1	2.48	0.49
2:G:1356:ALA:CB	2:G:1397:THR:HG22	2.42	0.49
2:K:92:GLU:HB3	2:K:95:HIS:NE2	2.27	0.49
2:H:776:LEU:HG	2:H:807:PHE:CE2	2.47	0.49
1:A:849:GLY:HA3	1:A:873:GLN:HG3	1.94	0.49
2:K:1142:ILE:HG13	2:K:1209:PRO:HG2	1.94	0.49
2:I:611:THR:HA	2:I:1051:GLU:OE2	2.12	0.49
1:E:1547:ARG:HG2	1:E:1604:TYR:HD1	1.75	0.49
2:J:329:THR:HG21	2:K:1333:GLU:CB	2.41	0.49
1:C:24:MET:HB3	2:I:2043:VAL:HG12	1.94	0.49
2:G:1338:ARG:HH21	2:I:327:PRO:HD2	1.77	0.49
2:H:1217:ILE:O	2:H:1233:GLU:HA	2.12	0.49
2:G:617:PHE:CE1	2:G:822:ALA:HB2	2.47	0.49
1:B:1153:ALA:O	1:D:1121:ARG:NH1	2.43	0.49
2:J:221:TYR:CE2	2:J:225:LEU:HD22	2.47	0.49
1:B:1534:GLU:HG2	1:B:1625:PHE:CE1	2.47	0.49
2:K:1402:ASN:ND2	2:K:1416:CYS:HB2	2.28	0.49
2:H:617:PHE:CE1	2:H:822:ALA:HB2	2.47	0.49
2:K:416:GLN:HE22	2:K:425:LYS:H	1.60	0.49
2:K:1622:THR:HG23	2:K:1627:ASN:OD1	2.12	0.49
1:C:1579:GLN:O	1:C:1583:THR:HG23	2.11	0.49
2:L:1231:THR:HG23	2:L:1595:VAL:CG2	2.37	0.49
1:B:1150:ILE:HG12	1:D:1148:LEU:CD2	2.42	0.49
1:D:1100:VAL:HG21	1:D:1150:ILE:CD1	2.43	0.49
1:D:628:TYR:OH	1:D:630:LYS:HG2	2.13	0.49
2:K:512:HIS:HE1	2:K:566:VAL:HG13	1.77	0.49
1:A:1148:LEU:HD21	1:E:1150:ILE:HG12	1.95	0.49
2:I:685:VAL:CG1	2:I:687:ILE:HG13	2.38	0.49

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:H:1500:ASN:HB2	2:H:1503:VAL:H	1.78	0.49
1:C:1363:MET:HE3	1:C:1368:ALA:CB	2.42	0.49
2:I:2063:GLY:O	2:I:2065:PRO:HD3	2.12	0.49
2:G:1299:VAL:HG22	2:G:1301:PHE:CD1	2.48	0.49
2:J:820:LYS:HG3	2:J:821:GLU:HG2	1.94	0.49
2:J:1734:ILE:O	2:J:1738:VAL:HG23	2.12	0.49
2:J:376:ARG:NH2	2:K:1340:LYS:CG	2.76	0.49
2:G:2021:LEU:O	2:G:2025:ILE:HG13	2.12	0.49
2:K:1370:LEU:HA	2:K:1435:TYR:CE2	2.48	0.49
2:G:914:TRP:CH2	2:G:1033:ALA:HA	2.48	0.49
1:A:336:PHE:O	1:A:339:GLN:HB2	2.12	0.49
2:G:1468:ARG:NH1	2:G:1475:LEU:HD22	2.28	0.49
2:I:1315:ILE:HA	2:I:1393:ASP:O	2.12	0.49
1:A:15:VAL:HG11	2:G:2022:LEU:CD2	2.41	0.49
2:L:24:LEU:HD12	2:L:37:VAL:CG2	2.41	0.49
2:K:580:LEU:HG	2:K:1098:LEU:HD23	1.95	0.49
2:H:1456:LEU:HD11	2:H:1543:TYR:CE2	2.45	0.49
1:E:506:ILE:HD11	1:E:926:SER:HB3	1.93	0.49
2:G:271:GLU:HB2	2:G:274:GLU:HG3	1.94	0.49
2:I:1175:MET:HA	2:I:1274:ILE:CD1	2.42	0.49
1:B:1405:ARG:HA	1:D:1697:LEU:O	2.12	0.49
2:L:1805:PHE:O	2:L:1808:PRO:HD2	2.11	0.49
2:K:1028:VAL:HG13	2:K:1030:PHE:CD2	2.47	0.49
1:D:336:PHE:O	1:D:339:GLN:HB2	2.13	0.49
2:L:1350:ILE:HG22	2:L:1429:VAL:HG11	1.94	0.49
2:K:1317:ASN:HB3	2:K:1320:ALA:CB	2.42	0.49
2:K:1192:LEU:HD22	2:K:1196:PHE:HE1	1.76	0.49
2:I:1750:GLY:N	2:I:1754:GLY:HA3	2.27	0.49
2:J:617:PHE:CD1	2:J:822:ALA:HA	2.47	0.49
2:G:1752:PRO:O	2:G:1756:ILE:HG23	2.12	0.49
2:L:915:PHE:CD2	2:L:915:PHE:O	2.66	0.49
2:J:1752:PRO:O	2:J:1756:ILE:HG23	2.12	0.49
1:E:1419:LYS:O	1:E:1422:ARG:HB2	2.12	0.49
2:L:1813:MET:HG3	2:L:1814:GLU:N	2.27	0.49
2:G:126:VAL:HG12	2:G:127:ALA:H	1.75	0.49
2:H:798:THR:HA	2:H:802:TYR:O	2.11	0.49
2:K:1749:PHE:CG	2:K:1758:ARG:HB3	2.47	0.49
1:B:519:PHE:O	1:B:523:VAL:HG23	2.12	0.49
1:B:1335:ARG:HH11	1:B:1339:GLU:HG2	1.77	0.49
2:L:888:ARG:O	2:L:891:ARG:HB2	2.11	0.49
1:F:1293:THR:HG23	1:F:1298:LYS:HB2	1.95	0.49
2:H:1620:VAL:O	2:H:1624:ALA:HB3	2.12	0.49

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:F:17:LEU:HD23	2:L:2043:VAL:CG2	2.42	0.49
2:H:907:ASN:OD1	2:H:913:VAL:HG12	2.12	0.49
1:C:1001:GLU:O	1:C:1007:ASN:HA	2.11	0.49
2:G:1336:VAL:HG12	2:G:1336:VAL:O	2.12	0.49
2:H:1865:LEU:O	2:H:1869:VAL:HG22	2.12	0.49
1:D:542:GLN:CB	1:D:579:MET:HE2	2.17	0.49
1:E:1330:GLU:OE2	1:E:1342:ARG:NH2	2.45	0.49
2:H:472:THR:HG23	2:H:499:VAL:HA	1.94	0.49
1:E:965:TYR:OH	1:E:1199:LEU:HD22	2.11	0.49
2:L:717:LYS:HD2	4:L:2101:FMN:O2	2.13	0.49
2:G:1594:ARG:CG	2:G:1594:ARG:NH1	2.65	0.49
2:J:609:THR:HG22	2:J:633:GLY:HA3	1.93	0.49
1:B:628:TYR:OH	1:B:630:LYS:HE2	2.12	0.49
1:B:1079:ARG:NH1	1:B:1079:ARG:CG	2.69	0.49
2:L:663:ILE:N	2:L:663:ILE:HD12	2.23	0.49
2:K:1265:TYR:HE1	2:K:1267:PRO:HG3	1.73	0.49
1:E:962:ASN:ND2	2:K:1006:GLN:NE2	2.47	0.49
2:J:1180:VAL:CG1	2:J:1188:GLN:H	2.25	0.49
2:I:1603:PRO:HD2	2:I:1606:ILE:HD11	1.94	0.49
1:C:1004:PRO:HD3	1:C:1572:TRP:CH2	2.47	0.49
2:K:914:TRP:CZ3	2:K:1033:ALA:HA	2.48	0.49
2:L:1891:ILE:HD12	2:L:1895:PHE:CE2	2.47	0.49
2:K:2013:GLY:O	2:K:2016:PRO:HD2	2.12	0.49
2:K:1709:TYR:CE2	2:K:1716:LYS:HG2	2.47	0.49
2:G:1370:LEU:HA	2:G:1435:TYR:CE2	2.45	0.49
2:H:792:LEU:HD23	2:H:1094:HIS:ND1	2.28	0.49
2:L:1352:VAL:HG11	2:L:1395:LEU:HD12	1.94	0.49
2:L:391:VAL:HG12	2:L:398:LEU:HD21	1.95	0.49
2:I:221:TYR:CE2	2:I:225:LEU:HD22	2.48	0.49
2:K:1083:ILE:HA	2:K:1086:ILE:HG13	1.93	0.49
2:I:1515:LEU:HB3	2:I:1525:VAL:CG2	2.41	0.49
1:D:1337:PRO:HA	1:D:1340:MET:HG3	1.95	0.49
2:L:1192:LEU:HD22	2:L:1196:PHE:HE1	1.78	0.49
2:K:1286:LYS:HD3	2:K:1362:PHE:HA	1.94	0.49
1:F:504:GLY:HA2	1:F:929:ARG:HD2	1.94	0.49
1:E:731:ASP:HB3	1:E:735:GLY:HA3	1.95	0.49
2:J:1749:PHE:CG	2:J:1758:ARG:HB3	2.48	0.49
2:H:978:SER:O	2:H:981:GLN:HG2	2.12	0.49
1:A:1075:HIS:HB3	1:A:1166:THR:HB	1.94	0.49
1:B:1708:ASN:OD1	1:B:1710:GLU:HB2	2.12	0.49
2:J:416:GLN:HE22	2:J:425:LYS:H	1.61	0.49
1:E:1691:ILE:HG22	1:E:1695:VAL:HG23	1.94	0.49

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:C:358:PHE:C	1:C:358:PHE:CD2	2.85	0.49
1:A:68:TYR:HD1	2:I:371:HIS:CD2	2.29	0.49
1:B:1017:TYR:HD1	1:B:1017:TYR:N	2.10	0.49
2:G:1279:GLU:H	2:G:1279:GLU:CD	2.15	0.49
2:L:187:ARG:NH2	2:L:230:TRP:O	2.45	0.49
2:L:719:GLY:O	2:L:755:GLU:HG3	2.12	0.49
2:I:608:MET:HA	4:I:2101:FMN:N5	2.27	0.49
2:K:618:VAL:CG1	2:K:648:ILE:HD11	2.43	0.49
2:L:618:VAL:CG1	2:L:648:ILE:HD11	2.42	0.49
1:D:1079:ARG:CG	1:D:1079:ARG:NH1	2.64	0.49
2:K:528:THR:HA	2:K:531:ASN:ND2	2.27	0.49
2:K:582:LYS:HG3	2:K:1110:VAL:HG11	1.93	0.49
2:H:930:THR:CG2	2:H:933:GLU:H	2.25	0.49
1:A:1703:VAL:HG22	1:A:1713:PHE:N	2.27	0.49
2:J:1346:MET:CE	2:J:1617:ARG:NH2	2.75	0.49
2:K:208:LEU:HD12	2:K:227:ILE:CD1	2.40	0.49
2:H:775:VAL:HG12	2:H:777:VAL:HG23	1.94	0.49
2:K:1891:ILE:HD12	2:K:1895:PHE:CE2	2.48	0.49
1:D:1386:THR:HG22	1:D:1629:GLN:HE21	1.76	0.49
2:H:718:PRO:HG3	2:H:727:VAL:HG21	1.93	0.49
1:C:1307:PHE:HB3	1:C:1357:CYS:HB3	1.95	0.49
2:L:76:VAL:O	2:L:80:ILE:HG13	2.12	0.49
1:A:968:PRO:HG3	1:A:1376:TYR:CE1	2.47	0.49
2:L:1456:LEU:HD11	2:L:1543:TYR:CE2	2.46	0.49
2:H:153:PRO:HB3	2:H:270:ARG:HH11	1.78	0.49
2:K:1086:ILE:O	2:K:1090:ILE:HG13	2.13	0.49
2:G:80:ILE:HG12	2:G:105:ILE:CG2	2.43	0.49
2:G:1019:LEU:HA	2:G:1022:ARG:HD2	1.93	0.49
2:H:1517:LEU:HD12	2:H:1521:GLU:HB2	1.93	0.49
2:G:1821:MET:HA	2:G:1826:LEU:HD12	1.95	0.49
1:E:1323:ALA:HB1	1:E:1351:PHE:CE2	2.48	0.49
1:E:716:GLN:NE2	1:E:747:ALA:HB3	2.28	0.49
1:D:890:ASN:OD1	2:I:1755:LYS:HE2	2.13	0.49
2:L:1653:LEU:HD21	2:L:1667:VAL:HG13	1.94	0.49
2:G:1807:GLN:HB3	2:G:1860:VAL:CG1	2.42	0.49
2:L:1142:ILE:HG13	2:L:1209:PRO:HG3	1.95	0.49
2:K:1031:VAL:HG22	2:K:1041:TRP:HB3	1.95	0.49
2:L:1749:PHE:CG	2:L:1758:ARG:HB3	2.47	0.49
2:K:1741:ASN:HD21	2:K:1798:GLY:HA3	1.77	0.49
1:E:334:ALA:O	1:E:338:GLN:HG3	2.12	0.49
2:I:196:PHE:H	2:I:196:PHE:HD2	1.60	0.49
2:H:77:ALA:O	2:H:139:ALA:HB1	2.12	0.49

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:H:614:PRO:O	2:H:618:VAL:HG12	2.13	0.49
2:K:751:HIS:HB2	3:K:2102:NAP:N7N	2.28	0.49
1:B:1106:LEU:HD12	1:D:1104:GLN:HE22	1.78	0.49
2:J:622:MET:O	2:J:656:ARG:NH1	2.46	0.49
1:C:628:TYR:HD1	1:C:629:SER:N	2.11	0.49
2:H:870:THR:HG21	2:H:1064:THR:O	2.13	0.49
2:J:928:ASP:O	2:J:1007:LEU:HD23	2.13	0.49
2:J:582:LYS:HG3	2:J:1110:VAL:CG1	2.42	0.49
2:H:1115:TYR:OH	2:H:1173:HIS:HD2	1.95	0.49
2:G:962:PHE:O	2:G:966:VAL:HG23	2.12	0.49
1:D:20:TYR:CE2	2:J:2062:THR:HG23	2.46	0.49
2:G:460:ILE:CD1	2:G:487:ILE:HD11	2.43	0.49
1:A:1363:MET:HE3	1:A:1368:ALA:CB	2.42	0.49
2:H:743:TRP:CD2	2:H:761:ILE:HD11	2.48	0.49
1:B:983:GLN:O	1:B:987:MET:HG3	2.13	0.49
2:G:207:LEU:HD22	2:G:309:LYS:HG3	1.95	0.49
2:J:361:VAL:O	2:J:365:ILE:HG13	2.12	0.49
2:K:1725:HIS:CD2	2:K:1854:GLU:CB	2.96	0.49
1:C:537:ASN:HB3	1:C:585:MET:SD	2.52	0.49
2:K:1351:VAL:CG1	2:K:1352:VAL:N	2.75	0.49
1:C:330:LYS:HG3	1:C:333:ARG:HH12	1.77	0.49
1:D:1223:GLY:CA	1:D:1276:PRO:HD2	2.42	0.49
2:K:827:GLN:H	2:K:827:GLN:CD	2.14	0.49
2:L:1421:ARG:HD2	2:L:1426:VAL:CG2	2.41	0.49
2:G:1176:PHE:CE1	2:G:1192:LEU:HD13	2.48	0.49
2:G:270:ARG:HG3	2:G:274:GLU:CD	2.33	0.49
2:L:1204:VAL:HG22	2:L:1219:VAL:HG22	1.94	0.49
2:J:596:ARG:HD3	2:J:1119:ARG:HG3	1.94	0.49
2:K:1311:GLY:HA3	2:K:1397:THR:HB	1.95	0.49
1:F:573:VAL:O	1:F:577:LEU:HG	2.13	0.49
1:C:960:ARG:NH1	2:I:968:GLU:OE1	2.46	0.49
2:I:260:HIS:CE1	2:I:543:GLY:HA2	2.47	0.49
2:K:1947:LYS:HG2	2:K:1993:PHE:CD1	2.48	0.49
2:H:1653:LEU:HD21	2:H:1667:VAL:HG13	1.95	0.49
2:H:1208:ASN:N	2:H:1209:PRO:HD3	2.27	0.49
1:A:88:ILE:HG21	2:G:1821:MET:HE2	1.93	0.49
2:I:731:ALA:HA	2:I:739:ILE:CD1	2.42	0.49
2:K:1659:ILE:HG13	2:K:1664:ILE:HD11	1.94	0.49
1:C:962:ASN:HB3	2:I:969:ARG:HD2	1.94	0.49
1:C:329:THR:O	1:C:332:GLN:HB2	2.13	0.49
2:H:357:THR:HG22	2:H:359:SER:H	1.76	0.49
2:H:1269:ALA:HB1	2:H:1271:TYR:CE1	2.47	0.49

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:B:358:PHE:CD2	1:B:358:PHE:C	2.86	0.49
2:J:1975:GLU:O	2:J:1979:GLN:HG3	2.12	0.49
2:L:1946:LEU:HB3	2:L:1951:ILE:HD11	1.94	0.49
2:J:888:ARG:O	2:J:891:ARG:HB2	2.12	0.49
1:C:1082:GLU:HB2	1:C:1085:LEU:HD12	1.95	0.49
1:B:493:PRO:HD2	1:B:517:ARG:O	2.13	0.49
1:D:914:LEU:O	1:D:917:LYS:HB3	2.13	0.49
1:D:536:SER:HB3	1:D:540:LYS:HD2	1.94	0.49
2:L:472:THR:HG23	2:L:499:VAL:HA	1.95	0.49
2:L:614:PRO:O	2:L:618:VAL:HG12	2.13	0.49
2:J:420:PRO:HG3	2:J:847:TYR:CD1	2.48	0.49
2:K:907:ASN:OD1	2:K:913:VAL:HG12	2.13	0.49
2:G:928:ASP:HA	2:G:1007:LEU:HD23	1.94	0.49
2:H:1180:VAL:HA	2:H:1188:GLN:O	2.13	0.49
2:L:582:LYS:HA	2:L:587:GLN:O	2.12	0.49
2:G:935:VAL:HG11	2:G:997:LEU:HD21	1.94	0.49
2:G:1890:ARG:NH2	2:G:1996:ILE:HD11	2.17	0.49
1:C:998:GLY:HA3	1:C:1361:VAL:CG1	2.36	0.49
2:I:1299:VAL:HG22	2:I:1301:PHE:CD1	2.48	0.49
2:I:460:ILE:O	2:I:486:ILE:HB	2.13	0.49
2:K:358:ARG:HB2	2:K:389:PHE:CE2	2.47	0.49
1:A:22:PHE:HE1	2:G:1867:MET:HG3	1.77	0.49
1:A:1580:VAL:O	1:A:1617:ILE:HD11	2.12	0.49
2:K:197:VAL:HA	2:K:262:MET:HE1	1.95	0.49
2:H:1768:THR:O	2:H:1776:LYS:HB2	2.13	0.49
1:C:853:MET:HG2	1:C:856:ASN:ND2	2.24	0.49
1:D:1213:VAL:HG22	1:D:1300:ARG:CZ	2.42	0.49
2:J:1342:PHE:HE2	2:J:1391:VAL:HB	1.78	0.49
2:G:1384:PRO:HB3	2:G:1829:ARG:HH12	1.78	0.49
1:F:330:LYS:HG3	1:F:333:ARG:HH12	1.77	0.49
2:H:1411:LYS:O	2:H:1434:LEU:HD12	2.12	0.49
2:L:792:LEU:HD23	2:L:1094:HIS:ND1	2.28	0.49
2:L:22:ARG:HD2	2:L:42:HIS:HB3	1.95	0.49
1:E:1338:GLY:C	1:E:1340:MET:H	2.15	0.49
1:C:1154:LEU:HD21	1:F:1118:GLU:OE2	2.12	0.49
1:C:985:ARG:HB3	1:C:1422:ARG:HH22	1.78	0.49
1:D:1512:LEU:HD21	1:D:1641:TYR:CE2	2.48	0.49
2:K:1404:VAL:HA	2:K:1412:MET:O	2.11	0.49
2:I:1653:LEU:CD2	2:I:1667:VAL:HG13	2.43	0.49
1:F:846:TRP:HZ2	1:F:856:ASN:O	1.96	0.49
1:C:716:GLN:NE2	1:C:747:ALA:HB3	2.28	0.49
1:F:9:LEU:HB2	2:L:2050:ILE:HD11	1.94	0.49

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:F:1337:PRO:HA	1:F:1340:MET:CG	2.43	0.49
2:L:1157:VAL:HG13	2:L:1197:ALA:HA	1.94	0.49
2:G:1157:VAL:HG22	2:G:1198:PRO:HD2	1.95	0.49
1:F:1001:GLU:O	1:F:1007:ASN:HA	2.12	0.49
2:K:1555:VAL:O	2:K:1555:VAL:HG12	2.13	0.49
2:H:1946:LEU:HB3	2:H:1951:ILE:HD11	1.94	0.49
1:B:782:LYS:NZ	1:B:786:LYS:HD2	2.27	0.49
2:L:1975:GLU:O	2:L:1979:GLN:HG3	2.13	0.49
2:L:1561:ILE:HB	2:L:1655:HIS:HB3	1.95	0.49
1:D:94:PRO:HD3	2:J:1559:ASN:ND2	2.28	0.49
2:J:1910:VAL:HG11	2:J:1973:ILE:HG21	1.94	0.49
2:J:520:GLY:C	2:J:522:SER:H	2.16	0.49
1:E:450:TYR:CD2	1:E:450:TYR:C	2.85	0.49
1:E:626:TRP:CZ3	1:E:898:PHE:HB2	2.48	0.49
2:H:622:MET:O	2:H:656:ARG:NH1	2.46	0.49
2:L:622:MET:O	2:L:656:ARG:NH1	2.46	0.49
2:L:917:ARG:HB2	2:L:937:ARG:HD3	1.95	0.49
2:G:929:MET:HE1	2:G:934:VAL:HA	1.95	0.49
1:C:833:TRP:HH2	1:C:839:ILE:HD11	1.78	0.49
1:D:746:PHE:CD1	1:D:800:PRO:HG3	2.48	0.49
2:J:1500:ASN:HB2	2:J:1503:VAL:H	1.78	0.49
2:K:1603:PRO:HD2	2:K:1606:ILE:HD11	1.95	0.49
1:F:1005:TRP:HE1	1:F:1561:LEU:HD22	1.74	0.49
2:G:825:SER:CB	2:G:1053:ILE:HG13	2.43	0.49
2:G:1301:PHE:O	2:G:1364:ARG:N	2.42	0.49
2:G:796:TRP:HH2	2:G:805:MET:HE1	1.77	0.49
2:G:1074:LYS:HE3	2:G:1075:TYR:CE1	2.42	0.49
2:J:1093:ASP:O	2:J:1097:PHE:CD1	2.64	0.49
2:L:1725:HIS:CD2	2:L:1854:GLU:CB	2.96	0.49
2:L:1745:LEU:HB3	2:L:1799:LEU:CD2	2.43	0.49
2:J:378:ILE:HG23	2:J:391:VAL:CG1	2.43	0.49
2:J:915:PHE:CD2	2:J:915:PHE:O	2.65	0.49
2:H:1420:LYS:HG2	2:H:1425:PRO:CA	2.41	0.49
1:D:1161:ALA:O	1:D:1163:GLN:HG3	2.13	0.49
2:I:571:ASP:OD1	2:I:573:VAL:HG23	2.13	0.49
2:G:1380:TYR:HD2	2:G:1429:VAL:HG22	1.74	0.49
2:I:1311:GLY:HA3	2:I:1397:THR:HB	1.94	0.49
1:A:503:ARG:HA	1:A:933:ILE:CD1	2.42	0.49
2:J:699:ILE:H	2:J:699:ILE:CD1	2.25	0.49
2:K:291:VAL:O	2:K:295:ILE:HB	2.11	0.49
2:K:1207:THR:O	2:K:1215:THR:HG23	2.13	0.49
2:K:735:PRO:HA	2:K:773:ASN:OD1	2.13	0.49

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:G:411:PRO:HD2	2:G:414:LEU:CD1	2.42	0.49
1:D:1337:PRO:HA	1:D:1340:MET:CG	2.42	0.49
2:H:350:MET:HG3	2:H:435:ILE:CG2	2.43	0.49
2:I:611:THR:HG22	2:I:1051:GLU:OE2	2.13	0.49
1:C:88:ILE:HG21	2:I:1821:MET:CE	2.43	0.49
2:H:1017:LEU:HD21	2:H:1032:PRO:HB2	1.94	0.49
1:E:956:ILE:HG23	2:K:976:GLN:O	2.13	0.49
2:I:1359:LYS:O	2:I:1362:PHE:HD1	1.95	0.49
2:G:980:LEU:HD22	2:G:986:LEU:HD21	1.94	0.49
2:I:1946:LEU:HB3	2:I:1951:ILE:HD11	1.94	0.49
2:H:1887:ASN:OD1	2:H:1889:SER:HB2	2.13	0.49
1:E:9:LEU:HB2	2:K:2050:ILE:HD11	1.95	0.49
1:C:682:VAL:HG11	1:C:695:TYR:CE2	2.47	0.49
2:J:1946:LEU:HB3	2:J:1951:ILE:HD11	1.94	0.49
1:F:1208:GLU:OE2	1:F:1661:ARG:NH2	2.45	0.49
1:C:956:ILE:HA	2:I:977:PRO:HA	1.94	0.49
1:B:808:PHE:HA	1:B:912:LYS:HD3	1.95	0.49
2:I:1738:VAL:HA	2:I:1800:LEU:HD13	1.94	0.49
1:B:929:ARG:O	1:B:933:ILE:HG13	2.12	0.49
1:F:519:PHE:O	1:F:523:VAL:HG23	2.12	0.49
2:I:2053:GLU:HA	2:I:2056:GLU:OE1	2.13	0.49
1:C:1447:VAL:CG2	1:C:1467:LEU:HD21	2.36	0.49
2:H:315:LEU:HA	2:H:318:ILE:HD12	1.94	0.49
1:A:1330:GLU:HG2	1:A:1333:ARG:HH11	1.77	0.49
2:K:595:SER:HB2	2:K:600:VAL:O	2.13	0.49
2:J:1380:TYR:HD2	2:J:1429:VAL:HG22	1.77	0.49
2:K:300:THR:H	2:K:303:GLU:HB3	1.77	0.49
2:I:1380:TYR:HD2	2:I:1429:VAL:HG22	1.78	0.49
2:L:865:ILE:HG21	2:L:867:LYS:HE3	1.95	0.49
2:L:798:THR:HA	2:L:802:TYR:O	2.12	0.49
1:C:997:THR:CG2	1:C:1361:VAL:HG22	2.43	0.49
2:H:43:PHE:CD2	2:I:22:ARG:CD	2.96	0.49
2:H:43:PHE:CE2	2:I:22:ARG:CG	2.96	0.49
2:I:38:PRO:HD2	2:I:104:LEU:CD1	2.43	0.49
2:I:76:VAL:HG11	2:I:109:PHE:CD1	2.48	0.49
2:L:1497:ARG:O	2:L:1505:SER:HB3	2.13	0.49
2:J:1891:ILE:HD12	2:J:1895:PHE:CE2	2.47	0.49
2:J:207:LEU:HD22	2:J:309:LYS:HG3	1.95	0.49
1:E:868:VAL:HG11	1:E:908:ILE:CD1	2.38	0.49
1:B:487:TYR:CE2	1:B:881:LEU:HD13	2.48	0.49
2:J:2013:GLY:O	2:J:2016:PRO:HD2	2.13	0.49
2:G:208:LEU:HD12	2:G:227:ILE:CD1	2.41	0.49

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:I:837:GLY:HA3	2:I:1074:LYS:HG2	1.94	0.49
2:G:2013:GLY:C	2:G:2016:PRO:HD2	2.33	0.49
2:I:825:SER:O	2:I:828:ALA:HB3	2.13	0.49
1:B:1363:MET:HE1	1:B:1373:VAL:CG2	2.41	0.49
2:H:502:GLU:O	2:H:506:VAL:HG23	2.13	0.49
2:L:820:LYS:HB3	2:L:1080:ASP:O	2.13	0.49
2:L:788:THR:HG22	2:L:1094:HIS:HE1	1.77	0.49
1:A:445:LEU:O	1:A:448:MET:HB2	2.13	0.49
2:L:1751:GLY:O	2:L:1755:LYS:HG2	2.12	0.49
1:C:441:ASN:HB2	1:C:444:LEU:H	1.78	0.49
2:I:92:GLU:HA	2:I:95:HIS:CE1	2.48	0.49
2:J:1421:ARG:HD2	2:J:1426:VAL:CG2	2.43	0.49
1:A:1547:ARG:HG2	1:A:1604:TYR:HD1	1.75	0.49
2:K:915:PHE:CD2	2:K:915:PHE:O	2.66	0.49
1:E:30:GLU:HB2	2:K:2045:ALA:CB	2.42	0.49
2:J:611:THR:HA	2:J:1051:GLU:OE2	2.13	0.49
2:I:1643:VAL:HG13	2:I:1649:ILE:HD11	1.94	0.49
2:I:1328:VAL:HA	2:I:1611:TYR:HE1	1.78	0.49
2:J:291:VAL:O	2:J:295:ILE:HB	2.13	0.49
2:L:1019:LEU:HA	2:L:1022:ARG:HD2	1.95	0.49
2:G:1946:LEU:HB3	2:G:1951:ILE:HD11	1.95	0.49
2:J:1157:VAL:HG22	2:J:1198:PRO:HD2	1.95	0.49
2:J:676:LEU:C	2:J:676:LEU:HD13	2.34	0.49
1:F:1692:GLN:HG3	1:F:1696:PHE:CE2	2.48	0.49
2:I:888:ARG:O	2:I:891:ARG:HB2	2.13	0.49
1:D:1692:GLN:HG3	1:D:1696:PHE:CE2	2.47	0.49
2:G:735:PRO:HA	2:G:773:ASN:OD1	2.12	0.49
1:A:1651:TYR:CE2	1:A:1655:CYS:SG	3.06	0.49
1:B:1293:THR:HG23	1:B:1298:LYS:HB2	1.93	0.49
1:E:1177:GLU:O	1:E:1180:ILE:HB	2.12	0.49
1:D:1082:GLU:HB2	1:D:1085:LEU:HD12	1.95	0.49
2:I:668:ARG:HH21	2:I:1023:ARG:HH12	1.60	0.49
1:B:1229:THR:HB	1:B:1311:GLN:HG3	1.93	0.49
2:J:300:THR:H	2:J:303:GLU:HB3	1.78	0.48
2:G:613:VAL:HG12	2:G:614:PRO:HD3	1.94	0.48
2:K:857:VAL:HG13	2:K:876:TRP:CD1	2.46	0.48
2:L:1769:VAL:HG22	2:L:1775:ILE:CA	2.35	0.48
1:F:911:LEU:O	1:F:911:LEU:HD12	2.13	0.48
1:C:1208:GLU:OE2	1:C:1661:ARG:NH2	2.46	0.48
2:J:472:THR:HB	2:J:493:MET:HB3	1.95	0.48
1:E:973:TRP:NE1	1:E:1648:LYS:HB2	2.27	0.48
2:K:718:PRO:HG3	2:K:727:VAL:CG2	2.43	0.48

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:G:1745:LEU:HD12	2:G:1746:THR:N	2.28	0.48
2:K:1932:ASP:O	2:K:1936:LEU:HD23	2.13	0.48
2:I:1304:PRO:HA	2:I:1365:LYS:NZ	2.28	0.48
1:A:756:ILE:HA	1:A:759:ILE:CD1	2.41	0.48
1:A:1307:PHE:CB	1:A:1357:CYS:HB3	2.43	0.48
2:L:718:PRO:HG2	2:L:741:LEU:CD1	2.43	0.48
1:E:1218:VAL:HG13	1:E:1301:VAL:CG1	2.43	0.48
2:G:788:THR:CG2	2:G:1094:HIS:CE1	2.96	0.48
2:K:785:SER:O	2:K:789:TYR:HB2	2.13	0.48
2:J:1722:ALA:HB1	2:J:1812:LEU:HD21	1.95	0.48
2:K:35:PHE:CD2	2:K:37:VAL:HG22	2.48	0.48
2:G:1204:VAL:HA	2:G:1218:SER:O	2.13	0.48
2:G:784:GLY:HA3	2:G:786:GLU:OE2	2.13	0.48
2:L:350:MET:HG3	2:L:435:ILE:CG2	2.43	0.48
1:F:849:GLY:HA3	1:F:873:GLN:HG3	1.94	0.48
1:B:421:ARG:NH2	1:B:1613:LYS:HB3	2.28	0.48
2:H:931:TYR:O	2:H:935:VAL:HG12	2.13	0.48
1:D:1495:ARG:HG2	1:D:1495:ARG:HH11	1.77	0.48
2:H:520:GLY:C	2:H:522:SER:H	2.16	0.48
2:I:978:SER:O	2:I:981:GLN:HG2	2.12	0.48
2:J:978:SER:O	2:J:981:GLN:HG2	2.13	0.48
1:E:988:VAL:HG12	1:E:990:LEU:HD23	1.94	0.48
2:J:317:TRP:O	2:J:321:ARG:HG2	2.12	0.48
1:E:1075:HIS:HB3	1:E:1166:THR:HB	1.93	0.48
2:J:529:ASN:HD22	2:J:552:VAL:CG2	2.26	0.48
2:I:1344:ALA:N	2:I:1389:LEU:O	2.43	0.48
2:L:1894:THR:HB	2:L:1954:GLN:OE1	2.12	0.48
1:F:1075:HIS:HB3	1:F:1166:THR:HB	1.94	0.48
2:I:1195:LEU:HD23	2:I:1595:VAL:HG12	1.95	0.48
1:E:1330:GLU:HG2	1:E:1333:ARG:HH11	1.76	0.48
2:L:749:GLY:HA3	4:L:2101:FMN:HM81	1.95	0.48
1:B:579:MET:HE1	1:E:907:PHE:CZ	2.47	0.48
2:G:1026:LYS:HE2	2:G:1045:ASP:OD2	2.13	0.48
2:H:928:ASP:O	2:H:1007:LEU:HD23	2.13	0.48
2:K:460:ILE:O	2:K:486:ILE:N	2.46	0.48
2:K:489:GLU:O	2:K:492:ARG:HG2	2.13	0.48
2:G:1180:VAL:HA	2:G:1188:GLN:O	2.12	0.48
2:J:582:LYS:HA	2:J:587:GLN:O	2.13	0.48
2:L:818:THR:HG22	2:L:829:LYS:CB	2.37	0.48
2:K:779:GLY:HA3	2:K:811:MET:CE	2.42	0.48
2:I:1299:VAL:HG13	2:I:1301:PHE:CE1	2.47	0.48
1:A:498:THR:HG22	1:A:508:TYR:CD1	2.49	0.48

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:J:490:LEU:HA	2:J:493:MET:SD	2.53	0.48
2:I:465:LEU:HB2	2:I:479:ARG:HG3	1.95	0.48
2:L:1721:ARG:NH1	2:L:1854:GLU:OE2	2.46	0.48
1:D:759:ILE:HG12	1:D:813:LEU:HD23	1.96	0.48
1:D:422:LEU:HD13	1:D:429:ILE:HG12	1.95	0.48
1:B:1213:VAL:CG1	1:B:1217:GLU:HB2	2.42	0.48
2:G:1932:ASP:O	2:G:1936:LEU:HD23	2.13	0.48
2:L:38:PRO:HD2	2:L:104:LEU:CD1	2.44	0.48
2:L:76:VAL:HG11	2:L:109:PHE:CD1	2.47	0.48
2:G:24:LEU:HD12	2:G:37:VAL:CG2	2.43	0.48
2:J:845:ASN:HB3	2:J:851:THR:HG1	1.78	0.48
2:J:827:GLN:O	2:J:830:GLN:HB3	2.12	0.48
1:B:506:ILE:HD11	1:B:926:SER:HB3	1.95	0.48
1:C:533:SER:HA	1:C:907:PHE:CZ	2.48	0.48
2:L:1515:LEU:HB3	2:L:1525:VAL:CG2	2.44	0.48
1:A:1514:ILE:CD1	1:A:1545:LEU:HB3	2.44	0.48
2:K:797:SER:O	2:K:802:TYR:HB2	2.13	0.48
2:J:776:LEU:HG	2:J:807:PHE:CE2	2.47	0.48
1:A:876:MET:O	1:A:876:MET:HE3	2.13	0.48
1:B:1414:PRO:HG2	1:D:1473:HIS:NE2	2.28	0.48
2:L:1738:VAL:HA	2:L:1800:LEU:HD13	1.95	0.48
1:A:801:LEU:HD13	1:A:822:GLU:HG2	1.94	0.48
1:F:547:SER:HA	1:F:550:LYS:HB2	1.95	0.48
2:I:1975:GLU:O	2:I:1979:GLN:HG3	2.13	0.48
1:D:848:ARG:HG2	1:D:871:PHE:O	2.12	0.48
1:C:801:LEU:HD13	1:C:822:GLU:HG2	1.95	0.48
2:G:834:ASP:O	2:G:836:PRO:HD3	2.13	0.48
2:G:1344:ALA:N	2:G:1389:LEU:O	2.41	0.48
1:E:1132:ILE:HD12	1:E:1137:GLN:HB2	1.94	0.48
2:I:1731:GLY:O	2:I:1747:VAL:HG12	2.13	0.48
2:K:1141:LYS:HE2	2:K:1143:SER:HB2	1.95	0.48
2:I:1286:LYS:NZ	2:I:1367:ASP:HA	2.29	0.48
1:A:1579:GLN:O	1:A:1583:THR:HG23	2.14	0.48
1:B:1050:TRP:CE3	1:B:1050:TRP:HA	2.47	0.48
1:A:358:PHE:CD2	1:A:358:PHE:C	2.87	0.48
2:H:1753:ARG:HG3	2:H:1756:ILE:HD11	1.95	0.48
2:L:357:THR:HG22	2:L:359:SER:H	1.76	0.48
2:K:501:TRP:NE1	2:K:528:THR:CG2	2.71	0.48
2:J:917:ARG:HH11	2:J:917:ARG:HG2	1.68	0.48
2:L:1026:LYS:HE2	2:L:1045:ASP:OD2	2.14	0.48
2:J:172:ILE:HG22	2:J:514:VAL:O	2.12	0.48
2:K:472:THR:HG23	2:K:499:VAL:HA	1.94	0.48

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:E:673:LEU:HD21	1:E:884:MET:CE	2.43	0.48
2:L:582:LYS:HG3	2:L:1110:VAL:CG1	2.43	0.48
2:L:750:GLY:O	2:L:865:ILE:HA	2.13	0.48
2:J:2017:PHE:CE2	2:J:2021:LEU:HD11	2.48	0.48
1:D:1363:MET:HE3	1:D:1368:ALA:CB	2.44	0.48
2:J:792:LEU:HD23	2:J:1094:HIS:CE1	2.48	0.48
1:D:408:GLN:HE22	1:D:1610:ARG:H	1.61	0.48
2:G:1251:THR:HG22	2:G:1292:VAL:HG13	1.95	0.48
2:I:1074:LYS:HE3	2:I:1075:TYR:CE1	2.47	0.48
2:G:903:ILE:HD11	2:G:914:TRP:CZ2	2.47	0.48
1:E:759:ILE:N	1:E:759:ILE:HD12	2.29	0.48
2:H:1918:VAL:HG13	2:H:2006:HIS:CB	2.42	0.48
2:J:718:PRO:HG3	2:J:727:VAL:CG2	2.43	0.48
2:H:1093:ASP:O	2:H:1097:PHE:CD1	2.65	0.48
2:K:950:TRP:CE2	2:K:956:LYS:HG3	2.47	0.48
2:K:192:THR:O	2:K:194:PRO:HD3	2.12	0.48
2:J:1352:VAL:HG11	2:J:1395:LEU:HD12	1.95	0.48
2:L:1204:VAL:HA	2:L:1218:SER:O	2.13	0.48
1:E:746:PHE:CD2	3:E:1901:NAP:H4D	2.48	0.48
2:K:1236:LEU:HD21	2:K:1239:ASP:O	2.12	0.48
2:L:731:ALA:HA	2:L:739:ILE:CD1	2.42	0.48
2:H:1207:THR:O	2:H:1215:THR:HG23	2.13	0.48
2:L:202:THR:O	2:L:206:GLU:HG3	2.14	0.48
1:F:1113:LYS:O	1:F:1117:GLU:HG3	2.12	0.48
2:L:1587:TYR:O	2:L:1588:ASN:C	2.51	0.48
1:C:1001:GLU:HG2	1:C:1008:ALA:HB2	1.94	0.48
2:G:1128:PRO:HG2	2:G:1135:ALA:CB	2.44	0.48
2:I:2008:THR:HG22	2:I:2011:ARG:HE	1.78	0.48
2:K:1519:THR:O	2:K:1520:LYS:HB2	2.13	0.48
1:E:1599:MET:HA	1:E:1602:PHE:CD2	2.48	0.48
2:K:1279:GLU:H	2:K:1279:GLU:CD	2.16	0.48
1:D:1031:MET:HE2	1:D:1031:MET:HB3	1.72	0.48
2:I:1279:GLU:CD	2:I:1279:GLU:H	2.16	0.48
2:L:1403:ALA:HB2	2:L:1447:GLN:HG3	1.94	0.48
2:I:73:VAL:HA	2:I:113:PHE:CE2	2.49	0.48
2:I:1261:PHE:HE2	2:I:1285:ILE:HD11	1.77	0.48
1:B:427:ARG:HG3	1:B:492:ILE:HG12	1.95	0.48
2:L:595:SER:HB3	2:L:602:PRO:CD	2.43	0.48
1:A:526:MET:HE1	1:A:614:PHE:HB3	1.94	0.48
1:A:577:LEU:HB2	1:A:579:MET:HG2	1.96	0.48
2:K:315:LEU:HA	2:K:318:ILE:HD12	1.94	0.48
2:K:318:ILE:HA	2:K:451:ILE:HD13	1.95	0.48

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:K:1499:LYS:CG	2:K:1500:ASN:H	2.25	0.48
2:I:765:TYR:CD2	2:I:805:MET:HG2	2.49	0.48
2:I:35:PHE:CE1	2:I:105:ILE:HD13	2.48	0.48
2:G:824:THR:HG22	2:G:828:ALA:HB3	1.95	0.48
1:D:1280:CYS:HA	1:D:1566:LYS:O	2.13	0.48
1:E:498:THR:HG21	1:E:858:LEU:O	2.13	0.48
2:I:472:THR:HB	2:I:493:MET:HB3	1.95	0.48
1:E:1213:VAL:CG1	1:E:1214:HIS:N	2.76	0.48
2:I:663:ILE:CD1	2:I:663:ILE:H	2.10	0.48
2:I:751:HIS:HB2	3:I:2102:NAP:N7N	2.28	0.48
2:L:506:VAL:CG1	2:L:506:VAL:O	2.60	0.48
2:G:708:THR:HB	2:G:709:LEU:HD23	1.96	0.48
2:H:1872:GLU:HA	2:H:1872:GLU:OE1	2.14	0.48
2:G:747:ARG:NH2	2:G:757:PHE:CE1	2.82	0.48
2:K:48:LEU:HB2	2:K:79:TYR:OH	2.14	0.48
2:K:48:LEU:HD11	2:K:101:VAL:HG11	1.95	0.48
2:H:76:VAL:O	2:H:80:ILE:HG13	2.13	0.48
2:J:1192:LEU:HD22	2:J:1196:PHE:HE1	1.79	0.48
2:L:379:GLY:O	2:L:391:VAL:HG13	2.14	0.48
2:G:1192:LEU:HD22	2:G:1196:PHE:HE1	1.76	0.48
2:H:756:ASP:CA	2:H:843:TRP:HH2	2.25	0.48
1:C:1160:VAL:C	1:C:1352:MET:HE1	2.33	0.48
1:A:1131:GLU:HG2	1:A:1138:TYR:CE2	2.47	0.48
1:F:1514:ILE:HD13	1:F:1545:LEU:HB3	1.94	0.48
2:I:1142:ILE:HG13	2:I:1209:PRO:HG3	1.95	0.48
2:K:326:TYR:HA	2:L:1338:ARG:HH21	1.78	0.48
1:A:1011:ARG:HH11	1:A:1012:TRP:HA	1.78	0.48
1:E:1017:TYR:N	1:E:1017:TYR:CD1	2.81	0.48
1:D:914:LEU:CD1	1:D:918:LEU:HD12	2.44	0.48
1:C:782:LYS:NZ	1:C:786:LYS:HD2	2.28	0.48
2:I:1894:THR:HB	2:I:1954:GLN:OE1	2.14	0.48
2:L:1753:ARG:HG3	2:L:1756:ILE:HD11	1.95	0.48
1:E:529:GLY:HA2	1:E:614:PHE:CD2	2.49	0.48
2:G:281:GLY:HA3	2:G:470:TYR:HE1	1.78	0.48
2:K:353:ILE:O	2:K:353:ILE:HG22	2.12	0.48
2:J:1336:VAL:HG12	2:J:1336:VAL:O	2.13	0.48
2:G:1977:ARG:CD	2:G:1978:LYS:HG3	2.44	0.48
2:I:868:LEU:O	2:I:870:THR:HG23	2.14	0.48
2:I:911:GLN:NE2	2:I:1065:CYS:H	2.11	0.48
2:K:856:THR:HG23	2:K:866:HIS:NE2	2.28	0.48
2:L:511:THR:C	2:L:512:HIS:CD2	2.87	0.48
2:J:609:THR:CG2	2:J:633:GLY:HA3	2.44	0.48

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:K:685:VAL:CG1	2:K:687:ILE:HG13	2.38	0.48
2:G:1194:ARG:HH21	2:G:1601:ASN:CG	2.17	0.48
1:D:628:TYR:HD1	1:D:629:SER:N	2.12	0.48
2:J:1293:TRP:NE1	2:J:1354:TRP:HZ2	2.11	0.48
2:G:917:ARG:HB2	2:G:937:ARG:HD3	1.94	0.48
2:K:1610:MET:CA	2:K:1610:MET:HE2	2.33	0.48
2:H:663:ILE:N	2:H:663:ILE:HD12	2.27	0.48
2:I:1350:ILE:HG22	2:I:1429:VAL:HG11	1.95	0.48
2:I:762:LEU:HD23	2:I:805:MET:HE1	1.93	0.48
2:G:1436:ARG:NH2	2:G:1602:LEU:HD11	2.28	0.48
1:C:905:LEU:HD22	1:C:911:LEU:CD2	2.43	0.48
2:G:825:SER:HB2	2:G:1053:ILE:HG13	1.95	0.48
2:I:1288:PHE:CE2	2:I:1292:VAL:HG21	2.49	0.48
2:G:1404:VAL:HA	2:G:1412:MET:O	2.13	0.48
2:J:903:ILE:HD11	2:J:914:TRP:CZ2	2.48	0.48
2:L:914:TRP:CD1	2:L:916:GLY:HA3	2.49	0.48
1:B:1183:VAL:HG13	1:B:1252:GLU:OE1	2.13	0.48
2:I:2010:LEU:O	2:I:2014:VAL:HG23	2.13	0.48
1:A:759:ILE:HG12	1:A:813:LEU:HD23	1.96	0.48
2:G:2039:TYR:O	2:G:2041:PRO:HD3	2.13	0.48
2:I:1878:ARG:HE	2:I:1986:PRO:HG3	1.79	0.48
1:F:1223:GLY:CA	1:F:1276:PRO:HD2	2.41	0.48
1:F:1052:ASP:O	1:F:1055:THR:O	2.31	0.48
1:A:1037:ASN:CG	1:A:1674:ILE:HG23	2.33	0.48
2:L:260:HIS:CE1	2:L:543:GLY:HA2	2.49	0.48
1:C:1640:LYS:HG3	1:C:1641:TYR:N	2.28	0.48
1:A:744:VAL:HG12	1:A:746:PHE:CD1	2.49	0.48
1:B:506:ILE:HD13	1:B:922:ILE:HG22	1.95	0.48
1:E:843:VAL:HG22	1:E:843:VAL:O	2.13	0.48
2:I:621:THR:OG1	2:I:1083:ILE:HD13	2.14	0.48
1:C:575:ARG:HG2	1:C:579:MET:SD	2.53	0.48
2:I:1517:LEU:HD12	2:I:1521:GLU:HB2	1.94	0.48
2:K:1266:HIS:CD2	2:K:1275:ARG:CZ	2.97	0.48
2:H:1751:GLY:O	2:H:1752:PRO:C	2.52	0.48
2:J:1554:PRO:HG3	2:J:1659:ILE:HD11	1.95	0.48
2:I:1208:ASN:N	2:I:1209:PRO:HD3	2.29	0.48
2:I:202:THR:HA	2:I:228:LEU:HD11	1.95	0.48
2:G:192:THR:O	2:G:194:PRO:HD3	2.13	0.48
2:L:617:PHE:CD1	2:L:822:ALA:HA	2.48	0.48
1:E:1495:ARG:HG2	1:E:1495:ARG:HH11	1.77	0.48
2:G:690:LEU:HD22	2:G:691:THR:H	1.78	0.48
1:F:20:TYR:CE1	2:L:2018:ARG:NH2	2.81	0.48

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:H:416:GLN:HE22	2:H:425:LYS:H	1.60	0.48
2:J:126:VAL:HG12	2:J:127:ALA:H	1.76	0.48
1:F:1495:ARG:HG2	1:F:1495:ARG:HH11	1.78	0.48
2:L:1017:LEU:HD21	2:L:1032:PRO:HB2	1.96	0.48
2:I:1905:GLU:O	2:I:1908:ALA:HB3	2.12	0.48
2:G:73:VAL:HA	2:G:113:PHE:CE2	2.49	0.48
2:J:532:LYS:HD3	2:J:537:VAL:HG21	1.95	0.48
2:L:353:ILE:O	2:L:353:ILE:HG22	2.12	0.48
2:I:1443:GLU:HA	2:I:1443:GLU:OE1	2.14	0.48
1:F:1599:MET:HA	1:F:1602:PHE:CD2	2.48	0.48
2:G:1969:LEU:HA	2:G:1972:ILE:HD12	1.94	0.48
2:L:1141:LYS:HE2	2:L:1143:SER:HB2	1.94	0.48
1:D:1463:GLU:O	1:D:1467:LEU:HB2	2.14	0.48
2:K:942:MET:O	2:K:951:ILE:HG13	2.13	0.48
2:J:613:VAL:HG13	2:J:614:PRO:HD3	1.96	0.48
1:E:434:ILE:HD11	1:E:490:VAL:HG21	1.96	0.48
2:G:609:THR:HG23	4:G:2101:FMN:O4	2.13	0.48
2:K:1350:ILE:HG22	2:K:1429:VAL:HG11	1.96	0.48
1:B:585:MET:O	1:B:586:GLN:C	2.51	0.48
2:I:685:VAL:HA	2:I:686:PRO:HD3	1.60	0.48
2:H:1180:VAL:CG1	2:H:1188:GLN:H	2.27	0.48
2:H:1405:ILE:HA	2:H:1445:THR:OG1	2.12	0.48
1:C:500:ILE:HD11	1:C:922:ILE:HG23	1.95	0.48
2:J:459:LYS:O	2:J:461:PRO:HD3	2.14	0.48
2:J:465:LEU:HB2	2:J:479:ARG:CG	2.43	0.48
2:I:250:PHE:O	2:I:315:LEU:HD23	2.13	0.48
1:E:927:ALA:HB1	2:K:1462:GLN:NE2	2.29	0.48
2:G:502:GLU:O	2:G:506:VAL:HG23	2.13	0.48
1:A:401:SER:O	1:A:405:TRP:CD1	2.67	0.48
1:D:846:TRP:HZ2	1:D:856:ASN:O	1.96	0.48
2:L:621:THR:OG1	2:L:1083:ILE:HD13	2.13	0.48
2:I:48:LEU:HD13	2:I:101:VAL:HG11	1.96	0.48
2:L:1551:ILE:CG2	2:L:1552:GLU:N	2.76	0.48
2:G:372:LEU:CD1	2:G:397:SER:HB2	2.42	0.48
2:H:1203:TYR:O	2:H:1219:VAL:HA	2.14	0.48
2:G:260:HIS:CE1	2:G:543:GLY:HA2	2.48	0.48
2:G:699:ILE:N	2:G:699:ILE:HD12	2.28	0.48
2:L:1844:LEU:HD22	2:L:1850:VAL:HG21	1.95	0.48
1:E:1371:MET:O	1:E:1661:ARG:NH1	2.46	0.48
1:F:1129:ILE:HA	1:F:1139:THR:O	2.13	0.48
1:C:30:GLU:HB2	2:I:2045:ALA:CB	2.42	0.48
1:E:662:ALA:HA	1:E:694:TYR:OH	2.13	0.48

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:F:1017:TYR:N	1:F:1017:TYR:CD1	2.80	0.48
1:A:536:SER:HB3	1:A:540:LYS:HD2	1.96	0.48
2:L:1269:ALA:HB1	2:L:1271:TYR:CE1	2.49	0.48
2:K:835:ALA:HB3	2:K:1073:ALA:HB1	1.95	0.48
1:C:1075:HIS:HB3	1:C:1166:THR:HB	1.93	0.48
1:A:382:ILE:HD12	1:A:761:SER:HB3	1.95	0.48
2:I:907:ASN:HA	2:I:913:VAL:HG13	1.96	0.48
2:J:281:GLY:HA3	2:J:470:TYR:HE1	1.77	0.48
1:A:1278:GLY:CA	1:A:1630:LYS:HE2	2.40	0.48
2:I:752:HIS:NE2	2:I:856:THR:HG21	2.28	0.48
2:K:613:VAL:N	2:K:614:PRO:CD	2.76	0.48
2:K:613:VAL:HG12	2:K:614:PRO:HD3	1.94	0.48
2:J:752:HIS:NE2	2:J:856:THR:HG21	2.28	0.48
2:K:937:ARG:NE	2:K:941:LEU:CD1	2.77	0.48
1:D:997:THR:CG2	1:D:1361:VAL:HG22	2.44	0.48
2:I:1411:LYS:O	2:I:1434:LEU:HD12	2.13	0.48
2:H:582:LYS:HA	2:H:587:GLN:O	2.13	0.48
2:H:43:PHE:CZ	2:I:42:HIS:CD2	3.01	0.48
1:B:1094:LYS:HE3	1:B:1316:TYR:CG	2.48	0.48
1:E:1004:PRO:HD3	1:E:1572:TRP:HH2	1.78	0.48
2:I:2044:THR:HG22	2:I:2046:LYS:H	1.78	0.48
2:J:674:ILE:HD13	2:J:705:TYR:HE2	1.73	0.48
2:G:2013:GLY:O	2:G:2016:PRO:HD2	2.13	0.48
1:D:1705:GLN:HA	1:D:1711:LEU:HD23	1.95	0.48
1:C:959:PRO:CG	2:I:974:GLU:HG3	2.42	0.48
1:E:1640:LYS:HD2	1:E:1641:TYR:CE1	2.49	0.48
2:K:1299:VAL:HG13	2:K:1301:PHE:CE1	2.47	0.48
2:G:22:ARG:HD2	2:G:42:HIS:HB3	1.96	0.48
2:K:756:ASP:CA	2:K:843:TRP:HH2	2.27	0.48
2:I:875:PHE:O	2:I:878:GLU:HB2	2.14	0.48
1:B:620:LYS:HE3	1:B:626:TRP:CZ2	2.49	0.48
2:K:317:TRP:CD1	2:K:454:ASP:CG	2.87	0.48
2:J:1946:LEU:HD22	2:J:1951:ILE:HG12	1.95	0.48
2:G:529:ASN:HD22	2:G:552:VAL:HG23	1.79	0.48
2:G:1369:ASP:OD1	2:G:1371:LEU:HB3	2.14	0.48
2:J:1741:ASN:ND2	2:J:1798:GLY:HA3	2.29	0.48
1:C:23:ALA:HA	2:I:2007:SER:O	2.14	0.48
2:I:317:TRP:O	2:I:321:ARG:HG2	2.13	0.48
2:I:187:ARG:NH2	2:I:230:TRP:O	2.46	0.48
2:L:1402:ASN:ND2	2:L:1416:CYS:HB2	2.29	0.48
2:G:1975:GLU:O	2:G:1979:GLN:HG3	2.14	0.48
1:D:1293:THR:HG23	1:D:1298:LYS:HB2	1.95	0.48

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:J:618:VAL:CG1	2:J:648:ILE:HD11	2.43	0.48
1:E:1702:ARG:NH1	1:E:1702:ARG:HG2	2.17	0.48
2:G:609:THR:CB	2:G:610:PRO:HD3	2.44	0.48
1:C:427:ARG:HD2	1:C:490:VAL:HG12	1.96	0.48
2:I:1200:ARG:CD	2:I:1200:ARG:H	2.14	0.48
2:I:501:TRP:NE1	2:I:528:THR:CG2	2.75	0.48
2:L:285:HIS:CD2	2:L:501:TRP:CE3	3.02	0.48
2:K:372:LEU:CD1	2:K:397:SER:HB2	2.44	0.48
2:J:1180:VAL:HA	2:J:1188:GLN:O	2.14	0.48
1:A:1703:VAL:CG1	1:A:1711:LEU:HB3	2.35	0.48
2:I:1610:MET:CE	2:I:1610:MET:HA	2.34	0.48
2:J:1251:THR:HG22	2:J:1292:VAL:HG13	1.94	0.48
2:J:2044:THR:HG21	2:J:2054:TYR:CZ	2.48	0.48
2:G:1497:ARG:O	2:G:1505:SER:HB3	2.14	0.48
1:E:1363:MET:HE3	1:E:1368:ALA:CB	2.44	0.48
2:L:1851:MET:HE3	2:L:2025:ILE:HG12	1.95	0.48
2:I:2013:GLY:C	2:I:2016:PRO:HD2	2.33	0.48
2:J:2005:PHE:CA	2:J:2010:LEU:HD11	2.44	0.48
2:H:1299:VAL:HG13	2:H:1301:PHE:CE1	2.49	0.48
2:J:663:ILE:N	2:J:663:ILE:HD12	2.25	0.48
1:C:585:MET:O	1:C:586:GLN:C	2.52	0.48
2:K:2039:TYR:O	2:K:2041:PRO:HD3	2.13	0.48
2:J:716:PHE:CD1	2:J:727:VAL:HG13	2.48	0.48
2:J:271:GLU:H	2:J:274:GLU:HG3	1.78	0.48
2:J:1366:ILE:HG22	2:J:1366:ILE:O	2.13	0.48
2:I:270:ARG:HG3	2:I:274:GLU:CD	2.33	0.48
2:K:820:LYS:HG3	2:K:821:GLU:HG2	1.95	0.48
1:A:566:PHE:CE1	1:F:552:ILE:HD11	2.49	0.48
2:H:391:VAL:HG12	2:H:398:LEU:HD21	1.95	0.48
2:I:192:THR:O	2:I:194:PRO:HD3	2.14	0.48
2:K:1366:ILE:O	2:K:1366:ILE:HG22	2.13	0.48
2:J:1515:LEU:HB3	2:J:1525:VAL:CG2	2.44	0.48
2:K:202:THR:HA	2:K:228:LEU:HD11	1.96	0.48
2:J:1266:HIS:CD2	2:J:1275:ARG:CZ	2.97	0.48
1:D:36:LEU:HD21	1:D:44:ILE:HD11	1.96	0.48
1:D:491:SER:O	1:D:493:PRO:HD3	2.13	0.48
2:H:1335:PHE:CZ	2:H:1629:ILE:HD13	2.49	0.48
1:D:500:ILE:HD11	1:D:922:ILE:HG23	1.94	0.48
1:D:1050:TRP:CE3	1:D:1050:TRP:HA	2.48	0.48
2:K:1331:THR:HG22	2:K:1331:THR:O	2.13	0.48
2:K:594:MET:HB3	2:K:808:ASP:O	2.13	0.48
1:A:662:ALA:HA	1:A:694:TYR:CZ	2.49	0.48

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:G:1910:VAL:HG11	2:G:1973:ILE:HG21	1.94	0.48
1:B:1132:ILE:HD12	1:B:1137:GLN:HB2	1.94	0.48
2:K:609:THR:HA	2:K:631:ALA:HB1	1.94	0.48
2:K:930:THR:CG2	2:K:933:GLU:H	2.24	0.48
1:A:562:SER:CB	1:F:555:GLN:OE1	2.62	0.48
2:G:608:MET:H	2:G:612:THR:CB	2.27	0.48
1:A:492:ILE:HG13	1:A:492:ILE:H	1.48	0.48
2:I:601:PRO:HA	2:I:602:PRO:HD3	1.76	0.48
1:A:1102:ILE:HD11	1:A:1148:LEU:HG	1.95	0.48
2:G:942:MET:O	2:G:951:ILE:HG13	2.14	0.48
2:H:1769:VAL:HG13	2:H:1774:SER:C	2.34	0.48
2:H:1644:LEU:HB3	2:H:1645:PRO:CD	2.44	0.48
2:I:1301:PHE:O	2:I:1364:ARG:N	2.41	0.48
2:I:1795:SER:HB3	2:I:1799:LEU:HD12	1.95	0.48
1:A:31:THR:HG23	2:G:2040:ILE:CG2	2.37	0.48
1:B:1280:CYS:HA	1:B:1566:LYS:O	2.13	0.48
2:K:1764:MET:HG3	2:K:1781:PHE:HE1	1.78	0.48
1:D:859:VAL:O	1:D:859:VAL:HG12	2.13	0.48
1:D:967:PHE:CZ	1:D:1662:GLN:HA	2.49	0.48
2:L:73:VAL:HA	2:L:113:PHE:CE2	2.48	0.48
1:E:1078:ILE:HG23	1:E:1352:MET:HE3	1.95	0.48
2:J:80:ILE:HG12	2:J:105:ILE:CG2	2.44	0.48
1:D:827:ARG:NH1	1:D:831:GLU:OE2	2.46	0.48
1:B:60:THR:HG23	2:H:1922:VAL:HG13	1.96	0.48
2:H:1807:GLN:HB3	2:H:1860:VAL:CG1	2.44	0.48
2:L:1517:LEU:HD12	2:L:1521:GLU:HB2	1.95	0.48
1:E:1084:GLU:CD	1:E:1084:GLU:H	2.17	0.48
2:K:1208:ASN:N	2:K:1209:PRO:HD3	2.28	0.48
2:L:281:GLY:HA3	2:L:470:TYR:HE1	1.79	0.48
1:B:959:PRO:HG2	2:H:974:GLU:HG3	1.96	0.48
2:G:775:VAL:HG12	2:G:777:VAL:HG23	1.96	0.48
2:G:1729:ASN:O	2:G:1757:ILE:HG23	2.13	0.48
1:C:1236:TYR:O	1:F:1237:LYS:HB2	2.14	0.48
2:G:1269:ALA:HB1	2:G:1271:TYR:CE1	2.49	0.48
2:I:1835:GLY:HA3	2:I:1839:GLY:C	2.34	0.48
1:A:754:ARG:N	1:A:810:ASN:HB3	2.28	0.48
1:C:720:GLN:HG3	1:D:378:GLU:OE2	2.14	0.48
2:J:505:THR:O	2:J:505:THR:HG22	2.14	0.48
1:C:2:ARG:HB2	1:C:5:VAL:HB	1.95	0.48
2:J:1835:GLY:HA3	2:J:1839:GLY:C	2.34	0.48
2:I:855:ILE:HB	2:I:869:ALA:HB2	1.95	0.48
2:G:511:THR:CG2	2:G:512:HIS:HD2	2.16	0.48

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:L:290:VAL:CG1	2:L:314:LEU:HD23	2.42	0.48
2:L:489:GLU:O	2:L:493:MET:HG3	2.13	0.48
2:H:917:ARG:HB2	2:H:937:ARG:HD3	1.94	0.48
2:G:1200:ARG:HD3	2:G:1200:ARG:N	2.10	0.48
2:L:938:MET:O	2:L:942:MET:HG3	2.14	0.48
1:E:1148:LEU:HD23	1:E:1148:LEU:HA	1.59	0.48
2:L:685:VAL:CG1	2:L:687:ILE:HG13	2.40	0.48
2:H:1044:LYS:HE2	3:H:2102:NAP:H4B	1.96	0.48
2:G:582:LYS:HA	2:G:587:GLN:O	2.13	0.48
1:D:684:THR:CG2	1:D:686:ARG:H	2.19	0.48
1:E:1686:PRO:HB2	1:E:1713:PHE:CE1	2.49	0.48
2:G:1442:TYR:CG	2:G:1499:LYS:O	2.67	0.48
2:K:903:ILE:HD11	2:K:914:TRP:CZ2	2.48	0.48
2:H:300:THR:H	2:H:303:GLU:HB3	1.77	0.48
1:C:759:ILE:HG12	1:C:813:LEU:HD23	1.96	0.48
2:L:1745:LEU:HD12	2:L:1746:THR:H	1.79	0.48
2:L:1746:THR:CB	2:L:1792:THR:HG23	2.40	0.48
2:H:1871:VAL:HG21	2:H:2003:VAL:HA	1.94	0.48
1:F:15:VAL:HG11	2:L:2022:LEU:CD2	2.42	0.48
1:F:1055:THR:OG1	1:F:1057:GLU:HG2	2.14	0.48
2:J:1305:LEU:HD21	2:J:1365:LYS:HB2	1.96	0.48
2:L:35:PHE:CE1	2:L:105:ILE:HD13	2.49	0.48
1:F:983:GLN:O	1:F:987:MET:HG3	2.13	0.48
2:H:1204:VAL:HA	2:H:1218:SER:O	2.14	0.48
1:D:1096:LEU:O	1:D:1097:LEU:HD23	2.14	0.48
2:I:1881:TYR:CZ	2:I:2009:PHE:HE1	2.32	0.48
2:K:1234:ILE:HG22	2:K:1242:ILE:HG22	1.95	0.48
2:I:1142:ILE:HG13	2:I:1209:PRO:HG2	1.96	0.48
2:L:1208:ASN:N	2:L:1209:PRO:HD3	2.28	0.48
1:F:1323:ALA:HB1	1:F:1351:PHE:CE2	2.49	0.48
2:G:1977:ARG:HD3	2:G:1978:LYS:HG3	1.95	0.48
1:C:967:PHE:CD2	1:C:1662:GLN:HB2	2.49	0.48
2:H:1369:ASP:OD1	2:H:1371:LEU:HB3	2.13	0.48
2:J:1519:THR:O	2:J:1520:LYS:HB2	2.14	0.48
2:J:1510:ILE:HA	2:J:1528:VAL:O	2.14	0.48
2:H:1894:THR:HB	2:H:1954:GLN:OE1	2.14	0.48
1:E:1278:GLY:CA	1:E:1630:LYS:HE2	2.41	0.47
2:K:705:TYR:HA	2:K:709:LEU:HD21	1.96	0.47
2:K:708:THR:HB	2:K:709:LEU:HD23	1.96	0.47
2:L:1047:LEU:HD12	2:L:1047:LEU:N	2.29	0.47
2:J:614:PRO:O	2:J:618:VAL:HG12	2.13	0.47
2:H:930:THR:O	2:H:934:VAL:HG23	2.13	0.47

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:I:914:TRP:CH2	2:I:1033:ALA:HA	2.48	0.47
2:L:775:VAL:HG12	2:L:777:VAL:HG23	1.95	0.47
2:J:914:TRP:CH2	2:J:1033:ALA:HA	2.49	0.47
1:C:973:TRP:NE1	1:C:1648:LYS:HB2	2.28	0.47
1:D:740:LEU:HD12	1:D:781:ILE:HD13	1.96	0.47
2:H:1734:ILE:O	2:H:1738:VAL:HG23	2.13	0.47
1:A:472:GLN:HE21	1:A:472:GLN:HA	1.79	0.47
1:D:1213:VAL:CG1	1:D:1214:HIS:N	2.77	0.47
2:G:48:LEU:HD13	2:G:101:VAL:HG11	1.94	0.47
2:L:1120:ILE:HG13	2:L:1169:TYR:CE2	2.49	0.47
2:K:502:GLU:O	2:K:506:VAL:HG23	2.14	0.47
2:G:718:PRO:HG2	2:G:741:LEU:CD1	2.44	0.47
2:G:821:GLU:CD	2:G:1083:ILE:HG13	2.34	0.47
2:K:260:HIS:CE1	2:K:543:GLY:HA2	2.49	0.47
2:L:270:ARG:HG3	2:L:274:GLU:CD	2.34	0.47
2:K:1204:VAL:HA	2:K:1218:SER:O	2.14	0.47
2:I:276:LEU:HD21	2:I:296:ALA:HA	1.95	0.47
1:E:544:ASP:O	1:E:548:VAL:HG23	2.14	0.47
2:I:792:LEU:HD23	2:I:1094:HIS:CE1	2.49	0.47
1:E:876:MET:O	1:E:876:MET:HE3	2.13	0.47
2:K:1175:MET:HA	2:K:1274:ILE:CD1	2.44	0.47
2:L:196:PHE:N	2:L:196:PHE:CD2	2.82	0.47
2:I:350:MET:HG3	2:I:435:ILE:CG2	2.44	0.47
2:H:1328:VAL:HA	2:H:1611:TYR:HE1	1.79	0.47
1:A:1419:LYS:O	1:A:1422:ARG:HB2	2.15	0.47
2:G:1317:ASN:HB3	2:G:1320:ALA:CB	2.44	0.47
2:G:196:PHE:CD2	2:G:196:PHE:N	2.82	0.47
1:F:1367:LEU:HD22	1:F:1371:MET:HG3	1.96	0.47
2:J:529:ASN:HD22	2:J:552:VAL:HG23	1.79	0.47
1:A:493:PRO:HD2	1:A:517:ARG:O	2.14	0.47
1:D:754:ARG:N	1:D:810:ASN:HB3	2.29	0.47
1:F:869:ARG:O	1:F:903:GLY:HA3	2.13	0.47
2:I:1402:ASN:ND2	2:I:1416:CYS:HB2	2.29	0.47
2:G:907:ASN:OD1	2:G:913:VAL:HG12	2.14	0.47
2:L:1634:SER:HB3	2:L:1684:GLU:HB2	1.95	0.47
1:F:46:GLU:HB3	1:F:80:CYS:HA	1.96	0.47
1:B:857:ASN:HA	1:B:860:ALA:HB2	1.96	0.47
2:G:1886:VAL:HG22	2:G:1995:THR:HG22	1.95	0.47
2:H:134:ILE:HG13	2:H:545:ILE:CD1	2.44	0.47
1:F:1463:GLU:O	1:F:1467:LEU:HB2	2.14	0.47
1:C:1443:LEU:HD22	1:C:1474:ILE:HD11	1.95	0.47
2:I:511:THR:CG2	2:I:512:HIS:HD2	2.17	0.47

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:L:459:LYS:O	2:L:461:PRO:HD3	2.14	0.47
1:F:1330:GLU:HG2	1:F:1333:ARG:HH11	1.77	0.47
1:B:535:TYR:CD1	1:B:610:GLU:HB3	2.49	0.47
2:K:600:VAL:HG13	2:K:601:PRO:N	2.28	0.47
2:J:917:ARG:HD3	2:J:937:ARG:CZ	2.43	0.47
2:J:937:ARG:HG3	2:J:941:LEU:HD12	1.95	0.47
2:I:501:TRP:CZ2	2:I:524:ILE:HG21	2.49	0.47
1:C:409:ASP:HB2	1:C:439:ARG:HH12	1.79	0.47
2:G:966:VAL:O	2:G:970:PHE:HD1	1.96	0.47
1:C:989:ASN:H	1:C:1491:ASN:ND2	2.00	0.47
1:A:1280:CYS:HB2	1:A:1626:GLY:HA2	1.95	0.47
1:D:1565:PRO:O	1:D:1566:LYS:C	2.52	0.47
2:L:208:LEU:HD23	2:L:211:LEU:HD12	1.96	0.47
2:H:788:THR:CG2	2:H:1094:HIS:CE1	2.97	0.47
2:H:1932:ASP:O	2:H:1936:LEU:HD23	2.14	0.47
1:A:441:ASN:HB2	1:A:444:LEU:H	1.79	0.47
2:J:1171:TRP:CH2	2:J:1236:LEU:HB2	2.49	0.47
2:I:1171:TRP:CD1	2:I:1172:ARG:N	2.83	0.47
1:B:746:PHE:CD1	1:B:800:PRO:HG3	2.49	0.47
2:G:193:TYR:HD1	2:G:263:ILE:HD13	1.77	0.47
2:G:1515:LEU:HB3	2:G:1525:VAL:CG2	2.43	0.47
1:D:1131:GLU:HG2	1:D:1138:TYR:CE2	2.49	0.47
1:B:546:ARG:NH1	1:B:631:LYS:NZ	2.62	0.47
2:L:92:GLU:HA	2:L:95:HIS:CE1	2.48	0.47
2:I:2009:PHE:HD2	2:I:2009:PHE:C	2.18	0.47
2:K:202:THR:O	2:K:206:GLU:HG3	2.13	0.47
1:C:849:GLY:HA3	1:C:873:GLN:HG3	1.95	0.47
2:L:776:LEU:HG	2:L:807:PHE:CD2	2.48	0.47
1:A:36:LEU:HD21	1:A:44:ILE:HD11	1.95	0.47
1:F:1337:PRO:HA	1:F:1340:MET:HG3	1.95	0.47
2:H:980:LEU:CD2	2:H:986:LEU:HD21	2.44	0.47
2:J:737:PHE:O	2:J:773:ASN:HB3	2.14	0.47
2:H:1753:ARG:HG3	2:H:1756:ILE:CD1	2.43	0.47
1:E:457:THR:HG22	1:E:464:GLN:HA	1.96	0.47
2:I:1314:GLU:O	2:I:1394:VAL:HA	2.15	0.47
2:H:1510:ILE:HA	2:H:1528:VAL:O	2.14	0.47
2:H:835:ALA:HB3	2:H:1073:ALA:HB1	1.95	0.47
2:J:155:ASP:HB3	2:J:278:ARG:NH1	2.29	0.47
2:L:1865:LEU:O	2:L:1869:VAL:HG22	2.14	0.47
1:C:36:LEU:HD21	1:C:44:ILE:HD11	1.96	0.47
2:L:1622:THR:HA	2:L:1627:ASN:OD1	2.13	0.47
1:B:1514:ILE:HD13	1:B:1545:LEU:HB3	1.96	0.47

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:I:1204:VAL:HA	2:I:1218:SER:O	2.14	0.47
2:H:609:THR:HG23	4:H:2101:FMN:O4	2.14	0.47
2:H:608:MET:HA	4:H:2101:FMN:N5	2.30	0.47
2:K:609:THR:HG23	4:K:2101:FMN:O4	2.15	0.47
2:K:635:TYR:CD2	2:K:641:MET:HG3	2.49	0.47
2:L:460:ILE:O	2:L:486:ILE:N	2.46	0.47
2:H:290:VAL:HG11	2:H:315:LEU:CD1	2.44	0.47
2:G:601:PRO:HB2	2:G:626:TYR:CE2	2.50	0.47
2:G:1200:ARG:H	2:G:1200:ARG:CD	2.14	0.47
2:K:501:TRP:CZ2	2:K:524:ILE:HG21	2.49	0.47
1:B:997:THR:CG2	1:B:1361:VAL:HG22	2.44	0.47
1:F:1102:ILE:HD11	1:F:1148:LEU:HG	1.95	0.47
2:J:942:MET:O	2:J:951:ILE:HG13	2.14	0.47
1:A:1499:ARG:CD	1:E:1476:ARG:HH12	2.20	0.47
2:K:818:THR:HG22	2:K:829:LYS:CB	2.36	0.47
2:L:747:ARG:HH11	2:L:780:SER:CB	2.22	0.47
2:I:440:HIS:NE2	2:I:499:VAL:HG23	2.28	0.47
1:D:973:TRP:NE1	1:D:1648:LYS:HB2	2.28	0.47
2:I:747:ARG:HH11	2:I:780:SER:CB	2.24	0.47
1:B:1565:PRO:O	1:B:1566:LYS:C	2.52	0.47
1:A:452:ILE:CD1	1:A:467:LYS:HA	2.43	0.47
1:C:1161:ALA:O	1:C:1163:GLN:HG3	2.14	0.47
1:D:42:GLU:HG3	2:J:1689:VAL:HG23	1.95	0.47
2:J:153:PRO:HB3	2:J:270:ARG:NH1	2.29	0.47
1:B:392:ASP:HA	1:B:393:PRO:HD2	1.70	0.47
1:B:962:ASN:HD22	2:H:1006:GLN:NE2	2.11	0.47
1:A:502:ALA:HA	1:A:929:ARG:HD3	1.95	0.47
2:L:372:LEU:CD1	2:L:397:SER:HB2	2.43	0.47
2:H:1722:ALA:HB1	2:H:1812:LEU:HD21	1.95	0.47
2:I:1538:ASN:HB3	2:I:1541:ILE:CG2	2.42	0.47
2:K:1305:LEU:HD23	2:K:1366:ILE:HD11	1.96	0.47
1:D:1160:VAL:C	1:D:1352:MET:HE1	2.35	0.47
2:J:617:PHE:HE1	2:J:819:ALA:HB3	1.79	0.47
2:J:202:THR:HA	2:J:228:LEU:HD11	1.96	0.47
1:D:914:LEU:HD11	1:D:918:LEU:HD12	1.97	0.47
2:I:907:ASN:OD1	2:I:913:VAL:HG12	2.14	0.47
2:L:1905:GLU:O	2:L:1908:ALA:HB3	2.15	0.47
2:K:655:GLY:HA3	2:K:1272:ALA:CB	2.44	0.47
1:E:1393:VAL:N	1:E:1394:PRO:CD	2.77	0.47
2:L:1743:LYS:HA	2:L:1798:GLY:HA2	1.97	0.47
1:F:560:LYS:O	1:F:564:LEU:HB2	2.15	0.47
2:K:1123:ALA:O	2:K:1126:GLU:HG3	2.14	0.47

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:D:329:THR:O	1:D:332:GLN:HB2	2.14	0.47
2:I:511:THR:C	2:I:512:HIS:CD2	2.88	0.47
2:G:937:ARG:NE	2:G:941:LEU:CD1	2.77	0.47
2:K:2063:GLY:O	2:K:2065:PRO:HD3	2.15	0.47
2:L:686:PRO:HB3	2:L:1187:PHE:HE1	1.76	0.47
2:J:528:THR:HA	2:J:531:ASN:ND2	2.29	0.47
2:H:751:HIS:HB2	3:H:2102:NAP:N7N	2.29	0.47
1:C:1108:PRO:HA	1:C:1140:VAL:O	2.15	0.47
2:H:43:PHE:CG	2:I:22:ARG:CZ	2.96	0.47
1:B:684:THR:CG2	1:B:686:ARG:H	2.18	0.47
1:D:1004:PRO:HD3	1:D:1572:TRP:HH2	1.79	0.47
2:I:290:VAL:HG11	2:I:315:LEU:CD1	2.44	0.47
1:A:869:ARG:O	1:A:903:GLY:HA3	2.14	0.47
2:I:167:VAL:HG23	2:I:169:ILE:HG13	1.95	0.47
1:F:498:THR:HG21	1:F:858:LEU:O	2.15	0.47
1:C:537:ASN:CB	1:C:585:MET:SD	3.02	0.47
2:K:385:SER:HA	2:K:502:GLU:OE1	2.14	0.47
1:A:929:ARG:O	1:A:933:ILE:HG13	2.15	0.47
2:K:22:ARG:HD2	2:K:42:HIS:HB3	1.95	0.47
2:L:1203:TYR:O	2:L:1219:VAL:HA	2.14	0.47
1:A:746:PHE:CG	3:A:1901:NAP:H4D	2.49	0.47
1:F:441:ASN:HB2	1:F:444:LEU:H	1.79	0.47
1:E:1157:ASP:O	1:E:1159:LEU:HD12	2.14	0.47
1:B:846:TRP:HZ2	1:B:856:ASN:O	1.98	0.47
2:G:92:GLU:HA	2:G:95:HIS:CE1	2.49	0.47
2:K:784:GLY:HA3	2:K:786:GLU:OE2	2.13	0.47
1:F:1307:PHE:HB3	1:F:1357:CYS:HB3	1.97	0.47
1:A:535:TYR:HB2	1:F:576:ALA:HA	1.95	0.47
2:L:1266:HIS:CD2	2:L:1275:ARG:CZ	2.97	0.47
2:J:872:GLY:HA2	2:J:909:ASP:O	2.15	0.47
2:I:776:LEU:HG	2:I:807:PHE:CD2	2.49	0.47
1:E:36:LEU:HD21	1:E:44:ILE:HD11	1.95	0.47
2:G:1338:ARG:HH21	2:I:326:TYR:HA	1.79	0.47
2:G:1945:ILE:HG22	2:G:1946:LEU:N	2.28	0.47
1:E:383:TYR:O	1:E:387:ILE:HG12	2.14	0.47
1:C:875:GLU:O	1:C:878:PHE:HB3	2.13	0.47
2:G:1634:SER:HB3	2:G:1684:GLU:HB2	1.96	0.47
2:J:1887:ASN:OD1	2:J:1889:SER:HB2	2.13	0.47
2:K:1972:ILE:H	2:K:1972:ILE:HG13	1.43	0.47
2:I:798:THR:HA	2:I:802:TYR:O	2.14	0.47
2:G:1017:LEU:O	2:G:1021:GLN:HG3	2.15	0.47
2:I:281:GLY:HA3	2:I:470:TYR:HE1	1.80	0.47

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:L:1872:GLU:HA	2:L:1872:GLU:OE1	2.13	0.47
1:B:1599:MET:HA	1:B:1602:PHE:CD2	2.49	0.47
1:C:1330:GLU:HG2	1:C:1333:ARG:HH11	1.79	0.47
2:H:717:LYS:HD2	4:H:2101:FMN:O2	2.15	0.47
2:H:168:LYS:H	2:H:511:THR:HB	1.79	0.47
2:J:609:THR:HA	2:J:631:ALA:HB1	1.96	0.47
2:K:1115:TYR:CZ	2:K:1174:ALA:HB2	2.49	0.47
2:H:685:VAL:HA	2:H:686:PRO:HD3	1.57	0.47
2:J:818:THR:HA	2:J:829:LYS:HE2	1.97	0.47
2:H:1701:GLU:N	2:H:1704:MET:HE3	2.29	0.47
1:A:408:GLN:CG	1:A:1610:ARG:NH1	2.78	0.47
2:L:747:ARG:NH2	2:L:757:PHE:CE1	2.83	0.47
2:I:300:THR:H	2:I:303:GLU:HB3	1.78	0.47
2:K:388:ASN:HD22	2:K:389:PHE:N	2.13	0.47
2:H:604:MET:CE	2:H:811:MET:HB2	2.45	0.47
1:A:565:GLN:O	1:A:569:LEU:HG	2.13	0.47
1:D:767:HIS:NE2	1:D:771:LEU:HD22	2.29	0.47
1:F:1584:GLY:HA2	1:F:1617:ILE:CD1	2.45	0.47
2:K:1766:PHE:CE1	2:K:1869:VAL:HG23	2.50	0.47
2:K:1113:ILE:CG2	2:K:1169:TYR:CG	2.98	0.47
2:G:1331:THR:HG22	2:G:1331:THR:O	2.14	0.47
1:E:767:HIS:CB	1:E:813:LEU:HD12	2.42	0.47
2:L:1324:PHE:CA	2:L:1583:VAL:HG11	2.44	0.47
2:K:76:VAL:HG11	2:K:109:PHE:CD1	2.49	0.47
2:J:76:VAL:HG11	2:J:109:PHE:CD1	2.49	0.47
2:H:1805:PHE:O	2:H:1808:PRO:HD2	2.13	0.47
1:B:1496:ARG:NH2	1:D:1297:GLY:HA2	2.30	0.47
2:G:1753:ARG:HG3	2:G:1756:ILE:CD1	2.44	0.47
2:K:1554:PRO:HG3	2:K:1659:ILE:HD11	1.96	0.47
1:E:626:TRP:CE3	1:E:898:PHE:HB2	2.49	0.47
1:C:36:LEU:HD22	1:C:61:LEU:HD21	1.96	0.47
1:F:1082:GLU:HB2	1:F:1085:LEU:HD12	1.97	0.47
1:C:1229:THR:HB	1:C:1311:GLN:HG3	1.97	0.47
1:C:679:LYS:HG2	1:C:708:GLN:HB3	1.96	0.47
2:K:1961:SER:O	2:K:1965:VAL:HG22	2.15	0.47
2:I:1369:ASP:OD1	2:I:1371:LEU:HB3	2.15	0.47
2:G:1586:ASP:OD1	2:G:1588:ASN:HB2	2.13	0.47
2:G:589:PHE:CD1	2:G:1116:PHE:CD2	3.02	0.47
2:H:1656:VAL:O	2:H:1656:VAL:HG22	2.14	0.47
1:B:768:ARG:HA	1:B:772:THR:OG1	2.14	0.47
1:B:1042:LEU:HD12	1:B:1058:PRO:HG3	1.94	0.47
1:A:1443:LEU:HD22	1:A:1474:ILE:HD11	1.96	0.47

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:E:1404:ALA:HA	1:E:1501:ALA:HB1	1.96	0.47
2:L:251:PRO:CG	2:L:316:PHE:HA	2.44	0.47
1:B:1148:LEU:CD1	1:D:1148:LEU:HD13	2.28	0.47
2:K:285:HIS:CD2	2:K:501:TRP:CE3	3.02	0.47
1:B:998:GLY:CA	1:B:1361:VAL:HG13	2.31	0.47
2:G:929:MET:HE1	2:G:934:VAL:HG22	1.95	0.47
2:K:290:VAL:CG1	2:K:314:LEU:HD23	2.44	0.47
2:K:490:LEU:HA	2:K:493:MET:SD	2.55	0.47
2:L:765:TYR:CD2	2:L:805:MET:HG2	2.50	0.47
1:C:911:LEU:O	1:C:911:LEU:HD12	2.14	0.47
2:J:318:ILE:HA	2:J:451:ILE:HD13	1.97	0.47
2:H:2013:GLY:O	2:H:2016:PRO:HD2	2.14	0.47
2:L:2013:GLY:O	2:L:2016:PRO:HD2	2.13	0.47
1:A:868:VAL:HG11	1:A:908:ILE:CD1	2.37	0.47
2:I:502:GLU:O	2:I:506:VAL:HG23	2.14	0.47
1:A:1186:VAL:HG12	1:A:1187:THR:N	2.30	0.47
2:G:117:ASN:OD1	2:G:561:ARG:HB2	2.15	0.47
2:L:1099:LEU:HD12	2:L:1103:TYR:CB	2.45	0.47
2:J:1331:THR:O	2:J:1331:THR:HG22	2.15	0.47
2:L:1311:GLY:HA3	2:L:1397:THR:HB	1.97	0.47
2:K:1886:VAL:HG22	2:K:1995:THR:HG22	1.95	0.47
1:F:962:ASN:HB3	2:L:969:ARG:CD	2.42	0.47
2:K:270:ARG:HG3	2:K:274:GLU:CD	2.34	0.47
2:G:781:GLY:CA	2:G:1071:VAL:HG13	2.44	0.47
1:C:744:VAL:HG12	1:C:746:PHE:CD1	2.50	0.47
2:J:35:PHE:CD2	2:J:37:VAL:HG22	2.48	0.47
1:A:852:LEU:HD23	1:A:852:LEU:O	2.15	0.47
2:I:57:PRO:HB2	2:I:65:GLN:HE22	1.78	0.47
2:L:352:SER:HB2	2:L:433:LEU:HD11	1.96	0.47
2:L:1722:ALA:HB1	2:L:1812:LEU:HD21	1.97	0.47
2:I:2009:PHE:CD2	2:I:2009:PHE:C	2.88	0.47
1:F:6:GLU:HA	2:L:2050:ILE:CD1	2.44	0.47
1:C:984:LEU:HD21	1:C:1510:TRP:O	2.15	0.47
1:C:876:MET:HE3	1:C:876:MET:O	2.14	0.47
2:H:1317:ASN:HB3	2:H:1320:ALA:CB	2.44	0.47
1:B:849:GLY:HA3	1:B:873:GLN:HG3	1.97	0.47
2:J:1555:VAL:HG12	2:J:1555:VAL:O	2.14	0.47
2:J:1753:ARG:HG3	2:J:1756:ILE:HD11	1.95	0.47
1:A:1414:PRO:HG2	1:E:1473:HIS:NE2	2.30	0.47
2:L:1555:VAL:HG12	2:L:1555:VAL:O	2.15	0.47
1:B:526:MET:HE3	1:B:614:PHE:HB2	1.97	0.47
1:B:1236:TYR:O	1:D:1237:LYS:HB2	2.14	0.47

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:H:1749:PHE:CG	2:H:1758:ARG:HB3	2.50	0.47
1:E:407:ARG:NH2	1:E:1603:ASP:O	2.47	0.47
2:K:1708:LEU:O	2:K:1708:LEU:HD22	2.14	0.47
1:F:358:PHE:C	1:F:358:PHE:CD2	2.88	0.47
1:A:413:MET:O	1:A:416:ASP:HB2	2.14	0.47
2:J:1561:ILE:HB	2:J:1655:HIS:HB3	1.97	0.47
2:I:708:THR:HB	2:I:709:LEU:HD23	1.96	0.47
2:G:168:LYS:H	2:G:511:THR:HB	1.80	0.47
2:H:1047:LEU:H	2:H:1047:LEU:HD12	1.79	0.47
2:K:846:THR:HG22	2:K:855:ILE:C	2.35	0.47
2:L:250:PHE:O	2:L:315:LEU:HD23	2.15	0.47
1:E:1199:LEU:HD23	1:E:1199:LEU:O	2.14	0.47
1:B:1106:LEU:HD12	1:D:1104:GLN:NE2	2.29	0.47
2:K:685:VAL:CG2	2:K:1186:ARG:NH1	2.69	0.47
2:L:937:ARG:HG3	2:L:941:LEU:HD12	1.97	0.47
2:K:162:ALA:CA	2:K:167:VAL:HG22	2.42	0.47
2:J:932:ALA:O	2:J:935:VAL:HG13	2.13	0.47
2:K:1380:TYR:HD2	2:K:1429:VAL:HG22	1.80	0.47
2:K:2058:VAL:CG1	2:K:2067:ILE:HD12	2.44	0.47
1:F:1148:LEU:HA	1:F:1148:LEU:HD23	1.62	0.47
2:K:791:TYR:CD2	2:K:796:TRP:CG	3.03	0.47
2:J:938:MET:O	2:J:942:MET:HG3	2.14	0.47
2:K:1497:ARG:O	2:K:1505:SER:HB3	2.14	0.47
2:I:582:LYS:HG3	2:I:1110:VAL:CG1	2.45	0.47
2:G:685:VAL:CG2	2:G:1186:ARG:HH12	2.19	0.47
2:G:932:ALA:O	2:G:935:VAL:HG13	2.14	0.47
2:J:2021:LEU:HD22	2:J:2025:ILE:HD11	1.96	0.47
1:A:960:ARG:NH1	2:G:968:GLU:OE1	2.47	0.47
2:H:43:PHE:CB	2:I:22:ARG:NE	2.77	0.47
2:G:276:LEU:HD21	2:G:296:ALA:HA	1.96	0.47
2:G:472:THR:HG23	2:G:499:VAL:HA	1.97	0.47
2:L:743:TRP:CD2	2:L:761:ILE:HD11	2.48	0.47
2:I:315:LEU:HA	2:I:318:ILE:HD12	1.95	0.47
2:J:792:LEU:HD23	2:J:1094:HIS:ND1	2.29	0.47
2:L:914:TRP:CH2	2:L:1033:ALA:HA	2.50	0.47
1:B:1419:LYS:O	1:B:1422:ARG:HB2	2.14	0.47
2:G:2057:GLU:HA	2:G:2060:ARG:HH12	1.79	0.47
2:J:1768:THR:O	2:J:1776:LYS:HB2	2.15	0.47
2:G:1768:THR:O	2:G:1776:LYS:HB2	2.14	0.47
2:J:783:GLY:HA3	2:J:1075:TYR:CB	2.39	0.47
1:D:392:ASP:HA	1:D:393:PRO:HD2	1.73	0.47
2:H:1764:MET:HG3	2:H:1781:PHE:HE1	1.80	0.47

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:H:1738:VAL:HA	2:H:1800:LEU:HD13	1.96	0.47
2:J:716:PHE:HD1	2:J:727:VAL:CG1	2.27	0.47
2:H:821:GLU:CD	2:H:1083:ILE:HG13	2.35	0.47
2:K:1551:ILE:HG22	2:K:1552:GLU:N	2.29	0.47
2:H:1370:LEU:CA	2:H:1435:TYR:HE2	2.27	0.47
1:B:1426:GLU:HA	1:B:1429:ARG:HB2	1.95	0.47
2:L:76:VAL:HG11	2:L:109:PHE:HD1	1.79	0.47
2:I:1886:VAL:HG22	2:I:1995:THR:HG22	1.97	0.47
2:G:1234:ILE:HG22	2:G:1242:ILE:HG22	1.96	0.47
1:F:1640:LYS:HG3	1:F:1641:TYR:N	2.30	0.47
2:G:271:GLU:H	2:G:274:GLU:HG3	1.80	0.47
1:E:1186:VAL:HG12	1:E:1187:THR:N	2.30	0.47
1:A:1488:SER:HB3	1:E:1484:GLU:OE1	2.14	0.47
2:J:1229:VAL:HG12	2:J:1230:LYS:N	2.29	0.47
2:G:1352:VAL:HG11	2:G:1395:LEU:HD12	1.96	0.47
1:D:655:ALA:CB	1:D:742:TYR:HB2	2.45	0.47
2:L:521:VAL:CG1	2:L:549:ASN:HB2	2.44	0.47
2:L:534:GLY:O	2:L:571:ASP:HA	2.14	0.47
2:H:521:VAL:CG1	2:H:549:ASN:HB2	2.44	0.47
2:G:381:SER:OG	2:G:392:THR:HG23	2.14	0.47
2:K:92:GLU:HA	2:K:95:HIS:CE1	2.49	0.47
2:K:1515:LEU:HB3	2:K:1525:VAL:CG2	2.44	0.47
2:J:1844:LEU:HD22	2:J:1850:VAL:HG21	1.97	0.47
2:G:1142:ILE:HG13	2:G:1209:PRO:HG2	1.97	0.47
2:G:1028:VAL:HA	2:G:1029:PRO:HD3	1.74	0.47
2:H:2009:PHE:CD2	2:H:2009:PHE:C	2.88	0.47
2:L:1643:VAL:CG1	2:L:1649:ILE:HD11	2.44	0.47
2:K:728:ILE:O	2:K:732:LYS:HG3	2.14	0.47
2:K:611:THR:HG21	2:K:817:MET:HE2	1.95	0.47
2:I:1910:VAL:CG1	2:I:1973:ILE:HG21	2.45	0.47
2:L:1753:ARG:HG3	2:L:1756:ILE:CD1	2.44	0.47
1:B:967:PHE:CD2	1:B:1662:GLN:HB2	2.50	0.47
1:A:334:ALA:O	1:A:338:GLN:HG3	2.15	0.47
2:H:1655:HIS:HE1	2:H:1657:GLY:O	1.98	0.47
2:J:594:MET:HB3	2:J:808:ASP:O	2.14	0.47
2:K:1894:THR:HB	2:K:1954:GLN:OE1	2.15	0.47
2:H:589:PHE:CD1	2:H:1116:PHE:CD2	3.03	0.47
1:D:565:GLN:O	1:D:569:LEU:HG	2.13	0.47
1:A:1599:MET:HA	1:A:1602:PHE:CD2	2.48	0.47
2:L:979:LEU:HB2	2:L:996:ILE:HG23	1.97	0.47
1:E:50:SER:HB2	1:E:52:THR:HG23	1.97	0.47
2:L:1473:PHE:HE1	2:L:1513:VAL:HG21	1.79	0.47

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:G:1914:LEU:O	2:G:1931:GLY:HA3	2.14	0.47
2:I:1561:ILE:HB	2:I:1655:HIS:HB3	1.97	0.47
2:K:1321:VAL:HG12	2:K:1322:ALA:N	2.29	0.47
2:H:838:VAL:HG12	2:H:839:ASP:N	2.30	0.47
1:D:1075:HIS:HB3	1:D:1166:THR:HB	1.96	0.47
1:C:1184:ASP:OD1	1:C:1185:PRO:HD2	2.14	0.47
2:H:1587:TYR:O	2:H:1588:ASN:C	2.53	0.47
2:H:126:VAL:HG12	2:H:127:ALA:H	1.79	0.47
1:D:29:ILE:HD13	2:J:1923:ALA:HA	1.96	0.47
2:J:1634:SER:HB3	2:J:1684:GLU:HB2	1.96	0.47
1:B:427:ARG:NH1	1:B:427:ARG:CG	2.54	0.47
2:H:609:THR:CB	2:H:610:PRO:HD3	2.44	0.47
2:K:608:MET:H	2:K:612:THR:CB	2.26	0.47
2:K:929:MET:HE1	2:K:934:VAL:HA	1.96	0.47
2:H:465:LEU:HB2	2:H:479:ARG:CG	2.45	0.47
2:L:609:THR:CG2	2:L:633:GLY:HA3	2.44	0.47
2:G:1194:ARG:NH2	2:G:1601:ASN:HA	2.30	0.47
2:J:501:TRP:CZ2	2:J:524:ILE:HG21	2.50	0.47
1:C:1104:GLN:HE22	1:F:1106:LEU:HD12	1.80	0.47
2:I:1375:HIS:CE1	2:I:1610:MET:SD	3.07	0.47
1:E:967:PHE:HB3	1:E:968:PRO:HD2	1.97	0.47
1:A:960:ARG:HB3	2:G:969:ARG:NH1	2.30	0.47
1:C:859:VAL:O	1:C:859:VAL:HG12	2.15	0.47
2:G:2058:VAL:CG1	2:G:2067:ILE:HD12	2.45	0.47
2:G:465:LEU:HB2	2:G:479:ARG:HG3	1.96	0.47
1:A:1218:VAL:HG13	1:A:1301:VAL:CG1	2.45	0.47
2:L:300:THR:H	2:L:303:GLU:HB3	1.79	0.47
2:I:1903:VAL:HG11	2:I:1943:LEU:HD21	1.96	0.47
1:A:1213:VAL:CG1	1:A:1214:HIS:N	2.78	0.47
1:F:422:LEU:HD13	1:F:429:ILE:HG12	1.96	0.47
2:G:1350:ILE:HD13	2:G:1610:MET:SD	2.55	0.47
2:L:821:GLU:CD	2:L:1083:ILE:HG13	2.34	0.47
1:F:1426:GLU:HA	1:F:1429:ARG:HB2	1.97	0.47
2:K:821:GLU:CD	2:K:1083:ILE:HG13	2.35	0.47
1:C:740:LEU:HD12	1:C:781:ILE:HD13	1.96	0.47
2:I:1175:MET:HE1	2:I:1234:ILE:HG21	1.97	0.47
2:J:1204:VAL:HA	2:J:1218:SER:O	2.15	0.47
2:H:1404:VAL:HA	2:H:1412:MET:O	2.14	0.47
2:K:521:VAL:CG1	2:K:549:ASN:HB2	2.45	0.47
1:E:849:GLY:HA3	1:E:873:GLN:HG3	1.97	0.47
2:K:871:ARG:HB2	2:K:909:ASP:HB2	1.95	0.47
1:C:1414:PRO:HG2	1:F:1473:HIS:CD2	2.50	0.47

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:K:327:PRO:O	2:L:1338:ARG:NH2	2.39	0.47
2:H:1561:ILE:HB	2:H:1655:HIS:HB3	1.96	0.47
1:B:889:VAL:O	1:B:893:GLN:HG3	2.15	0.47
1:D:940:ASN:HB3	1:D:949:GLU:OE2	2.15	0.47
1:F:457:THR:HG22	1:F:464:GLN:HA	1.97	0.47
1:E:493:PRO:HD2	1:E:517:ARG:O	2.15	0.47
2:J:1141:LYS:HE2	2:J:1143:SER:HB2	1.96	0.47
1:E:1592:ALA:O	1:E:1593:ASP:C	2.52	0.47
1:F:1232:LEU:HD23	1:F:1232:LEU:HA	1.67	0.47
1:C:383:TYR:O	1:C:387:ILE:HG12	2.15	0.47
2:G:77:ALA:O	2:G:139:ALA:HB1	2.14	0.47
2:G:416:GLN:HE22	2:G:425:LYS:H	1.63	0.47
1:A:411:LEU:HD22	1:A:1612:ILE:HD13	1.96	0.47
2:L:2008:THR:HG22	2:L:2011:ARG:HE	1.80	0.47
2:K:1820:ASP:O	2:K:1823:SER:HB3	2.15	0.47
2:I:609:THR:CB	2:I:610:PRO:HD3	2.44	0.47
2:I:609:THR:HA	2:I:631:ALA:HB1	1.95	0.47
2:I:718:PRO:HG3	2:I:727:VAL:HG21	1.97	0.47
2:L:608:MET:HA	4:L:2101:FMN:N5	2.29	0.47
2:G:1047:LEU:HD12	2:G:1047:LEU:H	1.80	0.47
2:J:1200:ARG:CD	2:J:1200:ARG:H	2.13	0.47
1:A:1702:ARG:HG2	1:A:1702:ARG:NH1	2.20	0.47
2:L:929:MET:HE1	2:L:934:VAL:HA	1.97	0.47
2:G:929:MET:CE	2:G:934:VAL:HA	2.45	0.47
2:H:912:LYS:HB3	2:H:1030:PHE:HA	1.97	0.47
2:J:685:VAL:HA	2:J:686:PRO:HD3	1.59	0.47
2:H:582:LYS:HG3	2:H:1110:VAL:CG1	2.45	0.47
2:J:870:THR:HG21	2:J:1064:THR:O	2.15	0.47
1:A:487:TYR:CE2	1:A:881:LEU:HD13	2.50	0.47
1:E:968:PRO:CD	1:E:1374:PRO:HB3	2.45	0.47
2:J:1442:TYR:CG	2:J:1499:LYS:O	2.67	0.47
1:A:1218:VAL:HG22	1:A:1301:VAL:CG1	2.44	0.47
2:I:289:ILE:HG12	2:I:493:MET:CE	2.43	0.47
1:E:1307:PHE:CB	1:E:1357:CYS:HB3	2.44	0.47
1:E:1307:PHE:HB3	1:E:1357:CYS:HB2	1.97	0.47
2:G:347:PRO:HA	2:G:432:PHE:CE1	2.49	0.47
2:G:1093:ASP:O	2:G:1097:PHE:HD1	1.98	0.47
1:D:1306:GLY:O	1:D:1357:CYS:HB2	2.15	0.47
2:K:1301:PHE:HB3	2:K:1364:ARG:HG3	1.97	0.47
1:C:626:TRP:CD2	1:C:898:PHE:HD1	2.33	0.47
1:F:34:VAL:HG11	2:L:2047:PRO:HD3	1.97	0.47
2:L:571:ASP:OD1	2:L:573:VAL:HG23	2.15	0.47

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:F:1484:GLU:O	1:F:1487:THR:HB	2.14	0.47
1:C:399:TYR:HH	1:C:692:THR:HG23	1.80	0.47
2:I:1266:HIS:CD2	2:I:1275:ARG:CZ	2.98	0.47
1:D:679:LYS:HG2	1:D:708:GLN:CB	2.45	0.47
1:C:1303:LEU:HD23	1:C:1303:LEU:HA	1.62	0.47
2:J:871:ARG:HB2	2:J:909:ASP:HB2	1.96	0.47
1:E:1514:ILE:CD1	1:E:1545:LEU:HB3	2.44	0.47
1:F:893:GLN:OE1	2:G:1751:GLY:HA2	2.15	0.47
1:D:536:SER:HB3	1:D:540:LYS:HB3	1.96	0.47
1:C:1402:THR:HG22	1:F:1696:PHE:HB3	1.96	0.47
2:J:541:LEU:HG	2:J:552:VAL:CG1	2.45	0.47
1:B:967:PHE:CD2	1:B:1374:PRO:HG3	2.50	0.47
1:E:995:VAL:HG13	1:E:1375:ILE:HG23	1.96	0.47
1:F:413:MET:O	1:F:416:ASP:HB2	2.15	0.47
2:L:1910:VAL:HG11	2:L:1973:ILE:HG21	1.97	0.47
1:C:1692:GLN:HG3	1:C:1696:PHE:CE2	2.49	0.47
1:B:334:ALA:O	1:B:338:GLN:HG3	2.15	0.47
2:I:520:GLY:C	2:I:522:SER:H	2.17	0.47
2:G:1749:PHE:CG	2:G:1758:ARG:HB3	2.50	0.47
1:A:9:LEU:HB2	2:G:2050:ILE:HD11	1.97	0.47
1:E:1172:ARG:HH11	1:E:1172:ARG:HG3	1.80	0.47
2:I:1813:MET:HG3	2:I:1814:GLU:N	2.30	0.47
1:A:1172:ARG:HG3	1:A:1172:ARG:HH11	1.79	0.47
2:H:1708:LEU:HD22	2:H:1708:LEU:O	2.15	0.47
2:K:1269:ALA:HB1	2:K:1271:TYR:CE1	2.50	0.47
2:K:1278:MET:HA	2:K:1281:ARG:HB2	1.97	0.47
2:I:717:LYS:HD2	4:I:2101:FMN:O2	2.16	0.47
2:H:846:THR:HG22	2:H:855:ILE:C	2.36	0.47
2:K:749:GLY:HA3	4:K:2101:FMN:HM81	1.97	0.47
2:L:613:VAL:N	2:L:614:PRO:HD3	2.30	0.47
2:L:1265:TYR:HE1	2:L:1267:PRO:HG3	1.73	0.47
2:L:1678:VAL:O	2:L:1679:LEU:HD23	2.15	0.47
2:G:663:ILE:N	2:G:663:ILE:HD12	2.27	0.47
2:K:460:ILE:CD1	2:K:487:ILE:HD11	2.44	0.47
2:H:1602:LEU:HB3	2:H:1604:GLY:H	1.80	0.47
2:K:1061:VAL:HG11	2:K:1066:ILE:HD11	1.97	0.47
2:I:314:LEU:HG	2:I:318:ILE:CD1	2.45	0.47
1:B:1052:ASP:O	1:B:1055:THR:O	2.32	0.47
2:L:1764:MET:HG3	2:L:1781:PHE:HE1	1.79	0.47
1:C:889:VAL:O	1:C:893:GLN:HG3	2.15	0.47
1:A:1186:VAL:HG23	1:A:1309:ASP:HB2	1.96	0.47
2:K:48:LEU:HD13	2:K:101:VAL:HG11	1.95	0.47

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:L:1351:VAL:HG23	2:L:1584:SER:HA	1.97	0.47
2:K:785:SER:CB	2:K:1094:HIS:CD2	2.97	0.47
1:D:445:LEU:O	1:D:448:MET:HB2	2.15	0.47
2:G:1342:PHE:HE2	2:G:1391:VAL:HB	1.79	0.47
2:I:788:THR:CG2	2:I:1094:HIS:CE1	2.98	0.47
1:A:534:GLN:HA	1:A:610:GLU:O	2.15	0.47
2:L:291:VAL:O	2:L:295:ILE:HB	2.14	0.47
1:C:34:VAL:HG21	2:I:2045:ALA:O	2.14	0.47
2:I:204:ILE:HG21	2:I:312:VAL:HG21	1.97	0.47
2:J:1655:HIS:HE1	2:J:1657:GLY:O	1.98	0.47
2:L:980:LEU:HD22	2:L:986:LEU:HD21	1.97	0.47
2:L:1472:TRP:CE2	2:L:1540:VAL:HG22	2.50	0.47
2:H:1975:GLU:O	2:H:1979:GLN:HG3	2.14	0.47
1:C:46:GLU:HB3	1:C:80:CYS:HA	1.98	0.47
1:F:731:ASP:HB3	1:F:735:GLY:HA3	1.96	0.47
2:H:1883:MET:HB2	2:H:2001:ILE:HD12	1.96	0.47
1:A:383:TYR:O	1:A:387:ILE:HG12	2.15	0.47
1:D:334:ALA:O	1:D:338:GLN:HG3	2.15	0.47
2:L:594:MET:HB3	2:L:808:ASP:O	2.14	0.47
1:A:940:ASN:HB3	1:A:949:GLU:OE2	2.15	0.47
1:C:1050:TRP:HA	1:C:1050:TRP:CE3	2.50	0.47
2:L:1656:VAL:HG22	2:L:1656:VAL:O	2.15	0.47
2:I:622:MET:O	2:I:656:ARG:NH1	2.48	0.46
2:L:613:VAL:H	2:L:614:PRO:HD3	1.80	0.46
2:G:608:MET:HA	4:G:2101:FMN:C5A	2.45	0.46
2:G:937:ARG:HG3	2:G:941:LEU:HD12	1.96	0.46
1:E:13:LEU:HD11	2:K:2058:VAL:HG21	1.96	0.46
2:K:1293:TRP:HE1	2:K:1586:ASP:HA	1.80	0.46
2:H:1048:TRP:NE1	2:H:1049:GLN:HG2	2.29	0.46
2:L:528:THR:HA	2:L:531:ASN:ND2	2.30	0.46
2:H:1061:VAL:HG11	2:H:1066:ILE:HD11	1.96	0.46
2:H:1009:ASN:HB2	2:H:1012:ASP:OD2	2.15	0.46
2:L:796:TRP:HH2	2:L:805:MET:HE1	1.78	0.46
2:G:2063:GLY:O	2:G:2065:PRO:HD3	2.16	0.46
2:K:1074:LYS:HG3	2:K:1075:TYR:CD1	2.49	0.46
2:L:1873:ARG:NH1	2:L:2002:ASP:CB	2.78	0.46
1:E:631:LYS:O	1:E:635:ILE:HG22	2.15	0.46
2:I:1026:LYS:HG2	2:I:1027:PRO:HD2	1.98	0.46
1:E:553:ARG:NH2	1:E:567:ASN:HD21	2.13	0.46
2:J:357:THR:HG22	2:J:359:SER:H	1.80	0.46
1:B:574:ILE:H	1:B:574:ILE:HG12	1.60	0.46
2:H:1375:HIS:CE1	2:H:1610:MET:SD	3.03	0.46

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:K:1315:ILE:HA	2:K:1393:ASP:O	2.14	0.46
1:B:21:GLN:O	2:H:2006:HIS:HD2	1.98	0.46
2:L:718:PRO:HG3	2:L:727:VAL:CG2	2.45	0.46
2:G:1171:TRP:CH2	2:G:1236:LEU:HB2	2.49	0.46
1:A:552:ILE:CD1	1:F:552:ILE:HG12	2.45	0.46
2:G:521:VAL:CG1	2:G:549:ASN:HB2	2.45	0.46
1:E:846:TRP:HZ2	1:E:856:ASN:O	1.98	0.46
2:K:746:GLY:O	2:K:843:TRP:NE1	2.48	0.46
2:K:391:VAL:HG12	2:K:398:LEU:HD21	1.97	0.46
2:J:196:PHE:CD2	2:J:196:PHE:N	2.84	0.46
2:H:57:PRO:HB2	2:H:65:GLN:HE22	1.79	0.46
2:I:1722:ALA:HB1	2:I:1812:LEU:HD21	1.97	0.46
2:G:1305:LEU:HD23	2:G:1366:ILE:HD11	1.97	0.46
1:F:1207:TYR:CE2	1:F:1682:LYS:HD2	2.50	0.46
2:J:57:PRO:HB2	2:J:65:GLN:HE22	1.80	0.46
1:E:943:VAL:CG2	2:K:1539:PRO:HG3	2.45	0.46
2:L:1380:TYR:HD2	2:L:1429:VAL:HG22	1.80	0.46
2:H:381:SER:OG	2:H:392:THR:HG23	2.15	0.46
2:G:912:LYS:HB3	2:G:1030:PHE:HA	1.96	0.46
1:B:1078:ILE:HG23	1:B:1352:MET:CE	2.45	0.46
2:K:1753:ARG:HG3	2:K:1756:ILE:HD11	1.96	0.46
1:A:1011:ARG:C	1:A:1011:ARG:HD2	2.36	0.46
1:D:358:PHE:CD2	1:D:358:PHE:C	2.89	0.46
2:L:1655:HIS:HE1	2:L:1657:GLY:O	1.98	0.46
1:A:536:SER:HB3	1:A:540:LYS:HB3	1.97	0.46
1:A:537:ASN:HB2	1:A:608:LYS:HB2	1.96	0.46
2:G:529:ASN:HD22	2:G:552:VAL:CG2	2.29	0.46
1:E:29:ILE:HG13	2:K:1920:TYR:O	2.15	0.46
1:E:1651:TYR:CE2	1:E:1655:CYS:SG	3.08	0.46
1:C:1698:ASN:HA	1:C:1699:PRO:HD3	1.83	0.46
1:D:1335:ARG:HH11	1:D:1339:GLU:HG2	1.79	0.46
2:K:1335:PHE:CZ	2:K:1629:ILE:HD13	2.50	0.46
2:J:1279:GLU:CD	2:J:1279:GLU:H	2.18	0.46
2:L:1336:VAL:O	2:L:1336:VAL:HG12	2.15	0.46
1:D:1249:ILE:H	1:D:1249:ILE:HG13	1.32	0.46
2:J:1443:GLU:HA	2:J:1443:GLU:OE1	2.15	0.46
2:G:1325:VAL:HG13	2:G:1330:ASN:O	2.15	0.46
1:C:484:PRO:HA	1:C:485:PRO:HD3	1.80	0.46
2:G:1887:ASN:OD1	2:G:1889:SER:HB2	2.14	0.46
1:A:1142:LEU:HD12	1:A:1142:LEU:N	2.30	0.46
1:B:1501:ALA:O	1:B:1504:ARG:HB2	2.14	0.46
1:A:1685:ALA:HB1	1:A:1686:PRO:CD	2.45	0.46

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:L:465:LEU:HB2	2:L:479:ARG:CG	2.46	0.46
2:J:608:MET:HA	4:J:2101:FMN:N5	2.30	0.46
2:L:907:ASN:HD21	2:L:917:ARG:HE	1.62	0.46
2:I:937:ARG:HG3	2:I:941:LEU:HD12	1.96	0.46
2:L:1044:LYS:HE2	3:L:2102:NAP:H4B	1.97	0.46
2:J:686:PRO:HB3	2:J:1187:PHE:CE1	2.51	0.46
2:K:462:ALA:HB3	2:K:483:ASP:HA	1.97	0.46
2:I:1370:LEU:CA	2:I:1435:TYR:HE2	2.27	0.46
1:E:673:LEU:HD21	1:E:884:MET:HE3	1.97	0.46
2:L:2064:SER:OG	2:L:2067:ILE:HB	2.16	0.46
2:J:821:GLU:CD	2:J:1083:ILE:HG13	2.35	0.46
2:I:2013:GLY:O	2:I:2016:PRO:HD2	2.15	0.46
1:D:1099:GLU:HG2	1:D:1149:LEU:HD21	1.96	0.46
1:B:1149:LEU:CB	1:D:1149:LEU:HB2	2.44	0.46
2:H:709:LEU:N	2:H:709:LEU:HD23	2.26	0.46
2:J:708:THR:HB	2:J:709:LEU:HD23	1.97	0.46
2:J:357:THR:O	2:J:361:VAL:HG23	2.15	0.46
2:L:502:GLU:O	2:L:506:VAL:HG23	2.14	0.46
2:K:1352:VAL:HG11	2:K:1395:LEU:HD12	1.97	0.46
2:G:670:MET:CE	2:G:674:ILE:HD11	2.45	0.46
2:H:718:PRO:HG3	2:H:727:VAL:CG2	2.45	0.46
2:G:1050:SER:HA	2:G:1064:THR:HG21	1.97	0.46
2:G:779:GLY:HA3	2:G:811:MET:CE	2.44	0.46
2:I:207:LEU:HD22	2:I:309:LYS:HG3	1.95	0.46
2:J:1886:VAL:HG22	2:J:1995:THR:HG22	1.97	0.46
2:K:221:TYR:CD2	2:K:225:LEU:HD22	2.50	0.46
2:G:1420:LYS:HG2	2:G:1425:PRO:CA	2.43	0.46
2:I:746:GLY:O	2:I:843:TRP:NE1	2.47	0.46
1:B:382:ILE:HG13	1:B:382:ILE:H	1.59	0.46
1:B:347:LEU:HD12	1:E:340:LEU:HD12	1.96	0.46
2:K:1359:LYS:O	2:K:1362:PHE:HD1	1.98	0.46
1:B:88:ILE:HG21	2:H:1821:MET:HE1	1.97	0.46
2:K:1749:PHE:CD2	2:K:1758:ARG:HB3	2.50	0.46
2:L:1622:THR:HG23	2:L:1627:ASN:OD1	2.16	0.46
2:G:1377:SER:HB3	2:G:1432:GLN:HB2	1.96	0.46
1:F:914:LEU:O	1:F:917:LYS:HB3	2.15	0.46
2:G:357:THR:HG22	2:G:359:SER:H	1.80	0.46
2:L:1835:GLY:HA3	2:L:1839:GLY:C	2.35	0.46
2:I:173:PHE:CE2	2:I:516:PHE:HB2	2.50	0.46
1:E:519:PHE:O	1:E:523:VAL:HG23	2.14	0.46
2:L:2053:GLU:HA	2:L:2056:GLU:OE1	2.14	0.46
1:D:889:VAL:O	1:D:893:GLN:HG3	2.15	0.46

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:B:28:TRP:HE1	1:B:32:GLN:NE2	2.13	0.46
1:A:50:SER:HB2	1:A:52:THR:HG23	1.97	0.46
2:J:245:SER:HA	2:J:436:THR:OG1	2.15	0.46
1:A:661:GLY:O	1:A:667:ALA:HB2	2.15	0.46
1:D:844:ILE:HD12	1:D:844:ILE:N	2.31	0.46
2:K:1656:VAL:O	2:K:1656:VAL:HG22	2.15	0.46
2:I:1259:LEU:HD11	2:I:1285:ILE:HG12	1.97	0.46
1:C:1553:VAL:HG22	1:C:1604:TYR:O	2.14	0.46
2:L:601:PRO:HB2	2:L:626:TYR:CE2	2.50	0.46
2:K:1181:PHE:HE1	2:K:1191:PRO:HD2	1.74	0.46
1:D:427:ARG:NH1	1:D:492:ILE:HG12	2.30	0.46
1:B:1079:ARG:NH1	1:B:1079:ARG:HG2	2.11	0.46
2:K:1009:ASN:HB2	2:K:1012:ASP:OD2	2.16	0.46
1:B:1005:TRP:HE1	1:B:1561:LEU:CD2	2.25	0.46
2:L:1499:LYS:CG	2:L:1500:ASN:H	2.26	0.46
2:J:1745:LEU:HD12	2:J:1746:THR:N	2.30	0.46
1:E:498:THR:HG22	1:E:508:TYR:CD1	2.51	0.46
2:J:785:SER:HB3	2:J:1090:ILE:HG23	1.98	0.46
1:B:673:LEU:HD21	1:B:884:MET:CE	2.44	0.46
2:K:1884:CYS:HB3	2:K:1936:LEU:CD1	2.42	0.46
2:L:2005:PHE:CA	2:L:2010:LEU:HD11	2.46	0.46
1:E:740:LEU:HD12	1:E:781:ILE:HD13	1.98	0.46
1:A:564:LEU:O	1:A:567:ASN:HB2	2.15	0.46
2:L:1709:TYR:CE2	2:L:1716:LYS:HG2	2.50	0.46
1:A:859:VAL:O	1:A:859:VAL:HG12	2.14	0.46
2:J:48:LEU:HD11	2:J:101:VAL:HG11	1.96	0.46
2:G:705:TYR:HA	2:G:709:LEU:HD21	1.97	0.46
2:I:1933:LEU:HB3	2:I:1987:VAL:CG1	2.46	0.46
2:J:1464:LEU:HD13	2:J:1468:ARG:HG3	1.97	0.46
2:K:827:GLN:O	2:K:830:GLN:HB3	2.16	0.46
2:I:1804:GLN:HB3	2:I:1861:PHE:HE1	1.81	0.46
1:C:1055:THR:OG1	1:C:1057:GLU:HG2	2.16	0.46
2:L:48:LEU:HD13	2:L:101:VAL:HG11	1.95	0.46
1:C:1512:LEU:HD21	1:C:1641:TYR:CE2	2.50	0.46
1:E:746:PHE:CD1	1:E:800:PRO:HG3	2.50	0.46
2:L:756:ASP:CA	2:L:843:TRP:HH2	2.28	0.46
2:H:260:HIS:CE1	2:H:543:GLY:HA2	2.50	0.46
2:G:1722:ALA:HB1	2:G:1812:LEU:HD21	1.97	0.46
2:H:372:LEU:CD1	2:H:397:SER:HB2	2.46	0.46
2:G:291:VAL:O	2:G:295:ILE:HB	2.15	0.46
1:F:1083:PRO:HD2	1:F:1084:GLU:OE2	2.16	0.46
1:D:1393:VAL:N	1:D:1394:PRO:HD3	2.30	0.46

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:K:1561:ILE:HB	2:K:1655:HIS:HB3	1.96	0.46
1:E:1577:CYS:HB3	1:E:1620:PHE:CD2	2.50	0.46
2:J:1977:ARG:HD3	2:J:1978:LYS:HG3	1.97	0.46
1:F:940:ASN:HB3	1:F:949:GLU:OE2	2.16	0.46
2:H:529:ASN:HD22	2:H:552:VAL:CG2	2.28	0.46
2:I:617:PHE:CE1	2:I:822:ALA:HB2	2.50	0.46
2:J:1179:GLU:N	2:J:1179:GLU:OE1	2.45	0.46
1:A:687:PHE:C	1:A:687:PHE:CD2	2.88	0.46
1:D:1457:GLU:HG3	1:D:1457:GLU:H	1.51	0.46
1:A:1457:GLU:H	1:A:1457:GLU:HG3	1.47	0.46
2:L:1104:ASP:N	2:L:1104:ASP:OD1	2.48	0.46
2:G:585:VAL:HG12	2:G:585:VAL:O	2.15	0.46
1:A:782:LYS:NZ	1:A:786:LYS:HD2	2.31	0.46
1:B:960:ARG:HH11	2:H:968:GLU:HB3	1.80	0.46
2:L:608:MET:HB3	2:L:608:MET:HE2	1.50	0.46
2:J:167:VAL:C	2:J:168:LYS:HD2	2.36	0.46
1:E:1672:GLY:O	1:E:1676:ASN:N	2.48	0.46
2:K:907:ASN:HA	2:K:913:VAL:HG13	1.98	0.46
2:J:907:ASN:OD1	2:J:913:VAL:HG12	2.16	0.46
2:G:1346:MET:CE	2:G:1617:ARG:NH2	2.79	0.46
1:F:1108:PRO:HA	1:F:1140:VAL:O	2.15	0.46
2:K:251:PRO:CG	2:K:316:PHE:HA	2.44	0.46
2:L:1053:ILE:CD1	2:L:1061:VAL:HG13	2.45	0.46
2:I:1009:ASN:HB2	2:I:1012:ASP:OD2	2.16	0.46
2:L:779:GLY:HA3	2:L:811:MET:CE	2.46	0.46
2:K:211:LEU:HD13	2:K:313:GLU:HG3	1.98	0.46
2:H:708:THR:HB	2:H:709:LEU:HD23	1.96	0.46
2:I:2005:PHE:CA	2:I:2010:LEU:HD11	2.45	0.46
1:B:1055:THR:OG1	1:B:1057:GLU:HG2	2.15	0.46
1:D:1703:VAL:HG22	1:D:1712:LYS:C	2.35	0.46
1:D:1052:ASP:O	1:D:1055:THR:O	2.34	0.46
2:I:1932:ASP:O	2:I:1936:LEU:HD23	2.14	0.46
2:J:388:ASN:HD22	2:J:389:PHE:N	2.13	0.46
2:G:44:GLN:HG3	2:G:101:VAL:CG2	2.46	0.46
2:L:1331:THR:O	2:L:1331:THR:HG22	2.15	0.46
1:D:42:GLU:H	2:J:1689:VAL:HB	1.79	0.46
2:J:129:ILE:HG21	2:J:132:LYS:HD2	1.97	0.46
2:H:1370:LEU:CD1	2:H:1373:LEU:HD13	2.44	0.46
2:I:784:GLY:HA3	2:I:786:GLU:OE2	2.15	0.46
2:L:580:LEU:HG	2:L:1098:LEU:HD23	1.97	0.46
2:L:788:THR:CG2	2:L:1094:HIS:CE1	2.99	0.46
2:K:617:PHE:CD1	2:K:822:ALA:HA	2.50	0.46

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:E:441:ASN:HB2	1:E:444:LEU:H	1.81	0.46
2:K:26:LEU:HD23	2:K:49:LYS:HG3	1.98	0.46
1:B:852:LEU:HD23	1:B:852:LEU:O	2.16	0.46
1:F:1505:GLY:O	1:F:1509:THR:HG23	2.16	0.46
2:J:1538:ASN:HB3	2:J:1541:ILE:CG2	2.44	0.46
2:J:1517:LEU:HD12	2:J:1521:GLU:HB2	1.96	0.46
1:C:1131:GLU:HG2	1:C:1138:TYR:CE2	2.50	0.46
2:H:871:ARG:HB2	2:H:909:ASP:HB2	1.97	0.46
1:F:1514:ILE:H	1:F:1514:ILE:HG13	1.35	0.46
1:C:407:ARG:NH1	1:C:1606:VAL:HG23	2.30	0.46
2:K:776:LEU:HG	2:K:807:PHE:CD2	2.51	0.46
1:B:1017:TYR:N	1:B:1017:TYR:CD1	2.81	0.46
1:F:1371:MET:O	1:F:1661:ARG:NH1	2.48	0.46
2:J:2008:THR:HG22	2:J:2011:ARG:HE	1.79	0.46
1:D:1014:MET:O	1:D:1590:ARG:NH2	2.42	0.46
1:F:49:PRO:HG2	2:L:1810:LEU:HD21	1.97	0.46
2:H:317:TRP:O	2:H:321:ARG:HG2	2.15	0.46
2:K:1002:GLU:C	2:K:1004:SER:H	2.18	0.46
1:B:1075:HIS:HB3	1:B:1166:THR:HB	1.97	0.46
1:B:1393:VAL:N	1:B:1394:PRO:CD	2.79	0.46
2:I:1519:THR:O	2:I:1520:LYS:HB2	2.16	0.46
2:H:1472:TRP:CE2	2:H:1540:VAL:HG22	2.51	0.46
1:B:869:ARG:O	1:B:903:GLY:HA3	2.15	0.46
2:K:1883:MET:HB2	2:K:2001:ILE:HD12	1.96	0.46
2:L:356:LEU:HD22	2:L:356:LEU:HA	1.77	0.46
1:F:1172:ARG:HG3	1:F:1172:ARG:HH11	1.80	0.46
1:F:1065:LYS:O	1:F:1069:GLU:HB2	2.16	0.46
1:B:1592:ALA:O	1:B:1593:ASP:C	2.54	0.46
1:D:383:TYR:O	1:D:387:ILE:HG12	2.15	0.46
2:K:867:LYS:HB2	2:K:873:VAL:HG11	1.98	0.46
2:L:489:GLU:O	2:L:492:ARG:HG2	2.15	0.46
1:D:1102:ILE:HD11	1:D:1148:LEU:HG	1.96	0.46
1:D:1702:ARG:NH1	1:D:1702:ARG:HG2	2.15	0.46
1:F:555:GLN:HG2	1:F:557:ARG:NH2	2.30	0.46
1:E:1102:ILE:HD11	1:E:1148:LEU:HG	1.98	0.46
2:J:174:GLY:HA2	2:J:524:ILE:CG1	2.45	0.46
1:D:21:GLN:HE21	1:D:21:GLN:HB3	1.58	0.46
1:E:1280:CYS:HB2	1:E:1626:GLY:HA2	1.98	0.46
1:E:1565:PRO:O	1:E:1566:LYS:C	2.52	0.46
1:E:684:THR:CG2	1:E:686:ARG:H	2.23	0.46
2:L:606:ALA:HB2	2:L:811:MET:CG	2.45	0.46
2:I:1701:GLU:H	2:I:1704:MET:HE3	1.79	0.46

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:G:1746:THR:CB	2:G:1792:THR:HG23	2.39	0.46
1:D:1584:GLY:HA2	1:D:1617:ILE:CD1	2.45	0.46
1:E:1213:VAL:CG1	1:E:1217:GLU:HB2	2.46	0.46
2:I:1891:ILE:HD12	2:I:1895:PHE:CE2	2.51	0.46
2:J:912:LYS:HB3	2:J:1030:PHE:HA	1.98	0.46
2:L:1289:TYR:CB	2:L:1370:LEU:HD23	2.45	0.46
2:H:1411:LYS:HB2	2:H:1439:TYR:CD1	2.49	0.46
2:K:1871:VAL:HG21	2:K:2003:VAL:HA	1.95	0.46
2:L:785:SER:HB3	2:L:1090:ILE:HG23	1.97	0.46
2:J:1351:VAL:CG1	2:J:1352:VAL:N	2.79	0.46
1:D:15:VAL:HG11	2:J:2022:LEU:CD2	2.44	0.46
2:H:270:ARG:HG3	2:H:274:GLU:CD	2.36	0.46
2:H:1192:LEU:HD22	2:H:1196:PHE:CE1	2.50	0.46
1:D:441:ASN:HB2	1:D:444:LEU:H	1.80	0.46
1:C:1484:GLU:O	1:C:1487:THR:HB	2.16	0.46
2:J:352:SER:HB2	2:J:433:LEU:HD11	1.98	0.46
2:J:875:PHE:HE2	2:J:906:LEU:HD23	1.81	0.46
2:G:699:ILE:H	2:G:699:ILE:CD1	2.28	0.46
2:K:1538:ASN:HB3	2:K:1541:ILE:CG2	2.45	0.46
2:K:1175:MET:HE1	2:K:1234:ILE:HG21	1.95	0.46
1:D:914:LEU:HD11	1:D:918:LEU:CD1	2.45	0.46
1:C:457:THR:HG22	1:C:464:GLN:HA	1.98	0.46
1:E:1556:ILE:CD1	1:E:1587:PRO:HD2	2.44	0.46
2:H:1402:ASN:ND2	2:H:1416:CYS:HB2	2.31	0.46
1:B:718:SER:HA	1:E:378:GLU:OE1	2.16	0.46
1:E:413:MET:O	1:E:416:ASP:HB2	2.16	0.46
2:H:2053:GLU:HA	2:H:2056:GLU:OE1	2.15	0.46
2:I:1106:LYS:HD3	2:I:1106:LYS:HA	1.77	0.46
2:I:870:THR:HG21	2:I:1064:THR:O	2.16	0.46
2:H:618:VAL:HG11	2:H:648:ILE:HD11	1.96	0.46
2:H:609:THR:HA	2:H:631:ALA:HB1	1.98	0.46
2:H:749:GLY:HA3	4:H:2101:FMN:HM81	1.98	0.46
2:J:797:SER:O	2:J:802:TYR:HB2	2.16	0.46
2:H:685:VAL:HG23	2:H:1186:ARG:NH1	2.30	0.46
2:G:1009:ASN:HD22	2:G:1009:ASN:HA	1.53	0.46
2:G:1873:ARG:NH1	2:G:2002:ASP:CB	2.77	0.46
2:G:314:LEU:HG	2:G:318:ILE:CD1	2.44	0.46
2:G:440:HIS:NE2	2:G:499:VAL:HG23	2.31	0.46
2:J:1742:PRO:O	2:J:1799:LEU:HD13	2.15	0.46
1:E:869:ARG:HB2	1:E:869:ARG:HE	1.62	0.46
1:E:1055:THR:OG1	1:E:1057:GLU:HG2	2.15	0.46
2:I:1871:VAL:HG21	2:I:2003:VAL:HA	1.97	0.46

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:I:154:TYR:CD1	2:I:561:ARG:NH2	2.84	0.46
1:F:859:VAL:HG12	1:F:859:VAL:O	2.14	0.46
1:A:1494:TRP:CG	1:A:1505:GLY:HA3	2.51	0.46
2:G:1725:HIS:CD2	2:G:1854:GLU:CB	2.98	0.46
1:C:987:MET:O	1:C:1490:GLY:HA3	2.15	0.46
1:A:1078:ILE:HA	1:A:1162:GLY:HA2	1.97	0.46
2:I:1234:ILE:HG22	2:I:1242:ILE:HG22	1.96	0.46
2:K:1456:LEU:HD11	2:K:1543:TYR:CE2	2.49	0.46
1:A:34:VAL:HG11	2:G:2047:PRO:HD3	1.97	0.46
1:B:472:GLN:HE21	1:B:472:GLN:HA	1.81	0.46
2:J:827:GLN:H	2:J:827:GLN:CD	2.18	0.46
2:G:827:GLN:H	2:G:827:GLN:CD	2.18	0.46
1:B:401:SER:O	1:B:405:TRP:CD1	2.69	0.46
1:A:1343:PRO:O	1:A:1531:ASP:OD2	2.34	0.46
1:B:1446:GLU:HA	1:B:1449:ALA:HB3	1.97	0.46
2:G:352:SER:HB2	2:G:433:LEU:HD11	1.97	0.46
2:J:1208:ASN:N	2:J:1209:PRO:HD3	2.31	0.46
2:K:1753:ARG:HG3	2:K:1756:ILE:CD1	2.46	0.46
2:K:534:GLY:O	2:K:571:ASP:HA	2.15	0.46
2:H:1555:VAL:HG12	2:H:1555:VAL:O	2.15	0.46
1:C:411:LEU:CD2	1:C:1612:ILE:HD13	2.45	0.46
2:H:617:PHE:CD1	2:H:822:ALA:HA	2.51	0.46
2:G:113:PHE:N	2:G:113:PHE:CD1	2.84	0.46
2:I:1371:LEU:O	2:I:1590:ILE:HD11	2.15	0.46
2:J:2053:GLU:HA	2:J:2056:GLU:OE1	2.16	0.46
1:E:996:VAL:HG11	1:E:1578:LEU:HD11	1.96	0.46
2:L:1002:GLU:C	2:L:1004:SER:H	2.18	0.46
1:E:79:LEU:HD12	1:E:88:ILE:HD13	1.98	0.46
1:E:961:ALA:HB2	1:E:1022:LEU:HD12	1.98	0.46
1:A:1402:THR:HG22	1:E:1696:PHE:HB3	1.97	0.46
2:J:719:GLY:O	2:J:755:GLU:HG3	2.16	0.46
2:L:2009:PHE:CD2	2:L:2009:PHE:C	2.88	0.46
1:C:1031:MET:HE2	1:C:1031:MET:HB3	1.78	0.46
1:D:687:PHE:CD2	1:D:687:PHE:C	2.89	0.46
1:B:1296:GLN:HE21	1:D:1296:GLN:HG2	1.80	0.46
1:D:1553:VAL:HG22	1:D:1604:TYR:O	2.15	0.46
2:J:1231:THR:CG2	2:J:1595:VAL:HG11	2.46	0.46
2:L:490:LEU:HD23	2:L:493:MET:SD	2.56	0.46
2:L:609:THR:HA	2:L:631:ALA:HB1	1.98	0.46
2:K:685:VAL:HA	2:K:686:PRO:HD3	1.63	0.46
1:D:492:ILE:H	1:D:492:ILE:HG13	1.45	0.46
2:G:609:THR:HA	2:G:631:ALA:HB1	1.98	0.46

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:K:1587:TYR:O	2:K:1588:ASN:C	2.53	0.46
2:J:1181:PHE:HE1	2:J:1191:PRO:HD2	1.79	0.46
2:J:1635:TYR:CE2	2:J:1637:VAL:HG23	2.51	0.46
2:K:1602:LEU:HB3	2:K:1604:GLY:H	1.81	0.46
2:J:250:PHE:O	2:J:315:LEU:HD23	2.16	0.46
1:C:440:SER:HB3	1:C:481:LEU:CD2	2.42	0.46
2:H:1251:THR:HG22	2:H:1292:VAL:HG13	1.97	0.46
1:A:905:LEU:HD23	1:A:908:ILE:HD12	1.97	0.46
2:J:747:ARG:NH1	2:J:780:SER:O	2.48	0.46
2:G:1232:VAL:HA	2:G:1245:THR:O	2.15	0.46
1:C:1037:ASN:CG	1:C:1674:ILE:HG23	2.36	0.46
2:H:208:LEU:HD12	2:H:227:ILE:CD1	2.43	0.46
1:A:1154:LEU:HA	1:A:1154:LEU:HD23	1.69	0.46
2:G:718:PRO:HG3	2:G:727:VAL:CG2	2.46	0.46
1:C:12:THR:CG2	2:I:2066:LYS:HD3	2.45	0.46
2:G:1236:LEU:HD12	2:G:1241:GLU:O	2.16	0.46
2:L:1299:VAL:HG13	2:L:1301:PHE:CE1	2.51	0.46
2:I:391:VAL:HG12	2:I:398:LEU:HD21	1.96	0.46
1:D:1484:GLU:O	1:D:1487:THR:HB	2.16	0.46
2:L:1404:VAL:HA	2:L:1412:MET:O	2.15	0.46
2:L:1966:ARG:HG3	2:L:1967:ALA:N	2.30	0.46
1:B:1371:MET:O	1:B:1661:ARG:NH1	2.47	0.46
2:I:616:ASP:OD2	2:I:823:HIS:NE2	2.48	0.46
1:E:414:TYR:C	1:E:414:TYR:CD2	2.88	0.46
1:F:88:ILE:HG21	2:L:1821:MET:HE1	1.97	0.46
1:E:1546:GLY:O	1:E:1547:ARG:C	2.54	0.46
2:L:737:PHE:O	2:L:773:ASN:HB3	2.15	0.46
1:B:755:GLU:HG2	1:E:831:GLU:HG2	1.98	0.46
2:K:1017:LEU:HD21	2:K:1032:PRO:HB2	1.97	0.46
1:B:967:PHE:HB3	1:B:968:PRO:CD	2.46	0.46
2:I:1655:HIS:HE1	2:I:1657:GLY:O	1.99	0.46
1:F:1177:GLU:O	1:F:1180:ILE:HB	2.15	0.46
1:D:1208:GLU:OE2	1:D:1661:ARG:NH2	2.47	0.46
2:J:1491:ARG:O	2:J:1492:LEU:HD23	2.15	0.46
2:L:1914:LEU:O	2:L:1931:GLY:HA3	2.16	0.46
1:E:8:GLU:HG2	2:K:2027:LYS:HD3	1.97	0.46
2:I:1920:TYR:HD2	2:I:1927:TYR:HE2	1.62	0.46
1:A:1592:ALA:O	1:A:1593:ASP:C	2.54	0.46
2:K:690:LEU:HB2	2:K:711:ILE:HG21	1.97	0.46
2:K:1325:VAL:HG13	2:K:1330:ASN:O	2.15	0.46
1:E:1142:LEU:HD12	1:E:1142:LEU:N	2.31	0.46
1:B:1313:GLU:HG2	1:B:1313:GLU:H	1.55	0.46

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:L:1106:LYS:HA	2:L:1106:LYS:HD3	1.76	0.46
2:H:353:ILE:O	2:H:353:ILE:HG22	2.16	0.46
2:H:1179:GLU:OE1	2:H:1179:GLU:N	2.49	0.46
1:E:687:PHE:C	1:E:687:PHE:CD2	2.89	0.46
1:F:1313:GLU:HG2	1:F:1313:GLU:H	1.47	0.46
1:B:46:GLU:HB3	1:B:80:CYS:HA	1.98	0.46
2:I:662:LEU:HD22	2:I:673:GLN:OE1	2.16	0.46
2:G:511:THR:C	2:G:512:HIS:CD2	2.89	0.46
2:G:2052:LYS:HG2	2:G:2052:LYS:H	1.42	0.46
2:K:1350:ILE:HD13	2:K:1610:MET:SD	2.56	0.46
2:L:1180:VAL:CG1	2:L:1188:GLN:H	2.28	0.46
2:L:865:ILE:HG22	2:L:867:LYS:HG3	1.98	0.46
1:C:1218:VAL:O	1:C:1271:GLY:HA3	2.16	0.46
2:I:460:ILE:CD1	2:I:487:ILE:HD11	2.45	0.46
1:A:902:ASN:C	1:A:904:GLY:H	2.19	0.46
1:D:31:THR:HG23	2:J:2040:ILE:CG2	2.42	0.46
1:E:1584:GLY:HA2	1:E:1617:ILE:HD12	1.98	0.46
2:H:674:ILE:HD13	2:H:705:TYR:HE2	1.75	0.46
2:J:1985:GLN:C	2:J:1987:VAL:N	2.67	0.46
2:K:1807:GLN:HB3	2:K:1860:VAL:CG1	2.46	0.46
2:K:1903:VAL:HG11	2:K:1943:LEU:HD21	1.98	0.46
2:K:596:ARG:HD3	2:K:1119:ARG:HG3	1.98	0.46
2:J:751:HIS:HB2	3:J:2102:NAP:N7N	2.30	0.46
2:H:358:ARG:HB2	2:H:389:PHE:CE2	2.51	0.46
1:C:422:LEU:HD13	1:C:429:ILE:HG12	1.96	0.46
2:L:894:GLU:CD	2:L:897:LYS:HD3	2.35	0.46
2:G:1203:TYR:O	2:G:1219:VAL:HA	2.16	0.46
2:I:26:LEU:HD23	2:I:49:LYS:HG3	1.97	0.46
1:B:626:TRP:CZ3	1:B:898:PHE:HB2	2.51	0.46
1:E:1446:GLU:HA	1:E:1449:ALA:HB3	1.97	0.46
2:L:1553:GLN:HB3	2:L:1554:PRO:HD2	1.97	0.46
2:H:1643:VAL:CG1	2:H:1649:ILE:HD11	2.46	0.46
1:B:1078:ILE:HA	1:B:1162:GLY:HA2	1.98	0.46
2:H:1019:LEU:HA	2:H:1022:ARG:HD2	1.96	0.46
2:H:1315:ILE:HA	2:H:1393:ASP:O	2.16	0.46
1:E:1522:PHE:HB2	1:E:1557:PHE:CD1	2.51	0.46
1:D:849:GLY:HA3	1:D:873:GLN:HG3	1.97	0.46
1:B:17:LEU:HD23	2:H:2043:VAL:CG2	2.45	0.46
1:D:984:LEU:HD21	1:D:1510:TRP:O	2.16	0.46
1:C:88:ILE:HG21	2:I:1821:MET:HE2	1.97	0.46
2:J:1359:LYS:O	2:J:1362:PHE:HD1	1.98	0.46
2:G:534:GLY:O	2:G:571:ASP:HA	2.15	0.46

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:I:1157:VAL:HG22	2:I:1198:PRO:HD2	1.98	0.46
2:I:1734:ILE:O	2:I:1738:VAL:HG23	2.15	0.46
2:L:1977:ARG:CD	2:L:1978:LYS:HG3	2.46	0.46
1:D:1579:GLN:O	1:D:1583:THR:HG23	2.16	0.46
1:F:879:ASN:HB3	1:F:901:LEU:HD13	1.98	0.46
1:E:661:GLY:O	1:E:667:ALA:HB2	2.16	0.46
1:C:1157:ASP:O	1:C:1327:ALA:HB3	2.16	0.46
1:A:24:MET:HB3	2:G:2043:VAL:HG12	1.97	0.46
1:D:519:PHE:O	1:D:523:VAL:HG23	2.16	0.46
2:G:2053:GLU:HA	2:G:2056:GLU:OE1	2.16	0.46
1:D:1172:ARG:HH11	1:D:1172:ARG:HG3	1.80	0.46
2:J:1483:LEU:H	2:J:1483:LEU:HG	1.11	0.46
2:J:1820:ASP:O	2:J:1823:SER:HB3	2.15	0.46
1:E:71:ALA:HB3	2:J:371:HIS:HB2	1.98	0.46
1:B:1553:VAL:HG22	1:B:1604:TYR:O	2.16	0.46
2:I:1203:TYR:O	2:I:1219:VAL:HA	2.15	0.46
1:B:1330:GLU:HG2	1:B:1333:ARG:HH11	1.80	0.46
2:H:1047:LEU:CD1	2:H:1047:LEU:H	2.28	0.46
2:H:460:ILE:CD1	2:H:487:ILE:HD11	2.46	0.46
1:B:1107:GLU:HA	1:B:1108:PRO:HD3	1.71	0.46
2:J:600:VAL:HG13	2:J:601:PRO:N	2.30	0.46
2:L:1644:LEU:HB3	2:L:1645:PRO:CD	2.45	0.46
1:A:498:THR:HG21	1:A:858:LEU:O	2.16	0.46
2:J:208:LEU:HD12	2:J:227:ILE:CD1	2.40	0.46
2:I:382:LEU:HG	2:I:390:VAL:HB	1.98	0.46
2:J:606:ALA:HB2	2:J:811:MET:CG	2.46	0.46
1:D:1674:ILE:HG22	1:D:1675:ASN:OD1	2.16	0.46
1:F:1213:VAL:CG1	1:F:1217:GLU:HB2	2.46	0.46
2:L:726:GLN:O	2:L:730:ILE:HG12	2.16	0.46
2:G:726:GLN:O	2:G:730:ILE:HG12	2.15	0.46
2:J:1305:LEU:CD1	2:J:1305:LEU:H	2.26	0.46
2:I:1802:ALA:CB	2:I:1804:GLN:HE22	2.27	0.46
1:E:1078:ILE:HA	1:E:1162:GLY:HA2	1.98	0.46
1:C:502:ALA:O	1:C:929:ARG:HD3	2.15	0.46
2:L:1342:PHE:HE2	2:L:1391:VAL:HB	1.81	0.46
2:J:521:VAL:CG1	2:J:549:ASN:HB2	2.45	0.46
1:A:1160:VAL:HG11	1:A:1337:PRO:HB3	1.97	0.46
1:E:1179:ILE:O	1:E:1183:VAL:HG23	2.15	0.46
1:E:1187:THR:OG1	1:E:1258:MET:HG3	2.16	0.46
1:F:746:PHE:CG	3:F:1901:NAP:H4D	2.51	0.46
2:H:1311:GLY:HA3	2:H:1397:THR:HB	1.98	0.46
2:H:655:GLY:HA3	2:H:1272:ALA:HB2	1.98	0.46

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:L:950:TRP:CE2	2:L:956:LYS:HG3	2.51	0.46
2:L:827:GLN:H	2:L:827:GLN:CD	2.19	0.46
1:E:401:SER:O	1:E:405:TRP:CD1	2.69	0.46
1:B:1131:GLU:HG2	1:B:1138:TYR:CE2	2.50	0.46
2:H:1204:VAL:HG22	2:H:1219:VAL:HG22	1.98	0.46
2:I:1807:GLN:HB3	2:I:1860:VAL:CG1	2.46	0.46
2:L:1948:MET:HG2	2:L:1993:PHE:CZ	2.51	0.46
2:K:2009:PHE:CD2	2:K:2009:PHE:C	2.89	0.46
2:L:1175:MET:HE1	2:L:1234:ILE:HG21	1.97	0.46
2:L:1309:PHE:N	2:L:1309:PHE:CD1	2.84	0.46
1:F:1142:LEU:HD12	1:F:1142:LEU:H	1.79	0.46
2:I:411:PRO:HD2	2:I:414:LEU:CD1	2.45	0.46
2:H:1031:VAL:HA	2:H:1032:PRO:HD3	1.69	0.46
2:J:1587:TYR:O	2:J:1588:ASN:C	2.54	0.46
2:K:1741:ASN:ND2	2:K:1798:GLY:HA3	2.31	0.46
2:L:1555:VAL:HG21	2:L:1824:LYS:HA	1.97	0.46
1:F:1175:VAL:HA	1:F:1176:PRO:HD3	1.78	0.46
2:G:1622:THR:HG23	2:G:1627:ASN:OD1	2.16	0.46
2:J:1402:ASN:ND2	2:J:1416:CYS:HB2	2.31	0.46
1:A:457:THR:HG22	1:A:464:GLN:HA	1.97	0.46
1:D:996:VAL:HG11	1:D:1578:LEU:HD11	1.98	0.46
2:H:1104:ASP:N	2:H:1104:ASP:OD1	2.49	0.46
2:J:1104:ASP:N	2:J:1104:ASP:OD1	2.48	0.46
2:I:1555:VAL:HG12	2:I:1555:VAL:O	2.14	0.46
1:C:450:TYR:C	1:C:450:TYR:CD2	2.89	0.46
2:H:1634:SER:HB3	2:H:1684:GLU:HB2	1.98	0.46
2:J:1344:ALA:N	2:J:1389:LEU:O	2.41	0.46
2:J:52:PHE:HB2	2:J:82:PHE:CE2	2.50	0.46
2:K:870:THR:HG21	2:K:1064:THR:O	2.16	0.46
2:L:613:VAL:HG13	2:L:614:PRO:CD	2.46	0.46
2:G:1194:ARG:NH2	2:G:1601:ASN:CG	2.70	0.46
1:C:673:LEU:HD21	1:C:884:MET:CE	2.46	0.46
2:J:791:TYR:CD2	2:J:796:TRP:CG	3.03	0.46
2:K:932:ALA:O	2:K:935:VAL:HG13	2.16	0.46
2:J:929:MET:CE	2:J:934:VAL:HA	2.46	0.46
1:C:965:TYR:CE1	1:C:1669:PHE:CD1	3.04	0.46
1:D:746:PHE:CD2	3:D:1901:NAP:H4D	2.51	0.46
1:D:852:LEU:O	1:D:852:LEU:HD23	2.16	0.46
1:C:1565:PRO:HG3	1:C:1572:TRP:CH2	2.50	0.46
2:K:1053:ILE:CD1	2:K:1061:VAL:HG13	2.46	0.46
1:E:498:THR:HG22	1:E:508:TYR:HD1	1.81	0.46
2:J:460:ILE:CD1	2:J:487:ILE:HD11	2.45	0.46

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:K:207:LEU:HD22	2:K:309:LYS:HG3	1.98	0.46
2:H:676:LEU:C	2:H:676:LEU:HD13	2.36	0.46
2:J:347:PRO:HA	2:J:432:PHE:CE1	2.50	0.46
2:K:1872:GLU:HA	2:K:1872:GLU:OE1	2.13	0.46
2:G:792:LEU:HD23	2:G:1094:HIS:CE1	2.51	0.46
2:H:152:LYS:HA	2:H:153:PRO:HD3	1.81	0.46
2:G:1192:LEU:HD22	2:G:1196:PHE:CE1	2.51	0.46
2:H:1175:MET:O	2:H:1192:LEU:HD12	2.16	0.46
2:G:1204:VAL:HG22	2:G:1219:VAL:HG22	1.98	0.46
2:I:756:ASP:CA	2:I:843:TRP:HH2	2.28	0.46
2:L:200:LEU:H	2:L:200:LEU:HD23	1.80	0.46
2:I:1086:ILE:O	2:I:1090:ILE:HG13	2.17	0.46
2:J:781:GLY:CA	2:J:1071:VAL:HG13	2.46	0.46
2:I:1948:MET:HG2	2:I:1993:PHE:CZ	2.50	0.46
1:A:544:ASP:O	1:A:548:VAL:HG23	2.15	0.46
1:A:1514:ILE:O	1:A:1547:ARG:NH1	2.49	0.46
1:A:1446:GLU:HA	1:A:1449:ALA:HB3	1.98	0.46
2:L:196:PHE:HD2	2:L:196:PHE:N	2.14	0.46
2:J:611:THR:HG21	2:J:817:MET:CE	2.46	0.46
2:H:1142:ILE:HG13	2:H:1209:PRO:HG2	1.97	0.46
1:F:1078:ILE:HA	1:F:1162:GLY:HA2	1.97	0.46
2:K:196:PHE:N	2:K:196:PHE:CD2	2.84	0.46
2:J:1248:GLU:OE2	2:J:1250:ARG:NE	2.45	0.46
1:C:687:PHE:HD2	1:C:687:PHE:C	2.19	0.46
2:L:1946:LEU:HD22	2:L:1951:ILE:HG12	1.97	0.46
2:L:1734:ILE:O	2:L:1738:VAL:HG23	2.15	0.46
1:A:540:LYS:HG3	1:A:608:LYS:N	2.31	0.46
2:H:545:ILE:HG22	2:H:555:LYS:HD3	1.98	0.46
2:G:1587:TYR:O	2:G:1588:ASN:C	2.55	0.46
2:L:141:TYR:OH	2:L:267:THR:HG23	2.16	0.46
1:B:662:ALA:HA	1:B:694:TYR:CZ	2.50	0.46
2:G:520:GLY:C	2:G:522:SER:H	2.19	0.46
2:G:1738:VAL:HA	2:G:1800:LEU:HD13	1.97	0.46
1:C:1691:ILE:HG22	1:C:1695:VAL:HG23	1.97	0.46
1:F:916:THR:HA	1:F:919:ARG:HB2	1.98	0.46
1:A:1184:ASP:OD1	1:A:1185:PRO:HD2	2.16	0.46
1:F:661:GLY:O	1:F:667:ALA:HB2	2.15	0.46
2:I:200:LEU:H	2:I:200:LEU:HD23	1.81	0.46
2:I:444:LEU:HD23	2:I:444:LEU:HA	1.76	0.46
2:G:1473:PHE:HE1	2:G:1513:VAL:HG21	1.81	0.46
2:I:1047:LEU:N	2:I:1047:LEU:HD12	2.30	0.45
2:J:856:THR:HG23	2:J:866:HIS:NE2	2.31	0.45

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:K:1346:MET:HG3	2:K:1380:TYR:CD1	2.51	0.45
2:I:1350:ILE:HD13	2:I:1610:MET:SD	2.56	0.45
1:F:612:ILE:HG22	1:F:628:TYR:CD2	2.52	0.45
1:A:965:TYR:CE1	1:A:1199:LEU:HD22	2.51	0.45
2:H:791:TYR:CD2	2:H:796:TRP:CG	3.04	0.45
2:L:791:TYR:CD2	2:L:796:TRP:CG	3.04	0.45
1:C:1218:VAL:HG13	1:C:1301:VAL:CG1	2.46	0.45
1:A:20:TYR:CE1	2:G:2018:ARG:NH2	2.84	0.45
2:G:459:LYS:HA	2:G:485:ASP:CG	2.36	0.45
1:D:1005:TRP:HE1	1:D:1561:LEU:HD22	1.77	0.45
2:J:743:TRP:CD1	2:J:761:ILE:HD11	2.51	0.45
2:H:2005:PHE:CA	2:H:2010:LEU:HD11	2.46	0.45
2:G:914:TRP:CD1	2:G:916:GLY:HA3	2.52	0.45
1:D:1037:ASN:CG	1:D:1674:ILE:HG23	2.37	0.45
2:H:48:LEU:HD11	2:H:101:VAL:HG11	1.97	0.45
2:H:1871:VAL:CG2	2:H:2004:PRO:HD3	2.46	0.45
2:G:870:THR:HG21	2:G:1064:THR:O	2.16	0.45
2:K:1770:ASN:HB2	2:K:1776:LYS:CE	2.43	0.45
2:G:48:LEU:HD11	2:G:101:VAL:HG11	1.97	0.45
1:F:1275:THR:HA	1:F:1276:PRO:HD3	1.59	0.45
1:B:962:ASN:HB3	2:H:969:ARG:CD	2.46	0.45
2:H:1551:ILE:HG22	2:H:1552:GLU:N	2.30	0.45
2:K:789:TYR:O	2:K:792:LEU:HB3	2.16	0.45
2:K:76:VAL:HG11	2:K:109:PHE:HD1	1.81	0.45
2:I:1192:LEU:HD22	2:I:1196:PHE:CE1	2.50	0.45
1:C:1160:VAL:HG11	1:C:1337:PRO:HB3	1.98	0.45
1:E:60:THR:HG23	2:K:1922:VAL:HG13	1.99	0.45
2:I:820:LYS:HB3	2:I:1080:ASP:O	2.15	0.45
1:C:569:LEU:HD13	1:D:548:VAL:HG23	1.98	0.45
2:J:1142:ILE:HG13	2:J:1209:PRO:HG2	1.98	0.45
2:L:1192:LEU:HD22	2:L:1196:PHE:CE1	2.51	0.45
1:E:1542:LEU:HD22	1:E:1547:ARG:HD3	1.97	0.45
1:F:415:TYR:CD2	1:F:1614:THR:HA	2.51	0.45
1:B:1083:PRO:HD2	1:B:1084:GLU:OE2	2.16	0.45
2:L:173:PHE:CE2	2:L:516:PHE:HB2	2.51	0.45
1:C:375:TRP:CD2	1:D:375:TRP:HB3	2.51	0.45
2:G:173:PHE:CE2	2:G:516:PHE:HB2	2.51	0.45
1:A:720:GLN:HG3	1:F:378:GLU:OE2	2.15	0.45
2:H:719:GLY:O	2:H:755:GLU:HG3	2.16	0.45
1:C:493:PRO:HD2	1:C:517:ARG:O	2.16	0.45
1:A:1473:HIS:CD2	1:E:1414:PRO:HD2	2.52	0.45
1:B:731:ASP:HB3	1:B:735:GLY:HA3	1.97	0.45

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:B:457:THR:HG22	1:B:464:GLN:HA	1.97	0.45
1:F:1592:ALA:O	1:F:1593:ASP:C	2.54	0.45
2:L:155:ASP:N	2:L:155:ASP:OD1	2.49	0.45
1:B:450:TYR:CD2	1:B:450:TYR:C	2.90	0.45
2:K:182:TYR:CD1	2:K:183:PHE:N	2.84	0.45
2:I:613:VAL:HG13	2:I:614:PRO:CD	2.47	0.45
2:I:854:VAL:HA	2:I:867:LYS:O	2.16	0.45
4:H:2101:FMN:N1	4:H:2101:FMN:O2'	2.44	0.45
2:J:609:THR:CB	2:J:610:PRO:HD3	2.45	0.45
2:L:907:ASN:HA	2:L:913:VAL:HG13	1.97	0.45
2:K:1769:VAL:HG13	2:K:1774:SER:O	2.15	0.45
2:H:117:ASN:CA	2:H:561:ARG:HG3	2.34	0.45
2:J:174:GLY:H	2:J:517:GLY:CA	2.28	0.45
2:I:685:VAL:HG23	2:I:1186:ARG:NH1	2.31	0.45
2:K:394:PRO:HD2	2:K:397:SER:OG	2.16	0.45
2:K:290:VAL:HG11	2:K:315:LEU:CD1	2.46	0.45
1:A:962:ASN:HB3	2:G:969:ARG:CD	2.44	0.45
2:G:1602:LEU:HB3	2:G:1604:GLY:H	1.81	0.45
2:J:2063:GLY:O	2:J:2065:PRO:HD3	2.15	0.45
2:L:1410:GLY:HA2	2:L:1437:GLY:H	1.82	0.45
2:G:1404:VAL:O	2:G:1445:THR:HA	2.16	0.45
1:A:869:ARG:HE	1:A:869:ARG:HB2	1.58	0.45
1:F:740:LEU:HD12	1:F:781:ILE:HD13	1.98	0.45
2:J:1289:TYR:CB	2:J:1370:LEU:HD23	2.46	0.45
2:L:708:THR:HB	2:L:709:LEU:HD23	1.97	0.45
1:B:1004:PRO:HD3	1:B:1572:TRP:HH2	1.80	0.45
2:K:265:CYS:SG	2:K:275:LEU:HB2	2.57	0.45
1:E:974:ASP:O	1:E:979:PRO:HD3	2.16	0.45
1:E:17:LEU:HD23	2:K:2043:VAL:CG2	2.46	0.45
2:K:129:ILE:CG2	2:K:132:LYS:HD2	2.46	0.45
2:J:1000:TYR:HA	2:J:1001:PRO:HD2	1.74	0.45
2:K:621:THR:OG1	2:K:1083:ILE:HD13	2.16	0.45
1:B:1512:LEU:HD21	1:B:1641:TYR:CE2	2.51	0.45
2:K:76:VAL:O	2:K:80:ILE:HG13	2.16	0.45
1:C:746:PHE:CD1	1:C:800:PRO:HG3	2.51	0.45
2:K:894:GLU:CD	2:K:897:LYS:HD3	2.35	0.45
1:C:1338:GLY:C	1:C:1340:MET:H	2.19	0.45
1:C:1168:TRP:HE1	1:C:1173:TYR:HE1	1.64	0.45
1:B:565:GLN:HG2	1:B:565:GLN:O	2.15	0.45
2:K:350:MET:HG3	2:K:435:ILE:CB	2.45	0.45
2:L:57:PRO:HB2	2:L:65:GLN:HE22	1.81	0.45
1:A:846:TRP:HZ2	1:A:856:ASN:O	1.99	0.45

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:I:186:LEU:CG	2:I:256:VAL:HG22	2.45	0.45
1:D:1338:GLY:C	1:D:1340:MET:H	2.19	0.45
1:B:876:MET:HE3	1:B:876:MET:O	2.16	0.45
2:H:1948:MET:HG2	2:H:1993:PHE:CZ	2.52	0.45
2:H:2009:PHE:HD2	2:H:2009:PHE:O	1.99	0.45
1:C:1414:PRO:HG2	1:F:1473:HIS:NE2	2.31	0.45
1:B:1495:ARG:O	1:B:1496:ARG:HB3	2.15	0.45
1:E:1514:ILE:H	1:E:1514:ILE:HG13	1.37	0.45
2:I:1981:GLU:O	2:I:1984:PRO:HG3	2.16	0.45
2:J:1969:LEU:HA	2:J:1972:ILE:CD1	2.46	0.45
2:J:113:PHE:N	2:J:113:PHE:CD1	2.84	0.45
1:A:1011:ARG:HD2	1:A:1011:ARG:O	2.16	0.45
2:J:123:ALA:O	2:J:126:VAL:HG23	2.17	0.45
2:G:1031:VAL:HA	2:G:1032:PRO:HD3	1.64	0.45
2:L:1977:ARG:HD3	2:L:1978:LYS:HG3	1.98	0.45
1:A:1175:VAL:HA	1:A:1176:PRO:HD3	1.83	0.45
2:H:1622:THR:HG23	2:H:1627:ASN:OD1	2.16	0.45
1:A:994:VAL:HG21	1:A:1291:TYR:CD1	2.51	0.45
1:C:914:LEU:CD1	1:C:918:LEU:HD12	2.47	0.45
2:H:1344:ALA:N	2:H:1389:LEU:O	2.42	0.45
1:C:1097:LEU:HD12	1:F:1241:LEU:HD23	1.98	0.45
2:L:223:LYS:HB3	2:L:242:TYR:CZ	2.51	0.45
2:H:1961:SER:O	2:H:1965:VAL:HG22	2.16	0.45
2:H:1969:LEU:HA	2:H:1972:ILE:HD12	1.99	0.45
2:K:865:ILE:HG22	2:K:867:LYS:HG3	1.98	0.45
2:K:929:MET:CE	2:K:934:VAL:HA	2.46	0.45
2:J:846:THR:HG22	2:J:855:ILE:C	2.36	0.45
2:L:1048:TRP:NE1	2:L:1049:GLN:HG2	2.30	0.45
2:H:929:MET:CE	2:H:934:VAL:HA	2.46	0.45
2:K:459:LYS:O	2:K:461:PRO:HD3	2.16	0.45
2:G:1180:VAL:CG1	2:G:1188:GLN:H	2.30	0.45
2:J:1881:TYR:CB	2:J:2004:PRO:HG3	2.47	0.45
1:C:1363:MET:HB2	1:C:1363:MET:HE2	1.79	0.45
2:H:747:ARG:HH11	2:H:780:SER:CB	2.25	0.45
2:H:1745:LEU:HD12	2:H:1746:THR:N	2.31	0.45
2:J:912:LYS:HG2	2:J:1029:PRO:C	2.37	0.45
2:I:1709:TYR:HE2	2:I:1716:LYS:HE2	1.81	0.45
1:C:1183:VAL:HG11	1:C:1187:THR:CG2	2.46	0.45
2:K:1871:VAL:CG2	2:K:2004:PRO:HD3	2.46	0.45
1:D:1275:THR:HA	1:D:1276:PRO:HD3	1.55	0.45
2:G:578:PRO:HG3	2:G:792:LEU:O	2.16	0.45
2:J:1311:GLY:HA3	2:J:1397:THR:HB	1.97	0.45

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:K:785:SER:HB3	2:K:1090:ILE:HG23	1.98	0.45
2:I:521:VAL:CG1	2:I:549:ASN:HB2	2.46	0.45
2:K:73:VAL:HA	2:K:113:PHE:CE2	2.52	0.45
2:G:76:VAL:HG11	2:G:109:PHE:CD1	2.50	0.45
2:G:894:GLU:CD	2:G:897:LYS:HD3	2.37	0.45
2:H:1000:TYR:HA	2:H:1001:PRO:HD2	1.72	0.45
2:I:821:GLU:CD	2:I:1083:ILE:HG13	2.37	0.45
2:G:202:THR:HA	2:G:228:LEU:HD11	1.98	0.45
1:B:626:TRP:CE3	1:B:898:PHE:HB2	2.51	0.45
2:H:204:ILE:CG2	2:H:312:VAL:HG11	2.45	0.45
2:L:541:LEU:HG	2:L:552:VAL:CG1	2.47	0.45
2:H:737:PHE:O	2:H:773:ASN:HB3	2.16	0.45
2:H:1910:VAL:CG1	2:H:1973:ILE:HG21	2.46	0.45
2:J:1910:VAL:CG1	2:J:1973:ILE:HG21	2.46	0.45
2:L:1017:LEU:O	2:L:1021:GLN:HG3	2.17	0.45
1:D:493:PRO:HD2	1:D:517:ARG:O	2.16	0.45
2:L:980:LEU:CD2	2:L:986:LEU:HD21	2.46	0.45
2:L:2009:PHE:HD2	2:L:2009:PHE:C	2.19	0.45
1:D:661:GLY:O	1:D:667:ALA:HB2	2.16	0.45
1:D:667:ALA:O	1:D:671:GLN:HG3	2.15	0.45
2:H:1977:ARG:HD3	2:H:1978:LYS:HG3	1.98	0.45
1:E:1011:ARG:NH1	1:E:1012:TRP:HA	2.32	0.45
1:C:1169:ASP:OD2	1:C:1171:ARG:HB2	2.17	0.45
1:D:23:ALA:HA	2:J:2007:SER:O	2.17	0.45
2:J:1656:VAL:O	2:J:1656:VAL:HG22	2.17	0.45
1:D:999:LEU:HA	1:D:999:LEU:HD23	1.75	0.45
2:I:846:THR:HG22	2:I:855:ILE:C	2.37	0.45
2:K:1047:LEU:N	2:K:1047:LEU:HD12	2.31	0.45
2:L:440:HIS:NE2	2:L:499:VAL:HG23	2.32	0.45
2:L:468:PRO:HA	2:L:479:ARG:HD3	1.99	0.45
1:E:613:PRO:C	1:E:615:LEU:N	2.69	0.45
1:C:881:LEU:HA	1:C:884:MET:CG	2.32	0.45
2:L:174:GLY:H	2:L:517:GLY:CA	2.29	0.45
2:H:928:ASP:C	2:H:1007:LEU:HD23	2.36	0.45
1:A:907:PHE:CE1	1:F:579:MET:HE1	2.51	0.45
1:E:833:TRP:HH2	1:E:839:ILE:HD11	1.81	0.45
2:H:685:VAL:HG13	2:H:686:PRO:HD2	1.98	0.45
2:J:1053:ILE:HD11	2:J:1061:VAL:HG13	1.99	0.45
2:L:857:VAL:HG13	2:L:876:TRP:CD1	2.50	0.45
2:K:1289:TYR:CB	2:K:1370:LEU:HD23	2.46	0.45
2:L:207:LEU:HD22	2:L:309:LYS:HG3	1.99	0.45
2:L:1709:TYR:HE2	2:L:1716:LYS:HE2	1.81	0.45

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:D:1708:ASN:HD21	1:D:1712:LYS:NZ	2.15	0.45
2:I:2021:LEU:HD22	2:I:2025:ILE:HD11	1.98	0.45
1:B:759:ILE:HD12	1:B:759:ILE:N	2.31	0.45
1:E:472:GLN:HE21	1:E:472:GLN:HA	1.81	0.45
2:H:44:GLN:HG3	2:H:101:VAL:CG2	2.46	0.45
2:G:676:LEU:C	2:G:676:LEU:HD13	2.37	0.45
2:G:747:ARG:NH1	2:G:780:SER:O	2.49	0.45
2:J:270:ARG:HG3	2:J:274:GLU:CD	2.36	0.45
2:H:894:GLU:CD	2:H:897:LYS:HD3	2.36	0.45
2:H:882:LYS:HD3	2:H:898:ARG:CZ	2.47	0.45
2:K:1324:PHE:CA	2:K:1583:VAL:HG11	2.47	0.45
1:C:655:ALA:CB	1:C:742:TYR:HB2	2.46	0.45
1:E:853:MET:HG2	1:E:856:ASN:ND2	2.29	0.45
2:J:1551:ILE:HG22	2:J:1552:GLU:N	2.31	0.45
2:G:76:VAL:O	2:G:80:ILE:HG13	2.16	0.45
2:L:746:GLY:O	2:L:843:TRP:NE1	2.49	0.45
2:J:534:GLY:O	2:J:571:ASP:HA	2.17	0.45
2:I:699:ILE:H	2:I:699:ILE:CD1	2.26	0.45
1:E:893:GLN:OE1	2:H:1751:GLY:HA2	2.16	0.45
2:J:204:ILE:CG2	2:J:312:VAL:HG11	2.46	0.45
1:F:88:ILE:HG21	2:L:1821:MET:HE2	1.98	0.45
1:C:414:TYR:CE2	1:C:418:ILE:CD1	2.99	0.45
2:G:204:ILE:HG21	2:G:312:VAL:HG21	1.98	0.45
2:L:1293:TRP:HE1	2:L:1586:ASP:HA	1.81	0.45
2:I:617:PHE:HE1	2:I:819:ALA:HB3	1.82	0.45
1:C:914:LEU:HD11	1:C:918:LEU:CD1	2.46	0.45
2:G:1644:LEU:HB3	2:G:1645:PRO:CD	2.46	0.45
2:J:1894:THR:HB	2:J:1954:GLN:OE1	2.16	0.45
2:H:73:VAL:HA	2:H:113:PHE:CE2	2.52	0.45
1:A:46:GLU:HB3	1:A:80:CYS:HA	1.99	0.45
1:C:1084:GLU:H	1:C:1084:GLU:CD	2.19	0.45
1:F:1031:MET:HB3	1:F:1031:MET:HE2	1.74	0.45
1:F:334:ALA:O	1:F:338:GLN:HG3	2.16	0.45
2:G:1883:MET:HB2	2:G:2001:ILE:HD12	1.99	0.45
2:G:883:ILE:HG22	2:G:884:PHE:N	2.30	0.45
2:G:856:THR:HG23	2:G:866:HIS:NE2	2.32	0.45
4:J:2101:FMN:N1	4:J:2101:FMN:O2'	2.44	0.45
2:L:930:THR:O	2:L:934:VAL:HG23	2.16	0.45
2:L:942:MET:O	2:L:951:ILE:HG13	2.16	0.45
1:A:1150:ILE:HG12	1:E:1148:LEU:HD21	1.98	0.45
2:K:1635:TYR:CE2	2:K:1637:VAL:HG23	2.52	0.45
2:J:501:TRP:NE1	2:J:528:THR:CG2	2.73	0.45

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:G:685:VAL:CG1	2:G:687:ILE:HG13	2.41	0.45
2:J:1346:MET:CE	2:J:1617:ARG:HH21	2.30	0.45
1:B:40:ARG:NH2	1:B:72:THR:CG2	2.80	0.45
2:H:43:PHE:CZ	2:I:42:HIS:CE1	3.05	0.45
2:G:1053:ILE:CD1	2:G:1061:VAL:HG13	2.46	0.45
1:D:498:THR:CG2	1:D:858:LEU:HA	2.41	0.45
2:J:315:LEU:HA	2:J:318:ILE:HD12	1.97	0.45
2:I:290:VAL:CG1	2:I:314:LEU:HD23	2.46	0.45
2:H:1903:VAL:HG11	2:H:1943:LEU:HD21	1.99	0.45
1:F:767:HIS:NE2	1:F:771:LEU:HD22	2.32	0.45
1:A:11:TYR:CD1	2:G:2027:LYS:HG2	2.50	0.45
2:K:2017:PHE:CE2	2:K:2021:LEU:HD11	2.52	0.45
2:H:76:VAL:HG11	2:H:109:PHE:CD1	2.51	0.45
2:L:1802:ALA:CB	2:L:1804:GLN:HE22	2.27	0.45
2:L:153:PRO:HB3	2:L:270:ARG:NH1	2.31	0.45
2:K:790:PRO:HA	2:K:795:SER:OG	2.17	0.45
1:E:421:ARG:NH2	1:E:1613:LYS:CG	2.79	0.45
2:G:76:VAL:HG11	2:G:109:PHE:HD1	1.82	0.45
1:E:744:VAL:HG12	1:E:746:PHE:CD1	2.52	0.45
1:A:636:TYR:CE1	1:A:883:LEU:HD23	2.51	0.45
2:L:381:SER:OG	2:L:392:THR:HG23	2.17	0.45
2:H:202:THR:O	2:H:206:GLU:HG3	2.16	0.45
2:G:57:PRO:HB2	2:G:65:GLN:HE22	1.81	0.45
1:B:1337:PRO:HA	1:B:1340:MET:CG	2.46	0.45
2:H:1521:GLU:OE2	2:H:2028:THR:HG21	2.17	0.45
2:G:915:PHE:O	2:G:915:PHE:CD2	2.69	0.45
2:L:1234:ILE:HG22	2:L:1242:ILE:HG22	1.98	0.45
2:I:1749:PHE:CD2	2:I:1758:ARG:HB3	2.51	0.45
2:G:1655:HIS:HE1	2:G:1657:GLY:O	1.99	0.45
2:K:1655:HIS:HE1	2:K:1657:GLY:O	1.99	0.45
1:B:329:THR:O	1:B:332:GLN:HB2	2.16	0.45
2:L:1161:MET:HE1	2:L:1193:LYS:HG2	1.99	0.45
1:C:1335:ARG:HH11	1:C:1339:GLU:HG2	1.81	0.45
2:I:342:ASN:HB3	2:I:406:ARG:HD3	1.99	0.45
2:H:31:LEU:HB2	2:H:72:VAL:HG22	1.98	0.45
2:K:1473:PHE:HE1	2:K:1513:VAL:HG21	1.81	0.45
2:I:585:VAL:O	2:I:585:VAL:HG12	2.17	0.45
2:L:988:GLU:HA	2:L:989:PRO:HD3	1.74	0.45
2:G:1894:THR:HB	2:G:1954:GLN:OE1	2.16	0.45
1:C:963:LEU:HD23	1:C:1023:GLU:HB3	1.98	0.45
1:C:1463:GLU:O	1:C:1467:LEU:HB2	2.16	0.45
1:B:492:ILE:HG13	1:B:492:ILE:H	1.50	0.45

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:L:462:ALA:HB3	2:L:483:ASP:HA	1.98	0.45
2:H:1194:ARG:NH2	2:H:1601:ASN:HA	2.32	0.45
2:J:613:VAL:N	2:J:614:PRO:HD3	2.32	0.45
2:L:917:ARG:NH1	2:L:917:ARG:CG	2.44	0.45
2:I:917:ARG:HB2	2:I:937:ARG:HD3	1.98	0.45
1:A:997:THR:HG23	1:A:1361:VAL:HG22	1.98	0.45
2:L:1635:TYR:CE2	2:L:1637:VAL:HG23	2.52	0.45
2:I:501:TRP:CZ2	2:I:528:THR:CG2	2.99	0.45
2:K:1009:ASN:HA	2:K:1009:ASN:HD22	1.56	0.45
2:J:928:ASP:C	2:J:1007:LEU:HD23	2.37	0.45
2:G:472:THR:HB	2:G:493:MET:HB3	1.99	0.45
2:J:1903:VAL:HG11	2:J:1943:LEU:HD21	1.99	0.45
2:I:490:LEU:HA	2:I:493:MET:SD	2.56	0.45
2:J:788:THR:CG2	2:J:1094:HIS:CE1	2.99	0.45
2:G:1764:MET:HG3	2:G:1781:PHE:HE1	1.81	0.45
2:L:1884:CYS:HB3	2:L:1936:LEU:CD1	2.42	0.45
1:C:41:THR:HA	2:I:1689:VAL:HB	1.98	0.45
1:D:1055:THR:OG1	1:D:1057:GLU:HG2	2.17	0.45
1:F:1161:ALA:O	1:F:1163:GLN:HG3	2.17	0.45
1:C:1186:VAL:HG12	1:C:1187:THR:N	2.31	0.45
2:J:1175:MET:HE1	2:J:1234:ILE:HG21	1.98	0.45
2:G:1114:GLU:HB3	2:G:1169:TYR:CB	2.44	0.45
2:I:664:TYR:C	2:I:666:ASN:H	2.20	0.45
1:A:620:LYS:HE3	1:A:626:TRP:CZ2	2.52	0.45
2:G:1311:GLY:HA3	2:G:1397:THR:HB	1.99	0.45
2:I:1517:LEU:CD2	2:I:1523:ILE:HD11	2.46	0.45
1:A:1514:ILE:H	1:A:1514:ILE:HG13	1.36	0.45
1:B:1338:GLY:C	1:B:1340:MET:H	2.19	0.45
2:H:352:SER:HB2	2:H:433:LEU:HD11	1.99	0.45
2:H:1538:ASN:HB3	2:H:1541:ILE:CG2	2.47	0.45
1:D:79:LEU:HD12	1:D:88:ILE:HD13	1.99	0.45
1:F:421:ARG:NH2	1:F:1613:LYS:HB3	2.31	0.45
2:I:541:LEU:HG	2:I:552:VAL:CG1	2.47	0.45
1:C:17:LEU:HD23	2:I:2043:VAL:CG2	2.46	0.45
2:L:1945:ILE:HG22	2:L:1946:LEU:N	2.32	0.45
2:J:594:MET:SD	2:J:809:GLY:HA3	2.57	0.45
2:H:529:ASN:HD22	2:H:552:VAL:HG23	1.82	0.45
1:B:960:ARG:HH12	2:H:968:GLU:CD	2.19	0.45
1:A:1473:HIS:NE2	1:E:1414:PRO:HG2	2.31	0.45
2:H:155:ASP:HB3	2:H:278:ARG:NH1	2.32	0.45
2:I:1887:ASN:OD1	2:I:1889:SER:HB2	2.15	0.45
2:G:1905:GLU:O	2:G:1908:ALA:HB3	2.16	0.45

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:857:ASN:HA	1:A:860:ALA:HB2	1.98	0.45
2:I:246:ALA:N	2:I:247:PRO:HD2	2.32	0.45
1:B:1177:GLU:O	1:B:1180:ILE:HB	2.16	0.45
2:H:2008:THR:HG22	2:H:2011:ARG:HE	1.82	0.45
2:J:1269:ALA:HB1	2:J:1271:TYR:CE1	2.51	0.45
2:H:1384:PRO:HB3	2:H:1829:ARG:NH1	2.32	0.45
2:I:728:ILE:HG22	2:I:732:LYS:HE3	1.97	0.45
1:A:1050:TRP:CE3	1:A:1050:TRP:HA	2.52	0.45
2:K:200:LEU:H	2:K:200:LEU:HD23	1.82	0.45
1:C:857:ASN:HA	1:C:860:ALA:HB2	1.98	0.45
1:B:1463:GLU:O	1:B:1467:LEU:HB2	2.16	0.45
1:C:1278:GLY:CA	1:C:1630:LYS:HE2	2.41	0.45
1:B:427:ARG:HH12	1:B:492:ILE:CG2	2.07	0.45
2:I:856:THR:HG23	2:I:866:HIS:NE2	2.31	0.45
2:H:613:VAL:N	2:H:614:PRO:HD3	2.32	0.45
2:G:1194:ARG:CG	2:G:1194:ARG:NH1	2.51	0.45
1:D:526:MET:CE	1:D:615:LEU:HG	2.47	0.45
1:A:1491:ASN:ND2	1:A:1491:ASN:N	2.65	0.45
1:A:570:TYR:CD2	1:A:574:ILE:HD11	2.49	0.45
1:A:833:TRP:HH2	1:A:839:ILE:HD11	1.81	0.45
2:K:931:TYR:CZ	2:K:1008:ILE:HA	2.52	0.45
2:K:276:LEU:O	2:K:467:ILE:CD1	2.64	0.45
2:K:472:THR:HB	2:K:493:MET:HB3	1.99	0.45
2:I:1293:TRP:HZ3	2:I:1370:LEU:HD21	1.81	0.45
1:B:40:ARG:HH21	1:B:74:VAL:HG22	1.81	0.45
1:D:746:PHE:CG	3:D:1901:NAP:H4D	2.51	0.45
2:I:2058:VAL:O	2:I:2062:THR:HB	2.17	0.45
1:E:741:ASP:CG	1:E:793:ARG:HH11	2.19	0.45
1:A:498:THR:HG22	1:A:508:TYR:HD1	1.79	0.45
2:G:250:PHE:O	2:G:315:LEU:HD23	2.17	0.45
2:G:459:LYS:O	2:G:461:PRO:HD3	2.16	0.45
2:J:310:ARG:HH12	2:J:459:LYS:H	1.65	0.45
1:B:1562:THR:HB	1:B:1572:TRP:CZ3	2.52	0.45
1:A:22:PHE:HE2	2:G:2017:PHE:CB	2.29	0.45
2:H:1985:GLN:C	2:H:1987:VAL:N	2.67	0.45
1:A:549:TYR:O	1:A:553:ARG:HB3	2.17	0.45
1:A:553:ARG:NH2	1:A:567:ASN:HD21	2.15	0.45
2:K:193:TYR:HD1	2:K:263:ILE:HD13	1.79	0.45
1:D:30:GLU:CB	2:J:2045:ALA:HB1	2.41	0.45
2:G:1361:ILE:HG22	2:G:1435:TYR:OH	2.17	0.45
2:H:1350:ILE:HG22	2:H:1429:VAL:HG11	1.97	0.45
2:J:358:ARG:HB2	2:J:389:PHE:CE2	2.51	0.45

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:G:48:LEU:HB2	2:G:79:TYR:OH	2.17	0.45
2:H:22:ARG:HD2	2:H:42:HIS:CB	2.47	0.45
2:H:24:LEU:CD1	2:H:37:VAL:HG21	2.45	0.45
2:K:129:ILE:HG21	2:K:132:LYS:HD2	1.98	0.45
1:B:1484:GLU:O	1:B:1487:THR:HB	2.17	0.45
2:H:1351:VAL:CG1	2:H:1352:VAL:N	2.79	0.45
2:L:45:ALA:HB2	2:L:101:VAL:HG22	1.99	0.45
1:C:898:PHE:HD2	1:C:899:ALA:N	2.15	0.45
1:E:330:LYS:HG3	1:E:333:ARG:HH12	1.79	0.45
2:H:781:GLY:CA	2:H:1071:VAL:HG13	2.46	0.45
1:E:852:LEU:HD23	1:E:852:LEU:O	2.17	0.45
2:I:785:SER:HB3	2:I:1090:ILE:HG23	1.99	0.45
2:G:186:LEU:HD21	2:G:256:VAL:HG22	1.97	0.45
1:B:1129:ILE:HA	1:B:1139:THR:O	2.16	0.45
2:G:202:THR:O	2:G:206:GLU:HG3	2.16	0.45
2:G:1538:ASN:HB3	2:G:1541:ILE:CG2	2.46	0.45
2:I:871:ARG:HB2	2:I:909:ASP:HB2	1.98	0.45
2:G:871:ARG:HB2	2:G:909:ASP:HB2	1.98	0.45
2:L:906:LEU:HD22	2:L:906:LEU:HA	1.81	0.45
2:H:2009:PHE:HD2	2:H:2009:PHE:C	2.19	0.45
2:G:616:ASP:OD2	2:G:823:HIS:CE1	2.70	0.45
1:C:1473:HIS:NE2	1:F:1414:PRO:HG2	2.32	0.45
1:C:79:LEU:HD12	1:C:88:ILE:HD13	1.98	0.45
1:B:79:LEU:HD12	1:B:88:ILE:HD13	1.99	0.45
2:G:690:LEU:HB2	2:G:711:ILE:HG21	1.99	0.45
2:H:797:SER:O	2:H:802:TYR:HB2	2.16	0.45
2:H:907:ASN:HA	2:H:913:VAL:HG13	1.99	0.45
2:K:1017:LEU:O	2:K:1021:GLN:HG3	2.16	0.45
2:G:1969:LEU:HA	2:G:1972:ILE:CD1	2.47	0.45
2:L:1472:TRP:CD2	2:L:1540:VAL:HG22	2.52	0.45
1:F:28:TRP:HE1	1:F:32:GLN:NE2	2.14	0.45
1:A:1496:ARG:NH2	1:E:1297:GLY:HA2	2.32	0.45
1:A:1170:ALA:HB3	1:A:1188:LEU:HD13	1.98	0.45
1:A:1169:ASP:OD2	1:A:1171:ARG:HB2	2.17	0.45
2:G:1820:ASP:O	2:G:1823:SER:HB3	2.17	0.45
1:B:1440:TYR:O	1:B:1444:GLN:HB2	2.16	0.45
2:G:1002:GLU:C	2:G:1004:SER:H	2.19	0.45
2:H:1835:GLY:HA3	2:H:1839:GLY:C	2.37	0.45
1:B:1652:GLU:O	1:B:1656:VAL:HG23	2.16	0.45
1:A:506:ILE:HD13	1:A:922:ILE:HG22	1.99	0.45
2:I:1195:LEU:CD2	2:I:1595:VAL:HG12	2.47	0.45
2:I:608:MET:HA	4:I:2101:FMN:C5A	2.46	0.45

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:L:382:LEU:HG	2:L:390:VAL:HB	1.97	0.45
2:H:382:LEU:HG	2:H:390:VAL:HB	1.98	0.45
2:H:489:GLU:O	2:H:492:ARG:HG2	2.17	0.45
1:D:1102:ILE:HD13	1:D:1106:LEU:CD2	2.47	0.45
2:J:2052:LYS:H	2:J:2052:LYS:HG2	1.44	0.45
2:H:595:SER:HB3	2:H:602:PRO:HD3	1.99	0.45
2:H:626:TYR:OH	2:H:1088:ASP:HA	2.17	0.45
2:K:481:LEU:C	2:K:483:ASP:H	2.19	0.45
2:I:1361:ILE:HG22	2:I:1435:TYR:OH	2.17	0.45
2:I:931:TYR:CZ	2:I:1008:ILE:HA	2.52	0.45
2:L:762:LEU:HD23	2:L:805:MET:HE1	1.99	0.45
1:B:40:ARG:HH21	1:B:72:THR:CG2	2.30	0.45
2:I:76:VAL:HG11	2:I:109:PHE:HD1	1.81	0.45
1:B:440:SER:HB3	1:B:481:LEU:CD2	2.39	0.45
2:J:1289:TYR:CD2	2:J:1370:LEU:HD23	2.51	0.45
2:H:207:LEU:HD22	2:H:309:LYS:HG3	1.99	0.45
2:G:1709:TYR:CE2	2:G:1716:LYS:HG2	2.52	0.45
2:I:1721:ARG:NH1	2:I:1854:GLU:OE2	2.49	0.45
2:I:1985:GLN:C	2:I:1987:VAL:N	2.69	0.45
2:I:117:ASN:OD1	2:I:561:ARG:HB2	2.16	0.45
2:L:718:PRO:HG2	2:L:741:LEU:HD11	1.98	0.45
1:A:448:MET:HA	1:A:448:MET:HE3	1.99	0.45
2:G:330:SER:H	2:H:1331:THR:HG22	1.82	0.45
1:F:962:ASN:HD22	2:L:1006:GLN:NE2	2.11	0.45
1:B:859:VAL:HG12	1:B:859:VAL:O	2.16	0.45
2:G:1175:MET:CE	2:G:1234:ILE:HG21	2.47	0.45
2:G:391:VAL:HG12	2:G:398:LEU:HD21	1.99	0.45
2:L:1229:VAL:CG1	2:L:1230:LYS:N	2.79	0.45
2:L:193:TYR:HD1	2:L:263:ILE:HD13	1.78	0.45
2:G:1515:LEU:CB	2:G:1525:VAL:HG21	2.47	0.45
2:L:1517:LEU:CD2	2:L:1523:ILE:HD11	2.47	0.45
2:J:1019:LEU:HA	2:J:1022:ARG:HD2	1.97	0.45
2:K:1192:LEU:HD22	2:K:1196:PHE:CE1	2.50	0.45
2:G:1881:TYR:CZ	2:G:2009:PHE:HE1	2.35	0.45
2:I:372:LEU:CD1	2:I:397:SER:HB2	2.47	0.45
1:F:79:LEU:HD12	1:F:88:ILE:HD13	1.99	0.45
2:K:327:PRO:CD	2:L:1338:ARG:HH21	2.28	0.45
1:A:576:ALA:HB3	1:F:541:VAL:HG22	1.99	0.45
1:A:827:ARG:NH1	1:A:831:GLU:OE2	2.50	0.45
1:E:1171:ARG:HD3	1:E:1177:GLU:OE1	2.17	0.45
1:D:1495:ARG:O	1:D:1496:ARG:HB3	2.16	0.45
2:I:617:PHE:CD1	2:I:822:ALA:HA	2.51	0.45

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:H:155:ASP:OD1	2:H:155:ASP:N	2.49	0.45
1:D:413:MET:O	1:D:416:ASP:HB2	2.17	0.45
1:A:2:ARG:HB2	1:A:5:VAL:HB	1.98	0.45
2:G:60:THR:HG22	2:G:62:GLU:H	1.81	0.45
2:I:1656:VAL:O	2:I:1656:VAL:HG22	2.17	0.45
1:A:1507:LEU:HA	1:A:1507:LEU:HD23	1.84	0.45
2:L:444:LEU:HD23	2:L:444:LEU:HA	1.73	0.45
1:E:844:ILE:N	1:E:844:ILE:HD12	2.32	0.45
1:A:1696:PHE:HB3	1:E:1402:THR:HG22	1.99	0.45
1:B:1121:ARG:NH1	1:D:1153:ALA:O	2.49	0.45
2:G:1238:GLY:O	2:G:1239:ASP:HB2	2.17	0.45
1:E:1219:GLY:HA2	1:E:1272:PRO:HD2	1.98	0.45
1:D:1330:GLU:HG2	1:D:1333:ARG:HH11	1.81	0.45
2:I:1194:ARG:CG	2:I:1194:ARG:NH1	2.55	0.45
2:G:938:MET:O	2:G:942:MET:HG3	2.17	0.45
1:A:539:THR:HA	1:A:542:GLN:HE21	1.82	0.45
1:A:1199:LEU:HD23	1:A:1199:LEU:O	2.17	0.45
2:I:448:HIS:CD2	2:I:491:VAL:CG1	2.98	0.45
1:C:1562:THR:HB	1:C:1572:TRP:CZ3	2.52	0.45
1:B:1154:LEU:HD21	1:D:1118:GLU:OE2	2.17	0.45
1:F:1565:PRO:O	1:F:1566:LYS:C	2.55	0.45
1:C:1584:GLY:HA2	1:C:1617:ILE:HD12	1.99	0.45
2:I:251:PRO:CG	2:I:316:PHE:HA	2.44	0.45
1:D:1199:LEU:O	1:D:1199:LEU:HD23	2.17	0.45
2:J:785:SER:O	2:J:789:TYR:HB2	2.17	0.45
2:J:376:ARG:NH2	2:K:1340:LYS:HG3	2.32	0.45
2:G:1231:THR:HG23	2:G:1595:VAL:CG2	2.41	0.45
2:I:604:MET:CE	2:I:811:MET:HB2	2.46	0.45
2:I:747:ARG:NH1	2:I:780:SER:O	2.50	0.45
1:E:452:ILE:CD1	1:E:467:LYS:HA	2.47	0.45
2:G:1985:GLN:C	2:G:1987:VAL:N	2.67	0.45
2:G:914:TRP:CZ3	2:G:1033:ALA:HA	2.51	0.45
1:D:1426:GLU:HA	1:D:1429:ARG:HB2	1.98	0.45
2:L:44:GLN:O	2:L:48:LEU:HG	2.17	0.45
2:I:44:GLN:O	2:I:48:LEU:HG	2.16	0.45
1:C:443:LEU:HD12	1:C:443:LEU:H	1.82	0.45
2:K:1203:TYR:O	2:K:1219:VAL:HA	2.16	0.45
1:B:543:ASN:O	1:B:546:ARG:HB2	2.17	0.45
2:K:1342:PHE:HE2	2:K:1391:VAL:HB	1.82	0.45
2:L:962:PHE:O	2:L:965:ARG:HB3	2.16	0.45
2:K:1722:ALA:HB1	2:K:1812:LEU:HD21	1.99	0.45
1:D:1078:ILE:HA	1:D:1162:GLY:HA2	1.98	0.45

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:J:617:PHE:CD1	2:J:822:ALA:CA	3.00	0.45
1:E:1495:ARG:O	1:E:1496:ARG:HB3	2.16	0.45
1:F:1419:LYS:O	1:F:1422:ARG:HB2	2.17	0.45
1:B:679:LYS:HG2	1:B:708:GLN:CB	2.47	0.45
2:G:196:PHE:HD2	2:G:196:PHE:N	2.14	0.45
2:L:1384:PRO:HB3	2:L:1829:ARG:HH12	1.82	0.45
2:G:617:PHE:CD1	2:G:822:ALA:HA	2.51	0.45
2:J:541:LEU:HG	2:J:552:VAL:HG11	1.98	0.45
2:H:541:LEU:HG	2:H:552:VAL:CG1	2.47	0.45
1:E:1022:LEU:HD13	1:E:1022:LEU:O	2.17	0.45
1:F:1265:LEU:O	1:F:1266:LEU:HD23	2.17	0.45
2:I:52:PHE:HB2	2:I:82:PHE:CE2	2.51	0.45
1:E:1395:ALA:HA	1:E:1396:PRO:HD3	1.81	0.45
2:H:248:VAL:O	2:H:252:LEU:HB2	2.17	0.45
2:J:226:ASP:OD2	2:J:229:GLN:HB2	2.17	0.45
2:G:1835:GLY:HA3	2:G:1839:GLY:C	2.37	0.45
2:I:594:MET:HB3	2:I:808:ASP:O	2.16	0.45
2:I:716:PHE:CD1	2:I:727:VAL:HG13	2.52	0.45
2:L:318:ILE:HA	2:L:451:ILE:HD13	1.99	0.45
2:L:276:LEU:O	2:L:467:ILE:CD1	2.65	0.45
2:H:468:PRO:HA	2:H:479:ARG:HD3	1.99	0.45
2:H:460:ILE:O	2:H:486:ILE:N	2.49	0.45
1:E:1491:ASN:H	1:E:1491:ASN:ND2	2.15	0.45
2:G:937:ARG:CZ	2:G:941:LEU:HD11	2.47	0.45
2:G:955:LEU:HD21	2:G:1026:LYS:O	2.17	0.45
1:A:532:ILE:HG21	1:A:907:PHE:CB	2.44	0.45
2:K:311:ALA:O	2:K:314:LEU:HB3	2.17	0.45
2:G:501:TRP:NE1	2:G:528:THR:CG2	2.76	0.45
2:L:818:THR:HA	2:L:829:LYS:HE2	1.98	0.45
2:L:870:THR:HG21	2:L:1064:THR:O	2.16	0.45
1:B:20:TYR:CZ	2:H:2062:THR:HG23	2.52	0.45
2:H:2063:GLY:O	2:H:2065:PRO:HD3	2.16	0.45
1:D:605:ARG:HB3	1:D:606:PRO:HD2	1.96	0.45
2:J:1404:VAL:HA	2:J:1412:MET:O	2.17	0.45
2:J:2064:SER:OG	2:J:2067:ILE:HB	2.17	0.45
2:L:1602:LEU:HB3	2:L:1604:GLY:H	1.82	0.45
2:I:914:TRP:CZ3	2:I:1033:ALA:HA	2.52	0.45
2:G:290:VAL:HG11	2:G:315:LEU:CD1	2.47	0.45
2:G:1499:LYS:CG	2:G:1500:ASN:N	2.79	0.45
1:B:1686:PRO:HB2	1:B:1713:PHE:CE1	2.52	0.45
2:H:376:ARG:NH2	2:I:1340:LYS:HE3	2.27	0.45
2:I:1044:LYS:HE2	3:I:2102:NAP:H4B	1.99	0.45

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:H:718:PRO:HG2	2:H:741:LEU:CD1	2.47	0.45
2:J:129:ILE:CG2	2:J:132:LYS:HD2	2.47	0.45
2:K:57:PRO:HB2	2:K:65:GLN:HE22	1.81	0.45
2:I:399:TYR:CE2	2:I:403:LEU:HD11	2.52	0.45
1:C:1160:VAL:HB	1:C:1352:MET:HE1	1.99	0.45
2:I:655:GLY:HA3	2:I:1272:ALA:HB2	1.98	0.45
1:F:716:GLN:NE2	1:F:747:ALA:HB3	2.32	0.45
2:G:1496:VAL:HG21	2:G:1504:TYR:CD2	2.52	0.45
2:H:202:THR:HA	2:H:228:LEU:HD11	1.98	0.45
1:F:1306:GLY:O	1:F:1357:CYS:HB2	2.17	0.45
1:D:1129:ILE:HA	1:D:1139:THR:O	2.16	0.45
2:G:776:LEU:HG	2:G:807:PHE:CD2	2.52	0.45
2:I:1317:ASN:HB3	2:I:1320:ALA:CB	2.47	0.45
2:G:1910:VAL:CG1	2:G:1973:ILE:HG21	2.47	0.45
1:B:1296:GLN:HG2	1:D:1296:GLN:HE21	1.82	0.45
2:H:1057:TYR:C	2:H:1059:GLN:H	2.20	0.45
2:K:560:ASP:HB3	2:K:565:ALA:HB1	1.99	0.45
2:J:31:LEU:HB2	2:J:72:VAL:HG22	1.99	0.45
2:J:31:LEU:HD13	2:J:75:LEU:HG	1.99	0.45
1:A:21:GLN:HB3	1:A:21:GLN:HE21	1.57	0.45
1:B:661:GLY:O	1:B:667:ALA:HB2	2.16	0.45
2:G:1286:LYS:NZ	2:G:1367:ASP:HA	2.32	0.45
2:I:1510:ILE:HA	2:I:1528:VAL:O	2.17	0.45
2:H:329:THR:HA	2:I:1331:THR:HG22	1.98	0.45
1:F:50:SER:HB2	1:F:52:THR:HG23	1.99	0.45
2:K:1634:SER:HB3	2:K:1684:GLU:HB2	1.98	0.45
1:B:455:CYS:HA	1:B:456:PRO:HD3	1.83	0.45
1:A:1654:TYR:CZ	1:A:1658:VAL:HG21	2.52	0.45
2:G:1179:GLU:OE1	2:G:1179:GLU:N	2.49	0.45
1:B:835:ASN:N	1:B:835:ASN:OD1	2.50	0.45
2:K:187:ARG:HH22	2:K:234:PRO:HA	1.82	0.45
1:B:1011:ARG:HH11	1:B:1012:TRP:HA	1.82	0.45
1:E:1463:GLU:O	1:E:1467:LEU:HB2	2.17	0.44
2:H:1067:LEU:O	2:H:1068:GLN:HG2	2.17	0.44
2:K:608:MET:HB3	2:K:608:MET:HE2	1.63	0.44
1:C:1542:LEU:HD22	1:C:1547:ARG:HD3	1.99	0.44
2:L:472:THR:HB	2:L:493:MET:HB3	1.99	0.44
1:B:558:LEU:HD11	1:E:558:LEU:HD21	1.98	0.44
2:L:609:THR:CB	2:L:610:PRO:HD3	2.47	0.44
2:J:511:THR:C	2:J:512:HIS:CD2	2.91	0.44
2:J:749:GLY:HA3	4:J:2101:FMN:HM81	1.99	0.44
4:G:2101:FMN:O2'	4:G:2101:FMN:N1	2.47	0.44

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:H:601:PRO:HB2	2:H:626:TYR:CE2	2.52	0.44
1:D:409:ASP:HB2	1:D:439:ARG:HH12	1.82	0.44
1:B:575:ARG:HG2	1:B:579:MET:SD	2.57	0.44
1:E:612:ILE:HA	1:E:613:PRO:HD3	1.57	0.44
1:D:998:GLY:CA	1:D:1361:VAL:HG13	2.31	0.44
2:K:174:GLY:HA2	2:K:524:ILE:CG1	2.47	0.44
2:J:917:ARG:HB2	2:J:937:ARG:HD3	1.99	0.44
2:K:582:LYS:HA	2:K:587:GLN:O	2.17	0.44
2:J:942:MET:HE2	2:J:955:LEU:HD13	1.97	0.44
2:I:1635:TYR:CE2	2:I:1637:VAL:HG23	2.53	0.44
2:H:1635:TYR:CE2	2:H:1637:VAL:HG23	2.52	0.44
2:L:2044:THR:HG21	2:L:2054:TYR:CZ	2.52	0.44
1:F:487:TYR:CE2	1:F:881:LEU:HD13	2.52	0.44
2:H:2044:THR:HG21	2:H:2054:TYR:CZ	2.51	0.44
1:A:1280:CYS:HA	1:A:1566:LYS:O	2.17	0.44
2:G:460:ILE:O	2:G:486:ILE:N	2.50	0.44
2:J:459:LYS:HA	2:J:485:ASP:CG	2.37	0.44
1:B:1617:ILE:N	1:B:1617:ILE:CD1	2.77	0.44
2:J:815:ARG:NH2	2:J:1086:ILE:CG2	2.80	0.44
2:I:1764:MET:HB3	2:I:1780:ILE:CG1	2.47	0.44
2:H:571:ASP:OD2	2:H:573:VAL:HB	2.17	0.44
2:H:571:ASP:CG	2:H:573:VAL:HG23	2.38	0.44
1:A:1426:GLU:HA	1:A:1429:ARG:HB2	1.98	0.44
1:F:23:ALA:HB2	2:L:2010:LEU:HB2	1.99	0.44
2:I:1903:VAL:HG13	2:I:1942:VAL:HG11	1.99	0.44
2:I:2017:PHE:CE2	2:I:2021:LEU:HD11	2.53	0.44
1:E:392:ASP:HA	1:E:393:PRO:HD2	1.73	0.44
1:B:570:TYR:O	1:B:574:ILE:HG12	2.17	0.44
2:I:1352:VAL:HG11	2:I:1395:LEU:HD12	1.98	0.44
2:G:1086:ILE:O	2:G:1090:ILE:HG13	2.16	0.44
2:L:1083:ILE:H	2:L:1083:ILE:HG13	1.53	0.44
2:K:906:LEU:HA	2:K:906:LEU:HD22	1.79	0.44
1:C:714:PHE:CE1	1:C:725:LEU:HD12	2.51	0.44
2:H:746:GLY:O	2:H:843:TRP:NE1	2.50	0.44
1:C:626:TRP:CD2	1:C:898:PHE:CD1	3.04	0.44
2:J:38:PRO:HD2	2:J:104:LEU:CD1	2.45	0.44
2:J:76:VAL:HG11	2:J:109:PHE:HD1	1.82	0.44
2:H:827:GLN:CD	2:H:827:GLN:H	2.18	0.44
1:B:1164:ILE:CD1	1:B:1355:GLN:HG3	2.46	0.44
2:I:781:GLY:CA	2:I:1071:VAL:HG13	2.46	0.44
1:F:766:ALA:HA	1:F:769:ILE:HD12	2.00	0.44
2:G:1366:ILE:O	2:G:1366:ILE:HG22	2.17	0.44

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:1546:GLY:O	1:A:1547:ARG:C	2.55	0.44
2:I:1309:PHE:N	2:I:1309:PHE:CD1	2.84	0.44
2:H:1481:ILE:O	2:H:1481:ILE:HG13	2.17	0.44
2:L:787:ASP:O	2:L:790:PRO:HD2	2.17	0.44
2:G:1643:VAL:CG1	2:G:1649:ILE:HD11	2.48	0.44
2:I:1028:VAL:HA	2:I:1029:PRO:HD3	1.74	0.44
1:E:415:TYR:CE2	1:E:1614:THR:HB	2.52	0.44
2:J:1447:GLN:HB3	2:J:1496:VAL:HG13	1.99	0.44
2:K:699:ILE:HD12	2:K:699:ILE:N	2.31	0.44
2:G:317:TRP:CD1	2:G:454:ASP:CG	2.90	0.44
2:K:1031:VAL:HA	2:K:1032:PRO:HD3	1.70	0.44
2:H:1977:ARG:CD	2:H:1978:LYS:HG3	2.47	0.44
1:A:1495:ARG:HG2	1:A:1495:ARG:HH11	1.82	0.44
1:B:1265:LEU:O	1:B:1266:LEU:HD23	2.17	0.44
1:A:958:GLU:HA	1:A:959:PRO:HD3	1.84	0.44
1:A:1393:VAL:N	1:A:1394:PRO:CD	2.80	0.44
1:B:1321:MET:HE3	1:D:1251:GLN:HG3	1.97	0.44
2:H:52:PHE:HB2	2:H:82:PHE:CE2	2.52	0.44
2:G:1483:LEU:HG	2:G:1483:LEU:H	1.13	0.44
1:B:940:ASN:HB3	1:B:949:GLU:OE2	2.17	0.44
1:C:1393:VAL:N	1:C:1394:PRO:CD	2.80	0.44
1:E:1184:ASP:OD1	1:E:1185:PRO:HD2	2.16	0.44
2:G:1519:THR:O	2:G:1520:LYS:HB2	2.16	0.44
1:A:1685:ALA:HB1	1:A:1686:PRO:HD2	1.99	0.44
2:H:608:MET:HB3	2:H:608:MET:HE2	1.59	0.44
2:H:856:THR:HG23	2:H:866:HIS:NE2	2.32	0.44
1:C:1514:ILE:CD1	1:C:1545:LEU:HB3	2.47	0.44
2:L:276:LEU:HD21	2:L:296:ALA:HA	1.99	0.44
2:L:290:VAL:HG11	2:L:315:LEU:CD1	2.47	0.44
2:L:460:ILE:CD1	2:L:487:ILE:HD11	2.46	0.44
2:L:511:THR:O	2:L:512:HIS:CD2	2.70	0.44
2:H:472:THR:HB	2:H:493:MET:HB3	2.00	0.44
2:L:846:THR:HG22	2:L:855:ILE:C	2.37	0.44
2:J:168:LYS:H	2:J:511:THR:HB	1.82	0.44
2:K:917:ARG:NH1	2:K:917:ARG:CG	2.47	0.44
2:L:1181:PHE:HE1	2:L:1191:PRO:HD2	1.78	0.44
1:A:612:ILE:HG12	1:A:628:TYR:CD2	2.52	0.44
2:J:868:LEU:HD12	2:J:1066:ILE:HD12	1.99	0.44
2:I:1644:LEU:HB3	2:I:1645:PRO:CD	2.47	0.44
2:K:876:TRP:C	2:K:876:TRP:HD1	2.16	0.44
1:E:40:ARG:HH21	1:E:74:VAL:HG22	1.83	0.44
2:G:1299:VAL:HA	2:G:1300:PRO:HD3	1.82	0.44

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:I:606:ALA:HB2	2:I:811:MET:CG	2.47	0.44
1:C:392:ASP:HA	1:C:393:PRO:HD2	1.78	0.44
2:H:208:LEU:HD23	2:H:211:LEU:HD12	1.99	0.44
1:E:474:ILE:O	1:E:478:LYS:HG3	2.17	0.44
1:D:1703:VAL:CG1	1:D:1711:LEU:HD22	2.47	0.44
1:D:1674:ILE:HD12	2:J:1010:ALA:CB	2.46	0.44
1:D:564:LEU:O	1:D:567:ASN:HB2	2.16	0.44
2:G:1370:LEU:CA	2:G:1435:TYR:HE2	2.30	0.44
1:A:422:LEU:HD13	1:A:429:ILE:HG23	2.00	0.44
2:G:45:ALA:HB2	2:G:101:VAL:HG22	2.00	0.44
2:K:48:LEU:HG	2:K:48:LEU:H	1.54	0.44
2:L:48:LEU:HB2	2:L:79:TYR:OH	2.18	0.44
1:C:1419:LYS:O	1:C:1422:ARG:HB2	2.17	0.44
2:K:113:PHE:N	2:K:113:PHE:CD1	2.85	0.44
1:A:984:LEU:HD21	1:A:1510:TRP:O	2.17	0.44
1:F:852:LEU:O	1:F:852:LEU:HD23	2.17	0.44
1:D:626:TRP:CD2	1:D:898:PHE:HD1	2.35	0.44
1:E:935:GLU:HG3	2:K:1466:VAL:CG1	2.47	0.44
2:J:1948:MET:HG2	2:J:1993:PHE:CZ	2.52	0.44
1:B:1306:GLY:O	1:B:1357:CYS:HB2	2.17	0.44
2:K:204:ILE:CG2	2:K:312:VAL:HG21	2.46	0.44
1:A:47:ILE:CD1	2:G:1818:PHE:HD1	2.30	0.44
2:I:827:GLN:H	2:I:827:GLN:CD	2.21	0.44
2:L:871:ARG:HB2	2:L:909:ASP:HB2	1.98	0.44
2:L:204:ILE:CG2	2:L:312:VAL:HG11	2.47	0.44
2:K:2009:PHE:C	2:K:2009:PHE:HD2	2.20	0.44
2:K:1571:LEU:O	2:K:1649:ILE:N	2.46	0.44
2:K:196:PHE:CD1	2:K:266:LYS:HB3	2.52	0.44
2:K:1977:ARG:CD	2:K:1978:LYS:HG3	2.46	0.44
1:A:1084:GLU:H	1:A:1084:GLU:CD	2.19	0.44
1:E:526:MET:HE1	1:E:614:PHE:HB3	1.99	0.44
1:A:382:ILE:HG13	1:A:382:ILE:H	1.53	0.44
2:H:1972:ILE:HG13	2:H:1972:ILE:H	1.42	0.44
2:J:399:TYR:CE2	2:J:403:LEU:HD11	2.52	0.44
2:H:1325:VAL:HG13	2:H:1330:ASN:O	2.17	0.44
2:L:1820:ASP:O	2:L:1823:SER:HB3	2.17	0.44
1:E:1579:GLN:O	1:E:1583:THR:HG23	2.17	0.44
2:J:1961:SER:O	2:J:1965:VAL:HG22	2.18	0.44
2:L:52:PHE:HB2	2:L:82:PHE:CE2	2.53	0.44
2:H:1914:LEU:O	2:H:1931:GLY:HA3	2.18	0.44
1:C:1175:VAL:HA	1:C:1176:PRO:HD3	1.84	0.44
2:I:1634:SER:HB3	2:I:1684:GLU:HB2	1.99	0.44

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:B:681:ILE:HG23	1:B:681:ILE:O	2.17	0.44
2:L:1443:GLU:OE1	2:L:1443:GLU:HA	2.17	0.44
2:H:1336:VAL:HG12	2:H:1336:VAL:O	2.17	0.44
2:H:729:ASN:HD22	2:H:729:ASN:N	2.15	0.44
2:I:353:ILE:HG22	2:I:353:ILE:O	2.16	0.44
2:K:1336:VAL:HG12	2:K:1336:VAL:O	2.16	0.44
2:J:835:ALA:HB3	2:J:1073:ALA:HB1	1.98	0.44
2:I:1017:LEU:HD21	2:I:1032:PRO:HB2	1.99	0.44
2:I:1017:LEU:O	2:I:1021:GLN:HG3	2.18	0.44
1:D:1504:ARG:NH2	1:D:1545:LEU:O	2.50	0.44
2:I:1219:VAL:HB	2:I:1231:THR:HB	1.99	0.44
2:K:1047:LEU:H	2:K:1047:LEU:HD12	1.82	0.44
2:K:1050:SER:HA	2:K:1064:THR:HG21	1.99	0.44
2:K:609:THR:CB	2:K:610:PRO:HD3	2.46	0.44
1:D:1107:GLU:HA	1:D:1108:PRO:HD3	1.72	0.44
2:J:866:HIS:HB3	2:J:1068:GLN:O	2.17	0.44
2:K:685:VAL:HG13	2:K:686:PRO:HD2	1.99	0.44
1:E:570:TYR:CD2	1:E:574:ILE:HD11	2.51	0.44
1:E:409:ASP:HB2	1:E:439:ARG:HH12	1.83	0.44
2:H:501:TRP:NE1	2:H:528:THR:CG2	2.77	0.44
1:A:613:PRO:C	1:A:615:LEU:N	2.70	0.44
1:F:1102:ILE:HD13	1:F:1106:LEU:CD2	2.48	0.44
2:I:929:MET:CE	2:I:934:VAL:HA	2.47	0.44
2:K:743:TRP:CD1	2:K:761:ILE:HD11	2.52	0.44
1:F:673:LEU:HD21	1:F:884:MET:HE3	1.99	0.44
1:F:902:ASN:C	1:F:904:GLY:H	2.20	0.44
2:J:621:THR:OG1	2:J:1083:ILE:HD13	2.18	0.44
2:J:1709:TYR:HE2	2:J:1716:LYS:HE2	1.82	0.44
1:B:1186:VAL:HG12	1:B:1187:THR:N	2.31	0.44
1:E:553:ARG:C	1:E:555:GLN:H	2.21	0.44
1:F:452:ILE:HA	1:F:452:ILE:HD13	1.89	0.44
2:K:1358:THR:O	2:K:1361:ILE:HG13	2.18	0.44
2:K:1865:LEU:O	2:K:1869:VAL:HG22	2.17	0.44
2:G:916:GLY:O	2:G:924:VAL:HG23	2.17	0.44
2:H:1350:ILE:HD13	2:H:1610:MET:SD	2.57	0.44
1:C:1426:GLU:HA	1:C:1429:ARG:HB2	1.98	0.44
2:I:1933:LEU:HB3	2:I:1987:VAL:HB	1.99	0.44
2:H:1770:ASN:HB2	2:H:1776:LYS:CE	2.41	0.44
2:L:1371:LEU:O	2:L:1590:ILE:HD11	2.17	0.44
2:I:1351:VAL:CG1	2:I:1352:VAL:N	2.80	0.44
2:K:287:GLN:O	2:K:287:GLN:HG2	2.18	0.44
2:J:268:LEU:HB3	2:J:270:ARG:HD3	1.98	0.44

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:J:265:CYS:SG	2:J:275:LEU:HB2	2.57	0.44
2:G:821:GLU:OE2	2:G:1083:ILE:HG13	2.16	0.44
2:K:153:PRO:HB3	2:K:270:ARG:NH1	2.32	0.44
2:K:271:GLU:H	2:K:274:GLU:CG	2.30	0.44
2:K:1229:VAL:CG1	2:K:1230:LYS:N	2.81	0.44
1:B:330:LYS:HG3	1:B:333:ARG:HH12	1.80	0.44
2:G:38:PRO:HD2	2:G:104:LEU:CD1	2.46	0.44
1:D:1154:LEU:HD23	1:D:1154:LEU:HA	1.74	0.44
2:I:906:LEU:HA	2:I:906:LEU:HD22	1.80	0.44
2:K:541:LEU:HG	2:K:552:VAL:CG1	2.48	0.44
2:I:1481:ILE:O	2:I:1481:ILE:HG13	2.18	0.44
2:L:399:TYR:CE2	2:L:403:LEU:HD11	2.53	0.44
1:D:1446:GLU:HA	1:D:1449:ALA:HB3	1.98	0.44
2:L:202:THR:HA	2:L:228:LEU:HD11	1.98	0.44
2:H:611:THR:HG21	2:H:817:MET:CE	2.46	0.44
2:K:1752:PRO:O	2:K:1756:ILE:HG23	2.17	0.44
1:D:1686:PRO:HB2	1:D:1713:PHE:CE1	2.53	0.44
2:J:1749:PHE:CD2	2:J:1758:ARG:HB3	2.53	0.44
2:H:1384:PRO:CB	2:H:1829:ARG:HH12	2.30	0.44
1:F:21:GLN:HE22	2:L:1841:TYR:HE1	1.64	0.44
1:C:1592:ALA:O	1:C:1593:ASP:C	2.54	0.44
2:I:690:LEU:HD22	2:I:691:THR:H	1.82	0.44
1:C:93:GLU:HA	1:C:94:PRO:HD3	1.83	0.44
2:K:1146:LEU:HD11	2:K:1160:PHE:CE2	2.52	0.44
2:H:990:TYR:N	2:H:991:PRO:CD	2.80	0.44
2:I:1473:PHE:HE1	2:I:1513:VAL:HG21	1.81	0.44
1:A:1219:GLY:HA2	1:A:1272:PRO:HD2	1.99	0.44
2:K:990:TYR:N	2:K:991:PRO:CD	2.81	0.44
2:L:668:ARG:HH21	2:L:1023:ARG:HH12	1.66	0.44
2:G:1693:VAL:HA	2:G:1834:ALA:O	2.18	0.44
2:K:342:ASN:HB3	2:K:406:ARG:HD3	1.99	0.44
2:L:1969:LEU:HA	2:L:1972:ILE:HD12	2.00	0.44
1:F:450:TYR:C	1:F:450:TYR:CD2	2.90	0.44
1:B:1080:LEU:HA	1:B:1080:LEU:HD23	1.87	0.44
2:I:704:GLU:OE1	2:I:704:GLU:HA	2.17	0.44
2:L:416:GLN:HE22	2:L:425:LYS:H	1.66	0.44
2:I:1231:THR:CG2	2:I:1595:VAL:HG11	2.48	0.44
2:I:610:PRO:HD2	4:I:2101:FMN:C6	2.24	0.44
1:D:1148:LEU:HA	1:D:1148:LEU:HD23	1.67	0.44
1:A:1672:GLY:O	1:A:1676:ASN:N	2.50	0.44
2:G:1067:LEU:HB3	4:G:2101:FMN:HM82	2.00	0.44
2:G:609:THR:CG2	2:G:633:GLY:HA3	2.46	0.44

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:H:915:PHE:CD2	2:H:915:PHE:O	2.70	0.44
2:H:938:MET:HE2	2:H:959:THR:HG22	1.99	0.44
2:J:796:TRP:HH2	2:J:805:MET:HE1	1.76	0.44
2:H:327:PRO:N	2:I:1338:ARG:NH2	2.66	0.44
2:G:528:THR:HA	2:G:531:ASN:ND2	2.33	0.44
2:K:606:ALA:HB2	2:K:811:MET:CG	2.47	0.44
2:L:1645:PRO:O	2:L:1646:ASN:HB2	2.18	0.44
2:H:604:MET:HE1	2:H:777:VAL:HG11	1.99	0.44
2:H:1939:LEU:O	2:H:1943:LEU:HG	2.18	0.44
1:E:1275:THR:HA	1:E:1276:PRO:HD3	1.58	0.44
2:H:1746:THR:CB	2:H:1792:THR:HG23	2.43	0.44
1:D:1042:LEU:O	1:D:1043:LYS:HB2	2.17	0.44
2:J:45:ALA:HB2	2:J:101:VAL:HG22	2.00	0.44
2:H:1886:VAL:HG22	2:H:1995:THR:HG22	1.99	0.44
1:A:486:VAL:HG13	1:A:648:LEU:H	1.80	0.44
2:G:792:LEU:HD23	2:G:1094:HIS:ND1	2.32	0.44
2:L:821:GLU:OE2	2:L:1083:ILE:HG13	2.17	0.44
2:J:1353:GLY:HA2	2:J:1397:THR:HG21	2.00	0.44
2:K:617:PHE:HE1	2:K:819:ALA:HB3	1.82	0.44
2:G:1802:ALA:CB	2:G:1804:GLN:HE22	2.29	0.44
1:E:1493:PHE:CE2	1:E:1509:THR:HG22	2.52	0.44
2:J:1203:TYR:O	2:J:1219:VAL:HA	2.17	0.44
2:H:186:LEU:HD21	2:H:256:VAL:HG22	1.99	0.44
2:J:197:VAL:HA	2:J:262:MET:HE1	1.99	0.44
1:C:883:LEU:N	1:C:883:LEU:HD23	2.32	0.44
1:F:1553:VAL:HG22	1:F:1604:TYR:O	2.17	0.44
2:H:1966:ARG:HG3	2:H:1967:ALA:N	2.33	0.44
2:H:1643:VAL:HG13	2:H:1649:ILE:HD11	1.99	0.44
2:J:611:THR:HG22	2:J:1051:GLU:OE2	2.18	0.44
2:I:202:THR:O	2:I:206:GLU:HG3	2.18	0.44
2:J:728:ILE:O	2:J:732:LYS:HG3	2.17	0.44
1:F:1160:VAL:HG11	1:F:1337:PRO:HB3	1.99	0.44
1:C:844:ILE:H	1:C:844:ILE:HD12	1.82	0.44
2:L:1981:GLU:O	2:L:1984:PRO:HG3	2.16	0.44
2:K:1977:ARG:HD3	2:K:1978:LYS:HG3	1.98	0.44
1:D:1171:ARG:HD3	1:D:1177:GLU:OE1	2.16	0.44
2:I:1728:GLU:HG2	2:I:1753:ARG:HE	1.82	0.44
2:K:690:LEU:HD22	2:K:691:THR:H	1.83	0.44
1:C:450:TYR:CE1	1:C:1551:ASN:HB2	2.53	0.44
2:G:988:GLU:HA	2:G:989:PRO:HD3	1.70	0.44
2:G:1930:ALA:HB1	2:G:2004:PRO:HB3	1.99	0.44
1:E:1065:LYS:O	1:E:1069:GLU:HB2	2.18	0.44

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:E:679:LYS:HG2	1:E:708:GLN:HB3	1.99	0.44
2:J:1325:VAL:HG13	2:J:1330:ASN:O	2.17	0.44
2:I:719:GLY:O	2:I:755:GLU:HG3	2.17	0.44
1:D:942:VAL:O	2:J:1536:HIS:HB2	2.17	0.44
2:K:826:LYS:HA	2:K:826:LYS:HD3	1.79	0.44
1:B:1249:ILE:H	1:B:1249:ILE:HG13	1.31	0.44
2:I:1336:VAL:O	2:I:1336:VAL:HG12	2.17	0.44
2:I:155:ASP:N	2:I:155:ASP:OD1	2.51	0.44
2:G:342:ASN:HB3	2:G:406:ARG:HD3	1.97	0.44
1:C:1172:ARG:HG3	1:C:1172:ARG:HH11	1.83	0.44
2:G:754:PHE:N	2:G:754:PHE:CD1	2.85	0.44
1:F:687:PHE:CD2	1:F:687:PHE:C	2.91	0.44
1:C:1011:ARG:HH11	1:C:1012:TRP:HA	1.81	0.44
1:A:1420:TYR:O	1:A:1424:GLN:HG2	2.18	0.44
1:D:1514:ILE:CD1	1:D:1545:LEU:HB3	2.48	0.44
1:B:1504:ARG:NH2	1:B:1545:LEU:O	2.50	0.44
4:I:2101:FMN:N1	4:I:2101:FMN:O2'	2.45	0.44
2:K:608:MET:HA	4:K:2101:FMN:C5A	2.46	0.44
2:L:1047:LEU:HD12	2:L:1047:LEU:H	1.82	0.44
1:B:1104:GLN:OE1	1:D:1107:GLU:CB	2.60	0.44
2:G:855:ILE:HB	2:G:869:ALA:HB2	1.99	0.44
1:B:535:TYR:HH	1:B:630:LYS:HE3	1.74	0.44
2:G:600:VAL:HG13	2:G:601:PRO:N	2.32	0.44
2:G:1026:LYS:HG3	3:G:2102:NAP:N7A	2.32	0.44
2:J:854:VAL:HA	2:J:867:LYS:O	2.17	0.44
2:L:1123:ALA:O	2:L:1126:GLU:CG	2.57	0.44
2:J:2009:PHE:HD2	2:J:2009:PHE:C	2.20	0.44
2:J:1340:LYS:HG3	2:L:376:ARG:HH21	1.76	0.44
2:G:468:PRO:HA	2:G:479:ARG:HD3	2.00	0.44
1:E:1686:PRO:HD2	1:E:1687:TYR:CE2	2.52	0.44
1:C:1005:TRP:HE1	1:C:1561:LEU:HD22	1.78	0.44
2:I:472:THR:HB	2:I:493:MET:HE3	1.99	0.44
1:D:1301:VAL:HG23	1:D:1363:MET:HG3	2.00	0.44
2:H:779:GLY:HA3	2:H:811:MET:CE	2.46	0.44
2:J:604:MET:HG3	2:J:627:HIS:O	2.18	0.44
2:I:743:TRP:CD2	2:I:761:ILE:HD11	2.52	0.44
1:B:973:TRP:NE1	1:B:1648:LYS:HB2	2.31	0.44
2:I:818:THR:HA	2:I:829:LYS:HE2	1.99	0.44
1:B:1275:THR:HA	1:B:1276:PRO:HD3	1.60	0.44
1:B:1303:LEU:HA	1:B:1303:LEU:HD23	1.61	0.44
2:L:716:PHE:HD1	2:L:727:VAL:CG1	2.30	0.44
2:L:1361:ILE:HG22	2:L:1435:TYR:OH	2.18	0.44

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:G:724:ILE:O	2:G:727:VAL:HG23	2.17	0.44
2:L:80:ILE:HG12	2:L:105:ILE:CG2	2.47	0.44
2:L:596:ARG:HD3	2:L:1119:ARG:HG3	2.00	0.44
1:F:1099:GLU:HG2	1:F:1149:LEU:HD21	1.98	0.44
2:I:186:LEU:HD11	2:I:255:LEU:HD23	1.99	0.44
2:I:1934:ARG:H	2:I:1934:ARG:HG3	1.62	0.44
2:G:596:ARG:HD3	2:G:1119:ARG:HG3	1.99	0.44
2:K:1248:GLU:OE2	2:K:1250:ARG:NE	2.47	0.44
1:D:1078:ILE:HG23	1:D:1352:MET:HE3	1.99	0.44
1:B:6:GLU:HA	2:H:2050:ILE:HD11	2.00	0.44
1:F:1546:GLY:O	1:F:1547:ARG:C	2.56	0.44
1:F:968:PRO:HD2	1:F:1374:PRO:HB3	1.99	0.44
2:I:1028:VAL:HG13	2:I:1030:PHE:CE2	2.52	0.44
1:C:526:MET:HE3	1:C:614:PHE:CB	2.48	0.44
1:E:1522:PHE:CD2	1:E:1534:GLU:HB3	2.52	0.44
1:A:407:ARG:NH1	1:A:1606:VAL:HG23	2.32	0.44
2:G:907:ASN:HA	2:G:913:VAL:HG13	2.00	0.44
1:A:687:PHE:O	1:A:687:PHE:HD2	2.01	0.44
1:B:1171:ARG:HD3	1:B:1177:GLU:OE1	2.18	0.44
2:K:187:ARG:NH2	2:K:230:TRP:O	2.50	0.44
2:I:31:LEU:HB2	2:I:72:VAL:HG22	2.00	0.44
2:K:1465:ALA:O	2:K:1469:SER:HB3	2.18	0.44
2:I:77:ALA:O	2:I:139:ALA:HB1	2.18	0.44
2:K:60:THR:HG22	2:K:62:GLU:HG3	1.99	0.44
2:K:1257:VAL:HA	2:K:1258:PRO:HD3	1.78	0.44
2:G:737:PHE:HA	2:G:738:PRO:HD3	1.85	0.44
2:G:52:PHE:HB2	2:G:82:PHE:CE2	2.53	0.44
2:H:1945:ILE:O	2:H:1949:GLN:HB2	2.18	0.44
1:C:560:LYS:O	1:C:564:LEU:HB2	2.18	0.44
2:G:1217:ILE:O	2:G:1233:GLU:HA	2.17	0.44
2:L:1883:MET:HB2	2:L:2001:ILE:HD12	1.98	0.44
1:D:539:THR:HA	1:D:542:GLN:HE21	1.82	0.44
2:I:709:LEU:HD23	2:I:709:LEU:N	2.28	0.44
2:H:613:VAL:H	2:H:614:PRO:HD3	1.82	0.44
2:K:866:HIS:HB3	2:K:1068:GLN:O	2.18	0.44
2:H:310:ARG:HH12	2:H:459:LYS:H	1.66	0.44
1:B:1102:ILE:HD11	1:B:1148:LEU:HG	1.98	0.44
1:D:612:ILE:HG12	1:D:628:TYR:CD2	2.53	0.44
1:E:997:THR:HG23	1:E:1361:VAL:HG22	1.99	0.44
1:B:579:MET:CE	1:E:612:ILE:HD12	2.48	0.44
1:E:628:TYR:CD1	1:E:629:SER:N	2.86	0.44
2:I:174:GLY:H	2:I:517:GLY:CA	2.30	0.44

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:G:942:MET:HE2	2:G:955:LEU:HB3	1.99	0.44
2:H:912:LYS:HE2	2:H:1028:VAL:O	2.18	0.44
2:J:762:LEU:HD23	2:J:805:MET:HE1	2.00	0.44
2:K:382:LEU:HG	2:K:390:VAL:HB	2.00	0.44
2:J:865:ILE:HG22	2:J:867:LYS:HG3	2.00	0.44
2:J:1678:VAL:O	2:J:1679:LEU:HD23	2.17	0.44
1:A:1565:PRO:HG3	1:A:1572:TRP:CH2	2.52	0.44
2:G:489:GLU:O	2:G:492:ARG:HG2	2.17	0.44
1:A:1648:LYS:O	1:A:1652:GLU:HB2	2.17	0.44
1:B:1037:ASN:CG	1:B:1674:ILE:HG23	2.38	0.44
2:K:718:PRO:HG2	2:K:741:LEU:CD1	2.48	0.44
1:E:1580:VAL:O	1:E:1617:ILE:HD11	2.17	0.44
2:H:705:TYR:HA	2:H:709:LEU:HD21	1.98	0.44
1:C:452:ILE:HG22	1:C:453:ASP:N	2.31	0.44
1:D:524:LYS:O	1:D:525:GLN:C	2.55	0.44
1:E:1674:ILE:HG22	1:E:1675:ASN:OD1	2.18	0.44
2:J:48:LEU:HB2	2:J:79:TYR:OH	2.18	0.44
2:H:2003:VAL:HA	2:H:2004:PRO:HD3	1.85	0.44
2:G:1845:VAL:CG2	2:G:1856:LEU:HD22	2.42	0.44
2:K:506:VAL:CG1	2:K:506:VAL:O	2.63	0.44
2:K:52:PHE:HB2	2:K:82:PHE:CE2	2.52	0.44
2:J:1175:MET:O	2:J:1192:LEU:HD12	2.17	0.44
2:J:1192:LEU:HD22	2:J:1196:PHE:CE1	2.53	0.44
2:J:1234:ILE:HG22	2:J:1242:ILE:HG22	1.99	0.44
2:K:617:PHE:CD1	2:K:822:ALA:CA	3.01	0.44
1:A:330:LYS:HG3	1:A:333:ARG:HH12	1.79	0.44
2:K:38:PRO:HD2	2:K:104:LEU:CD1	2.45	0.44
1:E:746:PHE:CG	3:E:1901:NAP:H4D	2.53	0.44
2:L:1807:GLN:HB3	2:L:1860:VAL:CG1	2.47	0.44
2:L:26:LEU:HD23	2:L:49:LYS:HG3	2.00	0.44
2:L:1305:LEU:HD23	2:L:1366:ILE:HD11	2.00	0.44
1:F:655:ALA:CB	1:F:742:TYR:HB2	2.48	0.44
2:I:1515:LEU:CB	2:I:1525:VAL:HG21	2.47	0.44
2:L:411:PRO:HD2	2:L:414:LEU:HD11	1.98	0.44
1:B:343:ILE:O	1:B:347:LEU:HG	2.16	0.44
1:E:889:VAL:O	1:E:893:GLN:HG3	2.18	0.44
1:F:1514:ILE:CD1	1:F:1545:LEU:HB3	2.48	0.44
2:G:1207:THR:O	2:G:1215:THR:HG23	2.17	0.44
2:K:1945:ILE:O	2:K:1949:GLN:HB2	2.18	0.44
2:L:617:PHE:HE1	2:L:819:ALA:HB3	1.83	0.44
2:L:1028:VAL:HA	2:L:1029:PRO:HD3	1.73	0.44
1:B:613:PRO:O	1:B:615:LEU:N	2.50	0.44

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:H:1586:ASP:OD1	2:H:1588:ASN:HB2	2.17	0.44
1:C:914:LEU:O	1:C:917:LYS:HB3	2.16	0.44
1:A:1171:ARG:HD3	1:A:1177:GLU:OE1	2.17	0.44
1:B:413:MET:O	1:B:416:ASP:HB2	2.18	0.44
2:J:1116:PHE:O	2:J:1270:GLY:HA3	2.18	0.44
2:G:2008:THR:HG22	2:G:2011:ARG:HE	1.83	0.44
1:C:1078:ILE:HA	1:C:1162:GLY:HA2	2.00	0.44
1:F:1219:GLY:HA2	1:F:1272:PRO:HD2	2.00	0.44
1:F:857:ASN:HA	1:F:860:ALA:HB2	1.98	0.44
2:L:1179:GLU:N	2:L:1179:GLU:OE1	2.47	0.44
2:I:1163:LEU:HA	2:I:1163:LEU:HD12	1.83	0.44
2:L:990:TYR:N	2:L:991:PRO:CD	2.80	0.44
1:E:363:GLU:O	1:E:366:LYS:HB2	2.17	0.44
2:H:462:ALA:HB3	2:H:483:ASP:HA	1.99	0.44
1:D:1102:ILE:HG13	1:D:1102:ILE:H	1.64	0.44
2:J:169:ILE:HG22	2:J:279:PHE:CD2	2.52	0.44
2:J:613:VAL:HG13	2:J:614:PRO:CD	2.47	0.44
2:K:169:ILE:HG22	2:K:279:PHE:CD2	2.51	0.44
2:K:937:ARG:HG3	2:K:941:LEU:HD12	1.99	0.44
1:B:1491:ASN:N	1:B:1491:ASN:ND2	2.65	0.44
2:J:937:ARG:CZ	2:J:941:LEU:HD11	2.47	0.44
2:K:1637:VAL:HG11	2:K:1679:LEU:CD1	2.39	0.44
1:A:1491:ASN:ND2	1:A:1491:ASN:H	2.14	0.44
1:A:612:ILE:HD11	1:F:579:MET:HB3	2.00	0.44
2:G:1769:VAL:HG13	2:G:1774:SER:C	2.38	0.44
1:F:533:SER:O	1:F:611:THR:HG22	2.18	0.44
2:J:930:THR:CG2	2:J:933:GLU:H	2.27	0.44
1:D:40:ARG:HH21	1:D:74:VAL:HG22	1.82	0.44
2:I:1645:PRO:O	2:I:1646:ASN:HB2	2.16	0.44
2:J:1769:VAL:HG13	2:J:1774:SER:C	2.38	0.44
2:L:2058:VAL:CG1	2:L:2067:ILE:HD12	2.48	0.44
1:B:452:ILE:HG22	1:B:453:ASP:N	2.31	0.44
1:E:498:THR:CG2	1:E:858:LEU:HA	2.42	0.44
2:K:1120:ILE:HD11	2:K:1173:HIS:NE2	2.32	0.44
2:L:1768:THR:O	2:L:1776:LYS:HB2	2.17	0.44
1:E:759:ILE:HG12	1:E:813:LEU:HD23	2.00	0.44
2:H:138:ARG:HB2	2:H:192:THR:HA	1.99	0.44
2:J:664:TYR:C	2:J:666:ASN:H	2.19	0.44
2:H:76:VAL:HG11	2:H:109:PHE:HD1	1.83	0.44
2:G:1721:ARG:NH1	2:G:1854:GLU:OE2	2.51	0.44
1:E:1160:VAL:HG11	1:E:1337:PRO:HB3	1.99	0.44
2:H:1331:THR:O	2:H:1331:THR:HG22	2.18	0.44

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:J:1299:VAL:HG13	2:J:1301:PHE:CE1	2.53	0.44
2:K:1204:VAL:HG22	2:K:1219:VAL:HG22	2.00	0.44
1:E:445:LEU:O	1:E:448:MET:HB2	2.18	0.44
1:C:472:GLN:HA	1:C:472:GLN:HE21	1.82	0.44
2:K:381:SER:OG	2:K:392:THR:HG23	2.16	0.44
1:A:544:ASP:HB3	1:F:569:LEU:HD22	2.00	0.44
1:B:902:ASN:C	1:B:904:GLY:H	2.21	0.44
2:K:1116:PHE:O	2:K:1270:GLY:HA3	2.17	0.44
2:H:1031:VAL:HG22	2:H:1041:TRP:HB3	1.98	0.44
2:G:1945:ILE:O	2:G:1949:GLN:HB2	2.17	0.44
2:H:617:PHE:HE1	2:H:819:ALA:HB3	1.83	0.44
1:F:1171:ARG:HD3	1:F:1177:GLU:OE1	2.18	0.44
2:H:113:PHE:CD1	2:H:113:PHE:N	2.85	0.44
1:C:1011:ARG:NH1	1:C:1012:TRP:HA	2.32	0.44
2:G:248:VAL:O	2:G:252:LEU:HB2	2.18	0.44
1:B:726:VAL:HG21	1:B:780:ALA:HB3	1.99	0.44
2:J:1905:GLU:O	2:J:1908:ALA:HB3	2.17	0.44
2:I:1883:MET:HB2	2:I:2001:ILE:HD12	2.00	0.44
1:F:880:LEU:C	1:F:882:GLY:N	2.70	0.44
2:I:223:LYS:HB3	2:I:242:TYR:CZ	2.53	0.44
2:J:976:GLN:HA	2:J:977:PRO:HD3	1.88	0.44
2:L:858:LEU:CD2	2:L:864:PRO:HA	2.47	0.44
1:C:1153:ALA:O	1:F:1121:ARG:NH1	2.51	0.44
2:K:173:PHE:CE2	2:K:516:PHE:HB2	2.53	0.44
1:B:383:TYR:O	1:B:387:ILE:HG12	2.18	0.44
1:D:801:LEU:HD13	1:D:822:GLU:HG2	2.00	0.44
2:K:1102:LEU:HD23	2:K:1102:LEU:HA	1.83	0.44
2:J:444:LEU:HA	2:J:444:LEU:HD23	1.76	0.44
1:C:1293:THR:HG23	1:C:1298:LYS:HB2	1.99	0.44
2:J:1002:GLU:C	2:J:1004:SER:H	2.19	0.44
1:F:1404:ALA:HA	1:F:1501:ALA:HB1	2.00	0.44
1:C:667:ALA:O	1:C:671:GLN:HG3	2.18	0.44
2:L:1594:ARG:NH1	2:L:1595:VAL:HG13	2.33	0.44
4:I:2101:FMN:H1'2	4:I:2101:FMN:H9	1.90	0.44
2:H:1067:LEU:HB3	4:H:2101:FMN:HM82	2.00	0.44
2:L:459:LYS:HA	2:L:485:ASP:CG	2.38	0.44
2:J:608:MET:HA	4:J:2101:FMN:C5A	2.47	0.44
2:K:686:PRO:HG3	2:K:1185:HIS:O	2.17	0.44
2:G:613:VAL:N	2:G:614:PRO:HD3	2.33	0.44
2:H:937:ARG:NE	2:H:941:LEU:CD1	2.81	0.44
1:C:1102:ILE:HD11	1:C:1148:LEU:HG	2.00	0.44
1:E:960:ARG:HG3	1:E:960:ARG:NH1	2.33	0.44

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:K:461:PRO:HB3	2:K:483:ASP:O	2.17	0.44
1:F:628:TYR:CD1	1:F:629:SER:N	2.85	0.44
2:I:1602:LEU:HB3	2:I:1604:GLY:H	1.82	0.44
2:J:489:GLU:O	2:J:492:ARG:HG2	2.18	0.44
2:J:376:ARG:HH22	2:K:1340:LYS:HE2	1.82	0.44
1:C:1674:ILE:HG22	1:C:1675:ASN:OD1	2.18	0.44
1:F:973:TRP:NE1	1:F:1648:LYS:HB2	2.32	0.44
1:A:474:ILE:O	1:A:478:LYS:HG3	2.17	0.44
2:K:1985:GLN:C	2:K:1987:VAL:N	2.68	0.44
2:H:1851:MET:HB3	2:H:1851:MET:HE3	1.83	0.44
2:L:723:ALA:O	2:L:726:GLN:HB2	2.17	0.44
2:J:1305:LEU:HD23	2:J:1366:ILE:HD11	1.99	0.44
2:H:38:PRO:HD2	2:H:104:LEU:CD1	2.47	0.44
2:G:1551:ILE:HG22	2:G:1552:GLU:N	2.33	0.44
1:A:1338:GLY:C	1:A:1340:MET:H	2.19	0.44
2:G:746:GLY:O	2:G:843:TRP:NE1	2.50	0.44
2:K:1844:LEU:HD22	2:K:1850:VAL:HG21	1.99	0.44
2:K:1171:TRP:CH2	2:K:1236:LEU:HB2	2.53	0.44
2:H:521:VAL:O	2:H:521:VAL:HG12	2.18	0.44
2:L:781:GLY:CA	2:L:1071:VAL:HG13	2.45	0.44
2:I:1099:LEU:HD12	2:I:1103:TYR:CB	2.47	0.44
2:J:411:PRO:HD2	2:J:414:LEU:HD11	1.99	0.44
1:F:853:MET:HG2	1:F:856:ASN:ND2	2.32	0.44
2:K:196:PHE:N	2:K:196:PHE:HD2	2.16	0.44
1:E:902:ASN:C	1:E:904:GLY:H	2.21	0.44
2:L:1031:VAL:HG22	2:L:1041:TRP:HB3	2.00	0.44
1:E:491:SER:O	1:E:493:PRO:HD3	2.18	0.44
2:J:1977:ARG:CD	2:J:1978:LYS:HG3	2.47	0.44
1:C:1171:ARG:HD3	1:C:1177:GLU:OE1	2.17	0.44
1:C:1177:GLU:O	1:C:1180:ILE:HB	2.17	0.44
1:A:1577:CYS:SG	1:A:1622:VAL:HG12	2.58	0.44
1:F:1651:TYR:CE2	1:F:1655:CYS:SG	3.11	0.44
2:J:223:LYS:HB3	2:J:242:TYR:CZ	2.52	0.44
1:B:23:ALA:HA	2:H:2007:SER:O	2.17	0.44
2:K:1910:VAL:HG11	2:K:1973:ILE:HG21	1.98	0.44
1:F:1698:ASN:HA	1:F:1699:PRO:HD3	1.81	0.44
2:J:173:PHE:CE2	2:J:516:PHE:HB2	2.53	0.44
2:J:729:ASN:N	2:J:729:ASN:HD22	2.16	0.44
2:L:704:GLU:OE1	2:L:704:GLU:HA	2.17	0.44
2:G:1443:GLU:OE1	2:G:1443:GLU:HA	2.18	0.44
1:E:1470:ARG:HA	1:E:1470:ARG:HD3	1.77	0.44
2:I:676:LEU:HD13	2:I:676:LEU:C	2.38	0.44

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:K:656:ARG:CG	2:K:656:ARG:NH1	2.80	0.44
1:B:535:TYR:CE1	1:B:610:GLU:HB3	2.53	0.44
2:J:1048:TRP:NE1	2:J:1049:GLN:HG2	2.29	0.44
2:K:2064:SER:OG	2:K:2067:ILE:HB	2.18	0.44
2:L:174:GLY:HA2	2:L:524:ILE:CG1	2.48	0.44
1:E:1079:ARG:HG2	1:E:1079:ARG:NH1	2.14	0.44
1:A:526:MET:CE	1:A:614:PHE:HB3	2.48	0.44
1:A:1703:VAL:HG22	1:A:1712:LYS:C	2.37	0.44
2:H:765:TYR:CD2	2:H:805:MET:HG2	2.52	0.44
1:D:1280:CYS:HB2	1:D:1626:GLY:HA2	2.00	0.44
2:G:472:THR:CG2	2:G:499:VAL:HG22	2.48	0.44
2:I:459:LYS:HA	2:I:485:ASP:CG	2.37	0.44
2:J:1738:VAL:HA	2:J:1800:LEU:HD13	1.99	0.44
2:L:1871:VAL:HG21	2:L:2003:VAL:HA	2.00	0.44
1:B:1179:ILE:O	1:B:1183:VAL:HG23	2.18	0.44
1:E:452:ILE:HG22	1:E:453:ASP:N	2.33	0.44
1:A:553:ARG:C	1:A:555:GLN:H	2.21	0.44
2:G:2005:PHE:CA	2:G:2010:LEU:HD11	2.48	0.44
1:D:553:ARG:C	1:D:555:GLN:H	2.20	0.44
2:L:580:LEU:O	2:L:581:VAL:HG23	2.18	0.44
2:J:1351:VAL:CG2	2:J:1584:SER:HA	2.47	0.44
2:G:1000:TYR:HA	2:G:1001:PRO:HD2	1.69	0.44
1:E:1494:TRP:CG	1:E:1505:GLY:HA3	2.53	0.44
1:A:1160:VAL:C	1:A:1352:MET:HE1	2.38	0.44
1:D:47:ILE:CD1	2:J:1818:PHE:HD1	2.31	0.44
2:H:932:ALA:O	2:H:935:VAL:HG13	2.18	0.44
2:K:1981:GLU:O	2:K:1984:PRO:HG3	2.18	0.44
2:L:617:PHE:CD1	2:L:822:ALA:CA	3.01	0.44
2:G:1751:GLY:O	2:G:1755:LYS:HG2	2.18	0.44
1:A:407:ARG:HG3	1:A:407:ARG:H	1.59	0.44
2:L:187:ARG:NH2	2:L:234:PRO:HA	2.33	0.44
2:G:541:LEU:HG	2:G:552:VAL:CG1	2.48	0.44
2:K:1969:LEU:HA	2:K:1972:ILE:HD12	1.99	0.44
2:I:31:LEU:HD13	2:I:75:LEU:HG	1.99	0.44
1:E:914:LEU:O	1:E:917:LYS:HB3	2.18	0.44
2:J:1314:GLU:O	2:J:1394:VAL:HA	2.18	0.44
1:D:28:TRP:HE1	1:D:32:GLN:NE2	2.16	0.44
2:H:1149:ALA:HA	2:H:1150:PRO:HD3	1.89	0.44
2:J:1865:LEU:O	2:J:1869:VAL:HG22	2.18	0.44
2:I:1977:ARG:HD3	2:I:1978:LYS:HG3	1.99	0.44
2:I:1977:ARG:CD	2:I:1978:LYS:HG3	2.48	0.44
2:G:835:ALA:HB3	2:G:1073:ALA:HB1	2.00	0.44

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:484:PRO:HA	1:A:485:PRO:HD3	1.80	0.44
2:L:226:ASP:OD2	2:L:229:GLN:HB2	2.18	0.44
2:I:1820:ASP:O	2:I:1823:SER:HB3	2.17	0.44
2:K:704:GLU:OE1	2:K:704:GLU:HA	2.18	0.44
2:K:754:PHE:N	2:K:754:PHE:CD1	2.86	0.44
2:H:664:TYR:C	2:H:666:ASN:H	2.22	0.44
2:K:911:GLN:NE2	2:K:1065:CYS:H	2.16	0.43
2:L:1067:LEU:CB	4:L:2101:FMN:HM82	2.48	0.43
2:L:1194:ARG:HH21	2:L:1601:ASN:CG	2.21	0.43
1:D:1102:ILE:CG2	1:D:1104:GLN:HG2	2.47	0.43
2:G:618:VAL:HG11	2:G:648:ILE:HD11	2.00	0.43
1:A:427:ARG:O	1:A:430:VAL:HB	2.17	0.43
2:H:595:SER:HB2	2:H:600:VAL:O	2.18	0.43
1:E:532:ILE:HG23	1:E:907:PHE:CB	2.46	0.43
1:C:1102:ILE:HD13	1:C:1106:LEU:CD2	2.48	0.43
1:C:799:LEU:HD11	1:C:824:LEU:HD12	1.99	0.43
2:G:582:LYS:HG3	2:G:1110:VAL:CG1	2.48	0.43
2:K:272:PRO:HG2	2:K:300:THR:O	2.18	0.43
2:J:2009:PHE:CD2	2:J:2009:PHE:C	2.90	0.43
2:I:2058:VAL:CG1	2:I:2067:ILE:HD12	2.48	0.43
2:J:821:GLU:OE2	2:J:1083:ILE:HG13	2.18	0.43
2:I:2044:THR:HG21	2:I:2054:TYR:OH	2.18	0.43
2:G:1871:VAL:HG21	2:G:2003:VAL:HA	2.00	0.43
2:I:1305:LEU:H	2:I:1305:LEU:CD1	2.29	0.43
1:F:452:ILE:HG22	1:F:453:ASP:N	2.33	0.43
2:I:1768:THR:O	2:I:1776:LYS:HB2	2.17	0.43
1:A:1057:GLU:HA	1:A:1058:PRO:HD3	1.87	0.43
2:K:2005:PHE:CA	2:K:2010:LEU:HD11	2.47	0.43
2:G:48:LEU:H	2:G:48:LEU:HG	1.55	0.43
2:L:1886:VAL:HG22	2:L:1995:THR:HG22	1.99	0.43
2:I:221:TYR:N	2:I:222:PRO:HD3	2.33	0.43
2:K:221:TYR:N	2:K:222:PRO:HD3	2.33	0.43
1:F:1512:LEU:HD21	1:F:1641:TYR:CE2	2.53	0.43
1:C:620:LYS:HE3	1:C:626:TRP:CZ2	2.53	0.43
2:I:1551:ILE:HG22	2:I:1552:GLU:N	2.32	0.43
2:L:1551:ILE:HG22	2:L:1552:GLU:N	2.32	0.43
1:A:30:GLU:CB	2:G:2045:ALA:HB1	2.48	0.43
2:J:24:LEU:CD1	2:J:37:VAL:HG21	2.48	0.43
1:A:715:ASN:ND2	3:A:1901:NAP:H62A	2.16	0.43
2:K:1342:PHE:CE2	2:K:1391:VAL:CG2	2.99	0.43
1:B:405:TRP:CH2	1:B:1609:SER:HB3	2.53	0.43
1:D:898:PHE:HD2	1:D:899:ALA:N	2.16	0.43

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:L:882:LYS:HD3	2:L:898:ARG:CZ	2.48	0.43
2:I:256:VAL:O	2:I:260:HIS:HD2	2.00	0.43
1:B:415:TYR:CD2	1:B:1614:THR:HA	2.53	0.43
1:A:414:TYR:C	1:A:414:TYR:CD2	2.91	0.43
2:H:611:THR:HG22	2:H:1051:GLU:OE2	2.18	0.43
2:K:1982:ALA:C	2:K:1984:PRO:HD3	2.37	0.43
2:K:1750:GLY:N	2:K:1754:GLY:HA3	2.32	0.43
2:I:1587:TYR:O	2:I:1588:ASN:C	2.56	0.43
2:K:980:LEU:HB2	2:K:996:ILE:CD1	2.48	0.43
1:C:902:ASN:C	1:C:904:GLY:H	2.21	0.43
1:F:889:VAL:O	1:F:893:GLN:HG3	2.17	0.43
2:J:1725:HIS:CD2	2:J:1854:GLU:HB2	2.53	0.43
2:I:1752:PRO:O	2:I:1756:ILE:HG23	2.18	0.43
1:F:1050:TRP:HA	1:F:1050:TRP:HE3	1.82	0.43
2:K:416:GLN:C	2:K:418:ARG:H	2.22	0.43
1:C:962:ASN:HD22	2:I:1006:GLN:HE22	1.64	0.43
1:E:626:TRP:CD2	1:E:898:PHE:CD1	3.06	0.43
2:I:594:MET:SD	2:I:809:GLY:HA3	2.58	0.43
2:L:1972:ILE:H	2:L:1972:ILE:HG13	1.44	0.43
2:H:130:THR:HG23	2:H:546:ASP:HB3	1.99	0.43
2:I:1507:VAL:HG23	2:I:1530:TYR:HE2	1.82	0.43
1:E:1042:LEU:O	1:E:1043:LYS:HB2	2.18	0.43
2:J:1537:GLY:O	2:J:1539:PRO:HD3	2.17	0.43
1:F:1507:LEU:HD23	1:F:1507:LEU:HA	1.84	0.43
2:J:2050:ILE:HG12	2:J:2050:ILE:O	2.18	0.43
2:I:890:LYS:HB2	2:I:890:LYS:HE3	1.80	0.43
2:L:1257:VAL:HA	2:L:1258:PRO:HD3	1.78	0.43
2:I:613:VAL:N	2:I:614:PRO:HD3	2.32	0.43
1:F:492:ILE:H	1:F:492:ILE:HG13	1.51	0.43
2:H:1067:LEU:CB	4:H:2101:FMN:HM82	2.49	0.43
2:H:279:PHE:HB2	2:H:467:ILE:HD12	2.00	0.43
2:G:1067:LEU:O	2:G:1068:GLN:HG2	2.18	0.43
1:A:1102:ILE:HD13	1:A:1106:LEU:CD2	2.48	0.43
2:K:1293:TRP:CE2	2:K:1354:TRP:HZ2	2.36	0.43
2:H:1026:LYS:HG2	2:H:1027:PRO:HD2	2.00	0.43
2:K:1873:ARG:NH1	2:K:2002:ASP:CB	2.81	0.43
2:J:929:MET:HE1	2:J:934:VAL:HG22	2.00	0.43
2:I:1603:PRO:HB2	2:I:1644:LEU:HD21	2.00	0.43
2:H:1769:VAL:HG22	2:H:1775:ILE:CA	2.37	0.43
1:F:1005:TRP:HE1	1:F:1561:LEU:CD2	2.31	0.43
1:C:1212:TYR:CD2	1:C:1371:MET:HG2	2.52	0.43
2:I:1299:VAL:HA	2:I:1300:PRO:HD3	1.81	0.43

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:1301:VAL:HG23	1:A:1363:MET:HG3	1.99	0.43
1:B:1674:ILE:CD1	2:H:1011:GLN:HG3	2.41	0.43
2:J:1706:MET:HE2	2:J:1738:VAL:CG1	2.48	0.43
2:L:2017:PHE:CE2	2:L:2021:LEU:HD11	2.52	0.43
1:F:498:THR:CG2	1:F:858:LEU:HA	2.43	0.43
2:J:1361:ILE:HG22	2:J:1435:TYR:OH	2.18	0.43
2:J:1602:LEU:HB3	2:J:1604:GLY:H	1.83	0.43
1:B:1280:CYS:HB2	1:B:1626:GLY:HA2	2.00	0.43
2:G:1289:TYR:CD2	2:G:1370:LEU:HD23	2.53	0.43
2:J:44:GLN:O	2:J:48:LEU:HG	2.18	0.43
2:H:2021:LEU:HD22	2:H:2025:ILE:HD11	2.00	0.43
2:H:790:PRO:HA	2:H:795:SER:OG	2.18	0.43
2:L:1590:ILE:O	2:L:1597:SER:HB3	2.17	0.43
2:K:138:ARG:HB3	2:K:192:THR:HG23	2.00	0.43
2:I:1342:PHE:HE2	2:I:1391:VAL:HB	1.83	0.43
1:D:1307:PHE:HB3	1:D:1357:CYS:HB2	1.98	0.43
1:D:11:TYR:CG	2:J:2027:LYS:HG2	2.53	0.43
1:A:1275:THR:HA	1:A:1276:PRO:HD3	1.57	0.43
1:C:12:THR:HG21	2:I:2066:LYS:HD3	1.99	0.43
2:K:788:THR:HG21	2:K:810:CYS:SG	2.57	0.43
1:B:1623:THR:HG22	1:B:1633:GLN:HB2	2.00	0.43
1:C:1480:ARG:NH2	1:F:1488:SER:HB2	2.34	0.43
1:B:883:LEU:HD23	1:B:883:LEU:N	2.33	0.43
2:L:1574:PRO:HD3	2:L:1611:TYR:HE2	1.82	0.43
2:G:1966:ARG:HG3	2:G:1967:ALA:N	2.33	0.43
2:J:1851:MET:HE3	2:J:1851:MET:HB3	1.86	0.43
1:D:414:TYR:CE2	1:D:418:ILE:CD1	3.01	0.43
2:L:790:PRO:HA	2:L:795:SER:OG	2.18	0.43
2:K:2073:ASN:O	2:K:2076:LYS:N	2.51	0.43
2:G:1643:VAL:HG13	2:G:1649:ILE:HD11	2.00	0.43
1:C:414:TYR:CD2	1:C:414:TYR:C	2.91	0.43
2:L:1359:LYS:O	2:L:1362:PHE:HD1	2.01	0.43
2:H:1951:ILE:HD12	2:H:1951:ILE:H	1.83	0.43
1:A:1126:LYS:O	1:A:1127:VAL:HG23	2.19	0.43
1:C:29:ILE:HG13	2:I:1920:TYR:O	2.18	0.43
1:E:1219:GLY:CA	1:E:1272:PRO:HD2	2.48	0.43
1:F:1170:ALA:HB3	1:F:1188:LEU:HD13	2.00	0.43
2:K:437:ALA:HA	2:K:438:PRO:HD3	1.80	0.43
1:A:28:TRP:HE1	1:A:32:GLN:NE2	2.16	0.43
1:C:1063:ASP:O	1:C:1064:VAL:C	2.56	0.43
2:J:1883:MET:HB2	2:J:2001:ILE:HD12	1.98	0.43
2:G:664:TYR:C	2:G:666:ASN:H	2.22	0.43

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:I:545:ILE:HG22	2:I:555:LYS:HD3	2.00	0.43
1:D:1084:GLU:CD	1:D:1084:GLU:H	2.22	0.43
1:B:1031:MET:HE2	1:B:1031:MET:HB3	1.67	0.43
2:I:1810:LEU:HA	2:I:1810:LEU:HD23	1.89	0.43
1:D:916:THR:HA	1:D:919:ARG:HB2	2.00	0.43
2:H:594:MET:HB3	2:H:808:ASP:O	2.18	0.43
1:D:50:SER:HB2	1:D:52:THR:HG23	2.00	0.43
2:K:1644:LEU:HB3	2:K:1645:PRO:CD	2.47	0.43
1:D:1470:ARG:HD3	1:D:1470:ARG:HA	1.80	0.43
2:I:608:MET:H	2:I:612:THR:CB	2.28	0.43
2:I:670:MET:HE2	2:I:670:MET:HB3	1.71	0.43
2:I:511:THR:O	2:I:512:HIS:CD2	2.71	0.43
1:E:427:ARG:HH11	1:E:492:ILE:HG12	1.82	0.43
1:E:533:SER:HB2	1:E:612:ILE:H	1.83	0.43
1:E:533:SER:HB2	1:E:612:ILE:HB	1.99	0.43
2:K:1346:MET:HB3	2:K:1346:MET:HE2	1.78	0.43
1:B:409:ASP:HB2	1:B:439:ARG:HH12	1.83	0.43
2:J:1769:VAL:HG22	2:J:1775:ILE:CA	2.38	0.43
1:D:989:ASN:H	1:D:1491:ASN:ND2	2.03	0.43
2:H:1499:LYS:CG	2:H:1500:ASN:H	2.26	0.43
2:G:465:LEU:HB2	2:G:479:ARG:CG	2.48	0.43
2:G:481:LEU:C	2:G:483:ASP:H	2.22	0.43
2:J:290:VAL:HG11	2:J:315:LEU:CD1	2.48	0.43
2:J:481:LEU:C	2:J:483:ASP:H	2.22	0.43
1:B:498:THR:CG2	1:B:858:LEU:HA	2.43	0.43
2:J:743:TRP:CZ2	2:J:757:PHE:HA	2.50	0.43
1:B:632:LEU:O	1:B:633:THR:C	2.56	0.43
2:K:1709:TYR:HE2	2:K:1716:LYS:HE2	1.84	0.43
2:K:1721:ARG:NH1	2:K:1854:GLU:OE2	2.51	0.43
2:K:1351:VAL:CG2	2:K:1584:SER:HA	2.48	0.43
2:H:1709:TYR:CE2	2:H:1716:LYS:HG2	2.53	0.43
2:H:506:VAL:CG1	2:H:506:VAL:O	2.63	0.43
2:K:45:ALA:HB2	2:K:101:VAL:HG22	2.01	0.43
1:D:546:ARG:HH21	1:D:583:GLN:HG2	1.83	0.43
2:H:1361:ILE:HG22	2:H:1435:TYR:OH	2.18	0.43
2:G:718:PRO:HG2	2:G:741:LEU:HD11	1.99	0.43
2:L:1351:VAL:CG1	2:L:1352:VAL:N	2.81	0.43
2:J:1175:MET:SD	2:J:1274:ILE:HD13	2.58	0.43
2:K:821:GLU:HB2	2:K:1083:ILE:HD11	1.99	0.43
2:J:196:PHE:N	2:J:196:PHE:HD2	2.15	0.43
1:D:626:TRP:CD2	1:D:898:PHE:CD1	3.07	0.43
2:I:2009:PHE:O	2:I:2009:PHE:HD2	2.00	0.43

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:F:1218:VAL:O	1:F:1271:GLY:HA3	2.18	0.43
1:F:1218:VAL:HG13	1:F:1301:VAL:CG1	2.47	0.43
1:A:81:TYR:HD1	2:G:1821:MET:HE3	1.84	0.43
1:B:407:ARG:NH1	1:B:1606:VAL:HG23	2.34	0.43
2:H:196:PHE:N	2:H:196:PHE:CD2	2.85	0.43
1:D:1599:MET:HA	1:D:1602:PHE:HD2	1.84	0.43
2:I:196:PHE:N	2:I:196:PHE:CD2	2.86	0.43
2:L:1951:ILE:HD12	2:L:1951:ILE:H	1.83	0.43
1:F:1495:ARG:O	1:F:1496:ARG:HB3	2.19	0.43
2:H:1588:ASN:HA	2:H:1589:PRO:HD3	1.88	0.43
1:E:667:ALA:O	1:E:671:GLN:HG3	2.18	0.43
2:G:883:ILE:HG22	2:G:884:PHE:CD2	2.54	0.43
2:G:60:THR:HG22	2:G:62:GLU:HG3	2.00	0.43
1:B:1157:ASP:O	1:B:1327:ALA:HB3	2.17	0.43
1:B:1063:ASP:O	1:B:1064:VAL:C	2.55	0.43
1:B:340:LEU:HD12	1:E:347:LEU:HD12	2.00	0.43
1:B:533:SER:O	1:B:611:THR:HG22	2.18	0.43
2:I:1537:GLY:O	2:I:1539:PRO:HD3	2.17	0.43
2:K:245:SER:HA	2:K:436:THR:OG1	2.19	0.43
1:A:27:ARG:H	1:A:27:ARG:HG2	1.38	0.43
2:L:676:LEU:HD13	2:L:676:LEU:C	2.39	0.43
2:G:1102:LEU:HA	2:G:1102:LEU:HD23	1.78	0.43
2:I:1179:GLU:N	2:I:1179:GLU:OE1	2.47	0.43
2:I:1366:ILE:HG22	2:I:1366:ILE:O	2.19	0.43
2:K:134:ILE:HG13	2:K:545:ILE:CD1	2.48	0.43
2:I:618:VAL:CG1	2:I:648:ILE:HD11	2.48	0.43
2:I:716:PHE:HD1	2:I:727:VAL:CG1	2.31	0.43
2:K:1047:LEU:HD11	3:K:2102:NAP:O1N	2.18	0.43
2:G:846:THR:HG22	2:G:855:ILE:C	2.38	0.43
2:G:1067:LEU:CB	4:G:2101:FMN:HM82	2.49	0.43
2:L:1637:VAL:CG1	2:L:1679:LEU:HD13	2.34	0.43
2:L:1375:HIS:ND1	2:L:1610:MET:HG2	2.33	0.43
2:L:1610:MET:CA	2:L:1610:MET:HE2	2.33	0.43
2:K:174:GLY:H	2:K:517:GLY:CA	2.30	0.43
2:J:907:ASN:HA	2:J:913:VAL:HG13	1.99	0.43
2:G:1635:TYR:CE2	2:G:1637:VAL:HG23	2.53	0.43
2:I:930:THR:CG2	2:I:933:GLU:H	2.26	0.43
2:J:1050:SER:HA	2:J:1064:THR:HG21	2.01	0.43
2:L:828:ALA:O	2:L:832:ILE:HG13	2.18	0.43
2:H:43:PHE:CB	2:I:22:ARG:HE	2.30	0.43
1:D:1218:VAL:HG13	1:D:1301:VAL:CG1	2.47	0.43
2:J:580:LEU:HG	2:J:1098:LEU:HD23	2.01	0.43

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:B:498:THR:HG22	1:B:508:TYR:CD1	2.53	0.43
1:B:673:LEU:HD21	1:B:884:MET:HE1	1.99	0.43
1:E:1363:MET:HE2	1:E:1363:MET:HB2	1.74	0.43
2:K:726:GLN:O	2:K:730:ILE:HG12	2.18	0.43
1:E:1094:LYS:HE3	1:E:1316:TYR:CG	2.52	0.43
2:K:1706:MET:HE2	2:K:1738:VAL:HG11	2.00	0.43
2:K:1361:ILE:HG22	2:K:1435:TYR:OH	2.18	0.43
2:J:1028:VAL:HA	2:J:1029:PRO:HD3	1.73	0.43
2:G:1411:LYS:HB2	2:G:1439:TYR:CD1	2.53	0.43
1:C:1258:MET:HG2	1:C:1307:PHE:CZ	2.53	0.43
2:L:1985:GLN:C	2:L:1987:VAL:N	2.69	0.43
1:B:716:GLN:NE2	1:B:747:ALA:HB3	2.32	0.43
1:A:1493:PHE:CE2	1:A:1509:THR:HG22	2.53	0.43
1:D:967:PHE:CE2	1:D:1662:GLN:CB	3.01	0.43
2:K:221:TYR:HA	2:K:242:TYR:OH	2.18	0.43
2:K:1324:PHE:HA	2:K:1583:VAL:HG11	2.00	0.43
2:H:1366:ILE:O	2:H:1366:ILE:HG22	2.18	0.43
1:F:30:GLU:HB2	2:L:2045:ALA:CB	2.48	0.43
2:H:827:GLN:O	2:H:830:GLN:HB3	2.18	0.43
1:D:883:LEU:N	1:D:883:LEU:HD23	2.33	0.43
2:J:141:TYR:CD2	2:J:196:PHE:CZ	3.06	0.43
1:B:1697:LEU:O	1:D:1405:ARG:HA	2.18	0.43
2:I:1517:LEU:CG	2:I:1523:ILE:HD11	2.48	0.43
1:D:1303:LEU:HA	1:D:1303:LEU:HD23	1.61	0.43
1:E:883:LEU:HD23	1:E:883:LEU:N	2.32	0.43
2:J:381:SER:OG	2:J:392:THR:HG23	2.18	0.43
1:D:418:ILE:O	1:D:418:ILE:HG22	2.18	0.43
1:E:792:THR:O	2:H:1750:GLY:HA3	2.19	0.43
2:G:350:MET:HG3	2:G:435:ILE:CB	2.48	0.43
2:L:1093:ASP:O	2:L:1097:PHE:CD1	2.70	0.43
1:B:828:TRP:NE1	1:B:838:THR:HA	2.34	0.43
2:K:205:ALA:O	2:K:209:GLN:HG3	2.18	0.43
1:A:79:LEU:HD12	1:A:88:ILE:HD13	2.00	0.43
1:A:379:HIS:HE1	1:F:387:ILE:HD13	1.83	0.43
1:A:491:SER:O	1:A:493:PRO:HD3	2.19	0.43
2:I:690:LEU:HB2	2:I:711:ILE:HG21	2.00	0.43
2:J:589:PHE:CD1	2:J:1116:PHE:CD2	3.06	0.43
1:D:956:ILE:HA	2:J:977:PRO:HA	2.00	0.43
2:L:1133:LEU:HD12	2:L:1146:LEU:HD21	2.00	0.43
2:G:990:TYR:N	2:G:991:PRO:CD	2.81	0.43
2:I:1969:LEU:HA	2:I:1972:ILE:HD12	1.99	0.43
2:G:719:GLY:O	2:G:755:GLU:HG3	2.18	0.43

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:K:1314:GLU:O	2:K:1394:VAL:HA	2.18	0.43
1:B:996:VAL:HG11	1:B:1578:LEU:HD11	2.00	0.43
2:G:838:VAL:HG12	2:G:839:ASP:N	2.33	0.43
2:I:1726:PHE:CE1	2:I:1857:VAL:HB	2.53	0.43
1:F:662:ALA:HA	1:F:694:TYR:CZ	2.54	0.43
1:B:4:GLU:HG3	1:B:4:GLU:H	1.54	0.43
1:D:1514:ILE:HG13	1:D:1514:ILE:H	1.34	0.43
2:K:615:TRP:HB3	2:K:644:ALA:HB1	1.99	0.43
2:L:481:LEU:C	2:L:483:ASP:H	2.22	0.43
1:B:1148:LEU:CD2	1:D:1150:ILE:HG12	2.47	0.43
2:J:613:VAL:H	2:J:614:PRO:HD3	1.83	0.43
2:K:937:ARG:CZ	2:K:941:LEU:HD11	2.48	0.43
1:A:614:PHE:O	1:A:615:LEU:HD23	2.18	0.43
2:H:1873:ARG:NH1	2:H:2002:ASP:CB	2.81	0.43
2:K:1115:TYR:CE2	2:K:1174:ALA:HB2	2.54	0.43
2:G:1048:TRP:NE1	2:G:1049:GLN:HG2	2.31	0.43
2:K:352:SER:HB2	2:K:433:LEU:HD11	2.01	0.43
1:A:960:ARG:HH11	2:G:968:GLU:HB3	1.84	0.43
1:D:741:ASP:CG	1:D:793:ARG:HH11	2.21	0.43
2:J:1919:ASN:HA	2:J:1919:ASN:HD22	1.59	0.43
2:J:460:ILE:O	2:J:486:ILE:N	2.50	0.43
1:E:869:ARG:O	1:E:903:GLY:HA3	2.17	0.43
2:G:1701:GLU:N	2:G:1704:MET:HE3	2.33	0.43
1:B:1419:LYS:HA	1:B:1422:ARG:HB2	2.00	0.43
1:E:1617:ILE:N	1:E:1617:ILE:CD1	2.78	0.43
1:E:564:LEU:O	1:E:567:ASN:HB2	2.18	0.43
1:A:767:HIS:NE2	1:A:771:LEU:HD22	2.33	0.43
1:D:452:ILE:CD1	1:D:467:LYS:HA	2.48	0.43
2:I:1061:VAL:HG11	2:I:1066:ILE:HD11	1.99	0.43
1:B:1301:VAL:HG23	1:B:1363:MET:HG3	2.01	0.43
2:G:670:MET:HE2	2:G:674:ILE:HD11	2.00	0.43
2:I:1353:GLY:HA2	2:I:1397:THR:HG21	2.00	0.43
2:I:1356:ALA:HB3	2:I:1397:THR:CG2	2.47	0.43
2:G:330:SER:N	2:H:1331:THR:HG22	2.33	0.43
2:L:611:THR:HG22	2:L:1051:GLU:OE2	2.19	0.43
2:K:819:ALA:HA	2:K:1081:GLU:O	2.18	0.43
2:J:521:VAL:O	2:J:521:VAL:HG12	2.18	0.43
1:D:472:GLN:HA	1:D:472:GLN:HE21	1.83	0.43
2:G:1351:VAL:CG1	2:G:1352:VAL:N	2.81	0.43
2:G:876:TRP:HD1	2:G:876:TRP:C	2.21	0.43
2:I:1019:LEU:HA	2:I:1022:ARG:HD2	1.99	0.43
2:I:1481:ILE:HD12	2:I:1515:LEU:CD2	2.49	0.43

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:K:737:PHE:O	2:K:773:ASN:HB3	2.19	0.43
1:D:1078:ILE:HG23	1:D:1352:MET:CE	2.48	0.43
2:H:349:PRO:O	2:H:392:THR:HA	2.19	0.43
2:G:2009:PHE:CD2	2:G:2009:PHE:C	2.92	0.43
1:A:16:GLU:OE2	2:G:2066:LYS:HD2	2.18	0.43
2:J:1982:ALA:C	2:J:1984:PRO:HD3	2.39	0.43
1:F:1162:GLY:O	1:F:1354:SER:HA	2.18	0.43
1:C:34:VAL:HG11	2:I:2047:PRO:HD3	2.01	0.43
2:K:1938:THR:HG22	2:K:1977:ARG:HA	2.01	0.43
1:A:1554:LEU:HD23	1:A:1606:VAL:HG12	2.00	0.43
1:B:1050:TRP:HE3	1:B:1050:TRP:HA	1.84	0.43
2:I:113:PHE:N	2:I:113:PHE:CD1	2.86	0.43
2:I:317:TRP:CD1	2:I:454:ASP:CG	2.92	0.43
2:H:123:ALA:O	2:H:126:VAL:HG23	2.18	0.43
1:F:667:ALA:O	1:F:670:LEU:HB3	2.19	0.43
1:C:375:TRP:HB3	1:D:375:TRP:CD2	2.54	0.43
1:A:1177:GLU:O	1:A:1180:ILE:HB	2.17	0.43
1:C:995:VAL:HG13	1:C:1375:ILE:HG23	2.00	0.43
2:J:77:ALA:O	2:J:139:ALA:HB1	2.19	0.43
1:C:413:MET:O	1:C:416:ASP:HB2	2.17	0.43
2:L:664:TYR:C	2:L:666:ASN:H	2.21	0.43
2:K:858:LEU:CD2	2:K:864:PRO:HA	2.48	0.43
2:I:1002:GLU:C	2:I:1004:SER:H	2.22	0.43
2:J:1160:PHE:O	2:J:1164:ILE:HG13	2.18	0.43
2:J:712:ARG:O	2:J:738:PRO:HG2	2.19	0.43
2:G:1491:ARG:O	2:G:1492:LEU:HD23	2.19	0.43
2:H:763:LEU:HA	2:H:763:LEU:HD12	1.86	0.43
1:A:352:ARG:HB2	1:A:352:ARG:HE	1.62	0.43
2:K:890:LYS:HB2	2:K:890:LYS:HE3	1.81	0.43
1:C:50:SER:HB2	1:C:52:THR:HG23	2.00	0.43
2:J:1472:TRP:CD2	2:J:1540:VAL:HG22	2.53	0.43
1:C:940:ASN:HB3	1:C:949:GLU:OE2	2.19	0.43
1:E:1451:LYS:HG2	1:E:1454:ARG:HH22	1.83	0.43
1:E:1501:ALA:O	1:E:1504:ARG:HB2	2.19	0.43
2:I:2052:LYS:H	2:I:2052:LYS:HG2	1.44	0.43
2:G:635:TYR:CD2	2:G:641:MET:HG3	2.52	0.43
2:I:601:PRO:HB2	2:I:626:TYR:CE2	2.53	0.43
2:L:1637:VAL:HG12	2:L:1679:LEU:HD22	2.01	0.43
2:H:955:LEU:HD21	2:H:1026:LYS:O	2.18	0.43
1:E:960:ARG:HB3	2:K:969:ARG:HH12	1.82	0.43
1:E:881:LEU:HA	1:E:884:MET:CG	2.38	0.43
2:I:796:TRP:CG	2:I:797:SER:N	2.86	0.43

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:H:1769:VAL:HG13	2:H:1774:SER:O	2.18	0.43
2:L:797:SER:O	2:L:802:TYR:HB2	2.19	0.43
2:G:318:ILE:HA	2:G:451:ILE:HD13	2.00	0.43
2:G:461:PRO:HD2	2:G:464:SER:OG	2.19	0.43
2:J:2044:THR:HG21	2:J:2054:TYR:OH	2.18	0.43
1:F:538:ARG:CA	1:F:585:MET:HE1	2.40	0.43
2:L:1915:LEU:HB2	2:L:1935:ALA:HB1	1.99	0.43
2:G:1871:VAL:CG1	2:G:1872:GLU:N	2.81	0.43
1:E:1217:GLU:O	1:E:1299:ALA:HB1	2.19	0.43
1:D:553:ARG:NH2	1:D:567:ASN:HD21	2.16	0.43
2:H:1709:TYR:HE2	2:H:1716:LYS:HE2	1.84	0.43
2:H:821:GLU:HB2	2:H:1083:ILE:HD11	2.00	0.43
2:G:820:LYS:HB3	2:G:1080:ASP:O	2.18	0.43
1:F:408:GLN:HE22	1:F:1609:SER:H	1.66	0.43
2:L:1356:ALA:HB3	2:L:1397:THR:CG2	2.47	0.43
2:I:1114:GLU:HB3	2:I:1169:TYR:CB	2.48	0.43
2:I:1175:MET:SD	2:I:1274:ILE:HD13	2.59	0.43
2:H:1113:ILE:HG22	2:H:1114:GLU:N	2.34	0.43
2:J:80:ILE:HG12	2:J:105:ILE:HG22	2.01	0.43
2:I:95:HIS:CB	2:I:96:PRO:HD3	2.49	0.43
1:E:888:ILE:HA	1:E:891:LEU:HD12	2.00	0.43
1:B:1372:GLY:O	1:B:1661:ARG:HD2	2.18	0.43
1:C:828:TRP:NE1	1:C:838:THR:HA	2.33	0.43
1:A:1522:PHE:HB2	1:A:1557:PHE:CD1	2.53	0.43
2:L:1142:ILE:HG13	2:L:1209:PRO:HG2	2.00	0.43
1:F:382:ILE:H	1:F:382:ILE:HG13	1.61	0.43
2:K:1127:GLU:HA	2:K:1128:PRO:HD3	1.81	0.43
2:L:1982:ALA:C	2:L:1984:PRO:HD3	2.38	0.43
2:G:1624:ALA:CB	2:G:1665:ILE:HD13	2.49	0.43
2:I:1982:ALA:C	2:I:1984:PRO:HD3	2.39	0.43
1:D:782:LYS:HZ3	1:D:786:LYS:HD2	1.82	0.43
1:C:1495:ARG:O	1:C:1496:ARG:HB3	2.18	0.43
2:L:1945:ILE:O	2:L:1949:GLN:HB2	2.19	0.43
1:C:491:SER:O	1:C:493:PRO:HD3	2.18	0.43
2:L:1160:PHE:O	2:L:1164:ILE:HG13	2.18	0.43
2:I:1238:GLY:O	2:I:1239:ASP:HB2	2.19	0.43
2:I:1465:ALA:O	2:I:1469:SER:HB3	2.19	0.43
2:G:182:TYR:CD1	2:G:183:PHE:N	2.87	0.43
2:H:60:THR:HG22	2:H:62:GLU:HG3	2.00	0.43
2:L:1314:GLU:O	2:L:1394:VAL:HA	2.18	0.43
2:G:1920:TYR:HD2	2:G:1927:TYR:HE2	1.65	0.43
1:F:1686:PRO:HB2	1:F:1713:PHE:CD1	2.54	0.43

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:H:560:ASP:HB3	2:H:565:ALA:HB1	2.00	0.43
1:C:543:ASN:O	1:C:546:ARG:HB2	2.18	0.43
2:L:1961:SER:O	2:L:1965:VAL:HG22	2.18	0.43
2:K:988:GLU:HA	2:K:989:PRO:HD3	1.73	0.43
2:H:607:GLY:HA2	2:H:612:THR:HG21	2.00	0.43
2:H:162:ALA:CA	2:H:167:VAL:HG22	2.48	0.43
2:H:251:PRO:CG	2:H:316:PHE:HA	2.45	0.43
1:A:556:HIS:HA	1:A:563:GLN:HE22	1.83	0.43
1:D:557:ARG:HG3	1:D:557:ARG:NH1	2.01	0.43
2:K:595:SER:CB	2:K:602:PRO:HG3	2.30	0.43
2:K:174:GLY:HA2	2:K:524:ILE:HG12	2.01	0.43
2:G:1026:LYS:HG2	2:G:1027:PRO:HD2	2.00	0.43
2:H:1028:VAL:HG13	2:H:1030:PHE:CE2	2.54	0.43
2:H:912:LYS:HG2	2:H:1029:PRO:C	2.38	0.43
1:A:612:ILE:HA	1:A:613:PRO:HD3	1.59	0.43
1:F:1102:ILE:H	1:F:1102:ILE:HG13	1.66	0.43
1:C:1148:LEU:CD2	1:F:1150:ILE:HG12	2.49	0.43
2:K:276:LEU:HD21	2:K:296:ALA:HA	2.00	0.43
2:I:1370:LEU:CD1	2:I:1373:LEU:HD13	2.48	0.43
2:H:1265:TYR:HE1	2:H:1267:PRO:HG3	1.76	0.43
1:A:960:ARG:HG3	1:A:960:ARG:NH1	2.34	0.43
1:C:908:ILE:HA	1:C:909:PRO:HD3	1.87	0.43
2:I:1404:VAL:O	2:I:1445:THR:HA	2.19	0.43
2:J:1903:VAL:HG13	2:J:1942:VAL:HG11	2.01	0.43
2:J:472:THR:HG23	2:J:499:VAL:HA	1.99	0.43
1:B:1685:ALA:HB1	1:B:1686:PRO:CD	2.48	0.43
2:K:2044:THR:HG21	2:K:2054:TYR:CZ	2.53	0.43
2:J:1709:TYR:CE2	2:J:1716:LYS:HG2	2.53	0.43
1:F:498:THR:HG22	1:F:508:TYR:CD1	2.53	0.43
2:J:1764:MET:O	2:J:1780:ILE:HG13	2.18	0.43
1:B:985:ARG:O	1:B:987:MET:HG2	2.19	0.43
1:F:1648:LYS:O	1:F:1652:GLU:HB2	2.19	0.43
1:B:527:ALA:HB2	1:B:637:LEU:HD22	2.01	0.43
2:K:1706:MET:HE1	2:K:1735:ILE:HG23	2.00	0.43
1:A:756:ILE:HG22	1:F:827:ARG:NH1	2.34	0.43
2:J:379:GLY:O	2:J:391:VAL:HG13	2.18	0.43
2:G:358:ARG:HB2	2:G:389:PHE:CE2	2.53	0.43
1:F:11:TYR:CD1	2:L:2027:LYS:HG2	2.54	0.43
2:G:743:TRP:CD2	2:G:761:ILE:HD11	2.53	0.43
2:L:741:LEU:O	2:L:741:LEU:CG	2.64	0.43
2:K:785:SER:HB3	2:K:1094:HIS:CD2	2.53	0.43
1:C:405:TRP:CH2	1:C:1609:SER:HB3	2.54	0.43

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:L:256:VAL:O	2:L:260:HIS:HD2	2.01	0.43
1:C:898:PHE:CD2	1:C:899:ALA:N	2.86	0.43
2:K:80:ILE:HG12	2:K:105:ILE:CG2	2.49	0.43
1:F:620:LYS:HE3	1:F:626:TRP:CZ2	2.54	0.43
2:I:578:PRO:HG3	2:I:792:LEU:O	2.18	0.43
2:K:349:PRO:O	2:K:392:THR:HA	2.18	0.43
2:G:1447:GLN:HB3	2:G:1496:VAL:HG13	1.99	0.43
2:L:1553:GLN:HB3	2:L:1554:PRO:CD	2.48	0.43
1:C:573:VAL:O	1:C:577:LEU:HG	2.17	0.43
2:K:1537:GLY:O	2:K:1539:PRO:HD3	2.18	0.43
2:K:740:ILE:HG22	2:K:742:GLN:HG3	2.01	0.43
2:I:123:ALA:O	2:I:126:VAL:HG23	2.18	0.43
1:A:1038:HIS:CE1	1:A:1042:LEU:CD2	3.01	0.43
2:J:1127:GLU:HA	2:J:1128:PRO:HD3	1.83	0.43
1:F:1393:VAL:HB	1:F:1394:PRO:HD3	2.01	0.43
1:E:1050:TRP:HA	1:E:1050:TRP:HE3	1.84	0.43
1:C:968:PRO:CD	1:C:1374:PRO:HB3	2.49	0.43
1:C:967:PHE:CD2	1:C:1374:PRO:HG3	2.52	0.43
1:C:967:PHE:HB3	1:C:968:PRO:CD	2.49	0.43
1:E:1393:VAL:N	1:E:1394:PRO:HD3	2.33	0.43
2:L:594:MET:SD	2:L:809:GLY:HA3	2.58	0.43
1:A:1692:GLN:HG3	1:A:1696:PHE:CE2	2.54	0.43
2:I:690:LEU:HD22	2:I:691:THR:N	2.34	0.43
2:K:1343:PHE:CE2	2:K:1388:PRO:HD2	2.53	0.43
2:I:1961:SER:O	2:I:1965:VAL:HG22	2.17	0.43
2:H:223:LYS:HB3	2:H:242:TYR:CZ	2.54	0.43
1:F:801:LEU:HD13	1:F:822:GLU:HG2	1.99	0.43
1:E:46:GLU:HB3	1:E:80:CYS:HA	2.01	0.43
1:D:449:GLN:O	1:D:450:TYR:C	2.57	0.43
2:I:1472:TRP:CD2	2:I:1540:VAL:HG22	2.53	0.43
2:I:1472:TRP:CE2	2:I:1540:VAL:HG22	2.53	0.43
1:F:414:TYR:CD2	1:F:414:TYR:C	2.91	0.43
1:A:844:ILE:N	1:A:844:ILE:HD12	2.34	0.43
2:H:690:LEU:HD22	2:H:691:THR:H	1.82	0.43
2:I:1047:LEU:H	2:I:1047:LEU:HD12	1.83	0.43
2:I:718:PRO:HG2	2:I:741:LEU:CD1	2.49	0.43
1:C:1504:ARG:NH2	1:C:1545:LEU:O	2.52	0.43
2:L:311:ALA:O	2:L:314:LEU:HB3	2.18	0.43
2:G:610:PRO:HD2	4:G:2101:FMN:C6	2.28	0.43
1:F:997:THR:CG2	1:F:1361:VAL:HG22	2.49	0.43
2:K:962:PHE:O	2:K:965:ARG:HB3	2.18	0.43
1:C:1663:LYS:HE2	2:I:1005:THR:O	2.19	0.43

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:L:1061:VAL:HG11	2:L:1066:ILE:HD11	2.01	0.43
2:H:43:PHE:HB2	2:I:22:ARG:CZ	2.47	0.43
2:I:22:ARG:HD2	2:I:39:THR:HA	2.00	0.43
2:G:1939:LEU:O	2:G:1943:LEU:HG	2.18	0.43
2:G:310:ARG:HH12	2:G:459:LYS:H	1.67	0.43
2:G:462:ALA:HB3	2:G:483:ASP:HA	2.00	0.43
2:J:382:LEU:HG	2:J:390:VAL:HB	2.00	0.43
1:D:452:ILE:HA	1:D:452:ILE:HD13	1.87	0.43
1:C:21:GLN:HE22	2:I:1841:TYR:HE1	1.66	0.43
1:A:1051:VAL:HG13	1:A:1057:GLU:O	2.19	0.43
2:H:1760:ASN:O	2:H:1764:MET:HG2	2.18	0.43
2:L:2039:TYR:CD2	2:L:2039:TYR:C	2.91	0.43
1:D:1217:GLU:O	1:D:1299:ALA:HB1	2.19	0.43
2:J:256:VAL:O	2:J:260:HIS:HD2	2.01	0.43
2:J:2039:TYR:C	2:J:2039:TYR:CD2	2.91	0.43
2:L:36:LEU:HA	2:L:36:LEU:HD12	1.90	0.43
2:I:1804:GLN:CB	2:I:1861:PHE:HE1	2.32	0.43
2:K:1383:VAL:CG2	2:K:1428:TYR:HE1	2.30	0.43
2:K:1093:ASP:O	2:K:1097:PHE:CD1	2.71	0.43
1:C:985:ARG:O	1:C:987:MET:HG2	2.18	0.43
2:G:1171:TRP:CG	2:G:1172:ARG:N	2.86	0.43
2:K:1851:MET:HB3	2:K:1851:MET:HE3	1.83	0.43
1:E:421:ARG:HH22	1:E:1613:LYS:CG	2.31	0.43
1:C:1213:VAL:CG1	1:C:1217:GLU:HB2	2.49	0.43
1:B:746:PHE:CD2	3:B:1901:NAP:H4D	2.53	0.43
2:K:1237:VAL:O	2:K:1241:GLU:HB2	2.19	0.43
2:H:411:PRO:HD2	2:H:414:LEU:HD11	2.00	0.43
2:H:1229:VAL:CG1	2:H:1230:LYS:N	2.81	0.43
2:J:1481:ILE:HG13	2:J:1481:ILE:O	2.19	0.43
2:L:1481:ILE:HD12	2:L:1515:LEU:CD2	2.49	0.43
2:K:1521:GLU:OE2	2:K:2028:THR:CG2	2.67	0.43
2:G:1248:GLU:HB2	2:G:1596:PHE:CE1	2.54	0.43
2:H:2050:ILE:O	2:H:2050:ILE:HG12	2.19	0.43
1:A:88:ILE:HG21	2:G:1821:MET:HE1	2.00	0.43
2:J:372:LEU:CD1	2:J:397:SER:HB2	2.49	0.43
2:J:700:GLU:HA	2:J:703:ASN:HB2	2.01	0.43
2:L:1248:GLU:OE2	2:L:1250:ARG:NE	2.50	0.43
2:H:196:PHE:N	2:H:196:PHE:HD2	2.16	0.43
2:K:317:TRP:CD1	2:K:454:ASP:OD2	2.72	0.43
2:J:187:ARG:NH2	2:J:234:PRO:HA	2.33	0.43
2:J:1945:ILE:HG22	2:J:1946:LEU:N	2.33	0.43
1:C:968:PRO:HG3	1:C:1376:TYR:CE1	2.53	0.43

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:G:1749:PHE:CD2	2:G:1758:ARG:HB3	2.54	0.43
2:K:1920:TYR:HD2	2:K:1927:TYR:HE2	1.65	0.43
2:K:690:LEU:HD22	2:K:691:THR:N	2.34	0.43
2:K:187:ARG:NH2	2:K:234:PRO:HA	2.33	0.43
1:B:1011:ARG:NH1	1:B:1012:TRP:HA	2.33	0.43
2:J:1914:LEU:O	2:J:1931:GLY:HA3	2.17	0.43
1:D:662:ALA:HA	1:D:694:TYR:CZ	2.53	0.43
2:L:838:VAL:HG12	2:L:839:ASP:N	2.33	0.43
2:H:1920:TYR:HD2	2:H:1927:TYR:HE2	1.66	0.43
1:E:4:GLU:HG3	1:E:4:GLU:H	1.53	0.43
2:G:1961:SER:O	2:G:1965:VAL:HG22	2.19	0.43
1:C:916:THR:HA	1:C:919:ARG:HB2	2.01	0.43
2:G:1211:ASP:HA	2:G:1212:PRO:HD2	1.85	0.43
2:K:1726:PHE:CE1	2:K:1857:VAL:HB	2.54	0.43
2:J:1920:TYR:HD2	2:J:1927:TYR:HE2	1.65	0.43
2:K:1067:LEU:CB	4:K:2101:FMN:HM82	2.49	0.43
2:K:1067:LEU:O	2:K:1068:GLN:HG2	2.18	0.43
2:L:1067:LEU:HB3	4:L:2101:FMN:HM82	2.01	0.43
2:G:2031:ASP:C	2:G:2033:SER:N	2.72	0.43
2:H:501:TRP:CZ2	2:H:524:ILE:HG21	2.53	0.43
2:G:501:TRP:CD1	2:G:501:TRP:C	2.89	0.43
1:A:40:ARG:HH21	1:A:74:VAL:HG22	1.83	0.43
1:D:673:LEU:HD21	1:D:884:MET:HE3	2.00	0.43
2:G:490:LEU:HD23	2:G:493:MET:SD	2.59	0.43
1:A:1005:TRP:HE1	1:A:1561:LEU:HD22	1.81	0.43
1:C:1617:ILE:CD1	1:C:1617:ILE:N	2.77	0.43
1:D:440:SER:HB3	1:D:481:LEU:CD2	2.40	0.43
2:I:1764:MET:O	2:I:1780:ILE:HG13	2.18	0.43
2:G:2044:THR:HG21	2:G:2054:TYR:CZ	2.54	0.43
2:L:662:LEU:HD22	2:L:673:GLN:OE1	2.18	0.43
2:G:1851:MET:CE	2:G:2025:ILE:HG12	2.48	0.43
2:J:705:TYR:HA	2:J:709:LEU:HD21	2.00	0.43
1:F:756:ILE:HA	1:F:759:ILE:CD1	2.46	0.43
1:C:22:PHE:O	2:I:2006:HIS:HA	2.18	0.43
2:H:45:ALA:HB2	2:H:101:VAL:HG22	1.99	0.43
2:G:621:THR:OG1	2:G:1083:ILE:HD13	2.19	0.43
2:I:1337:ASP:HB2	2:I:1342:PHE:CD1	2.54	0.43
2:G:1551:ILE:CG2	2:G:1552:GLU:HG3	2.49	0.43
2:J:950:TRP:CE2	2:J:956:LYS:HG3	2.53	0.43
1:C:401:SER:O	1:C:405:TRP:CD1	2.72	0.43
2:I:358:ARG:HB2	2:I:389:PHE:CE2	2.54	0.43
2:K:41:LEU:HD13	2:K:100:GLU:HB3	2.01	0.43

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:I:193:TYR:HD1	2:I:263:ILE:HD13	1.81	0.43
2:I:1083:ILE:H	2:I:1083:ILE:HG13	1.51	0.43
2:I:792:LEU:HD23	2:I:1094:HIS:ND1	2.33	0.43
2:K:350:MET:SD	2:K:392:THR:CG2	3.07	0.43
1:C:1488:SER:HB2	1:F:1480:ARG:NH2	2.34	0.43
2:L:350:MET:SD	2:L:392:THR:CG2	3.07	0.43
1:D:414:TYR:C	1:D:414:TYR:CD2	2.92	0.43
2:K:1175:MET:SD	2:K:1274:ILE:HD13	2.59	0.43
1:D:27:ARG:H	1:D:27:ARG:HG2	1.42	0.43
1:E:1372:GLY:O	1:E:1661:ARG:HD2	2.18	0.43
1:B:1078:ILE:HG23	1:B:1352:MET:HE3	2.01	0.43
1:B:1522:PHE:CD2	1:B:1534:GLU:HB3	2.53	0.43
2:L:187:ARG:HH22	2:L:234:PRO:HA	1.84	0.43
1:C:962:ASN:HB3	2:I:969:ARG:CD	2.48	0.43
1:B:960:ARG:HH11	1:B:960:ARG:HG3	1.84	0.43
1:E:1011:ARG:HH11	1:E:1012:TRP:HA	1.83	0.43
1:B:667:ALA:O	1:B:671:GLN:HG3	2.18	0.43
2:G:441:SER:C	2:G:443:TYR:H	2.22	0.43
2:J:1133:LEU:HD12	2:J:1146:LEU:HD21	2.00	0.43
2:L:946:HIS:CE1	2:L:947:GLU:HG3	2.54	0.43
2:L:759:GLN:N	2:L:760:PRO:CD	2.82	0.43
1:B:447:PHE:CE1	1:B:451:HIS:NE2	2.87	0.43
2:J:1619:LEU:O	2:J:1623:TRP:HB2	2.19	0.43
2:I:1269:ALA:HB1	2:I:1271:TYR:CE1	2.53	0.43
1:B:414:TYR:CD2	1:B:414:TYR:C	2.93	0.43
2:L:476:GLN:HG2	2:L:476:GLN:H	1.71	0.43
1:B:1071:TYR:C	1:B:1071:TYR:CD2	2.92	0.43
1:B:1191:LEU:HD23	1:B:1191:LEU:HA	1.77	0.43
2:I:60:THR:HG22	2:I:62:GLU:H	1.84	0.43
1:F:1525:THR:O	1:F:1526:SER:HB3	2.19	0.43
1:B:427:ARG:HD2	1:B:490:VAL:HG12	2.01	0.43
2:I:866:HIS:HB3	2:I:1068:GLN:O	2.18	0.43
2:I:718:PRO:HG3	2:I:727:VAL:CG2	2.49	0.43
2:H:511:THR:C	2:H:512:HIS:CD2	2.92	0.43
2:K:501:TRP:CZ2	2:K:528:THR:CG2	3.01	0.43
2:K:174:GLY:HA3	2:K:518:PRO:HD2	2.01	0.43
2:J:1009:ASN:HB2	2:J:1012:ASP:OD2	2.19	0.43
2:G:1637:VAL:HG12	2:G:1679:LEU:HD22	2.00	0.43
1:A:612:ILE:HG23	1:A:613:PRO:HD2	2.01	0.43
2:K:765:TYR:CD2	2:K:805:MET:HG2	2.54	0.43
1:C:40:ARG:HH21	1:C:74:VAL:HG22	1.83	0.43
2:I:582:LYS:HA	2:I:587:GLN:O	2.19	0.43

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:H:2058:VAL:O	2:H:2062:THR:HB	2.18	0.43
1:B:1154:LEU:HD23	1:B:1154:LEU:HA	1.73	0.43
2:L:604:MET:HE1	2:L:777:VAL:HG11	2.00	0.43
1:B:1584:GLY:HA2	1:B:1617:ILE:HD12	1.99	0.43
2:I:465:LEU:HB2	2:I:479:ARG:CG	2.48	0.43
1:F:759:ILE:N	1:F:759:ILE:HD12	2.33	0.43
2:H:726:GLN:O	2:H:730:ILE:HG12	2.18	0.43
2:H:821:GLU:OE2	2:H:1083:ILE:HG13	2.18	0.43
2:G:44:GLN:O	2:G:48:LEU:HG	2.19	0.43
1:D:8:GLU:HG2	2:J:2027:LYS:HD3	2.01	0.43
2:K:616:ASP:HB2	2:K:617:PHE:H	1.73	0.43
2:I:388:ASN:C	2:I:388:ASN:ND2	2.72	0.43
2:I:1551:ILE:CG2	2:I:1552:GLU:HG3	2.48	0.43
1:F:746:PHE:CD1	1:F:800:PRO:HG3	2.53	0.43
2:K:357:THR:HG22	2:K:359:SER:H	1.83	0.43
2:I:1103:TYR:C	2:I:1104:ASP:OD1	2.57	0.43
1:B:445:LEU:O	1:B:448:MET:HB2	2.19	0.43
2:H:616:ASP:OD2	2:H:823:HIS:NE2	2.52	0.43
2:I:1553:GLN:HB3	2:I:1554:PRO:CD	2.48	0.43
1:C:526:MET:CE	1:C:615:LEU:HG	2.49	0.43
2:G:1948:MET:HG2	2:G:1993:PHE:CZ	2.54	0.43
2:I:422:THR:HG21	2:I:844:GLU:HG3	2.00	0.43
1:F:1338:GLY:C	1:F:1340:MET:N	2.72	0.43
2:H:980:LEU:HB2	2:H:996:ILE:CD1	2.48	0.43
1:D:876:MET:O	1:D:876:MET:HE3	2.19	0.43
2:L:1749:PHE:CD2	2:L:1758:ARG:HB3	2.53	0.43
2:J:1951:ILE:H	2:J:1951:ILE:HD12	1.84	0.43
2:G:437:ALA:HA	2:G:438:PRO:HD3	1.76	0.43
2:K:1344:ALA:N	2:K:1389:LEU:O	2.46	0.43
1:C:1274:LYS:HG2	1:F:1289:VAL:CG2	2.49	0.43
2:I:1161:MET:HE1	2:I:1193:LYS:HG2	2.00	0.43
2:K:1447:GLN:HB3	2:K:1496:VAL:HG13	2.00	0.43
1:C:28:TRP:HE1	1:C:32:GLN:NE2	2.16	0.43
2:G:31:LEU:HB2	2:G:72:VAL:HG22	2.00	0.43
1:B:1579:GLN:O	1:B:1583:THR:HG23	2.18	0.43
1:D:968:PRO:HD2	1:D:1374:PRO:HB3	2.01	0.43
2:J:1343:PHE:CE2	2:J:1388:PRO:HD2	2.54	0.43
2:H:226:ASP:OD2	2:H:229:GLN:HB2	2.19	0.43
2:G:245:SER:HA	2:G:436:THR:OG1	2.19	0.43
1:F:1470:ARG:HA	1:F:1470:ARG:HD3	1.83	0.42
1:A:1686:PRO:HD2	1:A:1687:TYR:CE2	2.54	0.42
2:K:652:ILE:O	2:K:654:PRO:HD3	2.19	0.42

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:L:2052:LYS:HG2	2:L:2052:LYS:H	1.42	0.42
2:G:717:LYS:HD2	4:G:2101:FMN:O2	2.18	0.42
2:L:685:VAL:HA	2:L:686:PRO:HD3	1.61	0.42
2:H:174:GLY:HA2	2:H:524:ILE:CG1	2.49	0.42
2:K:433:LEU:HA	2:K:434:PRO:HD3	1.83	0.42
2:K:472:THR:CG2	2:K:499:VAL:HG22	2.49	0.42
2:L:764:MET:O	2:L:765:TYR:C	2.57	0.42
2:J:1871:VAL:HG21	2:J:2004:PRO:HD3	2.01	0.42
2:G:818:THR:HA	2:G:829:LYS:HE2	2.01	0.42
2:L:1602:LEU:HA	2:L:1602:LEU:HD12	1.78	0.42
2:J:462:ALA:HB3	2:J:483:ASP:HA	2.00	0.42
2:I:462:ALA:HB3	2:I:483:ASP:HA	2.00	0.42
2:J:1706:MET:HE2	2:J:1738:VAL:HG11	2.01	0.42
1:D:1617:ILE:CD1	1:D:1617:ILE:N	2.80	0.42
1:D:1057:GLU:HA	1:D:1058:PRO:HD3	1.88	0.42
1:B:756:ILE:HA	1:B:759:ILE:CD1	2.48	0.42
2:J:720:SER:HB3	2:J:723:ALA:HB2	2.00	0.42
2:J:857:VAL:HG13	2:J:876:TRP:HE1	1.79	0.42
1:F:1051:VAL:HG13	1:F:1057:GLU:O	2.19	0.42
2:G:785:SER:HB3	2:G:1090:ILE:HG23	2.01	0.42
2:L:41:LEU:HD13	2:L:100:GLU:HB3	2.01	0.42
1:E:1205:ASP:OD2	1:E:1207:TYR:HB2	2.19	0.42
1:C:1494:TRP:HE1	1:C:1509:THR:HG21	1.84	0.42
2:I:45:ALA:HB2	2:I:101:VAL:HG22	2.00	0.42
2:H:221:TYR:CD2	2:H:225:LEU:HD22	2.54	0.42
2:G:41:LEU:HD13	2:G:100:GLU:HB3	2.01	0.42
1:C:1213:VAL:HG22	1:C:1300:ARG:CZ	2.48	0.42
1:B:655:ALA:CB	1:B:742:TYR:HB2	2.48	0.42
2:K:525:GLY:O	2:K:529:ASN:HB2	2.19	0.42
2:H:776:LEU:HG	2:H:807:PHE:CD2	2.53	0.42
2:K:308:ALA:O	2:K:312:VAL:HG23	2.19	0.42
1:B:1703:VAL:HG13	1:B:1712:LYS:O	2.19	0.42
2:I:894:GLU:CD	2:I:897:LYS:HD3	2.39	0.42
2:G:2009:PHE:C	2:G:2009:PHE:HD2	2.22	0.42
2:I:291:VAL:O	2:I:295:ILE:HB	2.19	0.42
2:G:1332:GLY:C	2:G:1334:ALA:H	2.21	0.42
1:B:551:LEU:HD11	1:E:565:GLN:HG3	2.01	0.42
2:H:700:GLU:HA	2:H:703:ASN:HB2	2.01	0.42
2:H:1472:TRP:CD2	2:H:1540:VAL:HG22	2.54	0.42
2:H:1662:ARG:NH1	2:H:1684:GLU:OE1	2.52	0.42
2:K:1160:PHE:O	2:K:1164:ILE:HG13	2.18	0.42
2:K:520:GLY:C	2:K:522:SER:H	2.21	0.42

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:E:2:ARG:HB2	1:E:5:VAL:HB	2.01	0.42
2:G:560:ASP:HB3	2:G:565:ALA:HB1	2.01	0.42
1:C:996:VAL:HG11	1:C:1578:LEU:HD11	2.00	0.42
2:H:646:SER:O	2:H:649:GLU:HG2	2.18	0.42
2:J:1278:MET:HA	2:J:1281:ARG:HB2	2.00	0.42
2:H:754:PHE:N	2:H:754:PHE:CD1	2.87	0.42
1:A:709:LEU:HA	1:A:709:LEU:HD23	1.82	0.42
2:H:704:GLU:OE1	2:H:704:GLU:HA	2.19	0.42
2:K:585:VAL:O	2:K:585:VAL:HG12	2.18	0.42
1:D:34:VAL:HG11	2:J:2047:PRO:HD3	2.00	0.42
1:F:1063:ASP:O	1:F:1064:VAL:C	2.56	0.42
1:D:1175:VAL:HA	1:D:1176:PRO:HD3	1.80	0.42
1:D:1652:GLU:O	1:D:1656:VAL:HG23	2.18	0.42
1:B:1466:TYR:CE2	1:B:1470:ARG:HG3	2.54	0.42
1:A:1330:GLU:O	1:A:1335:ARG:HB2	2.20	0.42
2:K:1180:VAL:CG1	2:K:1188:GLN:H	2.29	0.42
1:E:1491:ASN:N	1:E:1491:ASN:ND2	2.67	0.42
1:C:430:VAL:HG12	1:C:434:ILE:HD11	2.00	0.42
2:H:1009:ASN:HA	2:H:1009:ASN:HD22	1.53	0.42
2:H:938:MET:HE1	2:H:959:THR:HA	2.01	0.42
2:K:462:ALA:HB3	2:K:483:ASP:H	1.83	0.42
2:I:928:ASP:C	2:I:1007:LEU:HD23	2.40	0.42
2:G:174:GLY:HA2	2:G:524:ILE:CG1	2.49	0.42
2:I:1646:ASN:HD22	2:I:1646:ASN:HA	1.69	0.42
2:H:1346:MET:CE	2:H:1617:ARG:NH2	2.82	0.42
2:I:22:ARG:HG3	2:I:39:THR:HA	2.00	0.42
2:H:1499:LYS:CG	2:H:1500:ASN:N	2.80	0.42
2:K:1410:GLY:HA2	2:K:1437:GLY:H	1.84	0.42
1:D:498:THR:HG22	1:D:508:TYR:CD1	2.53	0.42
2:J:1745:LEU:HB3	2:J:1799:LEU:CD2	2.50	0.42
2:I:468:PRO:HA	2:I:479:ARG:HD3	2.01	0.42
2:K:723:ALA:O	2:K:726:GLN:HB2	2.19	0.42
2:L:705:TYR:HA	2:L:709:LEU:HD21	1.99	0.42
1:A:974:ASP:O	1:A:979:PRO:HD3	2.20	0.42
2:J:718:PRO:HG2	2:J:741:LEU:HD11	2.01	0.42
2:K:1795:SER:CB	2:K:1799:LEU:HD12	2.47	0.42
1:D:755:GLU:C	1:D:757:ASP:N	2.72	0.42
2:L:1000:TYR:HA	2:L:1001:PRO:HD2	1.72	0.42
1:D:11:TYR:CD1	2:J:2027:LYS:HG2	2.54	0.42
2:L:1318:ALA:HB2	2:L:1391:VAL:HG11	2.01	0.42
2:I:1236:LEU:HD12	2:I:1241:GLU:O	2.18	0.42
2:I:1418:THR:HG23	2:I:1428:TYR:CE2	2.54	0.42

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:G:1481:ILE:O	2:G:1481:ILE:HG13	2.18	0.42
1:A:626:TRP:CZ3	1:A:898:PHE:HB2	2.55	0.42
1:D:407:ARG:CZ	1:D:1606:VAL:HG23	2.49	0.42
2:J:26:LEU:HD23	2:J:49:LYS:HG3	2.01	0.42
2:I:1093:ASP:O	2:I:1097:PHE:CD1	2.71	0.42
2:J:1515:LEU:CB	2:J:1525:VAL:HG21	2.50	0.42
2:J:205:ALA:O	2:J:209:GLN:HG3	2.19	0.42
2:L:1515:LEU:CB	2:L:1525:VAL:HG21	2.49	0.42
1:A:1205:ASP:OD2	1:A:1207:TYR:HB2	2.19	0.42
2:I:1934:ARG:O	2:I:1938:THR:HG23	2.19	0.42
1:D:343:ILE:O	1:D:347:LEU:HG	2.18	0.42
1:E:1099:GLU:HG2	1:E:1149:LEU:HD21	2.01	0.42
1:E:414:TYR:CE2	1:E:418:ILE:CD1	3.02	0.42
1:E:911:LEU:O	1:E:911:LEU:HD12	2.19	0.42
1:B:890:ASN:OD1	2:K:1755:LYS:HE2	2.19	0.42
2:J:882:LYS:HD3	2:J:898:ARG:CZ	2.49	0.42
1:D:1522:PHE:CD2	1:D:1534:GLU:HB3	2.54	0.42
1:C:1599:MET:HA	1:C:1602:PHE:HD2	1.83	0.42
2:I:1945:ILE:O	2:I:1949:GLN:HB2	2.19	0.42
2:I:1951:ILE:H	2:I:1951:ILE:HD12	1.82	0.42
2:L:1910:VAL:CG1	2:L:1973:ILE:HG21	2.49	0.42
2:G:1734:ILE:O	2:G:1738:VAL:HG23	2.18	0.42
2:I:1960:MET:HB3	2:I:1964:ASP:HB2	2.02	0.42
1:B:1521:SER:HB2	1:B:1577:CYS:SG	2.59	0.42
2:L:1560:PRO:O	2:L:1562:PRO:HD3	2.18	0.42
1:D:963:LEU:HD23	1:D:1023:GLU:HB3	2.00	0.42
2:G:646:SER:O	2:G:649:GLU:HG2	2.19	0.42
1:B:352:ARG:HE	1:B:352:ARG:HB2	1.58	0.42
2:G:1740:ASN:O	2:G:1742:PRO:HD3	2.19	0.42
2:G:1575:ALA:O	2:G:1576:SER:HB3	2.19	0.42
1:B:687:PHE:C	1:B:687:PHE:CD2	2.92	0.42
2:K:1658:MET:HE3	2:K:1658:MET:HB3	1.90	0.42
1:C:27:ARG:H	1:C:27:ARG:HG2	1.40	0.42
1:D:340:LEU:HD23	1:D:340:LEU:O	2.18	0.42
1:D:457:THR:HG22	1:D:464:GLN:HA	2.01	0.42
2:L:342:ASN:HB3	2:L:406:ARG:HD3	2.01	0.42
2:I:1594:ARG:NH1	2:I:1595:VAL:HG13	2.34	0.42
1:C:1685:ALA:HB1	1:C:1686:PRO:CD	2.49	0.42
2:I:1067:LEU:HB3	4:I:2101:FMN:HM82	2.01	0.42
2:I:705:TYR:HA	2:I:709:LEU:HD21	2.01	0.42
2:I:723:ALA:O	2:I:726:GLN:HB2	2.19	0.42
2:H:290:VAL:CG1	2:H:314:LEU:HD23	2.48	0.42

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:G:615:TRP:HB2	2:G:648:ILE:HG13	2.01	0.42
1:D:613:PRO:C	1:D:615:LEU:N	2.72	0.42
2:K:1084:LYS:O	2:K:1088:ASP:CB	2.66	0.42
2:K:595:SER:HB3	2:K:602:PRO:HD3	2.00	0.42
2:G:2031:ASP:HB3	2:G:2033:SER:OG	2.19	0.42
1:A:998:GLY:CA	1:A:1361:VAL:HG13	2.32	0.42
2:H:865:ILE:HG22	2:H:867:LYS:HG3	2.02	0.42
2:H:942:MET:O	2:H:951:ILE:HG13	2.19	0.42
1:C:1107:GLU:HA	1:C:1108:PRO:HD3	1.72	0.42
1:F:612:ILE:HD12	1:F:907:PHE:CZ	2.38	0.42
2:G:174:GLY:HA3	2:G:518:PRO:HD2	2.02	0.42
2:L:1050:SER:HA	2:L:1064:THR:HG21	2.01	0.42
2:K:743:TRP:CZ2	2:K:757:PHE:HA	2.47	0.42
2:K:1410:GLY:HA2	2:K:1437:GLY:O	2.19	0.42
1:A:741:ASP:CG	1:A:793:ARG:HH11	2.23	0.42
2:G:276:LEU:O	2:G:467:ILE:CD1	2.67	0.42
2:I:472:THR:HG23	2:I:499:VAL:HA	2.02	0.42
1:B:1674:ILE:HG22	1:B:1675:ASN:OD1	2.19	0.42
2:J:914:TRP:CD1	2:J:916:GLY:N	2.87	0.42
2:G:1766:PHE:HB2	2:G:1780:ILE:HG12	2.02	0.42
1:C:756:ILE:HA	1:C:759:ILE:CD1	2.47	0.42
1:C:452:ILE:HA	1:C:452:ILE:HD13	1.88	0.42
2:H:857:VAL:CG1	2:H:876:TRP:CD1	3.02	0.42
1:E:633:THR:O	1:E:637:LEU:HB2	2.20	0.42
1:F:1154:LEU:HD23	1:F:1154:LEU:HA	1.72	0.42
2:H:1380:TYR:HD2	2:H:1429:VAL:HG22	1.81	0.42
2:G:673:GLN:O	2:G:676:LEU:HB3	2.19	0.42
2:G:1383:VAL:CG2	2:G:1428:TYR:HE1	2.30	0.42
2:L:1113:ILE:HG22	2:L:1114:GLU:N	2.33	0.42
2:J:1299:VAL:HG22	2:J:1301:PHE:CG	2.54	0.42
2:I:1241:GLU:HA	2:I:1263:PHE:O	2.19	0.42
1:F:443:LEU:H	1:F:443:LEU:HD12	1.84	0.42
2:K:737:PHE:O	2:K:739:ILE:HG13	2.19	0.42
1:C:1207:TYR:CE2	1:C:1682:LYS:HD2	2.53	0.42
1:D:904:GLY:C	1:D:906:GLN:H	2.23	0.42
2:I:1447:GLN:HB3	2:I:1496:VAL:HG13	2.01	0.42
2:J:2073:ASN:O	2:J:2076:LYS:N	2.51	0.42
1:A:827:ARG:NE	1:F:816:GLU:OE2	2.52	0.42
2:I:1910:VAL:HG13	2:I:1974:GLN:HE22	1.84	0.42
2:L:31:LEU:HD13	2:L:75:LEU:HG	2.00	0.42
2:J:317:TRP:CD1	2:J:454:ASP:CG	2.92	0.42
1:B:968:PRO:HG3	1:B:1376:TYR:CE1	2.54	0.42

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:L:2009:PHE:HD2	2:L:2009:PHE:O	2.02	0.42
2:K:1910:VAL:CG1	2:K:1973:ILE:HG21	2.50	0.42
2:K:1910:VAL:HG13	2:K:1974:GLN:HE22	1.85	0.42
2:H:690:LEU:HD22	2:H:691:THR:N	2.33	0.42
2:H:1321:VAL:HG12	2:H:1322:ALA:N	2.34	0.42
2:H:1314:GLU:O	2:H:1394:VAL:HA	2.18	0.42
2:L:1400:GLN:HG3	2:L:1448:ARG:HH12	1.83	0.42
1:D:623:PHE:O	1:D:624:GLY:C	2.57	0.42
2:I:1102:LEU:HA	2:I:1102:LEU:HD23	1.83	0.42
2:H:1470:LYS:HA	2:H:1470:LYS:HD3	1.90	0.42
1:C:547:SER:HA	1:C:550:LYS:HB2	2.01	0.42
1:B:427:ARG:O	1:B:430:VAL:HB	2.19	0.42
2:G:511:THR:O	2:G:512:HIS:CD2	2.72	0.42
2:K:1026:LYS:HG2	2:K:1027:PRO:HD2	2.01	0.42
2:K:615:TRP:HB2	2:K:648:ILE:HG13	2.01	0.42
2:L:420:PRO:HG3	2:L:847:TYR:CE1	2.55	0.42
1:D:427:ARG:HD2	1:D:490:VAL:HG12	2.00	0.42
2:G:595:SER:HB3	2:G:602:PRO:HD3	2.00	0.42
2:L:685:VAL:HG13	2:L:686:PRO:HD2	2.01	0.42
2:G:1346:MET:CE	2:G:1617:ARG:HH21	2.33	0.42
2:L:1009:ASN:HD22	2:L:1009:ASN:HA	1.56	0.42
2:I:1289:TYR:CD2	2:I:1370:LEU:HD23	2.52	0.42
2:L:1769:VAL:HG13	2:L:1774:SER:C	2.39	0.42
2:J:2058:VAL:O	2:J:2062:THR:HB	2.19	0.42
2:G:2058:VAL:O	2:G:2062:THR:HB	2.19	0.42
2:I:916:GLY:O	2:I:924:VAL:HG23	2.19	0.42
1:F:1674:ILE:HD12	2:L:1010:ALA:CB	2.48	0.42
1:A:902:ASN:OD1	1:A:905:LEU:HD12	2.19	0.42
2:L:709:LEU:HD23	2:L:709:LEU:N	2.29	0.42
1:D:1051:VAL:HG13	1:D:1057:GLU:O	2.18	0.42
2:K:1114:GLU:HB3	2:K:1169:TYR:CB	2.46	0.42
1:C:893:GLN:OE1	2:J:1751:GLY:HA2	2.19	0.42
1:B:767:HIS:NE2	1:B:771:LEU:HD22	2.33	0.42
2:I:534:GLY:O	2:I:571:ASP:HA	2.19	0.42
1:A:983:GLN:O	1:A:1418:ILE:HD13	2.19	0.42
2:H:1358:THR:O	2:H:1361:ILE:HG13	2.20	0.42
2:G:785:SER:O	2:G:789:TYR:HB2	2.20	0.42
2:I:1337:ASP:CA	2:I:1342:PHE:HD1	2.33	0.42
2:K:1886:VAL:CG1	2:K:1900:LEU:HD11	2.49	0.42
2:I:1886:VAL:CG1	2:I:1900:LEU:HD11	2.50	0.42
1:A:45:VAL:HB	2:G:1692:TYR:HD2	1.84	0.42
2:H:378:ILE:O	2:H:378:ILE:HG22	2.19	0.42

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:1369:LEU:HD11	1:A:1642:LEU:HD21	2.00	0.42
1:E:1623:THR:CG2	1:E:1633:GLN:HB2	2.48	0.42
1:C:746:PHE:CD2	3:C:1901:NAP:H4D	2.54	0.42
1:B:715:ASN:ND2	3:B:1901:NAP:H62A	2.18	0.42
1:A:626:TRP:CE3	1:A:898:PHE:HB2	2.55	0.42
1:D:1554:LEU:HD23	1:D:1606:VAL:HG12	2.00	0.42
2:J:433:LEU:HA	2:J:434:PRO:HD3	1.81	0.42
2:I:1653:LEU:HD21	2:I:1667:VAL:HG13	2.01	0.42
1:B:336:PHE:HA	1:B:339:GLN:HB2	2.01	0.42
1:D:1160:VAL:HB	1:D:1352:MET:HE1	2.00	0.42
2:K:1309:PHE:N	2:K:1309:PHE:CD1	2.87	0.42
2:L:196:PHE:CD1	2:L:266:LYS:HB3	2.54	0.42
2:I:611:THR:HG21	2:I:817:MET:CE	2.49	0.42
2:J:776:LEU:HG	2:J:807:PHE:CD2	2.53	0.42
2:K:887:ASP:O	2:K:888:ARG:C	2.57	0.42
2:H:1359:LYS:O	2:H:1362:PHE:HD1	2.02	0.42
1:A:1599:MET:HA	1:A:1602:PHE:HD2	1.85	0.42
2:G:416:GLN:C	2:G:418:ARG:H	2.22	0.42
1:B:1394:PRO:HB3	1:B:1627:PHE:CE2	2.54	0.42
2:J:1389:LEU:N	2:J:1389:LEU:HD23	2.34	0.42
2:K:60:THR:HG22	2:K:62:GLU:H	1.84	0.42
1:B:1060:ASP:HB2	1:B:1063:ASP:OD2	2.19	0.42
1:D:751:GLU:OE1	1:D:770:MET:HE1	2.20	0.42
2:I:226:ASP:OD2	2:I:229:GLN:HB2	2.19	0.42
2:H:173:PHE:CE2	2:H:516:PHE:HB2	2.53	0.42
2:I:416:GLN:HE22	2:I:425:LYS:H	1.67	0.42
1:A:363:GLU:O	1:A:366:LYS:HB2	2.19	0.42
1:E:1527:THR:OG1	1:E:1530:ASN:HB3	2.20	0.42
2:G:1639:MET:HE3	2:G:1639:MET:HB3	1.86	0.42
1:C:1080:LEU:HA	1:C:1080:LEU:HD23	1.84	0.42
1:E:1321:MET:HB3	1:E:1321:MET:HE2	1.87	0.42
1:D:577:LEU:HB2	1:D:579:MET:HG3	2.00	0.42
2:H:613:VAL:HG12	2:H:614:PRO:HD3	1.99	0.42
4:L:2101:FMN:H1'2	4:L:2101:FMN:H9	1.86	0.42
2:L:601:PRO:HA	2:L:602:PRO:HD3	1.79	0.42
1:E:427:ARG:O	1:E:430:VAL:HB	2.19	0.42
1:D:430:VAL:HG12	1:D:434:ILE:HD11	2.00	0.42
2:G:601:PRO:HA	2:G:602:PRO:HD3	1.85	0.42
2:I:937:ARG:NE	2:I:941:LEU:CD1	2.82	0.42
1:D:633:THR:O	1:D:637:LEU:HB2	2.19	0.42
2:L:174:GLY:HA3	2:L:518:PRO:HD2	2.02	0.42
2:H:828:ALA:O	2:H:832:ILE:HG13	2.19	0.42

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:F:631:LYS:O	1:F:635:ILE:HG22	2.19	0.42
1:F:883:LEU:HD23	1:F:883:LEU:N	2.33	0.42
2:J:929:MET:HE1	2:J:934:VAL:HA	2.00	0.42
1:E:881:LEU:O	1:E:884:MET:HB2	2.19	0.42
2:L:796:TRP:CG	2:L:797:SER:N	2.87	0.42
2:I:41:LEU:HD13	2:I:100:GLU:HB3	2.02	0.42
2:H:1442:TYR:CG	2:H:1499:LYS:O	2.73	0.42
2:K:1436:ARG:NH2	2:K:1602:LEU:HD11	2.34	0.42
2:G:765:TYR:CD2	2:G:805:MET:HG2	2.54	0.42
2:K:605:VAL:O	2:K:628:ILE:HA	2.20	0.42
2:G:290:VAL:CG1	2:G:314:LEU:HD23	2.48	0.42
2:J:472:THR:CG2	2:J:499:VAL:HG22	2.50	0.42
2:J:790:PRO:HA	2:J:795:SER:OG	2.20	0.42
2:H:743:TRP:CD1	2:H:761:ILE:HD11	2.54	0.42
2:K:1939:LEU:O	2:K:1943:LEU:HG	2.20	0.42
2:H:1764:MET:O	2:H:1780:ILE:HG13	2.19	0.42
1:E:539:THR:HA	1:E:542:GLN:HE21	1.85	0.42
2:I:506:VAL:O	2:I:506:VAL:CG1	2.61	0.42
1:F:1157:ASP:O	1:F:1159:LEU:HD12	2.19	0.42
2:J:718:PRO:HG2	2:J:741:LEU:CD1	2.49	0.42
2:H:80:ILE:HG12	2:H:105:ILE:HG22	2.01	0.42
1:E:1162:GLY:O	1:E:1354:SER:HA	2.19	0.42
2:L:48:LEU:HD11	2:L:101:VAL:HG11	2.00	0.42
1:C:1494:TRP:CG	1:C:1505:GLY:HA3	2.53	0.42
2:G:1236:LEU:HD12	2:G:1242:ILE:HA	2.02	0.42
1:A:655:ALA:CB	1:A:742:TYR:HB2	2.49	0.42
2:H:1236:LEU:HD12	2:H:1241:GLU:O	2.19	0.42
2:L:219:LYS:HB2	2:L:220:GLN:NE2	2.34	0.42
1:C:1480:ARG:HH21	1:F:1488:SER:HB2	1.85	0.42
2:J:1323:ASP:C	2:J:1583:VAL:HG11	2.39	0.42
1:F:336:PHE:HA	1:F:339:GLN:HB2	2.02	0.42
2:J:573:VAL:O	2:J:577:GLY:HA3	2.20	0.42
1:B:546:ARG:HH11	1:B:631:LYS:NZ	2.14	0.42
2:J:200:LEU:H	2:J:200:LEU:HD23	1.84	0.42
1:E:1129:ILE:HG22	1:E:1139:THR:O	2.19	0.42
2:K:1481:ILE:HG13	2:K:1481:ILE:O	2.19	0.42
2:I:872:GLY:HA2	2:I:909:ASP:O	2.20	0.42
2:K:1948:MET:HG2	2:K:1993:PHE:CZ	2.55	0.42
1:B:93:GLU:HA	1:B:94:PRO:HD3	1.82	0.42
2:I:1248:GLU:OE2	2:I:1250:ARG:HG2	2.19	0.42
2:H:1520:LYS:HD2	2:H:1520:LYS:N	2.34	0.42
2:G:1981:GLU:O	2:G:1984:PRO:HG3	2.20	0.42

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:K:1911:THR:HG21	2:K:1977:ARG:HB2	2.01	0.42
2:J:1248:GLU:OE2	2:J:1250:ARG:HG2	2.20	0.42
2:G:1389:LEU:N	2:G:1389:LEU:HD23	2.34	0.42
2:K:594:MET:SD	2:K:809:GLY:HA3	2.59	0.42
2:L:980:LEU:HB2	2:L:996:ILE:CD1	2.49	0.42
1:B:662:ALA:HA	1:B:694:TYR:OH	2.20	0.42
1:A:1495:ARG:O	1:A:1496:ARG:HB3	2.18	0.42
2:I:1911:THR:HG21	2:I:1977:ARG:HB2	2.02	0.42
1:E:1647:ASP:C	1:E:1649:ALA:N	2.72	0.42
1:D:1011:ARG:NH1	1:D:1012:TRP:HA	2.34	0.42
2:K:1835:GLY:HA3	2:K:1839:GLY:C	2.40	0.42
1:C:848:ARG:HG2	1:C:871:PHE:O	2.19	0.42
1:A:49:PRO:HG2	2:G:1810:LEU:HD21	2.02	0.42
1:B:337:LYS:O	1:B:341:GLU:HG2	2.20	0.42
1:B:1167:GLY:O	1:B:1172:ARG:NH1	2.53	0.42
1:D:1527:THR:OG1	1:D:1530:ASN:HB3	2.19	0.42
2:I:763:LEU:HD12	2:I:763:LEU:HA	1.88	0.42
1:C:584:ILE:H	1:C:584:ILE:HG12	1.67	0.42
1:D:960:ARG:HH11	1:D:960:ARG:HG3	1.85	0.42
2:G:1104:ASP:N	2:G:1104:ASP:OD1	2.52	0.42
2:G:1106:LYS:HA	2:G:1106:LYS:HD3	1.75	0.42
1:A:1574:LEU:HA	1:A:1574:LEU:HD12	1.86	0.42
2:H:2038:LYS:HA	2:H:2038:LYS:HD3	1.89	0.42
1:E:23:ALA:HA	2:K:2007:SER:O	2.19	0.42
2:J:1291:ARG:HD2	2:J:1297:LYS:HB3	2.02	0.42
1:C:942:VAL:O	2:I:1536:HIS:HB2	2.19	0.42
2:H:1960:MET:HB3	2:H:1964:ASP:HB2	2.02	0.42
2:J:1259:LEU:HD11	2:J:1285:ILE:HG12	2.01	0.42
2:I:1047:LEU:H	2:I:1047:LEU:CD1	2.29	0.42
4:K:2101:FMN:H1'2	4:K:2101:FMN:H9	1.87	0.42
1:B:1104:GLN:HE22	1:D:1106:LEU:HD12	1.84	0.42
1:B:1702:ARG:CG	1:B:1702:ARG:NH1	2.41	0.42
1:C:427:ARG:HG3	1:C:492:ILE:HG12	2.02	0.42
1:B:799:LEU:HD11	1:B:824:LEU:HD12	2.00	0.42
2:J:791:TYR:HD2	2:J:796:TRP:CG	2.37	0.42
2:I:928:ASP:O	2:I:1007:LEU:HD23	2.19	0.42
1:F:533:SER:OG	1:F:612:ILE:HG13	2.19	0.42
2:I:1410:GLY:HA2	2:I:1437:GLY:O	2.19	0.42
2:J:1637:VAL:HG12	2:J:1679:LEU:HD22	2.02	0.42
2:L:791:TYR:HD2	2:L:796:TRP:CG	2.37	0.42
2:K:747:ARG:NH1	2:K:780:SER:O	2.52	0.42
2:I:1299:VAL:HG22	2:I:1301:PHE:CG	2.55	0.42

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:I:1745:LEU:HD12	2:I:1746:THR:N	2.35	0.42
1:F:26:VAL:HG21	2:L:2006:HIS:CE1	2.54	0.42
2:I:318:ILE:HA	2:I:451:ILE:HD13	2.01	0.42
2:K:208:LEU:HD23	2:K:211:LEU:HD12	2.02	0.42
1:D:681:ILE:HG23	1:D:681:ILE:O	2.19	0.42
2:J:398:LEU:HD23	2:J:398:LEU:HA	1.88	0.42
1:D:452:ILE:HG22	1:D:453:ASP:N	2.34	0.42
2:L:1760:ASN:O	2:L:1764:MET:HG2	2.19	0.42
2:J:912:LYS:HE2	2:J:1028:VAL:O	2.19	0.42
2:J:1044:LYS:HE2	3:J:2102:NAP:H4B	2.02	0.42
2:I:2039:TYR:C	2:I:2039:TYR:CD2	2.93	0.42
2:H:44:GLN:O	2:H:48:LEU:HG	2.20	0.42
2:J:724:ILE:O	2:J:727:VAL:HG23	2.20	0.42
2:G:606:ALA:HB2	2:G:811:MET:CG	2.47	0.42
2:K:347:PRO:HA	2:K:432:PHE:CE1	2.55	0.42
1:D:1183:VAL:HG11	1:D:1187:THR:CG2	2.46	0.42
2:J:1236:LEU:HD21	2:J:1239:ASP:O	2.19	0.42
2:K:578:PRO:HG3	2:K:792:LEU:O	2.20	0.42
2:L:347:PRO:HA	2:L:432:PHE:CE1	2.54	0.42
2:G:950:TRP:CE2	2:G:956:LYS:HG3	2.54	0.42
2:I:666:ASN:N	2:I:667:PRO:HD3	2.34	0.42
2:K:664:TYR:OH	2:K:701:VAL:HG11	2.19	0.42
1:F:626:TRP:CE3	1:F:898:PHE:HB2	2.55	0.42
1:A:853:MET:HG2	1:A:856:ASN:ND2	2.33	0.42
2:G:1309:PHE:N	2:G:1309:PHE:CD1	2.87	0.42
1:A:888:ILE:HA	1:A:891:LEU:HD12	2.02	0.42
1:A:535:TYR:CE1	1:F:580:ASN:HB3	2.55	0.42
2:J:894:GLU:CD	2:J:897:LYS:HD3	2.40	0.42
2:J:1981:GLU:O	2:J:1984:PRO:HG3	2.20	0.42
2:G:204:ILE:CG2	2:G:312:VAL:HG11	2.48	0.42
1:F:1393:VAL:N	1:F:1394:PRO:HD3	2.33	0.42
1:A:1241:LEU:CD2	1:E:1097:LEU:HD12	2.49	0.42
1:A:662:ALA:HA	1:A:694:TYR:OH	2.19	0.42
1:A:667:ALA:O	1:A:671:GLN:HG3	2.19	0.42
1:C:1162:GLY:O	1:C:1354:SER:HA	2.20	0.42
2:J:1096:LYS:HD2	2:J:1100:ARG:NH2	2.34	0.42
1:F:29:ILE:HG13	2:L:1920:TYR:O	2.19	0.42
1:C:751:GLU:OE1	1:C:770:MET:HE1	2.19	0.42
1:D:1592:ALA:O	1:D:1593:ASP:C	2.56	0.42
2:L:1491:ARG:O	2:L:1492:LEU:HD23	2.19	0.42
1:E:848:ARG:HG2	1:E:871:PHE:O	2.20	0.42
1:C:71:ALA:HB3	2:H:371:HIS:HB2	2.02	0.42

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:L:1510:ILE:HA	2:L:1528:VAL:O	2.18	0.42
1:F:1071:TYR:CD2	1:F:1071:TYR:C	2.92	0.42
2:G:890:LYS:HB2	2:G:890:LYS:HE3	1.80	0.42
2:J:754:PHE:CD1	2:J:754:PHE:N	2.86	0.42
2:J:1731:GLY:O	2:J:1747:VAL:HG12	2.19	0.42
2:I:1204:VAL:HG22	2:I:1219:VAL:HG22	2.02	0.42
2:I:613:VAL:H	2:I:614:PRO:HD3	1.85	0.42
2:K:673:GLN:O	2:K:676:LEU:HB3	2.20	0.42
2:K:865:ILE:HG21	2:K:867:LYS:HE3	2.02	0.42
2:L:512:HIS:HE1	2:L:566:VAL:HG13	1.84	0.42
2:J:374:GLU:CA	2:J:377:HIS:CD2	2.80	0.42
2:J:717:LYS:HD2	4:J:2101:FMN:O2	2.20	0.42
4:J:2101:FMN:O4'	4:J:2101:FMN:H1'2	2.19	0.42
2:I:917:ARG:NH1	2:I:917:ARG:CG	2.45	0.42
2:K:626:TYR:OH	2:K:1088:ASP:HA	2.19	0.42
2:J:907:ASN:HD21	2:J:917:ARG:HE	1.66	0.42
2:I:174:GLY:HA2	2:I:524:ILE:CG1	2.49	0.42
2:L:501:TRP:CZ2	2:L:524:ILE:HG21	2.54	0.42
1:B:406:ALA:HB2	1:B:439:ARG:HD2	2.00	0.42
2:J:818:THR:HG22	2:J:829:LYS:CB	2.43	0.42
2:K:857:VAL:CG2	2:K:877:LYS:HB2	2.49	0.42
2:G:1499:LYS:CG	2:G:1500:ASN:H	2.25	0.42
1:D:756:ILE:HA	1:D:759:ILE:CD1	2.48	0.42
2:K:1113:ILE:HG23	2:K:1169:TYR:CD2	2.55	0.42
2:I:1915:LEU:HB2	2:I:1935:ALA:HB1	2.00	0.42
2:K:52:PHE:CD2	2:K:79:TYR:HD1	2.37	0.42
2:L:1940:ALA:HA	2:L:1995:THR:HG21	2.01	0.42
2:L:1353:GLY:HA2	2:L:1397:THR:HG21	2.02	0.42
2:G:1175:MET:O	2:G:1192:LEU:HD12	2.20	0.42
2:H:1234:ILE:HG22	2:H:1242:ILE:HG22	2.01	0.42
2:G:1229:VAL:CG1	2:G:1230:LYS:N	2.83	0.42
2:G:36:LEU:HA	2:G:36:LEU:HD12	1.91	0.42
2:J:1456:LEU:HD11	2:J:1543:TYR:CE2	2.48	0.42
2:G:1315:ILE:HA	2:G:1393:ASP:O	2.20	0.42
2:G:1515:LEU:HB2	2:G:1525:VAL:HG21	2.02	0.42
2:K:1328:VAL:HA	2:K:1611:TYR:CE1	2.49	0.42
1:D:620:LYS:HE3	1:D:626:TRP:CZ2	2.55	0.42
2:J:1481:ILE:HD12	2:J:1515:LEU:CD2	2.47	0.42
1:F:1301:VAL:HG22	1:F:1302:CYS:N	2.35	0.42
2:K:1362:PHE:N	2:K:1363:PRO:CD	2.83	0.42
2:G:1332:GLY:C	2:G:1334:ALA:N	2.72	0.42
2:H:1248:GLU:OE2	2:H:1250:ARG:NE	2.47	0.42

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:I:204:ILE:CG2	2:I:312:VAL:HG11	2.48	0.42
2:G:1359:LYS:O	2:G:1362:PHE:HD1	2.03	0.42
2:H:1982:ALA:C	2:H:1984:PRO:HD3	2.40	0.42
2:G:317:TRP:CD1	2:G:454:ASP:OD2	2.73	0.42
2:K:2050:ILE:O	2:K:2050:ILE:HG12	2.20	0.42
2:G:283:THR:HG23	2:G:470:TYR:O	2.20	0.42
1:E:1185:PRO:O	1:E:1188:LEU:HB2	2.19	0.42
1:A:1219:GLY:CA	1:A:1272:PRO:HD2	2.49	0.42
2:K:649:GLU:HG3	2:K:650:LYS:N	2.35	0.42
2:J:1762:MET:HA	2:J:1779:LYS:HE2	2.02	0.42
1:E:754:ARG:N	1:E:810:ASN:HB3	2.35	0.42
1:A:916:THR:HA	1:A:919:ARG:HB2	2.00	0.42
2:I:248:VAL:O	2:I:252:LEU:HB2	2.20	0.42
1:C:1525:THR:O	1:C:1526:SER:HB3	2.19	0.42
1:D:885:ALA:HA	1:D:886:PRO:HD3	1.89	0.42
1:C:1232:LEU:HD23	1:C:1232:LEU:HA	1.79	0.42
1:B:914:LEU:O	1:B:917:LYS:HB3	2.19	0.42
1:E:1232:LEU:HD23	1:E:1253:SER:HB2	2.02	0.42
2:J:990:TYR:N	2:J:991:PRO:CD	2.83	0.42
2:K:248:VAL:O	2:K:252:LEU:HB2	2.19	0.42
2:I:1914:LEU:O	2:I:1931:GLY:HA3	2.20	0.42
1:F:782:LYS:NZ	1:F:786:LYS:HD2	2.34	0.42
2:K:1163:LEU:HD12	2:K:1163:LEU:HA	1.78	0.42
1:F:999:LEU:HA	1:F:999:LEU:HD23	1.74	0.42
2:G:704:GLU:OE1	2:G:704:GLU:HA	2.19	0.42
2:L:754:PHE:CD1	2:L:754:PHE:N	2.88	0.42
1:E:711:VAL:HG12	1:E:712:VAL:H	1.84	0.42
2:J:560:ASP:HB3	2:J:565:ALA:HB1	2.00	0.42
2:H:1400:GLN:HG3	2:H:1448:ARG:HH12	1.85	0.42
1:D:1654:TYR:CZ	1:D:1658:VAL:HG21	2.54	0.42
2:I:724:ILE:O	2:I:727:VAL:HG23	2.20	0.42
2:K:868:LEU:HD21	2:K:1068:GLN:HG3	2.02	0.42
2:L:465:LEU:HD13	2:L:469:VAL:HB	2.01	0.42
2:L:472:THR:CG2	2:L:499:VAL:HG22	2.50	0.42
2:L:511:THR:CG2	2:L:512:HIS:HD2	2.19	0.42
2:L:866:HIS:HB3	2:L:1068:GLN:O	2.19	0.42
2:L:607:GLY:HA2	2:L:612:THR:HG21	2.02	0.42
2:L:615:TRP:O	2:L:618:VAL:HG13	2.20	0.42
2:L:937:ARG:NE	2:L:941:LEU:CD1	2.81	0.42
2:J:595:SER:HB3	2:J:602:PRO:HD3	2.01	0.42
2:L:1178:THR:HG22	2:L:1180:VAL:N	2.31	0.42
1:A:409:ASP:HB2	1:A:439:ARG:HH12	1.83	0.42

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:D:1672:GLY:O	1:D:1676:ASN:N	2.52	0.42
2:K:583:THR:HG22	2:K:1115:TYR:HA	2.01	0.42
1:E:960:ARG:HD3	2:K:969:ARG:NH2	2.34	0.42
2:G:1115:TYR:OH	2:G:1173:HIS:HD2	2.02	0.42
2:K:604:MET:HE1	2:K:777:VAL:HG11	2.02	0.42
2:I:1769:VAL:HG13	2:I:1774:SER:C	2.39	0.42
2:J:1340:LYS:CG	2:L:376:ARG:HH22	2.32	0.42
2:L:1410:GLY:HA2	2:L:1437:GLY:O	2.19	0.42
2:L:740:ILE:HA	2:L:775:VAL:HB	2.00	0.42
1:B:1674:ILE:HD12	2:H:1010:ALA:CB	2.48	0.42
2:G:1744:GLU:HA	2:G:1799:LEU:HD11	2.02	0.42
1:E:955:VAL:O	2:K:978:SER:N	2.48	0.42
2:J:1646:ASN:HA	2:J:1646:ASN:HD22	1.69	0.42
2:H:571:ASP:HB3	2:H:574:LYS:HB2	2.02	0.42
2:J:2010:LEU:O	2:J:2014:VAL:HG23	2.19	0.42
2:I:1725:HIS:CD2	2:I:1854:GLU:HB2	2.54	0.42
1:E:767:HIS:NE2	1:E:771:LEU:HD22	2.35	0.42
1:E:422:LEU:HD13	1:E:429:ILE:HG23	2.02	0.42
1:F:1157:ASP:O	1:F:1327:ALA:HB3	2.19	0.42
2:G:1084:LYS:O	2:G:1088:ASP:CB	2.65	0.42
2:H:1871:VAL:HG21	2:H:2004:PRO:HD3	2.02	0.42
2:H:578:PRO:HG3	2:H:792:LEU:O	2.20	0.42
1:E:859:VAL:HG12	1:E:859:VAL:O	2.19	0.42
1:F:422:LEU:HD13	1:F:429:ILE:HG23	2.02	0.42
2:G:1383:VAL:HA	2:G:1384:PRO:HD3	1.90	0.42
2:K:1455:GLN:HB2	2:K:1551:ILE:CG1	2.50	0.42
1:E:22:PHE:CE1	2:K:1867:MET:HG3	2.48	0.42
2:I:1318:ALA:HB2	2:I:1391:VAL:HG11	2.00	0.42
2:L:578:PRO:HG3	2:L:792:LEU:O	2.18	0.42
2:K:1083:ILE:HG13	2:K:1083:ILE:H	1.51	0.42
1:C:852:LEU:O	1:C:852:LEU:HD23	2.20	0.42
1:A:1488:SER:O	1:E:1480:ARG:NH2	2.47	0.42
2:J:1204:VAL:HG22	2:J:1219:VAL:HG22	2.01	0.42
1:D:626:TRP:CZ3	1:D:898:PHE:HB2	2.55	0.42
1:D:898:PHE:CD2	1:D:899:ALA:N	2.88	0.42
1:E:1157:ASP:O	1:E:1327:ALA:HB3	2.20	0.42
2:G:327:PRO:CD	2:H:1338:ARG:HH21	2.33	0.42
1:A:41:THR:HA	2:G:1689:VAL:HB	2.02	0.42
2:L:202:THR:O	2:L:205:ALA:HB3	2.19	0.42
2:G:863:GLU:HA	2:G:864:PRO:HD3	1.81	0.42
1:C:447:PHE:CE1	1:C:451:HIS:NE2	2.87	0.42
1:B:526:MET:CE	1:B:615:LEU:HG	2.50	0.42

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:B:526:MET:HE3	1:B:615:LEU:HG	2.01	0.42
2:H:541:LEU:HG	2:H:552:VAL:HG11	2.02	0.42
2:I:819:ALA:HA	2:I:1081:GLU:O	2.20	0.42
1:D:484:PRO:HA	1:D:485:PRO:HD3	1.77	0.42
2:I:646:SER:O	2:I:649:GLU:HG2	2.20	0.42
2:L:835:ALA:HB3	2:L:1073:ALA:HB1	2.00	0.42
2:I:1618:SER:O	2:I:1621:GLU:HB2	2.19	0.42
1:C:623:PHE:O	1:C:624:GLY:C	2.58	0.42
2:I:838:VAL:HG12	2:I:839:ASP:N	2.35	0.42
2:J:248:VAL:O	2:J:252:LEU:HB2	2.19	0.42
1:D:1232:LEU:HA	1:D:1232:LEU:HD23	1.72	0.42
2:I:2020:PHE:O	2:I:2024:LYS:HG2	2.20	0.42
1:E:1060:ASP:HB2	1:E:1063:ASP:OD2	2.19	0.42
1:D:447:PHE:CE1	1:D:451:HIS:NE2	2.88	0.42
2:G:162:ALA:CA	2:G:167:VAL:HG22	2.48	0.42
2:L:608:MET:HA	4:L:2101:FMN:C5A	2.49	0.42
2:K:2052:LYS:HG2	2:K:2052:LYS:H	1.38	0.42
1:D:527:ALA:HA	1:D:613:PRO:HB3	2.01	0.42
2:I:501:TRP:CD1	2:I:501:TRP:C	2.94	0.42
1:B:833:TRP:HH2	1:B:839:ILE:HD11	1.83	0.42
1:F:1672:GLY:O	1:F:1676:ASN:N	2.53	0.42
2:K:465:LEU:HD13	2:K:469:VAL:HB	2.01	0.42
2:L:1442:TYR:CG	2:L:1499:LYS:O	2.73	0.42
2:L:1603:PRO:HB2	2:L:1644:LEU:HD21	2.02	0.42
2:I:311:ALA:O	2:I:314:LEU:HB3	2.20	0.42
1:E:868:VAL:HG22	1:E:869:ARG:H	1.84	0.42
2:J:604:MET:CE	2:J:811:MET:HB2	2.48	0.42
2:G:208:LEU:HD23	2:G:211:LEU:HD12	2.02	0.42
1:E:549:TYR:O	1:E:553:ARG:HB3	2.20	0.42
2:K:1766:PHE:HB2	2:K:1780:ILE:HG12	2.02	0.42
2:H:815:ARG:NH2	2:H:1086:ILE:CG2	2.83	0.42
2:L:724:ILE:O	2:L:727:VAL:HG23	2.19	0.42
2:G:790:PRO:HA	2:G:795:SER:OG	2.19	0.42
2:K:186:LEU:HD23	2:K:186:LEU:HA	1.84	0.42
2:K:821:GLU:OE2	2:K:1083:ILE:HG13	2.20	0.42
2:J:521:VAL:HG13	2:J:549:ASN:HB2	2.01	0.42
2:L:220:GLN:O	2:L:222:PRO:HD3	2.19	0.42
1:B:746:PHE:CG	3:B:1901:NAP:H4D	2.54	0.42
2:I:1966:ARG:HG3	2:I:1967:ALA:N	2.34	0.42
1:C:1446:GLU:HA	1:C:1449:ALA:HB3	2.01	0.42
2:K:258:LEU:HD12	2:K:291:VAL:HG13	2.00	0.42
1:C:1275:THR:HA	1:C:1276:PRO:HD3	1.53	0.42

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:K:1538:ASN:HA	2:K:1539:PRO:HD3	1.87	0.42
1:A:1522:PHE:CD2	1:A:1534:GLU:HB3	2.55	0.42
1:D:1207:TYR:CE2	1:D:1682:LYS:HD2	2.54	0.42
2:I:202:THR:O	2:I:205:ALA:HB3	2.20	0.42
2:L:560:ASP:HB3	2:L:565:ALA:HB1	2.01	0.42
2:G:1751:GLY:O	2:G:1752:PRO:C	2.58	0.42
1:D:902:ASN:C	1:D:904:GLY:H	2.23	0.42
1:A:831:GLU:HG2	1:F:755:GLU:HG2	2.02	0.42
2:L:1022:ARG:HG3	2:L:1022:ARG:H	1.63	0.42
2:I:1945:ILE:HG22	2:I:1946:LEU:N	2.34	0.42
1:E:626:TRP:CD2	1:E:898:PHE:HD1	2.37	0.42
1:B:526:MET:HE1	1:B:614:PHE:HB3	2.01	0.42
2:K:1662:ARG:NH1	2:K:1684:GLU:OE1	2.52	0.42
2:I:1972:ILE:H	2:I:1972:ILE:HG13	1.41	0.42
1:C:71:ALA:CB	2:H:371:HIS:HB2	2.50	0.42
2:H:1238:GLY:O	2:H:1239:ASP:HB2	2.19	0.42
1:A:802:SER:HA	1:A:803:PRO:HD3	1.80	0.42
1:D:46:GLU:HB3	1:D:80:CYS:HA	2.02	0.42
1:B:711:VAL:HG12	1:B:712:VAL:H	1.84	0.42
1:F:1011:ARG:NH1	1:F:1012:TRP:HA	2.35	0.42
1:F:1011:ARG:HH11	1:F:1012:TRP:HA	1.84	0.42
2:I:1160:PHE:O	2:I:1164:ILE:HG13	2.20	0.42
2:H:1726:PHE:CE1	2:H:1857:VAL:HB	2.55	0.42
2:I:835:ALA:HB3	2:I:1073:ALA:HB1	2.00	0.42
1:D:1420:TYR:O	1:D:1424:GLN:HG2	2.20	0.42
1:B:916:THR:HA	1:B:919:ARG:HB2	2.01	0.42
2:J:437:ALA:HA	2:J:438:PRO:HD3	1.81	0.42
2:J:1470:LYS:HD3	2:J:1470:LYS:HA	1.89	0.42
2:G:444:LEU:HA	2:G:444:LEU:HD23	1.75	0.42
2:H:1163:LEU:HD12	2:H:1163:LEU:HA	1.85	0.42
2:J:99:LEU:HA	2:J:99:LEU:HD23	1.92	0.42
1:A:1191:LEU:HA	1:A:1191:LEU:HD23	1.90	0.42
1:D:1184:ASP:OD1	1:D:1185:PRO:HD2	2.19	0.42
1:A:1470:ARG:HA	1:A:1470:ARG:HD3	1.83	0.42
1:A:1389:ILE:HG13	1:E:1268:SER:CB	2.20	0.42
2:I:609:THR:HG23	4:I:2101:FMN:O4	2.20	0.42
2:H:608:MET:HA	4:H:2101:FMN:C5A	2.50	0.42
2:K:612:THR:CG2	2:K:629:GLU:O	2.68	0.42
2:L:169:ILE:HG22	2:L:279:PHE:CD2	2.55	0.42
2:L:461:PRO:HB3	2:L:483:ASP:O	2.20	0.42
2:L:955:LEU:HD21	2:L:1026:LYS:O	2.20	0.42
1:C:611:THR:HG22	1:C:612:ILE:N	2.35	0.42

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:H:501:TRP:CZ2	2:H:528:THR:CG2	3.03	0.42
2:J:765:TYR:CD2	2:J:805:MET:HG2	2.55	0.42
2:I:938:MET:HE2	2:I:959:THR:HG22	2.02	0.42
2:H:587:GLN:NE2	2:H:1268:GLU:HG2	2.35	0.42
2:I:1919:ASN:HA	2:I:1919:ASN:HD22	1.62	0.42
1:A:960:ARG:HH12	2:G:968:GLU:CD	2.23	0.42
2:J:1340:LYS:CG	2:L:376:ARG:HH21	2.32	0.42
1:D:13:LEU:HD11	2:J:2058:VAL:HG21	2.02	0.42
1:F:902:ASN:OD1	1:F:905:LEU:HD12	2.20	0.42
1:C:1301:VAL:HG23	1:C:1363:MET:HG3	2.00	0.42
2:I:1404:VAL:HA	2:I:1412:MET:O	2.20	0.42
2:L:1454:MET:HE2	2:L:1550:SER:CA	2.41	0.42
2:G:791:TYR:CD2	2:G:796:TRP:CG	3.07	0.42
1:A:1004:PRO:HD3	1:A:1572:TRP:HH2	1.82	0.42
2:G:479:ARG:C	2:G:481:LEU:H	2.23	0.42
1:F:1363:MET:HE3	1:F:1368:ALA:CB	2.49	0.42
2:L:744:THR:HG22	2:L:745:GLY:H	1.84	0.42
2:I:481:LEU:C	2:I:483:ASP:H	2.24	0.42
1:D:965:TYR:HE1	1:D:1669:PHE:CD1	2.38	0.42
2:I:2057:GLU:HA	2:I:2060:ARG:HH12	1.78	0.42
2:L:1939:LEU:O	2:L:1943:LEU:HG	2.19	0.42
2:H:272:PRO:HG2	2:H:300:THR:O	2.20	0.42
1:B:632:LEU:CA	1:B:635:ILE:HG22	2.45	0.42
2:H:1745:LEU:HB3	2:H:1799:LEU:CD2	2.50	0.42
2:I:1706:MET:HE1	2:I:1735:ILE:HG23	2.02	0.42
2:G:723:ALA:O	2:G:726:GLN:HB2	2.20	0.42
2:H:1337:ASP:HB2	2:H:1342:PHE:CD1	2.54	0.42
2:J:664:TYR:OH	2:J:701:VAL:HG11	2.20	0.42
2:H:41:LEU:HD13	2:H:100:GLU:HB3	2.01	0.42
1:C:1052:ASP:O	1:C:1055:THR:O	2.38	0.42
1:E:1160:VAL:C	1:E:1352:MET:HE1	2.40	0.42
2:L:48:LEU:HG	2:L:48:LEU:H	1.51	0.42
2:I:48:LEU:HD11	2:I:101:VAL:HG11	2.02	0.42
2:L:1324:PHE:N	2:L:1583:VAL:HG11	2.35	0.42
1:A:566:PHE:HE1	1:F:552:ILE:HD11	1.85	0.42
2:H:129:ILE:HG21	2:H:132:LYS:HD2	2.01	0.42
1:D:930:GLN:H	1:D:930:GLN:HG2	1.72	0.42
2:K:664:TYR:C	2:K:666:ASN:H	2.23	0.42
2:G:1400:GLN:HG3	2:G:1448:ARG:NH1	2.32	0.42
2:I:790:PRO:HA	2:I:795:SER:OG	2.20	0.42
2:L:351:LEU:HD22	2:L:352:SER:H	1.85	0.42
2:L:1537:GLY:O	2:L:1539:PRO:HD3	2.19	0.42

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:H:1515:LEU:CB	2:H:1525:VAL:HG21	2.50	0.42
2:I:827:GLN:O	2:I:830:GLN:HB3	2.20	0.42
2:H:1207:THR:HB	2:H:1216:VAL:HB	2.02	0.42
1:B:1554:LEU:HD23	1:B:1606:VAL:HG12	2.02	0.42
1:D:983:GLN:HB3	1:D:1418:ILE:HG21	2.02	0.42
2:K:155:ASP:OD1	2:K:155:ASP:N	2.53	0.42
1:E:902:ASN:O	1:E:904:GLY:N	2.52	0.42
2:L:700:GLU:HA	2:L:703:ASN:HB2	2.02	0.42
2:L:1520:LYS:HD2	2:L:1520:LYS:N	2.35	0.42
2:I:196:PHE:N	2:I:196:PHE:HD2	2.18	0.42
1:B:869:ARG:HE	1:B:869:ARG:HB2	1.64	0.42
2:H:2053:GLU:HG3	2:H:2053:GLU:H	1.67	0.42
1:A:21:GLN:HE22	2:G:1841:TYR:HE1	1.68	0.42
2:J:1472:TRP:CE2	2:J:1540:VAL:HG22	2.55	0.42
2:H:690:LEU:HB2	2:H:711:ILE:HG21	2.02	0.42
1:E:916:THR:HA	1:E:919:ARG:HB2	2.02	0.42
1:F:363:GLU:O	1:F:366:LYS:HB2	2.20	0.42
2:G:1335:PHE:CZ	2:G:1629:ILE:HD13	2.55	0.42
2:L:1378:ASN:HD22	2:L:1431:SER:CB	2.33	0.42
1:C:1237:LYS:HB2	1:F:1236:TYR:O	2.20	0.42
2:L:60:THR:HG22	2:L:62:GLU:H	1.84	0.42
2:G:1343:PHE:CE2	2:G:1388:PRO:HD2	2.55	0.42
2:K:1057:TYR:C	2:K:1059:GLN:H	2.23	0.42
2:J:1257:VAL:HA	2:J:1258:PRO:HD3	1.81	0.42
1:D:1080:LEU:HA	1:D:1080:LEU:HD23	1.85	0.42
1:B:1574:LEU:HD12	1:B:1574:LEU:HA	1.83	0.42
1:E:1071:TYR:C	1:E:1071:TYR:CD2	2.93	0.42
1:C:1651:TYR:CE2	1:C:1655:CYS:SG	3.13	0.42
1:C:1589:ASN:ND2	1:C:1589:ASN:C	2.74	0.42
2:J:1783:GLU:CD	2:J:1783:GLU:H	2.24	0.42
1:B:27:ARG:H	1:B:27:ARG:HG2	1.38	0.42
2:L:122:ILE:HD13	2:L:122:ILE:HA	1.94	0.42
2:L:248:VAL:O	2:L:252:LEU:HB2	2.20	0.42
2:G:1057:TYR:C	2:G:1059:GLN:H	2.23	0.42
2:G:1743:LYS:HA	2:G:1798:GLY:HA2	2.02	0.42
2:G:1510:ILE:HA	2:G:1528:VAL:O	2.20	0.42
2:I:589:PHE:CD1	2:I:1116:PHE:CD2	3.08	0.42
1:B:1682:LYS:HB3	1:D:1389:ILE:HD13	2.01	0.41
1:B:1207:TYR:CE2	1:B:1682:LYS:HD2	2.55	0.41
1:B:397:ARG:NH1	1:B:397:ARG:CG	2.48	0.41
2:H:420:PRO:HG3	2:H:847:TYR:HD1	1.85	0.41
2:L:279:PHE:HB2	2:L:467:ILE:HD12	2.02	0.41

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:397:ARG:HH12	1:A:692:THR:HG21	1.85	0.41
2:H:459:LYS:HA	2:H:485:ASP:CG	2.40	0.41
4:J:2101:FMN:H9	4:J:2101:FMN:H1'2	1.81	0.41
2:J:615:TRP:O	2:J:618:VAL:HG13	2.20	0.41
2:I:174:GLY:HA3	2:I:518:PRO:HD2	2.02	0.41
1:F:435:GLN:O	1:F:439:ARG:HG3	2.20	0.41
1:D:686:ARG:NH2	3:D:1901:NAP:O2X	2.53	0.41
1:F:904:GLY:HA2	1:F:906:GLN:CD	2.40	0.41
1:C:1491:ASN:N	1:C:1491:ASN:ND2	2.67	0.41
2:L:1721:ARG:NH2	2:L:1853:ILE:CD1	2.78	0.41
2:J:914:TRP:CZ3	2:J:1033:ALA:HA	2.55	0.41
2:G:211:LEU:HD13	2:G:313:GLU:HG3	2.02	0.41
1:A:569:LEU:O	1:A:573:VAL:HG23	2.20	0.41
2:J:1644:LEU:HB3	2:J:1645:PRO:CD	2.50	0.41
1:B:562:SER:OG	1:E:551:LEU:HD21	2.20	0.41
1:F:654:HIS:O	1:F:741:ASP:HB2	2.20	0.41
1:B:1214:HIS:CD2	1:B:1216:SER:OG	2.65	0.41
2:H:1802:ALA:CB	2:H:1804:GLN:HE22	2.27	0.41
2:L:720:SER:HB3	2:L:723:ALA:HB2	2.02	0.41
2:L:1590:ILE:HG22	2:L:1591:HIS:N	2.35	0.41
2:H:1289:TYR:CB	2:H:1370:LEU:HD23	2.50	0.41
2:G:720:SER:HB3	2:G:723:ALA:HB2	2.02	0.41
2:L:113:PHE:CD1	2:L:113:PHE:N	2.88	0.41
2:H:197:VAL:HG13	2:H:200:LEU:HD21	2.02	0.41
2:G:1847:LEU:N	2:G:1847:LEU:HD12	2.35	0.41
1:E:421:ARG:NH2	1:E:1613:LYS:CB	2.83	0.41
2:K:76:VAL:HG21	2:K:113:PHE:CZ	2.55	0.41
1:F:744:VAL:HG12	1:F:746:PHE:CD1	2.55	0.41
2:H:596:ARG:HD3	2:H:1119:ARG:HG3	2.02	0.41
2:H:1847:LEU:N	2:H:1847:LEU:HD12	2.35	0.41
2:I:698:SER:H	2:I:701:VAL:HG21	1.85	0.41
2:J:220:GLN:O	2:J:222:PRO:HD3	2.20	0.41
2:G:396:ILE:HD12	2:G:396:ILE:N	2.31	0.41
2:G:1337:ASP:HB2	2:G:1342:PHE:CD1	2.55	0.41
2:I:580:LEU:HG	2:I:1098:LEU:HD23	2.01	0.41
2:K:411:PRO:HD2	2:K:414:LEU:HD11	2.01	0.41
2:J:1966:ARG:HG3	2:J:1967:ALA:N	2.35	0.41
2:L:1346:MET:HG3	2:L:1380:TYR:CD1	2.55	0.41
2:K:1022:ARG:H	2:K:1022:ARG:HG3	1.65	0.41
1:D:1160:VAL:HG11	1:D:1337:PRO:HB3	2.01	0.41
2:G:152:LYS:HA	2:G:153:PRO:HD3	1.81	0.41
1:A:1142:LEU:HD12	1:A:1142:LEU:H	1.85	0.41

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:F:1685:ALA:HB1	1:F:1686:PRO:HD2	2.02	0.41
2:H:649:GLU:HG3	2:H:650:LYS:N	2.34	0.41
2:L:1723:ASP:O	2:L:1727:ARG:HG3	2.20	0.41
1:F:455:CYS:HA	1:F:456:PRO:HD3	1.84	0.41
2:I:990:TYR:N	2:I:991:PRO:CD	2.82	0.41
2:I:560:ASP:HB3	2:I:565:ALA:HB1	2.01	0.41
1:D:802:SER:HA	1:D:803:PRO:HD3	1.81	0.41
2:G:1777:THR:HG23	2:G:1777:THR:O	2.20	0.41
2:I:754:PHE:N	2:I:754:PHE:CD1	2.86	0.41
1:C:458:GLU:CD	1:C:458:GLU:H	2.22	0.41
2:L:246:ALA:N	2:L:247:PRO:HD2	2.35	0.41
1:E:1082:GLU:HB2	1:E:1085:LEU:HD12	2.02	0.41
2:I:1762:MET:HA	2:I:1779:LYS:HE2	2.01	0.41
1:D:1651:TYR:CE2	1:D:1655:CYS:SG	3.13	0.41
2:I:670:MET:CE	2:I:674:ILE:HD11	2.49	0.41
2:H:512:HIS:HE1	2:H:566:VAL:HG13	1.85	0.41
2:L:635:TYR:CD2	2:L:641:MET:HG3	2.53	0.41
2:L:615:TRP:HB2	2:L:648:ILE:HG13	2.03	0.41
2:J:511:THR:CG2	2:J:512:HIS:HD2	2.19	0.41
1:B:575:ARG:HD3	1:E:534:GLN:O	2.20	0.41
2:H:868:LEU:HD12	2:H:1066:ILE:HD12	2.01	0.41
2:G:1919:ASN:HD22	2:G:1919:ASN:HA	1.57	0.41
2:I:791:TYR:CD2	2:I:796:TRP:CG	3.08	0.41
1:C:998:GLY:CA	1:C:1361:VAL:HG13	2.40	0.41
1:D:905:LEU:C	1:D:907:PHE:H	2.24	0.41
2:I:1301:PHE:HB3	2:I:1364:ARG:HH11	1.83	0.41
1:E:1713:PHE:HA	1:E:1714:PRO:HD3	1.84	0.41
1:F:1562:THR:HB	1:F:1572:TRP:CZ3	2.55	0.41
2:K:1251:THR:CG2	2:K:1292:VAL:HG13	2.49	0.41
2:L:713:HIS:HD2	2:L:740:ILE:HD13	1.81	0.41
2:G:605:VAL:O	2:G:628:ILE:HA	2.20	0.41
1:E:1652:GLU:O	1:E:1656:VAL:HG23	2.20	0.41
2:L:914:TRP:CZ3	2:L:1033:ALA:HA	2.55	0.41
2:K:720:SER:HB3	2:K:723:ALA:HB2	2.02	0.41
2:H:744:THR:HG22	2:H:745:GLY:H	1.84	0.41
2:I:747:ARG:NH2	2:I:757:PHE:CE1	2.88	0.41
2:I:1891:ILE:CD1	2:I:1943:LEU:HB3	2.46	0.41
1:D:1157:ASP:O	1:D:1327:ALA:HB3	2.20	0.41
2:H:1886:VAL:CG1	2:H:1900:LEU:HD11	2.49	0.41
1:E:17:LEU:HD22	2:K:2041:PRO:HB3	2.01	0.41
2:H:2017:PHE:CE2	2:H:2021:LEU:HD11	2.55	0.41
2:K:48:LEU:HD13	2:K:83:VAL:HG22	2.02	0.41

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:K:785:SER:HB2	2:K:1094:HIS:CD2	2.56	0.41
2:H:129:ILE:CG2	2:H:132:LYS:HD2	2.50	0.41
2:L:219:LYS:HB2	2:L:220:GLN:HE21	1.84	0.41
2:J:1551:ILE:CG2	2:J:1552:GLU:HG3	2.47	0.41
2:L:197:VAL:HG13	2:L:200:LEU:HD21	2.01	0.41
1:D:749:ILE:HG13	1:D:769:ILE:HD13	2.02	0.41
2:L:1305:LEU:CD1	2:L:1305:LEU:H	2.25	0.41
2:J:193:TYR:HD1	2:J:263:ILE:HD13	1.82	0.41
2:H:95:HIS:CB	2:H:96:PRO:HD3	2.50	0.41
2:G:655:GLY:HA3	2:G:1272:ALA:HB2	2.01	0.41
2:H:1309:PHE:N	2:H:1309:PHE:CD1	2.87	0.41
2:J:1807:GLN:HB3	2:J:1860:VAL:CG1	2.49	0.41
2:J:731:ALA:HB1	2:J:771:CYS:SG	2.61	0.41
1:D:88:ILE:HG21	2:J:1821:MET:HE1	2.01	0.41
1:F:968:PRO:CD	1:F:1374:PRO:HB3	2.50	0.41
1:F:1129:ILE:HG22	1:F:1139:THR:O	2.20	0.41
1:A:1419:LYS:HA	1:A:1422:ARG:HB2	2.02	0.41
1:D:1369:LEU:HD11	1:D:1642:LEU:HD21	2.02	0.41
2:G:1982:ALA:C	2:G:1984:PRO:HD3	2.40	0.41
2:G:1755:LYS:HG2	2:G:1755:LYS:H	1.71	0.41
1:C:358:PHE:HB2	1:D:358:PHE:HB2	2.02	0.41
1:B:358:PHE:CD2	1:B:359:VAL:N	2.88	0.41
1:B:1414:PRO:HG2	1:D:1473:HIS:CD2	2.54	0.41
2:H:52:PHE:O	2:H:55:THR:HB	2.20	0.41
2:K:1496:VAL:HG21	2:K:1504:TYR:CD2	2.55	0.41
2:G:1160:PHE:O	2:G:1164:ILE:HG13	2.20	0.41
2:H:437:ALA:HA	2:H:438:PRO:HD3	1.81	0.41
2:H:1447:GLN:HB3	2:H:1496:VAL:HG13	2.02	0.41
2:K:1590:ILE:O	2:K:1597:SER:HB3	2.20	0.41
1:E:682:VAL:HG11	1:E:695:TYR:CE2	2.54	0.41
1:A:1296:GLN:HE21	1:E:1296:GLN:HG2	1.85	0.41
1:A:388:GLU:HA	1:A:389:PRO:HD3	1.95	0.41
2:G:155:ASP:N	2:G:155:ASP:OD1	2.52	0.41
2:J:704:GLU:HA	2:J:704:GLU:OE1	2.19	0.41
2:I:673:GLN:O	2:I:676:LEU:HB3	2.21	0.41
2:K:609:THR:HG22	2:K:633:GLY:CA	2.49	0.41
2:K:641:MET:CE	2:K:676:LEU:HD12	2.50	0.41
2:I:626:TYR:OH	2:I:1088:ASP:HA	2.20	0.41
1:D:526:MET:HE3	1:D:614:PHE:HB2	2.01	0.41
1:E:532:ILE:HD11	1:E:866:LEU:O	2.21	0.41
2:L:938:MET:CE	2:L:959:THR:HA	2.50	0.41
2:K:297:THR:HG22	2:K:298:ALA:N	2.34	0.41

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:H:1181:PHE:HE1	2:H:1191:PRO:HD2	1.84	0.41
2:J:1061:VAL:HG11	2:J:1066:ILE:HD11	1.99	0.41
2:K:747:ARG:HH11	2:K:780:SER:CB	2.26	0.41
1:F:13:LEU:CD1	2:L:2058:VAL:HG21	2.50	0.41
2:L:2063:GLY:O	2:L:2065:PRO:HD3	2.21	0.41
2:J:1939:LEU:O	2:J:1943:LEU:HG	2.20	0.41
1:F:1565:PRO:HG3	1:F:1572:TRP:CH2	2.55	0.41
2:K:916:GLY:O	2:K:924:VAL:N	2.46	0.41
2:J:821:GLU:HB2	2:J:1083:ILE:HD11	2.02	0.41
1:D:681:ILE:HG21	1:D:729:ILE:CD1	2.51	0.41
1:A:440:SER:HB3	1:A:481:LEU:CD2	2.45	0.41
2:I:1918:VAL:CG1	2:I:2006:HIS:HB2	2.47	0.41
2:H:388:ASN:ND2	2:H:388:ASN:C	2.71	0.41
2:H:1378:ASN:HB3	2:H:1610:MET:HE3	2.02	0.41
2:H:1851:MET:CE	2:H:2025:ILE:HG12	2.50	0.41
2:H:724:ILE:O	2:H:727:VAL:HG23	2.20	0.41
2:J:720:SER:H	2:J:723:ALA:HB3	1.85	0.41
1:F:11:TYR:HD1	2:L:2030:ILE:CD1	2.34	0.41
2:G:720:SER:H	2:G:723:ALA:HB3	1.85	0.41
2:J:746:GLY:O	2:J:843:TRP:NE1	2.53	0.41
1:C:1057:GLU:HA	1:C:1058:PRO:HD3	1.91	0.41
2:K:189:ILE:HD12	2:K:256:VAL:HG13	2.02	0.41
2:L:271:GLU:H	2:L:274:GLU:CG	2.33	0.41
1:A:1640:LYS:HD2	1:A:1641:TYR:CE1	2.55	0.41
2:G:1241:GLU:HA	2:G:1263:PHE:O	2.20	0.41
2:L:189:ILE:HD12	2:L:256:VAL:HG13	2.02	0.41
2:J:1338:ARG:NH2	2:L:327:PRO:N	2.67	0.41
1:C:1217:GLU:O	1:C:1299:ALA:HB1	2.20	0.41
1:F:448:MET:HA	1:F:448:MET:HE3	2.03	0.41
2:J:351:LEU:HD22	2:J:352:SER:H	1.85	0.41
2:J:349:PRO:O	2:J:392:THR:HA	2.20	0.41
2:I:381:SER:OG	2:I:392:THR:HG23	2.20	0.41
2:H:1751:GLY:O	2:H:1755:LYS:HG2	2.20	0.41
2:G:2009:PHE:O	2:G:2009:PHE:HD2	2.03	0.41
1:B:902:ASN:O	1:B:904:GLY:N	2.51	0.41
2:H:858:LEU:CD2	2:H:864:PRO:HA	2.50	0.41
1:D:1129:ILE:HG22	1:D:1139:THR:O	2.20	0.41
2:K:1753:ARG:O	2:K:1757:ILE:HG12	2.20	0.41
1:B:1696:PHE:HB3	1:D:1402:THR:HG22	2.03	0.41
1:A:1038:HIS:CE1	1:A:1042:LEU:HD23	2.54	0.41
2:L:1588:ASN:HA	2:L:1589:PRO:HD3	1.90	0.41
1:B:1522:PHE:HB2	1:B:1557:PHE:CD1	2.55	0.41

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:D:914:LEU:HD12	1:D:914:LEU:O	2.21	0.41
2:J:155:ASP:N	2:J:155:ASP:OD1	2.54	0.41
1:C:29:ILE:HG12	2:I:1921:ASN:C	2.40	0.41
2:I:1031:VAL:HA	2:I:1032:PRO:HD3	1.70	0.41
1:C:1060:ASP:HB2	1:C:1063:ASP:OD2	2.20	0.41
2:K:545:ILE:HG22	2:K:555:LYS:HD3	2.02	0.41
2:L:646:SER:O	2:L:649:GLU:HG2	2.20	0.41
2:I:1325:VAL:HG13	2:I:1330:ASN:O	2.20	0.41
1:B:801:LEU:HD13	1:B:822:GLU:HG2	2.02	0.41
1:B:34:VAL:O	1:B:38:GLU:HB2	2.20	0.41
2:I:1096:LYS:HD2	2:I:1100:ARG:NH2	2.35	0.41
1:E:1420:TYR:O	1:E:1424:GLN:HG2	2.21	0.41
1:E:681:ILE:HG23	1:E:681:ILE:O	2.20	0.41
1:D:1142:LEU:HD12	1:D:1142:LEU:N	2.35	0.41
1:F:407:ARG:HG3	1:F:407:ARG:H	1.59	0.41
2:G:223:LYS:HB3	2:G:242:TYR:CZ	2.55	0.41
2:K:441:SER:C	2:K:443:TYR:H	2.24	0.41
1:C:1395:ALA:HA	1:C:1396:PRO:HD3	1.83	0.41
1:C:1278:GLY:CA	1:C:1282:THR:HG22	2.49	0.41
2:K:670:MET:CE	2:K:674:ILE:HD11	2.51	0.41
2:K:642:SER:HB3	2:K:676:LEU:HD21	2.02	0.41
2:J:601:PRO:HA	2:J:602:PRO:HD3	1.83	0.41
1:D:612:ILE:HG23	1:D:613:PRO:HD2	2.02	0.41
1:C:612:ILE:CG2	1:C:628:TYR:CD2	2.90	0.41
2:G:636:TYR:CE2	3:G:2102:NAP:H3B	2.55	0.41
1:C:1104:GLN:NE2	1:F:1106:LEU:HD12	2.34	0.41
1:F:636:TYR:CE1	1:F:883:LEU:HD23	2.55	0.41
2:K:117:ASN:CA	2:K:561:ARG:HG3	2.38	0.41
1:A:673:LEU:HD21	1:A:884:MET:CE	2.50	0.41
1:D:881:LEU:HA	1:D:884:MET:CG	2.39	0.41
1:E:1710:GLU:OE1	1:E:1712:LYS:HE3	2.20	0.41
1:F:1280:CYS:HB2	1:F:1626:GLY:HA2	2.02	0.41
2:I:352:SER:HB2	2:I:433:LEU:HD11	2.03	0.41
2:I:479:ARG:C	2:I:481:LEU:H	2.24	0.41
2:H:2015:LYS:HB2	2:H:2016:PRO:CD	2.43	0.41
2:H:606:ALA:HB2	2:H:811:MET:CG	2.49	0.41
2:H:740:ILE:HA	2:H:775:VAL:HB	2.01	0.41
1:A:565:GLN:O	1:A:568:ALA:HB3	2.20	0.41
2:H:1721:ARG:NH1	2:H:1854:GLU:OE2	2.53	0.41
1:D:474:ILE:O	1:D:478:LYS:HG3	2.20	0.41
2:I:1884:CYS:HB3	2:I:1936:LEU:CD1	2.46	0.41
1:C:570:TYR:O	1:C:574:ILE:HG12	2.20	0.41

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:B:21:GLN:HE21	1:B:21:GLN:HB3	1.60	0.41
2:L:1120:ILE:HG13	2:L:1169:TYR:CZ	2.56	0.41
2:I:1456:LEU:CD1	2:I:1543:TYR:HE2	2.28	0.41
2:H:1289:TYR:CD2	2:H:1370:LEU:HD23	2.56	0.41
2:L:76:VAL:HG21	2:L:113:PHE:CZ	2.55	0.41
2:L:1886:VAL:CG1	2:L:1900:LEU:HD11	2.50	0.41
2:J:396:ILE:H	2:J:396:ILE:CD1	2.29	0.41
2:I:220:GLN:O	2:I:222:PRO:HD3	2.20	0.41
2:L:152:LYS:HA	2:L:153:PRO:HD3	1.82	0.41
2:L:154:TYR:CD1	2:L:561:ARG:CZ	3.03	0.41
2:K:616:ASP:OD2	2:K:823:HIS:NE2	2.53	0.41
2:K:223:LYS:HB3	2:K:242:TYR:CZ	2.54	0.41
2:J:1113:ILE:HG22	2:J:1114:GLU:N	2.35	0.41
2:K:521:VAL:HG12	2:K:521:VAL:O	2.20	0.41
2:H:47:GLN:CG	2:I:23:PRO:HD2	2.49	0.41
2:K:357:THR:O	2:K:361:VAL:HG23	2.20	0.41
2:L:535:THR:OG1	2:L:537:VAL:HG23	2.21	0.41
2:L:507:PHE:HA	2:L:508:PRO:HD3	1.90	0.41
1:A:1168:TRP:CE2	1:A:1173:TYR:HE1	2.39	0.41
1:B:963:LEU:CD2	1:B:1023:GLU:HB3	2.50	0.41
2:K:1945:ILE:HG22	2:K:1946:LEU:N	2.34	0.41
2:I:915:PHE:CG	2:I:915:PHE:O	2.73	0.41
2:G:887:ASP:O	2:G:888:ARG:C	2.58	0.41
2:L:819:ALA:HA	2:L:1081:GLU:O	2.21	0.41
2:G:1624:ALA:HB1	2:G:1665:ILE:CD1	2.50	0.41
2:H:1910:VAL:HG11	2:H:1973:ILE:CG2	2.51	0.41
1:C:968:PRO:HD2	1:C:1374:PRO:HB3	2.02	0.41
2:L:1810:LEU:HA	2:L:1810:LEU:HD23	1.84	0.41
1:C:1097:LEU:HD12	1:F:1241:LEU:CD2	2.51	0.41
1:F:1698:ASN:C	1:F:1698:ASN:OD1	2.58	0.41
2:J:1313:ARG:HG3	2:J:1394:VAL:CG1	2.51	0.41
1:F:1685:ALA:HB1	1:F:1686:PRO:CD	2.50	0.41
1:D:968:PRO:CD	1:D:1374:PRO:HB3	2.50	0.41
2:L:1920:TYR:HD2	2:L:1927:TYR:HE2	1.68	0.41
2:L:1096:LYS:HD2	2:L:1100:ARG:NH2	2.35	0.41
2:H:988:GLU:HA	2:H:989:PRO:HD3	1.75	0.41
1:B:802:SER:HA	1:B:803:PRO:HD3	1.83	0.41
1:B:1395:ALA:HA	1:B:1396:PRO:HD3	1.82	0.41
2:J:545:ILE:HG22	2:J:555:LYS:HD3	2.02	0.41
1:F:1579:GLN:O	1:F:1583:THR:HG23	2.20	0.41
1:C:1577:CYS:HB3	1:C:1620:PHE:CD2	2.55	0.41
2:L:418:ARG:HE	2:L:418:ARG:HB3	1.67	0.41

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:F:27:ARG:H	1:F:27:ARG:HG2	1.36	0.41
2:G:353:ILE:O	2:G:353:ILE:HG22	2.19	0.41
1:E:1574:LEU:HA	1:E:1574:LEU:HD12	1.80	0.41
2:I:1424:LYS:HB2	2:I:1424:LYS:HE3	1.96	0.41
2:I:1346:MET:HE2	2:I:1346:MET:HB3	1.87	0.41
2:K:1914:LEU:O	2:K:1931:GLY:HA3	2.19	0.41
1:B:1546:GLY:O	1:B:1547:ARG:C	2.57	0.41
2:H:618:VAL:CG1	2:H:648:ILE:HD11	2.50	0.41
2:H:472:THR:CG2	2:H:499:VAL:HG22	2.50	0.41
2:K:1678:VAL:O	2:K:1679:LEU:HD23	2.21	0.41
2:H:174:GLY:H	2:H:517:GLY:CA	2.32	0.41
2:H:528:THR:HA	2:H:531:ASN:ND2	2.36	0.41
1:A:632:LEU:O	1:A:633:THR:C	2.59	0.41
2:K:931:TYR:CD2	2:K:966:VAL:HG13	2.56	0.41
2:G:1120:ILE:HD13	2:G:1173:HIS:CE1	2.56	0.41
2:K:857:VAL:HG11	2:K:876:TRP:CD1	2.55	0.41
2:L:1064:THR:CG2	2:L:1065:CYS:N	2.83	0.41
2:H:605:VAL:O	2:H:628:ILE:HA	2.21	0.41
1:F:881:LEU:O	1:F:884:MET:HB2	2.21	0.41
2:I:1769:VAL:HG22	2:I:1775:ILE:CA	2.39	0.41
1:C:741:ASP:CG	1:C:793:ARG:HH11	2.24	0.41
1:C:1363:MET:SD	1:C:1367:LEU:HD13	2.61	0.41
2:I:463:SER:C	2:I:465:LEU:H	2.24	0.41
2:K:1000:TYR:HA	2:K:1001:PRO:HD2	1.72	0.41
1:D:1099:GLU:HA	1:D:1149:LEU:HD23	2.02	0.41
2:L:1706:MET:HE1	2:L:1735:ILE:HG23	2.02	0.41
1:B:1363:MET:HB2	1:B:1363:MET:HE2	1.77	0.41
2:K:1725:HIS:CD2	2:K:1854:GLU:HB2	2.55	0.41
2:H:1940:ALA:HA	2:H:1995:THR:HG21	2.03	0.41
2:H:788:THR:HG21	2:H:810:CYS:SG	2.60	0.41
2:L:716:PHE:CD1	2:L:727:VAL:HG13	2.56	0.41
2:G:1384:PRO:HB3	2:G:1829:ARG:NH1	2.35	0.41
1:E:21:GLN:HE21	1:E:21:GLN:HB3	1.58	0.41
2:H:265:CYS:SG	2:H:275:LEU:HB2	2.60	0.41
2:G:1175:MET:HE3	2:G:1192:LEU:HD11	2.02	0.41
1:E:448:MET:HE3	1:E:448:MET:HA	2.02	0.41
2:I:664:TYR:OH	2:I:701:VAL:HG11	2.20	0.41
1:D:12:THR:CG2	2:J:2066:LYS:HD3	2.50	0.41
1:E:18:LEU:HD21	2:K:1844:LEU:HD11	2.03	0.41
1:C:1168:TRP:CE2	1:C:1173:TYR:HE1	2.39	0.41
2:G:1342:PHE:CE2	2:G:1391:VAL:HB	2.55	0.41
1:E:1343:PRO:O	1:E:1531:ASP:OD2	2.38	0.41

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:I:821:GLU:OE2	2:I:1083:ILE:HG13	2.21	0.41
2:G:349:PRO:O	2:G:392:THR:HA	2.20	0.41
2:L:1517:LEU:CG	2:L:1523:ILE:HD11	2.49	0.41
2:I:1880:ASN:HB3	2:I:1881:TYR:CE1	2.55	0.41
2:H:1577:ASN:OD1	2:H:1607:THR:HA	2.20	0.41
2:H:1881:TYR:CZ	2:H:2009:PHE:HE1	2.38	0.41
1:F:1127:VAL:HG22	1:F:1142:LEU:HA	2.03	0.41
2:J:1362:PHE:N	2:J:1363:PRO:CD	2.84	0.41
2:L:932:ALA:O	2:L:935:VAL:HG13	2.20	0.41
2:I:740:ILE:HA	2:I:775:VAL:HB	2.02	0.41
2:I:1910:VAL:HG11	2:I:1973:ILE:CG2	2.50	0.41
1:F:2:ARG:CZ	2:L:2078:GLU:OE1	2.68	0.41
2:J:676:LEU:HA	2:J:679:ARG:NH2	2.35	0.41
1:C:679:LYS:HG2	1:C:708:GLN:CB	2.49	0.41
2:H:1749:PHE:CD2	2:H:1758:ARG:HB3	2.55	0.41
2:G:2050:ILE:O	2:G:2050:ILE:HG12	2.20	0.41
1:E:1167:GLY:O	1:E:1172:ARG:NH1	2.54	0.41
1:D:1011:ARG:HH11	1:D:1012:TRP:HA	1.86	0.41
2:J:60:THR:HG22	2:J:62:GLU:HG3	2.01	0.41
1:E:1654:TYR:CZ	1:E:1658:VAL:HG21	2.55	0.41
2:H:1473:PHE:HE1	2:H:1513:VAL:HG21	1.85	0.41
2:J:858:LEU:CD2	2:J:864:PRO:HA	2.51	0.41
2:L:1848:ALA:HA	2:L:2034:LYS:HD3	2.02	0.41
1:B:1527:THR:OG1	1:B:1530:ASN:HB3	2.20	0.41
1:F:848:ARG:HG2	1:F:871:PHE:O	2.21	0.41
1:C:1704:THR:HG23	1:C:1714:PRO:HG3	2.01	0.41
2:I:163:ALA:HB2	2:I:278:ARG:HE	1.85	0.41
2:K:1149:ALA:HA	2:K:1150:PRO:HD3	1.90	0.41
1:F:1191:LEU:HD23	1:F:1191:LEU:HA	1.80	0.41
1:E:674:LEU:HD23	1:E:674:LEU:HA	1.92	0.41
1:F:68:TYR:CD2	1:F:68:TYR:C	2.94	0.41
2:G:476:GLN:HG2	2:G:476:GLN:H	1.66	0.41
1:A:4:GLU:HG3	1:A:4:GLU:H	1.50	0.41
1:F:493:PRO:HD2	1:F:517:ARG:O	2.19	0.41
2:K:2020:PHE:O	2:K:2024:LYS:HG2	2.21	0.41
2:L:1241:GLU:HA	2:L:1263:PHE:O	2.20	0.41
2:K:1067:LEU:HB3	4:K:2101:FMN:HM82	2.02	0.41
2:H:2052:LYS:CD	2:H:2074:TRP:HE1	2.24	0.41
2:G:618:VAL:CG1	2:G:648:ILE:HD11	2.51	0.41
1:A:434:ILE:HD11	1:A:490:VAL:HG21	2.01	0.41
2:K:511:THR:C	2:K:512:HIS:CD2	2.93	0.41
1:E:1487:THR:HA	1:E:1491:ASN:ND2	2.35	0.41

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:L:929:MET:CE	2:L:934:VAL:HG22	2.51	0.41
2:K:1616:VAL:HG13	2:K:1635:TYR:OH	2.20	0.41
1:F:1107:GLU:HA	1:F:1108:PRO:HD3	1.73	0.41
2:H:1410:GLY:HA2	2:H:1437:GLY:O	2.21	0.41
1:F:13:LEU:HD21	2:L:2054:TYR:CD2	2.55	0.41
1:B:740:LEU:HD12	1:B:781:ILE:HD13	2.03	0.41
1:C:506:ILE:HD13	1:C:922:ILE:CG2	2.44	0.41
2:L:744:THR:HG22	2:L:745:GLY:N	2.36	0.41
2:L:743:TRP:CZ2	2:L:757:PHE:HA	2.51	0.41
2:J:578:PRO:HG3	2:J:792:LEU:O	2.19	0.41
2:L:1721:ARG:HH21	2:L:1853:ILE:CD1	2.31	0.41
2:K:2044:THR:C	2:K:2046:LYS:H	2.24	0.41
2:J:747:ARG:HH11	2:J:780:SER:CB	2.26	0.41
2:H:534:GLY:O	2:H:571:ASP:HA	2.20	0.41
2:J:1933:LEU:HB3	2:J:1987:VAL:CG1	2.51	0.41
1:D:1157:ASP:O	1:D:1159:LEU:HD12	2.21	0.41
1:A:422:LEU:HD13	1:A:429:ILE:HG12	2.02	0.41
2:H:723:ALA:O	2:H:726:GLN:HB2	2.20	0.41
2:J:723:ALA:O	2:J:726:GLN:HB2	2.20	0.41
2:G:744:THR:HG22	2:G:745:GLY:N	2.35	0.41
2:G:743:TRP:CZ2	2:G:757:PHE:HA	2.50	0.41
2:K:1871:VAL:HG21	2:K:2004:PRO:HD3	2.02	0.41
2:J:1236:LEU:HD12	2:J:1241:GLU:O	2.20	0.41
2:J:1802:ALA:CB	2:J:1804:GLN:HE22	2.31	0.41
2:K:820:LYS:HB3	2:K:1080:ASP:O	2.21	0.41
2:K:815:ARG:NH2	2:K:1086:ILE:CG2	2.83	0.41
2:H:1171:TRP:CG	2:H:1172:ARG:N	2.89	0.41
2:H:882:LYS:HD3	2:H:898:ARG:NH1	2.35	0.41
2:G:521:VAL:O	2:G:521:VAL:HG12	2.20	0.41
2:I:521:VAL:O	2:I:521:VAL:HG12	2.20	0.41
2:L:129:ILE:CG2	2:L:132:LYS:HD2	2.51	0.41
2:G:80:ILE:HG12	2:G:105:ILE:HG22	2.03	0.41
2:G:1351:VAL:CG2	2:G:1584:SER:HA	2.47	0.41
2:J:197:VAL:HG13	2:J:200:LEU:HD21	2.02	0.41
2:K:1207:THR:HB	2:K:1216:VAL:HB	2.03	0.41
1:D:544:ASP:O	1:D:548:VAL:HG23	2.21	0.41
1:F:876:MET:HE3	1:F:876:MET:O	2.21	0.41
2:J:819:ALA:HA	2:J:1081:GLU:O	2.19	0.41
2:K:699:ILE:H	2:K:699:ILE:CD1	2.34	0.41
1:C:382:ILE:HG13	1:C:382:ILE:H	1.65	0.41
1:A:523:VAL:HG11	1:A:641:GLU:CA	2.50	0.41
2:H:1753:ARG:O	2:H:1757:ILE:HG12	2.21	0.41

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:E:1599:MET:HA	1:E:1602:PHE:HD2	1.86	0.41
1:B:968:PRO:HD2	1:B:1374:PRO:HB3	2.03	0.41
1:C:1170:ALA:HB3	1:C:1188:LEU:HD13	2.03	0.41
2:J:1381:ARG:NH1	2:J:1634:SER:HB2	2.36	0.41
1:F:855:ALA:HB1	1:F:919:ARG:HH21	1.84	0.41
1:E:1170:ALA:HB3	1:E:1188:LEU:HD13	2.03	0.41
1:D:450:TYR:CD2	1:D:450:TYR:C	2.93	0.41
2:L:60:THR:HG22	2:L:62:GLU:HG3	2.01	0.41
2:L:1465:ALA:O	2:L:1469:SER:HB3	2.20	0.41
1:C:1404:ALA:HA	1:C:1501:ALA:HB1	2.02	0.41
1:F:42:GLU:OE1	2:L:1688:PRO:HB3	2.20	0.41
1:B:1232:LEU:HD23	1:B:1253:SER:HB2	2.03	0.41
2:G:1096:LYS:HD2	2:G:1100:ARG:NH2	2.35	0.41
1:E:1041:PRO:HA	1:E:1046:PRO:HA	2.03	0.41
1:C:1507:LEU:HA	1:C:1507:LEU:HD23	1.80	0.41
1:B:1277:VAL:HG23	1:D:1277:VAL:HG23	2.03	0.41
1:B:576:ALA:HB1	1:B:584:ILE:HD11	2.03	0.41
2:K:130:THR:HG23	2:K:546:ASP:HB3	2.02	0.41
2:H:399:TYR:CE2	2:H:403:LEU:HD11	2.56	0.41
1:C:580:ASN:OD1	1:C:583:GLN:HG3	2.20	0.41
2:G:246:ALA:N	2:G:247:PRO:HD2	2.36	0.41
1:D:1542:LEU:HD22	1:D:1547:ARG:HD3	2.03	0.41
2:I:1203:TYR:CE2	2:I:1205:GLU:HG3	2.55	0.41
2:J:1261:PHE:HE2	2:J:1285:ILE:HD11	1.85	0.41
2:I:720:SER:HB3	2:I:723:ALA:HB2	2.03	0.41
2:L:310:ARG:HH12	2:L:459:LYS:H	1.69	0.41
2:J:608:MET:HE2	2:J:608:MET:HB3	1.54	0.41
2:J:615:TRP:HA	2:J:618:VAL:CG1	2.51	0.41
4:G:2101:FMN:H1'2	4:G:2101:FMN:H9	1.88	0.41
2:K:626:TYR:CE1	2:K:1087:LEU:HB3	2.55	0.41
1:C:427:ARG:O	1:C:430:VAL:HB	2.21	0.41
2:L:1007:LEU:N	2:L:1007:LEU:CD1	2.76	0.41
2:G:938:MET:HE2	2:G:959:THR:HG22	2.01	0.41
2:G:938:MET:CE	2:G:959:THR:HA	2.50	0.41
2:H:636:TYR:CE2	3:H:2102:NAP:H3B	2.56	0.41
2:K:765:TYR:HB2	2:K:805:MET:HE3	2.01	0.41
2:K:440:HIS:CD2	2:K:497:ASP:O	2.61	0.41
1:F:833:TRP:HH2	1:F:839:ILE:HD11	1.86	0.41
2:G:1181:PHE:HE1	2:G:1191:PRO:HD2	1.84	0.41
2:I:764:MET:O	2:I:765:TYR:C	2.59	0.41
2:I:932:ALA:O	2:I:935:VAL:HG13	2.21	0.41
2:L:2058:VAL:O	2:L:2062:THR:HB	2.21	0.41

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:K:818:THR:HA	2:K:829:LYS:HE2	2.01	0.41
2:L:857:VAL:HG11	2:L:876:TRP:CD1	2.56	0.41
1:B:452:ILE:CD1	1:B:470:GLY:HA3	2.40	0.41
1:C:681:ILE:HG21	1:C:729:ILE:CD1	2.51	0.41
2:J:1700:GLN:HG2	2:J:1700:GLN:O	2.20	0.41
2:I:460:ILE:O	2:I:486:ILE:N	2.53	0.41
2:G:1454:MET:HA	2:G:1454:MET:HE2	2.02	0.41
2:G:1231:THR:HG22	2:G:1232:VAL:N	2.35	0.41
1:E:1051:VAL:HG13	1:E:1057:GLU:O	2.21	0.41
2:G:1709:TYR:HE2	2:G:1716:LYS:HE2	1.85	0.41
1:A:452:ILE:HG22	1:A:453:ASP:N	2.35	0.41
2:I:1053:ILE:CD1	2:I:1061:VAL:HG13	2.51	0.41
1:F:1217:GLU:O	1:F:1299:ALA:HB1	2.21	0.41
2:J:912:LYS:NZ	2:J:1044:LYS:O	2.53	0.41
2:J:48:LEU:H	2:J:48:LEU:HG	1.56	0.41
2:K:1847:LEU:HD12	2:K:1847:LEU:N	2.35	0.41
2:H:716:PHE:CD1	2:H:727:VAL:HG13	2.55	0.41
2:J:726:GLN:O	2:J:730:ILE:HG12	2.20	0.41
2:I:152:LYS:HA	2:I:153:PRO:HD3	1.84	0.41
1:F:859:VAL:HG13	1:F:918:LEU:CB	2.51	0.41
1:E:21:GLN:O	2:K:2006:HIS:CD2	2.71	0.41
2:H:1241:GLU:HA	2:H:1263:PHE:O	2.21	0.41
2:L:1847:LEU:N	2:L:1847:LEU:HD12	2.35	0.41
2:L:265:CYS:HA	2:L:275:LEU:HD12	2.03	0.41
2:J:1847:LEU:HD12	2:J:1847:LEU:N	2.35	0.41
1:A:34:VAL:HG21	2:G:2045:ALA:O	2.19	0.41
2:H:186:LEU:HD23	2:H:186:LEU:HA	1.78	0.41
2:L:1481:ILE:HG13	2:L:1481:ILE:O	2.20	0.41
2:G:433:LEU:HA	2:G:434:PRO:HD3	1.86	0.41
1:B:448:MET:HA	1:B:448:MET:CE	2.51	0.41
2:G:1207:THR:HB	2:G:1216:VAL:HB	2.03	0.41
1:B:1162:GLY:O	1:B:1354:SER:HA	2.21	0.41
1:F:1522:PHE:CD2	1:F:1534:GLU:HB3	2.55	0.41
1:F:1078:ILE:HG23	1:F:1352:MET:CE	2.50	0.41
2:L:912:LYS:HB3	2:L:1030:PHE:HA	2.03	0.41
2:K:416:GLN:HA	2:K:419:ILE:HG13	2.03	0.41
2:G:1017:LEU:HD21	2:G:1032:PRO:HB2	2.01	0.41
1:B:522:TYR:O	1:B:526:MET:HG2	2.21	0.41
2:H:317:TRP:CD1	2:H:454:ASP:CG	2.94	0.41
1:E:1127:VAL:HG22	1:E:1142:LEU:HA	2.03	0.41
2:H:329:THR:HG22	2:I:1331:THR:O	2.20	0.41
1:E:679:LYS:HG2	1:E:708:GLN:CB	2.50	0.41

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:L:1057:TYR:C	2:L:1059:GLN:H	2.23	0.41
1:C:1065:LYS:O	1:C:1069:GLU:HB2	2.20	0.41
1:A:1459:GLY:HA2	1:A:1460:PRO:HD3	1.92	0.41
2:J:1621:GLU:OE2	2:J:1629:ILE:HG23	2.21	0.41
1:C:39:LYS:HD3	2:I:1832:THR:HG21	2.03	0.41
1:D:363:GLU:O	1:D:366:LYS:HB2	2.20	0.41
2:H:1102:LEU:HD23	2:H:1102:LEU:HA	1.83	0.41
1:C:1191:LEU:HA	1:C:1191:LEU:HD23	1.89	0.41
1:E:619:LYS:HE3	1:E:619:LYS:HB2	1.84	0.41
1:E:1457:GLU:HG3	1:E:1457:GLU:H	1.48	0.41
2:G:1656:VAL:O	2:G:1656:VAL:HG22	2.21	0.41
1:C:1652:GLU:O	1:C:1656:VAL:HG23	2.21	0.41
1:B:682:VAL:HG11	1:B:695:TYR:CE2	2.56	0.41
2:H:1594:ARG:NH1	2:H:1595:VAL:HG13	2.36	0.41
1:C:1514:ILE:H	1:C:1514:ILE:HG13	1.31	0.41
1:B:1700:GLN:O	1:B:1701:SER:C	2.59	0.41
2:G:749:GLY:HA3	4:G:2101:FMN:HM81	2.02	0.41
1:B:579:MET:CE	1:E:907:PHE:CZ	3.04	0.41
2:J:174:GLY:HA2	2:J:524:ILE:HG12	2.02	0.41
2:I:929:MET:HE1	2:I:934:VAL:HA	2.02	0.41
1:F:637:LEU:HD23	1:F:640:LEU:HD23	2.02	0.41
2:H:791:TYR:HD2	2:H:796:TRP:CG	2.39	0.41
2:I:796:TRP:HH2	2:I:805:MET:HE1	1.81	0.41
2:G:174:GLY:H	2:G:517:GLY:CA	2.32	0.41
2:J:1871:VAL:CG2	2:J:2004:PRO:HD3	2.51	0.41
2:G:1301:PHE:HB3	2:G:1364:ARG:NH1	2.36	0.41
2:G:762:LEU:HD23	2:G:805:MET:HE1	2.03	0.41
2:G:765:TYR:HB2	2:G:805:MET:HE3	2.03	0.41
2:J:1091:HIS:O	2:J:1094:HIS:HB2	2.20	0.41
1:C:632:LEU:O	1:C:633:THR:C	2.59	0.41
1:F:498:THR:HG22	1:F:508:TYR:HD1	1.86	0.41
2:L:358:ARG:HB2	2:L:389:PHE:CE2	2.55	0.41
2:J:346:THR:HA	2:J:347:PRO:HD3	1.88	0.41
2:K:1692:TYR:O	2:K:1833:PHE:HA	2.21	0.41
2:K:2039:TYR:C	2:K:2039:TYR:CD2	2.94	0.41
2:H:1884:CYS:HB3	2:H:1936:LEU:CD1	2.46	0.41
2:J:186:LEU:HD11	2:J:255:LEU:HD23	2.02	0.41
2:G:1378:ASN:HD22	2:G:1431:SER:CB	2.33	0.41
2:K:1871:VAL:CG1	2:K:1872:GLU:N	2.84	0.41
2:K:2003:VAL:HA	2:K:2004:PRO:HD3	1.92	0.41
2:I:253:ILE:O	2:I:257:GLN:HG3	2.21	0.41
1:A:955:VAL:HG21	2:G:964:ARG:HH21	1.85	0.41

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:H:398:LEU:HA	2:H:398:LEU:HD23	1.91	0.41
2:L:1755:LYS:H	2:L:1755:LYS:HG2	1.69	0.41
2:H:1353:GLY:HA2	2:H:1397:THR:HG21	2.03	0.41
2:G:22:ARG:HD2	2:G:42:HIS:CB	2.50	0.41
1:F:343:ILE:O	1:F:347:LEU:HG	2.21	0.41
2:G:1353:GLY:HA2	2:G:1397:THR:HG21	2.03	0.41
2:K:1515:LEU:CB	2:K:1525:VAL:HG21	2.51	0.41
1:D:1310:PHE:CE1	1:D:1315:SER:HB2	2.56	0.41
2:J:740:ILE:HA	2:J:775:VAL:HB	2.02	0.41
1:C:1343:PRO:O	1:C:1531:ASP:OD2	2.39	0.41
2:G:912:LYS:NZ	2:G:1044:LYS:O	2.53	0.41
2:L:204:ILE:CG2	2:L:312:VAL:HG21	2.51	0.41
1:A:1371:MET:O	1:A:1661:ARG:NH1	2.54	0.41
1:F:963:LEU:CD2	1:F:1023:GLU:HB3	2.51	0.41
2:L:737:PHE:HA	2:L:738:PRO:HD3	1.86	0.41
2:I:775:VAL:HG12	2:I:777:VAL:HG23	2.01	0.41
2:K:976:GLN:HA	2:K:977:PRO:HD3	1.90	0.41
2:J:418:ARG:HB3	2:J:418:ARG:HE	1.70	0.41
1:C:36:LEU:O	1:C:76:ARG:NH2	2.52	0.41
2:J:2008:THR:O	2:J:2011:ARG:HG3	2.21	0.41
2:H:31:LEU:HD13	2:H:75:LEU:HG	2.02	0.41
1:A:1393:VAL:N	1:A:1394:PRO:HD3	2.35	0.41
2:K:1645:PRO:O	2:K:1646:ASN:HB2	2.20	0.41
1:B:352:ARG:O	1:B:356:LYS:HG3	2.20	0.41
2:I:858:LEU:CD2	2:I:864:PRO:HA	2.50	0.41
1:F:959:PRO:HG2	2:L:974:GLU:HG3	2.02	0.41
2:H:1968:HIS:O	2:H:1971:GLU:HB2	2.20	0.41
1:E:388:GLU:HA	1:E:389:PRO:HD3	1.95	0.41
1:D:49:PRO:HB2	2:J:1699:SER:O	2.21	0.41
2:H:536:GLY:HA2	2:H:569:ALA:O	2.21	0.41
2:H:1723:ASP:O	2:H:1727:ARG:HG3	2.21	0.41
2:L:1762:MET:HA	2:L:1779:LYS:HE2	2.01	0.41
2:K:1960:MET:HB3	2:K:1964:ASP:CB	2.51	0.41
2:J:246:ALA:N	2:J:247:PRO:HD2	2.35	0.41
1:A:1293:THR:HG23	1:A:1298:LYS:HB2	2.02	0.41
1:E:879:ASN:HB3	1:E:901:LEU:HD13	2.03	0.41
1:D:1063:ASP:O	1:D:1064:VAL:C	2.57	0.41
2:L:1960:MET:HB3	2:L:1964:ASP:HB2	2.03	0.41
1:C:4:GLU:HG3	1:C:4:GLU:H	1.56	0.41
2:I:1483:LEU:HG	2:I:1483:LEU:H	1.09	0.41
1:A:619:LYS:HB2	1:A:619:LYS:HE3	1.85	0.41
2:K:1106:LYS:HD3	2:K:1106:LYS:HA	1.76	0.41

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:D:1321:MET:HB3	1:D:1321:MET:HE2	1.76	0.41
1:F:674:LEU:HA	1:F:674:LEU:HD23	1.88	0.41
2:J:1163:LEU:HA	2:J:1163:LEU:HD12	1.79	0.41
1:C:662:ALA:HA	1:C:694:TYR:CZ	2.55	0.41
1:A:1463:GLU:O	1:A:1467:LEU:HB2	2.21	0.41
2:I:1229:VAL:CG1	2:I:1230:LYS:N	2.84	0.41
2:J:1594:ARG:NH1	2:J:1595:VAL:HG13	2.36	0.41
1:E:397:ARG:N	1:E:397:ARG:HD3	2.36	0.41
2:I:641:MET:CE	2:I:676:LEU:HD12	2.51	0.41
2:I:609:THR:HG22	2:I:633:GLY:CA	2.51	0.41
2:I:718:PRO:HG2	2:I:741:LEU:HD11	2.03	0.41
2:K:608:MET:O	2:K:609:THR:C	2.59	0.41
2:K:656:ARG:HA	2:K:656:ARG:HD2	1.91	0.41
2:K:717:LYS:HD2	4:K:2101:FMN:O2	2.21	0.41
2:I:168:LYS:H	2:I:511:THR:HB	1.85	0.41
1:C:1546:GLY:O	1:C:1547:ARG:C	2.59	0.41
2:L:314:LEU:O	2:L:318:ILE:HG13	2.21	0.41
2:H:462:ALA:HB3	2:H:483:ASP:H	1.85	0.41
2:H:481:LEU:C	2:H:483:ASP:H	2.25	0.41
2:H:490:LEU:HD23	2:H:493:MET:SD	2.60	0.41
2:L:615:TRP:HA	2:L:618:VAL:CG1	2.50	0.41
1:B:628:TYR:CD1	1:B:629:SER:N	2.89	0.41
2:G:1047:LEU:CD1	2:G:1047:LEU:H	2.29	0.41
1:B:1491:ASN:H	1:B:1491:ASN:ND2	2.16	0.41
1:E:612:ILE:HG23	1:E:613:PRO:HD2	2.01	0.41
1:E:530:GLY:O	1:E:611:THR:HG21	2.21	0.41
2:K:172:ILE:HG22	2:K:514:VAL:C	2.42	0.41
2:J:917:ARG:CG	2:J:917:ARG:NH1	2.48	0.41
2:J:931:TYR:CZ	2:J:1008:ILE:HA	2.56	0.41
2:L:928:ASP:C	2:L:1007:LEU:HD23	2.41	0.41
1:A:1107:GLU:CB	1:E:1104:GLN:OE1	2.66	0.41
2:K:1375:HIS:CE1	2:K:1610:MET:SD	3.12	0.41
2:H:501:TRP:CD1	2:H:501:TRP:C	2.94	0.41
2:H:1050:SER:HA	2:H:1064:THR:HG21	2.01	0.41
2:H:912:LYS:NZ	2:H:1044:LYS:O	2.54	0.41
2:G:1346:MET:HB3	2:G:1346:MET:HE3	1.88	0.41
2:G:1616:VAL:HG13	2:G:1635:TYR:OH	2.20	0.41
1:A:526:MET:HE3	1:A:614:PHE:HB2	2.03	0.41
2:K:351:LEU:O	2:K:390:VAL:HA	2.21	0.41
1:F:613:PRO:HD2	1:F:628:TYR:CE2	2.55	0.41
2:H:327:PRO:O	2:I:1338:ARG:NH2	2.40	0.41
2:I:765:TYR:HB2	2:I:805:MET:HE3	2.02	0.41

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:G:931:TYR:CZ	2:G:1008:ILE:HA	2.56	0.41
2:L:1064:THR:HG22	2:L:1065:CYS:H	1.85	0.41
2:J:2009:PHE:O	2:J:2009:PHE:HD2	2.03	0.41
2:H:1604:GLY:O	2:H:1644:LEU:HD22	2.21	0.41
2:G:376:ARG:HH22	2:H:1340:LYS:CE	2.34	0.41
1:C:1371:MET:O	1:C:1661:ARG:NH1	2.54	0.41
2:I:1497:ARG:O	2:I:1505:SER:HB3	2.21	0.41
1:C:20:TYR:CE2	2:I:2062:THR:HG23	2.56	0.41
2:G:796:TRP:CG	2:G:797:SER:N	2.88	0.41
1:A:498:THR:CG2	1:A:858:LEU:HA	2.41	0.41
1:B:777:LEU:CD2	1:B:781:ILE:HD11	2.51	0.41
2:G:297:THR:HG22	2:G:298:ALA:N	2.35	0.41
2:G:251:PRO:CG	2:G:316:PHE:HA	2.48	0.41
2:K:1701:GLU:N	2:K:1704:MET:HE3	2.33	0.41
2:J:479:ARG:C	2:J:481:LEU:H	2.24	0.41
2:I:310:ARG:HH12	2:I:459:LYS:H	1.68	0.41
2:H:916:GLY:O	2:H:924:VAL:HG23	2.20	0.41
2:I:2044:THR:C	2:I:2046:LYS:H	2.24	0.41
1:B:498:THR:HG22	1:B:508:TYR:HD1	1.85	0.41
1:C:632:LEU:CA	1:C:635:ILE:HG22	2.46	0.41
2:L:1991:ARG:HE	2:L:1996:ILE:HG12	1.86	0.41
1:D:1584:GLY:HA2	1:D:1617:ILE:HD12	2.03	0.41
2:J:1764:MET:HB3	2:J:1780:ILE:CG1	2.51	0.41
1:E:632:LEU:CA	1:E:635:ILE:HG22	2.47	0.41
2:H:673:GLN:O	2:H:676:LEU:HB3	2.21	0.41
1:A:392:ASP:HA	1:A:393:PRO:HD2	1.72	0.41
1:F:452:ILE:CD1	1:F:467:LYS:HA	2.51	0.41
2:K:1805:PHE:C	2:K:1808:PRO:HD2	2.41	0.41
1:D:1711:LEU:HA	1:D:1711:LEU:HD23	1.88	0.41
2:H:1299:VAL:HA	2:H:1300:PRO:HD3	1.81	0.41
2:H:2039:TYR:CD2	2:H:2039:TYR:C	2.94	0.41
2:H:1378:ASN:HD22	2:H:1431:SER:CB	2.33	0.41
2:J:716:PHE:HD1	2:J:727:VAL:HG13	1.85	0.41
1:F:1183:VAL:HG11	1:F:1187:THR:CG2	2.44	0.41
1:A:1484:GLU:O	1:A:1487:THR:HB	2.21	0.41
2:K:44:GLN:O	2:K:48:LEU:HG	2.20	0.41
2:K:1455:GLN:HB2	2:K:1551:ILE:HG13	2.03	0.41
1:A:1674:ILE:HG22	1:A:1675:ASN:OD1	2.21	0.41
2:G:821:GLU:HB2	2:G:1083:ILE:HD11	2.02	0.41
2:L:788:THR:HG21	2:L:810:CYS:SG	2.61	0.41
2:K:875:PHE:HE2	2:K:906:LEU:HD23	1.85	0.41
2:L:1238:GLY:O	2:L:1239:ASP:HB2	2.20	0.41

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:C:1623:THR:HG22	1:C:1633:GLN:HB2	2.03	0.41
2:K:1940:ALA:HA	2:K:1995:THR:HG21	2.02	0.41
2:G:1455:GLN:HB2	2:G:1551:ILE:HG13	2.03	0.41
2:J:1940:ALA:HA	2:J:1995:THR:HG21	2.02	0.41
1:E:443:LEU:HD12	1:E:443:LEU:H	1.85	0.41
2:J:1301:PHE:HB3	2:J:1364:ARG:NH1	2.36	0.41
2:H:1383:VAL:CG2	2:H:1428:TYR:HE1	2.33	0.41
2:G:38:PRO:CD	2:G:104:LEU:HD11	2.50	0.41
2:L:253:ILE:O	2:L:257:GLN:HG3	2.21	0.41
2:J:41:LEU:HD13	2:J:100:GLU:HB3	2.02	0.41
2:H:396:ILE:N	2:H:396:ILE:HD12	2.34	0.41
2:J:95:HIS:CB	2:J:96:PRO:HD3	2.49	0.41
2:K:521:VAL:HG13	2:K:549:ASN:HB2	2.03	0.41
1:D:626:TRP:CE3	1:D:898:PHE:HB2	2.56	0.41
2:J:875:PHE:C	2:J:878:GLU:HB2	2.41	0.41
1:C:636:TYR:CE1	1:C:883:LEU:HD23	2.56	0.41
2:G:202:THR:O	2:G:205:ALA:HB3	2.21	0.41
2:K:1028:VAL:HA	2:K:1029:PRO:HD3	1.72	0.41
2:H:350:MET:SD	2:H:392:THR:CG2	3.09	0.41
2:I:2073:ASN:O	2:I:2076:LYS:N	2.53	0.41
2:G:858:LEU:CD2	2:G:864:PRO:HA	2.51	0.41
2:L:541:LEU:HG	2:L:552:VAL:HG11	2.02	0.41
1:C:407:ARG:HB3	1:C:447:PHE:CE2	2.55	0.41
2:K:1751:GLY:O	2:K:1752:PRO:C	2.60	0.41
1:F:984:LEU:HD21	1:F:1510:TRP:O	2.21	0.41
2:K:740:ILE:H	2:K:740:ILE:HD12	1.86	0.41
1:F:1078:ILE:HG23	1:F:1352:MET:HE3	2.03	0.41
1:D:902:ASN:O	1:D:904:GLY:N	2.52	0.41
2:K:31:LEU:HD13	2:K:75:LEU:HG	2.02	0.41
1:E:358:PHE:HD2	1:E:359:VAL:N	2.18	0.41
1:A:407:ARG:CZ	1:A:1606:VAL:HG23	2.51	0.41
2:H:737:PHE:HA	2:H:738:PRO:HD3	1.85	0.41
2:I:979:LEU:HD21	2:I:999:ALA:CB	2.51	0.41
1:F:24:MET:HB3	2:L:2043:VAL:HG12	2.02	0.41
1:B:491:SER:O	1:B:493:PRO:HD3	2.21	0.41
2:L:1447:GLN:HB3	2:L:1496:VAL:HG13	2.03	0.41
2:L:1662:ARG:HH11	2:L:1684:GLU:HB3	1.86	0.41
2:K:1969:LEU:HA	2:K:1972:ILE:CD1	2.50	0.41
2:I:283:THR:HG23	2:I:470:TYR:O	2.21	0.41
1:A:1127:VAL:HG22	1:A:1142:LEU:HA	2.03	0.41
2:L:2053:GLU:HG3	2:L:2053:GLU:H	1.68	0.41
1:E:71:ALA:CB	2:J:371:HIS:HB2	2.51	0.41

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:C:914:LEU:O	1:C:914:LEU:HD12	2.20	0.41
1:B:726:VAL:HG21	1:B:780:ALA:CB	2.50	0.41
2:L:1146:LEU:HD11	2:L:1160:PHE:CE2	2.56	0.41
2:I:1969:LEU:HA	2:I:1972:ILE:CD1	2.51	0.41
1:F:1687:TYR:HD2	1:F:1713:PHE:CD1	2.39	0.41
2:L:342:ASN:OD1	2:L:406:ARG:CZ	2.68	0.41
1:D:484:PRO:HG3	1:D:651:GLN:OE1	2.21	0.41
1:D:1185:PRO:O	1:D:1188:LEU:HB2	2.21	0.41
2:K:1378:ASN:HD22	2:K:1431:SER:CB	2.34	0.41
2:H:339:SER:O	2:H:344:GLU:HB2	2.21	0.41
1:B:1065:LYS:O	1:B:1069:GLU:HB2	2.20	0.41
2:I:1057:TYR:C	2:I:1059:GLN:H	2.23	0.41
1:B:1175:VAL:HA	1:B:1176:PRO:HD3	1.80	0.41
2:I:339:SER:O	2:I:344:GLU:HB2	2.21	0.41
2:G:1314:GLU:O	2:G:1394:VAL:HA	2.19	0.41
1:A:751:GLU:OE1	1:A:770:MET:HE1	2.20	0.41
2:K:2038:LYS:HD3	2:K:2038:LYS:HA	1.89	0.41
1:A:1071:TYR:C	1:A:1071:TYR:CD2	2.94	0.41
2:G:200:LEU:HD23	2:G:200:LEU:H	1.86	0.41
1:C:381:ASP:O	1:C:384:ALA:HB3	2.21	0.41
1:C:1459:GLY:HA2	1:C:1460:PRO:HD3	1.94	0.41
2:L:910:PHE:O	2:L:1063:ARG:HD3	2.21	0.41
1:C:726:VAL:HG21	1:C:780:ALA:HB3	2.02	0.41
2:L:1740:ASN:O	2:L:1742:PRO:HD3	2.21	0.41
2:I:1257:VAL:HA	2:I:1258:PRO:HD3	1.82	0.41
1:D:1704:THR:HG23	1:D:1714:PRO:HG3	2.02	0.41
2:H:1002:GLU:C	2:H:1004:SER:H	2.24	0.41
1:B:994:VAL:HG21	1:B:1291:TYR:CD1	2.56	0.41
2:H:1406:ASN:OD1	2:H:1406:ASN:N	2.52	0.41
2:I:1783:GLU:CD	2:I:1783:GLU:H	2.24	0.41
2:H:342:ASN:N	2:H:342:ASN:HD22	2.19	0.41
2:H:1810:LEU:HA	2:H:1810:LEU:HD23	1.88	0.41
1:B:1288:ASP:OD2	1:B:1288:ASP:C	2.59	0.41
1:E:390:ALA:O	1:E:713:PRO:HB2	2.20	0.41
2:L:1343:PHE:CE2	2:L:1388:PRO:HD2	2.56	0.41
2:I:856:THR:HA	2:I:865:ILE:O	2.21	0.41
2:L:1047:LEU:CD1	2:L:1047:LEU:H	2.30	0.41
2:J:276:LEU:O	2:J:467:ILE:CD1	2.69	0.41
2:L:595:SER:HB2	2:L:600:VAL:O	2.21	0.41
2:L:1265:TYR:CZ	2:L:1267:PRO:HG3	2.53	0.41
2:J:595:SER:CB	2:J:602:PRO:HG3	2.32	0.41
2:L:1616:VAL:HG13	2:L:1635:TYR:OH	2.21	0.41

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:L:938:MET:HE1	2:L:959:THR:HA	2.03	0.41
1:F:1491:ASN:ND2	1:F:1491:ASN:N	2.69	0.41
1:D:715:ASN:ND2	3:D:1901:NAP:H62A	2.19	0.41
2:K:747:ARG:O	2:K:1070:PRO:HD2	2.20	0.41
1:D:1562:THR:HB	1:D:1572:TRP:CZ3	2.55	0.41
1:E:1562:THR:HB	1:E:1572:TRP:CZ3	2.56	0.41
2:I:472:THR:CG2	2:I:499:VAL:HG22	2.51	0.41
2:H:914:TRP:CH2	2:H:1033:ALA:HA	2.56	0.41
1:B:1686:PRO:HD2	1:B:1687:TYR:CE2	2.56	0.41
2:I:787:ASP:CG	2:I:1075:TYR:HE2	2.25	0.41
1:C:474:ILE:O	1:C:478:LYS:HG3	2.21	0.41
2:K:1709:TYR:HE2	2:K:1716:LYS:HG2	1.86	0.41
2:K:1903:VAL:HG13	2:K:1942:VAL:HG11	2.03	0.41
2:L:1766:PHE:HB2	2:L:1780:ILE:HG12	2.03	0.41
2:H:1706:MET:HE2	2:H:1738:VAL:HG11	2.03	0.41
2:J:186:LEU:HG	2:J:256:VAL:CG2	2.50	0.41
2:L:1289:TYR:OH	2:L:1371:LEU:HA	2.21	0.41
2:L:1406:ASN:HA	2:L:1411:LYS:HA	2.03	0.41
2:K:1918:VAL:HG13	2:K:2006:HIS:CB	2.50	0.41
2:H:36:LEU:HA	2:H:36:LEU:HD12	1.92	0.41
1:E:1338:GLY:C	1:E:1340:MET:N	2.74	0.41
2:H:200:LEU:HD23	2:H:200:LEU:H	1.86	0.41
2:I:268:LEU:HB3	2:I:270:ARG:HD3	2.02	0.41
2:K:22:ARG:HD2	2:K:42:HIS:CB	2.51	0.41
2:K:894:GLU:OE2	2:K:897:LYS:HD3	2.21	0.41
2:H:1844:LEU:HD22	2:H:1850:VAL:HG21	2.03	0.41
2:K:137:VAL:O	2:K:141:TYR:HD1	2.04	0.41
2:L:349:PRO:O	2:L:392:THR:HA	2.20	0.41
2:H:228:LEU:O	2:H:232:HIS:CD2	2.71	0.41
2:G:68:GLU:HB3	2:G:69:PRO:CD	2.51	0.41
2:I:1844:LEU:HD22	2:I:1850:VAL:HG21	2.02	0.41
2:H:863:GLU:HA	2:H:864:PRO:HD3	1.82	0.41
1:C:407:ARG:CZ	1:C:1606:VAL:HG23	2.51	0.41
2:K:1966:ARG:HG3	2:K:1967:ALA:N	2.36	0.41
1:B:1554:LEU:HB3	1:B:1586:VAL:HG11	2.03	0.41
2:H:1981:GLU:O	2:H:1984:PRO:HG3	2.21	0.41
2:K:2008:THR:O	2:K:2011:ARG:HG3	2.21	0.41
1:C:962:ASN:CB	2:I:969:ARG:HD2	2.51	0.41
1:E:522:TYR:O	1:E:526:MET:HG2	2.21	0.41
2:I:216:ASP:CB	2:I:321:ARG:HH12	2.34	0.41
1:B:967:PHE:HB3	1:B:968:PRO:HD2	2.02	0.41
1:C:1393:VAL:N	1:C:1394:PRO:HD3	2.36	0.41

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:I:60:THR:HG22	2:I:62:GLU:HG3	2.03	0.41
1:C:1232:LEU:HD23	1:C:1253:SER:HB2	2.01	0.41
1:E:970:LEU:HD21	1:E:1658:VAL:HG11	2.03	0.41
1:E:749:ILE:HA	1:E:750:PRO:HD3	1.89	0.41
1:D:1302:CYS:O	1:D:1362:ILE:HG12	2.21	0.41
2:K:1762:MET:HA	2:K:1779:LYS:HE2	2.02	0.41
2:J:1057:TYR:C	2:J:1059:GLN:H	2.23	0.41
2:I:1343:PHE:CE2	2:I:1388:PRO:HD2	2.56	0.41
2:K:226:ASP:OD2	2:K:229:GLN:HB2	2.20	0.41
1:E:49:PRO:HB2	2:K:1699:SER:O	2.21	0.41
1:E:1698:ASN:C	1:E:1698:ASN:OD1	2.58	0.41
1:E:1698:ASN:HA	1:E:1699:PRO:HD3	1.83	0.41
1:D:1521:SER:HB2	1:D:1577:CYS:SG	2.61	0.41
2:G:946:HIS:CE1	2:G:947:GLU:HG3	2.56	0.41
1:B:1651:TYR:CE2	1:B:1655:CYS:SG	3.14	0.41
2:L:690:LEU:HB2	2:L:711:ILE:HG21	2.03	0.41
2:G:1783:GLU:CD	2:G:1783:GLU:H	2.24	0.41
1:A:1698:ASN:C	1:A:1698:ASN:OD1	2.58	0.41
2:K:1104:ASP:OD1	2:K:1104:ASP:N	2.54	0.41
2:J:1782:LYS:H	2:J:1782:LYS:HG2	1.72	0.41
1:D:619:LYS:HE3	1:D:619:LYS:HB2	1.85	0.41
1:D:1440:TYR:O	1:D:1444:GLN:HB2	2.20	0.41
2:H:960:GLY:O	2:H:963:ILE:HB	2.21	0.41
2:I:1050:SER:HA	2:I:1064:THR:HG21	2.02	0.40
2:I:865:ILE:HG22	2:I:867:LYS:HG3	2.04	0.40
2:L:314:LEU:HG	2:L:318:ILE:CD1	2.47	0.40
2:J:297:THR:HG22	2:J:298:ALA:N	2.36	0.40
1:B:579:MET:HE1	1:E:907:PHE:CE1	2.56	0.40
1:E:534:GLN:HA	1:E:610:GLU:O	2.22	0.40
2:I:174:GLY:HA2	2:I:524:ILE:HG12	2.03	0.40
1:E:13:LEU:HG	2:K:2048:PHE:CE1	2.55	0.40
2:H:929:MET:CE	2:H:934:VAL:HG22	2.51	0.40
2:I:1181:PHE:HE1	2:I:1191:PRO:HD2	1.82	0.40
2:K:1048:TRP:NE1	2:K:1049:GLN:HG2	2.33	0.40
2:K:298:ALA:HA	2:K:303:GLU:HG2	2.04	0.40
2:I:938:MET:O	2:I:942:MET:HG3	2.21	0.40
2:H:764:MET:O	2:H:765:TYR:C	2.59	0.40
2:H:1410:GLY:HA2	2:H:1437:GLY:H	1.86	0.40
2:J:1891:ILE:HG22	2:J:1892:SER:N	2.36	0.40
1:A:868:VAL:HG22	1:A:869:ARG:H	1.85	0.40
2:L:1725:HIS:CD2	2:L:1854:GLU:HB2	2.56	0.40
2:L:1903:VAL:HG11	2:L:1943:LEU:HD21	2.03	0.40

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:E:1648:LYS:O	1:E:1652:GLU:HB2	2.20	0.40
2:H:1903:VAL:HG13	2:H:1942:VAL:HG11	2.03	0.40
2:J:1410:GLY:HA2	2:J:1437:GLY:O	2.21	0.40
2:J:1604:GLY:O	2:J:1644:LEU:HD22	2.21	0.40
1:E:452:ILE:CD1	1:E:470:GLY:HA3	2.45	0.40
2:H:1725:HIS:CD2	2:H:1854:GLU:HB2	2.56	0.40
1:A:816:GLU:OE2	1:F:827:ARG:NE	2.53	0.40
2:J:1750:GLY:N	2:J:1754:GLY:HA3	2.36	0.40
2:H:1871:VAL:CG1	2:H:1872:GLU:N	2.84	0.40
2:J:1884:CYS:HB3	2:J:1936:LEU:CD1	2.48	0.40
1:F:1057:GLU:HA	1:F:1058:PRO:HD3	1.88	0.40
2:G:785:SER:CB	2:G:1094:HIS:CD2	3.04	0.40
1:C:1042:LEU:O	1:C:1043:LYS:HB2	2.21	0.40
2:I:950:TRP:NE1	2:I:956:LYS:HD3	2.35	0.40
2:J:1886:VAL:CG1	2:J:1900:LEU:HD11	2.52	0.40
1:A:1162:GLY:O	1:A:1354:SER:HA	2.21	0.40
1:C:746:PHE:CG	3:C:1901:NAP:H4D	2.56	0.40
1:D:828:TRP:NE1	1:D:838:THR:HA	2.31	0.40
1:B:506:ILE:HD11	1:B:926:SER:CB	2.51	0.40
1:D:1323:ALA:CB	1:D:1351:PHE:HE2	2.34	0.40
1:F:1446:GLU:HA	1:F:1449:ALA:HB3	2.04	0.40
2:G:351:LEU:HD22	2:G:352:SER:H	1.86	0.40
2:K:331:LEU:CD2	2:K:396:ILE:HG13	2.51	0.40
1:D:27:ARG:NE	2:J:2043:VAL:O	2.53	0.40
2:K:700:GLU:HA	2:K:703:ASN:HB2	2.03	0.40
2:G:700:GLU:HA	2:G:703:ASN:HB2	2.02	0.40
2:H:1624:ALA:CB	2:H:1665:ILE:HD13	2.51	0.40
1:E:526:MET:CE	1:E:614:PHE:HB3	2.51	0.40
2:L:1031:VAL:HA	2:L:1032:PRO:HD3	1.69	0.40
2:G:1972:ILE:HG13	2:G:1972:ILE:H	1.39	0.40
1:C:23:ALA:CA	2:I:2007:SER:O	2.69	0.40
2:H:1974:GLN:HE21	2:H:1977:ARG:HH21	1.69	0.40
2:L:1969:LEU:HA	2:L:1972:ILE:CD1	2.51	0.40
2:I:1960:MET:HB3	2:I:1964:ASP:CB	2.51	0.40
2:L:1762:MET:HE2	2:L:1762:MET:HB3	2.01	0.40
2:K:838:VAL:HG12	2:K:839:ASP:N	2.36	0.40
2:L:540:ILE:HA	2:L:553:GLY:O	2.21	0.40
2:J:1960:MET:HB3	2:J:1964:ASP:CB	2.51	0.40
1:F:1395:ALA:HA	1:F:1396:PRO:HD3	1.81	0.40
2:I:441:SER:C	2:I:443:TYR:H	2.25	0.40
2:H:1106:LYS:HD3	2:H:1106:LYS:HA	1.80	0.40
2:I:2038:LYS:HD3	2:I:2038:LYS:HA	1.88	0.40

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:F:352:ARG:HB2	1:F:352:ARG:HE	1.56	0.40
1:F:1680:VAL:HG12	1:F:1680:VAL:O	2.20	0.40
2:K:536:GLY:HA2	2:K:569:ALA:O	2.22	0.40
2:L:437:ALA:HA	2:L:438:PRO:HD3	1.80	0.40
1:B:1514:ILE:HG13	1:B:1514:ILE:H	1.35	0.40
1:C:1268:SER:OG	1:C:1686:PRO:HD3	2.22	0.40
2:H:652:ILE:O	2:H:654:PRO:HD3	2.22	0.40
2:K:847:TYR:HA	2:K:856:THR:OG1	2.21	0.40
2:K:938:MET:HE1	2:K:959:THR:HA	2.03	0.40
2:L:297:THR:HG22	2:L:298:ALA:N	2.35	0.40
1:E:1102:ILE:H	1:E:1102:ILE:HG13	1.66	0.40
2:L:501:TRP:CZ2	2:L:528:THR:CG2	3.02	0.40
2:J:685:VAL:HG13	2:J:686:PRO:HD2	2.03	0.40
2:K:468:PRO:HA	2:K:479:ARG:HD3	2.03	0.40
2:I:38:PRO:CD	2:I:104:LEU:HD11	2.46	0.40
2:I:80:ILE:HG12	2:I:105:ILE:CG2	2.51	0.40
2:G:1299:VAL:HG22	2:G:1301:PHE:CG	2.56	0.40
2:J:208:LEU:HD23	2:J:211:LEU:HD12	2.03	0.40
2:I:351:LEU:O	2:I:390:VAL:HA	2.21	0.40
2:I:433:LEU:HA	2:I:434:PRO:HD3	1.85	0.40
2:J:1406:ASN:HA	2:J:1411:LYS:HA	2.03	0.40
2:H:2010:LEU:O	2:H:2014:VAL:HG23	2.20	0.40
2:K:1760:ASN:O	2:K:1764:MET:HG2	2.21	0.40
2:H:1799:LEU:C	2:H:1801:SER:H	2.23	0.40
2:K:1803:THR:C	2:K:1805:PHE:N	2.74	0.40
1:A:928:ILE:HG12	2:G:1462:GLN:HB2	2.03	0.40
2:H:1299:VAL:HG22	2:H:1301:PHE:CG	2.56	0.40
2:L:1464:LEU:C	2:L:1464:LEU:HD13	2.42	0.40
1:A:11:TYR:CG	2:G:2027:LYS:HG2	2.56	0.40
2:I:1861:PHE:O	2:I:1865:LEU:HG	2.21	0.40
1:A:967:PHE:HB3	1:A:968:PRO:HD2	2.04	0.40
2:J:1236:LEU:HD12	2:J:1242:ILE:HA	2.03	0.40
2:H:268:LEU:HB3	2:H:270:ARG:HD3	2.03	0.40
1:C:502:ALA:CA	1:C:929:ARG:HD3	2.50	0.40
2:G:1455:GLN:HB2	2:G:1551:ILE:CG1	2.51	0.40
2:I:48:LEU:HG	2:I:48:LEU:H	1.51	0.40
2:I:1455:GLN:HB2	2:I:1551:ILE:CG1	2.52	0.40
2:L:1455:GLN:HB2	2:L:1551:ILE:HG13	2.02	0.40
2:L:827:GLN:O	2:L:830:GLN:HB3	2.20	0.40
1:E:18:LEU:HD21	2:K:1844:LEU:CD1	2.51	0.40
2:K:1356:ALA:HB3	2:K:1397:THR:CG2	2.50	0.40
2:J:22:ARG:HD2	2:J:42:HIS:CB	2.50	0.40

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:G:396:ILE:CD1	2:G:396:ILE:H	2.33	0.40
1:E:1310:PHE:CE1	1:E:1315:SER:HB2	2.56	0.40
2:G:1016:PHE:O	2:G:1019:LEU:HB2	2.21	0.40
1:E:11:TYR:HD1	2:K:2030:ILE:CD1	2.34	0.40
2:J:1517:LEU:CD2	2:J:1523:ILE:HD11	2.51	0.40
2:J:1515:LEU:HB2	2:J:1525:VAL:HG21	2.03	0.40
2:K:882:LYS:HD3	2:K:898:ARG:CZ	2.51	0.40
1:D:1494:TRP:CG	1:D:1505:GLY:HA3	2.55	0.40
1:B:1307:PHE:CB	1:B:1357:CYS:HB3	2.51	0.40
2:H:2073:ASN:O	2:H:2076:LYS:N	2.54	0.40
1:F:1303:LEU:HA	1:F:1303:LEU:HD23	1.60	0.40
2:K:535:THR:OG1	2:K:537:VAL:HG23	2.22	0.40
1:C:522:TYR:O	1:C:526:MET:HG2	2.22	0.40
2:J:1250:ARG:CD	2:J:1250:ARG:H	2.34	0.40
1:A:1554:LEU:HB3	1:A:1586:VAL:HG11	2.04	0.40
2:H:1537:GLY:O	2:H:1539:PRO:HD3	2.21	0.40
2:H:1269:ALA:HB1	2:H:1271:TYR:CZ	2.55	0.40
1:D:1050:TRP:HA	1:D:1050:TRP:HE3	1.86	0.40
1:E:1692:GLN:HG3	1:E:1696:PHE:CE2	2.56	0.40
1:B:1441:LEU:O	1:B:1444:GLN:HB3	2.21	0.40
2:G:819:ALA:HA	2:G:1081:GLU:O	2.20	0.40
1:D:726:VAL:HG21	1:D:780:ALA:HB3	2.03	0.40
1:B:484:PRO:HA	1:B:485:PRO:HD3	1.80	0.40
1:E:857:ASN:HA	1:E:860:ALA:HB2	2.02	0.40
1:C:1198:LEU:HA	1:C:1198:LEU:HD23	1.89	0.40
1:D:1191:LEU:HA	1:D:1191:LEU:HD23	1.82	0.40
2:I:111:ARG:HE	2:I:111:ARG:HB2	1.73	0.40
2:G:1253:GLU:H	2:G:1253:GLU:HG2	1.74	0.40
1:F:835:ASN:N	1:F:835:ASN:OD1	2.54	0.40
2:L:1507:VAL:HG23	2:L:1530:TYR:HE2	1.86	0.40
2:I:656:ARG:CG	2:I:656:ARG:NH1	2.80	0.40
2:I:676:LEU:HA	2:I:679:ARG:NH2	2.36	0.40
2:G:512:HIS:HE1	2:G:566:VAL:HG13	1.86	0.40
2:H:1067:LEU:N	2:H:1067:LEU:HD12	2.36	0.40
2:K:670:MET:HB3	2:K:670:MET:HE2	1.82	0.40
2:H:461:PRO:HB3	2:H:483:ASP:O	2.21	0.40
1:B:1104:GLN:NE2	1:D:1106:LEU:HD12	2.36	0.40
1:B:1148:LEU:HA	1:B:1148:LEU:HD23	1.61	0.40
2:J:512:HIS:HE1	2:J:566:VAL:HG13	1.87	0.40
2:L:937:ARG:CZ	2:L:941:LEU:HD11	2.50	0.40
2:I:917:ARG:NH1	2:I:921:GLY:O	2.55	0.40
2:H:601:PRO:HA	2:H:602:PRO:HD3	1.81	0.40

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:K:582:LYS:HG3	2:K:1110:VAL:CG1	2.51	0.40
1:F:1491:ASN:ND2	1:F:1491:ASN:H	2.19	0.40
2:J:796:TRP:CG	2:J:797:SER:N	2.89	0.40
2:G:931:TYR:CD2	2:G:966:VAL:HG13	2.57	0.40
2:L:854:VAL:HA	2:L:867:LYS:O	2.21	0.40
2:H:2058:VAL:CG1	2:H:2067:ILE:HD12	2.51	0.40
1:D:650:PHE:CE2	1:D:881:LEU:HD22	2.57	0.40
2:L:605:VAL:O	2:L:628:ILE:HA	2.20	0.40
2:G:448:HIS:CD2	2:G:491:VAL:CG1	3.01	0.40
2:G:1891:ILE:HG22	2:G:1892:SER:N	2.35	0.40
2:G:1904:VAL:HG13	2:G:1915:LEU:HD23	2.04	0.40
2:L:876:TRP:HD1	2:L:876:TRP:C	2.21	0.40
2:K:1745:LEU:HD12	2:K:1746:THR:N	2.37	0.40
2:L:1851:MET:HE1	2:L:1859:VAL:HG21	2.03	0.40
2:H:1915:LEU:HB2	2:H:1935:ALA:HB1	2.02	0.40
1:E:452:ILE:HA	1:E:452:ILE:HD13	1.91	0.40
2:G:1406:ASN:HA	2:G:1411:LYS:HA	2.02	0.40
1:F:11:TYR:CD1	2:L:2027:LYS:HA	2.56	0.40
2:G:747:ARG:HH11	2:G:780:SER:CB	2.29	0.40
2:G:48:LEU:HD13	2:G:83:VAL:HG22	2.03	0.40
1:B:433:CYS:SG	1:B:473:LEU:HD13	2.61	0.40
2:H:271:GLU:H	2:H:274:GLU:CG	2.34	0.40
2:K:1081:GLU:HG2	2:K:1086:ILE:HG12	2.03	0.40
1:F:574:ILE:HG12	1:F:574:ILE:H	1.72	0.40
2:H:220:GLN:O	2:H:222:PRO:HD3	2.20	0.40
1:A:340:LEU:HD12	1:F:347:LEU:HD12	2.02	0.40
1:A:746:PHE:CD1	1:A:800:PRO:HG3	2.56	0.40
1:E:1303:LEU:HD23	1:E:1303:LEU:HA	1.71	0.40
2:H:1845:VAL:CG2	2:H:1856:LEU:HD22	2.49	0.40
1:A:1514:ILE:HD13	1:A:1545:LEU:CB	2.51	0.40
1:C:18:LEU:HD21	2:I:1844:LEU:CD1	2.51	0.40
2:J:1309:PHE:CD1	2:J:1309:PHE:N	2.89	0.40
2:H:1517:LEU:CD2	2:H:1523:ILE:HD11	2.51	0.40
2:I:616:ASP:OD2	2:I:823:HIS:CE1	2.74	0.40
2:L:1934:ARG:O	2:L:1938:THR:HG23	2.21	0.40
1:C:1405:ARG:HA	1:F:1697:LEU:O	2.21	0.40
2:L:1127:GLU:HA	2:L:1128:PRO:HD3	1.84	0.40
2:K:327:PRO:CD	2:L:1338:ARG:NH2	2.84	0.40
2:G:1624:ALA:HB2	2:G:1665:ILE:HD13	2.03	0.40
2:J:1473:PHE:CE1	2:J:1513:VAL:HG21	2.56	0.40
1:E:904:GLY:HA2	1:E:906:GLN:CD	2.41	0.40
2:G:216:ASP:CB	2:G:321:ARG:HH12	2.34	0.40

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:H:617:PHE:CD1	2:H:822:ALA:CA	3.04	0.40
2:J:416:GLN:C	2:J:418:ARG:H	2.24	0.40
1:A:68:TYR:CD1	2:I:371:HIS:CD2	3.09	0.40
1:B:1414:PRO:HD2	1:D:1473:HIS:CD2	2.57	0.40
1:B:1393:VAL:N	1:B:1394:PRO:HD3	2.36	0.40
2:G:1520:LYS:N	2:G:1520:LYS:HD2	2.36	0.40
2:J:759:GLN:N	2:J:760:PRO:CD	2.85	0.40
1:A:1065:LYS:O	1:A:1069:GLU:HB2	2.21	0.40
2:L:1278:MET:HA	2:L:1281:ARG:HB2	2.03	0.40
2:K:759:GLN:N	2:K:760:PRO:CD	2.83	0.40
2:I:1321:VAL:HG12	2:I:1322:ALA:N	2.36	0.40
2:G:1472:TRP:CD2	2:G:1540:VAL:HG22	2.57	0.40
2:H:1257:VAL:HA	2:H:1258:PRO:HD3	1.77	0.40
2:G:637:ASN:ND2	2:G:639:GLN:HB3	2.36	0.40
2:J:637:ASN:ND2	2:J:639:GLN:HB3	2.35	0.40
1:B:1536:ASP:O	1:B:1540:GLN:HG3	2.22	0.40
1:A:1475:GLU:O	1:A:1478:ALA:HB3	2.21	0.40
1:B:554:ARG:O	1:B:555:GLN:HG3	2.20	0.40
2:J:690:LEU:HB2	2:J:711:ILE:HG21	2.03	0.40
2:J:1507:VAL:HG23	2:J:1530:TYR:HE2	1.87	0.40
2:J:536:GLY:HA2	2:J:569:ALA:O	2.22	0.40
1:B:50:SER:HB2	1:B:52:THR:HG23	2.02	0.40
2:I:737:PHE:HA	2:I:738:PRO:HD3	1.83	0.40
1:C:1687:TYR:CD2	1:C:1687:TYR:N	2.88	0.40
2:G:1321:VAL:HG12	2:G:1322:ALA:N	2.36	0.40
1:A:93:GLU:HA	1:A:94:PRO:HD3	1.82	0.40
1:A:347:LEU:HD12	1:F:340:LEU:HD12	2.02	0.40
1:B:1514:ILE:CD1	1:B:1545:LEU:HB3	2.51	0.40
1:A:1467:LEU:HD23	1:A:1467:LEU:HA	1.90	0.40
2:I:717:LYS:N	2:I:718:PRO:HD3	2.37	0.40
4:H:2101:FMN:HO2'	4:H:2101:FMN:C10	2.32	0.40
2:K:615:TRP:HA	2:K:618:VAL:CG1	2.52	0.40
1:C:1545:LEU:HA	1:C:1545:LEU:HD23	1.62	0.40
2:L:856:THR:HG23	2:L:866:HIS:NE2	2.36	0.40
2:J:279:PHE:HB2	2:J:467:ILE:HD12	2.02	0.40
2:J:511:THR:O	2:J:512:HIS:CD2	2.75	0.40
2:H:2031:ASP:C	2:H:2033:SER:N	2.74	0.40
2:K:907:ASN:HD21	2:K:917:ARG:HE	1.69	0.40
2:J:501:TRP:CZ2	2:J:528:THR:CG2	3.04	0.40
1:F:1107:GLU:CG	1:F:1108:PRO:HD2	2.40	0.40
2:K:376:ARG:NH2	2:L:1340:LYS:CG	2.85	0.40
2:I:1293:TRP:NE1	2:I:1354:TRP:HZ2	2.18	0.40

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:I:930:THR:O	2:I:934:VAL:HG23	2.21	0.40
1:F:632:LEU:O	1:F:633:THR:C	2.59	0.40
2:I:1410:GLY:HA2	2:I:1437:GLY:H	1.86	0.40
2:L:1769:VAL:HG22	2:L:1775:ILE:HG23	2.03	0.40
1:D:21:GLN:O	2:J:2006:HIS:HD2	2.03	0.40
2:G:1410:GLY:HA2	2:G:1437:GLY:H	1.86	0.40
1:A:1562:THR:HB	1:A:1572:TRP:CZ3	2.56	0.40
2:G:382:LEU:HG	2:G:390:VAL:HB	2.02	0.40
1:E:1565:PRO:HG3	1:E:1572:TRP:CH2	2.54	0.40
2:J:290:VAL:HB	2:J:315:LEU:HD11	2.03	0.40
2:I:162:ALA:CA	2:I:167:VAL:HG22	2.49	0.40
2:K:1884:CYS:CB	2:K:1936:LEU:HD12	2.46	0.40
1:A:1584:GLY:HA2	1:A:1617:ILE:HD12	2.03	0.40
1:A:1617:ILE:CD1	1:A:1617:ILE:N	2.79	0.40
2:K:1764:MET:O	2:K:1780:ILE:HG13	2.22	0.40
1:A:1094:LYS:HE3	1:A:1316:TYR:CG	2.54	0.40
2:L:1764:MET:HG3	2:L:1781:PHE:CD1	2.56	0.40
2:J:1040:TYR:CE1	2:J:1044:LYS:HD2	2.57	0.40
1:C:537:ASN:HB2	1:C:585:MET:SD	2.61	0.40
2:G:662:LEU:HD22	2:G:673:GLN:OE1	2.22	0.40
2:H:785:SER:O	2:H:789:TYR:HB2	2.21	0.40
2:L:1358:THR:O	2:L:1361:ILE:HG13	2.22	0.40
2:L:1316:VAL:HG21	2:L:1393:ASP:HB2	2.04	0.40
2:J:1171:TRP:CG	2:J:1172:ARG:N	2.90	0.40
2:L:1236:LEU:HD21	2:L:1239:ASP:O	2.21	0.40
2:I:1236:LEU:HD12	2:I:1242:ILE:HA	2.03	0.40
2:G:906:LEU:HD22	2:G:906:LEU:HA	1.78	0.40
2:I:815:ARG:NH2	2:I:1086:ILE:CG2	2.85	0.40
2:K:529:ASN:ND2	2:K:552:VAL:HG23	2.34	0.40
2:I:1589:PRO:HB2	2:I:1596:PHE:HB3	2.04	0.40
1:C:1223:GLY:CA	1:C:1276:PRO:HD2	2.51	0.40
2:L:1880:ASN:HB3	2:L:1881:TYR:CE1	2.56	0.40
1:D:1162:GLY:O	1:D:1354:SER:HA	2.21	0.40
1:E:958:GLU:HA	1:E:959:PRO:HD3	1.85	0.40
2:K:396:ILE:HD12	2:K:396:ILE:N	2.36	0.40
2:J:817:MET:HB3	2:J:817:MET:HE2	1.84	0.40
2:I:541:LEU:HG	2:I:552:VAL:HG11	2.02	0.40
2:H:887:ASP:O	2:H:888:ARG:C	2.60	0.40
2:L:1577:ASN:OD1	2:L:1607:THR:HA	2.21	0.40
2:I:2050:ILE:O	2:I:2050:ILE:HG12	2.21	0.40
2:H:196:PHE:CD1	2:H:266:LYS:HB3	2.57	0.40
2:J:1910:VAL:HG11	2:J:1973:ILE:CG2	2.51	0.40

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:I:976:GLN:HA	2:I:977:PRO:HD3	1.92	0.40
2:L:1041:TRP:CE3	2:L:1041:TRP:HA	2.56	0.40
1:D:1232:LEU:HD23	1:D:1253:SER:HB2	2.03	0.40
2:L:540:ILE:HD13	2:L:557:GLU:HB2	2.04	0.40
2:J:1960:MET:HB3	2:J:1964:ASP:HB2	2.03	0.40
1:F:726:VAL:HG21	1:F:780:ALA:HB3	2.04	0.40
2:K:1472:TRP:CD2	2:K:1540:VAL:HG22	2.56	0.40
2:H:332:ALA:HB3	2:H:335:THR:OG1	2.22	0.40
1:F:970:LEU:HA	1:F:971:PRO:HD3	1.98	0.40
2:H:1820:ASP:O	2:H:1823:SER:HB3	2.21	0.40
2:I:538:ARG:HD2	2:I:539:VAL:H	1.87	0.40
1:A:1435:TRP:HD1	1:E:1427:LEU:HD11	1.86	0.40
2:I:1384:PRO:HB3	2:I:1829:ARG:HH12	1.86	0.40
2:J:1810:LEU:HA	2:J:1810:LEU:HD23	1.85	0.40
1:F:1321:MET:HB3	1:F:1321:MET:HE2	1.78	0.40
1:A:681:ILE:HG23	1:A:681:ILE:O	2.21	0.40
2:L:890:LYS:HB2	2:L:890:LYS:HE3	1.79	0.40
2:G:1708:LEU:O	2:G:1708:LEU:HD22	2.21	0.40
2:J:890:LYS:HB2	2:J:890:LYS:HE3	1.78	0.40
1:D:709:LEU:HA	1:D:709:LEU:HD23	1.81	0.40
2:G:237:GLN:HA	2:G:238:PRO:HD3	1.87	0.40
1:C:1466:TYR:CE2	1:C:1470:ARG:HG3	2.56	0.40
2:H:1261:PHE:HE2	2:H:1285:ILE:HD11	1.87	0.40
1:A:1268:SER:OG	1:A:1686:PRO:HD3	2.21	0.40
2:I:1067:LEU:CB	4:I:2101:FMN:HM82	2.52	0.40
2:H:866:HIS:HB3	2:H:1068:GLN:O	2.22	0.40
2:K:955:LEU:HD21	2:K:1026:LYS:O	2.21	0.40
2:H:169:ILE:HG22	2:H:279:PHE:CD2	2.57	0.40
2:H:472:THR:HG22	2:H:473:LYS:N	2.37	0.40
2:G:613:VAL:H	2:G:614:PRO:HD3	1.85	0.40
2:J:1350:ILE:HD13	2:J:1610:MET:SD	2.62	0.40
1:F:1703:VAL:HG22	1:F:1712:LYS:C	2.41	0.40
1:E:612:ILE:CD1	1:E:628:TYR:HD2	2.34	0.40
2:I:1048:TRP:NE1	2:I:1049:GLN:HG2	2.34	0.40
2:J:1873:ARG:NH1	2:J:2002:ASP:CB	2.83	0.40
1:A:1104:GLN:HG3	1:A:1105:ASP:O	2.22	0.40
2:K:1265:TYR:CZ	2:K:1267:PRO:HG3	2.54	0.40
2:K:791:TYR:HD2	2:K:796:TRP:CG	2.40	0.40
2:K:314:LEU:HG	2:K:318:ILE:CD1	2.45	0.40
1:E:650:PHE:CE2	1:E:881:LEU:HD22	2.57	0.40
2:J:1880:ASN:HB3	2:J:1881:TYR:CE1	2.57	0.40
2:G:797:SER:O	2:G:802:TYR:HB2	2.21	0.40

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:C:1280:CYS:HA	1:C:1566:LYS:O	2.21	0.40
1:C:681:ILE:HG23	1:C:681:ILE:O	2.21	0.40
2:J:497:ASP:HA	2:J:498:PRO:HD3	1.92	0.40
2:L:2003:VAL:HA	2:L:2004:PRO:HD3	1.78	0.40
2:H:747:ARG:NH2	2:H:757:PHE:CE1	2.90	0.40
2:G:1745:LEU:HD12	2:G:1746:THR:H	1.86	0.40
2:H:1891:ILE:HG22	2:H:1892:SER:N	2.36	0.40
2:J:1645:PRO:O	2:J:1646:ASN:HB2	2.21	0.40
1:C:759:ILE:N	1:C:759:ILE:HD12	2.37	0.40
2:H:1933:LEU:HB3	2:H:1987:VAL:HB	2.03	0.40
1:F:827:ARG:NH1	1:F:831:GLU:OE2	2.55	0.40
1:B:1363:MET:HE3	1:B:1368:ALA:CB	2.52	0.40
1:B:1365:ALA:O	1:B:1368:ALA:HB3	2.21	0.40
1:F:1199:LEU:HD23	1:F:1199:LEU:O	2.22	0.40
2:H:1706:MET:HE2	2:H:1738:VAL:CG1	2.51	0.40
2:H:1734:ILE:HG13	2:H:1735:ILE:N	2.36	0.40
2:J:48:LEU:HD11	2:J:101:VAL:HG21	2.03	0.40
2:I:1845:VAL:CB	2:I:1856:LEU:HD22	2.52	0.40
2:L:1933:LEU:HB3	2:L:1987:VAL:HB	2.03	0.40
2:J:1342:PHE:HE2	2:J:1391:VAL:CB	2.34	0.40
2:J:186:LEU:HD23	2:J:186:LEU:HA	1.82	0.40
2:G:1083:ILE:HG13	2:G:1083:ILE:H	1.48	0.40
2:G:789:TYR:O	2:G:792:LEU:HB3	2.22	0.40
2:L:815:ARG:NH2	2:L:1086:ILE:CG2	2.84	0.40
2:I:1865:LEU:O	2:I:1869:VAL:HG22	2.21	0.40
2:L:1171:TRP:CG	2:L:1172:ARG:N	2.89	0.40
1:B:1086:PHE:CZ	1:B:1310:PHE:HD2	2.39	0.40
2:H:1236:LEU:HD12	2:H:1242:ILE:HA	2.03	0.40
2:H:221:TYR:N	2:H:222:PRO:HD3	2.35	0.40
2:J:1299:VAL:HA	2:J:1300:PRO:HD3	1.80	0.40
2:K:24:LEU:CD1	2:K:37:VAL:HG21	2.48	0.40
2:G:220:GLN:O	2:G:222:PRO:HD3	2.20	0.40
2:I:138:ARG:HB2	2:I:192:THR:HA	2.03	0.40
2:L:521:VAL:O	2:L:521:VAL:HG12	2.21	0.40
2:K:1573:ALA:HA	2:K:1574:PRO:HD3	1.98	0.40
1:E:405:TRP:CH2	1:E:1609:SER:HB3	2.56	0.40
2:H:875:PHE:HE2	2:H:906:LEU:HD23	1.87	0.40
1:E:636:TYR:CE1	1:E:883:LEU:HD23	2.57	0.40
2:L:350:MET:HG3	2:L:435:ILE:CB	2.52	0.40
1:F:1301:VAL:HG22	1:F:1302:CYS:H	1.86	0.40
2:G:1248:GLU:OE2	2:G:1250:ARG:HG2	2.22	0.40
1:A:47:ILE:CD1	2:G:1818:PHE:CD1	3.04	0.40

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:E:1099:GLU:HA	1:E:1149:LEU:HD23	2.03	0.40
1:B:904:GLY:HA2	1:B:906:GLN:CD	2.41	0.40
1:A:12:THR:CG2	2:G:2066:LYS:HD3	2.51	0.40
2:G:2073:ASN:O	2:G:2076:LYS:N	2.54	0.40
1:E:1553:VAL:HG22	1:E:1604:TYR:O	2.21	0.40
2:J:1250:ARG:HD3	2:J:1250:ARG:H	1.86	0.40
2:K:123:ALA:O	2:K:126:VAL:HG23	2.22	0.40
2:G:1951:ILE:H	2:G:1951:ILE:HD12	1.86	0.40
1:B:1599:MET:HA	1:B:1602:PHE:HD2	1.87	0.40
1:C:1185:PRO:O	1:C:1188:LEU:HB2	2.21	0.40
2:H:1313:ARG:HG3	2:H:1394:VAL:CG1	2.52	0.40
2:L:1400:GLN:HE21	2:L:1400:GLN:N	2.20	0.40
2:L:1726:PHE:CE1	2:L:1857:VAL:HB	2.56	0.40
1:A:1527:THR:OG1	1:A:1530:ASN:HB3	2.21	0.40
1:A:996:VAL:HG11	1:A:1578:LEU:HD11	2.04	0.40
2:I:1619:LEU:O	2:I:1623:TRP:HB2	2.21	0.40
1:E:782:LYS:NZ	1:E:786:LYS:HD2	2.35	0.40
1:C:1440:TYR:O	1:C:1444:GLN:HB2	2.21	0.40
2:I:637:ASN:ND2	2:I:639:GLN:HB3	2.37	0.40
2:H:111:ARG:HB2	2:H:111:ARG:HE	1.71	0.40
1:E:1191:LEU:HA	1:E:1191:LEU:HD23	1.95	0.40
2:K:1470:LYS:HA	2:K:1470:LYS:HD3	1.90	0.40
2:I:1702:GLN:HB2	2:I:1702:GLN:HE21	1.68	0.40
2:L:245:SER:HA	2:L:436:THR:OG1	2.22	0.40
2:I:1488:LEU:HB2	2:I:1490:PHE:HE1	1.86	0.40
2:K:1733:SER:O	2:K:1737:ILE:HG13	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)
1:A:575:ARG:NH1	2:H:164:GLU:O[2.555]	2.01	0.19
1:B:1452:SER:O	2:G:1092:ASN:ND2[1_556]	2.18	0.02

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%)	1270 (88%)	164 (11%)	17 (1%)	19	62
1	B	1458/1878 (78%)	1278 (88%)	160 (11%)	20 (1%)	16	58
1	C	1456/1878 (78%)	1283 (88%)	156 (11%)	17 (1%)	19	62
1	D	1461/1878 (78%)	1276 (87%)	161 (11%)	24 (2%)	14	55
1	E	1450/1878 (77%)	1276 (88%)	155 (11%)	19 (1%)	18	60
1	F	1455/1878 (78%)	1282 (88%)	153 (10%)	20 (1%)	16	58
2	G	2058/2060 (100%)	1789 (87%)	237 (12%)	32 (2%)	14	55
2	H	2058/2060 (100%)	1791 (87%)	230 (11%)	37 (2%)	13	52
2	I	2058/2060 (100%)	1787 (87%)	238 (12%)	33 (2%)	14	55
2	J	2058/2060 (100%)	1784 (87%)	240 (12%)	34 (2%)	14	54
2	K	2058/2060 (100%)	1785 (87%)	239 (12%)	34 (2%)	14	54
2	L	2058/2060 (100%)	1780 (86%)	241 (12%)	37 (2%)	13	52
All	All	21079/23628 (89%)	18381 (87%)	2374 (11%)	324 (2%)	15	57

All (324) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	A	614	PHE
1	A	1566	LYS
1	B	614	PHE
1	B	624	GLY
1	B	1566	LYS
1	C	614	PHE
1	C	624	GLY
1	C	1566	LYS
1	D	614	PHE
1	D	624	GLY
1	D	1566	LYS
1	E	614	PHE
1	E	624	GLY
1	E	1566	LYS
1	F	613	PRO
1	F	614	PHE
1	F	624	GLY
1	F	1566	LYS
2	G	780	SER

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Mol	Chain	Res	Type
2	G	1986	PRO
2	G	2036	ILE
2	H	1986	PRO
2	H	2036	ILE
2	I	780	SER
2	I	1986	PRO
2	I	2036	ILE
2	J	780	SER
2	J	1986	PRO
2	J	2036	ILE
2	K	499	VAL
2	K	780	SER
2	K	1986	PRO
2	K	2036	ILE
2	L	780	SER
2	L	1986	PRO
2	L	2036	ILE
1	A	624	GLY
1	A	809	GLY
1	B	609	VAL
1	B	809	GLY
1	B	1166	THR
1	B	1226	VAL
1	C	425	VAL
1	C	809	GLY
1	C	812	GLY
1	C	1166	THR
1	D	425	VAL
1	D	527	ALA
1	D	809	GLY
1	D	1226	VAL
1	E	425	VAL
1	E	809	GLY
1	F	809	GLY
1	F	1226	VAL
2	G	520	GLY
2	G	665	VAL
2	G	742	GLN
2	G	1987	VAL
2	H	499	VAL
2	H	520	GLY
2	H	665	VAL

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Mol	Chain	Res	Type
2	H	780	SER
2	H	1987	VAL
2	I	520	GLY
2	I	665	VAL
2	I	1987	VAL
2	J	520	GLY
2	J	665	VAL
2	J	742	GLN
2	J	1987	VAL
2	K	520	GLY
2	K	665	VAL
2	K	742	GLN
2	K	1987	VAL
2	L	499	VAL
2	L	520	GLY
2	L	665	VAL
2	L	742	GLN
2	L	1987	VAL
1	A	425	VAL
1	A	426	ASP
1	A	846	TRP
1	A	1226	VAL
1	B	425	VAL
1	B	426	ASP
1	B	812	GLY
1	C	82	CYS
1	C	426	ASP
1	C	1226	VAL
1	D	82	CYS
1	D	426	ASP
1	D	526	MET
1	D	812	GLY
1	D	1166	THR
1	E	426	ASP
1	E	1166	THR
1	F	425	VAL
1	F	426	ASP
2	G	111	ARG
2	G	499	VAL
2	G	989	PRO
2	G	1212	PRO
2	G	1363	PRO

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Mol	Chain	Res	Type
2	G	1891	ILE
2	H	111	ARG
2	H	742	GLN
2	H	989	PRO
2	H	1212	PRO
2	H	1363	PRO
2	H	1961	SER
2	H	2012	SER
2	I	111	ARG
2	I	499	VAL
2	I	742	GLN
2	I	989	PRO
2	I	1212	PRO
2	I	1363	PRO
2	I	1891	ILE
2	J	111	ARG
2	J	499	VAL
2	J	989	PRO
2	J	1212	PRO
2	J	1363	PRO
2	J	1891	ILE
2	K	111	ARG
2	K	753	SER
2	K	989	PRO
2	K	1212	PRO
2	K	1363	PRO
2	K	1891	ILE
2	K	2012	SER
2	L	111	ARG
2	L	753	SER
2	L	989	PRO
2	L	1212	PRO
2	L	1363	PRO
2	L	1891	ILE
1	A	82	CYS
1	A	812	GLY
1	A	850	THR
1	A	1593	ASP
1	B	82	CYS
1	B	557	ARG
1	B	846	TRP
1	B	850	THR

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Mol	Chain	Res	Type
1	B	1593	ASP
1	C	66	GLU
1	C	846	TRP
1	D	66	GLU
1	D	546	ARG
1	D	582	SER
1	D	846	TRP
1	D	1468	ARG
1	E	66	GLU
1	E	82	CYS
1	E	812	GLY
1	E	846	TRP
1	E	1226	VAL
1	E	1593	ASP
1	F	82	CYS
1	F	812	GLY
1	F	846	TRP
1	F	1593	ASP
2	G	609	THR
2	G	1923	ALA
2	G	2076	LYS
2	H	609	THR
2	H	753	SER
2	H	1739	LYS
2	H	1891	ILE
2	I	753	SER
2	I	841	ASP
2	I	1961	SER
2	I	2012	SER
2	J	609	THR
2	J	841	ASP
2	J	2012	SER
2	K	609	THR
2	K	1279	GLU
2	L	609	THR
2	L	1739	LYS
2	L	1961	SER
2	L	2012	SER
1	A	66	GLU
1	A	546	ARG
1	A	703	GLY
1	B	66	GLU

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Mol	Chain	Res	Type
1	C	850	THR
1	C	1593	ASP
1	D	556	HIS
1	D	850	THR
1	D	1593	ASP
1	E	850	THR
1	E	1468	ARG
1	F	66	GLU
1	F	535	TYR
1	F	703	GLY
1	F	850	THR
1	F	1166	THR
2	G	127	ALA
2	G	602	PRO
2	G	753	SER
2	G	841	ASP
2	G	2012	SER
2	H	127	ALA
2	H	602	PRO
2	H	841	ASP
2	H	1752	PRO
2	H	1923	ALA
2	H	2076	LYS
2	I	609	THR
2	I	1739	LYS
2	I	1752	PRO
2	I	1859	VAL
2	I	2076	LYS
2	J	915	PHE
2	J	1752	PRO
2	J	1859	VAL
2	J	1923	ALA
2	J	1961	SER
2	K	602	PRO
2	K	841	ASP
2	K	869	ALA
2	K	1114	GLU
2	K	1739	LYS
2	K	1752	PRO
2	K	2076	LYS
2	L	602	PRO
2	L	841	ASP

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Mol	Chain	Res	Type
2	L	1859	VAL
2	L	1923	ALA
1	A	556	HIS
1	A	1468	ARG
1	B	703	GLY
1	B	1468	ARG
1	C	1468	ARG
1	D	606	PRO
1	D	703	GLY
1	E	556	HIS
1	E	703	GLY
1	F	1468	ARG
2	G	1688	PRO
2	G	1859	VAL
2	H	653	PRO
2	H	1859	VAL
2	I	653	PRO
2	I	1923	ALA
2	J	602	PRO
2	J	753	SER
2	J	1114	GLU
2	J	2076	LYS
2	K	498	PRO
2	K	616	ASP
2	K	803	PRO
2	K	1961	SER
2	L	127	ALA
2	L	480	GLU
2	L	653	PRO
2	L	1267	PRO
2	L	1752	PRO
1	D	1524	GLY
2	G	803	PRO
2	H	1258	PRO
2	H	1267	PRO
2	I	602	PRO
2	I	1632	VAL
2	J	519	GLY
2	J	653	PRO
2	J	1632	VAL
2	K	653	PRO
2	K	1267	PRO

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Mol	Chain	Res	Type
2	L	803	PRO
2	L	1258	PRO
1	B	1524	GLY
1	C	1524	GLY
1	F	1064	VAL
1	F	1524	GLY
2	G	498	PRO
2	G	1258	PRO
2	G	1267	PRO
2	G	1632	VAL
2	G	1752	PRO
2	H	57	PRO
2	H	498	PRO
2	H	803	PRO
2	H	1688	PRO
2	I	1316	VAL
2	J	1258	PRO
2	J	1267	PRO
2	K	57	PRO
2	L	498	PRO
1	D	1064	VAL
1	E	1524	GLY
2	G	57	PRO
2	G	653	PRO
2	H	1750	GLY
2	I	57	PRO
2	I	1258	PRO
2	I	1267	PRO
2	J	57	PRO
2	K	250	PHE
2	K	1258	PRO
2	L	57	PRO
2	L	1632	VAL
2	L	1750	GLY
2	L	2047	PRO
1	B	1064	VAL
1	C	1064	VAL
1	E	1064	VAL
2	G	250	PHE
2	H	1632	VAL
2	H	2047	PRO
2	I	153	PRO

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Mol	Chain	Res	Type
2	I	498	PRO
2	I	2047	PRO
2	J	153	PRO
2	J	498	PRO
2	J	803	PRO
2	K	153	PRO
2	L	153	PRO
2	L	250	PHE
2	L	521	VAL
2	H	153	PRO
2	H	250	PHE

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%)	1107 (91%)	113 (9%)	13	44
1	B	1227/1527 (80%)	1117 (91%)	110 (9%)	14	47
1	C	1225/1527 (80%)	1110 (91%)	115 (9%)	13	43
1	D	1229/1527 (80%)	1107 (90%)	122 (10%)	11	39
1	E	1219/1527 (80%)	1106 (91%)	113 (9%)	13	44
1	F	1224/1527 (80%)	1111 (91%)	113 (9%)	13	45
2	G	1752/1752 (100%)	1569 (90%)	183 (10%)	10	36
2	H	1752/1752 (100%)	1569 (90%)	183 (10%)	10	36
2	I	1752/1752 (100%)	1565 (89%)	187 (11%)	10	35
2	J	1752/1752 (100%)	1567 (89%)	185 (11%)	10	35
2	K	1752/1752 (100%)	1566 (89%)	186 (11%)	10	35
2	L	1752/1752 (100%)	1563 (89%)	189 (11%)	9	34
All	All	17856/19674 (91%)	16057 (90%)	1799 (10%)	11	38

All (1799) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	A	1	MET
1	A	12	THR
1	A	21	GLN
1	A	27	ARG
1	A	60	THR
1	A	61	LEU
1	A	352	ARG
1	A	358	PHE
1	A	361	SER
1	A	365	GLN
1	A	368	LEU
1	A	397	ARG
1	A	400	ASP
1	A	409	ASP
1	A	424	VAL
1	A	427	ARG
1	A	439	ARG
1	A	441	ASN
1	A	443	LEU
1	A	444	LEU
1	A	448	MET
1	A	486	VAL
1	A	492	ILE
1	A	513	ARG
1	A	547	SER
1	A	552	ILE
1	A	557	ARG
1	A	561	SER
1	A	562	SER
1	A	564	LEU
1	A	570	TYR
1	A	575	ARG
1	A	628	TYR
1	A	684	THR
1	A	687	PHE
1	A	696	GLN
1	A	709	LEU
1	A	725	LEU
1	A	736	LEU
1	A	754	ARG
1	A	770	MET
1	A	772	THR
1	A	783	THR

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Mol	Chain	Res	Type
1	A	793	ARG
1	A	813	LEU
1	A	815	SER
1	A	817	SER
1	A	837	LEU
1	A	843	VAL
1	A	850	THR
1	A	854	SER
1	A	869	ARG
1	A	883	LEU
1	A	911	LEU
1	A	919	ARG
1	A	946	GLU
1	A	980	LEU
1	A	984	LEU
1	A	988	VAL
1	A	995	VAL
1	A	999	LEU
1	A	1017	TYR
1	A	1022	LEU
1	A	1039	ASN
1	A	1042	LEU
1	A	1079	ARG
1	A	1093	ARG
1	A	1106	LEU
1	A	1107	GLU
1	A	1157	ASP
1	A	1158	ARG
1	A	1186	VAL
1	A	1226	VAL
1	A	1232	LEU
1	A	1249	ILE
1	A	1258	MET
1	A	1267	LEU
1	A	1273	ILE
1	A	1288	ASP
1	A	1308	ASP
1	A	1313	GLU
1	A	1317	GLU
1	A	1324	THR
1	A	1342	ARG
1	A	1344	THR

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Mol	Chain	Res	Type
1	A	1347	THR
1	A	1360	GLN
1	A	1361	VAL
1	A	1366	GLN
1	A	1367	LEU
1	A	1386	THR
1	A	1401	LEU
1	A	1418	ILE
1	A	1422	ARG
1	A	1457	GLU
1	A	1491	ASN
1	A	1504	ARG
1	A	1509	THR
1	A	1514	ILE
1	A	1538	ILE
1	A	1545	LEU
1	A	1553	VAL
1	A	1561	LEU
1	A	1564	HIS
1	A	1593	ASP
1	A	1603	ASP
1	A	1606	VAL
1	A	1617	ILE
1	A	1623	THR
1	A	1662	GLN
1	A	1673	LEU
1	A	1702	ARG
1	A	1707	SER
1	B	1	MET
1	B	12	THR
1	B	21	GLN
1	B	27	ARG
1	B	60	THR
1	B	61	LEU
1	B	352	ARG
1	B	361	SER
1	B	365	GLN
1	B	368	LEU
1	B	397	ARG
1	B	400	ASP
1	B	409	ASP
1	B	414	TYR

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Mol	Chain	Res	Type
1	B	424	VAL
1	B	427	ARG
1	B	439	ARG
1	B	441	ASN
1	B	443	LEU
1	B	444	LEU
1	B	448	MET
1	B	486	VAL
1	B	492	ILE
1	B	513	ARG
1	B	547	SER
1	B	551	LEU
1	B	557	ARG
1	B	567	ASN
1	B	574	ILE
1	B	628	TYR
1	B	684	THR
1	B	687	PHE
1	B	696	GLN
1	B	709	LEU
1	B	725	LEU
1	B	736	LEU
1	B	754	ARG
1	B	770	MET
1	B	772	THR
1	B	783	THR
1	B	793	ARG
1	B	813	LEU
1	B	815	SER
1	B	817	SER
1	B	837	LEU
1	B	843	VAL
1	B	850	THR
1	B	854	SER
1	B	869	ARG
1	B	883	LEU
1	B	911	LEU
1	B	919	ARG
1	B	980	LEU
1	B	984	LEU
1	B	988	VAL
1	B	995	VAL

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Mol	Chain	Res	Type
1	B	999	LEU
1	B	1017	TYR
1	B	1022	LEU
1	B	1039	ASN
1	B	1042	LEU
1	B	1079	ARG
1	B	1093	ARG
1	B	1106	LEU
1	B	1107	GLU
1	B	1157	ASP
1	B	1158	ARG
1	B	1226	VAL
1	B	1232	LEU
1	B	1249	ILE
1	B	1258	MET
1	B	1267	LEU
1	B	1273	ILE
1	B	1288	ASP
1	B	1308	ASP
1	B	1313	GLU
1	B	1317	GLU
1	B	1342	ARG
1	B	1344	THR
1	B	1347	THR
1	B	1353	GLU
1	B	1360	GLN
1	B	1361	VAL
1	B	1366	GLN
1	B	1367	LEU
1	B	1386	THR
1	B	1401	LEU
1	B	1418	ILE
1	B	1422	ARG
1	B	1457	GLU
1	B	1464	THR
1	B	1482	GLU
1	B	1491	ASN
1	B	1504	ARG
1	B	1509	THR
1	B	1514	ILE
1	B	1538	ILE
1	B	1545	LEU

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Mol	Chain	Res	Type
1	B	1553	VAL
1	B	1561	LEU
1	B	1564	HIS
1	B	1593	ASP
1	B	1603	ASP
1	B	1606	VAL
1	B	1617	ILE
1	B	1623	THR
1	B	1662	GLN
1	B	1673	LEU
1	B	1702	ARG
1	B	1707	SER
1	C	1	MET
1	C	12	THR
1	C	21	GLN
1	C	27	ARG
1	C	60	THR
1	C	61	LEU
1	C	352	ARG
1	C	358	PHE
1	C	361	SER
1	C	365	GLN
1	C	368	LEU
1	C	397	ARG
1	C	400	ASP
1	C	409	ASP
1	C	414	TYR
1	C	424	VAL
1	C	427	ARG
1	C	439	ARG
1	C	441	ASN
1	C	443	LEU
1	C	444	LEU
1	C	448	MET
1	C	465	LEU
1	C	486	VAL
1	C	492	ILE
1	C	513	ARG
1	C	536	SER
1	C	547	SER
1	C	551	LEU
1	C	557	ARG

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Mol	Chain	Res	Type
1	C	567	ASN
1	C	574	ILE
1	C	628	TYR
1	C	684	THR
1	C	687	PHE
1	C	696	GLN
1	C	709	LEU
1	C	725	LEU
1	C	736	LEU
1	C	754	ARG
1	C	770	MET
1	C	772	THR
1	C	783	THR
1	C	793	ARG
1	C	813	LEU
1	C	815	SER
1	C	817	SER
1	C	837	LEU
1	C	843	VAL
1	C	850	THR
1	C	854	SER
1	C	869	ARG
1	C	883	LEU
1	C	909	PRO
1	C	911	LEU
1	C	919	ARG
1	C	946	GLU
1	C	980	LEU
1	C	984	LEU
1	C	988	VAL
1	C	995	VAL
1	C	999	LEU
1	C	1017	TYR
1	C	1022	LEU
1	C	1039	ASN
1	C	1042	LEU
1	C	1061	ASP
1	C	1079	ARG
1	C	1093	ARG
1	C	1106	LEU
1	C	1107	GLU
1	C	1157	ASP

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Mol	Chain	Res	Type
1	C	1158	ARG
1	C	1183	VAL
1	C	1226	VAL
1	C	1232	LEU
1	C	1249	ILE
1	C	1258	MET
1	C	1267	LEU
1	C	1273	ILE
1	C	1288	ASP
1	C	1313	GLU
1	C	1317	GLU
1	C	1342	ARG
1	C	1344	THR
1	C	1347	THR
1	C	1360	GLN
1	C	1361	VAL
1	C	1366	GLN
1	C	1367	LEU
1	C	1386	THR
1	C	1401	LEU
1	C	1418	ILE
1	C	1422	ARG
1	C	1457	GLU
1	C	1464	THR
1	C	1482	GLU
1	C	1491	ASN
1	C	1504	ARG
1	C	1509	THR
1	C	1514	ILE
1	C	1538	ILE
1	C	1545	LEU
1	C	1553	VAL
1	C	1561	LEU
1	C	1589	ASN
1	C	1593	ASP
1	C	1603	ASP
1	C	1606	VAL
1	C	1617	ILE
1	C	1623	THR
1	C	1662	GLN
1	C	1673	LEU
1	C	1702	ARG

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Mol	Chain	Res	Type
1	C	1707	SER
1	D	1	MET
1	D	12	THR
1	D	21	GLN
1	D	27	ARG
1	D	60	THR
1	D	61	LEU
1	D	352	ARG
1	D	358	PHE
1	D	361	SER
1	D	365	GLN
1	D	368	LEU
1	D	397	ARG
1	D	400	ASP
1	D	409	ASP
1	D	414	TYR
1	D	424	VAL
1	D	427	ARG
1	D	439	ARG
1	D	441	ASN
1	D	443	LEU
1	D	444	LEU
1	D	448	MET
1	D	465	LEU
1	D	486	VAL
1	D	492	ILE
1	D	513	ARG
1	D	547	SER
1	D	552	ILE
1	D	557	ARG
1	D	561	SER
1	D	562	SER
1	D	564	LEU
1	D	570	TYR
1	D	575	ARG
1	D	579	MET
1	D	581	GLU
1	D	582	SER
1	D	584	ILE
1	D	628	TYR
1	D	684	THR
1	D	687	PHE

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Mol	Chain	Res	Type
1	D	696	GLN
1	D	709	LEU
1	D	725	LEU
1	D	736	LEU
1	D	754	ARG
1	D	770	MET
1	D	772	THR
1	D	783	THR
1	D	793	ARG
1	D	813	LEU
1	D	815	SER
1	D	817	SER
1	D	837	LEU
1	D	843	VAL
1	D	850	THR
1	D	854	SER
1	D	869	ARG
1	D	883	LEU
1	D	911	LEU
1	D	919	ARG
1	D	946	GLU
1	D	980	LEU
1	D	984	LEU
1	D	988	VAL
1	D	995	VAL
1	D	999	LEU
1	D	1022	LEU
1	D	1039	ASN
1	D	1042	LEU
1	D	1061	ASP
1	D	1079	ARG
1	D	1093	ARG
1	D	1106	LEU
1	D	1107	GLU
1	D	1157	ASP
1	D	1158	ARG
1	D	1226	VAL
1	D	1229	THR
1	D	1232	LEU
1	D	1249	ILE
1	D	1258	MET
1	D	1267	LEU

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Mol	Chain	Res	Type
1	D	1273	ILE
1	D	1288	ASP
1	D	1313	GLU
1	D	1317	GLU
1	D	1342	ARG
1	D	1344	THR
1	D	1347	THR
1	D	1360	GLN
1	D	1361	VAL
1	D	1366	GLN
1	D	1367	LEU
1	D	1386	THR
1	D	1387	ASP
1	D	1401	LEU
1	D	1418	ILE
1	D	1422	ARG
1	D	1441	LEU
1	D	1457	GLU
1	D	1464	THR
1	D	1482	GLU
1	D	1491	ASN
1	D	1504	ARG
1	D	1509	THR
1	D	1514	ILE
1	D	1538	ILE
1	D	1545	LEU
1	D	1553	VAL
1	D	1561	LEU
1	D	1564	HIS
1	D	1589	ASN
1	D	1593	ASP
1	D	1603	ASP
1	D	1606	VAL
1	D	1617	ILE
1	D	1623	THR
1	D	1646	LEU
1	D	1662	GLN
1	D	1673	LEU
1	D	1702	ARG
1	E	1	MET
1	E	12	THR
1	E	21	GLN

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Mol	Chain	Res	Type
1	E	27	ARG
1	E	60	THR
1	E	61	LEU
1	E	352	ARG
1	E	358	PHE
1	E	361	SER
1	E	365	GLN
1	E	368	LEU
1	E	397	ARG
1	E	400	ASP
1	E	409	ASP
1	E	414	TYR
1	E	424	VAL
1	E	427	ARG
1	E	439	ARG
1	E	441	ASN
1	E	443	LEU
1	E	444	LEU
1	E	448	MET
1	E	486	VAL
1	E	492	ILE
1	E	513	ARG
1	E	547	SER
1	E	552	ILE
1	E	557	ARG
1	E	562	SER
1	E	564	LEU
1	E	570	TYR
1	E	628	TYR
1	E	684	THR
1	E	687	PHE
1	E	696	GLN
1	E	709	LEU
1	E	713	PRO
1	E	725	LEU
1	E	736	LEU
1	E	754	ARG
1	E	770	MET
1	E	772	THR
1	E	783	THR
1	E	793	ARG
1	E	813	LEU

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Mol	Chain	Res	Type
1	E	815	SER
1	E	817	SER
1	E	837	LEU
1	E	843	VAL
1	E	850	THR
1	E	869	ARG
1	E	883	LEU
1	E	911	LEU
1	E	919	ARG
1	E	946	GLU
1	E	980	LEU
1	E	984	LEU
1	E	988	VAL
1	E	995	VAL
1	E	999	LEU
1	E	1022	LEU
1	E	1039	ASN
1	E	1042	LEU
1	E	1061	ASP
1	E	1079	ARG
1	E	1093	ARG
1	E	1106	LEU
1	E	1107	GLU
1	E	1157	ASP
1	E	1158	ARG
1	E	1186	VAL
1	E	1226	VAL
1	E	1232	LEU
1	E	1249	ILE
1	E	1258	MET
1	E	1267	LEU
1	E	1273	ILE
1	E	1288	ASP
1	E	1313	GLU
1	E	1317	GLU
1	E	1324	THR
1	E	1342	ARG
1	E	1344	THR
1	E	1347	THR
1	E	1360	GLN
1	E	1361	VAL
1	E	1366	GLN

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Mol	Chain	Res	Type
1	E	1367	LEU
1	E	1386	THR
1	E	1401	LEU
1	E	1418	ILE
1	E	1422	ARG
1	E	1457	GLU
1	E	1464	THR
1	E	1482	GLU
1	E	1491	ASN
1	E	1504	ARG
1	E	1509	THR
1	E	1514	ILE
1	E	1538	ILE
1	E	1545	LEU
1	E	1553	VAL
1	E	1561	LEU
1	E	1564	HIS
1	E	1593	ASP
1	E	1603	ASP
1	E	1606	VAL
1	E	1617	ILE
1	E	1623	THR
1	E	1662	GLN
1	E	1673	LEU
1	E	1702	ARG
1	E	1708	ASN
1	F	1	MET
1	F	12	THR
1	F	21	GLN
1	F	27	ARG
1	F	60	THR
1	F	61	LEU
1	F	352	ARG
1	F	361	SER
1	F	365	GLN
1	F	368	LEU
1	F	397	ARG
1	F	400	ASP
1	F	409	ASP
1	F	414	TYR
1	F	424	VAL
1	F	427	ARG

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Mol	Chain	Res	Type
1	F	441	ASN
1	F	443	LEU
1	F	444	LEU
1	F	448	MET
1	F	492	ILE
1	F	513	ARG
1	F	533	SER
1	F	535	TYR
1	F	547	SER
1	F	551	LEU
1	F	557	ARG
1	F	567	ASN
1	F	574	ILE
1	F	585	MET
1	F	612	ILE
1	F	613	PRO
1	F	628	TYR
1	F	684	THR
1	F	687	PHE
1	F	696	GLN
1	F	709	LEU
1	F	725	LEU
1	F	736	LEU
1	F	754	ARG
1	F	770	MET
1	F	772	THR
1	F	783	THR
1	F	793	ARG
1	F	813	LEU
1	F	815	SER
1	F	817	SER
1	F	837	LEU
1	F	843	VAL
1	F	850	THR
1	F	854	SER
1	F	869	ARG
1	F	883	LEU
1	F	911	LEU
1	F	919	ARG
1	F	980	LEU
1	F	984	LEU
1	F	988	VAL

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Mol	Chain	Res	Type
1	F	995	VAL
1	F	999	LEU
1	F	1022	LEU
1	F	1039	ASN
1	F	1042	LEU
1	F	1061	ASP
1	F	1079	ARG
1	F	1093	ARG
1	F	1106	LEU
1	F	1107	GLU
1	F	1157	ASP
1	F	1158	ARG
1	F	1226	VAL
1	F	1232	LEU
1	F	1249	ILE
1	F	1258	MET
1	F	1267	LEU
1	F	1273	ILE
1	F	1288	ASP
1	F	1308	ASP
1	F	1313	GLU
1	F	1317	GLU
1	F	1342	ARG
1	F	1344	THR
1	F	1347	THR
1	F	1353	GLU
1	F	1360	GLN
1	F	1361	VAL
1	F	1366	GLN
1	F	1367	LEU
1	F	1386	THR
1	F	1401	LEU
1	F	1418	ILE
1	F	1422	ARG
1	F	1441	LEU
1	F	1457	GLU
1	F	1491	ASN
1	F	1504	ARG
1	F	1509	THR
1	F	1514	ILE
1	F	1538	ILE
1	F	1545	LEU

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Mol	Chain	Res	Type
1	F	1553	VAL
1	F	1561	LEU
1	F	1564	HIS
1	F	1565	PRO
1	F	1593	ASP
1	F	1603	ASP
1	F	1606	VAL
1	F	1617	ILE
1	F	1623	THR
1	F	1662	GLN
1	F	1673	LEU
1	F	1702	ARG
1	F	1707	SER
2	G	30	SER
2	G	31	LEU
2	G	37	VAL
2	G	62	GLU
2	G	63	LEU
2	G	126	VAL
2	G	134	ILE
2	G	155	ASP
2	G	158	LEU
2	G	167	VAL
2	G	216	ASP
2	G	218	VAL
2	G	252	LEU
2	G	262	MET
2	G	276	LEU
2	G	295	ILE
2	G	300	THR
2	G	302	ASP
2	G	317	TRP
2	G	329	THR
2	G	339	SER
2	G	346	THR
2	G	351	LEU
2	G	356	LEU
2	G	375	ASP
2	G	382	LEU
2	G	387	ARG
2	G	388	ASN
2	G	401	LEU

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Mol	Chain	Res	Type
2	G	436	THR
2	G	464	SER
2	G	472	THR
2	G	474	THR
2	G	477	ASP
2	G	484	GLU
2	G	486	ILE
2	G	489	GLU
2	G	549	ASN
2	G	570	VAL
2	G	583	THR
2	G	600	VAL
2	G	604	MET
2	G	609	THR
2	G	616	ASP
2	G	618	VAL
2	G	652	ILE
2	G	663	ILE
2	G	670	MET
2	G	690	LEU
2	G	709	LEU
2	G	726	GLN
2	G	727	VAL
2	G	747	ARG
2	G	757	PHE
2	G	763	LEU
2	G	786	GLU
2	G	814	SER
2	G	818	THR
2	G	820	LYS
2	G	827	GLN
2	G	843	TRP
2	G	846	THR
2	G	855	ILE
2	G	856	THR
2	G	870	THR
2	G	876	TRP
2	G	878	GLU
2	G	883	ILE
2	G	900	ASP
2	G	903	ILE
2	G	906	LEU

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Mol	Chain	Res	Type
2	G	909	ASP
2	G	917	ARG
2	G	918	ASN
2	G	924	VAL
2	G	935	VAL
2	G	944	VAL
2	G	964	ARG
2	G	971	THR
2	G	979	LEU
2	G	995	ARG
2	G	1004	SER
2	G	1007	LEU
2	G	1008	ILE
2	G	1009	ASN
2	G	1036	GLU
2	G	1047	LEU
2	G	1050	SER
2	G	1063	ARG
2	G	1065	CYS
2	G	1071	VAL
2	G	1079	ILE
2	G	1083	ILE
2	G	1086	ILE
2	G	1104	ASP
2	G	1171	TRP
2	G	1180	VAL
2	G	1186	ARG
2	G	1194	ARG
2	G	1200	ARG
2	G	1207	THR
2	G	1217	ILE
2	G	1225	SER
2	G	1234	ILE
2	G	1235	LYS
2	G	1246	LEU
2	G	1250	ARG
2	G	1259	LEU
2	G	1265	TYR
2	G	1266	HIS
2	G	1294	PHE
2	G	1299	VAL
2	G	1302	ASP

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Mol	Chain	Res	Type
2	G	1305	LEU
2	G	1309	PHE
2	G	1313	ARG
2	G	1338	ARG
2	G	1351	VAL
2	G	1373	LEU
2	G	1383	VAL
2	G	1391	VAL
2	G	1400	GLN
2	G	1405	ILE
2	G	1409	SER
2	G	1421	ARG
2	G	1424	LYS
2	G	1431	SER
2	G	1436	ARG
2	G	1444	ASN
2	G	1462	GLN
2	G	1467	LEU
2	G	1483	LEU
2	G	1484	LEU
2	G	1487	THR
2	G	1496	VAL
2	G	1523	ILE
2	G	1541	ILE
2	G	1563	LEU
2	G	1564	SER
2	G	1590	ILE
2	G	1593	SER
2	G	1594	ARG
2	G	1595	VAL
2	G	1602	LEU
2	G	1622	THR
2	G	1628	ASN
2	G	1639	MET
2	G	1643	VAL
2	G	1655	HIS
2	G	1674	THR
2	G	1690	THR
2	G	1707	ASP
2	G	1708	LEU
2	G	1709	TYR
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	1789	THR
2	G	1803	THR
2	G	1804	GLN
2	G	1812	LEU
2	G	1813	MET
2	G	1823	SER
2	G	1851	MET
2	G	1866	THR
2	G	1873	ARG
2	G	1896	THR
2	G	1900	LEU
2	G	1951	ILE
2	G	1965	VAL
2	G	1972	ILE
2	G	1977	ARG
2	G	1985	GLN
2	G	2008	THR
2	G	2009	PHE
2	G	2036	ILE
2	G	2039	TYR
2	G	2049	GLU
2	G	2052	LYS
2	G	2062	THR
2	G	2064	SER
2	G	2067	ILE
2	H	31	LEU
2	H	37	VAL
2	H	48	LEU
2	H	62	GLU
2	H	63	LEU
2	H	126	VAL
2	H	134	ILE
2	H	155	ASP
2	H	158	LEU
2	H	216	ASP
2	H	218	VAL
2	H	252	LEU
2	H	262	MET
2	H	276	LEU

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Mol	Chain	Res	Type
2	H	289	ILE
2	H	295	ILE
2	H	300	THR
2	H	302	ASP
2	H	317	TRP
2	H	329	THR
2	H	334	SER
2	H	339	SER
2	H	346	THR
2	H	351	LEU
2	H	356	LEU
2	H	375	ASP
2	H	382	LEU
2	H	387	ARG
2	H	388	ASN
2	H	401	LEU
2	H	436	THR
2	H	464	SER
2	H	472	THR
2	H	474	THR
2	H	477	ASP
2	H	484	GLU
2	H	486	ILE
2	H	489	GLU
2	H	549	ASN
2	H	570	VAL
2	H	583	THR
2	H	600	VAL
2	H	604	MET
2	H	609	THR
2	H	616	ASP
2	H	618	VAL
2	H	652	ILE
2	H	663	ILE
2	H	670	MET
2	H	690	LEU
2	H	709	LEU
2	H	726	GLN
2	H	727	VAL
2	H	747	ARG
2	H	757	PHE
2	H	763	LEU

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Mol	Chain	Res	Type
2	H	780	SER
2	H	814	SER
2	H	818	THR
2	H	820	LYS
2	H	827	GLN
2	H	843	TRP
2	H	846	THR
2	H	855	ILE
2	H	856	THR
2	H	870	THR
2	H	876	TRP
2	H	878	GLU
2	H	883	ILE
2	H	900	ASP
2	H	903	ILE
2	H	906	LEU
2	H	909	ASP
2	H	917	ARG
2	H	918	ASN
2	H	924	VAL
2	H	935	VAL
2	H	944	VAL
2	H	964	ARG
2	H	971	THR
2	H	979	LEU
2	H	984	SER
2	H	995	ARG
2	H	1004	SER
2	H	1007	LEU
2	H	1008	ILE
2	H	1009	ASN
2	H	1036	GLU
2	H	1047	LEU
2	H	1063	ARG
2	H	1065	CYS
2	H	1071	VAL
2	H	1079	ILE
2	H	1083	ILE
2	H	1086	ILE
2	H	1104	ASP
2	H	1171	TRP
2	H	1180	VAL

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Mol	Chain	Res	Type
2	H	1186	ARG
2	H	1194	ARG
2	H	1200	ARG
2	H	1207	THR
2	H	1217	ILE
2	H	1225	SER
2	H	1234	ILE
2	H	1235	LYS
2	H	1246	LEU
2	H	1250	ARG
2	H	1259	LEU
2	H	1265	TYR
2	H	1266	HIS
2	H	1294	PHE
2	H	1299	VAL
2	H	1302	ASP
2	H	1305	LEU
2	H	1309	PHE
2	H	1313	ARG
2	H	1338	ARG
2	H	1351	VAL
2	H	1373	LEU
2	H	1383	VAL
2	H	1391	VAL
2	H	1400	GLN
2	H	1405	ILE
2	H	1409	SER
2	H	1421	ARG
2	H	1424	LYS
2	H	1431	SER
2	H	1436	ARG
2	H	1444	ASN
2	H	1462	GLN
2	H	1467	LEU
2	H	1483	LEU
2	H	1484	LEU
2	H	1487	THR
2	H	1496	VAL
2	H	1523	ILE
2	H	1563	LEU
2	H	1564	SER
2	H	1583	VAL

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Mol	Chain	Res	Type
2	H	1590	ILE
2	H	1593	SER
2	H	1594	ARG
2	H	1595	VAL
2	H	1602	LEU
2	H	1622	THR
2	H	1628	ASN
2	H	1639	MET
2	H	1643	VAL
2	H	1655	HIS
2	H	1674	THR
2	H	1690	THR
2	H	1707	ASP
2	H	1708	LEU
2	H	1709	TYR
2	H	1717	GLU
2	H	1740	ASN
2	H	1745	LEU
2	H	1746	THR
2	H	1789	THR
2	H	1792	THR
2	H	1804	GLN
2	H	1812	LEU
2	H	1813	MET
2	H	1823	SER
2	H	1866	THR
2	H	1873	ARG
2	H	1896	THR
2	H	1900	LEU
2	H	1951	ILE
2	H	1965	VAL
2	H	1972	ILE
2	H	1977	ARG
2	H	1985	GLN
2	H	2008	THR
2	H	2009	PHE
2	H	2036	ILE
2	H	2039	TYR
2	H	2049	GLU
2	H	2052	LYS
2	H	2062	THR
2	H	2064	SER

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Mol	Chain	Res	Type
2	H	2067	ILE
2	I	31	LEU
2	I	37	VAL
2	I	48	LEU
2	I	62	GLU
2	I	63	LEU
2	I	126	VAL
2	I	134	ILE
2	I	155	ASP
2	I	158	LEU
2	I	167	VAL
2	I	195	SER
2	I	218	VAL
2	I	252	LEU
2	I	262	MET
2	I	276	LEU
2	I	295	ILE
2	I	300	THR
2	I	302	ASP
2	I	317	TRP
2	I	329	THR
2	I	339	SER
2	I	346	THR
2	I	351	LEU
2	I	356	LEU
2	I	375	ASP
2	I	382	LEU
2	I	387	ARG
2	I	388	ASN
2	I	401	LEU
2	I	436	THR
2	I	464	SER
2	I	472	THR
2	I	474	THR
2	I	477	ASP
2	I	484	GLU
2	I	486	ILE
2	I	489	GLU
2	I	549	ASN
2	I	570	VAL
2	I	583	THR
2	I	600	VAL

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Mol	Chain	Res	Type
2	I	604	MET
2	I	609	THR
2	I	616	ASP
2	I	618	VAL
2	I	652	ILE
2	I	663	ILE
2	I	670	MET
2	I	690	LEU
2	I	709	LEU
2	I	726	GLN
2	I	727	VAL
2	I	747	ARG
2	I	757	PHE
2	I	763	LEU
2	I	814	SER
2	I	818	THR
2	I	820	LYS
2	I	827	GLN
2	I	843	TRP
2	I	846	THR
2	I	855	ILE
2	I	856	THR
2	I	857	VAL
2	I	870	THR
2	I	876	TRP
2	I	878	GLU
2	I	883	ILE
2	I	900	ASP
2	I	903	ILE
2	I	906	LEU
2	I	909	ASP
2	I	917	ARG
2	I	918	ASN
2	I	924	VAL
2	I	935	VAL
2	I	944	VAL
2	I	964	ARG
2	I	971	THR
2	I	979	LEU
2	I	995	ARG
2	I	1004	SER
2	I	1007	LEU

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Mol	Chain	Res	Type
2	I	1008	ILE
2	I	1009	ASN
2	I	1028	VAL
2	I	1036	GLU
2	I	1047	LEU
2	I	1050	SER
2	I	1053	ILE
2	I	1061	VAL
2	I	1063	ARG
2	I	1065	CYS
2	I	1071	VAL
2	I	1079	ILE
2	I	1083	ILE
2	I	1086	ILE
2	I	1104	ASP
2	I	1171	TRP
2	I	1180	VAL
2	I	1186	ARG
2	I	1194	ARG
2	I	1200	ARG
2	I	1207	THR
2	I	1217	ILE
2	I	1225	SER
2	I	1234	ILE
2	I	1235	LYS
2	I	1246	LEU
2	I	1250	ARG
2	I	1259	LEU
2	I	1265	TYR
2	I	1266	HIS
2	I	1290	TYR
2	I	1294	PHE
2	I	1299	VAL
2	I	1302	ASP
2	I	1305	LEU
2	I	1309	PHE
2	I	1313	ARG
2	I	1338	ARG
2	I	1351	VAL
2	I	1373	LEU
2	I	1383	VAL
2	I	1391	VAL

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Mol	Chain	Res	Type
2	I	1400	GLN
2	I	1405	ILE
2	I	1406	ASN
2	I	1409	SER
2	I	1421	ARG
2	I	1424	LYS
2	I	1431	SER
2	I	1444	ASN
2	I	1462	GLN
2	I	1467	LEU
2	I	1483	LEU
2	I	1484	LEU
2	I	1487	THR
2	I	1496	VAL
2	I	1505	SER
2	I	1523	ILE
2	I	1563	LEU
2	I	1564	SER
2	I	1590	ILE
2	I	1593	SER
2	I	1594	ARG
2	I	1595	VAL
2	I	1602	LEU
2	I	1622	THR
2	I	1628	ASN
2	I	1639	MET
2	I	1643	VAL
2	I	1655	HIS
2	I	1674	THR
2	I	1690	THR
2	I	1707	ASP
2	I	1708	LEU
2	I	1709	TYR
2	I	1717	GLU
2	I	1740	ASN
2	I	1745	LEU
2	I	1746	THR
2	I	1783	GLU
2	I	1789	THR
2	I	1792	THR
2	I	1803	THR
2	I	1804	GLN

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Mol	Chain	Res	Type
2	I	1812	LEU
2	I	1813	MET
2	I	1823	SER
2	I	1866	THR
2	I	1873	ARG
2	I	1896	THR
2	I	1900	LEU
2	I	1951	ILE
2	I	1965	VAL
2	I	1972	ILE
2	I	1977	ARG
2	I	1985	GLN
2	I	2009	PHE
2	I	2036	ILE
2	I	2039	TYR
2	I	2049	GLU
2	I	2052	LYS
2	I	2062	THR
2	I	2064	SER
2	I	2067	ILE
2	J	30	SER
2	J	31	LEU
2	J	37	VAL
2	J	48	LEU
2	J	62	GLU
2	J	63	LEU
2	J	126	VAL
2	J	134	ILE
2	J	155	ASP
2	J	158	LEU
2	J	167	VAL
2	J	218	VAL
2	J	252	LEU
2	J	262	MET
2	J	264	THR
2	J	276	LEU
2	J	295	ILE
2	J	300	THR
2	J	302	ASP
2	J	317	TRP
2	J	329	THR
2	J	339	SER

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Mol	Chain	Res	Type
2	J	346	THR
2	J	351	LEU
2	J	356	LEU
2	J	375	ASP
2	J	382	LEU
2	J	387	ARG
2	J	388	ASN
2	J	401	LEU
2	J	436	THR
2	J	464	SER
2	J	472	THR
2	J	474	THR
2	J	477	ASP
2	J	484	GLU
2	J	486	ILE
2	J	489	GLU
2	J	549	ASN
2	J	570	VAL
2	J	583	THR
2	J	600	VAL
2	J	604	MET
2	J	609	THR
2	J	616	ASP
2	J	618	VAL
2	J	652	ILE
2	J	663	ILE
2	J	670	MET
2	J	690	LEU
2	J	709	LEU
2	J	726	GLN
2	J	727	VAL
2	J	747	ARG
2	J	757	PHE
2	J	763	LEU
2	J	814	SER
2	J	818	THR
2	J	820	LYS
2	J	827	GLN
2	J	843	TRP
2	J	846	THR
2	J	855	ILE
2	J	856	THR

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Mol	Chain	Res	Type
2	J	857	VAL
2	J	870	THR
2	J	876	TRP
2	J	878	GLU
2	J	883	ILE
2	J	900	ASP
2	J	903	ILE
2	J	906	LEU
2	J	909	ASP
2	J	917	ARG
2	J	918	ASN
2	J	924	VAL
2	J	935	VAL
2	J	944	VAL
2	J	964	ARG
2	J	971	THR
2	J	979	LEU
2	J	995	ARG
2	J	1004	SER
2	J	1007	LEU
2	J	1008	ILE
2	J	1009	ASN
2	J	1036	GLU
2	J	1047	LEU
2	J	1061	VAL
2	J	1063	ARG
2	J	1065	CYS
2	J	1071	VAL
2	J	1079	ILE
2	J	1083	ILE
2	J	1086	ILE
2	J	1104	ASP
2	J	1171	TRP
2	J	1180	VAL
2	J	1186	ARG
2	J	1194	ARG
2	J	1200	ARG
2	J	1207	THR
2	J	1217	ILE
2	J	1225	SER
2	J	1234	ILE
2	J	1235	LYS

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Mol	Chain	Res	Type
2	J	1246	LEU
2	J	1250	ARG
2	J	1259	LEU
2	J	1265	TYR
2	J	1266	HIS
2	J	1290	TYR
2	J	1294	PHE
2	J	1299	VAL
2	J	1302	ASP
2	J	1305	LEU
2	J	1309	PHE
2	J	1313	ARG
2	J	1338	ARG
2	J	1351	VAL
2	J	1373	LEU
2	J	1383	VAL
2	J	1391	VAL
2	J	1400	GLN
2	J	1405	ILE
2	J	1421	ARG
2	J	1424	LYS
2	J	1431	SER
2	J	1436	ARG
2	J	1444	ASN
2	J	1462	GLN
2	J	1467	LEU
2	J	1483	LEU
2	J	1484	LEU
2	J	1487	THR
2	J	1496	VAL
2	J	1523	ILE
2	J	1563	LEU
2	J	1564	SER
2	J	1590	ILE
2	J	1593	SER
2	J	1594	ARG
2	J	1595	VAL
2	J	1602	LEU
2	J	1622	THR
2	J	1628	ASN
2	J	1639	MET
2	J	1643	VAL

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Mol	Chain	Res	Type
2	J	1655	HIS
2	J	1674	THR
2	J	1690	THR
2	J	1707	ASP
2	J	1708	LEU
2	J	1709	TYR
2	J	1717	GLU
2	J	1740	ASN
2	J	1745	LEU
2	J	1746	THR
2	J	1783	GLU
2	J	1789	THR
2	J	1792	THR
2	J	1803	THR
2	J	1804	GLN
2	J	1812	LEU
2	J	1813	MET
2	J	1823	SER
2	J	1851	MET
2	J	1866	THR
2	J	1873	ARG
2	J	1896	THR
2	J	1900	LEU
2	J	1919	ASN
2	J	1951	ILE
2	J	1965	VAL
2	J	1972	ILE
2	J	1977	ARG
2	J	1985	GLN
2	J	2009	PHE
2	J	2036	ILE
2	J	2039	TYR
2	J	2049	GLU
2	J	2052	LYS
2	J	2062	THR
2	J	2064	SER
2	J	2067	ILE
2	K	30	SER
2	K	31	LEU
2	K	37	VAL
2	K	48	LEU
2	K	62	GLU

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Mol	Chain	Res	Type
2	K	63	LEU
2	K	126	VAL
2	K	155	ASP
2	K	158	LEU
2	K	167	VAL
2	K	218	VAL
2	K	252	LEU
2	K	262	MET
2	K	276	LEU
2	K	289	ILE
2	K	295	ILE
2	K	300	THR
2	K	302	ASP
2	K	317	TRP
2	K	329	THR
2	K	339	SER
2	K	346	THR
2	K	351	LEU
2	K	356	LEU
2	K	375	ASP
2	K	382	LEU
2	K	387	ARG
2	K	388	ASN
2	K	401	LEU
2	K	436	THR
2	K	464	SER
2	K	472	THR
2	K	474	THR
2	K	477	ASP
2	K	479	ARG
2	K	484	GLU
2	K	486	ILE
2	K	489	GLU
2	K	549	ASN
2	K	570	VAL
2	K	583	THR
2	K	600	VAL
2	K	604	MET
2	K	609	THR
2	K	616	ASP
2	K	618	VAL
2	K	652	ILE

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Mol	Chain	Res	Type
2	K	663	ILE
2	K	670	MET
2	K	690	LEU
2	K	709	LEU
2	K	726	GLN
2	K	727	VAL
2	K	747	ARG
2	K	757	PHE
2	K	763	LEU
2	K	780	SER
2	K	786	GLU
2	K	814	SER
2	K	818	THR
2	K	820	LYS
2	K	827	GLN
2	K	843	TRP
2	K	846	THR
2	K	855	ILE
2	K	856	THR
2	K	870	THR
2	K	876	TRP
2	K	878	GLU
2	K	883	ILE
2	K	900	ASP
2	K	903	ILE
2	K	906	LEU
2	K	909	ASP
2	K	917	ARG
2	K	918	ASN
2	K	924	VAL
2	K	935	VAL
2	K	944	VAL
2	K	964	ARG
2	K	971	THR
2	K	979	LEU
2	K	995	ARG
2	K	1004	SER
2	K	1007	LEU
2	K	1008	ILE
2	K	1009	ASN
2	K	1036	GLU
2	K	1047	LEU

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Mol	Chain	Res	Type
2	K	1050	SER
2	K	1061	VAL
2	K	1065	CYS
2	K	1071	VAL
2	K	1079	ILE
2	K	1083	ILE
2	K	1086	ILE
2	K	1104	ASP
2	K	1171	TRP
2	K	1180	VAL
2	K	1186	ARG
2	K	1194	ARG
2	K	1200	ARG
2	K	1207	THR
2	K	1217	ILE
2	K	1225	SER
2	K	1234	ILE
2	K	1235	LYS
2	K	1246	LEU
2	K	1250	ARG
2	K	1259	LEU
2	K	1265	TYR
2	K	1266	HIS
2	K	1294	PHE
2	K	1299	VAL
2	K	1302	ASP
2	K	1305	LEU
2	K	1309	PHE
2	K	1313	ARG
2	K	1338	ARG
2	K	1351	VAL
2	K	1373	LEU
2	K	1383	VAL
2	K	1391	VAL
2	K	1400	GLN
2	K	1405	ILE
2	K	1409	SER
2	K	1421	ARG
2	K	1424	LYS
2	K	1431	SER
2	K	1436	ARG
2	K	1444	ASN

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Mol	Chain	Res	Type
2	K	1462	GLN
2	K	1467	LEU
2	K	1483	LEU
2	K	1484	LEU
2	K	1487	THR
2	K	1496	VAL
2	K	1523	ILE
2	K	1563	LEU
2	K	1564	SER
2	K	1583	VAL
2	K	1590	ILE
2	K	1593	SER
2	K	1594	ARG
2	K	1595	VAL
2	K	1602	LEU
2	K	1622	THR
2	K	1628	ASN
2	K	1639	MET
2	K	1643	VAL
2	K	1655	HIS
2	K	1674	THR
2	K	1690	THR
2	K	1707	ASP
2	K	1708	LEU
2	K	1709	TYR
2	K	1717	GLU
2	K	1740	ASN
2	K	1745	LEU
2	K	1746	THR
2	K	1789	THR
2	K	1792	THR
2	K	1803	THR
2	K	1804	GLN
2	K	1812	LEU
2	K	1813	MET
2	K	1823	SER
2	K	1851	MET
2	K	1866	THR
2	K	1873	ARG
2	K	1896	THR
2	K	1900	LEU
2	K	1919	ASN

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Mol	Chain	Res	Type
2	K	1951	ILE
2	K	1965	VAL
2	K	1972	ILE
2	K	1977	ARG
2	K	1985	GLN
2	K	2009	PHE
2	K	2036	ILE
2	K	2039	TYR
2	K	2049	GLU
2	K	2052	LYS
2	K	2062	THR
2	K	2064	SER
2	K	2067	ILE
2	L	31	LEU
2	L	37	VAL
2	L	48	LEU
2	L	62	GLU
2	L	63	LEU
2	L	126	VAL
2	L	134	ILE
2	L	155	ASP
2	L	158	LEU
2	L	171	SER
2	L	196	PHE
2	L	216	ASP
2	L	218	VAL
2	L	252	LEU
2	L	262	MET
2	L	276	LEU
2	L	289	ILE
2	L	295	ILE
2	L	300	THR
2	L	302	ASP
2	L	317	TRP
2	L	329	THR
2	L	339	SER
2	L	346	THR
2	L	351	LEU
2	L	356	LEU
2	L	375	ASP
2	L	381	SER
2	L	382	LEU

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Mol	Chain	Res	Type
2	L	387	ARG
2	L	388	ASN
2	L	401	LEU
2	L	436	THR
2	L	464	SER
2	L	474	THR
2	L	477	ASP
2	L	484	GLU
2	L	486	ILE
2	L	489	GLU
2	L	549	ASN
2	L	570	VAL
2	L	583	THR
2	L	600	VAL
2	L	604	MET
2	L	609	THR
2	L	616	ASP
2	L	618	VAL
2	L	652	ILE
2	L	663	ILE
2	L	670	MET
2	L	690	LEU
2	L	709	LEU
2	L	726	GLN
2	L	727	VAL
2	L	747	ARG
2	L	757	PHE
2	L	763	LEU
2	L	814	SER
2	L	818	THR
2	L	820	LYS
2	L	821	GLU
2	L	827	GLN
2	L	843	TRP
2	L	846	THR
2	L	855	ILE
2	L	856	THR
2	L	857	VAL
2	L	870	THR
2	L	876	TRP
2	L	878	GLU
2	L	883	ILE

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Mol	Chain	Res	Type
2	L	900	ASP
2	L	903	ILE
2	L	906	LEU
2	L	909	ASP
2	L	917	ARG
2	L	918	ASN
2	L	924	VAL
2	L	935	VAL
2	L	944	VAL
2	L	964	ARG
2	L	971	THR
2	L	979	LEU
2	L	995	ARG
2	L	1004	SER
2	L	1007	LEU
2	L	1008	ILE
2	L	1009	ASN
2	L	1028	VAL
2	L	1036	GLU
2	L	1047	LEU
2	L	1050	SER
2	L	1061	VAL
2	L	1063	ARG
2	L	1065	CYS
2	L	1071	VAL
2	L	1079	ILE
2	L	1083	ILE
2	L	1086	ILE
2	L	1104	ASP
2	L	1171	TRP
2	L	1180	VAL
2	L	1186	ARG
2	L	1194	ARG
2	L	1200	ARG
2	L	1207	THR
2	L	1217	ILE
2	L	1225	SER
2	L	1234	ILE
2	L	1235	LYS
2	L	1246	LEU
2	L	1250	ARG
2	L	1259	LEU

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Mol	Chain	Res	Type
2	L	1265	TYR
2	L	1266	HIS
2	L	1294	PHE
2	L	1299	VAL
2	L	1302	ASP
2	L	1305	LEU
2	L	1309	PHE
2	L	1313	ARG
2	L	1338	ARG
2	L	1351	VAL
2	L	1373	LEU
2	L	1383	VAL
2	L	1391	VAL
2	L	1400	GLN
2	L	1405	ILE
2	L	1409	SER
2	L	1421	ARG
2	L	1424	LYS
2	L	1431	SER
2	L	1436	ARG
2	L	1444	ASN
2	L	1462	GLN
2	L	1467	LEU
2	L	1483	LEU
2	L	1484	LEU
2	L	1487	THR
2	L	1496	VAL
2	L	1505	SER
2	L	1523	ILE
2	L	1563	LEU
2	L	1564	SER
2	L	1583	VAL
2	L	1590	ILE
2	L	1593	SER
2	L	1594	ARG
2	L	1595	VAL
2	L	1602	LEU
2	L	1622	THR
2	L	1628	ASN
2	L	1639	MET
2	L	1643	VAL
2	L	1655	HIS

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Mol	Chain	Res	Type
2	L	1674	THR
2	L	1690	THR
2	L	1707	ASP
2	L	1708	LEU
2	L	1709	TYR
2	L	1717	GLU
2	L	1740	ASN
2	L	1745	LEU
2	L	1746	THR
2	L	1783	GLU
2	L	1789	THR
2	L	1792	THR
2	L	1804	GLN
2	L	1812	LEU
2	L	1813	MET
2	L	1823	SER
2	L	1851	MET
2	L	1866	THR
2	L	1873	ARG
2	L	1896	THR
2	L	1900	LEU
2	L	1951	ILE
2	L	1965	VAL
2	L	1972	ILE
2	L	1977	ARG
2	L	1985	GLN
2	L	2009	PHE
2	L	2036	ILE
2	L	2039	TYR
2	L	2049	GLU
2	L	2052	LYS
2	L	2062	THR
2	L	2064	SER
2	L	2067	ILE

Some sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (492) such sidechains are listed below:

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

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Mol	Chain	Res	Type
1	A	454	HIS
1	A	472	GLN
1	A	525	GLN
1	A	542	GLN
1	A	565	GLN
1	A	671	GLN
1	A	715	ASN
1	A	767	HIS
1	A	856	ASN
1	A	873	GLN
1	A	930	GLN
1	A	1038	HIS
1	A	1039	ASN
1	A	1075	HIS
1	A	1163	GLN
1	A	1214	HIS
1	A	1320	ASN
1	A	1366	GLN
1	A	1398	GLN
1	A	1431	GLN
1	A	1473	HIS
1	A	1486	GLN
1	A	1491	ASN
1	A	1530	ASN
1	A	1541	GLN
1	A	1544	HIS
1	A	1558	GLN
1	A	1589	ASN
1	A	1629	GLN
1	A	1662	GLN
1	B	21	GLN
1	B	75	GLN
1	B	371	GLN
1	B	404	ASN
1	B	408	GLN
1	B	454	HIS
1	B	472	GLN
1	B	525	GLN
1	B	715	ASN
1	B	767	HIS
1	B	856	ASN
1	B	873	GLN

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Mol	Chain	Res	Type
1	B	930	GLN
1	B	1038	HIS
1	B	1039	ASN
1	B	1075	HIS
1	B	1163	GLN
1	B	1214	HIS
1	B	1251	GLN
1	B	1320	ASN
1	B	1366	GLN
1	B	1486	GLN
1	B	1491	ASN
1	B	1530	ASN
1	B	1558	GLN
1	B	1589	ASN
1	B	1629	GLN
1	B	1633	GLN
1	B	1662	GLN
1	C	21	GLN
1	C	75	GLN
1	C	371	GLN
1	C	404	ASN
1	C	408	GLN
1	C	454	HIS
1	C	472	GLN
1	C	525	GLN
1	C	671	GLN
1	C	708	GLN
1	C	715	ASN
1	C	767	HIS
1	C	856	ASN
1	C	873	GLN
1	C	1038	HIS
1	C	1075	HIS
1	C	1214	HIS
1	C	1251	GLN
1	C	1320	ASN
1	C	1366	GLN
1	C	1473	HIS
1	C	1486	GLN
1	C	1491	ASN
1	C	1530	ASN
1	C	1541	GLN

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Mol	Chain	Res	Type
1	C	1558	GLN
1	C	1589	ASN
1	C	1629	GLN
1	C	1662	GLN
1	D	21	GLN
1	D	75	GLN
1	D	371	GLN
1	D	404	ASN
1	D	408	GLN
1	D	454	HIS
1	D	472	GLN
1	D	525	GLN
1	D	542	GLN
1	D	708	GLN
1	D	715	ASN
1	D	767	HIS
1	D	856	ASN
1	D	873	GLN
1	D	1038	HIS
1	D	1039	ASN
1	D	1075	HIS
1	D	1214	HIS
1	D	1251	GLN
1	D	1320	ASN
1	D	1431	GLN
1	D	1473	HIS
1	D	1486	GLN
1	D	1491	ASN
1	D	1530	ASN
1	D	1558	GLN
1	D	1589	ASN
1	D	1629	GLN
1	D	1633	GLN
1	D	1662	GLN
1	E	21	GLN
1	E	404	ASN
1	E	408	GLN
1	E	454	HIS
1	E	472	GLN
1	E	525	GLN
1	E	542	GLN
1	E	565	GLN

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Mol	Chain	Res	Type
1	E	671	GLN
1	E	708	GLN
1	E	715	ASN
1	E	767	HIS
1	E	856	ASN
1	E	873	GLN
1	E	930	GLN
1	E	962	ASN
1	E	1038	HIS
1	E	1039	ASN
1	E	1075	HIS
1	E	1163	GLN
1	E	1214	HIS
1	E	1251	GLN
1	E	1320	ASN
1	E	1366	GLN
1	E	1431	GLN
1	E	1473	HIS
1	E	1486	GLN
1	E	1491	ASN
1	E	1530	ASN
1	E	1558	GLN
1	E	1589	ASN
1	E	1629	GLN
1	E	1633	GLN
1	E	1662	GLN
1	F	21	GLN
1	F	75	GLN
1	F	404	ASN
1	F	408	GLN
1	F	454	HIS
1	F	472	GLN
1	F	525	GLN
1	F	671	GLN
1	F	715	ASN
1	F	767	HIS
1	F	856	ASN
1	F	873	GLN
1	F	930	GLN
1	F	1038	HIS
1	F	1039	ASN
1	F	1075	HIS

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Mol	Chain	Res	Type
1	F	1163	GLN
1	F	1214	HIS
1	F	1251	GLN
1	F	1320	ASN
1	F	1431	GLN
1	F	1473	HIS
1	F	1486	GLN
1	F	1491	ASN
1	F	1530	ASN
1	F	1558	GLN
1	F	1589	ASN
1	F	1629	GLN
1	F	1633	GLN
1	F	1662	GLN
1	F	1670	HIS
2	G	44	GLN
2	G	65	GLN
2	G	98	ASN
2	G	166	ASN
2	G	220	GLN
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	430	ASN
2	G	448	HIS
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	729	ASN
2	G	752	HIS
2	G	827	GLN
2	G	845	ASN
2	G	911	GLN
2	G	1006	GLN
2	G	1009	ASN
2	G	1014	GLN

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Mol	Chain	Res	Type
2	G	1049	GLN
2	G	1094	HIS
2	G	1109	ASN
2	G	1173	HIS
2	G	1378	ASN
2	G	1400	GLN
2	G	1455	GLN
2	G	1462	GLN
2	G	1500	ASN
2	G	1547	HIS
2	G	1638	ASN
2	G	1646	ASN
2	G	1655	HIS
2	G	1697	GLN
2	G	1702	GLN
2	G	1725	HIS
2	G	1729	ASN
2	G	1759	GLN
2	G	1804	GLN
2	G	1901	GLN
2	G	1919	ASN
2	G	1968	HIS
2	G	1974	GLN
2	G	2006	HIS
2	H	44	GLN
2	H	47	GLN
2	H	65	GLN
2	H	98	ASN
2	H	166	ASN
2	H	220	GLN
2	H	232	HIS
2	H	260	HIS
2	H	285	HIS
2	H	287	GLN
2	H	371	HIS
2	H	388	ASN
2	H	416	GLN
2	H	430	ASN
2	H	448	HIS
2	H	512	HIS
2	H	529	ASN
2	H	549	ASN

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Mol	Chain	Res	Type
2	H	627	HIS
2	H	661	ASN
2	H	713	HIS
2	H	729	ASN
2	H	752	HIS
2	H	827	GLN
2	H	845	ASN
2	H	911	GLN
2	H	1006	GLN
2	H	1009	ASN
2	H	1014	GLN
2	H	1094	HIS
2	H	1173	HIS
2	H	1378	ASN
2	H	1400	GLN
2	H	1455	GLN
2	H	1547	HIS
2	H	1638	ASN
2	H	1646	ASN
2	H	1655	HIS
2	H	1687	GLN
2	H	1697	GLN
2	H	1702	GLN
2	H	1725	HIS
2	H	1729	ASN
2	H	1759	GLN
2	H	1804	GLN
2	H	1901	GLN
2	H	1919	ASN
2	H	1968	HIS
2	H	1974	GLN
2	H	2006	HIS
2	H	2042	ASN
2	H	2059	HIS
2	I	44	GLN
2	I	65	GLN
2	I	98	ASN
2	I	166	ASN
2	I	220	GLN
2	I	232	HIS
2	I	260	HIS
2	I	285	HIS

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Mol	Chain	Res	Type
2	I	287	GLN
2	I	371	HIS
2	I	388	ASN
2	I	416	GLN
2	I	430	ASN
2	I	440	HIS
2	I	448	HIS
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	729	ASN
2	I	752	HIS
2	I	827	GLN
2	I	911	GLN
2	I	1006	GLN
2	I	1009	ASN
2	I	1094	HIS
2	I	1173	HIS
2	I	1378	ASN
2	I	1400	GLN
2	I	1455	GLN
2	I	1462	GLN
2	I	1547	HIS
2	I	1608	HIS
2	I	1638	ASN
2	I	1646	ASN
2	I	1655	HIS
2	I	1697	GLN
2	I	1702	GLN
2	I	1725	HIS
2	I	1729	ASN
2	I	1759	GLN
2	I	1804	GLN
2	I	1901	GLN
2	I	1919	ASN
2	I	1968	HIS
2	I	1974	GLN
2	I	2006	HIS
2	I	2042	ASN

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Mol	Chain	Res	Type
2	J	42	HIS
2	J	65	GLN
2	J	166	ASN
2	J	220	GLN
2	J	232	HIS
2	J	260	HIS
2	J	285	HIS
2	J	287	GLN
2	J	388	ASN
2	J	416	GLN
2	J	430	ASN
2	J	448	HIS
2	J	512	HIS
2	J	529	ASN
2	J	549	ASN
2	J	627	HIS
2	J	661	ASN
2	J	713	HIS
2	J	729	ASN
2	J	752	HIS
2	J	827	GLN
2	J	845	ASN
2	J	911	GLN
2	J	1006	GLN
2	J	1009	ASN
2	J	1014	GLN
2	J	1094	HIS
2	J	1109	ASN
2	J	1173	HIS
2	J	1378	ASN
2	J	1400	GLN
2	J	1455	GLN
2	J	1547	HIS
2	J	1559	ASN
2	J	1638	ASN
2	J	1646	ASN
2	J	1655	HIS
2	J	1697	GLN
2	J	1702	GLN
2	J	1725	HIS
2	J	1729	ASN
2	J	1748	HIS

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Mol	Chain	Res	Type
2	J	1759	GLN
2	J	1804	GLN
2	J	1901	GLN
2	J	1919	ASN
2	J	1968	HIS
2	J	1974	GLN
2	J	2006	HIS
2	J	2059	HIS
2	K	65	GLN
2	K	166	ASN
2	K	220	GLN
2	K	232	HIS
2	K	260	HIS
2	K	285	HIS
2	K	287	GLN
2	K	371	HIS
2	K	388	ASN
2	K	416	GLN
2	K	430	ASN
2	K	440	HIS
2	K	448	HIS
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	729	ASN
2	K	752	HIS
2	K	827	GLN
2	K	845	ASN
2	K	911	GLN
2	K	1009	ASN
2	K	1014	GLN
2	K	1049	GLN
2	K	1094	HIS
2	K	1173	HIS
2	K	1378	ASN
2	K	1400	GLN
2	K	1455	GLN
2	K	1462	GLN
2	K	1500	ASN

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Mol	Chain	Res	Type
2	K	1547	HIS
2	K	1608	HIS
2	K	1638	ASN
2	K	1646	ASN
2	K	1655	HIS
2	K	1697	GLN
2	K	1702	GLN
2	K	1725	HIS
2	K	1729	ASN
2	K	1759	GLN
2	K	1804	GLN
2	K	1901	GLN
2	K	1919	ASN
2	K	1926	GLN
2	K	1968	HIS
2	K	1974	GLN
2	K	2006	HIS
2	K	2059	HIS
2	L	65	GLN
2	L	166	ASN
2	L	220	GLN
2	L	232	HIS
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	430	ASN
2	L	440	HIS
2	L	448	HIS
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	729	ASN
2	L	752	HIS
2	L	827	GLN
2	L	845	ASN
2	L	911	GLN

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Mol	Chain	Res	Type
2	L	1006	GLN
2	L	1009	ASN
2	L	1014	GLN
2	L	1094	HIS
2	L	1109	ASN
2	L	1173	HIS
2	L	1378	ASN
2	L	1400	GLN
2	L	1455	GLN
2	L	1547	HIS
2	L	1638	ASN
2	L	1646	ASN
2	L	1655	HIS
2	L	1687	GLN
2	L	1697	GLN
2	L	1702	GLN
2	L	1725	HIS
2	L	1729	ASN
2	L	1759	GLN
2	L	1804	GLN
2	L	1901	GLN
2	L	1919	ASN
2	L	1968	HIS
2	L	1974	GLN
2	L	2006	HIS
2	L	2059	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 ⓘ

18 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	NAP	A	1901	-	52,52,52	1.09	3 (5%)	80,80,80	1.73	8 (10%)
3	NAP	B	1901	-	52,52,52	1.08	3 (5%)	80,80,80	1.69	10 (12%)
3	NAP	C	1901	-	52,52,52	1.14	3 (5%)	80,80,80	1.76	7 (8%)
3	NAP	D	1901	-	52,52,52	1.24	3 (5%)	80,80,80	1.81	7 (8%)
3	NAP	E	1901	-	52,52,52	1.09	3 (5%)	80,80,80	1.81	9 (11%)
3	NAP	F	1901	-	52,52,52	1.11	3 (5%)	80,80,80	1.72	8 (10%)
4	FMN	G	2101	-	33,33,33	6.09	22 (66%)	46,50,50	1.76	8 (17%)
3	NAP	G	2102	-	52,52,52	1.07	4 (7%)	80,80,80	1.71	6 (7%)
4	FMN	H	2101	-	33,33,33	6.07	20 (60%)	46,50,50	1.67	8 (17%)
3	NAP	H	2102	-	52,52,52	1.07	4 (7%)	80,80,80	1.71	7 (8%)
4	FMN	I	2101	-	33,33,33	6.08	20 (60%)	46,50,50	1.75	10 (21%)
3	NAP	I	2102	-	52,52,52	1.01	3 (5%)	80,80,80	1.72	5 (6%)
4	FMN	J	2101	-	33,33,33	6.30	22 (66%)	46,50,50	1.73	6 (13%)
3	NAP	J	2102	-	52,52,52	1.09	4 (7%)	80,80,80	1.72	9 (11%)
4	FMN	K	2101	-	33,33,33	6.31	22 (66%)	46,50,50	1.93	10 (21%)
3	NAP	K	2102	-	52,52,52	1.04	4 (7%)	80,80,80	1.68	7 (8%)
4	FMN	L	2101	-	33,33,33	6.14	20 (60%)	46,50,50	1.71	8 (17%)
3	NAP	L	2102	-	52,52,52	1.05	4 (7%)	80,80,80	1.69	6 (7%)

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	NAP	A	1901	-	-	0/35/67/67	0/5/5/5
3	NAP	B	1901	-	-	0/35/67/67	0/5/5/5

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
3	NAP	C	1901	-	-	0/35/67/67	0/5/5/5
3	NAP	D	1901	-	-	0/35/67/67	0/5/5/5
3	NAP	E	1901	-	-	0/35/67/67	0/5/5/5
3	NAP	F	1901	-	-	0/35/67/67	0/5/5/5
4	FMN	G	2101	-	-	0/18/18/18	0/3/3/3
3	NAP	G	2102	-	-	0/35/67/67	0/5/5/5
4	FMN	H	2101	-	-	0/18/18/18	0/3/3/3
3	NAP	H	2102	-	-	0/35/67/67	0/5/5/5
4	FMN	I	2101	-	-	0/18/18/18	0/3/3/3
3	NAP	I	2102	-	-	0/35/67/67	0/5/5/5
4	FMN	J	2101	-	-	0/18/18/18	0/3/3/3
3	NAP	J	2102	-	-	0/35/67/67	0/5/5/5
4	FMN	K	2101	-	-	0/18/18/18	0/3/3/3
3	NAP	K	2102	-	-	0/35/67/67	0/5/5/5
4	FMN	L	2101	-	-	0/18/18/18	0/3/3/3
3	NAP	L	2102	-	-	0/35/67/67	0/5/5/5

All (167) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	K	2101	FMN	O2-C2	15.44	1.41	1.21
4	L	2101	FMN	O2-C2	15.03	1.41	1.21
4	G	2101	FMN	O2-C2	15.00	1.41	1.21
4	I	2101	FMN	O2-C2	14.84	1.40	1.21
4	J	2101	FMN	O2-C2	14.80	1.40	1.21
4	H	2101	FMN	O2-C2	14.57	1.40	1.21
4	J	2101	FMN	C6-C5A	12.59	1.58	1.41
4	K	2101	FMN	C6-C5A	12.36	1.58	1.41
4	G	2101	FMN	C6-C5A	12.29	1.58	1.41
4	L	2101	FMN	C6-C5A	12.29	1.58	1.41
4	H	2101	FMN	C6-C5A	12.19	1.58	1.41
4	I	2101	FMN	C6-C5A	12.18	1.58	1.41
4	K	2101	FMN	C4A-N5	10.65	1.51	1.33
4	J	2101	FMN	C4A-N5	10.42	1.50	1.33
4	H	2101	FMN	C4A-N5	10.33	1.50	1.33
4	I	2101	FMN	C4A-N5	10.31	1.50	1.33
4	L	2101	FMN	C4A-N5	10.12	1.50	1.33
4	G	2101	FMN	C4A-N5	10.01	1.50	1.33
4	J	2101	FMN	C4-N3	9.62	1.50	1.36
4	L	2101	FMN	C5A-N5	9.54	1.51	1.35
4	K	2101	FMN	C4-N3	9.33	1.50	1.36
4	G	2101	FMN	C5A-N5	9.19	1.50	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	I	2101	FMN	C5A-N5	9.08	1.50	1.35
4	J	2101	FMN	C5A-N5	9.07	1.50	1.35
4	H	2101	FMN	C5A-N5	8.99	1.50	1.35
4	K	2101	FMN	C5A-N5	8.98	1.50	1.35
4	K	2101	FMN	C10-N10	8.98	1.52	1.39
4	H	2101	FMN	C9-C9A	8.84	1.60	1.40
4	J	2101	FMN	C9-C9A	8.83	1.60	1.40
4	K	2101	FMN	C9-C9A	8.81	1.60	1.40
4	I	2101	FMN	C4-N3	8.81	1.49	1.36
4	L	2101	FMN	C10-N10	8.79	1.52	1.39
4	H	2101	FMN	C4-N3	8.78	1.49	1.36
4	G	2101	FMN	C4-N3	8.73	1.49	1.36
4	L	2101	FMN	C4-N3	8.72	1.49	1.36
4	I	2101	FMN	C9-C9A	8.60	1.59	1.40
4	G	2101	FMN	C9-C9A	8.54	1.59	1.40
4	L	2101	FMN	C9-C9A	8.52	1.59	1.40
4	J	2101	FMN	C10-N10	8.40	1.51	1.39
4	I	2101	FMN	C10-N10	8.27	1.51	1.39
4	G	2101	FMN	C10-N10	8.10	1.51	1.39
4	H	2101	FMN	C10-N10	7.81	1.51	1.39
4	K	2101	FMN	C10-N1	7.70	1.49	1.35
4	I	2101	FMN	C9A-N10	7.45	1.49	1.38
4	J	2101	FMN	C10-N1	7.43	1.48	1.35
4	K	2101	FMN	C9A-N10	7.40	1.49	1.38
4	J	2101	FMN	O4-C4	7.28	1.41	1.24
4	H	2101	FMN	C9A-N10	7.21	1.49	1.38
4	L	2101	FMN	C9A-N10	7.19	1.49	1.38
4	J	2101	FMN	C4A-C10	7.18	1.54	1.41
4	K	2101	FMN	O4-C4	7.18	1.41	1.24
4	L	2101	FMN	C10-N1	7.17	1.48	1.35
4	G	2101	FMN	O4-C4	7.15	1.41	1.24
4	J	2101	FMN	C9-C8	7.11	1.58	1.37
4	G	2101	FMN	C10-N1	7.08	1.48	1.35
4	J	2101	FMN	C6-C7	7.07	1.58	1.37
4	K	2101	FMN	C6-C7	7.03	1.57	1.37
4	G	2101	FMN	C9A-N10	6.99	1.49	1.38
4	I	2101	FMN	C10-N1	6.97	1.47	1.35
4	I	2101	FMN	O4-C4	6.97	1.40	1.24
4	H	2101	FMN	C6-C7	6.96	1.57	1.37
4	H	2101	FMN	O4-C4	6.96	1.40	1.24
4	L	2101	FMN	O4-C4	6.82	1.40	1.24
4	J	2101	FMN	C8-C7	6.78	1.59	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	H	2101	FMN	C10-N1	6.77	1.47	1.35
4	G	2101	FMN	C6-C7	6.76	1.57	1.37
4	K	2101	FMN	C4A-C10	6.69	1.53	1.41
4	G	2101	FMN	C9-C8	6.69	1.56	1.37
4	I	2101	FMN	C4A-C10	6.65	1.53	1.41
4	I	2101	FMN	C6-C7	6.65	1.56	1.37
4	L	2101	FMN	C4A-C10	6.64	1.53	1.41
4	L	2101	FMN	C6-C7	6.62	1.56	1.37
4	K	2101	FMN	C9-C8	6.60	1.56	1.37
4	J	2101	FMN	C9A-C5A	6.58	1.56	1.42
4	J	2101	FMN	C9A-N10	6.58	1.48	1.38
4	H	2101	FMN	C9-C8	6.54	1.56	1.37
4	H	2101	FMN	C4A-C10	6.54	1.53	1.41
4	G	2101	FMN	C4A-C10	6.53	1.53	1.41
4	I	2101	FMN	C9-C8	6.42	1.56	1.37
4	L	2101	FMN	C9-C8	6.38	1.56	1.37
4	H	2101	FMN	C8-C7	6.14	1.58	1.41
4	K	2101	FMN	C8-C7	6.13	1.58	1.41
4	L	2101	FMN	C9A-C5A	6.13	1.55	1.42
4	L	2101	FMN	C8-C7	6.08	1.58	1.41
4	K	2101	FMN	C2-N1	5.96	1.55	1.35
4	H	2101	FMN	C9A-C5A	5.95	1.54	1.42
4	G	2101	FMN	C9A-C5A	5.87	1.54	1.42
4	K	2101	FMN	C9A-C5A	5.87	1.54	1.42
4	I	2101	FMN	C8-C7	5.85	1.57	1.41
4	G	2101	FMN	C8-C7	5.79	1.57	1.41
4	I	2101	FMN	C9A-C5A	5.63	1.54	1.42
4	J	2101	FMN	C2-N1	5.58	1.54	1.35
4	I	2101	FMN	C2-N1	5.56	1.54	1.35
4	G	2101	FMN	C2-N1	5.54	1.53	1.35
4	L	2101	FMN	C2-N1	5.39	1.53	1.35
4	H	2101	FMN	C2-N1	5.34	1.53	1.35
3	D	1901	NAP	C2N-N1N	5.19	1.41	1.35
4	J	2101	FMN	C2-N3	4.67	1.52	1.36
4	L	2101	FMN	C2-N3	4.59	1.52	1.36
4	K	2101	FMN	C2-N3	4.53	1.51	1.36
4	I	2101	FMN	C2-N3	4.48	1.51	1.36
4	H	2101	FMN	C2-N3	4.46	1.51	1.36
4	G	2101	FMN	C2-N3	4.40	1.51	1.36
3	C	1901	NAP	C2N-N1N	4.29	1.40	1.35
3	F	1901	NAP	C2N-N1N	4.23	1.40	1.35
3	A	1901	NAP	C2N-N1N	4.14	1.40	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	J	2102	NAP	C2N-N1N	3.99	1.40	1.35
3	B	1901	NAP	C2N-N1N	3.98	1.40	1.35
3	E	1901	NAP	C2A-N3A	3.94	1.39	1.32
3	D	1901	NAP	C2A-N3A	3.93	1.39	1.32
3	C	1901	NAP	C2A-N3A	3.93	1.39	1.32
3	G	2102	NAP	C2N-N1N	3.90	1.40	1.35
3	K	2102	NAP	C2N-N1N	3.89	1.40	1.35
3	E	1901	NAP	C2N-N1N	3.83	1.40	1.35
3	L	2102	NAP	C2A-N3A	3.82	1.38	1.32
3	H	2102	NAP	C2N-N1N	3.81	1.40	1.35
3	A	1901	NAP	C2A-N3A	3.79	1.38	1.32
3	G	2102	NAP	C2A-N3A	3.64	1.38	1.32
3	L	2102	NAP	C2N-N1N	3.58	1.39	1.35
3	J	2102	NAP	C2A-N3A	3.56	1.38	1.32
3	H	2102	NAP	C2A-N3A	3.54	1.38	1.32
3	K	2102	NAP	C2A-N3A	3.51	1.38	1.32
3	B	1901	NAP	C2A-N3A	3.47	1.38	1.32
3	I	2102	NAP	C2A-N3A	3.45	1.38	1.32
3	I	2102	NAP	C2N-N1N	3.36	1.39	1.35
3	F	1901	NAP	C2A-N3A	3.34	1.38	1.32
4	J	2101	FMN	P-O3P	3.34	1.66	1.54
4	K	2101	FMN	P-O3P	3.34	1.66	1.54
4	G	2101	FMN	P-O2P	3.32	1.66	1.54
4	K	2101	FMN	P-O2P	3.22	1.66	1.54
4	H	2101	FMN	P-O2P	3.14	1.66	1.54
4	J	2101	FMN	C5'-C4'	3.10	1.56	1.51
4	L	2101	FMN	P-O2P	3.04	1.65	1.54
4	H	2101	FMN	P-O3P	3.00	1.65	1.54
4	J	2101	FMN	P-O2P	2.99	1.65	1.54
4	L	2101	FMN	P-O3P	2.96	1.65	1.54
4	I	2101	FMN	P-O2P	2.96	1.65	1.54
4	G	2101	FMN	P-O3P	2.87	1.65	1.54
4	I	2101	FMN	P-O3P	2.86	1.65	1.54
4	H	2101	FMN	C5'-C4'	2.82	1.56	1.51
3	F	1901	NAP	C2A-N1A	2.72	1.39	1.33
3	J	2102	NAP	C6N-N1N	2.62	1.42	1.35
3	D	1901	NAP	C2A-N1A	2.61	1.39	1.33
4	K	2101	FMN	C5'-C4'	2.54	1.55	1.51
4	J	2101	FMN	C8M-C8	2.49	1.55	1.51
4	L	2101	FMN	C5'-C4'	2.44	1.55	1.51
4	K	2101	FMN	C4-C4A	2.43	1.53	1.42
3	B	1901	NAP	C2A-N1A	2.41	1.38	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	C	1901	NAP	C2A-N1A	2.40	1.38	1.33
3	E	1901	NAP	C2A-N1A	2.39	1.38	1.33
3	L	2102	NAP	C2A-N1A	2.37	1.38	1.33
3	A	1901	NAP	C2A-N1A	2.32	1.38	1.33
3	G	2102	NAP	C2A-N1A	2.32	1.38	1.33
3	H	2102	NAP	C2A-N1A	2.30	1.38	1.33
3	H	2102	NAP	C6N-N1N	2.29	1.41	1.35
4	G	2101	FMN	C5'-C4'	2.29	1.55	1.51
3	K	2102	NAP	C6N-N1N	2.25	1.41	1.35
4	K	2101	FMN	P-O5'	2.25	1.67	1.60
3	J	2102	NAP	C2A-N1A	2.22	1.38	1.33
3	K	2102	NAP	C2A-N1A	2.20	1.38	1.33
3	I	2102	NAP	C2A-N1A	2.13	1.38	1.33
4	I	2101	FMN	C4-C4A	2.11	1.52	1.42
3	G	2102	NAP	C6N-N1N	2.10	1.41	1.35
4	J	2101	FMN	C4-C4A	2.08	1.52	1.42
3	L	2102	NAP	C6N-N1N	2.03	1.41	1.35
4	G	2101	FMN	C4-C4A	2.03	1.51	1.42
4	G	2101	FMN	C8M-C8	2.01	1.55	1.51

All (139) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	I	2102	NAP	N3A-C2A-N1A	-10.77	119.41	128.89
3	D	1901	NAP	N3A-C2A-N1A	-10.73	119.45	128.89
3	G	2102	NAP	N3A-C2A-N1A	-10.36	119.78	128.89
3	J	2102	NAP	N3A-C2A-N1A	-10.33	119.80	128.89
3	L	2102	NAP	N3A-C2A-N1A	-10.24	119.88	128.89
3	H	2102	NAP	N3A-C2A-N1A	-10.18	119.93	128.89
3	E	1901	NAP	N3A-C2A-N1A	-10.17	119.94	128.89
3	F	1901	NAP	N3A-C2A-N1A	-9.96	120.13	128.89
3	K	2102	NAP	N3A-C2A-N1A	-9.79	120.28	128.89
3	C	1901	NAP	N3A-C2A-N1A	-9.78	120.29	128.89
3	A	1901	NAP	N3A-C2A-N1A	-9.46	120.56	128.89
3	B	1901	NAP	N3A-C2A-N1A	-8.92	121.05	128.89
4	K	2101	FMN	C2-N1-C10	6.59	121.30	114.95
3	K	2102	NAP	C5A-C4A-N3A	-6.05	120.08	125.98
3	C	1901	NAP	C5A-C4A-N3A	-5.77	120.35	125.98
3	L	2102	NAP	C5A-C4A-N3A	-5.70	120.42	125.98
3	J	2102	NAP	C5A-C4A-N3A	-5.66	120.46	125.98
3	E	1901	NAP	C5A-C4A-N3A	-5.65	120.47	125.98
3	G	2102	NAP	C5A-C4A-N3A	-5.59	120.53	125.98

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	I	2102	NAP	C5A-C4A-N3A	-5.58	120.54	125.98
3	A	1901	NAP	C5A-C4A-N3A	-5.55	120.57	125.98
3	D	1901	NAP	C5A-C4A-N3A	-5.43	120.69	125.98
3	H	2102	NAP	C5A-C4A-N3A	-5.42	120.69	125.98
4	H	2101	FMN	C2'-C1'-N10	-5.41	105.19	112.60
4	G	2101	FMN	C2-N1-C10	5.38	120.13	114.95
3	B	1901	NAP	C5A-C4A-N3A	-5.34	120.77	125.98
4	K	2101	FMN	C2'-C1'-N10	-5.32	105.31	112.60
4	I	2101	FMN	C2-N1-C10	5.28	120.03	114.95
4	G	2101	FMN	C2'-C1'-N10	-5.21	105.47	112.60
4	J	2101	FMN	C2'-C1'-N10	-5.19	105.50	112.60
4	L	2101	FMN	C2-N1-C10	5.16	119.92	114.95
4	L	2101	FMN	C2'-C1'-N10	-5.14	105.56	112.60
4	J	2101	FMN	C2-N1-C10	4.89	119.66	114.95
4	I	2101	FMN	C2'-C1'-N10	-4.87	105.94	112.60
3	C	1901	NAP	O4D-C1D-C2D	-4.80	99.69	106.69
3	A	1901	NAP	O4D-C1D-N1N	4.78	113.38	108.13
3	F	1901	NAP	O4D-C1D-N1N	4.78	113.38	108.13
4	H	2101	FMN	C2-N1-C10	4.73	119.50	114.95
3	D	1901	NAP	O4D-C1D-C2D	-4.61	99.98	106.69
3	C	1901	NAP	O4D-C1D-N1N	4.60	113.18	108.13
4	J	2101	FMN	C5A-C9A-N10	4.60	121.02	117.63
3	B	1901	NAP	O4D-C1D-N1N	4.58	113.17	108.13
3	F	1901	NAP	C5A-C4A-N3A	-4.55	121.54	125.98
3	A	1901	NAP	O4D-C1D-C2D	-4.41	100.27	106.69
3	E	1901	NAP	O4D-C1D-N1N	4.34	112.90	108.13
3	E	1901	NAP	O4D-C1D-C2D	-4.34	100.37	106.69
3	B	1901	NAP	O4D-C1D-C2D	-4.21	100.56	106.69
3	D	1901	NAP	O4D-C1D-N1N	4.19	112.74	108.13
4	I	2101	FMN	C5A-C9A-N10	4.17	120.71	117.63
4	H	2101	FMN	C5A-C9A-N10	4.15	120.69	117.63
3	C	1901	NAP	N3A-C4A-N9A	4.13	132.47	125.39
3	E	1901	NAP	N3A-C4A-N9A	4.08	132.39	125.39
3	L	2102	NAP	N3A-C4A-N9A	4.00	132.25	125.39
3	I	2102	NAP	N3A-C4A-N9A	3.96	132.19	125.39
3	A	1901	NAP	N3A-C4A-N9A	3.96	132.19	125.39
3	K	2102	NAP	N3A-C4A-N9A	3.93	132.13	125.39
3	D	1901	NAP	N3A-C4A-N9A	3.92	132.11	125.39
3	F	1901	NAP	O4D-C1D-C2D	-3.89	101.03	106.69
4	K	2101	FMN	C5A-C9A-N10	3.84	120.47	117.63
3	J	2102	NAP	N3A-C4A-N9A	3.82	131.95	125.39
3	H	2102	NAP	N3A-C4A-N9A	3.82	131.95	125.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	G	2101	FMN	C5A-C9A-N10	3.81	120.44	117.63
3	G	2102	NAP	N3A-C4A-N9A	3.74	131.81	125.39
3	H	2102	NAP	P2B-O2B-C2B	3.74	130.40	121.77
3	B	1901	NAP	N3A-C4A-N9A	3.73	131.80	125.39
3	F	1901	NAP	N3A-C4A-N9A	3.50	131.40	125.39
4	J	2101	FMN	C1'-N10-C10	3.48	122.61	118.82
4	L	2101	FMN	C5A-C9A-N10	3.47	120.19	117.63
3	K	2102	NAP	P2B-O2B-C2B	3.38	129.58	121.77
3	G	2102	NAP	P2B-O2B-C2B	3.38	129.56	121.77
4	K	2101	FMN	C4A-N5-C5A	3.36	120.60	116.68
3	H	2102	NAP	O4D-C1D-N1N	3.13	111.58	108.13
3	J	2102	NAP	P2B-O2B-C2B	3.13	128.99	121.77
3	I	2102	NAP	P2B-O2B-C2B	3.12	128.96	121.77
3	L	2102	NAP	P2B-O2B-C2B	3.08	128.89	121.77
4	I	2101	FMN	C4A-N5-C5A	3.05	120.24	116.68
4	L	2101	FMN	C4A-N5-C5A	3.03	120.21	116.68
4	G	2101	FMN	C4A-N5-C5A	2.95	120.12	116.68
4	K	2101	FMN	C4A-C10-N1	-2.85	118.97	123.00
3	F	1901	NAP	C2D-C1D-N1N	-2.83	107.82	113.48
4	L	2101	FMN	C1'-N10-C10	2.79	121.86	118.82
3	G	2102	NAP	O4D-C1D-N1N	2.77	111.18	108.13
4	K	2101	FMN	C4-N3-C2	-2.70	119.85	125.39
4	H	2101	FMN	C1'-N10-C10	2.68	121.74	118.82
4	K	2101	FMN	C1'-N10-C10	2.66	121.72	118.82
3	I	2102	NAP	C2A-N3A-C4A	2.65	120.90	113.27
3	A	1901	NAP	C2D-C1D-N1N	-2.59	108.30	113.48
4	H	2101	FMN	C4A-C10-N10	-2.59	118.96	120.53
3	L	2102	NAP	C2A-N3A-C4A	2.59	120.73	113.27
3	K	2102	NAP	C2A-N3A-C4A	2.58	120.70	113.27
3	J	2102	NAP	C2A-N3A-C4A	2.58	120.69	113.27
3	E	1901	NAP	C2A-N3A-C4A	2.57	120.67	113.27
3	D	1901	NAP	C2A-N3A-C4A	2.57	120.66	113.27
3	D	1901	NAP	C2D-C1D-N1N	-2.53	108.42	113.48
3	G	2102	NAP	C2A-N3A-C4A	2.52	120.53	113.27
3	J	2102	NAP	O4D-C1D-N1N	2.52	110.90	108.13
3	H	2102	NAP	C2A-N3A-C4A	2.51	120.50	113.27
3	L	2102	NAP	O4D-C1D-N1N	2.51	110.89	108.13
4	I	2101	FMN	C1'-N10-C10	2.48	121.53	118.82
4	G	2101	FMN	O4'-C4'-C5'	-2.48	105.03	110.13
4	H	2101	FMN	C4A-N5-C5A	2.48	119.57	116.68
3	C	1901	NAP	C4D-O4D-C1D	-2.45	107.03	109.72
3	C	1901	NAP	C2A-N3A-C4A	2.44	120.30	113.27

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	I	2101	FMN	O4'-C4'-C5'	-2.43	105.13	110.13
4	G	2101	FMN	C1'-N10-C10	2.42	121.46	118.82
4	I	2101	FMN	C4-N3-C2	-2.38	120.51	125.39
3	E	1901	NAP	O7N-C7N-C3N	2.37	122.24	119.59
3	A	1901	NAP	C2A-N3A-C4A	2.36	120.08	113.27
3	A	1901	NAP	O7N-C7N-C3N	2.32	122.19	119.59
3	B	1901	NAP	C2D-C1D-N1N	-2.30	108.88	113.48
4	L	2101	FMN	C4A-C10-N1	-2.30	119.76	123.00
4	J	2101	FMN	C9A-N10-C10	-2.28	119.52	121.77
4	K	2101	FMN	C10-C4A-N5	-2.26	120.14	122.57
3	J	2102	NAP	O4B-C1B-N9A	2.25	112.99	108.10
4	I	2101	FMN	C4A-C10-N1	-2.24	119.84	123.00
3	K	2102	NAP	C4A-C5A-N7A	-2.24	107.25	109.41
3	K	2102	NAP	O4D-C1D-N1N	2.24	110.59	108.13
3	E	1901	NAP	C2D-C1D-N1N	-2.23	109.02	113.48
4	H	2101	FMN	C4-N3-C2	-2.23	120.82	125.39
4	L	2101	FMN	C4-N3-C2	-2.23	120.82	125.39
3	B	1901	NAP	C4D-O4D-C1D	-2.21	107.29	109.72
3	B	1901	NAP	C3N-C7N-N7N	-2.20	115.33	117.78
4	J	2101	FMN	C4A-C10-N10	-2.20	119.20	120.53
3	J	2102	NAP	C3N-C7N-N7N	-2.17	115.36	117.78
3	B	1901	NAP	C2A-N3A-C4A	2.16	119.50	113.27
4	G	2101	FMN	C4A-C10-N1	-2.16	119.96	123.00
3	F	1901	NAP	C2A-N3A-C4A	2.15	119.47	113.27
3	F	1901	NAP	C4D-O4D-C1D	-2.14	107.37	109.72
3	H	2102	NAP	C3N-C7N-N7N	-2.14	115.40	117.78
4	K	2101	FMN	C4A-C10-N10	-2.13	119.24	120.53
3	J	2102	NAP	O3X-P2B-O2B	2.10	113.15	107.09
4	L	2101	FMN	C4-C4A-C10	2.08	120.65	117.18
4	I	2101	FMN	C9A-C5A-N5	-2.06	119.35	122.39
3	B	1901	NAP	C4A-C5A-N7A	-2.06	107.42	109.41
4	G	2101	FMN	C9A-C5A-N5	-2.04	119.37	122.39
4	H	2101	FMN	C9A-C5A-N5	-2.03	119.38	122.39
4	K	2101	FMN	C9A-C5A-N5	-2.02	119.40	122.39
4	I	2101	FMN	C4A-C10-N10	-2.01	119.31	120.53
3	E	1901	NAP	C4D-O4D-C1D	-2.01	107.51	109.72

There are no chirality outliers.

There are no torsion outliers.

There are no ring outliers.

5.7 Other polymers ⓘ

There are no such residues in this entry.

5.8 Polymer linkage issues

There are no chain breaks in this entry.

6 Fit of model and data ⓘ

6.1 Protein, DNA and RNA chains ⓘ

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

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2			OWAB(Å²)	Q<0.9
1	A	1457/1878 (77%)	0.14	4 (0%)	91	53	16, 50, 103, 146	0
1	B	1464/1878 (77%)	0.16	8 (0%)	88	39	17, 50, 106, 157	0
1	C	1462/1878 (77%)	0.16	8 (0%)	88	39	15, 48, 107, 155	0
1	D	1467/1878 (78%)	0.14	3 (0%)	93	61	17, 52, 106, 151	0
1	E	1456/1878 (77%)	0.14	5 (0%)	91	53	17, 50, 106, 152	0
1	F	1461/1878 (77%)	0.17	4 (0%)	91	53	17, 47, 106, 156	0
2	G	2060/2060 (100%)	0.25	28 (1%)	72	17	24, 83, 128, 156	0
2	H	2060/2060 (100%)	0.31	67 (3%)	44	6	24, 85, 129, 155	0
2	I	2060/2060 (100%)	0.27	51 (2%)	54	9	20, 85, 129, 158	0
2	J	2060/2060 (100%)	0.34	95 (4%)	31	5	27, 88, 132, 157	0
2	K	2060/2060 (100%)	0.46	143 (6%)	17	3	25, 90, 133, 157	0
2	L	2060/2060 (100%)	0.32	72 (3%)	42	6	22, 86, 131, 158	0
All	All	21127/23628 (89%)	0.25	488 (2%)	57	9	15, 74, 125, 158	0

All (488) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
2	K	176	GLN	11.3
2	K	175	GLY	7.5
2	K	516	PHE	6.7
2	H	24	LEU	6.6
2	K	517	GLY	6.5
2	K	295	ILE	6.4
2	H	178	ASN	6.1
2	L	1915	LEU	6.1
2	K	26	LEU	6.0
2	K	178	ASN	5.8
2	K	817	MET	5.4

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Mol	Chain	Res	Type	RSRZ
2	H	35	PHE	5.4
2	I	1900	LEU	5.3
2	J	261	TYR	5.2
2	J	24	LEU	5.2
2	K	294	ALA	5.1
2	H	1953	ILE	5.1
2	I	1123	ALA	5.0
2	J	1123	ALA	4.9
2	K	104	LEU	4.8
2	J	26	LEU	4.8
2	K	105	ILE	4.7
2	K	478	LEU	4.6
2	K	543	GLY	4.6
2	K	435	ILE	4.6
2	J	1357	ILE	4.5
2	K	810	CYS	4.5
2	K	1068	GLN	4.5
2	K	285	HIS	4.5
2	J	558	LEU	4.5
2	K	604	MET	4.4
2	G	44	GLN	4.3
2	H	23	PRO	4.3
2	K	102	LEU	4.3
2	K	487	ILE	4.3
2	J	1122	LYS	4.3
2	K	279	PHE	4.3
2	H	79	TYR	4.2
2	K	100	GLU	4.2
2	K	109	PHE	4.2
2	K	1900	LEU	4.2
2	L	109	PHE	4.2
2	L	1348	PHE	4.1
2	K	260	HIS	4.1
2	L	41	LEU	4.0
2	K	177	GLY	4.0
2	K	252	LEU	4.0
2	K	258	LEU	4.0
2	K	1067	LEU	4.0
2	K	486	ILE	3.8
2	H	295	ILE	3.8
2	I	2077	TYR	3.8
2	H	177	GLY	3.8

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Mol	Chain	Res	Type	RSRZ
2	I	1128	PRO	3.8
2	L	478	LEU	3.8
2	K	558	LEU	3.8
2	K	76	VAL	3.8
2	H	225	LEU	3.7
2	L	1841	TYR	3.7
2	L	275	LEU	3.7
2	H	76	VAL	3.7
2	L	1900	LEU	3.7
2	H	1124	THR	3.7
2	K	255	LEU	3.6
2	G	606	ALA	3.6
2	K	606	ALA	3.6
2	K	173	PHE	3.6
2	K	123	ALA	3.6
2	J	516	PHE	3.6
2	J	1943	LEU	3.6
2	K	807	PHE	3.6
2	K	113	PHE	3.5
2	I	1357	ILE	3.5
2	J	45	ALA	3.5
2	K	41	LEU	3.5
2	I	176	GLN	3.5
2	J	252	LEU	3.5
2	L	2005	PHE	3.5
2	J	275	LEU	3.5
2	H	26	LEU	3.5
2	J	295	ILE	3.5
2	J	25	VAL	3.4
2	K	35	PHE	3.4
2	L	532	LYS	3.4
2	J	2078	GLU	3.4
1	A	577	LEU	3.4
2	K	518	PRO	3.4
2	K	662	LEU	3.3
2	J	75	LEU	3.3
2	K	24	LEU	3.3
2	H	33	PHE	3.3
2	K	293	ALA	3.3
2	L	2070	ILE	3.3
2	K	490	LEU	3.3
2	K	261	TYR	3.3

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Mol	Chain	Res	Type	RSRZ
2	K	283	THR	3.3
2	L	604	MET	3.3
2	K	159	PHE	3.3
2	L	1142	ILE	3.2
2	K	544	ALA	3.2
2	K	605	VAL	3.2
2	K	776	LEU	3.2
2	J	742	GLN	3.2
2	K	80	ILE	3.2
2	K	308	ALA	3.2
1	F	44	ILE	3.2
2	H	37	VAL	3.1
2	K	692	ILE	3.1
2	H	40	SER	3.1
2	K	40	SER	3.1
2	I	1902	TYR	3.1
2	H	1100	ARG	3.1
2	J	1196	PHE	3.1
2	K	275	LEU	3.1
2	L	1930	ALA	3.1
2	H	261	TYR	3.1
2	H	811	MET	3.1
2	J	627	HIS	3.0
2	K	163	ALA	3.0
1	F	1574	LEU	3.0
2	K	53	LEU	3.0
2	J	716	PHE	3.0
2	K	515	ASP	3.0
2	G	1305	LEU	3.0
2	I	178	ASN	3.0
2	H	175	GLY	3.0
2	I	1841	TYR	3.0
2	J	175	GLY	3.0
2	K	740	ILE	3.0
2	L	201	ILE	3.0
2	J	120	HIS	2.9
2	K	36	LEU	2.9
2	K	747	ARG	2.9
2	G	1350	ILE	2.9
2	I	1122	LYS	2.9
2	I	79	TYR	2.9
2	L	24	LEU	2.9

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Mol	Chain	Res	Type	RSRZ
2	K	1448	ARG	2.9
1	E	552	ILE	2.9
2	G	1065	CYS	2.9
2	H	293	ALA	2.9
2	K	296	ALA	2.9
2	K	284	GLY	2.9
2	H	551	GLU	2.9
2	H	1900	LEU	2.9
2	I	24	LEU	2.9
2	L	1122	LYS	2.9
2	J	1164	ILE	2.9
2	G	516	PHE	2.9
2	J	35	PHE	2.9
2	L	1886	VAL	2.9
2	H	328	ARG	2.9
2	J	172	ILE	2.9
2	I	23	PRO	2.9
2	J	467	ILE	2.9
2	K	44	GLN	2.9
1	E	44	ILE	2.9
2	K	101	VAL	2.9
1	C	853	MET	2.8
1	A	552	ILE	2.8
2	H	1915	LEU	2.8
2	K	48	LEU	2.8
2	K	491	VAL	2.8
2	I	1730	TYR	2.8
2	H	100	GLU	2.8
2	L	72	VAL	2.8
2	L	2004	PRO	2.8
2	K	1175	MET	2.8
2	I	1244	LEU	2.8
2	K	1227	LYS	2.8
2	H	1999	ARG	2.8
2	K	860	GLU	2.8
2	H	113	PHE	2.8
2	K	146	ALA	2.8
2	G	627	HIS	2.7
2	H	41	LEU	2.7
2	L	1128	PRO	2.7
2	L	351	LEU	2.7
2	L	176	GLN	2.7

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Mol	Chain	Res	Type	RSRZ
2	K	23	PRO	2.7
2	G	252	LEU	2.7
2	I	255	LEU	2.7
1	E	1443	LEU	2.7
2	J	48	LEU	2.7
2	J	158	LEU	2.7
2	K	292	ALA	2.7
2	J	308	ALA	2.7
2	J	490	LEU	2.7
2	J	23	PRO	2.7
2	K	25	VAL	2.7
2	L	1692	TYR	2.7
2	G	478	LEU	2.7
2	J	604	MET	2.6
2	K	514	VAL	2.6
2	J	1192	LEU	2.6
2	L	2066	LYS	2.6
2	I	1144	TYR	2.6
2	J	182	TYR	2.6
2	J	1124	THR	2.6
2	K	290	VAL	2.6
2	K	603	VAL	2.6
2	L	45	ALA	2.6
2	J	176	GLN	2.6
2	K	19	GLN	2.6
2	K	311	ALA	2.6
2	L	79	TYR	2.6
2	G	811	MET	2.6
2	J	1993	PHE	2.6
2	I	1427	MET	2.6
2	K	1895	PHE	2.6
2	L	83	VAL	2.6
2	K	174	GLY	2.6
2	J	1989	LEU	2.6
2	H	174	GLY	2.6
2	J	27	THR	2.6
2	J	93	ASP	2.5
2	K	171	SER	2.5
2	H	75	LEU	2.5
2	J	41	LEU	2.5
2	L	1121	LEU	2.5
2	K	1066	ILE	2.5

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Mol	Chain	Res	Type	RSRZ
2	I	1127	GLU	2.5
2	K	251	PRO	2.5
2	K	1589	PRO	2.5
2	K	598	LEU	2.5
2	K	1043	LYS	2.5
2	I	2005	PHE	2.5
2	J	28	HIS	2.5
1	B	14	LEU	2.5
2	K	169	ILE	2.5
2	L	516	PHE	2.5
2	L	1943	LEU	2.5
2	K	1401	ILE	2.5
2	H	80	ILE	2.5
2	I	26	LEU	2.5
2	I	487	ILE	2.5
2	I	104	LEU	2.5
2	K	347	PRO	2.5
2	G	1123	ALA	2.5
1	C	36	LEU	2.5
2	L	113	PHE	2.5
2	K	716	PHE	2.5
1	F	77	GLN	2.5
2	L	158	LEU	2.5
2	J	805	MET	2.5
2	J	659	THR	2.5
2	J	79	TYR	2.5
2	H	186	LEU	2.5
2	J	113	PHE	2.5
2	L	1068	GLN	2.5
2	K	1196	PHE	2.5
2	G	171	SER	2.4
2	K	526	VAL	2.4
2	J	1697	GLN	2.4
2	K	690	LEU	2.4
2	H	1954	GLN	2.4
2	K	493	MET	2.4
2	J	1261	PHE	2.4
2	H	285	HIS	2.4
2	K	660	VAL	2.4
2	J	1217	ILE	2.4
1	C	569	LEU	2.4
2	I	177	GLY	2.4

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Mol	Chain	Res	Type	RSRZ
2	J	1599	TYR	2.4
2	K	627	HIS	2.4
2	K	597	LEU	2.4
2	L	1840	GLU	2.4
2	J	1370	LEU	2.4
2	K	811	MET	2.4
2	H	102	LEU	2.4
2	H	120	HIS	2.4
2	J	816	MET	2.4
2	K	262	MET	2.4
2	J	514	VAL	2.4
2	I	1599	TYR	2.4
1	C	35	ILE	2.4
2	J	134	ILE	2.4
2	K	1965	VAL	2.4
2	K	186	LEU	2.4
2	J	1289	TYR	2.4
2	L	261	TYR	2.4
2	L	1204	VAL	2.4
2	K	172	ILE	2.4
2	J	709	LEU	2.3
2	G	853	GLY	2.3
2	K	1049	GLN	2.3
2	H	22	ARG	2.3
2	K	120	HIS	2.3
2	L	172	ILE	2.3
2	H	176	GLN	2.3
2	J	1612	THR	2.3
2	L	1642	MET	2.3
2	J	173	PHE	2.3
2	K	1042	PHE	2.3
2	J	1917	ILE	2.3
2	H	598	LEU	2.3
2	J	1998	LEU	2.3
2	K	693	GLY	2.3
2	I	1217	ILE	2.3
2	I	1943	LEU	2.3
2	L	513	ILE	2.3
2	I	35	PHE	2.3
2	I	810	CYS	2.3
2	H	36	LEU	2.3
2	G	32	GLU	2.3

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Mol	Chain	Res	Type	RSRZ
2	K	1793	TYR	2.3
2	K	56	LEU	2.3
2	L	1653	LEU	2.3
2	H	1943	LEU	2.3
2	J	1771	ALA	2.3
2	K	448	HIS	2.3
2	L	1217	ILE	2.3
2	G	662	LEU	2.3
2	H	1916	GLU	2.3
2	L	105	ILE	2.3
2	K	782	PHE	2.3
2	I	1243	ALA	2.3
2	K	282	THR	2.3
2	J	1939	LEU	2.3
1	B	1453	GLN	2.3
2	J	690	LEU	2.3
2	K	1590	ILE	2.3
2	I	1196	PHE	2.3
2	L	810	CYS	2.3
2	K	1483	LEU	2.3
2	G	1366	ILE	2.3
2	L	1936	LEU	2.3
2	H	986	LEU	2.3
2	L	268	LEU	2.3
2	L	255	LEU	2.3
2	I	809	GLY	2.3
2	H	284	GLY	2.2
2	I	1361	ILE	2.2
2	L	180	GLU	2.2
2	H	45	ALA	2.2
2	L	35	PHE	2.2
2	I	1124	THR	2.2
2	K	458	MET	2.2
2	H	779	GLY	2.2
2	L	598	LEU	2.2
2	J	782	PHE	2.2
1	D	14	LEU	2.2
2	L	1939	LEU	2.2
2	K	201	ILE	2.2
2	K	1029	PRO	2.2
2	L	1234	ILE	2.2
2	L	1361	ILE	2.2

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Mol	Chain	Res	Type	RSRZ
2	H	48	LEU	2.2
2	H	158	LEU	2.2
2	J	867	LYS	2.2
2	L	1126	GLU	2.2
1	A	44	ILE	2.2
2	I	1953	ILE	2.2
1	B	1574	LEU	2.2
2	I	1734	ILE	2.2
2	I	1916	GLU	2.2
2	H	227	ILE	2.2
2	H	1401	ILE	2.2
2	K	79	TYR	2.2
2	K	711	ILE	2.2
2	L	1917	ILE	2.2
1	B	18	LEU	2.2
2	K	93	ASP	2.2
2	J	283	THR	2.2
2	H	1870	ALA	2.2
2	G	807	PHE	2.2
2	K	350	MET	2.2
2	L	1067	LEU	2.2
2	J	139	ALA	2.2
1	A	1443	LEU	2.2
2	J	452	LEU	2.2
2	K	589	PHE	2.2
2	G	255	LEU	2.2
2	H	513	ILE	2.2
2	H	606	ALA	2.2
2	I	102	LEU	2.2
2	J	1900	LEU	2.2
2	G	815	ARG	2.2
2	J	291	VAL	2.2
1	D	570	TYR	2.2
2	H	1939	LEU	2.2
2	J	178	ASN	2.2
2	J	1348	PHE	2.2
2	I	45	ALA	2.2
2	H	193	TYR	2.2
2	K	37	VAL	2.2
2	L	252	LEU	2.2
2	J	542	ALA	2.2
2	J	2077	TYR	2.2

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Mol	Chain	Res	Type	RSRZ
2	H	1192	LEU	2.1
2	K	72	VAL	2.1
1	D	656	LEU	2.1
2	H	106	LEU	2.1
2	I	27	THR	2.1
2	J	259	ALA	2.1
2	J	1066	ILE	2.1
1	C	954	ARG	2.1
2	H	376	ARG	2.1
2	K	190	TYR	2.1
2	L	37	VAL	2.1
2	L	627	HIS	2.1
2	I	868	LEU	2.1
2	I	1067	LEU	2.1
2	K	92	GLU	2.1
2	L	76	VAL	2.1
2	I	123	ALA	2.1
2	K	28	HIS	2.1
2	K	1902	TYR	2.1
2	I	105	ILE	2.1
2	L	225	LEU	2.1
2	H	1883	MET	2.1
2	I	2040	ILE	2.1
2	G	376	ARG	2.1
2	K	259	ALA	2.1
2	L	1989	LEU	2.1
2	J	1596	PHE	2.1
2	G	1067	LEU	2.1
2	H	208	LEU	2.1
2	H	467	ILE	2.1
2	K	741	LEU	2.1
2	I	1946	LEU	2.1
2	J	1467	LEU	2.1
2	L	568	PHE	2.1
2	K	986	LEU	2.1
2	K	1326	HIS	2.1
2	L	264	THR	2.1
2	L	630	LEU	2.1
2	H	2035	LEU	2.1
2	L	1349	ALA	2.1
1	B	552	ILE	2.1
2	H	173	PHE	2.1

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Mol	Chain	Res	Type	RSRZ
2	J	1361	ILE	2.1
2	J	1886	VAL	2.1
2	G	778	ALA	2.1
2	H	77	ALA	2.1
1	C	1635	ILE	2.1
2	J	1305	LEU	2.1
2	J	1915	LEU	2.1
2	G	635	TYR	2.1
2	G	41	LEU	2.1
2	K	27	THR	2.1
1	B	608	LYS	2.1
2	G	294	ALA	2.1
2	J	122	ILE	2.1
2	K	524	ILE	2.1
2	I	1371	LEU	2.1
2	K	351	LEU	2.1
1	C	78	ILE	2.1
2	H	59	PRO	2.1
2	H	627	HIS	2.1
1	B	558	LEU	2.1
1	E	78	ILE	2.1
2	G	435	ILE	2.1
2	J	1999	ARG	2.1
2	K	364	HIS	2.1
2	L	2017	PHE	2.1
2	I	113	PHE	2.1
2	J	102	LEU	2.1
2	J	598	LEU	2.1
2	J	1128	PRO	2.1
1	B	555	GLN	2.0
2	K	1090	ILE	2.0
2	I	1195	LEU	2.0
2	J	677	LEU	2.0
2	I	516	PHE	2.0
2	L	860	GLU	2.0
2	G	1070	PRO	2.0
2	I	1917	ILE	2.0
2	J	807	PHE	2.0
2	K	1419	LEU	2.0
2	K	512	HIS	2.0
2	L	1123	ALA	2.0
1	F	36	LEU	2.0

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Mol	Chain	Res	Type	RSRZ
2	J	136	VAL	2.0
2	L	605	VAL	2.0
2	J	791	TYR	2.0
2	J	1126	GLU	2.0
2	G	1124	THR	2.0
1	E	18	LEU	2.0
2	J	169	ILE	2.0
2	L	2042	ASN	2.0
2	K	946	HIS	2.0
2	L	1914	LEU	2.0
2	J	1042	PHE	2.0
2	J	1067	LEU	2.0
2	K	1943	LEU	2.0
1	C	18	LEU	2.0
2	H	1836	HIS	2.0

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

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

6.3 Carbohydrates ⓘ

There are no carbohydrates in this entry.

6.4 Ligands ⓘ

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

Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(Å ²)	Q<0.9
3	NAP	A	1901	48/48	0.32	0.39	19,76,121,169	0
3	NAP	B	1901	48/48	0.31	0.31	23,78,115,145	0
3	NAP	F	1901	48/48	0.31	0.24	19,78,125,159	0
3	NAP	D	1901	48/48	0.32	0.05	21,83,127,174	0
3	NAP	C	1901	48/48	0.32	0.04	23,81,130,171	0
3	NAP	L	2102	48/48	0.30	-0.07	37,84,116,120	0

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Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
3	NAP	K	2102	48/48	0.28	-0.36	43,94,127,131	0
3	NAP	E	1901	48/48	0.26	-0.36	24,77,123,157	0
3	NAP	H	2102	48/48	0.25	-0.40	37,85,113,122	0
4	FMN	J	2101	31/31	0.32	-0.42	23,61,101,113	0
3	NAP	I	2102	48/48	0.26	-0.47	29,80,104,116	0
4	FMN	G	2101	31/31	0.32	-0.56	26,63,101,111	0
4	FMN	I	2101	31/31	0.30	-0.59	22,56,87,103	0
4	FMN	L	2101	31/31	0.29	-0.59	19,59,102,114	0
4	FMN	H	2101	31/31	0.32	-0.60	25,49,105,113	0
3	NAP	G	2102	48/48	0.23	-0.65	42,87,119,128	0
4	FMN	K	2101	31/31	0.34	-0.69	27,66,110,123	0
3	NAP	J	2102	48/48	0.21	-0.83	35,88,118,120	0

6.5 Other polymers ⓘ

There are no such residues in this entry.