



# Full wwPDB X-ray Structure Validation Report ⓘ

Feb 1, 2016 – 08:51 AM GMT

PDB ID : 3G60  
Title : Structure of P-glycoprotein Reveals a Molecular Basis for Poly-Specific Drug Binding  
Authors : Aller, S.G.; Yu, J.; Ward, A.; Weng, Y.; Chittaboina, S.; Zhuo, R.; Harrell, P.M.; Trinh, Y.T.; Zhang, Q.; Urbatsch, I.L.; Chang, G.  
Deposited on : 2009-02-05  
Resolution : 4.40 Å(reported)

This is a Full wwPDB X-ray Structure Validation Report for a publicly released PDB entry.  
We welcome your comments at [validation@mail.wwpdb.org](mailto:validation@mail.wwpdb.org)  
A user guide is available at  
<http://wwpdb.org/validation/2016/XrayValidationReportHelp>  
with specific help available everywhere you see the ⓘ symbol.

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

MolProbity : 4.02b-467  
Mogul : 1.7 (RC4), CSD as536be (2015)  
Xtriage (Phenix) : 1.9-1692  
EDS : rb-20026688  
Percentile statistics : 20151230.v01 (using entries in the PDB archive December 30th 2015)  
Refmac : 5.8.0135  
CCP4 : 6.5.0  
Ideal geometry (proteins) : Engh & Huber (2001)  
Ideal geometry (DNA, RNA) : Parkinson et al. (1996)  
Validation Pipeline (wwPDB-VP) : trunk26865

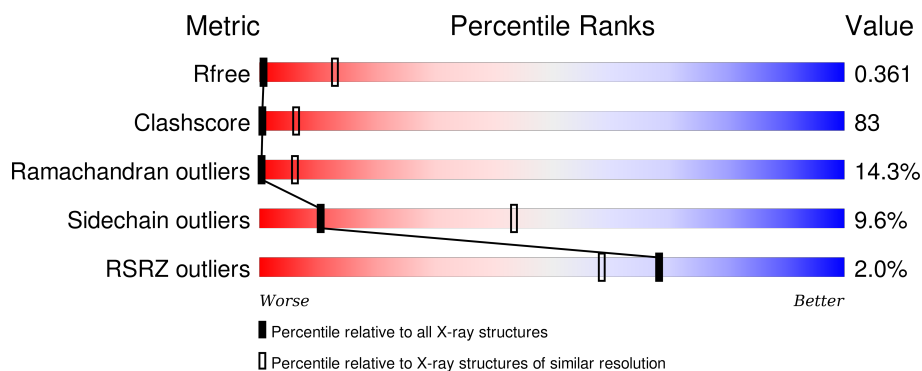
# 1 Overall quality at a glance ⓘ

The following experimental techniques were used to determine the structure:

## *X-RAY DIFFRACTION*

The reported resolution of this entry is 4.40 Å.

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



Metric	Whole archive (#Entries)	Similar resolution (#Entries, resolution range(Å))
$R_{free}$	91344	1067 (5.20-3.60)
Clashscore	102246	1175 (5.20-3.60)
Ramachandran outliers	100387	1114 (5.20-3.60)
Sidechain outliers	100360	1096 (5.20-3.60)
RSRZ outliers	91569	1071 (5.20-3.60)

The table below summarises the geometric issues observed across the polymeric chains and their fit to the electron density. The red, orange, yellow and green segments on the lower bar indicate the fraction of residues that contain outliers for  $\geq 3$ , 2, 1 and 0 types of geometric quality criteria. A grey segment represents the fraction of residues that are not modelled. The numeric value for each fraction is indicated below the corresponding segment, with a dot representing fractions  $\leq 5\%$ . The upper red bar (where present) indicates the fraction of residues that have poor fit to the electron density. The numeric value is given above the bar.

Mol	Chain	Length	Quality of chain
1	A	1284	
1	B	1284	

The following table lists non-polymeric compounds, carbohydrate monomers and non-standard residues in protein, DNA, RNA chains that are outliers for geometric or electron-density-fit criteria:

Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
2	0JZ	A	6001	-	-	-	X
2	0JZ	B	6002	-	-	-	X

## 2 Entry composition

There are 2 unique types of molecules in this entry. The entry contains 18414 atoms, of which 0 are hydrogens and 0 are deuteriums.

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.

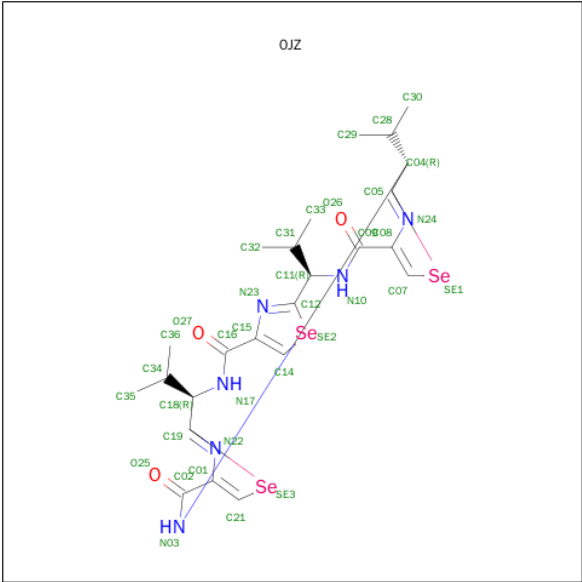
- Molecule 1 is a protein called Multidrug resistance protein 1a.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	A	1182	Total	C	N	O	S	0	0	0
			9171	5895	1552	1686	38			
1	B	1182	Total	C	N	O	S	0	0	0
			9171	5895	1552	1686	38			

There are 16 discrepancies between the modelled and reference sequences:

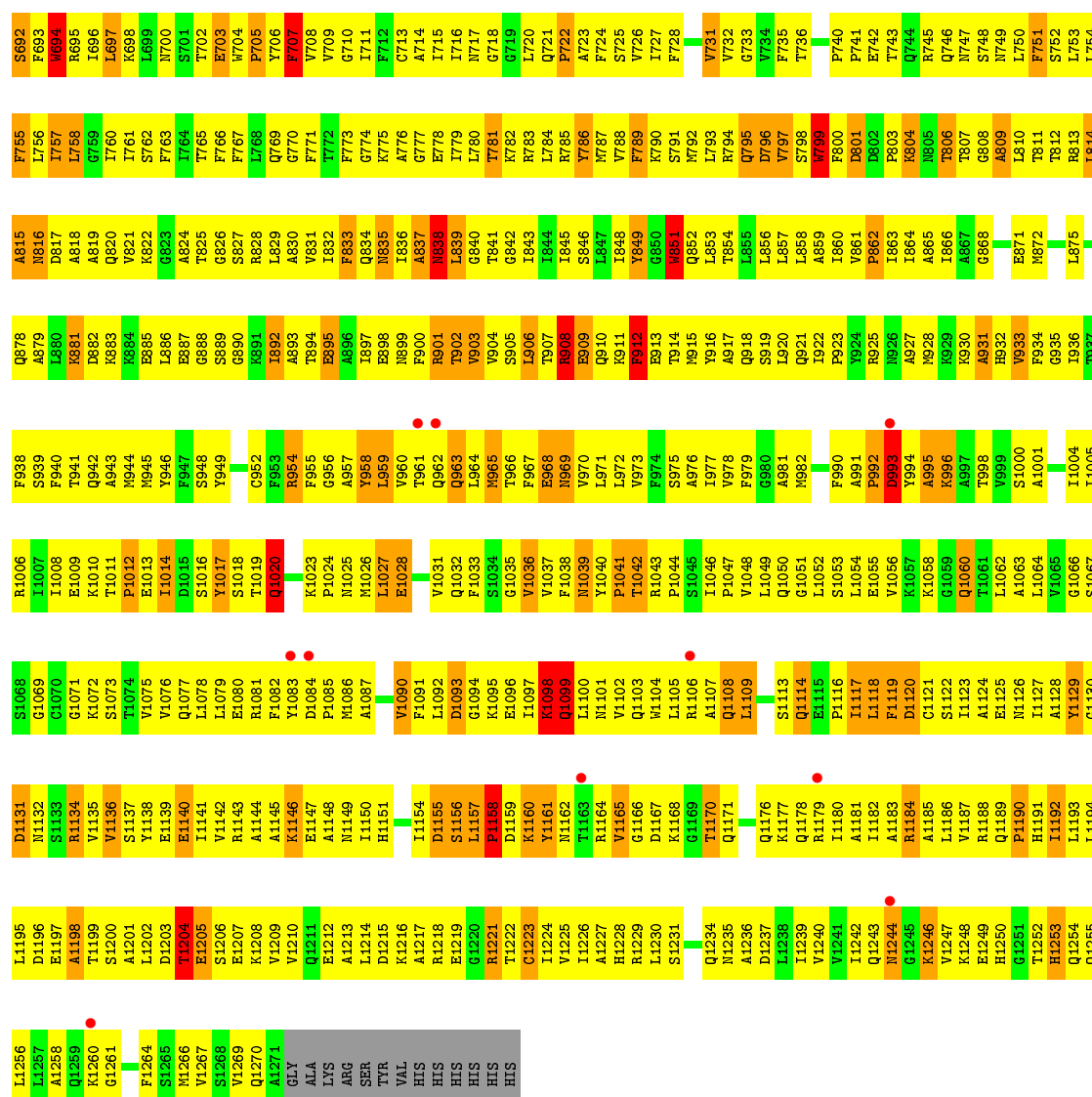
Chain	Residue	Modelled	Actual	Comment	Reference
A	1277	TYR	-	EXPRESSION TAG	UNP Q5I1Y5
A	1278	VAL	-	EXPRESSION TAG	UNP Q5I1Y5
A	1279	HIS	-	EXPRESSION TAG	UNP Q5I1Y5
A	1280	HIS	-	EXPRESSION TAG	UNP Q5I1Y5
A	1281	HIS	-	EXPRESSION TAG	UNP Q5I1Y5
A	1282	HIS	-	EXPRESSION TAG	UNP Q5I1Y5
A	1283	HIS	-	EXPRESSION TAG	UNP Q5I1Y5
A	1284	HIS	-	EXPRESSION TAG	UNP Q5I1Y5
B	1277	TYR	-	EXPRESSION TAG	UNP Q5I1Y5
B	1278	VAL	-	EXPRESSION TAG	UNP Q5I1Y5
B	1279	HIS	-	EXPRESSION TAG	UNP Q5I1Y5
B	1280	HIS	-	EXPRESSION TAG	UNP Q5I1Y5
B	1281	HIS	-	EXPRESSION TAG	UNP Q5I1Y5
B	1282	HIS	-	EXPRESSION TAG	UNP Q5I1Y5
B	1283	HIS	-	EXPRESSION TAG	UNP Q5I1Y5
B	1284	HIS	-	EXPRESSION TAG	UNP Q5I1Y5

- Molecule 2 is (4R,11R,18R)-4,11,18-TRI(PROPAN-2-YL)-6,13,20-TRISELENA-3,10,17,22,23,24-HEXAAZATETRACYCLO[17.2.1.1 5,8 .1 12,15 ]TETRACOSA-1(21),5(24),7,12(23),14,19(22)-HEXAENE-2,9,16-TRIONE (three-letter code: 0JZ) (formula: C<sub>24</sub>H<sub>30</sub>N<sub>6</sub>O<sub>3</sub>Se<sub>3</sub>).

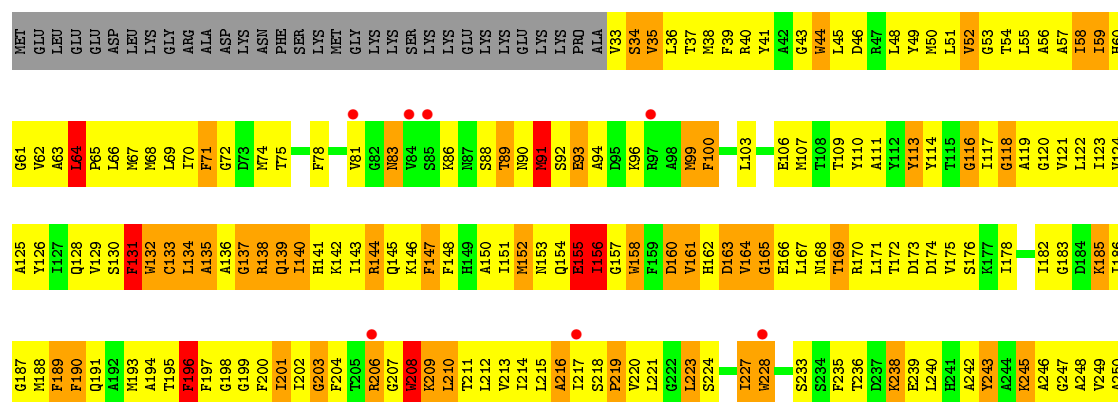
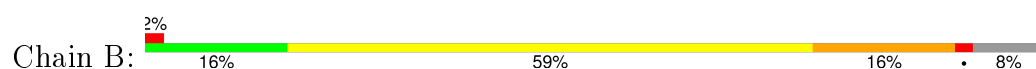


Mol	Chain	Residues	Atoms					ZeroOcc	AltConf
2	A	1	Total	C	N	O	Se	0	0
			36	24	6	3	3		
2	B	1	Total	C	N	O	Se	0	0
			36	24	6	3	3		





• Molecule 1: Multidrug resistance protein 1a



Q1189	N1126	A1063	P934	G868	G808	S748	B686	T626	D558	E497	Q434	F374	G313	E251
P1190	I1127	L1064	G935	E871	A809	N749	D697	ALA	T559	K498	L435	S375	T314	E252
H1191	A1001	G1065	I936	M871	L810	L750	V688	GLY	B560	K376	M436	A498	S315	V253
I1192	Y1129	G1066	T937	M872	T811	F751	P689	ASN	S561	V500	Q437	S377	L316	L254
L1193	H1037	S1067	P938	L875	T812	S752	P690	GLU	E562	K301	R438	G378	V317	A255
L1194	D1131	S1068	S939	L876	R813	L753	A691	ILE	A563	E502	L439	H379	I318	A256
L1195	I1104	G1069	P940	L877	L814	L754	S692	LEU	V564	A503	Y440	K380	I257	T257
L1196	I1005	C1070	T941	Q878	A815	F755	P693	LEU	V565	M504			K320	A258
E1197	I1007	G1071	Q942	A879	N816	L756	P694	GLY	Q566	A505	L443	P381	E321	T259
A1198	Y1135	K1072	A943	L880	D817	L757	H695	ASN	A567	Y506	D444	N383	Y322	V260
T1199	E1108	S1073	M944	K881	A818	L758	L696	GLU	A568	D507	G445	L384	S323	
S1200	S1137	T1074	M945	D882	A819	G759	L697	ALA	L569	F508	M446	G385	I324	F263
A1201	Y1138	Y1075	Y946	K883	Q820	L760		CYS	D570	I509	V447	G386	G325	
L1202	E1139	V1076	F947	K884	V821	I761		LYS		M510	S446	N387	Q326	Q266
T1203	I1140	Q1077	S948	E885	K822	S762	S701	SER	B573	K511	I449	L388	V327	K267
T1204	I1141	L1078	Y949	L886	G823	F763	T702	LYS	B574	L512	D450	L328	E321	K268
E1205	V1142	D1015	D1015	E887	A824	T765	E703	ASP	G575	P613	F390	T329	E269	E269
S1206	R1143	E1080	Y958	G888	T825	T766	H704	GLU	B576	H514	D453	V330	V330	L270
E1207	A1144	R1081	L959	S889	G826	F767	P705	ILE	T577	Q515	I454	F331	F331	E271
K1208	A1145	F1082	C952	L892	S827	F768	T706	ASP	T578		R455	F332	R272	
V1209	K1146	Y1083	P953	T892	R828	L768	F707	ASN	I579	T518	T456	S333	Y273	
G1210	G1021	D1084	G956	A893	L829	Q769	V708	LEU	V580	L519	I457	F395	V334	N274
Q1211	A1148	P1085	A957	T894	A830	G770	V709	ASP	I581	V520	M458	S396	L335	N275
E1212	N1149	M1086	Y958	E895	V831	F771	G710	MET	A582	G521	V459	Y397	I336	N276
A1213	I1150	A1087	L959	A896	I832	T772	I711	SER	H583	E522	R460	P398	G337	L277
L1214	H1151		V960	L897	F833	F773	F712	SER	B584	R523	Y461	S399		E278
D1215	I1154	V1090	T961	E898	Q834	G774	G713	LYS	L585	G524	L462	R400	S340	
K1216	D1155	F1091	Q962	N899	N835	K775	A714	ASP	A525	K280	R463	K401	V341	E279
A1217	S1156	L1092	L963	F900	I836	A776	I715	SER	V588	Q526	E464	E402	G342	K281
R1218	S1156	D1093	Q964	R901	A837	G777	I716	GLY	B589	L527	I465	V403	Q343	R282
E1219	L1157	G1094	M965	T902	N838	E778	N717	SER		S528	I466	Q404	A344	L283
G1220	P1158	K1095	T966	V903	L839	I779	G718	SER	V593	G529	Q467	I405	S345	G284
R1221	D1159	E1096	P967	P904	G940	L780	G719	LEU	I594	G530	V468	L406	P346	L285
T1222	K1160	I1097	E968	S905	T841	T781	Q721	ILE	F597	K532	V469	K407	N347	K286
C1223	Y1161	K1098	V1037	L906	G842	K782	Q721	ARG			S470	G408	I348	K287
I1224	N1162	Q1099	F1038	T907	I943	R783	P722	ARG	D598	Q533	Q471	L409	E349	A288
V1225	T1163	L1100	N1039	R908	I844	L784	A723	ARG	G599	R534	R472	N410	P351	I289
I1226	R1164	N1101	L972	E909	I845	R785	F724	SER	H600	I535		L411	P351	T290
A1227	V1165	V1102	V973	Q910	S846		S725	THR	V601	A536	F476	K412	A352	A291
H1228	G1166	Q1103	F974	K911	L847	M787	V726	ARG	I602	I537	A477	V413	N353	N292
R1229	D1167	H1104	S975	F912	I848	V788	I727	LYS	B504	R539	T478	S415	A354	I293
L1230	K1168	L1105	A976	E913	Y849	F789	F728	SER			T479	S415	R355	S294
S1231	G1169	R1106	I977	T914	G850	K790		ILE	H608	A540	I480	Q416	G356	K295
	T1170	A1107	V978	M915	K851	S791	V731	CYS			I480	Q417	A357	G296
	Q1171	Q1108	F979	Y916	Q852	M792	V732	GLY	L611	V542	A481	T418	A358	A297
	L1172	L1109	G980	A917	L853	L793	G733	PRO	H612	R543	E482	V419	Y359	A298
			M982	Q918	T854	R794	V734	HIS	N544	N544	N483	A420	E360	F299
				S919	L855	Q795	F735	ASP	P545	P545	I484	L421	V361	L300
				L920	L856	D796	T736	GLU	B514	K346	R485	V422	F362	L301
				Q921	L857	V797	V737	ASP	H615	I547	Y486	G423	K363	I302
				I922	L858	S798	G738	ARG	G616	L548	Q487	M424	I364	I303
				P923	A859	F799	G739	LYS	I617	L549	R488	S425	I365	A304
					I860	F800	P740	LEU	V618	L550	E489	G426	N367	A305
				A927	V861	D801	P741	SER	F619	D551	D490	C427	N367	V306
				M928	P862	D802	E742	THR	G620	E552	V491	G428	K368	A307
				K929	I863	P803	T743	LYS	L621	T554	T492	K423	P369	L308
				K930	I864	K804	Q744	GLU	V622	T554	K493	K423	S370	A309
				A931	A865	M805	R745	ALA	H623	S555	D494	T431	I371	F310
				H932	I866	T806	Q746		T624	A556	E495	T432	D372	N311
				V933	A867	T807	N747	D685	G625	L557	I496	V433	S373	Y312



H1250	G1251	T1252	H1253	Q1254	Q1255	L1256	L1257	A1258	Q1259	K1260	G1261	F1264	S1265	M1266	V1267	S1268	V1269	Q1270	A1271	GLY	ALA	LYS	ARG	SER	TYR	VAL	HIS	HIS	HIS	HIS	HIS

## 4 Data and refinement statistics

Property	Value	Source
Space group	P 21 21 21	Depositor
Cell constants a, b, c, $\alpha$ , $\beta$ , $\gamma$	96.63Å 115.09Å 374.20Å 90.00° 90.00° 90.00°	Depositor
Resolution (Å)	19.99 – 4.40 49.02 – 4.31	Depositor EDS
% Data completeness (in resolution range)	94.7 (19.99-4.40) 93.3 (49.02-4.31)	Depositor EDS
$R_{merge}$	(Not available)	Depositor
$R_{sym}$	0.07	Depositor
$\langle I/\sigma(I) \rangle$ <sup>1</sup>	5.10 (at 4.29Å)	Xtriage
Refinement program	CNS 1.2	Depositor
R, $R_{free}$	0.314 , 0.365 0.316 , 0.361	Depositor DCC
$R_{free}$ test set	2562 reflections (10.02%)	DCC
Wilson B-factor (Å <sup>2</sup> )	201.9	Xtriage
Anisotropy	0.359	Xtriage
Bulk solvent $k_{sol}$ (e/Å <sup>3</sup> ), $B_{sol}$ (Å <sup>2</sup> )	0.21 , 103.6	EDS
Estimated twinning fraction	No twinning to report.	Xtriage
L-test for twinning <sup>2</sup>	$\langle  L  \rangle = 0.48$ , $\langle L^2 \rangle = 0.31$	Xtriage
Outliers	0 of 28597 reflections	Xtriage
$F_o, F_c$ correlation	0.87	EDS
Total number of atoms	18414	wwPDB-VP
Average B, all atoms (Å <sup>2</sup> )	198.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 2.39% of the height of the origin peak. No significant pseudotranslation is detected.*

<sup>1</sup>Intensities estimated from amplitudes.

<sup>2</sup>Theoretical values of  $\langle |L| \rangle$ ,  $\langle L^2 \rangle$  for acentric reflections are 0.5, 0.375 respectively for untwinned datasets, and 0.333, 0.2 for perfectly twinned datasets.

## 5 Model quality [i](#)

### 5.1 Standard geometry [i](#)

Bond lengths and bond angles in the following residue types are not validated in this section: 0JZ

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	0.41	1/9339 (0.0%)	0.70	13/12626 (0.1%)
1	B	0.41	0/9339	0.68	8/12626 (0.1%)
All	All	0.41	1/18678 (0.0%)	0.69	21/25252 (0.1%)

All (1) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	A	851	TRP	CB-CG	5.17	1.59	1.50

All (21) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	427	CYS	N-CA-C	9.35	136.24	111.00
1	A	1098	LYS	N-CA-C	-7.80	89.94	111.00
1	A	164	VAL	N-CA-C	-7.79	89.98	111.00
1	A	267	LYS	N-CA-C	7.23	130.52	111.00
1	A	165	GLY	N-CA-C	-7.16	95.21	113.10
1	A	603	VAL	N-CA-C	7.01	129.92	111.00
1	A	450	ASP	N-CA-C	-6.87	92.46	111.00
1	B	267	LYS	N-CA-C	6.55	128.68	111.00
1	B	450	ASP	N-CA-C	-6.48	93.51	111.00
1	A	64	LEU	C-N-CD	6.36	141.75	128.40
1	B	64	LEU	C-N-CD	6.27	141.57	128.40
1	B	852	GLN	N-CA-C	-5.96	94.92	111.00
1	A	42	ALA	N-CA-C	5.64	126.24	111.00
1	A	574	GLU	N-CA-C	5.63	126.21	111.00
1	A	384	ILE	N-CA-C	-5.50	96.15	111.00
1	B	165	GLY	N-CA-C	-5.49	99.38	113.10
1	B	377	SER	N-CA-C	5.46	125.76	111.00
1	B	208	TRP	CB-CA-C	-5.19	100.02	110.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	B	1020	GLN	N-CA-C	5.18	125.00	111.00
1	A	851	TRP	N-CA-C	5.18	124.99	111.00
1	A	1160	LYS	N-CA-C	-5.13	97.15	111.00

There are no chirality outliers.

There are no planarity outliers.

## 5.2 Too-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 hydrogen atoms added and optimized by MolProbity. The Clashes column lists the number of clashes within the asymmetric unit, whereas Symm-Clashes lists symmetry related clashes.

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	A	9171	0	9344	1558	0
1	B	9171	0	9344	1534	0
2	A	36	0	27	12	0
2	B	36	0	27	10	0
All	All	18414	0	18742	3089	0

The all-atom clashscore is defined as the number of clashes found per 1000 atoms (including hydrogen atoms). The all-atom clashscore for this structure is 83.

All (3089) close contacts within the same asymmetric unit are listed below, sorted by their clash magnitude.

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:797:VAL:O	1:B:801:ASP:HB2	1.45	1.15
1:A:523:ARG:HD3	1:A:524:GLY:H	0.99	1.13
1:B:523:ARG:HD3	1:B:524:GLY:H	0.98	1.12
1:B:858:LEU:O	1:B:862:PRO:HD2	1.51	1.11
1:B:1204:THR:O	1:B:1206:SER:N	1.83	1.10
1:B:61:GLY:O	1:B:65:PRO:HD2	1.53	1.07
1:B:314:THR:HG23	1:B:327:VAL:HG21	1.30	1.07
1:A:979:PHE:O	1:A:982:MET:HG2	1.56	1.05
1:A:61:GLY:O	1:A:65:PRO:HD2	1.55	1.05
1:B:1020:GLN:HG2	1:B:1021:GLY:H	1.16	1.05
1:A:270:LEU:H	1:A:270:LEU:HD23	1.19	1.04
1:A:858:LEU:O	1:A:862:PRO:HD2	1.55	1.04
1:A:35:VAL:HG23	1:A:36:LEU:H	1.19	1.03

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:35:VAL:HG23	1:B:36:LEU:H	1.20	1.03
1:B:318:ILE:HD13	1:B:327:VAL:HG13	1.39	1.02
1:B:286:LYS:HA	1:B:289:ILE:HB	1.41	1.02
1:A:293:ILE:HG22	1:A:766:PHE:HB3	1.43	1.01
1:B:270:LEU:H	1:B:270:LEU:HD23	1.18	1.00
1:A:267:LYS:N	1:A:270:LEU:HD21	1.76	1.00
1:B:1114:GLN:HE22	1:B:1200:SER:HB3	1.25	1.00
1:A:286:LYS:HA	1:A:289:ILE:HB	1.43	1.00
1:B:795:GLN:HA	1:B:1012:PRO:HG3	1.39	1.00
1:B:416:GLY:H	1:B:577:THR:HG22	1.26	0.99
1:B:979:PHE:O	1:B:982:MET:HG2	1.62	0.99
1:A:164:VAL:O	1:A:164:VAL:HG23	1.58	0.99
1:A:336:ILE:HG12	2:A:6001:OJZ:SE1	2.12	0.99
1:B:267:LYS:N	1:B:270:LEU:HD21	1.77	0.98
1:A:1114:GLN:HE22	1:A:1200:SER:HB3	1.27	0.97
1:A:686:GLU:HG2	1:A:813:ARG:HH22	1.29	0.97
1:A:1063:ALA:HB3	1:A:1239:ILE:HA	1.45	0.97
1:B:797:VAL:O	1:B:801:ASP:CB	2.12	0.97
1:A:246:ALA:HB1	1:A:277:LEU:HB3	1.46	0.96
1:B:246:ALA:HB1	1:B:277:LEU:HB3	1.45	0.96
1:B:1063:ALA:HB3	1:B:1239:ILE:HA	1.46	0.95
1:A:919:SER:O	1:A:923:PRO:HD2	1.66	0.95
1:B:718:GLY:O	1:B:722:PRO:HD2	1.66	0.95
1:A:797:VAL:O	1:A:801:ASP:HB2	1.66	0.95
1:B:919:SER:O	1:B:923:PRO:HD2	1.66	0.94
1:A:416:GLY:H	1:A:577:THR:HG22	1.30	0.94
1:A:288:ALA:HA	1:A:291:ALA:HB3	1.48	0.94
1:A:853:LEU:HG	1:A:973:VAL:HG21	1.48	0.94
1:B:58:ILE:HG13	1:B:193:MET:HG3	1.49	0.94
1:B:288:ALA:HA	1:B:291:ALA:HB3	1.48	0.94
1:A:718:GLY:O	1:A:722:PRO:HD2	1.68	0.93
1:A:58:ILE:HG13	1:A:193:MET:HG3	1.50	0.93
1:A:155:GLU:HB3	1:A:156:ILE:HD12	1.48	0.93
1:A:1014:ILE:HD12	1:A:1106:ARG:HH12	1.34	0.93
1:B:978:VAL:HG13	2:B:6002:OJZ:H35B	1.51	0.93
1:A:1144:ALA:HA	1:A:1186:LEU:HD11	1.51	0.93
1:B:523:ARG:HD3	1:B:524:GLY:N	1.83	0.93
1:B:1036:VAL:HB	1:B:1052:LEU:HB3	1.52	0.92
1:B:1144:ALA:HA	1:B:1186:LEU:HD11	1.50	0.92
1:A:523:ARG:HD3	1:A:524:GLY:N	1.84	0.92
1:A:361:VAL:O	1:A:365:ILE:HG13	1.71	0.91

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1090:VAL:HG13	1:A:1097:ILE:HB	1.51	0.91
1:B:1122:SER:HA	1:B:1164:ARG:HA	1.52	0.90
1:B:1090:VAL:HG13	1:B:1097:ILE:HB	1.50	0.90
1:B:361:VAL:O	1:B:365:ILE:HG13	1.72	0.90
1:A:1036:VAL:HB	1:A:1052:LEU:HB3	1.52	0.90
1:A:1032:GLN:HB2	1:A:1091:PHE:HB2	1.54	0.89
1:B:956:GLY:O	1:B:966:THR:HB	1.72	0.89
1:A:278:GLU:O	1:A:282:ARG:HG2	1.71	0.89
1:B:519:LEU:HD13	1:B:519:LEU:H	1.36	0.89
1:B:573:ARG:HD2	1:B:578:THR:HG21	1.54	0.89
1:B:996:LYS:HD3	1:B:996:LYS:H	1.37	0.89
1:B:387:ASN:HD22	1:B:414:LYS:HA	1.36	0.89
1:A:267:LYS:HB3	1:A:790:LYS:HE2	1.54	0.89
1:B:693:PHE:O	1:B:696:ILE:HG12	1.72	0.89
1:A:927:ALA:HA	1:A:930:LYS:HE3	1.54	0.89
1:A:992:PRO:HB2	1:A:996:LYS:HZ1	1.38	0.88
1:A:1197:GLU:HG2	1:A:1227:ALA:HA	1.55	0.88
1:B:1032:GLN:HB2	1:B:1091:PHE:HB2	1.52	0.88
1:B:1216:LYS:HE2	1:B:1216:LYS:HA	1.53	0.88
1:A:849:TYR:OH	1:A:976:ALA:HB2	1.73	0.88
1:A:1216:LYS:HE2	1:A:1216:LYS:HA	1.53	0.88
1:B:278:GLU:O	1:B:282:ARG:HG2	1.73	0.88
1:A:158:TRP:HE1	1:A:900:PHE:HB3	1.36	0.88
1:A:136:ALA:HB2	1:A:182:ILE:HB	1.56	0.88
1:A:573:ARG:HD2	1:A:578:THR:HG21	1.54	0.87
1:B:849:TYR:OH	1:B:976:ALA:HB2	1.74	0.87
1:B:690:PRO:HG2	1:B:1006:ARG:NH2	1.90	0.87
1:A:519:LEU:H	1:A:519:LEU:HD13	1.36	0.87
1:B:136:ALA:HB2	1:B:182:ILE:HB	1.57	0.87
1:B:1193:LEU:HB2	1:B:1223:CYS:HB3	1.57	0.87
1:B:1197:GLU:HG2	1:B:1227:ALA:HA	1.56	0.87
1:A:478:THR:HG22	1:A:479:THR:H	1.40	0.86
1:A:996:LYS:HD3	1:A:996:LYS:H	1.39	0.86
1:B:523:ARG:CD	1:B:524:GLY:H	1.84	0.86
1:B:927:ALA:HA	1:B:930:LYS:HE3	1.55	0.86
1:A:1122:SER:HA	1:A:1164:ARG:HA	1.57	0.86
1:A:1193:LEU:HB2	1:A:1223:CYS:HB3	1.56	0.86
1:B:786:TYR:HE2	1:B:790:LYS:HZ2	1.24	0.86
1:B:379:HIS:HB3	1:B:457:ILE:HA	1.58	0.86
1:A:387:ASN:HD22	1:A:414:LYS:HA	1.38	0.86
1:A:964:LEU:HD13	1:A:965:MET:N	1.91	0.86

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:314:THR:CG2	1:B:327:VAL:HG21	2.05	0.85
1:A:172:THR:O	1:A:175:VAL:HG12	1.76	0.85
1:B:857:LEU:HD11	1:B:976:ALA:HB3	1.56	0.85
1:A:1079:LEU:HD23	1:A:1194:LEU:HD21	1.59	0.85
1:B:202:ILE:HD12	1:B:203:GLY:N	1.90	0.85
1:A:72:GLY:HA2	1:A:326:GLN:NE2	1.92	0.85
1:B:1039:ASN:HB2	1:B:1047:PRO:HA	1.58	0.85
1:B:976:ALA:HA	1:B:979:PHE:CD2	2.11	0.85
1:A:964:LEU:HD13	1:A:965:MET:H	1.41	0.85
1:B:1091:PHE:HE1	1:B:1096:GLU:HG2	1.41	0.85
1:A:163:ASP:HB2	1:A:166:GLU:HB3	1.58	0.84
1:A:523:ARG:CD	1:A:524:GLY:H	1.86	0.84
1:B:1014:ILE:HA	1:B:1102:VAL:HG11	1.59	0.84
1:A:976:ALA:HA	1:A:979:PHE:CD2	2.12	0.84
1:B:401:LYS:H	1:B:401:LYS:HD2	1.42	0.84
1:A:1037:VAL:HG12	1:A:1051:GLY:H	1.42	0.84
1:B:172:THR:O	1:B:175:VAL:HG12	1.77	0.84
1:A:694:TRP:O	1:A:697:LEU:HG	1.77	0.84
1:B:379:HIS:O	1:B:381:PRO:HD3	1.77	0.83
1:B:118:GLY:O	1:B:121:VAL:HG22	1.77	0.83
1:B:1079:LEU:HD23	1:B:1194:LEU:HD21	1.60	0.83
1:A:725:SER:HA	2:A:6001:OJZ:H36	1.59	0.83
1:A:1091:PHE:HE1	1:A:1096:GLU:HG2	1.41	0.83
1:A:429:LYS:H	1:A:429:LYS:HD3	1.39	0.83
1:B:1037:VAL:HG12	1:B:1051:GLY:H	1.42	0.83
1:B:379:HIS:HB2	1:B:456:THR:O	1.79	0.83
1:B:478:THR:HG22	1:B:479:THR:H	1.43	0.83
1:A:1039:ASN:HB2	1:A:1047:PRO:HA	1.60	0.83
1:B:72:GLY:HA2	1:B:326:GLN:NE2	1.93	0.83
1:A:118:GLY:O	1:A:121:VAL:HG22	1.78	0.83
1:B:59:ILE:HD11	1:B:124:VAL:HG11	1.61	0.83
1:A:202:ILE:HD12	1:A:203:GLY:N	1.93	0.82
1:A:853:LEU:HB3	1:A:973:VAL:CG1	2.08	0.82
1:A:1179:ARG:NH2	1:A:1209:VAL:HG11	1.94	0.82
1:A:564:VAL:O	1:A:567:ALA:HB3	1.79	0.82
1:B:155:GLU:HB3	1:B:156:ILE:HD12	1.59	0.82
1:B:318:ILE:HD11	1:B:325:GLY:N	1.93	0.82
1:B:964:LEU:HD13	1:B:965:MET:N	1.93	0.82
1:A:918:GLN:O	1:A:921:GLN:HB3	1.80	0.82
1:B:392:ASN:O	1:B:445:GLY:HA3	1.80	0.82
1:B:773:PHE:O	1:B:776:ALA:HB3	1.80	0.82

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:358:ALA:O	1:A:362:PHE:HB2	1.79	0.82
1:A:1218:ARG:HH22	1:A:1235:ASN:HD22	1.28	0.82
1:B:1179:ARG:NH2	1:B:1209:VAL:HG11	1.95	0.82
1:B:918:GLN:O	1:B:921:GLN:HB3	1.79	0.82
1:B:694:TRP:O	1:B:697:LEU:HG	1.80	0.82
1:B:1092:LEU:HB3	1:B:1097:ILE:HD11	1.61	0.81
1:B:187:GLY:O	1:B:190:PHE:HB3	1.81	0.81
1:A:163:ASP:O	1:A:164:VAL:C	2.19	0.81
1:B:1020:GLN:CG	1:B:1021:GLY:H	1.89	0.81
1:B:856:LEU:HD22	1:B:955:PHE:HD1	1.46	0.81
1:B:163:ASP:HB2	1:B:166:GLU:HB3	1.61	0.81
1:A:1121:CYS:HB2	1:A:1126:ASN:HD21	1.46	0.81
1:B:318:ILE:HD11	1:B:324:ILE:HD12	1.62	0.81
1:B:1121:CYS:HB2	1:B:1126:ASN:HD21	1.44	0.81
1:B:802:ASP:CG	1:B:1041:PRO:HB2	2.01	0.81
1:B:1142:VAL:O	1:B:1146:LYS:HG2	1.81	0.81
1:B:358:ALA:O	1:B:362:PHE:HB2	1.80	0.80
1:B:457:ILE:HD11	1:B:462:LEU:HD13	1.63	0.80
1:A:401:LYS:HD2	1:A:401:LYS:H	1.44	0.80
1:A:715:ILE:HG12	1:A:836:ILE:HD12	1.64	0.80
1:A:574:GLU:HG3	1:A:574:GLU:O	1.79	0.80
1:A:457:ILE:HD11	1:A:462:LEU:HD13	1.63	0.80
1:B:715:ILE:HG12	1:B:836:ILE:HD12	1.64	0.80
1:B:564:VAL:O	1:B:567:ALA:HB3	1.80	0.80
1:B:795:GLN:O	1:B:796:ASP:HB3	1.80	0.80
1:A:388:LEU:HB2	1:A:413:VAL:CG1	2.12	0.80
1:A:158:TRP:O	1:A:164:VAL:CG1	2.30	0.80
1:A:811:THR:O	1:A:814:LEU:HB2	1.82	0.80
1:B:1218:ARG:HH22	1:B:1235:ASN:HD22	1.27	0.80
1:B:508:PHE:HE2	1:B:534:ARG:HD2	1.47	0.79
1:A:379:HIS:HB3	1:A:457:ILE:HA	1.64	0.79
1:A:158:TRP:HE1	1:A:900:PHE:CB	1.95	0.79
1:A:210:LEU:O	1:A:214:ILE:HG13	1.82	0.79
1:B:388:LEU:HB2	1:B:413:VAL:CG1	2.12	0.79
1:A:856:LEU:HD22	1:A:955:PHE:HD1	1.46	0.79
1:B:785:ARG:HH21	1:B:815:ALA:HA	1.46	0.79
1:A:59:ILE:HD11	1:A:124:VAL:HG11	1.62	0.79
1:A:1142:VAL:O	1:A:1146:LYS:HG2	1.82	0.79
1:A:278:GLU:C	1:A:282:ARG:HG2	2.03	0.79
1:A:508:PHE:HE2	1:A:534:ARG:HD2	1.47	0.79
1:A:286:LYS:O	1:A:290:THR:HG23	1.83	0.79

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:35:VAL:HG23	1:A:36:LEU:N	1.97	0.78
1:B:811:THR:O	1:B:814:LEU:HB2	1.81	0.78
1:B:964:LEU:HD13	1:B:965:MET:H	1.45	0.78
1:A:1062:LEU:HD12	1:A:1224:ILE:HG23	1.65	0.78
1:A:689:PRO:HB2	1:A:690:PRO:HD3	1.66	0.78
1:A:504:ASN:O	1:A:534:ARG:HD3	1.83	0.78
1:B:35:VAL:HG23	1:B:36:LEU:N	1.98	0.78
1:A:392:ASN:O	1:A:445:GLY:HA3	1.84	0.78
1:A:905:SER:C	1:A:907:THR:H	1.86	0.78
1:B:1023:LYS:HB3	1:B:1026:MET:HG2	1.65	0.78
1:A:1092:LEU:HB3	1:A:1097:ILE:HD11	1.63	0.78
1:B:1113:SER:HA	1:B:1196:ASP:HB3	1.66	0.78
1:B:210:LEU:O	1:B:214:ILE:HG13	1.82	0.78
1:B:696:ILE:O	1:B:700:ASN:HB2	1.82	0.78
1:A:799:TRP:O	1:A:803:PRO:HB3	1.84	0.78
1:A:797:VAL:O	1:A:801:ASP:CB	2.32	0.78
1:A:864:ILE:HD12	1:A:865:ALA:N	1.99	0.78
1:A:1260:LYS:HD2	1:A:1260:LYS:H	1.48	0.78
1:B:1092:LEU:HD22	1:B:1097:ILE:HD11	1.66	0.78
1:A:959:LEU:HD22	1:A:964:LEU:HG	1.66	0.77
1:B:897:ILE:HD12	1:B:898:GLU:N	1.99	0.77
1:B:864:ILE:HD12	1:B:865:ALA:N	1.99	0.77
1:B:163:ASP:O	1:B:165:GLY:N	2.17	0.77
1:B:1181:ALA:O	1:B:1184:ARG:HB3	1.84	0.77
1:B:379:HIS:CB	1:B:457:ILE:HA	2.15	0.77
1:B:286:LYS:O	1:B:290:THR:HG23	1.84	0.77
1:A:308:LEU:HD12	1:A:751:PHE:CE2	2.20	0.77
1:A:550:LEU:HB2	1:A:580:VAL:HG23	1.67	0.77
1:B:128:GLN:O	1:B:131:PHE:HB3	1.85	0.77
1:A:314:THR:HG23	1:A:327:VAL:HG21	1.65	0.77
1:A:857:LEU:CD1	1:A:976:ALA:HB3	2.15	0.77
1:A:91:MET:HB2	1:A:94:ALA:HB3	1.67	0.77
1:B:756:LEU:HD12	1:B:757:ILE:N	2.00	0.77
1:A:785:ARG:HH21	1:A:815:ALA:HA	1.50	0.77
1:A:1092:LEU:HD22	1:A:1097:ILE:HD11	1.66	0.77
1:A:795:GLN:O	1:A:796:ASP:HB3	1.84	0.77
1:B:1038:PHE:HB2	1:B:1085:PRO:HA	1.66	0.77
1:B:550:LEU:HB2	1:B:580:VAL:HG23	1.65	0.76
1:B:285:ILE:O	1:B:289:ILE:HG12	1.84	0.76
1:A:756:LEU:HD12	1:A:757:ILE:N	1.99	0.76
1:A:843:ILE:HA	1:A:846:SER:HB3	1.67	0.76

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1014:ILE:HB	1:A:1102:VAL:HG21	1.66	0.76
1:A:800:PHE:O	1:A:803:PRO:HD3	1.85	0.76
1:B:215:LEU:O	1:B:219:PRO:HD2	1.86	0.76
1:B:306:TYR:O	1:B:310:PHE:HB2	1.85	0.76
1:B:753:LEU:HD12	1:B:756:LEU:HD11	1.68	0.76
1:A:773:PHE:O	1:A:776:ALA:HB3	1.85	0.76
1:A:1038:PHE:HB2	1:A:1085:PRO:HA	1.67	0.76
1:B:1260:LYS:H	1:B:1260:LYS:HD2	1.50	0.76
1:B:91:MET:HB2	1:B:94:ALA:HB3	1.68	0.76
1:B:314:THR:HG23	1:B:327:VAL:CG2	2.11	0.76
1:A:1113:SER:HA	1:A:1196:ASP:HB3	1.67	0.76
1:B:286:LYS:HG2	1:B:778:GLU:CG	2.15	0.76
1:B:324:ILE:HD12	1:B:326:GLN:H	1.51	0.76
1:A:285:ILE:O	1:A:289:ILE:HG12	1.86	0.76
1:B:1062:LEU:HD12	1:B:1224:ILE:HG23	1.66	0.76
1:B:504:ASN:O	1:B:534:ARG:HD3	1.85	0.76
1:B:797:VAL:O	1:B:801:ASP:CG	2.23	0.76
1:B:1056:VAL:HG23	1:B:1060:GLN:HE22	1.50	0.76
1:A:753:LEU:HD12	1:A:756:LEU:HD11	1.68	0.76
1:A:722:PRO:HB2	1:A:841:THR:HG21	1.68	0.76
1:B:800:PHE:O	1:B:803:PRO:HD3	1.85	0.76
1:B:394:HIS:HB2	1:B:444:ASP:HB3	1.67	0.76
1:B:278:GLU:C	1:B:282:ARG:HG2	2.05	0.76
1:A:1181:ALA:O	1:A:1184:ARG:HB3	1.85	0.76
1:A:740:PRO:HG2	1:A:741:PRO:HD3	1.68	0.76
1:B:905:SER:C	1:B:907:THR:H	1.88	0.76
1:B:512:LEU:HD12	1:B:513:PRO:HD2	1.68	0.75
1:B:799:TRP:O	1:B:803:PRO:HB3	1.86	0.75
1:A:1020:GLN:HG3	1:A:1101:ASN:HB2	1.68	0.75
1:B:608:HIS:HD1	1:B:618:TYR:HE2	1.33	0.75
1:B:797:VAL:HG12	1:B:798:SER:N	2.01	0.75
1:A:396:SER:HA	1:A:404:GLN:HA	1.67	0.75
1:A:897:ILE:HD12	1:A:898:GLU:N	2.01	0.75
1:B:35:VAL:HG12	1:B:359:TYR:CE2	2.22	0.75
1:B:270:LEU:HD23	1:B:270:LEU:N	1.98	0.75
1:B:819:ALA:O	1:B:822:LYS:HB3	1.86	0.75
1:B:843:ILE:HA	1:B:846:SER:HB3	1.68	0.75
1:A:853:LEU:H	1:A:853:LEU:HD22	1.51	0.75
1:B:1033:PHE:HB3	1:B:1036:VAL:HG21	1.68	0.75
1:B:740:PRO:HG2	1:B:741:PRO:HD3	1.68	0.75
1:A:608:HIS:HD1	1:A:618:TYR:HE2	1.33	0.75

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:270:LEU:N	1:A:270:LEU:HD23	1.99	0.75
1:B:1109:LEU:HD21	1:B:1188:ARG:HH11	1.51	0.75
1:A:282:ARG:O	1:A:286:LYS:HB2	1.86	0.75
1:A:819:ALA:O	1:A:822:LYS:HB3	1.87	0.75
1:A:218:SER:HB2	1:A:219:PRO:HD3	1.69	0.75
1:B:332:PHE:O	1:B:335:LEU:HB3	1.85	0.75
1:B:949:TYR:OH	2:B:6002:OJZ:H32	1.87	0.75
1:A:434:GLN:HE21	1:A:439:LEU:HG	1.51	0.75
1:B:407:LYS:NZ	1:B:601:VAL:HA	2.00	0.75
1:A:512:LEU:HD12	1:A:513:PRO:HD2	1.68	0.75
1:B:543:ARG:NH2	1:B:905:SER:O	2.20	0.75
1:A:265:GLY:HA2	1:A:793:LEU:HD21	1.68	0.75
1:B:1199:THR:HG23	1:B:1210:VAL:HG11	1.67	0.74
1:A:1109:LEU:HD21	1:A:1188:ARG:HH11	1.51	0.74
1:A:1033:PHE:HB3	1:A:1036:VAL:HG21	1.68	0.74
1:B:401:LYS:NZ	1:B:401:LYS:HB3	2.02	0.74
1:A:1056:VAL:HG23	1:A:1060:GLN:HE22	1.50	0.74
1:A:686:GLU:HG2	1:A:813:ARG:NH2	2.02	0.74
1:A:254:LEU:HD23	1:A:811:THR:HG22	1.69	0.74
1:B:1138:TYR:O	1:B:1142:VAL:HG23	1.86	0.74
1:A:35:VAL:HG12	1:A:359:TYR:CE2	2.22	0.74
1:A:360:GLU:HA	1:A:363:LYS:HE2	1.70	0.74
1:B:722:PRO:HB2	1:B:841:THR:HG21	1.69	0.74
1:A:306:TYR:O	1:A:310:PHE:HB2	1.87	0.74
1:B:396:SER:HA	1:B:404:GLN:HA	1.70	0.74
1:A:407:LYS:NZ	1:A:601:VAL:HA	2.01	0.74
1:A:206:ARG:O	1:A:211:THR:HB	1.86	0.74
1:A:713:CYS:SG	1:A:769:GLN:HB3	2.27	0.74
1:B:892:ILE:HB	1:B:916:TYR:CE1	2.23	0.74
1:A:696:ILE:O	1:A:700:ASN:HB2	1.86	0.74
1:A:215:LEU:O	1:A:219:PRO:HD2	1.88	0.74
1:B:278:GLU:HB3	1:B:782:LYS:HG2	1.67	0.74
1:B:298:ALA:O	1:B:302:ILE:HG12	1.87	0.74
1:B:857:LEU:HD12	1:B:973:VAL:HG12	1.70	0.74
1:A:1063:ALA:HB2	1:A:1236:ALA:HB1	1.70	0.74
1:A:128:GLN:O	1:A:131:PHE:HB3	1.88	0.74
1:B:690:PRO:HG2	1:B:1006:ARG:HH22	1.52	0.74
1:A:1138:TYR:O	1:A:1142:VAL:HG23	1.88	0.74
1:B:557:LEU:HG	1:B:561:SER:OG	1.87	0.74
1:A:1199:THR:HG23	1:A:1210:VAL:HG11	1.69	0.74
1:B:202:ILE:HD12	1:B:203:GLY:H	1.52	0.73

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:703:GLU:HB3	1:B:780:LEU:HD23	1.70	0.73
1:B:928:MET:O	1:B:931:ALA:HB3	1.87	0.73
1:B:218:SER:HB2	1:B:219:PRO:HD3	1.69	0.73
1:B:851:TRP:HA	1:B:854:THR:HB	1.70	0.73
1:A:892:ILE:HB	1:A:916:TYR:CE1	2.23	0.73
1:B:1100:LEU:HG	1:B:1101:ASN:H	1.53	0.73
1:B:36:LEU:HD12	1:B:37:THR:N	2.03	0.73
1:B:725:SER:HB3	1:B:975:SER:HB3	1.71	0.73
1:A:210:LEU:HD23	1:A:317:VAL:HG11	1.70	0.73
1:A:318:ILE:HD13	1:A:327:VAL:HG13	1.71	0.73
1:A:50:MET:HG3	1:A:131:PHE:CZ	2.23	0.73
1:A:103:LEU:HB2	1:A:960:VAL:CG2	2.17	0.73
1:B:282:ARG:O	1:B:286:LYS:HB2	1.87	0.73
1:A:703:GLU:HB3	1:A:780:LEU:HD23	1.71	0.73
1:A:36:LEU:HD12	1:A:37:THR:N	2.02	0.73
1:A:801:ASP:HB3	1:A:1083:TYR:OH	1.87	0.73
1:A:557:LEU:HG	1:A:561:SER:OG	1.88	0.73
1:B:1027:LEU:H	1:B:1027:LEU:HD23	1.53	0.73
1:B:543:ARG:HH12	1:B:905:SER:HA	1.53	0.73
1:A:722:PRO:O	1:A:725:SER:HB2	1.89	0.73
1:B:993:ASP:N	1:B:996:LYS:HZ1	1.86	0.73
1:A:394:HIS:HB2	1:A:444:ASP:HB3	1.69	0.73
1:B:722:PRO:O	1:B:725:SER:HB2	1.87	0.73
1:B:1063:ALA:HB2	1:B:1236:ALA:HB1	1.69	0.73
1:A:972:LEU:HD12	1:A:972:LEU:H	1.52	0.73
1:B:407:LYS:HZ1	1:B:601:VAL:HA	1.54	0.73
1:A:1242:ILE:HA	1:A:1247:VAL:HA	1.70	0.73
1:A:332:PHE:O	1:A:335:LEU:HB3	1.88	0.73
1:A:1013:GLU:O	1:A:1014:ILE:HG23	1.89	0.73
1:B:922:ILE:HB	1:B:923:PRO:HD3	1.70	0.73
1:B:930:LYS:O	1:B:933:VAL:HB	1.88	0.73
1:B:972:LEU:HD12	1:B:972:LEU:H	1.52	0.73
1:A:969:ASN:HD22	1:A:970:VAL:H	1.36	0.73
1:A:138:ARG:NH2	1:B:515:GLN:HE21	1.86	0.73
1:A:928:MET:O	1:A:931:ALA:HB3	1.89	0.73
1:B:1242:ILE:HA	1:B:1247:VAL:HA	1.69	0.73
1:B:1218:ARG:HH22	1:B:1235:ASN:ND2	1.87	0.72
1:A:992:PRO:HB2	1:A:996:LYS:NZ	2.04	0.72
1:B:713:CYS:SG	1:B:769:GLN:HB3	2.29	0.72
1:A:922:ILE:HB	1:A:923:PRO:HD3	1.69	0.72
1:B:992:PRO:HB2	1:B:996:LYS:HZ1	1.54	0.72

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:158:TRP:O	1:B:164:VAL:CG1	2.37	0.72
1:B:825:THR:O	1:B:829:LEU:HG	1.89	0.72
1:A:204:PHE:HA	1:A:211:THR:HG21	1.71	0.72
1:B:715:ILE:HG23	1:B:836:ILE:HG21	1.71	0.72
1:B:721:GLN:HB3	1:B:722:PRO:HD3	1.71	0.72
1:B:416:GLY:N	1:B:577:THR:HG22	2.02	0.72
1:A:1014:ILE:HD12	1:A:1106:ARG:NH1	2.02	0.72
1:B:133:CYS:SG	1:B:931:ALA:HA	2.30	0.72
1:A:942:GLN:O	1:A:945:MET:HB3	1.90	0.72
1:B:50:MET:HG3	1:B:131:PHE:CZ	2.23	0.72
1:B:207:GLY:HA3	1:B:211:THR:HB	1.72	0.72
1:B:289:ILE:O	1:B:293:ILE:HG12	1.90	0.72
1:B:132:TRP:HB2	1:B:186:ILE:HD13	1.71	0.72
1:A:303:TYR:O	1:A:306:TYR:N	2.23	0.72
1:A:214:ILE:CD1	1:A:330:VAL:HB	2.20	0.72
1:B:360:GLU:HA	1:B:363:LYS:HE2	1.72	0.72
1:A:158:TRP:HA	1:A:162:HIS:HD2	1.55	0.72
1:A:715:ILE:HG23	1:A:836:ILE:HG21	1.71	0.72
1:A:168:ASN:O	1:A:171:LEU:HB3	1.90	0.72
1:B:992:PRO:HB2	1:B:996:LYS:NZ	2.05	0.72
1:A:401:LYS:HB3	1:A:401:LYS:NZ	2.04	0.72
1:A:504:ASN:OD1	1:A:568:ALA:HB2	1.90	0.72
1:A:1218:ARG:HH22	1:A:1235:ASN:ND2	1.87	0.71
1:B:504:ASN:OD1	1:B:568:ALA:HB2	1.89	0.71
1:B:210:LEU:HD23	1:B:317:VAL:HG11	1.70	0.71
1:B:1121:CYS:HB2	1:B:1126:ASN:ND2	2.05	0.71
1:B:959:LEU:HD22	1:B:964:LEU:HB2	1.71	0.71
1:B:1150:ILE:HB	1:B:1179:ARG:HB3	1.72	0.71
1:A:267:LYS:HA	1:A:270:LEU:HD11	1.72	0.71
1:A:721:GLN:HB3	1:A:722:PRO:HD3	1.71	0.71
1:B:795:GLN:HE21	1:B:796:ASP:H	1.38	0.71
1:A:211:THR:O	1:A:215:LEU:HG	1.88	0.71
1:B:59:ILE:CD1	1:B:124:VAL:HG11	2.20	0.71
1:A:399:SER:O	1:A:402:GLU:HB2	1.90	0.71
1:B:390:PHE:HE1	1:B:432:THR:HB	1.55	0.71
1:B:849:TYR:HB2	1:B:854:THR:OG1	1.90	0.71
1:A:725:SER:HB3	1:A:975:SER:HB3	1.71	0.71
1:B:288:ALA:HA	1:B:291:ALA:CB	2.18	0.71
1:A:187:GLY:O	1:A:190:PHE:HB3	1.89	0.71
1:A:1100:LEU:HG	1:A:1101:ASN:H	1.56	0.71
1:A:289:ILE:O	1:A:293:ILE:HG12	1.89	0.71

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:186:ILE:HG13	1:A:187:GLY:N	2.05	0.71
1:B:942:GLN:O	1:B:945:MET:HB3	1.90	0.71
1:B:291:ALA:O	1:B:294:SER:HB2	1.90	0.71
1:A:407:LYS:HZ1	1:A:601:VAL:HA	1.56	0.71
1:B:399:SER:O	1:B:402:GLU:HB2	1.90	0.71
1:B:168:ASN:O	1:B:171:LEU:HB3	1.91	0.71
1:A:207:GLY:HA3	1:A:211:THR:H	1.55	0.71
1:A:239:GLU:HB3	1:A:285:ILE:HG12	1.72	0.71
1:A:797:VAL:HG12	1:A:798:SER:N	2.04	0.71
1:A:384:ILE:HG22	1:A:385:GLN:H	1.56	0.71
1:A:122:LEU:HD12	1:A:939:SER:HB2	1.72	0.71
1:B:1114:GLN:NE2	1:B:1200:SER:HB3	2.03	0.71
1:B:211:THR:O	1:B:215:LEU:HG	1.91	0.70
1:A:688:VAL:HB	1:A:1006:ARG:HH12	1.56	0.70
1:A:471:GLN:O	1:A:473:PRO:HD3	1.91	0.70
1:A:1150:ILE:HB	1:A:1179:ARG:HB3	1.72	0.70
1:A:59:ILE:CD1	1:A:124:VAL:HG11	2.21	0.70
1:A:1248:LYS:HE3	1:A:1248:LYS:HA	1.72	0.70
1:B:239:GLU:HB3	1:B:285:ILE:HG12	1.73	0.70
1:B:1098:LYS:HG2	1:B:1098:LYS:O	1.90	0.70
1:A:288:ALA:HA	1:A:291:ALA:CB	2.19	0.70
1:A:291:ALA:O	1:A:294:SER:HB2	1.91	0.70
1:A:157:GLY:HA2	1:A:160:ASP:HB2	1.72	0.70
1:B:109:THR:O	1:B:113:TYR:HB3	1.92	0.70
1:A:132:TRP:HB2	1:A:186:ILE:HD13	1.71	0.70
1:B:35:VAL:CG2	1:B:36:LEU:H	2.03	0.70
1:A:298:ALA:O	1:A:302:ILE:HG12	1.92	0.70
1:A:801:ASP:HB3	1:A:1083:TYR:CZ	2.26	0.70
1:B:158:TRP:HA	1:B:162:HIS:HD2	1.56	0.70
1:B:482:GLU:O	1:B:485:ARG:N	2.25	0.70
1:A:1019:THR:HB	1:A:1099:GLN:O	1.91	0.70
1:B:186:ILE:HG13	1:B:187:GLY:N	2.05	0.70
1:A:1121:CYS:HB2	1:A:1126:ASN:ND2	2.06	0.70
1:A:1218:ARG:NH2	1:A:1235:ASN:HD22	1.88	0.70
1:B:1218:ARG:NH2	1:B:1235:ASN:HD22	1.88	0.70
1:A:482:GLU:O	1:A:485:ARG:N	2.25	0.70
1:B:471:GLN:O	1:B:473:PRO:HD3	1.92	0.70
1:B:246:ALA:CB	1:B:277:LEU:HB3	2.22	0.70
1:A:416:GLY:N	1:A:577:THR:HG22	2.05	0.70
1:A:386:GLY:HA3	1:A:450:ASP:HA	1.73	0.69
1:A:482:GLU:O	1:A:483:ASN:C	2.29	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:779:ILE:HG13	1:B:780:LEU:N	2.08	0.69
1:B:969:ASN:HD22	1:B:970:VAL:H	1.38	0.69
1:B:1031:VAL:HB	1:B:1056:VAL:HG12	1.75	0.69
1:A:211:THR:HA	1:A:214:ILE:HD12	1.73	0.69
1:A:791:SER:HA	1:A:1010:LYS:HE3	1.74	0.69
1:B:802:ASP:CB	1:B:1041:PRO:HB2	2.22	0.69
1:A:158:TRP:O	1:A:164:VAL:HG11	1.91	0.69
1:B:35:VAL:O	1:B:39:PHE:HB2	1.92	0.69
1:B:781:THR:HG23	1:B:818:ALA:HB1	1.74	0.69
1:A:1193:LEU:HD11	1:A:1217:ALA:O	1.93	0.69
1:B:689:PRO:N	1:B:690:PRO:HD2	2.08	0.69
1:A:905:SER:O	1:A:907:THR:N	2.26	0.69
1:B:384:ILE:O	1:B:385:GLN:O	2.11	0.69
1:B:482:GLU:O	1:B:483:ASN:C	2.31	0.69
1:B:285:ILE:O	1:B:285:ILE:HD13	1.92	0.69
1:A:133:CYS:SG	1:A:931:ALA:HA	2.32	0.69
1:B:254:LEU:HD12	1:B:789:PHE:HZ	1.58	0.69
1:B:310:PHE:CZ	1:B:331:PHE:HB3	2.27	0.69
1:B:697:LEU:HA	1:B:700:ASN:HB2	1.73	0.69
1:A:1001:ALA:O	1:A:1005:ILE:HG12	1.92	0.69
1:A:697:LEU:HA	1:A:700:ASN:HB2	1.75	0.69
1:A:554:THR:OG1	1:A:562:GLU:HG3	1.93	0.69
1:B:447:VAL:HG13	1:B:454:ILE:HG21	1.75	0.69
1:B:1248:LYS:HA	1:B:1248:LYS:HE3	1.73	0.69
1:B:784:LEU:O	1:B:788:VAL:HG23	1.93	0.69
1:B:856:LEU:HD22	1:B:955:PHE:CD1	2.28	0.69
1:A:930:LYS:O	1:A:933:VAL:HB	1.92	0.69
1:B:554:THR:OG1	1:B:562:GLU:HG3	1.92	0.69
1:B:1106:ARG:HA	1:B:1109:LEU:HD13	1.75	0.69
1:A:826:GLY:HA2	1:A:829:LEU:HD12	1.73	0.69
1:A:795:GLN:HE21	1:A:796:ASP:H	1.40	0.69
1:B:1127:ILE:HD13	1:B:1180:ILE:HG23	1.75	0.69
1:A:1138:TYR:O	1:A:1141:ILE:HG12	1.92	0.69
1:B:552:GLU:HB3	1:B:555:SER:OG	1.92	0.69
1:B:1014:ILE:O	1:B:1015:ASP:HB2	1.92	0.69
1:B:705:PRO:HG2	1:B:706:TYR:H	1.58	0.69
1:B:1011:THR:N	1:B:1012:PRO:CD	2.56	0.69
1:A:324:ILE:HD12	1:A:326:GLN:H	1.56	0.69
1:A:779:ILE:HG13	1:A:780:LEU:N	2.08	0.69
1:A:1020:GLN:HG3	1:A:1101:ASN:CB	2.23	0.69
1:A:195:THR:HG23	1:A:196:PHE:H	1.58	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:257:ILE:HG21	1:A:800:PHE:HB3	1.75	0.68
1:A:919:SER:O	1:A:923:PRO:CD	2.41	0.68
1:B:1137:SER:OG	1:B:1140:GLU:HB2	1.94	0.68
1:A:1127:ILE:HD13	1:A:1180:ILE:HG23	1.74	0.68
1:A:109:THR:O	1:A:113:TYR:HB3	1.93	0.68
1:A:762:SER:HA	1:A:765:THR:HG22	1.74	0.68
1:A:1031:VAL:HB	1:A:1056:VAL:HG12	1.75	0.68
1:A:60:HIS:O	1:A:63:ALA:HB3	1.93	0.68
1:A:394:HIS:HA	1:A:406:LEU:O	1.93	0.68
1:B:826:GLY:HA2	1:B:829:LEU:HD12	1.75	0.68
1:A:853:LEU:HB3	1:A:973:VAL:HG11	1.75	0.68
1:A:39:PHE:HE2	1:A:358:ALA:HB3	1.58	0.68
1:A:99:MET:HB3	1:A:960:VAL:O	1.93	0.68
1:A:559:THR:O	1:A:562:GLU:HB3	1.94	0.68
1:B:210:LEU:HG	1:B:322:TYR:CD2	2.28	0.68
1:B:919:SER:O	1:B:923:PRO:CD	2.41	0.68
1:B:861:VAL:HB	1:B:862:PRO:HD3	1.76	0.68
1:B:267:LYS:H	1:B:270:LEU:HD21	1.57	0.68
1:B:1048:VAL:O	1:B:1049:LEU:HD22	1.94	0.68
1:A:390:PHE:HE1	1:A:432:THR:HB	1.59	0.68
1:A:1054:LEU:HD11	1:A:1240:VAL:HG11	1.75	0.68
1:A:138:ARG:HH22	1:B:515:GLN:HE21	1.40	0.68
1:A:1106:ARG:HA	1:A:1109:LEU:HD13	1.76	0.68
1:A:388:LEU:HB2	1:A:413:VAL:HG12	1.76	0.68
1:A:164:VAL:O	1:A:164:VAL:CG2	2.32	0.68
1:B:157:GLY:HA2	1:B:160:ASP:HB2	1.74	0.68
1:A:257:ILE:HD13	1:A:257:ILE:C	2.14	0.68
1:B:559:THR:O	1:B:562:GLU:HB3	1.93	0.68
1:A:705:PRO:HG2	1:A:706:TYR:H	1.59	0.68
1:A:781:THR:HG23	1:A:818:ALA:HB1	1.75	0.68
1:A:267:LYS:CB	1:A:790:LYS:HE2	2.23	0.67
1:A:1266:MET:O	1:A:1269:VAL:HG12	1.93	0.67
1:A:285:ILE:O	1:A:285:ILE:HD13	1.94	0.67
1:A:178:ILE:HG12	1:A:358:ALA:HB2	1.76	0.67
1:A:35:VAL:O	1:A:39:PHE:HB2	1.95	0.67
1:A:251:GLU:OE1	1:A:811:THR:HB	1.94	0.67
1:A:405:ILE:CG2	1:A:428:GLY:HA2	2.25	0.67
1:B:1054:LEU:HD11	1:B:1240:VAL:HG11	1.75	0.67
1:B:766:PHE:HA	1:B:769:GLN:HE21	1.59	0.67
1:A:857:LEU:HD13	1:A:976:ALA:HB3	1.76	0.67
1:A:861:VAL:HB	1:A:862:PRO:HD3	1.74	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1039:ASN:ND2	1:A:1047:PRO:HA	2.09	0.67
1:B:1063:ALA:HB2	1:B:1236:ALA:CB	2.24	0.67
1:B:1039:ASN:CB	1:B:1047:PRO:HA	2.24	0.67
1:B:133:CYS:O	1:B:134:LEU:C	2.31	0.67
1:B:303:TYR:O	1:B:306:TYR:N	2.27	0.67
1:A:202:ILE:HD12	1:A:203:GLY:H	1.56	0.67
1:A:1039:ASN:CB	1:A:1047:PRO:HA	2.24	0.67
1:A:467:GLY:HA3	1:A:545:PRO:HG3	1.77	0.67
1:A:569:LEU:O	1:A:573:ARG:HG3	1.93	0.67
1:B:484:ILE:HG21	1:B:496:ILE:HG23	1.74	0.67
1:B:784:LEU:HD12	1:B:1004:ILE:HD11	1.76	0.67
1:A:283:LEU:HD12	1:A:284:GLY:N	2.08	0.67
1:A:552:GLU:HB3	1:A:555:SER:OG	1.95	0.67
1:A:1114:GLN:NE2	1:A:1200:SER:HB3	2.05	0.67
1:B:254:LEU:HD12	1:B:789:PHE:CZ	2.30	0.67
1:B:257:ILE:O	1:B:260:VAL:HB	1.95	0.67
1:A:856:LEU:HD22	1:A:955:PHE:CD1	2.28	0.67
1:B:792:MET:HA	1:B:795:GLN:HB2	1.77	0.67
1:A:1063:ALA:HB2	1:A:1236:ALA:CB	2.25	0.67
1:A:1202:LEU:HD21	1:A:1206:SER:HB3	1.76	0.67
1:B:1266:MET:O	1:B:1269:VAL:HG12	1.94	0.67
1:A:484:ILE:HG21	1:A:496:ILE:HG23	1.75	0.67
1:B:211:THR:HA	1:B:214:ILE:HD12	1.76	0.67
1:B:195:THR:HG23	1:B:196:PHE:H	1.60	0.67
1:B:1066:GLY:H	1:B:1072:LYS:HE2	1.60	0.67
1:B:1118:LEU:HB3	1:B:1129:TYR:OH	1.95	0.66
1:B:1001:ALA:O	1:B:1005:ILE:HG12	1.94	0.66
1:B:60:HIS:O	1:B:63:ALA:HB3	1.94	0.66
1:B:467:GLY:HA3	1:B:545:PRO:HG3	1.77	0.66
1:A:178:ILE:HG12	1:A:358:ALA:CB	2.25	0.66
1:A:1218:ARG:HH12	1:A:1235:ASN:ND2	1.93	0.66
1:B:1193:LEU:HD11	1:B:1217:ALA:O	1.95	0.66
1:B:858:LEU:HD12	1:B:859:ALA:N	2.11	0.66
1:A:825:THR:O	1:A:829:LEU:HG	1.94	0.66
1:B:447:VAL:HG13	1:B:454:ILE:CG2	2.25	0.66
1:A:906:LEU:HD23	1:A:906:LEU:O	1.96	0.66
1:B:1243:GLN:O	1:B:1246:LYS:HD2	1.96	0.66
1:B:502:GLU:C	1:B:504:ASN:H	1.97	0.66
1:B:283:LEU:HD12	1:B:284:GLY:N	2.10	0.66
1:A:209:LYS:O	1:A:212:LEU:HB3	1.95	0.66
1:A:846:SER:OG	1:A:854:THR:HG23	1.94	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:59:ILE:HD11	1:B:124:VAL:HG21	1.78	0.66
1:B:185:LYS:HZ2	1:B:185:LYS:HB3	1.61	0.66
1:B:388:LEU:HB2	1:B:413:VAL:HG12	1.76	0.66
1:A:447:VAL:HG13	1:A:454:ILE:HG21	1.77	0.66
1:A:1189:GLN:N	1:A:1190:PRO:HD3	2.09	0.66
1:A:96:LYS:HG2	1:A:962:GLN:HB2	1.75	0.66
1:B:692:SER:HB2	1:B:695:ARG:HB3	1.77	0.66
1:B:508:PHE:CE2	1:B:534:ARG:HD2	2.30	0.66
1:B:902:THR:HG23	1:B:903:VAL:H	1.60	0.66
1:A:267:LYS:H	1:A:270:LEU:HD21	1.61	0.66
1:A:978:VAL:HG21	2:A:6001:OJZ:H35A	1.78	0.66
1:B:1218:ARG:HH12	1:B:1235:ASN:ND2	1.93	0.66
1:A:506:TYR:O	1:A:510:MET:HG2	1.93	0.66
1:B:218:SER:HB2	1:B:219:PRO:CD	2.26	0.66
1:A:784:LEU:HD12	1:A:1004:ILE:HD11	1.77	0.66
1:A:1150:ILE:O	1:A:1154:ILE:HD13	1.95	0.66
1:A:257:ILE:O	1:A:260:VAL:HB	1.96	0.66
1:B:603:VAL:HG23	1:B:604:GLU:H	1.61	0.66
1:B:1185:ALA:O	1:B:1190:PRO:HD3	1.96	0.66
1:B:762:SER:HA	1:B:765:THR:HG22	1.76	0.66
1:A:133:CYS:O	1:A:134:LEU:C	2.34	0.66
1:B:735:PHE:HD2	1:B:747:ASN:HD21	1.44	0.66
1:B:1150:ILE:O	1:B:1154:ILE:HD13	1.94	0.66
1:A:508:PHE:CE2	1:A:534:ARG:HD2	2.30	0.66
1:B:883:LYS:O	1:B:887:GLU:HB2	1.95	0.66
1:B:56:ALA:O	1:B:59:ILE:HG13	1.96	0.66
1:B:1189:GLN:N	1:B:1190:PRO:HD3	2.11	0.66
1:B:183:GLY:O	1:B:186:ILE:HG12	1.96	0.66
1:B:820:GLN:HG3	1:B:1000:SER:CB	2.26	0.66
1:B:290:THR:HG22	1:B:770:GLY:C	2.17	0.66
1:A:175:VAL:HG13	1:A:176:SER:N	2.11	0.66
1:B:39:PHE:HE2	1:B:358:ALA:HB3	1.60	0.65
1:B:384:ILE:HG22	1:B:385:GLN:H	1.60	0.65
1:B:458:ASN:HD22	1:B:459:VAL:N	1.95	0.65
1:B:506:TYR:O	1:B:510:MET:HG2	1.96	0.65
1:A:331:PHE:O	1:A:334:VAL:HG12	1.96	0.65
1:B:178:ILE:HG12	1:B:358:ALA:CB	2.26	0.65
1:B:1202:LEU:HD21	1:B:1206:SER:HB3	1.77	0.65
1:A:324:ILE:O	1:A:326:GLN:N	2.30	0.65
1:A:1039:ASN:HD22	1:A:1047:PRO:HA	1.62	0.65
1:B:386:GLY:HA3	1:B:450:ASP:HA	1.76	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:246:ALA:CB	1:A:277:LEU:HB3	2.23	0.65
1:A:792:MET:HA	1:A:795:GLN:HB2	1.77	0.65
1:B:178:ILE:HG12	1:B:358:ALA:HB2	1.77	0.65
1:A:363:LYS:O	1:A:367:ASN:HB3	1.97	0.65
1:B:1195:LEU:HD23	1:B:1214:LEU:HD11	1.78	0.65
1:B:324:ILE:O	1:B:326:GLN:N	2.29	0.65
1:A:858:LEU:HD12	1:A:859:ALA:N	2.11	0.65
1:A:1137:SER:OG	1:A:1140:GLU:HB2	1.96	0.65
1:A:447:VAL:HG13	1:A:454:ILE:CG2	2.26	0.65
1:A:154:GLN:NE2	1:A:162:HIS:NE2	2.42	0.65
1:A:538:ALA:O	1:A:541:LEU:HB3	1.97	0.65
1:B:311:TRP:HA	1:B:311:TRP:HE3	1.61	0.65
1:A:185:LYS:NZ	1:A:185:LYS:HB3	2.11	0.65
1:B:1138:TYR:O	1:B:1141:ILE:HG12	1.97	0.65
1:A:163:ASP:O	1:A:164:VAL:O	2.15	0.65
1:A:1118:LEU:HB3	1:A:1129:TYR:OH	1.95	0.65
1:A:426:GLY:O	1:A:599:GLY:HA2	1.96	0.65
1:A:424:ASN:HB3	1:A:598:ASP:OD1	1.97	0.65
1:A:1243:GLN:O	1:A:1246:LYS:HD2	1.96	0.65
1:A:902:THR:HG23	1:A:903:VAL:H	1.62	0.65
1:B:465:ILE:C	1:B:466:ILE:HD12	2.17	0.65
1:A:1185:ALA:O	1:A:1190:PRO:HD3	1.97	0.65
1:B:424:ASN:HB3	1:B:598:ASP:OD1	1.97	0.65
1:B:1058:LYS:O	1:B:1060:GLN:HG3	1.96	0.65
1:B:478:THR:HG21	1:B:482:GLU:HG3	1.78	0.65
1:A:1048:VAL:O	1:A:1049:LEU:HD22	1.97	0.65
1:A:458:ASN:HD22	1:A:459:VAL:N	1.94	0.65
1:B:1214:LEU:HA	1:B:1217:ALA:HB3	1.79	0.65
1:B:421:LEU:HB3	1:B:429:LYS:HB3	1.78	0.65
1:B:1011:THR:H	1:B:1012:PRO:CD	2.10	0.65
1:B:88:SER:O	1:B:90:ASN:N	2.30	0.65
1:B:49:TYR:CE2	1:B:134:LEU:HD12	2.32	0.64
1:B:311:TRP:CE3	1:B:311:TRP:HA	2.32	0.64
1:A:35:VAL:CG2	1:A:36:LEU:H	2.02	0.64
1:A:1066:GLY:H	1:A:1072:LYS:HE2	1.61	0.64
1:A:1195:LEU:HD23	1:A:1214:LEU:HD11	1.78	0.64
1:B:121:VAL:HG23	1:B:122:LEU:N	2.12	0.64
1:A:509:ILE:HD12	1:A:510:MET:N	2.13	0.64
1:B:270:LEU:CD2	1:B:270:LEU:H	2.01	0.64
1:A:270:LEU:CD2	1:A:270:LEU:H	2.02	0.64
1:A:735:PHE:HD2	1:A:747:ASN:HD21	1.44	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:257:ILE:HD13	1:B:257:ILE:C	2.17	0.64
1:A:857:LEU:HD11	1:A:976:ALA:HB3	1.79	0.64
1:A:972:LEU:O	1:A:975:SER:HB2	1.97	0.64
1:A:59:ILE:HD11	1:A:124:VAL:HG21	1.78	0.64
1:B:423:GLY:HA2	1:B:597:PHE:O	1.97	0.64
1:B:158:TRP:CZ2	1:B:900:PHE:HB2	2.33	0.64
1:B:458:ASN:HD22	1:B:459:VAL:H	1.44	0.64
1:B:1203:ASP:O	1:B:1204:THR:O	2.15	0.64
1:A:65:PRO:O	1:A:68:MET:N	2.31	0.64
1:A:103:LEU:HD22	1:A:960:VAL:H	1.62	0.64
1:B:363:LYS:O	1:B:367:ASN:HB3	1.97	0.64
1:A:1234:GLN:HA	1:A:1253:HIS:HD2	1.62	0.64
1:A:703:GLU:HG2	1:A:784:LEU:HD21	1.79	0.64
1:B:799:TRP:HA	1:B:799:TRP:CE3	2.33	0.64
1:B:1014:ILE:HD12	1:B:1106:ARG:HH11	1.62	0.64
1:B:1080:GLU:OE2	1:B:1109:LEU:HD12	1.97	0.64
1:A:154:GLN:HE22	1:A:162:HIS:CD2	2.16	0.64
1:A:218:SER:HB2	1:A:219:PRO:CD	2.26	0.64
1:A:883:LYS:O	1:A:887:GLU:HB2	1.98	0.64
1:A:1080:GLU:OE2	1:A:1109:LEU:HD12	1.97	0.64
1:B:881:LYS:HB2	1:B:881:LYS:NZ	2.12	0.64
1:A:502:GLU:C	1:A:504:ASN:H	2.01	0.64
1:B:879:ALA:O	1:B:883:LYS:HG2	1.97	0.64
1:B:318:ILE:CD1	1:B:324:ILE:HD12	2.27	0.64
1:A:405:ILE:HG21	1:A:428:GLY:HA2	1.79	0.64
1:A:121:VAL:HG23	1:A:122:LEU:N	2.12	0.64
1:B:185:LYS:HB3	1:B:185:LYS:NZ	2.11	0.64
1:B:207:GLY:HA2	1:B:210:LEU:HB3	1.80	0.64
1:B:207:GLY:HA3	1:B:211:THR:N	2.12	0.64
1:B:331:PHE:O	1:B:334:VAL:HG12	1.97	0.64
1:B:293:ILE:HG22	1:B:766:PHE:HB3	1.78	0.64
1:A:766:PHE:HA	1:A:769:GLN:HE21	1.62	0.64
1:B:1039:ASN:HD22	1:B:1047:PRO:HA	1.63	0.64
1:B:972:LEU:O	1:B:975:SER:HB2	1.98	0.64
1:A:49:TYR:CE2	1:A:134:LEU:HD12	2.33	0.64
1:A:458:ASN:HD22	1:A:459:VAL:H	1.45	0.64
1:A:90:ASN:HB2	1:A:91:MET:HE2	1.80	0.64
1:A:478:THR:HG21	1:A:482:GLU:HG3	1.78	0.63
1:B:780:LEU:O	1:B:784:LEU:HD23	1.98	0.63
1:B:703:GLU:HG2	1:B:784:LEU:HD21	1.78	0.63
1:A:311:TRP:HE3	1:A:311:TRP:HA	1.63	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:183:GLY:O	1:A:186:ILE:HG12	1.97	0.63
1:A:799:TRP:HE3	1:A:799:TRP:HA	1.63	0.63
1:A:221:LEU:HD11	1:A:309:ALA:HB3	1.80	0.63
1:A:718:GLY:HA3	1:A:837:ALA:HB2	1.80	0.63
1:A:846:SER:HA	1:A:849:TYR:CD1	2.34	0.63
1:B:394:HIS:HA	1:B:406:LEU:O	1.97	0.63
1:A:881:LYS:NZ	1:A:881:LYS:HB2	2.13	0.63
1:B:569:LEU:O	1:B:573:ARG:HG3	1.98	0.63
1:A:357:ALA:O	1:A:361:VAL:HG22	1.98	0.63
1:A:879:ALA:O	1:A:883:LYS:HG2	1.99	0.63
1:A:256:ALA:O	1:A:260:VAL:HG23	1.98	0.63
1:B:1039:ASN:ND2	1:B:1047:PRO:HA	2.12	0.63
1:B:1214:LEU:HD23	1:B:1214:LEU:O	1.98	0.63
1:B:175:VAL:HG13	1:B:176:SER:N	2.13	0.63
1:A:611:LEU:HD23	1:A:618:TYR:HB2	1.80	0.63
1:A:1058:LYS:O	1:A:1060:GLN:HG3	1.98	0.63
1:A:1079:LEU:CD2	1:A:1194:LEU:HD21	2.28	0.63
1:B:1179:ARG:HH21	1:B:1209:VAL:HG11	1.61	0.63
1:A:1038:PHE:CG	1:A:1039:ASN:N	2.66	0.63
1:A:1221:ARG:H	1:A:1221:ARG:HD2	1.64	0.63
1:B:981:ALA:HB3	2:B:6002:OJZ:H35	1.78	0.63
1:A:465:ILE:C	1:A:466:ILE:HD12	2.19	0.63
1:A:1267:VAL:O	1:A:1270:GLN:HB3	1.99	0.63
1:B:1234:GLN:HA	1:B:1253:HIS:HD2	1.63	0.63
1:B:45:LEU:HD22	1:B:45:LEU:H	1.63	0.63
1:B:711:ILE:O	1:B:714:ALA:HB3	1.99	0.63
1:A:288:ALA:CA	1:A:291:ALA:HB3	2.26	0.63
1:A:535:ILE:O	1:A:538:ALA:HB3	1.99	0.63
1:B:221:LEU:HD11	1:B:309:ALA:HB3	1.81	0.63
1:A:311:TRP:CE3	1:A:311:TRP:HA	2.33	0.63
1:A:1095:LYS:HD2	1:A:1095:LYS:H	1.62	0.63
1:B:144:ARG:NH1	1:B:175:VAL:HG11	2.14	0.63
1:A:780:LEU:O	1:A:784:LEU:HD23	1.98	0.63
1:A:50:MET:HG3	1:A:131:PHE:CE2	2.33	0.63
1:A:56:ALA:O	1:A:59:ILE:HG13	1.99	0.63
1:A:423:GLY:HA2	1:A:597:PHE:O	1.99	0.63
1:B:365:ILE:HG22	1:B:366:ASP:N	2.14	0.62
1:B:385:GLN:NE2	1:B:386:GLY:H	1.96	0.62
1:B:779:ILE:HG13	1:B:780:LEU:H	1.64	0.62
1:A:784:LEU:O	1:A:788:VAL:HG23	1.98	0.62
1:A:969:ASN:HD22	1:A:970:VAL:N	1.96	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:853:LEU:HB3	1:A:973:VAL:HG13	1.78	0.62
1:A:916:TYR:O	1:A:920:LEU:HD23	1.99	0.62
1:A:45:LEU:H	1:A:45:LEU:HD22	1.63	0.62
1:B:459:VAL:O	1:B:462:LEU:HB3	1.99	0.62
1:B:471:GLN:HG2	1:B:472:GLU:N	2.13	0.62
1:B:198:GLY:O	1:B:202:ILE:HG13	1.98	0.62
1:B:208:TRP:O	1:B:209:LYS:HG2	1.99	0.62
1:B:318:ILE:HD12	1:B:324:ILE:H	1.64	0.62
1:B:843:ILE:O	1:B:846:SER:HB3	1.99	0.62
1:A:471:GLN:HG2	1:A:472:GLU:N	2.14	0.62
1:B:696:ILE:HD13	1:B:998:THR:HG23	1.79	0.62
1:A:1214:LEU:HA	1:A:1217:ALA:HB3	1.81	0.62
1:A:428:GLY:O	1:A:431:THR:HB	1.99	0.62
1:B:375:SER:C	1:B:376:LYS:HD2	2.19	0.62
1:A:39:PHE:CE2	1:A:355:ARG:HA	2.34	0.62
1:B:807:THR:O	1:B:811:THR:HG23	2.00	0.62
1:A:253:VAL:HB	1:A:1119:PHE:HE1	1.63	0.62
1:B:1048:VAL:HG23	1:B:1049:LEU:CD2	2.30	0.62
1:B:1100:LEU:HG	1:B:1101:ASN:N	2.14	0.62
1:B:1221:ARG:HD2	1:B:1221:ARG:H	1.64	0.62
1:B:509:ILE:HD12	1:B:510:MET:N	2.15	0.62
1:B:267:LYS:HA	1:B:270:LEU:HD11	1.81	0.62
1:B:857:LEU:HD12	1:B:973:VAL:CG1	2.29	0.62
1:B:799:TRP:HE3	1:B:799:TRP:HA	1.64	0.62
1:A:1019:THR:OG1	1:A:1101:ASN:HA	1.99	0.62
1:A:799:TRP:CE3	1:A:799:TRP:HA	2.32	0.62
1:B:1063:ALA:HB3	1:B:1239:ILE:CA	2.28	0.62
1:A:388:LEU:N	1:A:388:LEU:HD12	2.14	0.62
1:B:257:ILE:HG23	1:B:258:ARG:N	2.15	0.62
1:B:388:LEU:N	1:B:388:LEU:HD12	2.14	0.62
1:A:308:LEU:HD12	1:A:751:PHE:HE2	1.62	0.62
1:B:608:HIS:ND1	1:B:618:TYR:HE2	1.97	0.62
1:A:195:THR:HB	1:A:340:SER:OG	1.99	0.62
1:B:207:GLY:HA3	1:B:211:THR:H	1.63	0.62
1:B:211:THR:O	1:B:214:ILE:HB	1.99	0.62
1:B:287:LYS:O	1:B:291:ALA:HB2	2.00	0.62
1:B:65:PRO:O	1:B:68:MET:N	2.33	0.62
1:A:696:ILE:HD13	1:A:998:THR:HG23	1.80	0.62
1:A:1196:ASP:HA	1:A:1226:ILE:CG1	2.29	0.62
1:A:1137:SER:O	1:A:1141:ILE:HG23	2.00	0.62
1:B:195:THR:HB	1:B:340:SER:OG	1.99	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1158:PRO:O	1:B:1159:ASP:HB2	2.00	0.62
1:A:820:GLN:HG3	1:A:1000:SER:CB	2.30	0.62
1:A:144:ARG:NH1	1:A:175:VAL:HG11	2.15	0.62
1:A:1048:VAL:HG23	1:A:1049:LEU:CD2	2.29	0.62
1:A:385:GLN:NE2	1:A:386:GLY:H	1.98	0.62
1:B:158:TRP:HE1	1:B:900:PHE:HB3	1.65	0.62
1:B:846:SER:HA	1:B:849:TYR:CD1	2.35	0.62
1:A:711:ILE:O	1:A:714:ALA:HB3	2.00	0.62
1:A:1179:ARG:HH21	1:A:1209:VAL:HG11	1.60	0.62
1:B:1037:VAL:HG12	1:B:1051:GLY:N	2.14	0.62
1:A:742:GLU:O	1:A:746:GLN:HG2	2.00	0.62
1:B:1216:LYS:CE	1:B:1216:LYS:HA	2.30	0.62
1:B:905:SER:O	1:B:907:THR:N	2.33	0.62
1:B:722:PRO:HD3	1:B:982:MET:HE1	1.82	0.62
1:A:107:MET:HA	1:A:110:TYR:HD2	1.63	0.62
1:A:185:LYS:HZ3	1:A:186:ILE:N	1.98	0.62
1:A:537:ILE:O	1:A:541:LEU:HB2	1.99	0.61
1:B:39:PHE:CE2	1:B:355:ARG:HA	2.35	0.61
1:B:916:TYR:O	1:B:920:LEU:HD23	1.99	0.61
1:B:217:ILE:HD11	1:B:331:PHE:HE2	1.64	0.61
1:B:1196:ASP:HA	1:B:1226:ILE:CG1	2.30	0.61
1:B:155:GLU:O	1:B:157:GLY:N	2.33	0.61
1:B:50:MET:HG3	1:B:131:PHE:CE2	2.33	0.61
1:B:538:ALA:O	1:B:541:LEU:HB3	1.99	0.61
1:B:956:GLY:O	1:B:966:THR:CB	2.46	0.61
1:B:574:GLU:HG3	1:B:574:GLU:O	1.98	0.61
1:B:107:MET:HA	1:B:110:TYR:HD2	1.63	0.61
1:B:209:LYS:O	1:B:212:LEU:HB3	2.01	0.61
1:B:324:ILE:HD13	1:B:326:GLN:HB3	1.83	0.61
1:A:806:THR:O	1:A:810:LEU:HG	2.00	0.61
1:A:1037:VAL:HG12	1:A:1051:GLY:N	2.14	0.61
1:B:1095:LYS:HD2	1:B:1095:LYS:H	1.64	0.61
1:B:238:LYS:NZ	1:B:242:ALA:HB2	2.15	0.61
1:B:1184:ARG:O	1:B:1187:VAL:HB	2.00	0.61
1:B:286:LYS:CA	1:B:289:ILE:HB	2.24	0.61
1:B:67:MET:SD	1:B:113:TYR:HE1	2.23	0.61
1:B:718:GLY:HA3	1:B:837:ALA:HB2	1.81	0.61
1:A:282:ARG:O	1:A:286:LYS:HD3	2.00	0.61
1:A:913:GLU:HA	1:A:913:GLU:OE2	2.00	0.61
1:B:158:TRP:O	1:B:164:VAL:HG11	2.00	0.61
1:B:282:ARG:O	1:B:286:LYS:HD3	2.00	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:67:MET:SD	1:A:113:TYR:HE1	2.24	0.61
1:A:204:PHE:CA	1:A:211:THR:HG21	2.30	0.61
1:B:154:GLN:NE2	1:B:162:HIS:NE2	2.42	0.61
1:B:321:GLU:O	1:B:322:TYR:C	2.38	0.61
1:A:217:ILE:HD11	1:A:331:PHE:HE2	1.65	0.61
1:A:267:LYS:CA	1:A:270:LEU:HD21	2.30	0.61
1:A:286:LYS:CA	1:A:289:ILE:HB	2.26	0.61
1:A:318:ILE:HD12	1:A:322:TYR:O	2.00	0.61
1:A:1216:LYS:CE	1:A:1216:LYS:HA	2.30	0.61
1:B:969:ASN:HD22	1:B:970:VAL:N	1.98	0.61
1:B:1075:VAL:O	1:B:1076:VAL:C	2.39	0.61
1:A:268:LYS:HZ2	1:A:272:ARG:HD3	1.66	0.61
1:A:133:CYS:O	1:A:135:ALA:N	2.34	0.61
1:A:257:ILE:HG23	1:A:258:ARG:N	2.15	0.61
1:B:611:LEU:HD23	1:B:618:TYR:HB2	1.81	0.61
1:B:766:PHE:O	1:B:769:GLN:HG2	2.00	0.61
1:A:722:PRO:HD3	1:A:982:MET:HE1	1.81	0.61
1:B:806:THR:O	1:B:810:LEU:HG	2.01	0.61
1:B:1038:PHE:CG	1:B:1039:ASN:N	2.68	0.61
1:A:603:VAL:HG23	1:A:604:GLU:H	1.66	0.61
1:A:1148:ALA:O	1:A:1149:ASN:HB2	2.01	0.61
1:B:968:GLU:O	1:B:971:LEU:HD23	2.01	0.61
1:A:492:THR:HG22	1:A:494:ASP:H	1.66	0.61
1:A:1158:PRO:O	1:A:1159:ASP:HB2	2.01	0.61
1:B:1148:ALA:HB1	1:B:1179:ARG:O	2.01	0.61
1:B:154:GLN:HE22	1:B:162:HIS:CD2	2.19	0.61
1:A:287:LYS:O	1:A:291:ALA:HB2	2.01	0.61
1:A:843:ILE:O	1:A:846:SER:HB3	2.00	0.61
1:B:133:CYS:O	1:B:135:ALA:N	2.34	0.60
1:B:429:LYS:HD2	1:B:430:SER:H	1.65	0.60
1:B:604:GLU:OE1	1:B:616:GLY:HA3	2.01	0.60
1:B:742:GLU:O	1:B:746:GLN:HG2	2.00	0.60
1:A:373:SER:O	1:A:374:PHE:HB3	2.01	0.60
1:A:1023:LYS:O	1:A:1025:ASN:N	2.34	0.60
1:A:238:LYS:NZ	1:A:242:ALA:HB2	2.15	0.60
1:B:1079:LEU:CD2	1:B:1194:LEU:HD21	2.29	0.60
1:A:268:LYS:NZ	1:A:272:ARG:HD3	2.16	0.60
1:A:733:GLY:HA3	1:A:968:GLU:HG3	1.83	0.60
1:A:365:ILE:HG22	1:A:366:ASP:N	2.14	0.60
1:A:1144:ALA:CA	1:A:1186:LEU:HD11	2.29	0.60
1:B:1148:ALA:O	1:B:1149:ASN:HB2	2.02	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:906:LEU:O	1:B:906:LEU:HD23	2.00	0.60
1:A:731:VAL:HG22	1:A:750:LEU:HB3	1.82	0.60
1:A:766:PHE:O	1:A:769:GLN:HG2	2.01	0.60
1:B:959:LEU:O	1:B:964:LEU:HB3	2.01	0.60
1:B:1097:ILE:O	1:B:1098:LYS:HB3	2.01	0.60
1:B:1106:ARG:O	1:B:1109:LEU:HD22	2.01	0.60
1:B:125:ALA:O	1:B:128:GLN:HG2	2.01	0.60
1:B:1038:PHE:O	1:B:1049:LEU:HB2	2.01	0.60
1:B:288:ALA:CA	1:B:291:ALA:HB3	2.25	0.60
1:B:849:TYR:CB	1:B:854:THR:OG1	2.49	0.60
1:A:267:LYS:HB3	1:A:790:LYS:CE	2.29	0.60
1:B:59:ILE:CG1	1:B:124:VAL:HG11	2.32	0.60
1:B:689:PRO:HG2	1:B:690:PRO:HD3	1.84	0.60
1:A:1075:VAL:O	1:A:1076:VAL:C	2.40	0.60
1:B:268:LYS:NZ	1:B:272:ARG:HD3	2.17	0.60
1:B:427:CYS:O	1:B:599:GLY:HA2	2.01	0.60
1:B:256:ALA:O	1:B:260:VAL:HG23	2.02	0.60
1:B:213:VAL:O	1:B:217:ILE:HG12	2.01	0.60
1:B:64:LEU:O	1:B:67:MET:HB3	2.02	0.60
1:A:211:THR:O	1:A:214:ILE:HB	2.01	0.60
1:A:1193:LEU:HB2	1:A:1223:CYS:CB	2.32	0.60
1:B:357:ALA:O	1:B:361:VAL:HG22	2.01	0.60
1:B:720:LEU:O	1:B:723:ALA:HB3	2.01	0.60
1:B:857:LEU:C	1:B:857:LEU:HD23	2.22	0.60
1:A:197:PHE:O	1:A:201:ILE:HD13	2.01	0.60
1:A:886:LEU:HD12	1:A:887:GLU:N	2.17	0.60
1:A:59:ILE:CG1	1:A:124:VAL:HG11	2.31	0.60
1:A:548:LEU:HD23	1:A:549:LEU:N	2.17	0.60
1:A:905:SER:C	1:A:907:THR:N	2.54	0.60
1:B:1202:LEU:HG	1:B:1206:SER:HB2	1.83	0.60
1:A:291:ALA:HA	1:A:294:SER:HB2	1.83	0.60
1:B:388:LEU:HD11	1:B:547:ILE:HD12	1.84	0.60
1:B:133:CYS:CB	1:B:931:ALA:HB1	2.32	0.60
1:B:197:PHE:O	1:B:201:ILE:HD13	2.01	0.60
1:A:1063:ALA:HB3	1:A:1239:ILE:CA	2.26	0.60
1:B:406:LEU:HD12	1:B:409:LEU:HB2	1.84	0.60
1:A:1038:PHE:O	1:A:1049:LEU:HB2	2.02	0.60
1:B:163:ASP:C	1:B:165:GLY:H	2.05	0.60
1:A:608:HIS:ND1	1:A:618:TYR:HE2	1.97	0.60
1:A:540:ALA:O	1:A:543:ARG:HB3	2.02	0.59
1:A:900:PHE:O	1:A:903:VAL:HG12	2.00	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:902:THR:O	1:A:904:VAL:N	2.35	0.59
1:B:156:ILE:HD11	1:B:373:SER:HB3	1.83	0.59
1:B:41:TYR:HE1	1:B:143:ILE:HD11	1.67	0.59
1:B:731:VAL:HG22	1:B:750:LEU:HB3	1.84	0.59
1:A:235:PHE:O	1:A:239:GLU:HG2	2.02	0.59
1:A:826:GLY:O	1:A:829:LEU:HB2	2.02	0.59
1:B:1020:GLN:CD	1:B:1020:GLN:N	2.56	0.59
1:A:807:THR:O	1:A:811:THR:HG23	2.01	0.59
1:A:387:ASN:O	1:A:450:ASP:O	2.20	0.59
1:B:978:VAL:CG1	2:B:6002:OJZ:H35B	2.30	0.59
1:A:468:VAL:HG22	1:A:549:LEU:HD13	1.84	0.59
1:B:268:LYS:HZ2	1:B:272:ARG:HD3	1.67	0.59
1:A:41:TYR:HE1	1:A:143:ILE:HD11	1.67	0.59
1:A:762:SER:O	1:A:765:THR:HG22	2.02	0.59
1:B:1120:ASP:HA	1:B:1165:VAL:HG21	1.84	0.59
1:A:1023:LYS:C	1:A:1025:ASN:H	2.06	0.59
1:A:279:GLU:HG2	1:A:782:LYS:CD	2.32	0.59
1:A:1009:GLU:C	1:A:1010:LYS:HG3	2.22	0.59
1:A:1100:LEU:HG	1:A:1101:ASN:N	2.16	0.59
1:B:938:PHE:O	1:B:941:THR:HB	2.02	0.59
1:B:81:VAL:HG13	1:B:99:MET:HG3	1.85	0.59
1:A:207:GLY:HA3	1:A:211:THR:N	2.17	0.59
1:A:718:GLY:O	1:A:722:PRO:CD	2.48	0.59
1:A:857:LEU:HD23	1:A:857:LEU:C	2.22	0.59
1:B:1022:LEU:O	1:B:1022:LEU:HD23	2.02	0.59
1:A:585:LEU:H	1:A:585:LEU:HD22	1.68	0.59
1:B:1144:ALA:HB1	1:B:1183:ALA:HB1	1.85	0.59
1:B:528:SER:OG	1:B:531:GLN:HG3	2.02	0.59
1:B:900:PHE:O	1:B:903:VAL:HG12	2.01	0.59
1:B:235:PHE:O	1:B:239:GLU:HG2	2.02	0.59
1:A:359:TYR:O	1:A:362:PHE:HB3	2.02	0.59
1:A:254:LEU:HD23	1:A:811:THR:CG2	2.30	0.59
1:A:388:LEU:HD11	1:A:547:ILE:HD12	1.84	0.59
1:B:933:VAL:O	1:B:934:PHE:C	2.40	0.59
1:A:725:SER:HA	2:A:6001:OJZ:C36	2.32	0.59
1:A:968:GLU:O	1:A:971:LEU:HD23	2.02	0.59
1:B:1020:GLN:HG2	1:B:1021:GLY:N	2.02	0.59
1:A:138:ARG:NH2	1:B:515:GLN:NE2	2.50	0.59
1:A:1018:SER:O	1:A:1101:ASN:HB2	2.02	0.59
1:B:617:ILE:O	1:B:621:LEU:HD23	2.03	0.59
1:B:913:GLU:HA	1:B:913:GLU:OE2	2.03	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:938:PHE:O	1:A:941:THR:HB	2.02	0.59
1:B:185:LYS:HZ3	1:B:186:ILE:N	1.99	0.59
2:A:6001:0JZ:H36B	2:A:6001:0JZ:O27	2.02	0.59
1:B:1267:VAL:O	1:B:1270:GLN:HB3	2.02	0.59
1:B:1109:LEU:HD21	1:B:1188:ARG:NH1	2.17	0.59
1:B:359:TYR:O	1:B:362:PHE:HB3	2.02	0.59
1:B:390:PHE:HB2	1:B:411:LEU:O	2.03	0.59
1:B:107:MET:HA	1:B:110:TYR:CD2	2.38	0.59
1:B:239:GLU:CB	1:B:285:ILE:HG12	2.33	0.59
1:A:1020:GLN:HB3	1:A:1100:LEU:HD12	1.85	0.59
1:B:263:PHE:CE1	1:B:1129:TYR:HB3	2.36	0.59
1:A:198:GLY:O	1:A:202:ILE:HG13	2.02	0.59
1:A:170:ARG:HB2	1:A:170:ARG:HH11	1.67	0.59
1:B:49:TYR:OH	1:B:130:SER:HB2	2.03	0.59
1:A:720:LEU:O	1:A:723:ALA:HB3	2.02	0.59
1:A:129:VAL:O	1:A:132:TRP:HB3	2.03	0.59
1:A:148:PHE:HB3	1:A:913:GLU:CD	2.24	0.59
1:A:1109:LEU:HD21	1:A:1188:ARG:NH1	2.18	0.59
1:B:1120:ASP:HA	1:B:1165:VAL:CG2	2.33	0.59
1:A:617:ILE:O	1:A:621:LEU:HD23	2.03	0.59
1:B:302:ILE:O	1:B:305:SER:HB3	2.02	0.58
1:B:327:VAL:HB	1:B:331:PHE:CE1	2.38	0.58
1:B:766:PHE:O	1:B:767:PHE:C	2.41	0.58
1:A:779:ILE:HG13	1:A:780:LEU:H	1.66	0.58
1:A:1016:SER:O	1:A:1017:TYR:HB2	2.02	0.58
1:A:797:VAL:O	1:A:801:ASP:CG	2.40	0.58
1:A:1071:GLY:O	1:A:1075:VAL:HG23	2.03	0.58
1:A:902:THR:OG1	1:A:908:ARG:HD3	2.03	0.58
1:B:507:ASP:OD1	1:B:508:PHE:N	2.35	0.58
1:B:199:GLY:HA2	1:B:202:ILE:HD11	1.86	0.58
1:B:1261:GLY:H	1:B:1264:PHE:HB3	1.68	0.58
1:B:479:THR:O	1:B:482:GLU:HB2	2.03	0.58
1:B:520:VAL:HG12	1:B:523:ARG:O	2.04	0.58
1:B:886:LEU:HD12	1:B:887:GLU:N	2.18	0.58
1:B:905:SER:C	1:B:907:THR:N	2.55	0.58
1:B:1005:ILE:O	1:B:1008:ILE:HG22	2.03	0.58
1:B:217:ILE:O	1:B:221:LEU:HG	2.02	0.58
1:A:213:VAL:O	1:A:217:ILE:HG12	2.02	0.58
1:A:993:ASP:N	1:A:996:LYS:HZ1	2.01	0.58
1:A:945:MET:O	1:A:949:TYR:HD1	1.86	0.58
1:A:81:VAL:HG13	1:A:99:MET:HG3	1.86	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:520:VAL:HG12	1:A:523:ARG:O	2.04	0.58
1:A:541:LEU:O	1:A:544:ASN:N	2.35	0.58
1:B:1199:THR:CG2	1:B:1210:VAL:HG11	2.34	0.58
1:A:64:LEU:O	1:A:67:MET:HB3	2.03	0.58
1:B:1037:VAL:HG22	1:B:1087:ALA:H	1.68	0.58
1:A:804:LYS:HD3	1:A:804:LYS:N	2.19	0.58
1:B:585:LEU:H	1:B:585:LEU:HD22	1.68	0.58
1:B:359:TYR:HA	1:B:362:PHE:HB3	1.86	0.58
1:B:37:THR:O	1:B:40:ARG:N	2.34	0.58
1:B:478:THR:CG2	1:B:482:GLU:HG3	2.34	0.58
1:B:535:ILE:O	1:B:538:ALA:HB3	2.04	0.58
1:B:540:ALA:O	1:B:543:ARG:HB3	2.03	0.58
1:B:902:THR:OG1	1:B:908:ARG:HD3	2.03	0.58
1:A:199:GLY:HA2	1:A:202:ILE:HD11	1.85	0.58
1:A:1009:GLU:O	1:A:1010:LYS:HG3	2.03	0.58
1:A:604:GLU:OE1	1:A:616:GLY:HA3	2.03	0.58
1:B:170:ARG:HB2	1:B:170:ARG:HH11	1.68	0.58
1:B:492:THR:HG22	1:B:494:ASP:H	1.67	0.58
1:B:500:VAL:HG23	1:B:501:LYS:N	2.19	0.58
1:B:318:ILE:HD13	1:B:327:VAL:CG1	2.23	0.58
1:B:762:SER:O	1:B:765:THR:HG22	2.04	0.58
1:A:798:SER:HB3	1:A:1041:PRO:HG2	1.85	0.58
1:B:537:ILE:O	1:B:541:LEU:HB2	2.03	0.58
1:A:257:ILE:HG13	1:A:800:PHE:CG	2.38	0.58
1:A:602:ILE:O	1:A:603:VAL:HG13	2.04	0.58
1:B:263:PHE:HE1	1:B:1129:TYR:HB3	1.67	0.58
1:A:528:SER:OG	1:A:531:GLN:HG3	2.03	0.58
1:B:468:VAL:HG22	1:B:549:LEU:HD13	1.85	0.58
1:B:429:LYS:HD3	1:B:581:ILE:HG12	1.85	0.58
1:A:993:ASP:C	1:A:995:ALA:H	2.07	0.58
1:A:478:THR:CG2	1:A:482:GLU:HG3	2.33	0.58
1:A:500:VAL:HG23	1:A:501:LYS:N	2.19	0.58
1:A:125:ALA:O	1:A:128:GLN:HG2	2.04	0.58
1:A:1184:ARG:O	1:A:1187:VAL:HB	2.03	0.58
1:A:507:ASP:OD1	1:A:508:PHE:N	2.36	0.58
1:B:711:ILE:HG13	1:B:832:ILE:HG21	1.85	0.58
1:A:207:GLY:HA2	1:A:210:LEU:HB3	1.85	0.58
1:A:239:GLU:CB	1:A:285:ILE:HG12	2.32	0.58
1:A:327:VAL:HB	1:A:331:PHE:CE1	2.38	0.58
1:A:766:PHE:O	1:A:767:PHE:C	2.40	0.58
1:B:1137:SER:CB	1:B:1140:GLU:HB2	2.33	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1132:ASN:OD1	1:B:1134:ARG:HG2	2.03	0.58
1:A:158:TRP:CZ2	1:A:900:PHE:HB2	2.39	0.57
1:B:129:VAL:O	1:B:132:TRP:HB3	2.04	0.57
1:B:379:HIS:CD2	1:B:380:LYS:H	2.22	0.57
1:A:278:GLU:OE2	1:A:785:ARG:HD2	2.03	0.57
1:A:784:LEU:HD12	1:A:1004:ILE:CD1	2.34	0.57
1:A:359:TYR:HA	1:A:362:PHE:HB3	1.86	0.57
1:A:1042:THR:C	1:A:1044:PRO:HD2	2.24	0.57
1:A:1077:GLN:O	1:A:1080:GLU:N	2.36	0.57
1:A:993:ASP:N	1:A:996:LYS:NZ	2.52	0.57
1:A:1037:VAL:HG22	1:A:1087:ALA:H	1.68	0.57
1:B:1037:VAL:HG22	1:B:1087:ALA:N	2.19	0.57
1:A:245:LYS:HA	1:A:245:LYS:HZ1	1.68	0.57
1:B:548:LEU:HD23	1:B:549:LEU:N	2.20	0.57
1:B:212:LEU:HD12	1:B:215:LEU:HD12	1.86	0.57
1:B:850:GLY:O	1:B:852:GLN:N	2.38	0.57
1:A:217:ILE:O	1:A:221:LEU:HG	2.04	0.57
1:A:708:VAL:O	1:A:711:ILE:HG22	2.04	0.57
1:A:834:GLN:HG3	1:A:835:ASN:N	2.19	0.57
1:A:853:LEU:CG	1:A:973:VAL:HG21	2.29	0.57
1:A:1214:LEU:HD23	1:A:1214:LEU:O	2.03	0.57
1:A:961:THR:O	1:A:962:GLN:HB3	2.04	0.57
1:B:356:GLY:HA2	1:B:359:TYR:CE1	2.39	0.57
1:B:465:ILE:O	1:B:465:ILE:HG22	2.04	0.57
1:B:908:ARG:O	1:B:909:GLU:C	2.41	0.57
1:A:324:ILE:HD13	1:A:326:GLN:HB3	1.85	0.57
1:A:39:PHE:CE2	1:A:358:ALA:HB3	2.38	0.57
1:A:1031:VAL:HB	1:A:1056:VAL:CG1	2.35	0.57
1:A:1148:ALA:HB1	1:A:1179:ARG:O	2.04	0.57
1:B:603:VAL:HG21	1:B:617:ILE:HG12	1.86	0.57
1:B:311:TRP:HZ2	1:B:728:PHE:CE2	2.22	0.57
1:A:111:ALA:HA	1:A:114:TYR:HE1	1.70	0.57
1:A:1199:THR:CG2	1:A:1210:VAL:HG11	2.34	0.57
1:B:195:THR:HG23	1:B:196:PHE:N	2.19	0.57
1:A:246:ALA:HB2	1:A:281:LYS:NZ	2.19	0.57
1:A:727:ILE:HD13	1:A:754:LEU:HD23	1.85	0.57
1:A:345:SER:HB3	1:A:346:PRO:HD3	1.87	0.57
1:A:1120:ASP:HA	1:A:1165:VAL:CG2	2.34	0.57
1:B:246:ALA:HB2	1:B:281:LYS:NZ	2.20	0.57
1:A:405:ILE:HG22	1:A:406:LEU:HD22	1.87	0.57
1:A:1261:GLY:H	1:A:1264:PHE:HB3	1.69	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:479:THR:O	1:A:482:GLU:HB2	2.04	0.57
1:B:291:ALA:HA	1:B:294:SER:HB2	1.87	0.57
1:A:61:GLY:O	1:A:65:PRO:CD	2.43	0.57
1:A:780:LEU:O	1:A:784:LEU:HB2	2.05	0.57
1:A:1120:ASP:HA	1:A:1165:VAL:HG21	1.87	0.57
1:A:933:VAL:O	1:A:934:PHE:C	2.43	0.57
1:A:1132:ASN:OD1	1:A:1134:ARG:HG2	2.04	0.57
1:B:342:GLY:O	1:B:345:SER:N	2.37	0.57
1:B:39:PHE:CE2	1:B:358:ALA:HB3	2.39	0.57
1:B:527:LEU:N	1:B:527:LEU:HD23	2.19	0.57
1:B:309:ALA:O	1:B:310:PHE:O	2.23	0.57
1:B:324:ILE:O	1:B:325:GLY:C	2.43	0.57
1:B:718:GLY:O	1:B:722:PRO:CD	2.47	0.57
1:B:784:LEU:HD12	1:B:1004:ILE:CD1	2.34	0.57
1:B:818:ALA:O	1:B:821:VAL:HG22	2.05	0.57
1:B:725:SER:HG	1:B:979:PHE:HE1	1.52	0.57
1:A:107:MET:HA	1:A:110:TYR:CD2	2.38	0.57
1:A:358:ALA:O	1:A:362:PHE:CB	2.52	0.57
1:B:59:ILE:HD11	1:B:124:VAL:CG1	2.34	0.57
1:A:459:VAL:O	1:A:462:LEU:HB3	2.04	0.57
1:B:618:TYR:O	1:B:622:VAL:HG23	2.03	0.57
1:A:337:GLY:O	1:A:341:VAL:HG23	2.05	0.57
1:A:707:PHE:HZ	1:A:775:LYS:HE2	1.69	0.57
1:B:1252:THR:HG23	1:B:1255:GLN:HB2	1.86	0.57
1:A:233:SER:O	1:A:236:THR:HB	2.05	0.57
1:B:110:TYR:HA	1:B:113:TYR:HD2	1.70	0.57
1:B:713:CYS:O	1:B:716:ILE:HG13	2.05	0.57
1:A:212:LEU:HD12	1:A:215:LEU:HD12	1.87	0.57
1:A:342:GLY:O	1:A:345:SER:N	2.38	0.57
1:A:362:PHE:O	1:A:365:ILE:HB	2.05	0.57
1:A:384:ILE:HG22	1:A:385:GLN:N	2.19	0.57
1:A:465:ILE:O	1:A:465:ILE:HG22	2.05	0.57
1:B:492:THR:C	1:B:494:ASP:N	2.57	0.57
1:B:379:HIS:C	1:B:381:PRO:HD3	2.24	0.57
1:B:215:LEU:C	1:B:219:PRO:HD2	2.25	0.57
1:A:49:TYR:OH	1:A:130:SER:HB2	2.03	0.57
1:A:195:THR:HG23	1:A:196:PHE:N	2.19	0.57
1:B:245:LYS:NZ	1:B:245:LYS:HA	2.19	0.57
1:B:136:ALA:HB2	1:B:182:ILE:CB	2.33	0.57
1:B:156:ILE:HG22	1:B:160:ASP:OD1	2.05	0.57
1:B:387:ASN:O	1:B:450:ASP:O	2.22	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:773:PHE:HB2	1:B:829:LEU:CD1	2.35	0.57
1:B:857:LEU:CD1	1:B:976:ALA:HB3	2.32	0.57
1:A:207:GLY:HA3	1:A:211:THR:HB	1.87	0.57
1:A:70:ILE:O	1:A:72:GLY:N	2.38	0.57
1:A:711:ILE:HG13	1:A:832:ILE:HG21	1.86	0.57
1:A:1137:SER:CB	1:A:1140:GLU:HB2	2.35	0.57
1:A:492:THR:C	1:A:494:ASP:N	2.56	0.57
1:B:492:THR:O	1:B:494:ASP:N	2.38	0.57
1:B:186:ILE:CG1	1:B:187:GLY:N	2.68	0.56
1:B:482:GLU:O	1:B:484:ILE:N	2.38	0.56
1:B:910:GLN:O	1:B:911:LYS:C	2.43	0.56
1:A:786:TYR:HE2	1:A:790:LYS:NZ	2.03	0.56
1:A:1119:PHE:HD2	1:A:1121:CYS:HG	1.51	0.56
1:A:156:ILE:HG22	1:A:160:ASP:OD1	2.05	0.56
1:B:945:MET:O	1:B:949:TYR:HD1	1.87	0.56
1:A:1037:VAL:HG22	1:A:1087:ALA:N	2.19	0.56
1:B:253:VAL:O	1:B:254:LEU:HD13	2.05	0.56
1:B:341:VAL:O	1:B:344:ALA:HB3	2.05	0.56
1:B:862:PRO:O	1:B:866:ILE:HG13	2.05	0.56
1:B:693:PHE:N	1:B:693:PHE:CD2	2.71	0.56
1:B:761:ILE:HD12	1:B:761:ILE:N	2.20	0.56
1:A:303:TYR:O	1:A:304:ALA:C	2.43	0.56
1:A:324:ILE:O	1:A:325:GLY:C	2.43	0.56
1:A:834:GLN:O	1:A:837:ALA:HB3	2.05	0.56
1:B:1020:GLN:CG	1:B:1021:GLY:N	2.66	0.56
1:A:354:ALA:O	1:A:358:ALA:HB3	2.05	0.56
1:A:810:LEU:O	1:A:813:ARG:HB2	2.05	0.56
1:A:1212:GLU:O	1:A:1215:ASP:HB3	2.05	0.56
1:A:1252:THR:HG23	1:A:1255:GLN:HB2	1.86	0.56
1:B:1031:VAL:HB	1:B:1056:VAL:CG1	2.34	0.56
1:B:1196:ASP:CG	1:B:1226:ILE:HD11	2.26	0.56
1:A:166:GLU:O	1:A:169:THR:HB	2.05	0.56
1:B:543:ARG:HH21	1:B:907:THR:HG23	1.70	0.56
1:B:318:ILE:CG1	1:B:325:GLY:H	2.19	0.56
1:B:711:ILE:CG1	1:B:832:ILE:HG21	2.35	0.56
1:B:834:GLN:HG3	1:B:835:ASN:N	2.19	0.56
1:A:131:PHE:O	1:A:132:TRP:C	2.44	0.56
1:B:810:LEU:O	1:B:813:ARG:HB2	2.05	0.56
1:A:1195:LEU:O	1:A:1226:ILE:HG12	2.05	0.56
1:A:1144:ALA:HB1	1:A:1183:ALA:HB1	1.86	0.56
1:B:401:LYS:HZ2	1:B:401:LYS:HB3	1.70	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:406:LEU:HD12	1:A:409:LEU:HB2	1.87	0.56
1:A:1027:LEU:H	1:A:1027:LEU:HD12	1.70	0.56
1:B:1144:ALA:CA	1:B:1186:LEU:HD11	2.27	0.56
1:A:908:ARG:O	1:A:909:GLU:C	2.42	0.56
1:B:519:LEU:CD1	1:B:519:LEU:H	2.13	0.56
1:B:727:ILE:HD13	1:B:754:LEU:HD23	1.86	0.56
1:B:707:PHE:HZ	1:B:775:LYS:HE2	1.69	0.56
1:A:1106:ARG:O	1:A:1109:LEU:HD22	2.04	0.56
1:B:118:GLY:O	1:B:119:ALA:C	2.44	0.56
1:A:419:VAL:HG23	1:A:593:VAL:HG13	1.88	0.56
1:B:1076:VAL:HG13	1:B:1194:LEU:HD22	1.88	0.56
1:A:508:PHE:O	1:A:512:LEU:HB2	2.06	0.56
1:B:37:THR:O	1:B:38:MET:C	2.43	0.56
1:B:550:LEU:N	1:B:550:LEU:HD12	2.20	0.56
1:B:286:LYS:HE2	1:B:778:GLU:HG2	1.86	0.56
1:B:708:VAL:O	1:B:711:ILE:HG22	2.05	0.56
1:B:70:ILE:O	1:B:72:GLY:N	2.39	0.56
1:B:716:ILE:HD11	1:B:765:THR:OG1	2.06	0.56
1:B:795:GLN:HE21	1:B:796:ASP:N	2.03	0.56
1:A:795:GLN:O	1:A:796:ASP:CB	2.54	0.56
1:A:603:VAL:HG21	1:A:617:ILE:HG12	1.87	0.56
1:A:245:LYS:NZ	1:A:245:LYS:HA	2.20	0.56
1:B:290:THR:HG22	1:B:770:GLY:O	2.04	0.56
1:B:1166:GLY:O	1:B:1167:ASP:HB3	2.05	0.56
1:A:438:ARG:O	1:A:439:LEU:C	2.41	0.56
1:B:163:ASP:C	1:B:165:GLY:N	2.59	0.56
1:A:618:TYR:O	1:A:622:VAL:HG23	2.05	0.56
1:A:552:GLU:O	1:A:555:SER:HB2	2.06	0.56
1:A:550:LEU:N	1:A:550:LEU:HD12	2.21	0.56
1:B:549:LEU:HD12	1:B:549:LEU:N	2.20	0.56
1:A:839:LEU:O	1:A:843:ILE:HG12	2.04	0.56
1:A:722:PRO:HB2	1:A:841:THR:CG2	2.34	0.56
1:A:53:GLY:O	1:A:54:THR:C	2.42	0.56
1:A:1260:LYS:HD2	1:A:1260:LYS:N	2.20	0.56
1:A:611:LEU:HB3	1:A:618:TYR:HB3	1.86	0.56
1:B:541:LEU:O	1:B:544:ASN:N	2.37	0.56
1:A:210:LEU:C	1:A:210:LEU:HD13	2.26	0.56
1:A:318:ILE:HG23	1:A:735:PHE:CZ	2.41	0.56
1:A:1090:VAL:HG13	1:A:1097:ILE:CB	2.31	0.56
1:B:233:SER:O	1:B:236:THR:HB	2.06	0.56
1:B:345:SER:HB3	1:B:346:PRO:HD3	1.88	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:931:ALA:O	1:B:932:HIS:C	2.43	0.56
1:A:711:ILE:CG1	1:A:832:ILE:HG21	2.36	0.56
1:A:821:VAL:O	1:A:824:ALA:N	2.39	0.56
1:A:853:LEU:N	1:A:853:LEU:HD22	2.19	0.56
1:A:257:ILE:HG23	1:A:258:ARG:H	1.71	0.56
1:A:405:ILE:HG23	1:A:427:CYS:O	2.05	0.56
1:A:461:TYR:O	1:A:465:ILE:HG12	2.05	0.56
1:B:733:GLY:HA3	1:B:968:GLU:HG3	1.86	0.56
1:B:1192:ILE:HA	1:B:1222:THR:O	2.06	0.56
1:A:908:ARG:HH21	1:A:908:ARG:HG3	1.71	0.56
1:B:362:PHE:O	1:B:365:ILE:HB	2.05	0.56
1:B:484:ILE:O	1:B:487:GLY:N	2.39	0.56
1:B:534:ARG:O	1:B:537:ILE:HB	2.05	0.56
1:B:769:GLN:HG3	1:B:770:GLY:N	2.21	0.56
1:A:952:CYS:SG	1:A:977:ILE:HD11	2.47	0.56
1:A:1096:GLU:HB2	1:A:1099:GLN:HE21	1.71	0.56
1:B:993:ASP:C	1:B:995:ALA:H	2.09	0.56
1:B:1255:GLN:O	1:B:1258:ALA:HB3	2.05	0.56
1:A:158:TRP:NE1	1:A:900:PHE:CB	2.66	0.55
1:B:724:PHE:CD1	1:B:754:LEU:HD22	2.41	0.55
1:B:780:LEU:O	1:B:784:LEU:HB2	2.05	0.55
1:A:110:TYR:HA	1:A:113:TYR:HD2	1.71	0.55
1:A:818:ALA:O	1:A:821:VAL:HG22	2.06	0.55
1:B:53:GLY:O	1:B:54:THR:C	2.45	0.55
1:B:978:VAL:HG13	2:B:6002:OJZ:C35	2.29	0.55
1:A:601:VAL:HG13	1:A:601:VAL:O	2.06	0.55
1:B:1064:LEU:HB3	1:B:1226:ILE:HG22	1.87	0.55
1:B:257:ILE:HG23	1:B:258:ARG:H	1.72	0.55
1:B:496:ILE:O	1:B:500:VAL:HG22	2.05	0.55
1:B:1206:SER:O	1:B:1210:VAL:HG23	2.06	0.55
1:B:111:ALA:HA	1:B:114:TYR:HE1	1.70	0.55
1:B:834:GLN:O	1:B:837:ALA:HB3	2.06	0.55
1:B:958:TYR:O	1:B:966:THR:OG1	2.19	0.55
1:A:318:ILE:HD11	1:A:325:GLY:N	2.21	0.55
1:A:761:ILE:HD12	1:A:761:ILE:N	2.21	0.55
1:A:861:VAL:HB	1:A:862:PRO:CD	2.36	0.55
1:A:186:ILE:CG1	1:A:187:GLY:N	2.69	0.55
1:A:1196:ASP:CG	1:A:1226:ILE:HD11	2.26	0.55
1:B:1048:VAL:C	1:B:1049:LEU:HD22	2.27	0.55
1:A:1260:LYS:H	1:A:1260:LYS:CD	2.17	0.55
1:B:617:ILE:HD12	1:B:617:ILE:N	2.20	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:907:THR:N	1:B:908:ARG:HE	2.04	0.55
1:B:711:ILE:O	1:B:715:ILE:HG13	2.07	0.55
1:A:310:PHE:CZ	1:A:331:PHE:HB3	2.42	0.55
1:A:773:PHE:HB2	1:A:829:LEU:CD1	2.36	0.55
1:A:849:TYR:HD1	1:A:854:THR:HG1	1.53	0.55
1:A:795:GLN:HE21	1:A:796:ASP:N	2.04	0.55
1:A:519:LEU:H	1:A:519:LEU:CD1	2.13	0.55
1:B:401:LYS:HD2	1:B:401:LYS:N	2.19	0.55
1:A:1127:ILE:CD1	1:A:1180:ILE:HG23	2.36	0.55
1:A:496:ILE:O	1:A:500:VAL:HG22	2.06	0.55
1:A:925:ARG:CZ	1:B:519:LEU:HD12	2.37	0.55
1:A:324:ILE:C	1:A:326:GLN:N	2.59	0.55
1:A:68:MET:HG3	1:A:336:ILE:HD12	1.89	0.55
1:A:716:ILE:HD11	1:A:765:THR:OG1	2.06	0.55
1:A:356:GLY:HA2	1:A:359:TYR:CE1	2.41	0.55
1:B:1011:THR:H	1:B:1012:PRO:HD3	1.70	0.55
1:B:993:ASP:N	1:B:996:LYS:NZ	2.54	0.55
1:B:1137:SER:HB3	1:B:1140:GLU:CB	2.37	0.55
1:B:804:LYS:HD3	1:B:804:LYS:N	2.21	0.55
1:B:419:VAL:HG23	1:B:593:VAL:HG13	1.88	0.55
1:B:318:ILE:HG13	1:B:325:GLY:H	1.72	0.55
1:B:65:PRO:O	1:B:66:LEU:C	2.43	0.55
1:A:302:ILE:O	1:A:305:SER:HB3	2.06	0.55
1:A:260:VAL:O	1:A:263:PHE:HB3	2.05	0.55
1:B:1037:VAL:CG2	1:B:1087:ALA:HB3	2.36	0.55
1:A:103:LEU:HD13	1:A:960:VAL:HG22	1.86	0.55
1:A:584:ARG:O	1:A:588:VAL:HG23	2.06	0.55
1:A:550:LEU:HD13	1:A:580:VAL:HB	1.89	0.55
1:A:910:GLN:O	1:A:911:LYS:C	2.44	0.55
1:B:908:ARG:HH21	1:B:908:ARG:HG3	1.70	0.55
1:A:1005:ILE:O	1:A:1008:ILE:HG22	2.06	0.55
1:A:721:GLN:HB3	1:A:722:PRO:CD	2.37	0.55
1:A:724:PHE:CD1	1:A:754:LEU:HD22	2.42	0.55
1:A:882:ASP:O	1:A:886:LEU:HG	2.07	0.55
1:A:1037:VAL:CG2	1:A:1087:ALA:HB3	2.37	0.55
1:A:88:SER:O	1:A:90:ASN:N	2.39	0.55
1:A:1202:LEU:HG	1:A:1206:SER:HB2	1.87	0.55
1:B:146:LYS:O	1:B:150:ALA:HB2	2.07	0.55
1:B:888:GLY:O	1:B:892:ILE:HG12	2.06	0.55
1:B:839:LEU:O	1:B:843:ILE:HG12	2.06	0.55
1:A:214:ILE:HG12	1:A:331:PHE:CZ	2.42	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:78:PHE:CZ	1:A:967:PHE:O	2.59	0.55
1:A:810:LEU:O	1:A:811:THR:C	2.45	0.55
1:A:617:ILE:N	1:A:617:ILE:HD12	2.22	0.55
1:B:601:VAL:O	1:B:601:VAL:HG13	2.06	0.55
1:B:188:MET:O	1:B:189:PHE:C	2.44	0.55
1:B:1183:ALA:O	1:B:1187:VAL:HG23	2.07	0.55
1:B:216:ALA:O	1:B:220:VAL:HG23	2.06	0.55
1:B:239:GLU:HG3	1:B:288:ALA:CB	2.37	0.55
1:A:289:ILE:O	1:A:292:ASN:HB3	2.07	0.55
1:A:713:CYS:O	1:A:716:ILE:HG13	2.07	0.55
1:A:769:GLN:HG3	1:A:770:GLY:N	2.21	0.55
1:A:1064:LEU:HB3	1:A:1226:ILE:HG22	1.89	0.55
1:A:1079:LEU:C	1:A:1081:ARG:H	2.09	0.55
1:B:1042:THR:C	1:B:1044:PRO:HD2	2.26	0.55
1:A:405:ILE:CG2	1:A:427:CYS:O	2.55	0.55
1:B:602:ILE:O	1:B:603:VAL:HG13	2.07	0.55
1:A:1203:ASP:O	1:A:1206:SER:HB2	2.07	0.55
1:A:492:THR:O	1:A:494:ASP:N	2.40	0.55
1:B:111:ALA:HA	1:B:114:TYR:CE1	2.42	0.55
1:B:209:LYS:O	1:B:213:VAL:HG23	2.07	0.55
1:A:697:LEU:HB3	1:A:828:ARG:NH2	2.22	0.55
1:A:434:GLN:O	1:A:436:MET:N	2.39	0.55
1:B:1137:SER:O	1:B:1141:ILE:HG23	2.06	0.55
1:B:1260:LYS:H	1:B:1260:LYS:CD	2.19	0.55
1:A:691:ALA:O	1:A:692:SER:HB3	2.06	0.55
1:B:1071:GLY:O	1:B:1075:VAL:HG23	2.07	0.55
1:B:255:ALA:C	1:B:257:ILE:N	2.60	0.55
1:B:210:LEU:HD13	1:B:210:LEU:C	2.26	0.55
1:B:282:ARG:HG3	1:B:782:LYS:HD3	1.89	0.55
1:B:74:MET:O	1:B:78:PHE:HB2	2.07	0.55
1:A:210:LEU:HD23	1:A:317:VAL:CG1	2.37	0.55
1:A:860:ILE:O	1:A:864:ILE:HG13	2.07	0.55
1:A:1166:GLY:O	1:A:1167:ASP:HB3	2.06	0.55
1:A:1183:ALA:O	1:A:1187:VAL:HG23	2.07	0.55
1:B:688:VAL:O	1:B:688:VAL:HG23	2.07	0.55
1:A:433:VAL:HG13	1:A:549:LEU:HD23	1.89	0.55
1:A:401:LYS:N	1:A:401:LYS:HD2	2.20	0.55
1:B:1077:GLN:O	1:B:1080:GLU:N	2.40	0.54
1:B:1151:HIS:HA	1:B:1154:ILE:HB	1.88	0.54
1:B:1195:LEU:O	1:B:1226:ILE:HG12	2.07	0.54
1:B:708:VAL:HG13	1:B:709:VAL:N	2.22	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:720:LEU:HD22	1:B:761:ILE:HG22	1.90	0.54
1:A:37:THR:O	1:A:38:MET:C	2.45	0.54
1:A:888:GLY:O	1:A:892:ILE:HG12	2.07	0.54
1:A:472:GLU:OE1	1:A:473:PRO:HD2	2.07	0.54
1:B:1058:LYS:HA	1:B:1222:THR:OG1	2.07	0.54
1:B:342:GLY:O	1:B:346:PRO:CD	2.56	0.54
1:B:716:ILE:HD11	1:B:765:THR:CB	2.37	0.54
1:A:209:LYS:O	1:A:213:VAL:HG23	2.06	0.54
1:A:59:ILE:HD11	1:A:124:VAL:CG1	2.34	0.54
1:A:401:LYS:HB3	1:A:401:LYS:HZ3	1.72	0.54
1:B:100:PHE:HB2	1:B:961:THR:HG23	1.88	0.54
1:B:1097:ILE:O	1:B:1098:LYS:CB	2.55	0.54
1:B:61:GLY:O	1:B:65:PRO:CD	2.42	0.54
1:B:70:ILE:C	1:B:72:GLY:N	2.59	0.54
1:A:859:ALA:O	1:A:863:ILE:HG12	2.08	0.54
1:A:1058:LYS:HA	1:A:1222:THR:OG1	2.07	0.54
1:A:791:SER:N	1:A:794:ARG:HH21	2.05	0.54
1:A:1063:ALA:CB	1:A:1239:ILE:HG12	2.37	0.54
1:B:51:LEU:O	1:B:52:VAL:C	2.46	0.54
1:A:117:ILE:O	1:A:121:VAL:HG13	2.08	0.54
1:B:611:LEU:HB3	1:B:618:TYR:HB3	1.90	0.54
1:B:254:LEU:N	1:B:254:LEU:HD22	2.22	0.54
1:A:1255:GLN:O	1:A:1258:ALA:HB3	2.06	0.54
1:A:1011:THR:HG23	1:A:1011:THR:O	2.07	0.54
1:A:527:LEU:N	1:A:527:LEU:HD23	2.21	0.54
1:A:239:GLU:HG3	1:A:288:ALA:CB	2.37	0.54
1:A:317:VAL:HG12	1:A:317:VAL:O	2.07	0.54
1:A:705:PRO:O	1:A:706:TYR:HB3	2.07	0.54
1:B:431:THR:O	1:B:435:LEU:HD23	2.07	0.54
1:B:370:SER:C	1:B:372:ASP:H	2.10	0.54
1:B:1090:VAL:HG13	1:B:1097:ILE:CB	2.31	0.54
1:B:536:ALA:O	1:B:537:ILE:C	2.46	0.54
1:B:324:ILE:C	1:B:326:GLN:N	2.59	0.54
1:A:336:ILE:CG1	2:A:6001:OJZ:SE1	2.99	0.54
1:A:315:SER:OG	1:A:747:ASN:HB3	2.08	0.54
1:A:311:TRP:HB2	1:A:751:PHE:HB2	1.89	0.54
1:A:722:PRO:HG2	1:A:841:THR:HB	1.89	0.54
1:A:853:LEU:CD2	1:A:853:LEU:H	2.19	0.54
1:A:969:ASN:ND2	1:A:970:VAL:N	2.54	0.54
1:A:136:ALA:HB2	1:A:182:ILE:CB	2.32	0.54
1:B:1011:THR:N	1:B:1012:PRO:HD2	2.22	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:51:LEU:O	1:A:52:VAL:C	2.46	0.54
1:B:1033:PHE:HB3	1:B:1036:VAL:CG2	2.36	0.54
1:A:549:LEU:HD12	1:A:549:LEU:N	2.22	0.54
1:B:419:VAL:O	1:B:579:ILE:HA	2.08	0.54
1:B:861:VAL:HB	1:B:862:PRO:CD	2.38	0.54
1:B:297:ALA:O	1:B:301:LEU:HB2	2.08	0.54
1:B:812:THR:O	1:B:813:ARG:C	2.44	0.54
1:A:443:LEU:HD23	1:A:443:LEU:O	2.07	0.54
1:B:1054:LEU:CD1	1:B:1240:VAL:HG11	2.38	0.54
1:B:583:HIS:O	1:B:585:LEU:HD22	2.07	0.54
1:B:247:GLY:O	1:B:250:ALA:HB3	2.06	0.54
1:B:1195:LEU:HD12	1:B:1195:LEU:N	2.22	0.54
1:B:461:TYR:O	1:B:465:ILE:HG12	2.07	0.54
1:B:721:GLN:HB3	1:B:722:PRO:CD	2.37	0.54
1:A:812:THR:O	1:A:813:ARG:C	2.45	0.54
1:B:1108:GLN:H	1:B:1108:GLN:HE21	1.56	0.54
1:A:536:ALA:O	1:A:537:ILE:C	2.46	0.54
1:B:472:GLU:OE1	1:B:473:PRO:HD2	2.07	0.54
1:B:722:PRO:HB2	1:B:841:THR:CG2	2.36	0.54
1:A:1076:VAL:HG13	1:A:1194:LEU:HD22	1.88	0.54
1:B:1143:ARG:HG2	1:B:1143:ARG:HH11	1.73	0.54
1:A:103:LEU:HB2	1:A:960:VAL:HG23	1.89	0.54
1:B:1079:LEU:C	1:B:1081:ARG:H	2.10	0.54
1:B:1221:ARG:N	1:B:1221:ARG:HD2	2.22	0.54
1:A:482:GLU:O	1:A:484:ILE:N	2.40	0.54
1:B:131:PHE:O	1:B:132:TRP:C	2.46	0.54
1:B:358:ALA:O	1:B:362:PHE:CB	2.53	0.54
1:B:215:LEU:O	1:B:219:PRO:CD	2.54	0.54
1:A:279:GLU:HG2	1:A:782:LYS:NZ	2.22	0.54
1:A:34:SER:O	1:A:38:MET:HB2	2.08	0.54
1:A:59:ILE:HD12	1:A:59:ILE:C	2.27	0.54
1:A:1137:SER:HB3	1:A:1140:GLU:CB	2.37	0.54
1:A:1140:GLU:O	1:A:1143:ARG:HB3	2.08	0.54
1:B:1053:SER:C	1:B:1054:LEU:HD22	2.28	0.54
1:A:583:HIS:O	1:A:585:LEU:HD22	2.07	0.54
1:B:185:LYS:HG3	1:B:351:PHE:CD2	2.43	0.54
1:B:438:ARG:O	1:B:439:LEU:C	2.44	0.54
1:B:550:LEU:HD13	1:B:580:VAL:HB	1.89	0.54
1:B:317:VAL:HG12	1:B:317:VAL:O	2.07	0.54
1:B:697:LEU:HB3	1:B:828:ARG:NH2	2.23	0.54
1:A:111:ALA:HA	1:A:114:TYR:CE1	2.42	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:215:LEU:C	1:A:219:PRO:HD2	2.28	0.54
1:A:215:LEU:O	1:A:219:PRO:CD	2.56	0.54
1:A:239:GLU:HG3	1:A:288:ALA:HB2	1.90	0.54
1:A:716:ILE:HD11	1:A:765:THR:CB	2.38	0.54
1:B:117:ILE:O	1:B:121:VAL:HG13	2.07	0.54
1:B:90:ASN:HB2	1:B:91:MET:HE2	1.89	0.54
1:A:191:GLN:O	1:A:195:THR:HG22	2.08	0.54
1:A:954:ARG:HG3	1:A:954:ARG:HH11	1.73	0.54
1:B:1019:THR:HG22	1:B:1100:LEU:HD12	1.89	0.53
1:B:508:PHE:O	1:B:512:LEU:HB2	2.08	0.53
1:B:705:PRO:O	1:B:706:TYR:HB3	2.08	0.53
1:A:852:GLN:HB2	1:A:853:LEU:HD22	1.90	0.53
1:A:969:ASN:ND2	1:A:970:VAL:H	2.05	0.53
1:A:1048:VAL:C	1:A:1049:LEU:HD22	2.28	0.53
1:B:166:GLU:O	1:B:169:THR:HB	2.07	0.53
1:A:188:MET:HB2	1:A:347:ASN:HB3	1.89	0.53
1:A:1108:GLN:H	1:A:1108:GLN:HE21	1.56	0.53
1:A:185:LYS:HZ2	1:A:185:LYS:HB3	1.73	0.53
1:A:1221:ARG:N	1:A:1221:ARG:HD2	2.23	0.53
1:A:1033:PHE:HB3	1:A:1036:VAL:CG2	2.36	0.53
1:B:617:ILE:H	1:B:617:ILE:HD12	1.74	0.53
1:B:969:ASN:ND2	1:B:970:VAL:N	2.57	0.53
1:B:152:MET:HG3	1:B:913:GLU:OE1	2.08	0.53
1:B:245:LYS:HA	1:B:245:LYS:HZ1	1.74	0.53
1:B:388:LEU:HB2	1:B:413:VAL:HG13	1.88	0.53
1:B:821:VAL:O	1:B:824:ALA:N	2.40	0.53
1:A:70:ILE:C	1:A:72:GLY:N	2.59	0.53
1:A:342:GLY:O	1:A:346:PRO:CD	2.56	0.53
1:B:1063:ALA:CB	1:B:1239:ILE:HG12	2.38	0.53
1:B:1142:VAL:HA	1:B:1161:TYR:OH	2.08	0.53
1:B:337:GLY:O	1:B:341:VAL:HG23	2.08	0.53
1:B:909:GLU:O	1:B:912:PHE:HB2	2.08	0.53
1:A:284:GLY:O	1:A:287:LYS:HB3	2.08	0.53
1:A:146:LYS:O	1:A:150:ALA:HB2	2.07	0.53
1:A:1039:ASN:HB2	1:A:1047:PRO:CA	2.37	0.53
1:A:48:LEU:O	1:A:52:VAL:HG23	2.08	0.53
1:A:437:GLN:NE2	1:A:468:VAL:HG21	2.23	0.53
1:A:1124:ALA:HB2	1:A:1161:TYR:O	2.08	0.53
1:A:1206:SER:O	1:A:1210:VAL:HG23	2.09	0.53
1:B:191:GLN:O	1:B:195:THR:HG22	2.07	0.53
1:B:533:GLN:O	1:B:536:ALA:HB3	2.09	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:305:SER:O	1:A:306:TYR:C	2.47	0.53
1:A:310:PHE:CE2	1:A:331:PHE:HB3	2.43	0.53
1:A:185:LYS:HG3	1:A:351:PHE:CD2	2.43	0.53
1:A:931:ALA:O	1:A:932:HIS:C	2.46	0.53
1:A:1144:ALA:HA	1:A:1186:LEU:CD1	2.32	0.53
1:B:1197:GLU:O	1:B:1198:ALA:C	2.46	0.53
1:A:434:GLN:NE2	1:A:439:LEU:HG	2.21	0.53
1:B:864:ILE:C	1:B:864:ILE:HD12	2.28	0.53
1:B:1005:ILE:HA	1:B:1008:ILE:HG22	1.89	0.53
1:B:853:LEU:H	1:B:853:LEU:HD22	1.73	0.53
1:A:203:GLY:C	1:A:211:THR:OG1	2.47	0.53
1:A:697:LEU:O	1:A:700:ASN:HB3	2.09	0.53
1:A:148:PHE:HD2	1:A:913:GLU:OE2	1.92	0.53
1:B:810:LEU:O	1:B:811:THR:C	2.46	0.53
1:A:1028:GLU:OE1	1:A:1058:LYS:HD2	2.08	0.53
1:A:620:LYS:HD3	1:A:624:THR:OG1	2.09	0.53
1:B:1127:ILE:CD1	1:B:1180:ILE:HG23	2.38	0.53
1:A:1142:VAL:HA	1:A:1161:TYR:OH	2.08	0.53
1:A:151:ILE:C	1:A:153:ASN:H	2.12	0.53
1:B:1060:GLN:HB2	1:B:1237:ASP:OD1	2.09	0.53
1:B:303:TYR:O	1:B:304:ALA:C	2.46	0.53
1:A:300:LEU:HA	1:A:303:TYR:HB2	1.90	0.53
1:A:1060:GLN:HB2	1:A:1237:ASP:OD1	2.09	0.53
1:A:388:LEU:HB2	1:A:413:VAL:HG13	1.89	0.53
1:B:1140:GLU:O	1:B:1143:ARG:HB3	2.09	0.53
1:B:405:ILE:HG22	1:B:406:LEU:HD22	1.91	0.53
1:B:1092:LEU:HD22	1:B:1097:ILE:CD1	2.37	0.53
1:B:383:ASN:C	1:B:384:ILE:O	2.41	0.53
1:B:543:ARG:NH2	1:B:907:THR:HG23	2.24	0.53
1:A:419:VAL:O	1:A:579:ILE:HA	2.09	0.53
1:B:434:GLN:C	1:B:436:MET:H	2.13	0.53
1:B:717:ASN:O	1:B:720:LEU:HB3	2.09	0.53
1:B:781:THR:HG23	1:B:818:ALA:CB	2.39	0.53
1:A:279:GLU:HG2	1:A:782:LYS:HD2	1.91	0.53
1:B:620:LYS:HD3	1:B:624:THR:OG1	2.09	0.53
1:B:552:GLU:O	1:B:555:SER:HB2	2.09	0.53
1:A:483:ASN:O	1:A:486:TYR:HB2	2.08	0.53
1:B:129:VAL:HG11	1:B:935:GLY:HA2	1.91	0.53
1:B:300:LEU:O	1:B:303:TYR:HB3	2.08	0.53
1:B:68:MET:HG3	1:B:336:ILE:HD12	1.90	0.53
1:A:1092:LEU:HD22	1:A:1097:ILE:CD1	2.37	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1195:LEU:HD12	1:A:1195:LEU:N	2.24	0.53
1:A:118:GLY:O	1:A:119:ALA:C	2.45	0.53
1:B:1124:ALA:HB2	1:B:1161:TYR:O	2.09	0.53
1:A:1123:ILE:O	1:A:1127:ILE:HG12	2.08	0.53
1:B:443:LEU:HD23	1:B:443:LEU:O	2.09	0.53
1:A:341:VAL:O	1:A:344:ALA:HB3	2.08	0.53
1:A:1254:GLN:N	1:A:1254:GLN:OE1	2.42	0.53
1:A:161:VAL:O	1:A:162:HIS:HB2	2.08	0.52
1:B:722:PRO:HG2	1:B:841:THR:HB	1.90	0.52
1:B:1212:GLU:O	1:B:1215:ASP:HB3	2.08	0.52
1:A:420:ALA:HA	1:A:580:VAL:O	2.09	0.52
1:B:882:ASP:O	1:B:886:LEU:HG	2.09	0.52
1:A:978:VAL:HG21	2:A:6001:OJZ:C35	2.38	0.52
1:A:731:VAL:HG22	1:A:750:LEU:CB	2.39	0.52
1:A:857:LEU:CD1	1:A:977:ILE:HG13	2.39	0.52
1:A:141:HIS:O	1:A:144:ARG:HB3	2.10	0.52
1:A:155:GLU:O	1:A:157:GLY:N	2.41	0.52
1:A:1197:GLU:O	1:A:1198:ALA:C	2.47	0.52
1:B:954:ARG:HH11	1:B:954:ARG:HG3	1.74	0.52
1:B:1186:LEU:HD12	1:B:1187:VAL:N	2.24	0.52
1:B:354:ALA:O	1:B:358:ALA:HB3	2.09	0.52
1:B:458:ASN:ND2	1:B:459:VAL:N	2.57	0.52
1:B:318:ILE:CD1	1:B:325:GLY:N	2.67	0.52
1:B:795:GLN:O	1:B:796:ASP:CB	2.50	0.52
1:A:1196:ASP:HA	1:A:1226:ILE:HG12	1.92	0.52
1:A:254:LEU:N	1:A:254:LEU:HD22	2.25	0.52
1:B:59:ILE:C	1:B:59:ILE:HD12	2.29	0.52
1:A:390:PHE:HB2	1:A:411:LEU:O	2.09	0.52
1:A:1053:SER:C	1:A:1054:LEU:HD22	2.29	0.52
1:A:1054:LEU:CD1	1:A:1240:VAL:HG11	2.37	0.52
1:A:398:PRO:HD3	1:A:440:TYR:CE2	2.44	0.52
1:B:240:LEU:O	1:B:243:TYR:HB3	2.09	0.52
1:B:1144:ALA:HA	1:B:1186:LEU:CD1	2.30	0.52
1:A:907:THR:N	1:A:908:ARG:HE	2.07	0.52
1:B:420:ALA:HA	1:B:580:VAL:O	2.09	0.52
1:B:202:ILE:HG12	1:B:333:SER:OG	2.09	0.52
1:B:318:ILE:CD1	1:B:324:ILE:H	2.22	0.52
1:A:65:PRO:O	1:A:66:LEU:C	2.46	0.52
1:A:74:MET:O	1:A:78:PHE:HB2	2.09	0.52
1:A:816:ASN:CG	1:A:817:ASP:N	2.63	0.52
1:A:1109:LEU:O	1:A:1109:LEU:HD23	2.10	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1144:ALA:HB2	1:A:1187:VAL:CG2	2.40	0.52
1:A:1143:ARG:HH11	1:A:1143:ARG:HG2	1.73	0.52
1:A:573:ARG:HD2	1:A:578:THR:CG2	2.33	0.52
1:B:483:ASN:O	1:B:486:TYR:HB2	2.10	0.52
1:B:816:ASN:CG	1:B:817:ASP:N	2.62	0.52
1:A:717:ASN:O	1:A:720:LEU:HB3	2.10	0.52
1:A:718:GLY:HA3	1:A:837:ALA:CB	2.39	0.52
1:A:862:PRO:O	1:A:866:ILE:HG13	2.09	0.52
1:B:860:ILE:O	1:B:864:ILE:HG13	2.09	0.52
1:B:969:ASN:ND2	1:B:970:VAL:H	2.07	0.52
1:B:188:MET:HB2	1:B:347:ASN:HB3	1.91	0.52
1:B:418:THR:HG22	1:B:578:THR:CG2	2.40	0.52
1:A:267:LYS:CA	1:A:790:LYS:HE2	2.40	0.52
1:B:1027:LEU:H	1:B:1027:LEU:CD2	2.22	0.52
1:B:349:GLU:O	1:B:352:ALA:N	2.42	0.52
1:B:548:LEU:C	1:B:549:LEU:HD12	2.30	0.52
1:A:311:TRP:HD1	1:A:754:LEU:HD12	1.74	0.52
1:A:69:LEU:HA	1:A:329:THR:HG21	1.91	0.52
1:A:827:SER:O	1:A:828:ARG:C	2.48	0.52
1:A:37:THR:O	1:A:40:ARG:N	2.37	0.52
1:A:1097:ILE:O	1:A:1098:LYS:CB	2.57	0.52
1:A:254:LEU:CD2	1:A:811:THR:HG22	2.39	0.52
1:A:548:LEU:C	1:A:549:LEU:HD12	2.30	0.52
1:B:406:LEU:HD12	1:B:409:LEU:CB	2.40	0.52
1:A:1095:LYS:HD2	1:A:1095:LYS:N	2.24	0.52
1:A:170:ARG:NH1	1:A:170:ARG:HB2	2.25	0.52
1:A:1011:THR:O	1:A:1012:PRO:C	2.48	0.52
1:B:151:ILE:C	1:B:153:ASN:H	2.12	0.52
1:A:240:LEU:O	1:A:243:TYR:HB3	2.09	0.52
1:B:1092:LEU:HB3	1:B:1097:ILE:CD1	2.36	0.52
1:B:1102:VAL:HG13	1:B:1103:GLN:N	2.24	0.52
1:A:418:THR:HG22	1:A:578:THR:CG2	2.39	0.52
1:A:902:THR:O	1:A:903:VAL:C	2.47	0.52
1:B:141:HIS:O	1:B:144:ARG:HB3	2.10	0.52
1:B:460:ARG:O	1:B:461:TYR:C	2.47	0.52
1:B:859:ALA:O	1:B:863:ILE:HG12	2.10	0.52
1:B:103:LEU:HD13	1:B:960:VAL:HG22	1.91	0.52
1:B:210:LEU:HD23	1:B:317:VAL:CG1	2.37	0.52
1:B:239:GLU:HG3	1:B:288:ALA:HB2	1.90	0.52
1:A:291:ALA:HA	1:A:294:SER:CB	2.39	0.52
1:A:697:LEU:HD12	1:A:697:LEU:C	2.30	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:724:PHE:CE1	1:A:754:LEU:HD22	2.45	0.52
1:A:864:ILE:C	1:A:864:ILE:HD12	2.30	0.52
1:A:967:PHE:HD1	1:A:968:GLU:H	1.58	0.52
1:A:979:PHE:HA	1:A:982:MET:SD	2.50	0.52
1:A:458:ASN:ND2	1:A:459:VAL:N	2.57	0.52
1:B:584:ARG:HA	1:B:584:ARG:NE	2.24	0.52
1:A:1108:GLN:N	1:A:1108:GLN:HE21	2.07	0.52
1:A:484:ILE:O	1:A:487:GLY:N	2.43	0.52
1:A:486:TYR:O	1:A:908:ARG:NH1	2.43	0.52
1:B:267:LYS:CA	1:B:270:LEU:HD21	2.39	0.52
1:B:289:ILE:O	1:B:292:ASN:HB3	2.10	0.52
1:A:781:THR:HG23	1:A:818:ALA:CB	2.40	0.52
1:A:827:SER:O	1:A:830:ALA:N	2.43	0.52
1:A:858:LEU:C	1:A:858:LEU:HD12	2.30	0.52
1:A:133:CYS:CB	1:A:931:ALA:HB1	2.39	0.52
1:A:1091:PHE:CE1	1:A:1096:GLU:HG2	2.32	0.52
1:A:1202:LEU:CD2	1:A:1206:SER:HB3	2.40	0.52
1:B:437:GLN:NE2	1:B:468:VAL:HG21	2.23	0.52
1:B:565:VAL:O	1:B:566:GLN:C	2.48	0.52
1:B:901:ARG:HD3	1:B:901:ARG:H	1.74	0.52
1:B:731:VAL:HG22	1:B:750:LEU:CB	2.40	0.52
1:B:766:PHE:HA	1:B:769:GLN:HG2	1.91	0.52
1:B:777:GLY:HA3	1:B:822:LYS:HG3	1.92	0.52
1:A:138:ARG:NH2	1:B:515:GLN:HG2	2.25	0.52
1:A:806:THR:HG23	1:A:809:ALA:H	1.75	0.52
1:A:432:THR:O	1:A:433:VAL:C	2.48	0.52
1:B:1124:ALA:HB2	1:B:1161:TYR:HB3	1.91	0.52
1:A:1027:LEU:N	1:A:1027:LEU:HD12	2.25	0.52
1:A:1108:GLN:NE2	1:A:1108:GLN:N	2.58	0.52
1:B:1219:GLU:HG3	1:B:1219:GLU:O	2.09	0.51
1:B:260:VAL:O	1:B:263:PHE:HB3	2.10	0.51
1:A:158:TRP:NE1	1:A:900:PHE:HB2	2.25	0.51
1:A:534:ARG:O	1:A:537:ILE:HB	2.09	0.51
1:B:352:ALA:O	1:B:355:ARG:N	2.42	0.51
1:B:1229:ARG:C	1:B:1231:SER:H	2.13	0.51
1:B:998:THR:O	1:B:1001:ALA:HB3	2.10	0.51
1:A:206:ARG:O	1:A:330:VAL:HG11	2.10	0.51
1:A:290:THR:HG22	1:A:770:GLY:C	2.31	0.51
1:A:708:VAL:HG13	1:A:709:VAL:N	2.24	0.51
1:A:843:ILE:HA	1:A:846:SER:CB	2.40	0.51
1:A:349:GLU:O	1:A:352:ALA:N	2.43	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1260:LYS:HD2	1:B:1260:LYS:N	2.22	0.51
1:A:373:SER:O	1:A:374:PHE:CB	2.57	0.51
1:B:584:ARG:O	1:B:588:VAL:HG23	2.10	0.51
1:B:895:GLU:O	1:B:899:ASN:ND2	2.43	0.51
1:B:133:CYS:HB3	1:B:931:ALA:CB	2.40	0.51
1:B:716:ILE:HD11	1:B:765:THR:HB	1.92	0.51
1:B:853:LEU:N	1:B:853:LEU:HD22	2.25	0.51
1:A:106:GLU:OE2	1:A:109:THR:HB	2.09	0.51
1:A:202:ILE:HG12	1:A:333:SER:OG	2.10	0.51
1:A:711:ILE:O	1:A:715:ILE:HG13	2.10	0.51
1:A:175:VAL:CG1	1:A:176:SER:N	2.73	0.51
1:A:354:ALA:O	1:A:358:ALA:CB	2.58	0.51
1:A:800:PHE:C	1:A:803:PRO:HD3	2.31	0.51
1:B:246:ALA:HB2	1:B:281:LYS:HZ2	1.75	0.51
1:A:59:ILE:HG12	1:A:124:VAL:HG11	1.92	0.51
1:A:460:ARG:O	1:A:461:TYR:C	2.48	0.51
1:A:247:GLY:O	1:A:250:ALA:HB3	2.09	0.51
1:B:915:MET:O	1:B:918:GLN:HB2	2.11	0.51
1:B:106:GLU:HG3	1:B:110:TYR:CZ	2.46	0.51
1:B:724:PHE:CE1	1:B:754:LEU:HD22	2.45	0.51
1:A:981:ALA:HB3	2:A:6001:OJZ:H33	1.93	0.51
1:A:720:LEU:HD22	1:A:761:ILE:HG22	1.91	0.51
1:A:144:ARG:HH12	1:A:175:VAL:HG11	1.76	0.51
1:A:1202:LEU:HG	1:A:1203:ASP:H	1.75	0.51
1:B:427:CYS:O	1:B:599:GLY:CA	2.57	0.51
1:B:1014:ILE:HG23	1:B:1014:ILE:O	2.10	0.51
1:B:1144:ALA:HB2	1:B:1187:VAL:HG23	1.92	0.51
1:A:464:GLU:HG2	1:A:543:ARG:HH21	1.76	0.51
1:A:901:ARG:H	1:A:901:ARG:HD3	1.75	0.51
1:B:480:ILE:O	1:B:481:ALA:C	2.48	0.51
1:B:902:THR:O	1:B:904:VAL:N	2.44	0.51
1:B:543:ARG:NH1	1:B:905:SER:HA	2.24	0.51
1:B:275:ASN:HA	1:B:278:GLU:HB2	1.92	0.51
1:B:757:ILE:O	1:B:761:ILE:HD13	2.09	0.51
1:A:297:ALA:O	1:A:301:LEU:HB2	2.10	0.51
1:A:1080:GLU:CD	1:A:1109:LEU:HD12	2.31	0.51
1:A:1178:GLN:O	1:A:1181:ALA:HB3	2.11	0.51
1:B:802:ASP:OD2	1:B:1041:PRO:HB2	2.10	0.51
1:A:379:HIS:HB2	1:A:456:THR:O	2.10	0.51
1:B:615:LYS:HA	1:B:619:PHE:CG	2.45	0.51
1:B:1225:VAL:HG13	1:B:1225:VAL:O	2.09	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:418:THR:HG22	1:A:578:THR:HG22	1.92	0.51
1:B:697:LEU:HD12	1:B:697:LEU:C	2.31	0.51
1:A:291:ALA:O	1:A:295:MET:SD	2.68	0.51
1:A:301:LEU:O	1:A:304:ALA:HB3	2.09	0.51
1:B:1035:GLY:C	1:B:1052:LEU:O	2.49	0.51
1:A:118:GLY:HA3	1:A:946:TYR:CD2	2.45	0.51
1:B:1056:VAL:CG2	1:B:1062:LEU:HB2	2.41	0.51
1:B:421:LEU:HD23	1:B:429:LYS:HA	1.92	0.51
1:A:113:TYR:CG	1:A:114:TYR:N	2.79	0.51
1:A:318:ILE:HD13	1:A:327:VAL:CG1	2.41	0.51
1:A:1151:HIS:HA	1:A:1154:ILE:HB	1.92	0.51
1:A:1192:ILE:HA	1:A:1222:THR:O	2.10	0.51
1:A:1196:ASP:HA	1:A:1226:ILE:HD11	1.91	0.51
1:B:59:ILE:HG12	1:B:124:VAL:HG11	1.93	0.51
1:B:1123:ILE:O	1:B:1127:ILE:HG12	2.10	0.51
1:A:374:PHE:CD2	1:A:375:SER:N	2.76	0.51
1:B:1254:GLN:OE1	1:B:1254:GLN:N	2.44	0.51
1:B:1096:GLU:HB2	1:B:1099:GLN:HE21	1.75	0.51
1:B:1108:GLN:HE21	1:B:1108:GLN:N	2.08	0.51
1:B:464:GLU:HG2	1:B:543:ARG:HH21	1.75	0.51
1:A:716:ILE:HD11	1:A:765:THR:HB	1.93	0.51
1:B:800:PHE:C	1:B:803:PRO:HD3	2.31	0.51
1:A:1218:ARG:HB2	1:A:1223:CYS:SG	2.51	0.51
1:B:1120:ASP:O	1:B:1164:ARG:NE	2.43	0.51
1:A:878:GLN:NE2	1:A:881:LYS:HD3	2.26	0.51
1:B:1218:ARG:HB2	1:B:1223:CYS:SG	2.51	0.51
1:B:133:CYS:HB3	1:B:931:ALA:HB1	1.91	0.51
1:B:573:ARG:HD2	1:B:578:THR:CG2	2.33	0.51
1:B:907:THR:C	1:B:908:ARG:HE	2.15	0.51
1:B:106:GLU:OE2	1:B:109:THR:HB	2.10	0.51
1:B:203:GLY:C	1:B:211:THR:OG1	2.49	0.51
1:B:718:GLY:HA3	1:B:837:ALA:CB	2.40	0.51
1:A:857:LEU:HG	1:A:977:ILE:HG12	1.92	0.51
1:A:1144:ALA:HB2	1:A:1187:VAL:HG23	1.91	0.51
1:A:962:GLN:O	1:A:962:GLN:HG2	2.11	0.51
1:B:498:LYS:HE2	1:B:499:ALA:N	2.26	0.51
1:A:615:LYS:HA	1:A:619:PHE:CG	2.46	0.51
1:B:1176:GLN:O	1:B:1179:ARG:N	2.44	0.51
1:B:175:VAL:CG1	1:B:176:SER:N	2.74	0.51
1:B:113:TYR:CG	1:B:114:TYR:N	2.78	0.51
1:B:826:GLY:O	1:B:829:LEU:HB2	2.10	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1005:ILE:HA	1:A:1008:ILE:HG22	1.92	0.51
1:A:762:SER:CA	1:A:765:THR:HG22	2.40	0.51
1:A:1120:ASP:O	1:A:1164:ARG:NE	2.44	0.51
1:B:48:LEU:O	1:B:52:VAL:HG23	2.10	0.51
1:A:949:TYR:N	1:A:949:TYR:CD1	2.79	0.51
1:B:962:GLN:HG2	1:B:962:GLN:O	2.10	0.51
1:B:86:LYS:HG2	1:B:738:GLY:O	2.11	0.51
1:B:1080:GLU:CD	1:B:1109:LEU:HD12	2.31	0.51
1:B:161:VAL:O	1:B:162:HIS:HB2	2.11	0.51
1:B:34:SER:O	1:B:38:MET:HB2	2.11	0.51
1:B:418:THR:HA	1:B:578:THR:O	2.11	0.51
1:B:902:THR:HG23	1:B:903:VAL:N	2.25	0.51
1:B:314:THR:O	1:B:315:SER:C	2.49	0.51
1:A:1032:GLN:HE21	1:A:1055:GLU:HG3	1.76	0.51
1:A:1056:VAL:CG2	1:A:1060:GLN:HE22	2.23	0.51
1:A:409:LEU:HD13	1:A:410:ASN:N	2.26	0.51
1:B:1109:LEU:HD23	1:B:1109:LEU:O	2.11	0.50
1:A:158:TRP:O	1:A:164:VAL:HG12	2.10	0.50
1:B:35:VAL:HG12	1:B:359:TYR:CZ	2.46	0.50
1:B:484:ILE:O	1:B:485:ARG:C	2.50	0.50
1:B:1202:LEU:HG	1:B:1203:ASP:H	1.76	0.50
1:B:721:GLN:O	1:B:722:PRO:C	2.48	0.50
1:B:286:LYS:HG2	1:B:778:GLU:HG3	1.89	0.50
1:B:788:VAL:HG21	1:B:1004:ILE:HG13	1.94	0.50
1:B:845:ILE:O	1:B:848:ILE:HG12	2.12	0.50
1:A:1020:GLN:CG	1:A:1101:ASN:HB3	2.41	0.50
1:A:1102:VAL:HG13	1:A:1103:GLN:N	2.24	0.50
1:A:801:ASP:OD2	1:A:1082:PHE:HB3	2.11	0.50
1:A:430:SER:O	1:A:434:GLN:HB2	2.11	0.50
1:A:431:THR:O	1:A:434:GLN:HB3	2.11	0.50
1:A:467:GLY:O	1:A:548:LEU:HA	2.12	0.50
1:B:248:ALA:O	1:B:251:GLU:HB2	2.11	0.50
1:B:1144:ALA:HB2	1:B:1187:VAL:CG2	2.41	0.50
1:A:915:MET:O	1:A:918:GLN:HB2	2.11	0.50
1:B:35:VAL:HG21	1:B:355:ARG:HH21	1.76	0.50
1:B:467:GLY:O	1:B:548:LEU:HA	2.12	0.50
1:B:905:SER:HB2	1:B:908:ARG:CZ	2.41	0.50
1:A:702:THR:HB	1:A:703:GLU:OE1	2.10	0.50
1:A:717:ASN:HB3	1:A:833:PHE:CE1	2.46	0.50
1:B:791:SER:N	1:B:794:ARG:HH21	2.08	0.50
1:B:121:VAL:CG2	1:B:122:LEU:N	2.74	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:693:PHE:C	1:A:695:ARG:H	2.14	0.50
1:A:499:ALA:CB	1:A:542:VAL:HG22	2.41	0.50
1:B:466:ILE:HG22	1:B:468:VAL:HG23	1.94	0.50
1:B:702:THR:HB	1:B:703:GLU:OE1	2.10	0.50
1:B:786:TYR:HE2	1:B:790:LYS:NZ	2.03	0.50
1:A:214:ILE:HD11	1:A:330:VAL:HB	1.92	0.50
1:A:766:PHE:HA	1:A:769:GLN:HG2	1.92	0.50
1:B:415:SER:HA	1:B:577:THR:HG21	1.93	0.50
1:A:248:ALA:O	1:A:251:GLU:HB2	2.12	0.50
1:B:1108:GLN:NE2	1:B:1108:GLN:N	2.59	0.50
1:B:1196:ASP:HA	1:B:1226:ILE:HG12	1.92	0.50
1:A:314:THR:CG2	1:A:327:VAL:HG21	2.36	0.50
1:A:318:ILE:CD1	1:A:324:ILE:H	2.24	0.50
1:A:61:GLY:HA3	1:A:194:ALA:HB2	1.94	0.50
1:B:1023:LYS:HB3	1:B:1026:MET:CG	2.37	0.50
1:B:978:VAL:HG22	2:B:6002:OJZ:H35B	1.93	0.50
1:B:118:GLY:HA3	1:B:946:TYR:CD2	2.46	0.50
1:A:617:ILE:HD12	1:A:617:ILE:H	1.74	0.50
1:A:121:VAL:CG2	1:A:122:LEU:N	2.74	0.50
1:A:85:SER:HA	1:A:963:GLN:OE1	2.11	0.50
1:A:584:ARG:NE	1:A:584:ARG:HA	2.26	0.50
1:A:534:ARG:O	1:A:537:ILE:N	2.45	0.50
1:B:398:PRO:HD3	1:B:440:TYR:CE2	2.45	0.50
1:B:300:LEU:HA	1:B:303:TYR:HB2	1.92	0.50
1:B:69:LEU:HA	1:B:329:THR:HG21	1.93	0.50
1:B:697:LEU:HA	1:B:700:ASN:CB	2.41	0.50
1:B:816:ASN:O	1:B:819:ALA:HB3	2.11	0.50
1:A:201:ILE:HG22	1:A:202:ILE:N	2.27	0.50
1:A:318:ILE:HD11	1:A:325:GLY:H	1.74	0.50
1:A:824:ALA:O	1:A:828:ARG:HG2	2.11	0.50
1:A:1186:LEU:HD12	1:A:1187:VAL:N	2.26	0.50
1:A:797:VAL:CG1	1:A:798:SER:N	2.69	0.50
1:B:1064:LEU:HD13	1:B:1064:LEU:C	2.32	0.50
1:B:1092:LEU:CD2	1:B:1097:ILE:HD11	2.40	0.50
1:A:484:ILE:O	1:A:485:ARG:C	2.50	0.50
1:B:757:ILE:HA	1:B:761:ILE:HD13	1.94	0.50
1:B:766:PHE:O	1:B:769:GLN:N	2.44	0.50
1:A:309:ALA:O	1:A:310:PHE:O	2.30	0.50
1:A:312:TYR:HB2	1:A:751:PHE:CE2	2.46	0.50
1:A:757:ILE:O	1:A:761:ILE:HD13	2.11	0.50
1:A:972:LEU:CD1	1:A:972:LEU:H	2.23	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:255:ALA:C	1:A:257:ILE:N	2.62	0.50
1:A:406:LEU:HD12	1:A:409:LEU:CB	2.41	0.50
1:B:170:ARG:HB2	1:B:170:ARG:NH1	2.26	0.50
1:A:691:ALA:O	1:A:692:SER:CB	2.60	0.50
1:A:531:GLN:O	1:A:534:ARG:HB3	2.12	0.50
1:B:271:GLU:O	1:B:274:ASN:HB2	2.12	0.50
1:B:717:ASN:HD21	1:B:766:PHE:HE1	1.57	0.50
1:B:838:ASN:O	1:B:839:LEU:C	2.50	0.50
1:A:267:LYS:HG2	1:A:793:LEU:HG	1.93	0.50
1:A:892:ILE:O	1:A:893:ALA:C	2.50	0.50
1:A:57:ALA:O	1:A:60:HIS:HB3	2.11	0.50
1:A:959:LEU:O	1:A:964:LEU:HB3	2.12	0.50
1:B:421:LEU:O	1:B:581:ILE:HD12	2.11	0.50
1:B:207:GLY:C	1:B:209:LYS:H	2.15	0.50
1:A:106:GLU:HG3	1:A:110:TYR:CZ	2.46	0.50
1:A:721:GLN:O	1:A:722:PRO:C	2.49	0.50
1:A:842:GLY:HA2	1:A:979:PHE:CE2	2.47	0.50
1:A:1164:ARG:C	1:A:1166:GLY:N	2.65	0.50
1:B:1037:VAL:HG21	1:B:1087:ALA:HB3	1.94	0.50
1:B:878:GLN:NE2	1:B:881:LYS:HD3	2.26	0.50
1:A:533:GLN:O	1:A:536:ALA:HB3	2.11	0.50
1:A:902:THR:HG23	1:A:903:VAL:N	2.26	0.50
1:B:485:ARG:O	1:B:488:ARG:N	2.43	0.50
1:B:532:LYS:O	1:B:533:GLN:C	2.49	0.50
1:B:284:GLY:O	1:B:287:LYS:HB3	2.12	0.50
1:B:291:ALA:O	1:B:295:MET:SD	2.70	0.50
1:B:705:PRO:HG2	1:B:706:TYR:N	2.27	0.50
1:B:750:LEU:O	1:B:753:LEU:HB3	2.12	0.50
1:A:35:VAL:HG21	1:A:355:ARG:HH21	1.76	0.50
1:B:991:ALA:HB1	1:B:992:PRO:HD2	1.93	0.50
1:B:1197:GLU:OE2	1:B:1228:HIS:HB2	2.12	0.50
1:A:620:LYS:O	1:A:623:MET:N	2.45	0.50
1:A:1124:ALA:HB2	1:A:1161:TYR:HB3	1.93	0.50
1:B:394:HIS:O	1:B:443:LEU:HB3	2.11	0.50
1:A:227:ILE:HG22	1:A:228:TRP:N	2.27	0.50
1:B:201:ILE:HG22	1:B:202:ILE:N	2.27	0.49
1:B:762:SER:CA	1:B:765:THR:HG22	2.42	0.49
1:A:777:GLY:HA3	1:A:822:LYS:HG3	1.93	0.49
1:B:967:PHE:HD1	1:B:968:GLU:H	1.56	0.49
1:A:480:ILE:O	1:A:481:ALA:C	2.49	0.49
1:A:485:ARG:O	1:A:488:ARG:C	2.51	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:158:TRP:HZ2	1:B:900:PHE:HB2	1.75	0.49
1:B:706:TYR:O	1:B:707:PHE:CG	2.66	0.49
1:B:717:ASN:HB3	1:B:833:PHE:CE1	2.46	0.49
1:B:850:GLY:C	1:B:852:GLN:H	2.15	0.49
1:A:311:TRP:CD1	1:A:754:LEU:HD12	2.47	0.49
1:A:1056:VAL:CG2	1:A:1062:LEU:HB2	2.41	0.49
1:A:1037:VAL:HG21	1:A:1087:ALA:HB3	1.94	0.49
1:A:466:ILE:HG22	1:A:468:VAL:HG23	1.93	0.49
1:A:120:GLY:O	1:A:121:VAL:C	2.51	0.49
1:B:425:SER:HB2	1:B:598:ASP:O	2.12	0.49
1:B:1095:LYS:N	1:B:1095:LYS:HD2	2.26	0.49
1:A:238:LYS:HZ1	1:A:242:ALA:HB2	1.76	0.49
1:B:1139:GLU:CD	1:B:1139:GLU:H	2.14	0.49
1:B:1196:ASP:HA	1:B:1226:ILE:HD11	1.93	0.49
1:B:129:VAL:HG11	1:B:935:GLY:N	2.27	0.49
1:B:139:GLN:O	1:B:140:ILE:C	2.50	0.49
1:B:418:THR:HG22	1:B:578:THR:HG22	1.92	0.49
1:B:843:ILE:HA	1:B:846:SER:CB	2.40	0.49
1:A:307:ALA:O	1:A:308:LEU:O	2.30	0.49
1:A:136:ALA:O	1:A:139:GLN:HB2	2.12	0.49
1:A:409:LEU:HD21	1:A:597:PHE:CE1	2.47	0.49
1:B:1128:ALA:HB2	1:B:1141:ILE:HG21	1.94	0.49
1:A:1229:ARG:C	1:A:1231:SER:H	2.14	0.49
1:B:1056:VAL:CG2	1:B:1060:GLN:HE22	2.23	0.49
1:A:158:TRP:CE2	1:A:900:PHE:HB2	2.48	0.49
1:B:858:LEU:C	1:B:858:LEU:HD12	2.33	0.49
1:A:318:ILE:HD11	1:A:324:ILE:H	1.78	0.49
1:A:70:ILE:O	1:A:71:PHE:C	2.50	0.49
1:A:857:LEU:HD11	1:A:977:ILE:N	2.28	0.49
1:A:147:PHE:O	1:A:150:ALA:HB3	2.13	0.49
1:A:174:ASP:O	1:A:175:VAL:C	2.51	0.49
1:A:1164:ARG:O	1:A:1166:GLY:N	2.44	0.49
1:B:238:LYS:HZ1	1:B:242:ALA:HB2	1.75	0.49
1:B:499:ALA:CB	1:B:542:VAL:HG22	2.42	0.49
1:B:144:ARG:HG2	1:B:920:LEU:HD11	1.93	0.49
1:B:206:ARG:O	1:B:330:VAL:HG11	2.12	0.49
1:B:291:ALA:HA	1:B:294:SER:CB	2.42	0.49
1:B:311:TRP:CE3	1:B:311:TRP:CA	2.96	0.49
1:B:842:GLY:HA2	1:B:979:PHE:CE2	2.47	0.49
1:A:291:ALA:CA	1:A:294:SER:HB2	2.42	0.49
1:A:786:TYR:HE2	1:A:790:LYS:HZ1	1.58	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:35:VAL:HG12	1:A:359:TYR:CZ	2.47	0.49
1:A:1079:LEU:C	1:A:1081:ARG:N	2.66	0.49
1:A:620:LYS:HD2	1:A:621:LEU:HD22	1.95	0.49
1:B:620:LYS:HD2	1:B:621:LEU:HD22	1.95	0.49
1:A:1202:LEU:HG	1:A:1206:SER:CB	2.42	0.49
1:B:1178:GLN:O	1:B:1181:ALA:HB3	2.13	0.49
1:A:895:GLU:O	1:A:899:ASN:ND2	2.45	0.49
1:A:905:SER:HB2	1:A:908:ARG:CZ	2.42	0.49
1:A:907:THR:C	1:A:908:ARG:HE	2.16	0.49
1:A:909:GLU:O	1:A:912:PHE:HB2	2.13	0.49
1:B:144:ARG:HH12	1:B:175:VAL:HG11	1.74	0.49
1:B:301:LEU:O	1:B:304:ALA:HB3	2.13	0.49
1:B:305:SER:O	1:B:306:TYR:C	2.50	0.49
1:B:824:ALA:O	1:B:828:ARG:HG2	2.12	0.49
1:B:972:LEU:CD1	1:B:972:LEU:H	2.22	0.49
1:A:270:LEU:HG	1:A:271:GLU:H	1.78	0.49
1:A:750:LEU:O	1:A:753:LEU:HB3	2.12	0.49
1:A:253:VAL:O	1:A:254:LEU:HD13	2.11	0.49
1:B:949:TYR:CD1	1:B:949:TYR:N	2.80	0.49
1:B:1166:GLY:HA3	1:B:1171:GLN:OE1	2.12	0.49
1:A:992:PRO:C	1:A:994:TYR:H	2.16	0.49
1:A:1189:GLN:N	1:A:1190:PRO:CD	2.76	0.49
1:A:1095:LYS:CD	1:A:1095:LYS:H	2.24	0.49
1:B:314:THR:CG2	1:B:327:VAL:CG2	2.81	0.49
1:A:175:VAL:HG13	1:A:176:SER:H	1.75	0.49
1:A:352:ALA:O	1:A:355:ARG:N	2.46	0.49
1:B:795:GLN:NE2	1:B:796:ASP:H	2.08	0.49
1:A:157:GLY:HA2	1:A:160:ASP:CB	2.41	0.49
1:B:1193:LEU:HB2	1:B:1223:CYS:CB	2.34	0.49
1:B:1214:LEU:HD23	1:B:1214:LEU:C	2.32	0.49
1:A:505:ALA:HB1	1:A:508:PHE:CZ	2.47	0.49
1:B:434:GLN:O	1:B:436:MET:N	2.46	0.49
1:B:907:THR:C	1:B:908:ARG:NE	2.65	0.49
1:B:843:ILE:CA	1:B:846:SER:HB3	2.39	0.49
1:A:209:LYS:HA	1:A:212:LEU:HB3	1.95	0.49
1:A:843:ILE:CA	1:A:846:SER:HB3	2.39	0.49
1:B:1020:GLN:O	1:B:1021:GLY:O	2.30	0.49
1:A:1080:GLU:OE1	1:A:1109:LEU:HD12	2.12	0.49
1:A:1147:GLU:OE1	1:A:1216:LYS:HB2	2.11	0.49
1:B:57:ALA:O	1:B:60:HIS:HB3	2.13	0.49
1:A:485:ARG:O	1:A:488:ARG:N	2.42	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:110:TYR:HA	1:B:113:TYR:CD2	2.47	0.49
1:B:853:LEU:HB3	1:B:973:VAL:CG2	2.43	0.49
1:A:216:ALA:O	1:A:220:VAL:HG23	2.13	0.49
1:A:300:LEU:O	1:A:303:TYR:HB3	2.12	0.49
1:A:816:ASN:O	1:A:819:ALA:HB3	2.13	0.49
1:A:1035:GLY:C	1:A:1052:LEU:O	2.51	0.49
1:A:1197:GLU:OE2	1:A:1228:HIS:HB2	2.12	0.49
1:A:429:LYS:O	1:A:432:THR:N	2.46	0.49
1:B:409:LEU:HD13	1:B:410:ASN:N	2.26	0.49
1:B:583:HIS:HB2	1:B:584:ARG:HH12	1.78	0.49
1:B:1205:GLU:HA	1:B:1208:LYS:HB3	1.94	0.49
1:B:1147:GLU:OE1	1:B:1216:LYS:HB2	2.12	0.49
1:B:1076:VAL:HG13	1:B:1194:LEU:HB3	1.94	0.49
1:B:255:ALA:O	1:B:257:ILE:N	2.45	0.49
1:A:901:ARG:O	1:A:902:THR:C	2.51	0.49
1:B:44:TRP:CD1	1:B:45:LEU:HD22	2.48	0.49
1:B:570:ASP:HA	1:B:573:ARG:NH1	2.28	0.49
1:A:722:PRO:HA	1:A:979:PHE:HE1	1.78	0.49
1:A:830:ALA:O	1:A:833:PHE:HB3	2.13	0.49
1:A:706:TYR:O	1:A:707:PHE:CG	2.66	0.49
1:A:498:LYS:HE2	1:A:499:ALA:N	2.28	0.49
1:B:1102:VAL:HG13	1:B:1103:GLN:H	1.77	0.48
1:B:1080:GLU:OE1	1:B:1109:LEU:HD12	2.13	0.48
1:B:342:GLY:O	1:B:345:SER:HB3	2.12	0.48
1:B:462:LEU:O	1:B:465:ILE:N	2.45	0.48
1:B:61:GLY:HA3	1:B:194:ALA:HB2	1.95	0.48
1:B:218:SER:CB	1:B:219:PRO:HD3	2.42	0.48
1:B:415:SER:HA	1:B:577:THR:CG2	2.43	0.48
1:A:394:HIS:O	1:A:443:LEU:HB3	2.12	0.48
1:A:570:ASP:HA	1:A:573:ARG:NH1	2.28	0.48
1:B:933:VAL:O	1:B:935:GLY:N	2.46	0.48
1:B:270:LEU:HG	1:B:271:GLU:H	1.78	0.48
1:A:214:ILE:HG12	1:A:331:PHE:CE2	2.48	0.48
1:A:132:TRP:CD2	1:A:183:GLY:HA3	2.47	0.48
1:A:883:LYS:HA	1:A:886:LEU:HG	1.95	0.48
1:B:505:ALA:HB1	1:B:508:PHE:CZ	2.49	0.48
1:B:777:GLY:CA	1:B:822:LYS:HG3	2.44	0.48
1:B:281:LYS:HD2	1:B:281:LYS:N	2.28	0.48
1:A:401:LYS:HB3	1:A:401:LYS:HZ2	1.77	0.48
1:B:409:LEU:HD21	1:B:597:PHE:CE1	2.47	0.48
1:A:418:THR:HA	1:A:578:THR:O	2.12	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:722:PRO:HA	1:B:979:PHE:HE1	1.78	0.48
1:A:213:VAL:O	1:A:216:ALA:HB3	2.13	0.48
1:A:1043:ARG:N	1:A:1044:PRO:HD2	2.27	0.48
1:B:741:PRO:O	1:B:742:GLU:HB2	2.13	0.48
1:B:370:SER:O	1:B:372:ASP:N	2.44	0.48
1:B:167:LEU:HD23	1:B:167:LEU:C	2.34	0.48
1:B:371:ILE:HG22	1:B:371:ILE:O	2.13	0.48
1:B:1091:PHE:CE1	1:B:1096:GLU:HG2	2.32	0.48
1:A:532:LYS:O	1:A:533:GLN:C	2.50	0.48
1:A:565:VAL:O	1:A:566:GLN:C	2.51	0.48
1:A:914:THR:O	1:A:917:ALA:HB3	2.14	0.48
1:B:132:TRP:CD2	1:B:183:GLY:HA3	2.48	0.48
1:B:147:PHE:O	1:B:150:ALA:HB3	2.14	0.48
1:B:200:PHE:O	1:B:201:ILE:C	2.51	0.48
1:B:761:ILE:HD12	1:B:761:ILE:H	1.78	0.48
1:A:286:LYS:HE3	1:A:822:LYS:HZ1	1.78	0.48
1:B:792:MET:HE3	1:B:810:LEU:HD22	1.95	0.48
1:A:44:TRP:CD1	1:A:45:LEU:HD22	2.48	0.48
1:B:1032:GLN:HE21	1:B:1055:GLU:HG3	1.77	0.48
1:B:534:ARG:O	1:B:537:ILE:N	2.46	0.48
1:B:697:LEU:O	1:B:700:ASN:HB3	2.13	0.48
1:B:773:PHE:HB2	1:B:829:LEU:HD13	1.95	0.48
1:B:846:SER:HA	1:B:849:TYR:CG	2.49	0.48
1:B:837:ALA:HB1	1:B:982:MET:CE	2.43	0.48
1:A:788:VAL:HG21	1:A:1004:ILE:HG13	1.95	0.48
1:A:837:ALA:HB1	1:A:982:MET:CE	2.44	0.48
1:A:1097:ILE:O	1:A:1098:LYS:HB3	2.13	0.48
1:A:1166:GLY:HA3	1:A:1171:GLN:OE1	2.13	0.48
1:A:795:GLN:NE2	1:A:796:ASP:H	2.10	0.48
1:A:437:GLN:HE21	1:A:468:VAL:HG21	1.79	0.48
1:A:1128:ALA:CB	1:A:1136:VAL:HG13	2.43	0.48
1:A:1128:ALA:HB2	1:A:1141:ILE:HG21	1.96	0.48
1:A:1204:THR:C	1:A:1206:SER:H	2.16	0.48
1:B:881:LYS:HZ3	1:B:881:LYS:HB2	1.78	0.48
1:B:131:PHE:CD2	1:B:131:PHE:C	2.86	0.48
1:B:979:PHE:HA	1:B:982:MET:SD	2.54	0.48
1:A:209:LYS:C	1:A:212:LEU:HB3	2.34	0.48
1:A:246:ALA:HB2	1:A:281:LYS:HZ2	1.77	0.48
1:A:846:SER:HA	1:A:849:TYR:CE1	2.49	0.48
1:B:806:THR:HG23	1:B:809:ALA:H	1.78	0.48
1:A:1090:VAL:CG1	1:A:1097:ILE:HB	2.36	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1135:VAL:O	1:B:1137:SER:N	2.47	0.48
1:B:1014:ILE:HD12	1:B:1106:ARG:NH1	2.29	0.48
1:B:1149:ASN:O	1:B:1179:ARG:HD3	2.14	0.48
1:B:1186:LEU:HD12	1:B:1186:LEU:C	2.34	0.48
1:B:566:GLN:HA	1:B:569:LEU:HD12	1.96	0.48
1:B:221:LEU:HD13	1:B:306:TYR:HA	1.95	0.48
1:B:322:TYR:CE2	1:B:324:ILE:HD11	2.49	0.48
1:B:704:TRP:CZ2	1:B:707:PHE:N	2.82	0.48
1:B:852:GLN:HB3	1:B:853:LEU:HD22	1.96	0.48
1:A:846:SER:HA	1:A:849:TYR:CG	2.48	0.48
1:A:52:VAL:O	1:A:53:GLY:C	2.52	0.48
1:B:1036:VAL:HB	1:B:1052:LEU:CB	2.35	0.48
1:A:429:LYS:N	1:A:429:LYS:HD3	2.19	0.48
1:A:583:HIS:HB2	1:A:584:ARG:HH12	1.78	0.48
1:B:1192:ILE:HD13	1:B:1193:LEU:N	2.29	0.48
1:B:1149:ASN:OD1	1:B:1213:ALA:HB2	2.14	0.48
1:A:894:THR:O	1:A:895:GLU:C	2.52	0.48
1:A:204:PHE:HA	1:A:211:THR:CG2	2.41	0.48
1:A:175:VAL:CG1	1:A:176:SER:H	2.27	0.48
1:A:1098:LYS:O	1:A:1099:GLN:HB2	2.14	0.48
1:A:1186:LEU:HD12	1:A:1186:LEU:C	2.34	0.48
1:A:1225:VAL:O	1:A:1225:VAL:HG13	2.13	0.48
1:B:335:LEU:C	1:B:335:LEU:HD23	2.35	0.48
1:A:470:SER:HB2	1:A:471:GLN:OE1	2.14	0.48
1:A:425:SER:HB2	1:A:598:ASP:O	2.14	0.48
1:B:175:VAL:HG13	1:B:176:SER:H	1.78	0.48
1:B:476:PHE:O	1:B:478:THR:N	2.41	0.48
1:B:318:ILE:CD1	1:B:325:GLY:H	2.26	0.48
1:B:779:ILE:O	1:B:780:LEU:C	2.53	0.48
1:A:221:LEU:HD13	1:A:306:TYR:HA	1.96	0.48
1:A:281:LYS:N	1:A:281:LYS:HD2	2.28	0.48
1:A:335:LEU:C	1:A:335:LEU:HD23	2.34	0.48
1:A:761:ILE:HD12	1:A:761:ILE:H	1.79	0.48
1:A:134:LEU:O	1:A:138:ARG:HG3	2.14	0.48
1:A:139:GLN:O	1:A:140:ILE:C	2.52	0.48
1:A:991:ALA:HB1	1:A:992:PRO:HD2	1.96	0.48
1:A:1137:SER:HB3	1:A:1140:GLU:HB2	1.96	0.48
1:A:43:GLY:HA3	1:A:46:ASP:HB2	1.96	0.48
1:B:1079:LEU:C	1:B:1081:ARG:N	2.68	0.47
1:A:907:THR:C	1:A:908:ARG:NE	2.68	0.47
1:B:909:GLU:OE2	1:B:909:GLU:N	2.44	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:930:LYS:HA	1:B:933:VAL:CG2	2.44	0.47
1:B:217:ILE:HG13	1:B:218:SER:N	2.29	0.47
1:B:318:ILE:HG12	1:B:325:GLY:HA2	1.96	0.47
1:A:217:ILE:HG13	1:A:218:SER:N	2.28	0.47
1:A:751:PHE:CD1	1:A:752:SER:N	2.82	0.47
1:A:753:LEU:O	1:A:754:LEU:C	2.52	0.47
1:A:725:SER:HG	1:A:979:PHE:HE1	1.62	0.47
1:A:1064:LEU:C	1:A:1064:LEU:HD13	2.34	0.47
1:A:1078:LEU:HD23	1:A:1083:TYR:O	2.14	0.47
1:A:1092:LEU:CD2	1:A:1097:ILE:HD11	2.40	0.47
1:A:1076:VAL:HG13	1:A:1194:LEU:HB3	1.96	0.47
1:A:409:LEU:CD2	1:A:602:ILE:HB	2.44	0.47
1:A:453:ASP:HB3	1:A:456:THR:HG23	1.96	0.47
1:B:1193:LEU:HD21	1:B:1221:ARG:HH11	1.78	0.47
1:A:421:LEU:O	1:A:581:ILE:HD12	2.14	0.47
1:B:453:ASP:HB3	1:B:456:THR:HG23	1.96	0.47
1:B:892:ILE:HB	1:B:916:TYR:HE1	1.75	0.47
1:B:724:PHE:HA	1:B:727:ILE:CG2	2.43	0.47
1:B:727:ILE:HG21	1:B:754:LEU:HD23	1.96	0.47
1:B:821:VAL:O	1:B:824:ALA:HB3	2.14	0.47
1:A:817:ASP:OD1	1:A:1000:SER:HB3	2.14	0.47
1:A:314:THR:O	1:A:315:SER:C	2.51	0.47
1:A:278:GLU:HB3	1:A:782:LYS:HG2	1.96	0.47
1:B:1038:PHE:CD1	1:B:1039:ASN:N	2.82	0.47
1:B:1043:ARG:N	1:B:1044:PRO:HD2	2.29	0.47
1:B:875:LEU:HD23	1:B:875:LEU:C	2.34	0.47
1:B:1032:GLN:HE21	1:B:1055:GLU:CG	2.27	0.47
1:A:534:ARG:O	1:A:535:ILE:C	2.50	0.47
1:B:1202:LEU:HG	1:B:1206:SER:CB	2.44	0.47
1:A:110:TYR:HA	1:A:113:TYR:CD2	2.48	0.47
1:A:275:ASN:HA	1:A:278:GLU:HB2	1.95	0.47
1:A:933:VAL:O	1:A:935:GLY:N	2.47	0.47
1:A:959:LEU:C	1:A:959:LEU:HD23	2.34	0.47
1:B:1123:ILE:HG13	1:B:1124:ALA:N	2.29	0.47
1:A:1107:ALA:HB3	1:A:1108:GLN:NE2	2.29	0.47
1:B:437:GLN:HE21	1:B:468:VAL:HG21	1.79	0.47
1:B:468:VAL:HG12	1:B:469:VAL:N	2.29	0.47
1:A:311:TRP:CA	1:A:311:TRP:CE3	2.97	0.47
1:B:808:GLY:O	1:B:810:LEU:N	2.47	0.47
1:B:686:GLU:HB2	1:B:813:ARG:HH21	1.79	0.47
1:A:1193:LEU:HD21	1:A:1221:ARG:HH11	1.78	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1149:ASN:OD1	1:A:1213:ALA:HB2	2.14	0.47
1:A:258:ARG:O	1:A:259:THR:C	2.52	0.47
1:A:157:GLY:HA2	1:A:160:ASP:OD2	2.15	0.47
1:A:438:ARG:O	1:A:439:LEU:O	2.31	0.47
1:B:405:ILE:N	1:B:405:ILE:HD12	2.29	0.47
1:B:409:LEU:CD2	1:B:602:ILE:HB	2.45	0.47
1:B:1208:LYS:C	1:B:1208:LYS:HD3	2.35	0.47
1:B:1031:VAL:H	1:B:1056:VAL:HG13	1.78	0.47
1:B:258:ARG:O	1:B:259:THR:C	2.51	0.47
1:B:533:GLN:O	1:B:537:ILE:HG12	2.15	0.47
1:B:295:MET:C	1:B:297:ALA:N	2.68	0.47
1:B:753:LEU:O	1:B:754:LEU:C	2.53	0.47
1:B:401:LYS:HZ3	1:B:401:LYS:HB3	1.75	0.47
1:B:959:LEU:O	1:B:964:LEU:CB	2.62	0.47
1:B:1137:SER:HB3	1:B:1140:GLU:HB2	1.95	0.47
1:B:396:SER:HB3	1:B:443:LEU:HD12	1.97	0.47
1:B:967:PHE:CD1	1:B:968:GLU:N	2.82	0.47
1:A:704:TRP:CZ2	1:A:707:PHE:N	2.82	0.47
1:B:374:PHE:HD1	1:B:375:SER:H	1.61	0.47
1:A:1139:GLU:CD	1:A:1139:GLU:H	2.17	0.47
1:B:1107:ALA:HB3	1:B:1108:GLN:NE2	2.29	0.47
1:B:273:TYR:O	1:B:274:ASN:O	2.33	0.47
1:A:724:PHE:HA	1:A:727:ILE:CG2	2.44	0.47
1:A:1032:GLN:HE21	1:A:1055:GLU:CG	2.27	0.47
1:A:1214:LEU:HD23	1:A:1214:LEU:C	2.35	0.47
1:A:53:GLY:O	1:A:56:ALA:N	2.48	0.47
1:A:435:LEU:H	1:A:435:LEU:HD23	1.80	0.47
1:A:533:GLN:O	1:A:537:ILE:HG12	2.14	0.47
1:B:900:PHE:O	1:B:901:ARG:C	2.53	0.47
1:B:354:ALA:O	1:B:358:ALA:CB	2.62	0.47
1:B:485:ARG:O	1:B:488:ARG:C	2.53	0.47
1:B:502:GLU:OE1	1:B:541:LEU:HD11	2.14	0.47
1:B:314:THR:HG22	1:B:315:SER:N	2.29	0.47
1:B:957:ALA:O	1:B:958:TYR:C	2.53	0.47
1:B:318:ILE:HD11	1:B:325:GLY:H	1.77	0.47
1:B:838:ASN:C	1:B:838:ASN:HD22	2.18	0.47
1:A:777:GLY:CA	1:A:822:LYS:HG3	2.43	0.47
1:A:797:VAL:HG13	1:A:1082:PHE:O	2.15	0.47
1:A:1092:LEU:HB3	1:A:1097:ILE:CD1	2.37	0.47
1:A:1116:PRO:HB3	1:A:1178:GLN:OE1	2.15	0.47
1:A:258:ARG:HH22	1:A:1113:SER:CB	2.27	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:796:ASP:O	1:A:797:VAL:C	2.52	0.47
1:B:116:GLY:O	1:B:117:ILE:C	2.52	0.47
1:A:468:VAL:HG12	1:A:469:VAL:N	2.29	0.47
1:A:1204:THR:O	1:A:1206:SER:N	2.48	0.47
1:A:705:PRO:HG2	1:A:706:TYR:N	2.27	0.47
1:B:1095:LYS:CD	1:B:1095:LYS:H	2.27	0.47
1:A:188:MET:O	1:A:189:PHE:C	2.50	0.47
1:A:589:ARG:HG2	1:A:589:ARG:HH11	1.80	0.47
1:B:174:ASP:O	1:B:175:VAL:C	2.51	0.47
1:B:503:ALA:O	1:B:504:ASN:C	2.53	0.47
1:B:1203:ASP:O	1:B:1206:SER:HB2	2.13	0.47
1:A:218:SER:CB	1:A:219:PRO:HD3	2.42	0.47
1:A:727:ILE:HG21	1:A:754:LEU:HD23	1.97	0.47
1:A:125:ALA:O	1:A:126:TYR:C	2.52	0.47
1:A:415:SER:HA	1:A:577:THR:HG21	1.97	0.47
1:A:1123:ILE:HG13	1:A:1124:ALA:N	2.30	0.47
1:A:502:GLU:OE1	1:A:541:LEU:HD11	2.14	0.47
1:B:157:GLY:HA2	1:B:160:ASP:OD2	2.15	0.47
1:B:531:GLN:O	1:B:534:ARG:HB3	2.14	0.47
1:B:320:LYS:O	1:B:323:SER:OG	2.32	0.47
1:B:972:LEU:HD12	1:B:972:LEU:N	2.25	0.47
1:B:853:LEU:HG	1:B:973:VAL:HG21	1.97	0.47
1:B:722:PRO:HA	1:B:979:PHE:CE1	2.50	0.47
1:A:185:LYS:O	1:A:186:ILE:C	2.52	0.47
1:B:59:ILE:HD11	1:B:124:VAL:CG2	2.45	0.47
1:A:58:ILE:O	1:A:60:HIS:N	2.48	0.47
1:A:875:LEU:HD23	1:A:875:LEU:C	2.34	0.47
1:A:539:ARG:O	1:A:540:ALA:C	2.53	0.47
1:A:566:GLN:HA	1:A:569:LEU:HD12	1.97	0.47
1:B:434:GLN:C	1:B:436:MET:N	2.68	0.47
1:B:249:VAL:O	1:B:273:TYR:HB3	2.14	0.47
1:B:64:LEU:O	1:B:65:PRO:C	2.50	0.47
1:A:249:VAL:O	1:A:273:TYR:HB3	2.15	0.47
1:A:315:SER:O	1:A:318:ILE:HG22	2.15	0.47
1:B:942:GLN:O	1:B:945:MET:N	2.48	0.47
1:A:476:PHE:O	1:A:478:THR:N	2.45	0.46
1:B:468:VAL:HG22	1:B:549:LEU:HB2	1.97	0.46
1:B:933:VAL:C	1:B:935:GLY:N	2.68	0.46
1:B:291:ALA:CA	1:B:294:SER:HB2	2.45	0.46
1:B:709:VAL:HG13	1:B:710:GLY:N	2.30	0.46
1:B:846:SER:HA	1:B:849:TYR:CE1	2.50	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:207:GLY:CA	1:A:210:LEU:HB3	2.45	0.46
1:A:998:THR:O	1:A:1001:ALA:HB3	2.15	0.46
1:A:1101:ASN:OD1	1:A:1103:GLN:HB3	2.15	0.46
1:A:1135:VAL:O	1:A:1137:SER:N	2.47	0.46
1:A:868:GLY:O	1:A:871:GLU:HB3	2.14	0.46
1:B:342:GLY:O	1:B:346:PRO:HD3	2.15	0.46
1:B:536:ALA:O	1:B:539:ARG:N	2.49	0.46
1:B:144:ARG:HG2	1:B:920:LEU:CD1	2.45	0.46
1:B:199:GLY:O	1:B:203:GLY:HA3	2.15	0.46
1:B:315:SER:O	1:B:318:ILE:HG22	2.16	0.46
1:A:274:ASN:O	1:A:278:GLU:HG3	2.15	0.46
1:A:78:PHE:CE2	1:A:967:PHE:O	2.69	0.46
1:A:973:VAL:O	1:A:976:ALA:N	2.47	0.46
1:A:1218:ARG:NH1	1:A:1235:ASN:HD22	2.14	0.46
1:A:405:ILE:N	1:A:405:ILE:HD12	2.30	0.46
1:A:468:VAL:HG22	1:A:549:LEU:HB2	1.97	0.46
1:B:1116:PRO:HB3	1:B:1178:GLN:OE1	2.15	0.46
1:A:420:ALA:C	1:A:421:LEU:HD12	2.35	0.46
1:B:383:ASN:O	1:B:384:ILE:C	2.53	0.46
1:B:902:THR:O	1:B:903:VAL:C	2.54	0.46
1:B:207:GLY:CA	1:B:210:LEU:HB3	2.45	0.46
1:B:751:PHE:CD1	1:B:752:SER:N	2.83	0.46
1:A:200:PHE:O	1:A:201:ILE:C	2.54	0.46
1:A:697:LEU:HA	1:A:700:ASN:CB	2.43	0.46
1:A:773:PHE:HB2	1:A:829:LEU:HD13	1.96	0.46
1:A:845:ILE:O	1:A:848:ILE:HG12	2.14	0.46
1:B:1167:ASP:O	1:B:1168:LYS:HB2	2.16	0.46
1:A:121:VAL:HG23	1:A:122:LEU:H	1.78	0.46
1:B:714:ALA:HB1	1:B:833:PHE:HB2	1.98	0.46
1:B:852:GLN:HG3	1:B:955:PHE:CZ	2.51	0.46
1:B:957:ALA:O	1:B:958:TYR:O	2.33	0.46
1:A:278:GLU:HA	1:A:282:ARG:NH1	2.31	0.46
1:A:322:TYR:CE2	1:A:324:ILE:HD11	2.50	0.46
1:A:297:ALA:HB1	1:A:763:PHE:CD2	2.51	0.46
1:A:887:GLU:O	1:A:888:GLY:C	2.53	0.46
1:A:1167:ASP:O	1:A:1168:LYS:HB2	2.15	0.46
1:A:1149:ASN:O	1:A:1179:ARG:HD3	2.15	0.46
1:B:55:LEU:C	1:B:55:LEU:HD23	2.36	0.46
1:B:1164:ARG:O	1:B:1166:GLY:N	2.49	0.46
1:B:1039:ASN:HD22	1:B:1048:VAL:N	2.14	0.46
1:B:227:ILE:HG22	1:B:228:TRP:N	2.30	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1157:LEU:HD22	1:B:1157:LEU:N	2.30	0.46
1:B:1032:GLN:NE2	1:B:1055:GLU:HB2	2.30	0.46
1:A:158:TRP:HA	1:A:162:HIS:CD2	2.43	0.46
1:B:550:LEU:HD23	1:B:569:LEU:HD13	1.97	0.46
1:B:470:SER:HA	1:B:551:ASP:HB3	1.97	0.46
1:B:291:ALA:C	1:B:294:SER:H	2.19	0.46
1:B:831:VAL:O	1:B:832:ILE:C	2.54	0.46
1:B:1020:GLN:O	1:B:1026:MET:CE	2.64	0.46
1:A:992:PRO:O	1:A:994:TYR:N	2.49	0.46
1:B:1243:GLN:O	1:B:1244:ASN:C	2.53	0.46
1:A:165:GLY:H	1:A:167:LEU:H	1.63	0.46
1:A:167:LEU:C	1:A:167:LEU:HD23	2.36	0.46
1:B:589:ARG:HG2	1:B:589:ARG:HH11	1.80	0.46
1:B:1170:THR:HG22	1:B:1170:THR:O	2.15	0.46
1:A:550:LEU:HD23	1:A:569:LEU:HD13	1.97	0.46
1:B:125:ALA:O	1:B:126:TYR:C	2.53	0.46
1:B:204:PHE:HA	1:B:211:THR:HG21	1.98	0.46
1:B:765:THR:HG23	1:B:766:PHE:N	2.30	0.46
1:A:210:LEU:HG	1:A:322:TYR:CD2	2.51	0.46
1:A:709:VAL:HG13	1:A:710:GLY:N	2.31	0.46
1:A:766:PHE:O	1:A:769:GLN:N	2.49	0.46
1:A:892:ILE:HB	1:A:916:TYR:HE1	1.74	0.46
1:A:1218:ARG:O	1:A:1219:GLU:HB3	2.16	0.46
1:B:52:VAL:O	1:B:53:GLY:C	2.53	0.46
1:A:462:LEU:O	1:A:465:ILE:N	2.48	0.46
1:B:969:ASN:N	1:B:969:ASN:HD22	2.12	0.46
1:A:540:ALA:O	1:A:543:ARG:CB	2.63	0.46
1:A:901:ARG:O	1:A:904:VAL:HG12	2.16	0.46
1:B:310:PHE:HB3	1:B:311:TRP:H	1.47	0.46
1:B:70:ILE:O	1:B:71:PHE:C	2.53	0.46
1:B:293:ILE:CD1	1:B:773:PHE:HZ	2.29	0.46
1:A:324:ILE:CD1	1:A:326:GLN:H	2.26	0.46
1:A:972:LEU:HD12	1:A:972:LEU:N	2.24	0.46
1:A:342:GLY:O	1:A:345:SER:HB3	2.16	0.46
1:B:940:PHE:O	1:B:944:MET:HG2	2.16	0.46
1:A:1036:VAL:HB	1:A:1052:LEU:CB	2.36	0.46
1:A:83:ASN:O	1:A:86:LYS:HB3	2.16	0.46
1:A:93:GLU:CD	1:A:93:GLU:H	2.19	0.46
1:B:1101:ASN:OD1	1:B:1103:GLN:HB3	2.16	0.46
1:A:925:ARG:HG2	1:B:514:HIS:ND1	2.31	0.46
1:B:313:GLY:O	1:B:317:VAL:HG23	2.16	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:838:ASN:HD22	1:A:838:ASN:C	2.17	0.46
1:A:967:PHE:CD1	1:A:968:GLU:N	2.82	0.46
1:A:722:PRO:HA	1:A:979:PHE:CE1	2.50	0.46
1:B:686:GLU:HB2	1:B:813:ARG:NH2	2.30	0.46
1:A:1102:VAL:HG13	1:A:1103:GLN:H	1.81	0.46
1:A:429:LYS:O	1:A:431:THR:N	2.49	0.46
1:B:1145:ALA:HA	1:B:1150:ILE:HG22	1.98	0.46
1:A:536:ALA:O	1:A:539:ARG:N	2.48	0.46
1:B:383:ASN:O	1:B:384:ILE:O	2.34	0.46
1:B:894:THR:O	1:B:895:GLU:C	2.54	0.46
1:B:704:TRP:CZ2	1:B:707:PHE:HB2	2.51	0.46
1:A:770:GLY:HA2	1:A:773:PHE:CE2	2.51	0.46
1:A:838:ASN:O	1:A:839:LEU:C	2.52	0.46
1:A:131:PHE:CD2	1:A:131:PHE:C	2.89	0.46
1:A:33:VAL:O	1:A:34:SER:C	2.54	0.46
1:A:1114:GLN:O	1:A:1116:PRO:HD3	2.15	0.46
1:A:449:ILE:O	1:A:450:ASP:C	2.53	0.46
1:A:55:LEU:HD23	1:A:55:LEU:C	2.35	0.46
1:A:429:LYS:H	1:A:429:LYS:CD	2.18	0.46
1:A:1026:MET:HE1	1:A:1104:TRP:CZ3	2.51	0.46
1:A:1170:THR:O	1:A:1170:THR:HG22	2.15	0.46
1:B:1078:LEU:HD23	1:B:1083:TYR:O	2.16	0.46
1:A:570:ASP:O	1:A:573:ARG:N	2.46	0.46
1:B:136:ALA:O	1:B:139:GLN:HB2	2.16	0.46
1:B:33:VAL:O	1:B:34:SER:C	2.54	0.46
1:B:534:ARG:O	1:B:535:ILE:C	2.53	0.46
1:A:291:ALA:C	1:A:294:SER:H	2.18	0.46
1:A:310:PHE:HB3	1:A:311:TRP:H	1.50	0.46
1:A:315:SER:CA	1:A:318:ILE:HG22	2.46	0.46
1:A:314:THR:HG22	1:A:315:SER:N	2.31	0.46
1:A:147:PHE:O	1:A:148:PHE:C	2.54	0.46
1:A:356:GLY:HA2	1:A:359:TYR:HE1	1.79	0.46
1:B:1128:ALA:CB	1:B:1136:VAL:HG13	2.46	0.46
1:B:620:LYS:O	1:B:623:MET:N	2.48	0.46
1:A:585:LEU:HA	1:A:588:VAL:HB	1.97	0.46
1:B:1090:VAL:CG1	1:B:1097:ILE:HB	2.35	0.45
1:A:500:VAL:HG23	1:A:501:LYS:H	1.81	0.45
1:B:901:ARG:O	1:B:902:THR:C	2.55	0.45
1:B:214:ILE:HG12	1:B:331:PHE:CZ	2.50	0.45
1:B:728:PHE:CD1	1:B:728:PHE:C	2.89	0.45
1:B:770:GLY:HA2	1:B:773:PHE:CE2	2.52	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:75:THR:HB	1:A:326:GLN:OE1	2.16	0.45
1:A:833:PHE:CG	1:A:834:GLN:N	2.83	0.45
1:A:886:LEU:C	1:A:886:LEU:HD12	2.37	0.45
1:A:1048:VAL:HG23	1:A:1049:LEU:HD22	1.97	0.45
1:A:1048:VAL:HG23	1:A:1049:LEU:HD23	1.97	0.45
1:A:1144:ALA:O	1:A:1148:ALA:CB	2.64	0.45
1:A:386:GLY:CA	1:A:450:ASP:HA	2.44	0.45
1:A:930:LYS:HA	1:A:933:VAL:CG2	2.46	0.45
1:B:1246:LYS:HD2	1:B:1246:LYS:H	1.81	0.45
1:B:692:SER:CB	1:B:695:ARG:HD3	2.47	0.45
1:B:1155:ASP:O	1:B:1160:LYS:HE3	2.16	0.45
1:B:1218:ARG:O	1:B:1219:GLU:HB3	2.16	0.45
1:B:817:ASP:OD1	1:B:1000:SER:HB3	2.15	0.45
1:B:207:GLY:HA3	1:B:211:THR:CB	2.44	0.45
1:B:282:ARG:O	1:B:286:LYS:CB	2.63	0.45
1:B:286:LYS:HA	1:B:289:ILE:CB	2.29	0.45
1:A:1196:ASP:HA	1:A:1226:ILE:CD1	2.46	0.45
1:B:1036:VAL:O	1:B:1052:LEU:HB3	2.17	0.45
1:B:1121:CYS:O	1:B:1165:VAL:HG13	2.16	0.45
1:B:399:SER:O	1:B:402:GLU:N	2.46	0.45
1:A:463:ARG:HH11	1:A:463:ARG:HG3	1.82	0.45
1:B:868:GLY:O	1:B:871:GLU:HB3	2.16	0.45
1:B:157:GLY:HA2	1:B:160:ASP:CB	2.43	0.45
1:B:570:ASP:O	1:B:573:ARG:N	2.48	0.45
1:B:218:SER:CB	1:B:219:PRO:CD	2.94	0.45
1:A:282:ARG:O	1:A:286:LYS:CB	2.61	0.45
1:A:716:ILE:HD12	1:A:716:ILE:C	2.37	0.45
1:A:765:THR:HG23	1:A:766:PHE:N	2.30	0.45
1:A:969:ASN:HD22	1:A:969:ASN:N	2.12	0.45
1:A:1218:ARG:CZ	1:A:1235:ASN:HD22	2.29	0.45
1:A:255:ALA:O	1:A:257:ILE:N	2.49	0.45
1:A:415:SER:HA	1:A:577:THR:CG2	2.46	0.45
1:A:51:LEU:O	1:A:54:THR:HB	2.16	0.45
1:A:55:LEU:O	1:A:58:ILE:HB	2.16	0.45
1:B:1164:ARG:C	1:B:1166:GLY:N	2.68	0.45
1:A:1037:VAL:O	1:A:1086:MET:N	2.50	0.45
1:A:396:SER:HB3	1:A:443:LEU:HD12	1.98	0.45
1:B:134:LEU:O	1:B:138:ARG:HG3	2.16	0.45
1:B:887:GLU:O	1:B:888:GLY:C	2.55	0.45
1:B:788:VAL:CG2	1:B:1004:ILE:HG13	2.46	0.45
1:A:727:ILE:O	1:A:731:VAL:HG23	2.17	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:809:ALA:O	1:B:813:ARG:HG2	2.16	0.45
1:A:1039:ASN:HD22	1:A:1048:VAL:N	2.14	0.45
1:A:927:ALA:HA	1:A:930:LYS:CE	2.37	0.45
1:A:454:ILE:HG23	1:A:455:ARG:N	2.32	0.45
1:B:1261:GLY:H	1:B:1264:PHE:CB	2.30	0.45
1:B:528:SER:O	1:B:532:LYS:HG3	2.17	0.45
1:B:311:TRP:HZ2	1:B:728:PHE:HE2	1.62	0.45
1:B:697:LEU:CA	1:B:700:ASN:HB2	2.45	0.45
1:B:748:SER:HA	1:B:751:PHE:CD1	2.51	0.45
1:B:99:MET:HB3	1:B:960:VAL:O	2.16	0.45
1:A:68:MET:HG3	1:A:336:ILE:CD1	2.46	0.45
1:A:779:ILE:CG1	1:A:780:LEU:N	2.79	0.45
1:A:981:ALA:CB	2:A:6001:OJZ:H33	2.46	0.45
1:A:1243:GLN:O	1:A:1244:ASN:C	2.54	0.45
1:A:151:ILE:HD12	1:A:167:LEU:HD11	1.99	0.45
1:B:1218:ARG:CZ	1:B:1235:ASN:HD22	2.29	0.45
1:B:801:ASP:HB3	1:B:1083:TYR:CE2	2.51	0.45
1:A:154:GLN:HG2	1:A:154:GLN:O	2.17	0.45
1:B:438:ARG:O	1:B:439:LEU:O	2.34	0.45
1:B:500:VAL:HG23	1:B:501:LYS:H	1.82	0.45
1:B:901:ARG:O	1:B:904:VAL:HG12	2.16	0.45
1:B:1202:LEU:CD2	1:B:1206:SER:HB3	2.44	0.45
1:B:60:HIS:O	1:B:63:ALA:N	2.50	0.45
2:B:6002:OJZ:O25	2:B:6002:OJZ:H29B	2.16	0.45
1:B:1048:VAL:HG23	1:B:1049:LEU:HD22	1.97	0.45
1:A:942:GLN:O	1:A:945:MET:N	2.49	0.45
1:B:860:ILE:HG21	1:B:948:SER:HB3	1.97	0.45
1:A:238:LYS:HZ3	1:A:242:ALA:HB2	1.82	0.45
1:B:937:THR:O	1:B:938:PHE:C	2.54	0.45
1:B:1092:LEU:CB	1:B:1097:ILE:HD11	2.38	0.45
1:A:902:THR:C	1:A:904:VAL:N	2.68	0.45
1:B:155:GLU:O	1:B:156:ILE:C	2.55	0.45
1:B:386:GLY:CA	1:B:450:ASP:HA	2.45	0.45
1:B:470:SER:HB2	1:B:471:GLN:OE1	2.16	0.45
1:B:249:VAL:HG12	1:B:249:VAL:O	2.17	0.45
1:B:833:PHE:CG	1:B:834:GLN:N	2.83	0.45
1:A:218:SER:CB	1:A:219:PRO:CD	2.95	0.45
1:A:271:GLU:O	1:A:274:ASN:HB2	2.16	0.45
1:A:860:ILE:HG21	1:A:948:SER:HB3	1.97	0.45
1:B:792:MET:CA	1:B:795:GLN:HB2	2.46	0.45
1:A:1150:ILE:HG13	1:A:1150:ILE:O	2.16	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1048:VAL:HG23	1:B:1049:LEU:HD23	1.97	0.45
1:A:943:ALA:O	1:A:944:MET:C	2.55	0.45
1:A:740:PRO:N	1:A:741:PRO:HD2	2.32	0.45
1:B:1249:GLU:O	1:B:1250:HIS:HB3	2.16	0.45
1:B:1114:GLN:O	1:B:1116:PRO:HD3	2.17	0.45
1:B:359:TYR:HA	1:B:362:PHE:CB	2.45	0.45
1:B:411:LEU:C	1:B:411:LEU:HD23	2.37	0.45
1:B:883:LYS:HA	1:B:886:LEU:HG	1.99	0.45
1:B:306:TYR:CG	1:B:307:ALA:N	2.84	0.45
1:B:696:ILE:O	1:B:700:ASN:CB	2.60	0.45
1:A:62:VAL:O	1:A:65:PRO:HG2	2.17	0.45
1:A:714:ALA:HB1	1:A:833:PHE:HB2	1.98	0.45
1:A:135:ALA:O	1:A:136:ALA:C	2.54	0.45
1:A:60:HIS:O	1:A:63:ALA:N	2.50	0.45
1:A:492:THR:C	1:A:494:ASP:H	2.19	0.45
1:A:728:PHE:C	1:A:728:PHE:CD1	2.91	0.45
1:B:463:ARG:HH11	1:B:463:ARG:HG3	1.81	0.45
1:B:892:ILE:O	1:B:893:ALA:C	2.54	0.45
1:B:207:GLY:CA	1:B:211:THR:H	2.28	0.45
1:B:308:LEU:O	1:B:309:ALA:C	2.55	0.45
1:A:848:ILE:O	1:A:848:ILE:HG13	2.17	0.45
1:A:853:LEU:HG	1:A:973:VAL:CG2	2.33	0.45
1:A:1193:LEU:HD21	1:A:1221:ARG:NH1	2.32	0.45
1:A:1195:LEU:HB2	1:A:1225:VAL:HA	1.98	0.45
1:A:792:MET:HE3	1:A:810:LEU:HD22	1.98	0.45
1:B:885:GLU:HB3	1:B:923:PRO:HG3	1.97	0.45
1:B:996:LYS:HD3	1:B:996:LYS:N	2.19	0.45
1:A:993:ASP:O	1:A:995:ALA:N	2.47	0.45
1:B:689:PRO:HG2	1:B:690:PRO:CD	2.46	0.45
1:A:1157:LEU:HD22	1:A:1157:LEU:N	2.32	0.45
1:B:1150:ILE:O	1:B:1150:ILE:HG13	2.16	0.45
1:A:908:ARG:O	1:A:911:LYS:HB3	2.17	0.45
1:B:527:LEU:HB2	1:B:531:GLN:OE1	2.17	0.45
1:B:830:ALA:O	1:B:833:PHE:HB3	2.17	0.45
1:A:304:ALA:O	1:A:307:ALA:HB3	2.17	0.45
1:A:69:LEU:O	1:A:72:GLY:N	2.49	0.45
1:B:792:MET:O	1:B:795:GLN:N	2.50	0.45
1:A:1178:GLN:HA	1:A:1178:GLN:OE1	2.17	0.45
1:A:59:ILE:HD11	1:A:124:VAL:CG2	2.45	0.45
1:B:1037:VAL:HG23	1:B:1086:MET:HB2	1.98	0.45
1:B:492:THR:C	1:B:494:ASP:H	2.19	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:732:VAL:O	1:B:736:THR:HG23	2.16	0.45
1:B:1056:VAL:HG21	1:B:1062:LEU:HB2	1.99	0.44
1:B:1218:ARG:NH1	1:B:1235:ASN:HD22	2.14	0.44
1:B:35:VAL:HG21	1:B:355:ARG:NH2	2.32	0.44
1:B:388:LEU:N	1:B:388:LEU:CD1	2.81	0.44
1:B:215:LEU:CA	1:B:219:PRO:HD2	2.47	0.44
1:B:304:ALA:O	1:B:307:ALA:HB3	2.17	0.44
1:A:295:MET:C	1:A:297:ALA:N	2.69	0.44
1:A:717:ASN:HD21	1:A:766:PHE:HE1	1.56	0.44
1:A:838:ASN:ND2	1:A:838:ASN:C	2.70	0.44
1:A:1168:LYS:HD2	1:A:1168:LYS:N	2.31	0.44
1:A:1072:LYS:HB3	1:A:1226:ILE:HD12	1.98	0.44
1:B:121:VAL:HG23	1:B:122:LEU:H	1.80	0.44
1:B:942:GLN:O	1:B:943:ALA:C	2.56	0.44
1:B:945:MET:O	1:B:949:TYR:CD1	2.69	0.44
1:B:454:ILE:HG23	1:B:455:ARG:N	2.32	0.44
1:B:1189:GLN:N	1:B:1190:PRO:CD	2.78	0.44
1:A:1023:LYS:C	1:A:1025:ASN:N	2.71	0.44
1:B:612:MET:HA	1:B:619:PHE:HB2	1.99	0.44
1:A:1205:GLU:HA	1:A:1208:LYS:HB3	1.97	0.44
1:B:1097:ILE:HG23	1:B:1105:LEU:HD22	1.98	0.44
1:A:502:GLU:C	1:A:504:ASN:N	2.68	0.44
1:A:478:THR:O	1:A:520:VAL:HG23	2.17	0.44
1:A:911:LYS:O	1:A:914:THR:HB	2.17	0.44
1:B:486:TYR:O	1:B:908:ARG:NH1	2.50	0.44
1:B:693:PHE:N	1:B:693:PHE:HD2	2.13	0.44
1:B:827:SER:O	1:B:828:ARG:C	2.55	0.44
1:B:957:ALA:O	1:B:960:VAL:HG13	2.17	0.44
1:A:270:LEU:HB3	1:A:789:PHE:CE1	2.53	0.44
1:A:71:PHE:HA	1:A:74:MET:HG2	1.99	0.44
1:A:821:VAL:HG23	1:A:822:LYS:N	2.32	0.44
1:A:821:VAL:O	1:A:824:ALA:HB3	2.16	0.44
1:A:382:ASP:O	1:A:384:ILE:HG13	2.18	0.44
1:B:690:PRO:HG2	1:B:1006:ARG:CZ	2.47	0.44
1:B:1037:VAL:O	1:B:1086:MET:N	2.50	0.44
1:B:740:PRO:N	1:B:741:PRO:HD2	2.32	0.44
1:A:1246:LYS:H	1:A:1246:LYS:HD2	1.82	0.44
1:B:433:VAL:HG13	1:B:549:LEU:HD23	1.99	0.44
1:B:318:ILE:CG1	1:B:325:GLY:N	2.80	0.44
1:A:269:GLU:O	1:A:270:LEU:C	2.54	0.44
1:A:1032:GLN:NE2	1:A:1055:GLU:HB2	2.32	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1145:ALA:HA	1:A:1150:ILE:HG22	1.99	0.44
1:A:797:VAL:O	1:A:801:ASP:OD1	2.36	0.44
1:B:1168:LYS:N	1:B:1168:LYS:HD2	2.33	0.44
1:A:1037:VAL:HG23	1:A:1086:MET:HB2	1.98	0.44
1:A:467:GLY:H	1:A:545:PRO:CB	2.31	0.44
1:A:44:TRP:C	1:A:46:ASP:N	2.71	0.44
1:A:732:VAL:O	1:A:736:THR:HG23	2.18	0.44
1:A:393:ILE:O	1:A:393:ILE:HG13	2.17	0.44
1:B:1072:LYS:HB3	1:B:1226:ILE:HD12	1.98	0.44
1:B:886:LEU:HD12	1:B:886:LEU:C	2.37	0.44
1:B:914:THR:O	1:B:917:ALA:HB3	2.17	0.44
1:A:217:ILE:HG13	1:A:218:SER:H	1.82	0.44
1:A:306:TYR:CG	1:A:307:ALA:N	2.85	0.44
1:A:716:ILE:HD12	1:A:717:ASN:N	2.32	0.44
1:A:757:ILE:HA	1:A:761:ILE:HD13	1.98	0.44
1:A:1038:PHE:CZ	1:A:1040:TYR:N	2.85	0.44
1:A:1092:LEU:CB	1:A:1097:ILE:HD11	2.40	0.44
1:A:1192:ILE:HD13	1:A:1193:LEU:N	2.32	0.44
1:B:120:GLY:O	1:B:121:VAL:C	2.55	0.44
1:A:940:PHE:O	1:A:944:MET:HG2	2.16	0.44
1:A:88:SER:OG	1:A:89:THR:N	2.51	0.44
1:A:740:PRO:HG2	1:A:741:PRO:CD	2.44	0.44
1:A:407:LYS:HG3	1:A:407:LYS:O	2.18	0.44
1:A:1267:VAL:HG13	1:A:1270:GLN:OE1	2.17	0.44
1:A:1027:LEU:CD1	1:A:1027:LEU:H	2.29	0.44
1:A:508:PHE:CE1	1:A:509:ILE:HG23	2.53	0.44
1:B:147:PHE:O	1:B:148:PHE:C	2.54	0.44
1:B:356:GLY:HA2	1:B:359:TYR:HE1	1.80	0.44
1:B:420:ALA:C	1:B:421:LEU:HD12	2.37	0.44
1:B:278:GLU:HB3	1:B:782:LYS:CG	2.44	0.44
1:B:303:TYR:O	1:B:306:TYR:HB3	2.17	0.44
1:B:727:ILE:O	1:B:731:VAL:HG23	2.17	0.44
1:B:762:SER:O	1:B:763:PHE:C	2.55	0.44
1:B:849:TYR:HD1	1:B:854:THR:HA	1.83	0.44
1:A:342:GLY:O	1:A:346:PRO:HD3	2.17	0.44
1:A:35:VAL:HG21	1:A:355:ARG:NH2	2.33	0.44
1:A:1125:GLU:O	1:A:1126:ASN:C	2.56	0.44
1:A:547:ILE:HG22	1:A:549:LEU:HD11	1.99	0.44
1:A:943:ALA:O	1:A:945:MET:N	2.51	0.44
1:B:151:ILE:HD12	1:B:167:LEU:HD11	2.00	0.44
1:B:1090:VAL:CG2	1:B:1091:PHE:N	2.80	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1178:GLN:OE1	1:B:1178:GLN:HA	2.18	0.44
1:B:1196:ASP:HA	1:B:1226:ILE:CD1	2.48	0.44
1:B:539:ARG:O	1:B:540:ALA:C	2.54	0.44
1:B:916:TYR:O	1:B:920:LEU:HB2	2.17	0.44
1:B:723:ALA:O	1:B:727:ILE:HG22	2.17	0.44
1:A:199:GLY:O	1:A:203:GLY:HA3	2.17	0.44
1:A:249:VAL:HG12	1:A:249:VAL:O	2.17	0.44
1:A:723:ALA:O	1:A:727:ILE:HG22	2.18	0.44
1:A:773:PHE:CD1	1:A:773:PHE:C	2.91	0.44
1:A:788:VAL:CG2	1:A:1004:ILE:HG13	2.47	0.44
1:A:837:ALA:HB1	1:A:982:MET:HE1	2.00	0.44
1:A:1090:VAL:CG2	1:A:1091:PHE:N	2.80	0.44
1:A:384:ILE:HG23	1:A:546:LYS:HE2	2.00	0.44
1:A:411:LEU:C	1:A:411:LEU:HD23	2.38	0.44
1:A:690:PRO:O	1:A:1006:ARG:NH2	2.50	0.44
1:B:88:SER:OG	1:B:89:THR:N	2.51	0.44
1:A:1261:GLY:H	1:A:1264:PHE:CB	2.30	0.44
1:B:393:ILE:HG13	1:B:393:ILE:O	2.17	0.44
1:B:93:GLU:H	1:B:93:GLU:CD	2.21	0.44
1:A:527:LEU:HB2	1:A:531:GLN:OE1	2.18	0.44
1:B:508:PHE:CE1	1:B:509:ILE:HG23	2.53	0.44
1:B:306:TYR:HE1	1:B:310:PHE:CE1	2.36	0.44
1:B:307:ALA:O	1:B:308:LEU:O	2.35	0.44
1:A:207:GLY:C	1:A:209:LYS:H	2.21	0.44
1:A:1041:PRO:O	1:A:1042:THR:HB	2.18	0.44
1:A:58:ILE:HG22	1:A:59:ILE:N	2.33	0.44
1:B:91:MET:HE3	1:B:91:MET:N	2.32	0.44
1:B:363:LYS:O	1:B:367:ASN:CB	2.66	0.44
1:B:615:LYS:HA	1:B:619:PHE:CD2	2.53	0.44
1:A:364:ILE:O	1:A:364:ILE:HG22	2.17	0.44
1:A:541:LEU:C	1:A:543:ARG:N	2.71	0.44
1:B:129:VAL:HG11	1:B:935:GLY:CA	2.48	0.44
1:B:855:LEU:HA	1:B:858:LEU:HG	2.00	0.44
1:A:313:GLY:O	1:A:317:VAL:HG23	2.18	0.44
2:A:6001:0JZ:SE3	2:A:6001:0JZ:H35B	2.68	0.44
1:A:708:VAL:HA	1:A:711:ILE:HG22	2.00	0.44
1:B:996:LYS:H	1:B:996:LYS:CD	2.16	0.44
1:A:933:VAL:C	1:A:935:GLY:N	2.69	0.44
1:A:993:ASP:O	1:A:994:TYR:HB3	2.18	0.44
1:A:466:ILE:O	1:A:466:ILE:HG22	2.17	0.44
1:A:602:ILE:HG12	1:A:603:VAL:N	2.32	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:121:VAL:CG2	1:A:122:LEU:H	2.31	0.44
1:A:1159:ASP:HB3	1:A:1162:ASN:HB2	2.00	0.44
1:B:793:LEU:C	1:B:793:LEU:HD13	2.37	0.44
1:B:1193:LEU:HD21	1:B:1221:ARG:NH1	2.33	0.44
1:A:573:ARG:O	1:A:575:GLY:N	2.46	0.44
1:B:478:THR:O	1:B:520:VAL:HG23	2.17	0.44
1:B:479:THR:HA	1:B:518:THR:O	2.18	0.44
1:B:538:ALA:O	1:B:539:ARG:C	2.57	0.44
1:B:911:LYS:C	1:B:911:LYS:HD3	2.38	0.44
1:B:781:THR:O	1:B:782:LYS:C	2.56	0.44
1:A:306:TYR:HE1	1:A:310:PHE:CE1	2.36	0.44
1:A:778:GLU:C	1:A:782:LYS:HE2	2.39	0.44
1:A:781:THR:O	1:A:782:LYS:C	2.56	0.44
1:B:810:LEU:O	1:B:813:ARG:N	2.51	0.44
1:A:798:SER:CB	1:A:1041:PRO:HG2	2.47	0.44
1:B:1037:VAL:HG22	1:B:1087:ALA:HB3	2.00	0.44
1:B:560:GLU:O	1:B:561:SER:C	2.56	0.44
1:A:704:TRP:CZ2	1:A:707:PHE:HB2	2.53	0.44
1:A:900:PHE:O	1:A:901:ARG:C	2.56	0.43
1:B:129:VAL:CG1	1:B:935:GLY:HA2	2.48	0.43
1:B:547:ILE:HG22	1:B:549:LEU:HD11	1.99	0.43
1:B:267:LYS:HA	1:B:790:LYS:HE2	2.00	0.43
1:B:68:MET:HG3	1:B:336:ILE:CD1	2.48	0.43
1:B:69:LEU:O	1:B:72:GLY:N	2.50	0.43
1:B:756:LEU:HD12	1:B:757:ILE:H	1.78	0.43
1:B:75:THR:HB	1:B:326:GLN:OE1	2.17	0.43
1:B:756:LEU:O	1:B:760:ILE:HB	2.18	0.43
1:B:841:THR:O	1:B:845:ILE:HG13	2.17	0.43
1:B:837:ALA:HB1	1:B:982:MET:HE1	2.00	0.43
1:A:272:ARG:O	1:A:276:ASN:HB2	2.18	0.43
1:A:278:GLU:HA	1:A:282:ARG:CZ	2.48	0.43
1:A:297:ALA:HB1	1:A:763:PHE:HA	2.00	0.43
1:A:748:SER:HA	1:A:751:PHE:CD1	2.53	0.43
1:A:144:ARG:CZ	1:A:175:VAL:HG21	2.48	0.43
1:A:1131:ASP:OD2	1:A:1188:ARG:NE	2.51	0.43
1:B:55:LEU:O	1:B:58:ILE:HB	2.17	0.43
1:A:429:LYS:C	1:A:431:THR:N	2.69	0.43
1:A:945:MET:O	1:A:949:TYR:CD1	2.68	0.43
1:A:689:PRO:HB2	1:A:690:PRO:CD	2.43	0.43
1:A:470:SER:HA	1:A:551:ASP:HB3	1.98	0.43
1:A:195:THR:HA	1:A:337:GLY:HA2	2.00	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:163:ASP:C	1:A:164:VAL:HG22	2.38	0.43
1:A:911:LYS:C	1:A:911:LYS:HD3	2.38	0.43
1:B:207:GLY:CA	1:B:211:THR:HB	2.45	0.43
1:B:318:ILE:HD11	1:B:324:ILE:C	2.38	0.43
1:B:716:ILE:HD12	1:B:717:ASN:N	2.32	0.43
1:A:731:VAL:HA	1:A:750:LEU:HD12	2.00	0.43
1:A:846:SER:O	1:A:849:TYR:HB2	2.17	0.43
1:B:791:SER:O	1:B:795:GLN:HB2	2.18	0.43
1:A:1097:ILE:HG23	1:A:1105:LEU:HD22	2.00	0.43
1:B:51:LEU:O	1:B:54:THR:HB	2.18	0.43
1:A:1036:VAL:O	1:A:1052:LEU:HB3	2.17	0.43
1:A:363:LYS:O	1:A:367:ASN:CB	2.66	0.43
1:B:552:GLU:O	1:B:553:ALA:C	2.57	0.43
1:B:195:THR:HA	1:B:337:GLY:HA2	1.99	0.43
1:A:96:LYS:O	1:A:100:PHE:HB2	2.18	0.43
1:A:612:MET:HA	1:A:619:PHE:HB2	2.00	0.43
1:A:912:PHE:O	1:A:915:MET:N	2.51	0.43
1:B:44:TRP:CD1	1:B:45:LEU:N	2.86	0.43
1:B:384:ILE:HG23	1:B:546:LYS:HE2	1.98	0.43
1:B:217:ILE:HG13	1:B:218:SER:H	1.83	0.43
1:B:266:GLN:HB2	1:B:270:LEU:CD2	2.48	0.43
1:B:269:GLU:O	1:B:270:LEU:C	2.55	0.43
1:B:62:VAL:O	1:B:65:PRO:HG2	2.18	0.43
1:B:65:PRO:HG3	1:B:198:GLY:CA	2.48	0.43
1:A:266:GLN:HB2	1:A:270:LEU:CD2	2.49	0.43
1:A:727:ILE:HD12	1:A:753:LEU:HD23	2.00	0.43
1:A:308:LEU:HD13	1:A:755:PHE:CD1	2.53	0.43
1:A:831:VAL:O	1:A:832:ILE:C	2.57	0.43
1:A:1077:GLN:O	1:A:1078:LEU:C	2.56	0.43
1:A:434:GLN:C	1:A:436:MET:H	2.20	0.43
1:A:960:VAL:CG1	1:A:966:THR:OG1	2.67	0.43
1:B:419:VAL:CG2	1:B:593:VAL:HG13	2.48	0.43
1:B:1106:ARG:O	1:B:1109:LEU:CD2	2.66	0.43
1:B:175:VAL:CG1	1:B:176:SER:H	2.30	0.43
1:B:43:GLY:HA3	1:B:46:ASP:HB2	2.01	0.43
1:A:65:PRO:HG3	1:A:198:GLY:CA	2.48	0.43
1:A:265:GLY:CA	1:A:793:LEU:HD21	2.45	0.43
1:A:359:TYR:HA	1:A:362:PHE:CB	2.46	0.43
1:A:1009:GLU:O	1:A:1010:LYS:CG	2.65	0.43
1:A:796:ASP:HA	1:A:800:PHE:CD2	2.54	0.43
1:A:957:ALA:O	1:A:960:VAL:HG13	2.19	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1144:ALA:O	1:B:1148:ALA:CB	2.65	0.43
1:B:1147:GLU:HB3	1:B:1186:LEU:HD22	2.00	0.43
1:A:478:THR:HG22	1:A:479:THR:N	2.20	0.43
1:B:379:HIS:HB2	1:B:457:ILE:HA	1.95	0.43
1:B:532:LYS:O	1:B:535:ILE:N	2.52	0.43
1:B:213:VAL:O	1:B:216:ALA:HB3	2.19	0.43
1:B:309:ALA:O	1:B:310:PHE:C	2.56	0.43
1:B:315:SER:CA	1:B:318:ILE:HG22	2.49	0.43
1:B:833:PHE:O	1:B:834:GLN:C	2.56	0.43
1:A:273:TYR:O	1:A:274:ASN:O	2.36	0.43
1:A:773:PHE:CD1	1:A:774:GLY:N	2.87	0.43
1:A:1101:ASN:O	1:A:1102:VAL:C	2.57	0.43
1:A:796:ASP:O	1:A:797:VAL:O	2.35	0.43
1:A:59:ILE:O	1:A:63:ALA:HB2	2.19	0.43
1:B:1039:ASN:HB2	1:B:1047:PRO:CA	2.37	0.43
1:A:91:MET:HG3	1:A:91:MET:H	1.61	0.43
1:B:561:SER:O	1:B:562:GLU:C	2.56	0.43
1:A:615:LYS:HA	1:A:619:PHE:CD2	2.53	0.43
1:B:83:ASN:O	1:B:86:LYS:HB3	2.19	0.43
1:B:1116:PRO:O	1:B:1117:ILE:HB	2.19	0.43
1:B:1195:LEU:HB2	1:B:1225:VAL:HG23	2.01	0.43
1:B:346:PRO:O	1:B:349:GLU:HB3	2.18	0.43
1:B:44:TRP:C	1:B:46:ASP:N	2.71	0.43
1:B:207:GLY:O	1:B:209:LYS:N	2.51	0.43
1:B:321:GLU:O	1:B:323:SER:N	2.51	0.43
1:B:308:LEU:HD12	1:B:751:PHE:CE2	2.54	0.43
1:A:265:GLY:C	1:A:267:LYS:HG3	2.39	0.43
1:B:1026:MET:O	1:B:1026:MET:HG3	2.18	0.43
1:B:58:ILE:HG22	1:B:59:ILE:N	2.33	0.43
1:A:1252:THR:CG2	1:A:1255:GLN:HB2	2.49	0.43
1:B:1176:GLN:O	1:B:1177:LYS:C	2.56	0.43
1:B:463:ARG:NH1	1:B:903:VAL:HG22	2.33	0.43
1:B:568:ALA:O	1:B:569:LEU:C	2.56	0.43
1:B:279:GLU:O	1:B:282:ARG:HB2	2.18	0.43
1:B:316:LEU:C	1:B:318:ILE:H	2.22	0.43
1:A:282:ARG:O	1:A:286:LYS:N	2.50	0.43
1:A:322:TYR:CZ	1:A:324:ILE:HG12	2.54	0.43
1:A:765:THR:HG23	1:A:766:PHE:HD1	1.84	0.43
1:A:833:PHE:O	1:A:834:GLN:C	2.57	0.43
1:A:733:GLY:CA	1:A:968:GLU:HG3	2.49	0.43
1:B:1022:LEU:O	1:B:1023:LYS:C	2.57	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1031:VAL:H	1:A:1056:VAL:HG13	1.83	0.43
1:A:808:GLY:O	1:A:810:LEU:N	2.52	0.43
1:B:992:PRO:C	1:B:994:TYR:H	2.21	0.43
1:A:388:LEU:N	1:A:388:LEU:CD1	2.81	0.43
1:A:949:TYR:H	1:A:949:TYR:HD1	1.67	0.43
1:A:618:TYR:CE2	1:A:622:VAL:HG21	2.53	0.43
1:B:1076:VAL:CG1	1:B:1194:LEU:HD13	2.49	0.43
1:B:171:LEU:HD13	1:B:172:THR:N	2.34	0.43
1:B:433:VAL:O	1:B:436:MET:HB3	2.18	0.43
1:B:156:ILE:HG12	1:B:439:LEU:O	2.18	0.43
1:B:513:PRO:O	1:B:514:HIS:HB2	2.19	0.43
1:B:312:TYR:O	1:B:314:THR:N	2.52	0.43
2:A:6001:OJZ:H29B	2:A:6001:OJZ:O25	2.19	0.43
1:A:796:ASP:OD2	1:A:1014:ILE:HD11	2.19	0.43
1:A:1119:PHE:HD2	1:A:1121:CYS:SG	2.42	0.43
1:A:1195:LEU:HB2	1:A:1225:VAL:HG23	2.01	0.43
1:A:1213:ALA:O	1:A:1217:ALA:HB2	2.19	0.43
1:A:255:ALA:O	1:A:256:ALA:C	2.57	0.43
1:A:257:ILE:HG13	1:A:800:PHE:CD2	2.54	0.43
1:B:58:ILE:O	1:B:60:HIS:N	2.51	0.43
1:B:993:ASP:O	1:B:995:ALA:N	2.52	0.43
1:B:1040:TYR:O	1:B:1042:THR:HG22	2.19	0.43
1:A:943:ALA:C	1:A:945:MET:N	2.71	0.43
1:B:959:LEU:C	1:B:959:LEU:HD23	2.39	0.43
1:B:407:LYS:HG3	1:B:407:LYS:O	2.18	0.43
1:B:272:ARG:O	1:B:276:ASN:HB2	2.19	0.43
1:B:1252:THR:CG2	1:B:1255:GLN:HB2	2.49	0.43
1:B:431:THR:HG22	1:B:435:LEU:HD23	2.00	0.43
1:B:936:ILE:O	1:B:939:SER:OG	2.37	0.43
1:A:389:GLU:OE1	1:A:412:LYS:HB2	2.17	0.43
1:B:1092:LEU:HD22	1:B:1100:LEU:HD22	2.01	0.43
1:B:1076:VAL:HG13	1:B:1194:LEU:HD13	2.01	0.43
1:B:1218:ARG:NH1	1:B:1235:ASN:ND2	2.65	0.43
1:B:182:ILE:O	1:B:186:ILE:HG23	2.19	0.43
1:B:449:ILE:O	1:B:450:ASP:C	2.57	0.43
1:B:908:ARG:O	1:B:911:LYS:HB3	2.19	0.43
1:B:324:ILE:CD1	1:B:326:GLN:H	2.24	0.43
1:A:307:ALA:O	1:A:308:LEU:C	2.55	0.43
1:A:78:PHE:HZ	1:A:967:PHE:O	1.99	0.43
1:A:362:PHE:HA	1:A:365:ILE:HD12	2.01	0.43
1:A:1014:ILE:CD1	1:A:1106:ARG:HH22	2.31	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:809:ALA:O	1:A:813:ARG:HG2	2.19	0.43
1:A:116:GLY:O	1:A:117:ILE:C	2.56	0.43
1:B:740:PRO:O	1:B:743:THR:HG23	2.19	0.43
1:A:492:THR:O	1:A:493:MET:C	2.57	0.43
1:B:519:LEU:HD22	1:B:526:GLN:HE22	1.84	0.43
1:B:209:LYS:C	1:B:212:LEU:HB3	2.38	0.43
1:B:773:PHE:CB	1:B:829:LEU:HD13	2.49	0.43
1:B:852:GLN:HE22	1:B:966:THR:CG2	2.31	0.43
1:A:203:GLY:HA2	1:A:211:THR:OG1	2.17	0.43
1:A:315:SER:C	1:A:318:ILE:HG22	2.39	0.43
1:A:723:ALA:O	1:A:724:PHE:C	2.57	0.43
1:A:861:VAL:CB	1:A:862:PRO:HD3	2.48	0.43
1:A:1028:GLU:HB2	1:A:1093:ASP:OD1	2.19	0.43
1:A:1116:PRO:O	1:A:1117:ILE:HB	2.19	0.43
1:A:1176:GLN:O	1:A:1179:ARG:N	2.52	0.43
1:A:155:GLU:HB3	1:A:156:ILE:CD1	2.34	0.43
1:B:943:ALA:O	1:B:945:MET:N	2.52	0.43
1:A:103:LEU:HD22	1:A:960:VAL:HG22	2.01	0.43
1:A:560:GLU:O	1:A:561:SER:C	2.56	0.43
1:B:875:LEU:HD23	1:B:875:LEU:O	2.19	0.43
1:A:252:GLU:OE1	1:A:252:GLU:N	2.52	0.43
1:B:1131:ASP:OD2	1:B:1188:ARG:NE	2.52	0.42
1:A:909:GLU:OE2	1:A:909:GLU:N	2.45	0.42
1:B:158:TRP:HA	1:B:162:HIS:CD2	2.45	0.42
1:B:348:ILE:O	1:B:351:PHE:HB3	2.19	0.42
1:B:362:PHE:HA	1:B:365:ILE:HD12	2.01	0.42
1:B:540:ALA:O	1:B:543:ARG:CB	2.65	0.42
1:B:820:GLN:CB	1:B:1000:SER:HB2	2.49	0.42
1:B:696:ILE:O	1:B:700:ASN:N	2.52	0.42
1:B:705:PRO:CG	1:B:706:TYR:H	2.30	0.42
1:B:821:VAL:HG23	1:B:822:LYS:N	2.34	0.42
1:A:215:LEU:CA	1:A:219:PRO:HD2	2.49	0.42
1:A:288:ALA:O	1:A:292:ASN:N	2.52	0.42
1:A:697:LEU:HD12	1:A:698:LYS:N	2.34	0.42
1:A:74:MET:HG3	1:A:75:THR:N	2.34	0.42
1:A:171:LEU:HD13	1:A:172:THR:N	2.34	0.42
1:B:53:GLY:O	1:B:56:ALA:N	2.52	0.42
1:A:59:ILE:HD12	1:A:59:ILE:O	2.19	0.42
1:B:1041:PRO:O	1:B:1042:THR:HB	2.19	0.42
1:A:561:SER:O	1:A:562:GLU:C	2.56	0.42
1:B:1267:VAL:HG13	1:B:1270:GLN:OE1	2.18	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:151:ILE:O	1:A:153:ASN:N	2.51	0.42
1:B:151:ILE:O	1:B:153:ASN:N	2.52	0.42
1:B:252:GLU:N	1:B:252:GLU:OE1	2.52	0.42
1:B:1176:GLN:OE1	1:B:1176:GLN:N	2.52	0.42
1:B:436:MET:HE1	1:B:449:ILE:HD13	2.01	0.42
1:B:381:PRO:HG3	1:B:457:ILE:HB	2.00	0.42
1:B:506:TYR:CD1	1:B:509:ILE:HD11	2.54	0.42
1:B:299:PHE:O	1:B:303:TYR:N	2.51	0.42
1:A:779:ILE:HA	1:A:782:LYS:HE3	2.01	0.42
1:A:711:ILE:HD11	1:A:832:ILE:HG21	2.01	0.42
1:A:352:ALA:O	1:A:353:ASN:C	2.57	0.42
1:A:1084:ASP:HA	1:A:1085:PRO:HD2	1.89	0.42
1:A:1144:ALA:O	1:A:1148:ALA:HB3	2.19	0.42
1:A:1121:CYS:O	1:A:1165:VAL:HG13	2.19	0.42
1:A:942:GLN:O	1:A:945:MET:CB	2.64	0.42
1:A:401:LYS:H	1:A:401:LYS:CD	2.24	0.42
1:B:1159:ASP:HB3	1:B:1162:ASN:HB2	2.00	0.42
1:B:1195:LEU:HB2	1:B:1225:VAL:HA	2.01	0.42
1:A:513:PRO:O	1:A:514:HIS:HB2	2.18	0.42
1:B:185:LYS:O	1:B:186:ILE:C	2.58	0.42
1:B:352:ALA:O	1:B:353:ASN:C	2.57	0.42
1:B:471:GLN:HG2	1:B:472:GLU:H	1.80	0.42
1:B:573:ARG:O	1:B:575:GLY:N	2.44	0.42
1:B:324:ILE:O	1:B:326:GLN:HB2	2.19	0.42
1:B:74:MET:HG3	1:B:75:THR:N	2.33	0.42
1:B:827:SER:O	1:B:830:ALA:N	2.53	0.42
1:B:838:ASN:ND2	1:B:838:ASN:C	2.71	0.42
1:A:793:LEU:HD13	1:A:793:LEU:C	2.39	0.42
1:A:182:ILE:O	1:A:186:ILE:HG23	2.20	0.42
1:A:883:LYS:HA	1:A:886:LEU:CG	2.49	0.42
1:A:1179:ARG:CZ	1:A:1209:VAL:HG11	2.49	0.42
1:B:121:VAL:CG2	1:B:122:LEU:H	2.32	0.42
1:A:519:LEU:HD22	1:A:526:GLN:HE22	1.84	0.42
1:A:1076:VAL:CG1	1:A:1194:LEU:HD13	2.50	0.42
1:A:460:ARG:O	1:A:462:LEU:N	2.52	0.42
1:B:692:SER:HB2	1:B:695:ARG:HD3	2.01	0.42
1:A:1182:ILE:N	1:A:1182:ILE:HD12	2.34	0.42
1:B:389:GLU:OE1	1:B:412:LYS:HB2	2.19	0.42
1:B:154:GLN:O	1:B:154:GLN:HG2	2.19	0.42
1:B:432:THR:O	1:B:433:VAL:C	2.56	0.42
1:B:1229:ARG:C	1:B:1231:SER:N	2.73	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1207:GLU:OE2	1:B:1229:ARG:NH2	2.52	0.42
1:B:315:SER:C	1:B:318:ILE:HG22	2.40	0.42
1:A:981:ALA:HB1	2:A:6001:OJZ:H32	2.02	0.42
1:A:144:ARG:HG2	1:A:920:LEU:CD1	2.49	0.42
1:A:348:ILE:O	1:A:349:GLU:C	2.57	0.42
1:A:792:MET:O	1:A:795:GLN:N	2.53	0.42
1:A:1063:ALA:HB3	1:A:1239:ILE:HG12	2.01	0.42
1:A:60:HIS:O	1:A:63:ALA:CB	2.65	0.42
1:B:974:PHE:HB3	2:B:6002:OJZ:C30	2.49	0.42
1:A:1037:VAL:HG22	1:A:1087:ALA:HB3	2.00	0.42
1:A:447:VAL:HG13	1:A:454:ILE:HG22	2.01	0.42
1:A:490:ASP:O	1:A:491:VAL:HB	2.19	0.42
1:B:1031:VAL:O	1:B:1055:GLU:HA	2.19	0.42
1:B:1077:GLN:O	1:B:1078:LEU:C	2.58	0.42
1:B:1129:TYR:CD2	1:B:1184:ARG:HG3	2.54	0.42
1:A:474:VAL:HG11	1:A:901:ARG:CB	2.48	0.42
1:A:900:PHE:O	1:A:903:VAL:N	2.51	0.42
1:B:136:ALA:O	1:B:137:GLY:C	2.57	0.42
1:B:548:LEU:HD22	1:B:550:LEU:HD11	2.02	0.42
1:B:286:LYS:O	1:B:290:THR:CG2	2.63	0.42
1:B:727:ILE:HD12	1:B:753:LEU:HD23	1.99	0.42
1:A:209:LYS:CA	1:A:212:LEU:HB3	2.49	0.42
1:A:293:ILE:CG2	1:A:766:PHE:HB3	2.31	0.42
1:A:785:ARG:O	1:A:786:TYR:C	2.57	0.42
1:B:54:THR:O	1:B:58:ILE:HD13	2.19	0.42
1:B:1119:PHE:HD2	1:B:1121:CYS:SG	2.42	0.42
1:A:957:ALA:O	1:A:958:TYR:C	2.58	0.42
1:A:962:GLN:O	1:A:963:GLN:HB2	2.19	0.42
1:B:238:LYS:HZ3	1:B:242:ALA:HB2	1.83	0.42
1:B:1090:VAL:HG22	1:B:1097:ILE:HG13	2.01	0.42
1:A:506:TYR:CD1	1:A:509:ILE:HD11	2.54	0.42
1:B:178:ILE:HG12	1:B:358:ALA:HB1	2.00	0.42
1:B:348:ILE:O	1:B:349:GLU:C	2.57	0.42
1:B:39:PHE:CD2	1:B:355:ARG:HA	2.55	0.42
1:B:467:GLY:H	1:B:545:PRO:CB	2.33	0.42
1:B:905:SER:HB3	1:B:907:THR:OG1	2.18	0.42
1:B:278:GLU:HA	1:B:282:ARG:NH1	2.34	0.42
1:B:703:GLU:HA	1:B:783:ARG:HH12	1.84	0.42
1:B:778:GLU:C	1:B:782:LYS:HE2	2.40	0.42
1:B:278:GLU:CB	1:B:782:LYS:HG2	2.43	0.42
1:A:64:LEU:O	1:A:65:PRO:C	2.52	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:55:LEU:O	1:A:56:ALA:C	2.58	0.42
1:A:471:GLN:HG2	1:A:472:GLU:H	1.80	0.42
1:A:188:MET:C	1:A:188:MET:SD	2.97	0.42
1:A:1207:GLU:OE2	1:A:1229:ARG:NH2	2.52	0.42
1:A:532:LYS:O	1:A:535:ILE:N	2.53	0.42
1:B:135:ALA:O	1:B:136:ALA:C	2.57	0.42
1:A:279:GLU:O	1:A:282:ARG:HB2	2.19	0.42
1:A:303:TYR:O	1:A:306:TYR:HB3	2.19	0.42
1:A:696:ILE:O	1:A:700:ASN:N	2.53	0.42
1:A:279:GLU:CG	1:A:782:LYS:HD2	2.49	0.42
1:A:406:LEU:O	1:A:408:GLY:N	2.47	0.42
1:B:618:TYR:CE2	1:B:622:VAL:HG21	2.54	0.42
1:B:1073:SER:O	1:B:1077:GLN:HG3	2.20	0.42
1:B:1178:GLN:O	1:B:1181:ALA:N	2.53	0.42
1:B:541:LEU:C	1:B:543:ARG:N	2.73	0.42
1:B:708:VAL:HA	1:B:711:ILE:HG22	2.00	0.42
1:B:731:VAL:HA	1:B:750:LEU:HD12	2.02	0.42
1:B:278:GLU:OE2	1:B:785:ARG:HD2	2.20	0.42
1:A:308:LEU:O	1:A:309:ALA:C	2.55	0.42
1:A:970:VAL:HG23	1:A:971:LEU:HD22	2.02	0.42
1:A:1020:GLN:CG	1:A:1101:ASN:CB	2.92	0.42
1:A:922:ILE:HB	1:A:923:PRO:CD	2.46	0.42
1:B:942:GLN:O	1:B:945:MET:CB	2.64	0.42
1:B:943:ALA:C	1:B:945:MET:N	2.73	0.42
1:A:419:VAL:CG2	1:A:593:VAL:HG13	2.48	0.42
1:B:691:ALA:HA	1:B:1002:SER:HB3	2.01	0.42
1:A:1249:GLU:O	1:A:1250:HIS:HB3	2.20	0.42
1:B:1032:GLN:HB3	1:B:1091:PHE:HD2	1.85	0.42
1:B:266:GLN:HB2	1:B:270:LEU:HD22	2.01	0.42
1:B:328:LEU:HD11	1:B:728:PHE:HZ	1.84	0.42
1:B:765:THR:HG23	1:B:766:PHE:HD1	1.84	0.42
1:A:718:GLY:O	1:A:721:GLN:N	2.53	0.42
1:A:756:LEU:O	1:A:760:ILE:HB	2.19	0.42
1:B:1125:GLU:O	1:B:1126:ASN:C	2.58	0.42
1:A:945:MET:SD	1:A:946:TYR:N	2.93	0.42
1:B:447:VAL:HG13	1:B:454:ILE:HG22	2.00	0.42
1:B:1185:ALA:O	1:B:1190:PRO:CD	2.67	0.42
1:B:1179:ARG:CZ	1:B:1209:VAL:HG11	2.50	0.42
1:B:257:ILE:CG2	1:B:258:ARG:N	2.82	0.42
1:A:43:GLY:CA	1:A:46:ASP:HB2	2.49	0.42
1:A:44:TRP:CD1	1:A:45:LEU:N	2.88	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:585:LEU:HA	1:B:588:VAL:HB	2.02	0.42
1:B:492:THR:O	1:B:493:MET:C	2.58	0.42
1:A:692:SER:HB2	1:A:695:ARG:HB3	2.02	0.42
1:A:625:GLN:O	1:A:626:THR:HB	2.20	0.42
1:B:797:VAL:O	1:B:801:ASP:OD1	2.38	0.41
1:A:538:ALA:O	1:A:539:ARG:C	2.58	0.41
1:B:132:TRP:CE2	1:B:183:GLY:HA3	2.55	0.41
1:B:144:ARG:CZ	1:B:175:VAL:HG21	2.49	0.41
1:B:529:GLY:HA2	1:B:532:LYS:HD3	2.01	0.41
1:B:212:LEU:CD1	1:B:215:LEU:HD12	2.49	0.41
1:B:721:GLN:HG2	1:B:982:MET:HE3	2.02	0.41
1:A:820:GLN:CB	1:A:1000:SER:HB2	2.50	0.41
1:A:281:LYS:O	1:A:285:ILE:HG22	2.21	0.41
1:A:762:SER:O	1:A:763:PHE:C	2.57	0.41
1:A:779:ILE:O	1:A:780:LEU:C	2.58	0.41
1:A:773:PHE:CB	1:A:829:LEU:HD13	2.50	0.41
1:A:948:SER:O	1:A:952:CYS:SG	2.75	0.41
1:A:1092:LEU:HD22	1:A:1100:LEU:HD22	2.01	0.41
1:A:1129:TYR:CD2	1:A:1184:ARG:HG3	2.54	0.41
1:B:59:ILE:O	1:B:59:ILE:HD12	2.20	0.41
1:A:54:THR:O	1:A:58:ILE:HD13	2.20	0.41
1:A:99:MET:N	1:A:99:MET:SD	2.93	0.41
1:A:1229:ARG:C	1:A:1231:SER:N	2.74	0.41
1:A:1156:SER:OG	1:A:1157:LEU:HD22	2.20	0.41
1:A:900:PHE:C	1:A:902:THR:N	2.73	0.41
1:B:773:PHE:CD1	1:B:774:GLY:N	2.88	0.41
1:B:832:ILE:O	1:B:835:ASN:HB3	2.20	0.41
1:B:846:SER:O	1:B:849:TYR:HB2	2.20	0.41
1:A:697:LEU:CA	1:A:700:ASN:HB2	2.47	0.41
1:A:718:GLY:CA	1:A:837:ALA:HB2	2.50	0.41
1:A:178:ILE:HG12	1:A:358:ALA:HB1	2.00	0.41
1:A:434:GLN:C	1:A:436:MET:N	2.74	0.41
1:A:741:PRO:O	1:A:742:GLU:HB2	2.20	0.41
1:B:96:LYS:O	1:B:100:PHE:HB2	2.20	0.41
1:B:1076:VAL:O	1:B:1079:LEU:HB3	2.19	0.41
1:B:439:LEU:HB3	1:B:440:TYR:H	1.74	0.41
1:B:466:ILE:O	1:B:466:ILE:HG22	2.20	0.41
1:B:215:LEU:HA	1:B:219:PRO:HD2	2.01	0.41
1:A:312:TYR:O	1:A:314:THR:N	2.53	0.41
1:A:856:LEU:O	1:A:860:ILE:HG12	2.20	0.41
1:A:887:GLU:O	1:A:890:GLY:N	2.53	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:885:GLU:HB3	1:A:923:PRO:HG3	2.02	0.41
1:B:945:MET:SD	1:B:946:TYR:N	2.93	0.41
1:A:1076:VAL:O	1:A:1079:LEU:HB3	2.20	0.41
1:B:970:VAL:HG23	1:B:971:LEU:HD22	2.02	0.41
1:A:513:PRO:O	1:A:518:THR:OG1	2.39	0.41
1:A:905:SER:HB3	1:A:907:THR:OG1	2.21	0.41
1:B:138:ARG:O	1:B:139:GLN:C	2.58	0.41
1:B:144:ARG:O	1:B:145:GLN:C	2.57	0.41
1:B:34:SER:O	1:B:35:VAL:C	2.59	0.41
1:B:883:LYS:HD3	1:B:886:LEU:HD21	2.02	0.41
1:B:910:GLN:O	1:B:912:PHE:N	2.53	0.41
1:B:911:LYS:O	1:B:914:THR:HB	2.19	0.41
1:B:1229:ARG:O	1:B:1231:SER:N	2.53	0.41
1:B:286:LYS:HG2	1:B:778:GLU:CD	2.41	0.41
1:B:702:THR:C	1:B:704:TRP:H	2.23	0.41
1:A:756:LEU:HD12	1:A:757:ILE:H	1.79	0.41
1:A:144:ARG:O	1:A:145:GLN:C	2.59	0.41
1:A:39:PHE:CD2	1:A:355:ARG:HA	2.54	0.41
1:A:1164:ARG:O	1:A:1165:VAL:C	2.57	0.41
1:A:889:SER:OG	1:A:919:SER:HB2	2.20	0.41
1:B:59:ILE:O	1:B:63:ALA:HB2	2.21	0.41
1:A:155:GLU:O	1:A:156:ILE:C	2.58	0.41
1:A:1076:VAL:HG13	1:A:1194:LEU:HD13	2.01	0.41
1:A:388:LEU:H	1:A:388:LEU:HD12	1.83	0.41
1:B:617:ILE:H	1:B:617:ILE:CD1	2.33	0.41
1:A:740:PRO:O	1:A:743:THR:HG23	2.20	0.41
1:B:740:PRO:HG2	1:B:741:PRO:CD	2.45	0.41
1:A:1234:GLN:HA	1:A:1253:HIS:CD2	2.50	0.41
1:B:152:MET:CG	1:B:913:GLU:OE1	2.69	0.41
1:A:151:ILE:C	1:A:153:ASN:N	2.72	0.41
1:B:1250:HIS:C	1:B:1256:LEU:HD21	2.40	0.41
1:A:1050:GLN:O	1:A:1050:GLN:HG3	2.21	0.41
1:B:1129:TYR:O	1:B:1131:ASP:N	2.52	0.41
1:B:156:ILE:HG23	1:B:439:LEU:HD12	2.02	0.41
1:B:476:PHE:CE2	1:B:912:PHE:HZ	2.38	0.41
1:B:322:TYR:CZ	1:B:324:ILE:HG12	2.55	0.41
1:B:773:PHE:CD1	1:B:773:PHE:C	2.93	0.41
1:A:268:LYS:O	1:A:269:GLU:C	2.59	0.41
1:A:324:ILE:O	1:A:326:GLN:HB2	2.20	0.41
1:A:710:GLY:O	1:A:711:ILE:C	2.57	0.41
1:A:345:SER:O	1:A:346:PRO:C	2.56	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1090:VAL:HG22	1:A:1097:ILE:HG13	2.03	0.41
1:A:1176:GLN:O	1:A:1177:LYS:C	2.59	0.41
1:A:1176:GLN:N	1:A:1176:GLN:OE1	2.53	0.41
1:A:705:PRO:CG	1:A:706:TYR:H	2.31	0.41
1:A:1189:GLN:O	1:A:1190:PRO:O	2.39	0.41
1:A:583:HIS:HB2	1:A:584:ARG:NH1	2.35	0.41
1:B:583:HIS:HB2	1:B:584:ARG:NH1	2.35	0.41
1:A:245:LYS:NZ	1:A:245:LYS:CA	2.83	0.41
1:B:86:LYS:HE2	1:B:739:GLY:N	2.35	0.41
1:B:1079:LEU:O	1:B:1105:LEU:HD21	2.21	0.41
1:B:345:SER:O	1:B:346:PRO:C	2.57	0.41
1:B:278:GLU:HA	1:B:282:ARG:CZ	2.51	0.41
1:B:286:LYS:HG2	1:B:778:GLU:HG2	1.99	0.41
1:B:848:ILE:HG13	1:B:848:ILE:O	2.21	0.41
1:B:808:GLY:O	1:B:809:ALA:C	2.58	0.41
1:A:1176:GLN:O	1:A:1179:ARG:HB2	2.20	0.41
1:B:889:SER:OG	1:B:919:SER:HB2	2.21	0.41
1:B:943:ALA:O	1:B:944:MET:C	2.56	0.41
1:A:617:ILE:CD1	1:A:617:ILE:H	2.33	0.41
1:B:409:LEU:HD21	1:B:597:PHE:CZ	2.56	0.41
1:A:740:PRO:N	1:A:741:PRO:CD	2.84	0.41
1:A:92:SER:OG	1:A:962:GLN:NE2	2.51	0.41
1:A:881:LYS:HZ2	1:A:881:LYS:HB2	1.81	0.41
1:B:188:MET:SD	1:B:188:MET:C	2.98	0.41
1:A:1250:HIS:C	1:A:1256:LEU:HD21	2.40	0.41
1:A:745:ARG:O	1:A:749:ASN:HB2	2.21	0.41
1:B:223:LEU:O	1:B:224:SER:C	2.59	0.41
1:B:258:ARG:C	1:B:260:VAL:N	2.74	0.41
1:B:43:GLY:CA	1:B:46:ASP:HB2	2.50	0.41
1:B:900:PHE:O	1:B:902:THR:N	2.53	0.41
1:B:710:GLY:O	1:B:711:ILE:C	2.57	0.41
1:B:716:ILE:HD12	1:B:716:ILE:C	2.41	0.41
1:B:727:ILE:HD13	1:B:754:LEU:CD2	2.50	0.41
1:B:711:ILE:HD11	1:B:832:ILE:HG21	2.02	0.41
1:A:731:VAL:HA	1:A:750:LEU:CD1	2.50	0.41
1:A:147:PHE:CE2	1:A:365:ILE:HG12	2.56	0.41
1:A:1031:VAL:O	1:A:1055:GLU:HA	2.21	0.41
1:B:990:PHE:O	1:B:991:ALA:C	2.58	0.41
1:A:443:LEU:HD23	1:A:443:LEU:C	2.41	0.41
1:B:733:GLY:CA	1:B:968:GLU:HG3	2.51	0.41
1:A:494:ASP:O	1:A:497:GLU:HB3	2.21	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:374:PHE:CG	1:A:375:SER:N	2.89	0.41
1:B:151:ILE:C	1:B:153:ASN:N	2.73	0.41
1:B:459:VAL:O	1:B:460:ARG:C	2.57	0.41
1:B:46:ASP:O	1:B:49:TYR:N	2.54	0.41
1:B:906:LEU:HA	1:B:909:GLU:OE2	2.21	0.41
1:B:274:ASN:O	1:B:275:ASN:C	2.59	0.41
1:B:296:GLY:O	1:B:300:LEU:HG	2.20	0.41
1:B:307:ALA:O	1:B:308:LEU:C	2.58	0.41
1:B:779:ILE:HA	1:B:782:LYS:HE3	2.03	0.41
1:A:211:THR:HA	1:A:214:ILE:CD1	2.44	0.41
1:A:267:LYS:HA	1:A:270:LEU:HD21	2.00	0.41
1:A:315:SER:HA	1:A:318:ILE:HG22	2.02	0.41
1:A:334:VAL:O	1:A:335:LEU:C	2.59	0.41
1:A:816:ASN:O	1:A:820:GLN:HG2	2.21	0.41
1:A:721:GLN:HG2	1:A:982:MET:HE3	2.02	0.41
1:A:1039:ASN:CG	1:A:1047:PRO:HA	2.41	0.41
1:A:1178:GLN:O	1:A:1181:ALA:N	2.54	0.41
1:B:922:ILE:HB	1:B:923:PRO:CD	2.45	0.41
1:A:459:VAL:O	1:A:460:ARG:C	2.56	0.41
1:B:422:VAL:O	1:B:597:PHE:O	2.39	0.41
1:B:255:ALA:O	1:B:256:ALA:C	2.59	0.41
1:B:1107:ALA:O	1:B:1188:ARG:HD3	2.21	0.41
1:A:503:ALA:O	1:A:504:ASN:C	2.58	0.41
1:A:568:ALA:O	1:A:569:LEU:C	2.57	0.41
1:B:551:ASP:HA	1:B:581:ILE:HG23	2.03	0.41
1:B:892:ILE:O	1:B:895:GLU:HB3	2.21	0.41
1:B:912:PHE:O	1:B:915:MET:N	2.54	0.41
1:B:388:LEU:H	1:B:388:LEU:HD12	1.83	0.41
1:B:449:ILE:O	1:B:450:ASP:HB3	2.21	0.41
1:B:129:VAL:HG11	1:B:934:PHE:C	2.41	0.41
1:B:1203:ASP:O	1:B:1207:GLU:HG3	2.21	0.41
1:B:693:PHE:H	1:B:693:PHE:HD2	1.65	0.41
1:B:300:LEU:O	1:B:303:TYR:CB	2.68	0.41
1:B:731:VAL:O	1:B:734:VAL:HG12	2.21	0.41
1:B:761:ILE:H	1:B:761:ILE:CD1	2.33	0.41
1:A:209:LYS:HA	1:A:212:LEU:CB	2.51	0.41
1:A:215:LEU:HA	1:A:219:PRO:HD2	2.03	0.41
1:A:286:LYS:HA	1:A:289:ILE:CB	2.31	0.41
1:A:309:ALA:O	1:A:310:PHE:C	2.59	0.41
1:A:266:GLN:HB2	1:A:270:LEU:HD22	2.03	0.41
1:A:312:TYR:O	1:A:313:GLY:C	2.59	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:787:MET:SD	1:A:1008:ILE:HD11	2.61	0.41
1:A:845:ILE:O	1:A:849:TYR:CD2	2.74	0.41
1:A:342:GLY:O	1:A:346:PRO:HD2	2.20	0.41
1:A:883:LYS:HD3	1:A:886:LEU:HD21	2.02	0.41
1:A:1056:VAL:HG21	1:A:1062:LEU:HB2	2.01	0.41
1:A:1073:SER:O	1:A:1077:GLN:HG3	2.21	0.41
1:A:792:MET:CA	1:A:795:GLN:HB2	2.47	0.41
1:A:799:TRP:O	1:A:803:PRO:CB	2.62	0.41
1:A:808:GLY:O	1:A:809:ALA:C	2.59	0.41
1:A:1038:PHE:CD2	1:A:1078:LEU:HD21	2.56	0.41
1:A:1147:GLU:HB3	1:A:1186:LEU:HD22	2.02	0.41
1:B:54:THR:O	1:B:57:ALA:HB3	2.20	0.41
1:B:974:PHE:CD1	2:B:6002:OJZ:H30B	2.56	0.41
1:A:933:VAL:O	1:A:936:ILE:HG22	2.21	0.41
1:B:689:PRO:CD	1:B:690:PRO:HD2	2.51	0.41
1:A:942:GLN:O	1:A:943:ALA:C	2.58	0.41
1:B:948:SER:O	1:B:952:CYS:SG	2.76	0.41
1:A:91:MET:HE3	1:A:91:MET:N	2.36	0.41
1:A:1252:THR:O	1:A:1255:GLN:HB3	2.21	0.41
1:B:614:GLU:O	1:B:615:LYS:C	2.59	0.41
1:B:1156:SER:OG	1:B:1157:LEU:HD22	2.20	0.41
1:A:441:ASP:OD1	1:A:442:PRO:HD2	2.21	0.41
1:B:1213:ALA:O	1:B:1217:ALA:HB2	2.21	0.41
1:A:899:ASN:OD1	1:A:901:ARG:NH2	2.54	0.41
1:B:140:ILE:O	1:B:143:ILE:N	2.53	0.41
1:B:142:LYS:O	1:B:143:ILE:C	2.60	0.41
1:B:480:ILE:O	1:B:482:GLU:N	2.54	0.41
1:B:900:PHE:C	1:B:902:THR:N	2.73	0.41
1:B:973:VAL:O	1:B:976:ALA:N	2.51	0.41
1:A:174:ASP:O	1:A:178:ILE:HG13	2.21	0.41
1:A:348:ILE:O	1:A:351:PHE:HB3	2.20	0.41
1:B:796:ASP:HA	1:B:800:PHE:CD2	2.56	0.41
1:A:471:GLN:N	1:A:471:GLN:OE1	2.52	0.41
1:B:1067:SER:OG	1:B:1244:ASN:ND2	2.54	0.41
1:B:1003:HIS:O	1:B:1007:ILE:HG13	2.21	0.41
1:A:901:ARG:O	1:A:904:VAL:N	2.44	0.40
1:B:147:PHE:CE2	1:B:365:ILE:HG12	2.56	0.40
1:B:381:PRO:CG	1:B:457:ILE:HB	2.50	0.40
1:B:534:ARG:O	1:B:537:ILE:CB	2.68	0.40
1:B:270:LEU:O	1:B:274:ASN:HB2	2.22	0.40
1:B:288:ALA:O	1:B:292:ASN:N	2.54	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:327:VAL:O	1:A:331:PHE:HD1	2.04	0.40
1:A:703:GLU:HA	1:A:783:ARG:HH12	1.86	0.40
1:A:853:LEU:HD11	1:A:956:GLY:HA2	2.03	0.40
1:A:346:PRO:O	1:A:349:GLU:HB3	2.21	0.40
1:A:892:ILE:HG12	1:A:892:ILE:H	1.49	0.40
1:A:928:MET:O	1:A:931:ALA:CB	2.65	0.40
1:A:1067:SER:OG	1:A:1244:ASN:ND2	2.54	0.40
1:A:1255:GLN:O	1:A:1258:ALA:N	2.54	0.40
1:A:1107:ALA:HB3	1:A:1108:GLN:HE22	1.86	0.40
1:B:471:GLN:OE1	1:B:471:GLN:N	2.49	0.40
1:B:500:VAL:CG2	1:B:501:LYS:N	2.84	0.40
1:B:310:PHE:CE2	1:B:331:PHE:HB3	2.55	0.40
1:B:279:GLU:HG2	1:B:782:LYS:NZ	2.35	0.40
1:A:212:LEU:CD1	1:A:215:LEU:HD12	2.50	0.40
1:A:727:ILE:HD13	1:A:754:LEU:CD2	2.50	0.40
1:A:761:ILE:CD1	1:A:761:ILE:H	2.34	0.40
1:A:183:GLY:O	1:A:184:ASP:C	2.60	0.40
1:A:1039:ASN:O	1:A:1040:TYR:C	2.59	0.40
1:A:810:LEU:O	1:A:813:ARG:N	2.54	0.40
1:A:58:ILE:C	1:A:60:HIS:N	2.72	0.40
1:B:1038:PHE:CZ	1:B:1040:TYR:N	2.89	0.40
1:A:462:LEU:HD12	1:A:466:ILE:CD1	2.51	0.40
1:A:1155:ASP:O	1:A:1160:LYS:HE3	2.21	0.40
1:B:745:ARG:O	1:B:749:ASN:HB2	2.21	0.40
1:A:925:ARG:NE	1:B:519:LEU:HD12	2.36	0.40
1:B:342:GLY:O	1:B:346:PRO:HD2	2.21	0.40
1:B:358:ALA:O	1:B:362:PHE:N	2.53	0.40
1:B:519:LEU:N	1:B:519:LEU:HD13	2.19	0.40
1:B:899:ASN:OD1	1:B:901:ARG:NH2	2.54	0.40
1:B:206:ARG:O	1:B:211:THR:HB	2.21	0.40
1:A:282:ARG:HD3	1:A:282:ARG:HA	1.83	0.40
1:A:316:LEU:C	1:A:318:ILE:H	2.24	0.40
1:A:714:ALA:O	1:A:717:ASN:HB3	2.22	0.40
1:A:1014:ILE:HA	1:A:1017:TYR:HE2	1.86	0.40
1:A:1032:GLN:HB3	1:A:1091:PHE:HD2	1.85	0.40
1:A:253:VAL:HB	1:A:1119:PHE:CE1	2.52	0.40
1:A:791:SER:O	1:A:795:GLN:HB2	2.21	0.40
1:A:387:ASN:ND2	1:A:415:SER:H	2.20	0.40
1:A:449:ILE:O	1:A:450:ASP:HB3	2.21	0.40
1:B:58:ILE:C	1:B:60:HIS:N	2.72	0.40
1:B:332:PHE:HE1	2:B:6002:OJZ:N24	2.19	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:403:VAL:O	1:A:405:ILE:HD12	2.21	0.40
1:B:1243:GLN:HG3	1:B:1246:LYS:HZ2	1.85	0.40
1:B:1132:ASN:C	1:B:1134:ARG:H	2.25	0.40
1:B:364:ILE:HG22	1:B:364:ILE:O	2.21	0.40
1:A:901:ARG:N	1:A:901:ARG:HD3	2.36	0.40
1:B:140:ILE:O	1:B:141:HIS:C	2.60	0.40
1:B:436:MET:HB3	1:B:549:LEU:HD21	2.03	0.40
1:B:462:LEU:HD12	1:B:466:ILE:CD1	2.51	0.40
1:B:302:ILE:O	1:B:303:TYR:C	2.59	0.40
1:B:756:LEU:HD12	1:B:757:ILE:HG12	2.04	0.40
1:B:770:GLY:HA2	1:B:773:PHE:CZ	2.56	0.40
1:B:838:ASN:O	1:B:839:LEU:O	2.38	0.40
1:A:110:TYR:CA	1:A:113:TYR:HD2	2.34	0.40
1:A:770:GLY:HA2	1:A:773:PHE:CZ	2.56	0.40
1:A:1191:HIS:HA	1:A:1221:ARG:HB2	2.02	0.40
1:B:688:VAL:HB	1:B:1006:ARG:HH12	1.87	0.40
1:A:409:LEU:HD21	1:A:597:PHE:CZ	2.56	0.40
1:A:961:THR:O	1:A:962:GLN:CB	2.69	0.40
1:B:92:SER:O	1:B:96:LYS:HG3	2.21	0.40
1:A:1208:LYS:HD3	1:A:1208:LYS:C	2.41	0.40
1:A:369:PRO:O	1:A:370:SER:C	2.60	0.40
1:A:479:THR:HA	1:A:518:THR:O	2.21	0.40
1:B:129:VAL:CB	1:B:935:GLY:HA2	2.51	0.40
1:B:155:GLU:HA	1:B:158:TRP:CZ3	2.56	0.40
1:B:439:LEU:HB3	1:B:440:TYR:HD1	1.86	0.40
1:B:500:VAL:O	1:B:503:ALA:N	2.55	0.40
1:B:901:ARG:N	1:B:901:ARG:HD3	2.35	0.40
1:B:902:THR:C	1:B:904:VAL:N	2.75	0.40
1:B:327:VAL:O	1:B:331:PHE:HD1	2.04	0.40
1:A:203:GLY:O	1:A:215:LEU:HD21	2.21	0.40
1:A:203:GLY:CA	1:A:211:THR:OG1	2.70	0.40
1:A:299:PHE:O	1:A:303:TYR:N	2.53	0.40
1:A:302:ILE:O	1:A:303:TYR:C	2.57	0.40
1:A:724:PHE:CD1	1:A:758:LEU:HD12	2.57	0.40
1:A:835:ASN:O	1:A:836:ILE:C	2.57	0.40
1:A:971:LEU:O	1:A:972:LEU:C	2.60	0.40
1:A:382:ASP:C	1:A:384:ILE:N	2.75	0.40
1:B:990:PHE:O	1:B:991:ALA:O	2.40	0.40
1:A:92:SER:O	1:A:96:LYS:HG3	2.22	0.40
1:A:1159:ASP:O	1:A:1160:LYS:C	2.60	0.40
1:A:693:PHE:O	1:A:695:ARG:N	2.55	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:614:GLU:O	1:A:615:LYS:C	2.60	0.40

There are no symmetry-related clashes.

## 5.3 Torsion angles [i](#)

### 5.3.1 Protein backbone [i](#)

In the following table, the Percentiles column shows the percent Ramachandran outliers of the chain as a percentile score with respect to all 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	1178/1284 (92%)	704 (60%)	302 (26%)	172 (15%)	0	6
1	B	1178/1284 (92%)	707 (60%)	305 (26%)	166 (14%)	0	6
All	All	2356/2568 (92%)	1411 (60%)	607 (26%)	338 (14%)	0	6

All (338) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	A	34	SER
1	A	35	VAL
1	A	52	VAL
1	A	89	THR
1	A	133	CYS
1	A	134	LEU
1	A	135	ALA
1	A	156	ILE
1	A	190	PHE
1	A	201	ILE
1	A	274	ASN
1	A	308	LEU
1	A	310	PHE
1	A	371	ILE
1	A	385	GLN
1	A	400	ARG
1	A	439	LEU

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Mol	Chain	Res	Type
1	A	489	GLU
1	A	521	GLY
1	A	539	ARG
1	A	574	GLU
1	A	598	ASP
1	A	603	VAL
1	A	692	SER
1	A	757	ILE
1	A	796	ASP
1	A	797	VAL
1	A	833	PHE
1	A	837	ALA
1	A	849	TYR
1	A	909	GLU
1	A	958	TYR
1	A	959	LEU
1	A	1014	ILE
1	A	1042	THR
1	A	1098	LYS
1	A	1099	GLN
1	A	1114	GLN
1	A	1136	VAL
1	A	1155	ASP
1	A	1161	TYR
1	A	1198	ALA
1	A	1201	ALA
1	A	1204	THR
1	A	1205	GLU
1	A	1244	ASN
1	B	34	SER
1	B	35	VAL
1	B	52	VAL
1	B	89	THR
1	B	133	CYS
1	B	134	LEU
1	B	135	ALA
1	B	156	ILE
1	B	164	VAL
1	B	190	PHE
1	B	201	ILE
1	B	208	TRP
1	B	274	ASN

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Mol	Chain	Res	Type
1	B	308	LEU
1	B	310	PHE
1	B	371	ILE
1	B	377	SER
1	B	385	GLN
1	B	400	ARG
1	B	439	LEU
1	B	489	GLU
1	B	521	GLY
1	B	574	GLU
1	B	598	ASP
1	B	603	VAL
1	B	757	ILE
1	B	796	ASP
1	B	797	VAL
1	B	833	PHE
1	B	839	LEU
1	B	849	TYR
1	B	851	TRP
1	B	909	GLU
1	B	958	TYR
1	B	959	LEU
1	B	1014	ILE
1	B	1015	ASP
1	B	1016	SER
1	B	1021	GLY
1	B	1042	THR
1	B	1098	LYS
1	B	1136	VAL
1	B	1155	ASP
1	B	1198	ALA
1	B	1201	ALA
1	B	1204	THR
1	B	1205	GLU
1	B	1244	ASN
1	A	91	MET
1	A	132	TRP
1	A	137	GLY
1	A	144	ARG
1	A	152	MET
1	A	216	ALA
1	A	227	ILE

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Mol	Chain	Res	Type
1	A	325	GLY
1	A	373	SER
1	A	384	ILE
1	A	429	LYS
1	A	434	GLN
1	A	435	LEU
1	A	491	VAL
1	A	707	PHE
1	A	758	LEU
1	A	799	TRP
1	A	806	THR
1	A	835	ASN
1	A	839	LEU
1	A	840	GLY
1	A	851	TRP
1	A	906	LEU
1	A	908	ARG
1	A	933	VAL
1	A	965	MET
1	A	993	ASP
1	A	995	ALA
1	A	1020	GLN
1	A	1024	PRO
1	A	1027	LEU
1	A	1069	GLY
1	A	1190	PRO
1	B	44	TRP
1	B	132	TRP
1	B	137	GLY
1	B	144	ARG
1	B	152	MET
1	B	155	GLU
1	B	209	LYS
1	B	216	ALA
1	B	227	ILE
1	B	272	ARG
1	B	322	TYR
1	B	325	GLY
1	B	384	ILE
1	B	392	ASN
1	B	491	VAL
1	B	539	ARG

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Mol	Chain	Res	Type
1	B	555	SER
1	B	691	ALA
1	B	707	PHE
1	B	758	LEU
1	B	814	LEU
1	B	835	ASN
1	B	837	ALA
1	B	840	GLY
1	B	908	ARG
1	B	933	VAL
1	B	965	MET
1	B	993	ASP
1	B	995	ALA
1	B	1019	THR
1	B	1069	GLY
1	B	1114	GLN
1	B	1161	TYR
1	B	1190	PRO
1	B	1230	LEU
1	A	44	TRP
1	A	123	ILE
1	A	131	PHE
1	A	139	GLN
1	A	160	ASP
1	A	169	THR
1	A	272	ARG
1	A	276	ASN
1	A	278	GLU
1	A	329	THR
1	A	374	PHE
1	A	392	ASN
1	A	424	ASN
1	A	504	ASN
1	A	522	GLU
1	A	526	GLN
1	A	532	LYS
1	A	545	PRO
1	A	555	SER
1	A	615	LYS
1	A	687	ASP
1	A	781	THR
1	A	814	LEU

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Mol	Chain	Res	Type
1	A	815	ALA
1	A	838	ASN
1	A	903	VAL
1	A	1017	TYR
1	A	1046	ILE
1	A	1117	ILE
1	A	1130	GLY
1	A	1134	ARG
1	A	1156	SER
1	A	1158	PRO
1	A	1230	LEU
1	B	91	MET
1	B	123	ILE
1	B	131	PHE
1	B	139	GLN
1	B	160	ASP
1	B	267	LYS
1	B	276	ASN
1	B	278	GLU
1	B	329	THR
1	B	424	ASN
1	B	435	LEU
1	B	477	ALA
1	B	493	MET
1	B	504	ASN
1	B	522	GLU
1	B	526	GLN
1	B	532	LYS
1	B	545	PRO
1	B	693	PHE
1	B	781	THR
1	B	799	TRP
1	B	806	THR
1	B	809	ALA
1	B	838	ASN
1	B	906	LEU
1	B	992	PRO
1	B	1036	VAL
1	B	1046	ILE
1	B	1119	PHE
1	B	1130	GLY
1	B	1134	ARG

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Mol	Chain	Res	Type
1	B	1156	SER
1	B	1158	PRO
1	B	1253	HIS
1	A	209	LYS
1	A	223	LEU
1	A	266	GLN
1	A	267	LYS
1	A	369	PRO
1	A	477	ALA
1	A	483	ASN
1	A	493	MET
1	A	523	ARG
1	A	573	ARG
1	A	620	LYS
1	A	809	ALA
1	A	912	PHE
1	A	963	GLN
1	A	1036	VAL
1	A	1041	PRO
1	A	1093	ASP
1	A	1094	GLY
1	A	1119	PHE
1	A	1120	ASP
1	A	1170	THR
1	A	1253	HIS
1	B	71	PHE
1	B	169	THR
1	B	223	LEU
1	B	256	ALA
1	B	258	ARG
1	B	266	GLN
1	B	369	PRO
1	B	483	ASN
1	B	523	ARG
1	B	573	ARG
1	B	615	LYS
1	B	620	LYS
1	B	731	VAL
1	B	815	ALA
1	B	903	VAL
1	B	931	ALA
1	B	957	ALA

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Mol	Chain	Res	Type
1	B	963	GLN
1	B	1093	ASP
1	B	1094	GLY
1	B	1117	ILE
1	B	1120	ASP
1	B	1146	LYS
1	B	1170	THR
1	A	162	HIS
1	A	196	PHE
1	A	258	ARG
1	A	312	TYR
1	A	317	VAL
1	A	370	SER
1	A	691	ALA
1	A	726	VAL
1	A	731	VAL
1	A	931	ALA
1	A	992	PRO
1	A	1012	PRO
1	A	1028	GLU
1	A	1039	ASN
1	A	1129	TYR
1	A	1157	LEU
1	A	1184	ARG
1	B	196	PHE
1	B	312	TYR
1	B	912	PHE
1	B	1011	THR
1	B	1012	PRO
1	B	1023	LYS
1	B	1041	PRO
1	B	1157	LEU
1	A	71	PHE
1	A	381	PRO
1	A	428	GLY
1	A	694	TRP
1	A	895	GLU
1	A	1146	LYS
1	B	116	GLY
1	B	772	THR
1	B	895	GLU
1	B	1100	LEU

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Mol	Chain	Res	Type
1	B	1129	TYR
1	A	118	GLY
1	B	140	ILE
1	B	203	GLY
1	B	317	VAL
1	B	380	LYS
1	B	726	VAL
1	A	116	GLY
1	A	140	ILE
1	A	164	VAL
1	A	593	VAL
1	B	118	GLY
1	A	58	ILE
1	A	365	ILE
1	A	1165	VAL
1	B	313	GLY
1	B	705	PRO
1	A	121	VAL
1	A	199	GLY
1	A	203	GLY
1	A	356	GLY
1	A	705	PRO
1	B	58	ILE
1	B	365	ILE
1	B	593	VAL
1	A	165	GLY
1	B	161	VAL

### 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	976/1065 (92%)	884 (91%)	92 (9%)	11	45
1	B	976/1065 (92%)	880 (90%)	96 (10%)	10	42
All	All	1952/2130 (92%)	1764 (90%)	188 (10%)	10	43



All (188) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	A	59	ILE
1	A	83	ASN
1	A	91	MET
1	A	93	GLU
1	A	99	MET
1	A	100	PHE
1	A	113	TYR
1	A	131	PHE
1	A	138	ARG
1	A	147	PHE
1	A	155	GLU
1	A	156	ILE
1	A	158	TRP
1	A	163	ASP
1	A	173	ASP
1	A	185	LYS
1	A	189	PHE
1	A	196	PHE
1	A	206	ARG
1	A	210	LEU
1	A	219	PRO
1	A	228	TRP
1	A	238	LYS
1	A	245	LYS
1	A	252	GLU
1	A	254	LEU
1	A	257	ILE
1	A	270	LEU
1	A	281	LYS
1	A	285	ILE
1	A	295	MET
1	A	306	TYR
1	A	310	PHE
1	A	311	TRP
1	A	330	VAL
1	A	332	PHE
1	A	397	TYR
1	A	401	LYS
1	A	402	GLU
1	A	404	GLN
1	A	435	LEU
1	A	438	ARG

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Mol	Chain	Res	Type
1	A	439	LEU
1	A	458	ASN
1	A	493	MET
1	A	519	LEU
1	A	694	TRP
1	A	697	LEU
1	A	703	GLU
1	A	707	PHE
1	A	722	PRO
1	A	751	PHE
1	A	755	PHE
1	A	771	PHE
1	A	786	TYR
1	A	789	PHE
1	A	795	GLN
1	A	799	TRP
1	A	801	ASP
1	A	804	LYS
1	A	816	ASN
1	A	838	ASN
1	A	851	TRP
1	A	862	PRO
1	A	872	MET
1	A	881	LYS
1	A	892	ILE
1	A	901	ARG
1	A	902	THR
1	A	908	ARG
1	A	912	PHE
1	A	954	ARG
1	A	968	GLU
1	A	969	ASN
1	A	990	PHE
1	A	993	ASP
1	A	996	LYS
1	A	1020	GLN
1	A	1060	GLN
1	A	1090	VAL
1	A	1099	GLN
1	A	1108	GLN
1	A	1109	LEU
1	A	1118	LEU

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Mol	Chain	Res	Type
1	A	1131	ASP
1	A	1140	GLU
1	A	1158	PRO
1	A	1192	ILE
1	A	1204	THR
1	A	1221	ARG
1	A	1223	CYS
1	A	1246	LYS
1	B	59	ILE
1	B	64	LEU
1	B	83	ASN
1	B	91	MET
1	B	93	GLU
1	B	99	MET
1	B	100	PHE
1	B	113	TYR
1	B	131	PHE
1	B	138	ARG
1	B	147	PHE
1	B	155	GLU
1	B	156	ILE
1	B	158	TRP
1	B	163	ASP
1	B	173	ASP
1	B	185	LYS
1	B	189	PHE
1	B	196	PHE
1	B	206	ARG
1	B	210	LEU
1	B	219	PRO
1	B	228	TRP
1	B	238	LYS
1	B	243	TYR
1	B	245	LYS
1	B	252	GLU
1	B	254	LEU
1	B	257	ILE
1	B	270	LEU
1	B	281	LYS
1	B	285	ILE
1	B	295	MET
1	B	299	PHE

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Mol	Chain	Res	Type
1	B	306	TYR
1	B	310	PHE
1	B	311	TRP
1	B	330	VAL
1	B	332	PHE
1	B	374	PHE
1	B	397	TYR
1	B	401	LYS
1	B	402	GLU
1	B	404	GLN
1	B	429	LYS
1	B	438	ARG
1	B	439	LEU
1	B	458	ASN
1	B	493	MET
1	B	519	LEU
1	B	693	PHE
1	B	694	TRP
1	B	697	LEU
1	B	703	GLU
1	B	707	PHE
1	B	722	PRO
1	B	751	PHE
1	B	755	PHE
1	B	771	PHE
1	B	786	TYR
1	B	789	PHE
1	B	795	GLN
1	B	799	TRP
1	B	801	ASP
1	B	804	LYS
1	B	816	ASN
1	B	838	ASN
1	B	851	TRP
1	B	862	PRO
1	B	872	MET
1	B	881	LYS
1	B	892	ILE
1	B	901	ARG
1	B	902	THR
1	B	908	ARG
1	B	912	PHE

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Mol	Chain	Res	Type
1	B	954	ARG
1	B	968	GLU
1	B	969	ASN
1	B	990	PHE
1	B	996	LYS
1	B	1010	LYS
1	B	1060	GLN
1	B	1090	VAL
1	B	1099	GLN
1	B	1108	GLN
1	B	1109	LEU
1	B	1118	LEU
1	B	1131	ASP
1	B	1140	GLU
1	B	1158	PRO
1	B	1192	ILE
1	B	1204	THR
1	B	1221	ARG
1	B	1223	CYS
1	B	1246	LYS

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

Mol	Chain	Res	Type
1	A	60	HIS
1	A	83	ASN
1	A	87	ASN
1	A	128	GLN
1	A	153	ASN
1	A	154	GLN
1	A	191	GLN
1	A	274	ASN
1	A	347	ASN
1	A	379	HIS
1	A	385	GLN
1	A	387	ASN
1	A	392	ASN
1	A	394	HIS
1	A	404	GLN
1	A	434	GLN
1	A	437	GLN
1	A	458	ASN

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Mol	Chain	Res	Type
1	A	515	GLN
1	A	605	GLN
1	A	625	GLN
1	A	721	GLN
1	A	769	GLN
1	A	795	GLN
1	A	805	ASN
1	A	834	GLN
1	A	838	ASN
1	A	878	GLN
1	A	932	HIS
1	A	962	GLN
1	A	969	ASN
1	A	1032	GLN
1	A	1039	ASN
1	A	1099	GLN
1	A	1108	GLN
1	A	1114	GLN
1	A	1126	ASN
1	A	1149	ASN
1	A	1191	HIS
1	A	1235	ASN
1	A	1244	ASN
1	A	1253	HIS
1	B	60	HIS
1	B	83	ASN
1	B	87	ASN
1	B	128	GLN
1	B	154	GLN
1	B	191	GLN
1	B	274	ASN
1	B	347	ASN
1	B	379	HIS
1	B	385	GLN
1	B	387	ASN
1	B	392	ASN
1	B	394	HIS
1	B	404	GLN
1	B	434	GLN
1	B	437	GLN
1	B	458	ASN
1	B	515	GLN

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Mol	Chain	Res	Type
1	B	605	GLN
1	B	625	GLN
1	B	721	GLN
1	B	769	GLN
1	B	795	GLN
1	B	805	ASN
1	B	834	GLN
1	B	838	ASN
1	B	852	GLN
1	B	878	GLN
1	B	932	HIS
1	B	963	GLN
1	B	969	ASN
1	B	1032	GLN
1	B	1039	ASN
1	B	1099	GLN
1	B	1108	GLN
1	B	1114	GLN
1	B	1126	ASN
1	B	1149	ASN
1	B	1235	ASN
1	B	1244	ASN
1	B	1253	HIS

### 5.3.3 RNA ⓘ

There are no RNA molecules in this entry.

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

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

### 5.5 Carbohydrates ⓘ

There are no carbohydrates in this entry.

### 5.6 Ligand geometry ⓘ

2 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$
2	0JZ	A	6001	-	27,39,39	1.87	6 (22%)	24,57,57	2.48	9 (37%)
2	0JZ	B	6002	-	27,39,39	1.54	4 (14%)	24,57,57	1.89	6 (25%)

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

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
2	0JZ	A	6001	-	-	0/24/48/48	0/0/4/4
2	0JZ	B	6002	-	-	0/24/48/48	0/0/4/4

All (10) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	6002	0JZ	C15-C16	-2.62	1.44	1.50
2	A	6001	0JZ	C34-C18	2.03	1.60	1.54
2	B	6002	0JZ	C16-N17	2.44	1.39	1.34
2	A	6001	0JZ	C18-N17	2.85	1.52	1.46
2	A	6001	0JZ	C19-C18	2.97	1.54	1.51
2	B	6002	0JZ	C02-N03	3.56	1.42	1.34
2	A	6001	0JZ	C09-N10	3.73	1.42	1.34
2	A	6001	0JZ	C02-N03	4.22	1.43	1.34
2	B	6002	0JZ	C09-N10	4.27	1.43	1.34
2	A	6001	0JZ	C16-N17	5.27	1.46	1.34

All (15) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	A	6001	0JZ	C29-C28-C04	2.06	113.18	111.30
2	A	6001	0JZ	C15-C16-N17	2.18	119.96	115.10
2	B	6002	0JZ	C01-C02-N03	2.33	120.29	115.10
2	B	6002	0JZ	C18-N17-C16	2.71	126.58	122.02
2	A	6001	0JZ	C33-C31-C11	2.91	113.96	111.30

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Mol	Chain	Res	Type	Atoms	Z	Observed( $^{\circ}$ )	Ideal( $^{\circ}$ )
2	B	6002	0JZ	C11-N10-C09	2.98	127.04	122.02
2	A	6001	0JZ	C36-C34-C18	3.06	114.09	111.30
2	B	6002	0JZ	C04-N03-C02	3.45	127.82	122.02
2	A	6001	0JZ	C11-N10-C09	3.58	128.04	122.02
2	A	6001	0JZ	C30-C28-C04	3.87	114.84	111.30
2	B	6002	0JZ	C29-C28-C04	3.88	114.85	111.30
2	B	6002	0JZ	C33-C31-C11	3.91	114.87	111.30
2	A	6001	0JZ	C35-C34-C18	4.46	115.38	111.30
2	A	6001	0JZ	C18-N17-C16	5.13	130.66	122.02
2	A	6001	0JZ	C04-N03-C02	5.38	131.07	122.02

There are no chirality outliers.

There are no torsion outliers.

There are no ring outliers.

2 monomers are involved in 22 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
2	A	6001	0JZ	12	0
2	B	6002	0JZ	10	0

## 5.7 Other polymers [i](#)

There are no such residues in this entry.

## 5.8 Polymer linkage issues [i](#)

There are no chain breaks in this entry.

## 6 Fit of model and data

### 6.1 Protein, DNA and RNA chains

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

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å <sup>2</sup> )	Q<0.9
1	A	1182/1284 (92%)	-0.07	22 (1%) 70 61	118, 194, 243, 306	0
1	B	1182/1284 (92%)	-0.09	25 (2%) 67 57	123, 200, 243, 301	0
All	All	2364/2568 (92%)	-0.08	47 (1%) 68 58	118, 197, 244, 306	0

All (47) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
1	B	963	GLN	5.1
1	B	1199	THR	4.8
1	A	1084	ASP	4.2
1	B	228	TRP	4.1
1	A	574	GLU	4.0
1	A	577	THR	3.5
1	B	1136	VAL	3.3
1	B	1249	GLU	3.3
1	A	1179	ARG	3.1
1	B	85	SER	3.0
1	A	993	ASP	3.0
1	B	1128	ALA	2.9
1	B	1260	LYS	2.9
1	A	554	THR	2.8
1	B	603	VAL	2.8
1	A	961	THR	2.8
1	A	1260	LYS	2.7
1	B	988	SER	2.6
1	A	427	CYS	2.6
1	B	594	ILE	2.5
1	B	597	PHE	2.5
1	B	84	VAL	2.5
1	A	962	GLN	2.5
1	A	1163	THR	2.5

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Mol	Chain	Res	Type	RSRZ
1	A	600	GLY	2.5
1	B	97	ARG	2.5
1	A	424	ASN	2.4
1	B	767	PHE	2.4
1	A	1244	ASN	2.4
1	B	1172	LEU	2.4
1	B	217	ILE	2.3
1	B	1230	LEU	2.3
1	B	524	GLY	2.3
1	A	581	ILE	2.2
1	B	1127	ILE	2.2
1	A	442	PRO	2.2
1	A	107	MET	2.2
1	B	81	VAL	2.2
1	A	423	GLY	2.2
1	A	416	GLY	2.2
1	B	617	ILE	2.1
1	A	1106	ARG	2.1
1	B	1198	ALA	2.1
1	A	1083	TYR	2.1
1	B	962	GLN	2.1
1	B	206	ARG	2.0
1	A	552	GLU	2.0

## 6.2 Non-standard residues in protein, DNA, RNA chains [i](#)

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

## 6.3 Carbohydrates [i](#)

There are no carbohydrates in this entry.

## 6.4 Ligands [i](#)

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

Mol	Type	Chain	Res	Atoms	RSCC	RSR	LLDF	B-factors( $\text{\AA}^2$ )	Q<0.9
2	OJZ	A	6001	36/36	0.64	0.43	2.00	196,196,196,196	0
2	OJZ	B	6002	36/36	0.63	0.41	0.80	196,196,196,196	0

## 6.5 Other polymers [i](#)

There are no such residues in this entry.