



# Full wwPDB X-ray Structure Validation Report ⓘ

Mar 10, 2026 – 06:35 PM UTC

PDB ID : 3HOY / pdb\_00003hoy  
Title : Complete RNA polymerase II elongation complex VI  
Authors : Sydow, J.F.; Brueckner, F.; Cheung, A.C.M.; Damsma, G.E.; Dengl, S.;  
Lehmann, E.; Vassylyev, D.; Cramer, P.  
Deposited on : 2009-06-03  
Resolution : 3.40 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

<https://www.wwpdb.org/validation/2017/XrayValidationReportHelp>

with specific help available everywhere you see the ⓘ symbol.

The types of validation reports are described at

<http://www.wwpdb.org/validation/2017/FAQs#types>.

---

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

MolProbity	:	4-5-2 with Phenix2.0
Mogul	:	2022.3.0, CSD as543be (2022)
Xtriage (Phenix)	:	2.0
EDS	:	3.0
Percentile statistics	:	20250101.v01 (using entries in the PDB archive January 1st 2025)
CCP4	:	9.0.010 (Gargrove)
Density-Fitness	:	1.0.12
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	2.49

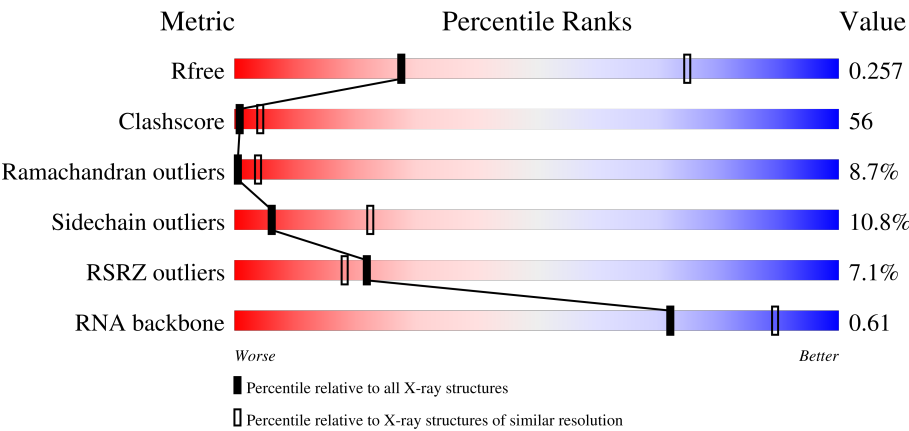
# 1 Overall quality at a glance i

The following experimental techniques were used to determine the structure:

*X-RAY DIFFRACTION*

The reported resolution of this entry is 3.40 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 <sub>free</sub>	180053	1001 (3.44-3.36)
Clashscore	190562	1022 (3.44-3.36)
Ramachandran outliers	187476	1012 (3.44-3.36)
Sidechain outliers	187428	1012 (3.44-3.36)
RSRZ outliers	180081	1001 (3.44-3.36)
RNA backbone	3983	1157 (3.80-3.00)

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 of the lower bar indicate the fraction of residues that contain outliers for  $\geq 3$ , 2, 1 and 0 types of geometric quality criteria respectively. A grey segment represents the fraction of residues that are not modelled. The numeric value for each fraction is indicated below the corresponding segment, with a dot representing fractions  $\leq 5\%$ . 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	1733	<div><div>4%</div><div>24%43%13%•18%</div></div>
2	B	1224	<div><div>7%</div><div>25%50%14%•10%</div></div>
3	C	347	<div><div>%</div><div>20%43%13%•23%</div></div>
4	D	221	<div><div>11%</div><div>28%38%15%19%</div></div>

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
5	E	215	
6	F	155	
7	G	171	
8	H	146	
9	I	122	
10	J	70	
11	K	120	
12	L	70	
13	T	41	
14	N	41	
15	P	20	

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
13	BRU	T	20	-	-	X	-

## 2 Entry composition [i](#)

There are 17 unique types of molecules in this entry. The entry contains 31803 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 DNA-directed RNA polymerase II subunit RPB1.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	A	1419	Total	C	N	O	S	0	0	0
			11166	7036	1953	2115	62			

- Molecule 2 is a protein called DNA-directed RNA polymerase II subunit RPB2.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
2	B	1105	Total	C	N	O	S	0	0	0
			8786	5564	1541	1627	54			

- Molecule 3 is a protein called DNA-directed RNA polymerase II subunit RPB3.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
3	C	266	Total	C	N	O	S	0	0	0
			2095	1317	348	417	13			

There are 30 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
C	-28	MET	-	expression tag	UNP P16370
C	-27	GLY	-	expression tag	UNP P16370
C	-26	SER	-	expression tag	UNP P16370
C	-25	HIS	-	expression tag	UNP P16370
C	-24	HIS	-	expression tag	UNP P16370
C	-23	HIS	-	expression tag	UNP P16370
C	-22	HIS	-	expression tag	UNP P16370
C	-21	HIS	-	expression tag	UNP P16370
C	-20	HIS	-	expression tag	UNP P16370
C	-19	SER	-	expression tag	UNP P16370
C	-18	ASN	-	expression tag	UNP P16370
C	-17	SER	-	expression tag	UNP P16370
C	-16	GLY	-	expression tag	UNP P16370
C	-15	LEU	-	expression tag	UNP P16370

*Continued on next page...*

*Continued from previous page...*

Chain	Residue	Modelled	Actual	Comment	Reference
C	-14	ASN	-	expression tag	UNP P16370
C	-13	ASP	-	expression tag	UNP P16370
C	-12	ILE	-	expression tag	UNP P16370
C	-11	PHE	-	expression tag	UNP P16370
C	-10	GLU	-	expression tag	UNP P16370
C	-9	ALA	-	expression tag	UNP P16370
C	-8	GLN	-	expression tag	UNP P16370
C	-7	LYS	-	expression tag	UNP P16370
C	-6	ILE	-	expression tag	UNP P16370
C	-5	GLU	-	expression tag	UNP P16370
C	-4	TRP	-	expression tag	UNP P16370
C	-3	HIS	-	expression tag	UNP P16370
C	-2	GLU	-	expression tag	UNP P16370
C	-1	ASP	-	expression tag	UNP P16370
C	0	THR	-	expression tag	UNP P16370
C	1	GLY	-	expression tag	UNP P16370

- Molecule 4 is a protein called DNA-directed RNA polymerase II subunit RPB4.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
4	D	178	Total	C	N	O	S	0	0	0
			1365	845	242	276	2			

- Molecule 5 is a protein called DNA-directed RNA polymerases I, II, and III subunit RPABC1.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
5	E	213	Total	C	N	O	S	0	0	0
			1744	1107	308	318	11			

- Molecule 6 is a protein called DNA-directed RNA polymerases I, II, and III subunit RPABC2.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
6	F	87	Total	C	N	O	S	0	0	0
			705	451	119	132	3			

- Molecule 7 is a protein called DNA-directed RNA polymerase II subunit RPB7.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
7	G	171	Total	C	N	O	S	0	0	0
			1340	861	222	249	8			

- Molecule 8 is a protein called DNA-directed RNA polymerases I, II, and III subunit RPABC3.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
8	H	133	Total	C	N	O	S	0	0	0
			1068	673	180	211	4			

- Molecule 9 is a protein called DNA-directed RNA polymerase II subunit RPB9.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
9	I	119	Total	C	N	O	S	0	0	0
			971	596	179	186	10			

- Molecule 10 is a protein called DNA-directed RNA polymerases I, II, and III subunit RPABC5.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
10	J	65	Total	C	N	O	S	0	0	0
			532	339	93	94	6			

- Molecule 11 is a protein called DNA-directed RNA polymerase II subunit RPB11.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
11	K	114	Total	C	N	O	S	0	0	0
			919	590	156	171	2			

- Molecule 12 is a protein called DNA-directed RNA polymerases I, II, and III subunit RPABC4.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
12	L	46	Total	C	N	O	S	0	0	0
			363	224	72	63	4			

- Molecule 13 is a DNA chain called 5'-D(\*CP\*CP\*AP\*AP\*GP\*CP\*TP\*CP\*AP\*AP\*G\*TP\*AP\*CP\*TP\*TP\*AP\*CP\*GP\*CP\*CP\*(BRU)P\*GP\*GP\*TP\*CP\*AP\*TP\*TP\*AP\*CP\*TP\*AP\*GP\*TP\*AP\*CP\*TP\*GP\*CP\*C)-3'.

Mol	Chain	Residues	Atoms						ZeroOcc	AltConf	Trace
13	T	19	Total	Br	C	N	O	P	8	0	0
			382	1	184	64	115	18			

- Molecule 14 is a DNA chain called 5'-D(\*CP\*CP\*GP\*GP\*CP\*AP\*GP\*TP\*AP\*CP\*TP\*AP\*GP\*TP\*AP\*AP\*AP\*CP\*TP\*AP\*GP\*TP\*AP\*TP\*T\*GP\*AP\*AP\*AP\*GP\*TP\*AP\*CP\*TP\*TP\*GP\*AP\*GP\*CP\*TP\*T)-3'.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
14	N	7	Total	C	N	O	P	11	0	0
			145	70	32	37	6			

- Molecule 15 is a RNA chain called 5'-R(\*UP\*AP\*UP\*AP\*UP\*GP\*CP\*A\*UP\*AP\*AP\*AP\*GP\*AP\*CP\*CP\*AP\*GP\*GP\*A)-3'.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
15	P	10	Total	C	N	O	P	0	0	0
			213	97	43	64	9			

- Molecule 16 is ZINC ION (CCD ID: ZN) (formula: Zn).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
16	A	2	Total	Zn	0	0
			2	2		
16	B	1	Total	Zn	0	0
			1	1		
16	C	1	Total	Zn	0	0
			1	1		
16	I	2	Total	Zn	0	0
			2	2		
16	J	1	Total	Zn	0	0
			1	1		
16	L	1	Total	Zn	0	0
			1	1		

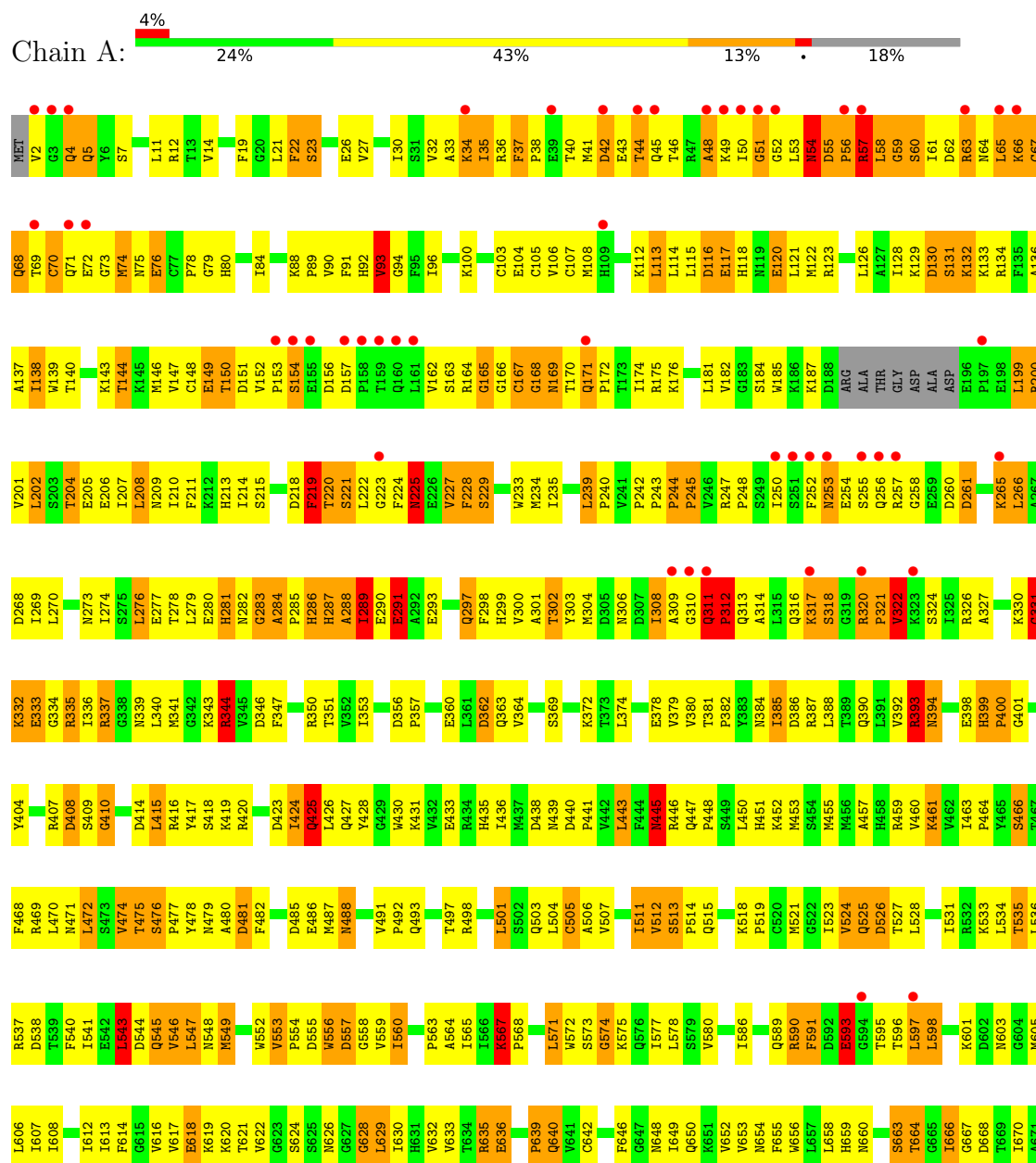
- Molecule 17 is MAGNESIUM ION (CCD ID: MG) (formula: Mg).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
17	A	1	Total	Mg	0	0
			1	1		

### 3 Residue-property plots

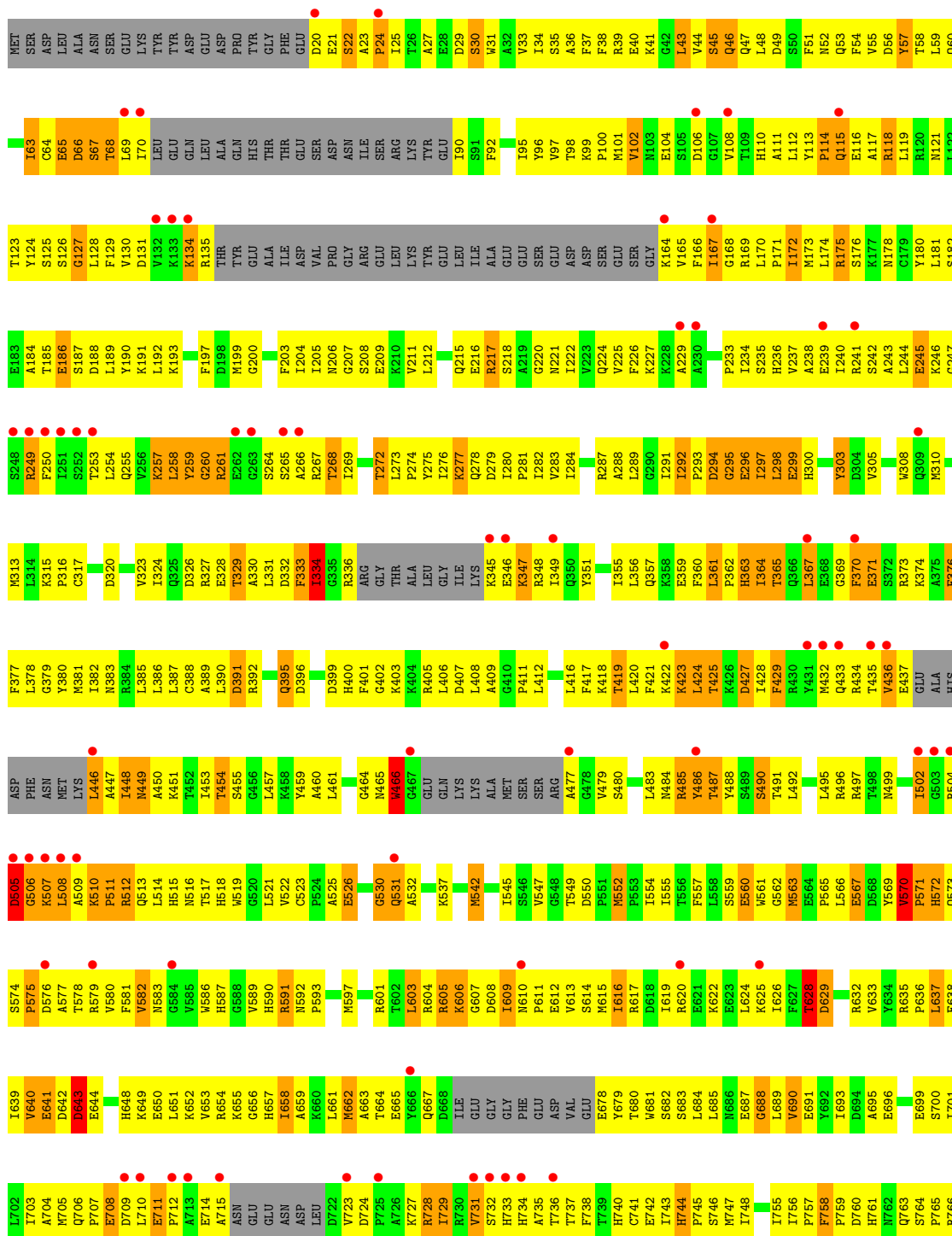
These plots are drawn for all protein, RNA, DNA and oligosaccharide chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and electron density. Residues are color-coded according to the number of geometric quality criteria for which they contain at least one outlier: green = 0, yellow = 1, orange = 2 and red = 3 or more. A red dot above a residue indicates a poor fit to the electron density ( $RSRZ > 2$ ). Stretches of 2 or more consecutive residues without any outlier are shown as a green connector. Residues present in the sample, but not in the model, are shown in grey.

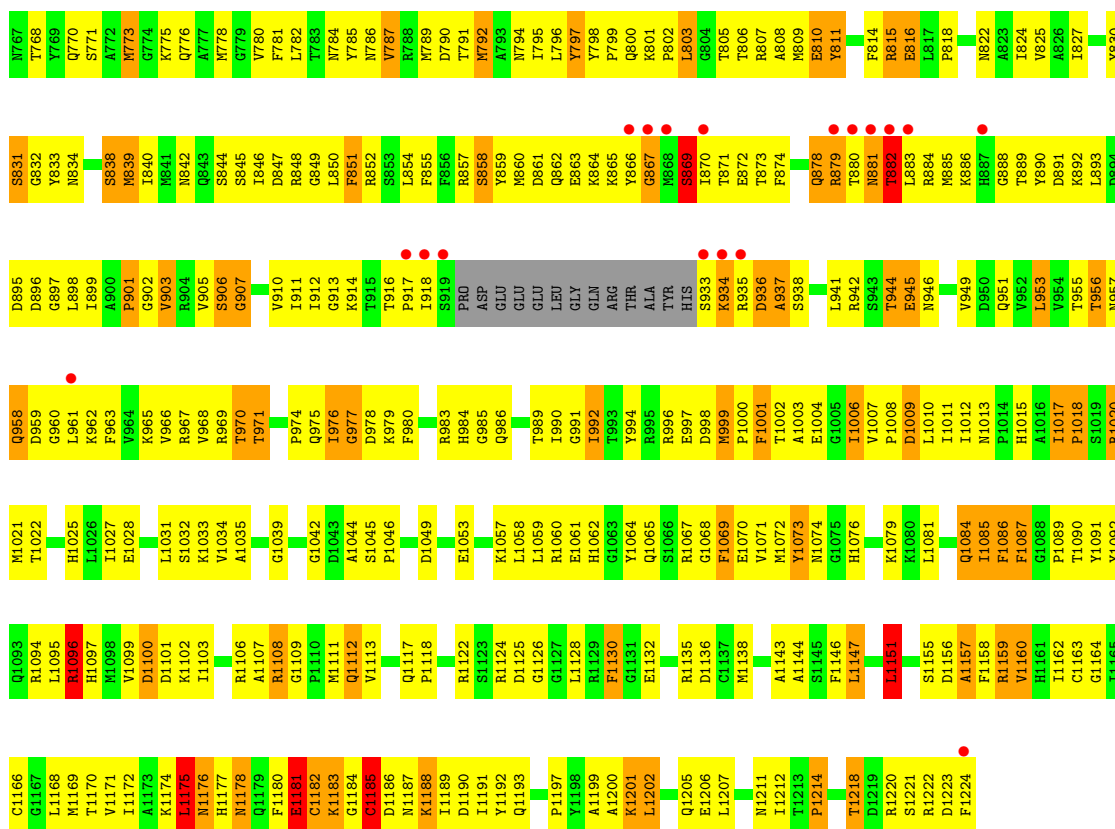
#### • Molecule 1: DNA-directed RNA polymerase II subunit RPB1



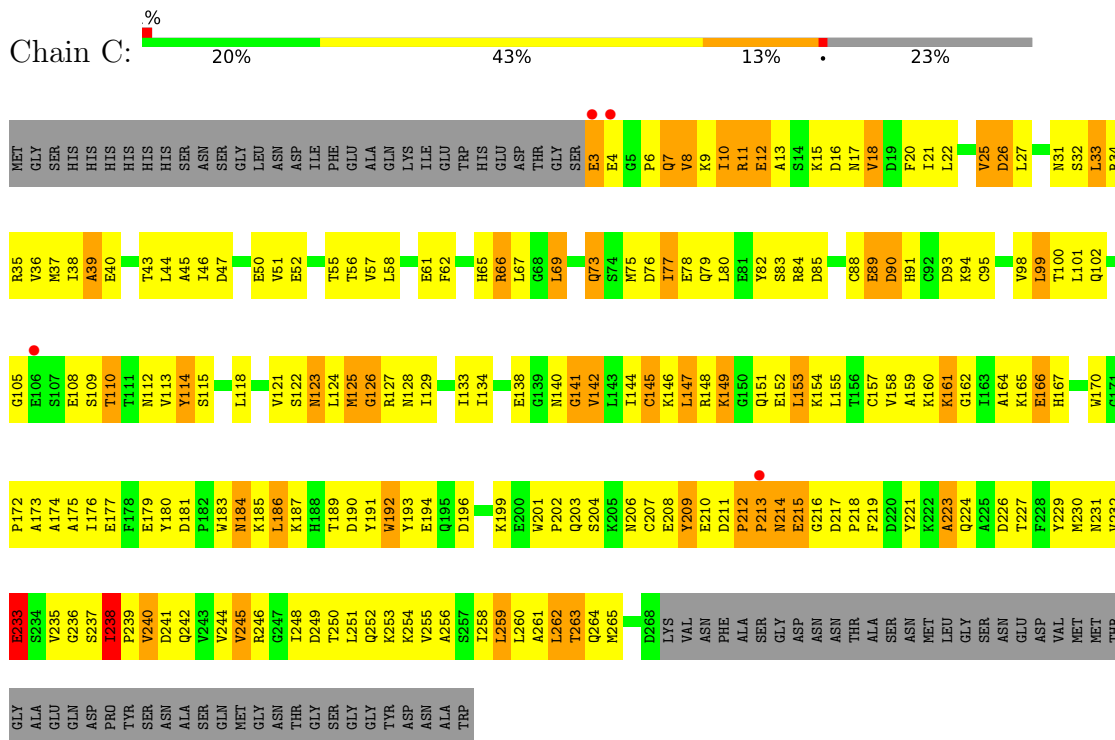


SER	PRO	ALA	M1454	M1390	I1322	L1260	E1139	E1074	I1007	L936	G885	N802	V735	D672
THR	THR	ASP	P1465	M1393	D1323	K1261	H1140	P1075	Q1008	V937	F866	S803	N736	G673
THR	THR	GLY	GLU	T1394	T1141	K1262	T1141	A1076	M1009	L737	F867	S804	N737	P674
SER	SER	GLU	GLN	T1325	T1142	K1263	T1142		M1010	K941	F868	L805	K738	T675
PRO	PRO	ALA	ILE	I1327	L1143	N1203	L1143	M1079	Q1011	L943	G869	R806	D739	M676
THR	THR	THR	THR	Y1328	D1204	N1265	S1144	T1080	L1014	L740	E870	L808	L741	R677
SER	SER	GLU	GLU	T1329	K1205	T1266	S1145	L1081	A1014	N741	D871	T809	N742	E678
PRO	PRO	PRO	ILE	N1330	D1206	L1268	V1146	ASN	V1015	V946	G872	P810	N743	I679
SER	SER	PHE	GLU	N1331	T1207		T1147	THR	T1016	F947	M873	Q811	F743	T682
THR	THR	GLY	ASP	F1332	T1208		I1148	PHE	L1017	V948	D874	Q812	K744	F683
SER	SER	ALA	GLY	I1333	M1209		A1149	HIS	F1018	G950	A875	E812	Q745	A684
PRO	PRO	GLY	GLN	I1334	G1210		S1150	PHE	C1019	V954	A876	F813	M746	E685
THR	THR	ASP	ASP	E1403	G1211		E1151	ALA	C1020	W954	H877	F814	V747	A686
SER	SER	GLY	GLY	E1404	V1212		I1152	GLY	L1021	P955	L878	F815	M748	K687
THR	THR	GLY	GLY	M1336	G1213		Y1153	VAL	S1024	P956	E879	H816	A749	K688
PRO	PRO	ALA	GLY	E1337	E1214		Y1154	ALA	R1025	L956	K880	A817	G750	F689
SER	SER	PRO	VAL	V1338	R1215		D1155	S1091	L1032	S751	M818	G819	P957	V690
THR	THR	THR	THR	L1339	R1216		D1156	K1092	L1033	K752	G888	G820	G753	L691
SER	SER	SER	PRO	G1340	K1217		D1157	K1093	Q1034	S754	L883	R821	G754	D692
PRO	PRO	PRO	TYR	I1341	Q1218		P1158	V1094	R1029	R961	T885	E822	S755	V693
THR	THR	GLY	SER	E1342	T1219		P1159	T1095	R1030	R962	K866	E823	F756	T694
SER	SER	GLY	ASN	R1345	F1220		S1096	S1096	V1031	I963	G887	I825	T756	K695
PRO	PRO	GLY	GLU	V1282	K1221		T1161	G1097	L1032	I964	G888	T826	N757	E696
SER	SER	VAL	SER	M1284	N1222		V1162	V1098	Q1034	Q965	S889	R827	I758	A697
THR	THR	SER	GLY	M1285	D1223		I1163	R1100	Y1035	A967	R886	A828	A759	Q698
SER	SER	SER	LEU	K1286	L1224		P1164	L1101	R1036	Q968	H887	R829	A763	A699
PRO	PRO	PRO	VAL	Y1287	F1225		E1165	L1102	L1037	Q969	R888	T831	C764	N700
THR	THR	GLY	ASN	D1288	V1226		L1166	K1102	T1038	T970	G889	T832	G765	L701
SER	SER	PHE	ALA	K1289	E1227		E1167	E1103	T1038	T971	D900	A832	G766	
PRO	PRO	SER	ASP	K1290	W1228		K1104	L1104	K1038		D900	F833	G767	K705
SER	SER	PRO	LEU	K1291	S1229		I1169	L1105	Q1040	D974	L902	T834	Q768	H706
THR	THR	ASP	ASP	E1292	E1230		I1170	N1106	A1041	H975	N903	G895	G769	G707
SER	SER	VAL	VAL	P1292	D1231		Q1171	K1109	F1042	T976	T904	R836	V770	M708
PRO	PRO	PRO	LYS	S1293	M1232		H1172	M1110	D1043	K977	D905	I837	E771	T709
THR	THR	THR	ASP	T1295	D1233		H1173	M1111	V1045	P978	Q838	R839	G772	L710
SER	SER	TYR	GLU	G1296	F1174		S1175	K1112	L1046	S979	H906	R840	K773	R711
PRO	PRO	LEU	LEU	E1297	L1176		L1176	T1113	S1047	D980	P910	L841	R774	E712
SER	SER	MET	MET	Y1298	L1236		LEU	P1114	M1048	T982	L913	L842		S713
THR	THR	PHE	PHE	V1299	I1237		ASP	S1115	I1049	T982	E914	K843	F779	F714
SER	SER	SER	SER	K1300	I1238		GLU	L1116	E1050	I983	S915	A844	V780	E715
PRO	PRO	PRO	PRO	E1301	C1240		GLU	T1117	Q1052	K984	G916	L845	D781	D716
THR	THR	ALA	LEU	P1302	R1241		ALA	Y1118	F1053	D985		E846	R782	N717
SER	SER	VAL	VAL	E1303	V1242		GLU	Y1119	L1054	P987		L784	T783	V718
PRO	PRO	SER	ASP	V1304	V1243		GLN	L1120	R1055	L988		V850	L784	V719
SER	SER	PRO	SER	V1305	R1244		ASP	P1122	S1056	G989		H851	H786	R720
THR	THR	GLY	GLY	L1306	PRO		SER	E1121	V1057	V990		D922	F787	L722
SER	SER	PRO	ASN	E1307	LYS		PHE	K1123	Y1058	Q994		L923	S788	N723
THR	THR	THR	ASP	T1308	SER		LEU	H1124	V1059			D853	K789	E724
SER	SER	TYR	ALA	D1309	ASP		Q1187	A1125	H1059	L998		M854	A725	A725
PRO	PRO	TYR	MET	G1310	ALA		Q1188	A1126	P1060	V999		T855	Y792	R726
SER	SER	PRO	ALA	V1311	GLU		S1189	D1127	G1061	L998		Q926	F792	D727
THR	THR	THR	GLY	N1312	THR		P1190	Q1128	E1062	V999		T856	S793	K728
SER	SER	GLY	GLY	L1313	GLU		W1191	L1128	M1062	L1000		L928	P794	A729
PRO	PRO	PRO	THR	S1314	GLU		L1192	Q1130	V1064	R1001		L929	E795	G730
THR	THR	PRO	PHE	E1315	A1254		L1193			G1002		D930	S859	R731
SER	SER	THR	THR	V1316	E1255		R1194	I1134	L1067	K1003		E931	S796	
SER	SER	ALA	ALA	M1317	E1256		L1195			N1004		E932	K797	
PRO	PRO	TYR	TYR	T1318	D1257		E1196	A1137	I1072	E1005		V863	V800	L732
SER	SER	PRO	GLY	H1387	H1258		L1197		G1073	I1006		I864	E801	E734
THR	THR	THR	GLY	F1389	M1259		D1198	I1138						

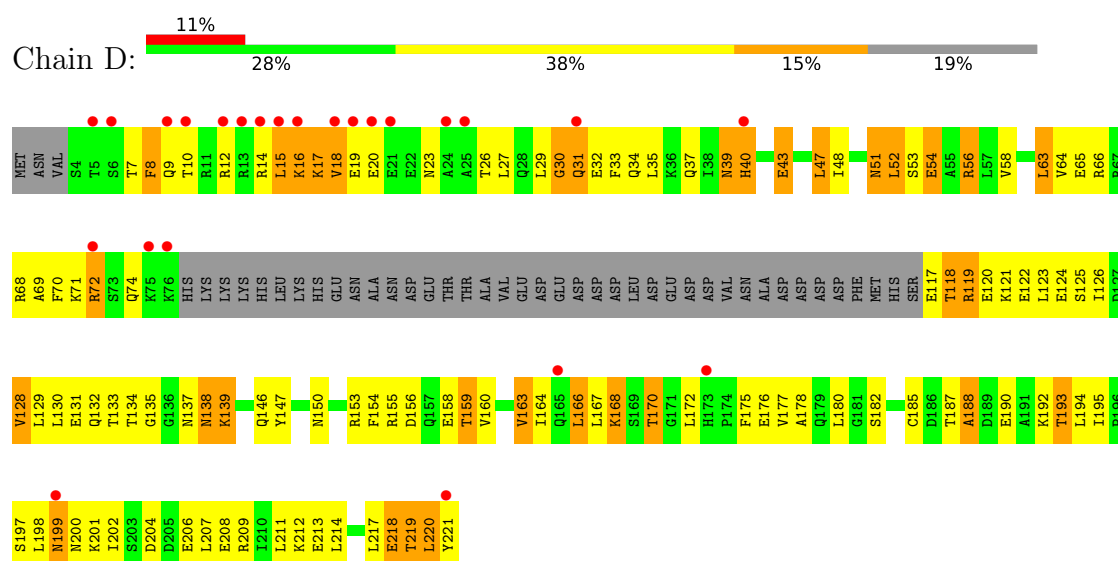




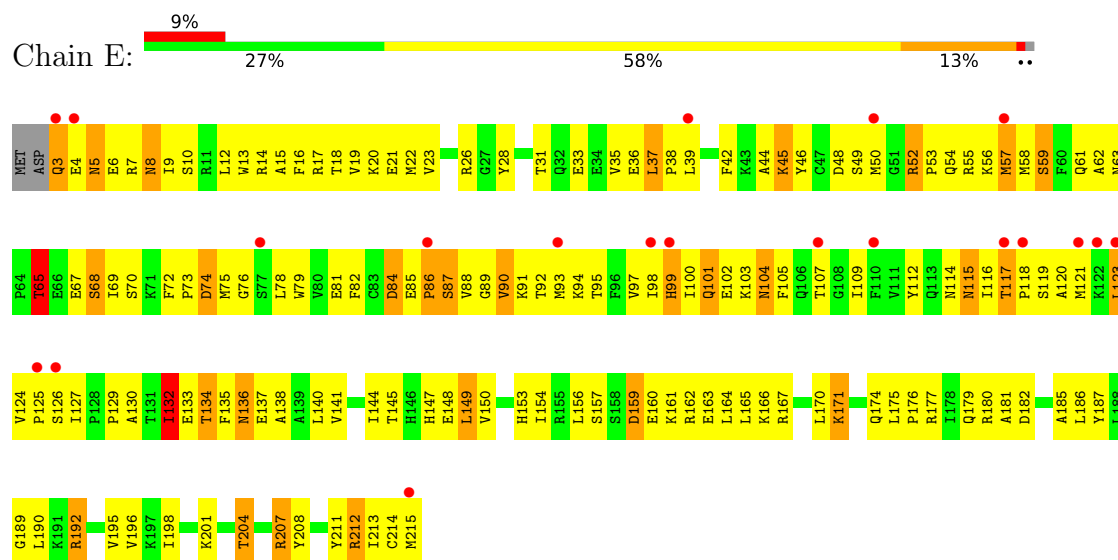
- Molecule 3: DNA-directed RNA polymerase II subunit RPB3



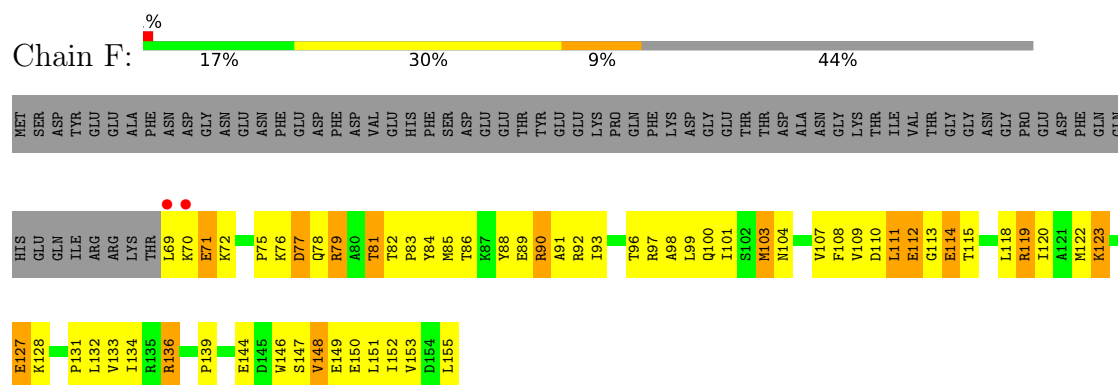
- Molecule 4: DNA-directed RNA polymerase II subunit RPB4



- Molecule 5: DNA-directed RNA polymerases I, II, and III subunit RPABC1

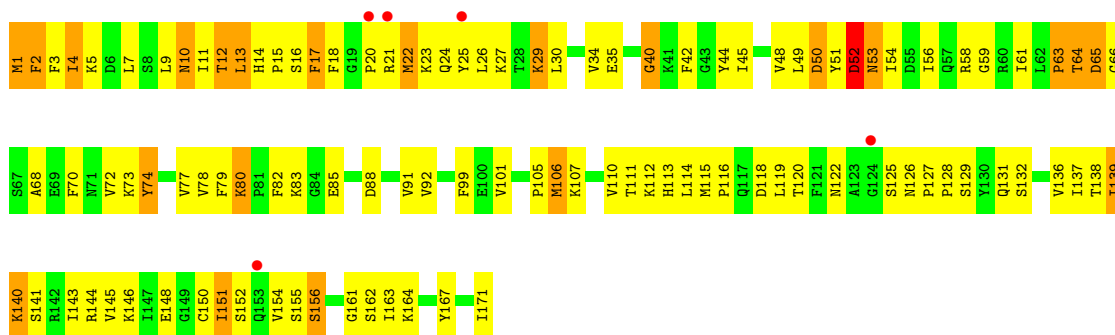


- Molecule 6: DNA-directed RNA polymerases I, II, and III subunit RPABC2

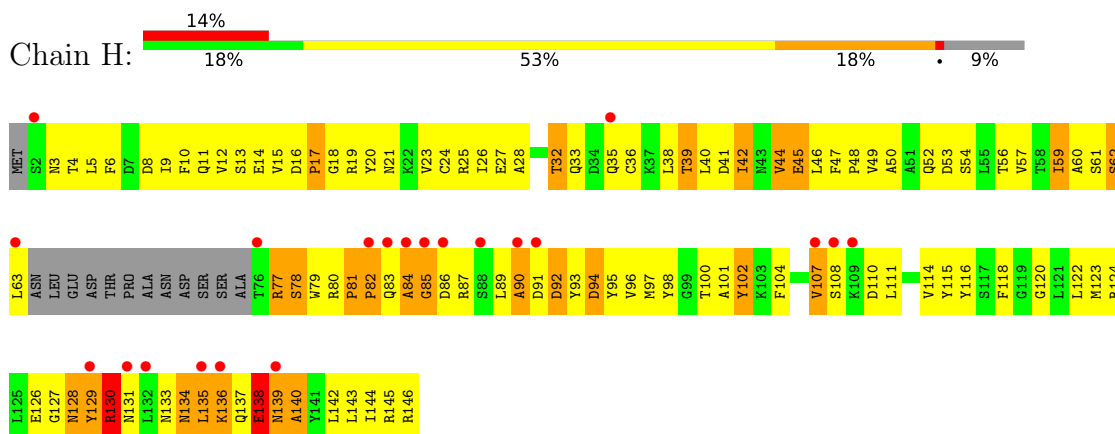


- Molecule 7: DNA-directed RNA polymerase II subunit RPB7

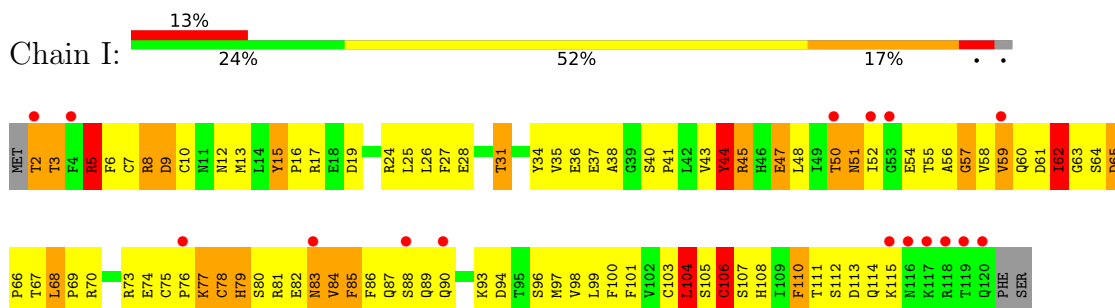




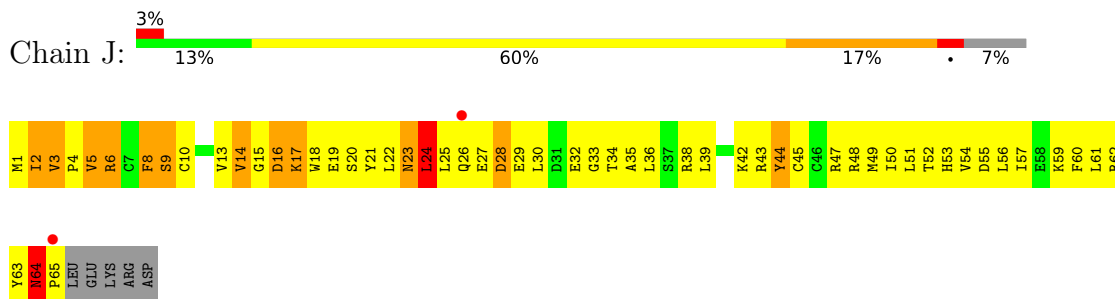
- Molecule 8: DNA-directed RNA polymerases I, II, and III subunit RPABC3



- Molecule 9: DNA-directed RNA polymerase II subunit RPB9



- Molecule 10: DNA-directed RNA polymerases I, II, and III subunit RPABC5

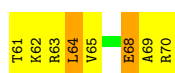
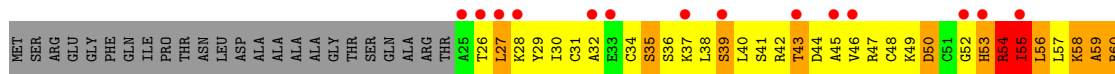


- Molecule 11: DNA-directed RNA polymerase II subunit RPB11

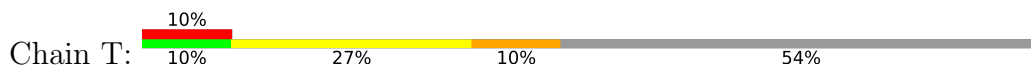




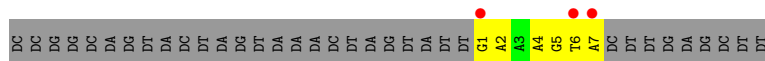
- Molecule 12: DNA-directed RNA polymerases I, II, and III subunit RPABC4



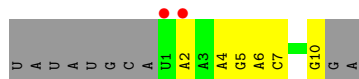
- Molecule 13: 5'-D(\*CP\*CP\*AP\*AP\*GP\*CP\*TP\*CP\*AP\*AP\*G\*TP\*AP\*CP\*TP\*TP\*AP\*CP\*GP\*CP\*CP\*(BRU)P\*GP\*GP\*TP\*CP\*AP\*TP\*TP\*AP\*CP\*TP\*AP\*GP\*TP\*AP\*CP\*TP\*GP\*CP\*C)-3'



- Molecule 14: 5'-D(\*CP\*CP\*GP\*GP\*CP\*AP\*GP\*TP\*AP\*CP\*TP\*AP\*GP\*TP\*AP\*AP\*AP\*CP\*TP\*AP\*GP\*TP\*AP\*TP\*T\*GP\*AP\*AP\*AP\*GP\*TP\*AP\*CP\*TP\*TP\*GP\*AP\*GP\*CP\*TP\*T)-3'



- Molecule 15: 5'-R(\*UP\*AP\*UP\*AP\*UP\*GP\*CP\*A\*UP\*AP\*AP\*AP\*GP\*AP\*CP\*CP\*AP\*GP\*GP\*A)-3'



## 4 Data and refinement statistics

Property	Value	Source
Space group	C 2 2 21	Depositor
Cell constants a, b, c, $\alpha$ , $\beta$ , $\gamma$	222.14Å 392.69Å 282.38Å 90.00° 90.00° 90.00°	Depositor
Resolution (Å)	50.00 – 3.40 50.00 – 3.40	Depositor EDS
% Data completeness (in resolution range)	99.9 (50.00-3.40) 99.9 (50.00-3.40)	Depositor EDS
$R_{merge}$	(Not available)	Depositor
$R_{sym}$	(Not available)	Depositor
$\langle I/\sigma(I) \rangle$ <sup>1</sup>	3.88 (at 3.40Å)	Xtriage
Refinement program	CNS 1.2	Depositor
R, $R_{free}$	0.216 , 0.254 0.216 , 0.257	Depositor DCC
$R_{free}$ test set	3325 reflections (1.98%)	wwPDB-VP
Wilson B-factor (Å <sup>2</sup> )	89.1	Xtriage
Anisotropy	0.021	Xtriage
Bulk solvent $k_{sol}$ (e/Å <sup>3</sup> ), $B_{sol}$ (Å <sup>2</sup> )	0.34 , 88.5	EDS
L-test for twinning <sup>2</sup>	$\langle  L  \rangle = 0.48$ , $\langle L^2 \rangle = 0.31$	Xtriage
Estimated twinning fraction	0.013 for 1/2*h-1/2*k,-3/2*h-1/2*k,-l 0.018 for 1/2*h+1/2*k,3/2*h-1/2*k,-l	Xtriage
$F_o, F_c$ correlation	0.91	EDS
Total number of atoms	31803	wwPDB-VP
Average B, all atoms (Å <sup>2</sup> )	75.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 2.04% 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, 0.333 respectively for untwinned datasets, and 0.375, 0.2 for perfectly twinned datasets.

## 5 Model quality

### 5.1 Standard geometry

Bond lengths and bond angles in the following residue types are not validated in this section: ZN, MG, BRU

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	0.65	1/11365 (0.0%)	1.17	111/15367 (0.7%)
2	B	0.62	2/8957 (0.0%)	1.11	66/12078 (0.5%)
3	C	0.67	0/2133	1.18	13/2891 (0.4%)
4	D	0.60	0/1374	1.14	10/1849 (0.5%)
5	E	0.54	0/1780	1.13	15/2395 (0.6%)
6	F	0.74	0/717	1.30	7/967 (0.7%)
7	G	0.65	0/1368	1.15	11/1844 (0.6%)
8	H	0.50	0/1086	1.10	8/1470 (0.5%)
9	I	0.51	0/989	1.05	9/1331 (0.7%)
10	J	0.63	0/541	1.21	8/727 (1.1%)
11	K	0.60	0/937	1.02	4/1265 (0.3%)
12	L	0.65	0/365	1.14	2/485 (0.4%)
13	T	0.38	0/403	0.88	1/617 (0.2%)
14	N	0.42	0/164	0.73	0/252
15	P	0.43	0/239	0.79	0/371
All	All	0.62	3/32418 (0.0%)	1.13	265/43909 (0.6%)

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

Mol	Chain	#Chirality outliers	#Planarity outliers
13	T	0	3

All (3) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	1170	THR	CA-CB	-5.37	1.45	1.53
1	A	55	ASP	CA-C	-5.24	1.46	1.52
2	B	968	VAL	CA-CB	-5.01	1.48	1.54



All (265) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	D	26	THR	N-CA-C	-15.91	89.31	113.02
6	F	71	GLU	N-CA-C	-13.74	95.85	113.17
1	A	452	LYS	N-CA-C	-13.65	96.48	111.36
2	B	1185	CYS	N-CA-C	-11.62	97.54	114.39
5	E	171	LYS	N-CA-C	-10.86	94.32	109.95
2	B	134	LYS	N-CA-C	10.72	122.97	111.28
2	B	507	LYS	N-CA-C	-10.08	101.18	112.57
3	C	39	ALA	N-CA-C	9.85	127.81	114.12
8	H	45	GLU	N-CA-C	-9.85	101.02	113.43
12	L	68	GLU	N-CA-C	-9.82	97.57	110.53
2	B	427	ASP	N-CA-C	-9.71	99.77	112.68
2	B	423	LYS	N-CA-C	-9.65	101.63	113.50
5	E	150	VAL	CA-C-N	9.59	129.53	119.85
5	E	150	VAL	C-N-CA	9.59	129.53	119.85
3	C	162	GLY	N-CA-C	9.57	121.05	111.95
2	B	296	GLU	N-CA-C	-9.56	101.38	113.23
1	A	970	THR	N-CA-C	-9.33	102.41	113.88
2	B	934	LYS	N-CA-C	9.17	122.13	109.11
1	A	1445	ILE	CB-CA-C	-9.10	99.94	110.96
3	C	108	GLU	N-CA-C	-8.97	102.49	112.72
2	B	825	VAL	N-CA-C	8.83	120.47	108.11
1	A	567	LYS	CA-C-N	-8.72	108.93	119.84
1	A	567	LYS	C-N-CA	-8.72	108.93	119.84
1	A	63	ARG	N-CA-C	-8.51	99.50	111.24
5	E	52	ARG	CA-C-N	8.42	128.94	119.93
5	E	52	ARG	C-N-CA	8.42	128.94	119.93
2	B	297	ILE	N-CA-C	-8.38	103.66	111.45
2	B	570	VAL	CA-C-N	8.27	130.17	119.84
2	B	570	VAL	C-N-CA	8.27	130.17	119.84
9	I	31	THR	N-CA-C	-8.08	105.41	114.62
1	A	472	LEU	N-CA-C	8.06	119.70	111.07
2	B	851	PHE	N-CA-C	8.03	122.43	112.47
5	E	150	VAL	N-CA-C	7.99	114.83	107.56
1	A	513	SER	CA-C-N	7.93	128.00	119.28
1	A	513	SER	C-N-CA	7.93	128.00	119.28
8	H	85	GLY	N-CA-C	-7.86	102.82	113.27
6	F	77	ASP	N-CA-C	-7.85	99.51	110.35
1	A	1404	GLU	N-CA-C	7.83	123.37	112.72
1	A	56	PRO	N-CA-C	-7.83	96.34	112.47
10	J	5	VAL	N-CA-C	-7.80	98.84	109.37
2	B	628	THR	N-CA-C	-7.73	104.00	113.50
1	A	481	ASP	N-CA-C	-7.70	98.61	109.69

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	363	HIS	N-CA-C	-7.70	97.79	109.79
1	A	398	GLU	N-CA-C	-7.68	100.62	110.53
1	A	1395	GLY	N-CA-C	7.64	120.72	111.93
1	A	288	ALA	N-CA-C	-7.61	105.17	114.75
1	A	466	SER	N-CA-C	7.56	120.98	112.97
1	A	511	ILE	N-CA-C	7.52	118.05	110.23
1	A	1310	GLY	N-CA-C	-7.51	101.68	111.37
1	A	1113	THR	CA-C-N	-7.49	110.47	119.84
1	A	1113	THR	C-N-CA	-7.49	110.47	119.84
1	A	1376	THR	N-CA-C	7.47	122.97	113.55
4	D	31	GLN	N-CA-C	-7.42	103.21	111.82
1	A	311	GLN	N-CA-C	7.37	126.10	109.81
1	A	117	GLU	N-CA-C	-7.36	104.18	113.01
1	A	950	GLY	N-CA-C	-7.31	104.40	114.64
4	D	188	ALA	N-CA-C	-7.29	103.36	111.82
9	I	104	LEU	N-CA-C	-7.26	104.43	113.28
5	E	5	ASN	N-CA-C	-7.25	104.30	113.72
2	B	43	LEU	N-CA-C	7.21	120.98	111.75
1	A	1256	GLU	N-CA-C	7.21	121.66	113.01
3	C	238	ILE	CA-C-N	7.20	128.33	119.98
3	C	238	ILE	C-N-CA	7.20	128.33	119.98
3	C	7	GLN	N-CA-C	7.18	120.36	109.23
2	B	526	GLU	N-CA-C	7.16	120.77	109.39
10	J	44	TYR	N-CA-C	7.11	121.59	112.34
1	A	710	LEU	N-CA-C	-7.08	103.56	111.28
1	A	1406	VAL	N-CA-C	7.03	118.66	111.00
1	A	847	ASP	N-CA-C	7.01	121.54	113.19
3	C	192	TRP	N-CA-C	-6.99	101.12	110.55
1	A	60	SER	N-CA-C	6.99	117.25	108.45
2	B	555	ILE	N-CA-C	-6.90	104.13	110.82
1	A	289	ILE	N-CA-C	-6.89	103.48	111.00
1	A	227	VAL	CB-CA-C	-6.88	103.63	111.55
1	A	165	GLY	N-CA-C	-6.88	103.32	112.82
9	I	68	LEU	CA-C-N	6.88	127.05	120.31
9	I	68	LEU	C-N-CA	6.88	127.05	120.31
2	B	640	VAL	N-CA-C	6.87	117.72	111.81
1	A	242	PRO	CA-C-N	6.87	127.46	120.38
1	A	242	PRO	C-N-CA	6.87	127.46	120.38
2	B	127	GLY	N-CA-C	6.87	123.24	111.15
2	B	1001	PHE	N-CA-C	6.85	120.14	109.52
2	B	1009	ASP	N-CA-C	-6.83	105.23	113.97
1	A	513	SER	N-CA-C	6.80	119.69	110.31

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	978	ASP	N-CA-C	6.75	119.53	110.35
1	A	1209	MET	N-CA-C	-6.70	103.98	111.28
2	B	1177	HIS	N-CA-C	-6.68	105.52	113.21
1	A	998	LEU	N-CA-C	6.68	119.47	109.25
1	A	1072	ILE	N-CA-C	-6.66	105.26	111.45
4	D	56	ARG	N-CA-C	-6.65	103.51	111.69
10	J	9	SER	N-CA-C	6.64	122.26	111.37
5	E	149	LEU	CA-C-N	-6.58	118.13	122.60
5	E	149	LEU	C-N-CA	-6.58	118.13	122.60
7	G	141	SER	N-CA-C	6.58	119.91	110.24
2	B	888	GLY	N-CA-C	6.53	119.52	112.33
2	B	896	ASP	N-CA-C	-6.52	105.31	113.20
2	B	395	GLN	N-CA-C	-6.51	101.94	110.53
3	C	114	TYR	N-CA-C	6.50	120.12	109.85
4	D	72	ARG	N-CA-C	-6.47	104.65	112.54
1	A	677	ARG	N-CA-C	-6.42	103.98	110.97
1	A	1311	VAL	N-CA-C	6.41	117.35	108.12
1	A	507	VAL	CB-CA-C	-6.41	107.61	113.70
2	B	609	ILE	N-CA-C	-6.40	98.52	107.80
2	B	46	GLN	N-CA-C	6.29	118.95	111.33
8	H	110	ASP	N-CA-C	-6.29	100.08	109.83
1	A	1403	GLU	N-CA-C	6.29	124.19	110.80
1	A	445	ASN	N-CA-C	6.28	118.69	108.76
1	A	535	THR	N-CA-C	6.26	119.04	111.40
1	A	1237	ILE	N-CA-C	6.23	117.33	108.42
4	D	8	PHE	N-CA-C	6.22	124.06	110.80
1	A	308	ILE	N-CA-C	6.20	116.81	110.05
2	B	606	LYS	N-CA-C	-6.19	104.45	112.68
1	A	393	ARG	N-CA-C	-6.15	104.49	111.07
2	B	827	ILE	CB-CA-C	-6.13	106.36	113.22
2	B	1130	PHE	N-CA-C	-6.13	96.46	107.98
1	A	204	THR	N-CA-C	-6.12	104.24	111.03
1	A	219	PHE	N-CA-C	-6.07	97.86	110.80
1	A	291	GLU	N-CA-C	-6.07	104.74	111.36
1	A	321	PRO	N-CA-C	6.07	121.81	113.98
2	B	208	SER	N-CA-C	6.05	119.94	110.32
2	B	1084	GLN	N-CA-C	-6.04	101.82	110.59
1	A	229	SER	N-CA-C	6.03	117.84	107.28
7	G	52	ASP	N-CA-C	6.01	120.15	112.34
3	C	172	PRO	N-CA-C	-6.01	106.21	114.98
2	B	1201	LYS	N-CA-C	-6.00	104.06	111.33
1	A	266	LEU	N-CA-C	-5.99	104.09	111.40

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1151	LEU	N-CA-C	5.98	118.58	111.71
1	A	1005	GLU	N-CA-C	5.97	117.79	111.28
2	B	945	GLU	N-CA-C	5.97	117.59	110.19
1	A	683	ILE	N-CA-C	-5.95	104.83	110.42
5	E	63	ASN	N-CA-C	5.93	119.18	110.10
1	A	1339	LEU	N-CA-C	5.93	120.36	113.18
2	B	858	SER	N-CA-C	5.93	118.06	108.34
2	B	977	GLY	N-CA-C	5.92	121.19	114.67
1	A	1452	LYS	N-CA-C	-5.92	104.17	111.75
3	C	212	PRO	CA-C-N	5.91	127.23	119.84
3	C	212	PRO	C-N-CA	5.91	127.23	119.84
8	H	136	LYS	N-CA-C	-5.90	103.87	113.19
2	B	903	VAL	N-CA-C	5.89	117.94	109.51
1	A	78	PRO	N-CA-C	-5.89	100.33	112.47
1	A	732	LEU	N-CA-C	-5.85	104.59	110.97
7	G	83	LYS	N-CA-C	-5.85	102.25	110.50
7	G	65	ASP	N-CA-C	-5.85	102.11	110.59
10	J	3	VAL	CB-CA-C	-5.82	104.61	110.89
1	A	999	VAL	N-CA-C	-5.80	107.20	111.90
1	A	225	ASN	N-CA-C	5.80	117.58	107.49
4	D	39	ASN	N-CA-C	5.77	118.19	110.35
5	E	63	ASN	CA-C-N	5.76	127.04	119.84
5	E	63	ASN	C-N-CA	5.76	127.04	119.84
1	A	1059	HIS	N-CA-C	5.75	117.23	109.24
1	A	344	ARG	N-CA-C	-5.75	101.97	110.48
2	B	1013	ASN	N-CA-C	5.74	116.88	109.65
2	B	936	ASP	N-CA-C	5.73	117.72	110.33
1	A	331	GLY	N-CA-C	5.71	126.71	113.18
1	A	816	HIS	N-CA-C	-5.70	105.16	111.71
4	D	51	ASN	N-CA-C	-5.69	102.10	110.52
1	A	1155	ASP	CA-C-N	5.67	125.77	119.87
1	A	1155	ASP	C-N-CA	5.67	125.77	119.87
1	A	219	PHE	CB-CA-C	-5.65	99.18	110.42
2	B	1184	GLY	N-CA-C	-5.63	107.20	113.79
9	I	83	ASN	N-CA-C	5.63	117.95	109.23
1	A	830	LYS	N-CA-C	-5.62	106.26	113.01
10	J	64	ASN	N-CA-C	5.61	122.21	109.81
4	D	10	THR	N-CA-C	5.60	117.06	109.11
2	B	971	THR	N-CA-C	-5.60	100.58	109.59
1	A	1366	ARG	N-CA-C	5.59	118.09	111.33
5	E	159	ASP	N-CA-C	-5.59	105.25	112.68
11	K	68	PHE	N-CA-C	5.58	118.34	109.24

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	132	LYS	N-CA-C	5.58	117.44	111.36
1	A	505	CYS	N-CA-C	5.57	119.38	112.59
7	G	29	LYS	N-CA-C	-5.56	105.13	111.14
2	B	1168	LEU	N-CA-C	5.54	118.72	110.52
1	A	875	ALA	N-CA-C	5.54	118.03	111.33
1	A	1405	THR	N-CA-C	5.54	122.59	110.80
2	B	637	LEU	N-CA-C	5.53	118.24	109.50
1	A	1207	LEU	N-CA-C	5.53	117.59	109.24
2	B	292	ILE	N-CA-C	5.53	120.82	108.88
6	F	136	ARG	N-CA-C	5.53	117.31	108.41
2	B	882	THR	N-CA-C	5.52	122.56	110.80
5	E	118	PRO	N-CA-C	-5.52	106.66	113.84
8	H	16	ASP	CA-C-N	5.52	126.74	119.84
8	H	16	ASP	C-N-CA	5.52	126.74	119.84
1	A	228	PHE	N-CA-C	5.51	120.12	112.90
11	K	55	LYS	N-CA-C	-5.51	106.87	113.21
1	A	1076	ALA	N-CA-C	-5.50	106.57	113.28
12	L	58	LYS	N-CA-C	5.50	119.15	111.56
2	B	1166	CYS	N-CA-C	-5.49	100.73	109.96
6	F	91	ALA	N-CA-C	-5.49	105.30	111.28
2	B	976	ILE	N-CA-C	5.48	120.74	109.34
7	G	140	LYS	N-CA-C	5.45	118.14	111.82
7	G	22	MET	N-CA-C	-5.44	105.45	112.68
11	K	20	LYS	N-CA-C	-5.43	98.70	108.48
3	C	232	VAL	N-CA-C	5.42	115.07	107.37
2	B	1085	ILE	N-CA-C	5.41	115.91	108.12
6	F	148	VAL	N-CA-C	-5.41	104.10	111.89
1	A	983	ILE	N-CA-C	-5.38	104.50	112.04
2	B	334	ILE	N-CA-C	-5.38	98.15	109.34
11	K	2	ASN	N-CA-C	-5.37	105.01	113.02
10	J	3	VAL	N-CA-C	5.37	114.21	108.95
1	A	239	LEU	N-CA-C	5.34	117.15	109.04
1	A	750	GLY	N-CA-C	-5.32	107.44	115.32
1	A	281	HIS	N-CA-C	-5.32	106.17	113.30
8	H	130	ARG	N-CA-C	-5.30	103.64	111.81
1	A	23	SER	N-CA-C	-5.30	103.36	109.93
2	B	773	MET	N-CA-C	5.29	116.86	111.14
2	B	1086	PHE	N-CA-C	-5.28	102.57	110.23
2	B	347	LYS	N-CA-C	-5.28	105.17	111.03
1	A	55	ASP	CA-C-N	5.28	126.44	119.84
1	A	55	ASP	C-N-CA	5.28	126.44	119.84
1	A	1104	ILE	N-CA-C	5.27	115.71	110.23

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	869	SER	N-CA-C	5.27	122.02	110.80
1	A	1422	ARG	N-CA-C	-5.26	106.63	113.16
2	B	838	SER	N-CA-C	-5.26	101.08	109.23
1	A	629	LEU	N-CA-C	-5.26	105.55	111.28
7	G	129	SER	N-CA-C	5.25	116.63	109.18
9	I	44	TYR	N-CA-C	5.22	116.35	108.46
1	A	927	VAL	N-CA-C	-5.21	106.05	111.58
6	F	127	GLU	N-CA-C	-5.21	106.69	112.57
10	J	5	VAL	CB-CA-C	-5.21	103.10	111.59
13	T	21	DG	C5'-C4'-C3'	-5.20	107.10	114.90
1	A	663	SER	N-CA-C	5.20	115.24	108.07
7	G	63	PRO	N-CA-C	5.19	123.16	112.47
1	A	234	MET	N-CA-C	-5.18	106.99	113.15
1	A	1428	VAL	N-CA-C	-5.17	105.45	110.42
2	B	361	LEU	CA-C-N	5.17	124.96	119.28
2	B	361	LEU	C-N-CA	5.17	124.96	119.28
1	A	709	THR	N-CA-C	-5.16	102.88	110.52
6	F	98	ALA	N-CA-C	-5.16	105.57	111.14
1	A	553	VAL	CA-C-N	5.16	126.29	119.84
1	A	553	VAL	C-N-CA	5.16	126.29	119.84
5	E	132	ILE	N-CA-C	5.15	115.54	108.12
7	G	106	MET	N-CA-C	5.15	118.34	110.36
7	G	40	GLY	N-CA-C	-5.14	100.99	113.18
2	B	944	THR	CB-CA-C	-5.14	102.77	110.90
1	A	1421	CYS	N-CA-C	5.13	118.80	111.92
2	B	662	MET	N-CA-C	-5.13	106.71	112.87
2	B	99	LYS	CA-C-N	5.13	126.25	119.84
2	B	99	LYS	C-N-CA	5.13	126.25	119.84
2	B	424	LEU	N-CA-C	-5.13	105.15	111.40
9	I	5	ARG	N-CA-C	5.12	118.08	110.14
1	A	982	THR	N-CA-C	-5.12	102.90	110.48
4	D	54	GLU	N-CA-C	-5.12	105.83	111.71
1	A	1262	LYS	N-CA-C	-5.11	105.36	111.03
1	A	1445	ILE	N-CA-CB	5.11	116.82	111.00
9	I	65	ASP	CA-C-N	5.10	124.89	119.28
9	I	65	ASP	C-N-CA	5.10	124.89	119.28
1	A	636	GLU	N-CA-C	5.10	117.96	111.69
1	A	55	ASP	N-CA-CB	5.09	119.43	110.37
1	A	171	GLN	CA-C-N	5.07	125.86	119.98
1	A	171	GLN	C-N-CA	5.07	125.86	119.98
2	B	102	VAL	N-CA-C	5.07	114.59	106.88
3	C	134	ILE	N-CA-C	5.06	115.20	108.11

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
8	H	138	GLU	N-CA-C	-5.06	105.45	110.97
1	A	362	ASP	N-CA-C	5.05	118.59	112.93
1	A	543	LEU	N-CA-C	5.05	121.55	110.80
1	A	1377	THR	N-CA-C	5.05	117.18	111.02
2	B	448	ILE	CB-CA-C	-5.05	107.57	113.22
2	B	400	HIS	N-CA-C	-5.04	102.17	109.59
1	A	199	LEU	N-CA-C	5.04	117.52	109.96
1	A	425	GLN	N-CA-C	-5.03	99.22	108.02
1	A	1138	ILE	CB-CA-C	-5.03	106.66	111.44
10	J	59	LYS	N-CA-C	-5.03	105.51	111.69
1	A	564	ALA	N-CA-C	-5.01	106.68	112.89
1	A	639	PRO	N-CA-C	-5.01	107.01	113.57
1	A	687	LYS	N-CA-C	-5.01	105.53	111.69

There are no chirality outliers.

All (3) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
13	T	18	DC	Sidechain
13	T	19	DC	Sidechain
13	T	21	DG	Sidechain

## 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	11166	0	11248	1247	0
2	B	8786	0	8819	1130	0
3	C	2095	0	2051	295	0
4	D	1365	0	1325	125	0
5	E	1744	0	1772	203	0
6	F	705	0	731	75	0
7	G	1340	0	1357	160	0
8	H	1068	0	1040	181	0
9	I	971	0	929	134	0
10	J	532	0	542	87	0
11	K	919	0	929	106	0

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
12	L	363	0	388	74	0
13	T	382	0	215	31	0
14	N	145	0	80	9	0
15	P	213	0	111	4	0
16	A	2	0	0	0	0
16	B	1	0	0	0	0
16	C	1	0	0	0	0
16	I	2	0	0	0	0
16	J	1	0	0	0	0
16	L	1	0	0	0	0
17	A	1	0	0	0	0
All	All	31803	0	31537	3535	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 56.

All (3535) 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)
14:N:5:DG:H2''	14:N:6:DT:H71	1.17	1.15
3:C:57:VAL:HG11	10:J:60:PHE:HB3	1.22	1.14
2:B:345:LYS:HE2	2:B:349:ILE:HD11	1.30	1.14
1:A:868:TYR:CE1	1:A:1064:VAL:HG11	1.83	1.14
3:C:189:THR:HG22	3:C:190:ASP:H	1.11	1.14
1:A:1386:ARG:HB2	1:A:1403:GLU:HG3	1.26	1.13
2:B:273:LEU:HB2	2:B:276:ILE:HD12	1.22	1.12
2:B:559:SER:HA	2:B:563:MET:HB3	1.26	1.10
6:F:111:LEU:HD12	6:F:111:LEU:H	1.05	1.10
1:A:899:VAL:HB	1:A:929:LEU:HD11	1.27	1.09
8:H:59:ILE:HG22	8:H:60:ALA:H	1.12	1.09
2:B:505:ASP:HB3	13:T:17:DG:H22	1.17	1.09
1:A:53:LEU:HD23	1:A:54:ASN:N	1.65	1.09
2:B:806:THR:HG22	2:B:808:ALA:H	1.18	1.09
2:B:510:LYS:HG3	2:B:511:PRO:HD3	1.25	1.08
2:B:254:LEU:HD23	2:B:381:MET:HE1	1.36	1.06
2:B:577:ALA:HB1	2:B:589:VAL:HG11	1.37	1.06
7:G:26:LEU:HD12	7:G:56:ILE:HD11	1.33	1.06
2:B:763:GLN:HG2	2:B:765:PRO:HD2	1.37	1.06
2:B:664:THR:HA	2:B:667:GLN:HE21	1.15	1.06
2:B:593:PRO:HG2	2:B:617:ARG:HH21	1.10	1.05
2:B:96:TYR:HB2	2:B:129:PHE:HB2	1.30	1.04

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:102:VAL:HG23	2:B:112:LEU:HB2	1.37	1.04
2:B:815:ARG:HB2	2:B:815:ARG:HH11	1.15	1.04
3:C:101:LEU:HD13	3:C:118:LEU:HD23	1.39	1.04
2:B:882:THR:HG23	2:B:884:ARG:H	1.15	1.03
1:A:344:ARG:HB3	1:A:344:ARG:HH11	1.17	1.03
2:B:899:ILE:HG21	2:B:949:VAL:HG21	1.37	1.03
2:B:261:ARG:HH11	2:B:261:ARG:HB3	1.18	1.02
2:B:654:ARG:H	2:B:657:HIS:HD2	1.02	1.02
1:A:567:LYS:HB3	8:H:96:VAL:H	1.22	1.02
3:C:166:GLU:HG3	11:K:10:PHE:HZ	1.25	1.01
1:A:114:LEU:HD13	1:A:171:GLN:HE22	1.23	1.01
1:A:567:LYS:HD2	1:A:568:PRO:HD2	1.42	1.01
5:E:180:ARG:HH21	5:E:192:ARG:HB2	1.23	1.01
7:G:34:VAL:HG12	7:G:45:ILE:HG21	1.43	1.01
1:A:567:LYS:CD	1:A:568:PRO:HD2	1.90	1.01
2:B:505:ASP:HB3	13:T:17:DG:N2	1.75	1.00
1:A:53:LEU:CD2	1:A:54:ASN:H	1.72	1.00
5:E:22:MET:HE3	5:E:26:ARG:HE	1.22	1.00
1:A:668:ASP:HB3	1:A:741:ASN:HD21	1.27	1.00
1:A:567:LYS:CG	1:A:568:PRO:HD2	1.91	0.99
1:A:858:ASN:ND2	1:A:860:LEU:H	1.58	0.99
10:J:44:TYR:HA	10:J:47:ARG:HB3	1.43	0.99
4:D:40:HIS:HA	7:G:73:LYS:HZ1	1.23	0.99
2:B:510:LYS:HG3	2:B:511:PRO:CD	1.93	0.99
7:G:52:ASP:C	7:G:53:ASN:HD22	1.70	0.98
1:A:154:SER:HB3	1:A:162:VAL:HG21	1.46	0.98
8:H:104:PHE:CZ	8:H:136:LYS:HA	1.99	0.98
1:A:768:GLN:HG2	1:A:816:HIS:HA	1.46	0.97
2:B:295:GLY:H	2:B:298:LEU:HD23	1.27	0.97
2:B:531:GLN:HG3	2:B:532:ALA:H	1.30	0.97
2:B:955:THR:HG22	2:B:956:THR:H	1.30	0.97
1:A:14:VAL:H	1:A:1432:GLN:HE22	1.09	0.97
9:I:111:THR:HG22	9:I:113:ASP:H	1.29	0.96
1:A:399:HIS:HB3	1:A:400:PRO:HD3	1.48	0.96
2:B:603:LEU:HB3	2:B:609:ILE:HG13	1.47	0.96
1:A:1329:THR:HG22	1:A:1331:SER:H	1.30	0.96
1:A:868:TYR:HE1	1:A:1064:VAL:HG11	1.21	0.96
5:E:22:MET:O	5:E:26:ARG:HG2	1.66	0.95
2:B:957:ASN:HD22	2:B:961:LEU:HD12	1.31	0.95
3:C:242:GLN:HA	3:C:245:VAL:HG23	1.48	0.95
6:F:119:ARG:HH11	6:F:119:ARG:HG3	1.29	0.95

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:53:LEU:HD23	1:A:54:ASN:H	0.81	0.95
8:H:44:VAL:HG13	8:H:48:PRO:HA	1.47	0.95
3:C:73:GLN:HE22	3:C:75:MET:HB2	1.27	0.95
2:B:315:LYS:HG2	9:I:13:MET:HE1	1.49	0.94
1:A:1094:VAL:HG13	1:A:1113:THR:HG21	1.49	0.94
1:A:901:LEU:N	1:A:926:GLN:HE21	1.64	0.94
10:J:5:VAL:HG12	10:J:6:ARG:HG3	1.48	0.94
12:L:28:LYS:HB2	12:L:39:SER:HA	1.50	0.94
1:A:1116:LEU:N	1:A:1308:THR:HG22	1.83	0.93
2:B:123:THR:HG23	2:B:205:ILE:HA	1.48	0.93
9:I:50:THR:HG22	9:I:51:ASN:H	1.33	0.93
1:A:900:ASP:HA	1:A:926:GLN:NE2	1.83	0.93
1:A:1063:MET:SD	1:A:1436:ILE:HG13	2.09	0.93
1:A:49:LYS:HE2	1:A:61:ILE:HD12	1.46	0.93
2:B:882:THR:HG23	2:B:884:ARG:N	1.84	0.93
5:E:207:ARG:HB3	5:E:207:ARG:HH11	1.34	0.93
6:F:111:LEU:HD12	6:F:111:LEU:N	1.84	0.92
2:B:884:ARG:O	2:B:936:ASP:HB2	1.69	0.92
3:C:189:THR:HG22	3:C:190:ASP:N	1.80	0.92
7:G:15:PRO:HA	7:G:18:PHE:CE1	2.05	0.92
1:A:71:GLN:HG3	1:A:72:GLU:H	1.35	0.92
1:A:350:ARG:HH11	1:A:488:ASN:HD21	1.15	0.92
1:A:154:SER:HB3	1:A:162:VAL:CG2	2.01	0.92
9:I:105:SER:O	9:I:106:CYS:HB3	1.65	0.91
7:G:131:GLN:HG2	7:G:136:VAL:HG22	1.51	0.91
6:F:111:LEU:H	6:F:111:LEU:CD1	1.83	0.91
1:A:900:ASP:HA	1:A:926:GLN:HE22	1.35	0.91
2:B:955:THR:HG22	2:B:956:THR:N	1.84	0.91
8:H:42:ILE:HG23	8:H:95:TYR:HE1	1.36	0.91
8:H:135:LEU:HD13	8:H:137:GLN:HB2	1.53	0.91
1:A:1385:THR:HG22	1:A:1387:HIS:H	1.33	0.91
10:J:1:MET:H1	10:J:57:ILE:H	0.91	0.91
8:H:59:ILE:HG22	8:H:60:ALA:N	1.84	0.90
1:A:503:GLN:NE2	6:F:90:ARG:HH21	1.69	0.90
1:A:903:ASN:HD22	1:A:906:HIS:H	1.12	0.90
2:B:778:MET:CE	2:B:1094:ARG:HD3	2.01	0.90
4:D:40:HIS:HA	7:G:73:LYS:NZ	1.88	0.89
1:A:858:ASN:C	1:A:858:ASN:HD22	1.80	0.89
2:B:37:PHE:HE1	2:B:41:LYS:HG3	1.36	0.89
2:B:33:VAL:HG21	2:B:638:PHE:HZ	1.38	0.89
1:A:1313:LEU:HD23	1:A:1338:VAL:HG21	1.55	0.89

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:K:113:THR:O	11:K:114:LEU:HB2	1.69	0.89
2:B:977:GLY:HA3	2:B:1099:VAL:HG21	1.55	0.88
1:A:1170:ILE:H	1:A:1170:ILE:HD12	1.38	0.88
3:C:189:THR:CG2	3:C:190:ASP:H	1.86	0.88
4:D:220:LEU:HD22	4:D:221:TYR:H	1.37	0.88
4:D:156:ASP:HB2	4:D:159:THR:OG1	1.73	0.88
1:A:399:HIS:O	1:A:401:GLY:N	2.07	0.88
1:A:901:LEU:H	1:A:926:GLN:HE21	1.15	0.88
4:D:220:LEU:HD13	4:D:221:TYR:N	1.89	0.87
9:I:77:LYS:HG2	9:I:78:CYS:H	1.38	0.87
10:J:1:MET:N	10:J:57:ILE:H	1.72	0.87
1:A:1402:PHE:CE2	1:A:1403:GLU:HG2	2.10	0.87
2:B:168:GLY:N	2:B:450:ALA:HB1	1.89	0.87
2:B:593:PRO:HG2	2:B:617:ARG:NH2	1.90	0.87
10:J:1:MET:H1	10:J:57:ILE:N	1.71	0.87
1:A:90:VAL:HG12	1:A:297:GLN:NE2	1.88	0.87
1:A:605:MET:HE1	1:A:612:ILE:HG23	1.53	0.87
2:B:563:MET:HE1	2:B:580:VAL:HB	1.54	0.87
5:E:120:ALA:O	5:E:123:LEU:HG	1.74	0.87
3:C:22:LEU:HD21	3:C:25:VAL:HG11	1.56	0.87
1:A:568:PRO:HG2	8:H:46:LEU:HD22	1.56	0.86
1:A:1445:ILE:HD11	7:G:68:ALA:HB1	1.55	0.86
1:A:828:ALA:CB	2:B:530:GLY:HA2	2.03	0.86
1:A:225:ASN:ND2	1:A:228:PHE:H	1.73	0.86
3:C:11:ARG:HH21	3:C:229:TYR:HD2	1.24	0.86
2:B:345:LYS:HG2	2:B:346:GLU:H	1.39	0.86
1:A:1254:ALA:O	1:A:1255:GLU:HB2	1.75	0.86
2:B:882:THR:HG21	2:B:934:LYS:O	1.76	0.86
6:F:99:LEU:O	6:F:103:MET:HG3	1.75	0.86
1:A:34:LYS:NZ	1:A:57:ARG:HH12	1.72	0.86
1:A:855:THR:HG21	1:A:857:ARG:HE	1.41	0.86
2:B:658:ILE:HG22	2:B:662:MET:HE2	1.58	0.86
1:A:883:LEU:HD11	1:A:1017:LEU:HD11	1.58	0.85
7:G:88:ASP:HB3	7:G:144:ARG:HA	1.56	0.85
1:A:12:ARG:HB2	2:B:1218:THR:HG22	1.57	0.85
1:A:567:LYS:HB3	8:H:96:VAL:N	1.91	0.85
7:G:111:THR:HB	7:G:114:LEU:HD13	1.58	0.85
2:B:25:ILE:HD11	2:B:653:VAL:HG12	1.57	0.85
2:B:324:ILE:HD13	2:B:330:ALA:HA	1.57	0.85
1:A:1118:VAL:HG23	1:A:1306:LEU:HB2	1.57	0.85
7:G:15:PRO:HA	7:G:18:PHE:CD1	2.11	0.85

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:261:ARG:HB3	2:B:261:ARG:NH1	1.92	0.84
9:I:65:ASP:HB3	9:I:68:LEU:HD12	1.58	0.84
14:N:5:DG:C2'	14:N:6:DT:H71	2.05	0.84
1:A:1285:MET:HE3	1:A:1286:LYS:H	1.40	0.84
5:E:22:MET:CE	5:E:26:ARG:HE	1.90	0.84
1:A:982:THR:HG22	1:A:984:LYS:H	1.38	0.84
1:A:1116:LEU:H	1:A:1308:THR:HG22	1.38	0.84
1:A:828:ALA:HB1	2:B:530:GLY:HA2	1.57	0.84
1:A:392:VAL:HG13	1:A:415:LEU:HD11	1.59	0.84
2:B:642:ASP:HA	2:B:649:LYS:HA	1.58	0.84
11:K:55:LYS:HB3	11:K:81:TYR:HD1	1.41	0.84
1:A:445:ASN:HB2	1:A:455:MET:HG2	1.60	0.84
3:C:99:LEU:N	3:C:99:LEU:HD23	1.93	0.84
7:G:1:MET:SD	7:G:2:PHE:N	2.51	0.84
1:A:14:VAL:H	1:A:1432:GLN:NE2	1.75	0.84
1:A:63:ARG:H	1:A:74:MET:CE	1.90	0.84
2:B:218:SER:HB2	2:B:241:ARG:NH1	1.92	0.84
2:B:944:THR:HG21	2:B:1122:ARG:NH2	1.92	0.84
5:E:212:ARG:HH11	5:E:212:ARG:HG3	1.42	0.84
7:G:27:LYS:HD3	7:G:51:TYR:CE2	2.12	0.83
1:A:503:GLN:HE21	6:F:90:ARG:HH21	1.21	0.83
6:F:103:MET:CE	7:G:66:GLY:H	1.91	0.83
2:B:806:THR:HG22	2:B:808:ALA:N	1.93	0.83
5:E:90:VAL:N	5:E:120:ALA:HB2	1.93	0.83
1:A:1036:ARG:HG2	1:A:1036:ARG:HH11	1.43	0.83
11:K:47:ARG:HB3	11:K:47:ARG:HH11	1.42	0.83
1:A:341:MET:HE1	2:B:1135:ARG:NH1	1.94	0.83
1:A:534:LEU:O	1:A:574:GLY:HA3	1.78	0.83
11:K:55:LYS:HB3	11:K:81:TYR:CD1	2.12	0.83
1:A:62:ASP:HB3	1:A:64:ASN:HB2	1.59	0.83
1:A:182:VAL:HG22	1:A:201:VAL:HG22	1.59	0.83
2:B:549:THR:HG22	2:B:550:ASP:N	1.94	0.83
2:B:579:ARG:HB2	2:B:586:TRP:NE1	1.94	0.83
1:A:698:GLN:HA	9:I:97:MET:O	1.79	0.83
7:G:111:THR:HG22	7:G:113:HIS:H	1.42	0.83
1:A:1187:GLN:HG3	1:A:1188:GLN:HG3	1.59	0.82
3:C:11:ARG:NH2	3:C:229:TYR:HD2	1.77	0.82
1:A:1224:LEU:HD11	1:A:1240:CYS:HB3	1.60	0.82
2:B:542:MET:HE3	2:B:747:MET:HG3	1.59	0.82
9:I:111:THR:HG22	9:I:112:SER:N	1.93	0.82
1:A:140:THR:HA	1:A:143:LYS:HE2	1.61	0.82

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:G:1:MET:SD	7:G:79:PHE:CD1	2.73	0.82
3:C:6:PRO:HB3	3:C:25:VAL:HG12	1.61	0.82
1:A:407:ARG:HG2	1:A:430:TRP:CZ2	2.14	0.82
1:A:913:LEU:HD12	1:A:914:GLU:H	1.44	0.82
1:A:254:GLU:HB2	2:B:935:ARG:HH22	1.44	0.82
1:A:535:THR:HG21	1:A:616:VAL:HA	1.62	0.82
2:B:654:ARG:H	2:B:657:HIS:CD2	1.94	0.82
7:G:1:MET:HE1	7:G:79:PHE:HA	1.62	0.82
1:A:901:LEU:H	1:A:926:GLN:NE2	1.77	0.82
2:B:601:ARG:O	2:B:605:ARG:HG3	1.79	0.82
2:B:504:ARG:HG3	2:B:505:ASP:H	1.42	0.81
2:B:955:THR:CG2	2:B:956:THR:H	1.91	0.81
2:B:226:PHE:HA	2:B:395:GLN:HG3	1.62	0.81
7:G:34:VAL:HG11	7:G:74:TYR:HE1	1.45	0.81
8:H:4:THR:HA	8:H:60:ALA:HB2	1.61	0.81
1:A:1267:MET:HA	1:A:1271:ILE:HD12	1.62	0.81
1:A:710:LEU:H	1:A:710:LEU:HD12	1.45	0.81
2:B:211:VAL:O	2:B:480:SER:HA	1.81	0.81
2:B:801:LYS:O	10:J:52:THR:HG23	1.80	0.81
2:B:807:ARG:HG2	2:B:1045:SER:OG	1.79	0.81
9:I:111:THR:HG22	9:I:112:SER:H	1.46	0.81
1:A:1312:ASN:O	1:A:1316:VAL:HG23	1.81	0.81
1:A:754:SER:H	1:A:757:ASN:HD22	1.28	0.81
1:A:344:ARG:HB3	1:A:344:ARG:NH1	1.95	0.81
3:C:128:ASN:O	3:C:129:ILE:HG13	1.81	0.81
2:B:542:MET:HE2	2:B:747:MET:HE2	1.63	0.80
3:C:177:GLU:HB2	3:C:231:ASN:HB3	1.63	0.80
3:C:238:ILE:HD11	3:C:246:ARG:CZ	2.11	0.80
1:A:84:ILE:HD11	1:A:270:LEU:HD13	1.62	0.80
1:A:679:ILE:HG12	1:A:732:LEU:HD12	1.61	0.80
2:B:102:VAL:HG22	2:B:112:LEU:HD22	1.63	0.80
11:K:1:MET:O	11:K:1:MET:HG2	1.80	0.80
1:A:896:ARG:NH2	1:A:1030:ARG:HH21	1.80	0.80
2:B:510:LYS:CG	2:B:511:PRO:HD3	2.10	0.80
5:E:165:LEU:HD21	5:E:175:LEU:HD11	1.62	0.80
6:F:103:MET:HE3	7:G:15:PRO:HG2	1.64	0.80
8:H:24:CYS:HB2	8:H:44:VAL:HG21	1.63	0.80
2:B:126:SER:OG	2:B:172:ILE:HD11	1.82	0.80
2:B:641:GLU:HB3	2:B:643:ASP:OD2	1.82	0.80
2:B:999:MET:HG3	2:B:1000:PRO:HD2	1.63	0.80
2:B:1187:ASN:O	2:B:1188:LYS:HB2	1.79	0.80

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:896:ARG:HD3	1:A:897:TYR:CE1	2.17	0.80
1:A:596:THR:O	1:A:598:LEU:N	2.15	0.80
2:B:172:ILE:HG12	2:B:178:ASN:HD22	1.47	0.80
3:C:50:GLU:HB3	12:L:64:LEU:CD1	2.12	0.80
1:A:675:THR:O	1:A:679:ILE:HG13	1.81	0.80
3:C:66:ARG:NH1	10:J:2:ILE:HG21	1.97	0.80
3:C:115:SER:HB3	3:C:141:GLY:O	1.82	0.80
9:I:26:LEU:HD23	9:I:37:GLU:HA	1.64	0.80
1:A:488:ASN:HD22	2:B:1128:LEU:HD13	1.47	0.79
2:B:373:ARG:HA	2:B:566:LEU:HD23	1.64	0.79
1:A:71:GLN:CG	1:A:72:GLU:H	1.92	0.79
2:B:245:GLU:O	2:B:246:LYS:HG3	1.82	0.79
2:B:1072:MET:CE	2:B:1085:ILE:HB	2.11	0.79
2:B:839:MET:HE3	2:B:1010:LEU:HD11	1.63	0.79
1:A:780:VAL:O	1:A:782:ARG:HG2	1.81	0.79
8:H:135:LEU:HD22	8:H:137:GLN:HG3	1.64	0.79
1:A:1323:ASP:OD1	1:A:1325:THR:HG22	1.81	0.79
3:C:123:ASN:ND2	3:C:125:MET:HG2	1.98	0.79
1:A:254:GLU:HB2	2:B:935:ARG:NH2	1.98	0.79
2:B:1072:MET:HE3	2:B:1085:ILE:CD1	2.13	0.79
2:B:101:MET:HG2	2:B:111:ALA:HA	1.64	0.79
2:B:193:LYS:HD3	2:B:787:VAL:HG11	1.63	0.79
3:C:32:SER:O	3:C:36:VAL:HG23	1.83	0.79
3:C:253:LYS:O	3:C:256:ALA:HB3	1.82	0.79
9:I:50:THR:HG22	9:I:51:ASN:N	1.96	0.79
1:A:22:PHE:HB2	2:B:1211:ASN:ND2	1.98	0.79
2:B:345:LYS:HA	2:B:348:ARG:HE	1.47	0.79
8:H:40:LEU:HD13	8:H:123:MET:HE3	1.63	0.79
1:A:71:GLN:HG3	1:A:72:GLU:N	1.92	0.79
2:B:274:PRO:HG2	2:B:359:GLU:HB3	1.65	0.78
1:A:244:PRO:HB2	1:A:245:PRO:HD3	1.62	0.78
2:B:559:SER:CA	2:B:563:MET:HB3	2.12	0.78
2:B:1072:MET:HE3	2:B:1085:ILE:HD13	1.64	0.78
11:K:79:GLU:HG3	11:K:80:GLY:N	1.98	0.78
3:C:166:GLU:HG3	11:K:10:PHE:CZ	2.17	0.78
3:C:22:LEU:HD13	3:C:230:MET:HE1	1.64	0.78
8:H:40:LEU:HD23	8:H:42:ILE:HD11	1.65	0.78
1:A:34:LYS:HZ1	1:A:57:ARG:HH12	1.32	0.78
5:E:78:LEU:HD11	5:E:109:ILE:HG13	1.62	0.78
1:A:372:LYS:HA	1:A:435:HIS:ND1	1.98	0.78
1:A:868:TYR:CD2	1:A:1058:VAL:HG21	2.19	0.78

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:664:THR:HA	2:B:667:GLN:NE2	1.96	0.78
5:E:180:ARG:NH2	5:E:192:ARG:HB2	1.97	0.78
2:B:580:VAL:HG22	2:B:624:LEU:HB3	1.64	0.78
2:B:605:ARG:NH1	2:B:639:ILE:HG21	1.98	0.78
1:A:601:LYS:HB2	1:A:603:ASN:ND2	1.99	0.78
2:B:277:LYS:HE3	2:B:336:ARG:HD2	1.66	0.78
2:B:345:LYS:HE2	2:B:349:ILE:CD1	2.13	0.78
1:A:567:LYS:HD3	8:H:95:TYR:HA	1.66	0.78
2:B:29:ASP:CG	2:B:658:ILE:HD13	2.09	0.78
2:B:115:GLN:O	2:B:119:LEU:HD12	1.83	0.77
1:A:567:LYS:CB	8:H:95:TYR:HA	2.14	0.77
5:E:15:ALA:O	5:E:19:VAL:HG23	1.83	0.77
7:G:34:VAL:HG11	7:G:74:TYR:CE1	2.18	0.77
2:B:979:LYS:HG2	2:B:1095:LEU:HD12	1.66	0.77
1:A:899:VAL:CB	1:A:929:LEU:HD11	2.13	0.77
1:A:1308:THR:HG23	1:A:1309:ASP:N	1.98	0.77
2:B:37:PHE:CE1	2:B:41:LYS:HG3	2.19	0.77
3:C:18:VAL:HG12	3:C:20:PHE:HD2	1.49	0.77
1:A:886:ILE:HG22	1:A:887:GLY:N	1.99	0.77
3:C:181:ASP:CG	3:C:186:LEU:HD13	2.10	0.77
7:G:126:ASN:ND2	7:G:127:PRO:HA	1.99	0.77
2:B:295:GLY:N	2:B:298:LEU:HD23	2.00	0.77
3:C:124:LEU:O	3:C:127:ARG:HG2	1.83	0.77
10:J:64:ASN:HB3	10:J:65:PRO:CD	2.14	0.77
1:A:14:VAL:N	1:A:1432:GLN:HE22	1.82	0.77
1:A:103:CYS:SG	1:A:108:MET:HE1	2.25	0.77
7:G:14:HIS:HD2	7:G:16:SER:CB	1.98	0.77
7:G:127:PRO:HG2	7:G:138:THR:HG21	1.65	0.77
1:A:1151:GLU:HG2	9:I:45:ARG:HB2	1.66	0.77
2:B:345:LYS:N	2:B:347:LYS:HE2	2.00	0.77
2:B:292:ILE:HD11	2:B:327:ARG:H	1.48	0.77
2:B:345:LYS:C	2:B:347:LYS:H	1.92	0.77
5:E:17:ARG:HH21	5:E:35:VAL:HG12	1.49	0.77
8:H:17:PRO:HB3	8:H:24:CYS:SG	2.24	0.77
1:A:1329:THR:HG22	1:A:1331:SER:N	1.99	0.77
3:C:165:LYS:O	11:K:6:ARG:NH1	2.18	0.77
1:A:956:LEU:HD21	1:A:1017:LEU:HG	1.66	0.76
1:A:1148:ILE:HD11	1:A:1198:ASP:HA	1.66	0.76
2:B:212:LEU:HD23	2:B:480:SER:HB2	1.68	0.76
2:B:359:GLU:O	2:B:362:PRO:HD3	1.84	0.76
1:A:1348:LEU:O	1:A:1352:VAL:HG23	1.85	0.76

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:265:MET:HE1	11:K:19:LEU:HB2	1.67	0.76
6:F:77:ASP:O	6:F:78:GLN:HB2	1.84	0.76
12:L:38:LEU:O	12:L:39:SER:HB3	1.83	0.76
1:A:151:ASP:OD1	1:A:163:SER:HA	1.85	0.76
2:B:763:GLN:HG2	2:B:765:PRO:CD	2.15	0.76
1:A:1285:MET:HE3	1:A:1286:LYS:N	2.00	0.76
2:B:274:PRO:O	2:B:275:TYR:HB2	1.83	0.76
2:B:839:MET:HE1	2:B:980:PHE:HB2	1.66	0.76
2:B:873:THR:O	2:B:914:LYS:HA	1.84	0.76
3:C:245:VAL:HA	3:C:248:ILE:HD12	1.65	0.76
1:A:114:LEU:HD13	1:A:171:GLN:NE2	2.00	0.76
1:A:779:PHE:CE1	1:A:785:PRO:HD3	2.21	0.76
1:A:1114:PRO:O	1:A:1311:VAL:HG23	1.86	0.76
2:B:254:LEU:HD22	2:B:361:LEU:HD11	1.66	0.76
1:A:55:ASP:N	1:A:56:PRO:HD3	1.98	0.76
2:B:273:LEU:CB	2:B:276:ILE:HD12	2.11	0.76
8:H:104:PHE:HZ	8:H:136:LYS:HA	1.49	0.76
9:I:70:ARG:NH1	9:I:84:VAL:HB	2.01	0.76
12:L:60:ARG:HG2	12:L:61:THR:H	1.51	0.76
1:A:72:GLU:HB3	1:A:76:GLU:HG2	1.67	0.76
2:B:549:THR:CG2	2:B:550:ASP:H	1.98	0.76
10:J:3:VAL:HG21	10:J:18:TRP:HB2	1.66	0.76
1:A:1171:GLN:O	1:A:1174:PHE:HB2	1.86	0.76
8:H:93:TYR:HB3	8:H:144:ILE:O	1.85	0.76
1:A:1398:MET:HB2	1:A:1426:GLU:OE2	1.86	0.75
3:C:76:ASP:OD2	3:C:128:ASN:N	2.19	0.75
1:A:79:GLY:HA3	1:A:243:PRO:HG3	1.66	0.75
2:B:629:ASP:HB3	2:B:632:ARG:HE	1.49	0.75
2:B:642:ASP:HB3	2:B:649:LYS:CD	2.16	0.75
1:A:326:ARG:HD3	1:A:330:LYS:NZ	2.01	0.75
2:B:43:LEU:HD13	2:B:492:LEU:HD13	1.68	0.75
4:D:34:GLN:O	4:D:47:LEU:HD23	1.85	0.75
10:J:23:ASN:C	10:J:25:LEU:H	1.94	0.75
1:A:524:VAL:HG12	1:A:525:GLN:H	1.51	0.75
1:A:563:PRO:HG3	1:A:572:TRP:CZ2	2.22	0.75
1:A:1215:ARG:HA	1:A:1218:GLN:HG2	1.67	0.75
9:I:55:THR:HG22	9:I:58:VAL:HG21	1.67	0.75
11:K:63:VAL:HG23	11:K:63:VAL:O	1.86	0.75
1:A:215:SER:OG	1:A:218:ASP:HB2	1.86	0.75
1:A:225:ASN:ND2	1:A:227:VAL:H	1.85	0.75
12:L:49:LYS:O	12:L:50:ASP:HB2	1.86	0.75

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:903:ASN:HD22	1:A:906:HIS:N	1.82	0.75
2:B:902:GLY:O	12:L:65:VAL:HG11	1.87	0.75
4:D:220:LEU:HD22	4:D:221:TYR:N	2.01	0.75
14:N:5:DG:H2"	14:N:6:DT:C7	2.08	0.75
2:B:33:VAL:HG21	2:B:638:PHE:CZ	2.22	0.74
8:H:127:GLY:O	8:H:128:ASN:HB2	1.87	0.74
4:D:220:LEU:CD2	4:D:221:TYR:H	2.01	0.74
7:G:99:PHE:CE2	7:G:115:MET:HE2	2.22	0.74
1:A:56:PRO:O	1:A:57:ARG:CD	2.36	0.74
1:A:567:LYS:HG3	1:A:568:PRO:HD2	1.69	0.74
1:A:1193:LEU:HB2	1:A:1260:LEU:HD21	1.67	0.74
2:B:296:GLU:O	2:B:299:GLU:HB2	1.87	0.74
2:B:345:LYS:CE	2:B:349:ILE:HD11	2.15	0.74
2:B:579:ARG:HG2	2:B:579:ARG:HH11	1.51	0.74
2:B:606:LYS:HD2	2:B:608:ASP:OD2	1.87	0.74
1:A:37:PHE:N	1:A:37:PHE:HD1	1.86	0.74
1:A:252:PHE:O	1:A:253:ASN:HB2	1.87	0.74
1:A:1386:ARG:NH1	13:T:16:DC:H5"	2.03	0.74
2:B:815:ARG:HB2	2:B:815:ARG:NH1	1.99	0.74
2:B:871:THR:HG22	2:B:872:GLU:N	2.02	0.74
3:C:123:ASN:HD21	3:C:125:MET:HG2	1.50	0.74
11:K:47:ARG:HD3	11:K:59:ALA:O	1.87	0.74
2:B:34:ILE:HG12	2:B:542:MET:HE1	1.69	0.74
14:N:1:DG:H2"	14:N:2:DA:OP2	1.87	0.74
1:A:1208:THR:HB	1:A:1211:GLN:HG3	1.70	0.74
2:B:273:LEU:HB2	2:B:276:ILE:CD1	2.11	0.74
1:A:774:ARG:HE	1:A:797:LYS:HB2	1.52	0.74
1:A:1111:MET:HE1	1:A:1330:ASN:OD1	1.88	0.74
2:B:744:HIS:HD2	2:B:746:SER:OG	1.70	0.74
2:B:780:VAL:HG21	10:J:56:LEU:HD11	1.69	0.74
12:L:32:ALA:HB2	12:L:55:ILE:HG13	1.70	0.74
1:A:51:GLY:O	1:A:56:PRO:HB3	1.88	0.74
1:A:567:LYS:HD2	1:A:568:PRO:CD	2.16	0.74
1:A:1138:ILE:HG22	1:A:1279:ILE:HG21	1.70	0.74
2:B:815:ARG:HH11	2:B:815:ARG:CB	1.98	0.74
3:C:147:LEU:N	3:C:147:LEU:HD23	2.03	0.74
5:E:19:VAL:O	5:E:23:VAL:HG23	1.88	0.74
2:B:798:TYR:HE2	3:C:62:PHE:CZ	2.05	0.74
2:B:842:ASN:HD22	2:B:845:SER:H	1.36	0.73
2:B:1159:ARG:HD2	2:B:1159:ARG:O	1.88	0.73
7:G:126:ASN:HD22	7:G:127:PRO:HA	1.53	0.73

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1261:LYS:O	1:A:1264:GLU:HB3	1.88	0.73
2:B:504:ARG:O	2:B:506:GLY:N	2.22	0.73
6:F:103:MET:HE1	7:G:66:GLY:H	1.53	0.73
2:B:332:ASP:O	2:B:334:ILE:N	2.20	0.73
2:B:652:LYS:HD3	2:B:688:GLY:O	1.88	0.73
8:H:81:PRO:CB	8:H:82:PRO:HD2	2.18	0.73
1:A:901:LEU:HB2	1:A:926:GLN:HG2	1.71	0.73
2:B:69:LEU:HD13	2:B:429:PHE:HD1	1.52	0.73
2:B:549:THR:HG22	2:B:550:ASP:H	1.50	0.73
2:B:1084:GLN:HG2	3:C:201:TRP:CZ2	2.24	0.73
4:D:118:THR:HB	4:D:121:LYS:HB2	1.70	0.73
1:A:12:ARG:HB2	2:B:1218:THR:CG2	2.18	0.73
5:E:48:ASP:HB3	5:E:54:GLN:NE2	2.03	0.73
1:A:93:VAL:HG13	1:A:301:ALA:HB1	1.69	0.73
2:B:167:ILE:HG22	2:B:453:ILE:HD12	1.70	0.73
2:B:899:ILE:CG2	2:B:949:VAL:HG21	2.16	0.73
12:L:55:ILE:HD13	12:L:55:ILE:H	1.54	0.73
2:B:1099:VAL:O	2:B:1101:ASP:N	2.22	0.73
3:C:39:ALA:HA	3:C:164:ALA:HB3	1.71	0.73
6:F:76:LYS:O	6:F:79:ARG:HD3	1.89	0.73
1:A:42:ASP:HA	1:A:46:THR:O	1.88	0.73
1:A:63:ARG:H	1:A:74:MET:HE1	1.53	0.73
2:B:424:LEU:HA	2:B:427:ASP:OD2	1.89	0.73
2:B:577:ALA:CB	2:B:589:VAL:HG11	2.16	0.73
3:C:238:ILE:HD11	3:C:246:ARG:NH1	2.03	0.73
7:G:27:LYS:HE2	7:G:54:ILE:HB	1.71	0.73
1:A:67:CYS:C	1:A:68:GLN:HG3	2.14	0.72
1:A:751:SER:O	1:A:752:LYS:HG2	1.89	0.72
1:A:858:ASN:HD21	1:A:860:LEU:HB2	1.54	0.72
2:B:583:ASN:HD21	2:B:628:THR:CG2	2.02	0.72
2:B:547:VAL:HG12	2:B:612:GLU:OE2	1.89	0.72
1:A:134:ARG:HD2	1:A:221:SER:O	1.89	0.72
1:A:1118:VAL:CG2	1:A:1306:LEU:HB2	2.19	0.72
9:I:77:LYS:NZ	9:I:77:LYS:HB3	2.03	0.72
1:A:590:ARG:O	1:A:591:PHE:HB2	1.89	0.72
1:A:1198:ASP:HB3	1:A:1201:ALA:HB3	1.70	0.72
7:G:7:LEU:HB2	7:G:74:TYR:CE2	2.25	0.72
2:B:1072:MET:HE3	2:B:1085:ILE:HB	1.71	0.72
5:E:116:ILE:O	5:E:121:MET:HE2	1.89	0.72
13:T:19:DC:C5	13:T:20:BRU:BR	2.98	0.72
1:A:84:ILE:CG2	1:A:239:LEU:HB3	2.20	0.72

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:1017:ILE:HB	2:B:1018:PRO:HD3	1.70	0.72
3:C:196:ASP:OD2	3:C:199:LYS:HE3	1.89	0.72
1:A:69:THR:O	1:A:71:GLN:N	2.22	0.72
1:A:974:ASP:HB2	1:A:976:THR:HG23	1.71	0.72
2:B:390:LEU:O	2:B:391:ASP:HB2	1.88	0.72
2:B:977:GLY:HA3	2:B:1099:VAL:CG2	2.19	0.72
7:G:106:MET:HG2	7:G:107:LYS:N	2.03	0.72
14:N:6:DT:H2"	14:N:7:DA:C8	2.25	0.72
1:A:222:LEU:O	1:A:224:PHE:HD1	1.72	0.72
2:B:65:GLU:HG3	2:B:66:ASP:OD1	1.90	0.72
2:B:593:PRO:CG	2:B:617:ARG:HH21	1.97	0.72
3:C:7:GLN:HG2	11:K:104:ASN:ND2	2.05	0.72
1:A:646:PHE:O	1:A:650:GLN:HG3	1.90	0.72
1:A:858:ASN:HD22	1:A:860:LEU:H	1.37	0.72
1:A:1242:VAL:O	1:A:1243:VAL:HG23	1.90	0.72
2:B:291:ILE:HD13	2:B:300:HIS:CD2	2.25	0.72
9:I:111:THR:CG2	9:I:112:SER:H	2.02	0.71
1:A:35:ILE:HG22	1:A:35:ILE:O	1.90	0.71
2:B:165:VAL:HG11	2:B:448:ILE:HD12	1.70	0.71
2:B:651:LEU:HD21	2:B:741:CYS:HB3	1.72	0.71
2:B:756:ILE:O	2:B:759:PRO:HD3	1.90	0.71
6:F:119:ARG:HH11	6:F:119:ARG:CG	2.04	0.71
2:B:185:THR:H	2:B:188:ASP:HB2	1.53	0.71
3:C:101:LEU:HD13	3:C:118:LEU:CD2	2.19	0.71
3:C:73:GLN:NE2	3:C:75:MET:HB2	2.03	0.71
5:E:56:LYS:HB2	5:E:57:MET:HE3	1.72	0.71
8:H:5:LEU:HD13	8:H:134:ASN:HA	1.71	0.71
1:A:129:LYS:O	1:A:130:ASP:HB2	1.89	0.71
11:K:37:LYS:O	11:K:38:GLU:HG2	1.91	0.71
1:A:567:LYS:HD3	8:H:95:TYR:CG	2.24	0.71
2:B:23:ALA:HB1	2:B:24:PRO:HD2	1.72	0.71
3:C:114:TYR:CD2	3:C:140:ASN:HB3	2.26	0.71
4:D:220:LEU:HD13	4:D:221:TYR:H	1.52	0.71
2:B:1172:ILE:HG22	2:B:1172:ILE:O	1.91	0.71
11:K:65:HIS:CD2	11:K:67:PHE:H	2.08	0.71
1:A:172:PRO:HB3	1:A:185:TRP:CD2	2.26	0.71
1:A:340:LEU:HD13	1:A:1429:ILE:HG23	1.71	0.71
2:B:425:THR:HA	2:B:428:ILE:HD12	1.71	0.71
4:D:185:CYS:O	4:D:211:LEU:HD22	1.91	0.71
5:E:135:PHE:HB3	5:E:140:LEU:HD11	1.72	0.71
5:E:153:HIS:O	5:E:154:ILE:HG13	1.90	0.71

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:G:1:MET:SD	7:G:79:PHE:HD1	2.11	0.71
1:A:975:HIS:HA	1:A:1036:ARG:HG3	1.72	0.71
2:B:616:ILE:HD12	2:B:616:ILE:N	2.05	0.71
5:E:85:GLU:C	5:E:87:SER:H	1.99	0.71
5:E:159:ASP:HA	5:E:162:ARG:NH2	2.05	0.71
8:H:12:VAL:HG11	8:H:26:ILE:HD11	1.73	0.71
1:A:1313:LEU:HD23	1:A:1338:VAL:CG2	2.21	0.71
2:B:172:ILE:N	2:B:172:ILE:HD12	2.06	0.71
2:B:408:LEU:HD21	2:B:545:ILE:HD12	1.70	0.71
1:A:66:LYS:O	1:A:67:CYS:HB2	1.90	0.70
1:A:335:ARG:HH12	2:B:1206:GLU:CD	1.99	0.70
1:A:567:LYS:HD3	8:H:95:TYR:CD2	2.26	0.70
1:A:1048:ASN:O	1:A:1049:ILE:C	2.33	0.70
2:B:1007:VAL:CG2	2:B:1008:PRO:HD2	2.21	0.70
10:J:3:VAL:HG21	10:J:18:TRP:CB	2.21	0.70
1:A:864:ILE:HD12	1:A:864:ILE:N	2.05	0.70
1:A:1120:LEU:HD13	1:A:1304:TRP:O	1.90	0.70
6:F:97:ARG:O	6:F:101:ILE:HG13	1.91	0.70
8:H:130:ARG:H	8:H:130:ARG:HD2	1.54	0.70
7:G:26:LEU:CD1	7:G:56:ILE:HD11	2.19	0.70
9:I:55:THR:HG22	9:I:58:VAL:CG2	2.21	0.70
1:A:466:SER:HB2	2:B:1099:VAL:HG11	1.72	0.70
9:I:5:ARG:HG2	9:I:6:PHE:N	2.06	0.70
2:B:549:THR:CG2	2:B:550:ASP:N	2.54	0.70
8:H:4:THR:HA	8:H:60:ALA:CB	2.21	0.70
1:A:455:MET:HE1	2:B:1130:PHE:HE1	1.56	0.70
4:D:167:LEU:HB3	4:D:177:VAL:HG13	1.72	0.70
11:K:6:ARG:O	11:K:9:LEU:HG	1.90	0.70
1:A:590:ARG:HG3	1:A:590:ARG:HH11	1.56	0.70
1:A:605:MET:HE2	1:A:607:ILE:CG1	2.22	0.70
2:B:44:VAL:HG11	2:B:199:MET:HG2	1.73	0.70
7:G:14:HIS:HD2	7:G:16:SER:HB3	1.54	0.70
8:H:4:THR:HG22	8:H:5:LEU:N	2.07	0.70
14:N:1:DG:H1'	14:N:2:DA:O5'	1.92	0.70
2:B:758:PHE:CE2	2:B:1044:ALA:HA	2.26	0.70
8:H:81:PRO:HB3	8:H:82:PRO:HD2	1.74	0.70
3:C:212:PRO:HB3	3:C:213:PRO:HD2	1.73	0.70
9:I:93:LYS:H	9:I:93:LYS:HD2	1.55	0.70
9:I:111:THR:HG22	9:I:113:ASP:N	2.06	0.70
1:A:50:ILE:C	1:A:52:GLY:H	2.00	0.69
1:A:858:ASN:ND2	1:A:858:ASN:C	2.49	0.69

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:830:TYR:CE2	2:B:1000:PRO:HD3	2.27	0.69
2:B:1138:MET:HE2	2:B:1146:PHE:CD2	2.27	0.69
7:G:17:PHE:N	7:G:17:PHE:CD2	2.59	0.69
8:H:100:THR:HG23	8:H:138:GLU:HA	1.73	0.69
1:A:79:GLY:H	2:B:1205:GLN:HE22	1.41	0.69
1:A:710:LEU:H	1:A:710:LEU:CD1	2.05	0.69
2:B:199:MET:HE2	2:B:492:LEU:HD23	1.73	0.69
2:B:274:PRO:CG	2:B:359:GLU:HB3	2.22	0.69
2:B:806:THR:HB	2:B:809:MET:HG3	1.75	0.69
2:B:579:ARG:HB2	2:B:586:TRP:HE1	1.57	0.69
2:B:778:MET:HE1	2:B:1094:ARG:HH11	1.58	0.69
3:C:11:ARG:HE	3:C:21:ILE:HD11	1.56	0.69
3:C:57:VAL:CG1	10:J:60:PHE:HB3	2.13	0.69
1:A:549:MET:SD	1:A:577:ILE:HD11	2.32	0.69
2:B:278:GLN:HG2	2:B:279:ASP:H	1.57	0.69
2:B:345:LYS:O	2:B:347:LYS:HG2	1.91	0.69
2:B:1007:VAL:HG22	2:B:1008:PRO:HD2	1.72	0.69
2:B:1103:ILE:O	2:B:1122:ARG:NH1	2.24	0.69
3:C:152:GLU:HG2	3:C:153:LEU:H	1.56	0.69
2:B:642:ASP:HA	2:B:649:LYS:HG3	1.74	0.69
3:C:258:ILE:O	3:C:262:LEU:HB2	1.92	0.69
5:E:12:LEU:HD21	5:E:58:MET:SD	2.32	0.69
8:H:44:VAL:CG1	8:H:48:PRO:HA	2.19	0.69
1:A:1166:ASP:HA	1:A:1169:ILE:HD12	1.74	0.69
2:B:505:ASP:O	2:B:507:LYS:HG3	1.93	0.69
2:B:708:GLU:O	2:B:710:LEU:N	2.26	0.69
10:J:65:PRO:HG3	12:L:32:ALA:O	1.92	0.69
1:A:821:ARG:HB2	1:A:821:ARG:HH11	1.57	0.69
1:A:1168:GLU:HA	1:A:1171:GLN:NE2	2.08	0.69
1:A:1236:LEU:O	1:A:1237:ILE:HG13	1.92	0.69
2:B:969:ARG:NH1	3:C:61:GLU:OE1	2.26	0.69
1:A:34:LYS:CE	1:A:57:ARG:HH12	2.05	0.69
1:A:84:ILE:HG22	1:A:239:LEU:HB3	1.75	0.69
1:A:326:ARG:HH11	1:A:330:LYS:HZ1	1.41	0.69
1:A:350:ARG:HH11	1:A:488:ASN:ND2	1.90	0.69
1:A:567:LYS:HB3	8:H:95:TYR:HA	1.73	0.69
1:A:942:PHE:HE1	5:E:207:ARG:HD3	1.57	0.69
3:C:18:VAL:HG23	3:C:240:VAL:CG1	2.23	0.69
7:G:79:PHE:CE2	7:G:106:MET:HE2	2.28	0.69
9:I:50:THR:CG2	9:I:51:ASN:H	2.05	0.69
9:I:55:THR:HG23	9:I:86:PHE:CZ	2.28	0.69

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:37:PHE:N	1:A:37:PHE:CD1	2.58	0.69
2:B:291:ILE:HD13	2:B:300:HIS:NE2	2.08	0.69
2:B:797:TYR:HE1	2:B:854:LEU:HD23	1.58	0.69
2:B:1001:PHE:CE1	2:B:1073:TYR:HB2	2.27	0.69
6:F:109:VAL:HG11	6:F:123:LYS:HD3	1.75	0.69
8:H:135:LEU:HD21	8:H:137:GLN:HE21	1.58	0.69
2:B:254:LEU:CD2	2:B:381:MET:HE1	2.21	0.69
2:B:507:LYS:HA	2:B:512:ARG:HH21	1.54	0.69
5:E:116:ILE:HG22	5:E:120:ALA:HB3	1.75	0.69
6:F:75:PRO:O	6:F:77:ASP:O	2.11	0.69
1:A:362:ASP:OD1	1:A:459:ARG:HD3	1.93	0.68
1:A:901:LEU:HD22	1:A:919:ILE:HG22	1.76	0.68
2:B:364:ILE:O	2:B:365:THR:HB	1.93	0.68
2:B:637:LEU:HD12	2:B:693:ILE:HD12	1.75	0.68
2:B:654:ARG:N	2:B:657:HIS:HD2	1.86	0.68
8:H:139:ASN:O	8:H:140:ALA:HB2	1.91	0.68
1:A:388:LEU:O	1:A:392:VAL:HG23	1.94	0.68
2:B:197:PHE:CE2	2:B:816:GLU:HG2	2.28	0.68
2:B:216:GLU:OE1	2:B:537:LYS:HE2	1.94	0.68
1:A:701:LEU:HD21	9:I:114:GLN:HB2	1.74	0.68
1:A:1433:MET:CE	7:G:63:PRO:HB3	2.24	0.68
9:I:82:GLU:O	9:I:104:LEU:HG	1.92	0.68
1:A:70:CYS:O	1:A:72:GLU:HG2	1.93	0.68
1:A:866:PHE:C	1:A:867:ILE:HD12	2.18	0.68
2:B:423:LYS:O	2:B:423:LYS:HD3	1.93	0.68
2:B:1065:GLN:HE21	2:B:1067:ARG:N	1.91	0.68
1:A:946:VAL:HG22	5:E:201:LYS:HB3	1.75	0.68
6:F:109:VAL:CG1	6:F:123:LYS:HD3	2.24	0.68
11:K:47:ARG:HB3	11:K:47:ARG:NH1	2.08	0.68
1:A:699:ALA:HB3	1:A:701:LEU:HG	1.76	0.68
1:A:830:LYS:HE2	1:A:1081:LEU:HB2	1.74	0.68
1:A:832:ALA:O	13:T:18:DC:H5'	1.93	0.68
1:A:1236:LEU:C	1:A:1237:ILE:HG13	2.18	0.68
7:G:17:PHE:N	7:G:17:PHE:HD2	1.91	0.68
1:A:1094:VAL:HG13	1:A:1113:THR:CG2	2.24	0.68
2:B:605:ARG:HH12	2:B:639:ILE:HG21	1.57	0.68
2:B:916:THR:O	2:B:935:ARG:HG2	1.93	0.68
2:B:41:LYS:HE2	2:B:41:LYS:HA	1.76	0.68
2:B:531:GLN:CG	2:B:532:ALA:H	2.05	0.68
2:B:1001:PHE:CE2	3:C:34:ARG:CZ	2.77	0.68
1:A:270:LEU:O	1:A:274:ILE:HG13	1.94	0.68

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:H:40:LEU:CD1	8:H:123:MET:HB2	2.24	0.68
12:L:32:ALA:CB	12:L:55:ILE:HG13	2.24	0.68
1:A:150:THR:HG23	1:A:166:GLY:HA3	1.74	0.67
2:B:461:LEU:HD12	2:B:461:LEU:H	1.59	0.67
2:B:294:ASP:O	2:B:296:GLU:N	2.26	0.67
2:B:1001:PHE:HE2	3:C:34:ARG:CZ	2.05	0.67
1:A:399:HIS:O	1:A:400:PRO:C	2.36	0.67
1:A:535:THR:CG2	1:A:616:VAL:HA	2.25	0.67
1:A:714:PHE:HB2	9:I:97:MET:HE1	1.76	0.67
1:A:942:PHE:CE1	5:E:207:ARG:HD3	2.28	0.67
2:B:90:ILE:HD12	2:B:432:MET:SD	2.34	0.67
2:B:705:MET:H	2:B:710:LEU:CD1	2.07	0.67
2:B:797:TYR:HE1	2:B:854:LEU:CD2	2.07	0.67
3:C:147:LEU:HB2	3:C:151:GLN:HB2	1.75	0.67
13:T:19:DC:C6	13:T:20:BRU:BR	3.03	0.67
1:A:34:LYS:NZ	1:A:57:ARG:NH1	2.41	0.67
1:A:858:ASN:ND2	1:A:860:LEU:N	2.39	0.67
2:B:652:LYS:HB3	2:B:689:LEU:HD23	1.75	0.67
9:I:74:GLU:HA	9:I:80:SER:O	1.93	0.67
1:A:311:GLN:O	1:A:312:PRO:C	2.37	0.67
1:A:1407:GLU:CD	1:A:1407:GLU:H	2.03	0.67
2:B:906:SER:O	2:B:941:LEU:HD23	1.94	0.67
3:C:50:GLU:HB3	12:L:64:LEU:HD11	1.75	0.67
3:C:101:LEU:CD1	3:C:118:LEU:HD23	2.21	0.67
3:C:203:GLN:HG3	3:C:207:CYS:SG	2.34	0.67
7:G:150:CYS:C	7:G:151:ILE:HG13	2.18	0.67
1:A:42:ASP:HB3	1:A:45:GLN:N	2.10	0.67
1:A:1015:VAL:HG12	1:A:1019:CYS:SG	2.34	0.67
1:A:1032:LEU:O	1:A:1036:ARG:HD3	1.94	0.67
1:A:1105:LEU:HD22	1:A:1384:VAL:HG21	1.75	0.67
1:A:1276:VAL:HG11	1:A:1315:GLU:HB3	1.76	0.67
2:B:90:ILE:CD1	2:B:432:MET:SD	2.83	0.67
2:B:324:ILE:HG23	2:B:329:THR:HG22	1.77	0.67
2:B:800:GLN:HB3	10:J:52:THR:HG21	1.76	0.67
2:B:871:THR:HG22	2:B:872:GLU:H	1.60	0.67
5:E:207:ARG:HH11	5:E:207:ARG:CB	2.06	0.67
1:A:869:GLY:O	5:E:204:THR:HG21	1.95	0.67
1:A:974:ASP:C	1:A:976:THR:H	2.02	0.67
1:A:1242:VAL:HG12	1:A:1243:VAL:H	1.58	0.67
10:J:23:ASN:C	10:J:25:LEU:N	2.51	0.67
1:A:399:HIS:HB3	1:A:400:PRO:CD	2.23	0.67

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:942:ARG:NH2	13:T:24:DC:OP2	2.28	0.67
7:G:27:LYS:HD3	7:G:51:TYR:HE2	1.56	0.67
1:A:875:ALA:HA	1:A:878:ILE:HD12	1.77	0.67
1:A:1006:ILE:HG22	1:A:1007:ILE:N	2.08	0.67
2:B:25:ILE:HG23	2:B:658:ILE:HD11	1.77	0.67
2:B:102:VAL:CG2	2:B:112:LEU:HD22	2.25	0.67
2:B:377:PHE:O	2:B:380:TYR:N	2.28	0.67
2:B:976:ILE:O	2:B:990:ILE:HB	1.95	0.67
2:B:1039:GLY:HA2	10:J:51:LEU:CD2	2.25	0.67
3:C:51:VAL:HG22	3:C:155:LEU:HD22	1.75	0.67
1:A:219:PHE:O	1:A:222:LEU:N	2.27	0.67
1:A:593:GLU:HA	1:A:593:GLU:OE1	1.93	0.67
2:B:705:MET:HB3	2:B:706:GLN:OE1	1.95	0.67
8:H:24:CYS:HB2	8:H:44:VAL:CG2	2.25	0.67
1:A:42:ASP:HB3	1:A:45:GLN:CA	2.24	0.66
1:A:427:GLN:HG3	1:A:430:TRP:CZ2	2.29	0.66
2:B:90:ILE:O	2:B:90:ILE:HG22	1.95	0.66
5:E:157:SER:OG	5:E:160:GLU:HG3	1.95	0.66
12:L:58:LYS:O	12:L:59:ALA:O	2.13	0.66
1:A:1002:GLY:H	1:A:1007:ILE:HG21	1.60	0.66
2:B:642:ASP:CA	2:B:649:LYS:HG3	2.25	0.66
2:B:991:GLY:O	2:B:992:ILE:HB	1.94	0.66
4:D:170:THR:CG2	4:D:172:LEU:HG	2.25	0.66
2:B:185:THR:O	2:B:188:ASP:HB2	1.95	0.66
2:B:292:ILE:HD13	2:B:326:ASP:HA	1.77	0.66
2:B:582:VAL:HG22	2:B:626:ILE:HB	1.76	0.66
4:D:159:THR:O	4:D:163:VAL:HG23	1.96	0.66
4:D:164:ILE:O	4:D:168:LYS:HG2	1.95	0.66
10:J:27:GLU:O	10:J:29:GLU:N	2.28	0.66
1:A:982:THR:HB	1:A:985:ASP:H	1.61	0.66
2:B:629:ASP:HB3	2:B:632:ARG:NE	2.11	0.66
2:B:637:LEU:HD22	2:B:741:CYS:O	1.94	0.66
2:B:863:GLU:OE2	2:B:873:THR:HA	1.95	0.66
5:E:56:LYS:HG3	5:E:84:ASP:HB2	1.78	0.66
9:I:77:LYS:HG2	9:I:78:CYS:N	2.10	0.66
9:I:111:THR:CG2	9:I:112:SER:N	2.58	0.66
2:B:175:ARG:HH11	2:B:175:ARG:HG3	1.60	0.66
2:B:1187:ASN:O	2:B:1188:LYS:CB	2.44	0.66
12:L:55:ILE:O	12:L:56:LEU:HB2	1.95	0.66
1:A:783:THR:HG21	1:A:796:SER:O	1.95	0.66
1:A:855:THR:HG21	1:A:857:ARG:NE	2.11	0.66

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:90:VAL:HG11	1:A:297:GLN:HA	1.78	0.66
1:A:326:ARG:HD3	1:A:330:LYS:HZ2	1.61	0.66
1:A:350:ARG:HD2	1:A:488:ASN:ND2	2.10	0.66
1:A:787:PHE:HE1	1:A:796:SER:HA	1.59	0.66
1:A:1161:THR:C	1:A:1163:ILE:H	2.00	0.66
2:B:603:LEU:HB3	2:B:609:ILE:CG1	2.24	0.66
2:B:770:GLN:OE1	2:B:983:ARG:HA	1.96	0.66
8:H:15:VAL:HG22	8:H:26:ILE:CD1	2.26	0.66
8:H:100:THR:HG22	8:H:101:ALA:N	2.10	0.66
9:I:35:VAL:HG12	9:I:36:GLU:N	2.10	0.66
1:A:1259:MET:HE3	1:A:1262:LYS:NZ	2.11	0.66
5:E:161:LYS:HD2	5:E:195:VAL:HG23	1.78	0.66
7:G:106:MET:CG	7:G:107:LYS:N	2.58	0.66
1:A:182:VAL:CG2	1:A:201:VAL:HG22	2.26	0.66
1:A:855:THR:HA	1:A:866:PHE:O	1.95	0.66
1:A:1141:THR:OG1	1:A:1205:LYS:HD3	1.95	0.66
2:B:1065:GLN:HG3	2:B:1067:ARG:H	1.61	0.66
8:H:40:LEU:HD13	8:H:123:MET:HB2	1.77	0.66
1:A:853:ASP:OD1	1:A:855:THR:HG22	1.95	0.66
2:B:255:GLN:HB2	2:B:272:THR:HB	1.78	0.66
2:B:296:GLU:C	2:B:299:GLU:HB2	2.20	0.66
4:D:204:ASP:O	4:D:208:GLU:HB2	1.96	0.66
7:G:126:ASN:HD22	7:G:128:PRO:HD3	1.60	0.66
1:A:1436:ILE:O	1:A:1437:GLY:C	2.39	0.65
2:B:345:LYS:HG2	2:B:346:GLU:N	2.11	0.65
5:E:7:ARG:HG3	5:E:8:ASN:H	1.61	0.65
7:G:51:TYR:HD2	7:G:51:TYR:C	2.04	0.65
9:I:16:PRO:HB3	9:I:27:PHE:HE2	1.61	0.65
1:A:341:MET:HE2	1:A:843:LYS:NZ	2.12	0.65
1:A:407:ARG:HG2	1:A:430:TRP:CH2	2.31	0.65
1:A:441:PRO:HD2	1:A:498:ARG:NH2	2.11	0.65
5:E:93:MET:O	5:E:97:VAL:HG23	1.96	0.65
2:B:273:LEU:O	2:B:276:ILE:HB	1.97	0.65
2:B:576:ASP:HA	2:B:622:LYS:NZ	2.10	0.65
2:B:806:THR:CG2	2:B:808:ALA:H	2.03	0.65
2:B:951:GLN:HE21	12:L:57:LEU:HD13	1.61	0.65
8:H:15:VAL:HG22	8:H:26:ILE:HD11	1.78	0.65
8:H:89:LEU:C	8:H:91:ASP:H	2.04	0.65
12:L:42:ARG:O	12:L:43:THR:HB	1.96	0.65
13:T:18:DC:OP1	13:T:18:DC:H3'	1.95	0.65
1:A:63:ARG:H	1:A:74:MET:HE2	1.61	0.65

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:224:PHE:HD2	1:A:229:SER:O	1.80	0.65
1:A:710:LEU:HD12	1:A:710:LEU:N	2.10	0.65
1:A:787:PHE:CE1	1:A:796:SER:HA	2.31	0.65
1:A:809:THR:HG23	1:A:812:GLU:OE1	1.96	0.65
2:B:276:ILE:HD13	2:B:280:ILE:HD11	1.79	0.65
2:B:848:ARG:HD2	10:J:8:PHE:O	1.96	0.65
2:B:897:GLY:O	2:B:898:LEU:HD23	1.96	0.65
2:B:29:ASP:HB3	2:B:658:ILE:CD1	2.27	0.65
2:B:378:LEU:O	2:B:382:ILE:HG13	1.95	0.65
2:B:890:TYR:O	2:B:893:LEU:HB2	1.95	0.65
4:D:71:LYS:HG2	4:D:74:GLN:NE2	2.12	0.65
4:D:130:LEU:O	4:D:132:GLN:N	2.30	0.65
6:F:119:ARG:HG3	6:F:119:ARG:NH1	2.06	0.65
7:G:138:THR:HG22	7:G:139:ILE:N	2.11	0.65
12:L:30:ILE:O	12:L:56:LEU:HA	1.96	0.65
1:A:698:GLN:NE2	9:I:99:LEU:HD11	2.11	0.65
2:B:589:VAL:HG12	2:B:590:HIS:N	2.12	0.65
3:C:3:GLU:HG2	3:C:4:GLU:HG3	1.78	0.65
3:C:75:MET:HE1	3:C:239:PRO:HG2	1.78	0.65
1:A:167:CYS:O	1:A:169:ASN:N	2.29	0.65
10:J:27:GLU:C	10:J:29:GLU:H	2.04	0.65
1:A:1225:PHE:CE2	1:A:1227:ILE:HD11	2.32	0.65
6:F:153:VAL:O	6:F:153:VAL:HG12	1.97	0.65
1:A:903:ASN:ND2	1:A:906:HIS:H	1.90	0.65
8:H:59:ILE:O	8:H:60:ALA:HB3	1.97	0.65
1:A:108:MET:SD	1:A:210:ILE:HD13	2.37	0.65
1:A:903:ASN:ND2	1:A:906:HIS:N	2.45	0.65
1:A:1111:MET:HE3	1:A:1114:PRO:HA	1.79	0.65
1:A:1166:ASP:OD2	1:A:1239:ARG:HD2	1.97	0.65
2:B:417:PHE:HE1	2:B:453:ILE:HD13	1.61	0.65
2:B:879:ARG:HD2	2:B:883:LEU:HD23	1.79	0.65
5:E:14:ARG:HH21	5:E:141:VAL:HG12	1.61	0.65
1:A:332:LYS:H	1:A:337:ARG:HB3	1.60	0.64
1:A:914:GLU:HB2	1:A:979:SER:O	1.97	0.64
2:B:39:ARG:NH1	2:B:665:GLU:HG2	2.12	0.64
2:B:1002:THR:OG1	2:B:1006:ILE:HG13	1.96	0.64
2:B:1147:LEU:HD22	2:B:1151:LEU:HD22	1.79	0.64
7:G:53:ASN:HD22	7:G:53:ASN:N	1.94	0.64
1:A:767:GLN:NE2	1:A:774:ARG:HB3	2.12	0.64
2:B:44:VAL:HG21	2:B:199:MET:O	1.97	0.64
9:I:55:THR:HG23	9:I:86:PHE:HZ	1.62	0.64

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:705:LYS:HD2	1:A:708:MET:CE	2.27	0.64
2:B:642:ASP:HB3	2:B:649:LYS:HD2	1.78	0.64
2:B:984:HIS:CD2	2:B:1025:HIS:HA	2.33	0.64
3:C:52:GLU:OE2	3:C:154:LYS:HD2	1.97	0.64
5:E:90:VAL:CA	5:E:120:ALA:HB2	2.27	0.64
8:H:83:GLN:H	11:K:54:ARG:HD3	1.62	0.64
1:A:668:ASP:CB	1:A:741:ASN:HD21	2.07	0.64
2:B:701:ILE:HD11	2:B:703:ILE:HD11	1.79	0.64
4:D:190:GLU:O	4:D:194:LEU:HG	1.98	0.64
1:A:707:GLY:HA3	1:A:1281:ARG:HD3	1.79	0.64
1:A:853:ASP:O	1:A:854:ASN:HB2	1.97	0.64
6:F:107:VAL:HG12	6:F:109:VAL:H	1.62	0.64
9:I:110:PHE:H	9:I:110:PHE:HD2	1.44	0.64
1:A:42:ASP:HB3	1:A:45:GLN:H	1.63	0.64
2:B:313:MET:O	2:B:316:PRO:HD2	1.97	0.64
2:B:351:TYR:O	2:B:355:ILE:HG13	1.97	0.64
2:B:809:MET:HE2	2:B:814:PHE:CD2	2.31	0.64
3:C:112:ASN:HB3	3:C:114:TYR:CE1	2.33	0.64
1:A:513:SER:OG	1:A:515:GLN:HB3	1.97	0.64
2:B:654:ARG:HH11	2:B:654:ARG:HG3	1.62	0.64
2:B:705:MET:HA	2:B:705:MET:HE3	1.79	0.64
3:C:66:ARG:CZ	10:J:2:ILE:HG21	2.27	0.64
7:G:14:HIS:CD2	7:G:16:SER:H	2.16	0.64
8:H:84:ALA:HA	8:H:87:ARG:HB2	1.80	0.64
1:A:287:HIS:HA	1:A:290:GLU:CD	2.23	0.64
1:A:335:ARG:HH12	2:B:1202:LEU:HD22	1.63	0.64
1:A:666:ILE:HD12	1:A:667:GLY:H	1.62	0.64
2:B:865:LYS:NZ	2:B:869:SER:HA	2.12	0.64
2:B:1099:VAL:C	2:B:1101:ASP:H	2.05	0.64
3:C:179:GLU:HG2	3:C:180:TYR:N	2.13	0.64
8:H:47:PHE:HD2	8:H:95:TYR:HD1	1.43	0.64
1:A:69:THR:HG21	2:B:1174:LYS:NZ	2.12	0.64
1:A:219:PHE:HB3	1:A:224:PHE:HB2	1.79	0.64
1:A:709:THR:HB	1:A:712:GLU:HG3	1.78	0.64
1:A:830:LYS:CE	1:A:1081:LEU:HD12	2.28	0.64
2:B:604:ARG:C	2:B:606:LYS:H	2.06	0.64
2:B:642:ASP:HB3	2:B:649:LYS:CE	2.27	0.64
1:A:41:MET:O	1:A:50:ILE:HG13	1.98	0.63
1:A:107:CYS:SG	1:A:148:CYS:HB2	2.38	0.63
2:B:20:ASP:O	2:B:22:SER:N	2.31	0.63
2:B:176:SER:O	2:B:182:SER:HB3	1.98	0.63

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:882:THR:CG2	2:B:883:LEU:N	2.61	0.63
2:B:882:THR:HG22	2:B:883:LEU:N	2.13	0.63
4:D:220:LEU:CD1	4:D:221:TYR:H	2.11	0.63
7:G:51:TYR:C	7:G:51:TYR:CD2	2.74	0.63
1:A:436:ILE:HD11	1:A:491:VAL:HG11	1.80	0.63
1:A:870:GLU:HG2	5:E:208:TYR:CG	2.34	0.63
1:A:1317:MET:O	1:A:1322:ILE:HD11	1.98	0.63
2:B:731:VAL:HG12	2:B:732:SER:N	2.11	0.63
7:G:122:ASN:ND2	7:G:125:SER:HB3	2.13	0.63
1:A:244:PRO:HB2	1:A:245:PRO:CD	2.28	0.63
1:A:850:VAL:HG21	1:A:1058:VAL:HG11	1.81	0.63
1:A:1438:THR:HG22	6:F:92:ARG:HD2	1.80	0.63
2:B:705:MET:H	2:B:710:LEU:HD12	1.62	0.63
7:G:74:TYR:H	7:G:74:TYR:HD2	1.46	0.63
1:A:62:ASP:O	1:A:63:ARG:C	2.42	0.63
1:A:545:GLN:O	1:A:548:ASN:N	2.31	0.63
1:A:598:LEU:HA	8:H:122:LEU:HD13	1.79	0.63
1:A:899:VAL:CG2	1:A:1029:ARG:HG2	2.28	0.63
1:A:1409:LEU:HD13	2:B:1207:LEU:HD11	1.80	0.63
2:B:57:TYR:N	2:B:57:TYR:HD1	1.97	0.63
2:B:412:LEU:HB3	2:B:466:TRP:HE1	1.63	0.63
2:B:557:PHE:C	2:B:557:PHE:CD2	2.76	0.63
11:K:18:LYS:NZ	11:K:38:GLU:HG2	2.13	0.63
1:A:899:VAL:HB	1:A:929:LEU:CD1	2.17	0.63
1:A:1149:ALA:CB	9:I:47:GLU:HA	2.28	0.63
2:B:842:ASN:ND2	2:B:845:SER:H	1.95	0.63
2:B:1189:ILE:HG22	2:B:1190:ASP:N	2.13	0.63
3:C:184:ASN:OD1	3:C:187:LYS:HA	1.99	0.63
5:E:55:ARG:HA	5:E:58:MET:HG3	1.81	0.63
1:A:68:GLN:OE1	1:A:68:GLN:O	2.15	0.63
1:A:337:ARG:HD3	2:B:1132:GLU:CD	2.23	0.63
1:A:1206:ASP:O	1:A:1274:ARG:NH2	2.32	0.63
1:A:1341:ILE:HG23	1:A:1342:GLU:N	2.13	0.63
2:B:778:MET:HE2	2:B:1094:ARG:HG2	1.79	0.63
3:C:3:GLU:HB3	11:K:104:ASN:HD21	1.63	0.63
1:A:37:PHE:HB2	1:A:52:GLY:HA3	1.79	0.63
1:A:728:LYS:O	1:A:732:LEU:HG	1.99	0.63
2:B:822:ASN:ND2	10:J:52:THR:HG21	2.13	0.63
2:B:1033:LYS:NZ	2:B:1070:GLU:OE1	2.29	0.63
2:B:1138:MET:HE2	2:B:1146:PHE:HD2	1.63	0.63
3:C:50:GLU:HB3	12:L:64:LEU:HD12	1.80	0.63

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:440:ASP:O	1:A:460:VAL:HG23	1.99	0.63
1:A:1121:GLU:HG2	1:A:1122:PRO:HD2	1.80	0.63
2:B:347:LYS:HG3	2:B:348:ARG:H	1.64	0.63
2:B:711:GLU:H	2:B:712:PRO:HD2	1.64	0.63
12:L:52:GLY:O	12:L:53:HIS:C	2.42	0.63
1:A:447:GLN:NE2	13:T:20:BRU:H4'	2.13	0.63
2:B:1074:ASN:OD1	2:B:1076:HIS:HB2	1.99	0.63
1:A:443:LEU:HD13	1:A:455:MET:HE2	1.81	0.62
1:A:852:TYR:CE2	1:A:1060:PRO:HB2	2.34	0.62
5:E:140:LEU:HD12	5:E:140:LEU:N	2.14	0.62
1:A:172:PRO:HD3	1:A:185:TRP:NE1	2.14	0.62
1:A:344:ARG:HH11	1:A:344:ARG:CB	2.04	0.62
1:A:466:SER:HB3	2:B:1103:ILE:HD12	1.79	0.62
1:A:1345:ARG:HG2	1:A:1372:VAL:HG12	1.82	0.62
2:B:187:SER:O	2:B:191:LYS:HG3	1.99	0.62
2:B:429:PHE:HA	2:B:432:MET:HE2	1.80	0.62
2:B:998:ASP:OD1	3:C:35:ARG:NH2	2.31	0.62
3:C:33:LEU:HD12	3:C:37:MET:HE2	1.81	0.62
6:F:89:GLU:HB3	6:F:134:ILE:HD13	1.79	0.62
9:I:70:ARG:HH11	9:I:84:VAL:HB	1.61	0.62
1:A:822:GLU:HA	2:B:513:GLN:HE22	1.64	0.62
1:A:901:LEU:N	1:A:926:GLN:NE2	2.41	0.62
1:A:967:ALA:O	1:A:971:PHE:HD1	1.82	0.62
1:A:1386:ARG:HB2	1:A:1403:GLU:CG	2.18	0.62
2:B:63:ILE:HA	2:B:421:PHE:CE2	2.34	0.62
2:B:294:ASP:C	2:B:296:GLU:H	2.06	0.62
2:B:707:PRO:HG2	2:B:708:GLU:H	1.63	0.62
2:B:865:LYS:O	2:B:866:TYR:HD1	1.81	0.62
2:B:881:ASN:HD22	2:B:933:SER:N	1.96	0.62
1:A:61:ILE:O	1:A:62:ASP:CB	2.48	0.62
1:A:168:GLY:O	1:A:169:ASN:C	2.41	0.62
2:B:57:TYR:N	2:B:57:TYR:CD1	2.66	0.62
2:B:110:HIS:CB	12:L:54:ARG:HH22	2.12	0.62
7:G:145:VAL:HG12	7:G:146:LYS:N	2.14	0.62
8:H:8:ASP:OD2	8:H:9:ILE:N	2.26	0.62
9:I:16:PRO:HB3	9:I:27:PHE:CE2	2.33	0.62
10:J:53:HIS:CD2	10:J:54:VAL:N	2.67	0.62
1:A:107:CYS:N	1:A:114:LEU:HD21	2.14	0.62
1:A:853:ASP:OD1	1:A:853:ASP:C	2.42	0.62
2:B:236:HIS:CE1	2:B:389:ALA:HA	2.34	0.62
2:B:502:ILE:H	2:B:502:ILE:HD13	1.64	0.62

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:G:112:LYS:NZ	7:G:120:THR:HA	2.14	0.62
1:A:399:HIS:CB	1:A:400:PRO:HD3	2.28	0.62
1:A:1116:LEU:C	1:A:1116:LEU:HD12	2.25	0.62
1:A:1339:LEU:HD13	5:E:147:HIS:CD2	2.35	0.62
1:A:1345:ARG:HG2	1:A:1372:VAL:CG1	2.29	0.62
3:C:173:ALA:O	3:C:174:ALA:HB3	1.98	0.62
1:A:105:CYS:O	1:A:114:LEU:HG	1.99	0.62
1:A:404:TYR:HB2	1:A:433:GLU:HB2	1.82	0.62
1:A:598:LEU:HD11	8:H:124:ARG:HB2	1.81	0.62
1:A:1130:GLN:O	1:A:1134:ILE:HG13	1.99	0.62
2:B:983:ARG:HH11	2:B:1091:TYR:HB3	1.64	0.62
2:B:865:LYS:HZ3	2:B:869:SER:HA	1.62	0.62
3:C:75:MET:HE1	3:C:239:PRO:CG	2.30	0.62
1:A:608:ILE:HD12	1:A:613:ILE:CD1	2.30	0.62
2:B:770:GLN:HG2	2:B:983:ARG:O	1.99	0.62
2:B:1117:GLN:HE21	2:B:1199:ALA:HB2	1.64	0.62
5:E:124:VAL:HG13	5:E:132:ILE:HB	1.82	0.62
1:A:913:LEU:HG	1:A:915:SER:H	1.63	0.62
4:D:39:ASN:HD22	4:D:43:GLU:HG3	1.65	0.62
9:I:104:LEU:N	9:I:104:LEU:HD23	2.13	0.62
1:A:49:LYS:HZ1	1:A:61:ILE:N	1.98	0.61
2:B:110:HIS:HB2	12:L:54:ARG:NH2	2.15	0.61
2:B:560:GLU:O	2:B:561:TRP:CD1	2.52	0.61
3:C:242:GLN:OE1	3:C:245:VAL:HG21	2.00	0.61
6:F:132:LEU:O	6:F:148:VAL:HG23	2.00	0.61
1:A:767:GLN:NE2	1:A:774:ARG:HD2	2.15	0.61
1:A:1277:GLU:C	1:A:1279:ILE:H	2.08	0.61
1:A:1433:MET:HE3	7:G:63:PRO:HB3	1.82	0.61
2:B:800:GLN:HB3	10:J:52:THR:CG2	2.30	0.61
5:E:6:GLU:HA	5:E:9:ILE:HD12	1.80	0.61
6:F:109:VAL:HG12	6:F:110:ASP:H	1.65	0.61
7:G:79:PHE:HE2	7:G:106:MET:HE2	1.63	0.61
8:H:36:CYS:HA	8:H:126:GLU:O	2.01	0.61
1:A:741:ASN:HD22	1:A:742:ASN:N	1.97	0.61
1:A:1208:THR:HG22	1:A:1210:GLY:N	2.15	0.61
3:C:213:PRO:O	3:C:214:ASN:HB2	1.99	0.61
6:F:109:VAL:HG12	6:F:110:ASP:N	2.16	0.61
1:A:1161:THR:C	1:A:1163:ILE:N	2.56	0.61
1:A:1208:THR:HG22	1:A:1210:GLY:H	1.65	0.61
1:A:69:THR:HG21	2:B:1174:LYS:HZ2	1.65	0.61
1:A:326:ARG:HH11	1:A:330:LYS:NZ	1.98	0.61

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1079:MET:HG2	1:A:1359:ASP:OD1	2.00	0.61
6:F:111:LEU:O	6:F:113:GLY:N	2.33	0.61
9:I:80:SER:OG	9:I:105:SER:HB2	2.00	0.61
10:J:1:MET:H3	10:J:56:LEU:N	1.98	0.61
1:A:298:PHE:O	1:A:302:THR:HB	2.00	0.61
2:B:642:ASP:O	2:B:644:GLU:N	2.29	0.61
2:B:799:PRO:HB3	2:B:818:PRO:HG2	1.81	0.61
2:B:1183:LYS:O	2:B:1183:LYS:HE3	2.00	0.61
3:C:166:GLU:CG	11:K:10:PHE:HZ	2.07	0.61
5:E:98:ILE:HA	5:E:101:GLN:HB2	1.83	0.61
8:H:33:GLN:HG2	8:H:129:TYR:HE2	1.65	0.61
1:A:709:THR:HG23	9:I:94:ASP:HA	1.82	0.61
2:B:209:GLU:OE2	2:B:485:ARG:NE	2.33	0.61
2:B:735:ALA:HB3	2:B:738:PHE:CE1	2.35	0.61
2:B:780:VAL:HG21	10:J:56:LEU:CD1	2.30	0.61
2:B:936:ASP:OD1	2:B:937:ALA:N	2.34	0.61
2:B:971:THR:OG1	3:C:61:GLU:HG3	2.00	0.61
5:E:48:ASP:CG	5:E:49:SER:H	2.09	0.61
1:A:709:THR:HG22	1:A:711:ARG:H	1.66	0.61
1:A:863:VAL:C	1:A:864:ILE:HD12	2.25	0.61
1:A:1402:PHE:CD2	1:A:1403:GLU:HG2	2.36	0.61
2:B:464:GLY:HA2	2:B:479:VAL:O	2.01	0.61
2:B:579:ARG:HG2	2:B:579:ARG:NH1	2.16	0.61
3:C:58:LEU:HD11	10:J:2:ILE:HG13	1.82	0.61
4:D:208:GLU:O	4:D:212:LYS:HG3	2.00	0.61
9:I:55:THR:HG22	9:I:55:THR:O	1.99	0.61
1:A:385:ILE:HG22	1:A:386:ASP:N	2.16	0.61
1:A:545:GLN:O	1:A:546:VAL:C	2.44	0.61
1:A:567:LYS:CD	8:H:95:TYR:HA	2.31	0.61
1:A:773:LYS:H	1:A:773:LYS:HD2	1.66	0.61
1:A:1000:LEU:N	1:A:1000:LEU:HD12	2.16	0.61
2:B:583:ASN:HD21	2:B:628:THR:HG23	1.64	0.61
4:D:217:LEU:O	4:D:219:THR:N	2.34	0.61
5:E:7:ARG:HG3	5:E:8:ASN:N	2.16	0.61
5:E:180:ARG:HB2	5:E:215:MET:OXT	2.00	0.61
1:A:208:LEU:O	1:A:208:LEU:HD23	2.02	0.60
1:A:608:ILE:HD12	1:A:613:ILE:HD12	1.83	0.60
2:B:603:LEU:HD13	2:B:608:ASP:HB2	1.83	0.60
3:C:208:GLU:O	3:C:210:GLU:N	2.34	0.60
13:T:19:DC:H2"	13:T:20:BRU:H6	1.82	0.60
1:A:547:LEU:HD13	11:K:58:PHE:CD1	2.36	0.60

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:628:GLY:O	1:A:632:VAL:HG23	2.00	0.60
1:A:744:LYS:HG2	1:A:748:MET:HE2	1.81	0.60
2:B:506:GLY:HA2	2:B:508:LEU:HG	1.84	0.60
2:B:755:ILE:O	2:B:755:ILE:HG22	2.00	0.60
2:B:1065:GLN:HE21	2:B:1067:ARG:H	1.47	0.60
3:C:242:GLN:HA	3:C:245:VAL:CG2	2.28	0.60
5:E:124:VAL:C	5:E:126:SER:H	2.10	0.60
2:B:31:TRP:CE3	2:B:34:ILE:HD12	2.36	0.60
2:B:235:SER:O	2:B:236:HIS:HD2	1.84	0.60
9:I:85:PHE:HD1	9:I:99:LEU:HD22	1.64	0.60
1:A:1206:ASP:HB3	1:A:1274:ARG:HH22	1.67	0.60
2:B:281:PRO:HB3	2:B:320:ASP:OD2	2.01	0.60
2:B:402:GLY:HA2	2:B:695:ALA:HB3	1.83	0.60
2:B:502:ILE:HD13	2:B:502:ILE:N	2.15	0.60
2:B:834:ASN:HB3	2:B:840:ILE:HG13	1.83	0.60
13:T:16:DC:H2"	13:T:17:DG:C8	2.36	0.60
1:A:803:SER:H	1:A:806:ARG:HG3	1.66	0.60
1:A:903:ASN:ND2	1:A:905:ASP:N	2.48	0.60
1:A:1080:THR:O	1:A:1080:THR:HG22	2.02	0.60
2:B:254:LEU:HD23	2:B:381:MET:CE	2.22	0.60
2:B:254:LEU:HD22	2:B:361:LEU:CD1	2.31	0.60
9:I:68:LEU:HB3	9:I:84:VAL:HG23	1.83	0.60
10:J:1:MET:N	10:J:56:LEU:N	2.49	0.60
1:A:341:MET:HE2	1:A:843:LYS:HZ3	1.67	0.60
1:A:393:ARG:HG3	1:A:393:ARG:NH1	2.17	0.60
1:A:1116:LEU:N	1:A:1308:THR:CG2	2.63	0.60
1:A:1438:THR:HG23	6:F:92:ARG:HB2	1.83	0.60
2:B:96:TYR:N	2:B:129:PHE:O	2.29	0.60
2:B:866:TYR:HB2	2:B:870:ILE:HB	1.84	0.60
2:B:941:LEU:HD21	2:B:946:ASN:HA	1.82	0.60
5:E:114:ASN:O	5:E:115:ASN:HB3	2.01	0.60
11:K:82:ASP:OD1	11:K:84:LYS:N	2.33	0.60
1:A:304:MET:O	1:A:324:SER:HB2	2.02	0.60
1:A:1092:LYS:O	1:A:1094:VAL:HG23	2.02	0.60
5:E:136:ASN:OD1	5:E:138:ALA:N	2.35	0.60
1:A:79:GLY:HA3	1:A:243:PRO:CG	2.32	0.60
1:A:268:ASP:HB3	1:A:299:HIS:CE1	2.37	0.60
1:A:382:PRO:HB3	1:A:428:TYR:HE2	1.67	0.60
1:A:470:LEU:C	1:A:470:LEU:HD12	2.27	0.60
2:B:882:THR:CG2	2:B:934:LYS:O	2.47	0.60
1:A:55:ASP:C	1:A:57:ARG:H	2.10	0.60

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:115:LEU:O	1:A:122:MET:HE2	2.02	0.60
1:A:393:ARG:HG3	1:A:393:ARG:HH11	1.67	0.60
2:B:705:MET:N	2:B:710:LEU:HD12	2.17	0.60
2:B:839:MET:CE	2:B:980:PHE:HB2	2.31	0.60
4:D:130:LEU:C	4:D:132:GLN:H	2.10	0.60
1:A:1200:ALA:HA	1:A:1203:ASN:HD22	1.67	0.60
2:B:217:ARG:HE	2:B:405:ARG:HB2	1.65	0.60
2:B:642:ASP:HB3	2:B:649:LYS:HE3	1.84	0.60
8:H:63:LEU:C	8:H:90:ALA:HB3	2.27	0.60
1:A:225:ASN:HD22	1:A:228:PHE:H	1.49	0.59
1:A:280:GLU:HG2	1:A:289:ILE:HD13	1.83	0.59
1:A:821:ARG:O	1:A:825:ILE:HG13	2.02	0.59
1:A:899:VAL:O	1:A:929:LEU:HD12	2.02	0.59
1:A:1025:ARG:O	1:A:1026:LEU:HD23	2.02	0.59
2:B:244:LEU:HG	2:B:250:PHE:H	1.67	0.59
2:B:412:LEU:HB3	2:B:466:TRP:NE1	2.16	0.59
2:B:287:ARG:HG3	2:B:292:ILE:HG12	1.83	0.59
1:A:172:PRO:HB3	1:A:185:TRP:CE2	2.36	0.59
1:A:774:ARG:HE	1:A:797:LYS:CB	2.15	0.59
1:A:828:ALA:HB2	2:B:530:GLY:HA2	1.82	0.59
1:A:962:ARG:HA	1:A:965:GLN:HG3	1.82	0.59
1:A:1386:ARG:HH11	13:T:16:DC:H5"	1.66	0.59
3:C:22:LEU:HD13	3:C:230:MET:CE	2.32	0.59
3:C:186:LEU:N	3:C:186:LEU:HD12	2.17	0.59
1:A:417:TYR:O	1:A:418:SER:C	2.45	0.59
1:A:497:THR:CG2	2:B:1146:PHE:HD1	2.15	0.59
1:A:605:MET:HE2	1:A:607:ILE:HG12	1.82	0.59
1:A:740:LEU:C	1:A:740:LEU:HD12	2.27	0.59
1:A:1187:GLN:HG3	1:A:1188:GLN:N	2.17	0.59
1:A:1211:GLN:O	1:A:1214:GLU:HB2	2.03	0.59
2:B:98:THR:O	2:B:126:SER:HB2	2.02	0.59
2:B:542:MET:CE	2:B:747:MET:HG3	2.31	0.59
3:C:89:GLU:O	3:C:90:ASP:HB3	2.02	0.59
12:L:55:ILE:O	12:L:56:LEU:CB	2.50	0.59
1:A:60:SER:C	1:A:61:ILE:HG13	2.28	0.59
1:A:260:ASP:OD1	1:A:261:ASP:N	2.36	0.59
1:A:883:LEU:CD1	1:A:1017:LEU:HD11	2.32	0.59
2:B:218:SER:HB2	2:B:241:ARG:HH11	1.61	0.59
2:B:454:THR:HG22	2:B:455:SER:N	2.18	0.59
2:B:956:THR:HA	2:B:961:LEU:O	2.02	0.59
4:D:71:LYS:HG2	4:D:74:GLN:HE21	1.68	0.59

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:H:84:ALA:CB	8:H:87:ARG:HB2	2.32	0.59
12:L:61:THR:HG21	12:L:63:ARG:HG3	1.84	0.59
1:A:133:LYS:O	1:A:136:ALA:HB3	2.02	0.59
1:A:700:ASN:ND2	9:I:115:LYS:HD2	2.17	0.59
1:A:902:LEU:HG	1:A:926:GLN:HG3	1.83	0.59
2:B:100:PRO:HB2	2:B:180:TYR:HE1	1.66	0.59
2:B:424:LEU:O	2:B:428:ILE:HG13	2.03	0.59
7:G:21:ARG:HD2	7:G:24:GLN:HB2	1.85	0.59
8:H:18:GLY:O	8:H:19:ARG:HB2	2.01	0.59
1:A:322:VAL:O	1:A:322:VAL:HG12	2.01	0.59
1:A:541:ILE:HG21	1:A:549:MET:HE3	1.85	0.59
1:A:1025:ARG:HA	1:A:1030:ARG:NH1	2.17	0.59
1:A:1205:LYS:O	1:A:1207:LEU:HG	2.03	0.59
3:C:75:MET:HB3	3:C:128:ASN:HB3	1.85	0.59
4:D:121:LYS:O	4:D:124:GLU:HB3	2.01	0.59
5:E:176:PRO:O	5:E:212:ARG:HA	2.02	0.59
9:I:78:CYS:SG	9:I:103:CYS:SG	3.00	0.59
2:B:847:ASP:O	3:C:65:HIS:HE1	1.86	0.59
4:D:123:LEU:HD11	4:D:150:ASN:HD21	1.68	0.59
5:E:5:ASN:O	5:E:9:ILE:HG13	2.03	0.59
13:T:25:DA:H2"	13:T:26:DT:OP2	2.03	0.59
1:A:23:SER:HB3	1:A:233:TRP:CZ2	2.37	0.59
1:A:284:ALA:O	1:A:286:HIS:N	2.31	0.59
1:A:1205:LYS:C	1:A:1274:ARG:HH12	2.10	0.59
2:B:215:GLN:HA	2:B:215:GLN:HE21	1.68	0.59
2:B:882:THR:CG2	2:B:884:ARG:H	2.04	0.59
2:B:1181:GLU:HG2	2:B:1188:LYS:CG	2.33	0.59
3:C:36:VAL:HG21	3:C:251:LEU:HD13	1.83	0.59
3:C:99:LEU:HD12	3:C:118:LEU:HD13	1.84	0.59
6:F:69:LEU:HB2	6:F:72:LYS:HD2	1.85	0.59
1:A:130:ASP:O	1:A:131:SER:C	2.46	0.59
1:A:144:THR:O	1:A:146:MET:HG3	2.03	0.59
1:A:1453:TYR:O	1:A:1454:MET:HB3	2.03	0.59
2:B:181:LEU:HD22	2:B:189:LEU:CD2	2.33	0.59
3:C:39:ALA:CA	3:C:164:ALA:HB3	2.33	0.59
3:C:167:HIS:HA	11:K:6:ARG:HH12	1.65	0.59
4:D:192:LYS:HD2	4:D:199:ASN:HA	1.83	0.59
11:K:45:LEU:HG	11:K:94:ILE:HD13	1.85	0.59
1:A:883:LEU:HD23	1:A:1021:LEU:HD13	1.83	0.58
2:B:507:LYS:HA	2:B:512:ARG:NH2	2.17	0.58
2:B:758:PHE:CE1	2:B:1027:ILE:HG22	2.38	0.58

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:944:THR:HG21	2:B:1122:ARG:HH21	1.64	0.58
2:B:983:ARG:HD2	2:B:1091:TYR:HD2	1.67	0.58
5:E:119:SER:O	5:E:123:LEU:HD21	2.03	0.58
7:G:106:MET:CG	7:G:107:LYS:H	2.16	0.58
11:K:111:LEU:N	11:K:111:LEU:HD23	2.18	0.58
2:B:878:GLN:O	2:B:879:ARG:C	2.46	0.58
2:B:880:THR:HB	2:B:934:LYS:HD2	1.85	0.58
2:B:1182:CYS:O	2:B:1183:LYS:C	2.47	0.58
4:D:69:ALA:HB2	4:D:72:ARG:NH1	2.17	0.58
8:H:102:TYR:OH	8:H:122:LEU:HD22	2.03	0.58
9:I:62:ILE:O	9:I:62:ILE:HG12	2.03	0.58
1:A:297:GLN:HG3	1:A:297:GLN:O	2.00	0.58
1:A:933:TYR:O	1:A:937:VAL:HG23	2.03	0.58
1:A:1100:ARG:HH21	1:A:1351:GLU:CG	2.16	0.58
2:B:199:MET:HE2	2:B:492:LEU:CD2	2.33	0.58
2:B:486:TYR:CE1	2:B:1096:ARG:NH2	2.71	0.58
2:B:891:ASP:C	2:B:893:LEU:H	2.12	0.58
10:J:30:LEU:HD21	10:J:38:ARG:NH1	2.18	0.58
11:K:60:ALA:O	11:K:73:LEU:HD12	2.03	0.58
2:B:101:MET:CG	2:B:111:ALA:HA	2.33	0.58
2:B:215:GLN:NE2	2:B:499:ASN:HB3	2.18	0.58
2:B:282:ILE:CD1	2:B:382:ILE:HD13	2.33	0.58
2:B:345:LYS:C	2:B:347:LYS:N	2.61	0.58
2:B:345:LYS:O	2:B:347:LYS:N	2.30	0.58
2:B:802:PRO:HG2	2:B:805:THR:HG22	1.85	0.58
2:B:959:ASP:HB2	2:B:961:LEU:HG	1.86	0.58
5:E:85:GLU:O	5:E:87:SER:N	2.34	0.58
13:T:14:DT:H2''	13:T:15:DA:C2	2.38	0.58
1:A:1191:TRP:CZ3	9:I:43:VAL:HG21	2.39	0.58
2:B:110:HIS:HB2	12:L:54:ARG:HH22	1.68	0.58
2:B:245:GLU:C	2:B:246:LYS:HG3	2.28	0.58
3:C:138:GLU:OE1	3:C:138:GLU:N	2.36	0.58
5:E:28:TYR:C	5:E:65:THR:HG22	2.28	0.58
8:H:130:ARG:HD2	8:H:130:ARG:N	2.17	0.58
13:T:19:DC:H2'	13:T:20:BRU:BR	2.58	0.58
1:A:567:LYS:CB	1:A:568:PRO:CD	2.82	0.58
1:A:1441:PHE:CZ	6:F:89:GLU:HA	2.39	0.58
2:B:562:GLY:HA3	2:B:590:HIS:CE1	2.38	0.58
2:B:610:ASN:OD1	2:B:611:PRO:HD2	2.04	0.58
2:B:737:THR:HG21	9:I:66:PRO:HA	1.84	0.58
2:B:842:ASN:HD21	2:B:844:SER:HB2	1.68	0.58

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:864:LYS:HG3	2:B:872:GLU:OE1	2.03	0.58
4:D:155:ARG:HG2	4:D:155:ARG:O	2.02	0.58
8:H:32:THR:HG22	8:H:33:GLN:N	2.17	0.58
8:H:59:ILE:CG2	8:H:60:ALA:N	2.58	0.58
9:I:50:THR:CG2	9:I:51:ASN:N	2.66	0.58
1:A:541:ILE:HG22	1:A:546:VAL:HG23	1.85	0.58
1:A:768:GLN:CG	1:A:816:HIS:HA	2.27	0.58
1:A:789:LYS:HE3	9:I:67:THR:OG1	2.02	0.58
1:A:1195:LEU:HD11	1:A:1267:MET:HE1	1.86	0.58
1:A:1220:PHE:CE2	1:A:1263:ILE:HG23	2.39	0.58
2:B:292:ILE:CD1	2:B:327:ARG:H	2.17	0.58
3:C:38:ILE:HA	3:C:173:ALA:HB2	1.85	0.58
3:C:244:VAL:HG12	3:C:248:ILE:HD11	1.86	0.58
5:E:67:GLU:O	5:E:70:SER:N	2.29	0.58
8:H:84:ALA:CA	8:H:87:ARG:HB2	2.33	0.58
10:J:23:ASN:O	10:J:25:LEU:N	2.37	0.58
10:J:52:THR:O	10:J:52:THR:HG22	2.03	0.58
12:L:27:LEU:HB3	12:L:37:LYS:HD3	1.84	0.58
1:A:351:THR:HG22	1:A:468:PHE:CE1	2.38	0.58
1:A:830:LYS:HE2	1:A:1081:LEU:HD12	1.85	0.58
1:A:984:LYS:HB3	1:A:988:LEU:HD12	1.86	0.58
2:B:363:HIS:O	2:B:364:ILE:HB	2.03	0.58
3:C:226:ASP:O	3:C:227:THR:HB	2.03	0.58
5:E:99:HIS:C	5:E:99:HIS:HD1	2.12	0.58
5:E:157:SER:C	5:E:159:ASP:H	2.10	0.58
9:I:40:SER:OG	9:I:41:PRO:HD2	2.04	0.58
1:A:738:LYS:C	1:A:740:LEU:H	2.11	0.58
1:A:825:ILE:O	1:A:829:VAL:HG23	2.03	0.58
1:A:1364:ASN:HD22	1:A:1365:TYR:N	2.02	0.58
2:B:247:GLY:C	2:B:249:ARG:H	2.10	0.58
8:H:5:LEU:HD22	8:H:133:ASN:O	2.04	0.58
2:B:284:ILE:HD13	2:B:333:PHE:HD2	1.69	0.57
2:B:460:ALA:HB1	2:B:466:TRP:CZ3	2.38	0.57
2:B:1072:MET:CE	2:B:1087:PHE:HD1	2.17	0.57
6:F:118:LEU:O	6:F:122:MET:HG3	2.04	0.57
8:H:42:ILE:HG23	8:H:95:TYR:CE1	2.27	0.57
10:J:14:VAL:O	10:J:14:VAL:HG12	2.04	0.57
1:A:767:GLN:CD	1:A:774:ARG:HD2	2.29	0.57
1:A:998:LEU:HD12	1:A:998:LEU:N	2.19	0.57
1:A:1171:GLN:HG3	1:A:1172:LEU:H	1.68	0.57
1:A:1215:ARG:HA	1:A:1218:GLN:CG	2.34	0.57

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:999:MET:HA	2:B:999:MET:HE3	1.86	0.57
8:H:61:SER:O	8:H:62:SER:HB2	2.04	0.57
14:N:6:DT:H2"	14:N:7:DA:N7	2.19	0.57
1:A:50:ILE:HG22	1:A:52:GLY:H	1.70	0.57
2:B:29:ASP:OD1	2:B:658:ILE:HG21	2.04	0.57
2:B:209:GLU:OE2	2:B:483:LEU:HD23	2.04	0.57
5:E:100:ILE:HG23	5:E:105:PHE:HB2	1.85	0.57
1:A:666:ILE:HD12	1:A:666:ILE:N	2.20	0.57
1:A:1210:GLY:O	1:A:1214:GLU:HG2	2.04	0.57
1:A:1323:ASP:C	1:A:1325:THR:H	2.13	0.57
1:A:1356:ILE:HG21	1:A:1363:VAL:HG23	1.86	0.57
2:B:303:TYR:N	2:B:303:TYR:HD2	2.01	0.57
2:B:610:ASN:HB3	2:B:613:VAL:HG23	1.86	0.57
2:B:755:ILE:HG23	2:B:809:MET:HE3	1.85	0.57
2:B:970:THR:HG22	2:B:971:THR:N	2.19	0.57
3:C:167:HIS:CD2	12:L:70:ARG:HB3	2.39	0.57
4:D:51:ASN:O	4:D:52:LEU:O	2.21	0.57
1:A:714:PHE:O	1:A:718:VAL:HG23	2.05	0.57
1:A:866:PHE:O	1:A:867:ILE:HD12	2.05	0.57
2:B:710:LEU:HD22	2:B:733:HIS:HB3	1.87	0.57
8:H:82:PRO:HB2	11:K:54:ARG:NH1	2.19	0.57
1:A:1332:PHE:HE1	1:A:1381:LEU:HD13	1.69	0.57
2:B:197:PHE:CZ	2:B:816:GLU:HG2	2.40	0.57
2:B:912:ILE:O	2:B:938:SER:HB3	2.04	0.57
2:B:1169:MET:HE1	2:B:1201:LYS:HA	1.86	0.57
5:E:98:ILE:HA	5:E:101:GLN:HE21	1.70	0.57
1:A:89:PRO:C	1:A:204:THR:HG21	2.30	0.57
1:A:567:LYS:HB2	1:A:568:PRO:CD	2.34	0.57
1:A:875:ALA:HB2	1:A:1366:ARG:HD2	1.86	0.57
1:A:1035:TYR:O	1:A:1037:LEU:N	2.37	0.57
1:A:1095:THR:HG23	1:A:1112:LYS:HD2	1.86	0.57
2:B:525:ALA:O	2:B:768:THR:HG23	2.05	0.57
3:C:244:VAL:O	3:C:248:ILE:HG13	2.03	0.57
5:E:90:VAL:O	5:E:90:VAL:HG22	2.04	0.57
6:F:85:MET:HE2	6:F:93:ILE:HD12	1.86	0.57
8:H:61:SER:CB	8:H:139:ASN:HB3	2.35	0.57
8:H:135:LEU:CD2	8:H:137:GLN:HE21	2.17	0.57
1:A:392:VAL:HG13	1:A:415:LEU:CD1	2.33	0.57
1:A:535:THR:HG21	1:A:617:VAL:H	1.68	0.57
2:B:235:SER:C	2:B:236:HIS:HD2	2.13	0.57
2:B:303:TYR:N	2:B:303:TYR:CD2	2.73	0.57

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:1039:GLY:HA2	10:J:51:LEU:HD22	1.87	0.57
2:B:1096:ARG:HB3	2:B:1096:ARG:HH11	1.70	0.57
5:E:84:ASP:O	5:E:86:PRO:HD3	2.05	0.57
1:A:42:ASP:HB3	1:A:45:GLN:HA	1.87	0.57
1:A:84:ILE:O	1:A:84:ILE:HG23	2.04	0.57
1:A:683:ILE:HG21	1:A:801:GLU:HG3	1.87	0.57
1:A:1115:SER:OG	1:A:1116:LEU:N	2.37	0.57
1:A:1149:ALA:HB2	9:I:47:GLU:HA	1.85	0.57
2:B:433:GLN:O	2:B:434:ARG:HG3	2.05	0.57
2:B:604:ARG:O	2:B:606:LYS:N	2.37	0.57
2:B:776:GLN:O	2:B:1095:LEU:HA	2.05	0.57
2:B:778:MET:HE1	2:B:1094:ARG:NH1	2.19	0.57
2:B:859:TYR:OH	2:B:941:LEU:HD12	2.04	0.57
3:C:46:ILE:HG23	3:C:157:CYS:HB3	1.87	0.57
3:C:184:ASN:HD21	3:C:189:THR:HB	1.69	0.57
4:D:47:LEU:HD11	7:G:3:PHE:CD2	2.39	0.57
1:A:438:ASP:O	1:A:439:ASN:HB2	2.05	0.57
1:A:650:GLN:O	1:A:654:ASN:HB2	2.05	0.57
2:B:446:LEU:HG	2:B:448:ILE:HG13	1.87	0.57
2:B:728:ARG:O	2:B:729:ILE:HG13	2.05	0.57
3:C:174:ALA:HB2	3:C:235:VAL:HG22	1.85	0.57
8:H:82:PRO:O	8:H:84:ALA:N	2.32	0.57
12:L:38:LEU:O	12:L:39:SER:CB	2.53	0.57
1:A:335:ARG:NH1	2:B:1206:GLU:CD	2.63	0.56
2:B:167:ILE:HD12	2:B:167:ILE:N	2.20	0.56
2:B:416:LEU:HD11	2:B:460:ALA:CB	2.34	0.56
7:G:9:LEU:HG	7:G:10:ASN:N	2.20	0.56
8:H:91:ASP:C	8:H:93:TYR:H	2.12	0.56
9:I:15:TYR:N	9:I:15:TYR:CD1	2.72	0.56
12:L:27:LEU:HD23	12:L:27:LEU:N	2.20	0.56
1:A:66:LYS:O	1:A:67:CYS:CB	2.52	0.56
1:A:89:PRO:HB2	1:A:204:THR:CG2	2.35	0.56
1:A:441:PRO:HD2	1:A:498:ARG:CZ	2.34	0.56
1:A:503:GLN:NE2	6:F:90:ARG:NH2	2.49	0.56
1:A:567:LYS:NZ	8:H:47:PHE:HB3	2.20	0.56
1:A:705:LYS:HD2	1:A:708:MET:HE1	1.86	0.56
1:A:903:ASN:ND2	1:A:905:ASP:H	2.04	0.56
1:A:1120:LEU:HD12	1:A:1120:LEU:N	2.20	0.56
2:B:377:PHE:CE2	2:B:381:MET:HE2	2.39	0.56
2:B:903:VAL:O	2:B:949:VAL:HG23	2.05	0.56
2:B:1059:LEU:HD23	2:B:1065:GLN:O	2.05	0.56

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:146:LYS:C	3:C:147:LEU:HD23	2.28	0.56
6:F:119:ARG:CG	6:F:119:ARG:NH1	2.62	0.56
1:A:286:HIS:O	1:A:288:ALA:N	2.36	0.56
1:A:326:ARG:HH11	1:A:330:LYS:HE3	1.70	0.56
1:A:713:SER:O	1:A:717:ASN:ND2	2.38	0.56
1:A:714:PHE:CB	9:I:97:MET:HE1	2.35	0.56
1:A:779:PHE:CZ	1:A:785:PRO:HD3	2.40	0.56
1:A:844:ALA:O	1:A:845:LEU:HD23	2.05	0.56
1:A:1256:GLU:HA	1:A:1259:MET:HB2	1.86	0.56
2:B:582:VAL:O	2:B:582:VAL:HG12	2.05	0.56
2:B:638:PHE:HA	2:B:690:VAL:HG23	1.86	0.56
2:B:871:THR:CG2	2:B:872:GLU:N	2.67	0.56
3:C:18:VAL:HG23	3:C:240:VAL:HG11	1.85	0.56
3:C:39:ALA:HA	3:C:164:ALA:CB	2.34	0.56
3:C:203:GLN:CG	3:C:207:CYS:SG	2.93	0.56
1:A:40:THR:HG23	1:A:41:MET:N	2.21	0.56
2:B:789:MET:HE3	2:B:965:LYS:HB3	1.87	0.56
2:B:871:THR:CG2	2:B:872:GLU:H	2.17	0.56
3:C:26:ASP:O	3:C:27:LEU:C	2.48	0.56
3:C:124:LEU:O	3:C:125:MET:C	2.49	0.56
1:A:96:ILE:HG21	1:A:176:LYS:HE3	1.86	0.56
1:A:310:GLY:O	1:A:312:PRO:HD2	2.06	0.56
1:A:332:LYS:C	1:A:334:GLY:H	2.14	0.56
1:A:357:PRO:HD2	2:B:833:TYR:CZ	2.41	0.56
1:A:1195:LEU:HD11	1:A:1267:MET:CE	2.35	0.56
2:B:53:GLN:NE2	2:B:57:TYR:HB2	2.21	0.56
2:B:185:THR:N	2:B:188:ASP:HB2	2.20	0.56
8:H:83:GLN:C	8:H:85:GLY:H	2.14	0.56
8:H:111:LEU:HA	8:H:127:GLY:O	2.05	0.56
12:L:29:TYR:O	12:L:30:ILE:HG13	2.05	0.56
1:A:91:PHE:HB2	1:A:297:GLN:HE22	1.71	0.56
1:A:326:ARG:HH11	1:A:330:LYS:CE	2.18	0.56
1:A:337:ARG:HD3	2:B:1132:GLU:OE2	2.05	0.56
2:B:29:ASP:HB3	2:B:658:ILE:HD13	1.87	0.56
2:B:1039:GLY:HA2	10:J:51:LEU:HD21	1.87	0.56
3:C:57:VAL:HG11	10:J:60:PHE:CB	2.15	0.56
3:C:212:PRO:CB	3:C:213:PRO:HD2	2.35	0.56
4:D:52:LEU:O	4:D:54:GLU:N	2.35	0.56
4:D:198:LEU:O	4:D:200:ASN:N	2.39	0.56
6:F:147:SER:OG	6:F:150:GLU:HG3	2.05	0.56
7:G:45:ILE:HA	7:G:78:VAL:HG12	1.87	0.56

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:591:PHE:HD2	1:A:595:THR:HB	1.71	0.56
1:A:774:ARG:NH2	1:A:797:LYS:HG3	2.21	0.56
2:B:351:TYR:CZ	2:B:355:ILE:HD11	2.40	0.56
2:B:434:ARG:O	2:B:436:VAL:HG23	2.06	0.56
3:C:186:LEU:N	3:C:186:LEU:CD1	2.69	0.56
6:F:85:MET:HE1	6:F:148:VAL:HG13	1.87	0.56
8:H:40:LEU:CD2	8:H:42:ILE:HD11	2.36	0.56
8:H:100:THR:CG2	8:H:101:ALA:N	2.68	0.56
1:A:93:VAL:CG1	1:A:301:ALA:HB1	2.36	0.56
1:A:286:HIS:C	1:A:288:ALA:H	2.13	0.56
1:A:801:GLU:OE1	2:B:729:ILE:HG21	2.06	0.56
1:A:1189:SER:O	1:A:1241:ARG:HD3	2.06	0.56
2:B:401:PHE:HB2	2:B:517:THR:OG1	2.06	0.56
3:C:43:THR:HG22	3:C:44:LEU:N	2.19	0.56
3:C:133:ILE:HD13	3:C:236:GLY:C	2.30	0.56
3:C:239:PRO:O	3:C:240:VAL:C	2.49	0.56
1:A:786:HIS:N	1:A:786:HIS:CD2	2.74	0.56
1:A:873:MET:C	1:A:1058:VAL:HG23	2.30	0.56
2:B:1176:ASN:C	2:B:1178:ASN:H	2.13	0.56
7:G:1:MET:HE2	7:G:3:PHE:CE1	2.41	0.56
8:H:138:GLU:O	8:H:139:ASN:C	2.49	0.56
1:A:567:LYS:HB3	8:H:95:TYR:CA	2.36	0.56
1:A:1224:LEU:HD11	1:A:1240:CYS:CB	2.34	0.56
2:B:226:PHE:HA	2:B:395:GLN:CG	2.36	0.56
2:B:269:ILE:HD11	2:B:386:LEU:HD21	1.88	0.56
2:B:589:VAL:HG12	2:B:590:HIS:H	1.71	0.56
2:B:679:TYR:CE1	2:B:683:SER:HB3	2.41	0.56
2:B:737:THR:HB	9:I:66:PRO:CB	2.36	0.56
2:B:860:MET:HE2	2:B:963:PHE:CE1	2.41	0.56
3:C:184:ASN:ND2	3:C:189:THR:HB	2.21	0.56
4:D:123:LEU:HD11	4:D:150:ASN:ND2	2.21	0.56
4:D:219:THR:HG22	4:D:220:LEU:O	2.06	0.56
5:E:112:TYR:CE1	5:E:136:ASN:HB2	2.41	0.56
5:E:124:VAL:HG13	5:E:132:ILE:HD12	1.88	0.56
7:G:14:HIS:CD2	7:G:16:SER:CB	2.85	0.56
1:A:225:ASN:HD22	1:A:225:ASN:C	2.13	0.55
1:A:923:LEU:O	1:A:927:VAL:HG23	2.06	0.55
2:B:405:ARG:O	2:B:406:LEU:HD23	2.06	0.55
2:B:522:VAL:HG12	2:B:523:CYS:N	2.21	0.55
4:D:29:LEU:HB3	7:G:82:PHE:CE2	2.40	0.55
4:D:153:ARG:HB3	4:D:154:PHE:CE1	2.40	0.55

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:D:220:LEU:CG	4:D:221:TYR:H	2.19	0.55
1:A:463:ILE:HB	1:A:464:PRO:HD2	1.88	0.55
1:A:567:LYS:CB	1:A:568:PRO:HD2	2.37	0.55
1:A:596:THR:C	1:A:598:LEU:N	2.62	0.55
1:A:732:LEU:O	1:A:735:VAL:HG23	2.06	0.55
2:B:215:GLN:HE22	2:B:499:ASN:HB3	1.70	0.55
2:B:504:ARG:O	2:B:505:ASP:C	2.49	0.55
2:B:1182:CYS:SG	2:B:1185:CYS:HB2	2.46	0.55
3:C:112:ASN:CB	3:C:114:TYR:CE1	2.89	0.55
3:C:259:LEU:HD21	11:K:91:CYS:HB3	1.88	0.55
6:F:82:THR:HG22	6:F:84:TYR:H	1.70	0.55
1:A:38:PRO:HA	1:A:270:LEU:HD23	1.87	0.55
1:A:567:LYS:HE3	8:H:46:LEU:CB	2.36	0.55
1:A:867:ILE:HD11	1:A:1000:LEU:HD21	1.89	0.55
2:B:128:LEU:N	2:B:128:LEU:HD12	2.22	0.55
2:B:620:ARG:NH2	9:I:89:GLN:NE2	2.53	0.55
8:H:4:THR:CG2	8:H:5:LEU:N	2.69	0.55
1:A:79:GLY:N	2:B:1205:GLN:HE22	2.05	0.55
1:A:699:ALA:O	1:A:700:ASN:HB3	2.07	0.55
1:A:864:ILE:N	1:A:864:ILE:CD1	2.70	0.55
1:A:1143:LEU:HD23	1:A:1267:MET:O	2.07	0.55
2:B:29:ASP:CB	2:B:658:ILE:HD13	2.37	0.55
2:B:181:LEU:HD22	2:B:189:LEU:HD22	1.88	0.55
2:B:313:MET:HE3	2:B:386:LEU:HD22	1.87	0.55
2:B:390:LEU:HD13	2:B:392:ARG:HH21	1.70	0.55
2:B:508:LEU:O	2:B:509:ALA:HB3	2.06	0.55
5:E:19:VAL:HG22	5:E:140:LEU:HD23	1.87	0.55
6:F:69:LEU:HB3	6:F:71:GLU:CD	2.31	0.55
8:H:89:LEU:O	8:H:91:ASP:N	2.40	0.55
13:T:15:DA:H2''	13:T:16:DC:H5'	1.88	0.55
1:A:5:GLN:O	2:B:1159:ARG:NH2	2.39	0.55
1:A:475:THR:HG22	1:A:476:SER:N	2.19	0.55
1:A:622:VAL:O	1:A:622:VAL:HG22	2.06	0.55
1:A:1445:ILE:HD11	7:G:68:ALA:CB	2.32	0.55
2:B:29:ASP:OD1	2:B:658:ILE:HD13	2.06	0.55
3:C:229:TYR:N	3:C:229:TYR:CD1	2.73	0.55
6:F:90:ARG:HD3	6:F:155:LEU:HD13	1.89	0.55
13:T:15:DA:H2''	13:T:16:DC:OP2	2.06	0.55
1:A:225:ASN:ND2	1:A:225:ASN:C	2.64	0.55
1:A:523:ILE:HD12	1:A:622:VAL:HG21	1.88	0.55
1:A:538:ASP:O	1:A:540:PHE:HD1	1.90	0.55

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:868:TYR:CZ	1:A:1064:VAL:HG11	2.38	0.55
1:A:1220:PHE:O	1:A:1221:LYS:HB2	2.06	0.55
1:A:1226:VAL:C	1:A:1227:ILE:HD12	2.31	0.55
1:A:1407:GLU:CD	1:A:1407:GLU:N	2.65	0.55
3:C:183:TRP:O	3:C:185:LYS:N	2.40	0.55
3:C:223:ALA:O	3:C:224:GLN:HG2	2.07	0.55
1:A:53:LEU:O	1:A:54:ASN:C	2.50	0.55
1:A:335:ARG:HA	1:A:339:ASN:HD22	1.71	0.55
1:A:913:LEU:HD12	1:A:914:GLU:N	2.19	0.55
1:A:1152:ILE:HG12	1:A:1260:LEU:HD23	1.88	0.55
1:A:1438:THR:HB	2:B:1144:ALA:HB3	1.88	0.55
2:B:165:VAL:HG11	2:B:448:ILE:CD1	2.35	0.55
2:B:276:ILE:HD13	2:B:280:ILE:CD1	2.36	0.55
2:B:1175:LEU:O	2:B:1176:ASN:HB2	2.06	0.55
4:D:122:GLU:C	4:D:124:GLU:N	2.62	0.55
1:A:34:LYS:HE3	1:A:57:ARG:HH12	1.70	0.55
1:A:879:GLU:O	1:A:955:PRO:HA	2.06	0.55
2:B:59:LEU:CD1	2:B:417:PHE:CE2	2.90	0.55
2:B:128:LEU:HD11	2:B:170:LEU:N	2.22	0.55
2:B:282:ILE:HD12	2:B:382:ILE:HD13	1.88	0.55
2:B:582:VAL:HB	2:B:587:HIS:HD2	1.72	0.55
3:C:35:ARG:NH1	11:K:41:THR:OG1	2.40	0.55
5:E:165:LEU:CD2	5:E:175:LEU:HD11	2.33	0.55
6:F:109:VAL:HG13	6:F:127:GLU:OE1	2.06	0.55
8:H:95:TYR:CE2	8:H:97:MET:HG3	2.42	0.55
1:A:567:LYS:CG	1:A:568:PRO:CD	2.75	0.55
2:B:710:LEU:HA	2:B:733:HIS:CG	2.42	0.55
2:B:957:ASN:O	2:B:958:GLN:C	2.49	0.55
2:B:1087:PHE:C	2:B:1087:PHE:CD2	2.85	0.55
3:C:121:VAL:O	3:C:121:VAL:HG12	2.07	0.55
3:C:254:LYS:HB3	11:K:42:LEU:HD12	1.89	0.55
8:H:63:LEU:C	8:H:90:ALA:CB	2.80	0.55
1:A:399:HIS:CB	1:A:400:PRO:CD	2.85	0.55
1:A:1030:ARG:HA	1:A:1034:GLU:HG3	1.88	0.55
4:D:40:HIS:CA	7:G:73:LYS:NZ	2.67	0.55
1:A:427:GLN:HG3	1:A:430:TRP:CE2	2.42	0.54
1:A:738:LYS:H	1:A:738:LYS:HD2	1.72	0.54
1:A:814:PHE:CD2	1:A:814:PHE:O	2.60	0.54
1:A:1207:LEU:HD13	1:A:1273:LEU:HD23	1.89	0.54
2:B:104:GLU:CD	12:L:54:ARG:HE	2.15	0.54
2:B:293:PRO:HG2	2:B:296:GLU:CB	2.37	0.54

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:966:VAL:HG12	2:B:967:ARG:N	2.21	0.54
3:C:208:GLU:C	3:C:210:GLU:H	2.14	0.54
4:D:154:PHE:HB2	4:D:160:VAL:HG22	1.88	0.54
7:G:126:ASN:ND2	7:G:128:PRO:HD3	2.22	0.54
1:A:269:ILE:CG1	1:A:299:HIS:HB3	2.38	0.54
1:A:668:ASP:CG	1:A:742:ASN:HD22	2.15	0.54
1:A:1356:ILE:HG21	1:A:1363:VAL:CG2	2.37	0.54
2:B:287:ARG:HD2	2:B:324:ILE:HG22	1.90	0.54
2:B:351:TYR:CE1	2:B:355:ILE:HD11	2.43	0.54
2:B:847:ASP:C	2:B:849:GLY:H	2.14	0.54
2:B:1135:ARG:NH2	2:B:1136:ASP:OD1	2.34	0.54
3:C:187:LYS:HG3	3:C:219:PHE:HE1	1.73	0.54
5:E:17:ARG:HG3	5:E:18:THR:N	2.21	0.54
6:F:103:MET:O	6:F:104:ASN:HB2	2.08	0.54
7:G:9:LEU:HG	7:G:10:ASN:H	1.72	0.54
1:A:92:HIS:O	1:A:94:GLY:N	2.40	0.54
1:A:202:LEU:N	1:A:202:LEU:HD23	2.23	0.54
1:A:668:ASP:HB3	1:A:741:ASN:ND2	2.11	0.54
1:A:800:VAL:HA	1:A:812:GLU:HG2	1.89	0.54
2:B:273:LEU:HD22	2:B:360:PHE:HD1	1.73	0.54
2:B:986:GLN:NE2	2:B:1022:THR:HG21	2.22	0.54
3:C:66:ARG:NH2	10:J:3:VAL:O	2.41	0.54
3:C:166:GLU:C	11:K:6:ARG:NH1	2.65	0.54
5:E:124:VAL:HB	5:E:125:PRO:HD3	1.89	0.54
5:E:212:ARG:HG3	5:E:212:ARG:NH1	2.18	0.54
1:A:56:PRO:O	1:A:57:ARG:HD2	2.08	0.54
1:A:868:TYR:CE1	1:A:1064:VAL:CG1	2.75	0.54
1:A:1197:LEU:HD11	1:A:1238:ILE:HD11	1.89	0.54
1:A:1345:ARG:HH11	1:A:1373:ASP:CG	2.16	0.54
2:B:274:PRO:HG2	2:B:359:GLU:CB	2.37	0.54
1:A:75:ASN:O	1:A:76:GLU:CB	2.54	0.54
1:A:946:VAL:HG12	1:A:947:PHE:N	2.21	0.54
1:A:1004:ASN:CG	5:E:167:ARG:HD2	2.33	0.54
2:B:69:LEU:HD22	2:B:429:PHE:CE1	2.42	0.54
2:B:234:ILE:HG21	2:B:237:VAL:HG23	1.88	0.54
2:B:408:LEU:HD12	2:B:408:LEU:N	2.23	0.54
2:B:1182:CYS:O	2:B:1182:CYS:SG	2.66	0.54
3:C:51:VAL:HG22	3:C:155:LEU:CD2	2.37	0.54
3:C:99:LEU:N	3:C:99:LEU:CD2	2.65	0.54
3:C:101:LEU:C	3:C:102:GLN:HG3	2.31	0.54
5:E:13:TRP:O	5:E:16:PHE:HB3	2.07	0.54

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:409:SER:O	1:A:410:GLY:C	2.51	0.54
1:A:844:ALA:C	1:A:845:LEU:HD23	2.33	0.54
1:A:1215:ARG:HB2	1:A:1215:ARG:HH11	1.71	0.54
1:A:1356:ILE:HD12	1:A:1368:MET:SD	2.48	0.54
1:A:1438:THR:CG2	6:F:92:ARG:HB2	2.37	0.54
2:B:128:LEU:HD13	2:B:168:GLY:O	2.07	0.54
2:B:260:GLY:O	2:B:267:ARG:HD3	2.06	0.54
2:B:388:CYS:C	2:B:390:LEU:H	2.15	0.54
4:D:122:GLU:C	4:D:124:GLU:H	2.15	0.54
10:J:52:THR:CG2	10:J:52:THR:O	2.56	0.54
1:A:69:THR:O	1:A:70:CYS:C	2.50	0.54
1:A:455:MET:HE1	2:B:1130:PHE:CE1	2.40	0.54
1:A:855:THR:CG2	1:A:857:ARG:HE	2.18	0.54
1:A:1004:ASN:HD21	1:A:1007:ILE:HG12	1.72	0.54
1:A:1208:THR:HB	1:A:1211:GLN:CG	2.37	0.54
1:A:1285:MET:HG3	1:A:1307:GLU:OE2	2.07	0.54
1:A:1293:SER:OG	1:A:1294:PRO:HD2	2.08	0.54
2:B:235:SER:OG	2:B:236:HIS:CD2	2.61	0.54
2:B:293:PRO:HG2	2:B:296:GLU:HB2	1.89	0.54
2:B:640:VAL:O	2:B:641:GLU:C	2.49	0.54
2:B:917:PRO:O	2:B:918:ILE:HG13	2.08	0.54
4:D:66:ARG:HG3	7:G:51:TYR:CD1	2.43	0.54
10:J:8:PHE:N	10:J:49:MET:HE3	2.23	0.54
1:A:34:LYS:CE	1:A:57:ARG:NH1	2.71	0.54
1:A:401:GLY:C	1:A:435:HIS:HD2	2.15	0.54
1:A:1164:PRO:HA	1:A:1167:GLU:HG2	1.90	0.54
2:B:258:LEU:HG	2:B:258:LEU:O	2.07	0.54
2:B:288:ALA:HB1	2:B:331:LEU:HD12	1.90	0.54
2:B:578:THR:HG23	2:B:622:LYS:C	2.33	0.54
2:B:830:TYR:C	2:B:832:GLY:N	2.64	0.54
7:G:114:LEU:HD23	7:G:162:SER:HB3	1.88	0.54
8:H:44:VAL:O	8:H:44:VAL:HG12	2.08	0.54
8:H:84:ALA:HB2	8:H:87:ARG:HD2	1.90	0.54
9:I:50:THR:HG22	9:I:52:ILE:H	1.73	0.54
1:A:414:ASP:OD1	1:A:416:ARG:HG2	2.07	0.54
1:A:555:ASP:O	1:A:556:TRP:C	2.51	0.54
2:B:383:ASN:O	2:B:387:LEU:HD13	2.08	0.54
3:C:148:ARG:CZ	3:C:149:LYS:HE3	2.38	0.54
4:D:51:ASN:C	4:D:52:LEU:O	2.51	0.54
12:L:31:CYS:SG	12:L:34:CYS:SG	3.05	0.54
1:A:33:ALA:HB1	1:A:56:PRO:HB2	1.90	0.54

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:635:ARG:HH11	1:A:635:ARG:HA	1.72	0.54
1:A:731:ARG:O	1:A:735:VAL:HG22	2.08	0.54
1:A:868:TYR:HD2	1:A:1058:VAL:HG21	1.70	0.54
1:A:1036:ARG:HG2	1:A:1036:ARG:NH1	2.17	0.54
1:A:1191:TRP:HZ3	9:I:43:VAL:HG21	1.72	0.54
2:B:1001:PHE:CD1	2:B:1001:PHE:C	2.85	0.54
3:C:67:LEU:HD11	3:C:155:LEU:CD1	2.38	0.54
3:C:73:GLN:O	3:C:129:ILE:HA	2.08	0.54
8:H:89:LEU:C	8:H:91:ASP:N	2.66	0.54
12:L:60:ARG:HG2	12:L:61:THR:N	2.21	0.54
1:A:208:LEU:HD23	1:A:208:LEU:C	2.34	0.53
1:A:321:PRO:O	1:A:322:VAL:HB	2.07	0.53
1:A:549:MET:SD	1:A:577:ILE:CD1	2.97	0.53
1:A:763:ALA:O	1:A:803:SER:HB3	2.08	0.53
2:B:259:TYR:HD1	2:B:259:TYR:H	1.55	0.53
2:B:417:PHE:CE1	2:B:453:ILE:HD13	2.43	0.53
4:D:40:HIS:C	4:D:40:HIS:CD2	2.86	0.53
8:H:11:GLN:HA	8:H:53:ASP:O	2.08	0.53
9:I:73:ARG:HD2	9:I:101:PHE:CE2	2.43	0.53
1:A:512:VAL:HA	1:A:519:PRO:HA	1.90	0.53
2:B:95:ILE:HG13	2:B:129:PHE:O	2.08	0.53
2:B:114:PRO:O	2:B:115:GLN:C	2.51	0.53
2:B:345:LYS:HA	2:B:348:ARG:NE	2.21	0.53
2:B:390:LEU:HD13	2:B:392:ARG:NH2	2.23	0.53
3:C:22:LEU:HD21	3:C:25:VAL:CG1	2.35	0.53
3:C:39:ALA:O	3:C:164:ALA:HB3	2.09	0.53
3:C:115:SER:HB2	3:C:142:VAL:HB	1.89	0.53
3:C:261:ALA:C	3:C:263:THR:H	2.17	0.53
6:F:133:VAL:HG13	6:F:146:TRP:O	2.08	0.53
8:H:12:VAL:HA	8:H:28:ALA:HB2	1.91	0.53
1:A:12:ARG:HD2	2:B:1218:THR:CG2	2.38	0.53
1:A:590:ARG:HG3	1:A:590:ARG:NH1	2.21	0.53
1:A:868:TYR:OH	1:A:1366:ARG:HD3	2.09	0.53
2:B:638:PHE:HB2	2:B:741:CYS:O	2.09	0.53
8:H:15:VAL:HA	8:H:26:ILE:HG13	1.89	0.53
11:K:54:ARG:HG2	11:K:54:ARG:O	2.07	0.53
1:A:2:VAL:C	1:A:4:GLN:H	2.17	0.53
1:A:786:HIS:O	1:A:787:PHE:HD2	1.92	0.53
1:A:836:TYR:CE2	1:A:840:ARG:HD2	2.43	0.53
1:A:896:ARG:HD3	1:A:897:TYR:HE1	1.71	0.53
1:A:1208:THR:O	1:A:1211:GLN:HB2	2.09	0.53

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1293:SER:OG	1:A:1295:THR:HG23	2.08	0.53
3:C:6:PRO:O	3:C:7:GLN:HG3	2.08	0.53
8:H:126:GLU:C	8:H:130:ARG:HH22	2.16	0.53
8:H:127:GLY:O	8:H:128:ASN:CB	2.55	0.53
1:A:382:PRO:HB3	1:A:428:TYR:CE2	2.44	0.53
1:A:401:GLY:C	1:A:435:HIS:CD2	2.87	0.53
1:A:596:THR:C	1:A:598:LEU:H	2.17	0.53
2:B:63:ILE:HG22	2:B:64:CYS:SG	2.48	0.53
2:B:185:THR:H	2:B:188:ASP:CB	2.21	0.53
2:B:217:ARG:HH11	2:B:217:ARG:HG2	1.74	0.53
2:B:644:GLU:OE1	2:B:644:GLU:HA	2.09	0.53
2:B:707:PRO:HG2	2:B:708:GLU:N	2.24	0.53
2:B:744:HIS:CD2	2:B:746:SER:OG	2.58	0.53
2:B:781:PHE:O	2:B:782:LEU:HG	2.08	0.53
2:B:882:THR:C	2:B:884:ARG:H	2.17	0.53
2:B:1087:PHE:C	2:B:1087:PHE:HD2	2.16	0.53
3:C:31:ASN:O	3:C:34:ARG:HB3	2.08	0.53
8:H:84:ALA:HB1	8:H:87:ARG:HB2	1.90	0.53
9:I:59:VAL:O	9:I:61:ASP:N	2.41	0.53
1:A:870:GLU:HB2	5:E:204:THR:HG21	1.91	0.53
1:A:963:ILE:HG22	1:A:1045:VAL:HG13	1.91	0.53
1:A:1446:ASP:HB3	1:A:1449:SER:OG	2.08	0.53
1:A:1454:MET:O	1:A:1454:MET:HG3	2.07	0.53
2:B:131:ASP:HA	2:B:164:LYS:HB3	1.90	0.53
2:B:640:VAL:HG23	2:B:740:HIS:HA	1.90	0.53
2:B:906:SER:O	2:B:907:GLY:O	2.27	0.53
3:C:11:ARG:NH2	3:C:229:TYR:CD2	2.68	0.53
5:E:22:MET:CE	5:E:26:ARG:NE	2.68	0.53
7:G:88:ASP:HB3	7:G:144:ARG:CA	2.35	0.53
1:A:528:LEU:O	1:A:531:ILE:HG22	2.09	0.53
1:A:920:LEU:HD23	1:A:920:LEU:C	2.33	0.53
1:A:1227:ILE:HG22	1:A:1228:TRP:N	2.24	0.53
1:A:1404:GLU:O	1:A:1408:ILE:HG13	2.08	0.53
2:B:295:GLY:O	2:B:299:GLU:HG2	2.09	0.53
2:B:486:TYR:CD2	2:B:486:TYR:N	2.75	0.53
2:B:487:THR:CG2	2:B:488:TYR:N	2.72	0.53
2:B:653:VAL:HA	2:B:689:LEU:HD22	1.91	0.53
6:F:89:GLU:HB3	6:F:134:ILE:CD1	2.39	0.53
9:I:17:ARG:HD2	9:I:28:GLU:OE1	2.08	0.53
1:A:12:ARG:HD2	2:B:1218:THR:HG21	1.91	0.53
1:A:252:PHE:O	1:A:256:GLN:NE2	2.42	0.53

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1141:THR:CG2	1:A:1205:LYS:HD3	2.39	0.53
1:A:1283:VAL:HG12	1:A:1284:MET:N	2.22	0.53
2:B:376:PHE:CE2	2:B:569:TYR:HD2	2.26	0.53
2:B:408:LEU:HD11	2:B:545:ILE:HD13	1.91	0.53
2:B:638:PHE:HB3	2:B:651:LEU:CD2	2.39	0.53
4:D:122:GLU:HG2	4:D:126:ILE:HG13	1.91	0.53
5:E:17:ARG:HH21	5:E:35:VAL:CG1	2.21	0.53
10:J:8:PHE:H	10:J:49:MET:HE3	1.74	0.53
10:J:34:THR:O	10:J:35:ALA:C	2.52	0.53
10:J:64:ASN:HB3	10:J:65:PRO:HD3	1.88	0.53
11:K:59:ALA:HA	11:K:74:ARG:O	2.09	0.53
1:A:154:SER:HB3	1:A:162:VAL:HG23	1.90	0.53
1:A:786:HIS:HE1	2:B:705:MET:HE1	1.73	0.53
2:B:519:TRP:C	2:B:519:TRP:CD1	2.87	0.53
2:B:576:ASP:HA	2:B:622:LYS:HZ1	1.73	0.53
2:B:857:ARG:NH2	13:T:24:DC:OP1	2.42	0.53
5:E:46:TYR:CE2	5:E:58:MET:HA	2.44	0.53
5:E:190:LEU:HD11	5:E:196:VAL:HG21	1.91	0.53
8:H:15:VAL:HG21	8:H:49:VAL:O	2.09	0.53
12:L:53:HIS:O	12:L:55:ILE:HD13	2.08	0.53
1:A:22:PHE:CB	2:B:1211:ASN:ND2	2.69	0.53
1:A:58:LEU:O	1:A:59:GLY:O	2.27	0.53
2:B:850:LEU:HD12	2:B:851:PHE:N	2.24	0.53
2:B:1099:VAL:C	2:B:1101:ASP:N	2.67	0.53
3:C:18:VAL:HG12	3:C:18:VAL:O	2.08	0.53
4:D:15:LEU:O	4:D:17:LYS:N	2.38	0.53
7:G:1:MET:O	7:G:2:PHE:C	2.52	0.53
8:H:57:VAL:HG13	8:H:142:LEU:HD11	1.91	0.53
13:T:15:DA:HI'	13:T:16:DC:C5'	2.39	0.53
1:A:92:HIS:O	1:A:93:VAL:C	2.52	0.52
1:A:696:GLU:O	1:A:696:GLU:HG2	2.09	0.52
1:A:711:ARG:HH21	9:I:87:GLN:CD	2.16	0.52
1:A:1062:GLU:OE2	6:F:88:TYR:OH	2.26	0.52
1:A:1341:ILE:CG2	1:A:1342:GLU:N	2.72	0.52
2:B:215:GLN:HA	2:B:215:GLN:NE2	2.23	0.52
2:B:464:GLY:CA	2:B:479:VAL:O	2.57	0.52
3:C:105:GLY:HA3	3:C:149:LYS:O	2.09	0.52
4:D:193:THR:HG22	4:D:194:LEU:HD23	1.91	0.52
4:D:220:LEU:CD1	4:D:221:TYR:N	2.67	0.52
7:G:1:MET:HE3	7:G:80:LYS:O	2.08	0.52
8:H:81:PRO:CB	8:H:82:PRO:CD	2.86	0.52

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:50:ILE:HG22	1:A:52:GLY:N	2.23	0.52
1:A:486:GLU:OE2	2:B:1102:LYS:HD3	2.09	0.52
1:A:901:LEU:HB2	1:A:926:GLN:CG	2.38	0.52
1:A:920:LEU:HD23	1:A:921:GLY:N	2.24	0.52
2:B:110:HIS:ND1	2:B:111:ALA:N	2.57	0.52
2:B:227:LYS:HG3	2:B:395:GLN:OE1	2.10	0.52
2:B:294:ASP:H	9:I:12:ASN:ND2	2.07	0.52
4:D:70:PHE:HE1	7:G:51:TYR:CE1	2.27	0.52
8:H:111:LEU:HD23	8:H:127:GLY:O	2.09	0.52
12:L:40:LEU:HB3	12:L:44:ASP:OD2	2.09	0.52
1:A:208:LEU:HA	1:A:235:ILE:HD12	1.90	0.52
1:A:331:GLY:O	1:A:332:LYS:HB3	2.09	0.52
1:A:337:ARG:HD3	2:B:1132:GLU:OE1	2.08	0.52
1:A:418:SER:C	1:A:420:ARG:H	2.18	0.52
1:A:1265:ASN:C	1:A:1267:MET:N	2.65	0.52
1:A:1385:THR:C	1:A:1387:HIS:N	2.67	0.52
1:A:1445:ILE:HG13	7:G:61:ILE:HD11	1.89	0.52
2:B:130:VAL:HG23	2:B:167:ILE:HD13	1.90	0.52
2:B:134:LYS:O	2:B:135:ARG:C	2.51	0.52
2:B:313:MET:CE	2:B:386:LEU:HD22	2.40	0.52
2:B:581:PHE:HB2	2:B:625:LYS:HG2	1.91	0.52
2:B:654:ARG:O	2:B:656:GLY:N	2.43	0.52
3:C:239:PRO:O	3:C:242:GLN:N	2.42	0.52
1:A:341:MET:CE	1:A:843:LYS:HZ3	2.22	0.52
1:A:356:ASP:OD2	11:K:65:HIS:HE1	1.93	0.52
2:B:56:ASP:C	2:B:57:TYR:HD1	2.18	0.52
2:B:531:GLN:HG3	2:B:532:ALA:N	2.12	0.52
2:B:575:PRO:HG2	2:B:576:ASP:H	1.73	0.52
2:B:604:ARG:C	2:B:606:LYS:N	2.67	0.52
2:B:757:PRO:HG3	2:B:1028:GLU:OE2	2.09	0.52
2:B:1079:LYS:HA	3:C:27:LEU:HD21	1.91	0.52
4:D:29:LEU:HD23	7:G:82:PHE:CZ	2.45	0.52
4:D:155:ARG:HB2	4:D:221:TYR:OH	2.09	0.52
6:F:79:ARG:HB2	6:F:79:ARG:HH11	1.74	0.52
12:L:54:ARG:HH11	12:L:54:ARG:HG3	1.74	0.52
1:A:1450:LEU:HD11	6:F:108:PHE:CZ	2.44	0.52
2:B:34:ILE:O	2:B:35:SER:C	2.52	0.52
2:B:388:CYS:C	2:B:390:LEU:N	2.66	0.52
2:B:521:LEU:HD13	2:B:633:VAL:HG12	1.92	0.52
2:B:805:THR:HB	2:B:809:MET:SD	2.50	0.52
3:C:66:ARG:NH1	3:C:144:ILE:O	2.42	0.52

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:H:4:THR:HG22	8:H:5:LEU:H	1.73	0.52
8:H:13:SER:O	8:H:14:GLU:HB2	2.09	0.52
9:I:56:ALA:O	9:I:57:GLY:C	2.52	0.52
1:A:34:LYS:HE3	1:A:57:ARG:NH1	2.25	0.52
1:A:900:ASP:CA	1:A:926:GLN:NE2	2.65	0.52
1:A:1004:ASN:ND2	5:E:167:ARG:HD2	2.25	0.52
1:A:1370:LEU:O	1:A:1374:VAL:HG23	2.10	0.52
2:B:224:GLN:HA	2:B:396:ASP:OD2	2.09	0.52
3:C:40:GLU:OE1	3:C:254:LYS:HE3	2.09	0.52
5:E:179:GLN:O	5:E:182:ASP:HB2	2.10	0.52
6:F:76:LYS:O	6:F:79:ARG:HB2	2.09	0.52
9:I:2:THR:O	9:I:3:THR:C	2.53	0.52
13:T:15:DA:H1'	13:T:16:DC:H5''	1.92	0.52
1:A:62:ASP:HB3	1:A:64:ASN:CB	2.36	0.52
1:A:350:ARG:HD2	1:A:488:ASN:HD21	1.74	0.52
1:A:898:ARG:O	1:A:1029:ARG:NH1	2.42	0.52
1:A:966:ASN:O	1:A:967:ALA:C	2.52	0.52
2:B:113:TYR:CD2	2:B:192:LEU:HD22	2.45	0.52
2:B:128:LEU:O	2:B:167:ILE:HD12	2.09	0.52
2:B:1224:PHE:CZ	5:E:174:GLN:NE2	2.78	0.52
3:C:98:VAL:C	3:C:99:LEU:HD23	2.34	0.52
4:D:40:HIS:CA	7:G:73:LYS:HZ1	2.10	0.52
4:D:117:GLU:HG3	4:D:155:ARG:NH1	2.24	0.52
4:D:153:ARG:C	4:D:154:PHE:CD1	2.88	0.52
5:E:134:THR:C	5:E:135:PHE:HD1	2.17	0.52
7:G:1:MET:SD	7:G:79:PHE:CE1	3.03	0.52
1:A:105:CYS:SG	1:A:139:TRP:HA	2.50	0.52
1:A:283:GLY:O	1:A:285:PRO:CD	2.58	0.52
1:A:829:VAL:C	1:A:831:THR:H	2.16	0.52
1:A:1147:THR:HG22	9:I:48:LEU:HD12	1.92	0.52
1:A:1225:PHE:CZ	1:A:1227:ILE:HD11	2.45	0.52
1:A:1376:THR:HG23	5:E:212:ARG:NH2	2.25	0.52
2:B:118:ARG:HH11	2:B:204:ILE:HD11	1.75	0.52
2:B:170:LEU:O	2:B:172:ILE:HD12	2.09	0.52
2:B:235:SER:C	2:B:236:HIS:CD2	2.88	0.52
2:B:259:TYR:HB2	2:B:268:THR:HG23	1.92	0.52
2:B:654:ARG:HG3	2:B:654:ARG:NH1	2.25	0.52
2:B:846:ILE:HG23	2:B:974:PRO:HG2	1.92	0.52
3:C:112:ASN:HB2	3:C:114:TYR:HE1	1.74	0.52
7:G:155:SER:O	7:G:156:SER:HB3	2.09	0.52
8:H:128:ASN:ND2	8:H:131:ASN:OD1	2.43	0.52

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:I:73:ARG:O	9:I:81:ARG:HA	2.10	0.52
1:A:283:GLY:O	1:A:285:PRO:HD2	2.09	0.52
1:A:322:VAL:O	1:A:322:VAL:CG1	2.58	0.52
1:A:1299:VAL:HG12	1:A:1300:LYS:N	2.24	0.52
1:A:1433:MET:HE1	7:G:63:PRO:HB3	1.92	0.52
2:B:299:GLU:OE1	2:B:572:HIS:CE1	2.62	0.52
2:B:479:VAL:O	2:B:480:SER:HB3	2.10	0.52
3:C:133:ILE:HD12	3:C:237:SER:HA	1.91	0.52
5:E:26:ARG:HD3	5:E:187:TYR:O	2.09	0.52
7:G:7:LEU:CD1	7:G:45:ILE:HD11	2.40	0.52
7:G:110:VAL:HG22	7:G:161:GLY:O	2.10	0.52
8:H:62:SER:O	8:H:63:LEU:O	2.28	0.52
8:H:104:PHE:CE2	8:H:136:LYS:HG2	2.45	0.52
11:K:29:ASN:O	11:K:76:GLN:HG3	2.10	0.52
1:A:60:SER:OG	1:A:61:ILE:N	2.38	0.52
1:A:91:PHE:H	1:A:297:GLN:HE22	1.57	0.52
1:A:710:LEU:HD22	9:I:96:SER:HB3	1.92	0.52
1:A:1187:GLN:HG3	1:A:1188:GLN:H	1.74	0.52
2:B:25:ILE:CD1	2:B:653:VAL:HG12	2.35	0.52
2:B:220:GLY:O	2:B:222:ILE:HG13	2.10	0.52
3:C:8:VAL:HG21	11:K:105:PHE:HA	1.92	0.52
4:D:32:GLU:HG2	7:G:42:PHE:CE2	2.45	0.52
6:F:79:ARG:NH2	6:F:150:GLU:OE1	2.42	0.52
9:I:50:THR:HG23	9:I:52:ILE:HG12	1.91	0.52
11:K:31:VAL:HG12	11:K:32:VAL:H	1.75	0.52
1:A:463:ILE:HD11	1:A:469:ARG:HG3	1.92	0.51
1:A:559:VAL:O	1:A:559:VAL:HG12	2.10	0.51
1:A:974:ASP:O	1:A:976:THR:N	2.43	0.51
1:A:1206:ASP:O	1:A:1274:ARG:CZ	2.58	0.51
2:B:44:VAL:CG1	2:B:199:MET:HG2	2.40	0.51
2:B:168:GLY:H	2:B:450:ALA:HB1	1.72	0.51
2:B:906:SER:O	2:B:907:GLY:C	2.53	0.51
2:B:1032:SER:HB3	2:B:1089:PRO:HG2	1.91	0.51
4:D:128:VAL:HG12	4:D:129:LEU:N	2.25	0.51
5:E:54:GLN:HA	5:E:84:ASP:OD1	2.10	0.51
9:I:85:PHE:HD1	9:I:99:LEU:CD2	2.23	0.51
12:L:27:LEU:HD13	12:L:37:LYS:HE2	1.91	0.51
1:A:42:ASP:O	1:A:44:THR:N	2.41	0.51
1:A:445:ASN:CB	1:A:455:MET:HG2	2.35	0.51
1:A:1094:VAL:O	1:A:1095:THR:C	2.52	0.51
1:A:1116:LEU:HB2	1:A:1329:THR:OG1	2.10	0.51

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1209:MET:HE1	1:A:1237:ILE:N	2.26	0.51
2:B:33:VAL:O	2:B:36:ALA:HB3	2.10	0.51
2:B:63:ILE:O	2:B:67:SER:HB3	2.10	0.51
2:B:347:LYS:HG3	2:B:348:ARG:N	2.26	0.51
2:B:407:ASP:C	2:B:408:LEU:HD12	2.34	0.51
2:B:579:ARG:CB	2:B:586:TRP:HE1	2.21	0.51
4:D:195:ILE:HG22	4:D:198:LEU:HG	1.92	0.51
4:D:207:LEU:HD12	4:D:207:LEU:O	2.11	0.51
8:H:33:GLN:OE1	8:H:33:GLN:HA	2.10	0.51
8:H:116:TYR:HE2	8:H:140:ALA:CB	2.24	0.51
10:J:16:ASP:O	10:J:18:TRP:N	2.44	0.51
1:A:332:LYS:C	1:A:334:GLY:N	2.68	0.51
1:A:839:ARG:HG2	1:A:839:ARG:HH11	1.76	0.51
2:B:171:PRO:HD2	2:B:457:LEU:HD13	1.92	0.51
2:B:298:LEU:HD22	2:B:298:LEU:H	1.75	0.51
2:B:637:LEU:O	2:B:690:VAL:HG22	2.10	0.51
2:B:733:HIS:C	2:B:735:ALA:H	2.18	0.51
8:H:134:ASN:O	8:H:135:LEU:O	2.27	0.51
11:K:18:LYS:NZ	11:K:38:GLU:OE2	2.43	0.51
13:T:19:DC:C2'	13:T:20:BRU:H6	2.41	0.51
1:A:63:ARG:N	1:A:74:MET:HE2	2.25	0.51
1:A:239:LEU:HD12	1:A:240:PRO:HD2	1.92	0.51
1:A:556:TRP:CZ3	1:A:558:GLY:HA2	2.46	0.51
1:A:666:ILE:HD11	2:B:1086:PHE:HE1	1.76	0.51
1:A:699:ALA:O	1:A:700:ASN:CB	2.58	0.51
1:A:793:SER:HB2	1:A:794:PRO:HD2	1.93	0.51
2:B:287:ARG:NH1	2:B:324:ILE:O	2.39	0.51
2:B:298:LEU:HD22	2:B:298:LEU:N	2.25	0.51
1:A:34:LYS:HB3	1:A:36:ARG:NH1	2.25	0.51
1:A:1435:PRO:O	1:A:1436:ILE:HD12	2.11	0.51
2:B:283:VAL:HG21	2:B:317:CYS:O	2.10	0.51
2:B:408:LEU:O	2:B:411:PRO:HD2	2.11	0.51
2:B:1028:GLU:OE1	2:B:1090:THR:HG23	2.10	0.51
2:B:1096:ARG:HH11	2:B:1096:ARG:CB	2.23	0.51
2:B:1181:GLU:HG2	2:B:1188:LYS:HG2	1.93	0.51
5:E:23:VAL:HG13	5:E:28:TYR:HD1	1.75	0.51
5:E:182:ASP:HB3	5:E:185:ALA:CB	2.40	0.51
1:A:71:GLN:O	1:A:73:GLY:N	2.37	0.51
1:A:382:PRO:HD3	1:A:428:TYR:CE2	2.46	0.51
1:A:961:ARG:HD3	1:A:965:GLN:CD	2.35	0.51
1:A:1036:ARG:HH11	1:A:1036:ARG:CG	2.16	0.51

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:212:LEU:HD13	2:B:409:ALA:HA	1.91	0.51
2:B:254:LEU:CD2	2:B:361:LEU:HD11	2.39	0.51
2:B:687:GLU:O	2:B:689:LEU:HG	2.11	0.51
3:C:123:ASN:CG	3:C:125:MET:H	2.18	0.51
5:E:58:MET:O	5:E:59:SER:O	2.27	0.51
5:E:212:ARG:HH11	5:E:212:ARG:CG	2.17	0.51
7:G:14:HIS:CD2	7:G:16:SER:HB2	2.45	0.51
7:G:88:ASP:CB	7:G:144:ARG:HA	2.36	0.51
7:G:138:THR:CG2	7:G:139:ILE:N	2.74	0.51
9:I:62:ILE:O	9:I:62:ILE:CG1	2.58	0.51
1:A:34:LYS:O	1:A:35:ILE:HB	2.11	0.51
1:A:384:ASN:O	1:A:385:ILE:C	2.54	0.51
1:A:545:GLN:O	1:A:547:LEU:N	2.42	0.51
1:A:998:LEU:N	1:A:998:LEU:CD1	2.74	0.51
2:B:172:ILE:HG22	2:B:173:MET:N	2.25	0.51
2:B:380:TYR:O	2:B:383:ASN:HB3	2.11	0.51
2:B:582:VAL:CG2	2:B:626:ILE:HB	2.39	0.51
2:B:641:GLU:HB3	2:B:643:ASP:CG	2.36	0.51
2:B:794:ASN:C	2:B:795:ILE:HD12	2.36	0.51
2:B:822:ASN:HD22	10:J:52:THR:HG21	1.75	0.51
2:B:1180:PHE:HB3	2:B:1191:ILE:CD1	2.40	0.51
5:E:127:ILE:O	5:E:127:ILE:HG13	2.10	0.51
5:E:186:LEU:O	5:E:189:GLY:N	2.38	0.51
6:F:81:THR:HG23	6:F:144:GLU:OE1	2.10	0.51
6:F:147:SER:C	6:F:149:GLU:N	2.65	0.51
10:J:53:HIS:HD2	10:J:54:VAL:N	2.09	0.51
12:L:34:CYS:O	12:L:36:SER:N	2.44	0.51
12:L:46:VAL:HG12	12:L:56:LEU:HD12	1.93	0.51
1:A:364:VAL:O	1:A:364:VAL:HG13	2.11	0.51
1:A:447:GLN:HE22	13:T:20:BRU:H4'	1.75	0.51
2:B:102:VAL:CG2	2:B:112:LEU:HB2	2.27	0.51
2:B:604:ARG:HA	2:B:609:ILE:O	2.10	0.51
3:C:22:LEU:HD23	3:C:22:LEU:C	2.35	0.51
4:D:134:THR:HG22	4:D:135:GLY:N	2.25	0.51
5:E:170:LEU:C	5:E:171:LYS:HD3	2.35	0.51
8:H:84:ALA:C	8:H:86:ASP:N	2.66	0.51
8:H:98:TYR:C	8:H:118:PHE:HD2	2.19	0.51
9:I:85:PHE:CD1	9:I:99:LEU:HD22	2.44	0.51
10:J:16:ASP:OD1	10:J:17:LYS:HD2	2.11	0.51
11:K:68:PHE:HD1	11:K:70:ARG:HH12	1.57	0.51
11:K:89:ASN:O	11:K:90:ALA:C	2.53	0.51

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:L:27:LEU:HD13	12:L:37:LYS:CD	2.41	0.51
1:A:250:ILE:O	1:A:258:GLY:HA3	2.11	0.51
2:B:114:PRO:O	2:B:116:GLU:N	2.44	0.51
2:B:446:LEU:HD21	2:B:448:ILE:HD11	1.93	0.51
2:B:505:ASP:O	2:B:507:LYS:N	2.44	0.51
2:B:953:LEU:HD23	2:B:953:LEU:C	2.35	0.51
2:B:970:THR:HG22	2:B:971:THR:H	1.74	0.51
5:E:48:ASP:CG	5:E:49:SER:N	2.68	0.51
12:L:47:ARG:NE	12:L:54:ARG:HG2	2.26	0.51
12:L:49:LYS:O	12:L:50:ASP:CB	2.57	0.51
1:A:568:PRO:HB2	3:C:221:TYR:CE1	2.46	0.51
1:A:1111:MET:CE	1:A:1114:PRO:HA	2.40	0.51
1:A:1170:ILE:HD12	1:A:1170:ILE:N	2.18	0.51
1:A:1356:ILE:HD13	1:A:1363:VAL:HG21	1.93	0.51
2:B:48:LEU:O	2:B:51:PHE:N	2.43	0.51
5:E:42:PHE:CZ	5:E:58:MET:HE3	2.46	0.51
5:E:90:VAL:HA	5:E:120:ALA:HB2	1.92	0.51
5:E:157:SER:C	5:E:159:ASP:N	2.67	0.51
1:A:596:THR:O	1:A:597:LEU:C	2.54	0.50
2:B:175:ARG:HB2	2:B:200:GLY:HA3	1.92	0.50
2:B:640:VAL:HG12	2:B:649:LYS:HG2	1.92	0.50
2:B:763:GLN:CG	2:B:765:PRO:HD2	2.26	0.50
2:B:811:TYR:N	2:B:811:TYR:CD1	2.80	0.50
2:B:842:ASN:HB2	2:B:1009:ASP:HA	1.93	0.50
2:B:1084:GLN:OE1	3:C:189:THR:CG2	2.59	0.50
3:C:263:THR:C	3:C:265:MET:N	2.66	0.50
6:F:86:THR:OG1	6:F:89:GLU:HG3	2.11	0.50
9:I:8:ARG:C	9:I:10:CYS:H	2.19	0.50
10:J:28:ASP:O	10:J:30:LEU:HD12	2.11	0.50
12:L:34:CYS:O	12:L:35:SER:C	2.54	0.50
1:A:34:LYS:HD3	1:A:34:LYS:H	1.75	0.50
1:A:91:PHE:N	1:A:297:GLN:HE22	2.09	0.50
1:A:147:VAL:O	1:A:149:GLU:OE1	2.29	0.50
1:A:423:ASP:O	1:A:424:ILE:HB	2.10	0.50
2:B:217:ARG:HG2	2:B:217:ARG:NH1	2.27	0.50
2:B:661:LEU:HD23	2:B:679:TYR:O	2.11	0.50
2:B:850:LEU:HD12	2:B:851:PHE:H	1.76	0.50
2:B:1181:GLU:H	2:B:1188:LYS:HA	1.75	0.50
3:C:43:THR:CG2	3:C:44:LEU:N	2.74	0.50
3:C:148:ARG:NH1	10:J:64:ASN:HA	2.26	0.50
3:C:191:TYR:HB3	3:C:201:TRP:CD1	2.47	0.50

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:G:91:VAL:HG12	7:G:92:VAL:N	2.26	0.50
12:L:53:HIS:HB3	12:L:55:ILE:CD1	2.42	0.50
1:A:471:ASN:O	1:A:474:VAL:HG12	2.11	0.50
1:A:567:LYS:HD3	8:H:95:TYR:CA	2.39	0.50
1:A:1155:ASP:OD2	1:A:1162:VAL:HG23	2.11	0.50
1:A:1159:ARG:NH2	1:A:1187:GLN:NE2	2.60	0.50
2:B:189:LEU:O	2:B:192:LEU:N	2.45	0.50
2:B:365:THR:HG21	2:B:370:PHE:CD1	2.47	0.50
3:C:144:ILE:O	3:C:145:CYS:HB3	2.12	0.50
3:C:233:GLU:OE2	10:J:43:ARG:NH2	2.39	0.50
5:E:44:ALA:O	5:E:45:LYS:HB2	2.11	0.50
7:G:22:MET:O	7:G:25:TYR:N	2.45	0.50
7:G:34:VAL:HG12	7:G:45:ILE:CG2	2.29	0.50
8:H:80:ARG:O	8:H:81:PRO:O	2.28	0.50
1:A:89:PRO:HB2	1:A:204:THR:HG22	1.93	0.50
1:A:208:LEU:C	1:A:208:LEU:CD2	2.84	0.50
1:A:451:HIS:NE2	1:A:1074:GLU:HG3	2.26	0.50
1:A:670:ILE:HG12	1:A:805:LEU:HD21	1.93	0.50
1:A:683:ILE:HD13	1:A:801:GLU:HG3	1.93	0.50
1:A:990:VAL:O	1:A:994:GLN:HG3	2.12	0.50
1:A:1002:GLY:N	1:A:1007:ILE:HG21	2.24	0.50
1:A:1096:SER:O	1:A:1099:PRO:HG2	2.12	0.50
2:B:48:LEU:O	2:B:49:ASP:C	2.54	0.50
2:B:276:ILE:HG22	2:B:278:GLN:O	2.11	0.50
2:B:497:ARG:NH2	2:B:775:LYS:NZ	2.60	0.50
2:B:791:THR:O	2:B:792:MET:O	2.29	0.50
3:C:83:SER:OG	3:C:160:LYS:HD3	2.11	0.50
3:C:133:ILE:CD1	3:C:237:SER:HA	2.41	0.50
8:H:130:ARG:HA	8:H:133:ASN:HB2	1.93	0.50
1:A:335:ARG:NH1	2:B:1202:LEU:HD22	2.25	0.50
1:A:552:TRP:O	1:A:554:PRO:HD3	2.11	0.50
1:A:1168:GLU:O	1:A:1172:LEU:HG	2.11	0.50
1:A:1349:TYR:O	1:A:1350:LYS:C	2.55	0.50
2:B:113:TYR:O	2:B:114:PRO:C	2.55	0.50
2:B:333:PHE:O	2:B:334:ILE:HG12	2.12	0.50
2:B:861:ASP:OD1	2:B:862:GLN:N	2.45	0.50
3:C:56:THR:HG22	3:C:57:VAL:N	2.27	0.50
1:A:316:GLN:O	1:A:318:SER:N	2.44	0.50
1:A:447:GLN:CD	13:T:20:BRU:H4'	2.36	0.50
1:A:476:SER:O	1:A:477:PRO:C	2.55	0.50
1:A:979:SER:OG	1:A:980:ASP:N	2.45	0.50

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1018:PHE:O	1:A:1021:LEU:HB3	2.12	0.50
1:A:1134:ILE:O	1:A:1138:ILE:HG13	2.11	0.50
1:A:1239:ARG:NH1	1:A:1239:ARG:HB3	2.27	0.50
1:A:1376:THR:HG23	5:E:212:ARG:HH21	1.76	0.50
2:B:128:LEU:HD11	2:B:170:LEU:HB3	1.94	0.50
2:B:185:THR:O	2:B:186:GLU:C	2.53	0.50
2:B:209:GLU:CD	2:B:485:ARG:HE	2.18	0.50
2:B:859:TYR:N	2:B:859:TYR:CD1	2.80	0.50
2:B:882:THR:CB	2:B:934:LYS:O	2.60	0.50
7:G:4:ILE:HG12	7:G:77:VAL:HG22	1.94	0.50
9:I:58:VAL:O	9:I:59:VAL:C	2.55	0.50
11:K:18:LYS:HZ2	11:K:38:GLU:HG2	1.74	0.50
1:A:35:ILE:HA	1:A:52:GLY:O	2.12	0.50
1:A:56:PRO:HD2	1:A:58:LEU:HG	1.92	0.50
1:A:72:GLU:OE2	2:B:1175:LEU:HG	2.11	0.50
1:A:879:GLU:OE1	1:A:962:ARG:NH2	2.45	0.50
1:A:1162:VAL:HG11	9:I:41:PRO:HG3	1.94	0.50
1:A:1279:ILE:HD11	1:A:1312:ASN:HB3	1.94	0.50
2:B:174:LEU:O	2:B:175:ARG:HB2	2.11	0.50
2:B:745:PRO:O	2:B:748:ILE:HG12	2.12	0.50
2:B:890:TYR:OH	2:B:936:ASP:OD2	2.29	0.50
3:C:18:VAL:HG23	3:C:240:VAL:HG12	1.94	0.50
4:D:220:LEU:HD13	4:D:221:TYR:C	2.37	0.50
7:G:14:HIS:CE1	7:G:15:PRO:HD2	2.46	0.50
7:G:29:LYS:O	7:G:30:LEU:C	2.55	0.50
8:H:143:LEU:HD12	8:H:143:LEU:N	2.26	0.50
9:I:8:ARG:O	9:I:10:CYS:N	2.41	0.50
9:I:106:CYS:O	9:I:107:SER:HB2	2.12	0.50
10:J:5:VAL:HG12	10:J:6:ARG:CG	2.31	0.50
11:K:42:LEU:O	11:K:42:LEU:HD23	2.10	0.50
1:A:40:THR:HG23	1:A:41:MET:H	1.76	0.50
1:A:913:LEU:HD11	1:A:981:LEU:O	2.12	0.50
2:B:205:ILE:N	2:B:205:ILE:HD12	2.27	0.50
2:B:221:ASN:N	2:B:241:ARG:O	2.26	0.50
5:E:85:GLU:C	5:E:87:SER:N	2.68	0.50
5:E:153:HIS:C	5:E:154:ILE:HG13	2.37	0.50
7:G:4:ILE:CG1	7:G:77:VAL:HG22	2.41	0.50
10:J:53:HIS:CD2	10:J:53:HIS:C	2.89	0.50
11:K:68:PHE:N	11:K:68:PHE:CD2	2.78	0.50
1:A:27:VAL:O	1:A:30:ILE:HG22	2.11	0.50
1:A:356:ASP:HB2	1:A:469:ARG:HH11	1.76	0.50

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:589:GLN:HG2	1:A:606:LEU:HD13	1.93	0.50
1:A:720:ARG:O	1:A:724:GLU:HG3	2.12	0.50
1:A:853:ASP:OD1	1:A:855:THR:CG2	2.60	0.50
2:B:128:LEU:HD11	2:B:170:LEU:CB	2.42	0.50
2:B:197:PHE:HE2	2:B:816:GLU:HG2	1.73	0.50
2:B:203:PHE:HB3	2:B:205:ILE:CD1	2.42	0.50
2:B:402:GLY:CA	2:B:695:ALA:HB3	2.41	0.50
2:B:504:ARG:CG	2:B:505:ASP:H	2.19	0.50
3:C:263:THR:C	3:C:265:MET:H	2.18	0.50
7:G:137:ILE:CG2	7:G:143:ILE:HD11	2.42	0.50
8:H:91:ASP:O	8:H:93:TYR:N	2.39	0.50
1:A:12:ARG:HD2	2:B:1218:THR:HB	1.93	0.49
1:A:731:ARG:HG3	1:A:734:GLU:OE1	2.11	0.49
1:A:1126:ALA:O	1:A:1128:GLN:N	2.40	0.49
2:B:53:GLN:HG2	2:B:547:VAL:CG2	2.42	0.49
2:B:237:VAL:HG12	2:B:239:GLU:HG3	1.94	0.49
2:B:261:ARG:HH11	2:B:261:ARG:CB	2.07	0.49
2:B:661:LEU:C	2:B:663:ALA:H	2.18	0.49
2:B:914:LYS:HG2	2:B:937:ALA:HB3	1.94	0.49
3:C:56:THR:HG22	3:C:57:VAL:H	1.77	0.49
3:C:193:TYR:C	3:C:193:TYR:CD1	2.90	0.49
5:E:65:THR:O	5:E:69:ILE:HG13	2.12	0.49
5:E:159:ASP:CG	5:E:162:ARG:HH22	2.20	0.49
8:H:8:ASP:CG	8:H:9:ILE:H	2.19	0.49
1:A:100:LYS:O	1:A:104:GLU:HG3	2.12	0.49
1:A:857:ARG:CZ	6:F:139:PRO:HG3	2.42	0.49
1:A:1265:ASN:C	1:A:1267:MET:H	2.20	0.49
2:B:100:PRO:O	2:B:101:MET:HG3	2.11	0.49
2:B:315:LYS:HG2	9:I:13:MET:CE	2.33	0.49
2:B:661:LEU:C	2:B:663:ALA:N	2.65	0.49
2:B:1031:LEU:HD11	2:B:1042:GLY:CA	2.42	0.49
2:B:1096:ARG:O	2:B:1097:HIS:HB2	2.12	0.49
5:E:192:ARG:HH11	5:E:192:ARG:HG3	1.76	0.49
7:G:26:LEU:HD11	7:G:70:PHE:CE1	2.47	0.49
8:H:143:LEU:C	8:H:144:ILE:HG13	2.37	0.49
11:K:47:ARG:HH11	11:K:47:ARG:CB	2.21	0.49
1:A:418:SER:C	1:A:420:ARG:N	2.70	0.49
2:B:123:THR:O	2:B:125:SER:N	2.44	0.49
2:B:412:LEU:CD2	2:B:479:VAL:HG11	2.43	0.49
2:B:653:VAL:CG2	2:B:689:LEU:HB3	2.43	0.49
2:B:801:LYS:O	10:J:52:THR:CG2	2.57	0.49

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:865:LYS:C	2:B:866:TYR:HD1	2.20	0.49
3:C:236:GLY:C	3:C:238:ILE:N	2.64	0.49
4:D:153:ARG:HB3	4:D:154:PHE:CD1	2.46	0.49
9:I:83:ASN:HA	9:I:104:LEU:HD21	1.94	0.49
1:A:382:PRO:HD3	1:A:428:TYR:CD2	2.47	0.49
1:A:559:VAL:O	1:A:560:ILE:C	2.55	0.49
2:B:422:LYS:HA	2:B:425:THR:HB	1.93	0.49
3:C:73:GLN:HE22	3:C:75:MET:CB	2.12	0.49
3:C:259:LEU:HD12	11:K:88:LYS:HG2	1.93	0.49
7:G:35:GLU:HG2	7:G:48:VAL:HG23	1.93	0.49
8:H:82:PRO:C	8:H:84:ALA:H	2.17	0.49
10:J:64:ASN:HB3	10:J:65:PRO:HD2	1.94	0.49
1:A:332:LYS:H	1:A:337:ARG:CB	2.25	0.49
1:A:427:GLN:O	1:A:428:TYR:C	2.54	0.49
1:A:567:LYS:CD	8:H:95:TYR:CD2	2.94	0.49
1:A:1279:ILE:HG22	1:A:1279:ILE:O	2.12	0.49
2:B:288:ALA:HB1	2:B:331:LEU:CD1	2.43	0.49
2:B:803:LEU:O	2:B:805:THR:HG23	2.11	0.49
6:F:77:ASP:C	6:F:79:ARG:H	2.21	0.49
7:G:116:PRO:HB2	7:G:118:ASP:OD1	2.12	0.49
9:I:55:THR:OG1	9:I:100:PHE:CD2	2.66	0.49
9:I:78:CYS:SG	9:I:105:SER:O	2.70	0.49
9:I:103:CYS:HB3	9:I:107:SER:H	1.78	0.49
15:P:4:A:O2'	15:P:5:G:H5'	2.13	0.49
1:A:65:LEU:O	1:A:66:LYS:O	2.31	0.49
1:A:276:LEU:O	1:A:279:LEU:HB2	2.12	0.49
1:A:332:LYS:O	1:A:334:GLY:N	2.45	0.49
1:A:446:ARG:HB2	1:A:487:MET:SD	2.52	0.49
1:A:619:LYS:HD2	1:A:750:GLY:O	2.12	0.49
1:A:855:THR:HG23	1:A:857:ARG:HG3	1.94	0.49
1:A:1193:LEU:HB2	1:A:1260:LEU:CD2	2.41	0.49
1:A:1259:MET:HE3	1:A:1262:LYS:CE	2.43	0.49
2:B:31:TRP:CZ3	2:B:34:ILE:HD12	2.47	0.49
2:B:429:PHE:HA	2:B:432:MET:CE	2.42	0.49
2:B:658:ILE:HG22	2:B:659:ALA:N	2.28	0.49
2:B:664:THR:HG23	2:B:678:GLU:N	2.26	0.49
2:B:724:ASP:HB3	2:B:727:LYS:HG3	1.94	0.49
2:B:1065:GLN:HB3	2:B:1069:PHE:O	2.12	0.49
2:B:1106:ARG:HD3	2:B:1126:GLY:C	2.37	0.49
9:I:70:ARG:HA	9:I:83:ASN:O	2.12	0.49
9:I:82:GLU:HB3	9:I:104:LEU:HD12	1.95	0.49

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:T:26:DT:H2"	13:T:27:DT:OP2	2.12	0.49
1:A:335:ARG:NH1	2:B:1206:GLU:OE1	2.46	0.49
1:A:1042:PHE:CE2	1:A:1046:LEU:HD11	2.47	0.49
1:A:1102:LYS:O	1:A:1106:ASN:ND2	2.46	0.49
2:B:56:ASP:HB3	2:B:57:TYR:CD1	2.47	0.49
2:B:293:PRO:C	2:B:294:ASP:O	2.51	0.49
2:B:408:LEU:CD2	2:B:545:ILE:HD12	2.39	0.49
2:B:778:MET:HE3	2:B:1094:ARG:HD3	1.88	0.49
2:B:1221:SER:O	2:B:1223:ASP:N	2.45	0.49
8:H:6:PHE:HE1	8:H:129:TYR:HE1	1.61	0.49
1:A:399:HIS:CG	1:A:400:PRO:N	2.79	0.49
1:A:598:LEU:CD1	8:H:124:ARG:HB2	2.43	0.49
1:A:738:LYS:HB3	8:H:19:ARG:HH12	1.77	0.49
1:A:869:GLY:O	1:A:870:GLU:HB2	2.11	0.49
6:F:85:MET:HB2	6:F:151:LEU:HB3	1.95	0.49
8:H:59:ILE:O	8:H:60:ALA:CB	2.61	0.49
9:I:105:SER:O	9:I:106:CYS:CB	2.49	0.49
12:L:59:ALA:O	12:L:60:ARG:O	2.31	0.49
1:A:956:LEU:HD13	1:A:1021:LEU:HD22	1.95	0.49
1:A:1021:LEU:O	1:A:1024:SER:HB3	2.13	0.49
1:A:1036:ARG:NH1	1:A:1036:ARG:CG	2.74	0.49
1:A:1158:PRO:C	1:A:1159:ARG:HG2	2.37	0.49
1:A:1265:ASN:O	1:A:1268:LEU:N	2.46	0.49
2:B:557:PHE:C	2:B:557:PHE:HD2	2.21	0.49
2:B:591:ARG:O	2:B:592:ASN:C	2.55	0.49
2:B:681:TRP:C	2:B:683:SER:N	2.69	0.49
2:B:798:TYR:CE2	3:C:62:PHE:CZ	2.95	0.49
2:B:880:THR:HG22	2:B:880:THR:O	2.13	0.49
2:B:1007:VAL:HG22	2:B:1008:PRO:CD	2.42	0.49
2:B:1065:GLN:NE2	2:B:1067:ARG:HG2	2.28	0.49
5:E:102:GLU:C	5:E:104:ASN:H	2.21	0.49
5:E:102:GLU:C	5:E:104:ASN:N	2.68	0.49
7:G:138:THR:O	7:G:140:LYS:N	2.46	0.49
8:H:4:THR:CG2	8:H:5:LEU:H	2.25	0.49
8:H:129:TYR:H	8:H:130:ARG:HD2	1.78	0.49
1:A:372:LYS:HA	1:A:435:HIS:CE1	2.48	0.49
1:A:889:SER:HB3	1:A:1297:GLU:HG3	1.95	0.49
2:B:29:ASP:HB3	2:B:658:ILE:HD11	1.95	0.49
2:B:305:VAL:O	2:B:305:VAL:HG12	2.12	0.49
2:B:857:ARG:HD2	2:B:945:GLU:OE1	2.13	0.49
3:C:82:TYR:O	3:C:85:ASP:N	2.46	0.49

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:I:15:TYR:N	9:I:15:TYR:HD1	2.11	0.49
1:A:269:ILE:HD11	1:A:300:VAL:HA	1.94	0.48
1:A:556:TRP:CE3	1:A:558:GLY:HA2	2.48	0.48
1:A:814:PHE:O	1:A:818:MET:HG3	2.13	0.48
1:A:899:VAL:HG23	1:A:1029:ARG:HG2	1.94	0.48
1:A:1389:PHE:CD1	1:A:1390:ASN:N	2.81	0.48
2:B:95:ILE:HA	2:B:129:PHE:O	2.13	0.48
2:B:298:LEU:H	2:B:298:LEU:CD2	2.26	0.48
2:B:491:THR:O	2:B:495:LEU:HD12	2.13	0.48
2:B:597:MET:SD	2:B:624:LEU:HD11	2.53	0.48
3:C:47:ASP:HA	12:L:69:ALA:HB3	1.95	0.48
3:C:112:ASN:CB	3:C:114:TYR:HE1	2.25	0.48
4:D:39:ASN:HB3	4:D:43:GLU:HG3	1.94	0.48
4:D:154:PHE:CD2	4:D:163:VAL:HG21	2.47	0.48
7:G:112:LYS:HZ3	7:G:120:THR:HA	1.78	0.48
10:J:36:LEU:HD12	10:J:47:ARG:NH1	2.28	0.48
1:A:549:MET:CE	1:A:656:TRP:HD1	2.26	0.48
1:A:782:ARG:NH2	2:B:699:GLU:O	2.42	0.48
1:A:1059:HIS:O	1:A:1060:PRO:C	2.53	0.48
1:A:1203:ASN:O	1:A:1204:ASP:C	2.57	0.48
1:A:1215:ARG:CA	1:A:1218:GLN:HG2	2.40	0.48
1:A:1329:THR:CG2	1:A:1331:SER:H	2.15	0.48
1:A:1437:GLY:O	1:A:1439:GLY:N	2.46	0.48
1:A:1450:LEU:O	1:A:1450:LEU:HG	2.13	0.48
4:D:58:VAL:HG11	7:G:4:ILE:HD11	1.95	0.48
5:E:171:LYS:HD3	5:E:171:LYS:N	2.27	0.48
7:G:138:THR:O	7:G:139:ILE:C	2.55	0.48
8:H:116:TYR:HE2	8:H:140:ALA:HB2	1.78	0.48
9:I:59:VAL:C	9:I:61:ASP:H	2.22	0.48
9:I:76:PRO:HD2	9:I:108:HIS:HD2	1.78	0.48
1:A:50:ILE:C	1:A:52:GLY:N	2.63	0.48
1:A:65:LEU:O	1:A:66:LYS:C	2.56	0.48
1:A:134:ARG:NH1	1:A:220:THR:O	2.47	0.48
1:A:281:HIS:C	1:A:282:ASN:HD22	2.22	0.48
1:A:845:LEU:O	1:A:846:GLU:C	2.55	0.48
1:A:1158:PRO:HG2	1:A:1159:ARG:HE	1.78	0.48
2:B:237:VAL:HG22	2:B:257:LYS:HA	1.95	0.48
2:B:547:VAL:H	2:B:612:GLU:CD	2.20	0.48
2:B:792:MET:HE1	13:T:23:DT:O3'	2.14	0.48
2:B:880:THR:O	2:B:881:ASN:HB2	2.12	0.48
8:H:39:THR:O	8:H:123:MET:HA	2.14	0.48

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:691:LEU:HD11	1:A:695:LYS:HE3	1.96	0.48
1:A:705:LYS:HB2	1:A:708:MET:CE	2.43	0.48
1:A:1079:MET:HE2	1:A:1359:ASP:HB2	1.96	0.48
2:B:848:ARG:HH22	2:B:996:ARG:HD3	1.79	0.48
2:B:911:ILE:HD11	2:B:941:LEU:HD13	1.96	0.48
3:C:124:LEU:HD12	3:C:124:LEU:N	2.27	0.48
4:D:170:THR:HG21	4:D:172:LEU:HG	1.95	0.48
5:E:10:SER:O	5:E:14:ARG:HG3	2.13	0.48
1:A:229:SER:HA	1:A:233:TRP:CE3	2.48	0.48
1:A:310:GLY:C	1:A:312:PRO:HD2	2.38	0.48
1:A:1202:MET:HE1	1:A:1212:VAL:CG2	2.44	0.48
2:B:100:PRO:O	2:B:180:TYR:OH	2.26	0.48
2:B:418:LYS:O	2:B:420:LEU:N	2.47	0.48
2:B:882:THR:CG2	2:B:884:ARG:N	2.68	0.48
2:B:1031:LEU:HD11	2:B:1042:GLY:HA3	1.95	0.48
4:D:137:ASN:O	4:D:139:LYS:N	2.43	0.48
4:D:188:ALA:N	4:D:208:GLU:OE2	2.47	0.48
5:E:124:VAL:HB	5:E:125:PRO:CD	2.43	0.48
5:E:159:ASP:HA	5:E:162:ARG:CZ	2.42	0.48
7:G:40:GLY:O	7:G:80:LYS:HE2	2.14	0.48
10:J:9:SER:HB2	10:J:45:CYS:HB2	1.95	0.48
11:K:53:ASP:O	11:K:56:VAL:HB	2.13	0.48
11:K:89:ASN:O	11:K:91:CYS:N	2.46	0.48
1:A:113:LEU:HG	1:A:218:ASP:CG	2.38	0.48
2:B:34:ILE:O	2:B:37:PHE:N	2.45	0.48
2:B:362:PRO:C	2:B:363:HIS:O	2.55	0.48
2:B:711:GLU:H	2:B:712:PRO:CD	2.26	0.48
2:B:1003:ALA:HB1	3:C:179:GLU:HB2	1.94	0.48
4:D:154:PHE:CD1	4:D:154:PHE:N	2.81	0.48
5:E:182:ASP:HB3	5:E:185:ALA:HB2	1.95	0.48
15:P:6:A:H2'	15:P:7:C:O4'	2.12	0.48
2:B:55:VAL:HG12	2:B:97:VAL:HG21	1.96	0.48
2:B:346:GLU:HA	2:B:349:ILE:HD12	1.96	0.48
2:B:566:LEU:O	2:B:567:GLU:C	2.56	0.48
2:B:604:ARG:NH1	2:B:691:GLU:OE2	2.43	0.48
3:C:67:LEU:HD11	3:C:155:LEU:HD13	1.96	0.48
3:C:187:LYS:HG3	3:C:219:PHE:CE1	2.49	0.48
8:H:12:VAL:HA	8:H:28:ALA:CB	2.44	0.48
1:A:326:ARG:NH2	1:A:1407:GLU:OE2	2.47	0.48
1:A:818:MET:HG2	2:B:514:LEU:HG	1.95	0.48
1:A:860:LEU:HD11	1:A:1393:ASN:HB2	1.96	0.48

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:913:LEU:CD1	1:A:914:GLU:H	2.21	0.48
1:A:1277:GLU:O	1:A:1279:ILE:N	2.44	0.48
2:B:515:HIS:CD2	2:B:517:THR:HG23	2.48	0.48
2:B:526:GLU:HG3	2:B:771:SER:HB3	1.95	0.48
3:C:191:TYR:HD2	3:C:201:TRP:CD1	2.31	0.48
4:D:160:VAL:HG12	4:D:160:VAL:O	2.14	0.48
9:I:77:LYS:HB3	9:I:77:LYS:HZ1	1.78	0.48
9:I:110:PHE:CD2	9:I:110:PHE:N	2.78	0.48
11:K:40:HIS:O	11:K:41:THR:C	2.57	0.48
1:A:22:PHE:CB	2:B:1211:ASN:HD21	2.27	0.48
1:A:306:ASN:CB	1:A:324:SER:HB3	2.44	0.48
1:A:663:SER:OG	1:A:664:THR:N	2.46	0.48
1:A:684:ALA:O	1:A:687:LYS:HB2	2.14	0.48
1:A:930:ASP:O	1:A:931:GLU:C	2.57	0.48
1:A:1161:THR:HG22	1:A:1163:ILE:HG13	1.95	0.48
2:B:48:LEU:HD23	2:B:173:MET:SD	2.54	0.48
2:B:225:VAL:HG12	2:B:238:ALA:HA	1.95	0.48
2:B:297:ILE:C	2:B:299:GLU:N	2.70	0.48
2:B:1012:ILE:HG21	2:B:1092:TYR:OH	2.14	0.48
2:B:1017:ILE:CB	2:B:1018:PRO:HD3	2.43	0.48
2:B:1085:ILE:HG22	2:B:1086:PHE:O	2.13	0.48
5:E:19:VAL:HG22	5:E:140:LEU:CD2	2.43	0.48
12:L:53:HIS:C	12:L:55:ILE:HD13	2.38	0.48
1:A:229:SER:HA	1:A:233:TRP:HE3	1.79	0.48
1:A:269:ILE:HD13	1:A:300:VAL:HG22	1.96	0.48
1:A:574:GLY:O	1:A:575:LYS:C	2.56	0.48
1:A:635:ARG:HA	1:A:635:ARG:NH1	2.29	0.48
1:A:1445:ILE:HG12	7:G:18:PHE:CE2	2.49	0.48
11:K:17:SER:O	11:K:18:LYS:C	2.57	0.48
11:K:88:LYS:O	11:K:91:CYS:HB2	2.14	0.48
11:K:89:ASN:C	11:K:91:CYS:N	2.72	0.48
1:A:343:LYS:HB2	2:B:1117:GLN:OE1	2.14	0.47
1:A:1030:ARG:HG3	1:A:1034:GLU:HG3	1.96	0.47
1:A:1445:ILE:HD13	7:G:70:PHE:CZ	2.49	0.47
2:B:37:PHE:HE2	2:B:542:MET:HA	1.79	0.47
2:B:383:ASN:C	2:B:387:LEU:HD13	2.39	0.47
2:B:432:MET:C	2:B:434:ARG:H	2.22	0.47
2:B:516:ASN:HD22	2:B:516:ASN:H	1.63	0.47
2:B:583:ASN:ND2	2:B:628:THR:CG2	2.74	0.47
2:B:640:VAL:HG23	2:B:740:HIS:CA	2.44	0.47
2:B:914:LYS:HD3	2:B:937:ALA:O	2.13	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:164:ALA:HA	3:C:167:HIS:O	2.14	0.47
5:E:88:VAL:HG12	5:E:89:GLY:N	2.28	0.47
10:J:36:LEU:HD13	10:J:47:ARG:HG3	1.96	0.47
12:L:55:ILE:CG1	12:L:56:LEU:H	2.26	0.47
12:L:61:THR:CG2	12:L:63:ARG:HG3	2.43	0.47
1:A:308:ILE:HG22	1:A:309:ALA:N	2.28	0.47
1:A:317:LYS:O	1:A:318:SER:HB3	2.14	0.47
1:A:1020:CYS:O	1:A:1024:SER:HB2	2.15	0.47
1:A:1313:LEU:O	1:A:1315:GLU:N	2.47	0.47
1:A:1390:ASN:OD1	1:A:1399:ARG:HA	2.14	0.47
1:A:1451:VAL:HG22	7:G:20:PRO:O	2.14	0.47
2:B:436:VAL:C	2:B:437:GLU:HG3	2.39	0.47
2:B:727:LYS:HD3	2:B:1049:ASP:OD1	2.15	0.47
2:B:758:PHE:CE1	2:B:1027:ILE:CG2	2.96	0.47
2:B:763:GLN:O	2:B:764:SER:C	2.57	0.47
2:B:778:MET:CE	2:B:1094:ARG:CD	2.83	0.47
2:B:951:GLN:HE21	12:L:57:LEU:CD1	2.25	0.47
2:B:1065:GLN:HB2	3:C:201:TRP:CZ3	2.50	0.47
2:B:1095:LEU:C	2:B:1096:ARG:O	2.55	0.47
3:C:249:ASP:HB2	11:K:102:LYS:NZ	2.28	0.47
4:D:194:LEU:HD21	7:G:167:TYR:HB2	1.95	0.47
5:E:159:ASP:HA	5:E:162:ARG:HH22	1.78	0.47
9:I:5:ARG:CD	9:I:36:GLU:OE2	2.63	0.47
1:A:53:LEU:CD2	1:A:54:ASN:N	2.51	0.47
1:A:601:LYS:HB2	1:A:603:ASN:HD21	1.77	0.47
1:A:648:ASN:O	1:A:649:ILE:C	2.56	0.47
1:A:842:VAL:O	1:A:843:LYS:C	2.57	0.47
1:A:1002:GLY:HA3	1:A:1007:ILE:HG21	1.97	0.47
1:A:1144:LYS:HB2	1:A:1268:LEU:O	2.14	0.47
2:B:365:THR:OG1	2:B:367:LEU:HG	2.15	0.47
2:B:377:PHE:C	2:B:379:GLY:N	2.68	0.47
2:B:881:ASN:CB	2:B:933:SER:N	2.77	0.47
2:B:1060:ARG:HA	2:B:1060:ARG:HD2	1.59	0.47
2:B:1073:TYR:N	2:B:1073:TYR:CD1	2.83	0.47
3:C:173:ALA:O	3:C:174:ALA:CB	2.63	0.47
4:D:192:LYS:HE3	4:D:207:LEU:HD23	1.95	0.47
5:E:50:MET:O	5:E:50:MET:HG3	2.15	0.47
5:E:59:SER:OG	5:E:81:GLU:HG3	2.14	0.47
5:E:93:MET:HG3	5:E:97:VAL:CG2	2.44	0.47
6:F:76:LYS:O	6:F:79:ARG:NH1	2.46	0.47
10:J:13:VAL:HG12	10:J:14:VAL:N	2.30	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:K:48:ALA:O	11:K:51:LEU:HB2	2.14	0.47
12:L:27:LEU:HD13	12:L:37:LYS:HG2	1.97	0.47
1:A:265:LYS:HD3	1:A:302:THR:CG2	2.44	0.47
1:A:324:SER:O	1:A:327:ALA:HB3	2.15	0.47
1:A:523:ILE:HG21	1:A:527:THR:HG22	1.95	0.47
1:A:548:ASN:OD1	11:K:60:ALA:HB1	2.14	0.47
1:A:738:LYS:NZ	3:C:194:GLU:HA	2.29	0.47
1:A:841:LEU:HA	1:A:841:LEU:HD23	1.66	0.47
1:A:961:ARG:O	1:A:965:GLN:HG3	2.15	0.47
1:A:1385:THR:O	1:A:1387:HIS:N	2.48	0.47
2:B:390:LEU:O	2:B:391:ASP:CB	2.60	0.47
2:B:705:MET:H	2:B:710:LEU:HD11	1.80	0.47
3:C:22:LEU:CD2	3:C:25:VAL:HG21	2.44	0.47
3:C:204:SER:C	3:C:206:ASN:N	2.72	0.47
7:G:26:LEU:HD11	7:G:70:PHE:CD1	2.50	0.47
8:H:82:PRO:C	8:H:84:ALA:N	2.71	0.47
8:H:145:ARG:O	8:H:146:ARG:HB2	2.15	0.47
10:J:32:GLU:O	10:J:33:GLY:C	2.57	0.47
11:K:33:ILE:HD13	11:K:87:LEU:HD22	1.95	0.47
1:A:261:ASP:OD1	1:A:322:VAL:HA	2.14	0.47
1:A:518:LYS:HE2	1:A:624:SER:O	2.15	0.47
1:A:741:ASN:HD22	1:A:741:ASN:C	2.20	0.47
1:A:755:PHE:O	1:A:756:ILE:C	2.56	0.47
1:A:1364:ASN:HD22	1:A:1365:TYR:H	1.62	0.47
2:B:25:ILE:HD11	2:B:653:VAL:C	2.39	0.47
2:B:52:ASN:O	2:B:53:GLN:C	2.57	0.47
2:B:364:ILE:HG22	2:B:365:THR:N	2.29	0.47
2:B:465:ASN:HA	2:B:477:ALA:N	2.29	0.47
2:B:637:LEU:O	2:B:690:VAL:CG2	2.62	0.47
2:B:803:LEU:HG	2:B:822:ASN:OD1	2.14	0.47
2:B:1001:PHE:HD2	3:C:34:ARG:NH2	2.12	0.47
3:C:147:LEU:CB	3:C:151:GLN:HB2	2.42	0.47
3:C:215:GLU:O	3:C:216:GLY:C	2.57	0.47
5:E:55:ARG:HG3	5:E:55:ARG:HH11	1.80	0.47
11:K:62:LYS:O	11:K:71:PHE:HB2	2.15	0.47
11:K:65:HIS:HD2	11:K:67:PHE:H	1.56	0.47
1:A:55:ASP:O	1:A:55:ASP:CG	2.56	0.47
1:A:167:CYS:O	1:A:168:GLY:C	2.58	0.47
1:A:206:GLU:O	1:A:210:ILE:HG13	2.15	0.47
1:A:567:LYS:HE3	8:H:46:LEU:HB3	1.96	0.47
1:A:1007:ILE:O	1:A:1010:ALA:HB3	2.15	0.47

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1100:ARG:NH2	1:A:1351:GLU:CG	2.77	0.47
1:A:1364:ASN:ND2	1:A:1365:TYR:N	2.62	0.47
2:B:373:ARG:NH2	2:B:587:HIS:ND1	2.62	0.47
2:B:1001:PHE:CD2	3:C:34:ARG:NH2	2.83	0.47
2:B:1223:ASP:OD1	2:B:1224:PHE:N	2.36	0.47
3:C:31:ASN:O	3:C:35:ARG:HG3	2.14	0.47
3:C:33:LEU:O	3:C:37:MET:HG3	2.14	0.47
4:D:170:THR:HB	4:D:172:LEU:HG	1.95	0.47
9:I:35:VAL:CG1	9:I:36:GLU:N	2.77	0.47
10:J:9:SER:OG	10:J:48:ARG:NH2	2.47	0.47
12:L:40:LEU:HD22	12:L:44:ASP:OD2	2.15	0.47
1:A:63:ARG:N	1:A:74:MET:CE	2.69	0.47
1:A:528:LEU:HD23	1:A:751:SER:HA	1.95	0.47
1:A:533:LYS:NZ	1:A:745:GLN:HE22	2.12	0.47
1:A:567:LYS:HG3	1:A:568:PRO:CD	2.43	0.47
1:A:717:ASN:HB3	1:A:721:PHE:CZ	2.48	0.47
1:A:770:VAL:C	1:A:772:GLY:N	2.72	0.47
1:A:858:ASN:HD21	1:A:860:LEU:H	1.53	0.47
1:A:1011:GLN:HE22	1:A:1015:VAL:HG21	1.78	0.47
1:A:1015:VAL:HG12	1:A:1015:VAL:O	2.15	0.47
1:A:1048:ASN:O	1:A:1050:GLU:N	2.47	0.47
2:B:174:LEU:HD12	2:B:174:LEU:N	2.29	0.47
2:B:333:PHE:C	2:B:334:ILE:HG12	2.39	0.47
2:B:383:ASN:ND2	2:B:387:LEU:HD11	2.29	0.47
2:B:651:LEU:HD21	2:B:741:CYS:CB	2.41	0.47
2:B:661:LEU:O	2:B:664:THR:N	2.47	0.47
2:B:661:LEU:HD11	2:B:684:LEU:HD21	1.96	0.47
2:B:758:PHE:O	2:B:761:HIS:HB2	2.15	0.47
2:B:860:MET:SD	2:B:861:ASP:N	2.87	0.47
2:B:874:PHE:HD1	2:B:962:LYS:HD3	1.79	0.47
2:B:1027:ILE:O	2:B:1028:GLU:C	2.57	0.47
3:C:39:ALA:C	3:C:164:ALA:HB3	2.40	0.47
5:E:56:LYS:HE3	5:E:84:ASP:CB	2.44	0.47
7:G:17:PHE:HD2	7:G:17:PHE:H	1.59	0.47
7:G:44:TYR:CE2	7:G:105:PRO:HB2	2.50	0.47
7:G:126:ASN:HA	7:G:127:PRO:C	2.40	0.47
8:H:82:PRO:HB2	11:K:54:ARG:CZ	2.44	0.47
10:J:24:LEU:N	10:J:24:LEU:HD23	2.30	0.47
1:A:321:PRO:O	1:A:322:VAL:CB	2.63	0.47
1:A:346:ASP:HB3	2:B:1108:ARG:H	1.80	0.47
1:A:770:VAL:C	1:A:772:GLY:H	2.23	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:829:VAL:C	1:A:831:THR:N	2.70	0.47
1:A:1127:ASP:O	1:A:1128:GLN:C	2.57	0.47
1:A:1445:ILE:HG12	7:G:18:PHE:HE2	1.80	0.47
2:B:44:VAL:O	2:B:45:SER:C	2.58	0.47
2:B:125:SER:HA	2:B:172:ILE:CD1	2.45	0.47
2:B:128:LEU:HD13	2:B:169:ARG:HA	1.97	0.47
2:B:842:ASN:ND2	2:B:844:SER:HB2	2.30	0.47
3:C:100:THR:CG2	3:C:102:GLN:HE21	2.27	0.47
3:C:147:LEU:N	3:C:147:LEU:CD2	2.75	0.47
4:D:66:ARG:HG3	7:G:51:TYR:HD1	1.79	0.47
5:E:124:VAL:HA	5:E:132:ILE:HD12	1.96	0.47
6:F:101:ILE:HD13	6:F:120:ILE:CG2	2.45	0.47
7:G:99:PHE:CD2	7:G:115:MET:HE2	2.49	0.47
12:L:30:ILE:HG22	12:L:31:CYS:N	2.29	0.47
12:L:53:HIS:HB3	12:L:55:ILE:HD11	1.96	0.47
1:A:65:LEU:O	1:A:71:GLN:HA	2.14	0.47
1:A:726:ARG:O	1:A:729:ALA:HB3	2.14	0.47
1:A:1313:LEU:O	1:A:1314:SER:C	2.58	0.47
2:B:842:ASN:HD22	2:B:845:SER:N	2.08	0.47
2:B:885:MET:C	2:B:886:LYS:HG2	2.39	0.47
3:C:124:LEU:C	3:C:126:GLY:N	2.73	0.47
4:D:47:LEU:HD11	7:G:3:PHE:HD2	1.79	0.47
5:E:17:ARG:NH2	5:E:35:VAL:HG12	2.24	0.47
5:E:92:THR:HG22	5:E:92:THR:O	2.13	0.47
5:E:116:ILE:C	5:E:121:MET:HE2	2.39	0.47
5:E:177:ARG:C	5:E:212:ARG:HD3	2.40	0.47
8:H:100:THR:OG1	8:H:138:GLU:HG2	2.15	0.47
1:A:34:LYS:HZ1	1:A:57:ARG:NH1	2.07	0.47
1:A:54:ASN:OD1	1:A:54:ASN:O	2.32	0.47
1:A:308:ILE:HG22	1:A:309:ALA:H	1.79	0.47
1:A:360:GLU:HB2	1:A:363:GLN:HG3	1.97	0.47
1:A:546:VAL:HG21	1:A:572:TRP:CE3	2.50	0.47
1:A:1209:MET:SD	1:A:1236:LEU:HB3	2.55	0.47
1:A:1227:ILE:HD12	1:A:1227:ILE:N	2.30	0.47
2:B:649:LYS:HD3	2:B:736:THR:O	2.15	0.47
4:D:118:THR:HB	4:D:121:LYS:HD2	1.97	0.47
5:E:114:ASN:O	5:E:115:ASN:CB	2.63	0.47
7:G:49:LEU:HD11	7:G:77:VAL:HG23	1.96	0.47
8:H:107:VAL:HG21	8:H:126:GLU:OE2	2.15	0.47
12:L:38:LEU:HD22	12:L:56:LEU:HD21	1.96	0.47
1:A:56:PRO:O	1:A:57:ARG:CG	2.63	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:117:GLU:H	1:A:117:GLU:CD	2.22	0.46
1:A:595:THR:C	1:A:596:THR:HG23	2.40	0.46
1:A:722:LEU:HD21	1:A:794:PRO:HB3	1.96	0.46
1:A:877:HIS:C	1:A:878:ILE:HG13	2.38	0.46
1:A:1332:PHE:CD1	1:A:1332:PHE:C	2.93	0.46
2:B:55:VAL:CG1	2:B:97:VAL:HG21	2.45	0.46
2:B:68:THR:O	2:B:69:LEU:HD23	2.14	0.46
2:B:743:ILE:O	2:B:744:HIS:HB2	2.14	0.46
2:B:860:MET:HE2	2:B:963:PHE:HE1	1.79	0.46
2:B:1020:ARG:O	2:B:1021:MET:C	2.57	0.46
4:D:29:LEU:O	4:D:30:GLY:O	2.32	0.46
5:E:23:VAL:O	5:E:28:TYR:HB2	2.15	0.46
5:E:61:GLN:HG2	5:E:62:ALA:N	2.31	0.46
5:E:92:THR:O	5:E:92:THR:CG2	2.62	0.46
5:E:124:VAL:H	5:E:125:PRO:HD2	1.80	0.46
7:G:13:LEU:HD22	7:G:17:PHE:HB2	1.96	0.46
10:J:27:GLU:C	10:J:29:GLU:N	2.66	0.46
1:A:90:VAL:CG1	1:A:297:GLN:NE2	2.72	0.46
1:A:255:SER:OG	2:B:918:ILE:HG21	2.14	0.46
1:A:390:GLN:O	1:A:394:ASN:HB2	2.16	0.46
1:A:514:PRO:O	1:A:515:GLN:C	2.58	0.46
1:A:1152:ILE:HA	1:A:1192:LEU:O	2.15	0.46
1:A:1277:GLU:C	1:A:1279:ILE:N	2.73	0.46
2:B:225:VAL:HG12	2:B:238:ALA:HB2	1.97	0.46
2:B:423:LYS:HD3	2:B:423:LYS:C	2.40	0.46
2:B:610:ASN:OD1	2:B:611:PRO:CD	2.63	0.46
4:D:16:LYS:O	4:D:18:VAL:N	2.49	0.46
5:E:35:VAL:C	5:E:37:LEU:H	2.23	0.46
5:E:112:TYR:CZ	5:E:136:ASN:HB2	2.49	0.46
7:G:52:ASP:C	7:G:53:ASN:ND2	2.55	0.46
9:I:5:ARG:HB2	9:I:5:ARG:HH11	1.80	0.46
1:A:34:LYS:HD3	1:A:34:LYS:N	2.29	0.46
1:A:211:PHE:HA	1:A:214:ILE:HG13	1.97	0.46
1:A:320:ARG:NH1	1:A:320:ARG:HB2	2.31	0.46
1:A:1265:ASN:O	1:A:1267:MET:N	2.48	0.46
2:B:242:SER:HB2	2:B:362:PRO:HG2	1.96	0.46
2:B:571:PRO:HG2	2:B:572:HIS:CE1	2.51	0.46
2:B:1096:ARG:O	2:B:1097:HIS:CB	2.62	0.46
3:C:6:PRO:HB3	3:C:25:VAL:CG1	2.41	0.46
4:D:202:ILE:CG2	4:D:207:LEU:HB2	2.45	0.46
5:E:99:HIS:C	5:E:99:HIS:ND1	2.72	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:E:117:THR:C	5:E:119:SER:N	2.70	0.46
6:F:109:VAL:HG11	6:F:123:LYS:CD	2.43	0.46
9:I:85:PHE:H	9:I:85:PHE:HD2	1.59	0.46
9:I:93:LYS:H	9:I:93:LYS:CD	2.27	0.46
9:I:101:PHE:N	9:I:101:PHE:CD1	2.84	0.46
10:J:14:VAL:HG11	10:J:50:ILE:HG12	1.96	0.46
11:K:54:ARG:C	11:K:56:VAL:H	2.21	0.46
12:L:54:ARG:HG3	12:L:54:ARG:H	1.36	0.46
1:A:152:VAL:HG13	1:A:153:PRO:HD2	1.97	0.46
1:A:707:GLY:CA	1:A:1281:ARG:HD3	2.43	0.46
1:A:1157:ASP:O	1:A:1159:ARG:N	2.45	0.46
2:B:35:SER:HA	2:B:811:TYR:HE2	1.80	0.46
2:B:334:ILE:C	2:B:336:ARG:H	2.23	0.46
2:B:1004:GLU:HA	3:C:177:GLU:HG2	1.97	0.46
2:B:1031:LEU:HD12	2:B:1031:LEU:O	2.15	0.46
2:B:1060:ARG:C	2:B:1062:HIS:H	2.24	0.46
3:C:6:PRO:CB	3:C:25:VAL:HG12	2.41	0.46
4:D:31:GLN:O	4:D:34:GLN:HG3	2.15	0.46
5:E:33:GLU:C	5:E:35:VAL:N	2.72	0.46
5:E:135:PHE:N	5:E:135:PHE:CD1	2.83	0.46
5:E:165:LEU:HD21	5:E:175:LEU:CD1	2.39	0.46
10:J:5:VAL:O	10:J:6:ARG:O	2.34	0.46
1:A:311:GLN:O	1:A:313:GLN:N	2.48	0.46
1:A:447:GLN:HA	1:A:448:PRO:C	2.41	0.46
1:A:977:LYS:HB3	1:A:978:PRO:HD2	1.98	0.46
1:A:1011:GLN:NE2	1:A:1015:VAL:HG21	2.30	0.46
2:B:38:PHE:CD1	2:B:811:TYR:CD2	3.03	0.46
2:B:175:ARG:HH11	2:B:175:ARG:CG	2.26	0.46
2:B:412:LEU:HD22	2:B:479:VAL:HG11	1.96	0.46
2:B:636:PRO:HG2	2:B:743:ILE:HD12	1.97	0.46
3:C:109:SER:O	3:C:110:THR:C	2.59	0.46
3:C:186:LEU:CD1	3:C:186:LEU:H	2.29	0.46
8:H:47:PHE:CD2	8:H:95:TYR:HD1	2.30	0.46
8:H:92:ASP:C	8:H:93:TYR:CD1	2.94	0.46
10:J:21:TYR:HB2	10:J:39:LEU:CD1	2.46	0.46
11:K:49:GLU:O	11:K:50:LEU:C	2.59	0.46
1:A:56:PRO:O	1:A:57:ARG:HD3	2.14	0.46
1:A:61:ILE:O	1:A:62:ASP:HB2	2.15	0.46
1:A:67:CYS:O	1:A:70:CYS:HB3	2.16	0.46
1:A:67:CYS:O	1:A:68:GLN:HG3	2.15	0.46
1:A:567:LYS:HE3	8:H:46:LEU:HB2	1.98	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:636:GLU:OE2	1:A:962:ARG:NH1	2.49	0.46
1:A:967:ALA:HA	1:A:1044:TRP:CZ3	2.51	0.46
1:A:1325:THR:CG2	1:A:1326:ARG:HG3	2.46	0.46
1:A:1327:ILE:O	1:A:1327:ILE:HG23	2.15	0.46
2:B:31:TRP:CE3	2:B:31:TRP:HA	2.49	0.46
2:B:68:THR:HA	2:B:90:ILE:O	2.14	0.46
2:B:68:THR:HG22	2:B:69:LEU:N	2.31	0.46
2:B:347:LYS:HG3	2:B:348:ARG:HG2	1.97	0.46
2:B:377:PHE:O	2:B:378:LEU:C	2.58	0.46
2:B:707:PRO:CG	2:B:708:GLU:H	2.27	0.46
2:B:758:PHE:N	2:B:759:PRO:CD	2.78	0.46
2:B:758:PHE:HE1	2:B:1027:ILE:HG22	1.76	0.46
3:C:260:LEU:O	3:C:263:THR:HB	2.15	0.46
4:D:14:ARG:O	4:D:16:LYS:N	2.49	0.46
5:E:147:HIS:CD2	5:E:149:LEU:H	2.34	0.46
9:I:111:THR:HG21	9:I:113:ASP:HB2	1.97	0.46
11:K:50:LEU:HD13	11:K:75:ILE:HG12	1.98	0.46
12:L:42:ARG:O	12:L:43:THR:CB	2.63	0.46
1:A:12:ARG:CZ	2:B:1192:TYR:CE2	2.98	0.46
1:A:51:GLY:HA2	1:A:56:PRO:HA	1.97	0.46
1:A:269:ILE:HG13	1:A:299:HIS:HB3	1.95	0.46
1:A:1124:HIS:CB	1:A:1130:GLN:HG2	2.46	0.46
2:B:357:GLN:HA	2:B:374:LYS:NZ	2.31	0.46
2:B:435:THR:C	2:B:437:GLU:H	2.22	0.46
2:B:597:MET:SD	2:B:617:ARG:HB2	2.56	0.46
2:B:714:GLU:HG2	2:B:715:ALA:N	2.29	0.46
2:B:1034:VAL:HG12	2:B:1035:ALA:N	2.31	0.46
3:C:16:ASP:O	3:C:17:ASN:CG	2.59	0.46
3:C:57:VAL:O	3:C:57:VAL:HG12	2.16	0.46
3:C:148:ARG:H	3:C:151:GLN:HG3	1.80	0.46
3:C:214:ASN:HB3	3:C:217:ASP:OD2	2.16	0.46
5:E:164:LEU:HD22	5:E:211:TYR:CD2	2.51	0.46
5:E:181:ALA:HA	5:E:186:LEU:HD21	1.98	0.46
7:G:1:MET:HE3	7:G:80:LYS:N	2.31	0.46
9:I:19:ASP:HB3	9:I:24:ARG:HG3	1.98	0.46
1:A:84:ILE:CG2	1:A:84:ILE:O	2.64	0.46
1:A:353:ILE:HG21	1:A:487:MET:HE3	1.98	0.46
1:A:488:ASN:HB3	2:B:1128:LEU:CD1	2.44	0.46
1:A:757:ASN:O	1:A:758:ILE:C	2.57	0.46
1:A:1157:ASP:C	1:A:1159:ARG:H	2.24	0.46
1:A:1166:ASP:O	1:A:1170:ILE:HD12	2.16	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1193:LEU:HD12	1:A:1194:ARG:N	2.31	0.46
2:B:629:ASP:HB3	2:B:632:ARG:CD	2.46	0.46
2:B:641:GLU:C	2:B:643:ASP:H	2.22	0.46
2:B:874:PHE:HA	2:B:913:GLY:O	2.16	0.46
2:B:1072:MET:HE3	2:B:1085:ILE:CB	2.45	0.46
3:C:238:ILE:HD11	3:C:246:ARG:HD2	1.97	0.46
4:D:47:LEU:HD13	4:D:48:ILE:N	2.30	0.46
7:G:115:MET:C	7:G:164:LYS:HG3	2.41	0.46
8:H:54:SER:O	8:H:146:ARG:HD2	2.15	0.46
9:I:85:PHE:CD2	9:I:85:PHE:N	2.82	0.46
1:A:69:THR:C	1:A:71:GLN:N	2.74	0.46
1:A:225:ASN:HD22	1:A:227:VAL:H	1.63	0.46
1:A:557:ASP:OD2	1:A:559:VAL:HB	2.16	0.46
1:A:630:ILE:HD13	1:A:646:PHE:CZ	2.51	0.46
1:A:746:MET:CE	2:B:1018:PRO:HG2	2.46	0.46
1:A:1315:GLU:C	1:A:1317:MET:N	2.74	0.46
2:B:842:ASN:ND2	2:B:845:SER:OG	2.47	0.46
3:C:44:LEU:HG	3:C:159:ALA:HB1	1.97	0.46
3:C:58:LEU:HD23	3:C:58:LEU:N	2.30	0.46
3:C:209:TYR:HD1	3:C:209:TYR:H	1.64	0.46
4:D:27:LEU:HD11	4:D:197:SER:HB3	1.97	0.46
4:D:146:GLN:O	4:D:147:TYR:C	2.59	0.46
5:E:56:LYS:HE3	5:E:84:ASP:HB3	1.97	0.46
7:G:50:ASP:O	7:G:50:ASP:CG	2.58	0.46
8:H:25:ARG:HA	8:H:41:ASP:HA	1.98	0.46
9:I:101:PHE:HE1	9:I:112:SER:HB3	1.81	0.46
1:A:428:TYR:H	1:A:428:TYR:HD1	1.63	0.46
1:A:825:ILE:HG21	2:B:509:ALA:HB2	1.98	0.46
1:A:852:TYR:CE1	6:F:136:ARG:HG2	2.50	0.46
1:A:1166:ASP:O	1:A:1170:ILE:CD1	2.64	0.46
1:A:1325:THR:O	5:E:148:GLU:HB2	2.16	0.46
2:B:236:HIS:HE1	2:B:389:ALA:HA	1.80	0.46
2:B:590:HIS:NE2	2:B:592:ASN:O	2.48	0.46
2:B:635:ARG:NH1	2:B:742:GLU:OE2	2.49	0.46
2:B:770:GLN:CD	2:B:983:ARG:HA	2.41	0.46
2:B:778:MET:HE2	2:B:1094:ARG:CG	2.46	0.46
2:B:852:ARG:HH22	12:L:70:ARG:C	2.24	0.46
3:C:174:ALA:O	10:J:10:CYS:O	2.34	0.46
3:C:249:ASP:O	3:C:252:GLN:HB3	2.16	0.46
5:E:39:LEU:O	5:E:42:PHE:HB3	2.15	0.46
5:E:56:LYS:CG	5:E:84:ASP:HB2	2.46	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:E:186:LEU:O	5:E:187:TYR:C	2.58	0.46
7:G:145:VAL:HG12	7:G:146:LYS:H	1.80	0.46
10:J:1:MET:H3	10:J:56:LEU:H	1.63	0.46
1:A:320:ARG:CB	1:A:320:ARG:HH11	2.29	0.45
1:A:346:ASP:OD1	2:B:1106:ARG:NH2	2.48	0.45
1:A:526:ASP:O	1:A:527:THR:C	2.58	0.45
1:A:563:PRO:HD3	8:H:79:TRP:CD1	2.50	0.45
1:A:658:LEU:HD13	2:B:831:SER:HA	1.99	0.45
1:A:1156:PRO:HA	1:A:1190:PRO:HA	1.96	0.45
1:A:1198:ASP:HB3	1:A:1201:ALA:CB	2.42	0.45
1:A:1280:GLU:OE1	1:A:1280:GLU:HA	2.14	0.45
1:A:1428:VAL:HG13	2:B:1151:LEU:CD2	2.45	0.45
2:B:69:LEU:HD13	2:B:429:PHE:CD1	2.42	0.45
2:B:101:MET:HA	2:B:112:LEU:H	1.81	0.45
2:B:345:LYS:C	2:B:347:LYS:HG2	2.41	0.45
2:B:622:LYS:HE3	9:I:59:VAL:HG22	1.97	0.45
2:B:792:MET:H	2:B:857:ARG:HA	1.80	0.45
3:C:152:GLU:HG2	3:C:153:LEU:N	2.28	0.45
4:D:7:THR:O	4:D:9:GLN:N	2.41	0.45
5:E:135:PHE:HD1	5:E:135:PHE:N	2.13	0.45
7:G:14:HIS:HD2	7:G:16:SER:HB2	1.74	0.45
10:J:3:VAL:HG21	10:J:18:TRP:CG	2.51	0.45
10:J:27:GLU:O	10:J:29:GLU:HG3	2.16	0.45
12:L:56:LEU:C	12:L:57:LEU:HD23	2.41	0.45
1:A:269:ILE:HG12	1:A:299:HIS:HB3	1.98	0.45
1:A:571:LEU:HD22	8:H:46:LEU:HD11	1.98	0.45
1:A:590:ARG:HH22	1:A:621:THR:HG1	1.64	0.45
1:A:598:LEU:HD12	8:H:115:TYR:CE2	2.51	0.45
1:A:1230:GLU:O	1:A:1233:ASP:N	2.48	0.45
1:A:1289:ARG:HD2	1:A:1303:GLU:OE2	2.16	0.45
1:A:1407:GLU:O	1:A:1411:GLU:HG3	2.17	0.45
2:B:47:GLN:O	2:B:173:MET:SD	2.75	0.45
2:B:511:PRO:O	2:B:513:GLN:N	2.49	0.45
2:B:570:VAL:HG23	2:B:573:GLN:HB3	1.97	0.45
2:B:707:PRO:HG2	2:B:708:GLU:HG2	1.98	0.45
2:B:737:THR:HB	9:I:66:PRO:HB2	1.99	0.45
2:B:737:THR:CG2	9:I:66:PRO:HA	2.46	0.45
4:D:197:SER:O	4:D:201:LYS:HE2	2.16	0.45
5:E:124:VAL:C	5:E:126:SER:N	2.74	0.45
7:G:113:HIS:C	7:G:114:LEU:HD12	2.41	0.45
1:A:252:PHE:HB2	1:A:256:GLN:OE1	2.16	0.45

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:407:ARG:O	1:A:408:ASP:C	2.60	0.45
1:A:767:GLN:HE22	1:A:774:ARG:HB3	1.80	0.45
1:A:843:LYS:NZ	1:A:1401:SER:OG	2.49	0.45
1:A:974:ASP:CB	1:A:976:THR:HG23	2.43	0.45
2:B:487:THR:O	2:B:490:SER:HB3	2.16	0.45
2:B:663:ALA:O	2:B:667:GLN:HG3	2.17	0.45
2:B:696:GLU:O	2:B:699:GLU:HB2	2.16	0.45
2:B:710:LEU:O	2:B:711:GLU:OE2	2.34	0.45
2:B:953:LEU:HD23	2:B:953:LEU:O	2.17	0.45
4:D:118:THR:HG21	4:D:121:LYS:HG3	1.98	0.45
5:E:42:PHE:CZ	5:E:58:MET:CE	2.99	0.45
11:K:40:HIS:O	11:K:43:GLY:N	2.49	0.45
1:A:122:MET:HG3	1:A:126:LEU:HD12	1.98	0.45
1:A:804:TYR:OH	1:A:816:HIS:NE2	2.41	0.45
1:A:1154:TYR:CD2	1:A:1156:PRO:HD3	2.52	0.45
2:B:167:ILE:C	2:B:450:ALA:HB1	2.40	0.45
2:B:388:CYS:O	2:B:390:LEU:N	2.49	0.45
2:B:784:ASN:O	2:B:785:TYR:C	2.59	0.45
2:B:1059:LEU:CD2	2:B:1065:GLN:O	2.65	0.45
3:C:208:GLU:C	3:C:210:GLU:N	2.75	0.45
11:K:12:LEU:HD21	11:K:18:LYS:N	2.32	0.45
11:K:16:GLU:OE1	11:K:37:LYS:HE2	2.16	0.45
11:K:82:ASP:OD1	11:K:82:ASP:C	2.58	0.45
1:A:225:ASN:ND2	1:A:227:VAL:N	2.58	0.45
1:A:981:LEU:HD21	1:A:1039:LYS:HA	1.99	0.45
1:A:999:VAL:C	1:A:1000:LEU:HD12	2.42	0.45
1:A:1161:THR:HG22	1:A:1163:ILE:H	1.82	0.45
1:A:1255:GLU:OE1	1:A:1258:HIS:HB3	2.17	0.45
1:A:1332:PHE:O	1:A:1336:MET:HB2	2.16	0.45
1:A:1453:TYR:N	1:A:1453:TYR:CD2	2.82	0.45
2:B:172:ILE:N	2:B:172:ILE:CD1	2.76	0.45
2:B:233:PRO:HG2	2:B:234:ILE:HD13	1.99	0.45
3:C:179:GLU:HG2	3:C:180:TYR:H	1.81	0.45
3:C:236:GLY:O	3:C:237:SER:C	2.60	0.45
4:D:23:ASN:N	4:D:23:ASN:HD22	2.15	0.45
5:E:153:HIS:O	5:E:154:ILE:CG1	2.62	0.45
1:A:42:ASP:C	1:A:44:THR:N	2.73	0.45
1:A:313:GLN:O	1:A:314:ALA:C	2.59	0.45
1:A:511:ILE:HA	1:A:521:MET:HE3	1.97	0.45
1:A:672:ASP:CB	1:A:736:ASN:HD21	2.30	0.45
1:A:765:VAL:HG23	1:A:802:ASN:O	2.16	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1143:LEU:HD21	1:A:1267:MET:HE2	1.99	0.45
1:A:1191:TRP:HH2	9:I:25:LEU:HD13	1.81	0.45
2:B:506:GLY:C	2:B:508:LEU:H	2.23	0.45
2:B:654:ARG:C	2:B:656:GLY:H	2.25	0.45
2:B:757:PRO:O	2:B:758:PHE:HB2	2.17	0.45
2:B:830:TYR:C	2:B:832:GLY:H	2.23	0.45
2:B:891:ASP:C	2:B:893:LEU:N	2.70	0.45
2:B:1175:LEU:HD23	2:B:1175:LEU:H	1.81	0.45
3:C:73:GLN:OE1	3:C:73:GLN:HA	2.15	0.45
3:C:133:ILE:HD13	3:C:236:GLY:O	2.17	0.45
3:C:148:ARG:N	3:C:151:GLN:HG3	2.31	0.45
3:C:213:PRO:HG2	3:C:214:ASN:H	1.80	0.45
3:C:217:ASP:HA	3:C:218:PRO:HD3	1.84	0.45
5:E:17:ARG:O	5:E:20:LYS:HB2	2.17	0.45
8:H:40:LEU:HD22	8:H:123:MET:HE3	1.97	0.45
8:H:59:ILE:CG2	8:H:60:ALA:H	1.95	0.45
1:A:43:GLU:CD	1:A:48:ALA:HB3	2.41	0.45
1:A:207:ILE:HA	1:A:210:ILE:CD1	2.46	0.45
1:A:218:ASP:HA	1:A:221:SER:OG	2.16	0.45
1:A:431:LYS:HB2	1:A:431:LYS:HE3	1.75	0.45
1:A:443:LEU:HD23	1:A:443:LEU:HA	1.78	0.45
1:A:639:PRO:HG2	1:A:640:GLN:N	2.32	0.45
1:A:830:LYS:HE2	1:A:1081:LEU:CB	2.46	0.45
1:A:929:LEU:O	1:A:929:LEU:HD13	2.16	0.45
2:B:127:GLY:C	2:B:128:LEU:HD12	2.42	0.45
2:B:565:PRO:O	2:B:566:LEU:C	2.60	0.45
2:B:1224:PHE:HZ	5:E:174:GLN:NE2	2.15	0.45
6:F:147:SER:C	6:F:149:GLU:H	2.25	0.45
7:G:1:MET:CE	7:G:80:LYS:H	2.29	0.45
8:H:42:ILE:O	8:H:44:VAL:HG23	2.16	0.45
1:A:2:VAL:HG23	2:B:1157:ALA:C	2.41	0.45
1:A:174:ILE:HG22	1:A:175:ARG:N	2.32	0.45
1:A:288:ALA:O	1:A:291:GLU:HB2	2.17	0.45
1:A:567:LYS:HD3	8:H:95:TYR:CB	2.47	0.45
1:A:573:SER:O	1:A:574:GLY:C	2.60	0.45
1:A:755:PHE:O	1:A:757:ASN:N	2.50	0.45
1:A:1100:ARG:HH21	1:A:1351:GLU:HG3	1.80	0.45
2:B:659:ALA:HA	2:B:662:MET:HE3	1.99	0.45
2:B:838:SER:HA	2:B:989:THR:O	2.17	0.45
2:B:911:ILE:HD11	2:B:941:LEU:CD1	2.46	0.45
5:E:92:THR:O	5:E:95:THR:HB	2.17	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:E:94:LYS:O	5:E:98:ILE:HG13	2.17	0.45
5:E:129:PRO:O	5:E:130:ALA:C	2.59	0.45
10:J:8:PHE:H	10:J:49:MET:CE	2.30	0.45
1:A:211:PHE:C	1:A:213:HIS:N	2.75	0.45
1:A:614:PHE:CD1	1:A:614:PHE:C	2.95	0.45
1:A:1019:CYS:O	1:A:1020:CYS:C	2.60	0.45
1:A:1230:GLU:O	1:A:1232:ASN:N	2.50	0.45
1:A:1283:VAL:CG1	1:A:1284:MET:N	2.80	0.45
1:A:1450:LEU:HD11	6:F:108:PHE:HZ	1.80	0.45
2:B:170:LEU:HA	2:B:171:PRO:HD2	1.89	0.45
2:B:405:ARG:HE	2:B:629:ASP:CG	2.25	0.45
2:B:446:LEU:O	2:B:447:ALA:HB3	2.17	0.45
2:B:508:LEU:H	2:B:508:LEU:HD12	1.80	0.45
2:B:1007:VAL:HG23	2:B:1008:PRO:HD2	1.98	0.45
3:C:11:ARG:NE	3:C:21:ILE:HD11	2.28	0.45
4:D:118:THR:O	4:D:119:ARG:C	2.59	0.45
11:K:18:LYS:HZ2	11:K:38:GLU:CG	2.30	0.45
11:K:31:VAL:HG12	11:K:32:VAL:N	2.32	0.45
11:K:91:CYS:O	11:K:94:ILE:HB	2.16	0.45
14:N:4:DA:H2"	14:N:5:DG:C8	2.52	0.45
1:A:57:ARG:O	1:A:68:GLN:HG2	2.17	0.45
1:A:115:LEU:O	1:A:122:MET:HG2	2.17	0.45
1:A:737:LEU:HB2	1:A:744:LYS:HD2	1.99	0.45
2:B:247:GLY:C	2:B:249:ARG:N	2.75	0.45
2:B:515:HIS:O	2:B:518:HIS:HB2	2.17	0.45
2:B:773:MET:HE2	2:B:985:GLY:HA2	1.99	0.45
2:B:830:TYR:O	2:B:831:SER:C	2.60	0.45
2:B:1181:GLU:HG2	2:B:1188:LYS:HD3	1.99	0.45
3:C:100:THR:HG21	3:C:102:GLN:HE21	1.81	0.45
3:C:125:MET:HE2	3:C:127:ARG:CZ	2.47	0.45
3:C:260:LEU:O	3:C:264:GLN:HG3	2.17	0.45
5:E:17:ARG:O	5:E:21:GLU:HG3	2.17	0.45
5:E:61:GLN:HB2	5:E:79:TRP:HE3	1.81	0.45
5:E:82:PHE:CD1	5:E:82:PHE:N	2.84	0.45
1:A:61:ILE:HG22	1:A:62:ASP:N	2.32	0.44
1:A:381:THR:OG1	1:A:382:PRO:HD2	2.18	0.44
1:A:471:ASN:OD1	1:A:472:LEU:N	2.49	0.44
1:A:659:HIS:O	2:B:1081:LEU:HD23	2.16	0.44
1:A:1006:ILE:CD1	5:E:164:LEU:HA	2.48	0.44
2:B:190:TYR:CE2	10:J:62:ARG:HB3	2.52	0.44
2:B:755:ILE:O	2:B:755:ILE:CG2	2.65	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:766:ARG:HD3	2:B:766:ARG:HA	1.77	0.44
3:C:45:ALA:HB3	3:C:170:TRP:NE1	2.32	0.44
3:C:84:ARG:HG3	3:C:85:ASP:N	2.33	0.44
4:D:53:SER:C	4:D:56:ARG:H	2.25	0.44
5:E:102:GLU:O	5:E:104:ASN:N	2.50	0.44
7:G:50:ASP:O	7:G:51:TYR:C	2.58	0.44
7:G:74:TYR:CD2	7:G:74:TYR:N	2.85	0.44
1:A:273:ASN:O	1:A:274:ILE:C	2.59	0.44
1:A:1164:PRO:O	1:A:1167:GLU:HG2	2.18	0.44
1:A:1385:THR:C	1:A:1387:HIS:H	2.24	0.44
2:B:215:GLN:OE1	2:B:479:VAL:HG22	2.17	0.44
2:B:510:LYS:HG3	2:B:511:PRO:CG	2.44	0.44
2:B:589:VAL:CG1	2:B:590:HIS:N	2.80	0.44
2:B:687:GLU:O	2:B:688:GLY:C	2.60	0.44
3:C:9:LYS:O	3:C:10:ILE:C	2.59	0.44
3:C:66:ARG:O	3:C:69:LEU:N	2.51	0.44
3:C:133:ILE:CD1	3:C:236:GLY:C	2.90	0.44
3:C:147:LEU:HD12	3:C:151:GLN:O	2.17	0.44
3:C:236:GLY:C	3:C:238:ILE:H	2.25	0.44
5:E:16:PHE:CZ	5:E:20:LYS:HE2	2.52	0.44
9:I:5:ARG:HD2	9:I:36:GLU:OE2	2.18	0.44
9:I:58:VAL:HG13	9:I:62:ILE:HD12	1.99	0.44
9:I:87:GLN:NE2	9:I:97:MET:HG2	2.32	0.44
11:K:89:ASN:O	11:K:92:ASN:N	2.51	0.44
11:K:102:LYS:O	11:K:103:THR:C	2.60	0.44
12:L:55:ILE:HG12	12:L:56:LEU:N	2.31	0.44
12:L:61:THR:HG22	12:L:62:LYS:N	2.33	0.44
1:A:255:SER:OG	2:B:918:ILE:CG2	2.65	0.44
1:A:332:LYS:HG3	1:A:333:GLU:HG2	1.99	0.44
1:A:1001:ARG:HD2	6:F:81:THR:O	2.17	0.44
1:A:1259:MET:HE3	1:A:1262:LYS:HE3	1.99	0.44
1:A:1323:ASP:C	1:A:1325:THR:N	2.75	0.44
1:A:1332:PHE:CE1	1:A:1381:LEU:HD13	2.51	0.44
2:B:25:ILE:HG23	2:B:29:ASP:CB	2.47	0.44
2:B:243:ALA:HA	2:B:250:PHE:O	2.18	0.44
2:B:282:ILE:HG13	2:B:283:VAL:N	2.32	0.44
2:B:703:ILE:HA	2:B:740:HIS:O	2.17	0.44
2:B:824:ILE:HG12	10:J:48:ARG:NH1	2.33	0.44
2:B:892:LYS:O	2:B:899:ILE:HG12	2.17	0.44
2:B:1174:LYS:O	2:B:1176:ASN:N	2.50	0.44
3:C:260:LEU:HD21	3:C:264:GLN:NE2	2.32	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:G:1:MET:HG3	7:G:85:GLU:CD	2.42	0.44
13:T:22:DG:N9	13:T:23:DT:H72	2.31	0.44
1:A:22:PHE:HB2	2:B:1211:ASN:HD21	1.81	0.44
1:A:32:VAL:HG21	1:A:80:HIS:HB3	2.00	0.44
1:A:73:GLY:O	1:A:74:MET:C	2.60	0.44
1:A:466:SER:HB2	2:B:1099:VAL:CG1	2.43	0.44
1:A:711:ARG:HD2	9:I:97:MET:HG3	1.99	0.44
1:A:717:ASN:O	1:A:718:VAL:C	2.59	0.44
1:A:897:TYR:HB3	1:A:936:LEU:HD12	1.99	0.44
1:A:1428:VAL:HG13	2:B:1151:LEU:HD21	1.98	0.44
1:A:1444:MET:CG	7:G:58:ARG:HB3	2.48	0.44
2:B:225:VAL:HA	2:B:237:VAL:O	2.16	0.44
2:B:281:PRO:O	2:B:282:ILE:C	2.60	0.44
2:B:297:ILE:C	2:B:299:GLU:H	2.24	0.44
2:B:460:ALA:HB1	2:B:466:TRP:CE3	2.53	0.44
2:B:683:SER:C	2:B:685:LEU:N	2.74	0.44
3:C:36:VAL:CG2	3:C:251:LEU:HD13	2.47	0.44
3:C:148:ARG:CG	3:C:149:LYS:H	2.30	0.44
5:E:52:ARG:HA	5:E:53:PRO:HD2	1.63	0.44
7:G:44:TYR:CD2	7:G:105:PRO:HB2	2.53	0.44
7:G:51:TYR:HD2	7:G:51:TYR:O	1.99	0.44
7:G:128:PRO:O	7:G:138:THR:HG23	2.18	0.44
8:H:5:LEU:HD13	8:H:135:LEU:H	1.82	0.44
8:H:27:GLU:CG	8:H:39:THR:HG23	2.47	0.44
8:H:135:LEU:HB3	8:H:137:GLN:H	1.83	0.44
1:A:266:LEU:HD21	1:A:303:TYR:CE1	2.53	0.44
1:A:344:ARG:HB2	2:B:1118:PRO:HB2	2.00	0.44
1:A:347:PHE:H	2:B:1107:ALA:HA	1.83	0.44
1:A:418:SER:O	1:A:420:ARG:N	2.50	0.44
1:A:1175:SER:O	1:A:1176:LEU:C	2.59	0.44
2:B:101:MET:HG2	2:B:110:HIS:O	2.18	0.44
2:B:110:HIS:CB	12:L:54:ARG:NH2	2.75	0.44
2:B:289:LEU:HD21	2:B:356:LEU:HD22	1.99	0.44
2:B:303:TYR:HH	2:B:586:TRP:HH2	1.64	0.44
2:B:884:ARG:O	2:B:936:ASP:CB	2.54	0.44
2:B:889:THR:HG22	2:B:891:ASP:N	2.32	0.44
2:B:895:ASP:C	2:B:897:GLY:H	2.24	0.44
2:B:1084:GLN:NE2	3:C:192:TRP:H	2.16	0.44
2:B:1130:PHE:HZ	2:B:1138:MET:HG2	1.82	0.44
3:C:88:CYS:O	3:C:90:ASP:N	2.51	0.44
5:E:78:LEU:HD11	5:E:109:ILE:CG1	2.42	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:G:106:MET:HE2	7:G:106:MET:HB3	1.72	0.44
9:I:64:SER:O	9:I:66:PRO:HD3	2.17	0.44
10:J:53:HIS:CD2	10:J:54:VAL:C	2.96	0.44
1:A:49:LYS:HE2	1:A:61:ILE:CD1	2.33	0.44
1:A:560:ILE:HD11	8:H:78:SER:OG	2.18	0.44
1:A:589:GLN:HA	1:A:605:MET:O	2.18	0.44
1:A:1120:LEU:N	1:A:1120:LEU:CD1	2.80	0.44
1:A:1444:MET:HG3	7:G:59:GLY:O	2.18	0.44
2:B:185:THR:OG1	2:B:188:ASP:OD2	2.34	0.44
2:B:315:LYS:N	2:B:316:PRO:HD2	2.33	0.44
2:B:464:GLY:C	2:B:465:ASN:HD22	2.26	0.44
3:C:238:ILE:HA	3:C:239:PRO:HD3	1.83	0.44
8:H:12:VAL:HG13	8:H:26:ILE:HG12	2.00	0.44
1:A:89:PRO:HB2	1:A:204:THR:HG21	1.99	0.44
1:A:154:SER:C	1:A:156:ASP:H	2.26	0.44
1:A:225:ASN:HD22	1:A:227:VAL:N	2.16	0.44
1:A:374:LEU:O	1:A:436:ILE:HG12	2.18	0.44
1:A:379:VAL:HG22	1:A:431:LYS:HG3	1.99	0.44
1:A:476:SER:O	1:A:479:ASN:N	2.50	0.44
1:A:738:LYS:C	1:A:740:LEU:N	2.74	0.44
1:A:827:THR:HG22	1:A:828:ALA:N	2.33	0.44
1:A:1143:LEU:HB2	1:A:1271:ILE:CG2	2.47	0.44
1:A:1176:LEU:O	1:A:1176:LEU:HD13	2.18	0.44
1:A:1315:GLU:C	1:A:1317:MET:H	2.26	0.44
2:B:25:ILE:HG23	2:B:658:ILE:CD1	2.45	0.44
2:B:104:GLU:OE2	12:L:54:ARG:NE	2.48	0.44
2:B:365:THR:HG21	2:B:370:PHE:HD1	1.83	0.44
3:C:196:ASP:CG	3:C:199:LYS:HG3	2.42	0.44
3:C:219:PHE:CD2	8:H:45:GLU:HG2	2.53	0.44
3:C:236:GLY:O	3:C:238:ILE:N	2.50	0.44
5:E:58:MET:O	5:E:59:SER:C	2.59	0.44
5:E:112:TYR:C	5:E:112:TYR:CD1	2.95	0.44
11:K:70:ARG:NH1	11:K:70:ARG:HG2	2.32	0.44
1:A:90:VAL:HG13	1:A:297:GLN:HB2	2.00	0.44
1:A:100:LYS:HD2	1:A:104:GLU:CD	2.42	0.44
1:A:306:ASN:HD22	1:A:322:VAL:HG12	1.82	0.44
1:A:335:ARG:CZ	2:B:1202:LEU:HD13	2.48	0.44
1:A:427:GLN:HB2	1:A:430:TRP:CD1	2.53	0.44
1:A:618:GLU:OE1	1:A:620:LYS:HG3	2.18	0.44
1:A:1203:ASN:O	1:A:1206:ASP:N	2.50	0.44
1:A:1215:ARG:HH11	1:A:1215:ARG:CG	2.30	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1410:PHE:HD2	2:B:1212:ILE:CD1	2.30	0.44
1:A:1431:GLY:HA3	2:B:1197:PRO:HD3	2.00	0.44
2:B:67:SER:HB2	2:B:92:PHE:CD1	2.53	0.44
2:B:639:ILE:HG22	2:B:641:GLU:HG2	1.99	0.44
4:D:180:LEU:HD23	4:D:180:LEU:HA	1.79	0.44
5:E:140:LEU:N	5:E:140:LEU:CD1	2.80	0.44
5:E:213:ILE:HG12	5:E:214:CYS:N	2.33	0.44
9:I:75:CYS:HB2	9:I:76:PRO:CD	2.48	0.44
12:L:55:ILE:HG12	12:L:56:LEU:H	1.82	0.44
1:A:64:ASN:O	1:A:66:LYS:N	2.51	0.44
1:A:185:TRP:CZ3	1:A:200:ARG:HG2	2.53	0.44
1:A:438:ASP:OD1	1:A:461:LYS:HA	2.18	0.44
1:A:567:LYS:HZ2	8:H:47:PHE:HB3	1.82	0.44
2:B:100:PRO:HD2	2:B:180:TYR:CE1	2.53	0.44
2:B:360:PHE:CE1	2:B:361:LEU:HD13	2.53	0.44
2:B:569:TYR:O	2:B:570:VAL:HG13	2.17	0.44
2:B:570:VAL:HA	2:B:571:PRO:HD2	1.56	0.44
2:B:710:LEU:C	2:B:711:GLU:HG2	2.43	0.44
5:E:90:VAL:HB	5:E:120:ALA:N	2.32	0.44
6:F:82:THR:HA	6:F:83:PRO:HD3	1.83	0.44
8:H:61:SER:HB3	8:H:139:ASN:HB3	1.99	0.44
8:H:91:ASP:C	8:H:93:TYR:N	2.73	0.44
11:K:39:ASP:HB2	11:K:40:HIS:H	1.68	0.44
1:A:12:ARG:HD2	2:B:1218:THR:CB	2.48	0.43
1:A:253:ASN:HB3	2:B:935:ARG:CZ	2.48	0.43
1:A:709:THR:HB	1:A:712:GLU:H	1.83	0.43
1:A:1041:ALA:O	1:A:1044:TRP:HB3	2.17	0.43
1:A:1139:GLU:C	1:A:1275:GLY:HA3	2.42	0.43
1:A:1291:VAL:HG22	1:A:1292:PRO:HD2	1.99	0.43
1:A:1450:LEU:HD13	6:F:131:PRO:HG3	2.00	0.43
2:B:363:HIS:O	2:B:364:ILE:CB	2.65	0.43
2:B:549:THR:HB	2:B:628:THR:OG1	2.18	0.43
2:B:638:PHE:HD2	2:B:690:VAL:HG23	1.83	0.43
2:B:649:LYS:O	2:B:650:GLU:HB2	2.18	0.43
2:B:792:MET:CE	13:T:24:DC:OP1	2.66	0.43
2:B:1001:PHE:C	2:B:1001:PHE:HD1	2.24	0.43
2:B:1021:MET:HB2	2:B:1021:MET:HE3	1.65	0.43
2:B:1068:GLY:O	2:B:1069:PHE:C	2.61	0.43
2:B:1125:ASP:CG	2:B:1125:ASP:O	2.60	0.43
3:C:238:ILE:CD1	3:C:246:ARG:HD2	2.47	0.43
3:C:255:VAL:HG21	11:K:94:ILE:HG21	1.99	0.43

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:E:124:VAL:O	5:E:126:SER:N	2.48	0.43
6:F:128:LYS:HD2	6:F:149:GLU:HA	2.00	0.43
7:G:1:MET:HE2	7:G:1:MET:C	2.43	0.43
7:G:11:ILE:HD13	7:G:29:LYS:HB3	2.00	0.43
9:I:34:TYR:C	9:I:35:VAL:HG23	2.43	0.43
10:J:22:LEU:HD12	10:J:22:LEU:HA	1.77	0.43
11:K:70:ARG:HH11	11:K:70:ARG:CG	2.29	0.43
12:L:39:SER:O	12:L:40:LEU:HD23	2.19	0.43
13:T:22:DG:C8	13:T:23:DT:H72	2.53	0.43
1:A:71:GLN:C	1:A:73:GLY:H	2.26	0.43
1:A:282:ASN:O	1:A:284:ALA:N	2.52	0.43
1:A:326:ARG:NH1	1:A:330:LYS:HE3	2.32	0.43
1:A:808:LEU:HD23	1:A:812:GLU:C	2.43	0.43
1:A:852:TYR:CD2	1:A:1060:PRO:HB2	2.53	0.43
1:A:974:ASP:C	1:A:976:THR:N	2.69	0.43
1:A:1053:PHE:O	1:A:1054:LEU:C	2.61	0.43
2:B:577:ALA:CA	2:B:589:VAL:HG11	2.48	0.43
2:B:918:ILE:CG2	2:B:935:ARG:NH2	2.81	0.43
3:C:66:ARG:CZ	10:J:2:ILE:CG2	2.96	0.43
3:C:226:ASP:O	3:C:227:THR:CB	2.67	0.43
3:C:259:LEU:CD1	11:K:88:LYS:HG2	2.48	0.43
8:H:40:LEU:CD2	8:H:142:LEU:HD21	2.48	0.43
8:H:135:LEU:HD13	8:H:137:GLN:CB	2.36	0.43
1:A:12:ARG:CB	2:B:1218:THR:HG22	2.37	0.43
1:A:209:ASN:O	1:A:210:ILE:C	2.62	0.43
1:A:875:ALA:HA	1:A:878:ILE:CD1	2.48	0.43
1:A:975:HIS:N	1:A:975:HIS:CD2	2.85	0.43
1:A:1187:GLN:CG	1:A:1188:GLN:N	2.82	0.43
1:A:1389:PHE:CG	1:A:1390:ASN:N	2.87	0.43
2:B:174:LEU:HD21	2:B:204:ILE:HD11	2.01	0.43
2:B:192:LEU:O	2:B:193:LYS:HB2	2.18	0.43
2:B:225:VAL:HG12	2:B:238:ALA:CA	2.48	0.43
2:B:378:LEU:O	2:B:378:LEU:HD12	2.18	0.43
2:B:984:HIS:CD2	2:B:1025:HIS:CA	2.99	0.43
2:B:1099:VAL:HG12	2:B:1100:ASP:N	2.33	0.43
5:E:112:TYR:OH	5:E:136:ASN:HB2	2.18	0.43
6:F:81:THR:HB	6:F:82:THR:H	1.62	0.43
1:A:116:ASP:HB2	1:A:118:HIS:H	1.83	0.43
1:A:184:SER:O	1:A:184:SER:OG	2.36	0.43
1:A:204:THR:O	1:A:205:GLU:C	2.61	0.43
1:A:326:ARG:NH1	1:A:330:LYS:HZ1	2.13	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:485:ASP:OD1	15:P:10:G:H4'	2.18	0.43
1:A:549:MET:CE	1:A:577:ILE:HD11	2.49	0.43
1:A:898:ARG:HB2	1:A:933:TYR:CE1	2.53	0.43
1:A:1142:THR:O	1:A:1145:SER:OG	2.33	0.43
1:A:1381:LEU:HD23	1:A:1381:LEU:HA	1.80	0.43
2:B:34:ILE:HG12	2:B:542:MET:CE	2.46	0.43
2:B:43:LEU:HA	2:B:43:LEU:HD23	1.83	0.43
2:B:313:MET:HE2	2:B:390:LEU:HD21	2.00	0.43
2:B:360:PHE:CE2	2:B:361:LEU:HD22	2.54	0.43
2:B:504:ARG:HG3	2:B:505:ASP:N	2.21	0.43
2:B:576:ASP:O	2:B:577:ALA:C	2.60	0.43
2:B:616:ILE:HD12	2:B:616:ILE:H	1.81	0.43
2:B:1000:PRO:O	2:B:1007:VAL:HG23	2.18	0.43
3:C:44:LEU:HD22	3:C:129:ILE:HG23	2.00	0.43
5:E:3:GLN:C	5:E:5:ASN:H	2.26	0.43
5:E:163:GLU:O	5:E:166:LYS:N	2.50	0.43
8:H:50:ALA:O	8:H:53:ASP:OD1	2.35	0.43
9:I:61:ASP:C	9:I:63:GLY:H	2.27	0.43
10:J:50:ILE:HD13	10:J:50:ILE:HA	1.88	0.43
1:A:269:ILE:CD1	1:A:300:VAL:HA	2.48	0.43
1:A:692:ASP:C	1:A:694:THR:N	2.75	0.43
1:A:1205:LYS:C	1:A:1274:ARG:NH1	2.75	0.43
2:B:34:ILE:C	2:B:36:ALA:N	2.75	0.43
2:B:308:TRP:CZ3	9:I:45:ARG:HG2	2.53	0.43
2:B:830:TYR:O	2:B:832:GLY:N	2.52	0.43
3:C:11:ARG:HE	3:C:21:ILE:CD1	2.27	0.43
3:C:252:GLN:HG3	11:K:95:ILE:HG23	2.00	0.43
4:D:48:ILE:CG2	7:G:4:ILE:HB	2.49	0.43
7:G:64:THR:HG22	7:G:65:ASP:N	2.34	0.43
7:G:146:LYS:HD3	7:G:148:GLU:OE2	2.17	0.43
8:H:84:ALA:CA	8:H:87:ARG:HD2	2.48	0.43
8:H:87:ARG:O	8:H:89:LEU:HG	2.19	0.43
1:A:547:LEU:HD22	11:K:58:PHE:CE1	2.53	0.43
1:A:742:ASN:HA	1:A:745:GLN:HB2	2.00	0.43
1:A:1002:GLY:CA	1:A:1007:ILE:HG21	2.49	0.43
2:B:60:GLN:OE1	2:B:95:ILE:HG22	2.19	0.43
2:B:313:MET:CE	2:B:390:LEU:HD21	2.49	0.43
2:B:466:TRP:CE3	2:B:466:TRP:HA	2.53	0.43
2:B:515:HIS:HD2	2:B:517:THR:OG1	2.02	0.43
2:B:872:GLU:OE1	2:B:914:LYS:HE3	2.17	0.43
2:B:975:GLN:HG2	2:B:976:ILE:N	2.33	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:E:212:ARG:NH1	5:E:212:ARG:CG	2.77	0.43
1:A:143:LYS:HG3	1:A:144:THR:N	2.34	0.43
1:A:608:ILE:CD1	1:A:613:ILE:HD12	2.48	0.43
1:A:666:ILE:C	1:A:668:ASP:N	2.74	0.43
1:A:768:GLN:HG2	1:A:816:HIS:CA	2.34	0.43
1:A:1053:PHE:O	1:A:1056:SER:N	2.48	0.43
1:A:1081:LEU:HD11	1:A:1097:GLY:HA3	2.00	0.43
1:A:1142:THR:HG22	1:A:1271:ILE:O	2.19	0.43
1:A:1280:GLU:O	1:A:1281:ARG:O	2.36	0.43
1:A:1325:THR:HG22	1:A:1326:ARG:HG3	2.00	0.43
2:B:258:LEU:O	2:B:258:LEU:CG	2.65	0.43
2:B:637:LEU:HD12	2:B:693:ILE:CD1	2.47	0.43
2:B:840:ILE:HG21	2:B:994:TYR:HD1	1.84	0.43
2:B:889:THR:O	2:B:910:VAL:HG23	2.19	0.43
3:C:183:TRP:O	3:C:184:ASN:C	2.62	0.43
9:I:78:CYS:O	9:I:79:HIS:C	2.62	0.43
1:A:387:ARG:O	1:A:390:GLN:HB3	2.19	0.43
1:A:469:ARG:NH2	2:B:991:GLY:O	2.50	0.43
1:A:478:TYR:O	1:A:479:ASN:HB3	2.18	0.43
1:A:568:PRO:CG	8:H:46:LEU:HD22	2.38	0.43
1:A:886:ILE:HD11	1:A:943:LEU:HB3	1.99	0.43
1:A:910:PRO:HA	1:A:916:GLY:HA3	2.01	0.43
1:A:1094:VAL:HA	1:A:1113:THR:OG1	2.18	0.43
2:B:244:LEU:O	2:B:245:GLU:C	2.61	0.43
2:B:247:GLY:HA2	2:B:418:LYS:NZ	2.34	0.43
2:B:654:ARG:C	2:B:656:GLY:N	2.76	0.43
2:B:700:SER:C	2:B:701:ILE:CG2	2.91	0.43
2:B:703:ILE:HG22	2:B:704:ALA:N	2.34	0.43
2:B:766:ARG:HH21	2:B:1020:ARG:HB3	1.82	0.43
2:B:918:ILE:HG21	2:B:935:ARG:NH2	2.34	0.43
2:B:1022:THR:HG23	2:B:1022:THR:O	2.19	0.43
2:B:1072:MET:HE2	2:B:1085:ILE:HB	1.97	0.43
3:C:69:LEU:O	10:J:6:ARG:HD2	2.17	0.43
3:C:113:VAL:CG2	3:C:147:LEU:HD21	2.49	0.43
3:C:124:LEU:O	3:C:126:GLY:N	2.51	0.43
3:C:125:MET:HE2	3:C:127:ARG:NH2	2.33	0.43
5:E:42:PHE:HZ	5:E:58:MET:CE	2.32	0.43
5:E:100:ILE:HG12	5:E:105:PHE:CD1	2.53	0.43
5:E:164:LEU:HD21	5:E:211:TYR:CG	2.54	0.43
7:G:145:VAL:CG1	7:G:146:LYS:N	2.82	0.43
9:I:50:THR:CG2	9:I:52:ILE:HG12	2.48	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:K:24:ASP:OD2	11:K:74:ARG:NH1	2.49	0.43
11:K:35:PHE:N	11:K:35:PHE:CD1	2.86	0.43
11:K:94:ILE:O	11:K:98:LEU:HG	2.19	0.43
1:A:67:CYS:O	1:A:68:GLN:C	2.59	0.43
1:A:427:GLN:O	1:A:430:TRP:HB2	2.18	0.43
1:A:701:LEU:HD23	1:A:701:LEU:N	2.34	0.43
1:A:903:ASN:ND2	1:A:903:ASN:C	2.76	0.43
2:B:172:ILE:CG2	2:B:173:MET:N	2.82	0.43
2:B:250:PHE:HE1	2:B:359:GLU:OE1	2.02	0.43
2:B:313:MET:HE2	2:B:390:LEU:HD11	2.01	0.43
2:B:999:MET:HB3	2:B:1007:VAL:HG21	2.00	0.43
2:B:1187:ASN:HB3	2:B:1188:LYS:H	1.52	0.43
3:C:91:HIS:ND1	3:C:158:VAL:HG11	2.34	0.43
3:C:144:ILE:O	3:C:145:CYS:CB	2.67	0.43
6:F:111:LEU:O	6:F:112:GLU:C	2.62	0.43
7:G:22:MET:O	7:G:23:LYS:C	2.62	0.43
9:I:88:SER:C	9:I:90:GLN:H	2.26	0.43
1:A:100:LYS:HE3	1:A:100:LYS:HB3	1.86	0.43
1:A:350:ARG:NH1	1:A:488:ASN:HD21	1.98	0.43
1:A:553:VAL:HA	1:A:554:PRO:HD2	1.82	0.43
1:A:1261:LYS:C	1:A:1264:GLU:HB3	2.44	0.43
1:A:1279:ILE:CD1	1:A:1312:ASN:HB3	2.49	0.43
2:B:39:ARG:CZ	2:B:665:GLU:HG2	2.49	0.43
2:B:193:LYS:NZ	12:L:32:ALA:HB1	2.34	0.43
2:B:244:LEU:O	2:B:246:LYS:N	2.52	0.43
2:B:497:ARG:NH2	2:B:775:LYS:HZ2	2.17	0.43
2:B:778:MET:HE2	2:B:1094:ARG:HD3	1.96	0.43
4:D:170:THR:CB	4:D:172:LEU:HG	2.48	0.43
5:E:26:ARG:NH2	5:E:133:GLU:OE2	2.52	0.43
7:G:119:LEU:HD13	7:G:132:SER:HB2	2.00	0.43
8:H:95:TYR:CE2	8:H:97:MET:CG	3.02	0.43
10:J:64:ASN:CB	10:J:65:PRO:CD	2.90	0.43
11:K:78:THR:O	11:K:79:GLU:C	2.62	0.43
1:A:137:ALA:O	1:A:138:ILE:C	2.62	0.42
1:A:207:ILE:HA	1:A:210:ILE:HD12	2.01	0.42
1:A:457:ALA:HB3	1:A:506:ALA:HA	2.00	0.42
1:A:488:ASN:OD1	1:A:488:ASN:N	2.50	0.42
1:A:710:LEU:HD22	9:I:96:SER:CB	2.49	0.42
1:A:1264:GLU:HG3	1:A:1265:ASN:N	2.32	0.42
1:A:1313:LEU:HD12	1:A:1313:LEU:HA	1.86	0.42
2:B:54:PHE:HA	2:B:58:THR:HB	2.01	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:186:GLU:O	2:B:189:LEU:N	2.52	0.42
2:B:787:VAL:O	2:B:787:VAL:HG12	2.19	0.42
2:B:990:ILE:HG22	2:B:992:ILE:H	1.83	0.42
2:B:1053:GLU:O	2:B:1057:LYS:HG3	2.20	0.42
2:B:1157:ALA:H	2:B:1197:PRO:HA	1.84	0.42
5:E:67:GLU:O	5:E:68:SER:C	2.61	0.42
7:G:1:MET:SD	7:G:1:MET:C	3.02	0.42
7:G:53:ASN:N	7:G:53:ASN:ND2	2.61	0.42
9:I:69:PRO:HB2	9:I:85:PHE:CZ	2.53	0.42
9:I:77:LYS:HB3	9:I:77:LYS:HZ2	1.81	0.42
1:A:181:LEU:O	1:A:202:LEU:HG	2.19	0.42
1:A:577:ILE:HA	1:A:580:VAL:HG23	2.01	0.42
1:A:1064:VAL:O	1:A:1064:VAL:HG12	2.18	0.42
1:A:1201:ALA:C	1:A:1203:ASN:H	2.27	0.42
1:A:1362:TYR:CD1	1:A:1363:VAL:N	2.86	0.42
2:B:255:GLN:CB	2:B:272:THR:HB	2.48	0.42
2:B:604:ARG:O	2:B:607:GLY:N	2.52	0.42
2:B:918:ILE:HG21	2:B:935:ARG:CZ	2.48	0.42
2:B:1071:VAL:HG22	2:B:1084:GLN:HG3	2.01	0.42
2:B:1138:MET:HE3	2:B:1143:ALA:HB3	2.00	0.42
3:C:238:ILE:HD11	3:C:246:ARG:NE	2.32	0.42
4:D:166:LEU:HD23	4:D:214:LEU:CD2	2.49	0.42
5:E:136:ASN:OD1	5:E:136:ASN:C	2.61	0.42
7:G:111:THR:O	7:G:112:LYS:C	2.61	0.42
8:H:104:PHE:CD2	8:H:114:VAL:HG12	2.54	0.42
1:A:427:GLN:HB2	1:A:430:TRP:CG	2.54	0.42
1:A:666:ILE:O	1:A:667:GLY:C	2.63	0.42
1:A:746:MET:HE3	2:B:1018:PRO:HG2	2.00	0.42
1:A:1164:PRO:HG2	1:A:1165:GLU:H	1.84	0.42
1:A:1205:LYS:O	1:A:1206:ASP:C	2.62	0.42
2:B:295:GLY:CA	9:I:6:PHE:CE2	3.02	0.42
2:B:569:TYR:CE1	2:B:589:VAL:HG21	2.55	0.42
2:B:659:ALA:HA	2:B:662:MET:CE	2.48	0.42
2:B:707:PRO:CG	2:B:708:GLU:N	2.81	0.42
2:B:792:MET:HG3	2:B:855:PHE:HE1	1.85	0.42
2:B:882:THR:HG22	2:B:883:LEU:H	1.80	0.42
3:C:91:HIS:C	3:C:91:HIS:CD2	2.97	0.42
3:C:93:ASP:OD1	3:C:122:SER:HB2	2.19	0.42
3:C:166:GLU:CG	11:K:10:PHE:CZ	2.92	0.42
4:D:68:ARG:HB3	4:D:72:ARG:HH21	1.85	0.42
4:D:117:GLU:O	4:D:118:THR:HB	2.19	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:E:90:VAL:HA	5:E:120:ALA:CB	2.48	0.42
7:G:30:LEU:HD22	7:G:72:VAL:HG11	2.00	0.42
8:H:96:VAL:HA	8:H:142:LEU:O	2.19	0.42
8:H:116:TYR:CE2	8:H:140:ALA:CB	3.02	0.42
9:I:103:CYS:SG	9:I:106:CYS:SG	3.18	0.42
12:L:70:ARG:HG2	12:L:70:ARG:HH11	1.84	0.42
1:A:318:SER:HB2	13:T:28:DA:N3	2.34	0.42
1:A:537:ARG:NH1	8:H:120:GLY:O	2.52	0.42
1:A:709:THR:HG22	1:A:710:LEU:N	2.34	0.42
1:A:730:GLY:O	1:A:733:ALA:N	2.51	0.42
1:A:809:THR:O	1:A:810:PRO:C	2.62	0.42
1:A:984:LYS:O	1:A:988:LEU:HB2	2.19	0.42
1:A:1168:GLU:HA	1:A:1171:GLN:CD	2.44	0.42
1:A:1447:GLU:C	1:A:1447:GLU:OE1	2.62	0.42
2:B:53:GLN:HE21	2:B:57:TYR:HB2	1.83	0.42
2:B:217:ARG:NE	2:B:405:ARG:HB2	2.33	0.42
2:B:258:LEU:HB2	2:B:385:LEU:HD21	2.01	0.42
2:B:778:MET:HE2	2:B:1094:ARG:CD	2.50	0.42
2:B:957:ASN:O	2:B:960:GLY:N	2.51	0.42
2:B:1033:LYS:CE	2:B:1070:GLU:OE1	2.67	0.42
3:C:238:ILE:HG12	3:C:239:PRO:HD2	2.02	0.42
3:C:250:THR:O	3:C:253:LYS:N	2.52	0.42
4:D:32:GLU:HG2	7:G:42:PHE:HE2	1.84	0.42
4:D:53:SER:O	4:D:56:ARG:HB3	2.20	0.42
5:E:33:GLU:C	5:E:35:VAL:H	2.25	0.42
5:E:74:ASP:O	5:E:76:GLY:N	2.53	0.42
7:G:1:MET:HG3	7:G:85:GLU:OE1	2.20	0.42
7:G:137:ILE:HG23	7:G:143:ILE:HD11	2.00	0.42
10:J:19:GLU:O	10:J:20:SER:C	2.61	0.42
10:J:53:HIS:NE2	10:J:55:ASP:HA	2.34	0.42
10:J:61:LEU:C	10:J:63:TYR:H	2.28	0.42
11:K:102:LYS:HE3	11:K:102:LYS:HB2	1.90	0.42
1:A:90:VAL:CG1	1:A:297:GLN:HA	2.48	0.42
1:A:652:VAL:HG12	1:A:653:VAL:N	2.35	0.42
1:A:821:ARG:O	1:A:821:ARG:HG3	2.20	0.42
1:A:1170:ILE:H	1:A:1170:ILE:CD1	2.18	0.42
1:A:1319:VAL:O	1:A:1322:ILE:HG12	2.20	0.42
2:B:38:PHE:HD1	2:B:811:TYR:CD2	2.36	0.42
2:B:225:VAL:HG12	2:B:238:ALA:CB	2.49	0.42
2:B:371:GLU:OE1	2:B:371:GLU:N	2.51	0.42
2:B:640:VAL:CG1	2:B:649:LYS:HG2	2.49	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:885:MET:O	2:B:886:LYS:HG2	2.20	0.42
4:D:218:GLU:O	4:D:219:THR:C	2.61	0.42
7:G:1:MET:HG3	7:G:85:GLU:OE2	2.19	0.42
7:G:14:HIS:ND1	7:G:15:PRO:HD2	2.35	0.42
11:K:92:ASN:O	11:K:93:SER:C	2.61	0.42
12:L:27:LEU:HD13	12:L:37:LYS:CE	2.49	0.42
12:L:54:ARG:HG3	12:L:54:ARG:NH1	2.34	0.42
1:A:88:LYS:HB3	1:A:293:GLU:OE2	2.20	0.42
1:A:120:GLU:HA	1:A:123:ARG:HH21	1.84	0.42
1:A:120:GLU:O	1:A:121:LEU:C	2.62	0.42
1:A:172:PRO:HG3	1:A:185:TRP:CZ2	2.54	0.42
1:A:341:MET:CE	2:B:1135:ARG:NH1	2.74	0.42
1:A:695:LYS:C	1:A:697:ALA:H	2.27	0.42
1:A:870:GLU:HG2	5:E:208:TYR:CD2	2.54	0.42
1:A:932:GLU:HG2	1:A:933:TYR:N	2.34	0.42
1:A:1254:ALA:O	1:A:1255:GLU:CB	2.58	0.42
2:B:128:LEU:HD11	2:B:170:LEU:H	1.83	0.42
2:B:797:TYR:C	2:B:798:TYR:HD2	2.27	0.42
2:B:840:ILE:HG21	2:B:994:TYR:CD1	2.55	0.42
2:B:847:ASP:C	2:B:849:GLY:N	2.76	0.42
2:B:1004:GLU:OE2	2:B:1064:TYR:CE2	2.73	0.42
2:B:1069:PHE:CD1	2:B:1069:PHE:N	2.86	0.42
6:F:84:TYR:CE2	6:F:152:ILE:HG21	2.54	0.42
6:F:101:ILE:HD13	6:F:120:ILE:HG22	2.01	0.42
7:G:73:LYS:HD2	7:G:74:TYR:O	2.20	0.42
8:H:77:ARG:O	8:H:78:SER:C	2.62	0.42
8:H:128:ASN:ND2	8:H:128:ASN:C	2.78	0.42
9:I:25:LEU:HG	9:I:38:ALA:HB2	2.02	0.42
11:K:37:LYS:O	11:K:38:GLU:CG	2.63	0.42
1:A:19:PHE:HB3	1:A:1413:GLY:HA2	2.02	0.42
1:A:70:CYS:HA	2:B:1174:LYS:HG2	2.01	0.42
1:A:73:GLY:O	1:A:75:ASN:N	2.53	0.42
1:A:378:GLU:CD	1:A:387:ARG:HH22	2.28	0.42
1:A:567:LYS:HE2	8:H:95:TYR:CE2	2.55	0.42
1:A:708:MET:HE3	1:A:713:SER:OG	2.19	0.42
2:B:295:GLY:HA3	9:I:6:PHE:CE2	2.55	0.42
2:B:516:ASN:H	2:B:516:ASN:ND2	2.17	0.42
2:B:744:HIS:CG	2:B:745:PRO:HD2	2.55	0.42
2:B:803:LEU:HD12	2:B:1032:SER:HB3	2.01	0.42
2:B:882:THR:O	2:B:883:LEU:HB2	2.19	0.42
3:C:35:ARG:HD3	11:K:41:THR:OG1	2.18	0.42

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:E:7:ARG:C	5:E:9:ILE:N	2.77	0.42
11:K:18:LYS:HZ3	11:K:38:GLU:HG2	1.82	0.42
1:A:591:PHE:CD2	1:A:595:THR:HB	2.52	0.42
1:A:674:PRO:C	1:A:676:MET:N	2.76	0.42
1:A:820:GLY:C	1:A:822:GLU:N	2.78	0.42
1:A:1215:ARG:O	1:A:1219:THR:N	2.52	0.42
2:B:175:ARG:CG	2:B:175:ARG:NH1	2.82	0.42
2:B:465:ASN:HD22	2:B:465:ASN:N	2.17	0.42
2:B:807:ARG:O	2:B:810:GLU:HB3	2.19	0.42
2:B:1164:GLY:HA3	2:B:1190:ASP:OD2	2.19	0.42
2:B:1183:LYS:H	2:B:1183:LYS:HG3	1.69	0.42
4:D:122:GLU:HA	4:D:125:SER:OG	2.19	0.42
4:D:176:GLU:O	4:D:178:ALA:N	2.53	0.42
5:E:7:ARG:C	5:E:9:ILE:H	2.27	0.42
5:E:14:ARG:O	5:E:15:ALA:C	2.63	0.42
6:F:77:ASP:O	6:F:78:GLN:CB	2.57	0.42
8:H:38:LEU:HD11	8:H:123:MET:HE2	2.02	0.42
1:A:171:GLN:HA	1:A:172:PRO:HD2	1.89	0.42
1:A:586:ILE:HD12	1:A:633:VAL:HG22	2.01	0.42
1:A:699:ALA:CB	1:A:701:LEU:HG	2.49	0.42
1:A:886:ILE:HG12	1:A:943:LEU:HD12	2.02	0.42
1:A:1353:TYR:HD1	1:A:1368:MET:CE	2.32	0.42
2:B:40:GLU:OE1	2:B:682:SER:HB2	2.20	0.42
2:B:51:PHE:O	2:B:54:PHE:HB3	2.20	0.42
2:B:408:LEU:N	2:B:408:LEU:CD1	2.83	0.42
2:B:483:LEU:HD11	2:B:491:THR:CG2	2.50	0.42
2:B:614:SER:C	2:B:615:MET:HG3	2.43	0.42
3:C:3:GLU:CG	3:C:4:GLU:HG3	2.47	0.42
3:C:12:GLU:O	3:C:13:ALA:HB2	2.18	0.42
5:E:7:ARG:O	5:E:10:SER:HB3	2.19	0.42
8:H:128:ASN:C	8:H:128:ASN:HD22	2.28	0.42
9:I:44:TYR:CD1	9:I:45:ARG:N	2.88	0.42
9:I:55:THR:CG2	9:I:58:VAL:HG21	2.43	0.42
11:K:52:ASN:O	11:K:53:ASP:C	2.62	0.42
1:A:106:VAL:HG13	1:A:112:LYS:N	2.34	0.42
1:A:164:ARG:HG3	1:A:165:GLY:O	2.19	0.42
1:A:255:SER:OG	2:B:918:ILE:HD13	2.19	0.42
1:A:666:ILE:O	1:A:668:ASP:N	2.53	0.42
1:A:754:SER:O	1:A:755:PHE:C	2.62	0.42
1:A:795:GLU:HG2	2:B:731:VAL:CG2	2.50	0.42
2:B:121:ASN:HA	2:B:207:GLY:HA2	2.01	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:1015:HIS:C	2:B:1017:ILE:H	2.28	0.42
2:B:1058:LEU:HD23	2:B:1058:LEU:HA	1.88	0.42
2:B:1182:CYS:HB3	2:B:1187:ASN:HB2	2.00	0.42
3:C:15:LYS:HG2	3:C:16:ASP:OD1	2.20	0.42
3:C:17:ASN:C	3:C:240:VAL:HG11	2.45	0.42
3:C:57:VAL:C	3:C:58:LEU:HD23	2.45	0.42
3:C:69:LEU:HA	3:C:69:LEU:HD12	1.85	0.42
3:C:166:GLU:C	11:K:6:ARG:HH11	2.28	0.42
4:D:176:GLU:OE2	4:D:197:SER:HB2	2.20	0.42
5:E:69:ILE:HG13	5:E:69:ILE:H	1.50	0.42
7:G:99:PHE:HZ	7:G:163:ILE:HD13	1.85	0.42
9:I:82:GLU:HB3	9:I:104:LEU:CD1	2.50	0.42
1:A:26:GLU:O	1:A:27:VAL:C	2.63	0.41
1:A:79:GLY:CA	1:A:243:PRO:HG3	2.43	0.41
1:A:130:ASP:O	1:A:132:LYS:N	2.53	0.41
1:A:353:ILE:HD13	1:A:487:MET:CE	2.50	0.41
1:A:416:ARG:HE	1:A:417:TYR:HE1	1.68	0.41
1:A:679:ILE:HG12	1:A:732:LEU:CD1	2.42	0.41
1:A:715:GLU:O	1:A:716:ASP:C	2.63	0.41
1:A:1072:ILE:HD11	1:A:1368:MET:HA	2.01	0.41
1:A:1125:ALA:C	1:A:1127:ASP:H	2.26	0.41
2:B:129:PHE:HE2	2:B:166:PHE:CD1	2.38	0.41
2:B:173:MET:HE2	2:B:203:PHE:HE1	1.85	0.41
2:B:763:GLN:HG2	2:B:765:PRO:CG	2.49	0.41
3:C:33:LEU:HD13	3:C:37:MET:HG3	2.01	0.41
3:C:113:VAL:HG23	3:C:147:LEU:HD21	2.02	0.41
4:D:64:VAL:HG12	4:D:65:GLU:N	2.34	0.41
4:D:122:GLU:O	4:D:124:GLU:N	2.53	0.41
5:E:33:GLU:CD	5:E:33:GLU:N	2.78	0.41
5:E:144:ILE:HG13	5:E:145:THR:N	2.34	0.41
8:H:3:ASN:HB3	8:H:4:THR:H	1.70	0.41
8:H:94:ASP:OD1	8:H:94:ASP:N	2.51	0.41
8:H:139:ASN:O	8:H:140:ALA:CB	2.58	0.41
11:K:67:PHE:C	11:K:68:PHE:HD2	2.27	0.41
1:A:215:SER:HG	1:A:218:ASP:HB2	1.82	0.41
1:A:705:LYS:HB2	1:A:708:MET:HE2	2.02	0.41
1:A:1280:GLU:O	1:A:1281:ARG:C	2.62	0.41
2:B:172:ILE:HD12	2:B:172:ILE:H	1.81	0.41
2:B:249:ARG:NH1	2:B:418:LYS:HD2	2.35	0.41
2:B:640:VAL:O	2:B:641:GLU:O	2.38	0.41
3:C:94:LYS:HE3	3:C:94:LYS:HB2	1.88	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:114:TYR:O	3:C:115:SER:C	2.63	0.41
3:C:124:LEU:HD12	3:C:124:LEU:H	1.85	0.41
4:D:138:ASN:O	4:D:139:LYS:C	2.61	0.41
8:H:40:LEU:HD21	8:H:142:LEU:HD21	2.01	0.41
9:I:84:VAL:HG13	9:I:84:VAL:O	2.20	0.41
9:I:99:LEU:HB2	9:I:112:SER:OG	2.19	0.41
10:J:21:TYR:HA	10:J:39:LEU:HD11	2.02	0.41
11:K:49:GLU:C	11:K:51:LEU:N	2.77	0.41
1:A:71:GLN:C	1:A:73:GLY:N	2.78	0.41
1:A:524:VAL:HG12	1:A:525:GLN:N	2.26	0.41
1:A:705:LYS:O	1:A:706:HIS:C	2.63	0.41
1:A:900:ASP:C	1:A:926:GLN:HE21	2.23	0.41
1:A:1041:ALA:O	1:A:1045:VAL:HG23	2.19	0.41
1:A:1048:ASN:C	1:A:1050:GLU:N	2.78	0.41
2:B:115:GLN:HG2	2:B:193:LYS:HB2	2.02	0.41
2:B:313:MET:SD	2:B:390:LEU:HD21	2.60	0.41
2:B:365:THR:HG1	2:B:367:LEU:HG	1.85	0.41
2:B:376:PHE:CZ	2:B:569:TYR:HD2	2.38	0.41
2:B:681:TRP:C	2:B:683:SER:H	2.27	0.41
2:B:941:LEU:O	2:B:942:ARG:C	2.62	0.41
2:B:975:GLN:HE21	2:B:975:GLN:HB3	1.48	0.41
2:B:994:TYR:HD1	2:B:999:MET:HE1	1.85	0.41
2:B:1162:ILE:CG2	2:B:1163:CYS:N	2.83	0.41
2:B:1214:PRO:O	2:B:1214:PRO:HG2	2.20	0.41
3:C:80:LEU:CD1	3:C:95:CYS:HA	2.50	0.41
4:D:156:ASP:C	4:D:158:GLU:N	2.77	0.41
5:E:112:TYR:O	5:E:137:GLU:HG3	2.20	0.41
5:E:136:ASN:O	5:E:140:LEU:HD13	2.20	0.41
7:G:119:LEU:HD21	7:G:137:ILE:HD12	2.02	0.41
8:H:82:PRO:O	8:H:83:GLN:HB2	2.19	0.41
1:A:414:ASP:O	1:A:416:ARG:N	2.53	0.41
1:A:630:ILE:HG23	1:A:642:CYS:SG	2.60	0.41
1:A:924:LYS:HB3	1:A:924:LYS:HE2	1.82	0.41
1:A:1011:GLN:HE22	1:A:1015:VAL:CG2	2.33	0.41
1:A:1138:ILE:C	1:A:1275:GLY:HA2	2.45	0.41
1:A:1313:LEU:C	1:A:1315:GLU:N	2.79	0.41
1:A:1409:LEU:HD13	2:B:1207:LEU:CD1	2.47	0.41
2:B:70:ILE:O	2:B:70:ILE:HG22	2.20	0.41
2:B:361:LEU:CD2	2:B:377:PHE:HD2	2.33	0.41
2:B:419:THR:O	2:B:423:LYS:HB2	2.20	0.41
2:B:605:ARG:NH1	2:B:639:ILE:HD13	2.34	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:905:VAL:HG23	2:B:941:LEU:HD22	2.02	0.41
2:B:999:MET:HE2	2:B:1011:ILE:HD11	2.01	0.41
2:B:1158:PHE:CE2	2:B:1160:VAL:HG13	2.55	0.41
3:C:235:VAL:HG21	10:J:6:ARG:NH2	2.35	0.41
4:D:32:GLU:O	4:D:33:PHE:CG	2.73	0.41
4:D:63:LEU:O	4:D:129:LEU:HD11	2.20	0.41
4:D:118:THR:CB	4:D:121:LYS:HD2	2.50	0.41
5:E:31:THR:O	5:E:35:VAL:HG23	2.20	0.41
5:E:177:ARG:HH11	5:E:215:MET:CE	2.33	0.41
7:G:1:MET:CE	7:G:80:LYS:N	2.83	0.41
8:H:36:CYS:HB2	8:H:129:TYR:OH	2.20	0.41
12:L:28:LYS:O	12:L:29:TYR:HD2	2.03	0.41
13:T:25:DA:H1'	13:T:26:DT:C5'	2.50	0.41
1:A:72:GLU:HB3	1:A:76:GLU:CG	2.45	0.41
1:A:427:GLN:HB2	1:A:430:TRP:CD2	2.56	0.41
1:A:446:ARG:CD	1:A:480:ALA:HB2	2.50	0.41
1:A:1079:MET:HE2	1:A:1359:ASP:CB	2.50	0.41
1:A:1139:GLU:OE2	1:A:1205:LYS:HE2	2.21	0.41
1:A:1168:GLU:O	1:A:1171:GLN:HG3	2.21	0.41
2:B:418:LYS:C	2:B:420:LEU:N	2.78	0.41
2:B:449:ASN:C	2:B:451:LYS:H	2.28	0.41
2:B:1106:ARG:CZ	2:B:1109:GLY:H	2.33	0.41
2:B:1224:PHE:CZ	5:E:171:LYS:HG2	2.56	0.41
3:C:250:THR:O	3:C:251:LEU:C	2.63	0.41
4:D:48:ILE:HG21	7:G:4:ILE:HB	2.03	0.41
4:D:51:ASN:O	4:D:52:LEU:C	2.62	0.41
5:E:67:GLU:O	5:E:69:ILE:N	2.53	0.41
5:E:198:ILE:N	5:E:198:ILE:HD12	2.35	0.41
6:F:103:MET:CE	7:G:66:GLY:N	2.72	0.41
8:H:20:TYR:HB3	8:H:23:VAL:O	2.20	0.41
8:H:95:TYR:HE2	8:H:97:MET:CG	2.34	0.41
11:K:47:ARG:C	11:K:47:ARG:HD2	2.45	0.41
14:N:5:DG:H2''	14:N:6:DT:OP2	2.20	0.41
1:A:21:LEU:HD11	1:A:1414:ALA:HA	2.02	0.41
1:A:143:LYS:HG3	1:A:144:THR:H	1.84	0.41
1:A:218:ASP:O	1:A:219:PHE:C	2.63	0.41
1:A:255:SER:O	1:A:256:GLN:HG3	2.21	0.41
1:A:320:ARG:NH1	1:A:320:ARG:CB	2.83	0.41
1:A:353:ILE:HG13	1:A:482:PHE:HD2	1.85	0.41
1:A:492:PRO:HB3	1:A:501:LEU:CD1	2.50	0.41
1:A:540:PHE:CE2	1:A:565:ILE:HD12	2.56	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:567:LYS:HZ2	8:H:47:PHE:CB	2.33	0.41
1:A:947:PHE:CE2	1:A:954:TRP:CE2	3.09	0.41
1:A:1187:GLN:CG	1:A:1188:GLN:H	2.34	0.41
1:A:1364:ASN:O	1:A:1365:TYR:C	2.64	0.41
2:B:259:TYR:N	2:B:259:TYR:CD1	2.89	0.41
2:B:412:LEU:CB	2:B:466:TRP:HE1	2.31	0.41
2:B:575:PRO:C	2:B:577:ALA:H	2.28	0.41
2:B:866:TYR:CD2	2:B:870:ILE:HB	2.55	0.41
3:C:76:ASP:O	3:C:79:GLN:HG2	2.20	0.41
3:C:180:TYR:CD1	3:C:180:TYR:C	2.99	0.41
3:C:241:ASP:HB3	11:K:109:TRP:CE2	2.56	0.41
6:F:70:LYS:H	6:F:72:LYS:CD	2.33	0.41
8:H:84:ALA:CB	8:H:87:ARG:HD2	2.50	0.41
9:I:15:TYR:HD1	9:I:15:TYR:H	1.67	0.41
1:A:49:LYS:NZ	1:A:60:SER:HA	2.36	0.41
1:A:523:ILE:HD12	1:A:622:VAL:CG2	2.50	0.41
1:A:545:GLN:C	1:A:547:LEU:N	2.79	0.41
1:A:795:GLU:HG2	2:B:731:VAL:HG22	2.03	0.41
1:A:853:ASP:CG	1:A:855:THR:HG22	2.45	0.41
1:A:1410:PHE:C	1:A:1412:ALA:N	2.79	0.41
2:B:59:LEU:HD12	2:B:417:PHE:CE2	2.55	0.41
2:B:70:ILE:HD12	2:B:429:PHE:CZ	2.56	0.41
2:B:485:ARG:HH11	2:B:485:ARG:HG3	1.84	0.41
3:C:89:GLU:O	3:C:90:ASP:CB	2.66	0.41
4:D:176:GLU:O	4:D:177:VAL:C	2.63	0.41
12:L:57:LEU:HD23	12:L:57:LEU:N	2.35	0.41
1:A:7:SER:HB3	2:B:1193:GLN:OE1	2.21	0.41
1:A:415:LEU:HD23	1:A:415:LEU:HA	1.90	0.41
1:A:578:LEU:HD23	1:A:612:ILE:CD1	2.51	0.41
1:A:694:THR:O	1:A:698:GLN:HG3	2.20	0.41
1:A:792:TYR:N	1:A:792:TYR:CD1	2.89	0.41
1:A:837:ILE:O	1:A:838:GLN:C	2.63	0.41
1:A:878:ILE:HG23	1:A:956:LEU:C	2.45	0.41
1:A:1062:GLU:O	1:A:1064:VAL:N	2.54	0.41
1:A:1446:ASP:HB2	6:F:133:VAL:HG23	2.03	0.41
2:B:167:ILE:O	2:B:453:ILE:HD12	2.21	0.41
2:B:310:MET:HE3	2:B:310:MET:HB2	1.86	0.41
2:B:763:GLN:C	2:B:765:PRO:HD2	2.46	0.41
2:B:778:MET:HE1	2:B:1094:ARG:HD3	1.93	0.41
2:B:955:THR:HG23	12:L:54:ARG:O	2.21	0.41
2:B:1124:ARG:O	2:B:1125:ASP:HB3	2.20	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:1175:LEU:H	2:B:1175:LEU:CD2	2.34	0.41
3:C:35:ARG:NH1	11:K:41:THR:H	2.18	0.41
3:C:100:THR:HG22	3:C:101:LEU:N	2.35	0.41
3:C:196:ASP:CG	3:C:199:LYS:HE3	2.44	0.41
4:D:195:ILE:HG22	4:D:195:ILE:O	2.20	0.41
4:D:220:LEU:CG	4:D:221:TYR:N	2.83	0.41
5:E:101:GLN:HB2	5:E:101:GLN:HE21	1.59	0.41
9:I:75:CYS:HB2	9:I:76:PRO:HD2	2.03	0.41
11:K:107:THR:O	11:K:111:LEU:HG	2.21	0.41
12:L:61:THR:HG21	12:L:63:ARG:CG	2.49	0.41
1:A:75:ASN:O	1:A:76:GLU:HB2	2.20	0.41
1:A:122:MET:O	1:A:123:ARG:C	2.64	0.41
1:A:316:GLN:O	1:A:317:LYS:C	2.64	0.41
1:A:425:GLN:CD	1:A:425:GLN:N	2.78	0.41
1:A:451:HIS:HB3	1:A:453:MET:N	2.36	0.41
1:A:470:LEU:HD12	1:A:470:LEU:O	2.20	0.41
1:A:626:ASN:C	1:A:628:GLY:H	2.27	0.41
1:A:688:LYS:C	1:A:690:VAL:N	2.77	0.41
1:A:982:THR:HG22	1:A:983:ILE:N	2.36	0.41
1:A:1002:GLY:O	1:A:1008:GLN:NE2	2.45	0.41
1:A:1030:ARG:HG3	1:A:1034:GLU:CG	2.51	0.41
1:A:1038:THR:O	1:A:1039:LYS:C	2.63	0.41
1:A:1124:HIS:HB2	1:A:1130:GLN:HG2	2.02	0.41
1:A:1143:LEU:O	1:A:1146:VAL:HG23	2.21	0.41
2:B:51:PHE:HB2	2:B:173:MET:CE	2.51	0.41
2:B:114:PRO:O	2:B:117:ALA:N	2.53	0.41
2:B:125:SER:HA	2:B:172:ILE:HD12	2.03	0.41
2:B:217:ARG:C	2:B:217:ARG:HD2	2.46	0.41
2:B:265:SER:O	2:B:266:ALA:HB3	2.21	0.41
2:B:296:GLU:HA	2:B:299:GLU:HG3	2.03	0.41
2:B:708:GLU:C	2:B:710:LEU:N	2.79	0.41
2:B:872:GLU:OE2	2:B:914:LYS:HE2	2.21	0.41
2:B:881:ASN:HB2	2:B:933:SER:N	2.36	0.41
3:C:6:PRO:C	3:C:7:GLN:HG3	2.46	0.41
3:C:62:PHE:CD2	3:C:62:PHE:C	2.99	0.41
3:C:77:ILE:HA	3:C:77:ILE:HD13	1.74	0.41
3:C:123:ASN:OD1	3:C:125:MET:N	2.52	0.41
3:C:141:GLY:O	3:C:142:VAL:O	2.38	0.41
3:C:179:GLU:CG	3:C:180:TYR:N	2.82	0.41
3:C:251:LEU:O	3:C:255:VAL:HG23	2.21	0.41
4:D:54:GLU:O	4:D:58:VAL:HG23	2.21	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:D:120:GLU:O	4:D:120:GLU:HG2	2.20	0.41
4:D:126:ILE:C	4:D:128:VAL:N	2.78	0.41
5:E:78:LEU:HG	5:E:79:TRP:N	2.36	0.41
5:E:116:ILE:HG22	5:E:117:THR:N	2.36	0.41
5:E:190:LEU:HD21	5:E:196:VAL:CG2	2.51	0.41
6:F:96:THR:O	6:F:100:GLN:HG3	2.21	0.41
7:G:9:LEU:CG	7:G:10:ASN:N	2.83	0.41
7:G:91:VAL:CG1	7:G:92:VAL:N	2.84	0.41
8:H:56:THR:HB	8:H:145:ARG:HG2	2.02	0.41
8:H:83:GLN:C	8:H:85:GLY:N	2.79	0.41
8:H:84:ALA:O	8:H:85:GLY:C	2.64	0.41
11:K:51:LEU:HD12	11:K:51:LEU:HA	1.83	0.41
11:K:85:ASP:O	11:K:88:LYS:N	2.54	0.41
11:K:110:ASN:C	11:K:112:GLN:H	2.27	0.41
13:T:15:DA:H1'	13:T:16:DC:H5'	2.02	0.41
1:A:60:SER:O	1:A:61:ILE:HG13	2.21	0.41
1:A:248:PRO:O	1:A:260:ASP:HB2	2.21	0.41
1:A:1209:MET:CE	1:A:1236:LEU:HB3	2.51	0.41
1:A:1224:LEU:HD12	1:A:1241:ARG:O	2.21	0.41
1:A:1239:ARG:CB	1:A:1239:ARG:HH11	2.34	0.41
1:A:1422:ARG:HH21	2:B:1220:ARG:NH1	2.19	0.41
2:B:313:MET:CE	2:B:386:LEU:HB3	2.51	0.41
2:B:578:THR:C	2:B:589:VAL:HG13	2.45	0.41
2:B:652:LYS:CB	2:B:689:LEU:HD23	2.46	0.41
2:B:723:VAL:HG12	2:B:724:ASP:N	2.36	0.41
2:B:728:ARG:O	2:B:729:ILE:CG1	2.69	0.41
2:B:966:VAL:CG1	2:B:967:ARG:N	2.84	0.41
2:B:1207:LEU:HD23	2:B:1207:LEU:HA	1.84	0.41
3:C:242:GLN:C	3:C:244:VAL:N	2.77	0.41
4:D:129:LEU:HD12	4:D:129:LEU:O	2.21	0.41
5:E:42:PHE:HZ	5:E:58:MET:HE3	1.85	0.41
9:I:58:VAL:O	9:I:58:VAL:HG12	2.22	0.41
10:J:36:LEU:O	10:J:39:LEU:N	2.54	0.41
11:K:18:LYS:O	11:K:35:PHE:HA	2.21	0.41
12:L:41:SER:O	12:L:44:ASP:OD1	2.39	0.41
1:A:556:TRP:CH2	1:A:558:GLY:HA2	2.55	0.40
1:A:756:ILE:O	1:A:759:ALA:HB3	2.21	0.40
1:A:809:THR:O	1:A:811:GLN:N	2.55	0.40
1:A:1220:PHE:O	1:A:1221:LYS:CB	2.68	0.40
2:B:27:ALA:O	2:B:30:SER:OG	2.34	0.40
2:B:360:PHE:CD1	2:B:361:LEU:HD13	2.56	0.40

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:399:ASP:O	2:B:515:HIS:CD2	2.74	0.40
2:B:459:TYR:CD2	2:B:459:TYR:C	2.99	0.40
2:B:486:TYR:N	2:B:486:TYR:HD2	2.18	0.40
2:B:680:THR:OG1	2:B:681:TRP:N	2.54	0.40
2:B:866:TYR:O	2:B:867:GLY:C	2.65	0.40
2:B:883:LEU:O	2:B:885:MET:N	2.53	0.40
2:B:1103:ILE:O	2:B:1103:ILE:HG23	2.21	0.40
3:C:161:LYS:O	3:C:170:TRP:NE1	2.54	0.40
3:C:261:ALA:C	3:C:263:THR:N	2.78	0.40
4:D:40:HIS:C	4:D:40:HIS:HD2	2.30	0.40
5:E:23:VAL:HG12	5:E:28:TYR:HB2	2.03	0.40
5:E:50:MET:O	5:E:50:MET:HE3	2.21	0.40
7:G:12:THR:O	7:G:12:THR:HG22	2.20	0.40
8:H:135:LEU:HD11	8:H:137:GLN:NE2	2.36	0.40
9:I:35:VAL:O	9:I:36:GLU:HB3	2.20	0.40
9:I:77:LYS:H	9:I:77:LYS:HD2	1.85	0.40
1:A:525:GLN:O	1:A:526:ASP:C	2.63	0.40
1:A:577:ILE:O	1:A:578:LEU:C	2.64	0.40
1:A:784:LEU:C	1:A:786:HIS:H	2.29	0.40
1:A:853:ASP:OD1	1:A:855:THR:CB	2.69	0.40
1:A:1091:SER:HB3	1:A:1307:GLU:OE1	2.21	0.40
1:A:1451:VAL:C	1:A:1453:TYR:N	2.75	0.40
2:B:296:GLU:HA	2:B:299:GLU:CG	2.51	0.40
2:B:360:PHE:O	2:B:361:LEU:C	2.64	0.40
2:B:508:LEU:HD12	2:B:508:LEU:N	2.36	0.40
2:B:579:ARG:NH1	2:B:579:ARG:CG	2.83	0.40
2:B:579:ARG:CB	2:B:586:TRP:NE1	2.74	0.40
2:B:857:ARG:O	2:B:967:ARG:HA	2.21	0.40
2:B:1106:ARG:NH2	2:B:1111:MET:HE2	2.36	0.40
2:B:1112:GLN:HG3	15:P:2:A:OP1	2.21	0.40
2:B:1197:PRO:O	2:B:1200:ALA:N	2.45	0.40
3:C:175:ALA:O	3:C:176:ILE:CG1	2.70	0.40
3:C:181:ASP:OD1	3:C:186:LEU:HD13	2.21	0.40
4:D:37:GLN:OE1	7:G:5:LYS:NZ	2.53	0.40
6:F:84:TYR:CD1	6:F:84:TYR:N	2.88	0.40
6:F:114:GLU:OE2	6:F:114:GLU:HA	2.20	0.40
7:G:111:THR:C	7:G:113:HIS:N	2.76	0.40
8:H:12:VAL:HG11	8:H:26:ILE:CD1	2.48	0.40
11:K:49:GLU:HG3	11:K:94:ILE:CG1	2.52	0.40
11:K:56:VAL:O	11:K:56:VAL:HG12	2.20	0.40
1:A:220:THR:O	1:A:221:SER:C	2.63	0.40

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:317:LYS:O	1:A:318:SER:CB	2.68	0.40
1:A:524:VAL:O	1:A:525:GLN:C	2.64	0.40
1:A:655:PHE:O	1:A:658:LEU:HB3	2.20	0.40
1:A:675:THR:OG1	1:A:736:ASN:ND2	2.55	0.40
1:A:818:MET:N	2:B:514:LEU:HD23	2.36	0.40
1:A:1193:LEU:HD12	1:A:1193:LEU:C	2.45	0.40
1:A:1385:THR:HG22	1:A:1386:ARG:N	2.37	0.40
2:B:53:GLN:HG2	2:B:547:VAL:HG22	2.02	0.40
2:B:129:PHE:CE2	2:B:166:PHE:HD1	2.39	0.40
2:B:637:LEU:CD2	2:B:742:GLU:HA	2.51	0.40
2:B:847:ASP:HB3	3:C:167:HIS:CE1	2.56	0.40
2:B:865:LYS:C	2:B:866:TYR:CD1	2.99	0.40
2:B:1096:ARG:HH11	2:B:1096:ARG:CG	2.35	0.40
4:D:40:HIS:CB	7:G:73:LYS:NZ	2.84	0.40
4:D:172:LEU:HD13	4:D:198:LEU:HD21	2.02	0.40
4:D:176:GLU:C	4:D:178:ALA:N	2.77	0.40
5:E:89:GLY:C	5:E:91:LYS:H	2.30	0.40
5:E:117:THR:C	5:E:119:SER:H	2.28	0.40
5:E:154:ILE:H	5:E:196:VAL:HG13	1.85	0.40
5:E:156:LEU:HB3	5:E:160:GLU:HB2	2.03	0.40
8:H:12:VAL:O	8:H:52:GLN:N	2.54	0.40
10:J:14:VAL:HG12	10:J:50:ILE:HD11	2.03	0.40
11:K:73:LEU:CD2	11:K:75:ILE:HD11	2.51	0.40
12:L:30:ILE:CG2	12:L:31:CYS:N	2.84	0.40
12:L:38:LEU:HD11	12:L:48:CYS:SG	2.61	0.40
1:A:34:LYS:CB	1:A:36:ARG:NH1	2.84	0.40
1:A:543:LEU:O	1:A:544:ASP:C	2.64	0.40
1:A:774:ARG:HB2	1:A:797:LYS:HB3	2.02	0.40
1:A:920:LEU:C	1:A:920:LEU:CD2	2.94	0.40
2:B:33:VAL:HG12	2:B:681:TRP:HZ3	1.86	0.40
2:B:171:PRO:HD2	2:B:457:LEU:CD1	2.52	0.40
2:B:284:ILE:HD13	2:B:324:ILE:HD12	2.03	0.40
2:B:657:HIS:CE1	2:B:689:LEU:HD11	2.56	0.40
2:B:1106:ARG:HG3	2:B:1107:ALA:N	2.36	0.40
2:B:1224:PHE:HZ	5:E:174:GLN:CD	2.29	0.40
3:C:242:GLN:OE1	3:C:245:VAL:CG2	2.69	0.40
4:D:175:PHE:HZ	7:G:85:GLU:HG3	1.86	0.40
5:E:13:TRP:CZ3	5:E:39:LEU:HB2	2.56	0.40
7:G:119:LEU:HA	7:G:131:GLN:O	2.21	0.40
8:H:10:PHE:CD1	8:H:10:PHE:N	2.89	0.40
9:I:5:ARG:HG2	9:I:6:PHE:H	1.84	0.40

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:J:1:MET:CE	10:J:60:PHE:HE2	2.34	0.40
10:J:13:VAL:HG12	10:J:15:GLY:H	1.85	0.40
11:K:5:ASP:HB3	11:K:7:PHE:CE2	2.57	0.40
1:A:54:ASN:CB	1:A:247:ARG:HH12	2.34	0.40
1:A:350:ARG:HB2	2:B:1128:LEU:HD11	2.03	0.40
1:A:408:ASP:O	1:A:410:GLY:N	2.55	0.40
1:A:451:HIS:CD2	1:A:1074:GLU:HG3	2.57	0.40
1:A:541:ILE:HD13	1:A:549:MET:CE	2.52	0.40
1:A:555:ASP:O	1:A:556:TRP:O	2.38	0.40
1:A:868:TYR:CE1	1:A:1064:VAL:HG21	2.57	0.40
1:A:1005:GLU:O	1:A:1009:ASN:ND2	2.55	0.40
1:A:1410:PHE:HD2	2:B:1212:ILE:HD11	1.85	0.40
1:A:1437:GLY:C	1:A:1439:GLY:H	2.29	0.40
2:B:334:ILE:O	2:B:334:ILE:HG22	2.21	0.40
2:B:552:MET:C	2:B:554:ILE:N	2.79	0.40
2:B:760:ASP:OD1	2:B:760:ASP:N	2.55	0.40
2:B:859:TYR:CZ	2:B:941:LEU:HD12	2.57	0.40
2:B:889:THR:HG22	2:B:890:TYR:N	2.35	0.40
2:B:1017:ILE:O	2:B:1018:PRO:C	2.63	0.40
2:B:1084:GLN:OE1	3:C:189:THR:HG23	2.21	0.40
2:B:1174:LYS:O	2:B:1175:LEU:C	2.63	0.40
3:C:166:GLU:O	11:K:6:ARG:NH1	2.54	0.40
3:C:235:VAL:HG13	10:J:13:VAL:HG23	2.03	0.40
3:C:261:ALA:HA	3:C:264:GLN:OE1	2.20	0.40
7:G:30:LEU:HD23	7:G:54:ILE:HD13	2.03	0.40
8:H:142:LEU:C	8:H:143:LEU:HD12	2.47	0.40
9:I:5:ARG:HD3	9:I:36:GLU:OE1	2.22	0.40
11:K:78:THR:O	11:K:79:GLU:O	2.39	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	1409/1733 (81%)	1031 (73%)	264 (19%)	114 (8%)	1	4
2	B	1087/1224 (89%)	798 (73%)	191 (18%)	98 (9%)	0	3
3	C	264/347 (76%)	192 (73%)	49 (19%)	23 (9%)	0	4
4	D	174/221 (79%)	121 (70%)	35 (20%)	18 (10%)	0	2
5	E	211/215 (98%)	155 (74%)	41 (19%)	15 (7%)	1	6
6	F	85/155 (55%)	72 (85%)	10 (12%)	3 (4%)	3	16
7	G	169/171 (99%)	143 (85%)	20 (12%)	6 (4%)	2	16
8	H	129/146 (88%)	83 (64%)	26 (20%)	20 (16%)	0	0
9	I	117/122 (96%)	78 (67%)	27 (23%)	12 (10%)	0	2
10	J	63/70 (90%)	39 (62%)	15 (24%)	9 (14%)	0	0
11	K	112/120 (93%)	91 (81%)	15 (13%)	6 (5%)	1	10
12	L	44/70 (63%)	18 (41%)	14 (32%)	12 (27%)	0	0
All	All	3864/4594 (84%)	2821 (73%)	707 (18%)	336 (9%)	0	4

All (336) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	A	57	ARG
1	A	59	GLY
1	A	67	CYS
1	A	70	CYS
1	A	74	MET
1	A	93	VAL
1	A	130	ASP
1	A	167	CYS
1	A	168	GLY
1	A	223	GLY
1	A	257	ARG
1	A	286	HIS
1	A	311	GLN
1	A	312	PRO
1	A	318	SER
1	A	335	ARG
1	A	399	HIS
1	A	400	PRO
1	A	525	GLN
1	A	543	LEU
1	A	556	TRP
1	A	567	LYS

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
1	A	593	GLU
1	A	597	LEU
1	A	598	LEU
1	A	628	GLY
1	A	1124	HIS
1	A	1127	ASP
1	A	1255	GLU
1	A	1281	ARG
2	B	21	GLU
2	B	22	SER
2	B	68	THR
2	B	108	VAL
2	B	115	GLN
2	B	184	ALA
2	B	186	GLU
2	B	229	ALA
2	B	259	TYR
2	B	333	PHE
2	B	367	LEU
2	B	505	ASP
2	B	506	GLY
2	B	567	GLU
2	B	591	ARG
2	B	641	GLU
2	B	643	ASP
2	B	709	ASP
2	B	711	GLU
2	B	728	ARG
2	B	792	MET
2	B	867	GLY
2	B	869	SER
2	B	907	GLY
2	B	992	ILE
2	B	1046	PRO
2	B	1069	PHE
2	B	1100	ASP
2	B	1156	ASP
2	B	1176	ASN
3	C	110	THR
3	C	142	VAL
3	C	149	LYS
3	C	161	LYS

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
3	C	184	ASN
3	C	209	TYR
4	D	8	PHE
4	D	15	LEU
4	D	16	LYS
4	D	17	LYS
4	D	19	GLU
4	D	52	LEU
4	D	131	GLU
4	D	199	ASN
4	D	218	GLU
5	E	59	SER
6	F	81	THR
6	F	112	GLU
7	G	139	ILE
8	H	17	PRO
8	H	21	ASN
8	H	32	THR
8	H	62	SER
8	H	81	PRO
8	H	82	PRO
8	H	108	SER
8	H	128	ASN
8	H	135	LEU
8	H	140	ALA
9	I	50	THR
9	I	57	GLY
9	I	60	GLN
9	I	79	HIS
10	J	2	ILE
10	J	6	ARG
10	J	28	ASP
10	J	64	ASN
11	K	79	GLU
12	L	26	THR
12	L	35	SER
12	L	50	ASP
12	L	55	ILE
12	L	59	ALA
12	L	60	ARG
1	A	4	GLN
1	A	42	ASP

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
1	A	48	ALA
1	A	54	ASN
1	A	65	LEU
1	A	66	LYS
1	A	76	GLU
1	A	128	ILE
1	A	131	SER
1	A	169	ASN
1	A	253	ASN
1	A	276	LEU
1	A	287	HIS
1	A	331	GLY
1	A	410	GLY
1	A	415	LEU
1	A	426	LEU
1	A	546	VAL
1	A	673	GLY
1	A	692	ASP
1	A	886	ILE
1	A	975	HIS
1	A	1036	ARG
1	A	1212	VAL
1	A	1221	LYS
1	A	1231	ASP
1	A	1403	GLU
1	A	1438	THR
2	B	45	SER
2	B	66	ASP
2	B	124	TYR
2	B	245	GLU
2	B	249	ARG
2	B	295	GLY
2	B	334	ILE
2	B	365	THR
2	B	419	THR
2	B	449	ASN
2	B	466	TRP
2	B	512	ARG
2	B	605	ARG
2	B	629	ASP
2	B	655	LYS
2	B	731	VAL

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
2	B	803	LEU
2	B	879	ARG
2	B	1155	SER
2	B	1175	LEU
2	B	1186	ASP
2	B	1222	ARG
3	C	12	GLU
3	C	90	ASP
3	C	126	GLY
3	C	214	ASN
3	C	215	GLU
3	C	223	ALA
4	D	12	ARG
4	D	30	GLY
4	D	119	ARG
4	D	168	LYS
5	E	45	LYS
5	E	68	SER
5	E	87	SER
6	F	114	GLU
7	G	154	VAL
8	H	84	ALA
8	H	90	ALA
9	I	3	THR
9	I	9	ASP
9	I	51	ASN
9	I	78	CYS
9	I	106	CYS
10	J	17	LYS
10	J	42	LYS
12	L	43	THR
12	L	54	ARG
12	L	56	LEU
1	A	58	LEU
1	A	113	LEU
1	A	219	PHE
1	A	332	LYS
1	A	700	ASN
1	A	755	PHE
1	A	756	ILE
1	A	885	THR
1	A	958	VAL

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
1	A	968	GLN
1	A	986	ILE
1	A	1014	ALA
1	A	1114	PRO
1	A	1115	SER
1	A	1309	ASP
1	A	1314	SER
1	A	1386	ARG
1	A	1405	THR
1	A	1437	GLY
2	B	24	PRO
2	B	65	GLU
2	B	206	ASN
2	B	258	LEU
2	B	264	SER
2	B	294	ASP
2	B	511	PRO
2	B	531	GLN
2	B	648	HIS
2	B	688	GLY
2	B	881	ASN
2	B	937	ALA
2	B	958	GLN
2	B	1017	ILE
2	B	1096	ARG
2	B	1157	ALA
2	B	1178	ASN
3	C	11	ARG
3	C	125	MET
3	C	141	GLY
3	C	213	PRO
4	D	20	GLU
5	E	4	GLU
5	E	103	LYS
5	E	115	ASN
8	H	59	ILE
8	H	77	ARG
8	H	134	ASN
8	H	139	ASN
9	I	47	GLU
9	I	54	GLU
10	J	24	LEU

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
12	L	39	SER
12	L	45	ALA
12	L	53	HIS
1	A	5	GLN
1	A	44	THR
1	A	149	GLU
1	A	154	SER
1	A	317	LYS
1	A	419	LYS
1	A	424	ILE
1	A	1062	GLU
1	A	1109	LYS
1	A	1123	GLY
1	A	1223	ASP
1	A	1242	VAL
1	A	1266	THR
1	A	1308	THR
1	A	1398	MET
1	A	1454	MET
2	B	67	SER
2	B	277	LYS
2	B	391	ASP
2	B	436	VAL
2	B	560	GLU
2	B	658	ILE
2	B	708	GLU
2	B	906	SER
2	B	1182	CYS
2	B	1188	LYS
3	C	10	ILE
3	C	233	GLU
3	C	240	VAL
4	D	118	THR
4	D	138	ASN
4	D	166	LEU
5	E	36	GLU
5	E	65	THR
5	E	73	PRO
5	E	192	ARG
7	G	2	PHE
7	G	50	ASP
7	G	52	ASP

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
7	G	156	SER
8	H	78	SER
8	H	92	ASP
10	J	8	PHE
11	K	90	ALA
1	A	35	ILE
1	A	138	ILE
1	A	220	THR
1	A	284	ALA
1	A	322	VAL
1	A	380	VAL
1	A	526	ASP
1	A	536	LEU
1	A	591	PHE
1	A	718	VAL
1	A	932	GLU
1	A	1093	LYS
2	B	114	PRO
2	B	257	LYS
2	B	571	PRO
2	B	734	HIS
2	B	744	HIS
2	B	810	GLU
2	B	1108	ARG
2	B	1171	VAL
2	B	1181	GLU
3	C	78	GLU
5	E	75	MET
5	E	86	PRO
11	K	64	GLU
11	K	103	THR
11	K	111	LEU
1	A	829	VAL
1	A	871	ASP
1	A	1049	ILE
1	A	1378	GLN
2	B	1061	GLU
3	C	18	VAL
3	C	153	LEU
8	H	107	VAL
9	I	62	ILE
11	K	41	THR

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
1	A	916	GLY
2	B	729	ILE
2	B	758	PHE
2	B	901	PRO
2	B	1018	PRO
5	E	90	VAL
8	H	44	VAL
1	A	283	GLY
1	A	336	ILE
2	B	575	PRO
4	D	18	VAL
5	E	38	PRO
10	J	14	VAL
2	B	260	GLY
2	B	530	GLY
2	B	1214	PRO
3	C	25	VAL
1	A	51	GLY
1	A	574	GLY
2	B	369	GLY

### 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	1242/1520 (82%)	1092 (88%)	150 (12%)	5	19
2	B	958/1061 (90%)	868 (91%)	90 (9%)	8	29
3	C	234/299 (78%)	210 (90%)	24 (10%)	7	24
4	D	141/200 (70%)	122 (86%)	19 (14%)	4	15
5	E	195/197 (99%)	175 (90%)	20 (10%)	7	24
6	F	77/137 (56%)	70 (91%)	7 (9%)	9	30
7	G	152/152 (100%)	138 (91%)	14 (9%)	8	29
8	H	117/128 (91%)	109 (93%)	8 (7%)	14	40

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
9	I	113/116 (97%)	95 (84%)	18 (16%)	2	10
10	J	60/65 (92%)	55 (92%)	5 (8%)	10	35
11	K	99/102 (97%)	90 (91%)	9 (9%)	9	30
12	L	40/57 (70%)	35 (88%)	5 (12%)	4	18
All	All	3428/4034 (85%)	3059 (89%)	369 (11%)	6	22

All (369) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	A	11	LEU
1	A	22	PHE
1	A	34	LYS
1	A	37	PHE
1	A	54	ASN
1	A	57	ARG
1	A	68	GLN
1	A	93	VAL
1	A	116	ASP
1	A	120	GLU
1	A	144	THR
1	A	150	THR
1	A	157	ASP
1	A	170	THR
1	A	187	LYS
1	A	199	LEU
1	A	200	ARG
1	A	202	LEU
1	A	208	LEU
1	A	221	SER
1	A	225	ASN
1	A	244	PRO
1	A	245	PRO
1	A	261	ASP
1	A	265	LYS
1	A	277	GLU
1	A	278	THR
1	A	289	ILE
1	A	291	GLU
1	A	297	GLN
1	A	302	THR
1	A	312	PRO

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
1	A	320	ARG
1	A	322	VAL
1	A	333	GLU
1	A	337	ARG
1	A	344	ARG
1	A	369	SER
1	A	385	ILE
1	A	393	ARG
1	A	394	ASN
1	A	408	ASP
1	A	425	GLN
1	A	443	LEU
1	A	445	ASN
1	A	450	LEU
1	A	461	LYS
1	A	474	VAL
1	A	475	THR
1	A	476	SER
1	A	481	ASP
1	A	488	ASN
1	A	493	GLN
1	A	501	LEU
1	A	504	LEU
1	A	505	CYS
1	A	512	VAL
1	A	524	VAL
1	A	545	GLN
1	A	547	LEU
1	A	549	MET
1	A	557	ASP
1	A	560	ILE
1	A	571	LEU
1	A	590	ARG
1	A	593	GLU
1	A	618	GLU
1	A	629	LEU
1	A	635	ARG
1	A	640	GLN
1	A	660	ASN
1	A	664	THR
1	A	666	ILE
1	A	682	THR

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
1	A	685	GLU
1	A	701	LEU
1	A	710	LEU
1	A	711	ARG
1	A	735	VAL
1	A	740	LEU
1	A	768	GLN
1	A	769	SER
1	A	786	HIS
1	A	795	GLU
1	A	806	ARG
1	A	810	PRO
1	A	821	ARG
1	A	827	THR
1	A	834	THR
1	A	858	ASN
1	A	880	LYS
1	A	886	ILE
1	A	903	ASN
1	A	904	THR
1	A	929	LEU
1	A	941	LYS
1	A	948	VAL
1	A	961	ARG
1	A	970	THR
1	A	976	THR
1	A	983	ILE
1	A	987	VAL
1	A	1006	ILE
1	A	1029	ARG
1	A	1030	ARG
1	A	1035	TYR
1	A	1052	GLN
1	A	1060	PRO
1	A	1067	LEU
1	A	1110	ASN
1	A	1111	MET
1	A	1116	LEU
1	A	1122	PRO
1	A	1124	HIS
1	A	1129	GLU
1	A	1134	ILE

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
1	A	1146	VAL
1	A	1170	ILE
1	A	1176	LEU
1	A	1193	LEU
1	A	1215	ARG
1	A	1222	ASN
1	A	1223	ASP
1	A	1240	CYS
1	A	1255	GLU
1	A	1259	MET
1	A	1264	GLU
1	A	1271	ILE
1	A	1274	ARG
1	A	1276	VAL
1	A	1288	ASP
1	A	1295	THR
1	A	1297	GLU
1	A	1316	VAL
1	A	1333	ILE
1	A	1336	MET
1	A	1345	ARG
1	A	1368	MET
1	A	1376	THR
1	A	1384	VAL
1	A	1393	ASN
1	A	1400	CYS
1	A	1406	VAL
1	A	1417	GLU
1	A	1418	LEU
1	A	1424	VAL
1	A	1436	ILE
1	A	1438	THR
1	A	1442	ASP
1	A	1445	ILE
2	B	30	SER
2	B	46	GLN
2	B	57	TYR
2	B	63	ILE
2	B	106	ASP
2	B	118	ARG
2	B	167	ILE
2	B	172	ILE

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
2	B	175	ARG
2	B	217	ARG
2	B	240	ILE
2	B	253	THR
2	B	261	ARG
2	B	268	THR
2	B	272	THR
2	B	298	LEU
2	B	299	GLU
2	B	303	TYR
2	B	323	VAL
2	B	328	GLU
2	B	329	THR
2	B	364	ILE
2	B	370	PHE
2	B	371	GLU
2	B	376	PHE
2	B	403	LYS
2	B	425	THR
2	B	429	PHE
2	B	446	LEU
2	B	454	THR
2	B	466	TRP
2	B	484	ASN
2	B	485	ARG
2	B	486	TYR
2	B	487	THR
2	B	490	SER
2	B	496	ARG
2	B	502	ILE
2	B	505	ASP
2	B	508	LEU
2	B	510	LYS
2	B	542	MET
2	B	552	MET
2	B	563	MET
2	B	570	VAL
2	B	572	HIS
2	B	574	SER
2	B	582	VAL
2	B	603	LEU
2	B	616	ILE

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
2	B	619	ILE
2	B	628	THR
2	B	643	ASP
2	B	690	VAL
2	B	786	ASN
2	B	787	VAL
2	B	790	ASP
2	B	796	LEU
2	B	797	TYR
2	B	811	TYR
2	B	815	ARG
2	B	816	GLU
2	B	831	SER
2	B	839	MET
2	B	858	SER
2	B	878	GLN
2	B	882	THR
2	B	901	PRO
2	B	953	LEU
2	B	956	THR
2	B	970	THR
2	B	997	GLU
2	B	999	MET
2	B	1006	ILE
2	B	1020	ARG
2	B	1073	TYR
2	B	1087	PHE
2	B	1096	ARG
2	B	1112	GLN
2	B	1113	VAL
2	B	1147	LEU
2	B	1151	LEU
2	B	1159	ARG
2	B	1160	VAL
2	B	1175	LEU
2	B	1181	GLU
2	B	1183	LYS
2	B	1185	CYS
2	B	1202	LEU
2	B	1218	THR
3	C	3	GLU
3	C	8	VAL

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
3	C	26	ASP
3	C	33	LEU
3	C	55	THR
3	C	66	ARG
3	C	69	LEU
3	C	73	GLN
3	C	77	ILE
3	C	89	GLU
3	C	99	LEU
3	C	123	ASN
3	C	145	CYS
3	C	147	LEU
3	C	166	GLU
3	C	186	LEU
3	C	202	PRO
3	C	211	ASP
3	C	233	GLU
3	C	238	ILE
3	C	245	VAL
3	C	259	LEU
3	C	262	LEU
3	C	263	THR
4	D	35	LEU
4	D	40	HIS
4	D	43	GLU
4	D	47	LEU
4	D	63	LEU
4	D	128	VAL
4	D	133	THR
4	D	139	LYS
4	D	159	THR
4	D	163	VAL
4	D	170	THR
4	D	182	SER
4	D	187	THR
4	D	193	THR
4	D	206	GLU
4	D	209	ARG
4	D	213	GLU
4	D	219	THR
4	D	220	LEU
5	E	3	GLN

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
5	E	8	ASN
5	E	37	LEU
5	E	57	MET
5	E	65	THR
5	E	72	PHE
5	E	74	ASP
5	E	84	ASP
5	E	99	HIS
5	E	101	GLN
5	E	104	ASN
5	E	107	THR
5	E	117	THR
5	E	123	LEU
5	E	132	ILE
5	E	134	THR
5	E	136	ASN
5	E	204	THR
5	E	207	ARG
5	E	212	ARG
6	F	79	ARG
6	F	90	ARG
6	F	103	MET
6	F	111	LEU
6	F	115	THR
6	F	119	ARG
6	F	123	LYS
7	G	1	MET
7	G	4	ILE
7	G	10	ASN
7	G	12	THR
7	G	13	LEU
7	G	17	PHE
7	G	53	ASN
7	G	64	THR
7	G	74	TYR
7	G	80	LYS
7	G	101	VAL
7	G	151	ILE
7	G	152	SER
7	G	171	ILE
8	H	35	GLN
8	H	39	THR

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
8	H	42	ILE
8	H	94	ASP
8	H	102	TYR
8	H	129	TYR
8	H	130	ARG
8	H	138	GLU
9	I	2	THR
9	I	5	ARG
9	I	7	CYS
9	I	8	ARG
9	I	9	ASP
9	I	15	TYR
9	I	31	THR
9	I	44	TYR
9	I	45	ARG
9	I	59	VAL
9	I	62	ILE
9	I	77	LYS
9	I	84	VAL
9	I	85	PHE
9	I	98	VAL
9	I	104	LEU
9	I	106	CYS
9	I	110	PHE
10	J	4	PRO
10	J	16	ASP
10	J	23	ASN
10	J	24	LEU
10	J	26	GLN
11	K	25	THR
11	K	31	VAL
11	K	32	VAL
11	K	47	ARG
11	K	51	LEU
11	K	70	ARG
11	K	79	GLU
11	K	107	THR
11	K	111	LEU
12	L	27	LEU
12	L	54	ARG
12	L	55	ILE
12	L	64	LEU

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
12	L	68	GLU

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (113) such sidechains are listed below:

Mol	Chain	Res	Type
1	A	18	GLN
1	A	109	HIS
1	A	169	ASN
1	A	225	ASN
1	A	282	ASN
1	A	297	GLN
1	A	339	ASN
1	A	435	HIS
1	A	439	ASN
1	A	445	ASN
1	A	479	ASN
1	A	488	ASN
1	A	503	GLN
1	A	603	ASN
1	A	611	GLN
1	A	650	GLN
1	A	660	ASN
1	A	700	ASN
1	A	741	ASN
1	A	742	ASN
1	A	745	GLN
1	A	757	ASN
1	A	768	GLN
1	A	786	HIS
1	A	858	ASN
1	A	903	ASN
1	A	926	GLN
1	A	965	GLN
1	A	975	HIS
1	A	994	GLN
1	A	1033	GLN
1	A	1052	GLN
1	A	1106	ASN
1	A	1173	HIS
1	A	1187	GLN
1	A	1203	ASN
1	A	1218	GLN

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
1	A	1387	HIS
1	A	1432	GLN
2	B	53	GLN
2	B	178	ASN
2	B	215	GLN
2	B	236	HIS
2	B	325	GLN
2	B	366	GLN
2	B	433	GLN
2	B	465	ASN
2	B	484	ASN
2	B	513	GLN
2	B	515	HIS
2	B	516	ASN
2	B	518	HIS
2	B	657	HIS
2	B	667	GLN
2	B	744	HIS
2	B	762	ASN
2	B	842	ASN
2	B	951	GLN
2	B	957	ASN
2	B	975	GLN
2	B	984	HIS
2	B	986	GLN
2	B	1015	HIS
2	B	1065	GLN
2	B	1084	GLN
2	B	1161	HIS
2	B	1179	GLN
2	B	1205	GLN
2	B	1211	ASN
3	C	24	ASN
3	C	31	ASN
3	C	65	HIS
3	C	102	GLN
3	C	112	ASN
3	C	131	HIS
3	C	135	GLN
3	C	140	ASN
4	D	23	ASN
4	D	39	ASN

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
4	D	40	HIS
4	D	41	GLN
4	D	74	GLN
4	D	143	ASN
4	D	150	ASN
4	D	157	GLN
4	D	179	GLN
5	E	54	GLN
5	E	61	GLN
5	E	101	GLN
5	E	104	ASN
5	E	113	GLN
5	E	114	ASN
5	E	146	HIS
5	E	147	HIS
6	F	78	GLN
6	F	104	ASN
7	G	14	HIS
7	G	24	GLN
7	G	53	ASN
7	G	102	GLN
7	G	126	ASN
8	H	35	GLN
8	H	128	ASN
8	H	134	ASN
8	H	137	GLN
9	I	12	ASN
9	I	51	ASN
9	I	114	GLN
10	J	53	HIS
11	K	29	ASN
11	K	44	ASN
11	K	65	HIS
11	K	104	ASN

### 5.3.3 RNA ⓘ

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
15	P	9/20 (45%)	0	0

There are no RNA backbone outliers to report.

There are no RNA pucker outliers to report.

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

1 non-standard protein/DNA/RNA residue is 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$
13	BRU	T	20	15,13	18,21,22	3.94	1 (5%)	25,30,33	1.17	2 (8%)

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
13	BRU	T	20	15,13	-	0/7/21/22	0/2/2/2

All (1) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
13	T	20	BRU	BR-C5	-16.59	1.50	1.88

All (2) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
13	T	20	BRU	C6-C5-C4	-2.80	117.83	120.67
13	T	20	BRU	C2'-C1'-N1	-2.63	107.25	113.81

There are no chirality outliers.

There are no torsion outliers.

There are no ring outliers.

1 monomer is involved in 8 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
13	T	20	BRU	8	0

## 5.5 Carbohydrates [i](#)

There are no oligosaccharides in this entry.

## 5.6 Ligand geometry [i](#)

Of 9 ligands modelled in this entry, 9 are monoatomic - leaving 0 for Mogul analysis.

There are no bond length outliers.

There are no bond angle outliers.

There are no chirality outliers.

There are no torsion outliers.

There are no ring outliers.

No monomer is involved in short contacts.

## 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	1419/1733 (81%)	0.22	75 (5%)	32 24	21, 68, 106, 122	0
2	B	1105/1224 (90%)	0.48	88 (7%)	18 16	28, 78, 111, 122	0
3	C	266/347 (76%)	0.09	4 (1%)	72 57	38, 66, 91, 115	0
4	D	178/221 (80%)	0.65	24 (13%)	7 8	46, 77, 106, 115	0
5	E	213/215 (99%)	0.70	20 (9%)	14 14	47, 91, 115, 121	0
6	F	87/155 (56%)	-0.25	2 (2%)	61 46	29, 49, 75, 86	0
7	G	171/171 (100%)	0.24	5 (2%)	53 39	45, 67, 96, 108	0
8	H	133/146 (91%)	1.11	21 (15%)	5 6	81, 98, 112, 118	0
9	I	119/122 (97%)	0.98	16 (13%)	7 8	64, 97, 116, 124	0
10	J	65/70 (92%)	0.07	2 (3%)	51 38	42, 63, 88, 99	0
11	K	114/120 (95%)	-0.11	2 (1%)	67 53	33, 70, 88, 101	0
12	L	46/70 (65%)	1.72	14 (30%)	1 2	53, 105, 121, 123	0
13	T	18/41 (43%)	1.71	4 (22%)	2 4	63, 103, 129, 134	1 (5%)
14	N	7/41 (17%)	2.37	3 (42%)	0 1	54, 116, 124, 126	1 (14%)
15	P	10/20 (50%)	1.22	2 (20%)	3 4	80, 99, 124, 127	0
All	All	3951/4696 (84%)	0.39	282 (7%)	22 18	21, 74, 111, 134	2 (0%)

All (282) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
2	B	883	LEU	8.0
1	A	3	GLY	7.9
1	A	1176	LEU	6.3
2	B	882	THR	6.1
14	N	7	DA	5.8
13	T	10	DT	5.7
2	B	467	GLY	5.3

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	RSRZ
2	B	70	ILE	5.3
11	K	114	LEU	5.3
1	A	1254	ALA	5.3
1	A	158	PRO	5.3
12	L	26	THR	5.2
1	A	159	THR	5.1
2	B	715	ALA	5.0
8	H	63	LEU	4.9
13	T	28	DA	4.7
1	A	69	THR	4.7
2	B	505	ASP	4.6
12	L	27	LEU	4.5
2	B	507	LYS	4.5
2	B	436	VAL	4.5
1	A	252	PHE	4.5
2	B	477	ALA	4.4
8	H	132	LEU	4.4
1	A	56	PRO	4.4
2	B	250	PHE	4.4
12	L	25	ALA	4.4
12	L	53	HIS	4.3
8	H	108	SER	4.3
8	H	90	ALA	4.3
2	B	881	ASN	4.3
2	B	919	SER	4.3
12	L	52	GLY	4.2
9	I	120	GLN	4.2
1	A	65	LEU	4.0
1	A	2	VAL	4.0
15	P	1	U	4.0
2	B	108	VAL	4.0
8	H	135	LEU	4.0
1	A	51	GLY	4.0
1	A	1257	ASP	4.0
2	B	251	ILE	4.0
1	A	253	ASN	3.9
1	A	161	LEU	3.9
4	D	12	ARG	3.8
2	B	506	GLY	3.8
2	B	870	ILE	3.8
14	N	1	DG	3.7
2	B	446	LEU	3.7

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	RSRZ
12	L	28	LYS	3.7
1	A	1187	GLN	3.7
5	E	117	THR	3.7
2	B	868	MET	3.7
8	H	85	GLY	3.7
1	A	1455	PRO	3.6
6	F	69	LEU	3.6
2	B	879	ARG	3.6
2	B	502	ILE	3.6
4	D	173	HIS	3.6
5	E	121	MET	3.6
5	E	3	GLN	3.5
2	B	725	PRO	3.5
2	B	917	PRO	3.5
5	E	122	LYS	3.5
4	D	40	HIS	3.5
2	B	164	LYS	3.5
8	H	76	THR	3.5
1	A	1173	HIS	3.5
5	E	118	PRO	3.5
12	L	33	GLU	3.4
2	B	918	ILE	3.4
2	B	709	ASP	3.4
1	A	1174	PHE	3.4
1	A	311	GLN	3.4
4	D	9	GLN	3.4
8	H	82	PRO	3.4
2	B	24	PRO	3.4
8	H	84	ALA	3.3
4	D	15	LEU	3.3
1	A	255	SER	3.3
2	B	625	LYS	3.3
1	A	109	HIS	3.3
1	A	155	GLU	3.3
3	C	3	GLU	3.3
1	A	44	THR	3.3
2	B	710	LEU	3.3
8	H	86	ASP	3.2
2	B	503	GLY	3.2
9	I	53	GLY	3.2
2	B	422	LYS	3.2
4	D	16	LYS	3.2

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	RSRZ
2	B	712	PRO	3.2
8	H	107	VAL	3.1
8	H	139	ASN	3.1
1	A	250	ILE	3.1
2	B	229	ALA	3.1
9	I	118	ARG	3.1
1	A	50	ILE	3.1
2	B	733	HIS	3.1
2	B	887	HIS	3.1
9	I	116	ASN	3.1
9	I	119	THR	3.1
1	A	154	SER	3.1
1	A	251	SER	3.1
7	G	124	GLY	3.0
2	B	435	THR	3.0
4	D	18	VAL	3.0
1	A	1454	MET	3.0
1	A	320	ARG	3.0
8	H	83	GLN	3.0
2	B	880	THR	3.0
4	D	19	GLU	3.0
10	J	65	PRO	3.0
2	B	933	SER	3.0
1	A	171	GLN	3.0
9	I	117	LYS	2.9
2	B	433	GLN	2.9
2	B	262	GLU	2.9
4	D	20	GLU	2.9
1	A	57	ARG	2.9
4	D	5	THR	2.9
4	D	199	ASN	2.9
2	B	252	SER	2.8
2	B	346	GLU	2.8
2	B	732	SER	2.8
8	H	88	SER	2.8
12	L	32	ALA	2.8
2	B	935	ARG	2.8
9	I	52	ILE	2.8
2	B	866	TYR	2.8
1	A	1158	PRO	2.8
2	B	134	LYS	2.8
5	E	93	MET	2.8

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	RSRZ
4	D	25	ALA	2.8
1	A	1081	LEU	2.8
2	B	734	HIS	2.8
2	B	115	GLN	2.8
9	I	50	THR	2.8
12	L	39	SER	2.7
11	K	113	THR	2.7
2	B	504	ARG	2.7
4	D	24	ALA	2.7
1	A	72	GLU	2.7
14	N	6	DT	2.7
2	B	69	LEU	2.7
4	D	165	GLN	2.7
2	B	867	GLY	2.7
7	G	21	ARG	2.7
1	A	1125	ALA	2.7
2	B	106	ASP	2.7
4	D	221	TYR	2.7
8	H	129	TYR	2.7
9	I	4	PHE	2.7
1	A	49	LYS	2.6
8	H	136	LYS	2.6
2	B	432	MET	2.6
1	A	1256	GLU	2.6
5	E	57	MET	2.6
1	A	257	ARG	2.6
2	B	610	ASN	2.6
4	D	6	SER	2.6
5	E	126	SER	2.6
9	I	115	LYS	2.6
2	B	253	THR	2.6
2	B	736	THR	2.6
2	B	1224	PHE	2.5
1	A	71	GLN	2.5
2	B	713	ALA	2.5
2	B	309	GLN	2.5
1	A	39	GLU	2.5
4	D	21	GLU	2.5
9	I	2	THR	2.5
1	A	265	LYS	2.5
1	A	160	GLN	2.5
7	G	153	GLN	2.5

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	RSRZ
2	B	230	ALA	2.5
1	A	52	GLY	2.5
12	L	46	VAL	2.5
2	B	249	ARG	2.5
2	B	723	VAL	2.5
9	I	90	GLN	2.5
5	E	4	GLU	2.4
2	B	431	TYR	2.4
9	I	59	VAL	2.4
4	D	75	LYS	2.4
2	B	20	ASP	2.4
1	A	594	GLY	2.4
1	A	66	LYS	2.4
5	E	86	PRO	2.4
2	B	349	ILE	2.4
3	C	4	GLU	2.4
2	B	265	SER	2.4
2	B	266	ALA	2.4
12	L	37	LYS	2.4
5	E	107	THR	2.3
1	A	157	ASP	2.3
1	A	1225	PHE	2.3
2	B	370	PHE	2.3
2	B	248	SER	2.3
2	B	263	GLY	2.3
1	A	42	ASP	2.3
2	B	508	LEU	2.3
9	I	76	PRO	2.3
1	A	48	ALA	2.3
5	E	50	MET	2.3
8	H	131	ASN	2.3
9	I	83	ASN	2.3
5	E	110	PHE	2.3
1	A	323	LYS	2.3
1	A	1092	LYS	2.3
5	E	98	ILE	2.3
1	A	1110	ASN	2.3
10	J	26	GLN	2.3
2	B	132	VAL	2.3
4	D	13	ARG	2.3
2	B	167	ILE	2.3
1	A	197	PRO	2.2

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	RSRZ
15	P	2	A	2.2
5	E	99	HIS	2.2
1	A	1217	LYS	2.2
4	D	31	GLN	2.2
1	A	310	GLY	2.2
2	B	584	GLY	2.2
1	A	45	GLN	2.2
2	B	531	GLN	2.2
12	L	55	ILE	2.2
2	B	666	TYR	2.2
8	H	2	SER	2.2
2	B	509	ALA	2.2
5	E	215	MET	2.2
7	G	20	PRO	2.2
4	D	72	ARG	2.2
4	D	10	THR	2.2
2	B	486	TYR	2.2
5	E	77	SER	2.2
1	A	153	PRO	2.2
2	B	345	LYS	2.2
5	E	125	PRO	2.2
2	B	241	ARG	2.2
1	A	1150	SER	2.1
8	H	109	LYS	2.1
4	D	14	ARG	2.1
1	A	1208	THR	2.1
12	L	43	THR	2.1
2	B	133	LYS	2.1
2	B	934	LYS	2.1
8	H	35	GLN	2.1
1	A	1204	ASP	2.1
2	B	731	VAL	2.1
1	A	705	LYS	2.1
5	E	123	LEU	2.1
6	F	70	LYS	2.1
1	A	4	GLN	2.1
1	A	1126	ALA	2.1
9	I	88	SER	2.1
1	A	34	LYS	2.1
1	A	317	LYS	2.1
1	A	597	LEU	2.1
1	A	1231	ASP	2.1

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	RSRZ
1	A	1258	HIS	2.1
2	B	579	ARG	2.1
3	C	213	PRO	2.1
8	H	91	ASP	2.1
1	A	223	GLY	2.1
1	A	256	GLN	2.1
3	C	106	GLU	2.1
2	B	961	LEU	2.0
13	T	11	DA	2.0
2	B	576	ASP	2.0
1	A	1302	PRO	2.0
1	A	1093	LYS	2.0
1	A	63	ARG	2.0
2	B	367	LEU	2.0
13	T	13	DT	2.0
1	A	309	ALA	2.0
1	A	1137	ALA	2.0
12	L	45	ALA	2.0
7	G	25	TYR	2.0
4	D	76	LYS	2.0
2	B	239	GLU	2.0
2	B	620	ARG	2.0
5	E	39	LEU	2.0

## 6.2 Non-standard residues in protein, DNA, RNA chains [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. 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	B-factors(Å <sup>2</sup> )	Q<0.9
13	BRU	T	20	20/21	0.70	0.20	75,80,83,84	0

## 6.3 Carbohydrates [i](#)

There are no oligosaccharides 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. 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	B-factors( $\text{\AA}^2$ )	Q<0.9
17	MG	A	2458	1/1	0.89	0.14	100,100,100,100	0
16	ZN	I	1122	1/1	0.96	0.07	134,134,134,134	0
16	ZN	L	1071	1/1	0.97	0.06	119,119,119,119	0
16	ZN	A	2456	1/1	0.99	0.03	85,85,85,85	0
16	ZN	I	1121	1/1	1.00	0.02	75,75,75,75	0
16	ZN	A	2457	1/1	1.00	0.04	53,53,53,53	0
16	ZN	J	1066	1/1	1.00	0.03	64,64,64,64	0
16	ZN	B	2225	1/1	1.00	0.06	73,73,73,73	0
16	ZN	C	1269	1/1	1.00	0.05	65,65,65,65	0

## 6.5 Other polymers [i](#)

There are no such residues in this entry.