



# Full wwPDB X-ray Structure Validation Report ⓘ

Feb 1, 2016 – 09:07 AM GMT

PDB ID : 3H3V  
Title : Yeast RNAP II containing poly(A)-signal sequence in the active site  
Authors : Dengl, S.; Cramer, P.  
Deposited on : 2009-04-17  
Resolution : 4.00 Å(reported)

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

---

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

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

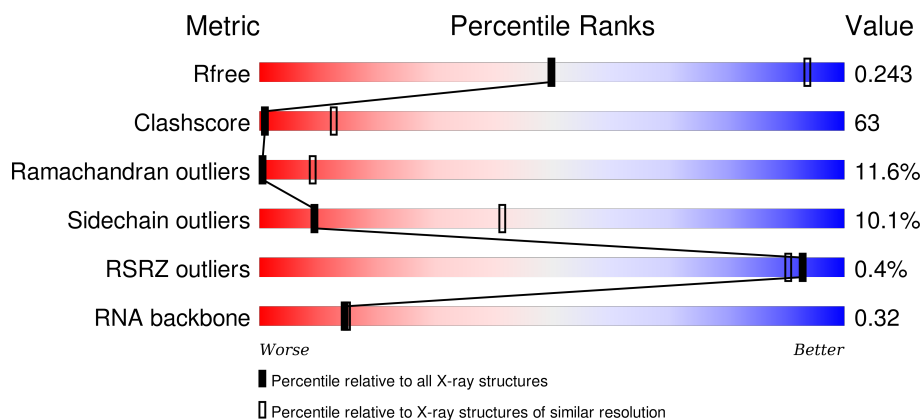
# 1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

## *X-RAY DIFFRACTION*

The reported resolution of this entry is 4.00 Å.

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



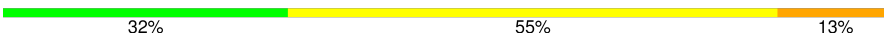

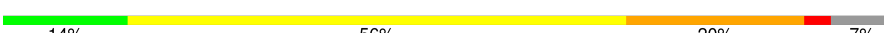


Metric	Whole archive (#Entries)	Similar resolution (#Entries, resolution range(Å))
$R_{free}$	91344	1010 (4.42-3.56)
Clashscore	102246	1052 (4.40-3.60)
Ramachandran outliers	100387	1005 (4.40-3.60)
Sidechain outliers	100360	1013 (4.42-3.58)
RSRZ outliers	91569	1013 (4.42-3.56)
RNA backbone	2183	1079 (5.04-2.80)

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

Mol	Chain	Length	Quality of chain
1	B	1733	
2	C	1224	
3	D	318	
4	E	221	

*Continued on next page...*

Continued from previous page...

Mol	Chain	Length	Quality of chain
5	F	215	
6	G	155	
7	H	171	
8	I	146	
9	J	122	
10	K	70	
11	L	120	
12	M	70	
13	N	14	
14	P	16	
15	T	26	

## 2 Entry composition

There are 17 unique types of molecules in this entry. The entry contains 31777 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	B	1416	Total	C	N	O	S	0	0	0
			11140	7021	1946	2111	62			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
2	C	1108	Total	C	N	O	S	0	0	0
			8810	5580	1541	1634	55			

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

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

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
4	E	177	Total	C	N	O	S	0	0	0
			1427	882	256	287	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	F	214	Total	C	N	O	S	0	0	0
			1752	1111	309	321	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	G	84	Total	C	N	O	S	0	0	0
			679	434	115	127	3			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
7	H	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	I	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	J	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	K	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	L	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	M	46	Total	C	N	O	S	0	0	0
			364	224	72	64	4			

- Molecule 13 is a DNA chain called 5'-D(\*AP\*GP\*CP\*TP\*CP\*AP\*AP\*GP\*TP\*AP\*GP\*C  
P\*TP\*GP\*CP\*TP\*TP\*TP\*AP\*TP\*TP\*GP\*CP\*AP\*TP\*T)-3'.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
13	N	7	Total	C	N	O	P	11	0	0
			138	67	26	39	6			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
14	P	8	Total	C	N	O	P	0	0	0
			168	77	33	51	7			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
15	T	18	Total	C	N	O	P	8	0	0
			365	177	60	111	17			

- Molecule 16 is ZINC ION (three-letter code: ZN) (formula: Zn).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
16	J	2	Total	Zn	0	0
			2	2		
16	D	1	Total	Zn	0	0
			1	1		
16	K	1	Total	Zn	0	0
			1	1		
16	B	2	Total	Zn	0	0
			2	2		
16	C	1	Total	Zn	0	0
			1	1		
16	M	1	Total	Zn	0	0
			1	1		

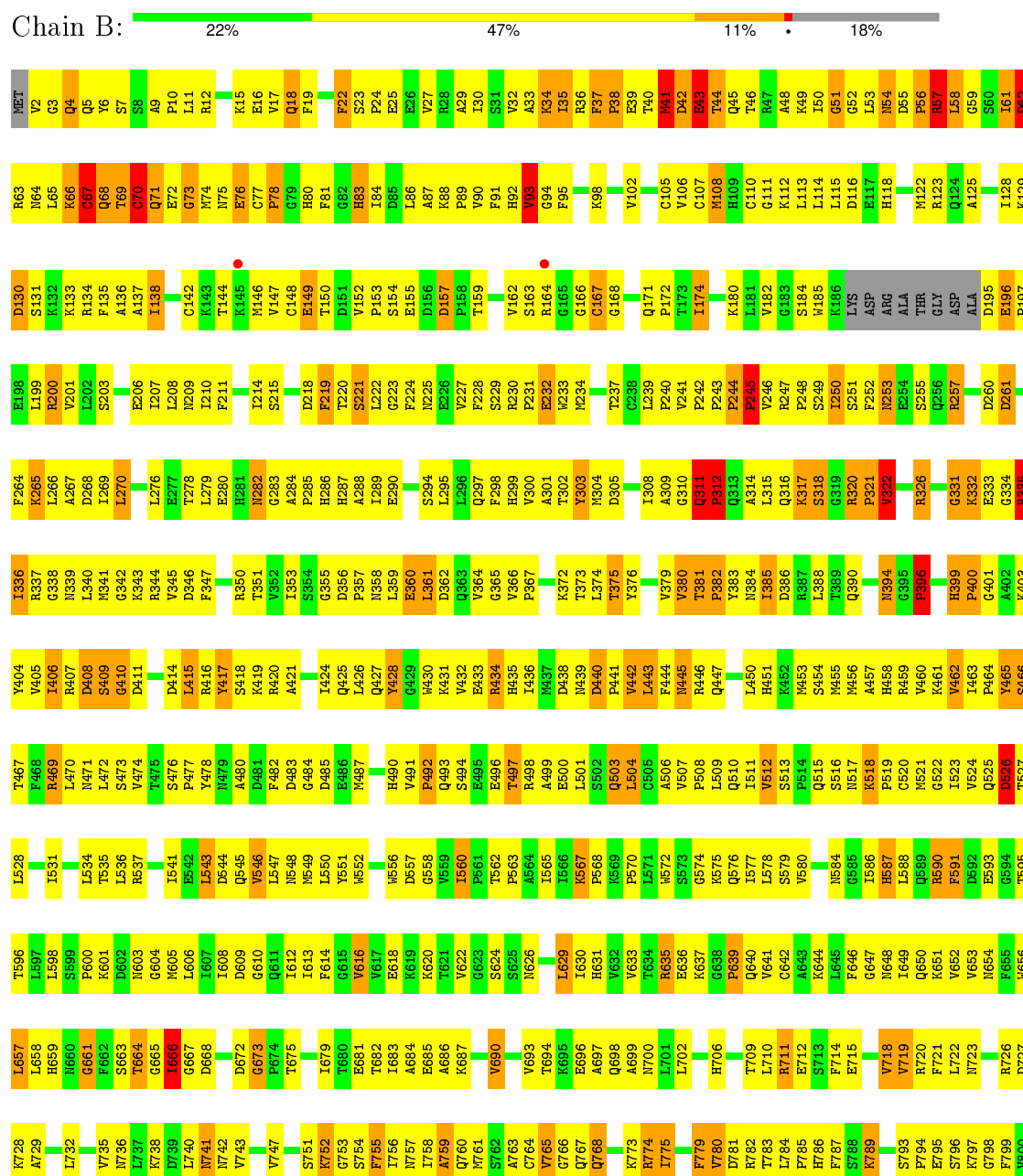
- Molecule 17 is MAGNESIUM ION (three-letter code: MG) (formula: Mg).

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

### 3 Residue-property plots

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

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

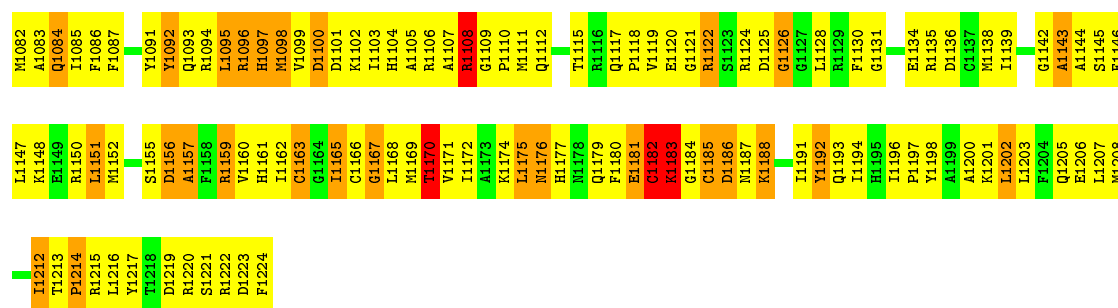


- Molecule 2: DNA-directed RNA polymerase II subunit RPB2



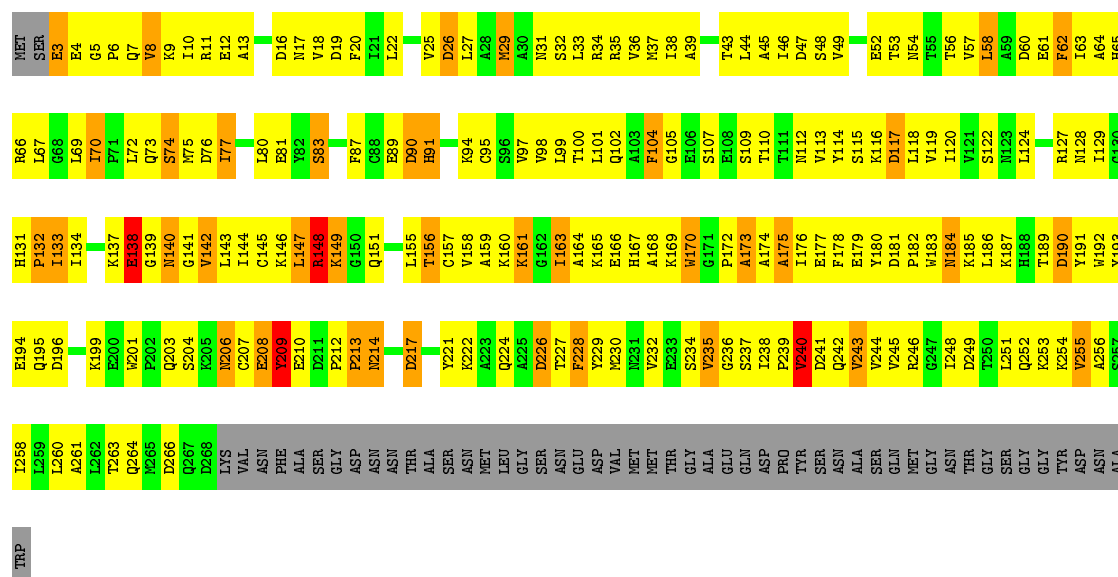


L1010	Y949	N885	V825	P759	D894	A630	E567	ARG	E437	A375	E312	R249	A184	T123	I63	MET
L1011	Y952	G888	V826	D760	A695	G631	D568	ASP	GLU	F376	R313	F250	T185	Y124	C64	SER
L1012	Y953	T889	I827	H761	E696	R632	Y669	GLY	ALA	F377	R314	I251	E186	S126	D66	ASP
L1013	Y954	T890	A828	N762	E697	R633	Y670	LEU	HIS	L378	R315	S252	E187	S126	E65	LEU
L1014	Y955	D891	G829	Q763	E698	R634	P571	ASP	ASP	G379	R316	T253	D188	G127	S67	ALA
L1015	Y956	N892	X830	S764	E699	R635	H572	PHE	PHE	Y380	R317	L254	L189	L128	T68	ASN
L1016	Y957	N893	S831	S765	S700	P636	Q573	ASN	ASN	N381	V318	Q255	Y190	F129	L69	SER
L1017	Y958	L893	S832	T768	I701	L637	S574	MET	MET	I382	E319	L258	K191	V130	F70	GLU
L1018	Y958	L894	G832	T769	L702	F638	S575	LYS	LYS	N383	D320	L259	L192	—	LEU	LYS
L1019	Y959	G897	N833	Q770	I703	E641	T578	LEU	L446	L385	V323	Y259	K193	K133	GLU	LYS
L1020	Y960	L898	Q835	Q771	A704	D642	R579	ALA	A447	L386	L324	G260	E194	K134	GLN	TTR
L1021	Y961	L899	E836	A772	M705	D643	R579	ALA	L448	L387	I325	R261	C195	ARG	LEU	ASP
L1022	Y962	T899	D837	M773	Q706	E644	V580	ALA	N449	L387	Q325	—	P196	THR	ALA	GLU
L1023	Y963	—	D837	G774	P707	—	F581	LYS	A450	C388	E326	S265	F197	TTR	GLN	ASP
L1024	Y964	G902	S838	K775	E708	L645	V582	LYS	K451	A389	R327	A266	D198	GLU	HIS	TTR
L1025	Y965	N903	M839	Q776	D709	L646	N583	GLY	T452	L390	E328	R267	M199	ALA	THR	PRO
L1026	Y966	R904	I840	A777	L710	G584	G520	GLU	L453	D391	T329	T268	C206	ILE	THR	GLY
L1027	Y967	N905	M841	M778	E711	K649	V585	GLU	T454	R392	L331	L269	Y202	ASP	GLU	PHE
L1028	Y968	S906	N842	G779	P712	E650	N586	LYS	—	K393	L331	V270	F203	VAL	SER	GLU
L1029	Y969	G907	Q843	V780	—	L651	H587	LYS	L457	D394	D332	A271	I204	PRO	ASP	D20
L1030	Y970	E908	R844	F781	A715	R652	G588	GLY	K458	Q395	F333	T272	I205	GLY	ASN	E21
L1031	Y971	D909	S845	L782	ASN	V653	V589	GLU	Y459	D396	T334	L273	M206	ARG	ILE	S22
L1032	Y972	V910	I846	T783	GLU	R654	H590	GLU	A460	D397	G335	P274	G207	GLU	SER	A23
L1033	Y973	Y911	D847	N784	GLU	K655	N591	GLU	L461	R398	ARG	Y275	—	LYS	ARG	P24
L1034	Y974	T912	R848	V785	ASN	G656	N592	GLU	A462	D399	GLY	L276	K210	LYS	LYS	D25
L1035	Y975	G913	G849	N786	ASP	H657	P593	GLU	—	H400	THR	K277	V211	TTR	TYR	—
L1036	Y976	R914	L850	V787	LEU	L658	A594	GLU	M465	F401	THR	Q278	L212	GLU	GLU	D29
L1037	Y977	R915	F851	V788	—	A659	R595	GLU	Y466	G402	ALA	D279	I213	LEU	S30	—
L1038	Y978	T916	R852	M789	—	K660	L596	GLU	G467	G410	LEU	F286	G220	ASP	S91	W31
L1039	Y979	N917	S853	D790	R728	L661	N597	GLU	E468	P411	GLY	R287	N221	ASP	F92	A32
L1040	Y980	T918	L854	V791	L729	M662	E598	GLY	Q469	L412	ILE	L282	E216	GLU	G93	V33
L1041	Y981	S919	F855	M792	R730	—	T599	GLY	K470	S475	LYS	Y283	R217	GLU	T34	—
L1042	Y982	—	F856	N793	V731	E665	L600	GLY	R471	I284	—	I284	S218	SER	S35	—
L1043	Y983	ASP	R857	H794	S732	D668	R601	GLU	A472	A409	R345	L285	A219	GLU	S36	—
L1044	Y984	GLU	S858	N795	H733	—	T602	GLU	N473	G410	E346	F286	G220	ASP	Y96	—
L1045	Y985	GLU	Y859	L796	H734	ILE	L603	GLU	S474	P411	R347	R287	N221	ASP	T98	—
L1046	Y986	GLU	M860	V797	A735	GLY	R604	GLY	S475	L412	R348	A288	I222	SER	R99	—
L1047	Y987	LEU	D861	V798	T736	GLY	R605	GLY	—	L413	Q350	L289	V223	GLU	P100	—
L1048	Y988	—	Q862	F799	—	GLY	—	GLY	—	A414	—	G290	Q224	SER	K41	—
L1049	Y989	—	E863	Q800	F738	PHE	D608	GLY	S480	Q415	—	I291	—	GLY	V102	—
L1050	Y990	ARG	K864	R801	T739	GLU	I609	GLU	Q481	L416	R355	I292	A229	R164	L43	—
L1051	Y991	THR	K865	P802	H740	ASP	N610	ASP	V482	F417	L356	P293	A230	V165	V44	—
L1052	Y992	ALA	Y866	L803	C741	VAL	P611	VAL	L483	K418	Q357	D294	P231	F166	S45	—
L1053	Y993	THR	G867	G804	E742	GLU	E612	GLU	V484	—	R358	Q295	S232	D106	Q46	—
L1054	Y994	HIS	M868	T805	I743	E678	V613	GLU	R485	F421	E359	E296	P233	G107	Q47	—
L1055	Y995	S933	S869	T806	H744	V679	S614	GLU	Y486	K422	F360	I297	I234	R169	L48	—
L1056	Y996	R934	I870	R807	P745	T680	N615	GLU	T487	K423	L361	L298	S235	T109	D49	—
L1057	Y997	R935	T871	A808	S746	W681	I616	GLU	Y488	L424	P362	E299	H236	H110	S50	—
L1058	Y998	D936	E872	M809	M747	S682	R617	GLU	S489	T425	R363	H300	V237	A111	F51	—
L1059	Y999	—	T873	E810	I748	S683	D613	GLU	S490	K426	I364	I301	A238	L112	N52	—
L1060	F1000	S938	F874	Y811	L749	L684	I619	GLY	T491	D427	T365	C302	E239	L174	Q53	—
L1061	F1001	—	—	—	G750	L685	I620	GLY	L492	I428	Q366	Y303	I240	R175	P54	—
L1062	T1002	L941	P877	F814	V751	M686	K622	GLY	L493	F429	L367	D304	R241	S176	P55	—
L1063	G1003	R942	Q878	R815	A752	E687	E623	GLY	S493	R430	E368	V305	S242	E116	V66	—
L1064	E1004	S943	R879	E816	A753	G688	L624	GLY	R496	Y431	C369	A243	N178	K177	D55	—
L1065	T1005	T944	T880	L817	S754	L689	V625	GLY	M432	L244	F370	D307	L244	G179	T57	—
L1066	T1006	E945	M881	F818	I755	V690	I626	GLY	T498	Q433	E371	W308	E245	L119	L59	—
L1067	T1007	R946	T882	A819	I756	E691	F627	GLY	—	R434	S372	Q309	R246	L181	Q60	—
L1068	P1008	—	L883	G820	P757	E692	T628	GLY	—	T435	R373	G247	N121	N120	D61	—
L1069	T1009	—	R884	Q821	F758	I693	D629	GLY	—	V436	R374	L311	S248	E183	L122	—



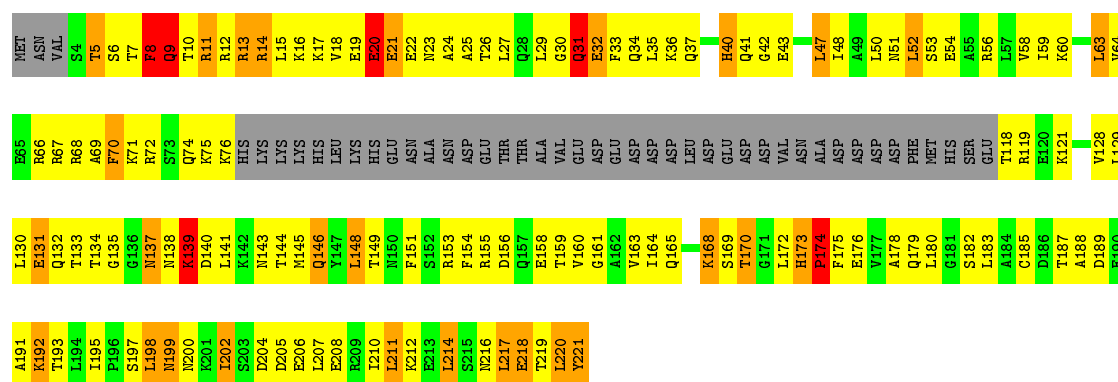
• Molecule 3: DNA-directed RNA polymerase II subunit RPB3

Chain D: 21% 49% 12% 16%



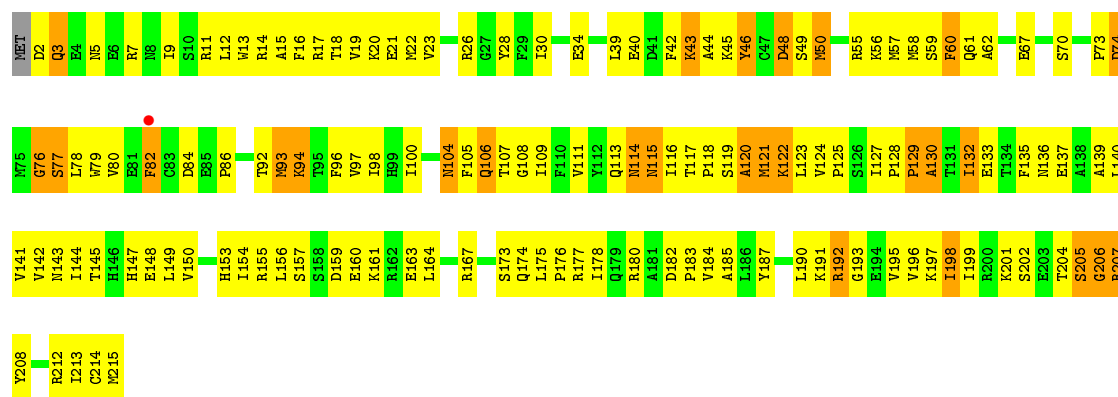
• Molecule 4: DNA-directed RNA polymerase II subunit RPB4

Chain E: 19% 45% 13% 20%

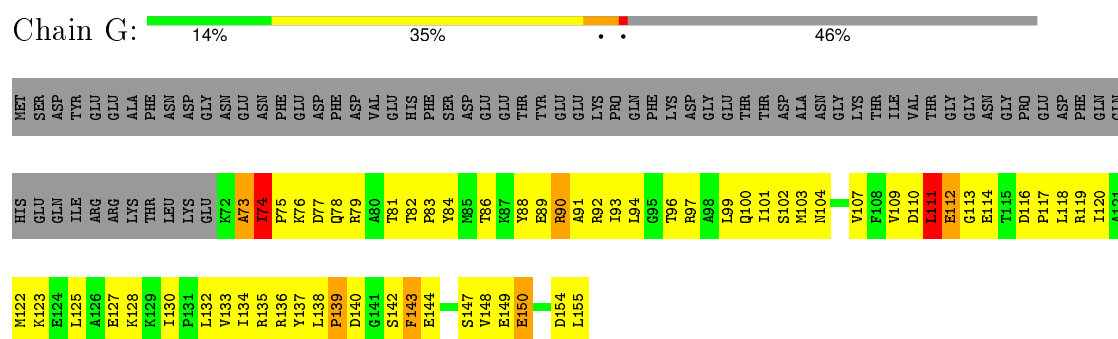


• Molecule 5: DNA-directed RNA polymerases I, II, and III subunit RPABC1

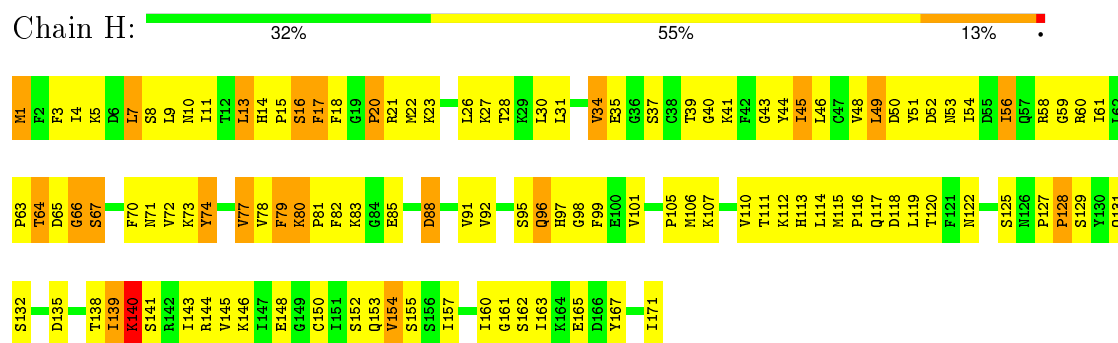
Chain F: 33% 53% 13%



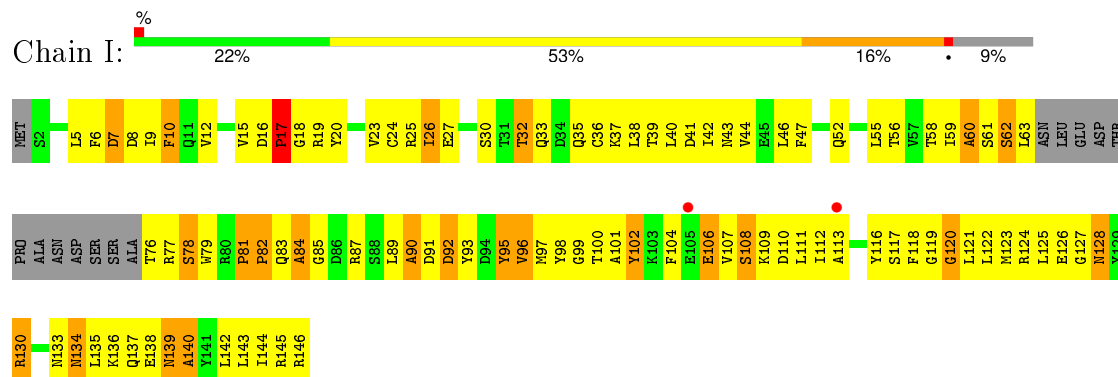
- Molecule 6: DNA-directed RNA polymerases I, II, and III subunit RPABC2



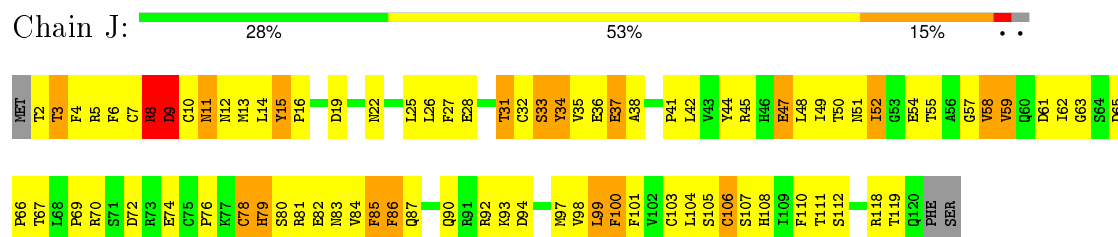
- Molecule 7: DNA-directed RNA polymerase II subunit RPB7



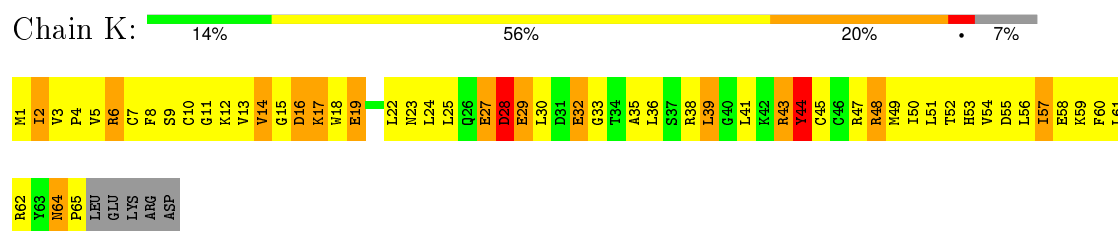
- Molecule 8: DNA-directed RNA polymerases I, II, and III subunit RPABC3



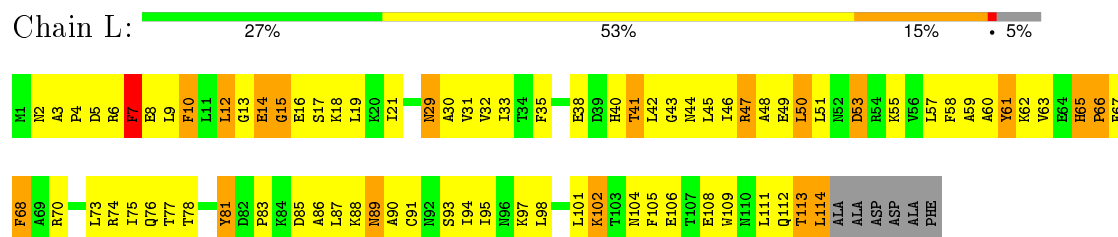
- Molecule 9: DNA-directed RNA polymerase II subunit RPB9



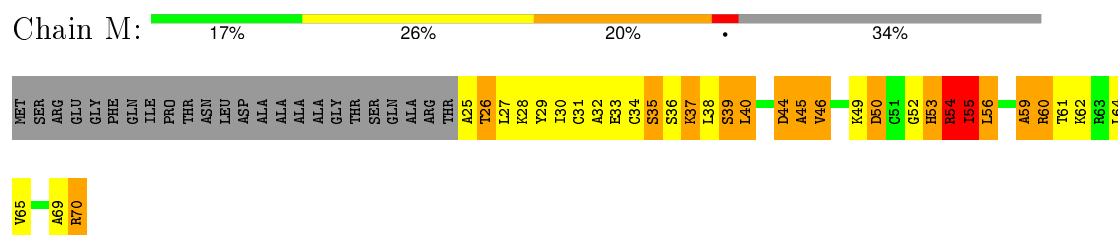
- Molecule 10: DNA-directed RNA polymerases I, II, and III subunit RPABC5



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



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

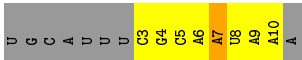


- Molecule 13: 5'-D(\*AP\*GP\*CP\*TP\*CP\*AP\*AP\*GP\*TP\*AP\*GP\*CP\*TP\*GP\*CP\*TP\*TP\*TP\*AP\*TP\*TP\*GP\*CP\*AP\*TP\*T)-3'

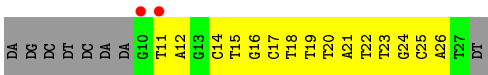
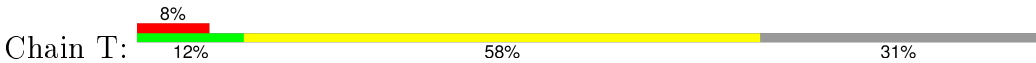


- Molecule 14: 5'-D(\*CP\*AP\*GP\*CP\*TP\*AP\*CP\*TP\*TP\*GP\*AP\*GP\*CP\*T)-3'





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



## 4 Data and refinement statistics

Property	Value	Source
Space group	C 2 2 21	Depositor
Cell constants a, b, c, $\alpha$ , $\beta$ , $\gamma$	222.47Å 391.62Å 284.12Å 90.00° 90.00° 90.00°	Depositor
Resolution (Å)	50.00 – 4.00 48.99 – 4.00	Depositor EDS
% Data completeness (in resolution range)	(Not available) (50.00-4.00) 100.0 (48.99-4.00)	Depositor EDS
$R_{merge}$	(Not available)	Depositor
$R_{sym}$	0.11	Depositor
$\langle I/\sigma(I) \rangle$ <sup>1</sup>	2.57 (at 4.00Å)	Xtriage
Refinement program	CNS 1.2	Depositor
R, $R_{free}$	0.205 , 0.241 0.215 , 0.243	Depositor DCC
$R_{free}$ test set	8343 reflections (7.99%)	DCC
Wilson B-factor (Å <sup>2</sup> )	131.8	Xtriage
Anisotropy	0.506	Xtriage
Bulk solvent $k_{sol}$ (e/Å <sup>3</sup> ), $B_{sol}$ (Å <sup>2</sup> )	0.27 , 82.8	EDS
Estimated twinning fraction	0.024 for 1/2*h-1/2*k,-3/2*h-1/2*k,-l 0.024 for 1/2*h+1/2*k,3/2*h-1/2*k,-l	Xtriage
L-test for twinning <sup>2</sup>	$\langle  L  \rangle = 0.46$ , $\langle L^2 \rangle = 0.29$	Xtriage
Outliers	0 of 202368 reflections	Xtriage
$F_o, F_c$ correlation	0.92	EDS
Total number of atoms	31777	wwPDB-VP
Average B, all atoms (Å <sup>2</sup> )	138.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 1.92% of the height of the origin peak. No significant pseudotranslation is detected.*

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

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

## 5 Model quality

### 5.1 Standard geometry

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

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	B	0.43	0/11339	0.71	4/15334 (0.0%)
2	C	0.43	0/8981	0.69	1/12108 (0.0%)
3	D	0.43	0/2133	0.71	0/2891
4	E	0.43	0/1437	0.69	0/1925
5	F	0.42	0/1788	0.67	0/2406
6	G	0.48	0/691	0.77	0/933
7	H	0.47	0/1368	0.73	0/1844
8	I	0.41	0/1086	0.69	0/1470
9	J	0.40	0/989	0.66	0/1331
10	K	0.44	0/541	0.75	0/727
11	L	0.45	0/937	0.69	0/1265
12	M	0.48	0/366	0.72	0/485
13	N	0.70	0/154	0.88	0/235
14	P	0.55	0/188	0.94	0/291
15	T	0.42	0/407	0.95	0/627
All	All	0.44	0/32405	0.71	5/43872 (0.0%)

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

Mol	Chain	#Chirality outliers	#Planarity outliers
10	K	0	1

There are no bond length outliers.

All (5) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	B	311	GLN	N-CA-C	5.60	126.11	111.00

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	B	56	PRO	N-CA-C	-5.54	97.71	112.10
1	B	425	GLN	N-CA-C	-5.38	96.48	111.00
2	C	1163	CYS	N-CA-C	-5.21	96.94	111.00
1	B	440	ASP	N-CA-C	-5.02	97.44	111.00

There are no chirality outliers.

All (1) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
10	K	44	TYR	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	B	11140	0	11215	1481	0
2	C	8810	0	8847	1266	0
3	D	2095	0	2051	295	0
4	E	1427	0	1451	175	0
5	F	1752	0	1776	183	0
6	G	679	0	701	98	0
7	H	1340	0	1357	185	0
8	I	1068	0	1040	166	0
9	J	971	0	929	123	0
10	K	532	0	542	122	0
11	L	919	0	929	135	0
12	M	364	0	388	57	0
13	N	138	0	80	8	0
14	P	168	0	88	15	0
15	T	365	0	208	48	0
16	B	2	0	0	0	0
16	C	1	0	0	0	0
16	D	1	0	0	0	0
16	J	2	0	0	0	0
16	K	1	0	0	0	0
16	M	1	0	0	0	0
17	B	1	0	0	0	0

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
All	All	31777	0	31602	3977	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 63.

All (3977) 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)
15:T:21:DA:C2'	15:T:22:DT:H5'	1.58	1.32
15:T:21:DA:H2''	15:T:22:DT:C5'	1.65	1.25
15:T:20:DT:C2'	15:T:21:DA:H5'	1.73	1.18
11:L:47:ARG:HH11	11:L:47:ARG:HB3	1.11	1.15
15:T:20:DT:H2'	15:T:21:DA:H5'	1.13	1.12
2:C:1072:MET:HE3	2:C:1085:ILE:HB	1.28	1.12
3:D:101:LEU:HD13	3:D:118:LEU:HD23	1.31	1.10
2:C:622:LYS:HE2	9:J:59:VAL:HG22	1.21	1.08
1:B:590:ARG:HH21	1:B:620:LYS:HB3	1.10	1.08
4:E:134:THR:HG22	4:E:135:GLY:H	1.13	1.08
1:B:53:LEU:HD23	1:B:54:ASN:H	1.14	1.07
1:B:356:ASP:HB2	1:B:469:ARG:HH12	1.19	1.07
2:C:839:MET:HG3	2:C:1010:LEU:HD12	1.37	1.06
1:B:981:LEU:HD21	1:B:1039:LYS:HA	1.35	1.06
1:B:682:THR:HG23	1:B:728:LYS:HE3	1.30	1.06
2:C:1197:PRO:HG2	2:C:1200:ALA:HB2	1.38	1.06
12:M:32:ALA:HB3	12:M:55:ILE:HD12	1.36	1.06
7:H:13:LEU:HD21	7:H:17:PHE:HB2	1.32	1.06
1:B:535:THR:HG21	1:B:616:VAL:HA	1.38	1.05
8:I:100:THR:HG23	8:I:138:GLU:HA	1.38	1.03
8:I:59:ILE:HG22	8:I:60:ALA:H	1.19	1.02
2:C:603:LEU:HD12	2:C:609:ILE:HG13	1.39	1.02
1:B:1445:ILE:H	1:B:1445:ILE:HD12	1.20	1.02
2:C:278:GLN:HG2	2:C:279:ASP:H	1.24	1.02
2:C:189:LEU:HA	2:C:192:LEU:HD12	1.40	1.02
1:B:443:LEU:HD21	1:B:455:MET:HB3	1.36	1.01
4:E:170:THR:HB	4:E:172:LEU:HG	1.43	1.00
2:C:577:ALA:HB1	2:C:589:VAL:HG11	1.41	1.00
2:C:516:ASN:HD22	2:C:516:ASN:N	1.58	1.00
1:B:901:LEU:HB2	1:B:926:GLN:HG2	1.42	1.00
15:T:21:DA:C2'	15:T:22:DT:C5'	2.30	1.00
1:B:1329:THR:H	1:B:1335:ILE:HD11	1.27	1.00
2:C:96:TYR:HB2	2:C:129:PHE:HB2	1.44	0.99

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:340:LEU:HD13	1:B:1429:ILE:HG23	1.42	0.99
6:G:111:LEU:H	6:G:111:LEU:HD12	1.26	0.99
3:D:57:VAL:HG11	10:K:60:PHE:HB3	1.44	0.99
1:B:1017:LEU:HB2	5:F:206:GLY:H	1.27	0.99
1:B:855:THR:HG21	1:B:857:ARG:HE	1.23	0.99
1:B:1444:MET:HE1	6:G:135:ARG:HB2	1.43	0.98
4:E:12:ARG:HH22	4:E:14:ARG:HG3	1.27	0.97
4:E:5:THR:HG22	7:H:8:SER:O	1.63	0.97
2:C:516:ASN:H	2:C:516:ASN:HD22	1.12	0.97
1:B:446:ARG:HD3	1:B:480:ALA:HB2	1.46	0.97
1:B:981:LEU:CD2	1:B:1039:LYS:HA	1.95	0.96
2:C:168:GLY:H	2:C:450:ALA:HB1	1.26	0.96
1:B:399:HIS:HB3	1:B:400:PRO:HD3	1.48	0.96
4:E:185:CYS:HB2	4:E:211:LEU:HD21	1.45	0.96
2:C:800:GLN:HG2	10:K:52:THR:CG2	1.96	0.96
4:E:40:HIS:HB2	7:H:73:LYS:HZ2	1.30	0.96
1:B:768:GLN:HG2	1:B:816:HIS:HA	1.48	0.96
1:B:567:LYS:CD	1:B:568:PRO:HD2	1.96	0.95
4:E:14:ARG:HH22	4:E:16:LYS:HZ1	1.14	0.95
1:B:1161:THR:HG22	1:B:1163:ILE:H	1.30	0.95
1:B:40:THR:HG22	1:B:41:MET:HG3	1.45	0.95
2:C:121:ASN:HA	2:C:207:GLY:HA2	1.48	0.95
5:F:180:ARG:HH21	5:F:192:ARG:HB2	1.27	0.95
11:L:49:GLU:HG3	11:L:94:ILE:HG12	1.44	0.95
2:C:728:ARG:HH12	2:C:1047:PHE:HB3	1.31	0.95
10:K:1:MET:H1	10:K:57:ILE:N	1.64	0.95
2:C:999:MET:HG3	2:C:1000:PRO:HD2	1.49	0.94
1:B:55:ASP:C	1:B:57:ARG:H	1.69	0.94
1:B:567:LYS:CG	1:B:568:PRO:HD2	1.98	0.94
1:B:563:PRO:HG3	1:B:572:TRP:CZ2	2.01	0.94
3:D:166:GLU:HG3	11:L:10:PHE:HZ	1.31	0.93
15:T:25:DC:H42	15:T:26:DA:N6	1.66	0.93
2:C:23:ALA:HB1	2:C:24:PRO:HD2	1.48	0.93
10:K:12:LYS:O	10:K:14:VAL:HG23	1.69	0.93
1:B:1006:ILE:HD11	5:F:163:GLU:HG3	1.48	0.93
1:B:1193:LEU:HD22	1:B:1260:LEU:HD11	1.51	0.93
12:M:49:LYS:O	12:M:50:ASP:HB2	1.65	0.93
8:I:23:VAL:HG22	8:I:43:ASN:HA	1.51	0.93
1:B:37:PHE:HB2	1:B:52:GLY:HA3	1.51	0.93
1:B:1424:VAL:HG13	1:B:1436:ILE:HD11	1.52	0.92
1:B:658:LEU:HD13	2:C:831:SER:H	1.33	0.92

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:754:SER:H	1:B:757:ASN:HD22	1.18	0.92
1:B:524:VAL:HG12	1:B:525:GLN:H	1.34	0.92
1:B:1002:GLY:HA3	1:B:1007:ILE:HG21	1.50	0.91
7:H:7:LEU:HB2	7:H:74:TYR:HE2	1.35	0.91
1:B:1208:THR:HG22	1:B:1210:GLY:H	1.35	0.91
1:B:547:LEU:HB3	11:L:58:PHE:HE1	1.31	0.91
10:K:1:MET:N	10:K:57:ILE:H	1.68	0.91
1:B:41:MET:CB	1:B:49:LYS:HA	2.01	0.91
2:C:515:HIS:H	2:C:518:HIS:HD2	1.13	0.91
15:T:25:DC:N4	15:T:26:DA:H62	1.67	0.91
4:E:40:HIS:HB2	7:H:73:LYS:NZ	1.86	0.91
2:C:483:LEU:HD11	2:C:491:THR:HG23	1.51	0.91
1:B:225:ASN:HD22	1:B:228:PHE:H	1.18	0.90
2:C:806:THR:HG22	2:C:808:ALA:H	1.37	0.90
1:B:1160:SER:HA	1:B:1170:ILE:HD13	1.53	0.90
11:L:47:ARG:NH1	11:L:47:ARG:HB3	1.85	0.90
6:G:90:ARG:HG3	6:G:91:ALA:N	1.85	0.90
2:C:821:GLN:HE22	2:C:851:PHE:HA	1.36	0.90
4:E:56:ARG:HD3	4:E:149:THR:HA	1.54	0.90
1:B:1341:ILE:HG23	1:B:1342:GLU:H	1.35	0.89
2:C:1156:ASP:HB3	2:C:1198:TYR:H	1.37	0.89
2:C:642:ASP:HA	2:C:649:LYS:HA	1.51	0.89
1:B:537:ARG:HD2	8:I:20:TYR:HE1	1.35	0.89
1:B:899:VAL:HG13	1:B:908:LEU:HD21	1.54	0.89
1:B:265:LYS:HG2	1:B:303:TYR:HA	1.55	0.89
8:I:59:ILE:HG22	8:I:60:ALA:N	1.86	0.89
1:B:913:LEU:HD12	1:B:914:GLU:H	1.38	0.89
2:C:214:ALA:HB3	2:C:498:THR:HA	1.52	0.89
1:B:110:CYS:HB3	1:B:167:CYS:SG	2.13	0.89
2:C:217:ARG:HE	2:C:405:ARG:HB2	1.37	0.89
1:B:347:PHE:H	2:C:1107:ALA:HA	1.38	0.89
2:C:810:GLU:HA	2:C:815:ARG:HH12	1.36	0.88
6:G:86:THR:OG1	6:G:89:GLU:HG3	1.74	0.88
2:C:778:MET:HE2	2:C:1094:ARG:HG2	1.55	0.88
5:F:19:VAL:O	5:F:23:VAL:HG23	1.73	0.88
1:B:470:LEU:H	1:B:470:LEU:HD23	1.38	0.88
1:B:534:LEU:O	1:B:574:GLY:HA3	1.74	0.88
2:C:112:LEU:HD21	2:C:117:ALA:HB2	1.56	0.88
15:T:18:DT:H2''	15:T:19:DT:H5'	1.56	0.88
7:H:91:VAL:HB	7:H:139:ILE:O	1.72	0.88
2:C:46:GLN:HG3	2:C:47:GLN:H	1.36	0.88

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:356:ASP:HB2	1:B:469:ARG:NH1	1.87	0.88
1:B:779:PHE:CE1	1:B:785:PRO:HD3	2.08	0.88
1:B:590:ARG:HH21	1:B:620:LYS:CB	1.87	0.88
1:B:779:PHE:HE1	1:B:785:PRO:HD3	1.37	0.87
11:L:12:LEU:H	11:L:12:LEU:HD12	1.39	0.87
12:M:27:LEU:HD13	12:M:37:LYS:HE2	1.56	0.87
2:C:1159:ARG:HB3	2:C:1159:ARG:NH1	1.88	0.87
1:B:1017:LEU:HB3	5:F:205:SER:HA	1.53	0.87
1:B:828:ALA:CB	2:C:530:GLY:HA2	2.04	0.87
5:F:156:LEU:HD12	5:F:195:VAL:HB	1.56	0.87
6:G:82:THR:HG22	6:G:84:TYR:H	1.36	0.87
2:C:737:THR:HG21	9:J:66:PRO:HA	1.56	0.87
2:C:847:ASP:HB3	3:D:167:HIS:NE2	1.90	0.87
10:K:44:TYR:HA	10:K:47:ARG:HB2	1.57	0.86
2:C:1159:ARG:HH11	2:C:1159:ARG:HB3	1.38	0.86
3:D:6:PRO:HB3	3:D:25:VAL:HG12	1.55	0.86
2:C:100:PRO:HD2	2:C:180:TYR:HE1	1.40	0.86
9:J:111:THR:HG22	9:J:112:SER:H	1.41	0.86
8:I:15:VAL:HG22	8:I:26:ILE:HD11	1.58	0.86
2:C:654:ARG:H	2:C:657:HIS:HD2	1.21	0.86
1:B:567:LYS:HB3	8:I:96:VAL:H	1.41	0.86
1:B:568:PRO:HG2	8:I:46:LEU:HD22	1.58	0.86
2:C:393:LYS:HE3	2:C:393:LYS:HA	1.58	0.85
1:B:709:THR:HG22	1:B:711:ARG:H	1.39	0.85
2:C:387:LEU:O	2:C:392:ARG:HB2	1.76	0.85
2:C:1065:GLN:HG3	2:C:1067:ARG:H	1.39	0.85
8:I:59:ILE:CG2	8:I:60:ALA:H	1.89	0.85
4:E:56:ARG:HB2	4:E:148:LEU:HD22	1.59	0.85
2:C:856:PHE:HD2	2:C:967:ARG:HD2	1.41	0.85
10:K:57:ILE:HA	10:K:60:PHE:HD2	1.41	0.85
3:D:47:ASP:HA	12:M:69:ALA:HB3	1.57	0.85
15:T:20:DT:C2'	15:T:21:DA:C5'	2.54	0.85
1:B:53:LEU:HD23	1:B:54:ASN:N	1.92	0.85
2:C:1180:PHE:HB3	2:C:1191:ILE:CD1	2.06	0.85
1:B:321:PRO:O	1:B:322:VAL:HB	1.75	0.84
5:F:117:THR:HG22	5:F:119:SER:H	1.41	0.84
2:C:549:THR:HG22	2:C:550:ASP:H	1.41	0.84
1:B:901:LEU:H	1:B:926:GLN:NE2	1.75	0.84
1:B:265:LYS:HA	1:B:265:LYS:HE3	1.60	0.84
1:B:1094:VAL:HG13	1:B:1113:THR:HG21	1.58	0.84
1:B:172:PRO:HD3	1:B:185:TRP:NE1	1.93	0.84

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:E:63:LEU:HD12	4:E:129:LEU:HG	1.58	0.84
3:D:39:ALA:HA	3:D:164:ALA:HB3	1.60	0.84
3:D:45:ALA:HA	3:D:72:LEU:HD12	1.59	0.84
1:B:196:GLU:HG3	1:B:197:PRO:HD2	1.59	0.84
2:C:521:LEU:HD22	2:C:633:VAL:HG12	1.58	0.84
2:C:1002:THR:HG23	2:C:1006:ILE:HG13	1.59	0.83
4:E:134:THR:HG22	4:E:135:GLY:N	1.93	0.83
2:C:261:ARG:NH1	2:C:261:ARG:HB3	1.93	0.83
2:C:579:ARG:HB2	2:C:586:TRP:NE1	1.92	0.83
7:H:30:LEU:HD13	7:H:72:VAL:HG11	1.61	0.83
1:B:353:ILE:HG21	1:B:487:MET:HE3	1.59	0.83
1:B:567:LYS:HD3	8:I:95:TYR:CG	2.14	0.83
4:E:47:LEU:HD11	7:H:3:PHE:CD2	2.13	0.83
2:C:825:VAL:HG12	2:C:826:ALA:N	1.93	0.83
2:C:210:LYS:HD3	2:C:481:GLN:O	1.78	0.83
9:J:85:PHE:HD2	9:J:85:PHE:H	1.24	0.83
2:C:770:GLN:OE1	2:C:983:ARG:HA	1.78	0.83
1:B:341:MET:CE	1:B:843:LYS:HZ1	1.90	0.83
1:B:1341:ILE:HG23	1:B:1342:GLU:N	1.93	0.83
2:C:899:ILE:HD11	2:C:911:ILE:HA	1.59	0.82
11:L:65:HIS:HD2	11:L:67:PHE:H	1.25	0.82
2:C:1072:MET:CE	2:C:1085:ILE:HB	2.08	0.82
1:B:598:LEU:HA	8:I:122:LEU:HD13	1.59	0.82
2:C:773:MET:CE	2:C:985:GLY:HA2	2.08	0.82
1:B:244:PRO:HB2	1:B:245:PRO:HD3	1.60	0.82
1:B:679:ILE:HG12	1:B:732:LEU:HD12	1.62	0.82
3:D:7:GLN:HG2	11:L:104:ASN:HD22	1.44	0.82
6:G:132:LEU:HD11	7:H:61:ILE:HD11	1.62	0.82
2:C:762:ASN:HD21	2:C:1024:ALA:HB3	1.44	0.82
10:K:48:ARG:HD2	10:K:49:MET:N	1.95	0.82
2:C:953:LEU:HD21	2:C:965:LYS:HB2	1.62	0.81
1:B:528:LEU:HD23	1:B:751:SER:HB3	1.62	0.81
2:C:520:GLY:H	2:C:748:ILE:HG22	1.45	0.81
1:B:343:LYS:HZ2	2:C:1151:LEU:HB3	1.45	0.81
11:L:113:THR:O	11:L:114:LEU:HB2	1.79	0.81
11:L:21:ILE:HG12	11:L:33:ILE:HG12	1.60	0.81
6:G:118:LEU:O	6:G:118:LEU:HD12	1.79	0.81
15:T:18:DT:C2'	15:T:19:DT:H5'	2.09	0.81
2:C:359:GLU:O	2:C:362:PRO:HD3	1.79	0.81
2:C:102:VAL:HG21	2:C:112:LEU:HD22	1.61	0.81
1:B:1116:LEU:HB3	1:B:1308:THR:HG21	1.63	0.81

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:E:47:LEU:HD11	7:H:3:PHE:HD2	1.42	0.81
8:I:55:LEU:HD22	8:I:144:ILE:CG2	2.10	0.81
1:B:12:ARG:O	2:C:1194:ILE:HG22	1.81	0.81
2:C:952:VAL:HG22	2:C:966:VAL:HG13	1.62	0.81
2:C:579:ARG:HB2	2:C:586:TRP:HE1	1.43	0.81
8:I:135:LEU:HD13	8:I:137:GLN:HE21	1.45	0.81
1:B:849:MET:CE	1:B:1061:GLY:HA2	2.09	0.81
10:K:3:VAL:HG21	10:K:18:TRP:HB2	1.62	0.81
10:K:1:MET:H1	10:K:57:ILE:H	0.86	0.80
3:D:46:ILE:HG23	3:D:157:CYS:HB3	1.63	0.80
3:D:238:ILE:CG2	3:D:242:GLN:HB2	2.11	0.80
2:C:244:LEU:HD21	2:C:366:GLN:NE2	1.96	0.80
1:B:855:THR:CG2	1:B:857:ARG:HE	1.94	0.80
7:H:106:MET:HG2	7:H:107:LYS:N	1.96	0.80
2:C:37:PHE:CE1	2:C:41:LYS:HG3	2.17	0.80
9:J:50:THR:HG23	9:J:52:ILE:HG23	1.63	0.80
2:C:210:LYS:HE2	2:C:462:ALA:HA	1.62	0.80
1:B:929:LEU:HD21	1:B:983:ILE:HG21	1.62	0.80
1:B:1148:ILE:HD11	1:B:1198:ASP:HA	1.64	0.80
1:B:993:LEU:HD23	1:B:1022:LEU:HD21	1.62	0.80
1:B:783:THR:HG21	1:B:815:PHE:CZ	2.16	0.80
12:M:27:LEU:HB3	12:M:37:LYS:HD3	1.64	0.80
1:B:1226:VAL:HG22	1:B:1240:CYS:HB3	1.62	0.80
8:I:81:PRO:HB2	8:I:82:PRO:HD2	1.64	0.79
1:B:913:LEU:HD12	1:B:914:GLU:N	1.96	0.79
15:T:24:DG:H3'	15:T:25:DC:H5''	1.65	0.79
1:B:440:ASP:H	1:B:460:VAL:HG12	1.47	0.79
1:B:1343:ALA:HB2	5:F:150:VAL:HG22	1.63	0.79
2:C:1069:PHE:HD1	2:C:1069:PHE:H	1.27	0.79
2:C:1085:ILE:HD12	2:C:1085:ILE:N	1.97	0.79
3:D:67:LEU:HD11	3:D:155:LEU:HD13	1.64	0.79
2:C:169:ARG:HB2	2:C:454:THR:HG23	1.65	0.79
1:B:1242:VAL:HG12	1:B:1243:VAL:H	1.45	0.79
1:B:743:VAL:O	1:B:747:VAL:HG23	1.82	0.79
5:F:153:HIS:HB3	5:F:196:VAL:CG1	2.11	0.79
3:D:70:ILE:HG12	3:D:142:VAL:HG11	1.64	0.79
2:C:1147:LEU:O	2:C:1151:LEU:HD13	1.80	0.79
1:B:849:MET:HE1	1:B:1061:GLY:HA2	1.65	0.79
1:B:1373:ASP:HA	1:B:1376:THR:HG22	1.65	0.79
5:F:80:VAL:HG22	5:F:109:ILE:HD12	1.64	0.79
7:H:45:ILE:HA	7:H:78:VAL:HG12	1.64	0.79

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:F:135:PHE:HB3	5:F:140:LEU:HD11	1.64	0.79
5:F:180:ARG:NH2	5:F:192:ARG:HB2	1.96	0.79
2:C:756:ILE:O	2:C:759:PRO:HD3	1.83	0.79
1:B:973:ILE:HD11	1:B:1038:THR:HG23	1.64	0.79
2:C:515:HIS:HD2	2:C:517:THR:H	1.28	0.79
5:F:198:ILE:HD11	5:F:212:ARG:HG3	1.63	0.78
9:J:93:LYS:H	9:J:93:LYS:HD2	1.46	0.78
3:D:44:LEU:HB2	3:D:77:ILE:HD11	1.63	0.78
2:C:593:PRO:HG2	2:C:617:ARG:NH2	1.97	0.78
5:F:78:LEU:HD21	5:F:80:VAL:HG23	1.66	0.78
2:C:847:ASP:HB3	3:D:167:HIS:CD2	2.17	0.78
1:B:767:GLN:NE2	1:B:774:ARG:HB3	1.99	0.78
15:T:21:DA:H2''	15:T:22:DT:H5'	0.82	0.78
8:I:17:PRO:HB3	8:I:24:CYS:SG	2.24	0.78
2:C:167:ILE:HG22	2:C:453:ILE:HD11	1.64	0.78
1:B:180:LYS:NZ	1:B:294:SER:HB3	1.99	0.78
2:C:1084:GLN:NE2	2:C:1084:GLN:H	1.81	0.78
11:L:47:ARG:HH11	11:L:47:ARG:CB	1.95	0.78
2:C:800:GLN:HG2	10:K:52:THR:HG22	1.64	0.78
4:E:159:THR:O	4:E:163:VAL:HG23	1.84	0.78
3:D:32:SER:O	3:D:36:VAL:HG23	1.84	0.78
7:H:14:HIS:CD2	7:H:16:SER:HB2	2.19	0.78
2:C:516:ASN:ND2	2:C:516:ASN:H	1.72	0.78
1:B:845:LEU:HD22	1:B:1374:VAL:HG21	1.65	0.78
1:B:857:ARG:HD3	1:B:861:GLY:O	1.83	0.78
2:C:25:ILE:HD11	2:C:653:VAL:O	1.82	0.78
1:B:1148:ILE:HG12	9:J:49:ILE:HD12	1.65	0.78
2:C:167:ILE:HG22	2:C:453:ILE:CD1	2.14	0.78
1:B:1325:THR:O	1:B:1325:THR:HG22	1.83	0.78
2:C:29:ASP:HB3	2:C:658:ILE:HD13	1.65	0.78
8:I:42:ILE:HG23	8:I:95:TYR:HE1	1.47	0.78
5:F:202:SER:OG	5:F:204:THR:HG22	1.83	0.78
3:D:43:THR:HG22	3:D:44:LEU:H	1.47	0.77
2:C:329:THR:HA	2:C:332:ASP:HB3	1.67	0.77
1:B:1193:LEU:HD22	1:B:1260:LEU:CD1	2.14	0.77
1:B:608:ILE:HB	1:B:613:ILE:HD11	1.65	0.77
3:D:147:LEU:HB2	3:D:151:GLN:HB2	1.65	0.77
2:C:798:TYR:HE2	3:D:62:PHE:CE2	2.03	0.77
3:D:196:ASP:HB3	3:D:199:LYS:HB2	1.65	0.77
2:C:1099:VAL:HG13	2:C:1100:ASP:N	1.98	0.77
5:F:94:LYS:NZ	5:F:98:ILE:HD11	1.99	0.77

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:667:GLY:HA3	3:D:192:TRP:CH2	2.19	0.77
2:C:830:TYR:CE2	2:C:1000:PRO:HD3	2.18	0.77
4:E:134:THR:CG2	4:E:135:GLY:H	1.96	0.77
4:E:202:ILE:HG21	4:E:207:LEU:HB2	1.66	0.77
2:C:1181:GLU:HG3	2:C:1188:LYS:HE3	1.67	0.77
1:B:836:TYR:CE2	1:B:840:ARG:HD2	2.18	0.77
10:K:4:PRO:HD3	10:K:53:HIS:CD2	2.20	0.77
3:D:175:ALA:HB2	10:K:10:CYS:HB2	1.66	0.77
7:H:15:PRO:HA	7:H:18:PHE:CD1	2.20	0.77
3:D:47:ASP:HA	12:M:69:ALA:CB	2.14	0.77
2:C:261:ARG:HH11	2:C:261:ARG:HB3	1.47	0.77
2:C:794:ASN:O	2:C:795:ILE:HD12	1.85	0.77
1:B:885:THR:O	1:B:940:ARG:HD2	1.83	0.77
7:H:14:HIS:ND1	7:H:15:PRO:HD2	2.00	0.77
3:D:163:ILE:HD13	3:D:163:ILE:N	1.98	0.77
7:H:143:ILE:HG22	7:H:144:ARG:N	2.00	0.77
4:E:71:LYS:HG2	4:E:74:GLN:HE21	1.50	0.77
2:C:828:ALA:HB2	2:C:1085:ILE:HG23	1.67	0.77
2:C:589:VAL:HG12	2:C:590:HIS:H	1.50	0.77
1:B:524:VAL:HG12	1:B:525:GLN:N	2.00	0.77
2:C:825:VAL:CG1	2:C:826:ALA:H	1.96	0.76
2:C:563:MET:CE	2:C:580:VAL:HB	2.15	0.76
1:B:763:ALA:O	1:B:803:SER:HB3	1.84	0.76
5:F:56:LYS:HE3	5:F:84:ASP:HB2	1.67	0.76
1:B:1116:LEU:HB3	1:B:1308:THR:CG2	2.15	0.76
14:P:3:C:H2'	14:P:4:G:C8	2.20	0.76
7:H:115:MET:HB2	7:H:116:PRO:HD2	1.66	0.76
3:D:67:LEU:HD11	3:D:155:LEU:CD1	2.15	0.76
1:B:41:MET:HE3	1:B:41:MET:N	2.00	0.76
2:C:975:GLN:O	2:C:990:ILE:HD12	1.85	0.76
9:J:58:VAL:HG13	9:J:62:ILE:HD12	1.68	0.76
1:B:1030:ARG:HG3	1:B:1034:GLU:OE2	1.84	0.76
6:G:77:ASP:O	6:G:78:GLN:HB2	1.83	0.76
1:B:1189:SER:O	1:B:1241:ARG:HD3	1.86	0.76
6:G:89:GLU:O	6:G:93:ILE:HG13	1.85	0.76
2:C:33:VAL:HG21	2:C:638:PHE:HZ	1.51	0.76
1:B:816:HIS:CD2	2:C:764:SER:HB2	2.21	0.76
7:H:139:ILE:HG22	7:H:140:LYS:H	1.50	0.76
2:C:825:VAL:CG1	2:C:826:ALA:N	2.48	0.76
2:C:100:PRO:HD2	2:C:180:TYR:CE1	2.20	0.76
2:C:874:PHE:HA	2:C:913:GLY:O	1.85	0.76

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:D:66:ARG:NH1	10:K:2:ILE:HG21	2.01	0.76
1:B:1015:VAL:HG12	1:B:1019:CYS:SG	2.25	0.76
3:D:254:LYS:O	3:D:258:ILE:HD13	1.85	0.76
11:L:21:ILE:CG2	11:L:31:VAL:HG11	2.16	0.76
8:I:38:LEU:HD12	8:I:124:ARG:O	1.86	0.76
1:B:55:ASP:C	1:B:57:ARG:N	2.37	0.75
3:D:133:ILE:HD11	3:D:237:SER:HA	1.67	0.75
3:D:6:PRO:HB2	11:L:101:LEU:HD12	1.68	0.75
2:C:69:LEU:HD11	2:C:425:THR:HG23	1.67	0.75
2:C:235:SER:HB3	2:C:258:LEU:HG	1.68	0.75
7:H:4:ILE:HG12	7:H:77:VAL:HG23	1.66	0.75
3:D:76:ASP:OD2	3:D:128:ASN:N	2.19	0.75
13:N:2:DA:H2'	13:N:3:DG:C8	2.20	0.75
2:C:603:LEU:HD13	2:C:608:ASP:HB2	1.68	0.75
2:C:217:ARG:HD2	2:C:217:ARG:C	2.06	0.75
1:B:590:ARG:NH2	1:B:620:LYS:HB3	1.95	0.75
1:B:230:ARG:H	1:B:233:TRP:HE3	1.28	0.75
2:C:39:ARG:NH2	2:C:665:GLU:HG2	2.01	0.75
2:C:879:ARG:NH1	2:C:883:LEU:HD13	2.00	0.75
1:B:1143:LEU:O	1:B:1146:VAL:HG23	1.87	0.75
1:B:382:PRO:HD3	1:B:428:TYR:CE2	2.21	0.75
1:B:447:GLN:HE22	15:T:20:DT:H4'	1.52	0.75
7:H:9:LEU:HD23	7:H:30:LEU:HD12	1.69	0.75
1:B:668:ASP:HB3	1:B:741:ASN:HD21	1.52	0.75
10:K:14:VAL:HG12	10:K:14:VAL:O	1.85	0.75
1:B:1424:VAL:HG13	1:B:1436:ILE:CD1	2.16	0.75
1:B:1438:THR:HB	2:C:1144:ALA:HB3	1.66	0.75
3:D:208:GLU:O	3:D:210:GLU:N	2.20	0.75
2:C:616:ILE:HD12	2:C:616:ILE:N	2.00	0.75
1:B:1004:ASN:ND2	5:F:167:ARG:HD2	2.01	0.74
2:C:770:GLN:CD	2:C:983:ARG:HA	2.08	0.74
1:B:1394:THR:HG22	1:B:1395:GLY:H	1.52	0.74
2:C:1196:ILE:HD12	2:C:1200:ALA:HB3	1.68	0.74
7:H:44:TYR:HE1	7:H:157:ILE:H	1.34	0.74
2:C:29:ASP:HB3	2:C:658:ILE:CD1	2.16	0.74
1:B:946:VAL:HG13	5:F:201:LYS:HB3	1.67	0.74
1:B:518:LYS:HE2	1:B:624:SER:O	1.87	0.74
1:B:1402:PHE:CE1	1:B:1403:GLU:HG3	2.21	0.74
9:J:14:LEU:HA	9:J:28:GLU:O	1.86	0.74
1:B:537:ARG:HD2	8:I:20:TYR:CE1	2.21	0.74
1:B:1208:THR:HB	1:B:1211:GLN:HG3	1.70	0.74

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:H:88:ASP:HB3	7:H:144:ARG:HA	1.68	0.74
9:J:51:ASN:O	9:J:54:GLU:HG3	1.87	0.74
1:B:567:LYS:HD2	1:B:568:PRO:HD2	1.66	0.74
3:D:166:GLU:HG3	11:L:10:PHE:CZ	2.19	0.74
9:J:25:LEU:HB3	9:J:38:ALA:HB2	1.69	0.74
1:B:1116:LEU:N	1:B:1308:THR:HG22	2.02	0.74
3:D:45:ALA:O	3:D:159:ALA:HA	1.86	0.74
1:B:353:ILE:HD13	1:B:487:MET:HE2	1.69	0.74
4:E:144:THR:O	4:E:148:LEU:HB2	1.87	0.74
2:C:69:LEU:HB3	2:C:429:PHE:HE1	1.51	0.74
2:C:1007:VAL:HG22	2:C:1008:PRO:HD2	1.69	0.74
5:F:23:VAL:HG13	5:F:78:LEU:HD13	1.68	0.74
10:K:48:ARG:HE	10:K:49:MET:HE2	1.53	0.74
5:F:145:THR:HG21	5:F:187:TYR:CE2	2.23	0.74
11:L:46:ILE:O	11:L:50:LEU:HB2	1.87	0.74
2:C:402:GLY:HA3	2:C:695:ALA:HB3	1.70	0.74
3:D:38:ILE:HA	3:D:173:ALA:HB2	1.68	0.74
7:H:1:MET:SD	7:H:79:PHE:HD1	2.10	0.74
1:B:388:LEU:HD23	1:B:432:VAL:HB	1.68	0.74
1:B:4:GLN:O	1:B:5:GLN:HB2	1.86	0.74
1:B:547:LEU:HB3	11:L:58:PHE:CE1	2.20	0.73
5:F:16:PHE:CZ	5:F:20:LYS:HE2	2.23	0.73
1:B:741:ASN:HD22	1:B:741:ASN:C	1.89	0.73
1:B:1394:THR:HG21	1:B:1398:MET:SD	2.27	0.73
2:C:731:VAL:HG12	2:C:732:SER:H	1.53	0.73
2:C:102:VAL:CG2	2:C:112:LEU:HD22	2.18	0.73
1:B:1329:THR:HG22	1:B:1331:SER:H	1.53	0.73
4:E:12:ARG:NH2	4:E:14:ARG:HG3	2.00	0.73
1:B:23:SER:HA	1:B:233:TRP:NE1	2.03	0.73
6:G:90:ARG:HD3	6:G:155:LEU:HD12	1.70	0.73
2:C:185:THR:O	2:C:188:ASP:HB2	1.88	0.73
1:B:659:HIS:HA	2:C:1074:ASN:HD22	1.53	0.73
2:C:274:PRO:HG2	2:C:359:GLU:HB3	1.70	0.73
1:B:682:THR:CG2	1:B:728:LYS:HE3	2.16	0.73
1:B:541:ILE:HD13	1:B:549:MET:CE	2.18	0.73
9:J:82:GLU:O	9:J:104:LEU:HG	1.88	0.73
6:G:73:ALA:HA	6:G:143:PHE:HE1	1.54	0.73
7:H:139:ILE:HG22	7:H:140:LYS:N	2.01	0.73
11:L:65:HIS:CD2	11:L:67:PHE:H	2.05	0.73
1:B:903:ASN:HD22	1:B:904:THR:N	1.87	0.73
1:B:41:MET:HB2	1:B:49:LYS:HA	1.69	0.73

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:L:49:GLU:HG3	11:L:94:ILE:CG1	2.19	0.73
2:C:810:GLU:HA	2:C:815:ARG:NH1	2.02	0.73
5:F:94:LYS:HZ3	5:F:98:ILE:HD11	1.54	0.73
1:B:1114:PRO:HB2	1:B:1311:VAL:HG23	1.71	0.73
5:F:78:LEU:HA	5:F:107:THR:HB	1.71	0.73
8:I:89:LEU:C	8:I:91:ASP:H	1.92	0.72
1:B:722:LEU:HD12	1:B:722:LEU:H	1.53	0.72
2:C:758:PHE:HB3	2:C:761:HIS:HD2	1.53	0.72
1:B:1028:THR:O	1:B:1032:LEU:HD12	1.88	0.72
10:K:64:ASN:HB3	10:K:65:PRO:CD	2.19	0.72
8:I:84:ALA:HA	8:I:87:ARG:HB2	1.70	0.72
1:B:855:THR:HG21	1:B:857:ARG:NE	2.03	0.72
1:B:1208:THR:O	1:B:1212:VAL:HG23	1.90	0.72
2:C:902:GLY:O	12:M:65:VAL:HG11	1.88	0.72
15:T:20:DT:H2'	15:T:21:DA:C5'	2.06	0.72
1:B:339:ASN:HB3	2:C:1117:GLN:HE22	1.54	0.72
2:C:378:LEU:O	2:C:378:LEU:HD12	1.89	0.72
10:K:1:MET:H3	10:K:56:LEU:N	1.86	0.72
1:B:90:VAL:CG1	1:B:297:GLN:HA	2.20	0.72
1:B:965:GLN:O	1:B:968:GLN:HB2	1.90	0.72
6:G:119:ARG:HG3	6:G:119:ARG:HH11	1.53	0.72
6:G:76:LYS:C	6:G:79:ARG:HD2	2.10	0.72
2:C:295:GLY:H	2:C:298:LEU:HD23	1.54	0.72
3:D:66:ARG:NH2	10:K:3:VAL:O	2.23	0.72
1:B:56:PRO:HD2	1:B:58:LEU:HG	1.71	0.72
2:C:642:ASP:HB3	2:C:649:LYS:CG	2.20	0.72
1:B:709:THR:HB	1:B:712:GLU:HG3	1.70	0.72
8:I:130:ARG:HB3	8:I:134:ASN:H	1.53	0.72
1:B:269:ILE:HD13	1:B:300:VAL:HG22	1.71	0.72
1:B:1369:ALA:O	1:B:1372:VAL:HG12	1.88	0.72
1:B:215:SER:HB3	1:B:218:ASP:HB2	1.69	0.72
13:N:3:DG:H2''	13:N:4:DC:OP2	1.88	0.72
1:B:965:GLN:HA	1:B:968:GLN:HG3	1.72	0.72
11:L:53:ASP:OD1	11:L:55:LYS:HB2	1.90	0.72
1:B:71:GLN:HE22	2:C:1176:ASN:ND2	1.88	0.72
7:H:143:ILE:HG22	7:H:144:ARG:H	1.54	0.72
2:C:882:THR:HG22	2:C:884:ARG:H	1.53	0.72
11:L:21:ILE:HG23	11:L:31:VAL:HG11	1.70	0.72
12:M:53:HIS:HB3	12:M:55:ILE:HD13	1.71	0.72
6:G:109:VAL:HG12	6:G:110:ASP:N	2.05	0.72
2:C:798:TYR:CE2	3:D:62:PHE:HE2	2.08	0.72

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:I:93:TYR:HB3	8:I:144:ILE:O	1.89	0.72
12:M:40:LEU:HD13	12:M:44:ASP:HB3	1.71	0.72
2:C:773:MET:HE2	2:C:985:GLY:HA2	1.71	0.72
2:C:865:LYS:NZ	2:C:869:SER:HA	2.03	0.72
10:K:44:TYR:HD2	10:K:44:TYR:H	1.36	0.71
7:H:79:PHE:HE2	7:H:105:PRO:HG2	1.54	0.71
1:B:41:MET:HB3	1:B:49:LYS:HA	1.71	0.71
1:B:427:GLN:HG3	1:B:430:TRP:CE2	2.25	0.71
10:K:23:ASN:C	10:K:25:LEU:H	1.93	0.71
1:B:993:LEU:CD2	1:B:1022:LEU:HD21	2.20	0.71
2:C:910:VAL:HG12	2:C:912:ILE:H	1.55	0.71
4:E:128:VAL:O	4:E:132:GLN:HG3	1.90	0.71
1:B:639:PRO:HG2	1:B:640:GLN:H	1.53	0.71
2:C:351:TYR:O	2:C:355:ILE:HG13	1.90	0.71
1:B:567:LYS:CB	8:I:95:TYR:HA	2.20	0.71
1:B:1342:GLU:OE2	5:F:212:ARG:NH1	2.24	0.71
7:H:7:LEU:HD12	7:H:74:TYR:OH	1.90	0.71
2:C:642:ASP:HB3	2:C:649:LYS:HG3	1.72	0.71
1:B:586:ILE:HG22	1:B:587:HIS:N	2.05	0.71
4:E:14:ARG:HH22	4:E:16:LYS:NZ	1.86	0.71
1:B:1261:LYS:HE3	9:J:44:TYR:CD2	2.26	0.71
3:D:238:ILE:HG23	3:D:242:GLN:HB2	1.71	0.71
2:C:819:ALA:HB1	2:C:1093:GLN:HE21	1.56	0.71
5:F:23:VAL:HB	5:F:30:ILE:HD11	1.71	0.71
2:C:1201:LYS:HE3	2:C:1205:GLN:OE1	1.90	0.71
1:B:1017:LEU:CB	5:F:205:SER:HA	2.19	0.71
2:C:758:PHE:HB3	2:C:761:HIS:CD2	2.25	0.71
8:I:127:GLY:O	8:I:128:ASN:HB2	1.91	0.71
2:C:175:ARG:HH11	2:C:175:ARG:HG2	1.56	0.71
2:C:642:ASP:HB3	2:C:649:LYS:CD	2.20	0.71
2:C:1182:CYS:O	2:C:1182:CYS:SG	2.48	0.71
2:C:879:ARG:HH12	2:C:883:LEU:HD13	1.56	0.71
1:B:1312:ASN:O	1:B:1316:VAL:HG23	1.89	0.71
1:B:866:PHE:C	1:B:867:ILE:HD12	2.11	0.71
1:B:67:CYS:O	1:B:70:CYS:HB3	1.91	0.71
5:F:16:PHE:CE2	5:F:20:LYS:HE2	2.24	0.71
1:B:827:THR:HG22	1:B:828:ALA:N	2.06	0.71
2:C:69:LEU:HB3	2:C:429:PHE:CE1	2.25	0.71
1:B:657:LEU:HD12	1:B:657:LEU:O	1.91	0.71
7:H:15:PRO:HA	7:H:18:PHE:CE1	2.26	0.71
1:B:567:LYS:HB3	8:I:96:VAL:N	2.05	0.70

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:H:80:LYS:N	7:H:80:LYS:HD3	2.06	0.70
2:C:1187:ASN:O	2:C:1188:LYS:HB2	1.90	0.70
2:C:168:GLY:N	2:C:450:ALA:HB1	2.04	0.70
1:B:49:LYS:HZ1	1:B:61:ILE:H	1.39	0.70
1:B:1261:LYS:HA	1:B:1264:GLU:HB3	1.73	0.70
7:H:7:LEU:HB2	7:H:74:TYR:CE2	2.24	0.70
1:B:710:LEU:HD13	9:J:94:ASP:O	1.90	0.70
1:B:483:ASP:HB2	2:C:987:LYS:HG3	1.73	0.70
1:B:53:LEU:HD22	1:B:54:ASN:ND2	2.06	0.70
2:C:276:ILE:HG22	2:C:278:GLN:O	1.90	0.70
1:B:92:HIS:O	1:B:94:GLY:N	2.24	0.70
3:D:194:GLU:O	3:D:195:GLN:HG3	1.91	0.70
1:B:496:GLU:HG2	6:G:99:LEU:HD22	1.73	0.70
8:I:102:TYR:OH	8:I:122:LEU:HD22	1.91	0.70
8:I:81:PRO:CB	8:I:82:PRO:HD2	2.21	0.70
4:E:71:LYS:HG2	4:E:74:GLN:NE2	2.06	0.70
2:C:955:THR:CG2	2:C:956:THR:N	2.54	0.70
3:D:179:GLU:HG2	3:D:180:TYR:N	2.07	0.70
2:C:190:TYR:CE2	10:K:62:ARG:HB3	2.26	0.70
15:T:21:DA:H2'	15:T:22:DT:C5'	2.21	0.70
1:B:728:LYS:O	1:B:732:LEU:HG	1.91	0.70
1:B:49:LYS:HZ1	1:B:61:ILE:N	1.89	0.70
3:D:244:VAL:O	3:D:248:ILE:HG13	1.90	0.70
2:C:190:TYR:CD2	10:K:62:ARG:HB3	2.26	0.70
2:C:102:VAL:HG13	2:C:958:GLN:HE21	1.56	0.70
6:G:111:LEU:H	6:G:111:LEU:CD1	2.03	0.70
3:D:74:SER:HB3	3:D:77:ILE:HG12	1.74	0.70
1:B:87:ALA:HB3	1:B:276:LEU:HD23	1.73	0.70
2:C:90:ILE:HD12	2:C:432:MET:SD	2.32	0.70
2:C:542:MET:CE	2:C:743:ILE:HG13	2.22	0.70
9:J:111:THR:HG22	9:J:112:SER:N	2.06	0.70
2:C:313:MET:HE3	2:C:386:LEU:HD22	1.74	0.70
1:B:340:LEU:HD13	1:B:1429:ILE:CG2	2.20	0.70
2:C:847:ASP:C	2:C:849:GLY:H	1.94	0.70
1:B:351:THR:HB	2:C:1103:ILE:HD12	1.74	0.70
1:B:53:LEU:CD2	1:B:54:ASN:H	2.00	0.70
1:B:567:LYS:HG3	1:B:568:PRO:HD2	1.73	0.70
8:I:100:THR:OG1	8:I:138:GLU:HG3	1.90	0.70
1:B:886:ILE:HG23	1:B:887:GLY:N	2.06	0.70
1:B:886:ILE:HD12	1:B:943:LEU:HB3	1.72	0.70
1:B:1445:ILE:CD1	1:B:1445:ILE:H	2.00	0.70

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:416:ARG:C	1:B:417:TYR:HD2	1.95	0.70
1:B:105:CYS:O	1:B:114:LEU:HG	1.92	0.70
1:B:567:LYS:HD3	8:I:95:TYR:CD2	2.27	0.69
1:B:1208:THR:HG22	1:B:1210:GLY:N	2.04	0.69
1:B:382:PRO:HB3	1:B:428:TYR:CE2	2.26	0.69
1:B:600:PRO:HG2	1:B:601:LYS:H	1.56	0.69
2:C:1122:ARG:HB3	15:T:22:DT:OP1	1.91	0.69
3:D:56:THR:HG22	3:D:58:LEU:HD23	1.73	0.69
1:B:915:SER:O	1:B:919:ILE:HG13	1.91	0.69
11:L:45:LEU:HG	11:L:94:ILE:HD13	1.73	0.69
1:B:1063:MET:CG	1:B:1436:ILE:HG23	2.22	0.69
2:C:654:ARG:H	2:C:657:HIS:CD2	2.08	0.69
1:B:881:GLN:HE22	1:B:960:ILE:H	1.39	0.69
3:D:209:TYR:H	3:D:209:TYR:HD1	1.40	0.69
3:D:184:ASN:HD21	3:D:187:LYS:HA	1.56	0.69
2:C:1085:ILE:HD12	2:C:1085:ILE:H	1.57	0.69
1:B:91:PHE:H	1:B:297:GLN:HE22	1.40	0.69
1:B:1436:ILE:HD13	2:C:1139:ILE:HG23	1.73	0.69
1:B:382:PRO:HB3	1:B:428:TYR:HE2	1.57	0.69
1:B:853:ASP:O	1:B:854:ASN:HB2	1.91	0.69
7:H:39:THR:HG22	7:H:41:LYS:H	1.57	0.69
11:L:29:ASN:O	11:L:76:GLN:HG3	1.92	0.69
2:C:52:ASN:OD1	2:C:177:LYS:HB2	1.92	0.69
5:F:135:PHE:HD2	5:F:140:LEU:HD21	1.56	0.69
2:C:1007:VAL:CG2	2:C:1008:PRO:HD2	2.22	0.69
1:B:49:LYS:NZ	1:B:61:ILE:HG13	2.07	0.69
2:C:916:THR:O	2:C:935:ARG:HG2	1.92	0.69
2:C:378:LEU:O	2:C:382:ILE:HG13	1.92	0.69
7:H:145:VAL:HG12	7:H:146:LYS:N	2.08	0.69
12:M:32:ALA:HB3	12:M:55:ILE:CD1	2.18	0.69
1:B:1445:ILE:HG12	7:H:18:PHE:CE2	2.27	0.69
7:H:59:GLY:HA3	7:H:70:PHE:CD2	2.28	0.69
1:B:535:THR:CG2	1:B:616:VAL:HA	2.20	0.69
11:L:50:LEU:HD11	11:L:75:ILE:HD13	1.75	0.69
2:C:728:ARG:NH1	2:C:1047:PHE:HB3	2.07	0.69
2:C:910:VAL:HG12	2:C:911:ILE:N	2.07	0.69
2:C:210:LYS:HD2	2:C:480:SER:OG	1.91	0.69
2:C:800:GLN:HG2	10:K:52:THR:HG21	1.73	0.69
7:H:61:ILE:HG23	7:H:66:GLY:O	1.93	0.69
8:I:40:LEU:HD22	8:I:123:MET:HE3	1.74	0.69
1:B:845:LEU:HB3	1:B:848:ILE:HD12	1.75	0.69

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:L:58:PHE:HE2	11:L:74:ARG:HE	1.39	0.69
5:F:14:ARG:HH21	5:F:141:VAL:HG12	1.57	0.69
2:C:1084:GLN:HE21	2:C:1084:GLN:H	1.40	0.69
6:G:109:VAL:HG12	6:G:110:ASP:H	1.57	0.69
5:F:22:MET:CE	5:F:26:ARG:HE	2.06	0.69
1:B:738:LYS:HB2	1:B:740:LEU:HG	1.74	0.69
1:B:567:LYS:HB3	8:I:95:TYR:HA	1.74	0.69
3:D:163:ILE:HD13	3:D:163:ILE:H	1.55	0.69
2:C:100:PRO:HG3	2:C:172:ILE:HD12	1.74	0.69
2:C:906:SER:O	2:C:941:LEU:HD23	1.93	0.69
13:N:2:DA:H2''	13:N:3:DG:O5'	1.93	0.69
15:T:25:DC:H42	15:T:26:DA:H62	1.24	0.69
1:B:1063:MET:SD	1:B:1436:ILE:HG23	2.33	0.69
1:B:182:VAL:HG22	1:B:201:VAL:HA	1.74	0.69
1:B:469:ARG:HH11	1:B:469:ARG:HB3	1.57	0.68
3:D:69:LEU:HD12	3:D:69:LEU:N	2.08	0.68
1:B:844:ALA:O	1:B:845:LEU:HD23	1.92	0.68
3:D:241:ASP:O	3:D:245:VAL:HG23	1.93	0.68
2:C:361:LEU:HD21	2:C:377:PHE:CD2	2.28	0.68
8:I:24:CYS:HB2	8:I:44:VAL:HG21	1.75	0.68
1:B:768:GLN:CG	1:B:816:HIS:HA	2.22	0.68
1:B:86:LEU:HG	1:B:237:THR:O	1.93	0.68
8:I:42:ILE:HG23	8:I:95:TYR:CE1	2.28	0.68
2:C:461:LEU:N	2:C:461:LEU:HD12	2.08	0.68
2:C:295:GLY:N	2:C:298:LEU:HD23	2.09	0.68
2:C:174:LEU:HD22	2:C:202:TYR:CE1	2.29	0.68
1:B:683:ILE:HG21	1:B:801:GLU:HG3	1.74	0.68
2:C:57:TYR:HD1	2:C:57:TYR:N	1.92	0.68
15:T:21:DA:C2'	15:T:22:DT:O5'	2.41	0.68
1:B:244:PRO:O	1:B:246:VAL:N	2.27	0.68
2:C:539:LEU:H	2:C:539:LEU:HD12	1.59	0.68
2:C:189:LEU:HD12	2:C:196:PRO:HA	1.74	0.68
6:G:111:LEU:HD12	6:G:111:LEU:N	2.06	0.68
6:G:82:THR:HG22	6:G:84:TYR:N	2.08	0.68
1:B:637:LYS:HB3	1:B:641:VAL:HG11	1.75	0.68
1:B:351:THR:HB	2:C:1103:ILE:CD1	2.24	0.68
2:C:798:TYR:CE2	3:D:62:PHE:CE2	2.81	0.68
2:C:569:TYR:CE1	2:C:589:VAL:HG21	2.29	0.68
2:C:579:ARG:HG2	2:C:579:ARG:HH11	1.58	0.68
2:C:1095:LEU:H	2:C:1095:LEU:HD12	1.59	0.68
2:C:570:VAL:HB	2:C:573:GLN:HB3	1.74	0.68

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:19:PHE:O	1:B:1416:ALA:HA	1.94	0.68
5:F:213:ILE:HG12	5:F:214:CYS:N	2.09	0.68
2:C:53:GLN:HG2	2:C:547:VAL:CG2	2.24	0.68
1:B:215:SER:HB3	1:B:218:ASP:OD2	1.94	0.68
1:B:92:HIS:HB3	1:B:95:PHE:HB2	1.76	0.68
12:M:38:LEU:O	12:M:39:SER:HB3	1.93	0.68
2:C:25:ILE:HD12	2:C:651:LEU:HD13	1.76	0.68
2:C:651:LEU:HD11	2:C:707:PRO:CB	2.24	0.68
2:C:243:ALA:CB	2:C:251:ILE:HG12	2.24	0.68
5:F:114:ASN:O	5:F:115:ASN:HB3	1.94	0.68
1:B:34:LYS:HG2	1:B:36:ARG:NH2	2.09	0.68
2:C:361:LEU:HD21	2:C:377:PHE:HD2	1.58	0.68
3:D:18:VAL:HG23	3:D:240:VAL:HB	1.76	0.68
2:C:405:ARG:NE	2:C:632:ARG:HG3	2.09	0.68
2:C:1180:PHE:HB3	2:C:1191:ILE:HD12	1.75	0.68
2:C:955:THR:HG22	2:C:956:THR:N	2.08	0.68
1:B:1127:ASP:CG	1:B:1130:GLN:HB2	2.14	0.68
3:D:142:VAL:H	10:K:16:ASP:HB3	1.58	0.67
3:D:144:ILE:HG22	3:D:145:CYS:N	2.09	0.67
2:C:589:VAL:HG12	2:C:590:HIS:N	2.09	0.67
1:B:1341:ILE:CG2	1:B:1342:GLU:H	2.06	0.67
2:C:619:ILE:HD12	9:J:65:ASP:HB2	1.76	0.67
2:C:398:ARG:HH11	2:C:398:ARG:HG3	1.59	0.67
2:C:380:TYR:O	2:C:384:ARG:HG2	1.95	0.67
7:H:9:LEU:HD12	7:H:10:ASN:N	2.10	0.67
1:B:1373:ASP:O	1:B:1376:THR:HG22	1.94	0.67
1:B:93:VAL:HG22	1:B:301:ALA:HA	1.76	0.67
1:B:1263:ILE:O	1:B:1267:MET:HG3	1.94	0.67
1:B:1198:ASP:HB3	1:B:1201:ALA:HB3	1.74	0.67
1:B:973:ILE:CD1	1:B:1038:THR:HG23	2.24	0.67
10:K:44:TYR:N	10:K:44:TYR:HD2	1.93	0.67
2:C:622:LYS:HE2	9:J:59:VAL:CG2	2.13	0.67
8:I:89:LEU:HB3	8:I:91:ASP:OD1	1.94	0.67
1:B:446:ARG:HB2	1:B:487:MET:SD	2.34	0.67
1:B:1152:ILE:HG23	1:B:1193:LEU:HD13	1.76	0.67
1:B:34:LYS:H	1:B:34:LYS:HD3	1.59	0.67
1:B:444:PHE:HB3	1:B:458:HIS:CD2	2.29	0.67
2:C:255:GLN:O	2:C:271:ALA:HB1	1.93	0.67
4:E:12:ARG:HH22	4:E:14:ARG:CG	2.02	0.67
5:F:13:TRP:O	5:F:16:PHE:HB3	1.95	0.67
1:B:973:ILE:HG21	1:B:1036:ARG:O	1.95	0.67

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:291:ILE:HD11	2:C:375:ALA:HB1	1.76	0.67
1:B:821:ARG:HD2	1:B:825:ILE:HD11	1.77	0.67
3:D:34:ARG:HA	3:D:37:MET:HE2	1.76	0.67
5:F:182:ASP:HB3	5:F:185:ALA:HB2	1.75	0.67
2:C:777:ALA:HA	2:C:1095:LEU:HA	1.75	0.67
1:B:519:PRO:HD3	1:B:631:HIS:HD1	1.60	0.67
1:B:1227:ILE:HG22	1:B:1228:TRP:N	2.09	0.67
5:F:161:LYS:HD2	5:F:195:VAL:HG23	1.76	0.67
3:D:17:ASN:N	3:D:240:VAL:HG11	2.10	0.67
2:C:185:THR:H	2:C:188:ASP:HB2	1.60	0.67
5:F:22:MET:HE3	5:F:26:ARG:HH21	1.58	0.67
2:C:1099:VAL:HG22	2:C:1103:ILE:HD13	1.74	0.67
1:B:577:ILE:O	1:B:580:VAL:HG23	1.94	0.67
1:B:341:MET:HE2	1:B:843:LYS:HZ1	1.58	0.67
3:D:5:GLY:O	3:D:7:GLN:HG3	1.95	0.67
2:C:1099:VAL:CG1	2:C:1100:ASP:N	2.58	0.67
4:E:47:LEU:HD13	4:E:48:ILE:N	2.10	0.67
1:B:61:ILE:HG22	1:B:62:ASP:H	1.58	0.67
1:B:1211:GLN:O	1:B:1214:GLU:HB2	1.95	0.67
4:E:153:ARG:HB3	4:E:154:PHE:CE1	2.30	0.67
7:H:96:GLN:HG3	7:H:97:HIS:CD2	2.30	0.67
2:C:842:ASN:O	2:C:846:ILE:HG13	1.95	0.67
7:H:145:VAL:HG12	7:H:146:LYS:H	1.60	0.67
8:I:63:LEU:C	8:I:90:ALA:HB3	2.16	0.67
5:F:191:LYS:O	5:F:193:GLY:N	2.27	0.67
3:D:46:ILE:HD12	3:D:67:LEU:HB3	1.77	0.66
1:B:567:LYS:CD	8:I:95:TYR:HA	2.25	0.66
2:C:911:ILE:HD11	2:C:941:LEU:HD13	1.76	0.66
7:H:111:THR:HG22	7:H:113:HIS:H	1.59	0.66
10:K:36:LEU:HB2	10:K:47:ARG:HH12	1.59	0.66
1:B:590:ARG:O	1:B:591:PHE:HB2	1.93	0.66
7:H:51:TYR:O	7:H:54:ILE:HG13	1.96	0.66
5:F:15:ALA:HA	5:F:140:LEU:O	1.95	0.66
1:B:794:PRO:HG2	1:B:795:GLU:OE2	1.95	0.66
2:C:101:MET:HB3	2:C:109:THR:HG22	1.76	0.66
2:C:794:ASN:C	2:C:795:ILE:HD12	2.15	0.66
1:B:29:ALA:HB1	2:C:1184:GLY:HA3	1.77	0.66
1:B:1445:ILE:N	1:B:1445:ILE:HD12	2.02	0.66
4:E:170:THR:CB	4:E:172:LEU:HG	2.22	0.66
1:B:399:HIS:CB	1:B:400:PRO:HD3	2.24	0.66
2:C:746:SER:HB2	2:C:1046:PRO:HG2	1.76	0.66

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:687:GLU:O	2:C:689:LEU:HG	1.96	0.66
8:I:27:GLU:HG2	8:I:39:THR:HG23	1.77	0.66
1:B:1325:THR:O	5:F:148:GLU:HB2	1.95	0.66
2:C:826:ALA:HB2	2:C:1008:PRO:HB3	1.77	0.66
1:B:903:ASN:HD22	1:B:904:THR:H	1.41	0.66
8:I:15:VAL:HG22	8:I:26:ILE:CD1	2.26	0.66
3:D:176:ILE:HG22	3:D:177:GLU:N	2.09	0.66
1:B:765:VAL:HG12	1:B:766:GLY:N	2.09	0.66
1:B:56:PRO:O	1:B:57:ARG:HD2	1.96	0.66
8:I:89:LEU:O	8:I:91:ASP:N	2.26	0.66
15:T:14:DC:H2"	15:T:15:DT:H71	1.77	0.66
9:J:7:CYS:HB3	9:J:14:LEU:HD21	1.77	0.66
2:C:243:ALA:HB2	2:C:251:ILE:HG12	1.78	0.66
1:B:285:PRO:HG2	1:B:288:ALA:HB3	1.77	0.66
9:J:80:SER:HB2	9:J:103:CYS:SG	2.36	0.66
1:B:418:SER:O	1:B:420:ARG:N	2.28	0.66
1:B:406:ILE:HG13	1:B:431:LYS:HB3	1.78	0.66
8:I:98:TYR:HE1	8:I:139:ASN:HA	1.61	0.66
1:B:899:VAL:CG1	1:B:908:LEU:HD21	2.24	0.66
2:C:792:MET:CE	2:C:857:ARG:HH12	2.08	0.66
1:B:852:TYR:CD2	1:B:1060:PRO:HB2	2.31	0.66
1:B:690:VAL:HG11	1:B:794:PRO:HD3	1.78	0.66
2:C:1016:ALA:O	2:C:1020:ARG:HG3	1.96	0.66
6:G:97:ARG:O	6:G:101:ILE:HG13	1.96	0.66
1:B:70:CYS:O	1:B:72:GLU:HG2	1.96	0.66
2:C:1202:LEU:O	2:C:1206:GLU:HG3	1.95	0.66
12:M:32:ALA:H	12:M:55:ILE:HG13	1.60	0.66
6:G:73:ALA:HA	6:G:143:PHE:CE1	2.30	0.66
2:C:278:GLN:HG2	2:C:279:ASP:N	2.05	0.66
12:M:40:LEU:HD22	12:M:44:ASP:CG	2.17	0.66
2:C:850:LEU:HD12	2:C:851:PHE:N	2.11	0.66
1:B:1242:VAL:O	1:B:1243:VAL:HB	1.96	0.66
1:B:606:LEU:HB3	1:B:614:PHE:CE2	2.31	0.66
1:B:382:PRO:HD3	1:B:428:TYR:CD2	2.30	0.66
1:B:332:LYS:HA	1:B:337:ARG:HD2	1.78	0.66
3:D:147:LEU:HD23	3:D:147:LEU:N	2.09	0.66
8:I:40:LEU:HD13	8:I:123:MET:HB2	1.78	0.66
1:B:567:LYS:HD3	8:I:95:TYR:HA	1.78	0.66
4:E:40:HIS:CB	7:H:73:LYS:NZ	2.58	0.66
1:B:50:ILE:C	1:B:52:GLY:H	2.00	0.66
4:E:53:SER:H	4:E:148:LEU:CD2	2.09	0.66

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:1180:PHE:HB3	2:C:1191:ILE:HD13	1.77	0.66
2:C:20:ASP:O	2:C:22:SER:N	2.28	0.66
7:H:117:GLN:C	7:H:119:LEU:H	1.98	0.66
1:B:441:PRO:HG3	1:B:498:ARG:HB2	1.77	0.65
2:C:327:ARG:O	2:C:331:LEU:HD13	1.95	0.65
2:C:990:ILE:HG22	2:C:991:GLY:N	2.10	0.65
2:C:63:ILE:O	2:C:67:SER:HB3	1.97	0.65
1:B:239:LEU:HD12	1:B:240:PRO:HD2	1.77	0.65
3:D:253:LYS:O	3:D:256:ALA:HB3	1.96	0.65
1:B:869:GLY:O	5:F:204:THR:HG21	1.96	0.65
3:D:179:GLU:HG2	3:D:180:TYR:H	1.61	0.65
2:C:1079:LYS:HG2	2:C:1080:LYS:H	1.61	0.65
1:B:714:PHE:O	1:B:718:VAL:HG23	1.97	0.65
1:B:870:GLU:HG2	5:F:208:TYR:CG	2.31	0.65
5:F:61:GLN:HB2	5:F:79:TRP:HE3	1.61	0.65
2:C:1001:PHE:CD2	3:D:34:ARG:NH2	2.65	0.65
1:B:590:ARG:HB2	1:B:590:ARG:HH11	1.61	0.65
1:B:443:LEU:CD2	1:B:455:MET:HB3	2.20	0.65
1:B:920:LEU:HD23	1:B:921:GLY:N	2.10	0.65
3:D:242:GLN:C	3:D:244:VAL:H	1.99	0.65
11:L:55:LYS:HD2	11:L:81:TYR:CD1	2.32	0.65
1:B:308:ILE:HG22	1:B:309:ALA:H	1.60	0.65
3:D:165:LYS:O	11:L:6:ARG:NH1	2.30	0.65
1:B:919:ILE:HG21	1:B:983:ILE:HD11	1.78	0.65
3:D:251:LEU:O	3:D:251:LEU:HD12	1.95	0.65
10:K:2:ILE:HG22	10:K:3:VAL:O	1.96	0.65
2:C:1160:VAL:HG11	2:C:1169:MET:SD	2.36	0.65
7:H:65:ASP:O	7:H:67:SER:N	2.29	0.65
1:B:298:PHE:CZ	1:B:314:ALA:HB2	2.32	0.65
1:B:298:PHE:HZ	1:B:314:ALA:HB2	1.61	0.65
1:B:90:VAL:HG11	1:B:297:GLN:HA	1.79	0.65
2:C:217:ARG:NE	2:C:405:ARG:HB2	2.10	0.65
2:C:563:MET:HE1	2:C:580:VAL:HB	1.77	0.65
1:B:310:GLY:O	1:B:312:PRO:HD2	1.97	0.65
6:G:135:ARG:HG2	6:G:137:TYR:CE1	2.31	0.65
3:D:43:THR:HG22	3:D:44:LEU:N	2.12	0.65
3:D:184:ASN:ND2	3:D:187:LYS:HA	2.12	0.65
2:C:1002:THR:O	2:C:1004:GLU:N	2.29	0.65
10:K:5:VAL:HG12	10:K:6:ARG:HG3	1.77	0.65
8:I:139:ASN:O	8:I:140:ALA:HB2	1.97	0.65
1:B:709:THR:HG22	1:B:711:ARG:N	2.12	0.65

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:314:LEU:HD12	2:C:314:LEU:H	1.61	0.65
7:H:115:MET:HB3	7:H:163:ILE:HD11	1.78	0.65
2:C:1079:LYS:HA	3:D:27:LEU:HD21	1.79	0.65
1:B:1450:LEU:O	1:B:1450:LEU:HG	1.96	0.65
8:I:43:ASN:ND2	8:I:46:LEU:HD12	2.11	0.65
1:B:49:LYS:HE2	1:B:61:ILE:HD12	1.77	0.65
2:C:1084:GLN:N	2:C:1084:GLN:NE2	2.44	0.65
1:B:34:LYS:HG2	1:B:36:ARG:HH21	1.60	0.65
2:C:1096:ARG:O	2:C:1097:HIS:HB2	1.97	0.65
3:D:214:ASN:HB3	3:D:217:ASP:OD2	1.96	0.65
1:B:560:ILE:HG13	8:I:78:SER:HB2	1.78	0.65
2:C:770:GLN:HG2	2:C:983:ARG:O	1.97	0.65
2:C:953:LEU:O	2:C:953:LEU:HD23	1.97	0.65
2:C:918:ILE:HD12	2:C:935:ARG:NH1	2.12	0.65
1:B:1411:GLU:HA	1:B:1414:ALA:HB3	1.78	0.65
1:B:1050:GLU:HG2	1:B:1051:ALA:N	2.12	0.65
1:B:353:ILE:HG21	1:B:487:MET:HG3	1.78	0.64
1:B:541:ILE:HD13	1:B:549:MET:HE3	1.78	0.64
5:F:17:ARG:O	5:F:21:GLU:HG3	1.96	0.64
9:J:26:LEU:HD23	9:J:37:GLU:HA	1.78	0.64
1:B:591:PHE:HA	1:B:595:THR:HG21	1.80	0.64
2:C:1166:CYS:HB2	2:C:1215:ARG:NH1	2.12	0.64
2:C:651:LEU:HD11	2:C:707:PRO:HB2	1.79	0.64
2:C:301:ILE:HG21	2:C:314:LEU:HD21	1.79	0.64
2:C:574:SER:HB3	2:C:577:ALA:HB2	1.79	0.64
1:B:305:ASP:OD1	1:B:326:ARG:HD2	1.98	0.64
11:L:57:LEU:HD12	11:L:77:THR:O	1.97	0.64
1:B:694:THR:O	1:B:698:GLN:HG3	1.96	0.64
2:C:210:LYS:HE2	2:C:462:ALA:CA	2.26	0.64
1:B:659:HIS:HA	2:C:1074:ASN:ND2	2.13	0.64
7:H:35:GLU:OE2	7:H:48:VAL:HG23	1.96	0.64
5:F:67:GLU:O	5:F:70:SER:HB3	1.96	0.64
1:B:504:LEU:HD11	6:G:91:ALA:HB1	1.78	0.64
1:B:1289:ARG:HD2	1:B:1303:GLU:OE2	1.97	0.64
2:C:880:THR:HG21	2:C:934:LYS:HE3	1.80	0.64
2:C:496:ARG:O	2:C:539:LEU:HD12	1.97	0.64
7:H:110:VAL:HG22	7:H:161:GLY:O	1.96	0.64
7:H:43:GLY:HA3	7:H:80:LYS:HB3	1.78	0.64
1:B:320:ARG:NH2	14:P:3:C:H1'	2.12	0.64
2:C:953:LEU:CD2	2:C:965:LYS:HB2	2.28	0.64
1:B:343:LYS:NZ	2:C:1151:LEU:HB3	2.12	0.64

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:896:ARG:NH2	1:B:1030:ARG:HH21	1.96	0.64
1:B:1348:LEU:HG	1:B:1372:VAL:CG2	2.27	0.64
1:B:960:ILE:O	1:B:963:ILE:HG22	1.98	0.64
2:C:57:TYR:CD1	2:C:57:TYR:N	2.63	0.64
4:E:180:LEU:HD23	4:E:195:ILE:HD12	1.77	0.64
3:D:61:GLU:HA	3:D:64:ALA:HB3	1.80	0.64
5:F:2:ASP:O	5:F:3:GLN:HG2	1.98	0.64
2:C:801:LYS:O	10:K:52:THR:CG2	2.45	0.64
2:C:801:LYS:O	10:K:52:THR:HG23	1.96	0.64
1:B:427:GLN:HG3	1:B:430:TRP:CZ2	2.32	0.64
1:B:961:ARG:HH11	1:B:961:ARG:HG3	1.62	0.64
1:B:1121:GLU:HG3	1:B:1122:PRO:HD2	1.78	0.64
3:D:261:ALA:HA	3:D:264:GLN:OE1	1.98	0.64
2:C:825:VAL:HG12	2:C:826:ALA:H	1.58	0.64
8:I:95:TYR:HE2	8:I:97:MET:CG	2.11	0.64
4:E:131:GLU:O	4:E:132:GLN:HG2	1.97	0.64
2:C:1079:LYS:HG2	2:C:1080:LYS:N	2.13	0.64
4:E:204:ASP:O	4:E:208:GLU:HB2	1.98	0.64
1:B:834:THR:HG21	1:B:1077:THR:HA	1.77	0.64
1:B:69:THR:O	1:B:71:GLN:N	2.30	0.64
12:M:39:SER:O	12:M:40:LEU:HG	1.98	0.64
5:F:23:VAL:O	5:F:28:TYR:HB2	1.97	0.64
2:C:269:ILE:HG21	2:C:282:ILE:HD13	1.79	0.64
1:B:444:PHE:HB3	1:B:458:HIS:HD2	1.63	0.64
10:K:35:ALA:O	10:K:39:LEU:HD12	1.97	0.64
2:C:114:PRO:HG3	2:C:181:LEU:HD11	1.80	0.64
1:B:768:GLN:HG2	1:B:816:HIS:CA	2.26	0.64
1:B:138:ILE:HG21	1:B:222:LEU:HD21	1.79	0.64
3:D:248:ILE:HD13	11:L:101:LEU:HD23	1.80	0.64
4:E:164:ILE:HG22	4:E:168:LYS:HG3	1.78	0.64
10:K:1:MET:N	10:K:56:LEU:N	2.45	0.64
2:C:577:ALA:CB	2:C:589:VAL:HG11	2.20	0.64
1:B:883:LEU:O	1:B:886:ILE:HG22	1.97	0.64
4:E:146:GLN:O	4:E:149:THR:HG22	1.97	0.64
2:C:652:LYS:HB3	2:C:689:LEU:HD23	1.80	0.64
2:C:661:LEU:HD23	2:C:679:TYR:O	1.97	0.64
2:C:956:THR:CG2	2:C:960:GLY:HA2	2.28	0.64
2:C:355:ILE:O	2:C:359:GLU:HB2	1.98	0.63
2:C:113:TYR:HE2	2:C:192:LEU:HD22	1.63	0.63
1:B:477:PRO:HG2	1:B:521:MET:HG2	1.80	0.63
1:B:853:ASP:OD1	1:B:855:THR:N	2.31	0.63

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:H:106:MET:HG2	7:H:107:LYS:H	1.60	0.63
2:C:1022:THR:O	2:C:1022:THR:HG23	1.98	0.63
1:B:1119:TYR:HA	1:B:1305:VAL:HG13	1.79	0.63
1:B:374:LEU:C	1:B:436:ILE:HD11	2.17	0.63
2:C:797:TYR:HB2	2:C:852:ARG:O	1.98	0.63
2:C:780:VAL:HG21	10:K:56:LEU:HD11	1.79	0.63
1:B:675:THR:O	1:B:679:ILE:HG13	1.97	0.63
1:B:1225:PHE:CZ	1:B:1227:ILE:HD11	2.33	0.63
1:B:184:SER:HB3	1:B:199:LEU:CD2	2.28	0.63
8:I:99:GLY:HA3	8:I:118:PHE:HA	1.81	0.63
1:B:883:LEU:HD11	1:B:1017:LEU:HD11	1.81	0.63
1:B:353:ILE:HD13	1:B:487:MET:CE	2.29	0.63
1:B:40:THR:HB	1:B:41:MET:HE3	1.79	0.63
2:C:65:GLU:OE2	2:C:247:GLY:HA2	1.95	0.63
1:B:40:THR:HB	1:B:41:MET:CE	2.27	0.63
2:C:899:ILE:CD1	2:C:911:ILE:HA	2.27	0.63
15:T:11:DT:H2"	15:T:12:DA:OP2	1.99	0.63
2:C:305:VAL:O	2:C:305:VAL:HG12	1.98	0.63
6:G:73:ALA:O	6:G:74:ILE:HG13	1.98	0.63
7:H:15:PRO:HG3	7:H:66:GLY:HA3	1.79	0.63
2:C:310:MET:O	2:C:313:MET:HB2	1.99	0.63
2:C:461:LEU:H	2:C:461:LEU:HD12	1.64	0.63
6:G:119:ARG:HG3	6:G:119:ARG:NH1	2.13	0.63
2:C:865:LYS:HB2	2:C:961:LEU:HD21	1.81	0.63
1:B:881:GLN:NE2	1:B:958:VAL:O	2.32	0.63
1:B:1120:LEU:H	1:B:1120:LEU:HD13	1.64	0.63
3:D:8:VAL:HG11	11:L:105:PHE:HD1	1.63	0.63
2:C:844:SER:HB3	2:C:848:ARG:HH12	1.64	0.63
10:K:43:ARG:H	10:K:43:ARG:HD3	1.63	0.63
1:B:901:LEU:O	1:B:921:GLY:N	2.31	0.63
1:B:372:LYS:HA	1:B:435:HIS:ND1	2.13	0.63
4:E:27:LEU:HD13	4:E:173:HIS:HB2	1.81	0.63
1:B:996:ASN:O	1:B:998:LEU:N	2.29	0.63
2:C:431:TYR:CD1	2:C:447:ALA:HB2	2.34	0.63
1:B:287:HIS:HA	1:B:290:GLU:HG2	1.81	0.63
8:I:95:TYR:CE2	8:I:97:MET:HG3	2.33	0.63
1:B:1022:LEU:HD11	1:B:1026:LEU:HD12	1.81	0.63
4:E:173:HIS:O	4:E:175:PHE:N	2.31	0.63
7:H:106:MET:CG	7:H:107:LYS:N	2.60	0.63
1:B:107:CYS:HA	1:B:171:GLN:OE1	1.98	0.63
5:F:13:TRP:CE3	5:F:39:LEU:HD13	2.34	0.63

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1042:PHE:CE2	1:B:1046:LEU:HD11	2.33	0.63
2:C:510:LYS:CG	2:C:511:PRO:HD3	2.28	0.63
1:B:32:VAL:HG21	1:B:68:GLN:HE21	1.64	0.63
2:C:113:TYR:CE2	2:C:192:LEU:HD22	2.34	0.63
1:B:535:THR:HG21	1:B:616:VAL:CA	2.24	0.63
1:B:899:VAL:HB	1:B:929:LEU:HD12	1.80	0.63
1:B:399:HIS:HB3	1:B:400:PRO:CD	2.27	0.63
3:D:164:ALA:HA	3:D:167:HIS:O	1.99	0.63
1:B:185:TRP:CZ3	1:B:200:ARG:HG2	2.34	0.63
1:B:751:SER:O	1:B:752:LYS:HB2	1.96	0.63
2:C:1020:ARG:HB2	2:C:1022:THR:HG22	1.79	0.63
2:C:105:SER:O	2:C:106:ASP:HB2	1.98	0.63
2:C:842:ASN:ND2	2:C:845:SER:OG	2.31	0.63
2:C:515:HIS:H	2:C:518:HIS:CD2	2.05	0.63
4:E:29:LEU:HD13	7:H:82:PHE:CZ	2.34	0.63
1:B:134:ARG:HD2	1:B:221:SER:O	1.99	0.63
3:D:18:VAL:CG2	3:D:240:VAL:HB	2.28	0.63
3:D:45:ALA:HA	3:D:72:LEU:CD1	2.28	0.63
7:H:15:PRO:CG	7:H:66:GLY:HA3	2.29	0.62
1:B:445:ASN:HB2	1:B:454:SER:O	1.98	0.62
11:L:21:ILE:HG23	11:L:31:VAL:CG1	2.28	0.62
11:L:31:VAL:HG12	11:L:32:VAL:N	2.14	0.62
2:C:821:GLN:NE2	2:C:851:PHE:HA	2.13	0.62
2:C:580:VAL:HG22	2:C:624:LEU:HB3	1.81	0.62
2:C:334:ILE:O	2:C:334:ILE:HG22	1.99	0.62
3:D:8:VAL:HG21	11:L:105:PHE:HA	1.80	0.62
1:B:1074:GLU:HB3	1:B:1075:PRO:HD3	1.81	0.62
1:B:78:PRO:HA	2:C:1201:LYS:NZ	2.14	0.62
2:C:192:LEU:O	2:C:193:LYS:HB2	1.99	0.62
1:B:902:LEU:HG	1:B:926:GLN:HG3	1.81	0.62
2:C:37:PHE:HE2	2:C:542:MET:HA	1.63	0.62
2:C:880:THR:HB	2:C:934:LYS:HD2	1.80	0.62
1:B:963:ILE:HD11	1:B:1048:ASN:CB	2.29	0.62
10:K:44:TYR:N	10:K:44:TYR:CD2	2.64	0.62
2:C:365:THR:HG23	2:C:367:LEU:H	1.65	0.62
2:C:579:ARG:NH1	2:C:579:ARG:HG2	2.14	0.62
2:C:193:LYS:NZ	12:M:32:ALA:HB1	2.15	0.62
1:B:519:PRO:HD3	1:B:631:HIS:ND1	2.14	0.62
2:C:515:HIS:O	2:C:518:HIS:HB2	2.00	0.62
1:B:41:MET:H	1:B:41:MET:HE3	1.64	0.62
2:C:850:LEU:HD12	2:C:851:PHE:H	1.65	0.62

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:J:50:THR:CG2	9:J:52:ILE:HG23	2.27	0.62
2:C:843:GLN:O	2:C:846:ILE:N	2.32	0.62
4:E:175:PHE:HZ	7:H:85:GLU:HG3	1.63	0.62
2:C:810:GLU:CA	2:C:815:ARG:HH12	2.09	0.62
2:C:314:LEU:O	2:C:317:CYS:HB3	1.98	0.62
1:B:684:ALA:O	1:B:687:LYS:HB2	2.00	0.62
1:B:513:SER:OG	1:B:515:GLN:HG2	1.99	0.62
1:B:252:PHE:O	1:B:253:ASN:HB2	1.98	0.62
2:C:839:MET:HG3	2:C:1010:LEU:CD1	2.22	0.62
3:D:235:VAL:HG12	10:K:13:VAL:CG2	2.29	0.62
3:D:31:ASN:OD1	3:D:34:ARG:HD3	1.98	0.62
3:D:100:THR:HG22	3:D:101:LEU:N	2.14	0.62
6:G:132:LEU:HD11	7:H:61:ILE:CD1	2.30	0.62
6:G:75:PRO:HG2	6:G:77:ASP:O	1.99	0.62
9:J:35:VAL:HG12	9:J:36:GLU:N	2.14	0.62
1:B:719:VAL:HG12	1:B:723:ASN:HD21	1.65	0.62
3:D:36:VAL:HG21	3:D:251:LEU:HB2	1.80	0.62
1:B:1224:LEU:HD11	1:B:1240:CYS:HB2	1.82	0.62
1:B:1441:PHE:CZ	6:G:89:GLU:HA	2.34	0.62
1:B:1325:THR:HG23	5:F:148:GLU:N	2.14	0.62
1:B:35:ILE:O	1:B:35:ILE:HG22	1.99	0.62
1:B:35:ILE:O	1:B:84:ILE:HG13	2.00	0.62
1:B:11:LEU:HD12	2:C:1193:GLN:O	2.00	0.62
2:C:792:MET:HE1	2:C:857:ARG:HH12	1.63	0.62
2:C:859:TYR:OH	2:C:941:LEU:HD12	1.99	0.62
1:B:341:MET:HE1	1:B:843:LYS:NZ	2.14	0.62
9:J:8:ARG:O	9:J:9:ASP:HB2	2.00	0.62
8:I:127:GLY:HA3	8:I:130:ARG:HH22	1.64	0.62
1:B:1349:TYR:CA	1:B:1372:VAL:HG21	2.29	0.62
1:B:863:VAL:HG11	1:B:866:PHE:CE2	2.34	0.62
1:B:1102:LYS:HG2	1:B:1106:ASN:HD21	1.64	0.62
2:C:526:GLU:HG2	2:C:538:ASN:HD22	1.64	0.62
1:B:2:VAL:HG11	2:C:1157:ALA:HB1	1.82	0.62
1:B:1029:ARG:HD2	1:B:1033:GLN:NE2	2.13	0.62
7:H:122:ASN:HD22	7:H:125:SER:HB3	1.64	0.62
2:C:115:GLN:HG2	2:C:193:LYS:HB2	1.81	0.62
2:C:604:ARG:NH1	2:C:691:GLU:OE2	2.33	0.62
1:B:222:LEU:O	1:B:224:PHE:N	2.33	0.62
3:D:163:ILE:HD11	11:L:10:PHE:CE1	2.34	0.62
1:B:316:GLN:HB2	1:B:322:VAL:HG23	1.82	0.62
2:C:220:GLY:O	2:C:222:ILE:HG13	2.00	0.62

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:364:ILE:HG12	2:C:585:VAL:HG13	1.80	0.62
1:B:1430:LEU:O	2:C:1196:ILE:HG22	2.00	0.62
1:B:57:ARG:HH11	1:B:57:ARG:HG2	1.64	0.62
4:E:30:GLY:O	4:E:32:GLU:N	2.33	0.62
7:H:106:MET:CG	7:H:107:LYS:H	2.12	0.62
1:B:110:CYS:SG	1:B:111:GLY:N	2.72	0.62
2:C:205:ILE:N	2:C:205:ILE:HD12	2.14	0.62
1:B:809:THR:HG23	1:B:812:GLU:OE1	2.00	0.62
1:B:55:ASP:N	1:B:56:PRO:HD3	2.15	0.62
1:B:67:CYS:C	1:B:68:GLN:HG3	2.21	0.62
4:E:7:THR:HG21	4:E:32:GLU:OE2	2.00	0.62
1:B:1153:TYR:CE1	9:J:42:LEU:HD13	2.35	0.62
2:C:405:ARG:HE	2:C:629:ASP:HB3	1.64	0.62
2:C:1181:GLU:CG	2:C:1188:LYS:HE3	2.30	0.62
5:F:153:HIS:HB3	5:F:196:VAL:HG11	1.82	0.62
1:B:2:VAL:CG1	2:C:1157:ALA:HB1	2.29	0.62
1:B:148:CYS:O	1:B:168:GLY:HA2	2.00	0.62
2:C:467:GLY:N	2:C:475:SER:HB3	2.15	0.62
3:D:147:LEU:HD12	3:D:151:GLN:O	2.00	0.61
1:B:54:ASN:C	1:B:56:PRO:HD3	2.20	0.61
5:F:15:ALA:O	5:F:19:VAL:HG23	2.00	0.61
2:C:36:ALA:HA	2:C:39:ARG:HD2	1.81	0.61
3:D:148:ARG:HD3	3:D:149:LYS:HG3	1.82	0.61
1:B:265:LYS:HD3	1:B:302:THR:HG22	1.82	0.61
1:B:38:PRO:HA	1:B:270:LEU:HD23	1.81	0.61
1:B:50:ILE:O	1:B:52:GLY:N	2.33	0.61
4:E:60:LYS:O	4:E:64:VAL:HG23	1.99	0.61
2:C:519:TRP:CH2	2:C:748:ILE:HD13	2.36	0.61
2:C:737:THR:CG2	9:J:66:PRO:HA	2.29	0.61
2:C:309:GLN:HG3	9:J:52:ILE:HD13	1.82	0.61
9:J:50:THR:HG23	9:J:52:ILE:CG2	2.30	0.61
2:C:792:MET:H	2:C:857:ARG:HA	1.64	0.61
1:B:180:LYS:HZ2	1:B:294:SER:HB3	1.66	0.61
1:B:1074:GLU:HB3	1:B:1075:PRO:CD	2.29	0.61
2:C:294:ASP:O	2:C:296:GLU:N	2.29	0.61
4:E:24:ALA:C	4:E:26:THR:H	2.04	0.61
2:C:1072:MET:HB2	2:C:1085:ILE:HD13	1.82	0.61
9:J:62:ILE:O	9:J:62:ILE:HG12	1.99	0.61
1:B:1155:ASP:OD2	1:B:1161:THR:HA	1.99	0.61
1:B:215:SER:HB3	1:B:218:ASP:CB	2.30	0.61
2:C:172:ILE:HD13	2:C:178:ASN:HD22	1.63	0.61

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:583:ASN:OD1	2:C:628:THR:HG22	2.00	0.61
3:D:31:ASN:O	3:D:34:ARG:HB3	2.00	0.61
2:C:1169:MET:CE	2:C:1201:LYS:HA	2.30	0.61
1:B:899:VAL:HG13	1:B:908:LEU:CD2	2.30	0.61
7:H:80:LYS:HD3	7:H:80:LYS:H	1.65	0.61
7:H:7:LEU:HD12	7:H:74:TYR:HH	1.65	0.61
1:B:885:THR:O	1:B:885:THR:HG22	1.99	0.61
2:C:108:VAL:HG12	2:C:109:THR:H	1.66	0.61
10:K:64:ASN:HB3	10:K:65:PRO:HD3	1.81	0.61
2:C:778:MET:CE	2:C:1094:ARG:HG2	2.28	0.61
2:C:910:VAL:HG12	2:C:911:ILE:H	1.63	0.61
1:B:184:SER:HB3	1:B:199:LEU:HD23	1.82	0.61
2:C:593:PRO:HG2	2:C:617:ARG:HH21	1.64	0.61
2:C:20:ASP:C	2:C:22:SER:H	2.02	0.61
1:B:1074:GLU:C	1:B:1076:ALA:H	2.02	0.61
11:L:61:TYR:CD2	11:L:61:TYR:C	2.70	0.61
3:D:116:LYS:HD3	3:D:140:ASN:HB3	1.82	0.61
2:C:1196:ILE:HD12	2:C:1200:ALA:CB	2.30	0.61
4:E:207:LEU:O	4:E:211:LEU:HB2	2.01	0.61
1:B:18:GLN:HB2	2:C:1215:ARG:HB2	1.82	0.61
2:C:745:PRO:O	2:C:747:MET:N	2.34	0.61
2:C:1182:CYS:O	2:C:1183:LYS:O	2.19	0.61
9:J:13:MET:CE	9:J:14:LEU:H	2.13	0.61
1:B:1348:LEU:HG	1:B:1372:VAL:HG23	1.83	0.61
1:B:88:LYS:HE3	1:B:280:GLU:OE2	2.00	0.61
2:C:1012:ILE:HD13	2:C:1092:TYR:OH	1.99	0.61
1:B:1444:MET:CG	7:H:60:ARG:HA	2.31	0.61
4:E:33:PHE:CE1	7:H:80:LYS:HE3	2.36	0.61
2:C:390:LEU:O	2:C:392:ARG:HG3	2.00	0.61
2:C:244:LEU:HD11	2:C:366:GLN:HE22	1.65	0.61
7:H:37:SER:OG	7:H:45:ILE:HB	2.01	0.61
1:B:1315:GLU:C	1:B:1317:MET:H	2.04	0.61
11:L:10:PHE:CD2	11:L:10:PHE:N	2.68	0.61
1:B:317:LYS:O	1:B:318:SER:HB3	1.99	0.61
3:D:238:ILE:HG22	3:D:243:VAL:HG23	1.82	0.61
2:C:287:ARG:HG2	2:C:292:ILE:HA	1.83	0.61
9:J:13:MET:HE3	9:J:14:LEU:H	1.65	0.61
1:B:417:TYR:HD2	1:B:417:TYR:N	1.99	0.61
10:K:8:PHE:H	10:K:49:MET:CE	2.13	0.61
7:H:26:LEU:HD11	7:H:70:PHE:CD1	2.36	0.61
1:B:222:LEU:O	1:B:224:PHE:HD1	1.83	0.61

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:884:ARG:HB2	2:C:935:ARG:HA	1.83	0.61
2:C:884:ARG:O	2:C:936:ASP:HB3	1.99	0.61
2:C:868:MET:O	2:C:870:ILE:HG13	2.00	0.61
1:B:152:VAL:HG13	1:B:153:PRO:HD2	1.82	0.61
1:B:890:ASP:H	1:B:1296:GLY:HA3	1.65	0.61
1:B:666:ILE:HD11	2:C:1067:ARG:O	2.01	0.61
1:B:57:ARG:NH1	1:B:57:ARG:HG2	2.15	0.61
7:H:66:GLY:O	7:H:67:SER:C	2.38	0.61
1:B:567:LYS:HD2	1:B:568:PRO:CD	2.31	0.61
8:I:44:VAL:O	8:I:44:VAL:HG12	2.00	0.61
1:B:224:PHE:CD2	1:B:231:PRO:HG3	2.36	0.61
1:B:266:LEU:HD21	1:B:303:TYR:CE1	2.36	0.61
2:C:44:VAL:CG1	2:C:199:MET:HG2	2.30	0.61
3:D:22:LEU:HD21	3:D:25:VAL:HG11	1.81	0.61
9:J:82:GLU:HB3	9:J:104:LEU:CD1	2.31	0.61
2:C:1079:LYS:CA	3:D:27:LEU:HD21	2.31	0.61
2:C:510:LYS:HG3	2:C:511:PRO:HD3	1.82	0.61
1:B:53:LEU:CD2	1:B:54:ASN:HD22	2.14	0.60
5:F:157:SER:OG	5:F:160:GLU:HG3	2.01	0.60
1:B:1325:THR:HG23	5:F:148:GLU:H	1.63	0.60
2:C:288:ALA:HB1	2:C:331:LEU:HD12	1.83	0.60
4:E:205:ASP:O	4:E:208:GLU:HB3	2.00	0.60
1:B:1404:GLU:HB2	1:B:1408:ILE:HG13	1.82	0.60
4:E:16:LYS:NZ	4:E:16:LYS:HB3	2.15	0.60
4:E:8:PHE:CE2	7:H:73:LYS:HD3	2.37	0.60
1:B:265:LYS:HG2	1:B:303:TYR:CA	2.30	0.60
1:B:806:ARG:HH12	2:C:729:ILE:HD11	1.66	0.60
1:B:446:ARG:CD	1:B:480:ALA:HB2	2.25	0.60
1:B:364:VAL:HG13	1:B:364:VAL:O	2.00	0.60
2:C:603:LEU:HD13	2:C:608:ASP:CB	2.30	0.60
1:B:500:GLU:OE2	1:B:1438:THR:HG21	2.01	0.60
2:C:642:ASP:HB3	2:C:649:LYS:HD2	1.84	0.60
1:B:1042:PHE:HE2	1:B:1046:LEU:HD11	1.66	0.60
2:C:1220:ARG:NH1	2:C:1220:ARG:HB3	2.16	0.60
2:C:735:ALA:O	2:C:738:PHE:HE1	1.84	0.60
1:B:635:ARG:HH11	1:B:635:ARG:HA	1.64	0.60
4:E:40:HIS:ND1	4:E:41:GLN:HG3	2.16	0.60
1:B:92:HIS:O	1:B:95:PHE:N	2.34	0.60
1:B:93:VAL:HG13	1:B:301:ALA:HB1	1.83	0.60
6:G:89:GLU:HB3	6:G:134:ILE:CD1	2.32	0.60
3:D:39:ALA:CA	3:D:164:ALA:HB3	2.31	0.60

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:758:PHE:HZ	2:C:1031:LEU:HD22	1.67	0.60
2:C:493:SER:HA	2:C:751:VAL:HG21	1.83	0.60
1:B:1443:VAL:O	1:B:1444:MET:HG3	2.02	0.60
1:B:93:VAL:HG21	1:B:301:ALA:O	2.01	0.60
15:T:24:DG:H5'	15:T:25:DC:OP2	2.02	0.60
1:B:1151:GLU:HA	9:J:44:TYR:O	2.01	0.60
2:C:217:ARG:HD2	2:C:217:ARG:O	2.00	0.60
2:C:37:PHE:HE1	2:C:41:LYS:HG3	1.64	0.60
2:C:745:PRO:C	2:C:747:MET:H	2.04	0.60
15:T:15:DT:H2''	15:T:16:DG:OP2	2.00	0.60
1:B:418:SER:C	1:B:420:ARG:H	2.04	0.60
2:C:1017:ILE:H	2:C:1018:PRO:CD	2.15	0.60
2:C:497:ARG:NH2	2:C:775:LYS:NZ	2.49	0.60
2:C:821:GLN:HE22	2:C:851:PHE:CA	2.13	0.60
1:B:341:MET:HE1	2:C:1135:ARG:NH1	2.16	0.60
1:B:741:ASN:HD22	1:B:742:ASN:N	2.00	0.60
1:B:1329:THR:HG22	1:B:1331:SER:N	2.17	0.60
1:B:1227:ILE:HG22	1:B:1228:TRP:H	1.66	0.60
2:C:878:GLN:HA	2:C:885:MET:SD	2.42	0.60
1:B:311:GLN:O	1:B:312:PRO:C	2.40	0.60
1:B:647:GLY:O	1:B:651:LYS:HG3	2.01	0.60
2:C:117:ALA:HB1	2:C:122:LEU:HB2	1.84	0.60
1:B:1001:ARG:O	1:B:1002:GLY:O	2.19	0.60
2:C:1106:ARG:HD2	2:C:1125:ASP:O	2.01	0.60
7:H:91:VAL:HG23	7:H:141:SER:O	2.02	0.60
2:C:215:GLN:NE2	2:C:215:GLN:HA	2.17	0.60
2:C:879:ARG:HD3	2:C:883:LEU:HD22	1.84	0.60
1:B:1101:LEU:HD11	1:B:1105:LEU:HD11	1.83	0.60
5:F:55:ARG:C	5:F:57:MET:H	2.05	0.60
1:B:871:ASP:OD2	1:B:873:MET:HB2	2.02	0.60
1:B:350:ARG:HB2	2:C:1128:LEU:HD11	1.83	0.60
1:B:1161:THR:HG22	1:B:1163:ILE:HG13	1.82	0.60
4:E:145:MET:O	4:E:149:THR:HB	2.01	0.60
2:C:983:ARG:HD2	2:C:1091:TYR:HB3	1.84	0.60
9:J:106:CYS:SG	9:J:108:HIS:HB2	2.42	0.60
5:F:48:ASP:CG	5:F:49:SER:H	2.03	0.60
2:C:992:ILE:HD11	11:L:66:PRO:HB2	1.84	0.60
2:C:562:GLY:O	2:C:590:HIS:ND1	2.31	0.59
2:C:273:LEU:HD12	2:C:276:ILE:HD11	1.84	0.59
7:H:1:MET:SD	7:H:79:PHE:CD1	2.95	0.59
2:C:1181:GLU:HG3	2:C:1188:LYS:CE	2.32	0.59

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:281:PRO:HG2	2:C:284:ILE:HG13	1.83	0.59
2:C:67:SER:HB2	2:C:92:PHE:HD1	1.67	0.59
8:I:102:TYR:N	8:I:102:TYR:CD2	2.70	0.59
4:E:64:VAL:HG22	4:E:129:LEU:HD22	1.83	0.59
1:B:339:ASN:HB3	2:C:1117:GLN:NE2	2.17	0.59
2:C:496:ARG:HH12	2:C:539:LEU:HB2	1.66	0.59
1:B:351:THR:CG2	2:C:1103:ILE:HG13	2.32	0.59
2:C:373:ARG:HA	2:C:566:LEU:HD23	1.84	0.59
7:H:23:LYS:HG3	7:H:56:ILE:HD13	1.85	0.59
1:B:567:LYS:HB2	1:B:568:PRO:CD	2.32	0.59
8:I:81:PRO:CB	8:I:82:PRO:CD	2.80	0.59
1:B:925:LEU:HD13	1:B:983:ILE:HD12	1.83	0.59
2:C:980:PHE:HD2	2:C:1094:ARG:HA	1.67	0.59
2:C:882:THR:HG22	2:C:884:ARG:HB2	1.83	0.59
1:B:986:ILE:HD12	1:B:1032:LEU:HD11	1.84	0.59
1:B:1349:TYR:CE1	1:B:1368:MET:HE3	2.37	0.59
1:B:1027:ALA:O	1:B:1031:VAL:HG23	2.02	0.59
3:D:138:GLU:N	3:D:138:GLU:OE1	2.36	0.59
5:F:118:PRO:O	5:F:122:LYS:HG3	2.02	0.59
1:B:466:SER:HB3	11:L:2:ASN:ND2	2.17	0.59
3:D:112:ASN:HB3	3:D:114:TYR:CE1	2.38	0.59
1:B:1420:ASP:HB3	1:B:1422:ARG:HG3	1.83	0.59
2:C:519:TRP:HE1	2:C:635:ARG:NH2	2.00	0.59
2:C:847:ASP:C	2:C:849:GLY:N	2.56	0.59
2:C:286:PHE:CD1	2:C:297:ILE:HG23	2.38	0.59
1:B:1143:LEU:HB2	1:B:1271:ILE:HG21	1.83	0.59
2:C:865:LYS:HZ2	2:C:869:SER:HA	1.65	0.59
2:C:956:THR:HG23	2:C:960:GLY:HA2	1.84	0.59
1:B:1129:GLU:HG3	1:B:1132:LYS:HD2	1.83	0.59
10:K:28:ASP:O	10:K:30:LEU:HG	2.01	0.59
1:B:358:ASN:C	1:B:359:LEU:HD23	2.23	0.59
2:C:782:LEU:HD12	2:C:788:ARG:HH11	1.66	0.59
2:C:600:LEU:O	2:C:609:ILE:HD12	2.02	0.59
1:B:445:ASN:HB2	1:B:455:MET:HA	1.84	0.59
1:B:511:ILE:HA	1:B:521:MET:HE3	1.84	0.59
3:D:73:GLN:NE2	3:D:75:MET:HB2	2.18	0.59
1:B:1076:ALA:HA	1:B:1079:MET:CE	2.32	0.59
4:E:54:GLU:O	4:E:58:VAL:HG23	2.03	0.59
10:K:7:CYS:SG	10:K:49:MET:HE3	2.42	0.59
1:B:1017:LEU:HB2	5:F:206:GLY:N	2.09	0.59
1:B:994:GLN:O	1:B:996:ASN:N	2.35	0.59

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1120:LEU:HD23	1:B:1124:HIS:O	2.02	0.59
1:B:629:LEU:HD22	1:B:633:VAL:HG23	1.83	0.59
2:C:1099:VAL:CG1	2:C:1100:ASP:H	2.15	0.59
10:K:16:ASP:OD1	10:K:17:LYS:HD2	2.02	0.59
1:B:1341:ILE:CG2	1:B:1342:GLU:N	2.63	0.59
1:B:1420:ASP:O	1:B:1421:CYS:HB2	2.02	0.59
1:B:230:ARG:HB2	1:B:233:TRP:CE3	2.38	0.59
1:B:1193:LEU:HB2	1:B:1260:LEU:HD11	1.83	0.59
2:C:806:THR:HG23	2:C:1046:PRO:HD3	1.85	0.59
1:B:195:ASP:O	1:B:196:GLU:HB3	2.01	0.59
2:C:402:GLY:CA	2:C:695:ALA:HB3	2.32	0.59
7:H:31:LEU:CD2	7:H:48:VAL:HG21	2.33	0.59
2:C:982:SER:HB3	2:C:1092:TYR:HE2	1.66	0.59
3:D:35:ARG:NH1	11:L:41:THR:H	1.99	0.59
10:K:14:VAL:HG12	10:K:50:ILE:HD11	1.84	0.59
4:E:195:ILE:HG22	4:E:198:LEU:HG	1.84	0.59
2:C:982:SER:HB3	2:C:1092:TYR:CE2	2.37	0.59
1:B:629:LEU:O	1:B:633:VAL:HG23	2.03	0.59
1:B:1041:ALA:O	1:B:1045:VAL:HG23	2.02	0.59
2:C:610:ASN:HB3	2:C:613:VAL:HG23	1.84	0.59
2:C:604:ARG:HA	2:C:609:ILE:O	2.03	0.59
1:B:901:LEU:HG	1:B:926:GLN:HE21	1.68	0.59
1:B:144:THR:O	1:B:146:MET:HG3	2.03	0.59
2:C:100:PRO:CD	2:C:180:TYR:HE1	2.12	0.59
9:J:69:PRO:HG2	9:J:85:PHE:CD2	2.38	0.59
1:B:341:MET:CE	1:B:843:LYS:NZ	2.66	0.59
1:B:1148:ILE:HG23	9:J:49:ILE:HB	1.84	0.59
1:B:979:SER:OG	1:B:980:ASP:N	2.32	0.59
8:I:98:TYR:CE1	8:I:139:ASN:HA	2.38	0.59
1:B:477:PRO:CG	1:B:521:MET:HG2	2.33	0.59
1:B:40:THR:C	1:B:41:MET:HG3	2.22	0.59
2:C:563:MET:HE3	2:C:580:VAL:HB	1.82	0.59
11:L:55:LYS:HD2	11:L:81:TYR:HD1	1.68	0.59
2:C:797:TYR:OH	2:C:971:THR:HG21	2.03	0.59
1:B:381:THR:C	1:B:383:TYR:H	2.06	0.59
2:C:280:ILE:HB	2:C:285:ILE:HD11	1.83	0.58
6:G:111:LEU:O	6:G:113:GLY:N	2.36	0.58
2:C:1181:GLU:H	2:C:1188:LYS:HG2	1.69	0.58
2:C:331:LEU:O	2:C:334:ILE:HB	2.03	0.58
1:B:1050:GLU:O	1:B:1053:PHE:N	2.36	0.58
2:C:171:PRO:HD2	2:C:457:LEU:HD13	1.85	0.58

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:K:22:LEU:O	10:K:22:LEU:HD12	2.02	0.58
2:C:833:TYR:N	2:C:833:TYR:HD1	2.02	0.58
1:B:679:ILE:HG12	1:B:732:LEU:CD1	2.33	0.58
12:M:30:ILE:HG22	12:M:31:CYS:N	2.17	0.58
2:C:1167:GLY:HA3	2:C:1216:LEU:H	1.68	0.58
7:H:129:SER:HB3	7:H:138:THR:OG1	2.03	0.58
2:C:126:SER:OG	2:C:172:ILE:HD11	2.03	0.58
2:C:955:THR:CG2	2:C:956:THR:H	2.14	0.58
2:C:102:VAL:HG13	2:C:958:GLN:NE2	2.18	0.58
1:B:901:LEU:HD22	1:B:919:ILE:HG22	1.83	0.58
1:B:932:GLU:OE1	1:B:987:VAL:HG22	2.03	0.58
7:H:114:LEU:HG	7:H:162:SER:HB3	1.84	0.58
1:B:663:SER:OG	1:B:664:THR:N	2.36	0.58
1:B:71:GLN:HG3	1:B:72:GLU:N	2.19	0.58
8:I:118:PHE:O	8:I:120:GLY:N	2.35	0.58
1:B:886:ILE:CG2	1:B:887:GLY:N	2.66	0.58
7:H:138:THR:CG2	7:H:139:ILE:HG13	2.33	0.58
2:C:885:MET:HA	2:C:936:ASP:HB3	1.85	0.58
2:C:731:VAL:HG12	2:C:732:SER:N	2.18	0.58
1:B:986:ILE:HG22	1:B:987:VAL:N	2.18	0.58
2:C:98:THR:HG23	2:C:127:GLY:O	2.03	0.58
1:B:469:ARG:HB3	1:B:469:ARG:NH1	2.19	0.58
3:D:98:VAL:HG12	3:D:99:LEU:N	2.18	0.58
1:B:335:ARG:HH11	2:C:1202:LEU:HD13	1.66	0.58
2:C:273:LEU:HB2	2:C:276:ILE:CD1	2.34	0.58
1:B:446:ARG:HB2	1:B:487:MET:HG2	1.86	0.58
1:B:35:ILE:HB	1:B:83:HIS:O	2.02	0.58
2:C:806:THR:HB	2:C:809:MET:HG3	1.84	0.58
2:C:701:ILE:HD11	2:C:703:ILE:HD11	1.84	0.58
2:C:811:TYR:N	2:C:811:TYR:CD1	2.70	0.58
2:C:880:THR:O	2:C:881:ASN:HB2	2.02	0.58
3:D:98:VAL:HG12	3:D:99:LEU:H	1.67	0.58
1:B:49:LYS:HZ1	1:B:61:ILE:HG13	1.66	0.58
2:C:1163:CYS:SG	2:C:1165:ILE:HB	2.44	0.58
7:H:45:ILE:HD13	7:H:78:VAL:CG1	2.34	0.58
1:B:947:PHE:HE2	1:B:954:TRP:CD2	2.22	0.58
2:C:978:ASP:OD2	2:C:1098:MET:HG2	2.03	0.58
1:B:675:THR:OG1	1:B:736:ASN:ND2	2.37	0.58
1:B:787:PHE:CE1	1:B:796:SER:HA	2.38	0.58
2:C:118:ARG:HG2	2:C:204:ILE:HD13	1.86	0.58
1:B:403:LYS:O	1:B:415:LEU:HB2	2.03	0.58

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1299:VAL:HG12	1:B:1300:LYS:H	1.68	0.58
2:C:843:GLN:O	2:C:846:ILE:HB	2.03	0.58
3:D:172:PRO:O	3:D:235:VAL:CG2	2.52	0.58
1:B:567:LYS:CB	1:B:568:PRO:CD	2.81	0.58
1:B:997:LEU:HD13	1:B:1018:PHE:HE2	1.69	0.58
4:E:14:ARG:NH2	4:E:16:LYS:HZ1	1.94	0.58
1:B:41:MET:HB3	1:B:50:ILE:H	1.69	0.58
2:C:313:MET:O	2:C:316:PRO:HD2	2.03	0.58
6:G:75:PRO:C	6:G:77:ASP:H	2.07	0.58
5:F:127:ILE:HG13	5:F:127:ILE:O	2.04	0.58
1:B:69:THR:C	1:B:71:GLN:H	2.07	0.58
4:E:5:THR:HG23	7:H:9:LEU:HB2	1.86	0.58
7:H:1:MET:O	7:H:3:PHE:CE1	2.57	0.58
1:B:84:ILE:HG22	1:B:239:LEU:HB3	1.85	0.58
2:C:121:ASN:HA	2:C:207:GLY:CA	2.28	0.58
11:L:42:LEU:O	11:L:46:ILE:HG13	2.04	0.58
1:B:798:GLY:HA2	1:B:815:PHE:HD1	1.68	0.58
2:C:542:MET:HE1	2:C:743:ILE:HG13	1.86	0.58
1:B:7:SER:HB3	2:C:1193:GLN:OE1	2.04	0.58
2:C:857:ARG:HD2	2:C:945:GLU:OE1	2.03	0.58
2:C:521:LEU:HB3	2:C:633:VAL:HG11	1.86	0.58
2:C:184:ALA:HB1	2:C:188:ASP:HB3	1.85	0.58
6:G:79:ARG:HB3	6:G:144:GLU:CD	2.23	0.58
2:C:398:ARG:HG3	2:C:398:ARG:NH1	2.18	0.58
1:B:1317:MET:O	1:B:1322:ILE:HD11	2.03	0.58
5:F:111:VAL:HG12	5:F:137:GLU:HG2	1.86	0.58
1:B:652:VAL:HG12	1:B:653:VAL:N	2.18	0.58
2:C:1172:ILE:HG22	2:C:1172:ILE:O	2.03	0.58
3:D:38:ILE:HA	3:D:173:ALA:CB	2.33	0.58
1:B:55:ASP:O	1:B:55:ASP:CG	2.41	0.58
1:B:981:LEU:HD23	1:B:1039:LYS:HA	1.85	0.58
1:B:499:ALA:O	1:B:503:GLN:HB2	2.04	0.58
2:C:310:MET:O	2:C:314:LEU:HD12	2.04	0.58
1:B:1118:VAL:HG23	1:B:1306:LEU:HB2	1.85	0.58
2:C:471:LYS:O	2:C:472:ALA:CB	2.52	0.58
1:B:913:LEU:HD23	1:B:919:ILE:HD12	1.84	0.57
2:C:244:LEU:O	2:C:249:ARG:HG2	2.03	0.57
2:C:862:GLN:HG2	2:C:963:PHE:HD1	1.69	0.57
2:C:129:PHE:CE2	2:C:166:PHE:HD1	2.22	0.57
1:B:63:ARG:HA	1:B:74:MET:SD	2.44	0.57
1:B:1436:ILE:O	1:B:1437:GLY:C	2.43	0.57

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:H:127:PRO:HG3	7:H:139:ILE:HD12	1.86	0.57
3:D:232:VAL:HG21	3:D:244:VAL:HG22	1.86	0.57
3:D:6:PRO:CB	3:D:25:VAL:HG12	2.33	0.57
9:J:99:LEU:N	9:J:99:LEU:HD23	2.19	0.57
1:B:711:ARG:NH2	9:J:87:GLN:OE1	2.38	0.57
2:C:617:ARG:HA	2:C:624:LEU:HD12	1.87	0.57
2:C:56:ASP:HB3	2:C:57:TYR:CD1	2.38	0.57
2:C:63:ILE:HA	2:C:421:PHE:CE2	2.39	0.57
11:L:18:LYS:NZ	11:L:38:GLU:HG2	2.19	0.57
1:B:584:ASN:HA	1:B:609:ASP:O	2.04	0.57
1:B:756:ILE:O	1:B:759:ALA:HB3	2.04	0.57
1:B:438:ASP:OD1	1:B:461:LYS:HA	2.04	0.57
2:C:459:TYR:CE1	2:C:469:GLN:HG2	2.39	0.57
4:E:34:GLN:C	4:E:36:LYS:H	2.07	0.57
11:L:68:PHE:HD1	11:L:70:ARG:NH1	2.01	0.57
1:B:1402:PHE:CD1	1:B:1403:GLU:HG3	2.38	0.57
1:B:1057:VAL:HG12	1:B:1058:VAL:N	2.19	0.57
1:B:814:PHE:O	1:B:818:MET:HG3	2.04	0.57
4:E:66:ARG:HD2	4:E:133:THR:HB	1.84	0.57
1:B:138:ILE:HG21	1:B:222:LEU:CD2	2.33	0.57
2:C:1192:TYR:CD1	2:C:1192:TYR:N	2.73	0.57
2:C:388:CYS:O	2:C:390:LEU:N	2.36	0.57
1:B:1138:ILE:HG21	1:B:1316:VAL:HG13	1.87	0.57
5:F:22:MET:HE2	5:F:26:ARG:HE	1.70	0.57
1:B:1127:ASP:OD1	1:B:1130:GLN:HB2	2.04	0.57
2:C:446:LEU:HG	2:C:446:LEU:O	2.03	0.57
1:B:1230:GLU:O	1:B:1232:ASN:N	2.38	0.57
1:B:1205:LYS:O	1:B:1207:LEU:HG	2.03	0.57
2:C:834:ASN:HB3	2:C:840:ILE:HG13	1.85	0.57
3:D:31:ASN:HA	3:D:34:ARG:HB3	1.86	0.57
1:B:1373:ASP:HA	1:B:1376:THR:CG2	2.33	0.57
1:B:401:GLY:C	1:B:435:HIS:CD2	2.78	0.57
2:C:778:MET:HE1	2:C:1094:ARG:NE	2.19	0.57
2:C:882:THR:CG2	2:C:884:ARG:HB2	2.35	0.57
1:B:417:TYR:CD2	1:B:417:TYR:N	2.72	0.57
1:B:147:VAL:O	1:B:149:GLU:HG3	2.04	0.57
9:J:119:THR:O	9:J:119:THR:HG22	2.04	0.57
9:J:15:TYR:CD1	9:J:15:TYR:N	2.71	0.57
5:F:178:ILE:HB	5:F:212:ARG:HD3	1.85	0.57
4:E:16:LYS:HG2	4:E:18:VAL:HG12	1.86	0.57
4:E:37:GLN:OE1	7:H:5:LYS:HD2	2.05	0.57

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:D:43:THR:CG2	3:D:44:LEU:H	2.10	0.57
1:B:180:LYS:HZ1	1:B:294:SER:HB3	1.65	0.57
13:N:2:DA:C2'	13:N:3:DG:C8	2.88	0.57
2:C:363:HIS:O	2:C:364:ILE:HB	2.04	0.57
2:C:361:LEU:HD11	2:C:381:MET:HE1	1.85	0.57
2:C:1197:PRO:O	2:C:1200:ALA:HB3	2.04	0.57
2:C:273:LEU:HD22	2:C:360:PHE:HD1	1.69	0.57
2:C:803:LEU:HD12	2:C:1032:SER:HB3	1.86	0.57
1:B:984:LYS:HG2	1:B:988:LEU:HD12	1.86	0.57
1:B:726:ARG:O	1:B:729:ALA:HB3	2.04	0.57
10:K:23:ASN:O	10:K:25:LEU:N	2.38	0.57
2:C:254:LEU:HD23	2:C:381:MET:HE1	1.86	0.57
2:C:582:VAL:HB	2:C:587:HIS:CD2	2.40	0.57
1:B:445:ASN:HA	1:B:478:TYR:HE2	1.70	0.57
1:B:35:ILE:HA	1:B:52:GLY:O	2.04	0.57
1:B:320:ARG:HH22	14:P:3:C:H1'	1.67	0.57
12:M:27:LEU:HB3	12:M:37:LYS:CD	2.34	0.57
1:B:87:ALA:CB	1:B:276:LEU:HD23	2.35	0.57
7:H:83:LYS:HE2	7:H:150:CYS:H	1.68	0.57
2:C:1069:PHE:N	2:C:1069:PHE:CD1	2.73	0.57
1:B:667:GLY:HA3	3:D:192:TRP:HH2	1.69	0.57
1:B:567:LYS:HB3	8:I:95:TYR:CA	2.34	0.57
1:B:1198:ASP:HB3	1:B:1201:ALA:CB	2.34	0.57
8:I:128:ASN:H	8:I:130:ARG:NH2	2.02	0.57
1:B:903:ASN:ND2	1:B:904:THR:N	2.52	0.57
1:B:903:ASN:O	1:B:907:THR:HB	2.05	0.57
1:B:1276:VAL:HB	1:B:1279:ILE:HD12	1.86	0.57
1:B:84:ILE:HD11	1:B:270:LEU:HD13	1.87	0.57
1:B:545:GLN:C	1:B:547:LEU:N	2.56	0.57
1:B:346:ASP:HB3	2:C:1108:ARG:H	1.70	0.57
3:D:74:SER:HB3	3:D:77:ILE:CG1	2.34	0.57
5:F:100:ILE:HG23	5:F:105:PHE:CD1	2.39	0.57
1:B:436:ILE:N	1:B:436:ILE:HD13	2.19	0.57
14:P:5:C:H2'	14:P:6:A:C8	2.40	0.57
7:H:154:VAL:HG12	7:H:155:SER:N	2.20	0.57
2:C:176:SER:O	2:C:182:SER:HB3	2.05	0.57
2:C:240:ILE:CG2	2:C:254:LEU:HB3	2.35	0.56
1:B:1373:ASP:CA	1:B:1376:THR:HG22	2.34	0.56
1:B:37:PHE:N	1:B:37:PHE:HD1	2.03	0.56
9:J:92:ARG:HG2	9:J:94:ASP:OD1	2.05	0.56
14:P:6:A:H2'	14:P:7:A:C8	2.40	0.56

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:433:GLN:O	2:C:434:ARG:HG3	2.05	0.56
2:C:345:LYS:O	2:C:347:LYS:HG2	2.05	0.56
2:C:780:VAL:HG12	2:C:782:LEU:O	2.05	0.56
1:B:541:ILE:HD13	1:B:549:MET:HE1	1.87	0.56
4:E:153:ARG:C	4:E:154:PHE:CD1	2.78	0.56
12:M:25:ALA:O	12:M:26:THR:HB	2.05	0.56
2:C:1002:THR:O	2:C:1005:GLY:N	2.37	0.56
3:D:116:LYS:O	3:D:118:LEU:N	2.37	0.56
1:B:590:ARG:HD3	1:B:604:GLY:HA2	1.87	0.56
7:H:23:LYS:HG3	7:H:56:ILE:CD1	2.35	0.56
7:H:13:LEU:O	7:H:67:SER:HA	2.05	0.56
7:H:26:LEU:HD12	7:H:56:ILE:HG21	1.86	0.56
1:B:596:THR:C	1:B:598:LEU:H	2.08	0.56
1:B:901:LEU:HA	1:B:907:THR:OG1	2.06	0.56
2:C:129:PHE:HE2	2:C:166:PHE:CD1	2.22	0.56
2:C:129:PHE:HE2	2:C:166:PHE:HD1	1.54	0.56
1:B:1373:ASP:O	1:B:1376:THR:N	2.39	0.56
1:B:401:GLY:C	1:B:435:HIS:HD2	2.09	0.56
1:B:22:PHE:CD1	2:C:1213:THR:HG22	2.40	0.56
1:B:90:VAL:HG13	1:B:297:GLN:HA	1.86	0.56
3:D:249:ASP:O	3:D:252:GLN:HB3	2.05	0.56
4:E:64:VAL:O	4:E:67:ARG:N	2.38	0.56
7:H:129:SER:CB	7:H:138:THR:OG1	2.52	0.56
2:C:180:TYR:HD1	2:C:180:TYR:H	1.53	0.56
3:D:20:PHE:HE1	3:D:22:LEU:HB2	1.71	0.56
1:B:1072:ILE:HD11	1:B:1368:MET:HA	1.86	0.56
1:B:881:GLN:NE2	1:B:959:ASN:HA	2.21	0.56
1:B:881:GLN:O	1:B:953:ASN:HA	2.05	0.56
1:B:719:VAL:CG1	1:B:723:ASN:HD21	2.18	0.56
3:D:137:LYS:HB3	3:D:138:GLU:OE1	2.04	0.56
1:B:984:LYS:O	1:B:988:LEU:HB2	2.06	0.56
2:C:999:MET:HG2	2:C:1007:VAL:HG22	1.86	0.56
2:C:838:SER:HA	2:C:989:THR:O	2.05	0.56
10:K:14:VAL:CG1	10:K:50:ILE:HD11	2.36	0.56
10:K:57:ILE:HA	10:K:60:PHE:CD2	2.30	0.56
1:B:1444:MET:HG2	7:H:60:ARG:HA	1.87	0.56
2:C:278:GLN:CG	2:C:279:ASP:H	2.06	0.56
3:D:258:ILE:HG23	11:L:19:LEU:HD11	1.88	0.56
11:L:19:LEU:HD22	11:L:33:ILE:CG2	2.36	0.56
1:B:494:SER:O	1:B:497:THR:HB	2.05	0.56
2:C:1187:ASN:O	2:C:1188:LYS:CB	2.54	0.56

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:751:SER:O	1:B:752:LYS:CB	2.53	0.56
5:F:147:HIS:HD2	5:F:149:LEU:HB2	1.70	0.56
1:B:34:LYS:N	1:B:34:LYS:HD3	2.20	0.56
1:B:1130:GLN:O	1:B:1134:ILE:HG13	2.04	0.56
4:E:198:LEU:O	4:E:200:ASN:N	2.38	0.56
1:B:719:VAL:HG12	1:B:723:ASN:ND2	2.20	0.56
2:C:204:ILE:C	2:C:205:ILE:HD12	2.25	0.56
1:B:1334:ASP:C	1:B:1336:MET:H	2.07	0.56
1:B:334:GLY:O	1:B:336:ILE:N	2.39	0.56
5:F:5:ASN:O	5:F:9:ILE:HG13	2.05	0.56
8:I:36:CYS:HA	8:I:126:GLU:O	2.05	0.56
2:C:1099:VAL:HG13	2:C:1100:ASP:H	1.70	0.56
1:B:225:ASN:ND2	1:B:227:VAL:H	2.03	0.56
1:B:503:GLN:C	1:B:504:LEU:HD12	2.25	0.56
1:B:524:VAL:CG1	1:B:525:GLN:H	2.12	0.56
1:B:586:ILE:CG2	1:B:587:HIS:N	2.68	0.56
2:C:496:ARG:HB3	2:C:496:ARG:NH1	2.20	0.56
1:B:1120:LEU:CD1	1:B:1120:LEU:N	2.68	0.56
1:B:211:PHE:HA	1:B:214:ILE:HG13	1.88	0.56
2:C:1169:MET:HE1	2:C:1201:LYS:HA	1.86	0.56
1:B:98:LYS:HE2	1:B:224:PHE:CZ	2.40	0.56
2:C:459:TYR:CZ	2:C:469:GLN:HG2	2.41	0.56
2:C:102:VAL:HG23	2:C:112:LEU:HB2	1.86	0.56
1:B:37:PHE:N	1:B:37:PHE:CD1	2.74	0.56
11:L:46:ILE:O	11:L:46:ILE:HG22	2.06	0.56
5:F:156:LEU:HA	5:F:160:GLU:OE1	2.04	0.56
4:E:59:ILE:HG21	4:E:145:MET:SD	2.46	0.56
1:B:347:PHE:CE2	1:B:375:THR:HG23	2.40	0.56
2:C:212:LEU:HD12	2:C:409:ALA:HB1	1.87	0.56
1:B:382:PRO:CB	1:B:428:TYR:HE2	2.17	0.56
2:C:957:ASN:HB3	2:C:961:LEU:H	1.70	0.56
2:C:56:ASP:HB3	2:C:57:TYR:HD1	1.71	0.56
8:I:18:GLY:O	8:I:19:ARG:HB2	2.05	0.56
8:I:100:THR:HG22	8:I:101:ALA:N	2.21	0.56
1:B:18:GLN:NE2	1:B:228:PHE:CE1	2.74	0.56
1:B:37:PHE:HB2	1:B:52:GLY:CA	2.30	0.56
2:C:542:MET:HB3	2:C:636:PRO:HD2	1.87	0.56
2:C:422:LYS:O	2:C:426:LYS:HG2	2.05	0.56
2:C:616:ILE:HG23	2:C:700:SER:OG	2.06	0.56
1:B:1114:PRO:HG2	1:B:1115:SER:H	1.70	0.56
2:C:758:PHE:CE1	2:C:1027:ILE:HG22	2.41	0.56

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1349:TYR:HA	1:B:1372:VAL:HG21	1.87	0.56
1:B:693:VAL:HG21	1:B:721:PHE:HE1	1.70	0.56
1:B:527:THR:HG21	1:B:650:GLN:HA	1.87	0.56
3:D:56:THR:CG2	3:D:58:LEU:HD23	2.36	0.56
6:G:90:ARG:CG	6:G:91:ALA:N	2.63	0.56
2:C:521:LEU:HD13	2:C:633:VAL:HB	1.87	0.56
2:C:215:GLN:OE1	2:C:479:VAL:HG22	2.06	0.56
1:B:1076:ALA:HA	1:B:1079:MET:HE1	1.88	0.56
2:C:411:PRO:O	2:C:414:ALA:HB3	2.06	0.56
1:B:367:PRO:HA	1:B:463:ILE:O	2.05	0.56
7:H:13:LEU:HD12	7:H:26:LEU:HD21	1.88	0.56
11:L:58:PHE:HE2	11:L:74:ARG:NE	2.04	0.56
5:F:93:MET:SD	5:F:97:VAL:HG23	2.46	0.56
2:C:221:ASN:N	2:C:241:ARG:O	2.31	0.56
11:L:109:TRP:O	11:L:112:GLN:HB2	2.06	0.56
2:C:833:TYR:CD1	2:C:833:TYR:N	2.70	0.55
1:B:78:PRO:HA	2:C:1201:LYS:HZ2	1.71	0.55
1:B:545:GLN:C	1:B:547:LEU:H	2.09	0.55
1:B:347:PHE:N	2:C:1107:ALA:HA	2.17	0.55
2:C:906:SER:HA	2:C:946:ASN:HB2	1.86	0.55
2:C:1151:LEU:CD1	2:C:1151:LEU:N	2.68	0.55
4:E:183:LEU:HD22	7:H:144:ARG:NH2	2.21	0.55
2:C:758:PHE:CE2	2:C:1044:ALA:HA	2.40	0.55
2:C:871:THR:HG22	2:C:872:GLU:N	2.21	0.55
2:C:871:THR:HG22	2:C:872:GLU:O	2.06	0.55
2:C:956:THR:HG22	2:C:957:ASN:O	2.07	0.55
2:C:423:LYS:HE2	2:C:470:LYS:NZ	2.21	0.55
1:B:857:ARG:NH2	6:G:139:PRO:HG3	2.21	0.55
7:H:79:PHE:CE2	7:H:105:PRO:HG2	2.37	0.55
1:B:230:ARG:N	1:B:233:TRP:CE3	2.62	0.55
3:D:254:LYS:C	3:D:256:ALA:H	2.09	0.55
2:C:1047:PHE:CD1	2:C:1047:PHE:N	2.74	0.55
1:B:1152:ILE:HG22	1:B:1192:LEU:O	2.07	0.55
1:B:441:PRO:CG	1:B:498:ARG:HB2	2.36	0.55
2:C:1156:ASP:HB3	2:C:1198:TYR:N	2.17	0.55
1:B:698:GLN:HA	9:J:97:MET:O	2.06	0.55
2:C:311:LEU:O	2:C:312:GLU:C	2.44	0.55
1:B:808:LEU:HD23	1:B:813:PHE:HA	1.88	0.55
1:B:315:LEU:HD12	2:C:471:LYS:HB3	1.88	0.55
3:D:48:SER:HB3	3:D:158:VAL:HB	1.87	0.55
1:B:666:ILE:HD12	1:B:666:ILE:N	2.21	0.55

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:577:ALA:HB1	2:C:589:VAL:CG1	2.27	0.55
9:J:55:THR:HG22	9:J:55:THR:O	2.06	0.55
9:J:59:VAL:C	9:J:61:ASP:H	2.10	0.55
1:B:53:LEU:CD2	1:B:54:ASN:ND2	2.68	0.55
1:B:1226:VAL:HG22	1:B:1240:CYS:CB	2.33	0.55
1:B:224:PHE:CG	1:B:231:PRO:HG3	2.41	0.55
6:G:82:THR:CG2	6:G:84:TYR:H	2.16	0.55
5:F:135:PHE:CD2	5:F:140:LEU:HD21	2.38	0.55
2:C:38:PHE:CD1	2:C:811:TYR:CD2	2.94	0.55
1:B:1242:VAL:HG12	1:B:1243:VAL:N	2.19	0.55
1:B:1325:THR:O	1:B:1325:THR:CG2	2.54	0.55
4:E:137:ASN:H	4:E:137:ASN:ND2	2.04	0.55
15:T:21:DA:H2'	15:T:22:DT:O5'	2.03	0.55
10:K:48:ARG:C	10:K:48:ARG:HD2	2.27	0.55
8:I:59:ILE:O	8:I:60:ALA:HB3	2.06	0.55
1:B:353:ILE:CG2	1:B:487:MET:HE3	2.35	0.55
1:B:541:ILE:HG21	1:B:549:MET:CE	2.36	0.55
1:B:1149:ALA:HB2	9:J:47:GLU:HA	1.88	0.55
2:C:757:PRO:HG3	2:C:1028:GLU:OE2	2.06	0.55
2:C:418:LYS:HE2	2:C:422:LYS:NZ	2.21	0.55
1:B:1266:THR:O	1:B:1270:ASN:HB2	2.06	0.55
2:C:986:GLN:OE1	2:C:986:GLN:HA	2.05	0.55
10:K:23:ASN:C	10:K:25:LEU:N	2.60	0.55
1:B:33:ALA:HB1	1:B:56:PRO:HB2	1.89	0.55
8:I:118:PHE:C	8:I:120:GLY:H	2.10	0.55
1:B:1261:LYS:CA	1:B:1264:GLU:HB3	2.36	0.55
1:B:1210:GLY:O	1:B:1214:GLU:HG2	2.06	0.55
2:C:25:ILE:HG22	2:C:29:ASP:CB	2.36	0.55
2:C:708:GLU:O	2:C:710:LEU:N	2.39	0.55
5:F:153:HIS:CE1	5:F:184:VAL:HG11	2.41	0.55
9:J:5:ARG:O	9:J:14:LEU:HG	2.07	0.55
7:H:31:LEU:HD22	7:H:48:VAL:HG21	1.89	0.55
1:B:1319:VAL:HG13	1:B:1320:PRO:HD2	1.88	0.55
2:C:552:MET:HA	2:C:555:ILE:HB	1.89	0.55
4:E:69:ALA:HA	4:E:72:ARG:HG3	1.88	0.55
1:B:322:VAL:O	1:B:322:VAL:HG12	2.07	0.55
2:C:483:LEU:HD21	2:C:491:THR:HG23	1.89	0.55
6:G:130:ILE:O	6:G:148:VAL:HG21	2.06	0.55
1:B:244:PRO:HB2	1:B:245:PRO:CD	2.32	0.55
3:D:182:PRO:HG3	3:D:206:ASN:O	2.06	0.55
1:B:1280:GLU:O	1:B:1282:VAL:HG23	2.06	0.55

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:273:LEU:HD22	2:C:360:PHE:CD1	2.42	0.55
1:B:230:ARG:N	1:B:233:TRP:HE3	2.02	0.55
1:B:1002:GLY:HA3	1:B:1007:ILE:CG2	2.30	0.55
1:B:545:GLN:O	1:B:547:LEU:N	2.40	0.55
2:C:51:PHE:CD2	2:C:173:MET:HB3	2.41	0.55
2:C:315:LYS:N	2:C:316:PRO:HD2	2.21	0.55
5:F:147:HIS:CD2	5:F:149:LEU:H	2.25	0.55
7:H:153:GLN:HG3	7:H:154:VAL:HG23	1.87	0.55
2:C:221:ASN:OD1	2:C:242:SER:HA	2.06	0.55
2:C:1008:PRO:HB2	2:C:1010:LEU:O	2.07	0.55
2:C:973:ILE:HG23	2:C:974:PRO:HD2	1.88	0.55
1:B:61:ILE:HG22	1:B:62:ASP:N	2.22	0.55
5:F:78:LEU:HD21	5:F:80:VAL:CG2	2.37	0.55
2:C:637:LEU:HD21	2:C:742:GLU:OE2	2.07	0.55
2:C:520:GLY:N	2:C:748:ILE:HG22	2.19	0.55
2:C:583:ASN:HD21	2:C:628:THR:CG2	2.20	0.55
2:C:508:LEU:O	2:C:509:ALA:HB3	2.07	0.55
1:B:1351:GLU:O	1:B:1355:VAL:HG23	2.07	0.55
10:K:8:PHE:H	10:K:49:MET:HE1	1.70	0.55
8:I:139:ASN:O	8:I:140:ALA:CB	2.55	0.55
7:H:81:PRO:HG3	7:H:106:MET:SD	2.46	0.55
11:L:93:SER:O	11:L:97:LYS:HG3	2.06	0.55
5:F:43:LYS:O	5:F:45:LYS:N	2.40	0.55
1:B:1149:ALA:CB	9:J:47:GLU:HA	2.36	0.55
3:D:80:LEU:HD22	3:D:129:ILE:HD13	1.88	0.55
1:B:608:ILE:C	1:B:610:GLY:H	2.10	0.55
7:H:143:ILE:CG2	7:H:144:ARG:H	2.20	0.55
8:I:130:ARG:HA	8:I:133:ASN:HB2	1.89	0.55
2:C:60:GLN:HE22	2:C:94:LYS:HA	1.72	0.55
1:B:150:THR:HG23	1:B:166:GLY:HA2	1.89	0.55
1:B:682:THR:HG23	1:B:728:LYS:CE	2.22	0.55
4:E:35:LEU:HA	4:E:47:LEU:HB2	1.89	0.55
1:B:828:ALA:HB3	2:C:530:GLY:HA2	1.87	0.55
2:C:654:ARG:N	2:C:657:HIS:HD2	1.96	0.55
1:B:407:ARG:HG2	1:B:430:TRP:CZ2	2.41	0.55
3:D:11:ARG:HD3	3:D:209:TYR:OH	2.07	0.55
5:F:121:MET:O	5:F:124:VAL:HG23	2.07	0.55
2:C:1103:ILE:O	2:C:1122:ARG:NH1	2.40	0.54
2:C:843:GLN:O	2:C:844:SER:C	2.45	0.54
4:E:5:THR:CG2	7:H:9:LEU:HB2	2.36	0.54
5:F:157:SER:C	5:F:159:ASP:H	2.09	0.54

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:503:GLN:HE21	6:G:90:ARG:HH21	1.54	0.54
5:F:78:LEU:C	5:F:78:LEU:HD23	2.28	0.54
1:B:185:TRP:HZ3	1:B:200:ARG:HG2	1.71	0.54
1:B:586:ILE:HG22	1:B:587:HIS:H	1.69	0.54
3:D:212:PRO:HB3	3:D:213:PRO:HD2	1.89	0.54
2:C:423:LYS:HE2	2:C:470:LYS:HZ1	1.72	0.54
3:D:173:ALA:O	3:D:174:ALA:HB3	2.06	0.54
3:D:34:ARG:O	3:D:38:ILE:HG13	2.07	0.54
3:D:46:ILE:CG2	3:D:157:CYS:HB3	2.35	0.54
2:C:361:LEU:HD21	2:C:377:PHE:HB3	1.88	0.54
7:H:3:PHE:CD1	7:H:80:LYS:NZ	2.75	0.54
1:B:827:THR:CG2	1:B:828:ALA:N	2.70	0.54
1:B:709:THR:HG22	1:B:710:LEU:N	2.22	0.54
1:B:172:PRO:HB3	1:B:185:TRP:CD2	2.42	0.54
3:D:44:LEU:HG	3:D:159:ALA:HB1	1.88	0.54
1:B:87:ALA:HB3	1:B:276:LEU:CD2	2.37	0.54
1:B:29:ALA:HB1	2:C:1184:GLY:CA	2.36	0.54
1:B:206:GLU:O	1:B:210:ILE:HG13	2.07	0.54
8:I:107:VAL:O	8:I:108:SER:O	2.25	0.54
2:C:485:ARG:NH2	2:C:782:LEU:HD11	2.22	0.54
1:B:54:ASN:HD21	1:B:247:ARG:HH12	1.55	0.54
12:M:38:LEU:CD1	12:M:49:LYS:HG2	2.38	0.54
6:G:89:GLU:OE2	6:G:134:ILE:HG21	2.07	0.54
1:B:829:VAL:C	1:B:831:THR:H	2.10	0.54
5:F:22:MET:HE3	5:F:26:ARG:HE	1.71	0.54
1:B:374:LEU:CB	1:B:436:ILE:HD11	2.37	0.54
2:C:942:ARG:O	2:C:944:THR:N	2.41	0.54
1:B:356:ASP:CB	1:B:469:ARG:HH12	2.08	0.54
15:T:19:DT:H2'	15:T:20:DT:C6	2.42	0.54
8:I:40:LEU:HD22	8:I:123:MET:CE	2.37	0.54
11:L:19:LEU:HD21	11:L:35:PHE:CE2	2.42	0.54
1:B:498:ARG:HA	1:B:501:LEU:HD12	1.88	0.54
4:E:53:SER:H	4:E:148:LEU:HD21	1.72	0.54
1:B:347:PHE:HE2	1:B:375:THR:HG23	1.73	0.54
2:C:1095:LEU:N	2:C:1095:LEU:HD12	2.22	0.54
2:C:542:MET:HE2	2:C:743:ILE:HG13	1.89	0.54
1:B:172:PRO:HD3	1:B:185:TRP:CE2	2.43	0.54
8:I:135:LEU:HD13	8:I:137:GLN:NE2	2.19	0.54
1:B:896:ARG:NH2	1:B:1030:ARG:NH2	2.56	0.54
9:J:35:VAL:HG12	9:J:36:GLU:H	1.73	0.54
1:B:765:VAL:HG23	1:B:802:ASN:O	2.07	0.54

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:F:93:MET:HE3	5:F:123:LEU:HB2	1.87	0.54
3:D:174:ALA:O	3:D:175:ALA:HB2	2.08	0.54
2:C:240:ILE:HG21	2:C:381:MET:HE1	1.89	0.54
1:B:69:THR:C	1:B:71:GLN:N	2.61	0.54
1:B:353:ILE:CD1	1:B:487:MET:HE2	2.36	0.54
1:B:18:GLN:CB	2:C:1215:ARG:HB2	2.37	0.54
1:B:1213:GLY:O	1:B:1214:GLU:C	2.45	0.54
6:G:86:THR:HG23	6:G:89:GLU:OE1	2.08	0.54
2:C:693:ILE:HD11	2:C:740:HIS:CD2	2.43	0.54
2:C:312:GLU:O	2:C:315:LYS:HB2	2.07	0.54
1:B:1394:THR:HG22	1:B:1395:GLY:N	2.21	0.54
9:J:34:TYR:CD2	9:J:35:VAL:N	2.75	0.54
4:E:160:VAL:O	4:E:164:ILE:HG13	2.06	0.54
2:C:984:HIS:NE2	2:C:1025:HIS:HA	2.23	0.54
2:C:1001:PHE:CZ	2:C:1073:TYR:HB2	2.42	0.54
3:D:175:ALA:HB3	10:K:43:ARG:HH22	1.71	0.54
1:B:1308:THR:HG23	1:B:1309:ASP:N	2.21	0.54
1:B:853:ASP:OD1	1:B:855:THR:HG22	2.08	0.54
1:B:500:GLU:OE2	2:C:1145:SER:HB2	2.06	0.54
2:C:642:ASP:CB	2:C:649:LYS:HG3	2.38	0.54
2:C:314:LEU:O	2:C:318:VAL:HG23	2.08	0.54
1:B:149:GLU:HB2	1:B:164:ARG:HH21	1.72	0.54
1:B:1144:LYS:HD2	1:B:1268:LEU:O	2.08	0.54
2:C:449:ASN:C	2:C:451:LYS:H	2.10	0.54
3:D:255:VAL:HG12	11:L:91:CYS:HB3	1.90	0.54
1:B:472:LEU:HD11	2:C:835:GLN:NE2	2.22	0.54
2:C:1001:PHE:CE2	3:D:34:ARG:CZ	2.91	0.54
3:D:35:ARG:HA	3:D:38:ILE:HD12	1.89	0.54
7:H:14:HIS:CD2	7:H:16:SER:CB	2.91	0.54
1:B:901:LEU:H	1:B:926:GLN:CD	2.10	0.54
4:E:207:LEU:HD12	4:E:207:LEU:O	2.08	0.54
1:B:91:PHE:N	1:B:297:GLN:HE22	2.04	0.54
15:T:25:DC:N4	15:T:26:DA:N6	2.34	0.54
4:E:141:LEU:HD12	4:E:141:LEU:O	2.07	0.54
2:C:393:LYS:CE	2:C:393:LYS:HA	2.35	0.54
9:J:93:LYS:CD	9:J:93:LYS:H	2.18	0.54
2:C:247:GLY:H	2:C:418:LYS:HZ1	1.54	0.54
2:C:1084:GLN:OE1	3:D:189:THR:HG22	2.08	0.54
6:G:116:ASP:O	6:G:120:ILE:HG13	2.07	0.54
1:B:809:THR:H	1:B:812:GLU:HB2	1.71	0.54
4:E:118:THR:HB	4:E:121:LYS:CB	2.38	0.54

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:367:PRO:HB3	1:B:466:SER:HA	1.89	0.54
1:B:471:ASN:OD1	1:B:472:LEU:N	2.41	0.54
2:C:651:LEU:HD11	2:C:707:PRO:HB3	1.89	0.54
2:C:1183:LYS:O	2:C:1183:LYS:HE3	2.06	0.54
2:C:357:GLN:O	2:C:366:GLN:HA	2.08	0.54
1:B:639:PRO:HG2	1:B:640:GLN:N	2.22	0.54
5:F:213:ILE:HG12	5:F:214:CYS:H	1.69	0.54
1:B:834:THR:HG21	1:B:1077:THR:CA	2.38	0.54
1:B:977:LYS:HB3	1:B:978:PRO:HD2	1.89	0.54
2:C:601:ARG:O	2:C:605:ARG:HG3	2.08	0.54
2:C:274:PRO:O	2:C:275:TYR:HB2	2.07	0.54
2:C:365:THR:HG21	2:C:370:PHE:CD1	2.43	0.54
8:I:59:ILE:CG2	8:I:60:ALA:N	2.56	0.54
1:B:443:LEU:HD12	2:C:1146:PHE:CE2	2.42	0.54
7:H:44:TYR:CD2	7:H:105:PRO:HB2	2.43	0.54
1:B:17:VAL:HG23	1:B:1421:CYS:SG	2.48	0.54
1:B:35:ILE:HD13	1:B:241:VAL:HG11	1.88	0.54
1:B:1152:ILE:HD11	9:J:44:TYR:HD2	1.73	0.54
2:C:642:ASP:CA	2:C:649:LYS:HG3	2.38	0.54
5:F:14:ARG:HH21	5:F:141:VAL:CG1	2.21	0.54
2:C:25:ILE:HD12	2:C:651:LEU:CD1	2.36	0.54
2:C:745:PRO:C	2:C:747:MET:N	2.60	0.54
1:B:827:THR:O	1:B:831:THR:HB	2.08	0.54
2:C:762:ASN:ND2	2:C:1024:ALA:HB3	2.18	0.54
1:B:251:SER:HA	1:B:257:ARG:O	2.08	0.54
1:B:485:ASP:OD1	14:P:10:A:H4'	2.08	0.54
1:B:490:HIS:HB3	2:C:1150:ARG:NH1	2.22	0.54
1:B:1022:LEU:CD1	1:B:1026:LEU:HD12	2.38	0.54
3:D:246:ARG:HA	3:D:249:ASP:HB3	1.89	0.54
1:B:1152:ILE:HG13	9:J:44:TYR:HB3	1.90	0.54
2:C:1180:PHE:O	2:C:1181:GLU:O	2.26	0.54
1:B:1343:ALA:HB2	5:F:150:VAL:CG2	2.35	0.54
1:B:1349:TYR:HE1	1:B:1368:MET:HE3	1.73	0.54
1:B:115:LEU:HD12	1:B:142:CYS:HB3	1.89	0.54
1:B:834:THR:HG21	1:B:1077:THR:OG1	2.08	0.54
2:C:1015:HIS:O	2:C:1018:PRO:HD2	2.08	0.54
11:L:18:LYS:HZ2	11:L:38:GLU:HG2	1.71	0.54
11:L:48:ALA:O	11:L:51:LEU:N	2.39	0.54
1:B:1324:PRO:HB2	5:F:142:VAL:HG11	1.88	0.54
2:C:101:MET:HA	2:C:112:LEU:H	1.73	0.53
1:B:1329:THR:CG2	1:B:1331:SER:HB3	2.38	0.53

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1001:ARG:NE	6:G:83:PRO:HD3	2.23	0.53
2:C:653:VAL:HA	2:C:689:LEU:HD22	1.89	0.53
8:I:15:VAL:HA	8:I:26:ILE:HG12	1.90	0.53
2:C:288:ALA:CB	2:C:331:LEU:HD12	2.38	0.53
1:B:1254:ALA:O	1:B:1255:GLU:HB2	2.07	0.53
11:L:40:HIS:O	11:L:43:GLY:N	2.41	0.53
2:C:117:ALA:CB	2:C:122:LEU:HB2	2.38	0.53
1:B:858:ASN:HD22	1:B:858:ASN:C	2.11	0.53
11:L:58:PHE:CD1	11:L:59:ALA:N	2.76	0.53
2:C:642:ASP:CA	2:C:649:LYS:HA	2.29	0.53
1:B:709:THR:HB	1:B:712:GLU:H	1.73	0.53
1:B:152:VAL:CG1	1:B:153:PRO:HD2	2.38	0.53
3:D:52:GLU:HA	12:M:64:LEU:HD22	1.90	0.53
15:T:18:DT:OP2	15:T:18:DT:C7	2.57	0.53
1:B:526:ASP:HB2	2:C:835:GLN:OE1	2.07	0.53
3:D:69:LEU:HD12	3:D:69:LEU:H	1.73	0.53
2:C:365:THR:HG23	2:C:367:LEU:N	2.23	0.53
2:C:112:LEU:HD12	2:C:113:TYR:H	1.72	0.53
5:F:192:ARG:O	5:F:192:ARG:HG2	2.07	0.53
15:T:24:DG:C2	15:T:25:DC:H1'	2.43	0.53
2:C:23:ALA:HB1	2:C:24:PRO:CD	2.29	0.53
5:F:156:LEU:HD12	5:F:195:VAL:CB	2.32	0.53
1:B:1264:GLU:HG3	1:B:1265:ASN:N	2.22	0.53
1:B:524:VAL:CG1	1:B:525:GLN:N	2.71	0.53
2:C:498:THR:CG2	2:C:537:LYS:HB2	2.38	0.53
2:C:100:PRO:HD3	2:C:172:ILE:CD1	2.38	0.53
2:C:653:VAL:HG22	2:C:689:LEU:HB3	1.90	0.53
2:C:707:PRO:HG2	2:C:708:GLU:H	1.72	0.53
9:J:111:THR:CG2	9:J:112:SER:H	2.18	0.53
4:E:154:PHE:CE2	4:E:163:VAL:HG21	2.43	0.53
1:B:606:LEU:HB3	1:B:614:PHE:CD2	2.44	0.53
1:B:896:ARG:HD3	1:B:897:TYR:CE1	2.44	0.53
2:C:400:HIS:O	2:C:402:GLY:N	2.41	0.53
1:B:1118:VAL:CG2	1:B:1306:LEU:HB2	2.38	0.53
9:J:76:PRO:HD2	9:J:108:HIS:HD2	1.73	0.53
8:I:32:THR:HG22	8:I:33:GLN:OE1	2.07	0.53
1:B:365:GLY:HA3	1:B:463:ILE:HD13	1.91	0.53
3:D:65:HIS:CE1	3:D:69:LEU:HD11	2.42	0.53
2:C:273:LEU:O	2:C:276:ILE:HB	2.07	0.53
2:C:483:LEU:CD1	2:C:491:THR:HG23	2.31	0.53
2:C:46:GLN:HG3	2:C:47:GLN:N	2.14	0.53

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:308:TRP:HZ3	9:J:45:ARG:HB3	1.72	0.53
2:C:1183:LYS:C	2:C:1185:CYS:H	2.12	0.53
11:L:65:HIS:C	11:L:65:HIS:CD2	2.82	0.53
11:L:68:PHE:CD1	11:L:70:ARG:NH1	2.76	0.53
2:C:1115:THR:HG22	2:C:1117:GLN:HG3	1.91	0.53
2:C:165:VAL:HG11	2:C:448:ILE:HD13	1.91	0.53
2:C:807:ARG:HG2	2:C:1045:SER:OG	2.08	0.53
6:G:76:LYS:O	6:G:79:ARG:HD2	2.08	0.53
1:B:416:ARG:HG3	1:B:417:TYR:CE2	2.44	0.53
2:C:53:GLN:HG2	2:C:547:VAL:HG21	1.90	0.53
2:C:233:PRO:HG2	2:C:234:ILE:HD13	1.90	0.53
1:B:332:LYS:H	1:B:337:ARG:HB3	1.74	0.53
2:C:1006:ILE:HD13	10:K:44:TYR:HE2	1.74	0.53
1:B:32:VAL:O	1:B:57:ARG:HD3	2.09	0.53
2:C:516:ASN:ND2	2:C:516:ASN:N	2.30	0.53
1:B:215:SER:HB3	1:B:218:ASP:CG	2.29	0.53
12:M:49:LYS:O	12:M:50:ASP:CB	2.47	0.53
1:B:547:LEU:HD13	11:L:58:PHE:HD1	1.74	0.53
2:C:642:ASP:C	2:C:644:GLU:H	2.11	0.53
1:B:10:PRO:HD2	2:C:1191:ILE:O	2.09	0.53
1:B:760:GLN:HG2	1:B:765:VAL:HA	1.89	0.53
2:C:431:TYR:CG	2:C:447:ALA:HB2	2.42	0.53
2:C:1110:PRO:HG3	2:C:1124:ARG:O	2.08	0.53
1:B:1431:GLY:HA3	2:C:1152:MET:HE2	1.91	0.53
15:T:20:DT:C3'	15:T:21:DA:H5'	2.34	0.53
1:B:53:LEU:CD2	1:B:54:ASN:N	2.68	0.53
1:B:1370:LEU:O	1:B:1373:ASP:HB2	2.09	0.53
1:B:399:HIS:CB	1:B:400:PRO:CD	2.86	0.53
1:B:62:ASP:HB3	1:B:64:ASN:ND2	2.23	0.53
7:H:49:LEU:HD21	7:H:77:VAL:HB	1.89	0.53
3:D:183:TRP:CZ2	3:D:207:CYS:HB3	2.44	0.53
3:D:98:VAL:HG23	3:D:122:SER:HB3	1.90	0.53
8:I:47:PHE:CD2	8:I:95:TYR:HD1	2.27	0.53
8:I:81:PRO:HB2	8:I:82:PRO:CD	2.36	0.53
8:I:89:LEU:C	8:I:91:ASP:N	2.60	0.53
1:B:401:GLY:CA	1:B:435:HIS:HD2	2.22	0.53
1:B:30:ILE:HG23	2:C:1170:THR:HG23	1.91	0.53
11:L:19:LEU:HD21	11:L:35:PHE:CD2	2.42	0.53
12:M:34:CYS:O	12:M:36:SER:N	2.41	0.53
2:C:309:GLN:O	2:C:312:GLU:HB3	2.08	0.53
1:B:382:PRO:CD	1:B:428:TYR:CE2	2.89	0.53

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:947:PHE:CD1	1:B:947:PHE:N	2.76	0.53
2:C:510:LYS:CB	2:C:511:PRO:HD3	2.39	0.53
1:B:814:PHE:O	1:B:817:ALA:HB3	2.09	0.53
2:C:233:PRO:HG2	2:C:234:ILE:CD1	2.38	0.53
2:C:224:GLN:O	2:C:238:ALA:HA	2.08	0.53
4:E:216:ASN:O	4:E:218:GLU:N	2.42	0.53
1:B:1197:LEU:HD11	1:B:1238:ILE:HD11	1.90	0.53
8:I:106:GLU:HG2	8:I:112:ILE:HG12	1.91	0.53
10:K:3:VAL:CG2	10:K:18:TRP:HB2	2.34	0.53
2:C:114:PRO:HD3	2:C:124:TYR:CE1	2.44	0.53
1:B:1152:ILE:CG1	9:J:44:TYR:HB3	2.39	0.53
1:B:783:THR:HG22	1:B:784:LEU:CD2	2.38	0.53
2:C:637:LEU:HD22	2:C:741:CYS:O	2.09	0.53
1:B:711:ARG:O	1:B:714:PHE:HB3	2.08	0.53
2:C:1147:LEU:HD23	2:C:1148:LYS:N	2.24	0.53
2:C:292:ILE:HG23	2:C:325:GLN:O	2.08	0.53
2:C:990:ILE:CG2	2:C:991:GLY:N	2.71	0.53
6:G:110:ASP:O	6:G:112:GLU:N	2.42	0.53
1:B:963:ILE:HD11	1:B:1048:ASN:HB2	1.89	0.53
9:J:74:GLU:HB2	9:J:79:HIS:HA	1.89	0.53
3:D:134:ILE:HG23	3:D:141:GLY:H	1.74	0.53
1:B:75:ASN:O	1:B:76:GLU:CB	2.57	0.53
2:C:370:PHE:HD2	2:C:373:ARG:CD	2.22	0.53
4:E:66:ARG:O	4:E:70:PHE:HB2	2.08	0.53
8:I:25:ARG:HA	8:I:41:ASP:HA	1.90	0.53
1:B:1308:THR:HG23	1:B:1310:GLY:H	1.74	0.53
2:C:96:TYR:N	2:C:129:PHE:O	2.30	0.53
1:B:1224:LEU:HD12	1:B:1241:ARG:O	2.08	0.53
2:C:1162:ILE:HD11	2:C:1194:ILE:HD13	1.90	0.53
1:B:1438:THR:HB	2:C:1144:ALA:CB	2.36	0.53
1:B:504:LEU:HD11	6:G:91:ALA:CB	2.38	0.53
2:C:1106:ARG:HD3	2:C:1126:GLY:O	2.09	0.53
6:G:93:ILE:HD13	6:G:148:VAL:HG12	1.91	0.53
1:B:668:ASP:OD1	1:B:741:ASN:ND2	2.42	0.53
1:B:1316:VAL:HG12	1:B:1316:VAL:O	2.09	0.53
1:B:1106:ASN:O	1:B:1107:VAL:HB	2.09	0.53
2:C:203:PHE:HB3	2:C:205:ILE:HD11	1.91	0.53
2:C:613:VAL:HG13	2:C:627:PHE:O	2.08	0.53
2:C:889:THR:HG22	2:C:891:ASP:H	1.74	0.53
1:B:1454:MET:HG3	1:B:1454:MET:O	2.09	0.53
7:H:27:LYS:O	7:H:30:LEU:N	2.41	0.53

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:I:55:LEU:HD22	8:I:144:ILE:HG21	1.90	0.53
4:E:185:CYS:HB2	4:E:211:LEU:CD2	2.29	0.53
1:B:548:ASN:HA	11:L:60:ALA:HB1	1.91	0.53
1:B:1152:ILE:HD11	9:J:44:TYR:HB3	1.90	0.53
1:B:1323:ASP:O	1:B:1325:THR:N	2.38	0.53
1:B:416:ARG:C	1:B:417:TYR:CD2	2.80	0.53
2:C:750:GLY:O	2:C:751:VAL:C	2.46	0.53
1:B:34:LYS:CG	1:B:36:ARG:HH21	2.22	0.53
2:C:430:ARG:O	2:C:434:ARG:HD2	2.08	0.53
1:B:527:THR:CG2	1:B:650:GLN:HA	2.39	0.53
2:C:999:MET:HG3	2:C:1000:PRO:CD	2.33	0.52
2:C:117:ALA:HA	2:C:122:LEU:HD12	1.90	0.52
1:B:1443:VAL:HG23	1:B:1443:VAL:O	2.09	0.52
1:B:470:LEU:H	1:B:470:LEU:CD2	2.17	0.52
1:B:774:ARG:NH2	1:B:797:LYS:HB2	2.24	0.52
3:D:208:GLU:C	3:D:210:GLU:H	2.13	0.52
1:B:416:ARG:HG3	1:B:417:TYR:CD2	2.44	0.52
1:B:551:TYR:CE2	11:L:62:LYS:HE2	2.44	0.52
4:E:217:LEU:O	4:E:219:THR:N	2.41	0.52
1:B:249:SER:O	1:B:250:ILE:HG13	2.09	0.52
2:C:1177:HIS:CB	2:C:1179:GLN:HE21	2.21	0.52
2:C:844:SER:HB3	2:C:848:ARG:NH1	2.24	0.52
2:C:304:ASP:OD1	2:C:306:ASN:HB2	2.09	0.52
1:B:593:GLU:C	1:B:595:THR:H	2.12	0.52
1:B:54:ASN:ND2	1:B:247:ARG:HH12	2.07	0.52
2:C:582:VAL:HG23	2:C:626:ILE:HB	1.91	0.52
7:H:79:PHE:CE2	7:H:105:PRO:CG	2.93	0.52
1:B:1239:ARG:HB3	1:B:1239:ARG:HH11	1.74	0.52
1:B:860:LEU:CD1	1:B:1393:ASN:HD22	2.22	0.52
2:C:44:VAL:HG11	2:C:199:MET:HG2	1.91	0.52
3:D:239:PRO:HB2	3:D:241:ASP:OD1	2.09	0.52
2:C:212:LEU:HD21	2:C:461:LEU:HG	1.90	0.52
1:B:528:LEU:CD2	1:B:751:SER:HB3	2.38	0.52
1:B:1323:ASP:C	1:B:1325:THR:H	2.12	0.52
2:C:732:SER:HB2	2:C:734:HIS:CD2	2.44	0.52
2:C:758:PHE:CZ	2:C:1044:ALA:HA	2.44	0.52
1:B:1348:LEU:O	1:B:1352:VAL:HG23	2.08	0.52
2:C:955:THR:HG22	2:C:956:THR:O	2.09	0.52
2:C:827:ILE:HG12	2:C:1012:ILE:HG13	1.91	0.52
11:L:17:SER:O	11:L:18:LYS:C	2.45	0.52
5:F:108:GLY:HA3	5:F:132:ILE:HG22	1.90	0.52

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:D:255:VAL:O	3:D:255:VAL:HG12	2.09	0.52
2:C:1174:LYS:O	2:C:1176:ASN:N	2.42	0.52
1:B:442:VAL:O	1:B:457:ALA:HA	2.10	0.52
2:C:95:ILE:HG13	2:C:129:PHE:O	2.08	0.52
1:B:883:LEU:CD2	1:B:1021:LEU:HB2	2.40	0.52
2:C:44:VAL:O	2:C:45:SER:C	2.48	0.52
8:I:26:ILE:HG23	8:I:27:GLU:N	2.24	0.52
2:C:899:ILE:HG22	2:C:903:VAL:HG21	1.91	0.52
1:B:388:LEU:CD2	1:B:432:VAL:HB	2.37	0.52
2:C:90:ILE:HG23	2:C:133:LYS:O	2.09	0.52
1:B:1313:LEU:HD23	1:B:1338:VAL:HG21	1.91	0.52
2:C:1001:PHE:CE1	2:C:1073:TYR:HB2	2.45	0.52
1:B:399:HIS:O	1:B:401:GLY:N	2.43	0.52
1:B:541:ILE:HG22	1:B:546:VAL:HG23	1.90	0.52
1:B:1193:LEU:CD2	1:B:1260:LEU:HD11	2.32	0.52
1:B:172:PRO:HG3	1:B:185:TRP:CZ2	2.45	0.52
3:D:7:GLN:HG2	11:L:104:ASN:ND2	2.19	0.52
1:B:1428:VAL:HG22	2:C:1151:LEU:HD21	1.90	0.52
6:G:79:ARG:HB3	6:G:144:GLU:OE1	2.09	0.52
2:C:298:LEU:N	2:C:298:LEU:HD22	2.24	0.52
1:B:1427:ASN:O	1:B:1431:GLY:N	2.41	0.52
4:E:192:LYS:HD2	4:E:199:ASN:HA	1.91	0.52
1:B:332:LYS:CA	1:B:337:ARG:HD2	2.39	0.52
2:C:825:VAL:HG13	2:C:826:ALA:H	1.73	0.52
2:C:240:ILE:HG22	2:C:254:LEU:HB3	1.91	0.52
2:C:1106:ARG:HG3	2:C:1107:ALA:N	2.23	0.52
2:C:34:ILE:HD13	2:C:747:MET:HE2	1.91	0.52
3:D:18:VAL:HG12	3:D:18:VAL:O	2.09	0.52
2:C:995:ARG:NH1	3:D:165:LYS:HA	2.25	0.52
2:C:1120:GLU:HG2	2:C:1121:GLY:N	2.23	0.52
1:B:556:TRP:CE3	1:B:558:GLY:HA2	2.45	0.52
3:D:116:LYS:HG3	3:D:117:ASP:N	2.24	0.52
1:B:568:PRO:CG	8:I:46:LEU:HD22	2.37	0.52
4:E:141:LEU:HD22	7:H:46:LEU:O	2.09	0.52
1:B:747:VAL:HG21	1:B:758:ILE:HD11	1.91	0.52
1:B:1289:ARG:NH1	1:B:1326:ARG:NH1	2.58	0.52
2:C:916:THR:HB	2:C:935:ARG:HD2	1.90	0.52
11:L:55:LYS:HB3	11:L:81:TYR:CE1	2.45	0.52
7:H:98:GLY:HA3	7:H:110:VAL:O	2.09	0.52
2:C:510:LYS:HG3	2:C:511:PRO:CD	2.38	0.52
7:H:125:SER:OG	7:H:128:PRO:HA	2.09	0.52

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:525:ALA:O	2:C:768:THR:HG23	2.09	0.52
1:B:1364:ASN:O	1:B:1366:ARG:HG3	2.10	0.52
8:I:40:LEU:CD1	8:I:123:MET:HB2	2.40	0.52
1:B:1341:ILE:HD12	1:B:1379:GLY:O	2.10	0.52
1:B:1004:ASN:OD1	1:B:1005:GLU:N	2.42	0.52
12:M:28:LYS:O	12:M:29:TYR:HD2	1.93	0.52
1:B:798:GLY:HA2	1:B:815:PHE:CD1	2.45	0.52
1:B:947:PHE:CE2	1:B:954:TRP:CE2	2.98	0.52
1:B:560:ILE:CG1	8:I:78:SER:HB2	2.39	0.52
2:C:245:GLU:O	2:C:246:LYS:HG3	2.09	0.52
3:D:31:ASN:O	3:D:32:SER:C	2.48	0.52
3:D:69:LEU:O	10:K:6:ARG:HD2	2.10	0.52
12:M:55:ILE:O	12:M:56:LEU:HB2	2.07	0.52
1:B:476:SER:N	1:B:477:PRO:CD	2.73	0.52
1:B:107:CYS:HA	1:B:171:GLN:CD	2.30	0.52
1:B:1006:ILE:O	1:B:1009:ASN:HB2	2.09	0.52
1:B:34:LYS:HB2	1:B:36:ARG:HH21	1.75	0.52
2:C:1097:HIS:N	2:C:1098:MET:HE2	2.25	0.52
2:C:467:GLY:N	2:C:475:SER:CB	2.72	0.52
1:B:556:TRP:CZ3	1:B:558:GLY:HA2	2.45	0.52
1:B:466:SER:CB	11:L:2:ASN:HD22	2.22	0.52
2:C:115:GLN:HB2	2:C:194:GLU:HG2	1.92	0.52
1:B:1018:PHE:O	1:B:1021:LEU:HB3	2.10	0.52
1:B:853:ASP:O	1:B:1000:LEU:HD21	2.10	0.52
1:B:547:LEU:HD22	11:L:58:PHE:CD1	2.45	0.52
2:C:100:PRO:CG	2:C:172:ILE:HD12	2.39	0.52
2:C:745:PRO:O	2:C:748:ILE:HG12	2.10	0.52
1:B:710:LEU:HD12	1:B:710:LEU:H	1.75	0.52
2:C:248:SER:H	2:C:418:LYS:NZ	2.08	0.52
2:C:332:ASP:C	2:C:334:ILE:H	2.13	0.52
2:C:976:ILE:O	2:C:990:ILE:HB	2.10	0.52
6:G:75:PRO:C	6:G:77:ASP:N	2.63	0.52
6:G:116:ASP:HB3	6:G:119:ARG:HB2	1.91	0.52
11:L:55:LYS:HB3	11:L:81:TYR:CD1	2.44	0.52
4:E:130:LEU:O	4:E:132:GLN:N	2.32	0.52
1:B:863:VAL:HG11	1:B:866:PHE:CD2	2.45	0.52
5:F:190:LEU:O	5:F:191:LYS:HG2	2.10	0.52
1:B:1107:VAL:HG12	1:B:1107:VAL:O	2.10	0.52
1:B:1381:LEU:HD23	1:B:1381:LEU:N	2.25	0.52
9:J:2:THR:O	9:J:3:THR:C	2.48	0.52
10:K:53:HIS:HE1	10:K:55:ASP:OD1	1.94	0.52

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:E:16:LYS:HZ3	4:E:16:LYS:HB3	1.74	0.52
1:B:219:PHE:CE2	1:B:231:PRO:HD2	2.45	0.52
1:B:91:PHE:HB2	1:B:297:GLN:HE22	1.75	0.52
2:C:642:ASP:O	2:C:644:GLU:N	2.40	0.52
2:C:637:LEU:HD11	2:C:703:ILE:HD13	1.91	0.52
3:D:18:VAL:O	3:D:20:PHE:HD2	1.93	0.52
1:B:1332:PHE:CE1	1:B:1348:LEU:HD13	2.45	0.52
2:C:294:ASP:HB2	9:J:12:ASN:HA	1.91	0.52
5:F:55:ARG:C	5:F:57:MET:N	2.63	0.52
3:D:203:GLN:HG2	3:D:207:CYS:SG	2.50	0.52
1:B:522:GLY:HA2	1:B:630:ILE:CD1	2.39	0.52
1:B:466:SER:O	1:B:467:THR:HG23	2.10	0.51
2:C:1085:ILE:CD1	2:C:1085:ILE:H	2.22	0.51
3:D:112:ASN:CB	3:D:114:TYR:CE1	2.93	0.51
1:B:590:ARG:CD	1:B:604:GLY:HA2	2.39	0.51
1:B:1437:GLY:O	1:B:1439:GLY:N	2.43	0.51
1:B:498:ARG:HG3	1:B:499:ALA:H	1.75	0.51
1:B:606:LEU:HD11	1:B:608:ILE:HG13	1.92	0.51
7:H:143:ILE:CG2	7:H:144:ARG:N	2.69	0.51
2:C:1010:LEU:O	2:C:1011:ILE:CG1	2.58	0.51
2:C:364:ILE:HG22	2:C:365:THR:N	2.25	0.51
2:C:579:ARG:CB	2:C:586:TRP:HE1	2.18	0.51
1:B:247:ARG:HH11	1:B:247:ARG:HG3	1.75	0.51
1:B:50:ILE:C	1:B:52:GLY:N	2.64	0.51
1:B:1152:ILE:HD11	9:J:44:TYR:CD2	2.46	0.51
2:C:172:ILE:CD1	2:C:178:ASN:HD22	2.23	0.51
5:F:154:ILE:O	5:F:196:VAL:HA	2.11	0.51
1:B:947:PHE:CD2	1:B:954:TRP:CE2	2.98	0.51
2:C:298:LEU:CD2	2:C:298:LEU:H	2.22	0.51
3:D:176:ILE:CG2	3:D:177:GLU:N	2.72	0.51
1:B:250:ILE:O	1:B:250:ILE:HG22	2.10	0.51
1:B:355:GLY:N	1:B:482:PHE:CZ	2.78	0.51
1:B:482:PHE:CE1	2:C:836:GLU:HB2	2.45	0.51
4:E:16:LYS:CG	4:E:18:VAL:HG12	2.40	0.51
4:E:40:HIS:CB	7:H:73:LYS:HZ2	2.10	0.51
1:B:24:PRO:HD2	1:B:233:TRP:HE1	1.74	0.51
1:B:1006:ILE:CD1	5:F:163:GLU:HG3	2.31	0.51
1:B:1063:MET:SD	1:B:1436:ILE:HG12	2.50	0.51
2:C:810:GLU:HB2	2:C:815:ARG:HH22	1.76	0.51
1:B:6:TYR:CD1	1:B:7:SER:N	2.78	0.51
2:C:654:ARG:HG3	2:C:654:ARG:HH11	1.76	0.51

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:425:THR:HA	2:C:428:ILE:HD12	1.91	0.51
1:B:951:GLU:HB3	1:B:954:TRP:HZ2	1.74	0.51
1:B:1114:PRO:HB2	1:B:1311:VAL:CG2	2.39	0.51
1:B:458:HIS:CE1	1:B:507:VAL:HG21	2.45	0.51
1:B:108:MET:HB3	1:B:210:ILE:HD13	1.91	0.51
1:B:116:ASP:C	1:B:118:HIS:H	2.13	0.51
8:I:143:LEU:N	8:I:143:LEU:HD12	2.26	0.51
2:C:549:THR:HG22	2:C:550:ASP:N	2.19	0.51
2:C:324:ILE:CG2	2:C:325:GLN:N	2.73	0.51
9:J:13:MET:O	9:J:14:LEU:HD23	2.11	0.51
1:B:1138:ILE:CG2	1:B:1316:VAL:HG13	2.40	0.51
1:B:34:LYS:CB	1:B:36:ARG:HH21	2.23	0.51
1:B:821:ARG:HB2	1:B:821:ARG:NH1	2.25	0.51
2:C:203:PHE:N	2:C:203:PHE:CD1	2.79	0.51
2:C:583:ASN:HD21	2:C:628:THR:HG22	1.74	0.51
3:D:56:THR:HG21	3:D:145:CYS:SG	2.50	0.51
2:C:603:LEU:CD1	2:C:609:ILE:HG13	2.27	0.51
1:B:1019:CYS:O	1:B:1022:LEU:N	2.44	0.51
1:B:853:ASP:C	1:B:853:ASP:OD1	2.49	0.51
11:L:10:PHE:HD2	11:L:10:PHE:N	2.09	0.51
3:D:242:GLN:C	3:D:244:VAL:N	2.63	0.51
1:B:586:ILE:CG2	1:B:587:HIS:H	2.23	0.51
2:C:63:ILE:HA	2:C:421:PHE:HE2	1.76	0.51
1:B:1336:MET:HE3	1:B:1381:LEU:HG	1.93	0.51
9:J:101:PHE:HB2	9:J:110:PHE:CE2	2.45	0.51
1:B:526:ASP:OD1	2:C:1013:ASN:ND2	2.42	0.51
2:C:848:ARG:HD2	10:K:8:PHE:O	2.11	0.51
4:E:29:LEU:HD22	7:H:82:PHE:CE2	2.46	0.51
2:C:806:THR:HG21	2:C:808:ALA:HB3	1.91	0.51
1:B:852:TYR:CE2	1:B:1060:PRO:HB2	2.45	0.51
2:C:547:VAL:HG12	2:C:612:GLU:OE2	2.11	0.51
2:C:614:SER:OG	2:C:627:PHE:HB2	2.10	0.51
7:H:112:LYS:NZ	7:H:120:THR:HA	2.26	0.51
1:B:358:ASN:O	1:B:359:LEU:HD23	2.11	0.51
1:B:54:ASN:HD22	1:B:54:ASN:N	2.08	0.51
7:H:14:HIS:HD2	7:H:16:SER:HB2	1.70	0.51
1:B:476:SER:N	1:B:477:PRO:HD3	2.26	0.51
4:E:172:LEU:HB3	4:E:176:GLU:OE1	2.11	0.51
1:B:848:ILE:HA	1:B:857:ARG:O	2.11	0.51
5:F:182:ASP:O	5:F:185:ALA:HB3	2.10	0.51
5:F:23:VAL:HB	5:F:30:ILE:CD1	2.39	0.51

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:779:PHE:O	1:B:780:VAL:C	2.49	0.51
2:C:708:GLU:HG3	2:C:709:ASP:H	1.75	0.51
3:D:232:VAL:HG11	3:D:244:VAL:HG22	1.92	0.51
2:C:752:ALA:O	2:C:755:ILE:HG13	2.11	0.51
2:C:185:THR:O	2:C:186:GLU:C	2.49	0.51
1:B:1121:GLU:CG	1:B:1122:PRO:HD2	2.40	0.51
4:E:216:ASN:C	4:E:218:GLU:N	2.64	0.51
1:B:248:PRO:O	1:B:260:ASP:HB2	2.09	0.51
1:B:351:THR:HG22	2:C:1103:ILE:HA	1.92	0.51
2:C:840:ILE:CG2	2:C:994:TYR:HD1	2.24	0.51
2:C:582:VAL:HA	2:C:626:ILE:O	2.10	0.51
11:L:57:LEU:H	11:L:77:THR:HA	1.75	0.51
1:B:709:THR:HG23	9:J:94:ASP:HA	1.91	0.51
2:C:244:LEU:HD21	2:C:366:GLN:HE21	1.71	0.51
2:C:284:ILE:HD13	2:C:333:PHE:HD2	1.76	0.51
9:J:82:GLU:HB3	9:J:104:LEU:HG	1.93	0.51
1:B:268:ASP:HB3	1:B:299:HIS:ND1	2.26	0.51
5:F:96:PHE:CE1	5:F:100:ILE:HD11	2.46	0.51
7:H:132:SER:HB3	7:H:135:ASP:HB2	1.92	0.51
1:B:453:MET:HB3	1:B:456:MET:HE2	1.93	0.51
4:E:220:LEU:O	4:E:221:TYR:HD1	1.93	0.51
2:C:834:ASN:HA	2:C:838:SER:O	2.09	0.51
9:J:55:THR:HG22	9:J:58:VAL:HG21	1.93	0.51
12:M:31:CYS:HA	12:M:56:LEU:HD23	1.92	0.51
6:G:103:MET:HE1	7:H:65:ASP:HA	1.92	0.51
2:C:498:THR:HG22	2:C:537:LYS:H	1.75	0.51
2:C:165:VAL:O	2:C:167:ILE:HD12	2.11	0.51
1:B:1121:GLU:HB3	1:B:1124:HIS:HD2	1.75	0.51
2:C:1032:SER:O	2:C:1036:ALA:HB2	2.11	0.51
1:B:882:SER:HA	1:B:952:ALA:O	2.11	0.51
3:D:235:VAL:HG12	10:K:13:VAL:HG22	1.93	0.51
2:C:273:LEU:HB2	2:C:276:ILE:HG13	1.93	0.51
1:B:1342:GLU:OE2	5:F:198:ILE:HD13	2.11	0.51
4:E:11:ARG:HD3	4:E:12:ARG:N	2.26	0.51
9:J:45:ARG:HE	9:J:47:GLU:HG3	1.75	0.51
1:B:1350:LYS:O	1:B:1354:ASN:ND2	2.44	0.51
1:B:958:VAL:HG12	1:B:960:ILE:HG13	1.92	0.51
4:E:51:ASN:O	4:E:54:GLU:HB3	2.11	0.51
2:C:471:LYS:O	2:C:472:ALA:HB2	2.10	0.51
2:C:345:LYS:HG3	2:C:348:ARG:HH21	1.75	0.51
1:B:102:VAL:HG11	1:B:211:PHE:CE2	2.46	0.51

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:D:70:ILE:HG22	3:D:70:ILE:O	2.10	0.50
3:D:99:LEU:O	3:D:156:THR:HA	2.11	0.50
2:C:29:ASP:CB	2:C:658:ILE:HD13	2.39	0.50
2:C:911:ILE:O	2:C:911:ILE:HG22	2.10	0.50
5:F:153:HIS:HB3	5:F:196:VAL:HG13	1.88	0.50
2:C:167:ILE:HG22	2:C:453:ILE:HD12	1.91	0.50
2:C:758:PHE:CE1	2:C:1027:ILE:CG2	2.94	0.50
1:B:639:PRO:CG	1:B:640:GLN:H	2.21	0.50
7:H:117:GLN:O	7:H:119:LEU:N	2.45	0.50
1:B:1299:VAL:HG12	1:B:1300:LYS:N	2.25	0.50
1:B:875:ALA:O	1:B:878:ILE:HG13	2.10	0.50
1:B:898:ARG:HB2	1:B:933:TYR:HE1	1.76	0.50
3:D:63:ILE:HA	3:D:66:ARG:HG3	1.94	0.50
2:C:1160:VAL:HG12	2:C:1161:HIS:N	2.26	0.50
12:M:55:ILE:O	12:M:56:LEU:CB	2.59	0.50
8:I:42:ILE:O	8:I:44:VAL:HG23	2.11	0.50
2:C:820:GLY:C	2:C:821:GLN:HG3	2.31	0.50
2:C:126:SER:O	2:C:169:ARG:HA	2.11	0.50
2:C:911:ILE:HD11	2:C:941:LEU:CD1	2.41	0.50
3:D:77:ILE:HG23	3:D:161:LYS:HE3	1.93	0.50
3:D:204:SER:O	3:D:207:CYS:SG	2.68	0.50
2:C:948:ILE:HG22	2:C:949:VAL:O	2.11	0.50
1:B:942:PHE:C	1:B:942:PHE:CD2	2.84	0.50
1:B:357:PRO:HD2	2:C:833:TYR:CE1	2.47	0.50
1:B:665:GLY:HA3	2:C:1086:PHE:CD1	2.46	0.50
12:M:30:ILE:O	12:M:56:LEU:HA	2.11	0.50
12:M:52:GLY:O	12:M:54:ARG:N	2.44	0.50
1:B:537:ARG:HH22	8:I:122:LEU:CD1	2.24	0.50
1:B:1015:VAL:CG1	1:B:1019:CYS:SG	2.98	0.50
5:F:182:ASP:HB3	5:F:185:ALA:CB	2.41	0.50
11:L:73:LEU:CD2	11:L:75:ILE:HD11	2.40	0.50
1:B:754:SER:O	1:B:755:PHE:C	2.49	0.50
3:D:243:VAL:O	3:D:243:VAL:HG12	2.11	0.50
1:B:1094:VAL:HG13	1:B:1113:THR:CG2	2.36	0.50
1:B:528:LEU:O	1:B:531:ILE:HG22	2.12	0.50
1:B:608:ILE:HG13	1:B:613:ILE:HD12	1.94	0.50
2:C:861:ASP:OD1	2:C:914:LYS:HD2	2.11	0.50
1:B:268:ASP:HB3	1:B:299:HIS:CE1	2.47	0.50
2:C:865:LYS:HZ3	2:C:869:SER:HA	1.74	0.50
11:L:6:ARG:O	11:L:9:LEU:HG	2.11	0.50
3:D:213:PRO:O	3:D:214:ASN:CB	2.59	0.50

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:1212:ILE:O	2:C:1214:PRO:HD3	2.11	0.50
2:C:1069:PHE:HA	2:C:1085:ILE:O	2.11	0.50
1:B:1445:ILE:HD11	7:H:61:ILE:HG12	1.93	0.50
1:B:598:LEU:HD22	8:I:25:ARG:NH1	2.27	0.50
1:B:997:LEU:HD13	1:B:1018:PHE:CE2	2.46	0.50
6:G:88:TYR:N	6:G:88:TYR:CD1	2.79	0.50
3:D:22:LEU:HD11	11:L:101:LEU:HD11	1.94	0.50
2:C:409:ALA:O	2:C:413:LEU:HG	2.11	0.50
11:L:68:PHE:N	11:L:68:PHE:CD2	2.76	0.50
7:H:49:LEU:HD23	7:H:49:LEU:N	2.25	0.50
8:I:130:ARG:HB3	8:I:133:ASN:HB2	1.93	0.50
1:B:1332:PHE:N	1:B:1332:PHE:CD2	2.80	0.50
11:L:6:ARG:O	11:L:8:GLU:N	2.45	0.50
3:D:213:PRO:HG2	3:D:214:ASN:H	1.77	0.50
1:B:635:ARG:HA	1:B:635:ARG:NH1	2.25	0.50
2:C:1034:VAL:HG12	2:C:1035:ALA:N	2.25	0.50
7:H:63:PRO:O	7:H:64:THR:CB	2.59	0.50
1:B:362:ASP:OD2	1:B:459:ARG:HD3	2.11	0.50
1:B:42:ASP:O	1:B:44:THR:N	2.41	0.50
4:E:10:THR:O	4:E:10:THR:HG22	2.12	0.50
1:B:568:PRO:HB2	3:D:221:TYR:CZ	2.46	0.50
1:B:1063:MET:HG3	2:C:1139:ILE:O	2.12	0.50
2:C:1095:LEU:H	2:C:1095:LEU:CD1	2.21	0.50
13:N:1:DC:H2''	13:N:2:DA:O5'	2.12	0.50
8:I:127:GLY:O	8:I:128:ASN:CB	2.58	0.50
1:B:1317:MET:HE2	1:B:1327:ILE:HG21	1.94	0.50
8:I:35:GLN:O	8:I:37:LYS:HG3	2.12	0.50
1:B:622:VAL:O	1:B:622:VAL:HG13	2.11	0.50
2:C:1010:LEU:O	2:C:1011:ILE:HG13	2.11	0.50
3:D:191:TYR:HD2	3:D:201:TRP:CD1	2.29	0.50
5:F:176:PRO:O	5:F:212:ARG:HA	2.12	0.50
1:B:1153:TYR:HB2	1:B:1192:LEU:HD23	1.93	0.50
2:C:910:VAL:CG1	2:C:911:ILE:N	2.75	0.50
7:H:115:MET:HB2	7:H:116:PRO:CD	2.37	0.50
1:B:637:LYS:O	1:B:641:VAL:HG21	2.12	0.50
1:B:942:PHE:C	1:B:942:PHE:HD2	2.15	0.50
2:C:1196:ILE:HB	2:C:1197:PRO:HD2	1.94	0.50
8:I:95:TYR:CE2	8:I:97:MET:CG	2.92	0.50
1:B:901:LEU:HB2	1:B:926:GLN:CG	2.28	0.50
1:B:1329:THR:HG22	1:B:1331:SER:HB3	1.93	0.50
1:B:1015:VAL:O	1:B:1017:LEU:N	2.45	0.50

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:992:ASP:O	1:B:993:LEU:C	2.49	0.50
5:F:145:THR:HG21	5:F:187:TYR:CD2	2.46	0.50
1:B:91:PHE:H	1:B:297:GLN:NE2	2.07	0.50
1:B:86:LEU:HD21	1:B:239:LEU:HB2	1.93	0.50
12:M:38:LEU:O	12:M:39:SER:CB	2.58	0.50
2:C:945:GLU:O	2:C:946:ASN:HB3	2.10	0.50
2:C:461:LEU:H	2:C:461:LEU:CD1	2.25	0.50
2:C:58:THR:O	2:C:62:ILE:HG13	2.11	0.50
2:C:508:LEU:HG	2:C:509:ALA:N	2.27	0.50
2:C:236:HIS:CE1	2:C:389:ALA:HA	2.47	0.50
4:E:161:GLY:O	4:E:165:GLN:HG3	2.11	0.50
2:C:265:SER:O	2:C:266:ALA:HB3	2.11	0.50
3:D:228:PHE:N	3:D:228:PHE:CD1	2.80	0.50
2:C:1004:GLU:HB2	2:C:1006:ILE:HG12	1.94	0.50
2:C:846:ILE:HG23	2:C:974:PRO:HG2	1.93	0.50
1:B:596:THR:C	1:B:598:LEU:N	2.63	0.50
8:I:59:ILE:O	8:I:60:ALA:CB	2.59	0.50
1:B:1008:GLN:O	1:B:1011:GLN:HB3	2.11	0.50
1:B:498:ARG:HG3	1:B:499:ALA:N	2.26	0.50
2:C:656:GLY:O	2:C:657:HIS:C	2.50	0.50
2:C:247:GLY:O	2:C:248:SER:HB3	2.11	0.50
9:J:82:GLU:OE2	9:J:104:LEU:HD12	2.11	0.50
9:J:82:GLU:HB3	9:J:104:LEU:HD12	1.94	0.50
2:C:1079:LYS:CG	2:C:1080:LYS:H	2.22	0.50
2:C:118:ARG:HD3	2:C:204:ILE:CD1	2.41	0.50
1:B:1334:ASP:O	1:B:1336:MET:N	2.45	0.50
5:F:108:GLY:HA3	5:F:132:ILE:CG2	2.42	0.50
2:C:1008:PRO:HD3	2:C:1087:PHE:HE1	1.76	0.50
2:C:1072:MET:HE1	2:C:1087:PHE:HD1	1.76	0.50
2:C:189:LEU:O	2:C:192:LEU:N	2.36	0.50
4:E:176:GLU:HG2	4:E:197:SER:OG	2.11	0.50
2:C:281:PRO:O	2:C:283:VAL:N	2.45	0.50
6:G:75:PRO:HG3	6:G:78:GLN:OE1	2.12	0.50
6:G:77:ASP:OD1	6:G:78:GLN:N	2.45	0.50
2:C:873:THR:CG2	2:C:874:PHE:N	2.75	0.50
1:B:300:VAL:O	1:B:300:VAL:HG12	2.12	0.50
2:C:955:THR:HG23	2:C:956:THR:H	1.76	0.50
4:E:51:ASN:OD1	4:E:51:ASN:O	2.30	0.50
1:B:1451:VAL:O	1:B:1454:MET:HG2	2.12	0.50
1:B:260:ASP:OD1	1:B:261:ASP:N	2.45	0.50
14:P:8:U:H2'	14:P:9:A:C8	2.47	0.50

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:611:PRO:HG2	2:C:685:LEU:HD21	1.92	0.50
1:B:1187:GLN:HG3	1:B:1188:GLN:HG3	1.94	0.50
7:H:52:ASP:C	7:H:53:ASN:HD22	2.14	0.50
15:T:18:DT:O5'	15:T:18:DT:H6	1.94	0.49
1:B:886:ILE:CG2	1:B:887:GLY:H	2.25	0.49
1:B:546:VAL:HG21	1:B:572:TRP:CE3	2.46	0.49
11:L:7:PHE:HA	11:L:10:PHE:CE2	2.47	0.49
5:F:163:GLU:O	5:F:164:LEU:C	2.49	0.49
4:E:144:THR:HG21	7:H:46:LEU:HD13	1.94	0.49
1:B:1397:LEU:O	1:B:1400:CYS:HB3	2.12	0.49
2:C:185:THR:N	2:C:188:ASP:HB2	2.26	0.49
1:B:852:TYR:CD1	6:G:136:ARG:HB3	2.47	0.49
1:B:1418:LEU:HD12	1:B:1419:ASP:N	2.27	0.49
1:B:1100:ARG:NH2	1:B:1351:GLU:HG2	2.27	0.49
2:C:601:ARG:HD3	2:C:605:ARG:HH21	1.77	0.49
1:B:409:SER:O	1:B:411:ASP:N	2.45	0.49
1:B:1371:LEU:O	1:B:1375:MET:HG3	2.12	0.49
1:B:50:ILE:HG22	1:B:52:GLY:H	1.77	0.49
6:G:93:ILE:HD11	6:G:134:ILE:HD11	1.95	0.49
1:B:722:LEU:N	1:B:722:LEU:HD12	2.26	0.49
3:D:128:ASN:O	3:D:129:ILE:HG13	2.11	0.49
2:C:401:PHE:HD2	2:C:521:LEU:HD12	1.77	0.49
2:C:981:ALA:HB2	2:C:987:LYS:HA	1.94	0.49
2:C:704:ALA:HB2	2:C:738:PHE:CD2	2.47	0.49
1:B:1254:ALA:O	1:B:1255:GLU:CB	2.60	0.49
2:C:234:ILE:HG21	2:C:237:VAL:HG23	1.94	0.49
1:B:344:ARG:HD2	2:C:1118:PRO:O	2.11	0.49
1:B:1389:PHE:CD1	1:B:1390:ASN:N	2.80	0.49
8:I:8:ASP:HB3	8:I:10:PHE:CE1	2.47	0.49
1:B:373:THR:HG21	2:C:1105:ALA:CB	2.42	0.49
8:I:5:LEU:HD12	8:I:60:ALA:HA	1.94	0.49
3:D:254:LYS:C	3:D:256:ALA:N	2.65	0.49
2:C:806:THR:CG2	2:C:808:ALA:HB3	2.42	0.49
2:C:35:SER:O	2:C:39:ARG:HG3	2.12	0.49
1:B:1198:ASP:O	1:B:1202:MET:HG2	2.13	0.49
1:B:588:LEU:O	1:B:606:LEU:HA	2.12	0.49
1:B:896:ARG:HH22	1:B:1030:ARG:HH21	1.59	0.49
1:B:896:ARG:HD3	1:B:897:TYR:HE1	1.77	0.49
1:B:946:VAL:HB	1:B:947:PHE:HD1	1.76	0.49
2:C:570:VAL:CB	2:C:573:GLN:HB3	2.41	0.49
9:J:106:CYS:O	9:J:107:SER:HB2	2.11	0.49

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:785:TYR:CD1	2:C:785:TYR:C	2.86	0.49
2:C:798:TYR:CD1	10:K:4:PRO:HB3	2.48	0.49
1:B:32:VAL:HG21	1:B:68:GLN:NE2	2.25	0.49
1:B:68:GLN:C	1:B:70:CYS:H	2.15	0.49
6:G:143:PHE:CD1	6:G:143:PHE:C	2.86	0.49
8:I:101:ALA:HB2	8:I:116:TYR:CE1	2.47	0.49
1:B:1377:THR:O	1:B:1379:GLY:N	2.45	0.49
1:B:134:ARG:O	1:B:138:ILE:HG13	2.12	0.49
1:B:12:ARG:CZ	2:C:1192:TYR:HE2	2.25	0.49
3:D:254:LYS:O	3:D:256:ALA:N	2.45	0.49
11:L:90:ALA:O	11:L:94:ILE:HG13	2.12	0.49
1:B:347:PHE:CE2	1:B:493:GLN:OE1	2.64	0.49
1:B:1441:PHE:CE2	6:G:89:GLU:HG2	2.48	0.49
2:C:638:PHE:HB3	2:C:651:LEU:HD22	1.94	0.49
2:C:385:LEU:HD23	2:C:386:LEU:HD23	1.94	0.49
2:C:388:CYS:O	2:C:391:ASP:N	2.45	0.49
1:B:396:PRO:HG3	1:B:416:ARG:HB3	1.95	0.49
5:F:61:GLN:HB2	5:F:79:TRP:CE3	2.44	0.49
2:C:203:PHE:HD1	2:C:203:PHE:N	2.11	0.49
11:L:61:TYR:O	11:L:62:LYS:HB3	2.12	0.49
10:K:27:GLU:C	10:K:29:GLU:H	2.16	0.49
2:C:1110:PRO:O	2:C:1119:VAL:HG13	2.11	0.49
8:I:6:PHE:O	8:I:58:THR:HA	2.12	0.49
1:B:446:ARG:HB2	1:B:487:MET:CG	2.42	0.49
1:B:225:ASN:HD22	1:B:228:PHE:N	1.97	0.49
5:F:16:PHE:O	5:F:19:VAL:N	2.45	0.49
5:F:46:TYR:CD2	5:F:58:MET:HG2	2.47	0.49
2:C:859:TYR:CZ	2:C:941:LEU:HD12	2.47	0.49
2:C:401:PHE:CD2	2:C:521:LEU:HD12	2.48	0.49
9:J:69:PRO:HG2	9:J:85:PHE:CE2	2.47	0.49
1:B:608:ILE:C	1:B:610:GLY:N	2.65	0.49
2:C:861:ASP:OD1	2:C:862:GLN:N	2.45	0.49
1:B:872:GLY:C	1:B:1058:VAL:HG23	2.33	0.49
9:J:11:ASN:C	9:J:12:ASN:HD22	2.15	0.49
4:E:51:ASN:O	4:E:52:LEU:O	2.31	0.49
5:F:124:VAL:N	5:F:125:PRO:HD2	2.28	0.49
2:C:785:TYR:CD1	2:C:786:ASN:N	2.80	0.49
2:C:412:LEU:HB3	2:C:466:TRP:CZ2	2.47	0.49
1:B:360:GLU:O	1:B:361:LEU:C	2.51	0.49
12:M:61:THR:HG22	12:M:62:LYS:N	2.27	0.49
5:F:50:MET:HG3	5:F:50:MET:O	2.12	0.49

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:T:18:DT:C2'	15:T:19:DT:C5'	2.88	0.49
2:C:108:VAL:HG12	2:C:109:THR:N	2.25	0.49
8:I:138:GLU:HG2	8:I:139:ASN:N	2.28	0.49
1:B:1116:LEU:HB3	1:B:1308:THR:HG22	1.95	0.49
1:B:1344:GLY:O	1:B:1345:ARG:C	2.51	0.49
1:B:1161:THR:CG2	1:B:1163:ILE:HG13	2.42	0.49
5:F:23:VAL:HG13	5:F:78:LEU:CD1	2.39	0.49
4:E:195:ILE:HG22	4:E:195:ILE:O	2.13	0.49
2:C:526:GLU:HB2	2:C:771:SER:HB3	1.94	0.49
2:C:531:GLN:HG3	2:C:532:ALA:H	1.76	0.49
1:B:278:THR:O	1:B:278:THR:HG22	2.12	0.49
2:C:1072:MET:CE	2:C:1087:PHE:HD1	2.25	0.49
2:C:798:TYR:HE2	3:D:62:PHE:CZ	2.30	0.49
2:C:1201:LYS:CG	2:C:1202:LEU:N	2.75	0.49
2:C:1166:CYS:O	2:C:1168:LEU:N	2.45	0.49
12:M:44:ASP:O	12:M:45:ALA:HB3	2.11	0.49
2:C:483:LEU:HD11	2:C:491:THR:CG2	2.33	0.49
5:F:135:PHE:CB	5:F:140:LEU:HD11	2.40	0.49
2:C:44:VAL:HG13	2:C:199:MET:HG2	1.94	0.49
11:L:12:LEU:HD12	11:L:12:LEU:N	2.20	0.49
5:F:117:THR:HG22	5:F:119:SER:N	2.21	0.49
11:L:67:PHE:C	11:L:68:PHE:HD2	2.16	0.49
1:B:244:PRO:CB	1:B:245:PRO:CD	2.91	0.49
2:C:975:GLN:HG2	2:C:976:ILE:N	2.28	0.49
2:C:175:ARG:NH1	2:C:175:ARG:HG2	2.27	0.49
1:B:963:ILE:HD11	1:B:1048:ASN:HB3	1.93	0.49
2:C:60:GLN:NE2	2:C:94:LYS:HA	2.28	0.49
1:B:408:ASP:O	1:B:410:GLY:N	2.38	0.49
1:B:1423:GLY:O	1:B:1426:GLU:HB2	2.13	0.49
1:B:356:ASP:OD1	1:B:358:ASN:HB2	2.13	0.49
1:B:667:GLY:CA	3:D:192:TRP:CH2	2.95	0.49
1:B:590:ARG:NH2	1:B:620:LYS:C	2.66	0.49
1:B:567:LYS:CG	1:B:568:PRO:CD	2.80	0.49
8:I:82:PRO:C	8:I:84:ALA:H	2.16	0.49
1:B:901:LEU:N	1:B:926:GLN:NE2	2.55	0.49
4:E:12:ARG:HH12	4:E:14:ARG:HG3	1.78	0.49
4:E:33:PHE:CE2	7:H:80:LYS:NZ	2.73	0.49
3:D:133:ILE:HD13	3:D:236:GLY:C	2.32	0.49
2:C:1135:ARG:O	2:C:1136:ASP:C	2.50	0.49
1:B:586:ILE:HB	1:B:610:GLY:HA2	1.95	0.49
2:C:864:LYS:N	2:C:872:GLU:OE1	2.40	0.49

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1305:VAL:HG12	1:B:1306:LEU:N	2.27	0.49
4:E:24:ALA:O	4:E:26:THR:N	2.36	0.49
1:B:44:THR:O	1:B:44:THR:HG22	2.12	0.49
5:F:128:PRO:HA	5:F:129:PRO:C	2.32	0.49
5:F:106:GLN:HA	5:F:130:ALA:HA	1.95	0.49
3:D:114:TYR:HB3	3:D:140:ASN:O	2.13	0.49
3:D:99:LEU:HA	3:D:119:VAL:O	2.12	0.49
2:C:254:LEU:CD2	2:C:361:LEU:HD13	2.43	0.49
1:B:1444:MET:HG3	7:H:60:ARG:HA	1.94	0.49
1:B:598:LEU:HD23	8:I:122:LEU:HD12	1.95	0.49
1:B:457:ALA:HB3	1:B:506:ALA:HA	1.94	0.49
6:G:76:LYS:HE3	6:G:150:GLU:OE2	2.12	0.49
1:B:852:TYR:CD2	1:B:1060:PRO:CB	2.96	0.49
1:B:738:LYS:HD2	1:B:740:LEU:HD21	1.95	0.49
2:C:446:LEU:O	2:C:447:ALA:HB3	2.13	0.49
2:C:203:PHE:HB3	2:C:205:ILE:CD1	2.43	0.49
2:C:1017:ILE:N	2:C:1018:PRO:CD	2.76	0.49
1:B:162:VAL:HG12	1:B:163:SER:N	2.27	0.49
11:L:40:HIS:O	11:L:41:THR:C	2.51	0.49
1:B:537:ARG:HH12	8:I:122:LEU:HG	1.77	0.49
1:B:1335:ILE:O	1:B:1335:ILE:CG2	2.61	0.49
4:E:34:GLN:C	4:E:36:LYS:N	2.65	0.49
1:B:24:PRO:HG2	1:B:25:GLU:OE1	2.12	0.49
2:C:199:MET:N	2:C:199:MET:SD	2.86	0.49
8:I:26:ILE:CG2	8:I:27:GLU:N	2.76	0.49
2:C:792:MET:HE2	2:C:857:ARG:NH1	2.28	0.49
2:C:1181:GLU:O	2:C:1182:CYS:CB	2.60	0.49
1:B:341:MET:HE1	1:B:843:LYS:HZ1	1.65	0.49
1:B:1323:ASP:OD1	1:B:1326:ARG:HG3	2.13	0.49
1:B:613:ILE:O	1:B:614:PHE:HB3	2.12	0.49
1:B:954:TRP:HB3	1:B:955:PRO:HD2	1.95	0.49
9:J:105:SER:O	9:J:106:CYS:HB2	2.12	0.49
10:K:5:VAL:O	10:K:6:ARG:O	2.31	0.48
1:B:53:LEU:O	1:B:54:ASN:O	2.31	0.48
7:H:9:LEU:HD12	7:H:10:ASN:H	1.76	0.48
8:I:56:THR:HB	8:I:145:ARG:HG2	1.95	0.48
4:E:64:VAL:HA	4:E:129:LEU:HD11	1.95	0.48
3:D:16:ASP:C	3:D:240:VAL:HG11	2.33	0.48
2:C:288:ALA:HA	2:C:331:LEU:HD12	1.94	0.48
2:C:243:ALA:HB1	2:C:251:ILE:HG12	1.93	0.48
1:B:34:LYS:N	1:B:34:LYS:CD	2.76	0.48

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:D:26:ASP:O	3:D:27:LEU:C	2.50	0.48
1:B:374:LEU:HB2	1:B:436:ILE:HD11	1.95	0.48
1:B:1380:GLY:C	1:B:1381:LEU:HD23	2.33	0.48
3:D:10:ILE:HD12	11:L:108:GLU:O	2.13	0.48
1:B:1389:PHE:CG	1:B:1390:ASN:N	2.81	0.48
3:D:100:THR:HG21	3:D:102:GLN:HE21	1.78	0.48
2:C:351:TYR:CD2	2:C:355:ILE:HD11	2.49	0.48
2:C:114:PRO:HG2	2:C:115:GLN:H	1.77	0.48
1:B:135:PHE:CD1	1:B:222:LEU:HD22	2.48	0.48
1:B:40:THR:HG22	1:B:41:MET:CG	2.31	0.48
2:C:1162:ILE:HD11	2:C:1194:ILE:CD1	2.43	0.48
11:L:50:LEU:HD11	11:L:75:ILE:CD1	2.42	0.48
5:F:157:SER:OG	5:F:159:ASP:HB2	2.14	0.48
2:C:30:SER:HB3	2:C:743:ILE:O	2.13	0.48
9:J:99:LEU:O	9:J:111:THR:HG23	2.13	0.48
9:J:85:PHE:CD2	9:J:85:PHE:N	2.72	0.48
1:B:1146:VAL:HG11	1:B:1202:MET:SD	2.53	0.48
2:C:324:ILE:HG12	2:C:329:THR:HG22	1.95	0.48
7:H:117:GLN:C	7:H:119:LEU:N	2.66	0.48
2:C:1098:MET:H	2:C:1098:MET:HE3	1.78	0.48
1:B:971:PHE:HE2	1:B:1040:GLN:HG2	1.78	0.48
4:E:23:ASN:O	7:H:83:LYS:HB2	2.14	0.48
9:J:101:PHE:HB2	9:J:110:PHE:CZ	2.47	0.48
11:L:13:GLY:O	11:L:14:GLU:C	2.51	0.48
2:C:1010:LEU:C	2:C:1011:ILE:HG13	2.34	0.48
2:C:361:LEU:N	2:C:362:PRO:CD	2.76	0.48
2:C:363:HIS:O	2:C:365:THR:N	2.41	0.48
10:K:64:ASN:CB	10:K:65:PRO:CD	2.89	0.48
8:I:123:MET:HE3	8:I:142:LEU:HD21	1.94	0.48
4:E:14:ARG:NH2	4:E:16:LYS:NZ	2.59	0.48
4:E:41:GLN:HB2	4:E:43:GLU:HG3	1.94	0.48
1:B:90:VAL:HG12	1:B:297:GLN:NE2	2.28	0.48
2:C:847:ASP:O	2:C:849:GLY:N	2.46	0.48
3:D:44:LEU:CG	3:D:159:ALA:HB1	2.43	0.48
2:C:554:ILE:O	2:C:558:LEU:HG	2.13	0.48
1:B:1333:ILE:O	1:B:1333:ILE:HD13	2.13	0.48
15:T:18:DT:OP2	15:T:18:DT:H73	2.14	0.48
10:K:16:ASP:OD1	10:K:17:LYS:CD	2.62	0.48
1:B:598:LEU:HA	8:I:122:LEU:CD1	2.38	0.48
8:I:58:THR:HB	8:I:143:LEU:HD13	1.94	0.48
1:B:137:ALA:O	1:B:138:ILE:C	2.51	0.48

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:35:ILE:HG22	1:B:84:ILE:HD12	1.95	0.48
11:L:60:ALA:O	11:L:73:LEU:HD12	2.14	0.48
1:B:1006:ILE:HD12	5:F:167:ARG:CG	2.44	0.48
2:C:1138:MET:HE2	2:C:1143:ALA:HB3	1.96	0.48
2:C:658:ILE:HG22	2:C:659:ALA:N	2.27	0.48
2:C:1183:LYS:HE3	2:C:1183:LYS:N	2.29	0.48
3:D:43:THR:O	3:D:77:ILE:HG13	2.12	0.48
1:B:366:VAL:HG21	1:B:460:VAL:HG23	1.96	0.48
2:C:288:ALA:CA	2:C:331:LEU:HD12	2.43	0.48
2:C:779:GLY:O	2:C:795:ILE:HA	2.13	0.48
2:C:459:TYR:CD1	2:C:469:GLN:NE2	2.81	0.48
4:E:189:ASP:HB3	7:H:167:TYR:OH	2.13	0.48
2:C:802:PRO:HG2	2:C:805:THR:HG22	1.95	0.48
2:C:259:TYR:HB2	2:C:268:THR:HG23	1.96	0.48
1:B:332:LYS:O	1:B:333:GLU:HB2	2.13	0.48
2:C:1085:ILE:HG22	2:C:1086:PHE:N	2.28	0.48
1:B:1011:GLN:HE21	1:B:1015:VAL:HG21	1.77	0.48
1:B:129:LYS:O	1:B:130:ASP:HB2	2.14	0.48
1:B:305:ASP:CG	1:B:326:ARG:HD2	2.33	0.48
7:H:139:ILE:CG2	7:H:140:LYS:H	2.16	0.48
2:C:180:TYR:N	2:C:180:TYR:CD1	2.81	0.48
3:D:73:GLN:HE21	3:D:75:MET:N	2.10	0.48
1:B:698:GLN:NE2	9:J:99:LEU:HD21	2.28	0.48
2:C:890:TYR:O	2:C:893:LEU:HB2	2.13	0.48
2:C:1151:LEU:N	2:C:1151:LEU:HD12	2.28	0.48
2:C:797:TYR:HE1	2:C:854:LEU:HD23	1.78	0.48
1:B:279:LEU:HB3	1:B:289:ILE:HD11	1.95	0.48
1:B:513:SER:HB2	1:B:520:CYS:HB3	1.95	0.48
1:B:650:GLN:HB3	1:B:654:ASN:ND2	2.28	0.48
1:B:942:PHE:O	1:B:942:PHE:HD2	1.96	0.48
2:C:843:GLN:N	2:C:994:TYR:O	2.31	0.48
1:B:1227:ILE:CG2	1:B:1228:TRP:N	2.77	0.48
1:B:302:THR:O	1:B:304:MET:N	2.47	0.48
1:B:1152:ILE:CD1	9:J:44:TYR:HB3	2.44	0.48
2:C:773:MET:HA	2:C:776:GLN:HE21	1.78	0.48
2:C:744:HIS:ND1	2:C:745:PRO:HD2	2.29	0.48
1:B:718:VAL:O	1:B:722:LEU:HD12	2.13	0.48
9:J:69:PRO:HB2	9:J:85:PHE:CE2	2.49	0.48
1:B:1030:ARG:NH1	1:B:1035:TYR:OH	2.46	0.48
6:G:75:PRO:HG2	6:G:78:GLN:HB2	1.96	0.48
10:K:35:ALA:C	10:K:39:LEU:HD12	2.33	0.48

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:390:GLN:HE21	1:B:394:ASN:HD21	1.62	0.48
5:F:136:ASN:HB3	5:F:139:ALA:HB3	1.95	0.48
10:K:3:VAL:CG1	10:K:15:GLY:HA2	2.43	0.48
10:K:4:PRO:HD3	10:K:53:HIS:HD2	1.76	0.48
1:B:1443:VAL:HG23	7:H:61:ILE:HB	1.96	0.48
1:B:491:VAL:HG12	1:B:492:PRO:O	2.14	0.48
1:B:836:TYR:CZ	1:B:840:ARG:HD2	2.48	0.48
4:E:71:LYS:HA	4:E:74:GLN:HG3	1.96	0.48
2:C:1079:LYS:CG	2:C:1080:LYS:N	2.75	0.48
2:C:486:TYR:N	2:C:486:TYR:CD2	2.80	0.48
2:C:508:LEU:O	2:C:509:ALA:CB	2.62	0.48
1:B:912:LEU:O	1:B:978:PRO:HA	2.14	0.48
8:I:104:PHE:CE2	8:I:136:LYS:HG2	2.49	0.48
11:L:47:ARG:C	11:L:47:ARG:HD2	2.34	0.48
2:C:834:ASN:ND2	2:C:1013:ASN:HA	2.29	0.48
2:C:1006:ILE:HG23	10:K:43:ARG:HG3	1.96	0.48
8:I:102:TYR:H	8:I:102:TYR:HD2	1.57	0.48
1:B:1155:ASP:HB3	1:B:1241:ARG:HH21	1.79	0.48
1:B:298:PHE:O	1:B:301:ALA:HB3	2.12	0.48
1:B:1220:PHE:O	1:B:1221:LYS:HB2	2.14	0.48
1:B:826:ASP:O	1:B:827:THR:C	2.52	0.48
2:C:1044:ALA:O	2:C:1045:SER:O	2.31	0.48
8:I:130:ARG:HB3	8:I:133:ASN:CB	2.44	0.48
1:B:1450:LEU:O	1:B:1450:LEU:CG	2.60	0.48
1:B:88:LYS:HB3	1:B:89:PRO:HD2	1.95	0.48
1:B:1334:ASP:C	1:B:1336:MET:N	2.67	0.48
6:G:96:THR:O	6:G:100:GLN:HG3	2.14	0.48
1:B:351:THR:HG21	2:C:1103:ILE:HG13	1.95	0.48
11:L:2:ASN:O	11:L:3:ALA:C	2.53	0.48
2:C:1005:GLY:O	2:C:1006:ILE:C	2.51	0.48
3:D:235:VAL:HG12	10:K:13:VAL:HG23	1.96	0.48
3:D:35:ARG:NH1	11:L:40:HIS:HB2	2.28	0.48
9:J:58:VAL:HG13	9:J:62:ILE:CD1	2.41	0.48
2:C:193:LYS:HZ2	12:M:32:ALA:HB1	1.78	0.48
7:H:10:ASN:OD1	7:H:71:ASN:HA	2.12	0.48
7:H:13:LEU:HD23	7:H:14:HIS:N	2.28	0.48
1:B:567:LYS:CB	1:B:568:PRO:HD2	2.41	0.48
1:B:1276:VAL:HB	1:B:1279:ILE:CD1	2.43	0.48
1:B:858:ASN:ND2	1:B:860:LEU:H	2.12	0.48
2:C:637:LEU:O	2:C:690:VAL:HG13	2.14	0.48
1:B:826:ASP:O	1:B:830:LYS:N	2.32	0.48

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:D:18:VAL:O	3:D:19:ASP:C	2.52	0.48
3:D:133:ILE:CD1	3:D:237:SER:N	2.77	0.48
2:C:479:VAL:HG12	2:C:480:SER:N	2.29	0.48
1:B:114:LEU:O	1:B:115:LEU:HG	2.13	0.48
3:D:148:ARG:CD	3:D:149:LYS:H	2.27	0.48
9:J:78:CYS:SG	9:J:106:CYS:HB2	2.54	0.48
8:I:10:PHE:CD1	8:I:10:PHE:N	2.82	0.48
5:F:173:SER:O	5:F:175:LEU:N	2.46	0.48
1:B:923:LEU:O	1:B:927:VAL:HG23	2.14	0.48
2:C:368:GLU:O	2:C:370:PHE:N	2.42	0.48
1:B:512:VAL:HA	1:B:519:PRO:HA	1.95	0.48
1:B:490:HIS:ND1	2:C:1150:ARG:NH1	2.62	0.48
2:C:1215:ARG:C	2:C:1216:LEU:HD23	2.35	0.48
1:B:504:LEU:N	1:B:504:LEU:HD12	2.29	0.48
11:L:30:ALA:HB2	11:L:76:GLN:HG3	1.95	0.48
7:H:140:LYS:H	7:H:140:LYS:HG2	1.38	0.48
1:B:774:ARG:NH1	1:B:797:LYS:HG3	2.28	0.48
3:D:22:LEU:HD13	3:D:230:MET:HE1	1.95	0.48
3:D:232:VAL:HG11	3:D:244:VAL:CG2	2.44	0.48
3:D:161:LYS:O	3:D:170:TRP:NE1	2.47	0.48
1:B:870:GLU:HB2	5:F:204:THR:HG21	1.96	0.48
1:B:1332:PHE:H	1:B:1332:PHE:HD2	1.62	0.48
1:B:1120:LEU:CD1	1:B:1304:TRP:O	2.61	0.48
2:C:852:ARG:NH2	12:M:70:ARG:OXT	2.26	0.48
1:B:1140:HIS:HA	1:B:1274:ARG:O	2.14	0.48
2:C:562:GLY:HA3	2:C:590:HIS:CE1	2.49	0.47
8:I:116:TYR:HB2	8:I:123:MET:HB3	1.96	0.47
3:D:221:TYR:CD2	8:I:46:LEU:HD23	2.48	0.47
2:C:604:ARG:HB2	2:C:609:ILE:HB	1.95	0.47
7:H:39:THR:O	7:H:43:GLY:N	2.43	0.47
7:H:43:GLY:HA2	7:H:157:ILE:HD11	1.96	0.47
1:B:12:ARG:NH2	2:C:1192:TYR:HE2	2.12	0.47
1:B:317:LYS:O	1:B:318:SER:CB	2.62	0.47
2:C:773:MET:HE1	2:C:985:GLY:HA2	1.94	0.47
2:C:687:GLU:O	2:C:688:GLY:C	2.52	0.47
1:B:722:LEU:HD23	1:B:799:PHE:CD1	2.49	0.47
2:C:258:LEU:HG	2:C:258:LEU:O	2.14	0.47
1:B:384:ASN:C	1:B:386:ASP:N	2.66	0.47
2:C:291:ILE:HD13	2:C:300:HIS:CD2	2.49	0.47
5:F:77:SER:O	5:F:105:PHE:HB3	2.14	0.47
5:F:93:MET:SD	5:F:97:VAL:CG2	3.02	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:1002:THR:HG23	2:C:1006:ILE:O	2.14	0.47
3:D:143:LEU:HD21	3:D:146:LYS:HE2	1.96	0.47
3:D:172:PRO:O	3:D:235:VAL:HG22	2.12	0.47
2:C:367:LEU:HD12	2:C:370:PHE:CZ	2.48	0.47
1:B:54:ASN:HD21	1:B:247:ARG:NH1	2.11	0.47
6:G:103:MET:HE3	7:H:66:GLY:N	2.30	0.47
1:B:548:ASN:OD1	11:L:60:ALA:HB1	2.13	0.47
2:C:405:ARG:HD2	2:C:631:GLY:HA3	1.96	0.47
2:C:45:SER:O	2:C:48:LEU:N	2.47	0.47
1:B:784:LEU:HD11	1:B:815:PHE:CE2	2.48	0.47
3:D:83:SER:OG	3:D:160:LYS:HD3	2.14	0.47
2:C:591:ARG:O	2:C:593:PRO:HD3	2.14	0.47
2:C:1034:VAL:O	2:C:1036:ALA:N	2.47	0.47
1:B:355:GLY:N	1:B:482:PHE:CE1	2.81	0.47
14:P:8:U:O2'	14:P:9:A:H5'	2.13	0.47
2:C:1004:GLU:OE2	2:C:1064:TYR:CE2	2.67	0.47
10:K:19:GLU:O	10:K:23:ASN:HB2	2.14	0.47
1:B:78:PRO:CA	2:C:1201:LYS:HZ2	2.27	0.47
6:G:135:ARG:CZ	6:G:143:PHE:CE2	2.97	0.47
8:I:40:LEU:HD12	8:I:122:LEU:O	2.14	0.47
1:B:50:ILE:HG22	1:B:52:GLY:N	2.28	0.47
3:D:252:GLN:HG3	11:L:95:ILE:HG23	1.96	0.47
5:F:42:PHE:CE1	5:F:58:MET:HE3	2.49	0.47
1:B:784:LEU:HD21	1:B:815:PHE:HE2	1.80	0.47
1:B:1242:VAL:O	1:B:1243:VAL:CB	2.60	0.47
7:H:145:VAL:CG1	7:H:146:LYS:N	2.76	0.47
1:B:629:LEU:HD22	1:B:633:VAL:CG2	2.44	0.47
11:L:108:GLU:O	11:L:112:GLN:HG2	2.15	0.47
5:F:124:VAL:CG1	5:F:132:ILE:HG13	2.44	0.47
4:E:118:THR:HB	4:E:121:LYS:HB3	1.94	0.47
10:K:2:ILE:HG12	10:K:57:ILE:HD12	1.95	0.47
12:M:53:HIS:O	12:M:55:ILE:HG12	2.15	0.47
2:C:600:LEU:HD13	2:C:626:ILE:HD11	1.96	0.47
2:C:273:LEU:HG	2:C:276:ILE:HD12	1.95	0.47
1:B:816:HIS:CD2	2:C:764:SER:H	2.32	0.47
1:B:1224:LEU:HD12	1:B:1225:PHE:N	2.29	0.47
1:B:441:PRO:HD2	1:B:498:ARG:CZ	2.44	0.47
5:F:43:LYS:C	5:F:45:LYS:H	2.18	0.47
7:H:91:VAL:HG22	7:H:101:VAL:HG22	1.97	0.47
1:B:796:SER:C	1:B:798:GLY:H	2.18	0.47
2:C:811:TYR:HD1	2:C:811:TYR:H	1.61	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:792:MET:CE	2:C:857:ARG:NH1	2.76	0.47
1:B:184:SER:CB	1:B:199:LEU:HD23	2.44	0.47
2:C:1081:LEU:O	2:C:1083:ALA:N	2.48	0.47
2:C:298:LEU:CD2	2:C:298:LEU:N	2.77	0.47
2:C:628:THR:O	2:C:628:THR:HG23	2.13	0.47
1:B:116:ASP:C	1:B:118:HIS:N	2.68	0.47
8:I:109:LYS:HB2	8:I:111:LEU:HD12	1.96	0.47
2:C:908:GLU:O	2:C:909:ASP:O	2.33	0.47
2:C:996:ARG:NH1	3:D:38:ILE:HG23	2.30	0.47
3:D:142:VAL:H	10:K:16:ASP:CB	2.27	0.47
1:B:667:GLY:CA	3:D:192:TRP:HH2	2.27	0.47
3:D:69:LEU:CD1	3:D:69:LEU:N	2.77	0.47
10:K:56:LEU:O	10:K:59:LYS:N	2.48	0.47
1:B:535:THR:HG23	1:B:575:LYS:HG2	1.95	0.47
1:B:455:MET:HE3	2:C:1134:GLU:HG3	1.97	0.47
1:B:919:ILE:HG23	1:B:925:LEU:HD12	1.97	0.47
4:E:56:ARG:CD	4:E:149:THR:HA	2.36	0.47
2:C:792:MET:HA	2:C:856:PHE:O	2.14	0.47
3:D:77:ILE:HA	3:D:129:ILE:HD11	1.97	0.47
2:C:284:ILE:HD13	2:C:333:PHE:CD2	2.49	0.47
3:D:148:ARG:CG	3:D:149:LYS:H	2.28	0.47
1:B:381:THR:O	1:B:383:TYR:N	2.48	0.47
1:B:43:GLU:O	1:B:44:THR:HB	2.13	0.47
9:J:4:PHE:HE1	9:J:6:PHE:HE2	1.63	0.47
1:B:789:LYS:HE3	9:J:67:THR:OG1	2.14	0.47
3:D:114:TYR:HE2	10:K:19:GLU:OE2	1.97	0.47
1:B:335:ARG:NH1	2:C:1202:LEU:HD13	2.29	0.47
10:K:65:PRO:HG3	12:M:32:ALA:O	2.14	0.47
7:H:30:LEU:HD13	7:H:72:VAL:CG1	2.39	0.47
8:I:102:TYR:N	8:I:102:TYR:HD2	2.09	0.47
8:I:84:ALA:CA	8:I:87:ARG:HB2	2.40	0.47
1:B:567:LYS:CB	8:I:96:VAL:H	2.20	0.47
1:B:1335:ILE:HG22	1:B:1335:ILE:O	2.14	0.47
4:E:47:LEU:HD11	7:H:3:PHE:CE2	2.49	0.47
1:B:295:LEU:O	1:B:298:PHE:HB3	2.15	0.47
1:B:753:GLY:HA2	1:B:757:ASN:ND2	2.30	0.47
6:G:130:ILE:O	6:G:148:VAL:CG2	2.62	0.47
2:C:980:PHE:CA	2:C:1095:LEU:HD11	2.44	0.47
3:D:44:LEU:HA	3:D:160:LYS:O	2.13	0.47
8:I:128:ASN:O	8:I:128:ASN:OD1	2.32	0.47
1:B:1048:ASN:O	1:B:1049:ILE:C	2.52	0.47

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:959:ASN:OD1	1:B:961:ARG:HB3	2.14	0.47
2:C:1079:LYS:N	3:D:27:LEU:HD21	2.30	0.47
2:C:473:MET:C	2:C:475:SER:H	2.18	0.47
1:B:1336:MET:HE2	1:B:1381:LEU:HD23	1.97	0.47
1:B:1097:GLY:O	1:B:1100:ARG:HB3	2.14	0.47
4:E:210:ILE:O	4:E:214:LEU:HD23	2.14	0.47
1:B:898:ARG:HB2	1:B:933:TYR:CE1	2.49	0.47
1:B:15:LYS:HG3	2:C:1219:ASP:HA	1.97	0.47
11:L:63:VAL:HG23	11:L:63:VAL:O	2.14	0.47
1:B:331:GLY:O	1:B:332:LYS:O	2.33	0.47
2:C:782:LEU:HB3	2:C:784:ASN:OD1	2.15	0.47
2:C:373:ARG:HD2	2:C:567:GLU:OE2	2.14	0.47
12:M:30:ILE:HG22	12:M:31:CYS:H	1.79	0.47
1:B:537:ARG:NH1	8:I:120:GLY:O	2.48	0.47
8:I:40:LEU:HD23	8:I:42:ILE:HD11	1.97	0.47
1:B:1329:THR:O	1:B:1331:SER:N	2.48	0.47
1:B:1345:ARG:HD2	1:B:1373:ASP:OD1	2.13	0.47
4:E:27:LEU:CD1	4:E:173:HIS:HB2	2.43	0.47
1:B:1161:THR:HG22	1:B:1162:VAL:N	2.29	0.47
1:B:49:LYS:NZ	1:B:61:ILE:H	2.11	0.47
1:B:63:ARG:HG2	1:B:74:MET:SD	2.54	0.47
2:C:483:LEU:HD21	2:C:491:THR:CG2	2.45	0.47
2:C:980:PHE:CD2	2:C:1094:ARG:HA	2.50	0.47
2:C:776:GLN:O	2:C:1095:LEU:HA	2.14	0.47
5:F:11:ARG:HH21	5:F:141:VAL:HG21	1.79	0.47
12:M:36:SER:O	12:M:37:LYS:O	2.33	0.47
2:C:530:GLY:O	2:C:533:CYS:HB2	2.15	0.47
2:C:897:GLY:O	2:C:898:LEU:HD23	2.15	0.47
3:D:77:ILE:HA	3:D:77:ILE:HD13	1.68	0.47
2:C:461:LEU:N	2:C:461:LEU:CD1	2.77	0.47
1:B:243:PRO:HB2	1:B:244:PRO:HD2	1.97	0.47
2:C:284:ILE:HG23	2:C:324:ILE:CD1	2.44	0.47
1:B:951:GLU:HB3	1:B:954:TRP:CZ2	2.49	0.47
1:B:1402:PHE:O	1:B:1403:GLU:HB2	2.14	0.47
1:B:961:ARG:NH1	1:B:961:ARG:HG3	2.28	0.47
5:F:26:ARG:HH22	5:F:133:GLU:CD	2.17	0.47
1:B:1317:MET:CE	1:B:1327:ILE:HG21	2.44	0.47
2:C:797:TYR:O	2:C:799:PRO:HD3	2.14	0.47
5:F:111:VAL:CG1	5:F:137:GLU:HG2	2.45	0.47
8:I:113:ALA:HB2	8:I:126:GLU:HG3	1.97	0.47
1:B:1410:PHE:HA	2:C:1212:ILE:CD1	2.45	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:611:PRO:O	2:C:692:TYR:HB2	2.14	0.47
1:B:781:ASP:O	1:B:789:LYS:HA	2.14	0.47
3:D:186:LEU:HD12	3:D:186:LEU:N	2.30	0.47
3:D:89:GLU:O	3:D:90:ASP:HB3	2.15	0.47
2:C:230:ALA:N	2:C:231:PRO:HD2	2.29	0.47
1:B:367:PRO:HB3	1:B:465:TYR:O	2.15	0.47
2:C:581:PHE:HA	2:C:585:VAL:O	2.15	0.47
2:C:1161:HIS:NE2	2:C:1175:LEU:HD21	2.29	0.47
7:H:51:TYR:C	7:H:51:TYR:CD2	2.88	0.47
7:H:59:GLY:HA3	7:H:70:PHE:CE2	2.50	0.47
1:B:1340:GLY:HA2	5:F:183:PRO:HD2	1.96	0.47
1:B:297:GLN:O	1:B:301:ALA:HB2	2.14	0.47
11:L:73:LEU:HD21	11:L:75:ILE:HD11	1.96	0.47
2:C:1125:ASP:O	2:C:1126:GLY:O	2.33	0.47
2:C:941:LEU:HD21	2:C:946:ASN:HA	1.97	0.47
2:C:882:THR:HG21	2:C:935:ARG:CA	2.45	0.47
6:G:109:VAL:HG11	6:G:127:GLU:OE2	2.14	0.47
3:D:181:ASP:OD1	3:D:185:LYS:HB2	2.15	0.47
3:D:113:VAL:O	3:D:144:ILE:N	2.48	0.47
10:K:36:LEU:CB	10:K:47:ARG:HH12	2.27	0.47
2:C:370:PHE:HD2	2:C:373:ARG:HD2	1.79	0.47
1:B:1446:ASP:O	1:B:1447:GLU:C	2.53	0.47
7:H:27:LYS:HD3	7:H:51:TYR:CE2	2.50	0.47
1:B:1377:THR:HA	5:F:212:ARG:HH21	1.79	0.47
1:B:1239:ARG:HB3	1:B:1239:ARG:NH1	2.30	0.47
1:B:492:PRO:O	1:B:493:GLN:NE2	2.47	0.47
1:B:774:ARG:O	1:B:775:ILE:C	2.52	0.47
1:B:780:VAL:HG23	2:C:699:GLU:OE1	2.14	0.47
7:H:88:ASP:N	7:H:88:ASP:OD2	2.40	0.47
1:B:115:LEU:CD1	1:B:142:CYS:HB3	2.45	0.47
15:T:18:DT:H2'	15:T:19:DT:H5'	1.95	0.47
1:B:665:GLY:O	1:B:667:GLY:N	2.48	0.47
2:C:376:PHE:CZ	2:C:569:TYR:HB3	2.50	0.47
9:J:100:PHE:CD1	9:J:100:PHE:N	2.83	0.47
2:C:582:VAL:CG2	2:C:626:ILE:HB	2.45	0.47
2:C:129:PHE:HD2	2:C:166:PHE:HA	1.79	0.47
1:B:1376:THR:HG23	1:B:1377:THR:N	2.29	0.47
7:H:80:LYS:O	7:H:80:LYS:HG2	2.15	0.47
7:H:34:VAL:HG11	7:H:74:TYR:OH	2.14	0.47
1:B:547:LEU:HD13	11:L:58:PHE:CD1	2.50	0.47
7:H:138:THR:HG23	7:H:139:ILE:HG13	1.97	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:313:MET:CE	2:C:386:LEU:HD22	2.42	0.47
2:C:899:ILE:HG22	2:C:903:VAL:CG2	2.45	0.47
2:C:1115:THR:O	2:C:1115:THR:HG22	2.13	0.47
1:B:821:ARG:HH11	1:B:821:ARG:HB2	1.80	0.47
1:B:1315:GLU:C	1:B:1317:MET:N	2.67	0.47
7:H:153:GLN:O	7:H:154:VAL:C	2.53	0.47
2:C:430:ARG:HB3	2:C:434:ARG:CZ	2.45	0.47
1:B:1364:ASN:O	1:B:1365:TYR:C	2.53	0.47
5:F:136:ASN:HB3	5:F:139:ALA:CB	2.45	0.47
2:C:254:LEU:HD23	2:C:381:MET:CE	2.44	0.46
2:C:596:LEU:O	2:C:599:THR:HB	2.15	0.46
4:E:6:SER:OG	4:E:7:THR:N	2.47	0.46
1:B:264:PHE:O	1:B:267:ALA:HB3	2.14	0.46
2:C:1138:MET:CE	2:C:1143:ALA:HB3	2.45	0.46
11:L:77:THR:HG23	11:L:83:PRO:HB3	1.97	0.46
5:F:39:LEU:O	5:F:43:LYS:HG3	2.14	0.46
1:B:1036:ARG:HG2	1:B:1036:ARG:HH11	1.80	0.46
2:C:324:ILE:HG22	2:C:325:GLN:N	2.29	0.46
1:B:255:SER:OG	2:C:918:ILE:HG21	2.15	0.46
2:C:882:THR:O	2:C:884:ARG:N	2.48	0.46
1:B:965:GLN:HA	1:B:968:GLN:CG	2.44	0.46
8:I:127:GLY:CA	8:I:130:ARG:HH22	2.28	0.46
1:B:418:SER:C	1:B:420:ARG:N	2.67	0.46
4:E:214:LEU:C	4:E:216:ASN:H	2.18	0.46
5:F:177:ARG:HD3	5:F:215:MET:CG	2.44	0.46
3:D:191:TYR:HB3	3:D:201:TRP:CD1	2.50	0.46
1:B:346:ASP:HB3	2:C:1108:ARG:N	2.30	0.46
2:C:386:LEU:C	2:C:388:CYS:N	2.68	0.46
2:C:308:TRP:CZ3	9:J:45:ARG:HB3	2.49	0.46
2:C:903:VAL:HG12	2:C:904:ARG:N	2.29	0.46
2:C:1183:LYS:HA	2:C:1186:ASP:HA	1.97	0.46
2:C:753:ALA:HA	2:C:756:ILE:HD12	1.97	0.46
15:T:14:DC:C2'	15:T:15:DT:H71	2.43	0.46
6:G:99:LEU:O	6:G:102:SER:OG	2.29	0.46
2:C:467:GLY:CA	2:C:475:SER:HB3	2.44	0.46
4:E:51:ASN:HB3	4:E:178:ALA:HA	1.98	0.46
3:D:124:LEU:O	3:D:127:ARG:HG2	2.16	0.46
7:H:21:ARG:HA	7:H:21:ARG:HD3	1.68	0.46
1:B:208:LEU:HD23	1:B:208:LEU:C	2.36	0.46
2:C:825:VAL:O	2:C:826:ALA:HB2	2.14	0.46
1:B:591:PHE:HA	1:B:595:THR:OG1	2.15	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:I:91:ASP:C	8:I:93:TYR:H	2.18	0.46
1:B:399:HIS:CE1	1:B:462:VAL:HG11	2.49	0.46
1:B:23:SER:HA	1:B:233:TRP:CD1	2.51	0.46
1:B:61:ILE:O	1:B:63:ARG:N	2.49	0.46
11:L:42:LEU:HD21	11:L:46:ILE:HD11	1.97	0.46
4:E:59:ILE:O	4:E:60:LYS:C	2.51	0.46
12:M:27:LEU:HD23	12:M:27:LEU:H	1.79	0.46
2:C:1159:ARG:HD3	2:C:1193:GLN:HB2	1.96	0.46
3:D:132:PRO:O	3:D:133:ILE:C	2.54	0.46
3:D:133:ILE:HD11	3:D:237:SER:CA	2.42	0.46
3:D:47:ASP:CA	12:M:69:ALA:CB	2.91	0.46
3:D:45:ALA:CA	3:D:72:LEU:HD12	2.37	0.46
2:C:1151:LEU:CD1	2:C:1151:LEU:H	2.28	0.46
2:C:865:LYS:HE2	2:C:871:THR:OG1	2.15	0.46
7:H:145:VAL:CG1	7:H:146:LYS:H	2.27	0.46
2:C:493:SER:N	2:C:751:VAL:HG11	2.30	0.46
1:B:793:SER:HB2	1:B:794:PRO:HD2	1.97	0.46
1:B:1385:THR:HG22	1:B:1386:ARG:H	1.79	0.46
3:D:234:SER:OG	3:D:235:VAL:N	2.48	0.46
10:K:36:LEU:HD22	10:K:41:LEU:HD12	1.96	0.46
10:K:48:ARG:CD	10:K:49:MET:N	2.75	0.46
1:B:591:PHE:CD2	1:B:595:THR:HB	2.50	0.46
1:B:51:GLY:HA2	1:B:56:PRO:HA	1.97	0.46
1:B:22:PHE:CE2	1:B:30:ILE:HD12	2.50	0.46
11:L:19:LEU:HD22	11:L:33:ILE:HG21	1.98	0.46
7:H:138:THR:HG22	7:H:139:ILE:HG13	1.96	0.46
2:C:47:GLN:HB3	2:C:173:MET:HE1	1.98	0.46
1:B:828:ALA:HB1	2:C:530:GLY:HA2	1.91	0.46
1:B:1074:GLU:C	1:B:1076:ALA:N	2.68	0.46
1:B:1418:LEU:HD12	1:B:1419:ASP:H	1.79	0.46
2:C:171:PRO:HD2	2:C:457:LEU:CD1	2.46	0.46
4:E:118:THR:HG22	4:E:118:THR:O	2.15	0.46
1:B:1385:THR:HG22	1:B:1386:ARG:N	2.30	0.46
1:B:1173:HIS:C	1:B:1174:PHE:HD1	2.17	0.46
2:C:1006:ILE:HD13	10:K:44:TYR:CE2	2.51	0.46
10:K:9:SER:HB2	10:K:45:CYS:HB2	1.97	0.46
2:C:579:ARG:NH1	2:C:622:LYS:O	2.49	0.46
8:I:145:ARG:HG3	8:I:146:ARG:HG3	1.97	0.46
2:C:276:ILE:O	2:C:276:ILE:HG22	2.15	0.46
1:B:445:ASN:HA	1:B:478:TYR:CE2	2.49	0.46
1:B:886:ILE:HB	1:B:943:LEU:HD12	1.98	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:E:12:ARG:HG3	4:E:12:ARG:HH21	1.80	0.46
1:B:1164:PRO:HG2	1:B:1165:GLU:H	1.80	0.46
1:B:1006:ILE:HD12	5:F:167:ARG:HG3	1.98	0.46
1:B:500:GLU:O	1:B:504:LEU:HD13	2.15	0.46
2:C:498:THR:HG22	2:C:537:LYS:HB2	1.96	0.46
1:B:710:LEU:HD12	1:B:710:LEU:N	2.30	0.46
5:F:147:HIS:HD2	5:F:149:LEU:H	1.62	0.46
2:C:755:ILE:H	2:C:755:ILE:HG13	1.50	0.46
1:B:807:GLY:HA2	2:C:760:ASP:O	2.15	0.46
1:B:868:TYR:C	1:B:868:TYR:CD1	2.85	0.46
4:E:20:GLU:O	4:E:21:GLU:O	2.32	0.46
10:K:57:ILE:HG12	10:K:61:LEU:HD11	1.96	0.46
1:B:51:GLY:O	1:B:56:PRO:HB3	2.16	0.46
1:B:71:GLN:CG	1:B:72:GLU:N	2.77	0.46
2:C:1174:LYS:O	2:C:1175:LEU:C	2.54	0.46
2:C:1197:PRO:HG2	2:C:1200:ALA:CB	2.27	0.46
1:B:442:VAL:HG12	1:B:490:HIS:O	2.14	0.46
1:B:563:PRO:HG3	1:B:572:TRP:CE2	2.49	0.46
5:F:11:ARG:C	5:F:13:TRP:N	2.69	0.46
2:C:388:CYS:C	2:C:390:LEU:H	2.19	0.46
2:C:910:VAL:CG1	2:C:911:ILE:H	2.27	0.46
2:C:873:THR:HG22	2:C:874:PHE:N	2.31	0.46
2:C:615:MET:C	2:C:616:ILE:HD12	2.36	0.46
1:B:1330:ASN:O	1:B:1332:PHE:N	2.48	0.46
6:G:109:VAL:CG1	6:G:110:ASP:N	2.74	0.46
1:B:639:PRO:CG	1:B:640:GLN:N	2.79	0.46
1:B:867:ILE:N	1:B:867:ILE:HD12	2.31	0.46
2:C:570:VAL:CG2	2:C:573:GLN:HB3	2.46	0.46
12:M:70:ARG:HH11	12:M:70:ARG:HG2	1.80	0.46
1:B:1102:LYS:O	1:B:1106:ASN:ND2	2.49	0.46
2:C:803:LEU:CD1	2:C:1032:SER:HB3	2.46	0.46
1:B:1215:ARG:NH1	1:B:1272:THR:O	2.49	0.46
2:C:557:PHE:C	2:C:557:PHE:CD2	2.89	0.46
2:C:299:GLU:HB3	2:C:571:PRO:HG3	1.97	0.46
2:C:1002:THR:CG2	2:C:1006:ILE:HG13	2.37	0.46
3:D:115:SER:HB3	3:D:142:VAL:HB	1.98	0.46
1:B:77:CYS:C	1:B:78:PRO:O	2.51	0.46
8:I:58:THR:HG22	8:I:59:ILE:H	1.81	0.46
1:B:886:ILE:HD12	1:B:943:LEU:CB	2.42	0.46
1:B:23:SER:O	1:B:27:VAL:HG23	2.16	0.46
1:B:1424:VAL:HG11	2:C:1139:ILE:HD13	1.97	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:D:6:PRO:HG2	11:L:101:LEU:HB2	1.98	0.46
1:B:709:THR:CB	1:B:712:GLU:HG3	2.42	0.46
6:G:94:LEU:HD21	6:G:122:MET:HA	1.98	0.46
1:B:947:PHE:HD1	1:B:947:PHE:N	2.13	0.46
1:B:1403:GLU:O	15:T:16:DG:OP1	2.33	0.46
2:C:758:PHE:CZ	2:C:1031:LEU:HD22	2.48	0.46
1:B:1411:GLU:O	1:B:1411:GLU:HG2	2.15	0.46
1:B:933:TYR:O	1:B:937:VAL:HG23	2.15	0.46
1:B:157:ASP:C	1:B:159:THR:H	2.18	0.46
5:F:116:ILE:HG22	5:F:120:ALA:HB3	1.97	0.46
3:D:229:TYR:CD1	3:D:229:TYR:N	2.84	0.46
2:C:1099:VAL:O	2:C:1101:ASP:N	2.49	0.46
3:D:191:TYR:CD2	3:D:201:TRP:CD1	3.04	0.46
2:C:361:LEU:HD11	2:C:381:MET:CE	2.44	0.46
2:C:240:ILE:HD13	2:C:377:PHE:HE2	1.81	0.46
1:B:72:GLU:O	1:B:73:GLY:O	2.34	0.46
3:D:221:TYR:CE1	3:D:222:LYS:HG3	2.51	0.46
5:F:144:ILE:HG13	5:F:145:THR:N	2.29	0.46
1:B:84:ILE:HD11	1:B:270:LEU:HD22	1.97	0.46
1:B:90:VAL:HG13	1:B:297:GLN:CD	2.36	0.46
3:D:252:GLN:CG	11:L:95:ILE:HG23	2.46	0.46
1:B:572:TRP:HA	1:B:576:GLN:OE1	2.16	0.46
3:D:163:ILE:N	3:D:163:ILE:CD1	2.68	0.46
14:P:3:C:H42	15:T:26:DA:N6	2.13	0.46
4:E:64:VAL:CG2	4:E:129:LEU:HD22	2.46	0.46
5:F:60:PHE:C	5:F:60:PHE:CD2	2.88	0.46
2:C:654:ARG:O	2:C:656:GLY:N	2.48	0.46
2:C:244:LEU:HD13	2:C:247:GLY:O	2.15	0.46
2:C:879:ARG:NH1	2:C:883:LEU:HD22	2.30	0.46
2:C:807:ARG:NH1	2:C:807:ARG:HB3	2.30	0.46
2:C:1098:MET:H	2:C:1098:MET:CE	2.27	0.46
1:B:403:LYS:O	1:B:404:TYR:CD2	2.68	0.46
1:B:438:ASP:O	1:B:439:ASN:HB2	2.15	0.46
1:B:650:GLN:HB3	1:B:654:ASN:HD21	1.81	0.46
1:B:203:SER:O	1:B:206:GLU:HB3	2.15	0.46
2:C:557:PHE:O	2:C:557:PHE:CD2	2.69	0.46
9:J:72:ASP:HA	9:J:81:ARG:O	2.15	0.46
1:B:591:PHE:HA	1:B:595:THR:CG2	2.45	0.46
1:B:590:ARG:NH2	1:B:620:LYS:CB	2.65	0.46
1:B:106:VAL:HG12	1:B:107:CYS:N	2.30	0.46
2:C:172:ILE:HG22	2:C:173:MET:N	2.31	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:F:202:SER:HG	5:F:204:THR:HG22	1.80	0.46
1:B:897:TYR:N	1:B:897:TYR:CD1	2.84	0.46
2:C:56:ASP:CB	2:C:57:TYR:HD1	2.28	0.46
2:C:583:ASN:ND2	2:C:628:THR:HG22	2.30	0.46
1:B:877:HIS:ND1	1:B:1056:SER:HA	2.31	0.46
2:C:1214:PRO:HG2	2:C:1214:PRO:O	2.16	0.46
1:B:578:LEU:HD23	1:B:612:ILE:CD1	2.46	0.46
15:T:22:DT:C2'	15:T:23:DT:O5'	2.64	0.46
2:C:840:ILE:HB	2:C:1011:ILE:HB	1.98	0.46
2:C:841:MET:O	2:C:993:THR:HA	2.16	0.46
10:K:14:VAL:CG1	10:K:14:VAL:O	2.58	0.46
2:C:276:ILE:HD13	2:C:280:ILE:HD11	1.98	0.46
11:L:86:ALA:HA	11:L:89:ASN:ND2	2.31	0.46
5:F:157:SER:C	5:F:159:ASP:N	2.69	0.46
2:C:746:SER:CB	2:C:1046:PRO:HG2	2.45	0.46
2:C:29:ASP:O	2:C:30:SER:C	2.54	0.46
2:C:33:VAL:HG21	2:C:638:PHE:CZ	2.40	0.46
2:C:637:LEU:HD22	2:C:742:GLU:HA	1.97	0.46
1:B:172:PRO:HA	1:B:184:SER:O	2.16	0.46
1:B:843:LYS:HA	1:B:846:GLU:HG3	1.98	0.46
2:C:329:THR:O	2:C:329:THR:HG22	2.16	0.46
4:E:137:ASN:HD22	4:E:138:ASN:N	2.14	0.46
8:I:7:ASP:O	8:I:8:ASP:HB2	2.15	0.46
2:C:216:GLU:HA	2:C:406:LEU:HD23	1.97	0.46
3:D:147:LEU:CD2	3:D:147:LEU:N	2.79	0.45
2:C:363:HIS:HD2	2:C:585:VAL:HG22	1.81	0.45
1:B:445:ASN:CB	1:B:455:MET:HG2	2.46	0.45
1:B:857:ARG:NH1	6:G:139:PRO:HB2	2.31	0.45
4:E:8:PHE:O	4:E:9:GLN:HB2	2.14	0.45
1:B:18:GLN:HB3	2:C:1215:ARG:HG3	1.97	0.45
2:C:1166:CYS:O	2:C:1166:CYS:SG	2.73	0.45
1:B:546:VAL:O	1:B:550:LEU:HG	2.16	0.45
12:M:28:LYS:HB3	12:M:39:SER:HA	1.97	0.45
2:C:847:ASP:CB	3:D:167:HIS:CD2	2.95	0.45
3:D:238:ILE:HG21	3:D:242:GLN:HB2	1.95	0.45
2:C:878:GLN:O	2:C:879:ARG:C	2.54	0.45
15:T:11:DT:H1'	15:T:12:DA:H5'	1.97	0.45
4:E:24:ALA:C	4:E:26:THR:N	2.69	0.45
2:C:423:LYS:CE	2:C:470:LYS:HZ1	2.30	0.45
1:B:1280:GLU:O	1:B:1281:ARG:C	2.54	0.45
8:I:83:GLN:C	8:I:85:GLY:H	2.19	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:1000:PRO:O	2:C:1007:VAL:HG23	2.16	0.45
3:D:69:LEU:CD1	3:D:69:LEU:H	2.30	0.45
3:D:35:ARG:HH11	11:L:41:THR:N	2.14	0.45
2:C:367:LEU:HD12	2:C:370:PHE:CE1	2.51	0.45
2:C:195:CYS:SG	2:C:196:PRO:HD2	2.56	0.45
1:B:266:LEU:HD21	1:B:303:TYR:CZ	2.51	0.45
4:E:59:ILE:O	4:E:63:LEU:HB2	2.16	0.45
1:B:709:THR:HG21	9:J:93:LYS:O	2.16	0.45
2:C:388:CYS:C	2:C:390:LEU:N	2.70	0.45
6:G:75:PRO:O	6:G:77:ASP:O	2.34	0.45
2:C:885:MET:HA	2:C:936:ASP:CB	2.46	0.45
1:B:427:GLN:HB2	1:B:430:TRP:CD1	2.51	0.45
7:H:95:SER:C	7:H:97:HIS:H	2.19	0.45
8:I:62:SER:OG	8:I:63:LEU:N	2.48	0.45
1:B:350:ARG:CB	2:C:1128:LEU:HD11	2.46	0.45
6:G:138:LEU:HB2	6:G:142:SER:O	2.15	0.45
2:C:544:CYS:HB3	2:C:634:TYR:CE1	2.51	0.45
3:D:100:THR:HG22	3:D:101:LEU:H	1.80	0.45
3:D:101:LEU:HD13	3:D:118:LEU:CD2	2.23	0.45
6:G:135:ARG:HD3	6:G:143:PHE:CE2	2.50	0.45
8:I:82:PRO:O	8:I:84:ALA:N	2.36	0.45
8:I:84:ALA:HA	8:I:87:ARG:HD2	1.98	0.45
2:C:1106:ARG:NH2	2:C:1109:GLY:H	2.14	0.45
1:B:782:ARG:NH2	2:C:699:GLU:O	2.45	0.45
3:D:133:ILE:HD13	3:D:237:SER:N	2.32	0.45
1:B:343:LYS:HB3	2:C:1117:GLN:OE1	2.17	0.45
13:N:6:DA:C2	15:T:12:DA:C2	3.04	0.45
2:C:1034:VAL:HG21	2:C:1055:ILE:HG23	1.98	0.45
5:F:124:VAL:HG13	5:F:132:ILE:HG13	1.98	0.45
1:B:1147:THR:HA	1:B:1197:LEU:HD23	1.98	0.45
1:B:630:ILE:HD13	1:B:646:PHE:CZ	2.51	0.45
3:D:91:HIS:CD2	3:D:91:HIS:O	2.69	0.45
2:C:996:ARG:HH21	3:D:175:ALA:HA	1.81	0.45
7:H:22:MET:O	7:H:23:LYS:C	2.54	0.45
4:E:176:GLU:O	4:E:179:GLN:N	2.49	0.45
1:B:434:ARG:HD2	1:B:435:HIS:O	2.16	0.45
1:B:1220:PHE:CE2	1:B:1263:ILE:HG23	2.51	0.45
5:F:13:TRP:CZ3	5:F:39:LEU:HB2	2.51	0.45
2:C:33:VAL:O	2:C:36:ALA:HB3	2.15	0.45
2:C:542:MET:HG2	2:C:747:MET:HB3	1.98	0.45
2:C:731:VAL:CG1	2:C:732:SER:H	2.23	0.45

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:414:ASP:OD1	1:B:416:ARG:CG	2.65	0.45
3:D:11:ARG:HD3	3:D:209:TYR:CZ	2.51	0.45
9:J:32:CYS:SG	9:J:33:SER:N	2.86	0.45
2:C:560:GLU:O	2:C:561:TRP:CD1	2.70	0.45
1:B:219:PHE:CD2	1:B:231:PRO:HD2	2.51	0.45
1:B:320:ARG:HA	1:B:321:PRO:HD3	1.87	0.45
5:F:156:LEU:HD12	5:F:195:VAL:CG1	2.46	0.45
1:B:1159:ARG:O	1:B:1160:SER:HB3	2.16	0.45
2:C:1107:ALA:O	2:C:1108:ARG:O	2.35	0.45
7:H:91:VAL:HA	7:H:101:VAL:HA	1.98	0.45
2:C:859:TYR:OH	2:C:941:LEU:CD1	2.65	0.45
1:B:1403:GLU:OE2	15:T:16:DG:H4'	2.16	0.45
3:D:8:VAL:HG21	11:L:105:PHE:CA	2.46	0.45
2:C:54:PHE:HE1	2:C:414:ALA:HA	1.81	0.45
1:B:522:GLY:HA2	1:B:630:ILE:HD13	1.98	0.45
1:B:578:LEU:HD23	1:B:612:ILE:HD11	1.99	0.45
1:B:696:GLU:OE2	1:B:702:LEU:HD21	2.17	0.45
8:I:76:THR:O	8:I:76:THR:HG22	2.15	0.45
5:F:34:GLU:O	5:F:34:GLU:HG2	2.16	0.45
5:F:207:ARG:HH11	5:F:207:ARG:CB	2.29	0.45
2:C:1099:VAL:C	2:C:1101:ASP:H	2.19	0.45
2:C:1039:GLY:O	10:K:32:GLU:HB2	2.15	0.45
9:J:86:PHE:CE1	9:J:100:PHE:HB2	2.52	0.45
9:J:55:THR:HG23	9:J:86:PHE:CZ	2.52	0.45
1:B:511:ILE:O	1:B:519:PRO:HA	2.17	0.45
1:B:302:THR:HA	1:B:305:ASP:O	2.17	0.45
1:B:1170:ILE:HG13	1:B:1170:ILE:H	1.49	0.45
9:J:8:ARG:HG3	9:J:34:TYR:CE1	2.52	0.45
2:C:995:ARG:HH11	3:D:165:LYS:HA	1.82	0.45
1:B:482:PHE:C	1:B:484:GLY:H	2.20	0.45
1:B:878:ILE:HG22	1:B:956:LEU:N	2.32	0.45
2:C:1111:MET:SD	2:C:1118:PRO:HA	2.56	0.45
9:J:4:PHE:C	9:J:4:PHE:CD1	2.90	0.45
1:B:699:ALA:O	1:B:700:ASN:CB	2.65	0.45
4:E:140:ASP:O	4:E:143:ASN:N	2.49	0.45
1:B:1154:TYR:N	9:J:41:PRO:O	2.49	0.45
1:B:332:LYS:HB2	1:B:337:ARG:NH1	2.32	0.45
2:C:110:HIS:CD2	12:M:54:ARG:HH22	2.35	0.45
7:H:1:MET:SD	7:H:1:MET:C	2.95	0.45
1:B:38:PRO:HG2	1:B:39:GLU:N	2.31	0.45
7:H:45:ILE:O	7:H:45:ILE:HG22	2.17	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:606:LEU:CB	1:B:614:PHE:CE2	3.00	0.45
9:J:54:GLU:OE2	9:J:118:ARG:NH1	2.49	0.45
2:C:510:LYS:CB	2:C:511:PRO:CD	2.94	0.45
4:E:52:LEU:HB2	4:E:182:SER:HB3	1.98	0.45
4:E:68:ARG:O	4:E:72:ARG:HG3	2.16	0.45
3:D:183:TRP:O	3:D:185:LYS:N	2.50	0.45
2:C:683:SER:O	2:C:685:LEU:N	2.50	0.45
1:B:697:ALA:HB2	1:B:702:LEU:HD12	1.99	0.45
3:D:226:ASP:O	3:D:227:THR:HB	2.17	0.45
1:B:1209:MET:SD	1:B:1236:LEU:HB3	2.57	0.45
2:C:1146:PHE:CZ	2:C:1150:ARG:HD2	2.52	0.45
1:B:470:LEU:HD13	1:B:487:MET:HE1	1.99	0.45
1:B:130:ASP:H	1:B:134:ARG:HH21	1.64	0.45
1:B:24:PRO:HD2	1:B:233:TRP:NE1	2.32	0.45
11:L:42:LEU:HD21	11:L:46:ILE:CD1	2.46	0.45
12:M:38:LEU:HD11	12:M:49:LYS:HE2	1.98	0.45
2:C:983:ARG:CD	2:C:1091:TYR:HB3	2.47	0.45
2:C:616:ILE:HG13	2:C:697:GLU:HG2	1.98	0.45
2:C:400:HIS:ND1	2:C:400:HIS:O	2.48	0.45
6:G:120:ILE:O	6:G:123:LYS:HB3	2.17	0.45
2:C:53:GLN:HG2	2:C:547:VAL:HG22	1.95	0.45
1:B:1411:GLU:HA	1:B:1414:ALA:CB	2.46	0.45
3:D:8:VAL:HG11	11:L:105:PHE:CD1	2.48	0.45
2:C:118:ARG:HD3	2:C:204:ILE:HD13	1.99	0.45
2:C:205:ILE:N	2:C:205:ILE:CD1	2.79	0.45
5:F:48:ASP:CG	5:F:49:SER:N	2.70	0.45
4:E:51:ASN:O	4:E:52:LEU:C	2.54	0.45
5:F:113:GLN:HA	5:F:137:GLU:HG3	1.99	0.45
3:D:10:ILE:CG2	3:D:13:ALA:HB2	2.46	0.45
9:J:101:PHE:CD1	9:J:101:PHE:N	2.84	0.45
1:B:898:ARG:HD3	1:B:933:TYR:CD1	2.52	0.45
1:B:390:GLN:HE21	1:B:394:ASN:ND2	2.15	0.45
3:D:3:GLU:OE1	3:D:4:GLU:HB2	2.17	0.45
10:K:16:ASP:O	10:K:18:TRP:N	2.49	0.45
10:K:36:LEU:HD11	10:K:51:LEU:HB2	1.98	0.45
10:K:57:ILE:CA	10:K:60:PHE:HD2	2.22	0.45
3:D:67:LEU:CD1	3:D:155:LEU:HD13	2.42	0.45
1:B:1444:MET:HE3	1:B:1444:MET:HB2	1.86	0.45
8:I:58:THR:HG22	8:I:59:ILE:N	2.31	0.45
4:E:35:LEU:CD2	4:E:173:HIS:HB3	2.46	0.45
5:F:161:LYS:HD2	5:F:195:VAL:CG2	2.46	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:500:GLU:OE1	2:C:1143:ALA:C	2.55	0.45
2:C:100:PRO:HD3	2:C:172:ILE:HD12	1.99	0.45
2:C:635:ARG:NH2	2:C:742:GLU:OE2	2.48	0.45
3:D:169:LYS:NZ	12:M:69:ALA:HB3	2.32	0.45
2:C:1151:LEU:H	2:C:1151:LEU:HD13	1.81	0.45
2:C:952:VAL:HG13	2:C:966:VAL:HG22	1.97	0.45
2:C:247:GLY:N	2:C:418:LYS:HZ1	2.14	0.45
2:C:65:GLU:HG3	2:C:66:ASP:OD1	2.17	0.45
5:F:154:ILE:HG22	5:F:155:ARG:N	2.30	0.45
1:B:836:TYR:CD2	1:B:840:ARG:HD2	2.50	0.45
9:J:34:TYR:O	9:J:35:VAL:CG2	2.65	0.45
1:B:1120:LEU:HD21	1:B:1304:TRP:O	2.17	0.45
2:C:467:GLY:H	2:C:475:SER:CB	2.30	0.45
1:B:873:MET:HG2	1:B:957:PRO:HB3	1.99	0.45
2:C:224:GLN:HA	2:C:396:ASP:OD2	2.17	0.45
4:E:216:ASN:O	4:E:217:LEU:C	2.54	0.45
1:B:344:ARG:HH11	1:B:344:ARG:HG2	1.81	0.45
2:C:487:THR:O	2:C:490:SER:HB3	2.17	0.45
1:B:81:PHE:CE1	2:C:1208:MET:HE2	2.51	0.45
5:F:197:LYS:HE2	5:F:199:ILE:HD11	1.98	0.45
6:G:125:LEU:O	6:G:125:LEU:HG	2.16	0.45
3:D:70:ILE:HD11	3:D:144:ILE:CG1	2.47	0.45
10:K:1:MET:N	10:K:55:ASP:C	2.70	0.45
2:C:360:PHE:HD2	2:C:374:LYS:HD3	1.82	0.45
1:B:921:GLY:O	1:B:922:ASP:C	2.55	0.45
2:C:1163:CYS:HB3	2:C:1166:CYS:O	2.17	0.45
3:D:258:ILE:N	3:D:258:ILE:HD12	2.32	0.45
1:B:1434:ALA:O	1:B:1436:ILE:N	2.50	0.45
1:B:366:VAL:CG2	1:B:460:VAL:HG23	2.47	0.45
2:C:281:PRO:HD2	2:C:284:ILE:HD12	1.98	0.45
1:B:946:VAL:HB	1:B:947:PHE:CD1	2.52	0.45
7:H:119:LEU:HD12	7:H:131:GLN:C	2.37	0.45
1:B:1120:LEU:HD11	1:B:1304:TRP:O	2.17	0.45
2:C:294:ASP:C	2:C:296:GLU:H	2.17	0.45
1:B:207:ILE:O	1:B:211:PHE:HD1	2.00	0.45
5:F:124:VAL:N	5:F:125:PRO:CD	2.80	0.45
2:C:977:GLY:HA3	2:C:1099:VAL:HB	2.00	0.44
1:B:358:ASN:ND2	2:C:833:TYR:OH	2.50	0.44
3:D:34:ARG:HA	3:D:37:MET:CE	2.46	0.44
7:H:15:PRO:HG2	7:H:66:GLY:HA3	1.99	0.44
1:B:567:LYS:HE3	8:I:46:LEU:HB3	1.98	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:I:98:TYR:CD1	8:I:99:GLY:N	2.85	0.44
4:E:40:HIS:C	4:E:42:GLY:H	2.20	0.44
1:B:1155:ASP:OD2	1:B:1162:VAL:N	2.49	0.44
1:B:24:PRO:HB3	1:B:237:THR:HB	1.99	0.44
1:B:497:THR:HG22	1:B:498:ARG:N	2.32	0.44
1:B:544:ASP:CG	1:B:545:GLN:N	2.70	0.44
2:C:644:GLU:C	2:C:646:LEU:H	2.21	0.44
2:C:707:PRO:O	2:C:711:GLU:HG2	2.17	0.44
2:C:935:ARG:HG3	2:C:935:ARG:O	2.18	0.44
2:C:1096:ARG:O	2:C:1097:HIS:CB	2.62	0.44
1:B:1120:LEU:CD2	1:B:1304:TRP:O	2.65	0.44
1:B:338:GLY:O	1:B:342:GLY:O	2.35	0.44
10:K:56:LEU:O	10:K:57:ILE:C	2.54	0.44
10:K:57:ILE:HG12	10:K:61:LEU:CD1	2.48	0.44
2:C:253:THR:HG22	2:C:254:LEU:N	2.33	0.44
2:C:254:LEU:HD22	2:C:361:LEU:HD13	1.99	0.44
7:H:27:LYS:O	7:H:30:LEU:HB3	2.18	0.44
1:B:567:LYS:CG	8:I:95:TYR:HA	2.48	0.44
1:B:899:VAL:CB	1:B:929:LEU:HD12	2.45	0.44
1:B:218:ASP:O	1:B:219:PHE:C	2.55	0.44
1:B:541:ILE:HD12	1:B:577:ILE:HD11	1.99	0.44
1:B:497:THR:O	1:B:500:GLU:N	2.42	0.44
5:F:23:VAL:HG12	5:F:28:TYR:HB2	1.99	0.44
2:C:45:SER:O	2:C:46:GLN:C	2.54	0.44
2:C:35:SER:HA	2:C:811:TYR:HE2	1.81	0.44
2:C:34:ILE:O	2:C:37:PHE:N	2.51	0.44
4:E:138:ASN:ND2	7:H:35:GLU:HB3	2.32	0.44
9:J:15:TYR:HD1	9:J:15:TYR:N	2.13	0.44
2:C:449:ASN:O	2:C:451:LYS:N	2.50	0.44
2:C:842:ASN:ND2	2:C:845:SER:CB	2.80	0.44
2:C:841:MET:SD	2:C:846:ILE:HD11	2.57	0.44
2:C:843:GLN:HB3	2:C:994:TYR:O	2.18	0.44
2:C:361:LEU:HG	2:C:363:HIS:CE1	2.52	0.44
2:C:362:PRO:C	2:C:363:HIS:O	2.55	0.44
2:C:102:VAL:O	2:C:104:GLU:HG2	2.17	0.44
2:C:129:PHE:CD2	2:C:166:PHE:HA	2.52	0.44
1:B:372:LYS:HA	1:B:435:HIS:HD1	1.82	0.44
1:B:1189:SER:OG	1:B:1256:GLU:OE1	2.22	0.44
15:T:24:DG:H2'	15:T:25:DC:O4'	2.17	0.44
1:B:375:THR:OG1	1:B:376:TYR:N	2.49	0.44
1:B:1441:PHE:HZ	6:G:89:GLU:HA	1.79	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:51:PHE:CZ	2:C:172:ILE:HA	2.53	0.44
2:C:25:ILE:HG23	2:C:658:ILE:HD12	2.00	0.44
1:B:709:THR:CG2	1:B:711:ARG:HB2	2.46	0.44
11:L:68:PHE:N	11:L:68:PHE:HD2	2.15	0.44
1:B:1343:ALA:O	1:B:1346:ALA:HB3	2.18	0.44
1:B:940:ARG:HH11	1:B:940:ARG:HG2	1.82	0.44
1:B:380:VAL:HG23	1:B:430:TRP:O	2.17	0.44
2:C:683:SER:C	2:C:685:LEU:N	2.70	0.44
2:C:529:GLU:OE1	2:C:769:TYR:CE2	2.71	0.44
2:C:1076:HIS:CD2	11:L:40:HIS:CE1	3.05	0.44
2:C:1065:GLN:HB2	3:D:201:TRP:CZ3	2.53	0.44
10:K:57:ILE:HG23	10:K:58:GLU:N	2.33	0.44
5:F:182:ASP:OD1	5:F:183:PRO:HD2	2.17	0.44
1:B:241:VAL:HA	1:B:242:PRO:HD2	1.88	0.44
1:B:49:LYS:NZ	1:B:61:ILE:N	2.63	0.44
1:B:546:VAL:HG12	1:B:546:VAL:O	2.16	0.44
2:C:31:TRP:CZ3	2:C:34:ILE:HD12	2.53	0.44
2:C:658:ILE:HG22	2:C:662:MET:HE2	1.98	0.44
12:M:34:CYS:SG	12:M:34:CYS:O	2.74	0.44
1:B:709:THR:HG21	1:B:711:ARG:HB2	1.99	0.44
2:C:906:SER:O	2:C:907:GLY:O	2.35	0.44
2:C:167:ILE:CG2	2:C:453:ILE:HD11	2.42	0.44
1:B:269:ILE:CG2	1:B:300:VAL:HG22	2.47	0.44
2:C:570:VAL:HB	2:C:573:GLN:CB	2.47	0.44
1:B:808:LEU:HD23	1:B:813:PHE:N	2.33	0.44
14:P:6:A:C4	14:P:7:A:C8	3.06	0.44
1:B:108:MET:HA	1:B:210:ILE:HG23	1.99	0.44
14:P:8:U:H2'	14:P:9:A:H8	1.83	0.44
8:I:8:ASP:C	8:I:9:ILE:HG13	2.38	0.44
1:B:1423:GLY:HA3	1:B:1426:GLU:HG2	1.98	0.44
9:J:16:PRO:HB3	9:J:27:PHE:CE2	2.52	0.44
15:T:21:DA:H2'	15:T:22:DT:C6	2.53	0.44
2:C:838:SER:CA	2:C:989:THR:O	2.66	0.44
3:D:66:ARG:CZ	10:K:2:ILE:HG21	2.47	0.44
8:I:93:TYR:N	8:I:93:TYR:CD1	2.85	0.44
1:B:626:ASN:O	1:B:631:HIS:CD2	2.71	0.44
1:B:241:VAL:HG13	1:B:266:LEU:HD13	1.98	0.44
1:B:1437:GLY:O	1:B:1438:THR:C	2.54	0.44
2:C:806:THR:C	2:C:808:ALA:N	2.71	0.44
2:C:899:ILE:HD11	2:C:911:ILE:HG12	2.00	0.44
2:C:418:LYS:HE2	2:C:422:LYS:HZ1	1.82	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:601:LYS:HB2	1:B:603:ASN:ND2	2.33	0.44
1:B:1126:ALA:O	1:B:1128:GLN:N	2.47	0.44
1:B:123:ARG:NH2	1:B:155:GLU:HG2	2.33	0.44
2:C:1004:GLU:OE2	2:C:1064:TYR:HE2	2.01	0.44
3:D:67:LEU:HD13	3:D:157:CYS:SG	2.57	0.44
1:B:1447:GLU:OE2	7:H:23:LYS:HB2	2.17	0.44
1:B:886:ILE:HG23	1:B:887:GLY:H	1.78	0.44
2:C:1162:ILE:HG23	2:C:1168:LEU:O	2.18	0.44
1:B:227:VAL:HG12	4:E:15:LEU:HD23	1.98	0.44
11:L:33:ILE:HD13	11:L:87:LEU:HD22	1.99	0.44
2:C:684:LEU:O	2:C:689:LEU:HB2	2.17	0.44
2:C:636:PRO:O	2:C:743:ILE:HD11	2.17	0.44
2:C:753:ALA:HA	2:C:756:ILE:CD1	2.48	0.44
9:J:83:ASN:OD1	9:J:103:CYS:HA	2.16	0.44
1:B:1118:VAL:HG12	1:B:1327:ILE:HG13	1.98	0.44
1:B:16:GLU:CD	2:C:1220:ARG:HA	2.38	0.44
5:F:12:LEU:HD22	5:F:55:ARG:CZ	2.48	0.44
10:K:30:LEU:HD11	10:K:38:ARG:HH12	1.82	0.44
14:P:6:A:H2'	14:P:7:A:O4'	2.17	0.44
2:C:683:SER:C	2:C:685:LEU:H	2.20	0.44
1:B:1272:THR:C	1:B:1273:LEU:HD12	2.38	0.44
1:B:648:ASN:O	1:B:649:ILE:C	2.54	0.44
3:D:101:LEU:C	3:D:102:GLN:HG3	2.38	0.44
3:D:155:LEU:HB3	3:D:156:THR:H	1.46	0.44
1:B:1224:LEU:HG	1:B:1226:VAL:HG23	2.00	0.44
1:B:230:ARG:O	1:B:231:PRO:C	2.55	0.44
1:B:22:PHE:HD2	1:B:27:VAL:HG22	1.83	0.44
11:L:87:LEU:O	11:L:90:ALA:HB3	2.18	0.44
5:F:78:LEU:CD2	5:F:80:VAL:HG23	2.43	0.44
2:C:681:TRP:O	2:C:684:LEU:N	2.51	0.44
2:C:378:LEU:C	2:C:378:LEU:HD12	2.38	0.44
1:B:765:VAL:HG12	1:B:766:GLY:H	1.81	0.44
2:C:984:HIS:CD2	2:C:1025:HIS:HA	2.52	0.44
1:B:1287:TYR:O	1:B:1302:PRO:HA	2.18	0.44
11:L:85:ASP:O	11:L:88:LYS:HB2	2.17	0.44
7:H:18:PHE:HA	7:H:22:MET:CE	2.48	0.44
1:B:22:PHE:CD2	1:B:27:VAL:HG22	2.53	0.44
11:L:68:PHE:HB3	11:L:70:ARG:NH1	2.32	0.44
7:H:88:ASP:HB3	7:H:144:ARG:CA	2.42	0.44
2:C:425:THR:O	2:C:428:ILE:HB	2.18	0.44
2:C:880:THR:CB	2:C:934:LYS:HD2	2.46	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:882:THR:HB	2:C:934:LYS:O	2.17	0.44
2:C:185:THR:H	2:C:188:ASP:CB	2.29	0.44
2:C:282:ILE:CD1	2:C:382:ILE:HG21	2.48	0.44
1:B:867:ILE:HG22	1:B:872:GLY:N	2.33	0.44
1:B:1051:ALA:O	1:B:1055:ARG:HG3	2.18	0.44
1:B:1118:VAL:HG23	1:B:1118:VAL:O	2.17	0.44
1:B:1104:ILE:C	1:B:1106:ASN:N	2.71	0.44
1:B:516:SER:O	1:B:517:ASN:C	2.55	0.44
10:K:53:HIS:C	10:K:53:HIS:ND1	2.71	0.44
2:C:303:TYR:O	2:C:304:ASP:HB2	2.18	0.44
2:C:361:LEU:HG	2:C:363:HIS:HE1	1.82	0.44
4:E:40:HIS:CE1	4:E:41:GLN:HG3	2.53	0.44
7:H:3:PHE:N	7:H:3:PHE:CD1	2.85	0.44
1:B:1239:ARG:HH22	1:B:1241:ARG:HH22	1.65	0.44
2:C:1165:ILE:O	2:C:1217:TYR:CE1	2.71	0.44
1:B:18:GLN:O	2:C:1215:ARG:HG2	2.18	0.44
1:B:577:ILE:C	1:B:579:SER:N	2.69	0.44
1:B:243:PRO:CB	1:B:244:PRO:HD2	2.46	0.44
2:C:913:GLY:HA2	2:C:938:SER:OG	2.18	0.44
2:C:881:ASN:O	2:C:883:LEU:HG	2.18	0.44
1:B:1349:TYR:HB2	1:B:1372:VAL:HG21	1.98	0.44
1:B:507:VAL:N	1:B:508:PRO:CD	2.81	0.44
4:E:208:GLU:O	4:E:212:LYS:HG3	2.18	0.44
1:B:409:SER:O	1:B:410:GLY:C	2.56	0.44
5:F:175:LEU:HD23	5:F:175:LEU:HA	1.78	0.44
1:B:1215:ARG:HA	1:B:1215:ARG:HD2	1.86	0.44
1:B:466:SER:O	2:C:1103:ILE:HD11	2.18	0.43
10:K:1:MET:N	10:K:57:ILE:HG22	2.33	0.43
10:K:64:ASN:HD22	10:K:65:PRO:HD3	1.83	0.43
8:I:55:LEU:HD22	8:I:144:ILE:HG23	1.96	0.43
4:E:29:LEU:N	4:E:29:LEU:HD23	2.32	0.43
1:B:239:LEU:HA	1:B:240:PRO:HD2	1.90	0.43
1:B:92:HIS:O	1:B:93:VAL:C	2.56	0.43
7:H:91:VAL:HG12	7:H:92:VAL:N	2.32	0.43
2:C:39:ARG:NH2	2:C:665:GLU:CG	2.77	0.43
3:D:83:SER:OG	3:D:160:LYS:HB3	2.17	0.43
1:B:1346:ALA:CB	5:F:149:LEU:HD12	2.48	0.43
8:I:130:ARG:CB	8:I:134:ASN:H	2.25	0.43
2:C:255:GLN:O	2:C:271:ALA:CB	2.66	0.43
2:C:293:PRO:HD2	2:C:296:GLU:OE1	2.18	0.43
2:C:465:ASN:HD22	2:C:465:ASN:N	2.15	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:108:MET:N	1:B:108:MET:SD	2.91	0.43
1:B:367:PRO:CB	1:B:466:SER:HA	2.48	0.43
1:B:351:THR:HG22	2:C:1103:ILE:HG13	2.00	0.43
2:C:1072:MET:HE3	2:C:1085:ILE:CB	2.21	0.43
10:K:1:MET:H2	10:K:55:ASP:HA	1.82	0.43
10:K:3:VAL:HA	10:K:53:HIS:CD2	2.53	0.43
8:I:56:THR:O	8:I:144:ILE:HA	2.18	0.43
2:C:582:VAL:HB	2:C:587:HIS:HD2	1.82	0.43
1:B:858:ASN:C	1:B:858:ASN:ND2	2.71	0.43
2:C:1142:GLY:O	2:C:1144:ALA:N	2.51	0.43
5:F:18:THR:O	5:F:19:VAL:C	2.57	0.43
3:D:44:LEU:HD23	3:D:72:LEU:HD12	2.00	0.43
4:E:156:ASP:HB2	4:E:159:THR:HG23	2.01	0.43
2:C:289:LEU:HD22	2:C:371:GLU:O	2.17	0.43
1:B:668:ASP:HB3	1:B:741:ASN:ND2	2.27	0.43
2:C:616:ILE:N	2:C:616:ILE:CD1	2.70	0.43
1:B:1138:ILE:O	1:B:1275:GLY:HA3	2.19	0.43
1:B:2:VAL:HG13	2:C:1157:ALA:HB1	2.00	0.43
1:B:552:TRP:HE1	11:L:62:LYS:HB2	1.83	0.43
2:C:234:ILE:N	2:C:234:ILE:HD12	2.34	0.43
1:B:1156:PRO:O	1:B:1158:PRO:HD3	2.18	0.43
2:C:1007:VAL:HG22	2:C:1008:PRO:CD	2.43	0.43
2:C:1065:GLN:NE2	2:C:1066:SER:H	2.16	0.43
7:H:39:THR:HG22	7:H:40:GLY:N	2.33	0.43
2:C:1165:ILE:O	2:C:1217:TYR:HE1	2.00	0.43
11:L:7:PHE:C	11:L:7:PHE:CD1	2.91	0.43
5:F:20:LYS:HZ3	5:F:60:PHE:HE1	1.63	0.43
2:C:653:VAL:CG2	2:C:689:LEU:HB3	2.48	0.43
2:C:390:LEU:O	2:C:391:ASP:C	2.56	0.43
2:C:757:PRO:HD3	2:C:983:ARG:NH2	2.33	0.43
4:E:156:ASP:C	4:E:158:GLU:H	2.21	0.43
2:C:329:THR:CA	2:C:332:ASP:HB3	2.44	0.43
2:C:860:MET:HG2	2:C:861:ASP:N	2.32	0.43
9:J:82:GLU:HB3	9:J:104:LEU:CG	2.47	0.43
1:B:1114:PRO:HG2	1:B:1115:SER:N	2.33	0.43
6:G:76:LYS:NZ	7:H:58:ARG:HH22	2.16	0.43
1:B:414:ASP:C	1:B:414:ASP:OD1	2.57	0.43
5:F:124:VAL:HB	5:F:125:PRO:HD3	2.00	0.43
1:B:43:GLU:HG3	1:B:46:THR:O	2.18	0.43
6:G:138:LEU:O	6:G:140:ASP:N	2.50	0.43
2:C:488:TYR:CG	2:C:817:LEU:HD12	2.53	0.43

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:K:3:VAL:HG11	10:K:14:VAL:O	2.18	0.43
10:K:52:THR:O	10:K:53:HIS:C	2.57	0.43
2:C:1076:HIS:CD2	11:L:40:HIS:NE2	2.85	0.43
8:I:95:TYR:HB3	8:I:144:ILE:HB	1.99	0.43
8:I:84:ALA:O	8:I:89:LEU:HD21	2.18	0.43
1:B:353:ILE:HG21	1:B:487:MET:CG	2.48	0.43
1:B:297:GLN:O	1:B:297:GLN:HG3	2.18	0.43
1:B:38:PRO:HG2	1:B:39:GLU:H	1.83	0.43
15:T:24:DG:H3'	15:T:25:DC:C5'	2.43	0.43
2:C:31:TRP:O	2:C:32:ALA:C	2.57	0.43
2:C:519:TRP:CD1	2:C:519:TRP:C	2.91	0.43
2:C:637:LEU:CD2	2:C:742:GLU:HA	2.48	0.43
1:B:1142:THR:O	1:B:1143:LEU:C	2.56	0.43
5:F:153:HIS:ND1	5:F:184:VAL:HG11	2.33	0.43
1:B:808:LEU:CD2	1:B:813:PHE:HA	2.47	0.43
5:F:113:GLN:HG2	5:F:137:GLU:OE1	2.18	0.43
2:C:234:ILE:HG21	2:C:237:VAL:CG2	2.48	0.43
3:D:142:VAL:O	3:D:142:VAL:HG12	2.19	0.43
1:B:54:ASN:H	1:B:54:ASN:HD22	1.66	0.43
1:B:1039:LYS:HE3	1:B:1043:ASP:OD2	2.18	0.43
1:B:443:LEU:HD12	2:C:1146:PHE:CZ	2.54	0.43
4:E:175:PHE:CZ	7:H:85:GLU:HG3	2.48	0.43
1:B:1226:VAL:HG13	1:B:1239:ARG:O	2.18	0.43
1:B:786:HIS:HE1	2:C:519:TRP:CZ2	2.36	0.43
3:D:236:GLY:O	3:D:237:SER:C	2.57	0.43
3:D:97:VAL:HB	3:D:159:ALA:HB3	2.00	0.43
1:B:196:GLU:HG3	1:B:197:PRO:CD	2.41	0.43
2:C:496:ARG:HH11	2:C:496:ARG:HB3	1.81	0.43
4:E:206:GLU:C	4:E:208:GLU:N	2.70	0.43
2:C:1035:ALA:HB1	2:C:1040:ASN:O	2.17	0.43
9:J:74:GLU:HB2	9:J:79:HIS:CA	2.48	0.43
2:C:908:GLU:O	2:C:909:ASP:C	2.56	0.43
2:C:229:ALA:HB1	2:C:231:PRO:HD2	2.01	0.43
1:B:605:MET:HE1	1:B:612:ILE:HG23	1.99	0.43
1:B:982:THR:O	1:B:985:ASP:HB2	2.19	0.43
1:B:463:ILE:HD12	1:B:469:ARG:CD	2.48	0.43
2:C:1102:LYS:C	2:C:1122:ARG:NH1	2.72	0.43
3:D:174:ALA:O	3:D:175:ALA:CB	2.67	0.43
10:K:43:ARG:HG2	10:K:45:CYS:SG	2.59	0.43
8:I:93:TYR:HB3	8:I:144:ILE:C	2.39	0.43
2:C:273:LEU:CG	2:C:276:ILE:HD12	2.48	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1026:LEU:HA	1:B:1026:LEU:HD23	1.76	0.43
1:B:1377:THR:OG1	1:B:1378:GLN:N	2.47	0.43
4:E:31:GLN:C	4:E:33:PHE:H	2.22	0.43
7:H:1:MET:O	7:H:3:PHE:HE1	2.00	0.43
1:B:1227:ILE:CG2	1:B:1228:TRP:H	2.30	0.43
1:B:113:LEU:HG	1:B:218:ASP:OD1	2.19	0.43
1:B:83:HIS:HA	1:B:239:LEU:O	2.18	0.43
11:L:59:ALA:HA	11:L:74:ARG:O	2.18	0.43
2:C:806:THR:CG2	2:C:808:ALA:H	2.20	0.43
2:C:31:TRP:CE3	2:C:34:ILE:HD12	2.54	0.43
2:C:383:ASN:ND2	2:C:387:LEU:HD22	2.34	0.43
1:B:244:PRO:CB	1:B:245:PRO:HD3	2.37	0.43
2:C:281:PRO:C	2:C:283:VAL:N	2.72	0.43
7:H:99:PHE:HZ	7:H:163:ILE:HD13	1.83	0.43
1:B:269:ILE:HG23	1:B:300:VAL:CG2	2.48	0.43
1:B:1127:ASP:HB3	1:B:1130:GLN:HB3	2.01	0.43
7:H:35:GLU:CG	7:H:48:VAL:HG23	2.48	0.43
4:E:187:THR:HG22	4:E:188:ALA:H	1.84	0.43
10:K:58:GLU:HA	10:K:61:LEU:HD12	1.99	0.43
2:C:1200:ALA:O	2:C:1201:LYS:C	2.57	0.43
12:M:52:GLY:O	12:M:53:HIS:C	2.56	0.43
1:B:1377:THR:O	1:B:1378:GLN:C	2.57	0.43
7:H:1:MET:HE3	7:H:81:PRO:HA	2.01	0.43
4:E:63:LEU:HB3	4:E:129:LEU:HD21	2.00	0.43
1:B:345:VAL:CG1	2:C:1130:PHE:HB2	2.49	0.43
5:F:46:TYR:N	5:F:46:TYR:CD1	2.87	0.43
12:M:27:LEU:N	12:M:27:LEU:HD23	2.34	0.43
1:B:722:LEU:H	1:B:722:LEU:CD1	2.28	0.43
2:C:314:LEU:N	2:C:314:LEU:HD12	2.31	0.43
2:C:1183:LYS:CE	2:C:1183:LYS:N	2.82	0.43
4:E:153:ARG:HB3	4:E:154:PHE:CD1	2.53	0.43
2:C:956:THR:HG22	2:C:957:ASN:N	2.34	0.43
1:B:1055:ARG:NE	6:G:154:ASP:OD1	2.47	0.43
1:B:16:GLU:HB3	1:B:1418:LEU:HD11	1.99	0.43
1:B:971:PHE:CE2	1:B:1040:GLN:HG2	2.54	0.43
2:C:459:TYR:HE2	2:C:465:ASN:HB2	1.83	0.43
1:B:207:ILE:HG23	1:B:211:PHE:CE1	2.53	0.43
5:F:124:VAL:HG13	5:F:132:ILE:CG1	2.48	0.43
7:H:20:PRO:CD	7:H:21:ARG:H	2.32	0.43
3:D:29:MET:CE	11:L:98:LEU:HG	2.48	0.43
3:D:53:THR:HG22	3:D:54:ASN:N	2.34	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:55:VAL:HG13	2:C:97:VAL:HG21	2.00	0.43
2:C:866:TYR:N	2:C:866:TYR:CD1	2.87	0.43
2:C:798:TYR:CE1	10:K:4:PRO:HB3	2.54	0.43
3:D:31:ASN:O	3:D:35:ARG:HG3	2.17	0.43
1:B:1021:LEU:O	1:B:1024:SER:HB3	2.19	0.43
1:B:230:ARG:HB3	1:B:232:GLU:HG2	1.99	0.43
2:C:1215:ARG:O	2:C:1216:LEU:HD23	2.18	0.43
6:G:118:LEU:O	6:G:122:MET:HG3	2.17	0.43
2:C:247:GLY:H	2:C:418:LYS:NZ	2.17	0.43
2:C:281:PRO:HB2	2:C:283:VAL:HG23	2.00	0.43
2:C:510:LYS:HB2	2:C:511:PRO:HD3	2.01	0.43
2:C:1034:VAL:O	2:C:1037:LEU:N	2.51	0.43
8:I:30:SER:HB3	8:I:36:CYS:HB3	2.00	0.43
2:C:1219:ASP:O	2:C:1219:ASP:OD1	2.36	0.43
3:D:91:HIS:HD2	3:D:91:HIS:O	2.01	0.43
1:B:122:MET:O	1:B:125:ALA:HB3	2.19	0.43
1:B:658:LEU:CD1	2:C:830:TYR:CD1	3.02	0.43
9:J:58:VAL:O	9:J:58:VAL:HG12	2.19	0.43
1:B:884:ASP:C	1:B:886:ILE:H	2.22	0.43
1:B:997:LEU:N	1:B:997:LEU:HD23	2.34	0.43
1:B:146:MET:HB3	1:B:171:GLN:O	2.18	0.43
2:C:48:LEU:O	2:C:49:ASP:C	2.57	0.43
1:B:9:ALA:HB1	1:B:10:PRO:HD2	2.00	0.43
5:F:94:LYS:O	5:F:98:ILE:HG13	2.19	0.43
2:C:882:THR:HG1	2:C:933:SER:N	2.17	0.43
1:B:741:ASN:C	1:B:741:ASN:ND2	2.62	0.43
9:J:7:CYS:HB2	9:J:34:TYR:CG	2.54	0.43
5:F:79:TRP:CD1	5:F:96:PHE:HE1	2.37	0.43
2:C:125:SER:CB	2:C:171:PRO:HA	2.49	0.43
3:D:10:ILE:CD1	11:L:109:TRP:HA	2.49	0.43
2:C:531:GLN:HG3	2:C:532:ALA:N	2.34	0.43
1:B:229:SER:HB3	1:B:1413:GLY:O	2.18	0.43
1:B:1283:VAL:HG12	1:B:1284:MET:N	2.32	0.43
1:B:1291:VAL:HG13	1:B:1292:PRO:N	2.33	0.43
2:C:641:GLU:C	2:C:643:ASP:H	2.21	0.43
3:D:100:THR:CG2	3:D:102:GLN:HE21	2.32	0.43
3:D:100:THR:HG21	3:D:102:GLN:NE2	2.34	0.43
1:B:853:ASP:CG	1:B:855:THR:HG22	2.38	0.43
4:E:34:GLN:O	4:E:47:LEU:HD23	2.18	0.43
7:H:1:MET:O	7:H:1:MET:CE	2.67	0.43
7:H:80:LYS:HE2	7:H:82:PHE:CE1	2.54	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:265:LYS:HD3	1:B:302:THR:CG2	2.48	0.43
1:B:1167:GLU:O	1:B:1170:ILE:HG13	2.19	0.43
6:G:147:SER:O	6:G:148:VAL:C	2.57	0.43
8:I:15:VAL:CG2	8:I:26:ILE:HD11	2.37	0.43
1:B:80:HIS:N	1:B:243:PRO:HG3	2.33	0.43
2:C:882:THR:HB	2:C:934:LYS:C	2.39	0.43
3:D:208:GLU:C	3:D:210:GLU:N	2.71	0.43
1:B:946:VAL:HG22	5:F:201:LYS:HD2	2.00	0.43
9:J:26:LEU:HD22	9:J:35:VAL:HG12	2.01	0.43
9:J:54:GLU:OE2	9:J:118:ARG:CZ	2.67	0.43
1:B:850:VAL:HG12	1:B:1060:PRO:HA	2.01	0.43
1:B:1313:LEU:O	1:B:1315:GLU:N	2.52	0.43
9:J:105:SER:O	9:J:106:CYS:CB	2.66	0.43
1:B:381:THR:C	1:B:383:TYR:N	2.71	0.43
2:C:347:LYS:O	2:C:350:GLN:HB3	2.18	0.43
8:I:113:ALA:HA	8:I:125:LEU:O	2.19	0.43
2:C:948:ILE:O	2:C:968:VAL:HG13	2.19	0.43
2:C:531:GLN:CG	2:C:532:ALA:H	2.31	0.43
2:C:1033:LYS:NZ	2:C:1070:GLU:OE1	2.50	0.43
5:F:82:PHE:CD1	5:F:82:PHE:N	2.87	0.43
1:B:465:TYR:CZ	11:L:4:PRO:HD2	2.54	0.42
2:C:1003:ALA:HA	3:D:178:PHE:O	2.18	0.42
7:H:15:PRO:O	7:H:16:SER:C	2.57	0.42
8:I:116:TYR:HE2	8:I:140:ALA:HB3	1.84	0.42
1:B:853:ASP:OD1	1:B:855:THR:CB	2.67	0.42
1:B:40:THR:HB	1:B:41:MET:HE2	1.99	0.42
6:G:88:TYR:HD1	6:G:88:TYR:H	1.66	0.42
2:C:498:THR:HG22	2:C:537:LYS:O	2.18	0.42
1:B:345:VAL:HG11	2:C:1130:PHE:HB2	2.00	0.42
1:B:774:ARG:HB2	1:B:797:LYS:HB3	2.01	0.42
2:C:680:THR:HB	2:C:681:TRP:H	1.55	0.42
2:C:657:HIS:O	2:C:660:LYS:HB3	2.19	0.42
9:J:90:GLN:HE21	9:J:92:ARG:HD2	1.82	0.42
2:C:308:TRP:CD1	2:C:308:TRP:N	2.86	0.42
2:C:792:MET:HG3	2:C:855:PHE:CE1	2.54	0.42
3:D:44:LEU:HD21	3:D:159:ALA:HB1	2.01	0.42
6:G:116:ASP:HB3	6:G:119:ARG:CB	2.49	0.42
1:B:1368:MET:O	1:B:1372:VAL:HB	2.18	0.42
1:B:133:LYS:O	1:B:136:ALA:HB3	2.19	0.42
2:C:1102:LYS:O	2:C:1103:ILE:C	2.58	0.42
2:C:801:LYS:O	10:K:52:THR:HG21	2.17	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:D:101:LEU:HD12	3:D:101:LEU:HA	1.88	0.42
2:C:303:TYR:HH	2:C:586:TRP:HH2	1.65	0.42
1:B:247:ARG:NH1	1:B:247:ARG:HG3	2.35	0.42
2:C:1160:VAL:CG1	2:C:1161:HIS:N	2.82	0.42
8:I:118:PHE:C	8:I:120:GLY:N	2.73	0.42
2:C:599:THR:O	2:C:603:LEU:HB2	2.19	0.42
2:C:95:ILE:HG13	2:C:130:VAL:HG22	2.01	0.42
4:E:30:GLY:O	4:E:31:GLN:C	2.57	0.42
1:B:30:ILE:HD11	2:C:1168:LEU:CD1	2.49	0.42
11:L:31:VAL:CG1	11:L:32:VAL:N	2.81	0.42
1:B:1265:ASN:C	1:B:1267:MET:N	2.71	0.42
1:B:1007:ILE:O	1:B:1010:ALA:N	2.52	0.42
2:C:37:PHE:CD1	2:C:41:LYS:HG3	2.53	0.42
2:C:893:LEU:HD22	2:C:897:GLY:C	2.39	0.42
2:C:1027:ILE:C	2:C:1029:CYS:N	2.72	0.42
1:B:380:VAL:CG1	1:B:385:ILE:HG12	2.49	0.42
2:C:1177:HIS:HB2	2:C:1179:GLN:HE21	1.84	0.42
1:B:208:LEU:HD23	1:B:209:ASN:N	2.34	0.42
2:C:553:PRO:O	2:C:557:PHE:HB2	2.18	0.42
2:C:487:THR:CG2	2:C:488:TYR:N	2.82	0.42
1:B:1409:LEU:HD13	2:C:1207:LEU:HD21	2.01	0.42
15:T:18:DT:OP2	15:T:18:DT:H72	2.19	0.42
1:B:658:LEU:HD11	2:C:830:TYR:CE1	2.55	0.42
2:C:1039:GLY:HA2	10:K:51:LEU:HD21	2.01	0.42
3:D:35:ARG:HH11	11:L:41:THR:H	1.62	0.42
3:D:99:LEU:HD23	3:D:120:ILE:HA	2.00	0.42
1:B:590:ARG:HH11	1:B:590:ARG:CB	2.30	0.42
1:B:1064:VAL:HG12	1:B:1370:LEU:HD22	2.01	0.42
7:H:44:TYR:HD2	7:H:105:PRO:HB2	1.85	0.42
1:B:1437:GLY:HA3	6:G:88:TYR:CD2	2.53	0.42
1:B:497:THR:O	1:B:498:ARG:C	2.57	0.42
1:B:787:PHE:HE1	1:B:796:SER:HA	1.82	0.42
2:C:659:ALA:HA	2:C:662:MET:HE2	2.00	0.42
2:C:662:MET:HA	2:C:665:GLU:HB2	2.01	0.42
3:D:242:GLN:O	3:D:244:VAL:N	2.53	0.42
1:B:715:GLU:O	1:B:718:VAL:HB	2.19	0.42
2:C:1084:GLN:N	2:C:1084:GLN:HE21	2.09	0.42
2:C:424:LEU:O	2:C:428:ILE:HG13	2.19	0.42
1:B:269:ILE:HD11	1:B:300:VAL:HA	2.00	0.42
1:B:269:ILE:HG12	1:B:299:HIS:HB3	2.01	0.42
4:E:160:VAL:HG12	4:E:160:VAL:O	2.20	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:898:ARG:HA	1:B:933:TYR:CD1	2.55	0.42
1:B:1215:ARG:HH11	1:B:1215:ARG:HG2	1.82	0.42
8:I:117:SER:HA	8:I:121:LEU:O	2.19	0.42
3:D:107:SER:C	3:D:109:SER:H	2.23	0.42
2:C:528:PRO:HG3	2:C:536:VAL:HB	2.01	0.42
12:M:59:ALA:O	12:M:60:ARG:O	2.38	0.42
1:B:567:LYS:NZ	8:I:47:PHE:HB3	2.34	0.42
1:B:1011:GLN:NE2	1:B:1015:VAL:HG21	2.34	0.42
1:B:1005:GLU:O	1:B:1006:ILE:C	2.58	0.42
5:F:160:GLU:O	5:F:163:GLU:HB3	2.19	0.42
1:B:1063:MET:HG3	1:B:1436:ILE:HG23	2.01	0.42
2:C:698:GLU:O	2:C:701:ILE:HG12	2.20	0.42
8:I:15:VAL:HG13	8:I:26:ILE:HG13	2.01	0.42
3:D:44:LEU:CD2	3:D:159:ALA:HB1	2.49	0.42
2:C:861:ASP:CG	2:C:914:LYS:HD2	2.38	0.42
1:B:1398:MET:C	1:B:1400:CYS:N	2.73	0.42
2:C:185:THR:O	2:C:188:ASP:N	2.52	0.42
1:B:364:VAL:CG1	1:B:364:VAL:O	2.68	0.42
2:C:1017:ILE:H	2:C:1018:PRO:HD2	1.84	0.42
2:C:1034:VAL:C	2:C:1036:ALA:N	2.72	0.42
2:C:948:ILE:HD12	2:C:969:ARG:NH1	2.34	0.42
3:D:186:LEU:HD21	3:D:224:GLN:C	2.40	0.42
1:B:864:ILE:O	1:B:865:GLN:HG2	2.20	0.42
9:J:70:ARG:NH1	9:J:84:VAL:HB	2.35	0.42
2:C:119:LEU:HD23	2:C:789:MET:HB2	2.02	0.42
1:B:761:MET:HA	1:B:804:TYR:HB2	2.00	0.42
3:D:33:LEU:O	3:D:34:ARG:C	2.57	0.42
10:K:51:LEU:O	10:K:51:LEU:HD12	2.18	0.42
10:K:53:HIS:CE1	10:K:55:ASP:OD1	2.72	0.42
2:C:566:LEU:HD22	2:C:586:TRP:HB3	2.01	0.42
4:E:66:ARG:HG3	7:H:51:TYR:CD1	2.55	0.42
1:B:1279:ILE:HG23	1:B:1308:THR:OG1	2.20	0.42
1:B:1017:LEU:O	1:B:1018:PHE:C	2.57	0.42
1:B:858:ASN:HD22	1:B:858:ASN:H	1.68	0.42
1:B:546:VAL:HG21	1:B:572:TRP:HB2	2.01	0.42
1:B:1214:GLU:O	1:B:1218:GLN:HG2	2.19	0.42
1:B:543:LEU:O	1:B:544:ASP:C	2.57	0.42
11:L:29:ASN:O	11:L:30:ALA:HB2	2.20	0.42
1:B:786:HIS:O	1:B:787:PHE:HD2	2.01	0.42
2:C:638:PHE:HB2	2:C:741:CYS:HB3	2.01	0.42
2:C:286:PHE:HE1	2:C:301:ILE:HD11	1.84	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:401:PHE:C	2:C:403:LYS:H	2.23	0.42
1:B:606:LEU:HG	1:B:613:ILE:HB	2.00	0.42
8:I:130:ARG:CA	8:I:133:ASN:HB2	2.50	0.42
1:B:427:GLN:HB2	1:B:430:TRP:CG	2.54	0.42
2:C:496:ARG:HD3	2:C:751:VAL:HG22	2.01	0.42
1:B:820:GLY:O	1:B:821:ARG:C	2.57	0.42
1:B:420:ARG:O	1:B:421:ALA:C	2.58	0.42
2:C:799:PRO:HB3	2:C:818:PRO:HG2	2.00	0.42
1:B:1040:GLN:O	1:B:1041:ALA:C	2.58	0.42
1:B:404:TYR:HB2	1:B:433:GLU:HB2	2.00	0.42
1:B:44:THR:O	1:B:45:GLN:HB2	2.18	0.42
2:C:487:THR:HG22	2:C:488:TYR:N	2.34	0.42
9:J:19:ASP:OD1	9:J:22:ASN:HB2	2.19	0.42
1:B:565:ILE:O	1:B:570:PRO:HA	2.19	0.42
4:E:17:LYS:O	4:E:17:LYS:HD3	2.19	0.42
1:B:557:ASP:N	1:B:557:ASP:OD1	2.52	0.42
1:B:666:ILE:HD11	2:C:1086:PHE:HE1	1.85	0.42
2:C:997:GLU:HB3	3:D:35:ARG:NH2	2.34	0.42
2:C:120:ARG:HB2	2:C:122:LEU:HG	2.00	0.42
8:I:96:VAL:HG13	8:I:143:LEU:HG	2.01	0.42
1:B:1116:LEU:HB2	1:B:1329:THR:OG1	2.20	0.42
1:B:399:HIS:CG	1:B:400:PRO:N	2.85	0.42
1:B:858:ASN:ND2	1:B:858:ASN:H	2.17	0.42
1:B:1259:MET:O	1:B:1261:LYS:N	2.49	0.42
6:G:92:ARG:O	6:G:93:ILE:C	2.56	0.42
3:D:167:HIS:CD2	3:D:168:ALA:H	2.37	0.42
9:J:69:PRO:HB2	9:J:85:PHE:HE2	1.84	0.42
3:D:189:THR:HG22	3:D:190:ASP:N	2.34	0.42
1:B:885:THR:O	1:B:885:THR:CG2	2.66	0.42
5:F:61:GLN:HG2	5:F:62:ALA:N	2.35	0.42
13:N:5:DT:H2"	13:N:6:DA:C8	2.54	0.42
1:B:808:LEU:HD23	1:B:812:GLU:C	2.39	0.42
5:F:177:ARG:HD3	5:F:215:MET:HG2	2.02	0.42
1:B:1293:SER:OG	1:B:1295:THR:CG2	2.67	0.42
1:B:773:LYS:HG3	1:B:773:LYS:H	1.58	0.42
12:M:46:VAL:O	12:M:46:VAL:HG12	2.19	0.42
1:B:471:ASN:O	1:B:474:VAL:HG12	2.19	0.42
1:B:658:LEU:CD1	2:C:831:SER:H	2.19	0.42
8:I:100:THR:HA	8:I:138:GLU:O	2.20	0.42
4:E:18:VAL:O	4:E:18:VAL:HG13	2.19	0.42
7:H:106:MET:HB3	7:H:106:MET:HE2	1.72	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1239:ARG:HH22	1:B:1241:ARG:NH2	2.16	0.42
1:B:241:VAL:O	1:B:241:VAL:HG12	2.19	0.42
11:L:42:LEU:CD2	11:L:46:ILE:CD1	2.98	0.42
2:C:1130:PHE:CD2	2:C:1130:PHE:O	2.73	0.42
3:D:6:PRO:CG	11:L:101:LEU:HB2	2.49	0.42
1:B:1111:MET:HG3	1:B:1113:THR:O	2.19	0.42
1:B:382:PRO:CD	1:B:428:TYR:HE2	2.32	0.42
5:F:22:MET:HE3	5:F:26:ARG:NH2	2.30	0.42
11:L:5:ASP:O	11:L:6:ARG:C	2.57	0.42
1:B:873:MET:HG3	1:B:1056:SER:O	2.20	0.42
2:C:1066:SER:O	2:C:1067:ARG:HD3	2.18	0.42
2:C:997:GLU:N	2:C:997:GLU:OE2	2.51	0.42
10:K:57:ILE:O	10:K:60:PHE:HB2	2.20	0.42
3:D:49:VAL:CG1	3:D:155:LEU:HD22	2.50	0.42
2:C:578:THR:HG23	2:C:622:LYS:C	2.40	0.42
1:B:56:PRO:O	1:B:57:ARG:CG	2.68	0.42
8:I:116:TYR:O	8:I:122:LEU:HA	2.19	0.42
2:C:272:THR:OG1	2:C:279:ASP:OD1	2.37	0.42
2:C:30:SER:O	2:C:33:VAL:HG23	2.20	0.42
2:C:653:VAL:CA	2:C:689:LEU:HD22	2.49	0.42
2:C:1159:ARG:HH11	2:C:1159:ARG:CB	2.21	0.42
2:C:899:ILE:HD11	2:C:911:ILE:CA	2.42	0.42
2:C:401:PHE:O	2:C:404:LYS:N	2.45	0.42
2:C:880:THR:HG22	2:C:880:THR:O	2.20	0.42
1:B:681:GLU:HA	1:B:684:ALA:HB3	2.01	0.42
2:C:205:ILE:O	2:C:206:ASN:C	2.57	0.42
1:B:1277:GLU:O	1:B:1278:ASN:HB2	2.20	0.42
10:K:3:VAL:HG12	10:K:15:GLY:HA2	2.00	0.42
2:C:1039:GLY:HA2	10:K:51:LEU:CD2	2.49	0.42
1:B:17:VAL:HA	2:C:1215:ARG:O	2.20	0.42
11:L:31:VAL:HG12	11:L:32:VAL:H	1.81	0.42
2:C:405:ARG:HD2	2:C:631:GLY:CA	2.50	0.42
2:C:693:ILE:HD13	2:C:701:ILE:HD13	2.02	0.42
2:C:1182:CYS:O	2:C:1183:LYS:C	2.58	0.42
1:B:1346:ALA:HB3	5:F:149:LEU:HD12	2.02	0.42
7:H:45:ILE:HD13	7:H:45:ILE:HA	1.89	0.42
2:C:175:ARG:HH11	2:C:175:ARG:CG	2.28	0.42
1:B:808:LEU:HG	1:B:812:GLU:HB3	2.02	0.42
1:B:350:ARG:HH11	1:B:350:ARG:HG3	1.84	0.42
1:B:818:MET:H	1:B:818:MET:HG3	1.70	0.42
1:B:1266:THR:HA	1:B:1270:ASN:HD22	1.84	0.42

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:108:MET:HA	1:B:210:ILE:CG2	2.50	0.42
1:B:898:ARG:HA	1:B:933:TYR:HD1	1.85	0.42
1:B:373:THR:HG21	2:C:1105:ALA:HB3	2.01	0.42
1:B:578:LEU:HG	1:B:578:LEU:O	2.19	0.42
7:H:148:GLU:HB2	7:H:160:ILE:O	2.20	0.42
1:B:1194:ARG:HH11	1:B:1194:ARG:HG2	1.83	0.42
1:B:337:ARG:O	1:B:337:ARG:HG2	2.19	0.42
1:B:337:ARG:NH2	1:B:839:ARG:HH12	2.18	0.42
2:C:843:GLN:CB	2:C:994:TYR:O	2.68	0.42
10:K:1:MET:HE2	10:K:56:LEU:HD12	2.02	0.42
2:C:364:ILE:CG1	2:C:585:VAL:HG13	2.49	0.42
9:J:100:PHE:HD1	9:J:100:PHE:N	2.18	0.42
1:B:1446:ASP:HB2	6:G:133:VAL:HG23	2.01	0.42
8:I:93:TYR:HA	8:I:145:ARG:HB3	2.02	0.42
1:B:509:LEU:C	1:B:511:ILE:H	2.22	0.42
1:B:1341:ILE:HG22	5:F:182:ASP:OD2	2.20	0.42
1:B:1163:ILE:HG22	1:B:1164:PRO:HD2	2.02	0.42
1:B:106:VAL:HG13	1:B:112:LYS:C	2.40	0.42
1:B:266:LEU:O	1:B:267:ALA:C	2.57	0.42
1:B:92:HIS:CD2	1:B:304:MET:HE3	2.54	0.42
1:B:786:HIS:CD2	1:B:786:HIS:N	2.86	0.42
2:C:910:VAL:HG12	2:C:912:ILE:N	2.29	0.42
6:G:109:VAL:CG1	6:G:110:ASP:H	2.26	0.42
1:B:600:PRO:CG	1:B:601:LYS:H	2.30	0.42
2:C:970:THR:HG22	2:C:971:THR:N	2.34	0.42
1:B:644:LYS:O	1:B:647:GLY:N	2.53	0.42
4:E:119:ARG:HD3	4:E:221:TYR:CD2	2.55	0.42
1:B:1173:HIS:O	1:B:1174:PHE:HD1	2.03	0.42
8:I:83:GLN:O	8:I:85:GLY:N	2.53	0.42
4:E:187:THR:HG22	4:E:188:ALA:N	2.35	0.42
2:C:1203:LEU:O	2:C:1207:LEU:HG	2.20	0.42
3:D:66:ARG:NH1	10:K:2:ILE:CG2	2.78	0.41
3:D:174:ALA:O	10:K:10:CYS:O	2.38	0.41
10:K:44:TYR:O	10:K:47:ARG:HB2	2.19	0.41
3:D:116:LYS:HG3	3:D:117:ASP:H	1.84	0.41
8:I:16:ASP:HA	8:I:17:PRO:HD3	1.91	0.41
1:B:853:ASP:OD1	1:B:855:THR:HB	2.20	0.41
4:E:185:CYS:O	4:E:211:LEU:HD22	2.19	0.41
2:C:519:TRP:NE1	2:C:635:ARG:NH2	2.67	0.41
1:B:709:THR:CG2	9:J:93:LYS:O	2.68	0.41
2:C:1135:ARG:NH2	2:C:1136:ASP:OD1	2.52	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:882:THR:C	2:C:884:ARG:H	2.23	0.41
1:B:382:PRO:CB	1:B:428:TYR:CE2	2.96	0.41
1:B:1313:LEU:HD11	1:B:1317:MET:HE1	2.02	0.41
3:D:148:ARG:HD3	3:D:149:LYS:H	1.85	0.41
1:B:552:TRP:HE1	11:L:62:LYS:CB	2.33	0.41
2:C:345:LYS:O	2:C:346:GLU:HB2	2.20	0.41
2:C:449:ASN:C	2:C:451:LYS:N	2.73	0.41
4:E:118:THR:HB	4:E:121:LYS:HB2	2.01	0.41
1:B:65:LEU:O	1:B:66:LYS:C	2.59	0.41
4:E:13:ARG:HH11	4:E:13:ARG:HG2	1.85	0.41
4:E:139:LYS:C	4:E:139:LYS:HD3	2.40	0.41
1:B:471:ASN:OD1	1:B:473:SER:N	2.54	0.41
2:C:1002:THR:O	2:C:1003:ALA:C	2.57	0.41
8:I:142:LEU:C	8:I:143:LEU:HD12	2.41	0.41
8:I:91:ASP:O	8:I:93:TYR:N	2.49	0.41
1:B:1370:LEU:O	1:B:1374:VAL:HG23	2.20	0.41
1:B:860:LEU:HA	1:B:1422:ARG:NH1	2.34	0.41
1:B:224:PHE:CE2	1:B:234:MET:HE2	2.55	0.41
5:F:167:ARG:HA	5:F:167:ARG:HD3	1.72	0.41
1:B:1437:GLY:CA	6:G:88:TYR:CD2	3.03	0.41
6:G:130:ILE:HB	6:G:148:VAL:HG21	2.01	0.41
2:C:34:ILE:HD13	2:C:747:MET:CE	2.51	0.41
1:B:414:ASP:OD1	1:B:416:ARG:HG2	2.21	0.41
4:E:137:ASN:N	4:E:137:ASN:ND2	2.67	0.41
1:B:1313:LEU:HD23	1:B:1338:VAL:CG2	2.50	0.41
4:E:220:LEU:HB3	4:E:221:TYR:H	1.57	0.41
1:B:1405:THR:HB	1:B:1406:VAL:H	1.54	0.41
3:D:104:PHE:HD2	3:D:105:GLY:N	2.17	0.41
1:B:174:ILE:HG13	1:B:174:ILE:H	1.66	0.41
12:M:55:ILE:H	12:M:55:ILE:HG12	1.60	0.41
7:H:15:PRO:HD3	7:H:67:SER:N	2.36	0.41
7:H:27:LYS:O	7:H:28:THR:C	2.58	0.41
1:B:855:THR:HG23	1:B:857:ARG:HG3	2.01	0.41
11:L:49:GLU:OE2	11:L:97:LYS:HE3	2.20	0.41
2:C:24:PRO:O	2:C:655:LYS:HB2	2.21	0.41
7:H:7:LEU:HD12	7:H:74:TYR:CZ	2.55	0.41
1:B:345:VAL:HG23	1:B:346:ASP:O	2.20	0.41
2:C:210:LYS:HG3	2:C:461:LEU:O	2.20	0.41
2:C:593:PRO:HG2	2:C:617:ARG:CZ	2.51	0.41
1:B:836:TYR:HE1	15:T:17:DC:OP1	2.03	0.41
9:J:13:MET:HG3	9:J:14:LEU:N	2.35	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1332:PHE:HD2	1:B:1332:PHE:N	2.17	0.41
4:E:180:LEU:CD2	4:E:195:ILE:HD12	2.48	0.41
2:C:992:ILE:CD1	11:L:66:PRO:HB2	2.49	0.41
1:B:405:VAL:HG23	1:B:415:LEU:HD11	2.03	0.41
5:F:129:PRO:O	5:F:130:ALA:C	2.58	0.41
9:J:84:VAL:O	9:J:84:VAL:HG13	2.20	0.41
1:B:1425:SER:O	1:B:1429:ILE:HG13	2.20	0.41
4:E:173:HIS:HA	4:E:174:PRO:HD2	1.64	0.41
4:E:7:THR:O	4:E:9:GLN:N	2.53	0.41
11:L:35:PHE:HE1	11:L:73:LEU:HB3	1.85	0.41
11:L:89:ASN:O	11:L:90:ALA:C	2.59	0.41
2:C:809:MET:HE1	2:C:814:PHE:CD2	2.55	0.41
6:G:89:GLU:HB3	6:G:134:ILE:HD11	2.00	0.41
2:C:711:GLU:H	2:C:712:PRO:HD2	1.86	0.41
1:B:710:LEU:CD1	1:B:710:LEU:H	2.33	0.41
1:B:1148:ILE:HD11	1:B:1198:ASP:CA	2.43	0.41
1:B:758:ILE:H	1:B:758:ILE:HG13	1.73	0.41
1:B:613:ILE:HG22	1:B:614:PHE:HD2	1.85	0.41
1:B:384:ASN:HB2	1:B:388:LEU:HD12	2.02	0.41
1:B:1134:ILE:O	1:B:1137:ALA:HB3	2.21	0.41
2:C:446:LEU:HD23	2:C:446:LEU:N	2.36	0.41
2:C:613:VAL:CG1	2:C:627:PHE:O	2.68	0.41
2:C:1034:VAL:C	2:C:1036:ALA:H	2.23	0.41
2:C:54:PHE:O	2:C:58:THR:HB	2.21	0.41
5:F:142:VAL:HG12	5:F:143:ASN:N	2.36	0.41
1:B:344:ARG:NH1	1:B:344:ARG:HG2	2.35	0.41
5:F:76:GLY:HA3	5:F:106:GLN:HB3	2.02	0.41
1:B:1215:ARG:NH1	1:B:1215:ARG:HG2	2.35	0.41
11:L:15:GLY:O	11:L:16:GLU:HG3	2.20	0.41
2:C:780:VAL:HG21	10:K:56:LEU:CD1	2.46	0.41
2:C:781:PHE:HE1	2:C:788:ARG:HD3	1.84	0.41
1:B:1446:ASP:HB2	6:G:133:VAL:CG2	2.50	0.41
7:H:23:LYS:HE2	7:H:27:LYS:HE3	2.03	0.41
1:B:568:PRO:HB2	3:D:221:TYR:CE1	2.55	0.41
8:I:100:THR:CG2	8:I:101:ALA:N	2.84	0.41
2:C:280:ILE:CG2	2:C:285:ILE:HG13	2.50	0.41
5:F:144:ILE:HD13	5:F:183:PRO:HB3	2.02	0.41
1:B:61:ILE:CG2	1:B:62:ASP:H	2.23	0.41
1:B:577:ILE:O	1:B:579:SER:N	2.53	0.41
12:M:38:LEU:CD1	12:M:49:LYS:HE2	2.51	0.41
5:F:16:PHE:O	5:F:19:VAL:HG23	2.21	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:F:42:PHE:HZ	5:F:58:MET:HE1	1.85	0.41
7:H:139:ILE:CG2	7:H:140:LYS:N	2.70	0.41
2:C:661:LEU:HD11	2:C:684:LEU:HD11	2.03	0.41
3:D:236:GLY:C	3:D:238:ILE:N	2.73	0.41
1:B:849:MET:CE	1:B:1061:GLY:CA	2.92	0.41
2:C:594:ALA:HA	2:C:617:ARG:NH1	2.36	0.41
1:B:1303:GLU:HG3	1:B:1303:GLU:O	2.19	0.41
2:C:873:THR:O	2:C:914:LYS:HA	2.20	0.41
7:H:77:VAL:CG1	7:H:77:VAL:O	2.68	0.41
1:B:382:PRO:HB3	1:B:428:TYR:OH	2.20	0.41
9:J:82:GLU:C	9:J:104:LEU:HG	2.40	0.41
1:B:1349:TYR:O	1:B:1350:LYS:C	2.58	0.41
5:F:190:LEU:C	5:F:191:LYS:HG2	2.40	0.41
1:B:289:ILE:CG2	1:B:290:GLU:N	2.84	0.41
1:B:874:ASP:O	1:B:875:ALA:C	2.57	0.41
6:G:128:LYS:HD3	6:G:149:GLU:O	2.20	0.41
3:D:146:LYS:C	3:D:147:LEU:HD23	2.41	0.41
2:C:376:PHE:HB3	2:C:586:TRP:CZ3	2.55	0.41
9:J:59:VAL:O	9:J:62:ILE:HG22	2.20	0.41
2:C:181:LEU:HD21	2:C:194:GLU:HG3	2.03	0.41
1:B:567:LYS:HZ3	8:I:47:PHE:HB3	1.85	0.41
4:E:32:GLU:HG3	7:H:5:LYS:HE2	2.03	0.41
1:B:49:LYS:HZ3	1:B:61:ILE:HG13	1.84	0.41
3:D:252:GLN:O	3:D:253:LYS:C	2.59	0.41
1:B:320:ARG:NH2	14:P:3:C:O2'	2.54	0.41
1:B:779:PHE:HD2	1:B:779:PHE:HA	1.79	0.41
3:D:22:LEU:HD13	3:D:230:MET:CE	2.50	0.41
3:D:75:MET:HE2	3:D:239:PRO:HD3	2.02	0.41
1:B:932:GLU:O	1:B:935:GLN:N	2.52	0.41
5:F:190:LEU:HD23	5:F:190:LEU:N	2.36	0.41
2:C:486:TYR:CE1	2:C:1096:ARG:NH2	2.85	0.41
1:B:1104:ILE:O	1:B:1106:ASN:N	2.53	0.41
1:B:1029:ARG:HD2	1:B:1033:GLN:HE22	1.81	0.41
1:B:650:GLN:C	1:B:654:ASN:ND2	2.74	0.41
1:B:1268:LEU:O	1:B:1269:GLU:HG2	2.21	0.41
2:C:597:MET:HE3	2:C:601:ARG:HG3	2.03	0.41
2:C:527:THR:OG1	2:C:528:PRO:HD2	2.19	0.41
1:B:944:ARG:NE	1:B:1298:TYR:HE1	2.18	0.41
15:T:20:DT:H2''	15:T:21:DA:C5'	2.47	0.41
3:D:113:VAL:O	3:D:143:LEU:HD12	2.20	0.41
2:C:566:LEU:O	2:C:567:GLU:C	2.59	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:63:ARG:HA	1:B:74:MET:CE	2.51	0.41
12:M:28:LYS:C	12:M:29:TYR:HD2	2.23	0.41
5:F:13:TRP:HB2	5:F:42:PHE:CE2	2.56	0.41
2:C:34:ILE:O	2:C:35:SER:C	2.57	0.41
2:C:681:TRP:O	2:C:682:SER:C	2.59	0.41
3:D:241:ASP:O	3:D:244:VAL:HB	2.21	0.41
2:C:911:ILE:O	2:C:912:ILE:HG13	2.20	0.41
2:C:186:GLU:HB3	2:C:187:SER:H	1.67	0.41
2:C:282:ILE:HG21	2:C:382:ILE:CD1	2.51	0.41
3:D:11:ARG:HB3	3:D:12:GLU:H	1.67	0.41
2:C:797:TYR:CE1	2:C:854:LEU:HD23	2.56	0.41
2:C:526:GLU:CB	2:C:771:SER:HB3	2.51	0.41
10:K:28:ASP:O	10:K:29:GLU:C	2.58	0.41
14:P:7:A:H2'	14:P:7:A:N3	2.35	0.41
2:C:512:ARG:HG2	2:C:512:ARG:HH11	1.86	0.41
6:G:114:GLU:HA	6:G:114:GLU:OE2	2.21	0.41
3:D:260:LEU:O	3:D:263:THR:HB	2.21	0.41
1:B:447:GLN:NE2	15:T:20:DT:H4'	2.29	0.41
10:K:32:GLU:H	10:K:32:GLU:CD	2.23	0.41
10:K:48:ARG:O	10:K:49:MET:C	2.59	0.41
2:C:370:PHE:HD2	2:C:373:ARG:HD3	1.86	0.41
12:M:54:ARG:HG3	12:M:54:ARG:H	1.55	0.41
8:I:101:ALA:HA	8:I:116:TYR:HA	2.03	0.41
1:B:919:ILE:O	1:B:920:LEU:C	2.59	0.41
2:C:95:ILE:CG1	2:C:130:VAL:HG22	2.50	0.41
1:B:12:ARG:NE	2:C:1192:TYR:HE2	2.18	0.41
3:D:258:ILE:CD1	3:D:258:ILE:N	2.84	0.41
1:B:498:ARG:O	1:B:501:LEU:N	2.54	0.41
11:L:58:PHE:HB3	11:L:76:GLN:HE21	1.86	0.41
4:E:67:ARG:HG2	4:E:67:ARG:O	2.21	0.41
2:C:51:PHE:HZ	2:C:172:ILE:HA	1.86	0.41
2:C:706:GLN:H	2:C:710:LEU:HD12	1.85	0.41
2:C:519:TRP:CZ3	2:C:748:ILE:HD13	2.56	0.41
2:C:308:TRP:HA	2:C:311:LEU:HD12	2.02	0.41
2:C:890:TYR:CE2	2:C:910:VAL:HG21	2.56	0.41
2:C:752:ALA:O	2:C:753:ALA:C	2.59	0.41
4:E:156:ASP:HB3	4:E:158:GLU:H	1.86	0.41
2:C:324:ILE:HD13	2:C:330:ALA:HA	2.02	0.41
13:N:2:DA:OP1	13:N:2:DA:H4'	2.21	0.41
9:J:36:GLU:O	9:J:37:GLU:O	2.38	0.41
2:C:1074:ASN:N	2:C:1081:LEU:CD2	2.84	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:600:PRO:HG2	1:B:601:LYS:N	2.31	0.41
8:I:61:SER:O	8:I:62:SER:HB2	2.21	0.41
3:D:264:GLN:H	3:D:264:GLN:HG3	1.51	0.41
4:E:214:LEU:O	4:E:218:GLU:HB2	2.21	0.41
2:C:802:PRO:HG2	2:C:805:THR:CG2	2.51	0.41
1:B:1068:ALA:HB1	1:B:1367:HIS:HA	2.02	0.41
1:B:672:ASP:O	1:B:673:GLY:C	2.59	0.41
1:B:464:PRO:O	1:B:465:TYR:HB2	2.21	0.41
2:C:1104:HIS:CG	2:C:1122:ARG:HB2	2.56	0.41
1:B:332:LYS:NZ	15:T:19:DT:OP2	2.51	0.41
2:C:1064:TYR:O	2:C:1065:GLN:C	2.58	0.41
2:C:784:ASN:O	2:C:788:ARG:HG3	2.21	0.41
2:C:1069:PHE:N	2:C:1069:PHE:HD1	2.04	0.41
10:K:10:CYS:SG	10:K:11:GLY:N	2.94	0.41
10:K:44:TYR:CA	10:K:47:ARG:HB2	2.39	0.41
3:D:98:VAL:O	3:D:99:LEU:HD23	2.20	0.41
2:C:303:TYR:N	2:C:303:TYR:CD2	2.88	0.41
2:C:589:VAL:CG1	2:C:590:HIS:H	2.28	0.41
1:B:72:GLU:OE2	2:C:1175:LEU:HD12	2.20	0.41
12:M:30:ILE:CG2	12:M:31:CYS:N	2.84	0.41
7:H:13:LEU:HD22	7:H:14:HIS:O	2.20	0.41
7:H:59:GLY:CA	7:H:70:PHE:CD2	3.00	0.41
7:H:79:PHE:CE2	7:H:105:PRO:HD2	2.55	0.41
1:B:22:PHE:HE2	1:B:30:ILE:HD12	1.84	0.41
1:B:265:LYS:HG3	1:B:303:TYR:HB2	2.02	0.41
1:B:316:GLN:O	1:B:318:SER:N	2.54	0.41
1:B:1151:GLU:HB3	1:B:1153:TYR:HE1	1.86	0.41
1:B:503:GLN:HE21	6:G:90:ARG:NH2	2.17	0.41
2:C:38:PHE:CD2	2:C:43:LEU:HD23	2.56	0.41
2:C:910:VAL:C	2:C:911:ILE:HG13	2.42	0.41
2:C:287:ARG:C	2:C:289:LEU:N	2.74	0.41
2:C:281:PRO:HB3	2:C:320:ASP:OD2	2.21	0.41
5:F:84:ASP:O	5:F:86:PRO:HD3	2.21	0.41
2:C:882:THR:HG21	2:C:935:ARG:HA	2.02	0.41
15:T:14:DC:H2"	15:T:15:DT:C7	2.46	0.41
1:B:384:ASN:O	1:B:386:ASP:N	2.53	0.41
1:B:1114:PRO:CG	1:B:1115:SER:H	2.34	0.41
6:G:81:THR:HG23	6:G:144:GLU:CD	2.42	0.41
6:G:81:THR:HG23	6:G:144:GLU:OE2	2.21	0.41
1:B:850:VAL:HG21	1:B:1058:VAL:HG11	2.03	0.41
4:E:137:ASN:HD22	4:E:137:ASN:N	2.19	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1101:LEU:HD11	1:B:1105:LEU:CD1	2.49	0.41
2:C:469:GLN:HB2	2:C:470:LYS:H	1.60	0.41
2:C:466:TRP:HA	2:C:466:TRP:CE3	2.55	0.41
1:B:1068:ALA:HA	1:B:1367:HIS:ND1	2.36	0.41
2:C:523:CYS:SG	2:C:524:PRO:HD2	2.61	0.41
12:M:33:GLU:C	12:M:35:SER:H	2.24	0.41
11:L:102:LYS:O	11:L:106:GLU:HG3	2.21	0.41
10:K:47:ARG:NH1	10:K:47:ARG:HG2	2.36	0.41
10:K:41:LEU:HD11	10:K:50:ILE:HG13	2.03	0.41
2:C:273:LEU:HB2	2:C:276:ILE:CG1	2.51	0.41
11:L:76:GLN:HG2	11:L:77:THR:N	2.35	0.41
2:C:815:ARG:O	10:K:54:VAL:HG21	2.20	0.41
2:C:899:ILE:CG1	2:C:911:ILE:HA	2.51	0.41
1:B:196:GLU:CG	1:B:197:PRO:HD2	2.40	0.41
1:B:1392:SER:O	1:B:1394:THR:N	2.53	0.41
1:B:560:ILE:HG13	8:I:79:TRP:H	1.85	0.41
4:E:137:ASN:H	4:E:137:ASN:HD22	1.69	0.41
1:B:1306:LEU:HA	1:B:1306:LEU:HD23	1.83	0.41
12:M:70:ARG:NH1	12:M:70:ARG:HG2	2.36	0.41
1:B:289:ILE:HG22	1:B:290:GLU:N	2.36	0.41
3:D:52:GLU:HA	12:M:64:LEU:CD2	2.50	0.41
1:B:1147:THR:HB	9:J:48:LEU:HD12	2.03	0.41
1:B:1409:LEU:CD1	2:C:1207:LEU:HD11	2.50	0.41
4:E:75:LYS:O	4:E:76:LYS:HB2	2.21	0.41
3:D:100:THR:HB	3:D:119:VAL:HB	2.03	0.40
1:B:506:ALA:O	1:B:509:LEU:HB2	2.21	0.40
11:L:58:PHE:CE2	11:L:74:ARG:NE	2.77	0.40
4:E:63:LEU:O	4:E:129:LEU:HD11	2.21	0.40
2:C:498:THR:HG22	2:C:537:LYS:N	2.36	0.40
1:B:767:GLN:NE2	1:B:798:GLY:O	2.54	0.40
1:B:973:ILE:HD11	1:B:1038:THR:H	1.86	0.40
1:B:870:GLU:HG2	5:F:208:TYR:CD1	2.56	0.40
2:C:287:ARG:C	2:C:289:LEU:H	2.24	0.40
2:C:69:LEU:HD13	2:C:429:PHE:CD1	2.57	0.40
9:J:35:VAL:CG1	9:J:36:GLU:N	2.83	0.40
1:B:1127:ASP:O	1:B:1130:GLN:N	2.54	0.40
1:B:719:VAL:O	1:B:721:PHE:N	2.54	0.40
1:B:808:LEU:HD23	1:B:813:PHE:CA	2.51	0.40
11:L:44:ASN:N	11:L:61:TYR:CE1	2.89	0.40
2:C:592:ASN:OD1	2:C:595:ARG:HG3	2.20	0.40
9:J:10:CYS:SG	9:J:31:THR:HB	2.62	0.40

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:466:SER:CB	11:L:2:ASN:ND2	2.82	0.40
1:B:1442:ASP:HB2	6:G:135:ARG:HB3	2.04	0.40
8:I:98:TYR:C	8:I:118:PHE:HD2	2.24	0.40
8:I:92:ASP:C	8:I:93:TYR:CD1	2.94	0.40
2:C:515:HIS:CD2	2:C:516:ASN:N	2.90	0.40
1:B:1376:THR:CG2	1:B:1377:THR:N	2.84	0.40
1:B:853:ASP:OD1	1:B:855:THR:CG2	2.70	0.40
1:B:1226:VAL:HG12	1:B:1227:ILE:N	2.36	0.40
1:B:218:ASP:O	1:B:219:PHE:O	2.39	0.40
1:B:998:LEU:HD22	1:B:1001:ARG:HG3	2.04	0.40
1:B:6:TYR:CD1	1:B:6:TYR:C	2.93	0.40
9:J:98:VAL:HG12	9:J:111:THR:HG22	2.03	0.40
2:C:899:ILE:CG2	2:C:903:VAL:HG21	2.52	0.40
2:C:165:VAL:HG11	2:C:448:ILE:CD1	2.50	0.40
1:B:608:ILE:O	1:B:610:GLY:N	2.55	0.40
2:C:877:PRO:C	2:C:878:GLN:HG3	2.42	0.40
1:B:426:LEU:HD13	1:B:432:VAL:HG21	2.03	0.40
1:B:964:ILE:HG22	1:B:965:GLN:N	2.36	0.40
2:C:118:ARG:CG	2:C:204:ILE:HD13	2.49	0.40
4:E:51:ASN:ND2	4:E:54:GLU:OE2	2.53	0.40
2:C:472:ALA:C	2:C:474:SER:H	2.24	0.40
1:B:956:LEU:HD23	1:B:956:LEU:HA	1.79	0.40
2:C:1223:ASP:O	2:C:1224:PHE:HB2	2.21	0.40
1:B:282:ASN:O	1:B:284:ALA:N	2.55	0.40
3:D:66:ARG:NH2	10:K:5:VAL:HG23	2.36	0.40
10:K:13:VAL:C	10:K:14:VAL:HG23	2.41	0.40
6:G:103:MET:O	6:G:104:ASN:HB2	2.22	0.40
6:G:143:PHE:CD1	6:G:143:PHE:N	2.88	0.40
1:B:1341:ILE:O	1:B:1344:GLY:N	2.54	0.40
1:B:848:ILE:HB	1:B:1065:GLY:HA3	2.03	0.40
1:B:112:LYS:HG2	1:B:113:LEU:N	2.36	0.40
1:B:534:LEU:HD13	1:B:656:TRP:CG	2.56	0.40
1:B:784:LEU:HB3	1:B:785:PRO:HD2	2.02	0.40
2:C:31:TRP:HA	2:C:31:TRP:CE3	2.55	0.40
2:C:899:ILE:HD11	2:C:910:VAL:O	2.21	0.40
2:C:975:GLN:HG2	2:C:976:ILE:H	1.86	0.40
1:B:661:GLY:HA3	2:C:1081:LEU:HD12	2.03	0.40
1:B:269:ILE:HG23	1:B:300:VAL:HG22	2.03	0.40
14:P:5:C:H2'	14:P:6:A:H8	1.85	0.40
1:B:1389:PHE:C	1:B:1389:PHE:CD1	2.94	0.40
8:I:104:PHE:CZ	8:I:136:LYS:HG2	2.56	0.40

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:487:THR:O	2:C:488:TYR:C	2.59	0.40
1:B:685:GLU:HG3	1:B:686:ALA:N	2.35	0.40
4:E:191:ALA:O	4:E:193:THR:N	2.55	0.40
4:E:151:PHE:CD1	4:E:151:PHE:N	2.89	0.40
2:C:999:MET:HG2	2:C:1007:VAL:CG2	2.52	0.40
4:E:40:HIS:CE1	4:E:41:GLN:CG	3.04	0.40
1:B:231:PRO:C	1:B:233:TRP:H	2.25	0.40
1:B:1260:LEU:HD12	1:B:1260:LEU:C	2.42	0.40
6:G:82:THR:HA	6:G:83:PRO:HD3	1.79	0.40
4:E:141:LEU:HD12	4:E:145:MET:HG2	2.03	0.40
5:F:11:ARG:O	5:F:13:TRP:N	2.54	0.40
2:C:540:SER:HB3	2:C:747:MET:O	2.21	0.40
3:D:131:HIS:HA	3:D:132:PRO:HD3	1.78	0.40
2:C:308:TRP:O	2:C:312:GLU:N	2.46	0.40
5:F:117:THR:C	5:F:119:SER:H	2.23	0.40
2:C:460:ALA:O	2:C:462:ALA:N	2.47	0.40
2:C:1115:THR:HG22	2:C:1117:GLN:CG	2.51	0.40
5:F:147:HIS:CD2	5:F:149:LEU:HB2	2.52	0.40
8:I:128:ASN:CG	8:I:128:ASN:O	2.59	0.40
8:I:63:LEU:C	8:I:90:ALA:CB	2.86	0.40
2:C:458:LYS:O	2:C:459:TYR:C	2.60	0.40
2:C:611:PRO:HB3	2:C:685:LEU:HD11	2.03	0.40
1:B:523:ILE:CD1	1:B:649:ILE:HG21	2.51	0.40
2:C:1221:SER:O	2:C:1223:ASP:N	2.55	0.40
1:B:666:ILE:HG12	2:C:1030:LEU:HD22	2.04	0.40
9:J:61:ASP:C	9:J:63:GLY:H	2.24	0.40
2:C:193:LYS:HD3	2:C:787:VAL:HG11	2.03	0.40
8:I:24:CYS:CB	8:I:44:VAL:HG21	2.48	0.40
1:B:1019:CYS:O	1:B:1020:CYS:C	2.59	0.40
1:B:844:ALA:C	1:B:845:LEU:HD23	2.41	0.40
4:E:12:ARG:NH1	4:E:14:ARG:HG3	2.36	0.40
1:B:754:SER:N	1:B:757:ASN:HD22	2.00	0.40
1:B:1010:ALA:O	1:B:1013:ASP:HB2	2.20	0.40
1:B:376:TYR:CD2	1:B:376:TYR:C	2.95	0.40
6:G:89:GLU:HB3	6:G:134:ILE:HD13	2.03	0.40
5:F:16:PHE:O	5:F:17:ARG:C	2.59	0.40
1:B:767:GLN:HE21	1:B:774:ARG:HB3	1.79	0.40
7:H:88:ASP:CB	7:H:144:ARG:HA	2.44	0.40
2:C:882:THR:HG22	2:C:884:ARG:CB	2.50	0.40
9:J:34:TYR:C	9:J:35:VAL:HG23	2.42	0.40
9:J:7:CYS:C	9:J:8:ARG:O	2.57	0.40

*Continued on next page...*

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:H:114:LEU:HD23	7:H:161:GLY:C	2.41	0.40
1:B:1317:MET:C	1:B:1319:VAL:H	2.24	0.40
2:C:293:PRO:HG2	2:C:296:GLU:CB	2.51	0.40
2:C:237:VAL:HG12	2:C:238:ALA:N	2.36	0.40
1:B:874:ASP:C	1:B:874:ASP:OD1	2.60	0.40
2:C:416:LEU:HD11	2:C:466:TRP:CZ2	2.57	0.40
1:B:1140:HIS:CE1	1:B:1272:THR:HG23	2.56	0.40
1:B:735:VAL:HG12	1:B:735:VAL:O	2.21	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	B	1406/1733 (81%)	965 (69%)	284 (20%)	157 (11%)	0	10
2	C	1090/1224 (89%)	719 (66%)	243 (22%)	128 (12%)	0	9
3	D	264/318 (83%)	163 (62%)	70 (26%)	31 (12%)	0	9
4	E	173/221 (78%)	107 (62%)	43 (25%)	23 (13%)	0	6
5	F	212/215 (99%)	154 (73%)	36 (17%)	22 (10%)	1	12
6	G	82/155 (53%)	62 (76%)	13 (16%)	7 (8%)	1	17
7	H	169/171 (99%)	129 (76%)	26 (15%)	14 (8%)	1	18
8	I	129/146 (88%)	79 (61%)	30 (23%)	20 (16%)	0	5
9	J	117/122 (96%)	80 (68%)	24 (20%)	13 (11%)	0	10
10	K	63/70 (90%)	38 (60%)	12 (19%)	13 (21%)	0	2
11	L	112/120 (93%)	81 (72%)	24 (21%)	7 (6%)	2	27
12	M	44/70 (63%)	22 (50%)	8 (18%)	14 (32%)	0	0
All	All	3861/4565 (85%)	2599 (67%)	813 (21%)	449 (12%)	0	9

All (449) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	B	4	GLN
1	B	41	MET
1	B	48	ALA
1	B	54	ASN
1	B	57	ARG
1	B	62	ASP
1	B	67	CYS
1	B	93	VAL
1	B	130	ASP
1	B	149	GLU
1	B	154	SER
1	B	223	GLY
1	B	245	PRO
1	B	250	ILE
1	B	286	HIS
1	B	311	GLN
1	B	312	PRO
1	B	318	SER
1	B	322	VAL
1	B	331	GLY
1	B	332	LYS
1	B	335	ARG
1	B	336	ILE
1	B	409	SER
1	B	419	LYS
1	B	536	LEU
1	B	543	LEU
1	B	567	LYS
1	B	752	LYS
1	B	755	PHE
1	B	765	VAL
1	B	780	VAL
1	B	789	LYS
1	B	980	ASP
1	B	986	ILE
1	B	995	GLU
1	B	1002	GLY
1	B	1016	THR
1	B	1114	PRO
1	B	1115	SER
1	B	1120	LEU
1	B	1124	HIS

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
1	B	1212	VAL
1	B	1223	ASP
1	B	1231	ASP
1	B	1242	VAL
1	B	1255	GLU
1	B	1261	LYS
1	B	1341	ILE
1	B	1365	TYR
1	B	1377	THR
1	B	1378	GLN
1	B	1393	ASN
2	C	21	GLU
2	C	45	SER
2	C	46	GLN
2	C	108	VAL
2	C	186	GLU
2	C	367	LEU
2	C	401	PHE
2	C	448	ILE
2	C	470	LYS
2	C	472	ALA
2	C	509	ALA
2	C	510	LYS
2	C	591	ARG
2	C	708	GLU
2	C	709	ASP
2	C	731	VAL
2	C	751	VAL
2	C	826	ALA
2	C	907	GLY
2	C	909	ASP
2	C	943	SER
2	C	1003	ALA
2	C	1006	ILE
2	C	1011	ILE
2	C	1045	SER
2	C	1046	PRO
2	C	1156	ASP
2	C	1171	VAL
2	C	1175	LEU
2	C	1181	GLU
2	C	1182	CYS

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
2	C	1183	LYS
3	D	81	GLU
3	D	117	ASP
3	D	149	LYS
3	D	156	THR
3	D	175	ALA
3	D	184	ASN
3	D	209	TYR
4	E	9	GLN
4	E	19	GLU
4	E	21	GLU
4	E	31	GLN
4	E	169	SER
4	E	173	HIS
4	E	174	PRO
4	E	199	ASN
4	E	218	GLU
4	E	220	LEU
5	F	43	LYS
5	F	44	ALA
5	F	48	ASP
5	F	59	SER
5	F	73	PRO
5	F	129	PRO
5	F	192	ARG
5	F	206	GLY
6	G	73	ALA
7	H	66	GLY
7	H	154	VAL
8	I	17	PRO
8	I	77	ARG
8	I	78	SER
8	I	81	PRO
8	I	84	ALA
8	I	108	SER
8	I	128	ASN
8	I	140	ALA
9	J	11	ASN
9	J	37	GLU
9	J	106	CYS
10	K	6	ARG
10	K	32	GLU

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
10	K	64	ASN
11	L	29	ASN
12	M	35	SER
12	M	37	LYS
12	M	50	ASP
12	M	53	HIS
12	M	55	ILE
12	M	59	ALA
12	M	60	ARG
1	B	42	ASP
1	B	44	THR
1	B	51	GLY
1	B	58	LEU
1	B	66	LYS
1	B	70	CYS
1	B	73	GLY
1	B	76	GLU
1	B	167	CYS
1	B	257	ARG
1	B	283	GLY
1	B	303	TYR
1	B	317	LYS
1	B	410	GLY
1	B	415	LEU
1	B	666	ILE
1	B	718	VAL
1	B	719	VAL
1	B	829	VAL
1	B	846	GLU
1	B	847	ASP
1	B	871	ASP
1	B	968	GLN
1	B	979	SER
1	B	1050	GLU
1	B	1064	VAL
1	B	1116	LEU
1	B	1221	LYS
1	B	1314	SER
1	B	1335	ILE
1	B	1366	ARG
1	B	1405	THR
1	B	1438	THR

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
2	C	184	ALA
2	C	206	ASN
2	C	229	ALA
2	C	260	GLY
2	C	304	ASP
2	C	305	VAL
2	C	365	THR
2	C	368	GLU
2	C	369	GLY
2	C	389	ALA
2	C	450	ALA
2	C	460	ALA
2	C	466	TRP
2	C	467	GLY
2	C	471	LYS
2	C	480	SER
2	C	511	PRO
2	C	543	SER
2	C	643	ASP
2	C	655	LYS
2	C	688	GLY
2	C	728	ARG
2	C	734	HIS
2	C	746	SER
2	C	825	VAL
2	C	827	ILE
2	C	883	LEU
2	C	1041	GLU
2	C	1082	MET
2	C	1096	ARG
2	C	1108	ARG
2	C	1112	GLN
2	C	1126	GLY
2	C	1155	SER
2	C	1167	GLY
2	C	1186	ASP
2	C	1188	LYS
3	D	94	LYS
3	D	110	THR
3	D	133	ILE
3	D	161	LYS
3	D	214	ASN

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
4	E	20	GLU
4	E	52	LEU
5	F	74	ASP
5	F	76	GLY
5	F	106	GLN
5	F	121	MET
5	F	174	GLN
7	H	17	PHE
7	H	64	THR
7	H	118	ASP
7	H	140	LYS
8	I	12	VAL
8	I	60	ALA
8	I	82	PRO
8	I	90	ALA
8	I	134	ASN
8	I	139	ASN
9	J	3	THR
9	J	8	ARG
9	J	33	SER
9	J	47	GLU
9	J	58	VAL
9	J	79	HIS
10	K	2	ILE
10	K	17	LYS
10	K	24	LEU
10	K	27	GLU
10	K	28	ASP
10	K	29	GLU
10	K	39	LEU
11	L	7	PHE
11	L	14	GLU
11	L	15	GLY
1	B	3	GLY
1	B	43	GLU
1	B	59	GLY
1	B	69	THR
1	B	131	SER
1	B	219	PHE
1	B	232	GLU
1	B	244	PRO
1	B	253	ASN

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
1	B	361	LEU
1	B	399	HIS
1	B	526	ASP
1	B	591	PHE
1	B	639	PRO
1	B	706	HIS
1	B	720	ARG
1	B	922	ASP
1	B	997	LEU
1	B	1139	GLU
1	B	1402	PHE
1	B	1448	GLU
2	C	219	ALA
2	C	266	ALA
2	C	295	GLY
2	C	427	ASP
2	C	430	ARG
2	C	613	VAL
2	C	711	GLU
2	C	712	PRO
2	C	792	MET
2	C	836	GLU
2	C	848	ARG
2	C	881	ASN
2	C	888	GLY
2	C	894	ASP
2	C	1018	PRO
2	C	1035	ALA
2	C	1074	ASN
2	C	1075	GLY
2	C	1100	ASP
2	C	1157	ALA
2	C	1176	ASN
3	D	60	ASP
3	D	95	CYS
3	D	138	GLU
3	D	148	ARG
3	D	240	VAL
4	E	8	PHE
4	E	131	GLU
4	E	139	LYS
4	E	198	LEU

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
5	F	3	GLN
5	F	50	MET
5	F	130	ALA
5	F	205	SER
7	H	20	PRO
7	H	67	SER
7	H	96	GLN
8	I	120	GLY
9	J	34	TYR
9	J	78	CYS
12	M	54	ARG
1	B	128	ILE
1	B	220	THR
1	B	424	ILE
1	B	428	TYR
1	B	465	TYR
1	B	510	GLN
1	B	587	HIS
1	B	636	GLU
1	B	825	ILE
1	B	958	VAL
1	B	1013	ASP
1	B	1051	ALA
1	B	1054	LEU
1	B	1105	LEU
1	B	1109	LYS
1	B	1229	SER
1	B	1330	ASN
1	B	1390	ASN
2	C	56	ASP
2	C	94	LYS
2	C	115	GLN
2	C	198	ASP
2	C	282	ILE
2	C	394	ASP
2	C	402	GLY
2	C	436	VAL
2	C	461	LEU
2	C	465	ASN
2	C	605	ARG
2	C	879	ARG
2	C	978	ASP

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
2	C	1143	ALA
3	D	87	PHE
3	D	90	ASP
3	D	206	ASN
3	D	213	PRO
4	E	25	ALA
4	E	192	LYS
4	E	217	LEU
5	F	115	ASN
5	F	120	ALA
5	F	122	LYS
6	G	112	GLU
6	G	150	GLU
7	H	16	SER
7	H	50	ASP
7	H	139	ILE
8	I	52	GLN
9	J	9	ASP
12	M	26	THR
12	M	39	SER
12	M	45	ALA
12	M	56	LEU
1	B	61	ILE
1	B	71	GLN
1	B	196	GLU
1	B	382	PRO
1	B	497	THR
1	B	661	GLY
1	B	775	ILE
1	B	821	ARG
1	B	972	HIS
1	B	1067	LEU
1	B	1324	PRO
1	B	1379	GLY
1	B	1394	THR
2	C	261	ARG
2	C	283	VAL
2	C	577	ALA
2	C	684	LEU
2	C	764	SER
2	C	800	GLN
2	C	832	GLY

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
2	C	946	ASN
2	C	982	SER
2	C	1097	HIS
3	D	9	LYS
3	D	132	PRO
3	D	173	ALA
3	D	208	GLU
4	E	32	GLU
4	E	155	ARG
4	E	168	LYS
5	F	40	GLU
6	G	111	LEU
6	G	139	PRO
7	H	128	PRO
8	I	32	THR
8	I	62	SER
8	I	92	ASP
8	I	119	GLY
9	J	57	GLY
10	K	33	GLY
11	L	41	THR
12	M	40	LEU
1	B	321	PRO
1	B	400	PRO
1	B	759	ALA
1	B	975	HIS
1	B	1128	GLN
2	C	259	TYR
2	C	325	GLN
2	C	763	GLN
2	C	1131	GLY
2	C	1165	ILE
2	C	1170	THR
3	D	142	VAL
3	D	217	ASP
5	F	104	ASN
10	K	14	VAL
10	K	57	ILE
11	L	53	ASP
1	B	492	PRO
1	B	546	VAL
1	B	673	GLY

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
1	B	916	GLY
2	C	524	PRO
2	C	1017	ILE
3	D	139	GLY
3	D	243	VAL
6	G	74	ILE
6	G	117	PRO
7	H	34	VAL
11	L	66	PRO
1	B	35	ILE
1	B	78	PRO
1	B	138	ILE
1	B	380	VAL
1	B	1006	ILE
2	C	562	GLY
3	D	255	VAL
4	E	202	ILE
12	M	46	VAL
1	B	38	PRO
1	B	396	PRO
1	B	948	VAL
2	C	911	ILE
2	C	1214	PRO
3	D	70	ILE
1	B	1435	PRO
2	C	571	PRO
2	C	636	PRO
2	C	867	GLY
1	B	1107	VAL

### 5.3.2 Protein sidechains ⓘ

In the following table, the Percentiles column shows the percent sidechain outliers of the chain as a percentile score with respect to all X-ray entries followed by that with respect to entries of similar resolution.

The Analysed column shows the number of residues for which the sidechain conformation was analysed, and the total number of residues.

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
1	B	1239/1520 (82%)	1113 (90%)	126 (10%)	9	41
2	C	962/1061 (91%)	867 (90%)	95 (10%)	10	43

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
3	D	234/274 (85%)	209 (89%)	25 (11%)	8	39
4	E	159/200 (80%)	136 (86%)	23 (14%)	4	27
5	F	196/197 (100%)	182 (93%)	14 (7%)	18	58
6	G	74/137 (54%)	69 (93%)	5 (7%)	20	59
7	H	152/152 (100%)	136 (90%)	16 (10%)	8	40
8	I	117/128 (91%)	107 (92%)	10 (8%)	13	51
9	J	113/116 (97%)	103 (91%)	10 (9%)	12	48
10	K	60/65 (92%)	54 (90%)	6 (10%)	9	42
11	L	99/102 (97%)	84 (85%)	15 (15%)	3	25
12	M	40/57 (70%)	36 (90%)	4 (10%)	9	42
All	All	3445/4009 (86%)	3096 (90%)	349 (10%)	9	41

All (349) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	B	18	GLN
1	B	22	PHE
1	B	34	LYS
1	B	37	PHE
1	B	41	MET
1	B	43	GLU
1	B	57	ARG
1	B	62	ASP
1	B	67	CYS
1	B	68	GLN
1	B	70	CYS
1	B	83	HIS
1	B	93	VAL
1	B	108	MET
1	B	157	ASP
1	B	174	ILE
1	B	200	ARG
1	B	221	SER
1	B	245	PRO
1	B	261	ASP
1	B	265	LYS
1	B	270	LEU
1	B	282	ASN

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
1	B	312	PRO
1	B	320	ARG
1	B	322	VAL
1	B	326	ARG
1	B	335	ARG
1	B	360	GLU
1	B	375	THR
1	B	379	VAL
1	B	381	THR
1	B	385	ILE
1	B	394	ASN
1	B	396	PRO
1	B	406	ILE
1	B	408	ASP
1	B	417	TYR
1	B	434	ARG
1	B	442	VAL
1	B	443	LEU
1	B	445	ASN
1	B	450	LEU
1	B	451	HIS
1	B	462	VAL
1	B	466	SER
1	B	469	ARG
1	B	503	GLN
1	B	504	LEU
1	B	512	VAL
1	B	518	LYS
1	B	526	ASP
1	B	560	ILE
1	B	562	THR
1	B	590	ARG
1	B	616	VAL
1	B	618	GLU
1	B	629	LEU
1	B	635	ARG
1	B	642	CYS
1	B	657	LEU
1	B	664	THR
1	B	666	ILE
1	B	690	VAL
1	B	711	ARG

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
1	B	727	ASP
1	B	741	ASN
1	B	764	CYS
1	B	768	GLN
1	B	774	ARG
1	B	779	PHE
1	B	821	ARG
1	B	827	THR
1	B	852	TYR
1	B	858	ASN
1	B	890	ASP
1	B	903	ASN
1	B	904	THR
1	B	906	HIS
1	B	907	THR
1	B	941	LYS
1	B	942	PHE
1	B	947	PHE
1	B	998	LEU
1	B	1035	TYR
1	B	1037	LEU
1	B	1067	LEU
1	B	1095	THR
1	B	1116	LEU
1	B	1120	LEU
1	B	1122	PRO
1	B	1138	ILE
1	B	1146	VAL
1	B	1147	THR
1	B	1152	ILE
1	B	1163	ILE
1	B	1170	ILE
1	B	1173	HIS
1	B	1194	ARG
1	B	1206	ASP
1	B	1240	CYS
1	B	1264	GLU
1	B	1271	ILE
1	B	1291	VAL
1	B	1295	THR
1	B	1298	TYR
1	B	1309	ASP

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
1	B	1332	PHE
1	B	1333	ILE
1	B	1351	GLU
1	B	1359	ASP
1	B	1366	ARG
1	B	1372	VAL
1	B	1385	THR
1	B	1386	ARG
1	B	1389	PHE
1	B	1391	ARG
1	B	1393	ASN
1	B	1400	CYS
1	B	1405	THR
1	B	1425	SER
1	B	1428	VAL
1	B	1432	GLN
1	B	1442	ASP
1	B	1444	MET
1	B	1445	ILE
2	C	20	ASP
2	C	25	ILE
2	C	44	VAL
2	C	57	TYR
2	C	61	ASP
2	C	63	ILE
2	C	98	THR
2	C	104	GLU
2	C	175	ARG
2	C	180	TYR
2	C	199	MET
2	C	203	PHE
2	C	217	ARG
2	C	250	PHE
2	C	258	LEU
2	C	283	VAL
2	C	286	PHE
2	C	289	LEU
2	C	323	VAL
2	C	365	THR
2	C	371	GLU
2	C	378	LEU
2	C	385	LEU

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
2	C	393	LYS
2	C	396	ASP
2	C	427	ASP
2	C	429	PHE
2	C	466	TRP
2	C	482	VAL
2	C	485	ARG
2	C	498	THR
2	C	502	ILE
2	C	511	PRO
2	C	513	GLN
2	C	516	ASN
2	C	539	LEU
2	C	544	CYS
2	C	582	VAL
2	C	602	THR
2	C	603	LEU
2	C	615	MET
2	C	616	ILE
2	C	619	ILE
2	C	629	ASP
2	C	635	ARG
2	C	644	GLU
2	C	683	SER
2	C	737	THR
2	C	742	GLU
2	C	748	ILE
2	C	755	ILE
2	C	790	ASP
2	C	797	TYR
2	C	807	ARG
2	C	811	TYR
2	C	830	TYR
2	C	833	TYR
2	C	835	GLN
2	C	837	ASP
2	C	839	MET
2	C	844	SER
2	C	862	GLN
2	C	866	TYR
2	C	878	GLN
2	C	894	ASP

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
2	C	909	ASP
2	C	944	THR
2	C	953	LEU
2	C	978	ASP
2	C	999	MET
2	C	1002	THR
2	C	1010	LEU
2	C	1045	SER
2	C	1046	PRO
2	C	1047	PHE
2	C	1060	ARG
2	C	1069	PHE
2	C	1076	HIS
2	C	1077	THR
2	C	1084	GLN
2	C	1092	TYR
2	C	1095	LEU
2	C	1098	MET
2	C	1108	ARG
2	C	1122	ARG
2	C	1151	LEU
2	C	1159	ARG
2	C	1170	THR
2	C	1182	CYS
2	C	1183	LYS
2	C	1185	CYS
2	C	1192	TYR
2	C	1202	LEU
2	C	1212	ILE
2	C	1222	ARG
3	D	3	GLU
3	D	8	VAL
3	D	26	ASP
3	D	29	MET
3	D	58	LEU
3	D	62	PHE
3	D	74	SER
3	D	77	ILE
3	D	83	SER
3	D	91	HIS
3	D	104	PHE
3	D	138	GLU

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
3	D	140	ASN
3	D	147	LEU
3	D	148	ARG
3	D	163	ILE
3	D	170	TRP
3	D	190	ASP
3	D	193	TYR
3	D	209	TYR
3	D	226	ASP
3	D	228	PHE
3	D	235	VAL
3	D	240	VAL
3	D	266	ASP
4	E	5	THR
4	E	8	PHE
4	E	9	GLN
4	E	11	ARG
4	E	13	ARG
4	E	14	ARG
4	E	20	GLU
4	E	22	GLU
4	E	31	GLN
4	E	40	HIS
4	E	47	LEU
4	E	50	LEU
4	E	63	LEU
4	E	70	PHE
4	E	137	ASN
4	E	139	LYS
4	E	146	GLN
4	E	148	LEU
4	E	170	THR
4	E	174	PRO
4	E	211	LEU
4	E	214	LEU
4	E	221	TYR
5	F	7	ARG
5	F	46	TYR
5	F	60	PHE
5	F	74	ASP
5	F	77	SER
5	F	82	PHE

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
5	F	92	THR
5	F	93	MET
5	F	94	LYS
5	F	104	ASN
5	F	114	ASN
5	F	132	ILE
5	F	198	ILE
5	F	207	ARG
6	G	74	ILE
6	G	90	ARG
6	G	107	VAL
6	G	111	LEU
6	G	143	PHE
7	H	1	MET
7	H	7	LEU
7	H	11	ILE
7	H	13	LEU
7	H	45	ILE
7	H	49	LEU
7	H	56	ILE
7	H	74	TYR
7	H	77	VAL
7	H	79	PHE
7	H	80	LYS
7	H	88	ASP
7	H	140	LYS
7	H	152	SER
7	H	165	GLU
7	H	171	ILE
8	I	7	ASP
8	I	10	PHE
8	I	17	PRO
8	I	26	ILE
8	I	95	TYR
8	I	96	VAL
8	I	102	TYR
8	I	106	GLU
8	I	110	ASP
8	I	130	ARG
9	J	8	ARG
9	J	9	ASP
9	J	15	TYR

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
9	J	31	THR
9	J	52	ILE
9	J	59	VAL
9	J	85	PHE
9	J	86	PHE
9	J	99	LEU
9	J	100	PHE
10	K	16	ASP
10	K	19	GLU
10	K	28	ASP
10	K	43	ARG
10	K	44	TYR
10	K	48	ARG
11	L	7	PHE
11	L	10	PHE
11	L	12	LEU
11	L	47	ARG
11	L	50	LEU
11	L	61	TYR
11	L	65	HIS
11	L	68	PHE
11	L	78	THR
11	L	81	TYR
11	L	89	ASN
11	L	102	LYS
11	L	111	LEU
11	L	113	THR
11	L	114	LEU
12	M	44	ASP
12	M	54	ARG
12	M	55	ILE
12	M	70	ARG

Some sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (106) such sidechains are listed below:

Mol	Chain	Res	Type
1	B	54	ASN
1	B	64	ASN
1	B	68	GLN
1	B	71	GLN
1	B	169	ASN
1	B	171	GLN

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
1	B	225	ASN
1	B	256	GLN
1	B	297	GLN
1	B	339	ASN
1	B	358	ASN
1	B	394	ASN
1	B	435	HIS
1	B	493	GLN
1	B	603	ASN
1	B	654	ASN
1	B	698	GLN
1	B	723	ASN
1	B	736	ASN
1	B	741	ASN
1	B	757	ASN
1	B	760	GLN
1	B	786	HIS
1	B	858	ASN
1	B	881	GLN
1	B	903	ASN
1	B	926	GLN
1	B	965	GLN
1	B	1033	GLN
1	B	1106	ASN
1	B	1124	HIS
1	B	1130	GLN
1	B	1140	HIS
1	B	1173	HIS
1	B	1188	GLN
1	B	1203	ASN
1	B	1218	GLN
1	B	1258	HIS
1	B	1270	ASN
1	B	1354	ASN
1	B	1393	ASN
2	C	60	GLN
2	C	110	HIS
2	C	121	ASN
2	C	178	ASN
2	C	236	HIS
2	C	363	HIS
2	C	366	GLN

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
2	C	383	ASN
2	C	465	ASN
2	C	515	HIS
2	C	516	ASN
2	C	518	HIS
2	C	538	ASN
2	C	734	HIS
2	C	744	HIS
2	C	763	GLN
2	C	770	GLN
2	C	776	GLN
2	C	821	GLN
2	C	842	ASN
2	C	862	GLN
2	C	957	ASN
2	C	958	GLN
2	C	1065	GLN
2	C	1074	ASN
2	C	1084	GLN
2	C	1093	GLN
2	C	1117	GLN
2	C	1161	HIS
2	C	1176	ASN
2	C	1179	GLN
3	D	24	ASN
3	D	65	HIS
3	D	73	GLN
3	D	91	HIS
3	D	102	GLN
3	D	112	ASN
3	D	167	HIS
4	E	39	ASN
4	E	74	GLN
4	E	137	ASN
4	E	143	ASN
4	E	173	HIS
4	E	199	ASN
5	F	101	GLN
5	F	104	ASN
5	F	114	ASN
5	F	147	HIS
7	H	14	HIS

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
7	H	53	ASN
7	H	97	HIS
7	H	122	ASN
7	H	126	ASN
7	H	153	GLN
7	H	158	HIS
8	I	137	GLN
9	J	12	ASN
9	J	90	GLN
9	J	108	HIS
11	L	44	ASN
11	L	65	HIS
11	L	76	GLN
11	L	89	ASN
11	L	110	ASN
12	M	53	HIS

### 5.3.3 RNA ⓘ

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
14	P	7/16 (43%)	1 (14%)	0

All (1) RNA backbone outliers are listed below:

Mol	Chain	Res	Type
14	P	7	A

There are no RNA pucker outliers to report.

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

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

## 5.5 Carbohydrates ⓘ

There are no carbohydrates in this entry.

## 5.6 Ligand geometry

Of 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

There are no such residues in this entry.

## 5.8 Polymer linkage issues

There are no chain breaks in this entry.

## 6 Fit of model and data

### 6.1 Protein, DNA and RNA chains

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

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å <sup>2</sup> )	Q<0.9
1	B	1416/1733 (81%)	-0.34	4 (0%) 94 92	76, 129, 175, 200	0
2	C	1108/1224 (90%)	-0.28	3 (0%) 94 92	79, 140, 185, 200	0
3	D	266/318 (83%)	-0.38	0 100 100	93, 126, 168, 188	0
4	E	177/221 (80%)	-0.31	0 100 100	106, 142, 182, 190	0
5	F	214/215 (99%)	-0.30	1 (0%) 91 88	99, 161, 187, 200	0
6	G	84/155 (54%)	-0.50	0 100 100	73, 107, 138, 147	0
7	H	171/171 (100%)	-0.31	0 100 100	98, 127, 164, 174	0
8	I	133/146 (91%)	0.07	2 (1%) 76 66	134, 165, 186, 196	0
9	J	119/122 (97%)	-0.28	0 100 100	122, 165, 189, 200	0
10	K	65/70 (92%)	-0.57	0 100 100	92, 121, 158, 169	0
11	L	114/120 (95%)	-0.37	0 100 100	94, 128, 156, 170	0
12	M	46/70 (65%)	0.02	0 100 100	120, 172, 195, 198	0
13	N	7/14 (50%)	1.41	2 (28%) 1 1	199, 200, 200, 200	1 (14%)
14	P	8/16 (50%)	0.14	0 100 100	198, 199, 200, 200	0
15	T	18/26 (69%)	0.84	2 (11%) 7 6	178, 199, 200, 200	1 (5%)
All	All	3946/4621 (85%)	-0.30	14 (0%) 93 90	73, 136, 184, 200	2 (0%)

All (14) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
1	B	1176	LEU	4.0
13	N	7	DC	3.1
2	C	471	LYS	2.9
15	T	11	DT	2.7
13	N	6	DA	2.5
8	I	105	GLU	2.4
1	B	1455	PRO	2.3

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	RSRZ
1	B	145	LYS	2.3
2	C	865	LYS	2.2
15	T	10	DG	2.1
5	F	82	PHE	2.1
1	B	164	ARG	2.1
2	C	432	MET	2.1
8	I	113	ALA	2.1

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

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

## 6.3 Carbohydrates [i](#)

There are no carbohydrates in this entry.

## 6.4 Ligands [i](#)

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

Mol	Type	Chain	Res	Atoms	RSCC	RSR	LLDF	B-factors(Å <sup>2</sup> )	Q<0.9
16	ZN	J	123	1/1	0.99	0.16	0.27	136,136,136,136	0
16	ZN	K	71	1/1	0.99	0.25	0.14	113,113,113,113	0
16	ZN	D	319	1/1	0.99	0.13	-0.66	98,98,98,98	0
16	ZN	B	1735	1/1	0.99	0.12	-1.49	110,110,110,110	0
16	ZN	M	71	1/1	0.98	0.05	-1.61	174,174,174,174	0
16	ZN	B	1734	1/1	0.99	0.04	-2.66	149,149,149,149	0
16	ZN	J	124	1/1	0.92	0.03	-2.80	200,200,200,200	0
17	MG	B	1736	1/1	0.86	0.10	-	153,153,153,153	0
16	ZN	C	1225	1/1	0.99	0.23	-	104,104,104,104	0

## 6.5 Other polymers [i](#)

There are no such residues in this entry.