



## Full wwPDB EM Validation Report ⓘ

Oct 28, 2024 – 03:44 pm GMT

PDB ID : 7Q55  
EMDB ID : EMD-13826  
Title : Single Particle Cryo-EM structure of photosynthetic A8B8 glyceraldehyde  
-3-phosphate dehydrogenase hexadecamer (major conformer) from *Spinacia  
oleracea*.  
Authors : Marotta, R.; Fermani, S.; Sparla, F.; Trost, P.; Del Giudice, A.  
Deposited on : 2021-11-02  
Resolution : 5.70 Å(reported)

This is a Full wwPDB EM Validation Report for a publicly released PDB entry.

We welcome your comments at [validation@mail.wwpdb.org](mailto:validation@mail.wwpdb.org)

A user guide is available at

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

with specific help available everywhere you see the ⓘ symbol.

The types of validation reports are described at

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

---

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

EMDB validation analysis : 0.0.1.dev113  
Mogul : 1.8.4, CSD as541be (2020)  
MolProbity : 4.02b-467  
buster-report : 1.1.7 (2018)  
Percentile statistics : 20231227.v01 (using entries in the PDB archive December 27th 2023)  
MapQ : 1.9.13  
Ideal geometry (proteins) : Engh & Huber (2001)  
Ideal geometry (DNA, RNA) : Parkinson et al. (1996)  
Validation Pipeline (wwPDB-VP) : 2.39

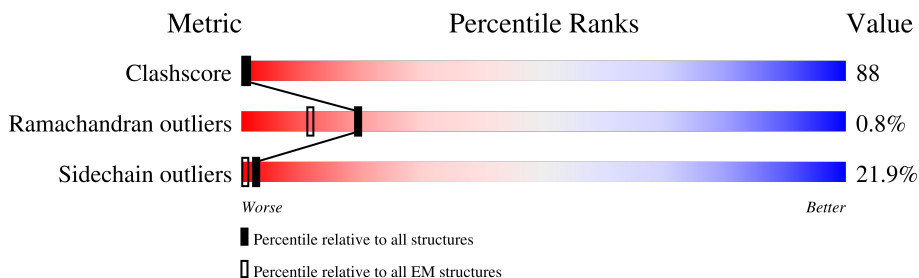
# 1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

*ELECTRON MICROSCOPY*

The reported resolution of this entry is 5.70 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.






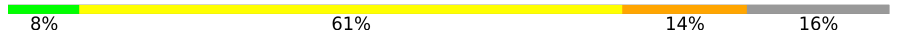
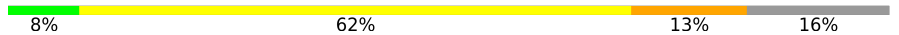
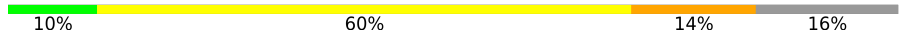
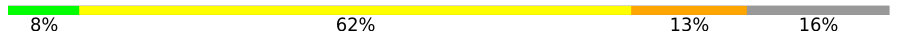
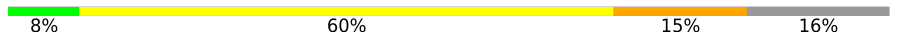
Metric	Whole archive (#Entries)	EM structures (#Entries)
Clashscore	210492	15764
Ramachandran outliers	207382	16835
Sidechain outliers	206894	16415

The table below summarises the geometric issues observed across the polymeric chains and their fit to the map. The red, orange, yellow and green segments of the bar indicate the fraction of residues that contain outliers for  $\geq 3$ , 2, 1 and 0 types of geometric quality criteria respectively. A grey segment represents the fraction of residues that are not modelled. The numeric value for each fraction is indicated below the corresponding segment, with a dot representing fractions  $\leq 5\%$ . The upper red bar (where present) indicates the fraction of residues that have poor fit to the EM map (all-atom inclusion  $< 40\%$ ). The numeric value is given above the bar.

Mol	Chain	Length	Quality of chain
1	A	451	
1	C	451	
1	E	451	
1	G	451	
1	I	451	
1	K	451	
1	O	451	
1	Q	451	

Continued on next page...

*Continued from previous page...*

Mol	Chain	Length	Quality of chain				
2	B	402		8%	61%	15%	16%
2	D	402		9%	62%	12%	16%
2	F	402		6%	65%	13%	16%
2	H	402		8%	61%	14%	16%
2	J	402		8%	62%	13%	16%
2	L	402		10%	60%	14%	16%
2	P	402		8%	62%	13%	16%
2	R	402		8%	60%	15%	16%

## 2 Entry composition [i](#)

There are 3 unique types of molecules in this entry. The entry contains 42608 atoms, of which 0 are hydrogens and 0 are deuteriums.

In the tables below, 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 Glyceraldehyde-3-phosphate dehydrogenase B, chloroplastic.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
1	O	368	2694	1700	473	510	11	0	0
1	Q	368	2694	1700	473	510	11	0	0
1	A	368	2694	1700	473	510	11	0	0
1	C	368	2694	1700	473	510	11	0	0
1	E	368	2694	1700	473	510	11	0	0
1	G	368	2694	1700	473	510	11	0	0
1	I	368	2694	1700	473	510	11	0	0
1	K	368	2694	1700	473	510	11	0	0

- Molecule 2 is a protein called Glyceraldehyde-3-phosphate dehydrogenase A, chloroplastic.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
2	P	337	2544	1600	445	488	11	0	0
2	R	337	2544	1600	445	488	11	0	0
2	B	337	2544	1600	445	488	11	0	0
2	D	337	2544	1600	445	488	11	0	0
2	F	337	2544	1600	445	488	11	0	0
2	H	337	2544	1600	445	488	11	0	0
2	J	337	2544	1600	445	488	11	0	0

*Continued on next page...*

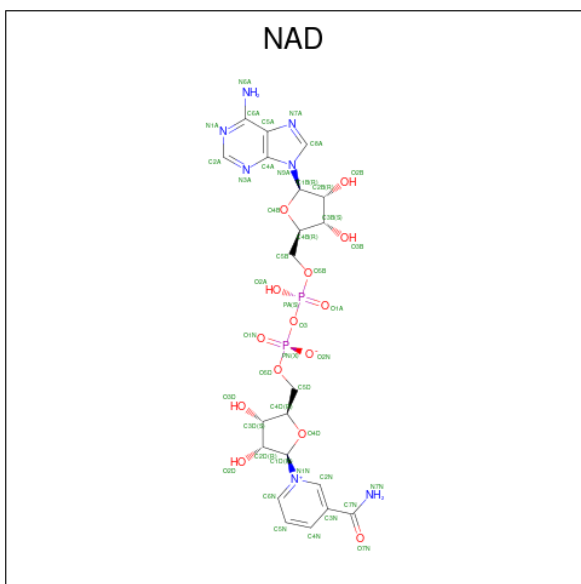
Continued from previous page...

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
2	L	337	2544	1600	445	488	11	0	0

There are 8 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
P	334	UNK	-	insertion	UNP P19866
R	334	UNK	-	insertion	UNP P19866
B	334	UNK	-	insertion	UNP P19866
D	334	UNK	-	insertion	UNP P19866
F	334	UNK	-	insertion	UNP P19866
H	334	UNK	-	insertion	UNP P19866
J	334	UNK	-	insertion	UNP P19866
L	334	UNK	-	insertion	UNP P19866

- Molecule 3 is NICOTINAMIDE-ADENINE-DINUCLEOTIDE (three-letter code: NAD) (formula: C<sub>21</sub>H<sub>27</sub>N<sub>7</sub>O<sub>14</sub>P<sub>2</sub>) (labeled as "Ligand of Interest" by depositor).



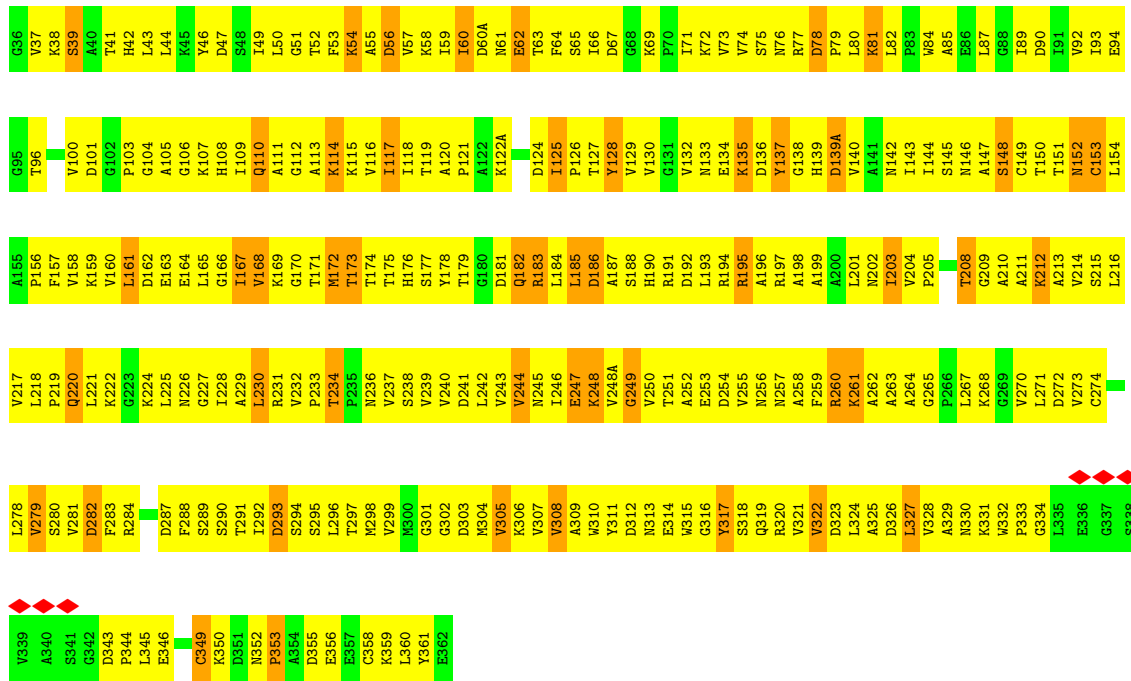
Mol	Chain	Residues	Atoms					AltConf
			Total	C	N	O	P	
3	O	1	44	21	7	14	2	0
3	P	1	44	21	7	14	2	0
3	Q	1	44	21	7	14	2	0
3	R	1	44	21	7	14	2	0

Continued on next page...

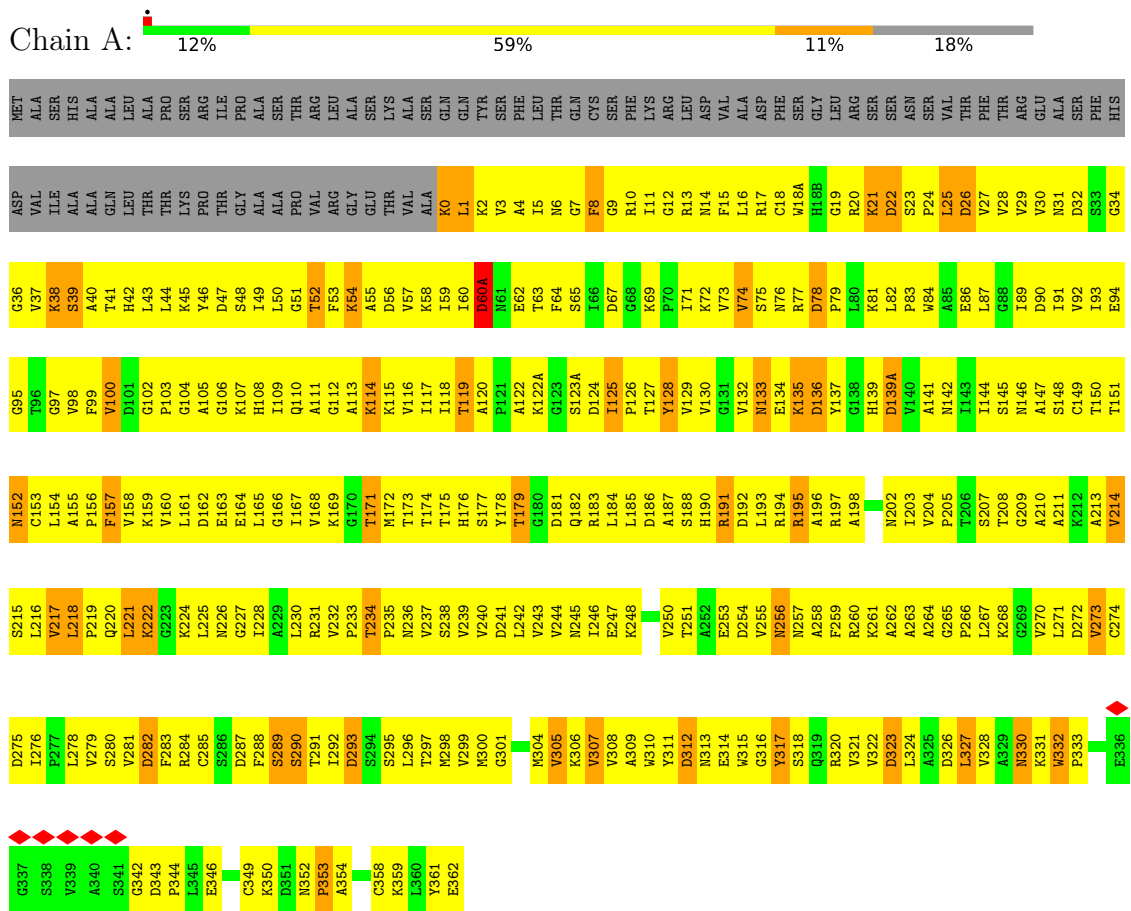
*Continued from previous page...*

Mol	Chain	Residues	Atoms					AltConf
			Total	C	N	O	P	
3	A	1	Total 44	C 21	N 7	O 14	P 2	0
3	B	1	Total 44	C 21	N 7	O 14	P 2	0
3	C	1	Total 44	C 21	N 7	O 14	P 2	0
3	D	1	Total 44	C 21	N 7	O 14	P 2	0
3	E	1	Total 44	C 21	N 7	O 14	P 2	0
3	F	1	Total 44	C 21	N 7	O 14	P 2	0
3	G	1	Total 44	C 21	N 7	O 14	P 2	0
3	H	1	Total 44	C 21	N 7	O 14	P 2	0
3	I	1	Total 44	C 21	N 7	O 14	P 2	0
3	J	1	Total 44	C 21	N 7	O 14	P 2	0
3	K	1	Total 44	C 21	N 7	O 14	P 2	0
3	L	1	Total 44	C 21	N 7	O 14	P 2	0





• Molecule 1: Glyceraldehyde-3-phosphate dehydrogenase B, chloroplastic



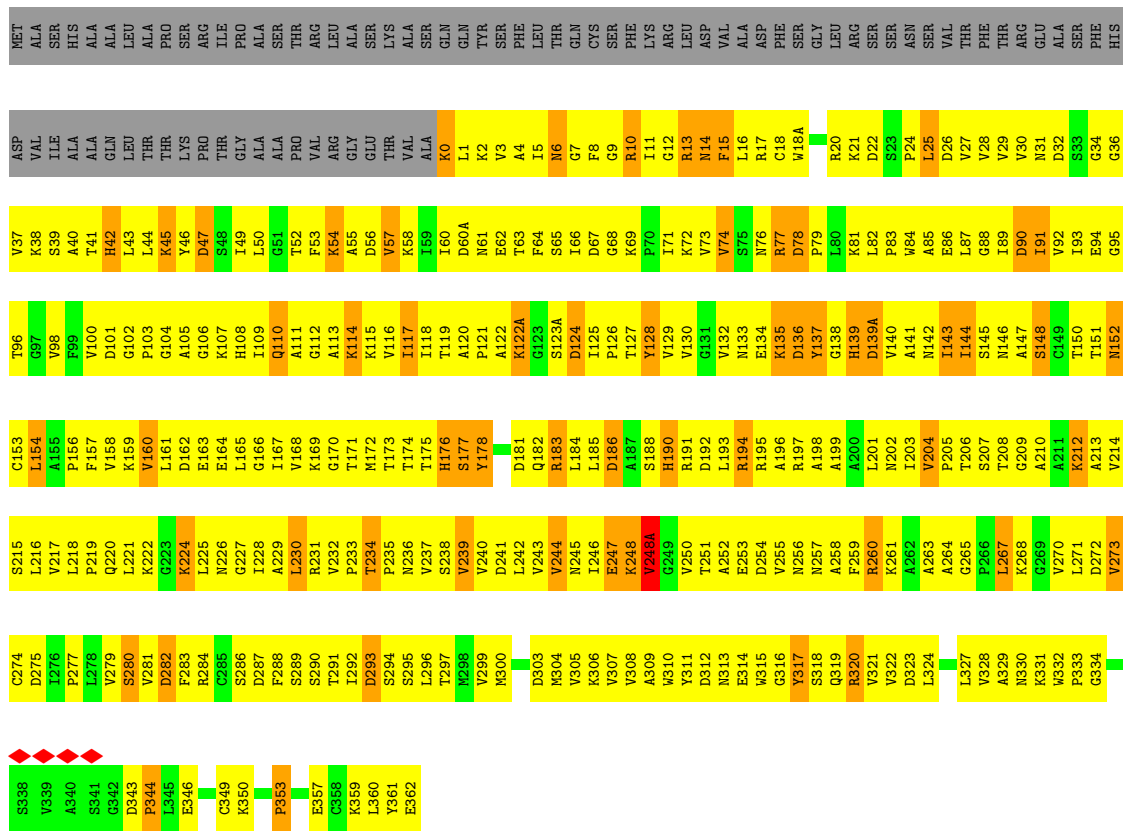
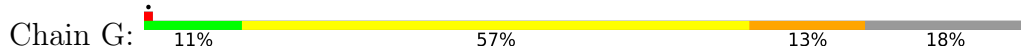
• Molecule 1: Glyceraldehyde-3-phosphate dehydrogenase B, chloroplastic



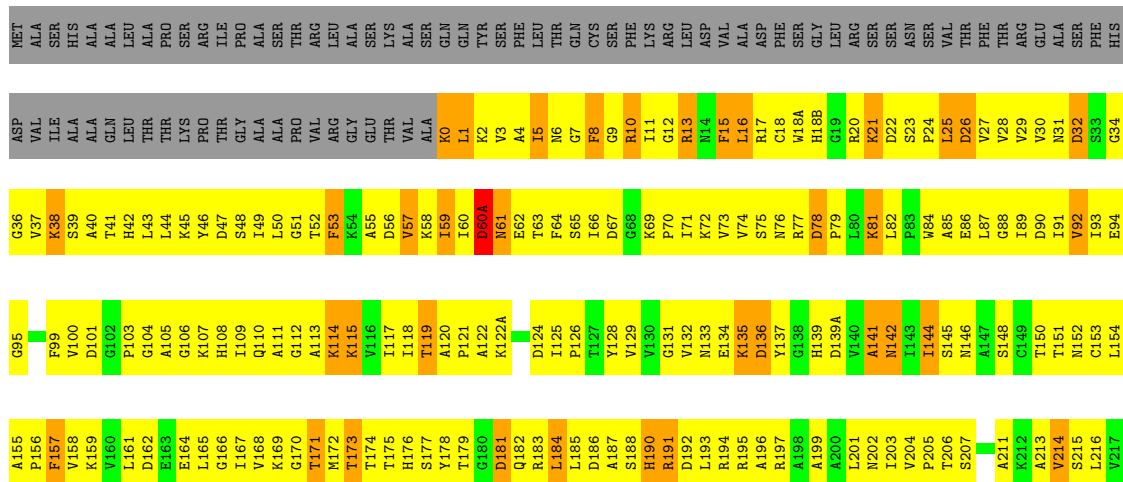
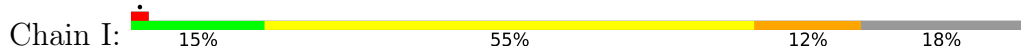


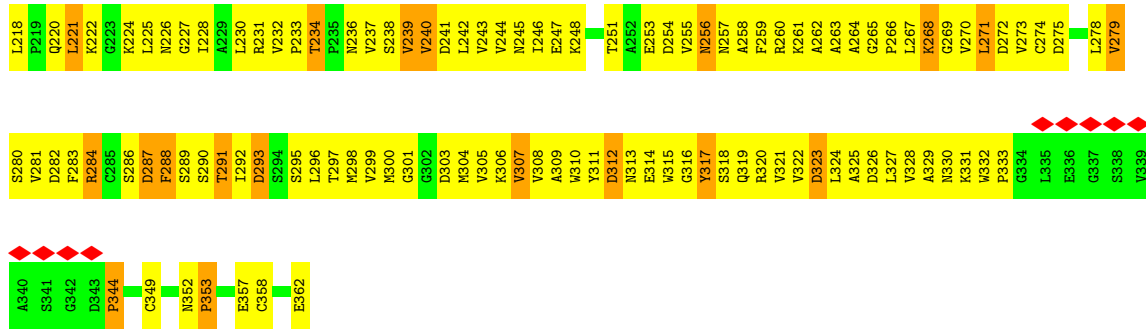


• Molecule 1: Glyceraldehyde-3-phosphate dehydrogenase B, chloroplastic

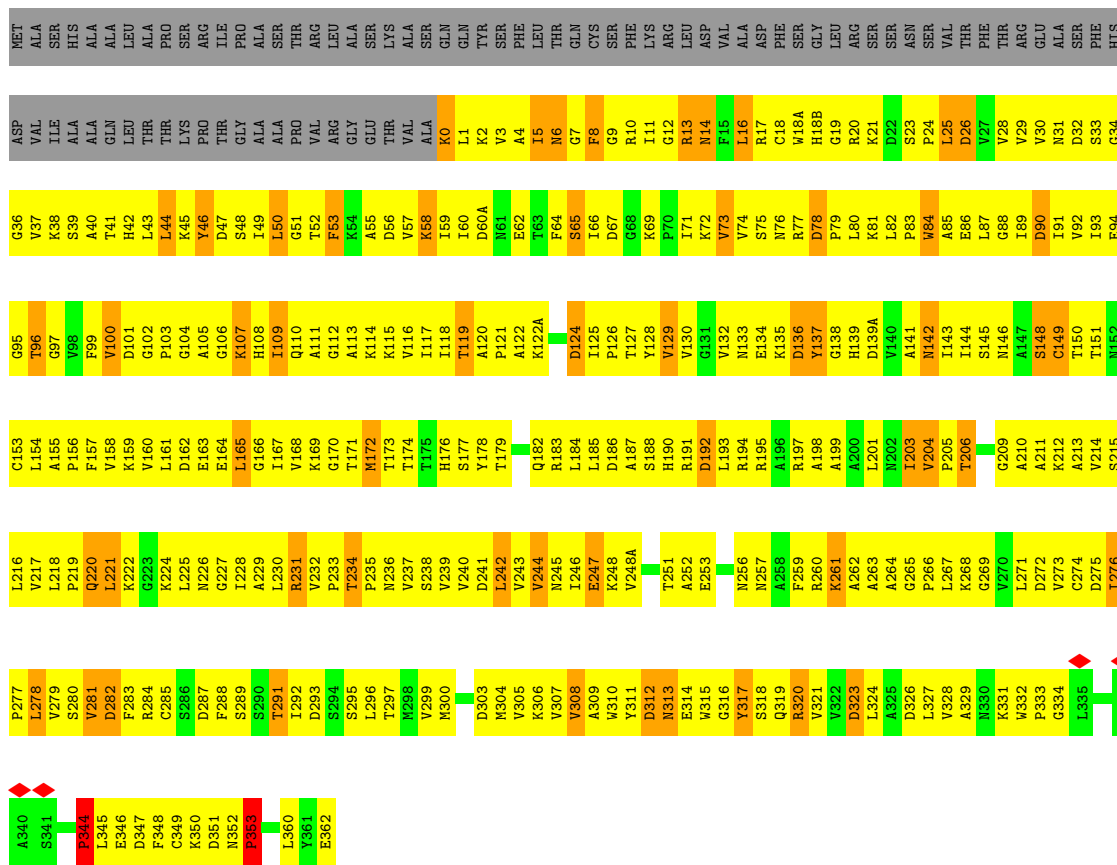
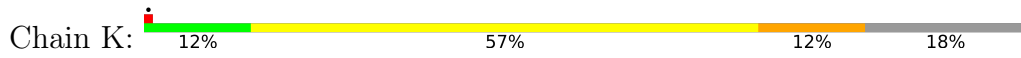


• Molecule 1: Glyceraldehyde-3-phosphate dehydrogenase B, chloroplastic

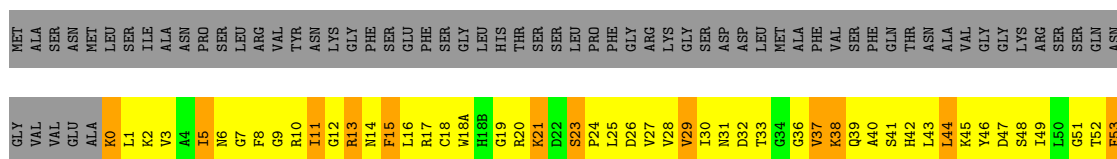
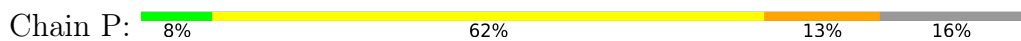




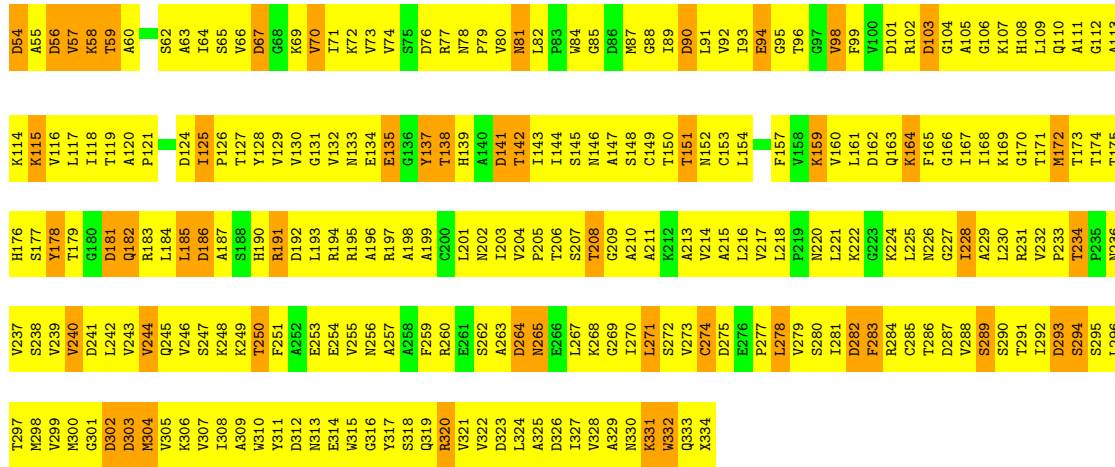
• Molecule 1: Glyceraldehyde-3-phosphate dehydrogenase B, chloroplatic



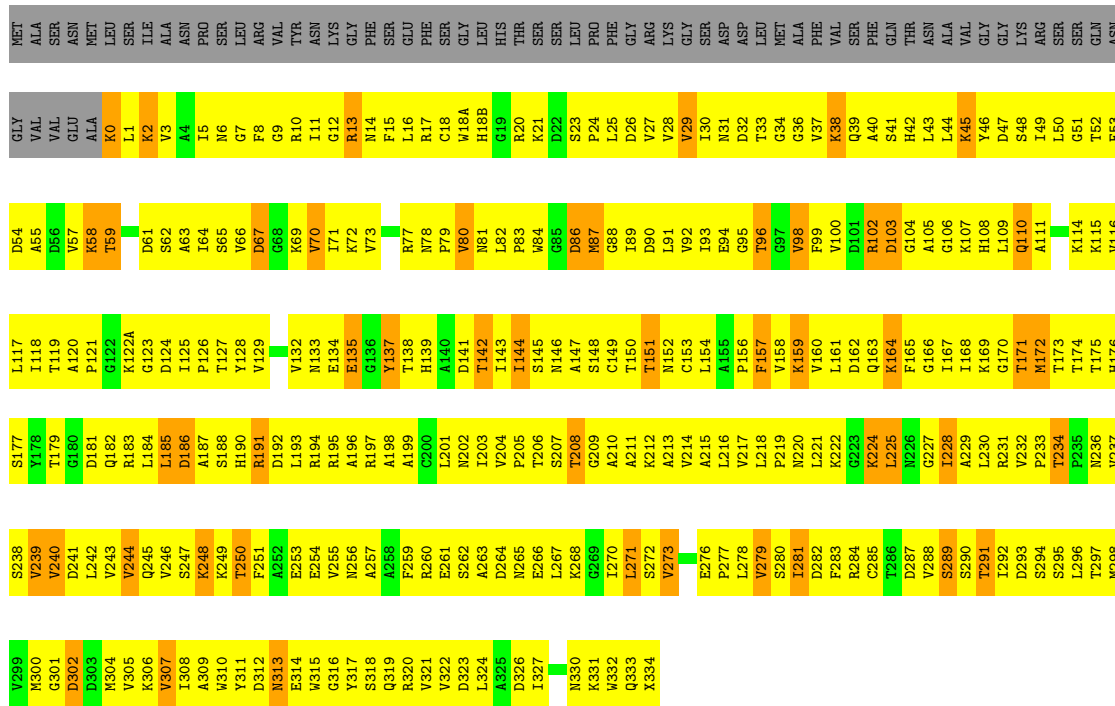
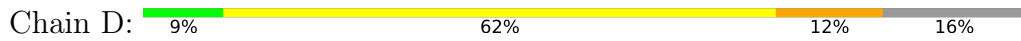
• Molecule 2: Glyceraldehyde-3-phosphate dehydrogenase A, chloroplatic



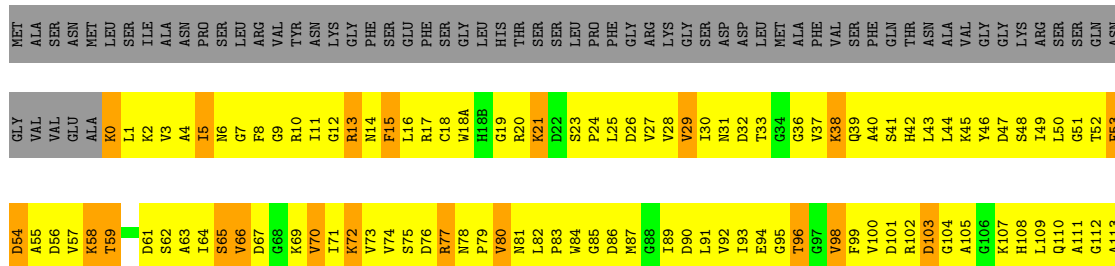
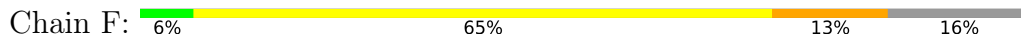




● Molecule 2: Glyceraldehyde-3-phosphate dehydrogenase A, chloroplastic

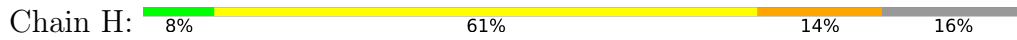


● Molecule 2: Glyceraldehyde-3-phosphate dehydrogenase A, chloroplastic



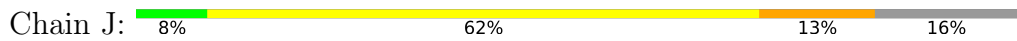
K114	T173	T234	S294
K115	T174	F235	S295
V116	T175	M236	L296
L117	H176	S237	L297
L118	H177	M238	V298
L119	S177	V239	M300
L120	H178	V240	G301
F121	G180	D241	D302
D122	L181	L242	A303
K122A	Q182	V243	M304
Q123	R183	V244	PRO124
D124	R184	Q245	V305
L125	L184	Q246	K306
L126	L185	S247	V307
L127	D186	S248	L308
T127	A187	K248	I309
Y128	S188	K249	T310
H129	H190	T250	W310
V130	R191	F251	Y311
G131	L192	A252	D312
G132	L193	E253	D313
V133	L194	E254	F314
N133	R195	V255	W315
E134	R196	M256	G316
E135	A196	N257	G317
G136	R197	A258	S318
Y137	A198	A259	Q319
F138	A199	F259	R320
H139	C200	R260	H321
A140	L201	E261	R202
D141	M202	S262	V322
D142	N203	S263	D323
D143	K203	A264	L324
I143	V204	D264	A325
I144	P205	N265	A326
S145	P206	E266	D326
N146	S207	L267	L327
A147	T208	K268	V328
S148	G209	G269	A329
C149	A210	L270	N330
C150	A211	L271	K331
T150	A212	S272	W332
T151	K212	V273	A334
M152	A213	C274	
C153	V214	D275	
L154	G215	E276	
A155	L216	E277	
P156	V217	P277	
F157	L218	L278	
V158	P219	V279	
M159	N220	S280	
V160	L221	L281	
L161	K222	D282	
D162	G223	F283	
Q163	K224	R284	
K164	L225	C285	
F165	N226	T286	
F166	G227	F165	
L167	A228	G166	
I168	L229	I167	
I169	L230	I168	
I170	A229	L109	
T171	S288	Q110	
L230	S290	A111	
R231	T291	G112	
V232	L292	T173	
P233	D293	H176	

• Molecule 2: Glyceraldehyde-3-phosphate dehydrogenase A, chloroplastic



MET	GLY	A55	K115	T175	N236	V298	K116	H176	V237	M238	V116	H177	V238	V117	S239	V118	G301	D302	M304	V305	V307	K306	L122A	V119	L184	L185	L186	S187	S188	H190	T250	F251	E252	E253	M254	V255	A196	R197	E195	L193	G131	V132	M133	E134	E135	G136	R17	R77	D76	L16	L17	R17	C18	P79	W18A	H18B	L201	M202	L203	V204	P205	P206	S207	S208	G209	L210	L211	L212	L213	L214	L215	M152	C153	L154	G95	G96	G97	V98	F99	V100	D101	R102	H42	L43	L44	A105	G106	D47	H108	L109	L110	A111	G112	T173	F174	M172	H176	D54
-----	-----	-----	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	-------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	-----	-----	-----	-----	-----	-----	-----	-----	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	-----	-----	-----	-----	-----	------	------	------	-----	-----	-----	------	------	-----	------	------	------	------	------	------	------	------	------	-----

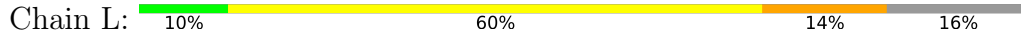
• Molecule 2: Glyceraldehyde-3-phosphate dehydrogenase A, chloroplastic



MET	GLY	B54	K115	V116	L117	L118	L119	A120	P121	D124	I125	P126	T127	Y128	V129	V130	G131	V132	M133	E134	E135	S75	D76	R77	N78	P79	W80	M81	L82	P83	S84	G85	D86	M87	G88	T89	D90	L91	V92	I93	E94	G95	T96	G97	V98	F99	V100	D101	Q103	S41	H42	G104	L43	L44	A105	G106	K107	G170	T171	I149	M172	T173	T174	H176	F53
-----	-----	-----	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	------	------	------	-----	-----	------	-----	-----	------	------	------	------	------	------	------	------	------	------	-----

S177	S238	M288	S238	M288
Y178	V239	V289	V239	V289
T179	V240	M300	V240	M300
G180	D241	G301	L242	D302
D181	L243	D302	V243	D303
Q182	V244	M304	Q245	M304
R183	Q245	Y305	V246	K306
L184	V246	K306	S247	ASN
L185	K248	I308	K248	I308
D186	S188	A309	S188	A309
A187	S188	W310	K249	W310
S188	H190	Y311	T250	Y311
S188	H190	R191	F251	R191
S188	R191	D192	A252	D192
S188	L193	L193	E253	L193
S188	R194	E314	E254	E314
S188	R195	W315	W315	W315
S188	R195	G316	N256	G316
S188	A196	Y317	A257	Y317
S188	R197	S318	A258	S318
S188	A198	Q319	F259	Q319
S188	A199	R320	R260	R320
S188	C200	V321	E261	V321
S188	L201	S262	S262	S262
S188	N202	D323	A263	D323
S188	L203	L324	D264	L324
S188	V204	A325	N265	A325
S188	P205	S326	E266	S326
S188	P206	I327	L267	I327
S188	S207	K328	K268	K328
S188	T268	N330	G269	N330
S188	G209	M331	L270	M331
S188	A210	L271	L271	L271
S188	A210	K331	S272	K331
S188	A210	W332	V273	W332
S188	L218	Q333	C274	Q333
S188	L218	X334	D275	X334
S188	L218	E276	E276	E276
S188	L218	P277	P277	P277
S188	L218	L278	L278	L278
S188	L218	S279	S279	S279
S188	L218	I281	I281	I281
S188	L218	D282	D282	D282
S188	L218	F283	F283	F283
S188	L218	R284	R284	R284
S188	L218	C285	C285	C285
S188	L218	T286	T286	T286
S188	L218	G227	G227	G227
S188	L218	I228	I228	I228
S188	L218	S289	S289	S289
S188	L218	L230	L230	L230
S188	L218	R231	R231	R231
S188	L218	V232	V232	V232
S188	L218	P233	P233	P233
S188	L218	T234	T234	T234
S188	L218	F235	F235	F235
S188	L218	D236	D236	D236
S188	L218	M237	M237	M237
S188	L218	V237	V237	V237
S188	L218	S238	S238	S238

● Molecule 2: Glyceraldehyde-3-phosphate dehydrogenase A, chloroplastic



MET	GLY	V67	L118	V178	V239	M300
ALA	VAL	K58	L119	L179	V240	G301
SER	VAL	T59	P120	G180	D241	D302
ASN	GLU	A60	P121	D181	L242	D303
MET	ALA	S62	G122	Q182	V243	M304
LEU	ALA	A63	K122A	R183	V244	V305
SER	KO	I64	G123	L184	Q245	K306
ILE	L1	S65	D124	L186	V246	I308
ALA	K2	V66	I125	D186	S247	A309
PRO	V3	D67	T126	A187	K248	W310
SER	I5	G68	P127	S188	K249	Y311
LEU	N6	G69	Y128	H190	T250	D312
ARG	G7	R69	V129	R191	F251	M313
VAL	F8	V70	V132	D192	A252	E314
TYR	G9	I71	M133	L193	E253	W315
ASN	R10	K72	H139	R194	E254	G316
LYS	I11	V73	E134	R195	V255	Y317
GLY	G12	W74	E135	A196	N256	S318
PHE	R13	S75	G136	R197	A257	Q319
SER	M14	D76	Y137	A198	A258	R320
LEU	R77	R77	T138	A199	F259	L324
THR	L16	N78	H139	C200	R260	A325
SER	R17	F79	A140	L201	E261	S326
GLY	C18	V80	D141	N202	S262	V328
LEU	W18A	N81	T142	I203	A263	N330
LEU	H18B	L82	I143	V204	D264	K331
ASP	G19	P83	I144	P205	N265	Q333
LEU	R20	W84	S145	T206	E266	X334
SER	S23	G85	N146	S207	L267	
LEU	P24	D86	A147	T208	K268	
PRO	L25	G87	S148	G209	G269	
PHE	D26	R88	C149	A210	L270	
ARG	V27	I89	T150	A211	L271	
LYS	V29	D90	M152	K212	S272	
GLY	I30	L91	C153	V214	V273	
SER	N31	V92	L154	A215	P277	
ASP	D32	E94	A155	L216	L278	
LEU	T33	T96	F156	V217	V279	
MET	K38	G97	F157	L218	L281	
ALA	Q39	V98	V158	L218	N220	
PHE	A40	F99	K159	L220	L221	
VAL	S41	V100	L161	K222	K222	
SER	H42	D101	D162	G223	G223	
PHE	L43	R102	Q163	K224	K224	
THR	L44	D103	K164	L225	L225	
ASN	K45	G104	F165	N226	N226	
ALA	Y46	A105	G166	G227	G227	
VAL	D47	G106	I167	I228	I228	
VAL	S48	K107	I168	A229	A229	
GLY	I49	H108	K169	L230	L230	
LYS	L50	L109	G170	R231	R231	
ARG	G51	Q110	T171	V232	V232	
SER	T52	A111	M172	P233	P233	
SER	F53	K114	T173	T234	T234	
GLN	D54	K115	T174	F235	F235	
ASN	A55	K116	T175	M236	M236	
	D56	V116	H176	V237	V237	
	L117	S177	S238	S238	S238	

## 4 Experimental information

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, C2	Depositor
Number of particles used	23611	Depositor
Resolution determination method	FSC 0.143 CUT-OFF	Depositor
CTF correction method	PHASE FLIPPING AND AMPLITUDE CORRECTION	Depositor
Microscope	FEI POLARA 300	Depositor
Voltage (kV)	300	Depositor
Electron dose ( $e^-/\text{\AA}^2$ )	42	Depositor
Minimum defocus (nm)	1500	Depositor
Maximum defocus (nm)	3500	Depositor
Magnification	Not provided	
Image detector	GATAN K2 SUMMIT (4k x 4k)	Depositor
Maximum map value	0.050	Depositor
Minimum map value	-0.016	Depositor
Average map value	0.000	Depositor
Map value standard deviation	0.003	Depositor
Recommended contour level	0.012	Depositor
Map size (Å)	363.0, 363.0, 363.0	wwPDB
Map dimensions	300, 300, 300	wwPDB
Map angles (°)	90.0, 90.0, 90.0	wwPDB
Pixel spacing (Å)	1.21, 1.21, 1.21	Depositor



## 5 Model quality [i](#)

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

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

The Z score for a bond length (or angle) is the number of standard deviations the observed value is removed from the expected value. A bond length (or angle) with  $|Z| > 5$  is considered an outlier worth inspection. RMSZ is the root-mean-square of all Z scores of the bond lengths (or angles).

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z  >5	RMSZ	# Z  >5
1	A	0.40	0/2739	0.56	2/3726 (0.1%)
1	C	0.44	0/2739	0.56	2/3726 (0.1%)
1	E	0.43	0/2739	0.58	2/3726 (0.1%)
1	G	0.44	0/2739	0.56	2/3726 (0.1%)
1	I	0.42	0/2739	0.57	2/3726 (0.1%)
1	K	0.43	0/2739	0.58	2/3726 (0.1%)
1	O	0.42	0/2739	0.56	2/3726 (0.1%)
1	Q	0.44	0/2739	0.55	2/3726 (0.1%)
2	B	0.39	0/2579	0.52	0/3502
2	D	0.39	0/2579	0.53	0/3502
2	F	0.38	0/2579	0.52	0/3502
2	H	0.40	0/2579	0.53	0/3502
2	J	0.39	0/2579	0.52	0/3502
2	L	0.39	0/2579	0.53	0/3502
2	P	0.38	0/2579	0.52	0/3502
2	R	0.40	0/2579	0.54	0/3502
All	All	0.41	0/42544	0.55	16/57824 (0.0%)

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

Mol	Chain	#Chirality outliers	#Planarity outliers
1	G	0	1

There are no bond length outliers.

All (16) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	K	344	PRO	N-CA-CB	7.13	111.86	103.30
1	A	344	PRO	N-CA-CB	6.72	111.36	103.30
1	I	344	PRO	N-CA-CB	6.70	111.34	103.30
1	K	353	PRO	N-CA-CB	6.26	110.81	103.30
1	E	344	PRO	N-CA-CB	6.10	110.62	103.30
1	Q	344	PRO	N-CA-CB	6.08	110.59	103.30
1	C	344	PRO	N-CA-CB	6.00	110.50	103.30
1	A	353	PRO	N-CA-CB	5.68	110.12	103.30
1	O	353	PRO	N-CA-CB	5.67	110.10	103.30
1	E	353	PRO	N-CA-CB	5.63	110.05	103.30
1	O	344	PRO	N-CA-CB	5.55	109.95	103.30
1	G	344	PRO	N-CA-CB	5.52	109.92	103.30
1	G	353	PRO	N-CA-CB	5.51	109.91	103.30
1	I	353	PRO	N-CA-CB	5.49	109.89	103.30
1	C	353	PRO	N-CA-CB	5.48	109.87	103.30
1	Q	353	PRO	N-CA-CB	5.35	109.72	103.30

There are no chirality outliers.

All (1) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
1	G	248	LYS	Peptide

## 5.2 Too-close contacts [i](#)

In the following table, the Non-H and H(model) columns list the number of non-hydrogen atoms and hydrogen atoms in the chain respectively. The H(added) column lists the number of hydrogen atoms added and optimized by MolProbity. The Clashes column lists the number of clashes within the asymmetric unit, whereas Symm-Clashes lists symmetry-related clashes.

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	A	2694	0	2681	479	0
1	C	2694	0	2681	536	0
1	E	2694	0	2681	515	0
1	G	2694	0	2681	547	0
1	I	2694	0	2681	461	0
1	K	2694	0	2681	479	0
1	O	2694	0	2681	565	0
1	Q	2694	0	2681	476	0
2	B	2544	0	2577	492	0
2	D	2544	0	2577	459	0
2	F	2544	0	2577	504	0

*Continued on next page...*

Continued from previous page...

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
2	H	2544	0	2577	485	0
2	J	2544	0	2577	494	0
2	L	2544	0	2577	454	0
2	P	2544	0	2577	457	0
2	R	2544	0	2577	477	0
3	A	44	0	26	7	0
3	B	44	0	25	11	0
3	C	44	0	25	12	0
3	D	44	0	25	12	0
3	E	44	0	25	9	0
3	F	44	0	25	10	0
3	G	44	0	25	16	0
3	H	44	0	25	11	0
3	I	44	0	26	9	0
3	J	44	0	26	9	0
3	K	44	0	26	11	0
3	L	44	0	25	10	0
3	O	44	0	26	10	0
3	P	44	0	26	14	0
3	Q	44	0	25	12	0
3	R	44	0	26	13	0
All	All	42608	0	42471	7484	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 88.

All (7484) close contacts within the same asymmetric unit are listed below, sorted by their clash magnitude.

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:O:37:VAL:HB	1:O:59:ILE:CG2	1.27	1.55
2:F:10:ARG:NH2	1:G:185:LEU:HD13	1.32	1.42
1:Q:37:VAL:CG1	1:Q:59:ILE:HG23	1.55	1.35
2:F:10:ARG:CZ	1:G:185:LEU:HD13	1.58	1.33
1:E:17:ARG:CD	1:E:44:LEU:HG	1.60	1.32
1:O:13:ARG:CA	1:O:44:LEU:HD13	1.60	1.27
2:B:10:ARG:HB2	3:B:401:NAD:O1N	1.38	1.24
1:G:199:ALA:HB1	1:G:231:ARG:NH1	1.52	1.24
1:O:37:VAL:CB	1:O:59:ILE:HG22	1.68	1.23
1:O:37:VAL:CB	1:O:59:ILE:CG2	2.15	1.23
2:F:10:ARG:HH22	1:G:185:LEU:CD1	1.53	1.20
1:G:199:ALA:CB	1:G:231:ARG:NH1	2.02	1.20

Continued on next page...

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:37:VAL:CG1	1:E:59:ILE:HB	1.73	1.18
1:Q:8:PHE:HB2	1:Q:32:ASP:OD2	1.38	1.17
2:H:10:ARG:HB2	3:H:401:NAD:O1N	1.42	1.17
2:R:59:THR:HA	2:R:64:ILE:HA	1.16	1.16
1:E:17:ARG:HD2	1:E:44:LEU:CD2	1.78	1.14
1:E:17:ARG:CD	1:E:44:LEU:CG	2.26	1.13
1:O:13:ARG:CA	1:O:44:LEU:CD1	2.26	1.13
1:E:37:VAL:HG11	1:E:59:ILE:HB	1.23	1.12
2:F:10:ARG:HH12	1:G:185:LEU:CD1	1.62	1.11
1:O:13:ARG:HB3	1:O:44:LEU:HD12	1.32	1.10
1:O:13:ARG:HA	1:O:44:LEU:CD1	1.82	1.10
2:R:120:ALA:HB2	3:R:401:NAD:H1D	1.31	1.10
1:C:249:GLY:HA2	1:C:302:GLY:CA	1.82	1.09
2:F:10:ARG:NH2	1:G:185:LEU:CD1	2.14	1.08
1:Q:37:VAL:HG12	1:Q:59:ILE:HG23	1.15	1.08
1:O:37:VAL:HG13	1:O:62:GLU:CA	1.85	1.06
1:E:16:LEU:HD23	1:E:44:LEU:HD13	1.38	1.05
1:C:237:VAL:HG11	1:C:280:SER:HB3	1.38	1.04
2:F:10:ARG:NH1	1:G:185:LEU:HD13	1.71	1.04
1:O:13:ARG:CB	1:O:44:LEU:CD1	2.36	1.04
2:F:10:ARG:NH1	1:G:185:LEU:CB	2.21	1.04
2:F:10:ARG:HB2	3:F:401:NAD:O1N	1.57	1.04
2:F:10:ARG:NH1	1:G:185:LEU:CD1	2.21	1.04
1:O:13:ARG:CB	1:O:44:LEU:HD13	1.86	1.03
1:C:249:GLY:HA2	1:C:302:GLY:HA3	1.37	1.03
2:H:10:ARG:CB	3:H:401:NAD:O1N	2.05	1.03
1:O:37:VAL:CG1	1:O:62:GLU:CA	2.36	1.03
1:E:17:ARG:CD	1:E:44:LEU:CD2	2.37	1.02
1:O:13:ARG:HA	1:O:44:LEU:HD13	1.04	1.01
1:E:17:ARG:NE	1:E:44:LEU:HG	1.74	1.01
1:I:188:SER:HB3	1:I:196:ALA:HA	1.41	1.01
1:O:13:ARG:HB3	1:O:44:LEU:CD1	1.91	1.00
1:O:37:VAL:HG13	1:O:62:GLU:HA	1.42	1.00
1:Q:37:VAL:HG12	1:Q:59:ILE:CG2	1.91	1.00
1:E:17:ARG:HD2	1:E:44:LEU:CG	1.90	1.00
1:E:17:ARG:HD2	1:E:44:LEU:HG	1.42	0.99
1:E:16:LEU:HD23	1:E:44:LEU:CD1	1.93	0.99
2:F:59:THR:HA	2:F:64:ILE:HA	1.42	0.98
2:F:10:ARG:NH1	1:G:185:LEU:HB3	1.77	0.98
2:B:10:ARG:CB	3:B:401:NAD:O1N	2.10	0.98
1:A:202:ASN:HD22	1:C:279:VAL:HG23	1.29	0.97

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:Q:37:VAL:CG1	1:Q:59:ILE:CG2	2.43	0.97
1:Q:37:VAL:HG11	1:Q:59:ILE:HG23	1.45	0.95
1:C:204:VAL:HB	1:C:231:ARG:HB3	1.46	0.95
1:C:249:GLY:CA	1:C:302:GLY:HA3	1.96	0.95
1:E:41:THR:OG1	1:E:59:ILE:CG2	2.15	0.95
1:O:165:LEU:HB3	1:O:246:ILE:HD11	1.47	0.95
1:E:41:THR:OG1	1:E:59:ILE:HG21	1.67	0.94
1:G:299:VAL:HA	1:G:305:VAL:HA	1.46	0.94
1:E:59:ILE:HD12	1:E:59:ILE:O	1.68	0.94
2:H:116:VAL:HB	2:H:143:ILE:HA	1.49	0.94
1:Q:8:PHE:CB	1:Q:32:ASP:OD2	2.15	0.94
1:A:185:LEU:HD12	2:D:10:ARG:NH1	1.83	0.94
1:C:6:ASN:HD21	1:C:96:THR:HG23	1.30	0.94
1:G:7:GLY:H	1:G:31:ASN:HB3	1.32	0.94
1:O:37:VAL:CG1	1:O:62:GLU:C	2.36	0.93
1:G:8:PHE:O	1:G:13:ARG:NH1	2.01	0.93
2:F:281:ILE:HG22	2:H:202:ASN:HD21	1.34	0.93
1:I:239:VAL:HA	1:I:310:TRP:HA	1.48	0.93
2:B:250:THR:H	2:B:302:ASP:HB3	1.33	0.93
2:R:77:ARG:HB3	3:R:401:NAD:H62A	1.33	0.92
2:D:250:THR:H	2:D:302:ASP:HB3	1.33	0.92
1:O:37:VAL:CG1	1:O:62:GLU:N	2.33	0.92
1:O:128:TYR:H	1:O:146:ASN:HA	1.35	0.91
2:R:116:VAL:HB	2:R:143:ILE:HA	1.49	0.91
1:O:37:VAL:HG12	1:O:62:GLU:C	1.91	0.91
1:I:186:ASP:HB3	2:L:43:LEU:HD22	1.53	0.91
2:P:177:SER:HA	2:P:234:THR:HG23	1.53	0.91
1:G:199:ALA:HB1	1:G:231:ARG:HH11	1.21	0.91
1:Q:246:ILE:HG22	1:Q:303:ASP:HA	1.54	0.90
1:E:59:ILE:HA	1:E:64:PHE:HA	1.54	0.90
2:F:177:SER:HA	2:F:234:THR:HG23	1.53	0.90
1:I:21:LYS:H	1:I:21:LYS:HZ2	1.18	0.90
2:H:46:TYR:HA	2:H:52:THR:HA	1.54	0.90
1:K:323:ASP:HA	1:K:326:ASP:HB2	1.54	0.90
2:B:282:ASP:OD1	2:B:282:ASP:N	2.04	0.89
1:E:239:VAL:HA	1:E:310:TRP:HA	1.55	0.89
1:A:218:LEU:HB3	1:A:220:GLN:HE22	1.36	0.89
2:J:177:SER:HA	2:J:234:THR:HG23	1.53	0.89
2:L:46:TYR:HA	2:L:52:THR:HA	1.54	0.89
2:J:250:THR:H	2:J:302:ASP:HB3	1.37	0.89
2:L:250:THR:H	2:L:302:ASP:HB3	1.38	0.89

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:Q:31:ASN:HA	1:Q:74:VAL:HG12	1.54	0.89
1:G:282:ASP:OD1	1:G:282:ASP:N	2.05	0.88
2:R:46:TYR:HA	2:R:52:THR:HA	1.53	0.88
1:I:296:LEU:HB3	1:I:308:VAL:HB	1.54	0.88
1:G:82:LEU:HB2	1:G:84:TRP:HE1	1.38	0.88
1:E:37:VAL:CG1	1:E:59:ILE:CB	2.52	0.88
1:O:37:VAL:HB	1:O:59:ILE:HG21	1.54	0.88
1:E:312:ASP:OD2	1:E:315:TRP:N	2.06	0.88
1:O:177:SER:HA	1:O:234:THR:HG23	1.55	0.88
1:Q:191:ARG:HB2	1:I:358:CYS:HA	1.56	0.88
2:F:8:PHE:O	2:F:13:ARG:NH2	2.06	0.88
1:G:199:ALA:CB	1:G:231:ARG:HH12	1.82	0.88
1:K:46:TYR:HA	1:K:52:THR:HA	1.53	0.87
1:O:37:VAL:HB	1:O:59:ILE:HG23	1.52	0.87
1:O:37:VAL:HB	1:O:59:ILE:HG22	0.88	0.87
1:O:282:ASP:OD1	1:O:282:ASP:N	2.08	0.87
1:K:137:TYR:O	1:K:331:LYS:NZ	2.07	0.87
2:L:13:ARG:HH11	2:L:13:ARG:H	1.23	0.86
1:C:237:VAL:HG21	1:C:280:SER:HA	1.57	0.86
2:D:46:TYR:HA	2:D:52:THR:HA	1.55	0.86
1:I:183:ARG:HB2	1:I:188:SER:HB2	1.57	0.86
1:O:37:VAL:HG11	1:O:62:GLU:N	1.90	0.86
1:O:174:THR:HG22	1:O:229:ALA:HB1	1.57	0.86
1:E:17:ARG:HD3	1:E:44:LEU:CG	2.06	0.86
2:F:261:GLU:OE1	2:F:265:ASN:ND2	2.09	0.86
1:Q:157:PHE:HA	1:Q:160:VAL:HB	1.57	0.86
2:J:202:ASN:HD21	2:L:281:ILE:H	1.23	0.85
2:P:261:GLU:OE1	2:P:265:ASN:ND2	2.09	0.85
2:F:41:SER:O	2:F:45:LYS:N	2.09	0.85
2:L:167:ILE:HA	2:L:246:VAL:HA	1.58	0.85
1:Q:139:HIS:HB2	1:Q:331:LYS:HD2	1.58	0.85
1:O:239:VAL:HA	1:O:310:TRP:HA	1.59	0.85
1:A:136:ASP:OD1	1:A:136:ASP:N	2.06	0.85
2:L:116:VAL:HB	2:L:143:ILE:HA	1.59	0.85
1:C:41:THR:O	1:C:45:LYS:N	2.10	0.84
2:B:318:SER:O	2:B:322:VAL:N	2.10	0.84
2:R:177:SER:HA	2:R:234:THR:HG23	1.59	0.84
1:I:270:VAL:O	1:I:320:ARG:NH2	2.11	0.84
1:I:262:ALA:HA	1:I:266:PRO:HD2	1.59	0.84
1:Q:89:ILE:O	1:Q:114:LYS:NZ	2.11	0.84
2:P:148:SER:HA	3:P:401:NAD:H5N	1.58	0.84

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:244:VAL:H	1:E:305:VAL:HG22	1.40	0.84
2:L:10:ARG:N	3:L:401:NAD:O1N	2.11	0.84
1:Q:293:ASP:OD2	1:Q:296:LEU:N	2.11	0.84
2:L:218:LEU:HB3	2:L:221:LEU:HD13	1.59	0.83
2:L:263:ALA:HA	2:L:267:LEU:HB2	1.60	0.83
2:D:10:ARG:N	3:D:401:NAD:O1N	2.10	0.83
2:D:13:ARG:HH11	2:D:13:ARG:H	1.26	0.83
1:E:17:ARG:HD2	1:E:44:LEU:HD23	1.59	0.83
2:J:281:ILE:HG13	2:J:284:ARG:HE	1.43	0.83
2:H:177:SER:HA	2:H:234:THR:HG23	1.58	0.83
2:D:167:ILE:HA	2:D:246:VAL:HA	1.59	0.83
2:J:54:ASP:OD1	2:J:54:ASP:N	2.08	0.83
1:O:16:LEU:HD23	1:O:44:LEU:HD21	1.60	0.83
1:C:246:ILE:HG22	1:C:248:LYS:H	1.41	0.83
2:J:318:SER:O	2:J:322:VAL:N	2.10	0.83
2:F:10:ARG:HH22	1:G:185:LEU:HD13	1.07	0.83
1:K:127:THR:O	1:K:133:ASN:ND2	2.12	0.83
2:D:116:VAL:HB	2:D:143:ILE:HA	1.60	0.83
1:K:41:THR:O	1:K:45:LYS:N	2.12	0.83
1:K:118:ILE:H	1:K:145:SER:HA	1.42	0.83
1:Q:183:ARG:NH1	1:Q:188:SER:O	2.12	0.83
1:Q:191:ARG:N	1:I:357:GLU:O	2.11	0.83
2:D:218:LEU:HB3	2:D:221:LEU:HD13	1.60	0.83
1:K:137:TYR:HE2	1:K:331:LYS:HB3	1.43	0.83
2:B:176:HIS:O	2:B:232:VAL:N	2.11	0.83
1:G:2:LYS:HB3	1:G:89:ILE:HA	1.59	0.83
1:A:90:ASP:HA	1:A:114:LYS:HB2	1.61	0.83
1:I:253:GLU:O	1:I:256:ASN:ND2	2.12	0.83
2:P:119:THR:HB	3:P:401:NAD:H1D	1.61	0.82
2:R:18:CYS:O	2:R:20:ARG:N	2.10	0.82
1:A:204:VAL:HB	1:A:231:ARG:HB2	1.61	0.82
1:E:8:PHE:HZ	1:E:16:LEU:HD23	1.43	0.82
2:J:202:ASN:ND2	2:L:280:SER:OG	2.12	0.82
1:O:256:ASN:HA	1:O:259:PHE:HB2	1.61	0.82
2:P:41:SER:O	2:P:45:LYS:N	2.12	0.82
1:C:274:CYS:N	1:C:292:ILE:O	2.12	0.82
1:O:157:PHE:HA	1:O:160:VAL:HB	1.61	0.82
1:C:177:SER:HA	1:C:234:THR:HG23	1.61	0.82
2:H:300:MET:HB2	2:H:304:MET:HB3	1.62	0.82
2:J:264:ASP:OD1	2:J:264:ASP:N	2.11	0.82
2:R:59:THR:CA	2:R:64:ILE:HA	2.05	0.82

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:177:SER:O	1:C:231:ARG:NH1	2.12	0.82
1:E:236:ASN:ND2	1:E:312:ASP:OD1	2.12	0.82
1:G:199:ALA:CA	1:G:231:ARG:HH12	1.91	0.82
1:O:182:GLN:HA	1:O:195:ARG:HB3	1.62	0.82
1:E:137:TYR:O	1:E:331:LYS:NZ	2.12	0.82
2:D:88:GLY:O	2:D:114:LYS:NZ	2.13	0.82
1:K:253:GLU:O	1:K:257:ASN:ND2	2.12	0.82
1:A:237:VAL:HG11	1:A:280:SER:HB2	1.62	0.82
1:Q:14:ASN:O	1:Q:18:CYS:N	2.10	0.82
1:A:83:PRO:HB2	1:A:86:GLU:HB3	1.60	0.82
2:F:10:ARG:HH12	1:G:185:LEU:CB	1.86	0.82
2:R:64:ILE:H	2:R:71:ILE:H	1.26	0.82
2:B:177:SER:HA	2:B:234:THR:HG23	1.62	0.82
1:E:16:LEU:CD2	1:E:44:LEU:HD13	2.09	0.82
1:G:121:PRO:HA	1:G:147:ALA:HA	1.62	0.82
2:P:169:LYS:HE2	2:R:301:GLY:HA3	1.62	0.81
2:B:38:LYS:O	2:B:42:HIS:ND1	2.12	0.81
2:B:264:ASP:OD1	2:B:264:ASP:N	2.11	0.81
1:C:0:LYS:NZ	1:C:24:PRO:O	2.13	0.81
2:D:41:SER:O	2:D:45:LYS:N	2.12	0.81
2:D:263:ALA:HA	2:D:267:LEU:HB2	1.61	0.81
2:R:282:ASP:OD1	2:R:282:ASP:N	2.12	0.81
1:O:1:LEU:HD22	1:O:333:PRO:HG3	1.60	0.81
2:R:300:MET:HB2	2:R:304:MET:HB3	1.62	0.81
2:F:13:ARG:H	2:F:13:ARG:HH11	1.27	0.81
1:O:17:ARG:NH1	1:O:44:LEU:O	2.13	0.81
1:E:118:ILE:O	1:E:146:ASN:ND2	2.14	0.81
1:G:291:THR:O	1:G:310:TRP:N	2.13	0.81
2:H:18:CYS:O	2:H:20:ARG:N	2.10	0.81
2:H:282:ASP:N	2:H:282:ASP:OD1	2.11	0.81
1:A:45:LYS:NZ	1:A:53:PHE:O	2.13	0.81
1:A:239:VAL:HA	1:A:310:TRP:HA	1.61	0.81
1:E:202:ASN:HD21	1:G:281:VAL:HG13	1.45	0.81
1:E:289:SER:OG	1:E:320:ARG:NH1	2.14	0.81
1:O:33:SER:CB	1:O:77:ARG:HH11	1.93	0.81
2:B:202:ASN:ND2	2:D:280:SER:OG	2.13	0.81
1:I:226:ASN:ND2	1:K:300:MET:SD	2.54	0.81
1:O:273:VAL:HG12	1:O:292:ILE:HB	1.63	0.81
2:P:28:VAL:HA	2:P:71:ILE:HG12	1.62	0.81
1:A:10:ARG:HH12	2:D:185:LEU:HB3	1.42	0.81
2:D:300:MET:HB2	2:D:304:MET:HB3	1.62	0.81

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:J:176:HIS:O	2:J:232:VAL:N	2.12	0.81
2:R:49:ILE:HG23	2:R:284:ARG:HH11	1.45	0.80
2:B:256:ASN:O	2:B:260:ARG:N	2.13	0.80
1:C:274:CYS:SG	1:C:275:ASP:N	2.54	0.80
2:L:88:GLY:O	2:L:114:LYS:NZ	2.13	0.80
2:L:300:MET:HB2	2:L:304:MET:HB3	1.61	0.80
2:F:306:LYS:HE3	2:H:171:THR:HB	1.64	0.80
2:J:256:ASN:O	2:J:260:ARG:N	2.14	0.80
1:A:118:ILE:HB	1:A:145:SER:HA	1.63	0.80
2:F:169:LYS:HE2	2:H:301:GLY:HA3	1.61	0.80
2:F:170:GLY:HA3	2:F:225:LEU:HD13	1.63	0.80
2:H:8:PHE:O	2:H:13:ARG:NH2	2.10	0.80
1:I:291:THR:H	1:I:310:TRP:HB2	1.46	0.80
1:O:37:VAL:CB	1:O:59:ILE:HG21	2.08	0.80
1:C:249:GLY:CA	1:C:302:GLY:CA	2.57	0.80
2:B:116:VAL:HB	2:B:143:ILE:HA	1.64	0.80
2:J:8:PHE:O	2:J:13:ARG:NH2	2.12	0.80
1:K:212:LYS:HZ1	1:K:226:ASN:HA	1.44	0.80
2:B:306:LYS:NZ	2:D:172:MET:O	2.14	0.80
1:G:188:SER:HB3	1:G:196:ALA:HA	1.63	0.80
2:D:63:ALA:HB1	2:D:70:VAL:HG23	1.63	0.80
2:F:10:ARG:CB	3:F:401:NAD:O1N	2.29	0.80
1:I:238:SER:N	1:I:311:TYR:O	2.12	0.80
2:L:239:VAL:HA	2:L:310:TRP:HA	1.64	0.80
1:E:33:SER:HA	1:E:75:SER:HB3	1.63	0.80
2:B:202:ASN:HD21	2:D:281:ILE:H	1.27	0.80
1:I:136:ASP:OD1	1:I:136:ASP:N	2.04	0.80
1:I:194:ARG:HD2	1:I:205:PRO:HD2	1.63	0.80
2:J:103:ASP:OD1	2:J:103:ASP:N	2.14	0.80
2:R:8:PHE:O	2:R:13:ARG:NH2	2.11	0.79
2:P:8:PHE:O	2:P:13:ARG:NH2	2.11	0.79
2:P:170:GLY:HA3	2:P:225:LEU:HD13	1.62	0.79
1:Q:244:VAL:HG13	1:Q:305:VAL:HG23	1.65	0.79
1:A:171:THR:HG21	1:C:243:VAL:HG21	1.64	0.79
1:O:165:LEU:HA	1:O:248:LYS:HD2	1.64	0.79
1:I:274:CYS:SG	1:I:275:ASP:N	2.56	0.79
2:J:137:TYR:O	2:J:331:LYS:NZ	2.16	0.79
1:Q:238:SER:HB2	1:Q:311:TYR:CE2	2.17	0.79
1:Q:291:THR:O	1:Q:310:TRP:N	2.15	0.79
1:C:192:ASP:OD2	1:C:195:ARG:N	2.16	0.79
1:E:33:SER:CB	1:E:77:ARG:HH11	1.94	0.79

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:O:246:ILE:HG13	1:O:248:LYS:H	1.47	0.79
1:O:326:ASP:OD1	1:O:326:ASP:N	2.12	0.79
1:Q:257:ASN:HA	1:Q:260:ARG:HB2	1.63	0.79
1:A:240:VAL:O	1:A:309:ALA:N	2.16	0.79
2:B:137:TYR:O	2:B:331:LYS:NZ	2.15	0.79
2:B:172:MET:N	2:B:172:MET:SD	2.56	0.79
1:E:167:ILE:HG13	1:E:244:VAL:HG21	1.63	0.79
2:F:10:ARG:N	3:F:401:NAD:O1N	2.16	0.79
2:P:281:ILE:H	2:R:202:ASN:HD21	1.29	0.79
1:A:234:THR:HG21	1:A:237:VAL:HG12	1.64	0.79
1:C:257:ASN:HA	1:C:260:ARG:HB2	1.64	0.79
1:G:248:LYS:HA	1:G:248(A):VAL:HG13	1.64	0.79
2:J:172:MET:N	2:J:172:MET:SD	2.56	0.79
1:E:257:ASN:O	1:E:261:LYS:N	2.16	0.79
2:R:239:VAL:HA	2:R:310:TRP:HA	1.64	0.79
1:A:270:VAL:O	1:A:289:SER:N	2.16	0.79
1:C:2:LYS:NZ	1:C:87:LEU:O	2.16	0.79
2:F:10:ARG:HH12	1:G:185:LEU:HD12	1.47	0.79
2:F:215:ALA:O	2:F:222:LYS:NZ	2.15	0.79
2:H:239:VAL:HA	2:H:310:TRP:HA	1.65	0.79
2:L:41:SER:O	2:L:45:LYS:N	2.11	0.79
2:L:270:ILE:O	2:L:289:SER:N	2.15	0.79
1:O:117:ILE:HD11	1:O:146:ASN:HB3	1.65	0.79
1:C:179:THR:OG1	1:C:182:GLN:NE2	2.16	0.79
1:C:312:ASP:OD1	1:C:316:GLY:N	2.16	0.79
1:E:17:ARG:CD	1:E:44:LEU:HD21	2.11	0.79
1:E:120:ALA:H	1:E:146:ASN:HD21	1.31	0.79
1:G:316:GLY:O	1:G:320:ARG:N	2.15	0.79
2:L:8:PHE:O	2:L:13:ARG:NH2	2.13	0.79
1:Q:8:PHE:O	1:Q:13:ARG:NH2	2.16	0.79
1:I:185:LEU:CD1	2:L:10:ARG:NH1	2.46	0.79
1:K:312:ASP:OD1	1:K:316:GLY:N	2.16	0.79
2:P:306:LYS:HE3	2:R:171:THR:HB	1.65	0.78
1:Q:190:HIS:ND1	1:Q:192:ASP:O	2.16	0.78
1:A:185:LEU:HD12	2:D:10:ARG:CZ	2.12	0.78
2:F:28:VAL:HA	2:F:71:ILE:HG12	1.63	0.78
1:A:238:SER:N	1:A:311:TYR:O	2.13	0.78
1:C:256:ASN:O	1:C:260:ARG:N	2.14	0.78
1:K:47:ASP:HB3	1:K:51:GLY:H	1.49	0.78
1:O:18:CYS:O	1:O:20:ARG:N	2.16	0.78
2:R:186:ASP:OD1	2:R:186:ASP:N	2.15	0.78

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:10:ARG:N	3:H:401:NAD:O1N	2.16	0.78
1:K:136:ASP:N	1:K:136:ASP:OD1	2.16	0.78
1:A:135:LYS:NZ	1:A:136:ASP:OD1	2.16	0.78
2:D:186:ASP:OD1	2:D:186:ASP:N	2.11	0.78
1:G:82:LEU:HB2	1:G:84:TRP:NE1	1.98	0.78
2:J:306:LYS:NZ	2:L:172:MET:O	2.16	0.78
1:Q:184:LEU:HG	1:Q:185:LEU:HG	1.65	0.78
1:A:274:CYS:SG	1:A:275:ASP:N	2.56	0.78
1:G:182:GLN:NE2	1:G:194:ARG:O	2.15	0.78
1:K:3:VAL:HG21	1:K:25:LEU:HG	1.65	0.78
2:L:5:ILE:HB	2:L:30:ILE:HG23	1.65	0.78
1:O:38:LYS:HG3	1:O:39:SER:H	1.49	0.78
1:O:173:THR:HA	1:O:229:ALA:HA	1.64	0.78
2:B:81:ASN:OD1	2:B:81:ASN:N	2.15	0.78
1:E:33:SER:OG	1:E:77:ARG:NH1	2.14	0.78
2:H:49:ILE:HG23	2:H:284:ARG:HH11	1.48	0.78
1:K:282:ASP:N	1:K:282:ASP:OD1	2.13	0.78
1:O:18(A):TRP:O	1:O:20:ARG:HB3	1.83	0.78
2:D:239:VAL:HA	2:D:310:TRP:HA	1.64	0.78
1:O:170:GLY:HA3	1:O:244:VAL:HG12	1.66	0.78
2:B:149:CYS:SG	3:B:401:NAD:N7N	2.56	0.78
2:D:118:ILE:H	2:D:145:SER:HA	1.49	0.78
1:I:312:ASP:OD1	1:I:316:GLY:N	2.13	0.78
2:P:3:VAL:HB	2:P:27:VAL:HG22	1.65	0.78
2:P:20:ARG:HG3	2:P:322:VAL:HG11	1.65	0.78
1:A:106:GLY:O	1:A:110:GLN:N	2.12	0.78
2:D:270:ILE:O	2:D:289:SER:N	2.16	0.78
2:R:41:SER:O	2:R:45:LYS:N	2.15	0.78
1:A:253:GLU:O	1:A:256:ASN:ND2	2.16	0.78
1:C:10:ARG:O	1:C:14:ASN:ND2	2.17	0.78
1:E:17:ARG:HD3	1:E:44:LEU:CD2	2.14	0.78
1:G:182:GLN:OE1	1:G:183:ARG:N	2.18	0.78
1:K:172:MET:HA	1:K:242:LEU:HA	1.65	0.77
2:L:28:VAL:O	2:L:72:LYS:N	2.17	0.77
1:G:205:PRO:HG3	1:G:230:LEU:HD22	1.66	0.77
2:J:233:PRO:HB2	2:L:233:PRO:HB2	1.65	0.77
1:A:226:ASN:N	1:C:300:MET:SD	2.58	0.77
2:B:8:PHE:O	2:B:13:ARG:NH2	2.11	0.77
2:B:103:ASP:OD1	2:B:103:ASP:N	2.14	0.77
2:H:41:SER:O	2:H:45:LYS:N	2.12	0.77
1:Q:2:LYS:NZ	1:Q:87:LEU:O	2.17	0.77

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:Q:209:GLY:HA2	1:Q:212:LYS:HD2	1.67	0.77
2:H:10:ARG:HH22	2:H:179:THR:HB	1.47	0.77
1:O:128:TYR:HA	1:O:133:ASN:HD21	1.49	0.77
1:E:253:GLU:O	1:E:257:ASN:N	2.14	0.77
1:K:221:LEU:HD13	1:K:224:LYS:HB3	1.66	0.77
1:Q:47:ASP:OD1	1:Q:49:ILE:N	2.18	0.77
2:R:59:THR:HA	2:R:64:ILE:CA	2.07	0.77
1:I:297:THR:HG22	1:I:308:VAL:H	1.48	0.77
1:Q:177:SER:HA	1:Q:234:THR:HG23	1.67	0.77
2:B:41:SER:O	2:B:45:LYS:N	2.16	0.77
1:G:10:ARG:N	3:G:401:NAD:O2A	2.16	0.77
2:J:263:ALA:O	2:J:268:LYS:NZ	2.18	0.77
1:G:116:VAL:HB	1:G:144:ILE:H	1.49	0.77
1:O:2:LYS:HB3	1:O:89:ILE:HD13	1.65	0.77
2:B:10:ARG:N	3:B:401:NAD:O1N	2.18	0.77
2:P:165:PHE:HA	2:P:248:LYS:HD3	1.67	0.76
2:P:172:MET:N	2:P:172:MET:SD	2.58	0.76
1:Q:191:ARG:NH2	1:I:349:CYS:SG	2.58	0.76
2:R:176:HIS:HB3	2:R:231:ARG:HA	1.67	0.76
1:A:164:GLU:O	1:A:248:LYS:NZ	2.18	0.76
1:O:118:ILE:O	1:O:146:ASN:ND2	2.19	0.76
2:B:54:ASP:OD1	2:B:54:ASP:N	2.09	0.76
1:C:27:VAL:HG22	1:C:29:VAL:H	1.50	0.76
1:G:183:ARG:HE	1:G:188:SER:HB2	1.50	0.76
1:I:191:ARG:HE	1:I:192:ASP:H	1.33	0.76
2:R:172:MET:HB3	2:R:242:LEU:HB2	1.67	0.76
2:B:102:ARG:NH2	2:B:143:ILE:O	2.17	0.76
1:E:38:LYS:HG3	1:E:39:SER:H	1.49	0.76
2:F:3:VAL:HB	2:F:27:VAL:HG22	1.67	0.76
2:H:5:ILE:HB	2:H:30:ILE:HG23	1.67	0.76
1:I:118:ILE:HB	1:I:145:SER:HA	1.67	0.76
2:J:84:TRP:HB3	2:J:113:ALA:HB2	1.67	0.76
2:J:102:ARG:NH2	2:J:143:ILE:O	2.18	0.76
2:R:13:ARG:HH11	2:R:13:ARG:H	1.33	0.76
1:A:149:CYS:SG	3:A:401:NAD:H4N	2.25	0.76
1:A:192:ASP:HB2	1:A:195:ARG:HB2	1.68	0.76
1:C:186:ASP:N	1:C:186:ASP:OD1	2.17	0.76
1:C:253:GLU:O	1:C:257:ASN:N	2.18	0.76
1:E:261:LYS:O	1:E:265:GLY:N	2.18	0.76
2:H:126:PRO:HD2	2:H:144:ILE:HA	1.68	0.76
1:I:278:LEU:O	1:K:194:ARG:NH1	2.17	0.76

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:R:20:ARG:HG3	2:R:322:VAL:HG11	1.68	0.76
1:G:139:HIS:HB2	1:G:331:LYS:HB3	1.67	0.76
2:J:269:GLY:O	2:J:320:ARG:NH1	2.17	0.76
2:F:137:TYR:O	2:F:331:LYS:NZ	2.18	0.76
1:I:183:ARG:HG3	1:I:185:LEU:H	1.49	0.76
2:J:13:ARG:HH11	2:J:13:ARG:H	1.34	0.76
2:L:118:ILE:H	2:L:145:SER:HA	1.49	0.76
2:B:78:ASN:HD21	2:B:80:VAL:HG22	1.51	0.76
2:D:312:ASP:OD1	2:D:315:TRP:N	2.18	0.76
1:E:17:ARG:HD3	1:E:44:LEU:HD21	1.66	0.76
1:O:7:GLY:H	1:O:31:ASN:HB3	1.51	0.76
1:O:66:ILE:HG13	1:O:69:LYS:HB2	1.66	0.76
1:Q:154:LEU:HA	1:Q:157:PHE:CZ	2.21	0.76
1:Q:360:LEU:HA	1:I:190:HIS:CD2	2.20	0.76
2:R:3:VAL:HB	2:R:27:VAL:HG22	1.68	0.76
2:R:90:ASP:O	2:R:115:LYS:N	2.17	0.76
1:A:176:HIS:O	1:A:232:VAL:N	2.17	0.76
1:C:237:VAL:HG21	1:C:280:SER:CA	2.16	0.76
2:D:45:LYS:NZ	2:D:55:ALA:O	2.16	0.76
1:E:183:ARG:NH1	1:E:188:SER:O	2.17	0.76
2:F:20:ARG:HG3	2:F:322:VAL:HG11	1.68	0.76
2:L:218:LEU:O	2:L:222:LYS:NZ	2.18	0.76
2:P:184:LEU:HB2	1:Q:184:LEU:HB2	1.68	0.76
1:Q:280:SER:HA	1:Q:310:TRP:HZ3	1.51	0.76
2:D:33:THR:OG1	2:D:77:ARG:NH1	2.19	0.76
2:J:8:PHE:H	2:J:32:ASP:HB2	1.51	0.76
2:J:174:THR:OG1	2:J:311:TYR:OH	2.03	0.76
2:L:33:THR:OG1	2:L:77:ARG:NH1	2.19	0.76
2:L:164:LYS:O	2:L:248:LYS:NZ	2.19	0.76
2:P:137:TYR:O	2:P:331:LYS:NZ	2.19	0.75
1:A:282:ASP:OD1	1:A:282:ASP:N	2.17	0.75
2:B:263:ALA:O	2:B:268:LYS:NZ	2.18	0.75
1:E:257:ASN:HA	1:E:260:ARG:HD2	1.65	0.75
1:I:316:GLY:O	1:I:320:ARG:N	2.20	0.75
1:O:257:ASN:OD1	1:O:260:ARG:NH1	2.18	0.75
1:Q:261:LYS:O	1:Q:265:GLY:N	2.19	0.75
1:A:102:GLY:O	1:A:106:GLY:N	2.13	0.75
2:D:28:VAL:O	2:D:72:LYS:N	2.18	0.75
2:D:177:SER:HA	2:D:234:THR:HG23	1.67	0.75
1:I:132:VAL:O	1:I:135:LYS:NZ	2.19	0.75
1:O:177:SER:OG	1:O:234:THR:O	2.02	0.75

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:P:214:VAL:HG23	2:P:218:LEU:HD12	1.68	0.75
2:R:126:PRO:HD2	2:R:144:ILE:HA	1.67	0.75
2:H:172:MET:HB3	2:H:242:LEU:HB2	1.67	0.75
1:I:185:LEU:HD12	2:L:10:ARG:NH1	2.01	0.75
2:J:116:VAL:HB	2:J:143:ILE:HA	1.66	0.75
1:A:18:CYS:O	1:A:20:ARG:N	2.20	0.75
2:F:165:PHE:HA	2:F:248:LYS:HD3	1.67	0.75
2:H:13:ARG:HH11	2:H:13:ARG:H	1.31	0.75
2:B:269:GLY:O	2:B:320:ARG:NH1	2.19	0.75
1:G:5:ILE:HA	1:G:93:ILE:HB	1.66	0.75
1:I:179:THR:O	1:I:182:GLN:NE2	2.18	0.75
1:K:30:VAL:HG22	1:K:73:VAL:HG22	1.69	0.75
1:O:63:THR:HA	1:O:72:LYS:HA	1.68	0.75
1:O:274:CYS:SG	1:O:275:ASP:N	2.59	0.75
1:A:52:THR:O	1:A:54:LYS:NZ	2.20	0.75
1:A:238:SER:HB3	1:A:311:TYR:CZ	2.22	0.75
2:F:28:VAL:O	2:F:72:LYS:N	2.19	0.75
2:H:172:MET:N	2:H:172:MET:SD	2.60	0.75
1:Q:345:LEU:O	1:Q:349:CYS:N	2.16	0.75
2:R:5:ILE:O	2:R:31:ASN:N	2.20	0.75
1:A:194:ARG:NH1	1:A:205:PRO:O	2.20	0.75
1:A:306:LYS:NZ	1:C:172:MET:O	2.20	0.75
1:G:199:ALA:HA	1:G:231:ARG:HH12	1.51	0.75
2:J:0:LYS:HZ1	2:J:329:ALA:HA	1.52	0.75
1:E:169:LYS:NZ	1:G:300:MET:O	2.19	0.75
2:H:20:ARG:HG3	2:H:322:VAL:HG11	1.68	0.75
2:H:148:SER:OG	2:H:150:THR:OG1	2.04	0.75
1:I:99:PHE:HB3	1:I:104:GLY:HA3	1.69	0.75
1:K:209:GLY:O	1:K:213:ALA:N	2.18	0.75
1:O:16:LEU:HD23	1:O:44:LEU:CD2	2.17	0.75
1:A:146:ASN:OD1	1:A:152:ASN:ND2	2.20	0.75
1:K:212:LYS:O	1:K:215:SER:OG	2.05	0.75
1:O:151:THR:HG22	1:O:210:ALA:HA	1.69	0.74
2:P:202:ASN:ND2	2:R:281:ILE:H	1.84	0.74
2:F:202:ASN:ND2	2:H:281:ILE:H	1.85	0.74
1:G:186:ASP:OD1	1:G:198:ALA:N	2.17	0.74
1:G:205:PRO:HB3	1:G:231:ARG:H	1.51	0.74
2:J:293:ASP:HB3	2:J:308:ILE:HG13	1.67	0.74
2:B:233:PRO:HB2	2:D:233:PRO:HB2	1.67	0.74
1:G:14:ASN:O	1:G:18:CYS:N	2.15	0.74
1:G:89:ILE:O	1:G:114:LYS:NZ	2.18	0.74

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:176:HIS:HB3	2:H:231:ARG:HA	1.69	0.74
1:I:174:THR:HG1	1:I:238:SER:HG	1.28	0.74
2:L:312:ASP:OD1	2:L:315:TRP:N	2.19	0.74
1:C:150:THR:O	1:C:154:LEU:N	2.21	0.74
1:E:72:LYS:NZ	1:E:73:VAL:O	2.20	0.74
1:I:245:ASN:HA	1:I:304:MET:HA	1.67	0.74
2:J:293:ASP:OD1	2:J:296:LEU:N	2.20	0.74
1:Q:146:ASN:OD1	1:Q:152:ASN:ND2	2.20	0.74
1:Q:253:GLU:O	1:Q:257:ASN:N	2.18	0.74
1:A:128:TYR:O	1:A:146:ASN:ND2	2.18	0.74
2:B:2:LYS:NZ	2:B:26:ASP:O	2.21	0.74
1:G:182:GLN:HE22	1:G:197:ARG:H	1.35	0.74
1:O:18(B):HIS:CG	1:O:69:LYS:HZ1	2.06	0.74
2:R:157:PHE:O	2:R:161:LEU:N	2.18	0.74
2:R:181:ASP:HB3	2:R:182:GLN:HE21	1.52	0.74
1:C:136:ASP:N	1:C:136:ASP:OD1	2.19	0.74
2:D:314:GLU:OE2	3:D:401:NAD:N7N	2.21	0.74
2:F:214:VAL:HG23	2:F:218:LEU:HD12	1.68	0.74
1:G:17:ARG:NH1	1:G:44:LEU:O	2.19	0.74
2:H:157:PHE:O	2:H:161:LEU:N	2.17	0.74
1:I:49:ILE:O	1:I:284:ARG:NH2	2.20	0.74
2:L:317:TYR:O	2:L:321:VAL:N	2.18	0.74
1:C:179:THR:N	1:C:182:GLN:OE1	2.18	0.74
2:D:206:THR:HG21	2:D:231:ARG:HE	1.51	0.74
1:E:177:SER:OG	1:E:234:THR:O	2.04	0.74
2:F:115:LYS:HD3	2:F:142:THR:HA	1.70	0.74
1:I:2:LYS:HA	1:I:26:ASP:HB2	1.69	0.74
1:K:274:CYS:N	1:K:292:ILE:O	2.18	0.74
1:Q:127:THR:O	1:Q:133:ASN:ND2	2.20	0.74
1:E:130:VAL:HA	1:E:134:GLU:HB3	1.69	0.74
1:G:5:ILE:HG13	1:G:27:VAL:HG21	1.69	0.74
1:K:96:THR:HA	3:K:401:NAD:H52A	1.70	0.74
2:P:194:ARG:HD3	2:P:205:PRO:HD2	1.70	0.74
1:K:183:ARG:HG3	1:K:188:SER:H	1.52	0.74
2:B:174:THR:HG1	2:B:311:TYR:HH	1.35	0.74
2:D:8:PHE:O	2:D:13:ARG:NH2	2.14	0.74
2:L:49:ILE:HG23	2:L:284:ARG:HH11	1.53	0.74
2:L:103:ASP:OD1	2:L:103:ASP:N	2.20	0.74
2:R:32:ASP:HA	3:R:401:NAD:H2A	1.70	0.74
1:A:11:ILE:O	1:A:15:PHE:N	2.15	0.74
2:B:161:LEU:HB3	2:B:167:ILE:HD11	1.70	0.74

*Continued on next page...*

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:21:LYS:HD3	1:C:21:LYS:H	1.53	0.74
1:O:253:GLU:OE1	1:O:257:ASN:ND2	2.21	0.73
2:R:186:ASP:OD2	2:R:197:ARG:NH1	2.20	0.73
2:B:293:ASP:HB3	2:B:308:ILE:HG13	1.68	0.73
2:D:5:ILE:HB	2:D:30:ILE:HG23	1.70	0.73
1:E:221:LEU:HD12	1:E:224:LYS:HD2	1.70	0.73
1:E:267:LEU:HB3	1:E:271:LEU:HB2	1.70	0.73
2:F:244:VAL:HG23	2:F:305:VAL:HB	1.69	0.73
2:H:174:THR:HA	2:H:240:VAL:HA	1.69	0.73
2:L:148:SER:OG	2:L:150:THR:OG1	2.06	0.73
1:O:176:HIS:HB3	1:O:231:ARG:HA	1.70	0.73
2:R:25:LEU:HB3	2:R:27:VAL:HG23	1.70	0.73
2:R:148:SER:OG	2:R:150:THR:OG1	2.04	0.73
1:G:29:VAL:HB	1:G:72:LYS:HB2	1.71	0.73
2:J:167:ILE:HA	2:J:246:VAL:HA	1.69	0.73
2:P:116:VAL:HB	2:P:143:ILE:HA	1.69	0.73
2:D:176:HIS:N	2:D:230:LEU:O	2.21	0.73
1:E:33:SER:CB	1:E:77:ARG:NH1	2.50	0.73
2:H:90:ASP:O	2:H:115:LYS:N	2.18	0.73
1:O:176:HIS:O	1:O:232:VAL:N	2.18	0.73
1:O:179:THR:OG1	1:O:181:ASP:OD1	2.07	0.73
1:O:289:SER:OG	1:O:320:ARG:NH1	2.21	0.73
2:P:233:PRO:HB2	2:R:233:PRO:HB2	1.71	0.73
2:B:0:LYS:HZ1	2:B:329:ALA:HA	1.51	0.73
2:B:293:ASP:OD1	2:B:296:LEU:N	2.20	0.73
1:E:184:LEU:HG	1:E:185:LEU:HD22	1.69	0.73
1:G:41:THR:O	1:G:45:LYS:N	2.17	0.73
1:K:165:LEU:HB3	1:K:246:ILE:HD11	1.70	0.73
2:R:244:VAL:HG23	2:R:305:VAL:HB	1.71	0.73
1:C:17:ARG:NH1	1:C:45:LYS:O	2.21	0.73
2:F:18:CYS:O	2:F:20:ARG:N	2.13	0.73
1:I:12:GLY:O	1:I:16:LEU:N	2.20	0.73
2:J:161:LEU:HB3	2:J:167:ILE:HD11	1.70	0.73
2:P:215:ALA:O	2:P:222:LYS:NZ	2.15	0.73
2:P:318:SER:O	2:P:322:VAL:N	2.16	0.73
2:R:174:THR:HA	2:R:240:VAL:HA	1.70	0.73
1:A:2:LYS:HB2	1:A:90:ASP:H	1.51	0.73
1:A:257:ASN:HA	1:A:260:ARG:HD2	1.70	0.73
1:E:314:GLU:O	1:E:318:SER:N	2.16	0.73
2:F:233:PRO:HB2	2:H:233:PRO:HB2	1.70	0.73
2:H:5:ILE:O	2:H:31:ASN:N	2.21	0.73

Continued on next page...



Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:Q:298:MET:HB3	1:Q:306:LYS:HB3	1.70	0.73
1:A:279:VAL:HB	1:C:202:ASN:HB3	1.69	0.73
2:H:244:VAL:HG23	2:H:305:VAL:HB	1.70	0.73
1:O:157:PHE:O	1:O:161:LEU:N	2.19	0.73
1:O:232:VAL:HG22	1:O:234:THR:HG22	1.70	0.73
2:P:244:VAL:HG23	2:P:305:VAL:HB	1.69	0.73
1:Q:129:VAL:N	1:Q:133:ASN:OD1	2.17	0.73
1:C:132:VAL:N	1:C:134:GLU:OE2	2.22	0.73
1:E:117:ILE:HD11	1:E:146:ASN:HB3	1.71	0.73
2:F:249:LYS:HD2	2:F:302:ASP:HB2	1.69	0.73
2:H:238:SER:O	2:H:311:TYR:N	2.21	0.73
2:P:249:LYS:HD2	2:P:302:ASP:HB2	1.69	0.73
2:R:28:VAL:HA	2:R:71:ILE:HG12	1.71	0.73
1:E:277:PRO:HG2	1:G:193:LEU:HD22	1.69	0.73
2:H:149:CYS:SG	3:H:401:NAD:N7N	2.57	0.73
1:I:18:CYS:O	1:I:20:ARG:N	2.16	0.73
2:L:224:LYS:HZ3	2:L:225:LEU:HB2	1.53	0.73
1:O:37:VAL:HG12	1:O:62:GLU:O	1.88	0.73
2:P:28:VAL:O	2:P:72:LYS:N	2.22	0.73
1:A:30:VAL:O	1:A:74:VAL:N	2.21	0.73
2:B:167:ILE:HA	2:B:246:VAL:HA	1.70	0.73
2:D:158:VAL:HA	2:D:161:LEU:HB3	1.70	0.73
1:I:125:ILE:HG21	1:I:144:ILE:HA	1.71	0.73
2:L:65:SER:HA	2:L:70:VAL:HA	1.70	0.73
1:O:92:VAL:N	1:O:115:LYS:O	2.22	0.72
2:P:154:LEU:HD21	2:P:210:ALA:HB1	1.71	0.72
1:Q:11:ILE:O	1:Q:14:ASN:ND2	2.21	0.72
2:B:13:ARG:HH11	2:B:13:ARG:H	1.35	0.72
1:C:18(B):HIS:NE2	1:C:67:ASP:OD2	2.22	0.72
2:D:65:SER:HA	2:D:70:VAL:HA	1.69	0.72
2:F:46:TYR:HA	2:F:52:THR:HA	1.71	0.72
1:G:199:ALA:HB2	1:G:231:ARG:NH1	2.02	0.72
2:H:165:PHE:O	2:H:247:SER:OG	2.06	0.72
2:J:2:LYS:NZ	2:J:26:ASP:O	2.22	0.72
2:J:13:ARG:O	2:J:17:ARG:N	2.20	0.72
2:L:9:GLY:O	2:L:13:ARG:NH1	2.22	0.72
2:L:244:VAL:HG23	2:L:305:VAL:HB	1.70	0.72
2:R:238:SER:O	2:R:311:TYR:N	2.21	0.72
1:C:177:SER:OG	1:C:234:THR:O	2.05	0.72
2:D:209:GLY:O	2:D:213:ALA:N	2.21	0.72
2:F:109:LEU:HD21	2:F:116:VAL:HG23	1.71	0.72

Continued on next page...

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:346:GLU:HA	1:G:349:CYS:HB2	1.71	0.72
3:G:401:NAD:N7N	3:G:401:NAD:O1N	2.22	0.72
2:L:17:ARG:NH2	2:L:54:ASP:OD1	2.23	0.72
2:L:45:LYS:NZ	2:L:55:ALA:O	2.21	0.72
2:P:109:LEU:HD21	2:P:116:VAL:HG23	1.71	0.72
1:Q:137:TYR:O	1:Q:331:LYS:NZ	2.22	0.72
1:Q:165:LEU:HG	1:Q:248:LYS:HD2	1.70	0.72
1:E:8:PHE:CZ	1:E:16:LEU:HD23	2.25	0.72
1:I:238:SER:HB3	1:I:311:TYR:CZ	2.24	0.72
2:J:184:LEU:HB2	1:K:184:LEU:HB2	1.69	0.72
1:O:318:SER:OG	1:O:319:GLN:OE1	2.06	0.72
1:Q:148:SER:O	1:Q:152:ASN:ND2	2.22	0.72
1:A:202:ASN:HD21	1:C:281:VAL:HG12	1.53	0.72
1:C:346:GLU:O	1:C:350:LYS:N	2.18	0.72
1:E:112:GLY:O	1:E:114:LYS:NZ	2.22	0.72
1:G:261:LYS:O	1:G:265:GLY:N	2.21	0.72
1:I:29:VAL:HG22	1:I:72:LYS:HB2	1.72	0.72
1:I:158:VAL:HA	1:I:161:LEU:HB2	1.70	0.72
2:J:282:ASP:OD1	2:J:282:ASP:N	2.14	0.72
1:K:28:VAL:HG13	1:K:29:VAL:HG12	1.70	0.72
2:P:179:THR:OG1	2:P:182:GLN:NE2	2.23	0.72
1:Q:72:LYS:NZ	1:Q:73:VAL:O	2.22	0.72
2:R:5:ILE:HB	2:R:30:ILE:HG23	1.71	0.72
1:A:259:PHE:O	1:A:263:ALA:N	2.20	0.72
2:B:84:TRP:HB3	2:B:113:ALA:HB2	1.70	0.72
2:H:273:VAL:HA	2:H:292:ILE:H	1.53	0.72
1:O:37:VAL:HG13	1:O:62:GLU:N	2.00	0.72
1:A:2:LYS:NZ	1:A:87:LEU:O	2.23	0.72
1:C:315:TRP:O	1:C:318:SER:OG	2.05	0.72
2:D:103:ASP:OD1	2:D:103:ASP:N	2.20	0.72
2:F:116:VAL:HB	2:F:143:ILE:HA	1.72	0.72
2:F:172:MET:SD	2:F:172:MET:N	2.58	0.72
2:F:202:ASN:HD21	2:H:281:ILE:HG22	1.54	0.72
1:G:94:GLU:HB3	1:G:118:ILE:HG23	1.71	0.72
1:O:293:ASP:OD2	1:O:296:LEU:N	2.23	0.72
1:Q:6:ASN:HB3	1:Q:94:GLU:HA	1.72	0.72
1:Q:289:SER:HB2	1:Q:320:ARG:HD2	1.71	0.72
2:R:165:PHE:O	2:R:247:SER:OG	2.06	0.72
2:R:231:ARG:HH12	3:R:401:NAD:H5N	1.54	0.72
1:A:185:LEU:CD1	2:D:10:ARG:CZ	2.67	0.72
1:G:137:TYR:O	1:G:331:LYS:NZ	2.19	0.72

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:138:GLY:HA3	1:G:140:VAL:HB	1.72	0.72
1:G:253:GLU:O	1:G:257:ASN:N	2.20	0.72
1:O:82:LEU:HB3	1:O:84:TRP:CZ2	2.24	0.72
1:A:172:MET:HA	1:A:242:LEU:HA	1.72	0.72
1:C:6:ASN:N	1:C:93:ILE:O	2.18	0.72
1:C:282:ASP:N	1:C:282:ASP:OD1	2.21	0.72
2:H:299:VAL:HG13	2:H:305:VAL:HG22	1.71	0.72
1:I:45:LYS:NZ	1:I:53:PHE:O	2.21	0.72
1:I:251:THR:OG1	1:I:253:GLU:OE1	2.07	0.72
1:O:178:TYR:HD2	1:O:233:PRO:HA	1.55	0.72
2:D:9:GLY:O	2:D:13:ARG:NH1	2.23	0.72
1:E:177:SER:HA	1:E:234:THR:HG23	1.70	0.72
1:E:194:ARG:NH1	1:E:205:PRO:O	2.22	0.72
2:F:154:LEU:HD21	2:F:210:ALA:HB1	1.70	0.72
2:P:281:ILE:HG22	2:R:202:ASN:HD21	1.55	0.72
2:R:9:GLY:O	2:R:13:ARG:NH1	2.23	0.72
2:R:172:MET:N	2:R:172:MET:SD	2.60	0.72
2:R:183:ARG:HD2	2:R:187:ALA:HB3	1.72	0.72
2:R:186:ASP:HB3	2:R:197:ARG:HA	1.72	0.72
1:E:47:ASP:OD2	1:E:50:LEU:N	2.18	0.72
1:G:174:THR:HA	1:G:240:VAL:HA	1.71	0.72
1:K:13:ARG:O	1:K:17:ARG:N	2.16	0.72
1:Q:238:SER:OG	1:Q:311:TYR:O	2.03	0.71
1:A:1:LEU:O	1:A:26:ASP:N	2.22	0.71
1:A:19:GLY:O	1:A:21:LYS:NZ	2.23	0.71
2:B:5:ILE:HB	2:B:30:ILE:HG23	1.72	0.71
2:J:165:PHE:O	2:J:247:SER:OG	2.08	0.71
2:P:6:ASN:OD1	2:P:31:ASN:ND2	2.23	0.71
1:Q:37:VAL:HG11	1:Q:59:ILE:CG2	2.16	0.71
1:C:13:ARG:O	1:C:17:ARG:N	2.22	0.71
1:E:271:LEU:HD22	1:E:290:SER:HB3	1.72	0.71
1:Q:57:VAL:HG22	1:Q:66:ILE:HG23	1.70	0.71
2:R:30:ILE:N	2:R:72:LYS:O	2.23	0.71
1:A:358:CYS:SG	1:G:191:ARG:NH2	2.63	0.71
2:B:281:ILE:H	2:D:202:ASN:ND2	1.88	0.71
1:G:37:VAL:O	1:G:41:THR:N	2.19	0.71
2:H:118:ILE:H	2:H:145:SER:HA	1.56	0.71
2:J:90:ASP:OD1	2:J:90:ASP:N	2.24	0.71
1:K:278:LEU:HB3	1:K:282:ASP:HB2	1.72	0.71
2:L:149:CYS:O	2:L:153:CYS:N	2.20	0.71
1:Q:194:ARG:HH21	1:Q:204:VAL:HA	1.55	0.71

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:R:273:VAL:HA	2:R:292:ILE:H	1.54	0.71
1:A:134:GLU:HG2	1:A:135:LYS:HD3	1.72	0.71
2:B:176:HIS:ND1	2:B:177:SER:O	2.22	0.71
2:D:218:LEU:O	2:D:222:LYS:NZ	2.22	0.71
1:E:25:LEU:HD11	1:E:329:ALA:HB2	1.71	0.71
1:E:136:ASP:N	1:E:136:ASP:OD1	2.20	0.71
2:F:194:ARG:NH1	2:H:278:LEU:O	2.24	0.71
1:G:129:VAL:N	1:G:133:ASN:OD1	2.19	0.71
1:K:182:GLN:OE1	1:K:231:ARG:NH2	2.23	0.71
1:Q:355:ASP:O	1:Q:359:LYS:N	2.24	0.71
2:R:109:LEU:HA	2:R:113:ALA:HB3	1.72	0.71
2:B:63:ALA:HB1	2:B:70:VAL:HG23	1.73	0.71
1:E:203:ILE:HA	1:E:232:VAL:HG12	1.71	0.71
1:E:236:ASN:H	1:E:284:ARG:HH22	1.36	0.71
2:F:252:ALA:O	2:F:256:ASN:N	2.24	0.71
2:H:25:LEU:HB3	2:H:27:VAL:HG23	1.72	0.71
2:H:103:ASP:N	2:H:103:ASP:OD1	2.24	0.71
1:I:38:LYS:O	1:I:42:HIS:ND1	2.23	0.71
2:J:281:ILE:HG22	2:L:202:ASN:HD21	1.55	0.71
1:K:149:CYS:O	1:K:153:CYS:N	2.22	0.71
1:A:257:ASN:OD1	1:A:260:ARG:NH1	2.23	0.71
1:C:0:LYS:HZ3	1:C:1:LEU:HB2	1.55	0.71
1:C:30:VAL:O	1:C:74:VAL:N	2.23	0.71
2:D:49:ILE:HG23	2:D:284:ARG:HH11	1.54	0.71
2:F:148:SER:HA	3:F:401:NAD:H4N	1.71	0.71
2:L:242:LEU:O	2:L:307:VAL:N	2.23	0.71
1:O:162:ASP:OD1	1:O:167:ILE:N	2.20	0.71
2:P:46:TYR:HA	2:P:52:THR:HA	1.71	0.71
2:R:250:THR:H	2:R:302:ASP:HB3	1.56	0.71
2:D:149:CYS:SG	2:D:150:THR:N	2.63	0.71
2:D:164:LYS:O	2:D:248:LYS:NZ	2.24	0.71
1:G:112:GLY:O	1:G:114:LYS:NZ	2.24	0.71
2:H:3:VAL:HB	2:H:27:VAL:HG22	1.71	0.71
2:J:80:VAL:HA	2:J:111:ALA:HB2	1.72	0.71
1:K:346:GLU:O	1:K:350:LYS:N	2.20	0.71
2:L:158:VAL:HA	2:L:161:LEU:HB3	1.72	0.71
1:O:153:CYS:SG	1:O:154:LEU:N	2.64	0.71
1:C:321:VAL:HA	1:C:324:LEU:HB2	1.73	0.71
2:D:244:VAL:HG23	2:D:305:VAL:HB	1.70	0.71
2:F:194:ARG:HD3	2:F:205:PRO:HD2	1.72	0.71
1:I:323:ASP:OD1	1:I:323:ASP:N	2.23	0.71

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:84:TRP:O	1:K:88:GLY:N	2.24	0.71
2:L:13:ARG:O	2:L:17:ARG:N	2.22	0.71
1:Q:315:TRP:NE1	1:Q:319:GLN:OE1	2.23	0.71
2:F:176:HIS:N	2:F:230:LEU:O	2.24	0.71
1:I:202:ASN:ND2	1:I:203:ILE:O	2.23	0.71
1:O:3:VAL:HG21	1:O:25:LEU:HB3	1.71	0.71
1:A:195:ARG:HH12	1:G:361:TYR:HA	1.55	0.71
1:C:358:CYS:SG	1:C:359:LYS:N	2.62	0.71
2:D:139:HIS:HB3	2:D:333:GLN:HB2	1.73	0.71
1:E:256:ASN:ND2	1:E:294:SER:OG	2.24	0.71
1:G:136:ASP:N	1:G:136:ASP:OD1	2.23	0.71
1:K:13:ARG:H	1:K:13:ARG:CZ	2.03	0.71
1:K:179:THR:OG1	1:K:231:ARG:NH2	2.24	0.71
1:K:349:CYS:O	1:K:353:PRO:N	2.24	0.71
2:L:176:HIS:N	2:L:230:LEU:O	2.24	0.71
1:O:293:ASP:HB3	1:O:308:VAL:HG21	1.73	0.70
2:P:267:LEU:HD22	2:P:271:LEU:HD23	1.73	0.70
1:A:165:LEU:HG	1:A:248:LYS:HZ3	1.55	0.70
1:G:319:GLN:O	1:G:323:ASP:N	2.21	0.70
2:L:38:LYS:O	2:L:42:HIS:ND1	2.24	0.70
1:Q:212:LYS:HZ2	1:Q:212:LYS:H	1.39	0.70
1:A:26:ASP:N	1:A:26:ASP:OD1	2.23	0.70
1:A:190:HIS:HE1	1:A:191:ARG:HH21	1.39	0.70
1:A:255:VAL:O	1:A:259:PHE:N	2.23	0.70
1:A:272:ASP:OD1	1:A:273:VAL:N	2.24	0.70
1:E:292:ILE:HG13	1:E:309:ALA:HB2	1.73	0.70
1:E:293:ASP:OD1	1:E:296:LEU:N	2.16	0.70
1:G:257:ASN:HA	1:G:260:ARG:HB2	1.73	0.70
2:H:184:LEU:HG	2:H:185:LEU:HD22	1.72	0.70
1:K:169:LYS:HA	1:K:224:LYS:HE3	1.72	0.70
2:P:64:ILE:H	2:P:71:ILE:H	1.38	0.70
1:C:6:ASN:HB3	1:C:94:GLU:HA	1.71	0.70
1:C:31:ASN:ND2	1:C:76:ASN:O	2.22	0.70
1:E:41:THR:C	1:E:45:LYS:HG2	2.11	0.70
1:K:41:THR:HA	1:K:44:LEU:HD23	1.73	0.70
2:L:149:CYS:SG	2:L:150:THR:N	2.63	0.70
2:P:18:CYS:O	2:P:20:ARG:N	2.14	0.70
2:P:118:ILE:HG22	2:P:120:ALA:H	1.56	0.70
2:P:204:VAL:HB	2:P:231:ARG:HB2	1.72	0.70
2:B:183:ARG:HG3	2:B:187:ALA:HB3	1.71	0.70
2:F:209:GLY:O	2:F:213:ALA:N	2.21	0.70

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:F:222:LYS:H	2:F:224:LYS:HZ3	1.40	0.70
1:K:101:ASP:HB2	1:K:103:PRO:HG2	1.73	0.70
1:K:107:LYS:O	1:K:111:ALA:N	2.25	0.70
2:L:314:GLU:OE2	3:L:401:NAD:N7N	2.23	0.70
2:B:165:PHE:O	2:B:247:SER:OG	2.09	0.70
1:C:149:CYS:HA	1:C:152:ASN:HB3	1.74	0.70
1:C:149:CYS:O	1:C:153:CYS:N	2.23	0.70
2:F:8:PHE:H	2:F:32:ASP:HB2	1.57	0.70
2:F:148:SER:OG	2:F:150:THR:OG1	2.08	0.70
2:F:173:THR:OG1	2:H:306:LYS:NZ	2.24	0.70
1:G:168:VAL:O	1:G:169:LYS:NZ	2.24	0.70
2:R:2:LYS:NZ	2:R:26:ASP:OD2	2.23	0.70
2:B:46:TYR:HA	2:B:52:THR:HA	1.71	0.70
2:B:174:THR:OG1	2:B:311:TYR:OH	2.06	0.70
2:D:264:ASP:O	2:D:268:LYS:NZ	2.16	0.70
1:E:30:VAL:HB	1:E:73:VAL:HG12	1.72	0.70
1:G:181:ASP:OD2	1:G:195:ARG:NH1	2.24	0.70
1:I:237:VAL:HA	1:I:312:ASP:HA	1.73	0.70
2:J:148:SER:OG	2:J:150:THR:OG1	2.07	0.70
2:D:13:ARG:O	2:D:17:ARG:N	2.22	0.70
2:F:318:SER:O	2:F:322:VAL:N	2.17	0.70
1:G:188:SER:OG	1:G:190:HIS:N	2.22	0.70
2:H:38:LYS:O	2:H:42:HIS:ND1	2.25	0.70
2:H:293:ASP:OD1	2:H:295:SER:OG	2.10	0.70
1:O:312:ASP:OD2	1:O:315:TRP:N	2.18	0.70
1:A:243:VAL:HG22	1:A:306:LYS:HG3	1.74	0.70
2:B:170:GLY:HA3	2:B:225:LEU:HD13	1.74	0.70
1:E:25:LEU:HG	1:E:325:ALA:HB1	1.72	0.70
2:F:176:HIS:ND1	2:F:177:SER:O	2.25	0.70
2:H:8:PHE:H	2:H:32:ASP:HB2	1.56	0.70
2:P:115:LYS:HD3	2:P:142:THR:HA	1.74	0.70
1:A:158:VAL:HA	1:A:161:LEU:HB2	1.72	0.70
2:F:204:VAL:HB	2:F:231:ARG:HB2	1.73	0.70
2:J:9:GLY:O	2:J:13:ARG:NH1	2.25	0.70
2:L:209:GLY:O	2:L:213:ALA:N	2.19	0.70
1:O:137:TYR:O	1:O:331:LYS:NZ	2.25	0.70
2:P:176:HIS:ND1	2:P:177:SER:O	2.25	0.70
2:R:127:THR:OG1	2:R:133:ASN:ND2	2.25	0.70
1:C:232:VAL:HG22	1:C:234:THR:HG22	1.73	0.70
2:F:20:ARG:NH2	2:F:323:ASP:OD1	2.22	0.70
1:I:167:ILE:N	1:I:247:GLU:OE1	2.24	0.70

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:I:271:LEU:HD22	1:I:289:SER:HB3	1.73	0.70
2:P:13:ARG:HH11	2:P:13:ARG:H	1.39	0.69
2:P:176:HIS:N	2:P:230:LEU:O	2.24	0.69
1:Q:208:THR:O	1:Q:212:LYS:NZ	2.25	0.69
2:R:256:ASN:HB3	2:R:294:SER:HB2	1.74	0.69
1:C:13:ARG:H	1:C:13:ARG:CZ	2.04	0.69
1:C:106:GLY:HA2	1:C:109:ILE:HB	1.74	0.69
1:E:246:ILE:H	1:E:304:MET:HA	1.56	0.69
2:F:176:HIS:O	2:F:232:VAL:N	2.16	0.69
2:F:179:THR:OG1	2:F:182:GLN:NE2	2.25	0.69
2:F:240:VAL:N	2:F:309:ALA:O	2.25	0.69
1:G:60(A):ASP:OD1	1:G:61:ASN:ND2	2.25	0.69
1:G:238:SER:HB3	1:G:311:TYR:CD2	2.27	0.69
2:H:109:LEU:HA	2:H:113:ALA:HB3	1.74	0.69
1:K:252:ALA:O	1:K:256:ASN:ND2	2.25	0.69
2:R:118:ILE:H	2:R:145:SER:HA	1.56	0.69
2:R:299:VAL:HG13	2:R:305:VAL:HG22	1.72	0.69
2:B:2:LYS:O	2:B:90:ASP:N	2.25	0.69
2:B:9:GLY:O	2:B:13:ARG:NH1	2.25	0.69
1:C:8:PHE:CZ	1:C:13:ARG:HB3	2.27	0.69
2:P:172:MET:O	2:R:306:LYS:NZ	2.26	0.69
1:Q:171:THR:N	1:Q:243:VAL:O	2.24	0.69
1:Q:174:THR:HA	1:Q:240:VAL:HA	1.74	0.69
1:E:10:ARG:N	3:E:401:NAD:O2N	2.25	0.69
1:E:20:ARG:HH21	1:E:21:LYS:HB2	1.57	0.69
1:I:221:LEU:HA	1:I:224:LYS:HD2	1.74	0.69
2:J:17:ARG:NH1	2:J:51:GLY:O	2.24	0.69
2:L:206:THR:HG21	2:L:231:ARG:HE	1.58	0.69
2:P:20:ARG:NH2	2:P:323:ASP:OD1	2.22	0.69
2:D:318:SER:O	2:D:322:VAL:N	2.18	0.69
1:E:162:ASP:OD1	1:E:167:ILE:N	2.21	0.69
2:F:172:MET:O	2:H:306:LYS:NZ	2.25	0.69
2:J:179:THR:OG1	2:J:182:GLN:NE2	2.22	0.69
1:K:244:VAL:HG23	1:K:305:VAL:HG13	1.74	0.69
1:O:161:LEU:O	1:O:165:LEU:N	2.25	0.69
1:O:162:ASP:O	1:O:166:GLY:N	2.26	0.69
2:P:172:MET:HA	2:P:242:LEU:HA	1.74	0.69
2:P:222:LYS:H	2:P:224:LYS:HZ3	1.38	0.69
2:B:13:ARG:O	2:B:17:ARG:N	2.20	0.69
1:I:293:ASP:OD2	1:I:296:LEU:N	2.25	0.69
1:K:10:ARG:O	1:K:14:ASN:ND2	2.25	0.69

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:O:172:MET:HB2	1:O:242:LEU:HB2	1.75	0.69
2:P:9:GLY:O	2:P:13:ARG:NH1	2.25	0.69
1:A:129:VAL:HG12	1:A:133:ASN:HD21	1.57	0.69
2:B:90:ASP:N	2:B:90:ASP:OD1	2.24	0.69
2:B:115:LYS:NZ	2:B:141:ASP:O	2.22	0.69
2:B:117:LEU:HG	2:B:145:SER:HA	1.75	0.69
2:D:242:LEU:O	2:D:307:VAL:N	2.23	0.69
1:E:8:PHE:CZ	1:E:44:LEU:HD12	2.28	0.69
1:G:46:TYR:HA	1:G:52:THR:HA	1.75	0.69
2:H:8:PHE:CZ	2:H:13:ARG:HG3	2.28	0.69
2:H:104:GLY:O	2:H:108:HIS:N	2.24	0.69
1:O:141:ALA:HB2	1:C:103:PRO:HG3	1.75	0.69
1:O:325:ALA:O	1:O:329:ALA:N	2.21	0.69
2:P:306:LYS:NZ	2:R:172:MET:O	2.26	0.69
1:Q:294:SER:O	1:Q:297:THR:OG1	2.10	0.69
2:B:80:VAL:HA	2:B:111:ALA:HB2	1.73	0.69
1:E:236:ASN:ND2	1:E:236:ASN:O	2.25	0.69
2:H:209:GLY:O	2:H:213:ALA:N	2.18	0.69
2:J:164:LYS:O	2:J:248:LYS:NZ	2.22	0.69
2:L:174:THR:HA	2:L:240:VAL:HA	1.75	0.69
2:L:279:VAL:HA	2:L:310:TRP:CH2	2.28	0.69
1:O:136:ASP:OD1	1:O:136:ASP:N	2.24	0.69
1:O:181:ASP:OD2	1:O:231:ARG:NH1	2.24	0.69
2:P:202:ASN:HD21	2:R:281:ILE:HG22	1.58	0.69
1:Q:248(A):VAL:HG22	1:Q:250:VAL:HG13	1.74	0.69
2:R:148:SER:O	2:R:152:ASN:N	2.20	0.69
1:A:186:ASP:OD1	1:A:198:ALA:N	2.24	0.69
2:B:17:ARG:NH1	2:B:51:GLY:O	2.26	0.69
1:C:348:PHE:O	1:C:352:ASN:N	2.24	0.69
2:D:148:SER:OG	2:D:150:THR:OG1	2.10	0.69
2:D:174:THR:HA	2:D:240:VAL:HA	1.75	0.69
2:F:253:GLU:OE2	2:F:260:ARG:NH1	2.22	0.69
2:F:267:LEU:HD22	2:F:271:LEU:HD23	1.74	0.69
2:H:28:VAL:O	2:H:72:LYS:N	2.18	0.69
2:H:45:LYS:NZ	2:H:55:ALA:O	2.25	0.69
2:H:148:SER:O	2:H:152:ASN:N	2.20	0.69
1:Q:312:ASP:OD1	1:Q:315:TRP:N	2.26	0.69
2:R:197:ARG:HH21	2:R:199:ALA:H	1.41	0.69
2:D:78:ASN:HB3	2:D:81:ASN:HB2	1.75	0.69
1:E:5:ILE:HB	1:E:30:VAL:HG13	1.75	0.69
2:F:6:ASN:OD1	2:F:31:ASN:ND2	2.24	0.69

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:F:306:LYS:HZ2	2:H:228:ILE:H	1.40	0.69
1:G:255:VAL:O	1:G:259:PHE:N	2.23	0.69
1:G:293:ASP:OD2	1:G:296:LEU:N	2.16	0.69
2:H:9:GLY:O	2:H:13:ARG:NH1	2.25	0.69
1:O:37:VAL:CG2	1:O:59:ILE:CG2	2.71	0.69
2:P:10:ARG:NH1	1:Q:185:LEU:HD22	2.07	0.69
2:P:148:SER:OG	2:P:150:THR:OG1	2.08	0.69
2:P:214:VAL:O	2:P:218:LEU:N	2.25	0.69
2:P:242:LEU:O	2:P:307:VAL:N	2.26	0.69
2:R:102:ARG:HH22	2:R:126:PRO:HD3	1.57	0.69
2:R:183:ARG:NE	2:R:188:SER:O	2.26	0.69
1:A:99:PHE:HB3	1:A:104:GLY:HA3	1.75	0.69
1:C:90:ASP:O	1:C:114:LYS:N	2.16	0.69
2:D:18(A):TRP:NE1	2:D:23:SER:OG	2.26	0.69
2:D:279:VAL:HA	2:D:310:TRP:CH2	2.27	0.69
2:F:197:ARG:NH1	1:G:46:TYR:O	2.19	0.69
1:G:154:LEU:HA	1:G:157:PHE:CZ	2.27	0.69
2:H:236:ASN:OD1	2:H:284:ARG:NH1	2.26	0.69
2:L:249:LYS:HD2	2:L:302:ASP:HB2	1.75	0.69
1:O:346:GLU:O	1:O:350:LYS:N	2.18	0.68
1:C:28:VAL:O	1:C:72:LYS:N	2.17	0.68
1:C:64:PHE:HE1	1:C:73:VAL:HG23	1.56	0.68
1:E:8:PHE:HZ	1:E:44:LEU:HD12	1.58	0.68
1:G:4:ALA:HA	1:G:27:VAL:HG13	1.74	0.68
2:H:102:ARG:HH22	2:H:126:PRO:HD3	1.56	0.68
2:J:32:ASP:OD2	3:J:401:NAD:H1B	1.92	0.68
1:K:36:GLY:O	1:K:39:SER:OG	2.11	0.68
2:L:139:HIS:HB3	2:L:333:GLN:HB2	1.74	0.68
2:D:176:HIS:O	2:D:232:VAL:N	2.26	0.68
1:E:94:GLU:OE2	1:E:96:THR:OG1	2.10	0.68
2:F:172:MET:HA	2:F:242:LEU:HA	1.74	0.68
1:G:47:ASP:OD2	1:G:50:LEU:N	2.18	0.68
1:K:60:ILE:H	1:K:64:PHE:HA	1.59	0.68
1:Q:5:ILE:HB	1:Q:30:VAL:HA	1.74	0.68
2:R:41:SER:HB2	2:R:57:VAL:HG13	1.75	0.68
1:C:115:LYS:HE2	1:C:142:ASN:HA	1.74	0.68
2:D:103:ASP:O	2:D:107:LYS:N	2.25	0.68
1:E:215:SER:O	1:E:222:LYS:NZ	2.27	0.68
2:F:89:ILE:O	2:F:114:LYS:NZ	2.24	0.68
2:F:117:LEU:HD21	2:F:146:ASN:HB2	1.75	0.68
2:F:281:ILE:H	2:H:202:ASN:HD21	1.41	0.68

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:2:LYS:NZ	2:H:26:ASP:OD2	2.24	0.68
1:I:239:VAL:HB	1:I:310:TRP:CD2	2.27	0.68
2:J:115:LYS:NZ	2:J:141:ASP:O	2.23	0.68
2:P:38:LYS:O	2:P:41:SER:OG	2.07	0.68
2:R:220:ASN:O	2:R:224:LYS:NZ	2.23	0.68
1:E:206:THR:H	1:E:228:ILE:HD12	1.58	0.68
1:G:64:PHE:O	1:G:71:ILE:N	2.17	0.68
1:G:237:VAL:O	1:G:313:ASN:ND2	2.26	0.68
1:G:239:VAL:HA	1:G:310:TRP:HA	1.75	0.68
1:I:314:GLU:HG2	3:I:401:NAD:H72N	1.59	0.68
1:K:275:ASP:N	1:K:275:ASP:OD1	2.25	0.68
2:L:18(A):TRP:NE1	2:L:23:SER:OG	2.26	0.68
1:E:274:CYS:SG	1:E:275:ASP:N	2.66	0.68
1:E:278:LEU:O	1:G:194:ARG:NH2	2.27	0.68
2:F:122:GLY:HA3	2:F:125:ILE:HG12	1.73	0.68
2:H:110:GLN:OE1	2:H:111:ALA:N	2.27	0.68
1:I:257:ASN:OD1	1:I:260:ARG:NH1	2.26	0.68
2:L:86:ASP:OD1	2:L:86:ASP:N	2.25	0.68
2:L:238:SER:O	2:L:311:TYR:N	2.27	0.68
1:O:218:LEU:HB3	1:O:221:LEU:HD23	1.76	0.68
2:P:2:LYS:O	2:P:90:ASP:N	2.24	0.68
2:P:190:HIS:HB3	2:P:196:ALA:HB2	1.74	0.68
2:P:228:ILE:H	2:R:306:LYS:HZ2	1.41	0.68
1:Q:192:ASP:OD1	1:Q:194:ARG:N	2.25	0.68
1:Q:259:PHE:O	1:Q:263:ALA:N	2.19	0.68
2:R:141:ASP:OD1	2:R:141:ASP:N	2.24	0.68
2:R:176:HIS:O	2:R:232:VAL:N	2.19	0.68
2:B:220:ASN:O	2:B:224:LYS:NZ	2.24	0.68
1:G:31:ASN:ND2	1:G:76:ASN:O	2.26	0.68
1:G:36:GLY:O	1:G:39:SER:OG	2.11	0.68
2:H:220:ASN:O	2:H:224:LYS:NZ	2.23	0.68
2:J:183:ARG:NE	2:J:188:SER:O	2.26	0.68
1:K:127:THR:OG1	1:K:146:ASN:OD1	2.12	0.68
1:K:157:PHE:O	1:K:161:LEU:N	2.26	0.68
1:O:287:ASP:N	1:O:287:ASP:OD1	2.23	0.68
2:P:173:THR:OG1	2:R:306:LYS:NZ	2.25	0.68
2:P:240:VAL:N	2:P:309:ALA:O	2.25	0.68
2:P:306:LYS:HZ2	2:R:228:ILE:H	1.42	0.68
1:Q:1:LEU:N	1:Q:24:PRO:O	2.26	0.68
1:Q:80:LEU:H	1:Q:107:LYS:HZ2	1.40	0.68
1:Q:82:LEU:HD13	1:Q:84:TRP:CZ2	2.28	0.68

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:R:192:ASP:HB3	2:R:195:ARG:HB2	1.76	0.68
1:C:36:GLY:O	1:C:39:SER:OG	2.10	0.68
2:D:317:TYR:O	2:D:321:VAL:N	2.19	0.68
1:E:157:PHE:O	1:E:161:LEU:N	2.25	0.68
1:E:163:GLU:HG2	1:E:164:GLU:HG3	1.74	0.68
1:E:241:ASP:HA	1:E:308:VAL:HA	1.76	0.68
2:F:190:HIS:HB3	2:F:196:ALA:HB2	1.76	0.68
2:F:220:ASN:O	2:F:224:LYS:NZ	2.26	0.68
2:F:306:LYS:NZ	2:H:172:MET:O	2.27	0.68
1:G:105:ALA:O	1:G:109:ILE:N	2.21	0.68
2:J:117:LEU:HG	2:J:145:SER:HA	1.75	0.68
1:K:183:ARG:NH2	1:K:188:SER:OG	2.27	0.68
1:O:303:ASP:OD2	1:Q:245:ASN:ND2	2.27	0.68
1:Q:361:TYR:O	1:I:195:ARG:NH2	2.26	0.68
2:B:186:ASP:OD2	2:B:197:ARG:NE	2.22	0.68
2:D:94:GLU:OE2	2:D:96:THR:OG1	2.12	0.68
2:F:54:ASP:OD1	2:F:54:ASP:N	2.21	0.68
2:H:20:ARG:HA	2:H:21:LYS:HZ1	1.57	0.68
2:H:250:THR:H	2:H:302:ASP:HB3	1.58	0.68
2:H:256:ASN:HB3	2:H:294:SER:HB2	1.74	0.68
1:K:8:PHE:CZ	1:K:13:ARG:HB3	2.29	0.68
2:P:8:PHE:H	2:P:32:ASP:HB2	1.59	0.68
2:P:77:ARG:HB3	3:P:401:NAD:H62A	1.58	0.68
2:P:220:ASN:O	2:P:224:LYS:NZ	2.27	0.68
2:R:1:LEU:N	2:R:26:ASP:H	1.92	0.68
1:C:261:LYS:O	1:C:261:LYS:NZ	2.22	0.68
1:E:192:ASP:OD2	1:E:195:ARG:N	2.22	0.68
1:K:167:ILE:O	1:K:224:LYS:NZ	2.23	0.68
2:P:251:PHE:HA	2:P:299:VAL:HG21	1.75	0.68
2:R:104:GLY:O	2:R:108:HIS:N	2.27	0.68
1:A:12:GLY:HA2	1:A:15:PHE:HB3	1.76	0.68
1:A:315:TRP:O	1:A:318:SER:OG	2.11	0.68
2:B:38:LYS:HZ3	2:B:39:GLN:HG3	1.59	0.68
1:C:50:LEU:HA	1:C:284:ARG:HH22	1.58	0.68
2:D:224:LYS:HZ3	2:D:225:LEU:HB2	1.59	0.68
1:E:18(B):HIS:HA	1:E:69:LYS:NZ	2.09	0.68
2:F:15:PHE:HE2	2:F:321:VAL:HB	1.59	0.68
2:F:251:PHE:HA	2:F:299:VAL:HG21	1.76	0.68
1:G:312:ASP:HB3	1:G:316:GLY:H	1.58	0.68
2:J:46:TYR:HA	2:J:52:THR:HA	1.74	0.68
2:L:90:ASP:O	2:L:115:LYS:N	2.23	0.68

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:L:103:ASP:O	2:L:107:LYS:N	2.25	0.68
1:O:139:HIS:HA	1:O:332:TRP:NE1	2.10	0.67
1:E:179:THR:O	1:E:182:GLN:NE2	2.25	0.67
1:G:157:PHE:O	1:G:161:LEU:N	2.24	0.67
1:G:193:LEU:HA	1:G:196:ALA:HB3	1.75	0.67
2:H:127:THR:OG1	2:H:133:ASN:ND2	2.25	0.67
2:H:145:SER:OG	2:H:146:ASN:N	2.27	0.67
1:I:135:LYS:NZ	1:I:136:ASP:OD1	2.23	0.67
1:I:222:LYS:O	1:I:224:LYS:NZ	2.27	0.67
1:K:148:SER:O	1:K:151:THR:OG1	2.09	0.67
2:L:94:GLU:OE2	2:L:96:THR:OG1	2.12	0.67
2:D:17:ARG:NH2	2:D:54:ASP:OD1	2.27	0.67
2:D:203:ILE:HD11	2:D:230:LEU:HB3	1.76	0.67
1:G:135:LYS:NZ	1:G:136:ASP:OD1	2.27	0.67
1:I:20:ARG:HE	1:I:322:VAL:HG11	1.58	0.67
2:J:170:GLY:HA3	2:J:225:LEU:HD13	1.74	0.67
2:P:209:GLY:O	2:P:213:ALA:N	2.20	0.67
2:R:8:PHE:CZ	2:R:13:ARG:HG3	2.29	0.67
2:B:192:ASP:O	2:B:196:ALA:N	2.27	0.67
2:B:204:VAL:HB	2:B:231:ARG:HB2	1.75	0.67
2:D:203:ILE:HG13	2:D:232:VAL:HG12	1.76	0.67
2:F:45:LYS:HD3	2:F:57:VAL:HB	1.77	0.67
1:I:103:PRO:O	1:I:107:LYS:N	2.23	0.67
1:I:118:ILE:O	1:I:146:ASN:N	2.27	0.67
1:I:259:PHE:O	1:I:263:ALA:N	2.19	0.67
2:J:77:ARG:HB3	3:J:401:NAD:H62A	1.58	0.67
2:L:168:ILE:HB	2:L:245:GLN:HG2	1.76	0.67
1:O:183:ARG:HG2	1:O:187:ALA:HB3	1.75	0.67
1:Q:46:TYR:HA	1:Q:52:THR:HA	1.77	0.67
1:Q:317:TYR:O	1:Q:321:VAL:N	2.20	0.67
2:R:110:GLN:OE1	2:R:111:ALA:N	2.27	0.67
2:B:139:HIS:CD2	2:B:334:UNK:H	2.13	0.67
2:B:162:ASP:OD1	2:B:167:ILE:N	2.25	0.67
1:C:16:LEU:HA	1:C:18(A):TRP:HD1	1.59	0.67
2:D:168:ILE:HB	2:D:245:GLN:HG2	1.76	0.67
2:F:306:LYS:NZ	2:H:173:THR:OG1	2.27	0.67
1:I:148:SER:O	1:I:151:THR:OG1	2.07	0.67
1:I:158:VAL:O	1:I:162:ASP:N	2.28	0.67
1:O:259:PHE:HB3	1:O:273:VAL:HG11	1.77	0.67
1:Q:139:HIS:ND1	1:Q:331:LYS:O	2.27	0.67
1:Q:209:GLY:O	1:Q:213:ALA:N	2.19	0.67

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:R:186:ASP:HB3	2:R:197:ARG:HD2	1.75	0.67
2:R:293:ASP:OD1	2:R:295:SER:OG	2.10	0.67
1:A:171:THR:HG23	1:A:243:VAL:HB	1.75	0.67
1:E:33:SER:HA	1:E:75:SER:CB	2.24	0.67
1:E:193:LEU:O	1:E:197:ARG:N	2.28	0.67
1:E:236:ASN:ND2	1:E:313:ASN:OD1	2.27	0.67
1:I:317:TYR:O	1:I:321:VAL:N	2.24	0.67
1:O:280:SER:OG	1:Q:203:ILE:N	2.27	0.67
2:P:306:LYS:NZ	2:R:173:THR:OG1	2.27	0.67
1:Q:17:ARG:HH12	1:Q:50:LEU:HD22	1.59	0.67
2:R:6:ASN:OD1	2:R:31:ASN:ND2	2.27	0.67
2:R:249:LYS:NZ	2:R:301:GLY:O	2.28	0.67
1:A:115:LYS:HA	1:A:142:ASN:HB3	1.76	0.67
1:A:293:ASP:OD2	1:A:296:LEU:N	2.28	0.67
2:B:47:ASP:OD1	2:B:48:SER:N	2.27	0.67
2:H:183:ARG:NE	2:H:188:SER:O	2.24	0.67
2:J:5:ILE:HB	2:J:30:ILE:HG23	1.76	0.67
1:K:78:ASP:OD2	1:K:81:LYS:N	2.17	0.67
1:O:7:GLY:N	1:O:31:ASN:HB3	2.10	0.67
1:O:186:ASP:O	2:R:10:ARG:NH1	2.28	0.67
1:Q:107:LYS:O	1:Q:111:ALA:N	2.27	0.67
2:R:236:ASN:OD1	2:R:284:ARG:NH1	2.28	0.67
1:A:45:LYS:NZ	1:A:55:ALA:O	2.26	0.67
1:A:147:ALA:O	1:A:152:ASN:ND2	2.22	0.67
2:B:253:GLU:O	2:B:257:ALA:N	2.23	0.67
1:E:134:GLU:H	1:E:134:GLU:CD	1.97	0.67
1:E:153:CYS:HA	1:E:289:SER:HB3	1.76	0.67
2:F:174:THR:HG1	2:F:311:TYR:HH	1.34	0.67
2:F:214:VAL:O	2:F:218:LEU:N	2.25	0.67
1:G:177:SER:OG	1:G:237:VAL:N	2.23	0.67
1:I:101:ASP:HB3	1:I:122(A):LYS:HD2	1.75	0.67
2:J:260:ARG:NH2	2:J:294:SER:OG	2.28	0.67
1:K:148:SER:OG	1:K:150:THR:OG1	2.12	0.67
2:L:165:PHE:O	2:L:247:SER:OG	2.13	0.67
2:P:102:ARG:NH2	2:P:124:ASP:O	2.27	0.67
1:Q:78:ASP:OD1	1:Q:107:LYS:NZ	2.28	0.67
1:A:39:SER:O	1:A:43:LEU:N	2.20	0.67
1:A:191:ARG:NH2	1:G:360:LEU:H	1.93	0.67
1:A:195:ARG:HH22	1:G:361:TYR:HA	1.59	0.67
2:B:172:MET:O	2:D:306:LYS:NZ	2.27	0.67
2:B:260:ARG:NH2	2:B:294:SER:OG	2.27	0.67

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:34:GLY:O	1:C:39:SER:OG	2.10	0.67
1:K:348:PHE:O	1:K:352:ASN:N	2.27	0.67
2:P:194:ARG:NH1	2:R:278:LEU:O	2.27	0.67
2:P:252:ALA:O	2:P:256:ASN:N	2.24	0.67
1:Q:3:VAL:HG13	1:Q:93:ILE:HG13	1.77	0.67
2:D:165:PHE:O	2:D:247:SER:OG	2.12	0.67
1:G:57:VAL:HA	1:G:66:ILE:HA	1.76	0.67
2:H:82:LEU:HB2	2:H:84:TRP:NE1	2.10	0.67
2:J:139:HIS:CD2	2:J:334:UNK:H	2.12	0.67
1:O:240:VAL:HG22	1:O:309:ALA:HB3	1.75	0.67
1:O:253:GLU:O	1:O:256:ASN:ND2	2.28	0.67
1:E:37:VAL:CG1	1:E:59:ILE:CG2	2.72	0.67
1:E:246:ILE:HB	1:E:305:VAL:HG12	1.76	0.67
2:F:10:ARG:HH12	1:G:185:LEU:CG	2.07	0.67
2:H:215:ALA:HB1	2:H:222:LYS:HD3	1.76	0.67
2:J:176:HIS:ND1	2:J:177:SER:O	2.28	0.67
2:B:59:THR:HA	2:B:64:ILE:HG23	1.75	0.66
2:D:249:LYS:HD2	2:D:302:ASP:HB2	1.76	0.66
1:E:8:PHE:HZ	1:E:44:LEU:CD1	2.09	0.66
1:E:318:SER:O	1:E:322:VAL:N	2.23	0.66
1:I:255:VAL:O	1:I:259:PHE:N	2.25	0.66
1:I:287:ASP:OD1	1:I:315:TRP:NE1	2.26	0.66
2:J:162:ASP:OD1	2:J:167:ILE:N	2.25	0.66
1:O:240:VAL:N	1:O:309:ALA:O	2.25	0.66
1:Q:172:MET:HG3	1:Q:225:LEU:HD11	1.77	0.66
1:E:45:LYS:HD3	1:E:57:VAL:HB	1.76	0.66
1:E:151:THR:HG22	1:E:214:VAL:HG13	1.77	0.66
1:E:327:LEU:HD23	1:E:330:ASN:HD22	1.60	0.66
2:F:118:ILE:HG22	2:F:120:ALA:H	1.59	0.66
2:H:176:HIS:O	2:H:232:VAL:N	2.21	0.66
2:J:172:MET:O	2:L:306:LYS:NZ	2.28	0.66
2:J:199:ALA:HA	2:J:202:ASN:HB2	1.78	0.66
1:K:176:HIS:O	1:K:232:VAL:N	2.26	0.66
1:O:33:SER:HB2	1:O:77:ARG:NH1	2.10	0.66
2:P:174:THR:OG1	2:P:311:TYR:OH	2.12	0.66
2:P:250:THR:OG1	2:P:251:PHE:N	2.29	0.66
1:Q:125:ILE:HG23	1:Q:143:ILE:HG22	1.76	0.66
1:Q:315:TRP:O	1:Q:318:SER:OG	2.12	0.66
1:A:151:THR:HG22	1:A:210:ALA:HA	1.76	0.66
2:B:72:LYS:NZ	2:B:87:MET:SD	2.63	0.66
1:C:49:ILE:O	1:C:284:ARG:NH1	2.27	0.66

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:162:ASP:OD1	1:C:167:ILE:N	2.20	0.66
1:G:118:ILE:HG22	1:G:120:ALA:H	1.59	0.66
1:G:240:VAL:O	1:G:309:ALA:N	2.28	0.66
2:H:287:ASP:O	2:H:320:ARG:NH2	2.29	0.66
1:I:139:HIS:CD2	1:I:332:TRP:HA	2.30	0.66
1:I:155:ALA:O	1:I:159:LYS:N	2.26	0.66
2:J:2:LYS:O	2:J:90:ASP:N	2.25	0.66
1:K:134:GLU:HB2	1:K:135:LYS:HZ3	1.60	0.66
1:O:179:THR:OG1	1:O:182:GLN:NE2	2.28	0.66
1:Q:112:GLY:O	1:Q:114:LYS:NZ	2.27	0.66
2:R:8:PHE:H	2:R:32:ASP:HB2	1.61	0.66
1:A:162:ASP:OD1	1:A:167:ILE:N	2.29	0.66
1:E:173:THR:OG1	1:E:228:ILE:O	2.11	0.66
2:F:179:THR:N	2:F:182:GLN:OE1	2.24	0.66
2:H:249:LYS:NZ	2:H:301:GLY:O	2.29	0.66
1:I:184:LEU:HB3	2:L:184:LEU:HB2	1.78	0.66
1:K:198:ALA:HB1	1:K:201:LEU:HD23	1.76	0.66
1:K:297:THR:HG22	1:K:308:VAL:H	1.60	0.66
2:L:137:TYR:O	2:L:331:LYS:NZ	2.22	0.66
1:C:275:ASP:N	1:C:275:ASP:OD1	2.27	0.66
2:F:256:ASN:O	2:F:260:ARG:N	2.27	0.66
1:G:3:VAL:HG13	1:G:91:ILE:HG13	1.77	0.66
1:I:183:ARG:CB	1:I:188:SER:HB2	2.24	0.66
1:K:157:PHE:HA	1:K:160:VAL:HB	1.77	0.66
2:L:0:LYS:O	2:L:2:LYS:NZ	2.29	0.66
2:L:183:ARG:HH22	2:L:191:ARG:HH22	1.42	0.66
2:R:190:HIS:HB3	2:R:196:ALA:HB2	1.78	0.66
2:R:209:GLY:O	2:R:213:ALA:N	2.18	0.66
1:A:126:PRO:O	1:A:145:SER:OG	2.12	0.66
2:D:8:PHE:H	2:D:32:ASP:HB2	1.60	0.66
1:E:182:GLN:OE1	1:E:182:GLN:N	2.27	0.66
1:E:273:VAL:HA	1:E:292:ILE:H	1.59	0.66
2:F:281:ILE:HG22	2:H:202:ASN:ND2	2.08	0.66
1:G:238:SER:OG	1:G:313:ASN:ND2	2.29	0.66
2:H:134:GLU:OE1	2:H:134:GLU:N	2.28	0.66
2:J:154:LEU:HD21	2:J:210:ALA:HB1	1.78	0.66
1:K:320:ARG:O	1:K:324:LEU:N	2.25	0.66
1:O:356:GLU:O	1:C:183:ARG:NH2	2.28	0.66
1:Q:44:LEU:HG	1:Q:57:VAL:HG21	1.77	0.66
2:R:20:ARG:NH2	2:R:323:ASP:OD1	2.28	0.66
2:R:82:LEU:HB2	2:R:84:TRP:NE1	2.10	0.66

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:R:287:ASP:O	2:R:320:ARG:NH2	2.29	0.66
1:C:92:VAL:HB	1:C:116:VAL:HG13	1.77	0.66
2:D:36:GLY:O	2:D:40:ALA:N	2.19	0.66
2:D:102:ARG:NH2	2:D:143:ILE:O	2.29	0.66
2:D:290:SER:OG	2:D:291:THR:N	2.29	0.66
2:H:168:ILE:HD12	2:H:245:GLN:HG2	1.78	0.66
1:K:0:LYS:HZ3	1:K:1:LEU:HD13	1.60	0.66
1:K:193:LEU:H	1:K:193:LEU:HD12	1.60	0.66
2:L:174:THR:OG1	2:L:311:TYR:OH	2.10	0.66
1:O:272:ASP:N	1:O:290:SER:O	2.25	0.66
1:Q:11:ILE:H	3:Q:401:NAD:PN	2.17	0.66
2:B:148:SER:OG	2:B:150:THR:OG1	2.07	0.66
1:G:128:TYR:O	1:G:146:ASN:ND2	2.26	0.66
1:I:328:VAL:HA	1:I:331:LYS:HD3	1.77	0.66
2:J:224:LYS:HG3	2:J:225:LEU:HD23	1.78	0.66
2:P:176:HIS:O	2:P:232:VAL:N	2.16	0.66
2:R:134:GLU:OE1	2:R:134:GLU:N	2.28	0.66
2:B:154:LEU:HD21	2:B:210:ALA:HB1	1.78	0.66
2:B:164:LYS:O	2:B:248:LYS:NZ	2.22	0.66
2:D:183:ARG:HH22	2:D:191:ARG:HH22	1.44	0.66
2:D:238:SER:O	2:D:311:TYR:N	2.27	0.66
2:H:173:THR:O	2:H:241:ASP:N	2.29	0.66
2:J:9:GLY:O	2:J:12:GLY:N	2.25	0.66
1:K:176:HIS:N	1:K:230:LEU:O	2.28	0.66
1:O:18(A):TRP:HE1	1:O:25:LEU:HB2	1.60	0.66
1:O:341:SER:O	1:C:191:ARG:NH1	2.29	0.66
2:P:282:ASP:N	2:P:282:ASP:OD1	2.26	0.66
2:R:2:LYS:HE3	2:R:87:MET:HB3	1.78	0.66
1:A:46:TYR:O	2:D:197:ARG:NH1	2.29	0.66
2:B:270:ILE:O	2:B:289:SER:OG	2.11	0.66
2:D:148:SER:O	2:D:152:ASN:N	2.22	0.66
1:E:172:MET:SD	1:E:173:THR:N	2.69	0.66
1:E:347:ASP:O	1:E:351:ASP:N	2.28	0.66
2:F:66:VAL:N	2:F:69:LYS:O	2.24	0.66
1:G:28:VAL:O	1:G:72:LYS:N	2.26	0.66
2:L:59:THR:HA	2:L:64:ILE:HG23	1.78	0.66
2:L:102:ARG:NH2	2:L:143:ILE:O	2.29	0.66
1:O:6:ASN:HD22	1:O:94:GLU:HA	1.59	0.65
1:O:257:ASN:HA	1:O:260:ARG:HD2	1.76	0.65
2:P:300:MET:HB2	2:P:304:MET:HB3	1.77	0.65
1:Q:240:VAL:HG12	1:Q:309:ALA:HB3	1.78	0.65

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:90:ASP:O	2:B:115:LYS:N	2.15	0.65
2:D:90:ASP:O	2:D:115:LYS:N	2.25	0.65
1:I:188:SER:CB	1:I:196:ALA:HA	2.23	0.65
2:J:139:HIS:NE2	2:J:334:UNK:O	2.27	0.65
1:Q:213:ALA:O	1:Q:217:VAL:N	2.28	0.65
2:B:287:ASP:O	2:B:320:ARG:NH2	2.28	0.65
1:C:142:ASN:HD22	1:C:143:ILE:H	1.44	0.65
2:D:18(B):HIS:NE2	2:D:67:ASP:OD2	2.27	0.65
1:E:174:THR:O	1:E:230:LEU:N	2.26	0.65
2:F:282:ASP:N	2:F:282:ASP:OD1	2.25	0.65
1:G:62:GLU:O	1:G:73:VAL:N	2.28	0.65
1:G:176:HIS:O	1:G:232:VAL:N	2.29	0.65
2:H:1:LEU:N	2:H:26:ASP:H	1.94	0.65
1:I:6:ASN:HA	1:I:31:ASN:HB3	1.78	0.65
1:I:90:ASP:HA	1:I:114:LYS:HB2	1.78	0.65
1:O:33:SER:HB2	1:O:77:ARG:HH11	1.62	0.65
1:O:190:HIS:CE1	1:O:196:ALA:H	2.14	0.65
1:O:221:LEU:HA	1:O:224:LYS:HD3	1.78	0.65
2:P:253:GLU:OE2	2:P:260:ARG:NH1	2.22	0.65
1:Q:326:ASP:O	1:Q:330:ASN:ND2	2.29	0.65
2:D:6:ASN:O	2:D:95:GLY:N	2.29	0.65
2:D:179:THR:OG1	2:D:182:GLN:NE2	2.26	0.65
1:E:90:ASP:HB3	1:E:114:LYS:HB2	1.78	0.65
1:G:181:ASP:OD1	1:G:182:GLN:N	2.29	0.65
1:G:242:LEU:N	1:G:307:VAL:O	2.29	0.65
2:H:64:ILE:N	2:H:71:ILE:O	2.29	0.65
2:H:222:LYS:H	2:H:224:LYS:HZ3	1.45	0.65
1:K:9:GLY:O	1:K:13:ARG:NH2	2.28	0.65
1:K:105:ALA:O	1:K:109:ILE:N	2.21	0.65
2:L:18(B):HIS:NE2	2:L:67:ASP:OD2	2.28	0.65
1:O:231:ARG:NH2	1:C:361:TYR:O	2.28	0.65
1:O:272:ASP:HB3	1:O:291:THR:HG22	1.78	0.65
2:P:190:HIS:CE1	2:P:192:ASP:H	2.15	0.65
1:A:37:VAL:O	1:A:41:THR:N	2.23	0.65
1:A:213:ALA:HA	1:A:216:LEU:HD23	1.78	0.65
1:C:151:THR:HA	1:C:154:LEU:HB2	1.78	0.65
1:C:194:ARG:HD2	1:C:205:PRO:HD2	1.78	0.65
2:F:190:HIS:CE1	2:F:192:ASP:H	2.15	0.65
2:H:167:ILE:HA	2:H:246:VAL:HA	1.79	0.65
1:I:179:THR:OG1	1:I:182:GLN:OE1	2.12	0.65
1:Q:11:ILE:HA	1:Q:14:ASN:HD21	1.61	0.65

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:Q:162:ASP:OD2	1:Q:162:ASP:N	2.30	0.65
2:R:103:ASP:OD1	2:R:103:ASP:N	2.28	0.65
1:C:57:VAL:HG22	1:C:66:ILE:HA	1.78	0.65
2:D:107:LYS:O	2:D:111:ALA:N	2.30	0.65
2:F:9:GLY:O	2:F:13:ARG:NH1	2.28	0.65
1:I:176:HIS:HB3	1:I:231:ARG:HG2	1.79	0.65
1:I:257:ASN:HA	1:I:260:ARG:HD2	1.77	0.65
2:J:72:LYS:NZ	2:J:87:MET:SD	2.63	0.65
1:K:106:GLY:O	1:K:110:GLN:N	2.24	0.65
1:K:274:CYS:SG	1:K:275:ASP:N	2.70	0.65
1:O:8:PHE:O	1:O:13:ARG:NH1	2.30	0.65
1:O:138:GLY:O	1:O:332:TRP:NE1	2.28	0.65
1:O:173:THR:OG1	1:O:174:THR:N	2.29	0.65
1:O:211:ALA:HB3	1:O:212:LYS:HZ1	1.61	0.65
1:A:5:ILE:HG12	1:A:93:ILE:HB	1.79	0.65
1:A:14:ASN:O	1:A:18:CYS:N	2.27	0.65
1:A:155:ALA:O	1:A:159:LYS:N	2.19	0.65
2:B:49:ILE:HG23	2:B:284:ARG:HH11	1.60	0.65
2:B:281:ILE:HG22	2:D:202:ASN:HD21	1.62	0.65
1:C:249:GLY:HA2	1:C:302:GLY:C	2.16	0.65
2:D:20:ARG:HG3	2:D:322:VAL:HG11	1.79	0.65
2:D:179:THR:N	2:D:182:GLN:OE1	2.28	0.65
2:D:220:ASN:O	2:D:224:LYS:NZ	2.25	0.65
1:E:20:ARG:HD2	1:E:322:VAL:HG13	1.78	0.65
2:F:242:LEU:O	2:F:307:VAL:N	2.27	0.65
1:G:148:SER:O	1:G:151:THR:OG1	2.10	0.65
1:I:28:VAL:HG23	1:I:29:VAL:HG23	1.77	0.65
2:J:90:ASP:O	2:J:115:LYS:N	2.15	0.65
2:P:13:ARG:O	2:P:17:ARG:N	2.22	0.65
2:P:197:ARG:NH1	1:Q:46:TYR:O	2.28	0.65
2:P:224:LYS:HG3	2:P:225:LEU:HD23	1.79	0.65
1:A:2:LYS:HA	1:A:26:ASP:HB2	1.78	0.65
2:D:250:THR:OG1	2:D:251:PHE:N	2.29	0.65
1:E:321:VAL:HA	1:E:324:LEU:HG	1.78	0.65
2:H:176:HIS:N	2:H:230:LEU:O	2.29	0.65
1:I:139:HIS:CD2	1:I:333:PRO:HD3	2.32	0.65
2:J:47:ASP:CG	2:J:49:ILE:H	2.00	0.65
2:J:64:ILE:N	2:J:71:ILE:O	2.29	0.65
2:J:220:ASN:O	2:J:224:LYS:NZ	2.25	0.65
1:K:31:ASN:O	3:K:401:NAD:H2A	1.97	0.65
1:K:261:LYS:O	1:K:265:GLY:N	2.29	0.65

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:L:7:GLY:HA3	2:L:96:THR:HG22	1.78	0.65
1:O:315:TRP:O	1:O:319:GLN:N	2.20	0.65
2:F:28:VAL:O	2:F:72:LYS:NZ	2.19	0.65
1:G:328:VAL:O	1:G:332:TRP:N	2.30	0.65
2:H:20:ARG:NH2	2:H:323:ASP:OD1	2.28	0.65
2:H:30:ILE:N	2:H:72:LYS:O	2.30	0.65
1:I:17:ARG:NH1	1:I:51:GLY:O	2.27	0.65
1:I:175:THR:HA	1:I:230:LEU:HB2	1.78	0.65
1:O:259:PHE:O	1:O:263:ALA:N	2.18	0.65
2:R:9:GLY:O	2:R:12:GLY:N	2.22	0.65
1:A:148:SER:O	1:A:151:THR:OG1	2.15	0.65
1:A:181:ASP:OD1	1:A:182:GLN:NE2	2.30	0.65
1:C:18:CYS:O	1:C:20:ARG:N	2.30	0.65
2:D:0:LYS:O	2:D:2:LYS:NZ	2.30	0.65
2:D:293:ASP:HB3	2:D:308:ILE:HG13	1.78	0.65
2:F:15:PHE:HD2	2:F:318:SER:HB2	1.62	0.65
2:H:9:GLY:O	2:H:12:GLY:N	2.22	0.65
2:H:325:ALA:O	2:H:329:ALA:N	2.23	0.65
1:K:48:SER:HA	2:L:281:ILE:HG12	1.78	0.65
2:L:78:ASN:HB3	2:L:81:ASN:HB2	1.78	0.65
2:L:250:THR:OG1	2:L:251:PHE:N	2.30	0.65
2:L:293:ASP:HB3	2:L:308:ILE:HG13	1.78	0.65
2:R:167:ILE:HA	2:R:246:VAL:HA	1.77	0.65
2:R:168:ILE:HD12	2:R:245:GLN:HG2	1.79	0.65
1:A:185:LEU:CD1	2:D:10:ARG:NH1	2.59	0.65
1:A:358:CYS:HA	1:G:190:HIS:CD2	2.32	0.65
2:B:242:LEU:O	2:B:307:VAL:N	2.30	0.65
2:D:28:VAL:HG13	2:D:70:VAL:O	1.97	0.65
1:E:259:PHE:HB3	1:E:273:VAL:HG11	1.77	0.65
2:F:224:LYS:HG3	2:F:225:LEU:HD23	1.79	0.65
1:G:78:ASP:OD2	1:G:81:LYS:N	2.30	0.65
2:H:192:ASP:O	2:H:196:ALA:N	2.24	0.65
2:H:242:LEU:O	2:H:307:VAL:N	2.29	0.65
1:I:26:ASP:N	1:I:26:ASP:OD1	2.29	0.65
1:I:187:ALA:HA	2:L:43:LEU:HD11	1.79	0.65
2:J:176:HIS:HB3	2:J:231:ARG:HA	1.78	0.65
1:K:107:LYS:HA	1:K:110:GLN:HE21	1.61	0.65
2:L:28:VAL:HG13	2:L:70:VAL:O	1.96	0.65
1:O:57:VAL:HA	1:O:64:PHE:HE2	1.62	0.64
1:Q:298:MET:O	1:Q:306:LYS:N	2.28	0.64
2:R:215:ALA:HB1	2:R:222:LYS:HD3	1.78	0.64

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:132:VAL:O	1:A:135:LYS:NZ	2.26	0.64
1:E:4:ALA:HA	1:E:27:VAL:HG13	1.79	0.64
2:F:10:ARG:NH1	1:G:185:LEU:HB2	2.12	0.64
2:H:2:LYS:N	2:H:90:ASP:OD2	2.30	0.64
2:H:129:VAL:N	2:H:133:ASN:OD1	2.30	0.64
1:I:29:VAL:HG21	1:I:87:LEU:HD22	1.79	0.64
1:K:2:LYS:N	1:K:90:ASP:OD2	2.30	0.64
2:L:217:VAL:HG23	2:L:218:LEU:HG	1.79	0.64
1:O:306:LYS:NZ	1:Q:173:THR:OG1	2.30	0.64
2:P:280:SER:OG	2:R:202:ASN:ND2	2.29	0.64
1:Q:160:VAL:HG13	1:Q:164:GLU:HG3	1.78	0.64
1:Q:215:SER:O	1:Q:222:LYS:NZ	2.30	0.64
1:A:22:ASP:N	1:A:22:ASP:OD1	2.30	0.64
2:B:179:THR:OG1	2:B:231:ARG:NH1	2.30	0.64
2:B:224:LYS:HG3	2:B:225:LEU:HD23	1.78	0.64
1:C:170:GLY:HA3	1:C:244:VAL:HG12	1.78	0.64
1:G:319:GLN:OE1	1:G:320:ARG:NH2	2.30	0.64
2:L:177:SER:HA	2:L:234:THR:HG23	1.79	0.64
1:O:130:VAL:HA	1:O:134:GLU:HB3	1.78	0.64
1:O:148:SER:O	1:O:152:ASN:N	2.19	0.64
1:O:240:VAL:O	1:O:309:ALA:N	2.31	0.64
2:P:31:ASN:ND2	2:P:76:ASP:O	2.25	0.64
2:P:239:VAL:HA	2:P:310:TRP:HA	1.78	0.64
2:B:47:ASP:CG	2:B:49:ILE:H	2.00	0.64
1:C:90:ASP:OD1	1:C:91:ILE:N	2.30	0.64
2:D:217:VAL:HG23	2:D:218:LEU:HG	1.78	0.64
2:F:169:LYS:O	2:F:245:GLN:N	2.30	0.64
2:H:181:ASP:HB3	2:H:182:GLN:HE21	1.62	0.64
1:I:106:GLY:O	1:I:110:GLN:N	2.20	0.64
1:I:214:VAL:HG21	1:I:225:LEU:HD23	1.79	0.64
2:J:63:ALA:HB1	2:J:70:VAL:HG23	1.79	0.64
1:O:78:ASP:OD2	1:O:81:LYS:N	2.26	0.64
1:O:129:VAL:HG13	1:O:132:VAL:HB	1.79	0.64
1:O:300:MET:HB2	1:Q:169:LYS:HD2	1.78	0.64
2:P:19:GLY:O	2:P:21:LYS:NZ	2.31	0.64
2:P:242:LEU:HB3	2:P:307:VAL:HG22	1.80	0.64
1:A:281:VAL:N	1:C:202:ASN:OD1	2.30	0.64
3:C:401:NAD:O1N	3:C:401:NAD:N7N	2.23	0.64
2:D:183:ARG:NE	2:D:188:SER:O	2.30	0.64
2:D:240:VAL:N	2:D:309:ALA:O	2.21	0.64
1:E:255:VAL:O	1:E:259:PHE:N	2.25	0.64

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:174:THR:O	1:G:230:LEU:N	2.31	0.64
2:H:2:LYS:HE3	2:H:87:MET:HB3	1.78	0.64
2:J:174:THR:HG1	2:J:311:TYR:HH	1.34	0.64
2:J:287:ASP:O	2:J:320:ARG:NH2	2.28	0.64
2:P:250:THR:H	2:P:302:ASP:HB3	1.63	0.64
2:P:297:THR:HG22	2:P:308:ILE:H	1.63	0.64
2:R:2:LYS:N	2:R:90:ASP:OD2	2.30	0.64
2:R:20:ARG:HA	2:R:21:LYS:HZ1	1.62	0.64
2:R:148:SER:HG	2:R:151:THR:H	1.45	0.64
2:R:173:THR:O	2:R:241:ASP:N	2.29	0.64
2:R:203:ILE:HG13	2:R:232:VAL:HG12	1.79	0.64
2:B:65:SER:HA	2:B:70:VAL:HA	1.78	0.64
1:C:297:THR:HA	1:C:306:LYS:HZ1	1.62	0.64
1:E:2:LYS:HB3	1:E:89:ILE:HD13	1.79	0.64
1:E:89:ILE:O	1:E:114:LYS:NZ	2.31	0.64
2:H:192:ASP:HB3	2:H:195:ARG:HB2	1.79	0.64
2:J:134:GLU:OE1	2:J:134:GLU:N	2.31	0.64
1:K:91:ILE:HG23	1:K:116:VAL:HA	1.80	0.64
1:K:137:TYR:CE2	1:K:331:LYS:HB3	2.29	0.64
1:A:182:GLN:HE21	1:A:231:ARG:HD3	1.61	0.64
2:B:159:LYS:O	2:B:163:GLN:N	2.23	0.64
1:E:148:SER:O	1:E:152:ASN:N	2.26	0.64
1:E:190:HIS:CE1	1:E:191:ARG:HG2	2.33	0.64
2:F:270:ILE:O	2:F:289:SER:N	2.26	0.64
2:H:10:ARG:NH2	2:H:179:THR:HB	2.12	0.64
2:H:240:VAL:N	2:H:309:ALA:O	2.25	0.64
1:I:185:LEU:HD13	2:L:10:ARG:NH1	2.11	0.64
2:P:3:VAL:HG22	2:P:91:LEU:HB3	1.80	0.64
1:Q:255:VAL:O	1:Q:259:PHE:N	2.28	0.64
1:A:195:ARG:HH22	1:G:361:TYR:CA	2.11	0.64
2:D:118:ILE:HG22	2:D:120:ALA:H	1.63	0.64
2:D:139:HIS:CE1	2:D:332:TRP:HA	2.33	0.64
2:D:253:GLU:OE2	2:D:260:ARG:NH1	2.31	0.64
1:E:78:ASP:OD2	1:E:81:LYS:NZ	2.26	0.64
2:F:239:VAL:HA	2:F:310:TRP:HA	1.80	0.64
2:H:6:ASN:HA	2:H:31:ASN:HB3	1.79	0.64
1:I:84:TRP:HA	1:I:87:LEU:HB2	1.80	0.64
1:I:185:LEU:HD13	2:L:10:ARG:CZ	2.28	0.64
2:J:203:ILE:HG23	2:J:205:PRO:HD3	1.80	0.64
1:O:85:ALA:HB2	1:O:112:GLY:HA3	1.80	0.64
1:O:132:VAL:N	1:O:134:GLU:OE1	2.31	0.64

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:0:LYS:N	2:B:26:ASP:OD1	2.29	0.64
2:B:149:CYS:O	2:B:153:CYS:N	2.23	0.64
1:C:6:ASN:ND2	1:C:96:THR:HG23	2.06	0.64
1:C:163:GLU:OE1	1:C:163:GLU:N	2.30	0.64
1:G:253:GLU:OE1	1:G:253:GLU:N	2.25	0.64
1:K:127:THR:HG1	1:K:146:ASN:HA	1.63	0.64
2:L:162:ASP:O	2:L:166:GLY:N	2.31	0.64
1:O:18(B):HIS:CD2	1:O:19:GLY:N	2.65	0.64
2:P:169:LYS:O	2:P:245:GLN:N	2.31	0.64
2:R:129:VAL:N	2:R:133:ASN:OD1	2.30	0.64
2:R:211:ALA:O	2:R:226:ASN:ND2	2.31	0.64
1:A:82:LEU:HD22	1:A:84:TRP:CD2	2.32	0.64
2:B:102:ARG:HH22	2:B:126:PRO:HD3	1.63	0.64
2:B:240:VAL:HG13	2:B:309:ALA:HB3	1.80	0.64
1:C:3:VAL:HG21	1:C:25:LEU:HB3	1.78	0.64
2:F:32:ASP:OD2	3:F:401:NAD:O3B	2.12	0.64
2:H:6:ASN:OD1	2:H:31:ASN:ND2	2.27	0.64
1:I:77:ARG:HH12	3:I:401:NAD:H2B	1.62	0.64
1:I:260:ARG:HA	1:I:263:ALA:HB3	1.79	0.64
1:O:82:LEU:HD12	1:O:108:HIS:CE1	2.33	0.64
1:O:245:ASN:ND2	1:Q:304:MET:SD	2.71	0.64
2:P:281:ILE:HG22	2:R:202:ASN:ND2	2.13	0.64
1:Q:47:ASP:OD1	1:Q:50:LEU:N	2.20	0.64
2:D:17:ARG:HD3	2:D:50:LEU:HD12	1.78	0.64
2:D:137:TYR:OH	2:D:139:HIS:ND1	2.29	0.64
1:E:106:GLY:O	1:E:110:GLN:N	2.22	0.64
2:F:176:HIS:HB3	2:F:231:ARG:HA	1.80	0.64
2:F:190:HIS:CE1	2:F:195:ARG:HB2	2.33	0.64
2:F:250:THR:OG1	2:F:251:PHE:N	2.29	0.64
1:I:185:LEU:HD12	2:L:10:ARG:HH12	1.62	0.64
2:J:92:VAL:HB	2:J:116:VAL:HG22	1.80	0.64
2:L:264:ASP:O	2:L:268:LYS:NZ	2.17	0.64
2:P:176:HIS:HB3	2:P:231:ARG:HA	1.80	0.63
2:D:1:LEU:HB3	2:D:25:LEU:HD13	1.79	0.63
2:F:64:ILE:H	2:F:71:ILE:H	1.46	0.63
2:F:149:CYS:O	2:F:153:CYS:N	2.28	0.63
2:F:203:ILE:HD11	2:F:230:LEU:HB3	1.79	0.63
2:F:240:VAL:HG13	2:F:309:ALA:HB3	1.80	0.63
1:I:128:TYR:O	1:I:146:ASN:ND2	2.30	0.63
1:K:132:VAL:HG21	1:K:155:ALA:HB1	1.79	0.63
2:L:62:SER:O	2:L:73:VAL:HG12	1.97	0.63

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:O:19:GLY:O	1:O:21:LYS:HD3	1.98	0.63
2:P:5:ILE:HG23	2:P:93:ILE:HB	1.79	0.63
1:Q:38:LYS:HG3	1:Q:39:SER:H	1.62	0.63
1:Q:181:ASP:OD2	1:I:362:GLU:N	2.26	0.63
1:A:5:ILE:O	1:A:31:ASN:N	2.27	0.63
1:A:256:ASN:O	1:A:260:ARG:N	2.27	0.63
1:A:316:GLY:O	1:A:320:ARG:N	2.23	0.63
1:A:332:TRP:CD2	1:A:333:PRO:HD2	2.33	0.63
2:F:156:PRO:HA	2:F:159:LYS:HE3	1.79	0.63
2:H:211:ALA:O	2:H:226:ASN:ND2	2.32	0.63
1:I:67:ASP:O	1:I:69:LYS:NZ	2.32	0.63
1:I:173:THR:HG23	1:I:228:ILE:H	1.62	0.63
2:J:65:SER:HA	2:J:70:VAL:HA	1.80	0.63
1:Q:9:GLY:C	1:Q:13:ARG:HE	2.01	0.63
2:R:214:VAL:HG23	2:R:218:LEU:HD12	1.81	0.63
2:R:267:LEU:HD13	2:R:271:LEU:HB2	1.80	0.63
1:A:57:VAL:HG22	1:A:59:ILE:HG13	1.80	0.63
2:B:173:THR:OG1	2:D:306:LYS:NZ	2.25	0.63
2:B:270:ILE:HA	2:B:320:ARG:HH11	1.63	0.63
1:E:122:ALA:O	1:E:122(A):LYS:NZ	2.31	0.63
1:G:37:VAL:HG12	1:G:41:THR:HG23	1.80	0.63
2:H:148:SER:HG	2:H:151:THR:H	1.45	0.63
2:J:240:VAL:HG13	2:J:309:ALA:HB3	1.81	0.63
2:L:94:GLU:OE2	2:L:99:PHE:N	2.26	0.63
2:L:290:SER:OG	2:L:291:THR:N	2.30	0.63
1:O:18(A):TRP:C	1:O:20:ARG:HB3	2.17	0.63
1:O:192:ASP:OD1	1:O:193:LEU:N	2.31	0.63
2:R:176:HIS:N	2:R:230:LEU:O	2.28	0.63
2:R:199:ALA:HA	2:R:202:ASN:HB2	1.79	0.63
2:B:134:GLU:OE1	2:B:134:GLU:N	2.31	0.63
1:E:186:ASP:OD1	1:E:198:ALA:N	2.30	0.63
1:E:326:ASP:O	1:E:330:ASN:N	2.24	0.63
3:E:401:NAD:O1N	3:E:401:NAD:N7N	2.23	0.63
2:F:289:SER:OG	2:F:320:ARG:NH1	2.31	0.63
2:J:102:ARG:HH22	2:J:126:PRO:HD3	1.63	0.63
2:J:194:ARG:NH1	2:L:278:LEU:O	2.23	0.63
2:J:253:GLU:O	2:J:257:ALA:N	2.23	0.63
1:K:135:LYS:O	1:K:331:LYS:NZ	2.31	0.63
1:O:139:HIS:HA	1:O:332:TRP:CE2	2.34	0.63
2:P:156:PRO:HA	2:P:159:LYS:HE3	1.79	0.63
2:P:242:LEU:HD11	2:P:244:VAL:HG13	1.80	0.63

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:Q:18:CYS:O	1:Q:20:ARG:N	2.30	0.63
1:Q:65:SER:OG	1:Q:69:LYS:N	2.30	0.63
2:R:145:SER:OG	2:R:146:ASN:N	2.27	0.63
2:R:193:LEU:O	2:R:197:ARG:N	2.32	0.63
2:R:242:LEU:O	2:R:307:VAL:N	2.29	0.63
2:B:218:LEU:HB3	2:B:221:LEU:HD13	1.80	0.63
2:F:250:THR:H	2:F:302:ASP:HB3	1.63	0.63
1:G:28:VAL:HA	1:G:71:ILE:HG12	1.79	0.63
1:G:93:ILE:HA	1:G:117:ILE:HB	1.79	0.63
2:H:204:VAL:N	2:H:231:ARG:O	2.32	0.63
2:H:267:LEU:HD13	2:H:271:LEU:HB2	1.81	0.63
1:I:194:ARG:HH11	1:I:194:ARG:HG3	1.62	0.63
2:J:270:ILE:O	2:J:289:SER:OG	2.16	0.63
2:L:64:ILE:H	2:L:71:ILE:H	1.45	0.63
2:L:107:LYS:O	2:L:111:ALA:N	2.31	0.63
1:Q:161:LEU:O	1:Q:165:LEU:N	2.28	0.63
1:Q:260:ARG:HD3	1:Q:273:VAL:HG11	1.81	0.63
2:B:6:ASN:HB3	2:B:94:GLU:HA	1.79	0.63
1:C:121:PRO:HG3	1:C:148:SER:H	1.63	0.63
2:D:7:GLY:HA3	2:D:96:THR:HG22	1.80	0.63
2:D:261:GLU:O	2:D:265:ASN:ND2	2.32	0.63
1:E:41:THR:HG1	1:E:59:ILE:HG21	1.61	0.63
2:H:117:LEU:HD21	2:H:146:ASN:HB2	1.80	0.63
2:J:218:LEU:HB3	2:J:221:LEU:HD13	1.80	0.63
2:L:118:ILE:HG22	2:L:120:ALA:H	1.63	0.63
1:O:190:HIS:NE2	1:O:192:ASP:OD2	2.32	0.63
1:O:346:GLU:HA	1:O:349:CYS:HB3	1.81	0.63
2:P:89:ILE:O	2:P:114:LYS:NZ	2.26	0.63
2:R:3:VAL:HG22	2:R:91:LEU:HB3	1.81	0.63
1:E:18(B):HIS:HA	1:E:69:LYS:HZ1	1.64	0.63
1:E:124:ASP:HB3	1:K:143:ILE:HD12	1.81	0.63
2:H:213:ALA:HA	2:H:216:LEU:HB2	1.81	0.63
1:I:173:THR:OG1	1:K:306:LYS:NZ	2.32	0.63
1:I:241:ASP:HA	1:I:308:VAL:HA	1.80	0.63
2:L:10:ARG:HB2	3:L:401:NAD:O1N	1.99	0.63
1:O:37:VAL:CG2	1:O:59:ILE:HG22	2.29	0.63
1:O:203:ILE:HG12	1:O:230:LEU:HD12	1.80	0.63
2:P:63:ALA:HA	2:P:72:LYS:HA	1.80	0.63
1:C:6:ASN:HD22	1:C:94:GLU:HG2	1.64	0.63
1:C:79:PRO:HB3	1:C:108:HIS:CE1	2.34	0.63
1:C:178:TYR:HA	1:C:231:ARG:HD2	1.81	0.63

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:279:VAL:O	2:D:282:ASP:N	2.30	0.63
2:F:3:VAL:HG22	2:F:91:LEU:HB3	1.80	0.63
1:G:259:PHE:O	1:G:263:ALA:N	2.25	0.63
2:H:15:PHE:O	2:H:18(A):TRP:N	2.18	0.63
2:H:37:VAL:HG23	2:H:38:LYS:H	1.64	0.63
2:J:3:VAL:HG22	2:J:91:LEU:HB3	1.81	0.63
2:L:1:LEU:HB3	2:L:25:LEU:HD13	1.81	0.63
1:O:13:ARG:C	1:O:44:LEU:CD1	2.67	0.63
1:O:37:VAL:CG2	1:O:59:ILE:HG21	2.28	0.63
1:O:94:GLU:OE2	1:O:96:THR:OG1	2.15	0.63
2:R:149:CYS:SG	2:R:150:THR:N	2.72	0.63
1:A:92:VAL:HB	1:A:116:VAL:HG13	1.81	0.63
1:A:174:THR:HG1	1:A:238:SER:HG	1.42	0.63
1:C:170:GLY:HA3	1:C:244:VAL:HA	1.79	0.63
1:C:272:ASP:HB2	1:C:288:PHE:CG	2.34	0.63
1:E:86:GLU:OE1	1:E:86:GLU:N	2.26	0.63
1:E:94:GLU:OE2	1:E:98:VAL:N	2.32	0.63
1:G:5:ILE:HB	1:G:30:VAL:HG22	1.80	0.63
2:H:1:LEU:HD22	2:H:329:ALA:HA	1.80	0.63
2:J:126:PRO:HD2	2:J:144:ILE:HA	1.80	0.63
1:K:0:LYS:NZ	1:K:24:PRO:O	2.24	0.63
1:K:9:GLY:HA2	3:K:401:NAD:H4B	1.80	0.63
1:O:41:THR:OG1	1:O:57:VAL:HG22	1.98	0.62
1:Q:7:GLY:H	1:Q:31:ASN:HB3	1.63	0.62
2:R:203:ILE:HD11	2:R:230:LEU:HB3	1.81	0.62
1:A:18(A):TRP:HE1	1:A:23:SER:HG	1.46	0.62
2:F:300:MET:HB2	2:F:304:MET:HB3	1.79	0.62
2:H:101:ASP:OD2	2:H:104:GLY:N	2.20	0.62
1:I:18(A):TRP:HE1	1:I:23:SER:HG	1.44	0.62
1:I:47:ASP:CG	1:I:49:ILE:H	2.01	0.62
1:I:120:ALA:N	1:I:146:ASN:O	2.32	0.62
1:I:165:LEU:HD13	1:I:248:LYS:HD2	1.80	0.62
2:J:2:LYS:HB3	2:J:89:ILE:HD13	1.80	0.62
2:J:77:ARG:HD2	3:J:401:NAD:N6A	2.13	0.62
1:K:316:GLY:O	1:K:320:ARG:NE	2.32	0.62
2:L:183:ARG:NE	2:L:188:SER:O	2.32	0.62
1:O:178:TYR:CD2	1:O:233:PRO:HA	2.34	0.62
2:P:190:HIS:CE1	2:P:195:ARG:HB2	2.34	0.62
1:Q:226:ASN:OD1	1:Q:227:GLY:N	2.31	0.62
1:Q:281:VAL:HA	1:Q:284:ARG:HH21	1.64	0.62
1:A:82:LEU:HB3	1:A:84:TRP:CE2	2.34	0.62

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:F:14:ASN:HD21	2:F:315:TRP:HA	1.65	0.62
2:F:38:LYS:O	2:F:41:SER:OG	2.08	0.62
1:G:240:VAL:N	1:G:309:ALA:O	2.25	0.62
2:H:214:VAL:HG23	2:H:218:LEU:HD12	1.81	0.62
1:I:89:ILE:O	1:I:114:LYS:NZ	2.30	0.62
1:K:18:CYS:O	1:K:20:ARG:N	2.32	0.62
2:P:149:CYS:O	2:P:153:CYS:N	2.27	0.62
2:P:256:ASN:O	2:P:260:ARG:N	2.27	0.62
1:A:172:MET:H	1:A:227:GLY:HA3	1.64	0.62
2:B:199:ALA:HA	2:B:202:ASN:HB2	1.81	0.62
1:C:63:THR:HA	1:C:72:LYS:HA	1.82	0.62
1:C:65:SER:HA	1:C:70:PRO:HA	1.80	0.62
2:H:312:ASP:OD1	2:H:315:TRP:N	2.26	0.62
1:I:57:VAL:HG22	1:I:59:ILE:HG12	1.81	0.62
2:J:0:LYS:N	2:J:26:ASP:OD1	2.29	0.62
2:J:118:ILE:H	2:J:145:SER:HA	1.65	0.62
2:J:296:LEU:HB2	2:J:308:ILE:HD11	1.81	0.62
2:P:76:ASP:OD1	2:P:77:ARG:N	2.33	0.62
2:P:161:LEU:O	2:P:165:PHE:N	2.33	0.62
2:R:240:VAL:N	2:R:309:ALA:O	2.25	0.62
2:B:2:LYS:HB3	2:B:89:ILE:HD13	1.80	0.62
2:B:296:LEU:HB2	2:B:308:ILE:HD11	1.80	0.62
1:C:9:GLY:O	1:C:12:GLY:N	2.25	0.62
1:E:184:LEU:HB3	2:H:184:LEU:HB2	1.80	0.62
1:G:37:VAL:HG22	1:G:73:VAL:HG11	1.81	0.62
1:G:177:SER:OG	1:G:234:THR:OG1	2.16	0.62
2:P:120:ALA:O	2:P:145:SER:OG	2.16	0.62
2:R:59:THR:HB	2:R:64:ILE:HD13	1.81	0.62
2:B:116:VAL:N	2:B:142:THR:O	2.27	0.62
2:B:240:VAL:N	2:B:309:ALA:O	2.33	0.62
1:C:179:THR:OG1	1:C:181:ASP:OD1	2.12	0.62
2:D:115:LYS:NZ	2:D:139:HIS:O	2.31	0.62
2:D:149:CYS:O	2:D:153:CYS:N	2.26	0.62
1:E:11:ILE:HG12	3:E:401:NAD:C2N	2.29	0.62
2:F:12:GLY:O	2:F:16:LEU:N	2.24	0.62
2:F:76:ASP:OD1	2:F:77:ARG:N	2.31	0.62
2:F:228:ILE:H	2:H:306:LYS:HZ2	1.47	0.62
1:G:168:VAL:HG23	1:G:247:GLU:HG3	1.81	0.62
2:H:316:GLY:HA2	2:H:319:GLN:HB2	1.80	0.62
1:I:115:LYS:HG3	1:I:142:ASN:HA	1.80	0.62
2:J:116:VAL:N	2:J:142:THR:O	2.27	0.62

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:18(B):HIS:NE2	1:K:67:ASP:OD2	2.33	0.62
1:K:156:PRO:HB3	1:K:267:LEU:HD22	1.82	0.62
1:K:241:ASP:OD1	1:K:307:VAL:N	2.33	0.62
1:O:171:THR:OG1	1:O:172:MET:N	2.29	0.62
2:P:8:PHE:CZ	2:P:13:ARG:HG3	2.35	0.62
2:P:14:ASN:HD21	2:P:315:TRP:HA	1.65	0.62
2:P:218:LEU:O	2:P:222:LYS:NZ	2.30	0.62
2:P:289:SER:OG	2:P:320:ARG:NH1	2.32	0.62
1:Q:10:ARG:NH1	1:Q:47:ASP:OD2	2.26	0.62
2:R:204:VAL:N	2:R:231:ARG:O	2.30	0.62
1:A:62:GLU:O	1:A:73:VAL:N	2.33	0.62
1:A:194:ARG:HH11	1:A:205:PRO:HD2	1.64	0.62
2:B:76:ASP:HB3	2:B:82:LEU:HD21	1.81	0.62
2:B:139:HIS:NE2	2:B:334:UNK:O	2.27	0.62
1:C:47:ASP:CG	1:C:49:ILE:H	2.03	0.62
1:E:115:LYS:HE2	1:E:137:TYR:HE1	1.65	0.62
1:G:192:ASP:O	1:G:196:ALA:N	2.33	0.62
2:H:3:VAL:HG22	2:H:91:LEU:HB3	1.82	0.62
1:I:18(B):HIS:NE2	1:I:67:ASP:OD2	2.33	0.62
1:I:304:MET:SD	1:K:245:ASN:ND2	2.73	0.62
2:J:242:LEU:O	2:J:307:VAL:N	2.29	0.62
1:K:182:GLN:OE1	1:K:182:GLN:N	2.32	0.62
1:O:345:LEU:O	1:O:349:CYS:N	2.29	0.62
1:Q:37:VAL:HG22	1:Q:73:VAL:HG21	1.82	0.62
2:R:325:ALA:O	2:R:329:ALA:N	2.23	0.62
1:A:18(A):TRP:NE1	1:A:23:SER:OG	2.32	0.62
1:A:108:HIS:CD2	1:A:108:HIS:H	2.16	0.62
1:A:134:GLU:CD	1:A:134:GLU:H	2.03	0.62
1:A:205:PRO:HA	1:A:230:LEU:HA	1.82	0.62
1:C:118:ILE:O	1:C:145:SER:OG	2.18	0.62
1:G:107:LYS:O	1:G:111:ALA:N	2.31	0.62
2:H:38:LYS:N	2:H:38:LYS:HZ2	1.98	0.62
2:L:17:ARG:HD3	2:L:50:LEU:HD12	1.82	0.62
2:L:47:ASP:CG	2:L:49:ILE:H	2.03	0.62
2:L:261:GLU:O	2:L:265:ASN:ND2	2.32	0.62
2:P:183:ARG:HH22	2:P:191:ARG:HH22	1.47	0.62
2:P:293:ASP:OD1	2:P:296:LEU:N	2.26	0.62
1:Q:33:SER:OG	3:Q:401:NAD:H2A	2.00	0.62
1:Q:90:ASP:HA	1:Q:114:LYS:HE2	1.82	0.62
2:R:167:ILE:HG21	2:R:225:LEU:HD11	1.82	0.62
2:R:265:ASN:OD1	2:R:265:ASN:N	2.33	0.62

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:190:HIS:CE1	1:A:191:ARG:HH21	2.18	0.62
2:D:9:GLY:O	2:D:12:GLY:N	2.31	0.62
2:D:162:ASP:O	2:D:166:GLY:N	2.30	0.62
2:F:242:LEU:HB3	2:F:307:VAL:HG22	1.81	0.62
1:I:234:THR:HG21	1:I:237:VAL:HG12	1.81	0.62
2:J:20:ARG:NH2	2:J:319:GLN:O	2.33	0.62
1:K:260:ARG:HG2	1:K:273:VAL:HG11	1.81	0.62
2:P:9:GLY:O	2:P:12:GLY:N	2.26	0.62
2:P:177:SER:OG	2:P:234:THR:O	2.15	0.62
1:Q:135:LYS:H	1:Q:135:LYS:HE3	1.64	0.62
1:A:220:GLN:O	1:A:224:LYS:NZ	2.23	0.62
2:B:3:VAL:HG22	2:B:91:LEU:HB3	1.80	0.62
2:B:20:ARG:NH2	2:B:319:GLN:O	2.32	0.62
1:C:157:PHE:O	1:C:161:LEU:N	2.30	0.62
2:D:139:HIS:ND1	2:D:331:LYS:O	2.32	0.62
2:D:157:PHE:O	2:D:161:LEU:N	2.23	0.62
1:E:303:ASP:OD2	1:G:245:ASN:ND2	2.33	0.62
2:H:45:LYS:O	2:H:52:THR:OG1	2.18	0.62
2:H:167:ILE:HG21	2:H:225:LEU:HD11	1.82	0.62
1:I:7:GLY:HA2	1:I:32:ASP:HA	1.80	0.62
1:K:256:ASN:OD1	1:K:260:ARG:NH2	2.33	0.62
1:K:287:ASP:HA	1:K:319:GLN:HG3	1.82	0.62
1:O:90:ASP:O	1:O:115:LYS:N	2.23	0.62
1:O:121:PRO:O	1:O:122(A):LYS:NZ	2.32	0.62
3:O:401:NAD:H1D	1:C:362:GLU:C	2.20	0.62
1:Q:312:ASP:HB3	1:Q:316:GLY:H	1.65	0.62
1:A:31:ASN:OD1	1:A:76:ASN:N	2.33	0.62
1:C:150:THR:OG1	1:C:151:THR:N	2.33	0.62
2:D:297:THR:HG22	2:D:308:ILE:H	1.65	0.62
1:E:47:ASP:OD1	1:E:48:SER:N	2.33	0.62
2:F:5:ILE:HG23	2:F:93:ILE:HB	1.80	0.62
2:F:77:ARG:HD2	3:F:401:NAD:N1A	2.15	0.62
2:F:242:LEU:HD11	2:F:244:VAL:HG13	1.81	0.62
1:G:173:THR:HA	1:G:228:ILE:O	2.00	0.62
2:L:20:ARG:HG3	2:L:322:VAL:HG11	1.82	0.62
1:O:106:GLY:O	1:O:110:GLN:N	2.21	0.61
1:O:148:SER:O	1:O:151:THR:OG1	2.10	0.61
1:Q:194:ARG:HE	1:Q:204:VAL:HG13	1.64	0.61
2:R:1:LEU:HD22	2:R:329:ALA:HA	1.81	0.61
1:A:41:THR:O	1:A:45:LYS:N	2.18	0.61
1:C:186:ASP:OD2	1:C:197:ARG:NH2	2.33	0.61

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:10:ARG:CB	3:D:401:NAD:O1N	2.47	0.61
1:E:59:ILE:HA	1:E:64:PHE:CA	2.28	0.61
1:I:176:HIS:N	1:I:230:LEU:O	2.33	0.61
1:K:317:TYR:O	1:K:320:ARG:NH2	2.23	0.61
2:L:139:HIS:CE1	2:L:332:TRP:HA	2.35	0.61
2:L:139:HIS:ND1	2:L:331:LYS:O	2.33	0.61
2:L:253:GLU:OE2	2:L:260:ARG:NH1	2.33	0.61
2:P:270:ILE:O	2:P:289:SER:N	2.27	0.61
1:Q:177:SER:OG	1:Q:234:THR:OG1	2.16	0.61
2:R:6:ASN:HA	2:R:31:ASN:HB3	1.82	0.61
2:R:117:LEU:HD21	2:R:146:ASN:HB2	1.80	0.61
1:A:120:ALA:N	1:A:146:ASN:O	2.33	0.61
1:A:174:THR:OG1	1:A:238:SER:OG	2.11	0.61
1:C:142:ASN:HD22	1:C:143:ILE:HD12	1.64	0.61
1:E:83:PRO:HA	1:E:86:GLU:CD	2.20	0.61
2:F:89:ILE:N	2:F:112:GLY:O	2.32	0.61
2:F:131:GLY:N	2:F:134:GLU:OE2	2.33	0.61
2:F:186:ASP:OD2	1:G:10:ARG:NH1	2.32	0.61
2:H:149:CYS:O	2:H:153:CYS:N	2.32	0.61
2:H:203:ILE:HG13	2:H:232:VAL:HG12	1.81	0.61
2:H:240:VAL:HG13	2:H:309:ALA:HB3	1.82	0.61
1:I:270:VAL:O	1:I:289:SER:N	2.33	0.61
2:J:149:CYS:O	2:J:153:CYS:N	2.23	0.61
1:K:213:ALA:HA	1:K:216:LEU:HD23	1.82	0.61
1:K:299:VAL:HG22	1:K:305:VAL:HB	1.81	0.61
1:O:47:ASP:OD2	1:O:50:LEU:N	2.22	0.61
2:P:47:ASP:CG	2:P:49:ILE:H	2.02	0.61
2:P:122:GLY:HA3	2:P:125:ILE:HG12	1.81	0.61
2:P:240:VAL:HG13	2:P:309:ALA:HB3	1.81	0.61
2:P:312:ASP:OD1	2:P:315:TRP:N	2.29	0.61
2:R:166:GLY:O	2:R:247:SER:N	2.24	0.61
2:R:192:ASP:O	2:R:196:ALA:N	2.24	0.61
2:B:9:GLY:O	2:B:12:GLY:N	2.28	0.61
1:C:167:ILE:HA	1:C:246:ILE:HD13	1.83	0.61
1:E:28:VAL:O	1:E:72:LYS:N	2.32	0.61
1:E:33:SER:HB2	1:E:77:ARG:NH1	2.14	0.61
1:G:116:VAL:CG2	1:G:143:ILE:HA	2.30	0.61
1:K:162:ASP:OD1	1:K:167:ILE:N	2.34	0.61
1:O:271:LEU:HA	1:O:288:PHE:HB3	1.83	0.61
2:P:272:SER:N	2:P:290:SER:O	2.33	0.61
2:P:273:VAL:HA	2:P:292:ILE:H	1.66	0.61

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:Q:240:VAL:O	1:Q:309:ALA:N	2.33	0.61
1:Q:253:GLU:OE1	1:Q:253:GLU:N	2.22	0.61
2:R:213:ALA:HA	2:R:216:LEU:HB2	1.81	0.61
1:A:64:PHE:O	1:A:71:ILE:N	2.33	0.61
1:A:241:ASP:HA	1:A:308:VAL:HA	1.83	0.61
2:B:193:LEU:O	2:B:197:ARG:N	2.33	0.61
2:F:13:ARG:HH21	2:F:43:LEU:HD13	1.65	0.61
2:H:172:MET:HG3	2:H:242:LEU:HD13	1.83	0.61
1:I:184:LEU:HG	1:I:185:LEU:HG	1.83	0.61
1:K:162:ASP:HB2	1:K:167:ILE:HD12	1.82	0.61
2:L:6:ASN:O	2:L:95:GLY:N	2.31	0.61
1:O:14:ASN:O	1:O:18:CYS:N	2.34	0.61
1:O:127:THR:OG1	1:O:128:TYR:N	2.34	0.61
2:D:204:VAL:N	2:D:231:ARG:O	2.34	0.61
1:E:211:ALA:HB1	1:E:226:ASN:HA	1.82	0.61
2:F:66:VAL:HB	2:F:69:LYS:HB3	1.81	0.61
1:G:42:HIS:HA	1:G:45:LYS:HB3	1.82	0.61
1:O:18:CYS:O	1:O:18(B):HIS:N	2.34	0.61
1:O:29:VAL:HA	1:O:72:LYS:O	1.99	0.61
2:P:42:HIS:O	2:P:46:TYR:N	2.33	0.61
2:P:134:GLU:OE1	2:P:134:GLU:N	2.34	0.61
1:Q:3:VAL:HG21	1:Q:25:LEU:HB3	1.83	0.61
2:R:54:ASP:OD1	2:R:54:ASP:N	2.34	0.61
2:R:149:CYS:O	2:R:153:CYS:N	2.32	0.61
1:A:0:LYS:HD2	1:A:1:LEU:HD13	1.81	0.61
1:C:118:ILE:H	1:C:145:SER:HA	1.64	0.61
1:C:183:ARG:HE	1:C:187:ALA:HB3	1.64	0.61
1:C:279:VAL:H	1:C:282:ASP:CG	2.04	0.61
1:C:284:ARG:NH2	1:C:285:CYS:SG	2.61	0.61
1:E:16:LEU:CD2	1:E:44:LEU:CD1	2.70	0.61
1:E:132:VAL:N	1:E:134:GLU:OE1	2.34	0.61
1:G:312:ASP:OD1	1:G:315:TRP:N	2.29	0.61
2:H:149:CYS:SG	2:H:150:THR:N	2.72	0.61
2:J:203:ILE:HG13	2:J:232:VAL:HG12	1.83	0.61
2:J:270:ILE:HA	2:J:320:ARG:HH11	1.64	0.61
2:L:137:TYR:OH	2:L:139:HIS:ND1	2.34	0.61
2:L:298:MET:HG2	2:L:306:LYS:HB3	1.83	0.61
2:P:79:PRO:HA	2:P:82:LEU:HD12	1.83	0.61
2:P:117:LEU:HD21	2:P:146:ASN:HB2	1.82	0.61
1:Q:157:PHE:O	1:Q:160:VAL:N	2.33	0.61
2:R:17:ARG:NH2	2:R:54:ASP:OD1	2.33	0.61

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:R:204:VAL:HB	2:R:231:ARG:HB2	1.83	0.61
2:B:126:PRO:HD2	2:B:144:ILE:HA	1.81	0.61
1:C:167:ILE:HD12	1:C:221:LEU:HD21	1.83	0.61
2:F:31:ASN:ND2	2:F:76:ASP:O	2.29	0.61
2:F:134:GLU:N	2:F:134:GLU:OE1	2.33	0.61
2:F:297:THR:HG22	2:F:308:ILE:H	1.65	0.61
1:K:34:GLY:O	1:K:39:SER:OG	2.13	0.61
1:K:170:GLY:HA3	1:K:244:VAL:HA	1.83	0.61
2:L:100:VAL:HG13	2:L:122(A):LYS:HB2	1.81	0.61
2:L:126:PRO:HD2	2:L:144:ILE:HA	1.82	0.61
1:O:1:LEU:O	1:O:3:VAL:HG23	2.01	0.61
1:O:41:THR:CB	1:O:59:ILE:HG12	2.31	0.61
1:O:60(A):ASP:C	1:O:62:GLU:H	2.03	0.61
1:O:62:GLU:HB3	1:O:72:LYS:HE3	1.82	0.61
1:O:169:LYS:HG3	1:Q:301:GLY:HA3	1.82	0.61
2:D:86:ASP:OD1	2:D:86:ASP:N	2.24	0.61
2:D:134:GLU:OE1	2:D:134:GLU:N	2.33	0.61
2:D:147:ALA:O	2:D:317:TYR:OH	2.19	0.61
1:E:222:LYS:O	1:E:224:LYS:NZ	2.32	0.61
2:F:10:ARG:NH1	1:G:185:LEU:CG	2.64	0.61
2:F:42:HIS:HA	2:F:46:TYR:HD2	1.65	0.61
2:F:186:ASP:N	2:F:186:ASP:OD1	2.33	0.61
2:F:265:ASN:OD1	2:F:266:GLU:N	2.34	0.61
1:G:220:GLN:HG2	1:G:221:LEU:HD12	1.83	0.61
1:I:29:VAL:HA	1:I:72:LYS:O	1.98	0.61
1:I:256:ASN:ND2	1:I:257:ASN:OD1	2.33	0.61
1:I:275:ASP:HA	1:I:293:ASP:HB2	1.82	0.61
1:I:281:VAL:HA	1:I:284:ARG:HG3	1.83	0.61
2:J:159:LYS:O	2:J:163:GLN:N	2.23	0.61
2:J:249:LYS:HD2	2:J:302:ASP:HB2	1.83	0.61
1:K:6:ASN:N	1:K:93:ILE:O	2.26	0.61
1:K:16:LEU:O	1:K:18(B):HIS:N	2.21	0.61
1:K:84:TRP:CD2	1:K:89:ILE:HD12	2.36	0.61
2:L:134:GLU:OE1	2:L:134:GLU:N	2.33	0.61
1:O:195:ARG:NH2	1:C:361:TYR:O	2.33	0.61
1:O:272:ASP:HB2	1:O:288:PHE:CG	2.35	0.61
1:O:347:ASP:O	1:O:351:ASP:N	2.33	0.61
2:P:131:GLY:N	2:P:134:GLU:OE2	2.33	0.61
2:R:170:GLY:HA3	2:R:225:LEU:HD13	1.83	0.61
2:R:315:TRP:O	2:R:318:SER:OG	2.18	0.61
1:A:47:ASP:OD2	1:A:50:LEU:N	2.24	0.61

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:60:ILE:HG22	1:A:60(A):ASP:H	1.65	0.61
1:C:5:ILE:HG23	1:C:30:VAL:HG13	1.83	0.61
1:C:9:GLY:HA2	3:C:401:NAD:H4B	1.83	0.61
2:D:154:LEU:HD21	2:D:210:ALA:HB1	1.83	0.61
1:E:301:GLY:N	1:E:303:ASP:OD1	2.34	0.61
2:F:84:TRP:HD1	2:F:111:ALA:HB3	1.66	0.61
2:F:161:LEU:O	2:F:165:PHE:N	2.32	0.61
1:G:46:TYR:HD1	1:G:52:THR:HG1	1.47	0.61
2:H:54:ASP:OD1	2:H:54:ASP:N	2.33	0.61
2:H:118:ILE:O	2:H:145:SER:OG	2.19	0.61
2:J:324:LEU:HA	2:J:327:ILE:HD12	1.83	0.61
1:K:179:THR:O	1:K:182:GLN:NE2	2.34	0.61
3:K:401:NAD:H2N	3:K:401:NAD:H52N	1.82	0.61
2:L:203:ILE:HG13	2:L:232:VAL:HG12	1.83	0.61
1:O:47:ASP:CG	1:O:49:ILE:H	2.04	0.61
1:O:94:GLU:OE1	1:O:97:GLY:N	2.27	0.61
1:O:256:ASN:O	1:O:260:ARG:N	2.21	0.61
1:A:7:GLY:N	1:A:31:ASN:O	2.27	0.61
1:A:176:HIS:NE2	1:A:179:THR:OG1	2.25	0.61
1:A:184:LEU:HA	2:D:184:LEU:HD13	1.83	0.61
2:B:102:ARG:NH2	2:B:126:PRO:HD3	2.16	0.61
2:B:290:SER:OG	2:B:310:TRP:O	2.15	0.61
2:D:18:CYS:O	2:D:20:ARG:N	2.34	0.61
2:D:79:PRO:HB3	2:D:108:HIS:CE1	2.36	0.61
1:E:317:TYR:O	1:E:321:VAL:HG13	2.01	0.61
2:F:18(A):TRP:HE1	2:F:23:SER:HG	1.48	0.61
2:F:38:LYS:N	2:F:38:LYS:HZ2	1.98	0.61
2:F:79:PRO:HA	2:F:82:LEU:HD12	1.81	0.61
1:G:90:ASP:HB2	1:G:91:ILE:HD13	1.82	0.61
1:G:209:GLY:O	1:G:213:ALA:N	2.25	0.61
1:G:226:ASN:OD1	1:G:227:GLY:N	2.30	0.61
2:H:253:GLU:O	2:H:257:ALA:N	2.21	0.61
2:J:290:SER:OG	2:J:310:TRP:O	2.15	0.61
1:K:186:ASP:OD1	1:K:198:ALA:N	2.32	0.61
2:L:10:ARG:CB	3:L:401:NAD:O1N	2.48	0.61
1:O:191:ARG:NH2	1:C:358:CYS:O	2.23	0.60
2:P:203:ILE:HG13	2:P:232:VAL:HG12	1.83	0.60
1:Q:60(A):ASP:HB3	1:Q:62:GLU:O	2.01	0.60
2:R:45:LYS:HB2	2:R:57:VAL:HG21	1.81	0.60
2:R:240:VAL:HG13	2:R:309:ALA:HB3	1.83	0.60
1:A:100:VAL:HB	1:A:122(A):LYS:HG2	1.82	0.60

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:147:ALA:O	2:B:317:TYR:OH	2.15	0.60
1:C:156:PRO:HB3	1:C:267:LEU:HD13	1.83	0.60
1:E:238:SER:O	1:E:311:TYR:N	2.32	0.60
1:G:63:THR:HA	1:G:72:LYS:HA	1.83	0.60
1:I:244:VAL:O	1:I:305:VAL:N	2.27	0.60
2:J:214:VAL:HA	2:J:217:VAL:HG22	1.82	0.60
1:K:177:SER:HA	1:K:234:THR:HG23	1.82	0.60
2:L:18:CYS:O	2:L:20:ARG:N	2.34	0.60
2:L:33:THR:HG23	2:L:77:ARG:HD3	1.83	0.60
2:L:181:ASP:HB3	2:L:182:GLN:HE21	1.66	0.60
2:L:220:ASN:O	2:L:224:LYS:NZ	2.25	0.60
2:P:174:THR:HG1	2:P:311:TYR:HH	1.49	0.60
2:P:250:THR:OG1	2:P:254:GLU:OE1	2.16	0.60
2:R:101:ASP:OD2	2:R:104:GLY:N	2.21	0.60
1:C:9:GLY:O	1:C:13:ARG:NH2	2.33	0.60
2:D:10:ARG:HB2	3:D:401:NAD:O1N	2.00	0.60
2:D:45:LYS:HZ2	2:D:53:PHE:HB3	1.64	0.60
2:D:298:MET:HG2	2:D:306:LYS:HB3	1.82	0.60
1:E:315:TRP:O	1:E:318:SER:OG	2.18	0.60
2:F:19:GLY:O	2:F:21:LYS:NZ	2.32	0.60
2:F:204:VAL:N	2:F:231:ARG:O	2.25	0.60
1:G:60:ILE:HB	1:G:64:PHE:HA	1.82	0.60
1:G:104:GLY:HA2	1:G:107:LYS:HE2	1.82	0.60
1:G:236:ASN:HD21	1:G:314:GLU:H	1.49	0.60
1:I:178:TYR:HD2	1:I:233:PRO:HA	1.66	0.60
1:I:183:ARG:HB2	1:I:188:SER:CB	2.29	0.60
2:J:63:ALA:HA	2:J:72:LYS:HA	1.83	0.60
2:J:279:VAL:HB	2:L:202:ASN:HB3	1.83	0.60
1:K:6:ASN:HD22	1:K:95:GLY:H	1.47	0.60
1:K:194:ARG:HB3	1:K:204:VAL:HG23	1.83	0.60
1:K:256:ASN:HA	1:K:259:PHE:HD2	1.65	0.60
2:L:240:VAL:N	2:L:309:ALA:O	2.21	0.60
2:L:293:ASP:OD1	2:L:296:LEU:N	2.28	0.60
1:O:13:ARG:C	1:O:44:LEU:HD11	2.22	0.60
1:O:183:ARG:HH12	1:C:357:GLU:H	1.48	0.60
1:Q:0:LYS:H1	1:Q:0:LYS:HD3	1.67	0.60
1:Q:6:ASN:ND2	1:Q:6:ASN:O	2.34	0.60
2:R:45:LYS:NZ	2:R:53:PHE:O	2.30	0.60
1:A:58:LYS:HZ2	1:A:58:LYS:HA	1.65	0.60
2:B:10:ARG:CA	3:B:401:NAD:O1N	2.50	0.60
1:C:37:VAL:HG12	1:C:59:ILE:HG23	1.84	0.60

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:45:LYS:NZ	1:C:53:PHE:O	2.32	0.60
1:E:13:ARG:C	1:E:17:ARG:HE	2.05	0.60
1:E:256:ASN:HA	1:E:259:PHE:HB2	1.83	0.60
2:F:47:ASP:CG	2:F:49:ILE:H	2.04	0.60
2:F:183:ARG:HH22	2:F:191:ARG:HH12	1.49	0.60
1:I:124:ASP:OD1	1:I:125:ILE:N	2.31	0.60
1:I:192:ASP:HB3	1:I:195:ARG:HB2	1.83	0.60
1:K:320:ARG:NH2	1:K:321:VAL:HG13	2.15	0.60
2:L:242:LEU:HD11	2:L:244:VAL:HG13	1.84	0.60
1:O:58:LYS:HZ3	1:O:60:ILE:HD13	1.67	0.60
1:O:168:VAL:N	1:O:245:ASN:OD1	2.34	0.60
2:P:164:LYS:O	2:P:248:LYS:NZ	2.27	0.60
2:R:316:GLY:HA2	2:R:319:GLN:HB2	1.81	0.60
2:B:194:ARG:NH1	2:D:278:LEU:O	2.24	0.60
1:C:257:ASN:O	1:C:261:LYS:N	2.26	0.60
2:D:80:VAL:HG22	2:D:107:LYS:HD2	1.83	0.60
1:E:63:THR:HA	1:E:72:LYS:HA	1.84	0.60
1:E:188:SER:OG	2:H:39:GLN:OE1	2.20	0.60
2:F:157:PHE:O	2:F:161:LEU:N	2.28	0.60
2:F:301:GLY:HA3	2:H:169:LYS:HE2	1.83	0.60
2:H:217:VAL:HG23	2:H:218:LEU:HG	1.83	0.60
1:I:45:LYS:HG3	1:I:52:THR:HG23	1.83	0.60
1:K:176:HIS:HB3	1:K:231:ARG:HA	1.82	0.60
2:L:115:LYS:NZ	2:L:139:HIS:O	2.31	0.60
2:L:154:LEU:HD21	2:L:210:ALA:HB1	1.82	0.60
2:L:279:VAL:O	2:L:282:ASP:N	2.31	0.60
2:L:297:THR:HG22	2:L:308:ILE:H	1.65	0.60
2:P:203:ILE:HD11	2:P:230:LEU:HB3	1.81	0.60
1:Q:356:GLU:O	1:I:183:ARG:NH2	2.34	0.60
1:A:41:THR:HG23	1:A:57:VAL:HG11	1.82	0.60
1:A:236:ASN:HA	1:A:313:ASN:HD21	1.66	0.60
2:B:273:VAL:HG23	2:B:292:ILE:HB	1.83	0.60
2:D:161:LEU:O	2:D:165:PHE:N	2.34	0.60
2:D:186:ASP:OD2	2:D:197:ARG:NH2	2.35	0.60
2:F:160:VAL:O	2:F:164:LYS:N	2.33	0.60
2:H:42:HIS:O	2:H:46:TYR:N	2.31	0.60
2:H:203:ILE:HD11	2:H:230:LEU:HB3	1.83	0.60
2:H:315:TRP:O	2:H:318:SER:OG	2.19	0.60
1:I:18(A):TRP:NE1	1:I:23:SER:OG	2.32	0.60
2:R:217:VAL:HG23	2:R:218:LEU:HG	1.82	0.60
1:C:183:ARG:NH1	1:C:183:ARG:HA	2.17	0.60

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:1:LEU:O	1:E:26:ASP:N	2.34	0.60
1:E:59:ILE:O	1:E:59:ILE:CD1	2.45	0.60
2:F:183:ARG:HH22	2:F:191:ARG:HH22	1.50	0.60
2:J:204:VAL:HB	2:J:231:ARG:HB2	1.83	0.60
2:J:211:ALA:O	2:J:226:ASN:ND2	2.35	0.60
1:K:40:ALA:HA	1:K:43:LEU:HB2	1.84	0.60
1:K:94:GLU:OE2	1:K:96:THR:OG1	2.19	0.60
1:K:299:VAL:HA	1:K:305:VAL:HA	1.83	0.60
1:O:243:VAL:HB	1:O:306:LYS:HG3	1.84	0.60
2:P:54:ASP:OD1	2:P:54:ASP:N	2.22	0.60
1:Q:170:GLY:HA2	1:Q:244:VAL:HA	1.83	0.60
2:B:179:THR:N	2:B:182:GLN:OE1	2.34	0.60
2:B:324:LEU:HA	2:B:327:ILE:HD12	1.84	0.60
2:D:8:PHE:CZ	2:D:13:ARG:HG3	2.37	0.60
1:E:128:TYR:N	1:E:145:SER:O	2.35	0.60
2:F:203:ILE:HG13	2:F:232:VAL:HG12	1.82	0.60
2:F:312:ASP:OD1	2:F:315:TRP:N	2.27	0.60
1:I:161:LEU:HD23	1:I:165:LEU:HD23	1.83	0.60
1:I:240:VAL:O	1:I:309:ALA:N	2.22	0.60
2:J:1:LEU:HB3	2:J:25:LEU:HA	1.83	0.60
2:J:102:ARG:NH2	2:J:126:PRO:HD3	2.17	0.60
1:K:292:ILE:HG13	1:K:309:ALA:HA	1.84	0.60
2:L:0:LYS:N	2:L:24:PRO:O	2.32	0.60
1:O:31:ASN:HA	1:O:74:VAL:HG12	1.83	0.60
2:R:118:ILE:O	2:R:145:SER:OG	2.19	0.60
2:B:28:VAL:HA	2:B:71:ILE:HG12	1.84	0.60
1:C:47:ASP:HB3	1:C:51:GLY:N	2.17	0.60
1:C:234:THR:OG1	1:C:237:VAL:HG12	2.02	0.60
2:F:36:GLY:HA3	2:F:38:LYS:HZ1	1.67	0.60
2:F:105:ALA:HB1	2:F:116:VAL:HG11	1.84	0.60
2:F:273:VAL:HA	2:F:292:ILE:H	1.65	0.60
1:G:159:LYS:NZ	1:G:163:GLU:OE2	2.32	0.60
1:G:167:ILE:N	1:G:247:GLU:OE2	2.35	0.60
2:H:76:ASP:OD1	2:H:78:ASN:N	2.35	0.60
1:I:325:ALA:O	1:I:329:ALA:N	2.34	0.60
2:L:318:SER:O	2:L:322:VAL:N	2.19	0.60
1:O:129:VAL:N	1:O:133:ASN:OD1	2.31	0.60
1:O:362:GLU:N	1:C:181:ASP:OD2	2.34	0.60
1:Q:299:VAL:HA	1:Q:305:VAL:HG12	1.82	0.60
2:R:206:THR:OG1	2:R:207:SER:N	2.35	0.60
1:A:124:ASP:H	1:G:143:ILE:HD12	1.67	0.60

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:13:ARG:HB3	2:B:44:LEU:HA	1.84	0.60
2:B:94:GLU:OE2	2:B:96:THR:OG1	2.18	0.60
2:B:118:ILE:H	2:B:145:SER:HA	1.67	0.60
2:B:228:ILE:H	2:D:306:LYS:HZ2	1.48	0.60
1:E:18:CYS:O	1:E:20:ARG:HB2	2.02	0.60
2:F:10:ARG:HH22	1:G:185:LEU:HD11	1.61	0.60
1:G:32:ASP:N	1:G:74:VAL:O	2.20	0.60
1:I:134:GLU:CD	1:I:134:GLU:H	2.06	0.60
1:K:37:VAL:HG12	1:K:59:ILE:HG12	1.84	0.60
2:P:58:LYS:HE2	2:P:59:THR:H	1.67	0.60
2:P:265:ASN:OD1	2:P:266:GLU:N	2.35	0.60
1:Q:242:LEU:HB3	1:Q:307:VAL:HG13	1.83	0.60
2:R:218:LEU:O	2:R:222:LYS:NZ	2.31	0.60
2:R:253:GLU:O	2:R:257:ALA:N	2.22	0.60
1:A:47:ASP:CG	1:A:49:ILE:H	2.04	0.60
2:D:129:VAL:N	2:D:133:ASN:OD1	2.35	0.60
2:D:242:LEU:HD11	2:D:244:VAL:HG13	1.83	0.60
1:E:211:ALA:HB3	1:E:212:LYS:HZ1	1.67	0.60
2:F:10:ARG:HA	2:F:13:ARG:HD2	1.82	0.60
1:G:2:LYS:NZ	1:G:87:LEU:O	2.27	0.60
1:I:36:GLY:O	1:I:39:SER:OG	2.20	0.60
1:I:104:GLY:HA2	1:I:107:LYS:HD2	1.84	0.60
1:I:240:VAL:N	1:I:309:ALA:O	2.32	0.60
1:K:86:GLU:OE1	1:K:86:GLU:N	2.19	0.60
2:L:287:ASP:OD1	2:L:315:TRP:NE1	2.34	0.60
1:O:45:LYS:HZ2	1:O:53:PHE:HB3	1.67	0.59
1:O:60:ILE:HB	1:O:63:THR:HB	1.84	0.59
2:P:301:GLY:HA3	2:R:169:LYS:HE2	1.83	0.59
1:Q:147:ALA:O	1:Q:317:TYR:OH	2.10	0.59
2:R:7:GLY:O	2:R:9:GLY:N	2.34	0.59
2:B:3:VAL:HB	2:B:27:VAL:HG22	1.82	0.59
2:B:172:MET:HG3	2:B:242:LEU:HD13	1.83	0.59
1:C:107:LYS:O	1:C:111:ALA:N	2.34	0.59
2:D:18(A):TRP:HE1	2:D:23:SER:HG	1.45	0.59
2:D:30:ILE:HG22	2:D:31:ASN:H	1.67	0.59
2:D:126:PRO:HD2	2:D:144:ILE:HA	1.83	0.59
1:E:101:ASP:HB2	1:E:103:PRO:HD2	1.84	0.59
1:E:162:ASP:HA	1:E:166:GLY:H	1.67	0.59
1:E:203:ILE:HG12	1:E:204:VAL:N	2.15	0.59
1:G:18:CYS:O	1:G:20:ARG:N	2.35	0.59
1:G:156:PRO:HG2	1:G:290:SER:OG	2.02	0.59

*Continued on next page...*

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:174:THR:HG22	1:G:229:ALA:HB1	1.83	0.59
2:H:206:THR:OG1	2:H:207:SER:N	2.35	0.59
1:I:60(A):ASP:OD2	1:I:61:ASN:ND2	2.35	0.59
2:J:18:CYS:O	2:J:20:ARG:N	2.35	0.59
2:J:45:LYS:NZ	2:J:53:PHE:O	2.34	0.59
1:O:37:VAL:HG13	1:O:61:ASN:C	2.23	0.59
1:O:64:PHE:N	1:O:71:ILE:O	2.35	0.59
1:O:238:SER:OG	1:O:311:TYR:O	2.14	0.59
2:P:213:ALA:HA	2:P:216:LEU:HB2	1.84	0.59
2:R:203:ILE:HG23	2:R:205:PRO:HD3	1.84	0.59
1:A:56:ASP:N	1:A:67:ASP:OD2	2.35	0.59
1:A:127:THR:O	1:A:133:ASN:ND2	2.35	0.59
2:B:1:LEU:HB3	2:B:25:LEU:HA	1.82	0.59
2:B:319:GLN:O	2:B:323:ASP:N	2.26	0.59
1:C:119:THR:O	1:C:119:THR:OG1	2.18	0.59
2:D:272:SER:OG	2:D:273:VAL:N	2.34	0.59
2:D:324:LEU:HA	2:D:327:ILE:HD12	1.83	0.59
2:F:177:SER:OG	2:F:234:THR:O	2.14	0.59
1:G:178:TYR:HD2	1:G:233:PRO:HA	1.66	0.59
1:I:37:VAL:O	1:I:41:THR:N	2.23	0.59
1:I:182:GLN:HB3	1:I:195:ARG:HH11	1.68	0.59
2:J:38:LYS:N	2:J:38:LYS:HZ2	2.00	0.59
1:K:192:ASP:OD2	1:K:195:ARG:N	2.23	0.59
1:K:206:THR:N	1:K:229:ALA:O	2.34	0.59
2:L:94:GLU:OE2	2:L:98:VAL:N	2.36	0.59
1:O:37:VAL:CG1	1:O:61:ASN:C	2.70	0.59
1:O:45:LYS:NZ	1:O:53:PHE:HB3	2.17	0.59
1:O:209:GLY:O	1:O:212:LYS:HG2	2.01	0.59
1:O:272:ASP:OD1	1:O:273:VAL:N	2.31	0.59
2:P:116:VAL:N	2:P:142:THR:O	2.25	0.59
1:Q:11:ILE:HG22	3:Q:401:NAD:O2N	2.01	0.59
1:A:251:THR:OG1	1:A:253:GLU:OE1	2.12	0.59
2:B:197:ARG:NH1	1:C:46:TYR:O	2.33	0.59
1:C:105:ALA:HA	1:C:108:HIS:CD2	2.38	0.59
1:C:209:GLY:O	1:C:213:ALA:N	2.20	0.59
2:F:94:GLU:O	2:F:119:THR:OG1	2.17	0.59
1:I:17:ARG:NH2	1:I:50:LEU:O	2.35	0.59
1:I:21:LYS:H	1:I:21:LYS:NZ	1.95	0.59
2:J:15:PHE:HZ	2:J:325:ALA:HB2	1.66	0.59
2:J:30:ILE:O	2:J:73:VAL:HA	2.02	0.59
2:J:91:LEU:HD21	2:J:93:ILE:HD11	1.84	0.59

Continued on next page...

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:J:204:VAL:O	2:J:230:LEU:HA	2.01	0.59
1:K:315:TRP:O	1:K:318:SER:OG	2.10	0.59
2:L:115:LYS:HD3	2:L:142:THR:HA	1.85	0.59
2:L:147:ALA:O	2:L:317:TYR:OH	2.20	0.59
1:O:13:ARG:O	1:O:44:LEU:HD11	2.01	0.59
1:A:172:MET:SD	1:A:173:THR:N	2.75	0.59
2:B:214:VAL:HA	2:B:217:VAL:HG22	1.82	0.59
1:C:162:ASP:HA	1:C:166:GLY:H	1.66	0.59
2:D:312:ASP:OD2	2:D:315:TRP:HB3	2.03	0.59
1:E:83:PRO:HB3	1:E:86:GLU:HB2	1.84	0.59
1:E:103:PRO:O	1:E:107:LYS:N	2.25	0.59
1:E:139:HIS:CE1	1:E:332:TRP:HA	2.37	0.59
2:F:206:THR:OG1	2:F:207:SER:N	2.35	0.59
2:H:250:THR:OG1	2:H:251:PHE:N	2.36	0.59
2:H:265:ASN:N	2:H:265:ASN:OD1	2.33	0.59
1:K:246:ILE:HG13	1:K:248:LYS:H	1.67	0.59
2:P:281:ILE:HG23	2:P:282:ASP:OD1	2.03	0.59
2:R:331:LYS:HB2	2:R:333:GLN:HE22	1.67	0.59
1:C:251:THR:HA	1:C:299:VAL:HG11	1.85	0.59
1:E:193:LEU:HD22	1:G:277:PRO:HG2	1.84	0.59
2:F:13:ARG:O	2:F:17:ARG:N	2.29	0.59
2:F:27:VAL:O	2:F:69:LYS:NZ	2.35	0.59
2:F:174:THR:HA	2:F:240:VAL:HB	1.84	0.59
2:F:182:GLN:HA	2:F:195:ARG:HB3	1.84	0.59
2:F:290:SER:OG	2:F:310:TRP:O	2.12	0.59
1:G:145:SER:OG	1:G:146:ASN:N	2.36	0.59
1:G:220:GLN:OE1	1:G:220:GLN:N	2.34	0.59
2:H:104:GLY:HA2	2:H:107:LYS:HB2	1.84	0.59
2:H:139:HIS:NE2	2:H:334:UNK:O	2.35	0.59
2:H:331:LYS:HB2	2:H:333:GLN:HE22	1.67	0.59
1:K:29:VAL:HA	1:K:72:LYS:O	2.03	0.59
1:K:220:GLN:OE1	1:K:221:LEU:N	2.36	0.59
2:P:206:THR:OG1	2:P:207:SER:N	2.35	0.59
1:Q:192:ASP:OD2	1:Q:195:ARG:NH1	2.35	0.59
1:A:34:GLY:O	1:A:39:SER:OG	2.19	0.59
1:A:342:GLY:O	2:F:75:SER:N	2.35	0.59
2:B:92:VAL:HB	2:B:116:VAL:HG22	1.84	0.59
1:C:356:GLU:O	1:C:358:CYS:N	2.35	0.59
2:D:105:ALA:HB1	2:D:116:VAL:HG11	1.85	0.59
1:G:171:THR:O	1:G:243:VAL:N	2.35	0.59
2:H:33:THR:H	3:H:401:NAD:C2A	2.16	0.59

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:253:GLU:HA	2:H:256:ASN:HB2	1.83	0.59
1:I:84:TRP:O	1:I:88:GLY:N	2.36	0.59
1:I:213:ALA:HA	1:I:216:LEU:HD23	1.84	0.59
2:J:191:ARG:NH1	2:J:191:ARG:H	2.00	0.59
1:K:64:PHE:HE1	1:K:73:VAL:HB	1.66	0.59
1:K:74:VAL:HG12	1:K:75:SER:H	1.67	0.59
1:K:118:ILE:O	1:K:145:SER:OG	2.20	0.59
1:O:60(A):ASP:O	1:O:62:GLU:N	2.35	0.59
1:O:66:ILE:HD12	1:O:69:LYS:HD2	1.85	0.59
1:Q:10:ARG:N	3:Q:401:NAD:O2N	2.35	0.59
2:R:253:GLU:HA	2:R:256:ASN:HB2	1.83	0.59
2:R:318:SER:O	2:R:322:VAL:HG23	2.03	0.59
1:C:220:GLN:H	1:C:220:GLN:CD	2.04	0.59
1:G:84:TRP:HB3	1:G:89:ILE:HB	1.83	0.59
1:G:127:THR:O	1:G:133:ASN:ND2	2.35	0.59
2:H:79:PRO:HB3	2:H:108:HIS:CE1	2.38	0.59
1:I:4:ALA:O	1:I:93:ILE:N	2.33	0.59
1:I:115:LYS:HA	1:I:142:ASN:HB3	1.85	0.59
1:K:5:ILE:HA	1:K:93:ILE:H	1.68	0.59
1:K:161:LEU:O	1:K:165:LEU:N	2.30	0.59
1:K:312:ASP:OD2	1:K:315:TRP:N	2.36	0.59
2:L:79:PRO:HB3	2:L:108:HIS:CE1	2.37	0.59
2:L:115:LYS:NZ	2:L:141:ASP:O	2.35	0.59
1:O:169:LYS:HA	1:O:224:LYS:HB2	1.85	0.59
1:O:204:VAL:N	1:O:231:ARG:O	2.34	0.59
2:R:28:VAL:O	2:R:72:LYS:N	2.21	0.59
2:R:147:ALA:HB1	2:R:151:THR:HB	1.85	0.59
2:R:250:THR:OG1	2:R:251:PHE:N	2.36	0.59
1:C:74:VAL:HG12	1:C:75:SER:H	1.67	0.59
1:C:256:ASN:HA	1:C:259:PHE:HB2	1.85	0.59
2:D:237:VAL:HG22	2:D:312:ASP:HA	1.85	0.59
2:F:213:ALA:HA	2:F:216:LEU:HB2	1.84	0.59
2:H:299:VAL:HG22	2:H:305:VAL:HG13	1.83	0.59
2:J:11:ILE:HG12	3:J:401:NAD:PN	2.42	0.59
2:J:17:ARG:CZ	2:J:53:PHE:HA	2.32	0.59
2:J:280:SER:OG	2:L:202:ASN:ND2	2.34	0.59
2:L:132:VAL:HG22	2:L:159:LYS:HE2	1.85	0.59
1:Q:184:LEU:O	1:Q:198:ALA:HA	2.02	0.59
2:R:4:ALA:HB3	2:R:84:TRP:CZ3	2.38	0.59
2:R:104:GLY:HA2	2:R:107:LYS:HB2	1.84	0.59
1:A:9:GLY:O	1:A:13:ARG:N	2.27	0.59

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:42:HIS:O	2:B:46:TYR:N	2.32	0.59
2:D:42:HIS:HA	2:D:45:LYS:HB3	1.84	0.59
2:D:47:ASP:CG	2:D:49:ILE:H	2.06	0.59
2:F:164:LYS:O	2:F:248:LYS:NZ	2.27	0.59
1:G:7:GLY:N	1:G:31:ASN:HB3	2.13	0.59
1:G:194:ARG:HG2	1:G:206:THR:HB	1.84	0.59
1:I:312:ASP:OD2	1:I:315:TRP:N	2.34	0.59
2:J:8:PHE:CZ	2:J:13:ARG:HG3	2.38	0.59
2:J:56:ASP:N	2:J:67:ASP:OD2	2.36	0.59
2:J:106:GLY:O	2:J:110:GLN:N	2.25	0.59
2:J:251:PHE:HE2	2:J:253:GLU:HB3	1.67	0.59
1:K:72:LYS:NZ	1:K:73:VAL:O	2.31	0.59
2:L:8:PHE:CZ	2:L:13:ARG:HG3	2.37	0.59
1:O:184:LEU:HB3	2:R:184:LEU:HB2	1.83	0.59
2:P:167:ILE:HG21	2:P:225:LEU:HD11	1.85	0.59
1:Q:238:SER:HB2	1:Q:311:TYR:CZ	2.37	0.59
2:R:176:HIS:ND1	2:R:177:SER:O	2.31	0.59
2:R:179:THR:H	2:R:182:GLN:HE22	1.51	0.59
2:R:299:VAL:HG22	2:R:305:VAL:HG13	1.84	0.59
1:A:3:VAL:N	1:A:26:ASP:O	2.35	0.59
1:A:18(A):TRP:NE1	1:A:25:LEU:O	2.34	0.59
1:C:213:ALA:HA	1:C:216:LEU:HD23	1.85	0.59
1:C:297:THR:HA	1:C:306:LYS:NZ	2.18	0.59
2:D:100:VAL:HG13	2:D:122(A):LYS:HB2	1.84	0.59
1:E:281:VAL:O	1:E:284:ARG:N	2.33	0.59
2:F:10:ARG:HH12	1:G:185:LEU:HB2	1.65	0.59
2:F:10:ARG:HH11	1:G:185:LEU:HB3	1.64	0.59
2:F:133:ASN:N	2:F:133:ASN:OD1	2.35	0.59
2:F:181:ASP:OD1	2:F:195:ARG:NH1	2.36	0.59
1:G:315:TRP:O	1:G:318:SER:OG	2.21	0.59
1:I:315:TRP:O	1:I:318:SER:OG	2.20	0.59
2:J:172:MET:HG3	2:J:242:LEU:HD13	1.85	0.59
2:J:318:SER:O	2:J:322:VAL:HG23	2.03	0.59
1:K:93:ILE:HA	1:K:117:ILE:O	2.02	0.59
2:L:206:THR:HG23	2:L:229:ALA:HB3	1.85	0.59
2:L:272:SER:OG	2:L:273:VAL:N	2.35	0.59
1:O:28:VAL:O	1:O:72:LYS:N	2.35	0.58
2:P:174:THR:HA	2:P:240:VAL:HB	1.85	0.58
1:Q:204:VAL:O	1:Q:231:ARG:N	2.32	0.58
2:R:162:ASP:OD1	2:R:167:ILE:N	2.30	0.58
1:A:20:ARG:HE	1:A:322:VAL:HG11	1.68	0.58

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:253:GLU:OE1	1:A:253:GLU:N	2.28	0.58
1:A:301:GLY:HA3	1:A:304:MET:HB3	1.84	0.58
2:D:115:LYS:NZ	2:D:141:ASP:O	2.35	0.58
2:D:204:VAL:O	2:D:230:LEU:HA	2.03	0.58
2:D:318:SER:HA	2:D:321:VAL:HB	1.85	0.58
1:E:195:ARG:HH22	1:E:231:ARG:NH1	2.00	0.58
1:E:215:SER:OG	1:E:218:LEU:O	2.18	0.58
1:I:87:LEU:HB3	1:I:89:ILE:HG12	1.84	0.58
1:I:129:VAL:HG12	1:I:133:ASN:HD21	1.68	0.58
2:L:169:LYS:O	2:L:245:GLN:N	2.36	0.58
1:Q:251:THR:OG1	1:Q:253:GLU:OE1	2.14	0.58
1:Q:254:ASP:OD1	1:Q:255:VAL:N	2.33	0.58
2:R:115:LYS:NZ	2:R:141:ASP:O	2.36	0.58
2:R:129:VAL:HA	2:R:324:LEU:HD11	1.85	0.58
1:A:275:ASP:HA	1:A:293:ASP:HB2	1.83	0.58
2:D:65:SER:HA	2:D:70:VAL:CA	2.32	0.58
1:E:18(A):TRP:CZ3	1:E:69:LYS:HD3	2.38	0.58
2:H:318:SER:O	2:H:322:VAL:HG23	2.03	0.58
1:I:107:LYS:O	1:I:111:ALA:N	2.35	0.58
2:J:177:SER:OG	2:J:234:THR:O	2.14	0.58
2:J:193:LEU:H	2:J:193:LEU:HD12	1.68	0.58
2:J:275:ASP:OD1	2:J:294:SER:N	2.36	0.58
1:K:281:VAL:HG12	1:K:284:ARG:HH11	1.68	0.58
1:O:83:PRO:HA	1:O:86:GLU:CD	2.24	0.58
1:O:90:ASP:HA	1:O:114:LYS:HZ2	1.68	0.58
1:O:176:HIS:N	1:O:230:LEU:O	2.32	0.58
1:Q:12:GLY:HA2	1:Q:15:PHE:HB3	1.84	0.58
1:Q:60:ILE:HG12	1:Q:64:PHE:HA	1.85	0.58
2:B:8:PHE:CZ	2:B:13:ARG:HG3	2.39	0.58
2:B:56:ASP:N	2:B:67:ASP:OD2	2.36	0.58
1:C:249:GLY:HA3	1:C:302:GLY:HA3	1.83	0.58
2:D:84:TRP:O	2:D:88:GLY:N	2.36	0.58
1:E:3:VAL:N	1:E:26:ASP:O	2.30	0.58
1:E:232:VAL:HG23	1:E:234:THR:HG22	1.85	0.58
1:G:218:LEU:HD23	1:G:220:GLN:HE21	1.67	0.58
1:G:254:ASP:OD1	1:G:255:VAL:N	2.33	0.58
1:K:118:ILE:N	1:K:145:SER:HA	2.15	0.58
2:L:161:LEU:O	2:L:165:PHE:N	2.34	0.58
2:L:203:ILE:HD11	2:L:230:LEU:HB3	1.85	0.58
1:O:18(B):HIS:HD2	1:O:19:GLY:N	2.00	0.58
2:P:267:LEU:HB3	2:P:271:LEU:HB2	1.86	0.58

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:Q:236:ASN:HD21	1:Q:314:GLU:H	1.51	0.58
1:Q:291:THR:HB	1:Q:310:TRP:HB2	1.85	0.58
1:A:0:LYS:N	1:A:24:PRO:O	2.36	0.58
1:A:28:VAL:HG23	1:A:29:VAL:HG23	1.86	0.58
1:A:47:ASP:OD1	1:A:48:SER:N	2.36	0.58
1:A:65:SER:OG	1:A:69:LYS:N	2.35	0.58
1:A:139:HIS:CD2	1:A:333:PRO:HD3	2.39	0.58
1:A:287:ASP:O	1:A:320:ARG:NH1	2.34	0.58
2:B:251:PHE:HE2	2:B:253:GLU:HB3	1.68	0.58
1:C:14:ASN:ND2	1:C:14:ASN:H	2.00	0.58
2:D:32:ASP:OD2	3:D:401:NAD:O3B	2.18	0.58
1:G:317:TYR:O	1:G:321:VAL:N	2.29	0.58
1:I:45:LYS:NZ	1:I:55:ALA:O	2.27	0.58
2:J:90:ASP:HA	2:J:114:LYS:HB2	1.86	0.58
1:K:41:THR:HG21	1:K:59:ILE:HG13	1.84	0.58
2:L:271:LEU:HD21	2:L:290:SER:HB3	1.86	0.58
1:O:194:ARG:NH1	1:Q:278:LEU:O	2.36	0.58
2:P:89:ILE:N	2:P:112:GLY:O	2.35	0.58
2:P:257:ALA:HA	2:P:260:ARG:HB2	1.86	0.58
1:Q:186:ASP:OD1	1:Q:198:ALA:N	2.36	0.58
2:B:249:LYS:HD2	2:B:302:ASP:HB2	1.84	0.58
2:B:318:SER:O	2:B:322:VAL:HG23	2.03	0.58
1:C:62:GLU:HB2	1:C:72:LYS:HE3	1.85	0.58
2:D:169:LYS:O	2:D:245:GLN:N	2.37	0.58
1:E:168:VAL:HG23	1:E:247:GLU:HB3	1.84	0.58
2:F:30:ILE:O	2:F:73:VAL:HA	2.03	0.58
2:F:102:ARG:NH2	2:F:124:ASP:O	2.37	0.58
2:F:102:ARG:HH22	2:F:126:PRO:HD2	1.68	0.58
2:F:202:ASN:HD21	2:H:281:ILE:H	1.51	0.58
1:G:165:LEU:HD21	1:G:305:VAL:HG21	1.85	0.58
1:G:287:ASP:OD1	1:G:319:GLN:NE2	2.23	0.58
2:H:115:LYS:NZ	2:H:141:ASP:O	2.36	0.58
2:H:166:GLY:O	2:H:247:SER:N	2.22	0.58
1:I:2:LYS:HB2	1:I:89:ILE:HA	1.83	0.58
1:I:220:GLN:HG2	1:I:221:LEU:HD23	1.84	0.58
1:I:290:SER:OG	1:I:291:THR:N	2.37	0.58
1:K:72:LYS:HZ2	1:K:74:VAL:HG22	1.67	0.58
1:K:184:LEU:HG	1:K:185:LEU:HG	1.86	0.58
2:L:80:VAL:HG22	2:L:107:LYS:HD2	1.86	0.58
2:R:172:MET:HG3	2:R:242:LEU:HD13	1.86	0.58
2:R:326:ASP:O	2:R:330:ASN:N	2.35	0.58

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:151:THR:OG1	1:A:152:ASN:OD1	2.21	0.58
2:B:40:ALA:HA	2:B:43:LEU:HD12	1.84	0.58
2:B:44:LEU:HD23	2:B:57:VAL:HB	1.86	0.58
2:B:204:VAL:O	2:B:230:LEU:HA	2.03	0.58
2:B:217:VAL:HG23	2:B:218:LEU:HG	1.86	0.58
1:C:47:ASP:OD1	1:C:48:SER:N	2.35	0.58
2:D:0:LYS:N	2:D:24:PRO:O	2.33	0.58
2:D:94:GLU:OE2	2:D:98:VAL:N	2.36	0.58
1:E:262:ALA:HB1	1:E:267:LEU:HD12	1.85	0.58
2:F:40:ALA:HA	2:F:43:LEU:HD12	1.86	0.58
2:H:38:LYS:HZ3	2:H:39:GLN:HG3	1.69	0.58
2:H:176:HIS:ND1	2:H:177:SER:O	2.32	0.58
2:H:204:VAL:HB	2:H:231:ARG:HB2	1.84	0.58
1:I:5:ILE:HB	1:I:30:VAL:HG13	1.86	0.58
1:I:298:MET:HG2	1:I:306:LYS:HB3	1.86	0.58
2:J:2:LYS:HA	2:J:2:LYS:HZ2	1.68	0.58
2:J:3:VAL:HB	2:J:27:VAL:HG22	1.86	0.58
2:J:6:ASN:HB3	2:J:94:GLU:HA	1.84	0.58
1:O:62:GLU:HB3	1:O:72:LYS:CE	2.33	0.58
2:P:182:GLN:HA	2:P:195:ARG:HB3	1.86	0.58
1:Q:20:ARG:HA	1:Q:20:ARG:NE	2.19	0.58
1:A:107:LYS:O	1:A:111:ALA:N	2.33	0.58
1:A:177:SER:HB3	1:A:234:THR:O	2.04	0.58
2:B:15:PHE:HZ	2:B:325:ALA:HB2	1.67	0.58
2:B:173:THR:N	2:B:241:ASP:OD1	2.37	0.58
2:B:211:ALA:O	2:B:226:ASN:ND2	2.36	0.58
1:C:85:ALA:H	1:C:112:GLY:HA3	1.67	0.58
1:C:184:LEU:H	1:C:184:LEU:HD23	1.68	0.58
2:D:78:ASN:HD22	2:D:81:ASN:CG	2.07	0.58
1:K:5:ILE:HG23	1:K:30:VAL:HG12	1.86	0.58
1:K:321:VAL:HA	1:K:324:LEU:HB2	1.84	0.58
2:L:8:PHE:H	2:L:32:ASP:HB2	1.69	0.58
1:O:151:THR:OG1	1:O:152:ASN:N	2.36	0.58
1:O:313:ASN:N	1:O:313:ASN:OD1	2.36	0.58
2:P:78:ASN:O	2:P:82:LEU:HG	2.03	0.58
2:P:179:THR:N	2:P:182:GLN:OE1	2.24	0.58
1:Q:132:VAL:N	1:Q:134:GLU:OE1	2.37	0.58
1:Q:139(A):ASP:OD1	1:Q:139(A):ASP:N	2.35	0.58
1:Q:319:GLN:O	1:Q:323:ASP:N	2.34	0.58
1:A:28:VAL:HA	1:A:71:ILE:HG12	1.86	0.58
1:A:48:SER:N	2:D:197:ARG:HH22	2.02	0.58

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:60:ILE:HB	1:A:64:PHE:HA	1.85	0.58
1:A:182:GLN:HG2	1:A:204:VAL:HG21	1.83	0.58
1:A:254:ASP:OD1	1:A:255:VAL:N	2.36	0.58
2:B:202:ASN:HD22	2:D:279:VAL:HB	1.68	0.58
2:B:281:ILE:HG13	2:B:284:ARG:HE	1.67	0.58
1:C:86:GLU:OE1	1:C:86:GLU:N	2.19	0.58
2:D:132:VAL:HG22	2:D:159:LYS:HE2	1.86	0.58
1:E:120:ALA:O	1:E:146:ASN:ND2	2.36	0.58
1:E:361:TYR:H	1:K:195:ARG:HH12	1.52	0.58
2:F:10:ARG:CA	3:F:401:NAD:O1N	2.51	0.58
1:I:65:SER:OG	1:I:66:ILE:N	2.35	0.58
1:I:203:ILE:O	1:I:205:PRO:HD3	2.03	0.58
2:J:47:ASP:OD1	2:J:48:SER:N	2.37	0.58
2:J:228:ILE:H	2:L:306:LYS:HZ2	1.51	0.58
1:K:102:GLY:O	1:K:106:GLY:N	2.27	0.58
1:O:241:ASP:OD1	1:O:307:VAL:N	2.36	0.58
1:Q:145:SER:OG	1:Q:146:ASN:N	2.37	0.58
1:A:3:VAL:HB	1:A:27:VAL:HA	1.86	0.58
2:B:250:THR:N	2:B:302:ASP:HB3	2.13	0.58
1:C:25:LEU:HD11	1:C:329:ALA:HB2	1.84	0.58
1:G:60(A):ASP:OD1	1:G:61:ASN:N	2.32	0.58
2:H:65:SER:HA	2:H:70:VAL:HA	1.84	0.58
2:H:129:VAL:HA	2:H:324:LEU:HD11	1.85	0.58
2:J:281:ILE:H	2:L:202:ASN:HD21	1.50	0.58
1:K:31:ASN:ND2	1:K:76:ASN:O	2.37	0.58
1:K:217:VAL:HG23	1:K:218:LEU:HD22	1.85	0.58
1:K:264:ALA:HA	1:K:268:LYS:NZ	2.19	0.58
2:L:6:ASN:N	2:L:93:ILE:O	2.36	0.58
2:L:270:ILE:HG23	2:L:320:ARG:HD2	1.86	0.58
2:P:38:LYS:N	2:P:38:LYS:HZ2	2.02	0.58
1:Q:258:ALA:O	1:Q:262:ALA:N	2.33	0.58
2:R:13:ARG:O	2:R:17:ARG:N	2.26	0.58
1:A:65:SER:HA	1:A:69:LYS:O	2.04	0.58
1:C:6:ASN:ND2	1:C:95:GLY:H	2.02	0.58
1:E:310:TRP:HH2	1:G:204:VAL:HG22	1.69	0.58
1:E:361:TYR:H	1:K:195:ARG:NH1	2.01	0.58
1:G:10:ARG:CZ	1:G:13:ARG:HE	2.17	0.58
1:G:132:VAL:HG11	1:G:218:LEU:HD11	1.86	0.58
2:H:24:PRO:HB2	2:H:329:ALA:HB1	1.86	0.58
2:J:14:ASN:HD21	2:J:315:TRP:HA	1.69	0.58
2:J:237:VAL:HG21	2:J:284:ARG:HA	1.84	0.58

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:142:ASN:HD22	1:K:143:ILE:HG13	1.69	0.58
1:K:318:SER:OG	1:K:319:GLN:OE1	2.21	0.58
1:O:147:ALA:O	1:O:152:ASN:ND2	2.35	0.57
1:O:238:SER:O	1:O:311:TYR:N	2.37	0.57
2:P:133:ASN:OD1	2:P:133:ASN:N	2.34	0.57
2:R:157:PHE:HA	2:R:160:VAL:HB	1.86	0.57
1:A:312:ASP:OD2	1:A:315:TRP:N	2.35	0.57
1:C:29:VAL:HA	1:C:72:LYS:O	2.03	0.57
1:C:129:VAL:HG13	1:C:132:VAL:HB	1.86	0.57
2:D:39:GLN:O	2:D:43:LEU:HG	2.03	0.57
2:D:287:ASP:OD1	2:D:315:TRP:NE1	2.31	0.57
1:E:242:LEU:HB3	1:E:307:VAL:HG13	1.86	0.57
1:G:37:VAL:HA	1:G:40:ALA:HB3	1.86	0.57
1:G:332:TRP:O	1:G:334:GLY:N	2.32	0.57
1:I:328:VAL:O	1:I:331:LYS:HG2	2.04	0.57
2:J:263:ALA:HA	2:J:267:LEU:HB2	1.85	0.57
2:L:42:HIS:HA	2:L:45:LYS:HB3	1.86	0.57
2:L:63:ALA:HB1	2:L:70:VAL:HG23	1.86	0.57
2:P:271:LEU:HD12	2:P:290:SER:HB3	1.86	0.57
2:R:85:GLY:N	2:R:111:ALA:O	2.37	0.57
2:R:139:HIS:NE2	2:R:334:UNK:O	2.36	0.57
1:A:173:THR:HA	1:A:228:ILE:O	2.04	0.57
1:A:184:LEU:HB2	2:D:184:LEU:HB2	1.87	0.57
2:B:20:ARG:HG3	2:B:322:VAL:HG11	1.86	0.57
2:B:166:GLY:O	2:B:247:SER:N	2.30	0.57
2:D:203:ILE:HG23	2:D:205:PRO:HD3	1.85	0.57
1:E:124:ASP:OD1	1:E:124:ASP:N	2.37	0.57
1:E:151:THR:HG21	1:E:213:ALA:HB3	1.85	0.57
1:E:238:SER:OG	1:E:311:TYR:O	2.20	0.57
1:G:114:LYS:O	1:G:142:ASN:HB2	2.03	0.57
2:H:147:ALA:HB1	2:H:151:THR:HB	1.85	0.57
1:I:177:SER:OG	1:I:313:ASN:ND2	2.37	0.57
1:I:257:ASN:O	1:I:261:LYS:N	2.25	0.57
2:J:217:VAL:HG23	2:J:218:LEU:HG	1.86	0.57
1:K:42:HIS:NE2	2:L:277:PRO:O	2.32	0.57
2:L:84:TRP:O	2:L:88:GLY:N	2.38	0.57
1:O:318:SER:O	1:O:322:VAL:N	2.19	0.57
1:Q:24:PRO:HB2	1:Q:329:ALA:HB1	1.87	0.57
1:Q:177:SER:OG	1:Q:237:VAL:N	2.26	0.57
2:R:24:PRO:HB2	2:R:329:ALA:HB1	1.87	0.57
1:A:176:HIS:N	1:A:230:LEU:O	2.37	0.57

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:272:ASP:O	1:A:291:THR:HA	2.04	0.57
2:B:90:ASP:HA	2:B:114:LYS:HB2	1.85	0.57
2:B:203:ILE:HG13	2:B:232:VAL:HG12	1.86	0.57
1:C:176:HIS:O	1:C:232:VAL:N	2.32	0.57
2:D:270:ILE:HG23	2:D:320:ARG:HD2	1.85	0.57
1:E:176:HIS:HB3	1:E:231:ARG:HG3	1.86	0.57
1:E:267:LEU:HD13	1:E:271:LEU:HD12	1.86	0.57
2:F:47:ASP:OD1	2:F:48:SER:N	2.37	0.57
2:F:167:ILE:HG21	2:F:225:LEU:HD11	1.85	0.57
2:H:242:LEU:HB3	2:H:307:VAL:HG22	1.87	0.57
1:I:181:ASP:OD1	1:I:181:ASP:N	2.35	0.57
1:K:14:ASN:ND2	1:K:14:ASN:H	2.03	0.57
1:K:105:ALA:HA	1:K:108:HIS:CD2	2.39	0.57
2:L:1:LEU:N	2:L:24:PRO:O	2.25	0.57
2:L:255:VAL:O	2:L:259:PHE:N	2.34	0.57
1:A:183:ARG:HH21	1:A:190:HIS:HB3	1.69	0.57
2:B:18:CYS:O	2:B:20:ARG:N	2.37	0.57
2:B:183:ARG:HH12	2:B:190:HIS:CD2	2.22	0.57
2:B:249:LYS:NZ	2:B:301:GLY:O	2.31	0.57
1:E:190:HIS:O	2:H:39:GLN:NE2	2.37	0.57
2:F:162:ASP:OD1	2:F:167:ILE:N	2.30	0.57
1:G:20:ARG:NE	1:G:20:ARG:HA	2.18	0.57
1:G:40:ALA:HA	1:G:43:LEU:HD12	1.85	0.57
1:G:126:PRO:HD2	1:G:144:ILE:HA	1.86	0.57
2:H:56:ASP:OD2	2:H:67:ASP:N	2.37	0.57
2:H:205:PRO:HA	2:H:230:LEU:HD23	1.86	0.57
1:I:112:GLY:O	1:I:114:LYS:NZ	2.32	0.57
1:K:85:ALA:H	1:K:112:GLY:HA3	1.68	0.57
1:K:115:LYS:NZ	1:K:332:TRP:HE1	2.03	0.57
1:K:132:VAL:N	1:K:134:GLU:OE1	2.38	0.57
1:K:214:VAL:O	1:K:218:LEU:N	2.37	0.57
2:L:18(A):TRP:NE1	2:L:25:LEU:O	2.35	0.57
2:L:65:SER:HA	2:L:70:VAL:CA	2.35	0.57
2:L:312:ASP:OD2	2:L:315:TRP:HB3	2.04	0.57
2:L:315:TRP:O	2:L:318:SER:OG	2.22	0.57
1:Q:31:ASN:HA	1:Q:74:VAL:CG1	2.32	0.57
1:Q:114:LYS:O	1:Q:142:ASN:ND2	2.28	0.57
1:Q:358:CYS:HB2	1:I:190:HIS:CE1	2.39	0.57
2:R:205:PRO:HA	2:R:230:LEU:HD23	1.87	0.57
1:A:240:VAL:HG22	1:A:309:ALA:HB3	1.84	0.57
2:B:17:ARG:CZ	2:B:53:PHE:HA	2.34	0.57

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:28:VAL:O	2:B:72:LYS:N	2.27	0.57
1:C:240:VAL:N	1:C:309:ALA:O	2.32	0.57
2:D:67:ASP:OD1	2:D:67:ASP:N	2.35	0.57
1:E:41:THR:HG22	1:E:45:LYS:CG	2.34	0.57
1:E:253:GLU:OE1	1:E:253:GLU:N	2.23	0.57
1:G:272:ASP:O	1:G:291:THR:HA	2.04	0.57
2:H:186:ASP:OD2	2:H:197:ARG:NH1	2.38	0.57
2:J:30:ILE:N	2:J:72:LYS:O	2.38	0.57
1:K:49:ILE:O	1:K:284:ARG:NH2	2.37	0.57
2:L:30:ILE:HG22	2:L:31:ASN:H	1.68	0.57
1:O:316:GLY:O	1:O:320:ARG:HG2	2.04	0.57
1:Q:159:LYS:HZ1	1:Q:267:LEU:HD21	1.69	0.57
1:Q:248(A):VAL:O	1:Q:250:VAL:N	2.34	0.57
1:A:267:LEU:HB3	1:A:271:LEU:HG	1.86	0.57
1:E:59:ILE:HG22	1:E:64:PHE:HB3	1.86	0.57
1:E:190:HIS:CE1	1:K:360:LEU:H	2.23	0.57
1:E:313:ASN:HB2	3:E:401:NAD:H4N	1.86	0.57
1:E:318:SER:OG	1:E:319:GLN:OE1	2.23	0.57
2:F:165:PHE:O	2:F:247:SER:OG	2.22	0.57
2:F:271:LEU:HD12	2:F:290:SER:HB3	1.86	0.57
1:I:260:ARG:O	1:I:264:ALA:N	2.37	0.57
2:J:66:VAL:HB	2:J:69:LYS:HB3	1.86	0.57
1:K:320:ARG:CZ	1:K:320:ARG:HB2	2.33	0.57
2:L:78:ASN:HD22	2:L:81:ASN:CG	2.08	0.57
1:O:5:ILE:HG12	1:O:93:ILE:HB	1.87	0.57
1:O:11:ILE:HA	1:O:14:ASN:HD21	1.68	0.57
1:O:37:VAL:C	1:O:59:ILE:HG21	2.25	0.57
1:O:125:ILE:HG23	1:O:141:ALA:HB1	1.87	0.57
1:O:183:ARG:NH2	1:O:188:SER:O	2.38	0.57
2:P:170:GLY:HA2	2:P:244:VAL:HA	1.87	0.57
2:P:204:VAL:N	2:P:231:ARG:O	2.25	0.57
2:P:250:THR:HG1	2:P:254:GLU:CD	2.08	0.57
1:Q:1:LEU:O	1:Q:26:ASP:N	2.38	0.57
1:Q:57:VAL:HG13	1:Q:66:ILE:HG12	1.87	0.57
1:A:2:LYS:O	1:A:91:ILE:N	2.37	0.57
1:A:47:ASP:HA	2:D:197:ARG:HH12	1.69	0.57
2:B:38:LYS:N	2:B:38:LYS:HZ2	2.02	0.57
2:B:176:HIS:HB3	2:B:231:ARG:HA	1.85	0.57
1:C:105:ALA:HA	1:C:108:HIS:HD2	1.68	0.57
1:C:312:ASP:OD2	1:C:315:TRP:N	2.38	0.57
2:F:257:ALA:HA	2:F:260:ARG:HB2	1.86	0.57

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:0:LYS:NZ	1:G:22:ASP:O	2.37	0.57
1:G:91:ILE:HG22	1:G:117:ILE:HD11	1.86	0.57
1:I:283:PHE:CG	1:I:291:THR:HG21	2.40	0.57
2:J:319:GLN:O	2:J:323:ASP:N	2.25	0.57
2:L:105:ALA:HB1	2:L:116:VAL:HG11	1.85	0.57
2:P:183:ARG:HH22	2:P:191:ARG:HH12	1.52	0.57
2:P:278:LEU:O	2:R:194:ARG:NH2	2.33	0.57
1:Q:78:ASP:OD2	1:Q:81:LYS:N	2.37	0.57
2:R:28:VAL:HG22	2:R:69:LYS:HZ1	1.70	0.57
2:R:47:ASP:OD2	2:R:50:LEU:N	2.28	0.57
2:B:42:HIS:CG	1:C:193:LEU:HD21	2.40	0.57
2:B:242:LEU:HD11	2:B:244:VAL:HG13	1.86	0.57
1:C:66:ILE:HB	1:C:69:LYS:HB3	1.87	0.57
1:C:293:ASP:HB3	1:C:296:LEU:HB2	1.86	0.57
2:D:13:ARG:HB3	2:D:44:LEU:HD12	1.87	0.57
1:E:238:SER:HB2	1:E:311:TYR:CE1	2.40	0.57
1:G:273:VAL:HA	1:G:292:ILE:H	1.70	0.57
2:H:7:GLY:O	2:H:9:GLY:N	2.37	0.57
2:H:100:VAL:HG22	2:H:122(A):LYS:N	2.20	0.57
2:H:170:GLY:HA3	2:H:225:LEU:HD13	1.87	0.57
1:I:150:THR:O	1:I:154:LEU:HG	2.03	0.57
2:J:315:TRP:O	2:J:318:SER:OG	2.22	0.57
1:K:47:ASP:HB3	1:K:51:GLY:N	2.19	0.57
1:K:171:THR:O	1:K:243:VAL:N	2.38	0.57
2:L:176:HIS:O	2:L:232:VAL:N	2.30	0.57
1:Q:116:VAL:HB	1:Q:143:ILE:HA	1.86	0.57
1:Q:240:VAL:N	1:Q:309:ALA:O	2.37	0.57
2:R:15:PHE:O	2:R:18(A):TRP:N	2.18	0.57
2:R:30:ILE:O	2:R:73:VAL:HA	2.05	0.57
1:A:6:ASN:O	1:A:95:GLY:N	2.37	0.57
1:A:280:SER:HA	1:A:310:TRP:HZ3	1.70	0.57
1:E:78:ASP:OD2	1:E:81:LYS:N	2.37	0.57
1:E:274:CYS:N	1:E:292:ILE:O	2.36	0.57
2:F:272:SER:N	2:F:290:SER:O	2.36	0.57
1:G:60:ILE:HG22	1:G:60(A):ASP:H	1.70	0.57
2:J:28:VAL:HA	2:J:71:ILE:HG12	1.87	0.57
2:J:173:THR:N	2:J:241:ASP:OD1	2.37	0.57
1:A:274:CYS:O	1:A:293:ASP:HA	2.05	0.57
2:B:14:ASN:HD21	2:B:315:TRP:HA	1.70	0.57
1:C:8:PHE:HZ	1:C:44:LEU:HB2	1.70	0.57
1:C:63:THR:HA	1:C:72:LYS:HG2	1.86	0.57

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:94:GLU:OE2	1:C:97:GLY:N	2.37	0.57
1:C:126:PRO:HD2	1:C:144:ILE:HG22	1.86	0.57
1:C:160:VAL:O	1:C:164:GLU:HG3	2.05	0.57
1:C:248(A):VAL:HG22	1:C:249:GLY:H	1.70	0.57
1:C:258:ALA:O	1:C:262:ALA:N	2.29	0.57
2:D:65:SER:CA	2:D:70:VAL:HA	2.34	0.57
2:D:315:TRP:O	2:D:318:SER:OG	2.23	0.57
2:F:146:ASN:HD22	2:F:321:VAL:HG13	1.70	0.57
2:F:281:ILE:HG23	2:F:282:ASP:OD1	2.05	0.57
1:G:0:LYS:HD3	1:G:24:PRO:HA	1.87	0.57
1:G:90:ASP:HA	1:G:114:LYS:HE2	1.87	0.57
1:G:289:SER:HB2	1:G:320:ARG:HD2	1.86	0.57
1:I:3:VAL:HG22	1:I:91:ILE:HB	1.87	0.57
1:I:150:THR:HG22	1:I:154:LEU:HD11	1.86	0.57
1:I:314:GLU:HG2	3:I:401:NAD:N7N	2.19	0.57
1:K:79:PRO:HB2	1:K:107:LYS:HZ2	1.69	0.57
1:K:121:PRO:O	1:K:122(A):LYS:NZ	2.30	0.57
2:L:45:LYS:HZ2	2:L:53:PHE:HB3	1.70	0.57
2:L:129:VAL:N	2:L:133:ASN:OD1	2.35	0.57
2:P:103:ASP:O	2:P:107:LYS:N	2.34	0.56
1:Q:76:ASN:OD1	1:Q:78:ASP:N	2.36	0.56
1:Q:201:LEU:HG	1:Q:202:ASN:HD22	1.70	0.56
2:R:242:LEU:HB3	2:R:307:VAL:HG22	1.86	0.56
1:C:40:ALA:HA	1:C:43:LEU:HB2	1.87	0.56
1:C:175:THR:OG1	1:C:239:VAL:N	2.36	0.56
2:D:6:ASN:N	2:D:93:ILE:O	2.38	0.56
1:E:7:GLY:HA3	1:E:96:THR:HG22	1.86	0.56
2:F:176:HIS:HD1	2:F:231:ARG:HB3	1.69	0.56
1:G:11:ILE:O	1:G:15:PHE:N	2.21	0.56
1:G:76:ASN:OD1	1:G:78:ASP:N	2.37	0.56
1:G:256:ASN:HA	1:G:259:PHE:CD2	2.40	0.56
1:I:40:ALA:O	1:I:44:LEU:N	2.24	0.56
1:K:226:ASN:OD1	1:K:227:GLY:N	2.32	0.56
2:L:0:LYS:H2	2:L:26:ASP:HB2	1.70	0.56
2:L:190:HIS:CE1	2:L:192:ASP:H	2.23	0.56
2:L:204:VAL:N	2:L:231:ARG:O	2.38	0.56
1:O:251:THR:HG23	1:O:254:ASP:H	1.69	0.56
2:P:131:GLY:HA3	2:P:156:PRO:HB3	1.87	0.56
2:P:184:LEU:HG	2:P:185:LEU:HD13	1.86	0.56
2:P:324:LEU:HD12	2:P:327:ILE:HB	1.87	0.56
1:Q:101:ASP:OD2	1:Q:104:GLY:N	2.32	0.56

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:Q:316:GLY:O	1:Q:320:ARG:HG2	2.05	0.56
1:A:58:LYS:HB3	1:A:65:SER:HB3	1.87	0.56
1:A:82:LEU:HD13	1:A:84:TRP:CH2	2.40	0.56
2:B:91:LEU:HD21	2:B:93:ILE:HD11	1.87	0.56
2:B:315:TRP:O	2:B:318:SER:OG	2.22	0.56
2:D:119:THR:O	2:D:317:TYR:OH	2.10	0.56
2:D:176:HIS:HB3	2:D:231:ARG:HA	1.86	0.56
2:D:206:THR:HG23	2:D:229:ALA:HB3	1.87	0.56
1:E:244:VAL:N	1:E:305:VAL:HG22	2.16	0.56
1:E:357:GLU:O	1:K:191:ARG:N	2.35	0.56
2:F:104:GLY:HA2	2:F:107:LYS:HB2	1.87	0.56
2:H:10:ARG:CA	3:H:401:NAD:O1N	2.52	0.56
2:H:60:ALA:HB2	2:H:65:SER:HB3	1.86	0.56
2:H:131:GLY:O	2:H:159:LYS:NZ	2.38	0.56
1:I:77:ARG:HA	3:I:401:NAD:N1A	2.19	0.56
2:J:84:TRP:HB2	2:J:111:ALA:HB3	1.87	0.56
1:K:2:LYS:HG2	1:K:89:ILE:HA	1.87	0.56
1:K:124:ASP:OD1	1:K:124:ASP:N	2.37	0.56
1:O:128:TYR:HA	1:O:133:ASN:ND2	2.18	0.56
2:P:47:ASP:OD1	2:P:48:SER:N	2.38	0.56
2:P:128:TYR:HD1	2:P:133:ASN:HB2	1.70	0.56
1:Q:8:PHE:HB2	1:Q:32:ASP:CG	2.21	0.56
1:Q:18:CYS:O	1:Q:20:ARG:HG2	2.04	0.56
1:Q:94:GLU:HB3	1:Q:118:ILE:HG23	1.86	0.56
1:Q:194:ARG:NH2	1:Q:205:PRO:HD2	2.21	0.56
1:Q:326:ASP:HA	1:Q:329:ALA:HB3	1.88	0.56
2:R:45:LYS:O	2:R:52:THR:OG1	2.22	0.56
1:A:40:ALA:HA	1:A:43:LEU:HD12	1.87	0.56
1:A:150:THR:O	1:A:154:LEU:HG	2.05	0.56
1:A:281:VAL:H	1:C:202:ASN:CG	2.09	0.56
1:A:292:ILE:HG13	1:A:309:ALA:HA	1.87	0.56
2:B:139:HIS:CD2	2:B:333:GLN:H	2.22	0.56
2:B:275:ASP:OD1	2:B:294:SER:N	2.38	0.56
1:C:221:LEU:HA	1:C:224:LYS:HD3	1.87	0.56
1:C:303:ASP:OD1	1:C:304:MET:N	2.35	0.56
2:D:80:VAL:HA	2:D:111:ALA:HB2	1.88	0.56
2:D:255:VAL:O	2:D:259:PHE:N	2.34	0.56
1:E:296:LEU:HB3	1:E:308:VAL:HG11	1.85	0.56
2:F:9:GLY:O	2:F:12:GLY:N	2.35	0.56
2:F:250:THR:OG1	2:F:254:GLU:OE1	2.16	0.56
1:G:65:SER:OG	1:G:69:LYS:N	2.25	0.56

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:156:PRO:HB3	1:G:267:LEU:HG	1.87	0.56
1:G:157:PHE:O	1:G:160:VAL:N	2.38	0.56
1:G:168:VAL:HG23	1:G:247:GLU:N	2.21	0.56
1:G:241:ASP:HA	1:G:308:VAL:HA	1.86	0.56
2:H:89:ILE:N	2:H:112:GLY:O	2.38	0.56
2:H:157:PHE:HA	2:H:160:VAL:HB	1.88	0.56
2:H:206:THR:HG23	2:H:229:ALA:HB3	1.86	0.56
2:H:249:LYS:HA	2:H:302:ASP:HB3	1.88	0.56
1:I:134:GLU:HG2	1:I:135:LYS:HG3	1.88	0.56
1:K:57:VAL:HG12	1:K:64:PHE:HB2	1.87	0.56
1:K:82:LEU:HD13	1:K:84:TRP:CZ2	2.40	0.56
1:K:203:ILE:HG12	1:K:231:ARG:O	2.03	0.56
1:K:236:ASN:ND2	1:K:312:ASP:OD2	2.39	0.56
1:K:272:ASP:HB2	1:K:288:PHE:CG	2.40	0.56
2:L:13:ARG:HB3	2:L:44:LEU:HD12	1.85	0.56
2:L:119:THR:O	2:L:317:TYR:OH	2.12	0.56
1:O:121:PRO:HG3	1:O:148:SER:H	1.71	0.56
1:O:179:THR:N	1:O:182:GLN:OE1	2.23	0.56
2:R:312:ASP:OD1	2:R:315:TRP:N	2.26	0.56
2:B:85:GLY:N	2:B:111:ALA:O	2.39	0.56
1:C:17:ARG:NH1	1:C:51:GLY:O	2.34	0.56
2:D:64:ILE:N	2:D:71:ILE:O	2.39	0.56
2:D:115:LYS:HD3	2:D:142:THR:HA	1.87	0.56
2:D:139:HIS:NE2	2:D:334:UNK:O	2.38	0.56
2:D:148:SER:HB2	3:D:401:NAD:H5N	1.87	0.56
1:E:44:LEU:HD23	1:E:44:LEU:O	2.06	0.56
2:J:28:VAL:O	2:J:72:LYS:N	2.29	0.56
2:J:40:ALA:HA	2:J:43:LEU:HD12	1.88	0.56
2:J:169:LYS:O	2:J:245:GLN:N	2.39	0.56
2:J:176:HIS:N	2:J:230:LEU:O	2.36	0.56
2:J:273:VAL:HG23	2:J:292:ILE:HB	1.86	0.56
1:K:121:PRO:HG3	1:K:148:SER:N	2.21	0.56
1:K:126:PRO:HD2	1:K:144:ILE:HG22	1.86	0.56
1:K:150:THR:O	1:K:154:LEU:N	2.34	0.56
1:K:178:TYR:HD2	1:K:233:PRO:HA	1.71	0.56
2:L:175:THR:OG1	2:L:239:VAL:N	2.32	0.56
2:L:186:ASP:OD2	2:L:197:ARG:NE	2.38	0.56
1:Q:17:ARG:CZ	1:Q:53:PHE:HB2	2.36	0.56
2:B:6:ASN:O	2:B:95:GLY:N	2.30	0.56
2:B:173:THR:HG1	2:D:306:LYS:HZ3	1.49	0.56
1:C:117:ILE:HA	1:C:144:ILE:O	2.05	0.56

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:267:LEU:HB3	1:C:270:VAL:HB	1.86	0.56
2:D:176:HIS:NE2	3:D:401:NAD:O7N	2.37	0.56
1:E:41:THR:O	1:E:45:LYS:HG2	2.06	0.56
1:E:84:TRP:O	1:E:88:GLY:N	2.37	0.56
2:F:179:THR:H	2:F:182:GLN:CD	2.07	0.56
2:F:324:LEU:HD12	2:F:327:ILE:HB	1.87	0.56
1:G:178:TYR:CD2	1:G:233:PRO:HA	2.40	0.56
1:G:206:THR:OG1	1:G:207:SER:N	2.37	0.56
2:H:190:HIS:HB3	2:H:196:ALA:HB2	1.87	0.56
1:K:47:ASP:CG	1:K:50:LEU:H	2.09	0.56
1:K:137:TYR:CZ	1:K:328:VAL:HA	2.41	0.56
1:K:300:MET:N	1:K:304:MET:O	2.38	0.56
2:L:289:SER:OG	2:L:320:ARG:NH1	2.34	0.56
1:O:6:ASN:HD21	1:O:96:THR:HG23	1.70	0.56
1:O:291:THR:OG1	1:O:310:TRP:HB2	2.05	0.56
2:P:127:THR:O	2:P:133:ASN:ND2	2.37	0.56
2:P:172:MET:HB3	2:P:242:LEU:HB2	1.86	0.56
2:P:246:VAL:N	2:P:303:ASP:O	2.37	0.56
1:A:10:ARG:NH1	2:D:186:ASP:OD1	2.39	0.56
2:B:105:ALA:HB1	2:B:116:VAL:HG11	1.88	0.56
2:B:174:THR:HA	2:B:240:VAL:HA	1.87	0.56
1:C:28:VAL:HA	1:C:71:ILE:HG13	1.88	0.56
1:C:101:ASP:OD2	1:C:103:PRO:HB2	2.05	0.56
1:E:154:LEU:O	1:E:158:VAL:HG13	2.05	0.56
2:F:42:HIS:HA	2:F:46:TYR:CD2	2.41	0.56
2:H:30:ILE:O	2:H:73:VAL:HA	2.06	0.56
2:H:30:ILE:HB	2:H:73:VAL:HB	1.86	0.56
2:H:137:TYR:HE2	2:H:331:LYS:HG3	1.71	0.56
2:J:20:ARG:HG3	2:J:322:VAL:HG11	1.88	0.56
1:K:178:TYR:CD2	1:K:233:PRO:HA	2.41	0.56
1:K:303:ASP:OD1	1:K:304:MET:N	2.38	0.56
2:L:67:ASP:OD1	2:L:67:ASP:N	2.37	0.56
2:L:80:VAL:HA	2:L:111:ALA:HB2	1.88	0.56
2:P:165:PHE:O	2:P:247:SER:OG	2.23	0.56
2:P:181:ASP:OD1	2:P:195:ARG:NH1	2.39	0.56
1:Q:63:THR:HA	1:Q:72:LYS:HA	1.87	0.56
2:R:42:HIS:O	2:R:46:TYR:N	2.34	0.56
1:A:94:GLU:HG2	1:A:97:GLY:H	1.71	0.56
1:A:202:ASN:ND2	1:C:281:VAL:H	2.04	0.56
2:B:84:TRP:HB2	2:B:111:ALA:HB3	1.88	0.56
2:B:194:ARG:HD3	2:B:205:PRO:HD2	1.88	0.56

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:172:MET:HA	2:D:242:LEU:HA	1.88	0.56
1:E:356:GLU:HA	1:K:183:ARG:HH22	1.71	0.56
2:F:120:ALA:O	2:F:145:SER:OG	2.19	0.56
1:G:96:THR:O	3:G:401:NAD:H8A	2.06	0.56
1:G:205:PRO:HG3	1:G:230:LEU:HA	1.86	0.56
2:H:85:GLY:N	2:H:111:ALA:O	2.38	0.56
2:H:326:ASP:O	2:H:330:ASN:N	2.35	0.56
1:I:11:ILE:HD13	3:I:401:NAD:N7N	2.21	0.56
2:L:9:GLY:O	2:L:12:GLY:N	2.32	0.56
2:L:157:PHE:O	2:L:161:LEU:N	2.24	0.56
2:L:168:ILE:N	2:L:245:GLN:O	2.39	0.56
1:O:149:CYS:HB3	1:O:317:TYR:HD1	1.71	0.56
2:P:40:ALA:HA	2:P:43:LEU:HD12	1.86	0.56
2:P:119:THR:O	2:P:317:TYR:OH	2.21	0.56
1:Q:212:LYS:O	1:Q:216:LEU:N	2.23	0.56
1:Q:214:VAL:O	1:Q:218:LEU:N	2.30	0.56
1:A:166:GLY:HA3	1:A:247:GLU:HB2	1.87	0.56
2:B:25:LEU:HD22	2:B:25:LEU:H	1.71	0.56
2:B:130:VAL:HG21	2:B:320:ARG:HG3	1.88	0.56
2:B:203:ILE:HD11	2:B:230:LEU:HB3	1.88	0.56
1:C:158:VAL:HA	1:C:161:LEU:HB3	1.87	0.56
1:C:172:MET:SD	1:C:173:THR:N	2.79	0.56
2:D:194:ARG:NH1	2:D:205:PRO:HD2	2.20	0.56
1:E:203:ILE:HD11	1:E:230:LEU:HD12	1.88	0.56
2:F:13:ARG:H	2:F:13:ARG:NH1	2.01	0.56
2:F:170:GLY:HA2	2:F:244:VAL:HA	1.87	0.56
2:H:4:ALA:HB3	2:H:84:TRP:CZ3	2.39	0.56
1:I:264:ALA:O	1:I:268:LYS:NZ	2.39	0.56
2:J:139:HIS:CD2	2:J:333:GLN:H	2.23	0.56
1:K:316:GLY:HA2	1:K:319:GLN:HG2	1.86	0.56
2:L:57:VAL:HA	2:L:66:VAL:HG13	1.87	0.56
2:L:148:SER:HB2	3:L:401:NAD:H5N	1.88	0.56
1:O:105:ALA:O	1:O:109:ILE:HG12	2.06	0.56
2:P:146:ASN:HD22	2:P:321:VAL:HG13	1.70	0.56
2:R:137:TYR:HE2	2:R:331:LYS:HG3	1.71	0.56
1:A:11:ILE:HB	3:A:401:NAD:H72N	1.70	0.56
2:B:6:ASN:HD22	2:B:108:HIS:HE1	1.54	0.56
2:B:30:ILE:O	2:B:73:VAL:HA	2.04	0.56
2:B:45:LYS:NZ	2:B:53:PHE:O	2.28	0.56
2:B:78:ASN:ND2	2:B:80:VAL:HG22	2.20	0.56
2:B:149:CYS:SG	2:B:150:THR:N	2.79	0.56

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:329:ALA:O	1:C:332:TRP:HB2	2.06	0.56
2:D:193:LEU:HD12	2:D:193:LEU:H	1.71	0.56
1:E:179:THR:OG1	1:E:181:ASP:N	2.39	0.56
2:F:177:SER:OG	2:F:178:TYR:N	2.38	0.56
2:H:103:ASP:HB2	2:H:107:LYS:HZ3	1.71	0.56
2:H:105:ALA:HB1	2:H:116:VAL:HG21	1.88	0.56
1:I:34:GLY:O	1:I:38:LYS:NZ	2.39	0.56
1:I:60:ILE:HB	1:I:64:PHE:HA	1.88	0.56
2:J:78:ASN:HD21	2:J:80:VAL:HG22	1.70	0.56
2:J:173:THR:OG1	2:L:306:LYS:NZ	2.26	0.56
1:K:128:TYR:HA	1:K:133:ASN:ND2	2.20	0.56
1:K:164:GLU:HG3	1:K:165:LEU:HD13	1.88	0.56
1:K:186:ASP:OD1	1:K:197:ARG:NE	2.38	0.56
1:K:240:VAL:O	1:K:309:ALA:N	2.38	0.56
2:L:318:SER:HA	2:L:321:VAL:HB	1.86	0.56
1:O:13:ARG:CG	1:O:44:LEU:HD13	2.35	0.56
1:O:37:VAL:HG21	1:O:61:ASN:HA	1.87	0.56
1:O:255:VAL:O	1:O:259:PHE:N	2.30	0.56
2:P:258:ALA:O	2:P:262:SER:OG	2.17	0.56
2:R:94:GLU:HG3	2:R:99:PHE:CD2	2.41	0.56
2:R:181:ASP:OD2	2:R:195:ARG:NE	2.39	0.56
2:B:0:LYS:NZ	2:B:329:ALA:HA	2.21	0.56
1:C:291:THR:HB	1:C:310:TRP:HB2	1.87	0.56
1:E:85:ALA:HB2	1:E:112:GLY:HA3	1.88	0.56
2:H:28:VAL:HG22	2:H:69:LYS:HZ1	1.70	0.56
2:H:193:LEU:O	2:H:197:ARG:N	2.38	0.56
1:I:293:ASP:O	1:I:296:LEU:HB2	2.06	0.56
1:O:191:ARG:N	2:R:39:GLN:OE1	2.40	0.55
1:Q:92:VAL:HB	1:Q:117:ILE:H	1.69	0.55
2:R:58:LYS:O	2:R:65:SER:HB3	2.06	0.55
2:R:179:THR:H	2:R:182:GLN:NE2	2.03	0.55
1:C:4:ALA:HB3	1:C:92:VAL:HG22	1.88	0.55
1:C:28:VAL:C	1:C:71:ILE:HG23	2.26	0.55
1:C:346:GLU:HA	1:C:349:CYS:HB3	1.87	0.55
2:D:236:ASN:O	2:D:313:ASN:ND2	2.30	0.55
1:E:257:ASN:O	1:E:261:LYS:NZ	2.33	0.55
1:E:272:ASP:OD1	1:E:273:VAL:N	2.39	0.55
2:F:250:THR:HG1	2:F:254:GLU:CD	2.08	0.55
2:H:186:ASP:HB3	2:H:198:ALA:H	1.70	0.55
1:I:240:VAL:HG22	1:I:309:ALA:HB3	1.88	0.55
2:J:0:LYS:NZ	2:J:329:ALA:HA	2.21	0.55

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:J:15:PHE:CZ	2:J:322:VAL:HA	2.41	0.55
2:J:25:LEU:HD22	2:J:25:LEU:H	1.71	0.55
2:J:85:GLY:N	2:J:111:ALA:O	2.39	0.55
1:O:60:ILE:O	1:O:63:THR:N	2.40	0.55
2:P:162:ASP:OD1	2:P:167:ILE:N	2.30	0.55
1:Q:148:SER:O	1:Q:151:THR:OG1	2.10	0.55
1:Q:160:VAL:O	1:Q:163:GLU:HG2	2.06	0.55
2:B:191:ARG:NH1	2:B:191:ARG:H	2.04	0.55
1:C:100:VAL:HB	1:C:122(A):LYS:H	1.71	0.55
1:C:172:MET:HA	1:C:242:LEU:HA	1.87	0.55
2:D:211:ALA:HB1	2:D:227:GLY:H	1.71	0.55
2:D:271:LEU:HD21	2:D:290:SER:HB3	1.86	0.55
1:E:90:ASP:HA	1:E:114:LYS:HZ3	1.70	0.55
1:E:92:VAL:N	1:E:116:VAL:HG22	2.21	0.55
2:F:246:VAL:N	2:F:303:ASP:O	2.36	0.55
2:F:278:LEU:HD23	2:F:282:ASP:HB3	1.88	0.55
1:I:141:ALA:O	1:I:144:ILE:HG23	2.06	0.55
1:I:239:VAL:HB	1:I:310:TRP:CE2	2.41	0.55
1:I:283:PHE:O	1:I:286:SER:OG	2.09	0.55
2:J:147:ALA:O	2:J:317:TYR:OH	2.14	0.55
1:K:291:THR:O	1:K:310:TRP:N	2.26	0.55
2:L:32:ASP:OD2	3:L:401:NAD:O3B	2.19	0.55
2:L:166:GLY:O	2:L:247:SER:N	2.28	0.55
3:O:401:NAD:H2N	3:O:401:NAD:O1N	2.05	0.55
2:P:147:ALA:O	2:P:317:TYR:OH	2.25	0.55
1:Q:211:ALA:HB3	1:Q:212:LYS:HZ1	1.71	0.55
2:B:267:LEU:HB3	2:B:271:LEU:H	1.71	0.55
1:C:58:LYS:NZ	1:C:59:ILE:O	2.39	0.55
1:C:96:THR:HG22	3:C:401:NAD:C4A	2.35	0.55
1:C:183:ARG:HG2	1:C:187:ALA:N	2.21	0.55
2:D:138:THR:HA	2:D:331:LYS:NZ	2.22	0.55
2:F:148:SER:O	2:F:152:ASN:N	2.30	0.55
1:G:10:ARG:N	3:G:401:NAD:O2N	2.39	0.55
2:H:11:ILE:O	2:H:15:PHE:N	2.31	0.55
1:O:213:ALA:O	1:O:216:LEU:HB2	2.06	0.55
2:P:45:LYS:NZ	2:P:55:ALA:O	2.31	0.55
2:P:157:PHE:O	2:P:161:LEU:N	2.28	0.55
2:P:177:SER:OG	2:P:178:TYR:N	2.40	0.55
2:R:100:VAL:HG22	2:R:122(A):LYS:N	2.20	0.55
2:R:206:THR:HG23	2:R:229:ALA:HB3	1.87	0.55
2:B:263:ALA:HA	2:B:267:LEU:HB2	1.88	0.55

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:278:LEU:O	2:D:194:ARG:NH1	2.31	0.55
1:C:21:LYS:HZ2	1:C:22:ASP:H	1.54	0.55
2:F:190:HIS:HD2	2:F:191:ARG:NH2	2.05	0.55
2:F:218:LEU:O	2:F:222:LYS:NZ	2.30	0.55
1:G:45:LYS:HE2	1:G:56:ASP:HA	1.88	0.55
1:I:90:ASP:HA	1:I:114:LYS:HE2	1.89	0.55
2:J:202:ASN:ND2	2:L:281:ILE:HG22	2.22	0.55
1:O:169:LYS:HE2	1:Q:301:GLY:HA3	1.88	0.55
1:Q:178:TYR:CD2	1:Q:233:PRO:HA	2.42	0.55
2:R:17:ARG:CZ	2:R:53:PHE:HA	2.36	0.55
1:A:12:GLY:O	1:A:16:LEU:N	2.29	0.55
1:A:104:GLY:HA2	1:A:107:LYS:HD2	1.89	0.55
1:A:221:LEU:HD22	1:A:224:LYS:HE2	1.88	0.55
1:A:256:ASN:ND2	1:A:257:ASN:OD1	2.40	0.55
1:A:358:CYS:O	1:G:191:ARG:NH2	2.39	0.55
2:B:165:PHE:HE2	2:B:250:THR:HB	1.70	0.55
2:B:192:ASP:HB3	2:B:195:ARG:HB2	1.89	0.55
2:B:206:THR:OG1	2:B:207:SER:N	2.40	0.55
1:C:186:ASP:HB3	1:C:197:ARG:HA	1.88	0.55
1:C:243:VAL:HA	1:C:306:LYS:HA	1.87	0.55
1:E:240:VAL:N	1:E:309:ALA:O	2.24	0.55
2:F:6:ASN:HB2	2:F:84:TRP:HH2	1.71	0.55
2:F:205:PRO:HA	2:F:230:LEU:HD23	1.88	0.55
2:F:267:LEU:HB3	2:F:271:LEU:HB2	1.88	0.55
1:G:11:ILE:H	3:G:401:NAD:PN	2.30	0.55
2:H:47:ASP:OD2	2:H:50:LEU:N	2.19	0.55
2:H:94:GLU:HG3	2:H:99:PHE:CD2	2.42	0.55
2:H:237:VAL:HG22	2:H:312:ASP:HA	1.88	0.55
1:I:191:ARG:NE	1:I:192:ASP:H	2.03	0.55
1:I:257:ASN:HA	1:I:260:ARG:HB2	1.88	0.55
1:I:282:ASP:OD2	1:K:197:ARG:NH2	2.40	0.55
1:I:299:VAL:HG13	1:I:305:VAL:HG12	1.88	0.55
2:J:174:THR:HA	2:J:240:VAL:HA	1.88	0.55
2:J:250:THR:N	2:J:302:ASP:HB3	2.16	0.55
1:K:150:THR:OG1	1:K:151:THR:N	2.40	0.55
2:L:179:THR:N	2:L:182:GLN:OE1	2.35	0.55
2:L:211:ALA:HB1	2:L:227:GLY:H	1.72	0.55
1:O:6:ASN:N	1:O:93:ILE:O	2.39	0.55
2:P:190:HIS:HD2	2:P:191:ARG:NH2	2.05	0.55
1:Q:0:LYS:NZ	1:Q:22:ASP:O	2.40	0.55
1:Q:11:ILE:N	3:Q:401:NAD:O2N	2.33	0.55

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:Q:124:ASP:HB3	1:I:216:LEU:HD11	1.89	0.55
1:C:4:ALA:HA	1:C:27:VAL:HG23	1.87	0.55
1:C:101:ASP:CG	1:C:104:GLY:H	2.10	0.55
1:C:255:VAL:O	1:C:259:PHE:N	2.37	0.55
2:D:94:GLU:OE2	2:D:99:PHE:N	2.27	0.55
1:G:132:VAL:HG22	1:G:159:LYS:HD3	1.87	0.55
1:G:220:GLN:H	1:G:220:GLN:CD	2.05	0.55
2:H:40:ALA:O	2:H:44:LEU:N	2.31	0.55
2:H:222:LYS:H	2:H:224:LYS:NZ	2.04	0.55
1:I:21:LYS:NZ	1:I:22:ASP:OD1	2.39	0.55
2:J:182:GLN:N	2:J:182:GLN:HE21	2.05	0.55
2:L:47:ASP:N	2:L:51:GLY:O	2.40	0.55
1:O:72:LYS:HB3	1:O:72:LYS:HZ3	1.72	0.55
1:O:253:GLU:OE2	1:O:260:ARG:NH1	2.36	0.55
2:P:160:VAL:O	2:P:164:LYS:N	2.34	0.55
2:P:179:THR:H	2:P:182:GLN:CD	2.09	0.55
2:R:192:ASP:CG	2:R:195:ARG:H	2.10	0.55
1:A:29:VAL:HG21	1:A:87:LEU:HD13	1.87	0.55
1:A:29:VAL:HG22	1:A:72:LYS:HB2	1.89	0.55
1:A:242:LEU:O	1:A:307:VAL:N	2.34	0.55
2:B:19:GLY:O	2:B:21:LYS:NZ	2.39	0.55
2:B:176:HIS:N	2:B:230:LEU:O	2.38	0.55
1:C:91:ILE:HD13	1:C:328:VAL:HG11	1.88	0.55
1:C:133:ASN:HA	1:C:136:ASP:CG	2.27	0.55
2:D:206:THR:OG1	2:D:207:SER:N	2.39	0.55
1:E:252:ALA:O	1:E:256:ASN:N	2.32	0.55
2:F:211:ALA:O	2:F:226:ASN:ND2	2.40	0.55
2:F:263:ALA:HA	2:F:267:LEU:HB2	1.88	0.55
2:F:281:ILE:H	2:H:202:ASN:ND2	2.04	0.55
1:G:237:VAL:HG23	1:G:280:SER:HB3	1.88	0.55
2:H:10:ARG:CG	3:H:401:NAD:O1N	2.54	0.55
1:I:128:TYR:N	1:I:145:SER:O	2.39	0.55
2:J:192:ASP:O	2:J:196:ALA:N	2.34	0.55
2:J:279:VAL:O	2:J:283:PHE:HD1	1.89	0.55
1:K:90:ASP:N	1:K:90:ASP:OD1	2.39	0.55
1:K:279:VAL:H	1:K:282:ASP:CG	2.10	0.55
2:L:148:SER:O	2:L:152:ASN:N	2.25	0.55
2:L:160:VAL:O	2:L:164:LYS:N	2.40	0.55
1:O:16:LEU:O	1:O:18(B):HIS:N	2.30	0.55
1:O:43:LEU:HD22	2:R:186:ASP:HB2	1.88	0.55
1:O:184:LEU:HG	1:O:185:LEU:HG	1.87	0.55

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:Q:79:PRO:HA	1:Q:82:LEU:HG	1.87	0.55
1:Q:80:LEU:HG	1:Q:107:LYS:HD2	1.88	0.55
1:Q:106:GLY:O	1:Q:110:GLN:NE2	2.40	0.55
2:R:30:ILE:HB	2:R:73:VAL:HB	1.87	0.55
2:R:222:LYS:H	2:R:224:LYS:NZ	2.04	0.55
1:A:15:PHE:O	1:A:18(A):TRP:N	2.28	0.55
1:A:244:VAL:HB	1:A:305:VAL:HG22	1.89	0.55
2:B:60:ALA:H	2:B:64:ILE:HA	1.71	0.55
2:B:106:GLY:O	2:B:110:GLN:N	2.25	0.55
1:E:92:VAL:HG12	1:E:93:ILE:H	1.71	0.55
2:F:193:LEU:HD22	2:H:277:PRO:HG2	1.89	0.55
1:G:39:SER:HA	1:G:42:HIS:HD2	1.72	0.55
2:H:149:CYS:HB3	2:H:317:TYR:CG	2.42	0.55
2:J:94:GLU:OE2	2:J:96:THR:OG1	2.18	0.55
1:K:160:VAL:O	1:K:164:GLU:N	2.22	0.55
1:K:172:MET:HB2	1:K:242:LEU:HB2	1.89	0.55
2:L:174:THR:O	2:L:230:LEU:HB2	2.06	0.55
1:O:15:PHE:O	1:O:18(A):TRP:N	2.40	0.55
1:O:160:VAL:HG11	1:O:262:ALA:HB2	1.88	0.55
2:P:30:ILE:O	2:P:73:VAL:HA	2.07	0.55
2:P:202:ASN:HD21	2:R:281:ILE:H	1.53	0.55
1:Q:14:ASN:HA	1:Q:17:ARG:HB2	1.89	0.55
1:Q:115:LYS:HA	1:Q:142:ASN:HB3	1.89	0.55
1:A:2:LYS:N	1:A:90:ASP:OD2	2.33	0.55
1:C:91:ILE:HG12	1:C:115:LYS:H	1.71	0.55
1:C:101:ASP:OD2	1:C:104:GLY:N	2.38	0.55
1:E:23:SER:C	1:E:25:LEU:H	2.09	0.55
2:F:119:THR:O	2:F:317:TYR:OH	2.20	0.55
2:F:293:ASP:OD1	2:F:296:LEU:N	2.30	0.55
1:G:256:ASN:O	1:G:260:ARG:NE	2.34	0.55
1:G:292:ILE:HG13	1:G:309:ALA:HA	1.87	0.55
2:H:47:ASP:OD1	2:H:49:ILE:N	2.38	0.55
2:H:179:THR:H	2:H:182:GLN:NE2	2.05	0.55
2:H:256:ASN:O	2:H:260:ARG:N	2.33	0.55
1:I:178:TYR:CD2	1:I:233:PRO:HA	2.41	0.55
2:J:149:CYS:HA	2:J:152:ASN:HB3	1.88	0.55
2:J:250:THR:OG1	2:J:251:PHE:N	2.39	0.55
1:K:13:ARG:HA	1:K:16:LEU:HB2	1.87	0.55
1:O:47:ASP:OD1	1:O:48:SER:N	2.40	0.55
1:O:79:PRO:HB3	1:O:108:HIS:CE1	2.42	0.55
1:O:84:TRP:O	1:O:88:GLY:N	2.40	0.55

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:Q:120:ALA:N	1:Q:146:ASN:O	2.40	0.55
1:Q:156:PRO:O	1:Q:160:VAL:N	2.39	0.55
2:R:62:SER:HA	2:R:73:VAL:O	2.07	0.55
2:R:224:LYS:HG3	2:R:225:LEU:HD23	1.89	0.55
1:A:38:LYS:HA	1:A:41:THR:HB	1.88	0.55
1:A:137:TYR:HD2	1:A:331:LYS:HZ3	1.54	0.55
1:A:156:PRO:HB2	1:A:271:LEU:HD11	1.88	0.55
1:A:242:LEU:N	1:A:307:VAL:O	2.32	0.55
1:A:272:ASP:N	1:A:290:SER:O	2.40	0.55
1:C:270:VAL:HG13	1:C:320:ARG:HD2	1.88	0.55
2:D:38:LYS:O	2:D:41:SER:OG	2.08	0.55
2:F:116:VAL:N	2:F:142:THR:O	2.25	0.55
1:G:10:ARG:NE	1:G:14:ASN:OD1	2.28	0.55
1:I:79:PRO:HB3	1:I:108:HIS:CE1	2.42	0.55
1:I:278:LEU:HB2	1:I:283:PHE:CE1	2.42	0.55
2:J:1:LEU:N	2:J:24:PRO:O	2.35	0.55
2:J:194:ARG:HD3	2:J:205:PRO:HD2	1.88	0.55
2:J:293:ASP:OD2	2:J:295:SER:OG	2.25	0.55
1:O:160:VAL:O	1:O:163:GLU:HG2	2.07	0.54
1:O:190:HIS:CD2	1:O:195:ARG:HB2	2.42	0.54
1:O:291:THR:HG1	1:O:310:TRP:HB2	1.71	0.54
1:O:358:CYS:HA	1:C:190:HIS:ND1	2.23	0.54
1:Q:215:SER:HB3	1:Q:222:LYS:HA	1.89	0.54
1:Q:249:GLY:HA3	1:Q:302:GLY:HA3	1.88	0.54
2:R:76:ASP:OD1	2:R:78:ASN:N	2.39	0.54
1:C:238:SER:HB3	1:C:311:TYR:CZ	2.42	0.54
2:D:168:ILE:N	2:D:245:GLN:O	2.40	0.54
1:E:55:ALA:HB1	1:E:67:ASP:OD2	2.06	0.54
1:E:242:LEU:N	1:E:307:VAL:O	2.29	0.54
1:E:280:SER:OG	1:G:203:ILE:N	2.40	0.54
2:F:127:THR:O	2:F:133:ASN:ND2	2.41	0.54
2:H:15:PHE:HA	2:H:18:CYS:HB2	1.89	0.54
2:J:36:GLY:HA3	2:J:38:LYS:HZ1	1.72	0.54
2:J:197:ARG:HH21	1:K:48:SER:HB3	1.72	0.54
1:K:47:ASP:CG	1:K:49:ILE:H	2.11	0.54
2:L:64:ILE:N	2:L:71:ILE:O	2.40	0.54
2:P:64:ILE:N	2:P:71:ILE:O	2.39	0.54
2:R:249:LYS:HA	2:R:302:ASP:HB3	1.89	0.54
2:B:15:PHE:CZ	2:B:322:VAL:HA	2.42	0.54
2:D:54:ASP:OD1	2:D:54:ASP:N	2.28	0.54
2:D:302:ASP:OD1	2:D:302:ASP:N	2.40	0.54

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:46:TYR:HA	1:E:52:THR:HA	1.89	0.54
1:E:176:HIS:N	1:E:230:LEU:O	2.39	0.54
2:F:20:ARG:HA	2:F:21:LYS:HZ3	1.72	0.54
2:F:59:THR:HB	2:F:64:ILE:HG23	1.89	0.54
1:G:57:VAL:HA	1:G:66:ILE:HG23	1.89	0.54
1:G:151:THR:OG1	1:G:152:ASN:N	2.39	0.54
1:G:293:ASP:CG	1:G:295:SER:HG	2.10	0.54
1:I:179:THR:H	1:I:182:GLN:NE2	2.05	0.54
2:J:105:ALA:HB1	2:J:116:VAL:HG11	1.89	0.54
1:K:32:ASP:OD1	1:K:77:ARG:NH1	2.40	0.54
1:K:236:ASN:HA	1:K:313:ASN:HD21	1.71	0.54
1:K:256:ASN:OD1	1:K:257:ASN:ND2	2.41	0.54
2:L:302:ASP:OD1	2:L:302:ASP:N	2.41	0.54
1:O:190:HIS:N	2:R:39:GLN:OE1	2.40	0.54
2:P:17:ARG:HG2	2:P:53:PHE:CE2	2.42	0.54
1:Q:6:ASN:ND2	1:Q:96:THR:H	2.05	0.54
2:R:172:MET:HA	2:R:242:LEU:HA	1.89	0.54
2:R:276:GLU:OE1	2:R:276:GLU:N	2.33	0.54
1:C:32:ASP:OD2	3:C:401:NAD:O2B	2.26	0.54
1:E:37:VAL:HG12	1:E:59:ILE:CB	2.36	0.54
2:F:184:LEU:HG	2:F:185:LEU:HD13	1.87	0.54
1:G:168:VAL:O	1:G:224:LYS:NZ	2.28	0.54
2:H:17:ARG:CZ	2:H:53:PHE:HA	2.37	0.54
2:H:41:SER:HG	2:H:42:HIS:H	1.54	0.54
2:H:203:ILE:HG23	2:H:205:PRO:HD3	1.87	0.54
1:I:76:ASN:OD1	1:I:77:ARG:N	2.40	0.54
2:J:118:ILE:O	2:J:145:SER:OG	2.22	0.54
1:K:211:ALA:HB1	1:K:225:LEU:HG	1.89	0.54
1:K:345:LEU:O	1:K:348:PHE:N	2.39	0.54
2:L:138:THR:HA	2:L:331:LYS:NZ	2.23	0.54
2:L:204:VAL:O	2:L:230:LEU:HA	2.07	0.54
2:L:237:VAL:HG22	2:L:312:ASP:HA	1.88	0.54
1:O:281:VAL:O	1:O:284:ARG:NE	2.41	0.54
1:Q:182:GLN:NE2	1:Q:183:ARG:O	2.35	0.54
2:R:83:PRO:HB2	2:R:86:ASP:HB2	1.88	0.54
1:A:79:PRO:HB3	1:A:108:HIS:CE1	2.42	0.54
1:A:169:LYS:HG3	1:C:301:GLY:HA3	1.88	0.54
2:B:7:GLY:O	2:B:9:GLY:N	2.38	0.54
2:B:37:VAL:HG23	2:B:38:LYS:H	1.72	0.54
2:B:148:SER:O	2:B:152:ASN:N	2.21	0.54
1:C:148:SER:HG	1:C:151:THR:H	1.52	0.54

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:178:TYR:CD2	1:C:233:PRO:HA	2.43	0.54
1:C:256:ASN:HB2	1:C:260:ARG:HH21	1.71	0.54
2:D:5:ILE:HG23	2:D:93:ILE:HB	1.89	0.54
2:F:5:ILE:HB	2:F:30:ILE:HG23	1.88	0.54
2:F:85:GLY:N	2:F:112:GLY:HA3	2.23	0.54
2:F:139:HIS:CD2	2:F:333:GLN:HB2	2.42	0.54
2:F:147:ALA:O	2:F:317:TYR:OH	2.25	0.54
2:F:172:MET:HB3	2:F:242:LEU:HB2	1.87	0.54
1:G:116:VAL:HG21	1:G:143:ILE:HA	1.90	0.54
1:I:203:ILE:HD11	1:I:230:LEU:HB3	1.89	0.54
2:J:236:ASN:OD1	2:J:284:ARG:NH1	2.40	0.54
1:O:6:ASN:O	1:O:95:GLY:N	2.40	0.54
1:O:256:ASN:HD22	1:O:260:ARG:NH1	2.06	0.54
1:O:271:LEU:HB2	1:O:290:SER:HB2	1.88	0.54
1:O:278:LEU:O	1:Q:194:ARG:NH1	2.27	0.54
2:P:85:GLY:N	2:P:112:GLY:HA3	2.22	0.54
2:P:320:ARG:NE	2:P:323:ASP:OD2	2.37	0.54
2:R:137:TYR:O	2:R:331:LYS:NZ	2.31	0.54
1:A:29:VAL:HA	1:A:72:LYS:O	2.06	0.54
1:A:178:TYR:HD2	1:A:233:PRO:HA	1.72	0.54
1:A:203:ILE:HG23	1:A:205:PRO:HD3	1.89	0.54
1:A:257:ASN:O	1:A:261:LYS:N	2.28	0.54
1:A:323:ASP:OD1	1:A:323:ASP:N	2.40	0.54
1:C:291:THR:O	1:C:310:TRP:N	2.24	0.54
2:D:14:ASN:OD1	2:D:315:TRP:HA	2.07	0.54
1:E:57:VAL:HG22	1:E:66:ILE:HG12	1.88	0.54
1:G:134:GLU:H	1:G:135:LYS:HZ1	1.56	0.54
1:G:176:HIS:HB3	1:G:231:ARG:HA	1.88	0.54
1:G:213:ALA:HA	1:G:216:LEU:HB2	1.89	0.54
2:H:177:SER:OG	2:H:234:THR:O	2.18	0.54
2:H:332:TRP:NE1	2:H:334:UNK:OXT	2.41	0.54
2:J:42:HIS:O	2:J:46:TYR:N	2.37	0.54
2:J:202:ASN:HD22	2:L:279:VAL:HB	1.72	0.54
1:K:79:PRO:HB3	1:K:108:HIS:CD2	2.43	0.54
2:L:255:VAL:HB	2:L:259:PHE:CZ	2.42	0.54
1:O:255:VAL:HG23	1:O:256:ASN:H	1.72	0.54
1:Q:176:HIS:O	1:Q:232:VAL:N	2.41	0.54
2:R:90:ASP:OD1	2:R:90:ASP:N	2.40	0.54
2:R:96:THR:HG22	3:R:401:NAD:C4A	2.37	0.54
2:R:99:PHE:CD1	2:R:104:GLY:HA3	2.43	0.54
2:R:127:THR:HG21	2:R:216:LEU:HB3	1.89	0.54

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:R:131:GLY:O	2:R:159:LYS:NZ	2.38	0.54
2:R:218:LEU:HD13	2:R:221:LEU:HD22	1.89	0.54
2:R:296:LEU:HB2	2:R:308:ILE:HG13	1.89	0.54
1:A:261:LYS:O	1:A:265:GLY:N	2.40	0.54
1:C:241:ASP:OD2	1:C:306:LYS:HG2	2.08	0.54
1:C:246:ILE:HG22	1:C:248:LYS:HB2	1.88	0.54
2:D:57:VAL:HA	2:D:66:VAL:HG13	1.90	0.54
2:D:160:VAL:O	2:D:164:LYS:N	2.41	0.54
3:E:401:NAD:O1N	3:E:401:NAD:H2N	2.06	0.54
2:F:17:ARG:HG2	2:F:53:PHE:CE2	2.43	0.54
1:G:295:SER:OG	1:G:296:LEU:N	2.40	0.54
2:H:47:ASP:OD1	2:H:48:SER:N	2.41	0.54
2:H:62:SER:HA	2:H:73:VAL:O	2.07	0.54
2:H:90:ASP:OD1	2:H:90:ASP:N	2.39	0.54
2:H:138:THR:OG1	2:H:141:ASP:OD1	2.14	0.54
2:H:203:ILE:HD11	2:H:230:LEU:HD13	1.90	0.54
1:I:45:LYS:O	1:I:53:PHE:N	2.41	0.54
1:I:101:ASP:H	1:I:122(A):LYS:HZ2	1.55	0.54
2:J:149:CYS:SG	2:J:150:THR:N	2.80	0.54
1:K:9:GLY:O	1:K:12:GLY:N	2.34	0.54
1:K:17:ARG:O	1:K:19:GLY:N	2.34	0.54
1:K:328:VAL:O	1:K:332:TRP:N	2.40	0.54
2:L:42:HIS:HD2	2:L:46:TYR:HE2	1.56	0.54
2:P:211:ALA:O	2:P:226:ASN:ND2	2.39	0.54
2:P:236:ASN:ND2	2:P:237:VAL:H	2.06	0.54
2:P:263:ALA:HA	2:P:267:LEU:HB2	1.90	0.54
1:Q:330:ASN:OD1	1:Q:331:LYS:N	2.38	0.54
2:R:105:ALA:HB1	2:R:116:VAL:HG21	1.90	0.54
2:R:237:VAL:HG22	2:R:312:ASP:HA	1.90	0.54
1:A:28:VAL:O	1:A:72:LYS:N	2.41	0.54
2:B:149:CYS:HA	2:B:152:ASN:HB3	1.88	0.54
1:C:148:SER:OG	1:C:150:THR:OG1	2.14	0.54
1:C:318:SER:HA	1:C:321:VAL:HG22	1.89	0.54
2:D:64:ILE:H	2:D:71:ILE:H	1.56	0.54
1:E:235:PRO:HG2	1:E:284:ARG:NH2	2.23	0.54
2:F:302:ASP:OD1	2:F:302:ASP:N	2.40	0.54
1:G:132:VAL:O	1:G:135:LYS:NZ	2.28	0.54
2:H:218:LEU:HD13	2:H:221:LEU:HD22	1.90	0.54
2:H:244:VAL:O	2:H:305:VAL:N	2.39	0.54
2:H:272:SER:O	2:H:292:ILE:HG12	2.07	0.54
2:J:13:ARG:HB3	2:J:44:LEU:HA	1.89	0.54

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:45:LYS:HB3	1:K:46:TYR:CE2	2.42	0.54
2:P:65:SER:HA	2:P:70:VAL:HA	1.90	0.54
2:P:84:TRP:CD1	2:P:111:ALA:HB3	2.43	0.54
2:P:317:TYR:O	2:P:321:VAL:HG23	2.08	0.54
2:R:149:CYS:HB3	2:R:317:TYR:CG	2.43	0.54
2:R:272:SER:O	2:R:292:ILE:HG12	2.07	0.54
1:A:49:ILE:HA	1:A:284:ARG:CZ	2.38	0.54
1:A:133:ASN:O	1:A:137:TYR:N	2.41	0.54
1:A:157:PHE:O	1:A:161:LEU:N	2.39	0.54
1:C:12:GLY:O	1:C:16:LEU:HG	2.07	0.54
1:C:165:LEU:HG	1:C:246:ILE:HG21	1.88	0.54
2:D:78:ASN:ND2	2:D:81:ASN:OD1	2.35	0.54
2:D:90:ASP:OD1	2:D:114:LYS:NZ	2.28	0.54
1:E:169:LYS:HB2	1:G:304:MET:SD	2.48	0.54
1:E:279:VAL:HG21	1:G:197:ARG:HH21	1.73	0.54
2:F:2:LYS:O	2:F:90:ASP:N	2.26	0.54
2:F:78:ASN:O	2:F:82:LEU:HG	2.08	0.54
2:J:193:LEU:HD13	2:L:277:PRO:HG3	1.88	0.54
2:L:14:ASN:OD1	2:L:315:TRP:HA	2.08	0.54
1:Q:58:LYS:HD3	1:Q:59:ILE:H	1.73	0.54
2:R:87:MET:N	2:R:87:MET:SD	2.81	0.54
2:R:105:ALA:O	2:R:109:LEU:N	2.38	0.54
1:A:213:ALA:O	1:A:216:LEU:HB2	2.08	0.54
1:C:94:GLU:CD	1:C:97:GLY:H	2.10	0.54
1:E:30:VAL:H	1:E:73:VAL:HA	1.72	0.54
1:E:132:VAL:HG13	1:E:156:PRO:HA	1.89	0.54
1:E:175:THR:O	1:E:238:SER:HA	2.08	0.54
1:E:194:ARG:HH21	1:G:277:PRO:HA	1.72	0.54
1:E:220:GLN:HB3	1:E:221:LEU:HD22	1.89	0.54
1:G:157:PHE:O	1:G:161:LEU:HG	2.08	0.54
2:H:191:ARG:H	2:H:191:ARG:NH1	2.05	0.54
1:I:11:ILE:O	1:I:15:PHE:N	2.28	0.54
1:O:299:VAL:HG22	1:O:305:VAL:HG12	1.90	0.54
2:R:56:ASP:HB3	2:R:67:ASP:H	1.73	0.54
2:R:138:THR:OG1	2:R:141:ASP:OD1	2.14	0.54
2:R:332:TRP:NE1	2:R:334:UNK:OXT	2.40	0.54
1:A:76:ASN:OD1	1:A:78:ASP:N	2.40	0.54
2:B:79:PRO:HA	2:B:82:LEU:HD12	1.90	0.54
1:C:60:ILE:H	1:C:64:PHE:HA	1.72	0.54
1:C:154:LEU:HA	1:C:157:PHE:CZ	2.43	0.54
1:C:246:ILE:CG2	1:C:248:LYS:HB2	2.38	0.54

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:289:SER:OG	2:D:320:ARG:NH1	2.35	0.54
2:F:47:ASP:OD1	2:F:49:ILE:N	2.40	0.54
1:G:31:ASN:HA	1:G:74:VAL:HG12	1.90	0.54
1:G:165:LEU:O	1:G:248:LYS:HB3	2.08	0.54
2:J:78:ASN:ND2	2:J:80:VAL:HG22	2.23	0.54
2:J:149:CYS:H	3:J:401:NAD:H72N	1.56	0.54
2:J:209:GLY:O	2:J:213:ALA:N	2.23	0.54
1:O:58:LYS:HG3	1:O:60:ILE:HD13	1.90	0.53
1:O:63:THR:HG22	1:O:64:PHE:H	1.73	0.53
1:O:167:ILE:O	1:O:224:LYS:NZ	2.32	0.53
1:O:204:VAL:HB	1:O:231:ARG:HB2	1.89	0.53
2:P:105:ALA:HB1	2:P:116:VAL:HG11	1.91	0.53
1:Q:47:ASP:H	1:Q:51:GLY:C	2.12	0.53
1:Q:151:THR:HG22	1:Q:210:ALA:HA	1.89	0.53
2:R:45:LYS:O	2:R:53:PHE:N	2.33	0.53
2:R:89:ILE:N	2:R:112:GLY:O	2.41	0.53
2:B:32:ASP:HA	3:B:401:NAD:H2A	1.90	0.53
1:E:50:LEU:O	1:E:54:LYS:NZ	2.27	0.53
1:E:107:LYS:O	1:E:111:ALA:N	2.35	0.53
2:F:131:GLY:HA3	2:F:156:PRO:HB3	1.90	0.53
2:F:273:VAL:HG23	2:F:292:ILE:HB	1.91	0.53
1:G:181:ASP:O	1:G:183:ARG:NH1	2.32	0.53
1:I:82:LEU:HB2	1:I:84:TRP:CZ2	2.44	0.53
1:I:220:GLN:HE21	1:I:221:LEU:HD23	1.73	0.53
1:I:304:MET:HB2	1:K:169:LYS:HZ3	1.73	0.53
2:J:33:THR:OG1	2:J:77:ARG:NH1	2.41	0.53
2:J:259:PHE:O	2:J:262:SER:OG	2.23	0.53
2:L:179:THR:H	2:L:182:GLN:CD	2.11	0.53
2:R:174:THR:O	2:R:230:LEU:HB2	2.07	0.53
2:B:18(A):TRP:HA	2:B:20:ARG:HB2	1.90	0.53
2:B:190:HIS:CE1	2:B:195:ARG:HB2	2.42	0.53
1:C:78:ASP:OD2	1:C:81:LYS:HG2	2.08	0.53
1:C:82:LEU:HD13	1:C:84:TRP:CZ2	2.43	0.53
1:C:83:PRO:HA	1:C:86:GLU:CD	2.29	0.53
1:C:162:ASP:HB2	1:C:167:ILE:HD12	1.90	0.53
1:C:261:LYS:O	1:C:265:GLY:N	2.42	0.53
2:D:47:ASP:N	2:D:51:GLY:O	2.40	0.53
2:D:326:ASP:O	2:D:330:ASN:N	2.34	0.53
1:E:37:VAL:HG12	1:E:59:ILE:HG21	1.90	0.53
1:E:231:ARG:HD2	1:E:231:ARG:H	1.72	0.53
2:F:63:ALA:HB1	2:F:70:VAL:HB	1.91	0.53

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:F:157:PHE:CD2	2:F:158:VAL:HG13	2.44	0.53
2:F:190:HIS:CE1	2:F:195:ARG:HD2	2.43	0.53
1:G:6:ASN:HD22	1:G:94:GLU:HA	1.73	0.53
2:H:174:THR:O	2:H:230:LEU:HB2	2.08	0.53
1:I:105:ALA:O	1:I:109:ILE:N	2.28	0.53
2:J:38:LYS:NZ	2:J:39:GLN:H	2.06	0.53
2:J:165:PHE:HE2	2:J:250:THR:HB	1.72	0.53
2:J:278:LEU:O	2:L:194:ARG:NH1	2.35	0.53
1:O:281:VAL:HA	1:O:284:ARG:NH2	2.24	0.53
1:O:281:VAL:N	1:Q:202:ASN:OD1	2.32	0.53
1:Q:10:ARG:NH2	1:Q:314:GLU:OE1	2.36	0.53
1:Q:295:SER:OG	1:Q:296:LEU:N	2.41	0.53
2:R:222:LYS:H	2:R:224:LYS:HZ3	1.56	0.53
2:R:297:THR:HG22	2:R:308:ILE:H	1.73	0.53
1:A:0:LYS:N	1:A:26:ASP:OD1	2.30	0.53
2:B:129:VAL:N	2:B:133:ASN:OD1	2.41	0.53
1:C:296:LEU:HB3	1:C:308:VAL:HG11	1.89	0.53
2:D:293:ASP:OD1	2:D:296:LEU:N	2.29	0.53
1:E:37:VAL:HG21	1:E:60(A):ASP:O	2.08	0.53
2:F:1:LEU:N	2:F:24:PRO:O	2.32	0.53
2:F:162:ASP:OD2	2:F:220:ASN:ND2	2.42	0.53
2:F:172:MET:HG3	2:F:242:LEU:HD13	1.91	0.53
1:G:18(A):TRP:CH2	1:G:69:LYS:HD3	2.43	0.53
2:H:79:PRO:HG2	2:H:107:LYS:HE2	1.91	0.53
2:H:127:THR:HG21	2:H:216:LEU:HB3	1.89	0.53
2:H:296:LEU:HB2	2:H:308:ILE:HG13	1.90	0.53
1:I:109:ILE:HD13	1:I:113:ALA:HB3	1.89	0.53
1:I:236:ASN:HA	1:I:313:ASN:HD21	1.72	0.53
2:J:240:VAL:N	2:J:309:ALA:O	2.37	0.53
1:O:318:SER:HA	1:O:321:VAL:HG22	1.90	0.53
1:Q:8:PHE:O	3:Q:401:NAD:O3B	2.25	0.53
1:Q:82:LEU:HB3	1:Q:84:TRP:NE1	2.23	0.53
1:Q:186:ASP:OD1	1:Q:186:ASP:N	2.41	0.53
1:A:5:ILE:HG12	1:A:93:ILE:HD13	1.90	0.53
1:A:7:GLY:O	1:A:9:GLY:N	2.41	0.53
2:B:326:ASP:O	2:B:330:ASN:N	2.40	0.53
2:D:1:LEU:N	2:D:24:PRO:O	2.26	0.53
2:D:104:GLY:HA2	2:D:107:LYS:HE2	1.90	0.53
2:D:183:ARG:HH22	2:D:191:ARG:NH2	2.07	0.53
1:E:20:ARG:HH11	1:E:322:VAL:HG11	1.73	0.53
1:E:254:ASP:O	1:E:258:ALA:N	2.26	0.53

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:F:128:TYR:HD1	2:F:133:ASN:HB2	1.73	0.53
1:I:161:LEU:O	1:I:166:GLY:N	2.41	0.53
1:I:254:ASP:O	1:I:258:ALA:N	2.24	0.53
1:K:60(A):ASP:HB3	1:K:62:GLU:OE2	2.09	0.53
1:K:149:CYS:HB3	1:K:317:TYR:CG	2.44	0.53
1:K:324:LEU:O	1:K:327:LEU:HB2	2.08	0.53
2:L:273:VAL:HA	2:L:292:ILE:H	1.74	0.53
1:O:17:ARG:NH1	1:O:45:LYS:O	2.42	0.53
1:O:41:THR:OG1	1:O:59:ILE:HG12	2.08	0.53
2:P:183:ARG:NE	2:P:188:SER:O	2.41	0.53
1:Q:194:ARG:HB3	1:Q:195:ARG:NH1	2.24	0.53
2:R:79:PRO:HB3	2:R:108:HIS:CE1	2.43	0.53
1:A:59:ILE:H	1:A:59:ILE:HD12	1.73	0.53
1:A:209:GLY:O	1:A:213:ALA:N	2.30	0.53
1:A:236:ASN:OD1	1:A:313:ASN:N	2.41	0.53
2:B:82:LEU:HB2	2:B:84:TRP:NE1	2.23	0.53
2:B:312:ASP:OD1	2:B:315:TRP:N	2.41	0.53
2:D:11:ILE:O	2:D:15:PHE:N	2.38	0.53
2:D:30:ILE:O	2:D:73:VAL:HA	2.08	0.53
2:D:190:HIS:CE1	2:D:192:ASP:H	2.26	0.53
1:E:314:GLU:OE1	1:E:315:TRP:N	2.41	0.53
2:F:64:ILE:N	2:F:71:ILE:H	2.06	0.53
2:F:192:ASP:OD2	2:F:195:ARG:N	2.32	0.53
1:G:118:ILE:C	1:G:145:SER:HG	2.09	0.53
2:H:82:LEU:HB2	2:H:84:TRP:CD1	2.44	0.53
2:H:102:ARG:NH2	2:H:124:ASP:O	2.41	0.53
1:I:25:LEU:HG	1:I:325:ALA:HB1	1.91	0.53
2:J:11:ILE:O	2:J:15:PHE:N	2.24	0.53
2:J:82:LEU:HB2	2:J:84:TRP:NE1	2.23	0.53
2:J:243:VAL:HA	2:J:306:LYS:HA	1.90	0.53
2:L:118:ILE:HB	2:L:145:SER:HB2	1.90	0.53
2:L:139:HIS:NE2	2:L:334:UNK:O	2.42	0.53
1:O:10:ARG:N	3:O:401:NAD:O2N	2.41	0.53
1:Q:0:LYS:HD3	1:Q:24:PRO:HA	1.91	0.53
1:Q:77:ARG:HG2	3:Q:401:NAD:N1A	2.24	0.53
1:Q:246:ILE:N	1:Q:303:ASP:O	2.37	0.53
1:Q:327:LEU:HA	1:Q:330:ASN:HD21	1.73	0.53
2:R:236:ASN:O	2:R:313:ASN:ND2	2.30	0.53
1:A:1:LEU:HD11	1:A:332:TRP:CE2	2.44	0.53
1:A:203:ILE:HD11	1:A:230:LEU:HB2	1.91	0.53
2:B:120:ALA:O	2:B:145:SER:OG	2.26	0.53

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:169:LYS:HD3	2:D:301:GLY:HA3	1.91	0.53
2:B:280:SER:HA	2:B:310:TRP:HZ3	1.74	0.53
1:C:16:LEU:O	1:C:18(B):HIS:N	2.29	0.53
1:E:47:ASP:H	1:E:51:GLY:C	2.12	0.53
1:E:84:TRP:HD1	1:E:108:HIS:O	1.91	0.53
1:E:149:CYS:HB3	1:E:317:TYR:HD1	1.72	0.53
2:F:79:PRO:HG3	2:F:108:HIS:CE1	2.43	0.53
2:F:103:ASP:OD1	2:F:103:ASP:N	2.38	0.53
1:G:18:CYS:SG	1:G:318:SER:OG	2.53	0.53
1:G:151:THR:OG1	1:G:152:ASN:OD1	2.26	0.53
1:G:172:MET:HB2	1:G:241:ASP:O	2.09	0.53
1:G:240:VAL:HG22	1:G:241:ASP:O	2.08	0.53
2:H:179:THR:H	2:H:182:GLN:HE22	1.56	0.53
2:H:218:LEU:HB3	2:H:221:LEU:HD13	1.91	0.53
2:H:270:ILE:HG22	2:H:271:LEU:HD22	1.90	0.53
1:I:18(A):TRP:NE1	1:I:25:LEU:O	2.41	0.53
2:J:20:ARG:HA	2:J:21:LYS:HZ3	1.74	0.53
1:K:297:THR:HG22	1:K:308:VAL:N	2.23	0.53
2:L:38:LYS:HB2	2:L:42:HIS:HE1	1.74	0.53
1:O:3:VAL:N	1:O:26:ASP:O	2.20	0.53
2:P:157:PHE:CD2	2:P:158:VAL:HG13	2.44	0.53
2:P:302:ASP:N	2:P:302:ASP:OD1	2.40	0.53
1:Q:47:ASP:N	1:Q:51:GLY:O	2.38	0.53
2:R:70:VAL:O	2:R:71:ILE:HG13	2.09	0.53
1:A:119:THR:O	1:A:119:THR:OG1	2.26	0.53
1:A:124:ASP:HB2	1:G:103:PRO:HA	1.91	0.53
2:B:190:HIS:CE1	2:B:192:ASP:H	2.26	0.53
2:B:292:ILE:HD13	2:B:309:ALA:HA	1.89	0.53
1:C:134:GLU:CD	1:C:134:GLU:H	2.12	0.53
1:E:16:LEU:HG	1:E:44:LEU:HD11	1.91	0.53
1:E:37:VAL:HG12	1:E:59:ILE:CG2	2.37	0.53
1:E:183:ARG:HG3	1:E:187:ALA:O	2.08	0.53
1:E:227:GLY:HA3	1:G:306:LYS:NZ	2.24	0.53
1:G:121:PRO:CA	1:G:147:ALA:HA	2.35	0.53
1:G:192:ASP:OD2	1:G:195:ARG:HG2	2.08	0.53
1:I:0:LYS:HD2	1:I:1:LEU:HD13	1.90	0.53
1:K:45:LYS:NZ	1:K:57:VAL:H	2.06	0.53
1:K:237:VAL:HG21	1:K:280:SER:HA	1.91	0.53
1:K:296:LEU:HB3	1:K:308:VAL:HG11	1.89	0.53
2:L:107:LYS:HA	2:L:110:GLN:HB2	1.90	0.53
2:L:157:PHE:HD2	2:L:158:VAL:HG13	1.74	0.53

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:L:183:ARG:HH22	2:L:191:ARG:NH2	2.06	0.53
1:O:37:VAL:HG23	1:O:59:ILE:HG21	1.89	0.53
1:O:64:PHE:CZ	1:O:66:ILE:HG12	2.43	0.53
2:P:84:TRP:HD1	2:P:111:ALA:HB3	1.72	0.53
2:P:171:THR:O	2:P:243:VAL:N	2.34	0.53
2:P:172:MET:HG3	2:P:242:LEU:HD13	1.90	0.53
2:R:15:PHE:HA	2:R:18:CYS:HB2	1.90	0.53
2:R:160:VAL:O	2:R:164:LYS:N	2.28	0.53
2:R:179:THR:OG1	2:R:180:GLY:N	2.41	0.53
2:R:275:ASP:OD2	2:R:294:SER:OG	2.26	0.53
1:A:17:ARG:HH11	1:A:44:LEU:HD12	1.74	0.53
1:A:20:ARG:HG3	1:A:21:LYS:H	1.74	0.53
1:C:212:LYS:O	1:C:215:SER:OG	2.14	0.53
2:D:62:SER:O	2:D:73:VAL:HG12	2.09	0.53
1:E:17:ARG:HD3	1:E:44:LEU:CD1	2.39	0.53
2:F:45:LYS:O	2:F:52:THR:OG1	2.24	0.53
2:F:83:PRO:HB2	2:F:86:ASP:OD1	2.09	0.53
1:G:171:THR:O	1:G:242:LEU:HD12	2.09	0.53
2:H:13:ARG:O	2:H:17:ARG:N	2.27	0.53
2:H:137:TYR:CE2	2:H:328:VAL:HA	2.44	0.53
2:H:224:LYS:HG3	2:H:225:LEU:HD23	1.91	0.53
1:I:291:THR:OG1	1:I:291:THR:O	2.27	0.53
2:J:6:ASN:HD22	2:J:108:HIS:HE1	1.55	0.53
2:J:265:ASN:C	2:J:268:LYS:HZ1	2.12	0.53
1:K:91:ILE:HA	1:K:115:LYS:O	2.09	0.53
1:K:128:TYR:HA	1:K:133:ASN:HD21	1.74	0.53
1:O:37:VAL:O	1:O:41:THR:HB	2.09	0.53
1:O:203:ILE:HD11	1:O:230:LEU:HB3	1.91	0.53
2:P:105:ALA:HA	2:P:108:HIS:CD2	2.44	0.53
2:P:150:THR:OG1	2:P:151:THR:N	2.42	0.53
2:P:162:ASP:OD2	2:P:220:ASN:ND2	2.42	0.53
1:Q:126:PRO:HD2	1:Q:144:ILE:HA	1.91	0.53
2:R:18(B):HIS:CE1	2:R:66:VAL:HG12	2.44	0.53
2:R:82:LEU:HB2	2:R:84:TRP:CD1	2.43	0.53
2:R:137:TYR:CE2	2:R:328:VAL:HA	2.44	0.53
2:R:318:SER:HA	2:R:321:VAL:HB	1.91	0.53
2:B:58:LYS:O	2:B:65:SER:N	2.42	0.53
2:B:185:LEU:HB3	1:C:10:ARG:HE	1.74	0.53
2:B:275:ASP:OD1	2:B:295:SER:N	2.41	0.53
1:C:164:GLU:OE1	1:C:165:LEU:N	2.42	0.53
1:E:279:VAL:HG21	1:G:197:ARG:NH2	2.24	0.53

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:93:ILE:HD13	1:G:117:ILE:HG13	1.91	0.53
1:G:248:LYS:C	1:G:248(A):VAL:HG22	2.29	0.53
1:I:273:VAL:HG12	1:I:292:ILE:HD12	1.91	0.53
1:I:279:VAL:HG23	1:I:282:ASP:HB2	1.90	0.53
1:I:332:TRP:HE3	1:I:333:PRO:HD2	1.74	0.53
2:J:190:HIS:CE1	2:J:192:ASP:H	2.26	0.53
1:O:103:PRO:O	1:O:107:LYS:N	2.30	0.53
1:O:139:HIS:ND1	1:O:139(A):ASP:OD1	2.42	0.53
2:P:78:ASN:HD21	2:P:80:VAL:HG22	1.74	0.53
2:P:281:ILE:H	2:R:202:ASN:ND2	2.00	0.53
2:P:332:TRP:NE1	2:P:334:UNK:OXT	2.42	0.53
1:Q:8:PHE:CE2	1:Q:13:ARG:HD2	2.44	0.53
1:Q:154:LEU:HB3	1:Q:158:VAL:HG11	1.91	0.53
1:Q:162:ASP:O	1:Q:166:GLY:N	2.42	0.53
1:Q:281:VAL:HG23	1:Q:284:ARG:HH21	1.74	0.53
1:Q:332:TRP:CD2	1:Q:333:PRO:HD2	2.43	0.53
2:R:109:LEU:HD21	2:R:116:VAL:HG23	1.91	0.53
2:R:186:ASP:HA	2:R:196:ALA:O	2.09	0.53
1:A:195:ARG:NH1	1:G:361:TYR:HA	2.23	0.53
1:A:293:ASP:H	1:A:296:LEU:HD12	1.73	0.53
2:B:30:ILE:N	2:B:72:LYS:O	2.41	0.53
2:B:177:SER:OG	2:B:234:THR:O	2.13	0.53
2:B:242:LEU:HB3	2:B:307:VAL:HG22	1.91	0.53
1:E:6:ASN:HA	1:E:31:ASN:HB3	1.90	0.53
1:E:16:LEU:CG	1:E:44:LEU:HD11	2.39	0.53
1:E:92:VAL:H	1:E:116:VAL:HG22	1.74	0.53
1:E:312:ASP:CG	1:E:314:GLU:H	2.13	0.53
1:E:316:GLY:O	1:E:320:ARG:HG2	2.09	0.53
1:G:77:ARG:HH11	1:G:77:ARG:N	2.07	0.53
1:G:125:ILE:HG23	1:G:144:ILE:HA	1.90	0.53
1:G:258:ALA:HA	1:G:261:LYS:HE3	1.91	0.53
2:H:109:LEU:HD21	2:H:116:VAL:HG23	1.90	0.53
1:I:41:THR:HG23	1:I:57:VAL:HG21	1.91	0.53
1:I:176:HIS:C	1:I:231:ARG:HA	2.29	0.53
1:I:324:LEU:H	1:I:324:LEU:HD22	1.74	0.53
2:J:117:LEU:HA	2:J:144:ILE:O	2.09	0.53
1:K:83:PRO:HA	1:K:86:GLU:CD	2.29	0.53
2:L:242:LEU:HB3	2:L:307:VAL:HG22	1.90	0.53
2:L:249:LYS:NZ	2:L:301:GLY:O	2.30	0.53
1:O:2:LYS:HA	1:O:26:ASP:HB3	1.92	0.52
3:O:401:NAD:O1N	3:O:401:NAD:H2D	2.09	0.52

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:P:79:PRO:HG3	2:P:108:HIS:HE1	1.74	0.52
2:P:149:CYS:SG	2:P:150:THR:N	2.82	0.52
1:Q:190:HIS:HD1	1:Q:196:ALA:HB2	1.75	0.52
1:Q:264:ALA:HA	1:Q:268:LYS:NZ	2.25	0.52
2:R:191:ARG:NH1	2:R:191:ARG:H	2.07	0.52
2:R:218:LEU:HB3	2:R:221:LEU:HD13	1.90	0.52
1:A:53:PHE:HA	1:A:54:LYS:HZ3	1.75	0.52
1:A:190:HIS:ND1	1:G:357:GLU:O	2.42	0.52
2:B:20:ARG:HA	2:B:21:LYS:HZ3	1.74	0.52
2:B:118:ILE:O	2:B:145:SER:OG	2.21	0.52
2:B:286:THR:HG22	2:B:288:VAL:HG13	1.90	0.52
1:C:40:ALA:O	1:C:44:LEU:N	2.34	0.52
1:C:84:TRP:HB2	1:C:111:ALA:O	2.09	0.52
2:F:168:ILE:HB	2:F:245:GLN:HG2	1.92	0.52
1:G:160:VAL:O	1:G:163:GLU:HG2	2.09	0.52
1:G:165:LEU:HG	1:G:246:ILE:HG21	1.90	0.52
1:G:170:GLY:HA2	1:G:244:VAL:HA	1.90	0.52
2:H:63:ALA:HA	2:H:72:LYS:HA	1.90	0.52
2:H:141:ASP:OD1	2:H:141:ASP:N	2.24	0.52
2:H:232:VAL:O	2:H:234:THR:N	2.40	0.52
2:H:288:VAL:HA	2:H:320:ARG:HH12	1.74	0.52
1:I:38:LYS:HA	1:I:41:THR:HB	1.91	0.52
2:J:88:GLY:O	2:J:114:LYS:NZ	2.41	0.52
2:J:173:THR:HG1	2:L:306:LYS:HZ3	1.49	0.52
2:J:192:ASP:HB3	2:J:195:ARG:HB2	1.90	0.52
1:K:28:VAL:O	1:K:71:ILE:HG23	2.08	0.52
1:K:101:ASP:OD2	1:K:103:PRO:HB2	2.09	0.52
1:K:115:LYS:HZ1	1:K:332:TRP:HE1	1.57	0.52
1:K:344:PRO:O	1:K:346:GLU:N	2.42	0.52
2:L:206:THR:OG1	2:L:207:SER:N	2.42	0.52
2:P:104:GLY:HA2	2:P:107:LYS:HB2	1.92	0.52
2:P:167:ILE:HA	2:P:246:VAL:HA	1.91	0.52
1:Q:236:ASN:HB3	1:Q:284:ARG:HH12	1.73	0.52
1:A:270:VAL:O	1:A:289:SER:OG	2.27	0.52
2:B:169:LYS:O	2:B:245:GLN:N	2.42	0.52
1:C:10:ARG:HB2	3:C:401:NAD:O3	2.09	0.52
1:C:115:LYS:HZ2	1:C:139:HIS:HA	1.73	0.52
1:C:240:VAL:HG12	1:C:311:TYR:CE1	2.45	0.52
2:D:255:VAL:HB	2:D:259:PHE:CZ	2.44	0.52
1:E:10:ARG:HH22	2:H:185:LEU:HD12	1.74	0.52
2:F:270:ILE:O	2:F:320:ARG:NH1	2.42	0.52

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:147:ALA:O	1:G:317:TYR:OH	2.20	0.52
1:G:165:LEU:HD12	1:G:248:LYS:O	2.09	0.52
2:H:1:LEU:HB3	2:H:25:LEU:HD13	1.91	0.52
1:I:47:ASP:OD1	1:I:48:SER:N	2.43	0.52
1:I:49:ILE:HG23	1:I:284:ARG:CZ	2.39	0.52
2:J:186:ASP:CG	2:J:198:ALA:H	2.13	0.52
2:J:206:THR:OG1	2:J:207:SER:N	2.42	0.52
1:O:132:VAL:O	1:O:135:LYS:NZ	2.25	0.52
1:Q:64:PHE:O	1:Q:71:ILE:N	2.30	0.52
1:Q:94:GLU:OE2	1:Q:96:THR:OG1	2.16	0.52
1:Q:249:GLY:HA2	1:Q:302:GLY:CA	2.40	0.52
1:A:103:PRO:O	1:A:107:LYS:N	2.42	0.52
1:A:126:PRO:HG3	1:A:144:ILE:HG22	1.91	0.52
1:C:203:ILE:O	1:C:205:PRO:HD3	2.09	0.52
1:C:270:VAL:O	1:C:289:SER:N	2.39	0.52
2:D:89:ILE:O	2:D:114:LYS:N	2.42	0.52
2:D:107:LYS:HA	2:D:110:GLN:HB2	1.92	0.52
1:E:28:VAL:C	1:E:71:ILE:HG23	2.30	0.52
1:E:310:TRP:N	1:E:310:TRP:CD1	2.77	0.52
2:F:150:THR:OG1	2:F:151:THR:N	2.43	0.52
2:F:320:ARG:NE	2:F:323:ASP:OD2	2.39	0.52
1:I:167:ILE:HB	1:I:221:LEU:HD11	1.91	0.52
1:K:6:ASN:O	1:K:6:ASN:ND2	2.43	0.52
1:K:18(A):TRP:NE1	1:K:26:ASP:HA	2.24	0.52
1:K:37:VAL:HA	1:K:40:ALA:HB3	1.91	0.52
1:O:101:ASP:HB2	1:O:103:PRO:HD2	1.90	0.52
1:O:315:TRP:O	1:O:318:SER:OG	2.27	0.52
2:P:100:VAL:HG13	2:P:122(A):LYS:HB2	1.90	0.52
1:Q:103:PRO:O	1:Q:107:LYS:N	2.37	0.52
1:Q:105:ALA:HA	1:Q:108:HIS:HD2	1.75	0.52
2:R:21:LYS:HZ2	2:R:21:LYS:H	1.56	0.52
2:R:218:LEU:HD22	2:R:221:LEU:HD13	1.92	0.52
2:R:256:ASN:O	2:R:260:ARG:N	2.32	0.52
1:A:128:TYR:HB2	1:A:145:SER:O	2.09	0.52
1:A:171:THR:C	1:A:242:LEU:HD12	2.29	0.52
1:A:176:HIS:HA	1:A:238:SER:HB2	1.91	0.52
2:B:6:ASN:HB2	2:B:84:TRP:CZ2	2.44	0.52
2:B:127:THR:HG23	2:B:133:ASN:ND2	2.24	0.52
1:C:254:ASP:HA	1:C:257:ASN:HD22	1.75	0.52
1:C:298:MET:HG2	1:C:306:LYS:HE3	1.91	0.52
2:D:205:PRO:HA	2:D:230:LEU:HD23	1.91	0.52

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:170:GLY:O	1:E:225:LEU:HA	2.09	0.52
2:F:194:ARG:NE	2:F:205:PRO:O	2.42	0.52
1:G:45:LYS:HG2	1:G:46:TYR:CZ	2.44	0.52
1:G:132:VAL:N	1:G:134:GLU:OE1	2.42	0.52
1:G:168:VAL:H	1:G:246:ILE:HA	1.73	0.52
1:G:248:LYS:HG2	1:G:248(A):VAL:HG22	1.91	0.52
1:G:256:ASN:O	1:G:259:PHE:HB2	2.09	0.52
2:H:17:ARG:NH2	2:H:54:ASP:OD1	2.42	0.52
2:H:83:PRO:HB2	2:H:86:ASP:HB2	1.90	0.52
2:H:106:GLY:HA2	2:H:109:LEU:HB2	1.90	0.52
1:I:243:VAL:HG21	1:K:243:VAL:HG11	1.91	0.52
2:J:6:ASN:O	2:J:95:GLY:N	2.41	0.52
2:J:279:VAL:HA	2:J:310:TRP:CH2	2.44	0.52
2:J:292:ILE:HD13	2:J:309:ALA:HA	1.90	0.52
1:K:79:PRO:HB2	1:K:107:LYS:HB2	1.90	0.52
1:K:219:PRO:HA	1:K:222:LYS:HD3	1.90	0.52
2:L:91:LEU:HA	2:L:115:LYS:O	2.10	0.52
1:O:134:GLU:OE1	1:O:134:GLU:N	2.41	0.52
1:O:321:VAL:HA	1:O:324:LEU:HG	1.91	0.52
1:Q:256:ASN:O	1:Q:260:ARG:N	2.31	0.52
3:Q:401:NAD:N7N	3:Q:401:NAD:O1N	2.42	0.52
2:R:106:GLY:HA2	2:R:109:LEU:HB2	1.91	0.52
2:R:203:ILE:HD11	2:R:230:LEU:HD13	1.92	0.52
2:R:251:PHE:CZ	2:R:253:GLU:HB3	2.44	0.52
1:A:14:ASN:ND2	1:A:314:GLU:OE1	2.43	0.52
1:A:16:LEU:HD22	1:A:44:LEU:HD13	1.91	0.52
1:A:137:TYR:HH	1:A:139:HIS:CE1	2.26	0.52
2:B:8:PHE:H	2:B:32:ASP:HB2	1.74	0.52
2:B:64:ILE:H	2:B:71:ILE:H	1.55	0.52
2:B:184:LEU:HG	2:B:185:LEU:HD13	1.91	0.52
2:B:202:ASN:ND2	2:D:281:ILE:HG22	2.24	0.52
1:C:148:SER:O	1:C:152:ASN:N	2.31	0.52
2:D:94:GLU:HG2	2:D:96:THR:HG23	1.92	0.52
2:D:157:PHE:HD2	2:D:158:VAL:HG13	1.74	0.52
1:E:267:LEU:HA	1:E:270:VAL:HB	1.91	0.52
2:F:115:LYS:NZ	2:F:139:HIS:O	2.33	0.52
1:G:102:GLY:N	1:G:103:PRO:HD2	2.25	0.52
2:H:77:ARG:HB3	3:H:401:NAD:H62A	1.74	0.52
2:J:19:GLY:O	2:J:21:LYS:NZ	2.43	0.52
2:J:281:ILE:H	2:L:202:ASN:ND2	2.07	0.52
1:K:1:LEU:HG	1:K:90:ASP:OD2	2.09	0.52

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:332:TRP:CH2	1:K:334:GLY:HA3	2.44	0.52
2:L:30:ILE:O	2:L:73:VAL:HA	2.09	0.52
2:P:7:GLY:HA2	3:P:401:NAD:N3A	2.25	0.52
2:P:42:HIS:HA	2:P:45:LYS:HB3	1.90	0.52
2:P:83:PRO:HB2	2:P:86:ASP:OD1	2.09	0.52
2:P:244:VAL:O	2:P:305:VAL:N	2.43	0.52
1:Q:236:ASN:ND2	1:Q:312:ASP:OD1	2.42	0.52
2:R:40:ALA:O	2:R:44:LEU:N	2.38	0.52
2:R:146:ASN:OD1	2:R:147:ALA:N	2.43	0.52
1:A:10:ARG:NH1	2:D:185:LEU:HB3	2.17	0.52
1:A:202:ASN:ND2	1:C:281:VAL:HG12	2.24	0.52
1:A:293:ASP:HB3	1:A:296:LEU:HG	1.90	0.52
2:B:213:ALA:HA	2:B:216:LEU:HD13	1.91	0.52
2:B:239:VAL:HA	2:B:310:TRP:HA	1.90	0.52
1:C:30:VAL:HB	1:C:73:VAL:HG13	1.89	0.52
1:C:178:TYR:HD2	1:C:233:PRO:HA	1.73	0.52
1:C:214:VAL:O	1:C:218:LEU:N	2.43	0.52
2:D:8:PHE:HB3	2:D:32:ASP:HB2	1.91	0.52
2:D:179:THR:H	2:D:182:GLN:CD	2.11	0.52
2:D:224:LYS:NZ	2:D:225:LEU:HB2	2.24	0.52
2:F:161:LEU:HD22	2:F:167:ILE:HD11	1.92	0.52
1:G:6:ASN:ND2	1:G:96:THR:OG1	2.34	0.52
2:H:146:ASN:OD1	2:H:147:ALA:N	2.43	0.52
1:K:240:VAL:HG13	1:K:311:TYR:CE1	2.45	0.52
2:L:8:PHE:HB3	2:L:32:ASP:HB2	1.91	0.52
2:L:41:SER:OG	2:L:42:HIS:N	2.43	0.52
2:L:172:MET:HA	2:L:242:LEU:HA	1.91	0.52
1:O:8:PHE:CZ	1:O:13:ARG:HG3	2.44	0.52
2:P:270:ILE:O	2:P:320:ARG:NH1	2.42	0.52
1:Q:172:MET:HA	1:Q:242:LEU:HA	1.91	0.52
2:R:94:GLU:HB3	2:R:118:ILE:HD11	1.92	0.52
2:R:197:ARG:NH2	2:R:198:ALA:HB3	2.24	0.52
2:R:243:VAL:HG22	2:R:306:LYS:HA	1.92	0.52
1:A:239:VAL:HB	1:A:310:TRP:CD2	2.44	0.52
2:B:41:SER:OG	2:B:42:HIS:N	2.41	0.52
2:B:209:GLY:O	2:B:213:ALA:N	2.23	0.52
1:C:21:LYS:NZ	1:C:22:ASP:H	2.08	0.52
1:C:46:TYR:HA	1:C:52:THR:HA	1.91	0.52
1:C:109:ILE:HG12	1:C:143:ILE:HD11	1.92	0.52
1:C:267:LEU:HB2	1:C:271:LEU:HB3	1.91	0.52
1:E:17:ARG:HD2	1:E:44:LEU:O	2.10	0.52

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:F:8:PHE:CZ	2:F:13:ARG:HG3	2.45	0.52
2:F:149:CYS:SG	2:F:150:THR:N	2.83	0.52
2:F:236:ASN:ND2	2:F:237:VAL:H	2.08	0.52
1:G:171:THR:N	1:G:243:VAL:O	2.40	0.52
2:H:318:SER:HA	2:H:321:VAL:HB	1.91	0.52
2:J:213:ALA:HA	2:J:216:LEU:HD13	1.91	0.52
2:J:242:LEU:HD11	2:J:244:VAL:HG13	1.91	0.52
1:K:29:VAL:HG23	1:K:73:VAL:HA	1.91	0.52
1:K:150:THR:O	1:K:154:LEU:HG	2.10	0.52
1:O:101:ASP:OD2	1:O:103:PRO:HB2	2.09	0.52
1:O:166:GLY:HA3	1:O:247:GLU:HG3	1.92	0.52
1:O:346:GLU:N	1:C:191:ARG:HD2	2.25	0.52
2:P:2:LYS:NZ	2:P:26:ASP:OD2	2.40	0.52
2:P:183:ARG:NH2	2:P:191:ARG:HH12	2.08	0.52
1:Q:50:LEU:HD21	1:Q:54:LYS:HZ3	1.74	0.52
1:Q:213:ALA:HA	1:Q:216:LEU:HB2	1.92	0.52
2:R:102:ARG:NH2	2:R:124:ASP:O	2.42	0.52
1:A:187:ALA:HA	2:D:43:LEU:HD13	1.91	0.52
2:B:215:ALA:HB1	2:B:222:LYS:HG2	1.92	0.52
2:B:293:ASP:OD2	2:B:295:SER:OG	2.27	0.52
1:C:169:LYS:H	1:C:245:ASN:CG	2.13	0.52
1:C:186:ASP:HB3	1:C:197:ARG:HE	1.74	0.52
1:C:251:THR:OG1	1:C:252:ALA:N	2.41	0.52
2:D:242:LEU:HB3	2:D:307:VAL:HG22	1.92	0.52
2:D:249:LYS:NZ	2:D:301:GLY:O	2.32	0.52
2:F:17:ARG:HD3	2:F:50:LEU:HD12	1.90	0.52
2:F:84:TRP:CD1	2:F:111:ALA:HB3	2.44	0.52
2:F:132:VAL:HG11	2:F:217:VAL:HB	1.92	0.52
2:F:244:VAL:O	2:F:305:VAL:N	2.42	0.52
1:G:167:ILE:HA	1:G:246:ILE:HD12	1.92	0.52
1:G:236:ASN:OD1	1:G:313:ASN:ND2	2.43	0.52
1:K:164:GLU:HG3	1:K:165:LEU:HD22	1.92	0.52
1:O:13:ARG:H	1:O:13:ARG:HD2	1.75	0.52
1:O:156:PRO:O	1:O:160:VAL:N	2.34	0.52
1:Q:151:THR:OG1	1:Q:152:ASN:N	2.41	0.52
1:Q:249:GLY:CA	1:Q:302:GLY:CA	2.88	0.52
2:R:1:LEU:H	2:R:26:ASP:H	1.57	0.52
2:R:244:VAL:O	2:R:305:VAL:N	2.38	0.52
2:R:270:ILE:HG22	2:R:271:LEU:HD22	1.90	0.52
2:B:236:ASN:OD1	2:B:284:ARG:NH1	2.43	0.52
1:C:293:ASP:OD1	1:C:295:SER:OG	2.16	0.52

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:10:ARG:HG3	3:D:401:NAD:O1N	2.10	0.52
2:D:137:TYR:O	2:D:331:LYS:NZ	2.23	0.52
1:E:139:HIS:ND1	1:E:332:TRP:HA	2.25	0.52
1:E:213:ALA:O	1:E:216:LEU:HB2	2.10	0.52
2:F:37:VAL:HG23	2:F:38:LYS:H	1.75	0.52
2:F:103:ASP:O	2:F:107:LYS:N	2.32	0.52
2:F:239:VAL:HG12	2:F:309:ALA:O	2.10	0.52
1:G:205:PRO:HD3	1:G:230:LEU:HD13	1.92	0.52
2:H:172:MET:HA	2:H:242:LEU:HA	1.91	0.52
2:H:186:ASP:HA	2:H:196:ALA:O	2.10	0.52
2:H:267:LEU:HD22	2:H:271:LEU:HD23	1.92	0.52
2:H:318:SER:O	2:H:322:VAL:N	2.31	0.52
1:I:9:GLY:HA2	3:I:401:NAD:H4B	1.90	0.52
1:I:46:TYR:C	2:L:197:ARG:HH12	2.14	0.52
1:I:183:ARG:NH1	1:I:187:ALA:O	2.43	0.52
1:I:318:SER:OG	1:I:319:GLN:N	2.41	0.52
2:J:5:ILE:O	2:J:31:ASN:N	2.40	0.52
2:J:6:ASN:OD1	2:J:7:GLY:N	2.42	0.52
2:J:157:PHE:HA	2:J:160:VAL:HB	1.92	0.52
2:J:181:ASP:OD1	2:J:195:ARG:NH1	2.42	0.52
2:L:5:ILE:HG23	2:L:93:ILE:HB	1.91	0.52
2:L:292:ILE:HG23	2:L:308:ILE:O	2.10	0.52
1:O:176:HIS:HB3	1:O:231:ARG:CA	2.39	0.52
2:P:14:ASN:OD1	2:P:318:SER:OG	2.14	0.52
2:P:205:PRO:HA	2:P:230:LEU:HD23	1.91	0.52
2:R:47:ASP:CG	2:R:50:LEU:H	2.13	0.52
2:R:102:ARG:HH22	2:R:125:ILE:HA	1.74	0.52
2:R:288:VAL:HA	2:R:320:ARG:HH12	1.74	0.52
1:A:190:HIS:O	2:D:39:GLN:NE2	2.42	0.52
1:C:248(A):VAL:HG13	1:C:249:GLY:H	1.74	0.52
1:C:285:CYS:HA	1:C:315:TRP:CG	2.45	0.52
2:D:18(A):TRP:NE1	2:D:25:LEU:O	2.40	0.52
2:D:118:ILE:HB	2:D:145:SER:HB2	1.91	0.52
2:D:273:VAL:HA	2:D:292:ILE:H	1.73	0.52
1:E:232:VAL:O	1:E:234:THR:N	2.42	0.52
2:F:157:PHE:CE1	2:F:271:LEU:HG	2.45	0.52
1:G:18(A):TRP:NE1	1:G:25:LEU:O	2.43	0.52
1:G:96:THR:HB	1:G:98:VAL:HG22	1.92	0.52
1:G:255:VAL:HA	1:G:258:ALA:HB3	1.92	0.52
1:I:134:GLU:HG2	1:I:135:LYS:H	1.74	0.52
1:I:135:LYS:H	1:I:135:LYS:HZ2	1.58	0.52

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:I:290:SER:OG	1:I:310:TRP:N	2.42	0.52
2:J:37:VAL:HG23	2:J:38:LYS:H	1.75	0.52
2:J:41:SER:O	2:J:45:LYS:N	2.19	0.52
2:J:130:VAL:HG21	2:J:320:ARG:HG3	1.90	0.52
2:J:237:VAL:HG13	2:J:312:ASP:HA	1.90	0.52
1:K:69:LYS:HB3	1:K:71:ILE:HD13	1.91	0.52
2:L:42:HIS:CD2	2:L:46:TYR:HE2	2.28	0.52
2:L:65:SER:CA	2:L:70:VAL:HA	2.38	0.52
2:P:168:ILE:HB	2:P:245:GLN:HG2	1.91	0.51
1:Q:28:VAL:O	1:Q:72:LYS:N	2.29	0.51
1:Q:171:THR:HA	1:Q:225:LEU:HD12	1.93	0.51
2:R:10:ARG:N	3:R:401:NAD:O2N	2.43	0.51
2:R:267:LEU:HD22	2:R:271:LEU:HD23	1.92	0.51
1:A:361:TYR:H	1:G:195:ARG:CZ	2.23	0.51
2:B:265:ASN:C	2:B:268:LYS:HZ1	2.13	0.51
2:B:273:VAL:HA	2:B:292:ILE:H	1.74	0.51
1:C:31:ASN:HD21	1:C:76:ASN:C	2.12	0.51
1:C:62:GLU:O	1:C:73:VAL:N	2.41	0.51
1:C:107:LYS:O	1:C:110:GLN:HG2	2.09	0.51
1:C:248(A):VAL:HG13	1:C:249:GLY:N	2.25	0.51
2:D:91:LEU:HA	2:D:115:LYS:O	2.10	0.51
2:D:292:ILE:HG23	2:D:308:ILE:O	2.10	0.51
1:E:94:GLU:O	1:E:119:THR:OG1	2.17	0.51
1:E:229:ALA:O	1:E:230:LEU:HD13	2.10	0.51
2:F:8:PHE:HB3	2:F:32:ASP:HB2	1.90	0.51
2:F:38:LYS:NZ	2:F:39:GLN:H	2.07	0.51
2:F:100:VAL:HG13	2:F:122(A):LYS:HB2	1.92	0.51
2:F:167:ILE:HA	2:F:246:VAL:HA	1.91	0.51
2:F:174:THR:O	2:F:230:LEU:HB2	2.10	0.51
2:F:332:TRP:NE1	2:F:334:UNK:OXT	2.43	0.51
1:G:12:GLY:HA2	1:G:15:PHE:HB3	1.92	0.51
2:H:79:PRO:HB3	2:H:108:HIS:ND1	2.24	0.51
2:H:105:ALA:O	2:H:109:LEU:N	2.40	0.51
2:H:162:ASP:OD1	2:H:167:ILE:N	2.31	0.51
2:H:192:ASP:CG	2:H:195:ARG:H	2.13	0.51
2:H:243:VAL:HG22	2:H:306:LYS:HA	1.92	0.51
2:J:157:PHE:O	2:J:161:LEU:N	2.26	0.51
2:J:215:ALA:HB1	2:J:222:LYS:HG2	1.92	0.51
2:L:94:GLU:HG2	2:L:96:THR:HG23	1.92	0.51
2:P:38:LYS:HZ3	2:P:39:GLN:HG3	1.75	0.51
2:P:157:PHE:CE1	2:P:271:LEU:HG	2.46	0.51

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:Q:2:LYS:N	1:Q:90:ASP:OD2	2.42	0.51
1:Q:175:THR:O	1:Q:238:SER:HA	2.09	0.51
1:A:293:ASP:O	1:A:296:LEU:HB2	2.10	0.51
2:B:2:LYS:HD3	2:B:87:MET:O	2.09	0.51
2:D:105:ALA:HA	2:D:108:HIS:CD2	2.46	0.51
2:F:2:LYS:HA	2:F:26:ASP:O	2.10	0.51
1:G:161:LEU:HB2	1:G:167:ILE:HD11	1.91	0.51
2:J:127:THR:HG23	2:J:133:ASN:ND2	2.24	0.51
2:J:129:VAL:N	2:J:133:ASN:OD1	2.41	0.51
2:J:138:THR:OG1	2:J:141:ASP:OD1	2.26	0.51
2:J:281:ILE:O	2:J:284:ARG:HB3	2.10	0.51
2:L:104:GLY:HA2	2:L:107:LYS:HE2	1.91	0.51
1:O:41:THR:HG23	1:O:57:VAL:CG1	2.40	0.51
1:O:123(A):SER:OG	1:C:142:ASN:ND2	2.44	0.51
1:O:200:ALA:HB3	1:O:201:LEU:HD23	1.93	0.51
1:O:253:GLU:HA	1:O:256:ASN:HD21	1.75	0.51
1:Q:85:ALA:N	1:Q:111:ALA:O	2.32	0.51
1:Q:156:PRO:HB3	1:Q:267:LEU:HG	1.93	0.51
1:Q:256:ASN:HA	1:Q:259:PHE:HB2	1.92	0.51
1:Q:324:LEU:HA	1:Q:327:LEU:HB3	1.92	0.51
1:A:127:THR:HG21	1:A:216:LEU:HB3	1.93	0.51
1:A:214:VAL:O	1:A:217:VAL:HG22	2.11	0.51
2:B:237:VAL:HG13	2:B:312:ASP:HA	1.92	0.51
1:C:168:VAL:HB	1:C:245:ASN:CG	2.30	0.51
1:C:239:VAL:HA	1:C:310:TRP:HA	1.91	0.51
2:D:141:ASP:OD1	2:D:141:ASP:N	2.43	0.51
2:D:240:VAL:HG13	2:D:309:ALA:HB3	1.93	0.51
1:E:219:PRO:HA	1:E:222:LYS:HZ1	1.75	0.51
2:F:63:ALA:HA	2:F:71:ILE:C	2.31	0.51
1:G:62:GLU:OE1	1:G:62:GLU:N	2.43	0.51
1:I:95:GLY:O	3:I:401:NAD:H1B	2.10	0.51
1:I:280:SER:HA	1:I:283:PHE:HB2	1.92	0.51
2:J:102:ARG:HH21	2:J:125:ILE:HA	1.76	0.51
2:J:179:THR:H	2:J:182:GLN:CD	2.12	0.51
2:P:38:LYS:NZ	2:P:39:GLN:H	2.08	0.51
2:P:94:GLU:O	2:P:119:THR:OG1	2.18	0.51
2:P:102:ARG:HH22	2:P:126:PRO:HD2	1.76	0.51
2:P:148:SER:O	2:P:152:ASN:N	2.30	0.51
2:P:161:LEU:HD22	2:P:167:ILE:HD11	1.92	0.51
2:P:190:HIS:CE1	2:P:195:ARG:HD2	2.45	0.51
2:P:237:VAL:HG22	2:P:312:ASP:HA	1.92	0.51

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:221:LEU:HD13	1:A:224:LYS:HB2	1.93	0.51
1:A:297:THR:OG1	1:A:298:MET:N	2.43	0.51
2:B:0:LYS:HZ1	2:B:332:TRP:HB2	1.75	0.51
2:B:203:ILE:O	2:D:279:VAL:HG11	2.10	0.51
1:C:82:LEU:HB3	1:C:84:TRP:CD2	2.45	0.51
1:C:169:LYS:N	1:C:245:ASN:OD1	2.39	0.51
1:C:176:HIS:HB3	1:C:231:ARG:CZ	2.40	0.51
2:D:58:LYS:O	2:D:65:SER:N	2.44	0.51
1:E:29:VAL:HA	1:E:72:LYS:O	2.09	0.51
1:E:30:VAL:HB	1:E:73:VAL:CG1	2.40	0.51
1:E:155:ALA:HA	1:E:158:VAL:HG22	1.91	0.51
2:F:13:ARG:HE	2:F:43:LEU:HB3	1.75	0.51
2:F:49:ILE:HG23	2:F:284:ARG:HH11	1.75	0.51
1:G:77:ARG:HH11	1:G:77:ARG:H	1.59	0.51
1:G:170:GLY:O	1:G:225:LEU:HA	2.10	0.51
2:H:17:ARG:HD3	2:H:50:LEU:HD12	1.92	0.51
2:H:251:PHE:CZ	2:H:253:GLU:HB3	2.45	0.51
1:I:60:ILE:HG22	1:I:60(A):ASP:H	1.74	0.51
1:I:128:TYR:HA	1:I:133:ASN:ND2	2.26	0.51
1:I:172:MET:HA	1:I:242:LEU:HA	1.90	0.51
1:I:246:ILE:HG23	1:I:248:LYS:N	2.25	0.51
2:J:102:ARG:HH21	2:J:125:ILE:HG13	1.75	0.51
2:J:166:GLY:O	2:J:247:SER:N	2.29	0.51
1:O:149:CYS:SG	1:O:150:THR:N	2.84	0.51
1:A:182:GLN:NE2	1:A:231:ARG:HD3	2.25	0.51
1:A:296:LEU:HB3	1:A:308:VAL:HB	1.93	0.51
2:B:78:ASN:ND2	2:B:81:ASN:OD1	2.44	0.51
2:D:2:LYS:O	2:D:90:ASP:N	2.32	0.51
1:E:244:VAL:O	1:E:305:VAL:N	2.37	0.51
1:E:315:TRP:O	1:E:319:GLN:N	2.27	0.51
1:G:18:CYS:O	1:G:20:ARG:HG2	2.10	0.51
2:H:58:LYS:O	2:H:65:SER:N	2.43	0.51
2:J:267:LEU:HB3	2:J:271:LEU:H	1.74	0.51
2:L:89:ILE:O	2:L:114:LYS:N	2.43	0.51
1:O:5:ILE:HB	1:O:30:VAL:HG13	1.93	0.51
2:P:7:GLY:HA3	2:P:96:THR:HA	1.92	0.51
2:P:20:ARG:HA	2:P:21:LYS:HZ3	1.76	0.51
1:Q:205:PRO:HB2	1:Q:228:ILE:HD12	1.92	0.51
1:Q:212:LYS:H	1:Q:212:LYS:NZ	2.06	0.51
2:B:102:ARG:HH21	2:B:125:ILE:HA	1.76	0.51
2:B:190:HIS:HB3	2:B:196:ALA:HB2	1.91	0.51

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:18(A):TRP:O	1:C:20:ARG:HB3	2.10	0.51
1:C:287:ASP:HA	1:C:319:GLN:HG3	1.91	0.51
2:D:6:ASN:HB3	2:D:94:GLU:HA	1.91	0.51
2:F:63:ALA:HA	2:F:71:ILE:O	2.10	0.51
1:G:141:ALA:O	1:G:144:ILE:HG23	2.11	0.51
1:G:260:ARG:HD3	1:G:273:VAL:HG11	1.93	0.51
1:I:58:LYS:HZ2	1:I:58:LYS:HA	1.76	0.51
2:J:4:ALA:HA	2:J:29:VAL:O	2.11	0.51
2:J:236:ASN:ND2	2:J:237:VAL:H	2.09	0.51
2:J:260:ARG:HE	2:J:273:VAL:HG13	1.76	0.51
1:K:104:GLY:O	1:K:108:HIS:HD2	1.93	0.51
1:K:166:GLY:C	1:K:247:GLU:HB3	2.31	0.51
1:K:177:SER:OG	1:K:234:THR:O	2.28	0.51
1:K:214:VAL:HB	1:K:218:LEU:HD23	1.93	0.51
1:O:55:ALA:HB1	1:O:67:ASP:OD2	2.11	0.51
1:O:60(A):ASP:C	1:O:62:GLU:N	2.64	0.51
1:O:124:ASP:N	1:O:124:ASP:OD1	2.44	0.51
2:P:186:ASP:OD1	2:P:186:ASP:N	2.40	0.51
2:P:206:THR:HG21	2:P:231:ARG:HE	1.76	0.51
2:P:273:VAL:HG23	2:P:292:ILE:HB	1.93	0.51
2:P:281:ILE:HD12	2:P:284:ARG:HE	1.76	0.51
1:Q:168:VAL:N	1:Q:247:GLU:OE1	2.44	0.51
2:R:179:THR:HG23	2:R:182:GLN:HE22	1.75	0.51
1:A:1:LEU:N	1:A:26:ASP:OD1	2.44	0.51
1:A:117:ILE:HD11	1:A:324:LEU:HB3	1.93	0.51
1:A:168:VAL:N	1:A:247:GLU:HG3	2.26	0.51
2:B:1:LEU:N	2:B:24:PRO:O	2.35	0.51
2:B:88:GLY:O	2:B:114:LYS:NZ	2.43	0.51
2:B:179:THR:OG1	2:B:182:GLN:NE2	2.42	0.51
1:C:133:ASN:N	1:C:133:ASN:OD1	2.44	0.51
1:C:145:SER:OG	1:C:146:ASN:N	2.42	0.51
2:D:279:VAL:N	2:D:282:ASP:OD2	2.25	0.51
2:F:157:PHE:HB2	2:F:259:PHE:CZ	2.46	0.51
2:F:270:ILE:O	2:F:289:SER:OG	2.24	0.51
1:G:192:ASP:OD1	1:G:194:ARG:HB2	2.10	0.51
2:H:91:LEU:HD21	2:H:93:ILE:HD11	1.93	0.51
2:J:304:MET:HE2	2:L:169:LYS:HB3	1.93	0.51
1:K:312:ASP:CG	1:K:316:GLY:H	2.14	0.51
2:L:2:LYS:O	2:L:90:ASP:N	2.31	0.51
2:L:29:VAL:HG11	2:L:89:ILE:HD11	1.93	0.51
2:L:123:GLY:O	2:L:125:ILE:N	2.44	0.51

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:L:326:ASP:O	2:L:330:ASN:N	2.35	0.51
1:O:191:ARG:HB3	1:C:358:CYS:HB2	1.93	0.51
1:O:238:SER:HB2	1:O:311:TYR:CE1	2.46	0.51
2:P:90:ASP:HA	2:P:114:LYS:HE2	1.93	0.51
2:P:239:VAL:HG12	2:P:309:ALA:O	2.10	0.51
1:Q:152:ASN:ND2	1:Q:152:ASN:H	2.07	0.51
1:Q:169:LYS:O	1:Q:244:VAL:HG23	2.10	0.51
2:R:17:ARG:HG2	2:R:53:PHE:CE2	2.46	0.51
2:R:117:LEU:HA	2:R:144:ILE:O	2.11	0.51
2:B:115:LYS:HD2	2:B:142:THR:HA	1.93	0.51
2:B:157:PHE:HA	2:B:160:VAL:HB	1.92	0.51
2:B:186:ASP:CG	2:B:198:ALA:H	2.13	0.51
2:B:203:ILE:HG12	2:B:204:VAL:H	1.76	0.51
1:C:161:LEU:HB2	1:C:259:PHE:HZ	1.75	0.51
1:C:259:PHE:HA	1:C:262:ALA:HB3	1.92	0.51
2:D:184:LEU:HG	2:D:185:LEU:HD22	1.93	0.51
1:E:139(A):ASP:N	1:E:139(A):ASP:OD1	2.41	0.51
2:F:15:PHE:CD2	2:F:318:SER:HB2	2.44	0.51
2:F:78:ASN:HD21	2:F:80:VAL:HG22	1.75	0.51
1:G:109:ILE:HA	1:G:113:ALA:HB3	1.92	0.51
1:G:246:ILE:O	1:G:303:ASP:HA	2.11	0.51
1:I:293:ASP:OD1	1:I:295:SER:N	2.43	0.51
2:J:7:GLY:O	2:J:9:GLY:N	2.42	0.51
2:J:15:PHE:HE2	2:J:321:VAL:HG12	1.76	0.51
2:J:139:HIS:CG	2:J:333:GLN:H	2.29	0.51
2:J:151:THR:HG23	2:J:210:ALA:HA	1.93	0.51
2:J:182:GLN:NE2	2:J:182:GLN:H	2.09	0.51
1:K:20:ARG:HA	1:K:21:LYS:HZ3	1.76	0.51
1:K:62:GLU:CG	1:K:72:LYS:HE2	2.40	0.51
2:L:47:ASP:CG	2:L:50:LEU:H	2.13	0.51
2:L:262:SER:HA	2:L:265:ASN:HD21	1.76	0.51
1:O:82:LEU:HB3	1:O:84:TRP:CE2	2.45	0.51
1:O:167:ILE:HG23	1:O:244:VAL:HB	1.93	0.51
1:O:169:LYS:HG2	1:Q:304:MET:SD	2.51	0.51
2:P:174:THR:O	2:P:230:LEU:HB2	2.10	0.51
2:R:317:TYR:O	2:R:321:VAL:N	2.30	0.51
1:A:87:LEU:HB2	1:A:89:ILE:HG12	1.92	0.51
2:B:157:PHE:O	2:B:161:LEU:N	2.26	0.51
2:B:186:ASP:HA	2:B:196:ALA:O	2.11	0.51
1:C:94:GLU:HB3	1:C:118:ILE:HA	1.93	0.51
1:C:256:ASN:N	1:C:256:ASN:OD1	2.44	0.51

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:174:THR:O	2:D:230:LEU:HB2	2.11	0.51
2:F:105:ALA:HA	2:F:108:HIS:HD2	1.75	0.51
2:F:203:ILE:O	2:F:205:PRO:HD3	2.10	0.51
1:G:134:GLU:H	1:G:134:GLU:CD	2.14	0.51
1:G:199:ALA:O	1:G:233:PRO:HG3	2.10	0.51
2:H:137:TYR:O	2:H:331:LYS:NZ	2.31	0.51
2:J:0:LYS:HZ1	2:J:332:TRP:HB2	1.75	0.51
2:J:149:CYS:HB3	2:J:317:TYR:CD2	2.46	0.51
2:J:275:ASP:OD1	2:J:295:SER:N	2.43	0.51
1:O:65:SER:HA	1:O:69:LYS:O	2.09	0.51
2:P:2:LYS:HA	2:P:26:ASP:O	2.11	0.51
2:P:203:ILE:O	2:P:205:PRO:HD3	2.10	0.51
2:P:277:PRO:HB2	2:R:194:ARG:HG3	1.92	0.51
1:Q:8:PHE:CZ	1:Q:13:ARG:HD2	2.46	0.51
2:R:17:ARG:O	2:R:19:GLY:N	2.31	0.51
2:R:242:LEU:HD11	2:R:244:VAL:HG13	1.93	0.51
1:A:182:GLN:HA	1:A:195:ARG:HB3	1.92	0.51
1:A:195:ARG:HH22	1:G:361:TYR:N	2.08	0.51
1:A:273:VAL:HG12	1:A:292:ILE:HB	1.92	0.51
2:B:121:PRO:HG3	2:B:148:SER:N	2.26	0.51
1:C:278:LEU:HB3	1:C:282:ASP:HB2	1.91	0.51
2:D:262:SER:HA	2:D:265:ASN:HD21	1.76	0.51
1:E:156:PRO:HG2	1:E:271:LEU:HD11	1.91	0.51
1:E:203:ILE:O	1:E:205:PRO:HD3	2.12	0.51
2:F:237:VAL:HG22	2:F:312:ASP:HA	1.93	0.51
2:F:306:LYS:HZ2	2:H:228:ILE:N	2.08	0.51
1:G:124:ASP:O	1:G:125:ILE:C	2.48	0.51
2:H:87:MET:N	2:H:87:MET:SD	2.84	0.51
2:H:116:VAL:O	2:H:144:ILE:HG12	2.10	0.51
2:H:179:THR:HG23	2:H:182:GLN:HE22	1.75	0.51
1:I:168:VAL:N	1:I:247:GLU:HG3	2.26	0.51
2:J:177:SER:OG	2:J:178:TYR:N	2.43	0.51
2:J:203:ILE:O	2:L:279:VAL:HG11	2.10	0.51
1:K:190:HIS:ND1	1:K:195:ARG:HB2	2.25	0.51
2:P:172:MET:SD	2:P:227:GLY:N	2.84	0.50
1:Q:5:ILE:O	1:Q:31:ASN:N	2.32	0.50
1:Q:355:ASP:O	1:Q:358:CYS:N	2.44	0.50
2:R:63:ALA:HB1	2:R:70:VAL:HB	1.93	0.50
2:R:149:CYS:HA	2:R:152:ASN:HD22	1.75	0.50
1:A:185:LEU:HD13	2:D:10:ARG:CZ	2.41	0.50
1:A:216:LEU:CD1	1:G:124:ASP:HB2	2.40	0.50

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:281:VAL:HB	1:C:202:ASN:HD21	1.75	0.50
2:B:151:THR:HG23	2:B:210:ALA:HA	1.93	0.50
1:C:172:MET:SD	1:C:240:VAL:HB	2.52	0.50
1:C:300:MET:HG2	1:C:304:MET:SD	2.51	0.50
2:D:120:ALA:O	2:D:145:SER:OG	2.25	0.50
1:E:20:ARG:NH1	1:E:322:VAL:HG11	2.26	0.50
1:E:32:ASP:O	1:E:34:GLY:N	2.44	0.50
3:E:401:NAD:O2D	1:K:362:GLU:O	2.28	0.50
2:F:172:MET:SD	2:F:227:GLY:N	2.84	0.50
1:G:85:ALA:N	1:G:111:ALA:O	2.40	0.50
1:G:134:GLU:N	1:G:135:LYS:HZ1	2.08	0.50
1:G:156:PRO:O	1:G:160:VAL:N	2.36	0.50
2:H:218:LEU:HD22	2:H:221:LEU:HD13	1.92	0.50
2:H:276:GLU:OE1	2:H:276:GLU:N	2.33	0.50
1:I:78:ASP:OD1	1:I:81:LYS:N	2.36	0.50
1:I:142:ASN:N	1:I:142:ASN:OD1	2.43	0.50
2:J:148:SER:O	2:J:152:ASN:N	2.21	0.50
1:K:313:ASN:O	1:K:317:TYR:HB2	2.11	0.50
2:P:7:GLY:O	2:P:9:GLY:N	2.44	0.50
2:P:221:LEU:H	2:P:221:LEU:HD12	1.76	0.50
1:Q:174:THR:HB	1:Q:240:VAL:HG23	1.93	0.50
1:Q:186:ASP:HA	1:Q:197:ARG:HA	1.94	0.50
2:B:64:ILE:N	2:B:71:ILE:O	2.44	0.50
2:B:117:LEU:HA	2:B:144:ILE:O	2.10	0.50
2:B:134:GLU:HG3	2:B:327:ILE:HD13	1.94	0.50
1:C:20:ARG:CZ	1:C:20:ARG:HA	2.41	0.50
2:D:123:GLY:O	2:D:125:ILE:N	2.44	0.50
2:D:293:ASP:H	2:D:308:ILE:HB	1.76	0.50
2:F:7:GLY:HA3	2:F:96:THR:HA	1.92	0.50
2:F:30:ILE:N	2:F:72:LYS:O	2.42	0.50
1:G:169:LYS:HB2	1:G:245:ASN:HD21	1.77	0.50
1:G:183:ARG:NE	1:G:188:SER:HB2	2.21	0.50
2:H:139:HIS:CE1	2:H:334:UNK:H	2.29	0.50
1:I:13:ARG:HA	1:I:16:LEU:HB3	1.93	0.50
1:I:194:ARG:NH1	1:I:205:PRO:O	2.45	0.50
2:J:312:ASP:OD1	2:J:315:TRP:N	2.43	0.50
1:K:17:ARG:HD2	1:K:44:LEU:HD12	1.93	0.50
1:K:39:SER:O	1:K:43:LEU:N	2.26	0.50
1:K:203:ILE:O	1:K:205:PRO:HD3	2.11	0.50
1:K:281:VAL:HG12	1:K:284:ARG:HD3	1.92	0.50
2:L:44:LEU:HD23	2:L:57:VAL:HG23	1.93	0.50

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:L:132:VAL:HG11	2:L:217:VAL:HG23	1.93	0.50
2:L:173:THR:HA	2:L:228:ILE:O	2.11	0.50
1:O:22:ASP:O	1:O:24:PRO:HD3	2.11	0.50
1:O:202:ASN:OD1	1:Q:281:VAL:N	2.31	0.50
3:O:401:NAD:H52N	3:O:401:NAD:O5B	2.11	0.50
2:P:28:VAL:C	2:P:71:ILE:HG23	2.32	0.50
2:P:102:ARG:NH2	2:P:125:ILE:HA	2.27	0.50
1:Q:13:ARG:HH12	1:Q:43:LEU:HD13	1.77	0.50
1:Q:82:LEU:HD12	1:Q:108:HIS:CE1	2.46	0.50
1:Q:238:SER:HB3	1:Q:313:ASN:HB3	1.94	0.50
1:Q:279:VAL:HG12	1:Q:282:ASP:OD1	2.12	0.50
2:R:7:GLY:N	2:R:31:ASN:O	2.45	0.50
2:B:60:ALA:O	2:B:63:ALA:HB3	2.10	0.50
2:B:292:ILE:HG23	2:B:308:ILE:O	2.12	0.50
1:C:248(A):VAL:HG22	1:C:249:GLY:N	2.25	0.50
2:D:173:THR:HA	2:D:228:ILE:O	2.12	0.50
2:D:312:ASP:CG	2:D:316:GLY:H	2.15	0.50
1:E:3:VAL:O	1:E:27:VAL:HA	2.12	0.50
1:E:194:ARG:NH1	1:E:205:PRO:HB2	2.27	0.50
2:F:126:PRO:HB2	2:F:128:TYR:CE2	2.46	0.50
2:F:258:ALA:O	2:F:262:SER:OG	2.16	0.50
2:H:17:ARG:HG2	2:H:53:PHE:CE2	2.46	0.50
2:H:242:LEU:HD11	2:H:244:VAL:HG13	1.94	0.50
2:H:297:THR:HG22	2:H:308:ILE:H	1.76	0.50
2:H:317:TYR:O	2:H:321:VAL:N	2.31	0.50
1:I:5:ILE:HA	1:I:93:ILE:HB	1.93	0.50
1:I:301:GLY:N	1:I:304:MET:O	2.41	0.50
2:J:302:ASP:N	2:J:302:ASP:OD1	2.43	0.50
1:K:229:ALA:O	1:K:230:LEU:HD13	2.11	0.50
2:L:1:LEU:HD11	2:L:332:TRP:CE3	2.47	0.50
2:L:236:ASN:ND2	2:L:237:VAL:H	2.09	0.50
1:O:19:GLY:O	1:O:20:ARG:C	2.49	0.50
1:O:174:THR:HG1	1:O:239:VAL:C	2.15	0.50
1:O:179:THR:H	1:O:182:GLN:CD	2.11	0.50
1:O:358:CYS:HA	1:C:190:HIS:CE1	2.47	0.50
2:P:11:ILE:HD11	3:P:401:NAD:H2N	1.92	0.50
1:Q:190:HIS:CE1	1:Q:195:ARG:HH11	2.28	0.50
1:A:63:THR:OG1	1:A:72:LYS:HD3	2.11	0.50
2:B:277:PRO:HB2	2:D:194:ARG:CG	2.42	0.50
1:C:13:ARG:HB2	1:C:44:LEU:HD12	1.93	0.50
1:C:184:LEU:HG	1:C:185:LEU:HG	1.94	0.50

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:237:VAL:CG1	1:C:280:SER:HB3	2.25	0.50
2:D:38:LYS:HZ2	2:D:38:LYS:H	1.58	0.50
2:D:115:LYS:HE2	2:D:142:THR:HB	1.94	0.50
2:D:117:LEU:HD12	2:D:144:ILE:HD11	1.93	0.50
1:E:137:TYR:OH	1:E:328:VAL:HA	2.11	0.50
1:E:192:ASP:O	1:E:196:ALA:N	2.31	0.50
2:F:58:LYS:O	2:F:65:SER:N	2.44	0.50
2:F:271:LEU:HD13	2:F:289:SER:HG	1.77	0.50
1:G:105:ALA:HA	1:G:108:HIS:CD2	2.46	0.50
1:G:139:HIS:C	1:G:140:VAL:H	2.15	0.50
1:I:28:VAL:O	1:I:72:LYS:N	2.44	0.50
1:I:246:ILE:HG22	1:I:303:ASP:OD1	2.11	0.50
2:J:6:ASN:HB2	2:J:84:TRP:CZ2	2.45	0.50
2:J:173:THR:HA	2:J:228:ILE:O	2.11	0.50
1:K:134:GLU:HG2	1:K:135:LYS:H	1.76	0.50
2:L:105:ALA:HA	2:L:108:HIS:CD2	2.46	0.50
2:L:177:SER:OG	2:L:234:THR:O	2.23	0.50
2:P:15:PHE:HE2	2:P:321:VAL:HB	1.76	0.50
2:R:116:VAL:O	2:R:144:ILE:HG12	2.10	0.50
2:R:139:HIS:CE1	2:R:334:UNK:H	2.29	0.50
1:A:8:PHE:CD1	1:A:13:ARG:HG2	2.46	0.50
1:C:17:ARG:HG2	1:C:53:PHE:CD2	2.46	0.50
1:C:37:VAL:HA	1:C:40:ALA:HB3	1.93	0.50
1:C:78:ASP:HB3	1:C:81:LYS:HE2	1.93	0.50
1:C:128:TYR:HE2	1:C:144:ILE:HG21	1.76	0.50
1:C:213:ALA:O	1:C:216:LEU:HB2	2.11	0.50
1:E:57:VAL:HG13	1:E:64:PHE:HB2	1.94	0.50
2:F:105:ALA:HA	2:F:108:HIS:CD2	2.47	0.50
1:G:2:LYS:HB2	1:G:90:ASP:OD1	2.11	0.50
1:G:239:VAL:HB	1:G:310:TRP:CD2	2.47	0.50
1:I:13:ARG:NE	1:I:43:LEU:HB3	2.26	0.50
1:I:213:ALA:O	1:I:216:LEU:HB2	2.12	0.50
1:K:142:ASN:ND2	1:K:143:ILE:H	2.09	0.50
2:L:7:GLY:O	2:L:9:GLY:N	2.45	0.50
2:L:141:ASP:OD1	2:L:141:ASP:N	2.42	0.50
2:P:32:ASP:OD1	2:P:33:THR:N	2.44	0.50
2:P:99:PHE:CD1	2:P:104:GLY:HA3	2.46	0.50
2:P:139:HIS:CD2	2:P:333:GLN:HB2	2.47	0.50
2:P:149:CYS:HA	2:P:152:ASN:HB3	1.93	0.50
2:P:306:LYS:HZ2	2:R:228:ILE:N	2.10	0.50
1:Q:2:LYS:HB2	1:Q:90:ASP:N	2.27	0.50

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:R:2:LYS:HA	2:R:26:ASP:O	2.11	0.50
1:A:60:ILE:H	1:A:64:PHE:HB2	1.76	0.50
1:A:215:SER:HB2	1:A:221:LEU:HB3	1.94	0.50
1:A:220:GLN:OE1	1:A:220:GLN:N	2.45	0.50
2:B:36:GLY:HA3	2:B:38:LYS:HZ1	1.76	0.50
2:B:300:MET:HB2	2:B:304:MET:HG2	1.94	0.50
2:B:302:ASP:N	2:B:302:ASP:OD1	2.44	0.50
1:C:160:VAL:HG22	1:C:259:PHE:HE1	1.76	0.50
2:D:293:ASP:OD1	2:D:295:SER:OG	2.21	0.50
1:E:41:THR:O	1:E:45:LYS:N	2.42	0.50
1:E:127:THR:OG1	1:E:128:TYR:N	2.44	0.50
1:E:156:PRO:O	1:E:159:LYS:HB3	2.12	0.50
1:E:174:THR:HG1	1:E:239:VAL:C	2.13	0.50
2:F:30:ILE:HG22	2:F:31:ASN:H	1.76	0.50
2:F:120:ALA:HA	3:F:401:NAD:H5N	1.93	0.50
1:G:161:LEU:O	1:G:166:GLY:N	2.45	0.50
2:H:102:ARG:HH22	2:H:125:ILE:HA	1.77	0.50
1:I:62:GLU:O	1:I:73:VAL:N	2.43	0.50
1:I:238:SER:HB3	1:I:311:TYR:CE2	2.45	0.50
2:J:120:ALA:O	2:J:145:SER:OG	2.30	0.50
2:J:269:GLY:O	2:J:288:VAL:HA	2.12	0.50
2:L:240:VAL:HG13	2:L:309:ALA:HB3	1.93	0.50
2:L:318:SER:O	2:L:322:VAL:HG23	2.11	0.50
1:O:1:LEU:HD21	1:O:90:ASP:HB2	1.92	0.50
2:P:190:HIS:ND1	2:P:195:ARG:HB2	2.26	0.50
1:Q:114:LYS:HB3	1:Q:115:LYS:HD2	1.93	0.50
2:R:106:GLY:O	2:R:109:LEU:N	2.44	0.50
2:R:312:ASP:HB3	2:R:316:GLY:H	1.76	0.50
1:A:195:ARG:NH2	1:G:361:TYR:HA	2.26	0.50
1:A:237:VAL:HA	1:A:312:ASP:HA	1.94	0.50
2:B:5:ILE:HD12	2:B:93:ILE:HB	1.94	0.50
2:B:102:ARG:HG3	2:B:143:ILE:HD12	1.93	0.50
2:D:2:LYS:N	2:D:90:ASP:OD2	2.45	0.50
2:D:215:ALA:O	2:D:222:LYS:NZ	2.44	0.50
1:E:291:THR:O	1:E:310:TRP:HD1	1.95	0.50
1:E:316:GLY:O	1:E:320:ARG:N	2.37	0.50
2:H:106:GLY:O	2:H:109:LEU:N	2.45	0.50
2:J:66:VAL:N	2:J:69:LYS:O	2.43	0.50
2:J:280:SER:N	2:L:202:ASN:HD22	2.09	0.50
1:K:38:LYS:O	1:K:41:THR:OG1	2.29	0.50
1:K:78:ASP:HB3	1:K:81:LYS:HZ3	1.77	0.50

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:168:VAL:HG23	1:K:247:GLU:HA	1.93	0.50
2:L:208:THR:HG22	2:L:229:ALA:HB2	1.93	0.50
2:L:312:ASP:CG	2:L:316:GLY:H	2.15	0.50
2:P:157:PHE:HB2	2:P:259:PHE:CZ	2.46	0.50
1:Q:134:GLU:CD	1:Q:134:GLU:H	2.15	0.50
1:Q:251:THR:OG1	1:Q:252:ALA:N	2.45	0.50
2:R:120:ALA:HB2	3:R:401:NAD:C1D	2.22	0.50
2:R:154:LEU:HA	2:R:157:PHE:CZ	2.47	0.50
1:A:236:ASN:ND2	1:A:312:ASP:OD2	2.43	0.50
2:B:45:LYS:HG3	2:B:46:TYR:CZ	2.47	0.50
2:B:253:GLU:CD	2:B:256:ASN:HB2	2.32	0.50
2:B:316:GLY:HA2	2:B:319:GLN:HB2	1.92	0.50
2:D:177:SER:OG	2:D:234:THR:O	2.19	0.50
1:E:274:CYS:SG	1:E:276:ILE:N	2.84	0.50
1:E:298:MET:SD	1:G:226:ASN:ND2	2.85	0.50
1:E:313:ASN:OD1	1:E:313:ASN:N	2.44	0.50
2:F:17:ARG:NH2	2:F:53:PHE:HA	2.26	0.50
1:G:157:PHE:HA	1:G:160:VAL:HB	1.93	0.50
1:G:182:GLN:O	1:G:183:ARG:NH2	2.45	0.50
1:I:173:THR:HA	1:I:228:ILE:O	2.11	0.50
1:I:274:CYS:O	1:I:293:ASP:HA	2.12	0.50
2:J:94:GLU:OE2	2:J:98:VAL:N	2.43	0.50
2:J:134:GLU:HG3	2:J:327:ILE:HD13	1.94	0.50
1:K:161:LEU:HD23	1:K:165:LEU:HB2	1.94	0.50
2:L:11:ILE:O	2:L:15:PHE:N	2.39	0.50
1:O:118:ILE:O	1:O:317:TYR:OH	2.21	0.50
1:O:149:CYS:O	1:O:153:CYS:N	2.45	0.50
2:P:126:PRO:HB2	2:P:128:TYR:CZ	2.47	0.50
1:Q:62:GLU:O	1:Q:63:THR:HB	2.12	0.50
1:Q:178:TYR:HD2	1:Q:233:PRO:HA	1.77	0.50
1:Q:328:VAL:HG12	1:Q:332:TRP:HD1	1.77	0.50
1:Q:360:LEU:HA	1:I:190:HIS:HD2	1.69	0.50
1:A:9:GLY:O	1:A:12:GLY:N	2.45	0.50
2:B:138:THR:OG1	2:B:141:ASP:OD1	2.26	0.50
2:B:149:CYS:HB3	2:B:317:TYR:CD2	2.46	0.50
2:B:243:VAL:HA	2:B:306:LYS:HA	1.93	0.50
1:C:125:ILE:HG23	1:C:144:ILE:HA	1.93	0.50
1:C:128:TYR:HA	1:C:133:ASN:ND2	2.27	0.50
1:C:246:ILE:N	1:C:303:ASP:O	2.44	0.50
1:C:270:VAL:HG13	1:C:320:ARG:CD	2.42	0.50
1:C:329:ALA:HA	1:C:332:TRP:CD1	2.47	0.50

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:329:ALA:HA	1:C:332:TRP:HD1	1.77	0.50
1:E:15:PHE:O	1:E:18(A):TRP:N	2.42	0.50
1:E:204:VAL:N	1:E:231:ARG:O	2.44	0.50
1:E:248:LYS:HG2	1:E:248(A):VAL:H	1.77	0.50
1:E:272:ASP:O	1:E:290:SER:OG	2.24	0.50
1:E:287:ASP:OD1	1:E:287:ASP:N	2.33	0.50
2:F:151:THR:HG23	2:F:210:ALA:HA	1.94	0.50
1:G:82:LEU:HD12	1:G:108:HIS:HE1	1.75	0.50
1:G:82:LEU:HD12	1:G:108:HIS:CE1	2.47	0.50
1:G:251:THR:HG1	1:G:252:ALA:H	1.60	0.50
1:G:251:THR:OG1	1:G:253:GLU:OE1	2.19	0.50
1:G:297:THR:HA	1:G:307:VAL:HG23	1.94	0.50
2:H:38:LYS:NZ	2:H:39:GLN:H	2.10	0.50
2:H:193:LEU:HA	2:H:196:ALA:HB3	1.93	0.50
1:I:100:VAL:HG11	1:I:121:PRO:O	2.12	0.50
1:I:170:GLY:O	1:I:225:LEU:HA	2.12	0.50
1:I:314:GLU:HA	3:I:401:NAD:H72N	1.77	0.50
2:J:60:ALA:O	2:J:63:ALA:HB3	2.12	0.50
2:J:76:ASP:HB3	2:J:82:LEU:HD21	1.94	0.50
2:J:109:LEU:HD21	2:J:116:VAL:HG23	1.93	0.50
2:J:124:ASP:O	2:J:125:ILE:HD12	2.12	0.50
1:K:117:ILE:HG23	1:K:144:ILE:HG13	1.94	0.50
1:K:281:VAL:HG23	1:K:282:ASP:OD1	2.11	0.50
2:L:15:PHE:CD1	2:L:322:VAL:HG22	2.47	0.50
2:L:179:THR:HG23	2:L:182:GLN:HE22	1.76	0.50
1:O:11:ILE:HD12	1:O:14:ASN:HD21	1.77	0.49
1:O:103:PRO:O	1:O:107:LYS:HG3	2.12	0.49
1:O:357:GLU:O	1:C:190:HIS:HA	2.12	0.49
2:P:18:CYS:HB3	2:P:322:VAL:HG21	1.94	0.49
2:P:117:LEU:HG	2:P:145:SER:HA	1.94	0.49
1:A:5:ILE:HB	1:A:30:VAL:HG22	1.93	0.49
1:A:6:ASN:N	1:A:93:ILE:O	2.36	0.49
1:A:162:ASP:HA	1:A:166:GLY:H	1.77	0.49
1:C:82:LEU:HB3	1:C:84:TRP:CE2	2.47	0.49
2:D:174:THR:HG23	2:D:230:LEU:H	1.76	0.49
2:D:190:HIS:HB3	2:D:196:ALA:HB2	1.94	0.49
2:F:18:CYS:HB3	2:F:322:VAL:HG21	1.94	0.49
2:F:236:ASN:OD1	2:F:284:ARG:NH1	2.45	0.49
2:F:239:VAL:HG13	2:F:310:TRP:CD2	2.47	0.49
1:G:280:SER:O	1:G:283:PHE:N	2.32	0.49
2:H:149:CYS:HA	2:H:152:ASN:HD22	1.75	0.49

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:I:119:THR:O	1:I:119:THR:OG1	2.30	0.49
2:J:127:THR:HG23	2:J:133:ASN:HD22	1.77	0.49
2:J:132:VAL:HG11	2:J:217:VAL:HB	1.93	0.49
2:J:326:ASP:O	2:J:330:ASN:N	2.39	0.49
1:K:5:ILE:HD12	1:K:93:ILE:O	2.12	0.49
1:K:62:GLU:HG2	1:K:72:LYS:HE2	1.94	0.49
1:K:100:VAL:O	1:K:122:ALA:HB1	2.12	0.49
1:O:33:SER:OG	1:O:77:ARG:HD3	2.11	0.49
1:O:318:SER:OG	1:O:319:GLN:N	2.44	0.49
2:R:1:LEU:HB3	2:R:25:LEU:HD13	1.93	0.49
2:R:102:ARG:NH2	2:R:125:ILE:HA	2.27	0.49
2:B:124:ASP:O	2:B:125:ILE:HD12	2.12	0.49
2:B:197:ARG:HH11	1:C:42:HIS:HE1	1.60	0.49
2:B:250:THR:OG1	2:B:251:PHE:N	2.45	0.49
1:E:8:PHE:CB	1:E:32:ASP:OD2	2.60	0.49
1:G:82:LEU:O	1:G:84:TRP:HD1	1.95	0.49
2:H:99:PHE:CD1	2:H:104:GLY:HA3	2.46	0.49
2:H:117:LEU:HA	2:H:144:ILE:O	2.11	0.49
2:H:312:ASP:HB3	2:H:316:GLY:H	1.76	0.49
1:I:177:SER:HB3	1:I:237:VAL:H	1.78	0.49
1:I:203:ILE:CD1	1:I:230:LEU:HB3	2.43	0.49
1:I:246:ILE:HG23	1:I:248:LYS:H	1.78	0.49
2:J:45:LYS:HZ3	2:J:55:ALA:C	2.16	0.49
2:J:60:ALA:HB2	2:J:65:SER:HB3	1.94	0.49
2:J:146:ASN:HD22	2:J:321:VAL:HG22	1.77	0.49
2:J:316:GLY:HA2	2:J:319:GLN:HB2	1.94	0.49
1:K:102:GLY:N	1:K:103:PRO:HD2	2.28	0.49
1:K:171:THR:C	1:K:242:LEU:HD12	2.33	0.49
1:K:241:ASP:HA	1:K:307:VAL:O	2.12	0.49
2:L:126:PRO:HG2	2:L:144:ILE:HG22	1.93	0.49
2:P:173:THR:OG1	2:P:228:ILE:HG13	2.13	0.49
1:Q:256:ASN:HA	1:Q:259:PHE:CD2	2.48	0.49
1:A:190:HIS:CE1	1:A:191:ARG:HE	2.30	0.49
1:A:190:HIS:CE1	1:G:359:LYS:H	2.30	0.49
2:B:44:LEU:O	2:B:53:PHE:HB2	2.12	0.49
2:B:177:SER:OG	2:B:178:TYR:N	2.44	0.49
2:B:283:PHE:N	2:B:283:PHE:CD1	2.80	0.49
1:C:172:MET:HG2	1:C:242:LEU:HB2	1.94	0.49
1:E:20:ARG:HD2	1:E:322:VAL:CG1	2.41	0.49
1:E:118:ILE:HD12	1:E:122:ALA:HB2	1.94	0.49
2:F:102:ARG:NH2	2:F:125:ILE:HA	2.26	0.49

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:F:103:ASP:HB2	2:F:107:LYS:HZ3	1.78	0.49
2:F:221:LEU:HD12	2:F:221:LEU:H	1.76	0.49
2:H:17:ARG:O	2:H:19:GLY:N	2.32	0.49
2:H:45:LYS:NZ	2:H:53:PHE:O	2.31	0.49
2:H:281:ILE:O	2:H:283:PHE:N	2.44	0.49
1:I:242:LEU:N	1:I:307:VAL:O	2.30	0.49
2:J:255:VAL:O	2:J:259:PHE:N	2.31	0.49
1:K:238:SER:O	1:K:311:TYR:N	2.42	0.49
2:L:139:HIS:CG	2:L:333:GLN:H	2.29	0.49
1:O:3:VAL:HG22	1:O:91:ILE:HB	1.94	0.49
1:O:226:ASN:ND2	1:O:227:GLY:H	2.11	0.49
1:O:238:SER:HB2	1:O:311:TYR:CZ	2.46	0.49
1:Q:92:VAL:HB	1:Q:116:VAL:HA	1.95	0.49
1:Q:234:THR:OG1	1:Q:237:VAL:N	2.44	0.49
2:R:302:ASP:N	2:R:302:ASP:OD1	2.45	0.49
1:A:17:ARG:HH21	1:A:50:LEU:HB3	1.78	0.49
1:A:178:TYR:CD2	1:A:233:PRO:HA	2.47	0.49
2:B:17:ARG:NH2	2:B:52:THR:O	2.44	0.49
2:B:109:LEU:HD21	2:B:116:VAL:HG23	1.93	0.49
2:B:125:ILE:HD11	2:B:143:ILE:HG22	1.95	0.49
2:B:181:ASP:OD2	2:B:182:GLN:NE2	2.46	0.49
2:D:15:PHE:CZ	2:D:322:VAL:HA	2.47	0.49
2:D:45:LYS:HB2	2:D:57:VAL:HG11	1.94	0.49
2:D:170:GLY:HA2	2:D:244:VAL:HA	1.94	0.49
1:E:176:HIS:C	1:E:231:ARG:HA	2.33	0.49
2:F:317:TYR:O	2:F:321:VAL:HG23	2.12	0.49
1:G:10:ARG:HA	1:G:13:ARG:NE	2.27	0.49
1:G:176:HIS:N	1:G:230:LEU:O	2.39	0.49
2:H:204:VAL:O	2:H:230:LEU:HA	2.13	0.49
1:I:8:PHE:CD1	1:I:13:ARG:HG2	2.47	0.49
1:I:270:VAL:HG13	1:I:320:ARG:HH12	1.76	0.49
1:I:290:SER:HG	1:I:292:ILE:HG12	1.77	0.49
2:J:96:THR:HG22	3:J:401:NAD:C4A	2.42	0.49
2:J:115:LYS:HD2	2:J:142:THR:HA	1.94	0.49
1:K:50:LEU:HD12	1:K:285:CYS:SG	2.52	0.49
1:K:276:ILE:O	1:K:278:LEU:HD22	2.11	0.49
1:O:103:PRO:HG3	1:C:110:GLN:HA	1.94	0.49
1:O:105:ALA:HA	1:O:108:HIS:HD2	1.78	0.49
1:Q:9:GLY:O	1:Q:13:ARG:N	2.39	0.49
1:Q:32:ASP:O	1:Q:34:GLY:N	2.45	0.49
1:Q:38:LYS:C	1:Q:42:HIS:CE1	2.86	0.49

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:Q:107:LYS:HD3	1:I:141:ALA:HA	1.94	0.49
1:Q:154:LEU:HB2	1:Q:214:VAL:HG11	1.93	0.49
1:Q:256:ASN:HB2	1:Q:260:ARG:HH21	1.77	0.49
1:Q:283:PHE:CD1	1:Q:283:PHE:N	2.81	0.49
2:R:79:PRO:HB3	2:R:108:HIS:ND1	2.28	0.49
2:B:139:HIS:CG	2:B:333:GLN:H	2.30	0.49
2:B:173:THR:HA	2:B:228:ILE:O	2.12	0.49
2:B:193:LEU:HD13	2:D:277:PRO:HG3	1.94	0.49
2:B:281:ILE:HG13	2:B:284:ARG:HH21	1.77	0.49
2:D:126:PRO:HG2	2:D:144:ILE:HG22	1.93	0.49
2:D:139:HIS:CG	2:D:333:GLN:H	2.30	0.49
2:F:44:LEU:HG	2:F:53:PHE:HD2	1.78	0.49
2:F:94:GLU:OE2	2:F:96:THR:OG1	2.22	0.49
2:F:184:LEU:HD13	1:G:184:LEU:HA	1.93	0.49
2:F:190:HIS:ND1	2:F:195:ARG:HB2	2.27	0.49
1:G:175:THR:HG21	1:G:239:VAL:HG13	1.93	0.49
1:G:287:ASP:HA	1:G:319:GLN:OE1	2.13	0.49
2:J:253:GLU:CD	2:J:256:ASN:HB2	2.33	0.49
2:J:257:ALA:O	2:J:260:ARG:HB2	2.13	0.49
2:J:277:PRO:HB2	2:L:194:ARG:HG2	1.95	0.49
1:K:82:LEU:O	1:K:84:TRP:N	2.44	0.49
1:K:272:ASP:O	1:K:292:ILE:N	2.41	0.49
1:O:41:THR:HG21	1:O:59:ILE:HD11	1.93	0.49
1:O:172:MET:O	1:Q:306:LYS:NZ	2.46	0.49
1:O:280:SER:HA	1:O:310:TRP:HZ3	1.77	0.49
1:O:349:CYS:SG	1:O:353:PRO:HA	2.53	0.49
2:P:5:ILE:HB	2:P:30:ILE:HG23	1.93	0.49
2:P:115:LYS:HE3	2:P:139:HIS:CE1	2.47	0.49
1:Q:37:VAL:HG23	1:Q:61:ASN:O	2.13	0.49
1:Q:100:VAL:HG12	1:Q:120:ALA:HB1	1.93	0.49
1:Q:176:HIS:HB3	1:Q:231:ARG:HD3	1.95	0.49
1:A:133:ASN:HA	1:A:136:ASP:CG	2.33	0.49
2:B:77:ARG:HD2	3:B:401:NAD:N6A	2.28	0.49
2:B:94:GLU:HB3	2:B:118:ILE:HD12	1.95	0.49
2:B:127:THR:HG23	2:B:133:ASN:HD22	1.77	0.49
2:B:259:PHE:O	2:B:262:SER:OG	2.23	0.49
1:C:79:PRO:HA	1:C:82:LEU:HD11	1.93	0.49
1:C:82:LEU:O	1:C:84:TRP:N	2.43	0.49
2:D:7:GLY:O	2:D:9:GLY:N	2.45	0.49
2:D:42:HIS:O	2:D:46:TYR:N	2.39	0.49
2:D:132:VAL:HG11	2:D:217:VAL:HG23	1.92	0.49

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:173:THR:O	2:D:241:ASP:N	2.45	0.49
2:D:276:GLU:H	2:D:276:GLU:CD	2.15	0.49
2:F:183:ARG:NH2	2:F:191:ARG:HH12	2.08	0.49
1:G:12:GLY:O	1:G:16:LEU:N	2.22	0.49
1:G:272:ASP:HB2	1:G:288:PHE:CD2	2.47	0.49
1:I:2:LYS:HB2	1:I:90:ASP:H	1.77	0.49
1:I:129:VAL:N	1:I:133:ASN:OD1	2.25	0.49
1:I:156:PRO:HB3	1:I:271:LEU:HD21	1.93	0.49
1:K:80:LEU:HD23	1:K:107:LYS:HB3	1.95	0.49
2:L:186:ASP:CG	2:L:198:ALA:H	2.16	0.49
1:O:45:LYS:O	1:O:53:PHE:N	2.45	0.49
1:O:123(A):SER:N	1:C:142:ASN:OD1	2.26	0.49
1:O:165:LEU:O	1:O:248:LYS:HB2	2.13	0.49
1:O:178:TYR:CE1	1:O:235:PRO:HA	2.48	0.49
2:P:132:VAL:HG11	2:P:217:VAL:HB	1.93	0.49
2:P:251:PHE:N	2:P:254:GLU:OE1	2.23	0.49
1:Q:37:VAL:CG2	1:Q:61:ASN:O	2.61	0.49
1:Q:54:LYS:H	1:Q:54:LYS:HD2	1.76	0.49
1:Q:280:SER:HA	1:Q:310:TRP:CZ3	2.41	0.49
2:R:15:PHE:CE1	2:R:322:VAL:HG22	2.47	0.49
2:R:16:LEU:HD13	2:R:44:LEU:HD13	1.95	0.49
1:A:139:HIS:CE1	1:A:332:TRP:HA	2.48	0.49
2:B:11:ILE:O	2:B:15:PHE:N	2.25	0.49
2:B:157:PHE:HB2	2:B:259:PHE:CZ	2.48	0.49
2:B:251:PHE:N	2:B:254:GLU:OE1	2.43	0.49
2:B:327:ILE:HA	2:B:330:ASN:ND2	2.28	0.49
1:C:41:THR:HG21	1:C:59:ILE:HG12	1.95	0.49
1:C:66:ILE:N	1:C:69:LYS:O	2.34	0.49
2:D:15:PHE:CD1	2:D:322:VAL:HG22	2.48	0.49
2:D:236:ASN:ND2	2:D:237:VAL:H	2.09	0.49
1:E:18:CYS:O	1:E:19:GLY:C	2.51	0.49
1:E:243:VAL:HG12	1:E:306:LYS:HA	1.95	0.49
1:E:297:THR:HG22	1:E:308:VAL:H	1.77	0.49
2:F:8:PHE:N	2:F:32:ASP:OD2	2.45	0.49
2:F:46:TYR:O	1:G:197:ARG:NH1	2.45	0.49
2:F:154:LEU:HD12	2:F:155:ALA:N	2.28	0.49
2:F:173:THR:OG1	2:F:228:ILE:HG13	2.13	0.49
1:G:11:ILE:HA	1:G:14:ASN:ND2	2.28	0.49
1:G:58:LYS:N	1:G:65:SER:O	2.45	0.49
1:G:84:TRP:CH2	1:G:92:VAL:HG23	2.47	0.49
1:G:101:ASP:CG	1:G:104:GLY:H	2.16	0.49

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:279:VAL:HG23	1:G:282:ASP:OD1	2.13	0.49
1:G:294:SER:O	1:G:297:THR:OG1	2.18	0.49
1:I:325:ALA:HA	1:I:328:VAL:HB	1.94	0.49
1:I:328:VAL:HG22	1:I:331:LYS:HZ3	1.76	0.49
1:K:32:ASP:OD1	1:K:33:SER:N	2.44	0.49
1:K:45:LYS:HZ3	1:K:57:VAL:H	1.58	0.49
1:K:57:VAL:HG13	1:K:66:ILE:HA	1.93	0.49
1:K:241:ASP:OD1	1:K:242:LEU:N	2.46	0.49
1:K:293:ASP:O	1:K:297:THR:HG23	2.13	0.49
2:L:0:LYS:N	2:L:26:ASP:HB2	2.27	0.49
2:L:117:LEU:HD11	2:L:146:ASN:HB2	1.95	0.49
1:O:14:ASN:HA	1:O:17:ARG:HB2	1.95	0.49
1:O:139:HIS:CD2	1:O:332:TRP:HA	2.47	0.49
1:O:174:THR:HG23	1:O:176:HIS:N	2.27	0.49
1:O:193:LEU:HD11	2:R:42:HIS:ND1	2.28	0.49
2:P:49:ILE:HG23	2:P:284:ARG:HH11	1.78	0.49
1:Q:29:VAL:HA	1:Q:72:LYS:O	2.11	0.49
1:Q:270:VAL:O	1:Q:289:SER:N	2.46	0.49
2:R:215:ALA:O	2:R:222:LYS:NZ	2.43	0.49
2:B:4:ALA:HA	2:B:29:VAL:O	2.13	0.49
2:B:15:PHE:HE2	2:B:321:VAL:HG12	1.78	0.49
2:B:132:VAL:HG11	2:B:217:VAL:HB	1.94	0.49
2:B:160:VAL:HA	2:B:163:GLN:HB2	1.95	0.49
2:B:285:CYS:HA	2:B:315:TRP:CD1	2.48	0.49
1:C:91:ILE:HG12	1:C:115:LYS:N	2.28	0.49
2:D:243:VAL:HA	2:D:306:LYS:HA	1.94	0.49
1:E:178:TYR:CD2	1:E:233:PRO:HA	2.47	0.49
2:F:36:GLY:H	2:F:39:GLN:NE2	2.11	0.49
1:G:94:GLU:OE2	1:G:96:THR:OG1	2.26	0.49
1:G:280:SER:HA	1:G:310:TRP:HZ3	1.76	0.49
2:H:15:PHE:CZ	2:H:322:VAL:HA	2.48	0.49
2:H:160:VAL:O	2:H:164:LYS:N	2.28	0.49
2:H:179:THR:H	2:H:182:GLN:CD	2.16	0.49
2:H:194:ARG:HD3	2:H:205:PRO:HD2	1.94	0.49
1:I:139:HIS:HB2	1:I:331:LYS:HB2	1.95	0.49
2:J:94:GLU:HG2	2:J:96:THR:H	1.77	0.49
2:J:116:VAL:HB	2:J:143:ILE:HG12	1.95	0.49
2:J:129:VAL:HG13	2:J:132:VAL:HB	1.95	0.49
2:J:157:PHE:HB2	2:J:259:PHE:CZ	2.48	0.49
2:J:183:ARG:NH2	2:J:191:ARG:HH12	2.10	0.49
1:K:31:ASN:HA	1:K:74:VAL:O	2.13	0.49

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:121:PRO:HG3	1:K:148:SER:H	1.78	0.49
1:O:3:VAL:O	1:O:27:VAL:HA	2.13	0.49
1:O:17:ARG:CZ	1:O:53:PHE:HB2	2.42	0.49
1:O:149:CYS:HA	1:O:152:ASN:HB2	1.94	0.49
1:O:167:ILE:HB	1:O:224:LYS:HZ3	1.76	0.49
1:O:243:VAL:HA	1:O:305:VAL:O	2.13	0.49
1:O:254:ASP:HA	1:O:257:ASN:ND2	2.28	0.49
2:P:1:LEU:N	2:P:24:PRO:O	2.33	0.49
2:P:151:THR:HG23	2:P:210:ALA:HA	1.94	0.49
1:Q:57:VAL:HA	1:Q:66:ILE:HA	1.94	0.49
1:Q:238:SER:OG	1:Q:313:ASN:N	2.42	0.49
1:Q:282:ASP:OD1	1:Q:282:ASP:N	2.44	0.49
1:Q:291:THR:O	1:Q:310:TRP:HD1	1.96	0.49
2:R:37:VAL:HG23	2:R:38:LYS:H	1.78	0.49
2:R:149:CYS:HB3	2:R:317:TYR:CD2	2.48	0.49
1:A:49:ILE:HG23	1:A:284:ARG:NE	2.28	0.49
1:A:207:SER:HB3	1:A:228:ILE:HG22	1.95	0.49
1:A:226:ASN:HB3	1:C:300:MET:HB2	1.94	0.49
1:A:312:ASP:OD1	1:A:316:GLY:N	2.25	0.49
2:B:255:VAL:O	2:B:259:PHE:N	2.33	0.49
2:B:269:GLY:O	2:B:288:VAL:HA	2.13	0.49
1:C:261:LYS:HZ2	1:C:261:LYS:C	2.14	0.49
2:D:17:ARG:HG2	2:D:53:PHE:HE2	1.78	0.49
2:D:41:SER:OG	2:D:42:HIS:N	2.46	0.49
2:D:166:GLY:O	2:D:247:SER:N	2.29	0.49
2:D:250:THR:N	2:D:302:ASP:HB3	2.16	0.49
1:E:319:GLN:O	1:E:322:VAL:HB	2.13	0.49
2:F:99:PHE:CD1	2:F:104:GLY:HA3	2.48	0.49
1:G:242:LEU:HD11	1:G:244:VAL:HG13	1.94	0.49
2:H:169:LYS:O	2:H:245:GLN:N	2.36	0.49
2:H:181:ASP:OD2	2:H:195:ARG:NE	2.45	0.49
1:I:10:ARG:HA	1:I:13:ARG:HG3	1.95	0.49
1:I:332:TRP:CE3	1:I:333:PRO:HD2	2.48	0.49
2:J:171:THR:HB	2:L:306:LYS:HE3	1.94	0.49
1:K:118:ILE:O	1:K:146:ASN:N	2.35	0.49
2:P:30:ILE:HG22	2:P:31:ASN:H	1.77	0.49
2:P:44:LEU:HD21	2:P:53:PHE:HD2	1.78	0.49
2:P:79:PRO:HG3	2:P:108:HIS:CE1	2.47	0.49
1:Q:80:LEU:H	1:Q:107:LYS:NZ	2.10	0.49
1:Q:185:LEU:HA	1:Q:198:ALA:HB2	1.94	0.49
1:Q:220:GLN:OE1	1:Q:220:GLN:N	2.35	0.49

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:219:PRO:O	1:A:222:LYS:HD3	2.13	0.49
1:C:16:LEU:HA	1:C:18(A):TRP:CD1	2.46	0.49
1:C:21:LYS:HG2	1:C:22:ASP:N	2.28	0.49
1:C:256:ASN:ND2	1:C:297:THR:OG1	2.45	0.49
2:H:84:TRP:HA	2:H:89:ILE:HG12	1.95	0.49
2:H:94:GLU:HB3	2:H:118:ILE:HD11	1.94	0.49
2:H:139:HIS:HB2	2:H:333:GLN:HB2	1.95	0.49
2:H:149:CYS:HB3	2:H:317:TYR:CD2	2.48	0.49
2:H:222:LYS:O	2:H:224:LYS:HG2	2.13	0.49
1:I:135:LYS:NZ	1:I:135:LYS:H	2.11	0.49
1:I:256:ASN:O	1:I:260:ARG:N	2.28	0.49
2:J:17:ARG:NH2	2:J:52:THR:O	2.46	0.49
2:J:242:LEU:HB3	2:J:307:VAL:HG22	1.95	0.49
2:J:292:ILE:HG23	2:J:308:ILE:O	2.12	0.49
2:J:316:GLY:HA2	2:J:320:ARG:HH21	1.78	0.49
1:K:103:PRO:O	1:K:107:LYS:HG3	2.12	0.49
1:K:133:ASN:N	1:K:133:ASN:OD1	2.43	0.49
2:L:84:TRP:HD1	2:L:108:HIS:O	1.95	0.49
2:L:293:ASP:OD1	2:L:295:SER:OG	2.22	0.49
1:O:18(B):HIS:CD2	1:O:53:PHE:CZ	3.01	0.48
1:O:303:ASP:OD1	1:O:303:ASP:N	2.46	0.48
2:P:18(A):TRP:HE1	2:P:23:SER:HG	1.59	0.48
2:P:109:LEU:HD23	2:P:113:ALA:HB3	1.95	0.48
1:Q:130:VAL:HA	1:Q:134:GLU:HB3	1.95	0.48
1:Q:274:CYS:O	1:Q:294:SER:N	2.46	0.48
1:Q:293:ASP:OD2	1:Q:295:SER:OG	2.31	0.48
2:R:56:ASP:O	2:R:66:VAL:HA	2.12	0.48
2:R:318:SER:O	2:R:322:VAL:N	2.31	0.48
1:A:108:HIS:O	1:A:113:ALA:N	2.45	0.48
2:B:0:LYS:HZ2	2:B:1:LEU:HD22	1.77	0.48
2:B:102:ARG:O	2:B:106:GLY:N	2.35	0.48
1:C:161:LEU:HA	1:C:164:GLU:OE2	2.13	0.48
1:C:239:VAL:HA	1:C:309:ALA:O	2.13	0.48
1:C:272:ASP:N	1:C:290:SER:O	2.32	0.48
2:D:0:LYS:H2	2:D:26:ASP:HB2	1.78	0.48
1:E:121:PRO:HB3	1:E:147:ALA:HA	1.94	0.48
1:E:162:ASP:OD1	1:E:221:LEU:HD11	2.13	0.48
1:E:166:GLY:HA3	1:E:247:GLU:OE2	2.13	0.48
2:F:117:LEU:HG	2:F:145:SER:HA	1.95	0.48
2:H:15:PHE:CE1	2:H:322:VAL:HG22	2.48	0.48
2:H:272:SER:N	2:H:290:SER:O	2.46	0.48

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:I:132:VAL:HA	1:I:159:LYS:NZ	2.28	0.48
1:I:232:VAL:HG22	1:I:234:THR:HB	1.93	0.48
2:J:193:LEU:O	2:J:197:ARG:N	2.45	0.48
1:K:134:GLU:H	1:K:134:GLU:CD	2.14	0.48
1:K:238:SER:HB3	1:K:311:TYR:CE2	2.47	0.48
2:L:270:ILE:HA	2:L:320:ARG:NH1	2.28	0.48
1:O:28:VAL:C	1:O:71:ILE:HG23	2.34	0.48
1:O:154:LEU:HD12	1:O:155:ALA:N	2.27	0.48
1:O:264:ALA:O	1:O:268:LYS:HE2	2.13	0.48
1:O:272:ASP:HB2	1:O:288:PHE:CD2	2.47	0.48
2:P:94:GLU:OE2	2:P:96:THR:OG1	2.24	0.48
2:P:100:VAL:HG22	2:P:122(A):LYS:N	2.28	0.48
2:P:126:PRO:HB2	2:P:128:TYR:CE2	2.48	0.48
1:Q:272:ASP:O	1:Q:291:THR:HA	2.12	0.48
2:R:36:GLY:H	2:R:39:GLN:HE21	1.60	0.48
2:R:84:TRP:CD1	2:R:111:ALA:HB3	2.48	0.48
2:R:147:ALA:O	2:R:317:TYR:OH	2.31	0.48
1:A:36:GLY:HA3	1:A:38:LYS:HZ1	1.78	0.48
1:A:40:ALA:HA	1:A:43:LEU:HB2	1.95	0.48
1:A:142:ASN:H	1:A:142:ASN:ND2	2.11	0.48
1:A:160:VAL:HA	1:A:163:GLU:CD	2.33	0.48
2:B:193:LEU:H	2:B:193:LEU:HD12	1.77	0.48
1:C:38:LYS:O	1:C:41:THR:OG1	2.31	0.48
1:C:121:PRO:O	1:C:122(A):LYS:NZ	2.34	0.48
1:C:133:ASN:N	1:C:134:GLU:OE2	2.45	0.48
1:C:178:TYR:CE1	1:C:235:PRO:HA	2.48	0.48
2:D:121:PRO:HD3	2:D:148:SER:N	2.28	0.48
2:D:251:PHE:CE1	2:D:254:GLU:HB2	2.48	0.48
2:D:280:SER:HA	2:D:283:PHE:HD1	1.78	0.48
1:E:142:ASN:O	1:E:144:ILE:HG22	2.13	0.48
2:F:173:THR:HA	2:F:228:ILE:O	2.13	0.48
1:G:272:ASP:OD2	1:G:273:VAL:N	2.45	0.48
1:G:314:GLU:HG2	3:G:401:NAD:H72N	1.77	0.48
2:H:16:LEU:HD13	2:H:44:LEU:HD13	1.94	0.48
2:H:127:THR:OG1	2:H:217:VAL:HA	2.14	0.48
2:H:130:VAL:HG13	2:H:324:LEU:HD12	1.95	0.48
2:H:302:ASP:N	2:H:302:ASP:OD1	2.44	0.48
2:J:121:PRO:HG3	2:J:148:SER:N	2.28	0.48
1:K:219:PRO:HD2	1:K:220:GLN:HE22	1.79	0.48
2:L:24:PRO:HB2	2:L:329:ALA:HB1	1.95	0.48
1:O:130:VAL:O	1:O:132:VAL:HG23	2.13	0.48

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:O:293:ASP:H	1:O:308:VAL:HG22	1.78	0.48
2:P:236:ASN:OD1	2:P:284:ARG:NH1	2.46	0.48
1:Q:236:ASN:HB3	1:Q:284:ARG:NH1	2.27	0.48
1:A:76:ASN:OD1	1:A:77:ARG:N	2.47	0.48
1:A:280:SER:OG	1:A:281:VAL:N	2.46	0.48
2:B:65:SER:HA	2:B:70:VAL:CA	2.41	0.48
2:B:244:VAL:O	2:B:304:MET:HA	2.13	0.48
1:C:190:HIS:ND1	1:C:191:ARG:N	2.61	0.48
1:C:291:THR:O	1:C:310:TRP:HD1	1.96	0.48
1:E:184:LEU:HD22	2:H:184:LEU:HB2	1.95	0.48
1:E:245:ASN:HA	1:E:304:MET:HG2	1.95	0.48
1:E:258:ALA:HA	1:E:261:LYS:HB2	1.95	0.48
2:F:128:TYR:HA	2:F:133:ASN:CG	2.33	0.48
2:H:154:LEU:HA	2:H:157:PHE:CZ	2.47	0.48
1:K:161:LEU:HD22	1:K:167:ILE:HD11	1.94	0.48
2:L:18:CYS:O	2:L:20:ARG:HG2	2.13	0.48
2:L:121:PRO:HD3	2:L:148:SER:N	2.29	0.48
2:L:199:ALA:HA	2:L:202:ASN:HB2	1.93	0.48
1:O:11:ILE:HG22	3:O:401:NAD:O2N	2.12	0.48
1:O:64:PHE:O	1:O:71:ILE:N	2.43	0.48
1:O:66:ILE:O	1:O:69:LYS:HG3	2.14	0.48
2:P:173:THR:HA	2:P:228:ILE:O	2.13	0.48
1:Q:22:ASP:N	1:Q:22:ASP:OD1	2.44	0.48
2:R:7:GLY:HA2	3:R:401:NAD:N3A	2.28	0.48
2:R:172:MET:O	2:R:173:THR:OG1	2.31	0.48
1:A:322:VAL:O	1:A:326:ASP:N	2.47	0.48
1:C:2:LYS:N	1:C:90:ASP:OD2	2.47	0.48
1:C:64:PHE:CZ	1:C:71:ILE:HG22	2.47	0.48
1:C:240:VAL:O	1:C:309:ALA:N	2.46	0.48
2:D:18:CYS:O	2:D:20:ARG:HG2	2.13	0.48
2:D:253:GLU:HA	2:D:256:ASN:OD1	2.14	0.48
2:D:297:THR:HG22	2:D:307:VAL:HA	1.95	0.48
2:F:126:PRO:HB2	2:F:128:TYR:CZ	2.49	0.48
1:I:13:ARG:NH2	1:I:43:LEU:O	2.38	0.48
1:I:218:LEU:O	1:I:220:GLN:NE2	2.47	0.48
1:I:293:ASP:HB3	1:I:296:LEU:HG	1.95	0.48
2:J:58:LYS:O	2:J:65:SER:N	2.47	0.48
2:J:102:ARG:HG3	2:J:143:ILE:HD12	1.95	0.48
1:K:176:HIS:CD2	1:K:231:ARG:HG2	2.48	0.48
1:K:186:ASP:HA	1:K:197:ARG:HA	1.96	0.48
1:O:57:VAL:HA	1:O:64:PHE:CE2	2.44	0.48

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:O:92:VAL:HG12	1:O:93:ILE:H	1.78	0.48
1:O:169:LYS:N	1:O:245:ASN:HD21	2.12	0.48
2:P:96:THR:O	3:P:401:NAD:H52A	2.13	0.48
1:Q:47:ASP:CG	1:Q:50:LEU:H	2.14	0.48
1:Q:236:ASN:OD1	1:Q:313:ASN:ND2	2.47	0.48
2:R:11:ILE:O	2:R:15:PHE:N	2.33	0.48
2:B:146:ASN:HD22	2:B:321:VAL:HG22	1.77	0.48
2:B:260:ARG:NH2	2:B:273:VAL:HG22	2.28	0.48
1:C:37:VAL:O	1:C:41:THR:N	2.28	0.48
1:C:60(A):ASP:OD1	1:C:63:THR:HG23	2.12	0.48
1:C:149:CYS:HB3	1:C:317:TYR:CG	2.48	0.48
2:D:3:VAL:O	2:D:27:VAL:HG13	2.14	0.48
1:E:11:ILE:HA	1:E:14:ASN:OD1	2.13	0.48
1:E:226:ASN:OD1	1:E:227:GLY:N	2.35	0.48
2:F:101:ASP:HB2	2:F:103:ASP:OD1	2.12	0.48
2:F:237:VAL:HG13	2:F:312:ASP:HA	1.96	0.48
2:F:281:ILE:HD12	2:F:284:ARG:HE	1.79	0.48
1:G:3:VAL:O	1:G:27:VAL:HA	2.13	0.48
1:G:34:GLY:O	1:G:39:SER:OG	2.31	0.48
1:G:251:THR:HA	1:G:299:VAL:HG11	1.96	0.48
2:H:102:ARG:NH2	2:H:125:ILE:HA	2.28	0.48
2:H:179:THR:OG1	2:H:180:GLY:N	2.41	0.48
1:I:85:ALA:N	1:I:112:GLY:HA3	2.28	0.48
2:J:104:GLY:HA2	2:J:107:LYS:HD2	1.96	0.48
2:J:327:ILE:HA	2:J:330:ASN:ND2	2.28	0.48
2:L:117:LEU:HD12	2:L:144:ILE:HD11	1.94	0.48
2:L:297:THR:HG22	2:L:307:VAL:HA	1.96	0.48
2:L:323:ASP:O	2:L:327:ILE:HG13	2.14	0.48
1:O:86:GLU:OE1	1:O:86:GLU:N	2.31	0.48
2:P:18(A):TRP:NE1	2:P:23:SER:OG	2.45	0.48
2:P:154:LEU:HD12	2:P:155:ALA:N	2.28	0.48
2:P:206:THR:HG23	2:P:229:ALA:HB3	1.96	0.48
1:Q:82:LEU:HB3	1:Q:84:TRP:CE2	2.48	0.48
1:Q:176:HIS:HD2	1:Q:177:SER:O	1.97	0.48
2:R:84:TRP:HB2	2:R:111:ALA:C	2.34	0.48
2:R:183:ARG:HE	2:R:190:HIS:HB2	1.78	0.48
1:A:148:SER:OG	1:A:151:THR:HG23	2.14	0.48
1:A:174:THR:O	1:A:230:LEU:HD23	2.13	0.48
2:B:280:SER:H	2:D:202:ASN:HB3	1.78	0.48
1:C:0:LYS:HG3	1:C:24:PRO:O	2.14	0.48
2:D:208:THR:HG22	2:D:229:ALA:HB2	1.96	0.48

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:91:ILE:HD11	1:E:328:VAL:HG11	1.95	0.48
1:E:154:LEU:HD13	1:E:157:PHE:CZ	2.47	0.48
1:E:184:LEU:HD23	1:E:184:LEU:H	1.78	0.48
2:F:206:THR:HG23	2:F:229:ALA:HB3	1.95	0.48
2:F:218:LEU:HB3	2:F:221:LEU:HD13	1.96	0.48
1:G:150:THR:O	1:G:154:LEU:N	2.39	0.48
1:I:20:ARG:HG3	1:I:21:LYS:HZ2	1.78	0.48
1:I:76:ASN:HB3	1:I:82:LEU:HD21	1.95	0.48
1:I:251:THR:HA	1:I:299:VAL:HG21	1.95	0.48
1:I:300:MET:SD	1:K:226:ASN:N	2.86	0.48
2:J:139:HIS:ND1	2:J:332:TRP:HA	2.28	0.48
2:J:206:THR:HG23	2:J:229:ALA:HB3	1.96	0.48
1:K:62:GLU:O	1:K:72:LYS:HD2	2.14	0.48
2:L:194:ARG:HD3	2:L:205:PRO:HD2	1.96	0.48
2:L:280:SER:HA	2:L:283:PHE:HD1	1.79	0.48
1:O:94:GLU:HB2	1:O:117:ILE:O	2.14	0.48
2:P:37:VAL:HG23	2:P:38:LYS:H	1.79	0.48
2:P:162:ASP:O	2:P:166:GLY:N	2.46	0.48
2:P:275:ASP:OD1	2:P:295:SER:N	2.41	0.48
1:Q:41:THR:HG21	1:Q:59:ILE:HG13	1.95	0.48
1:Q:84:TRP:HB3	1:Q:89:ILE:HB	1.95	0.48
1:Q:134:GLU:OE1	1:Q:134:GLU:N	2.47	0.48
2:R:204:VAL:O	2:R:230:LEU:HA	2.14	0.48
2:R:214:VAL:HG13	2:R:215:ALA:H	1.78	0.48
2:B:11:ILE:HA	2:B:14:ASN:HB3	1.95	0.48
2:B:33:THR:OG1	2:B:77:ARG:NH1	2.47	0.48
2:B:184:LEU:HB2	1:C:184:LEU:HB3	1.96	0.48
1:C:10:ARG:HB3	1:C:314:GLU:OE2	2.14	0.48
1:C:73:VAL:HG12	1:C:74:VAL:O	2.13	0.48
2:D:256:ASN:HA	2:D:259:PHE:CD2	2.49	0.48
1:E:42:HIS:O	1:E:45:LYS:HB2	2.14	0.48
1:E:115:LYS:HG2	1:E:142:ASN:HA	1.94	0.48
1:E:161:LEU:O	1:E:165:LEU:N	2.45	0.48
2:H:171:THR:O	2:H:242:LEU:HD12	2.14	0.48
2:H:214:VAL:HG13	2:H:215:ALA:H	1.78	0.48
2:H:270:ILE:O	2:H:289:SER:N	2.35	0.48
2:H:326:ASP:HA	2:H:329:ALA:HB3	1.95	0.48
1:I:64:PHE:O	1:I:71:ILE:N	2.42	0.48
2:J:2:LYS:HD3	2:J:87:MET:O	2.14	0.48
2:J:18(A):TRP:HA	2:J:20:ARG:HB2	1.95	0.48
2:J:39:GLN:HE21	1:K:191:ARG:HG3	1.78	0.48

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:9:GLY:CA	3:K:401:NAD:H4B	2.43	0.48
1:K:199:ALA:O	1:K:201:LEU:N	2.46	0.48
2:L:15:PHE:CZ	2:L:322:VAL:HA	2.49	0.48
2:L:224:LYS:NZ	2:L:225:LEU:HB2	2.24	0.48
1:O:3:VAL:HA	1:O:91:ILE:O	2.13	0.48
1:O:162:ASP:HA	1:O:166:GLY:H	1.78	0.48
1:O:166:GLY:O	1:O:247:GLU:N	2.45	0.48
1:O:246:ILE:HD12	1:O:246:ILE:HA	1.66	0.48
1:Q:28:VAL:C	1:Q:71:ILE:HG23	2.33	0.48
1:Q:251:THR:HG1	1:Q:252:ALA:H	1.62	0.48
2:R:172:MET:SD	2:R:227:GLY:N	2.87	0.48
2:R:222:LYS:O	2:R:224:LYS:HG2	2.13	0.48
1:A:11:ILE:HG22	3:A:401:NAD:O2N	2.14	0.48
1:A:36:GLY:O	1:A:39:SER:OG	2.23	0.48
1:A:54:LYS:CD	1:A:54:LYS:H	2.26	0.48
1:A:137:TYR:HB3	1:A:331:LYS:NZ	2.29	0.48
1:A:211:ALA:O	1:A:225:LEU:HB3	2.13	0.48
1:A:246:ILE:HD13	1:A:305:VAL:HG11	1.96	0.48
2:B:102:ARG:HH21	2:B:125:ILE:HG13	1.78	0.48
2:B:277:PRO:HB2	2:D:194:ARG:HG2	1.95	0.48
1:C:80:LEU:HG	1:C:107:LYS:HZ1	1.77	0.48
1:C:279:VAL:HA	1:C:310:TRP:CH2	2.49	0.48
2:D:0:LYS:N	2:D:26:ASP:HB2	2.29	0.48
1:E:161:LEU:HB3	1:E:165:LEU:HD12	1.96	0.48
2:F:91:LEU:HD21	2:F:93:ILE:HD11	1.95	0.48
1:G:2:LYS:N	1:G:90:ASP:OD2	2.46	0.48
2:H:29:VAL:N	2:H:71:ILE:HG23	2.29	0.48
1:I:202:ASN:HB2	1:K:280:SER:OG	2.14	0.48
2:L:173:THR:O	2:L:241:ASP:N	2.46	0.48
1:O:18(B):HIS:CD2	1:O:18(B):HIS:C	2.87	0.48
1:O:151:THR:HA	1:O:154:LEU:HD11	1.95	0.48
1:O:201:LEU:HD12	1:O:202:ASN:HD21	1.79	0.48
2:P:38:LYS:HZ3	2:P:39:GLN:H	1.61	0.48
2:P:92:VAL:HB	2:P:116:VAL:HG22	1.96	0.48
2:P:118:ILE:HB	2:P:145:SER:HB2	1.96	0.48
2:R:15:PHE:CZ	2:R:322:VAL:HA	2.48	0.48
1:A:32:ASP:N	1:A:74:VAL:O	2.37	0.48
1:A:37:VAL:HG13	1:A:38:LYS:H	1.78	0.48
1:A:45:LYS:O	1:A:52:THR:HA	2.14	0.48
2:B:82:LEU:HB2	2:B:84:TRP:CD1	2.49	0.48
2:B:213:ALA:O	2:B:217:VAL:HG13	2.14	0.48

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:250:THR:OG1	2:B:251:PHE:O	2.30	0.48
1:C:45:LYS:NZ	1:C:55:ALA:O	2.45	0.48
1:C:49:ILE:HG22	1:C:284:ARG:CZ	2.43	0.48
1:C:177:SER:O	1:C:179:THR:HG23	2.12	0.48
1:C:238:SER:HB3	1:C:311:TYR:CE1	2.49	0.48
1:C:313:ASN:O	1:C:317:TYR:HB2	2.14	0.48
2:D:29:VAL:HG11	2:D:89:ILE:HD11	1.95	0.48
1:E:65:SER:HA	1:E:69:LYS:O	2.13	0.48
1:E:94:GLU:OE2	1:E:99:PHE:N	2.28	0.48
2:F:1:LEU:O	2:F:3:VAL:N	2.47	0.48
2:F:218:LEU:HB3	2:F:221:LEU:HB2	1.96	0.48
1:I:175:THR:OG1	1:I:239:VAL:HG13	2.14	0.48
1:I:185:LEU:CD1	2:L:10:ARG:CZ	2.91	0.48
2:J:5:ILE:HD12	2:J:93:ILE:HB	1.95	0.48
2:J:49:ILE:HG23	2:J:284:ARG:HH11	1.78	0.48
2:J:63:ALA:O	2:J:64:ILE:HD13	2.13	0.48
2:J:174:THR:O	2:J:230:LEU:HB2	2.14	0.48
2:J:226:ASN:HB3	2:L:300:MET:HE1	1.95	0.48
2:J:277:PRO:HG3	2:L:193:LEU:HD13	1.95	0.48
1:K:161:LEU:HA	1:K:164:GLU:HG2	1.96	0.48
2:L:243:VAL:HA	2:L:306:LYS:HA	1.95	0.48
2:L:253:GLU:HA	2:L:256:ASN:OD1	2.13	0.48
2:L:293:ASP:H	2:L:308:ILE:HB	1.78	0.48
1:O:32:ASP:HB3	1:O:73:VAL:CG1	2.43	0.48
1:O:202:ASN:O	1:O:233:PRO:HD3	2.14	0.48
1:Q:24:PRO:HD2	1:Q:326:ASP:OD1	2.14	0.48
1:Q:270:VAL:HA	1:Q:288:PHE:HA	1.96	0.48
2:R:62:SER:O	2:R:73:VAL:HG12	2.14	0.48
2:R:169:LYS:O	2:R:245:GLN:N	2.37	0.48
2:R:210:ALA:O	2:R:214:VAL:HG12	2.14	0.48
2:R:272:SER:N	2:R:290:SER:O	2.47	0.48
1:A:54:LYS:H	1:A:54:LYS:HD2	1.77	0.48
1:A:109:ILE:HD13	1:A:113:ALA:HB3	1.96	0.48
1:A:139:HIS:NE2	1:A:333:PRO:HD3	2.29	0.48
1:A:169:LYS:HB3	1:C:300:MET:HG2	1.96	0.48
1:A:203:ILE:HD12	1:A:231:ARG:O	2.14	0.48
2:B:129:VAL:HG13	2:B:132:VAL:HB	1.95	0.48
2:B:139:HIS:ND1	2:B:332:TRP:HA	2.29	0.48
2:B:181:ASP:O	2:B:183:ARG:NH1	2.47	0.48
2:B:215:ALA:C	2:B:222:LYS:HZ3	2.16	0.48
1:C:47:ASP:OD2	1:C:50:LEU:N	2.25	0.48

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:256:ASN:C	1:C:260:ARG:HE	2.17	0.48
2:D:237:VAL:HG13	2:D:311:TYR:O	2.14	0.48
1:E:255:VAL:HA	1:E:258:ALA:HB3	1.96	0.48
1:E:318:SER:HA	1:E:321:VAL:HG22	1.95	0.48
1:G:49:ILE:O	1:G:284:ARG:NH2	2.36	0.48
1:G:137:TYR:CE2	1:G:331:LYS:HE3	2.49	0.48
1:G:177:SER:HG	1:G:234:THR:C	2.17	0.48
1:G:219:PRO:HA	1:G:222:LYS:HD3	1.95	0.48
1:G:346:GLU:O	1:G:350:LYS:N	2.41	0.48
2:H:37:VAL:HG11	2:H:61:ASP:O	2.13	0.48
2:H:60:ALA:O	2:H:63:ALA:HB3	2.14	0.48
2:H:122(A):LYS:HD2	2:H:122(A):LYS:HA	1.64	0.48
2:H:267:LEU:HA	2:H:270:ILE:HB	1.95	0.48
2:H:275:ASP:OD1	2:H:295:SER:N	2.27	0.48
1:I:42:HIS:HA	1:I:46:TYR:CE1	2.48	0.48
2:J:11:ILE:HG12	3:J:401:NAD:O1N	2.14	0.48
2:J:203:ILE:HD11	2:J:230:LEU:HB3	1.96	0.48
1:K:29:VAL:HB	1:K:72:LYS:HB3	1.95	0.48
1:K:80:LEU:HG	1:K:107:LYS:NZ	2.28	0.48
2:L:118:ILE:O	2:L:145:SER:OG	2.31	0.48
2:L:313:ASN:N	2:L:313:ASN:OD1	2.45	0.48
2:R:94:GLU:CD	2:R:96:THR:HG1	2.18	0.47
2:R:173:THR:OG1	2:R:228:ILE:HG13	2.14	0.47
2:R:258:ALA:HA	2:R:261:GLU:HG3	1.96	0.47
1:A:31:ASN:ND2	1:A:76:ASN:O	2.47	0.47
1:A:137:TYR:HB3	1:A:331:LYS:HZ3	1.79	0.47
1:A:195:ARG:HH22	1:G:361:TYR:H	1.61	0.47
1:A:262:ALA:C	1:A:265:GLY:H	2.17	0.47
2:B:6:ASN:OD1	2:B:7:GLY:N	2.47	0.47
2:B:13:ARG:HG2	2:B:43:LEU:C	2.34	0.47
2:B:39:GLN:NE2	1:C:191:ARG:HA	2.29	0.47
2:B:281:ILE:H	2:D:202:ASN:HD22	1.57	0.47
2:B:298:MET:HG3	2:B:306:LYS:HB3	1.96	0.47
1:C:4:ALA:HA	1:C:27:VAL:CG2	2.44	0.47
1:C:30:VAL:H	1:C:73:VAL:HA	1.79	0.47
1:C:58:LYS:O	1:C:64:PHE:HB2	2.14	0.47
1:C:203:ILE:HD12	1:C:231:ARG:O	2.14	0.47
1:E:46:TYR:CE1	2:F:278:LEU:HD21	2.49	0.47
1:E:74:VAL:HG22	1:E:75:SER:H	1.79	0.47
1:E:172:MET:SD	1:E:240:VAL:HB	2.54	0.47
2:F:62:SER:O	2:F:73:VAL:HG12	2.14	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:F:89:ILE:O	2:F:113:ALA:HA	2.14	0.47
2:F:102:ARG:HH21	2:F:125:ILE:HG13	1.77	0.47
2:F:183:ARG:NE	2:F:188:SER:O	2.46	0.47
1:G:8:PHE:HZ	1:G:44:LEU:HB2	1.79	0.47
1:G:52:THR:O	1:G:54:LYS:NZ	2.27	0.47
1:G:105:ALA:O	1:G:109:ILE:HG12	2.14	0.47
2:H:174:THR:OG1	2:H:175:THR:N	2.47	0.47
2:H:199:ALA:O	2:H:202:ASN:N	2.47	0.47
2:H:215:ALA:O	2:H:222:LYS:NZ	2.47	0.47
2:H:236:ASN:O	2:H:313:ASN:ND2	2.31	0.47
2:H:330:ASN:N	2:H:330:ASN:OD1	2.47	0.47
2:J:182:GLN:HE21	2:J:182:GLN:H	1.60	0.47
2:J:260:ARG:NH2	2:J:273:VAL:HG22	2.29	0.47
2:J:279:VAL:HA	2:J:310:TRP:HH2	1.79	0.47
1:K:17:ARG:HG2	1:K:53:PHE:CE2	2.49	0.47
1:K:84:TRP:N	1:K:86:GLU:OE1	2.46	0.47
1:K:134:GLU:OE1	1:K:134:GLU:N	2.36	0.47
2:L:3:VAL:HG13	2:L:91:LEU:O	2.14	0.47
2:L:38:LYS:HB2	2:L:42:HIS:CE1	2.49	0.47
2:L:100:VAL:O	2:L:122(A):LYS:N	2.35	0.47
1:O:56:ASP:N	1:O:67:ASP:OD1	2.47	0.47
1:O:198:ALA:O	1:O:201:LEU:HG	2.14	0.47
1:O:212:LYS:HZ2	1:O:212:LYS:H	1.62	0.47
2:P:9:GLY:HA3	3:P:401:NAD:O2N	2.14	0.47
2:P:76:ASP:OD1	2:P:78:ASN:N	2.47	0.47
1:Q:118:ILE:C	1:Q:145:SER:HG	2.12	0.47
1:Q:190:HIS:CE1	1:Q:195:ARG:N	2.82	0.47
1:Q:298:MET:SD	1:Q:299:VAL:N	2.87	0.47
2:R:127:THR:OG1	2:R:217:VAL:HA	2.14	0.47
1:A:4:ALA:HA	1:A:29:VAL:O	2.15	0.47
1:A:149:CYS:O	1:A:153:CYS:N	2.47	0.47
1:A:226:ASN:HD22	1:C:300:MET:HA	1.79	0.47
1:C:47:ASP:HB3	1:C:51:GLY:H	1.78	0.47
1:C:151:THR:O	1:C:154:LEU:N	2.47	0.47
1:C:217:VAL:HG23	1:C:218:LEU:HD22	1.95	0.47
1:C:298:MET:N	1:C:306:LYS:HE3	2.30	0.47
2:D:118:ILE:O	2:D:145:SER:OG	2.32	0.47
2:D:150:THR:OG1	2:D:151:THR:N	2.44	0.47
2:D:318:SER:O	2:D:322:VAL:HG23	2.14	0.47
1:E:17:ARG:HD3	1:E:44:LEU:HD11	1.96	0.47
1:E:105:ALA:O	1:E:109:ILE:HG12	2.14	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:F:92:VAL:HB	2:F:116:VAL:HG22	1.96	0.47
2:F:109:LEU:HD23	2:F:113:ALA:HB3	1.95	0.47
2:F:149:CYS:HA	2:F:152:ASN:HB3	1.95	0.47
1:G:194:ARG:NH2	1:G:204:VAL:HG11	2.28	0.47
2:H:18(A):TRP:HZ3	2:H:18(B):HIS:CE1	2.33	0.47
2:H:122:GLY:HA3	2:H:125:ILE:HG12	1.96	0.47
2:H:242:LEU:HD23	2:H:307:VAL:HG21	1.96	0.47
2:J:15:PHE:CG	2:J:322:VAL:HG22	2.49	0.47
2:J:250:THR:OG1	2:J:251:PHE:O	2.31	0.47
2:P:17:ARG:NH2	2:P:53:PHE:HA	2.29	0.47
2:P:128:TYR:HA	2:P:133:ASN:CG	2.34	0.47
2:P:193:LEU:HD22	2:R:277:PRO:HG2	1.97	0.47
1:Q:186:ASP:OD2	1:Q:197:ARG:NE	2.42	0.47
2:R:29:VAL:N	2:R:71:ILE:HG23	2.29	0.47
2:R:171:THR:O	2:R:242:LEU:HD12	2.14	0.47
2:R:274:CYS:HB3	2:R:276:GLU:CD	2.35	0.47
1:A:76:ASN:ND2	1:A:81:LYS:HG3	2.29	0.47
1:A:123(A):SER:HB2	1:G:124:ASP:HB3	1.95	0.47
2:B:174:THR:O	2:B:230:LEU:HB2	2.15	0.47
1:C:11:ILE:HG21	1:C:119:THR:HG21	1.97	0.47
1:C:84:TRP:N	1:C:86:GLU:OE1	2.47	0.47
1:C:105:ALA:O	1:C:108:HIS:N	2.47	0.47
2:D:270:ILE:HA	2:D:320:ARG:NH1	2.28	0.47
1:E:7:GLY:O	1:E:95:GLY:HA3	2.14	0.47
1:E:94:GLU:CD	1:E:96:THR:HG1	2.17	0.47
1:E:246:ILE:HG22	1:E:304:MET:N	2.30	0.47
2:F:190:HIS:CG	2:F:191:ARG:N	2.83	0.47
2:F:303:ASP:OD1	2:F:303:ASP:N	2.47	0.47
1:G:116:VAL:HG21	1:G:143:ILE:HG23	1.96	0.47
1:G:332:TRP:CG	1:G:333:PRO:HD2	2.48	0.47
2:H:28:VAL:HG13	2:H:70:VAL:O	2.14	0.47
2:H:275:ASP:OD2	2:H:294:SER:OG	2.27	0.47
1:I:60:ILE:HB	1:I:63:THR:O	2.15	0.47
1:I:114:LYS:O	1:I:142:ASN:ND2	2.32	0.47
1:I:129:VAL:HG12	1:I:133:ASN:ND2	2.28	0.47
1:I:133:ASN:HA	1:I:136:ASP:OD2	2.15	0.47
1:I:221:LEU:HD13	1:I:224:LYS:HB2	1.96	0.47
2:J:44:LEU:O	2:J:53:PHE:HB2	2.14	0.47
2:J:213:ALA:O	2:J:217:VAL:HG13	2.14	0.47
2:J:237:VAL:HG22	2:J:312:ASP:HA	1.96	0.47
2:J:272:SER:O	2:J:291:THR:HA	2.13	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:O:46:TYR:CD1	2:P:278:LEU:HD21	2.48	0.47
1:O:63:THR:HG22	1:O:64:PHE:N	2.29	0.47
1:O:292:ILE:HG13	1:O:309:ALA:HA	1.97	0.47
2:P:12:GLY:O	2:P:16:LEU:N	2.32	0.47
2:P:173:THR:N	2:P:241:ASP:OD1	2.47	0.47
2:P:184:LEU:HD13	1:Q:184:LEU:HD13	1.96	0.47
1:Q:121:PRO:HG3	1:Q:148:SER:H	1.79	0.47
2:R:330:ASN:N	2:R:330:ASN:OD1	2.47	0.47
1:A:178:TYR:CE1	1:A:235:PRO:HA	2.49	0.47
1:C:4:ALA:N	1:C:91:ILE:O	2.47	0.47
1:C:106:GLY:O	1:C:110:GLN:N	2.25	0.47
1:C:142:ASN:ND2	1:C:143:ILE:H	2.10	0.47
1:C:236:ASN:HD21	1:C:314:GLU:H	1.63	0.47
2:D:84:TRP:HD1	2:D:108:HIS:O	1.96	0.47
2:D:87:MET:N	2:D:87:MET:SD	2.86	0.47
1:E:18(A):TRP:HZ3	1:E:69:LYS:HD3	1.79	0.47
1:E:18(B):HIS:ND1	1:E:69:LYS:HD2	2.30	0.47
1:E:101:ASP:OD1	1:E:104:GLY:N	2.24	0.47
1:E:118:ILE:HG22	1:E:145:SER:HA	1.96	0.47
1:E:120:ALA:N	1:E:146:ASN:HD21	2.07	0.47
1:E:139:HIS:HE1	1:E:332:TRP:CD1	2.31	0.47
2:F:18(A):TRP:NE1	2:F:23:SER:OG	2.44	0.47
2:F:173:THR:N	2:F:241:ASP:OD1	2.47	0.47
1:G:22:ASP:OD1	1:G:22:ASP:N	2.47	0.47
1:G:53:PHE:CE2	1:G:55:ALA:HB3	2.49	0.47
1:G:126:PRO:O	1:G:127:THR:C	2.52	0.47
1:G:154:LEU:HA	1:G:154:LEU:HD12	1.68	0.47
2:H:210:ALA:O	2:H:214:VAL:HG12	2.14	0.47
1:I:165:LEU:HB3	1:I:246:ILE:HG13	1.97	0.47
1:I:193:LEU:O	1:I:197:ARG:N	2.48	0.47
1:I:321:VAL:HA	1:I:324:LEU:HD23	1.95	0.47
2:J:31:ASN:OD1	2:J:74:VAL:HG23	2.15	0.47
1:K:57:VAL:HG22	1:K:66:ILE:HG23	1.96	0.47
1:K:122(A):LYS:HA	1:K:122(A):LYS:HD3	1.72	0.47
2:L:25:LEU:HD22	2:L:329:ALA:HB2	1.96	0.47
2:L:170:GLY:HA2	2:L:244:VAL:HA	1.95	0.47
2:L:171:THR:O	2:L:242:LEU:HD12	2.15	0.47
2:L:190:HIS:CG	2:L:191:ARG:N	2.81	0.47
2:L:192:ASP:OD2	2:L:194:ARG:HB2	2.14	0.47
1:O:103:PRO:HA	1:C:110:GLN:HB2	1.96	0.47
1:O:142:ASN:O	1:O:144:ILE:HG22	2.14	0.47

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:P:45:LYS:O	2:P:52:THR:OG1	2.26	0.47
1:Q:186:ASP:CG	1:Q:197:ARG:HE	2.17	0.47
1:Q:312:ASP:OD2	1:Q:315:TRP:HB3	2.13	0.47
2:R:47:ASP:CG	2:R:49:ILE:H	2.15	0.47
2:R:91:LEU:HD21	2:R:93:ILE:HD11	1.96	0.47
2:R:326:ASP:HA	2:R:329:ALA:HB3	1.95	0.47
1:A:125:ILE:HG22	1:A:126:PRO:HD2	1.95	0.47
1:A:236:ASN:HD21	1:A:314:GLU:H	1.62	0.47
2:B:0:LYS:NZ	2:B:1:LEU:HD13	2.29	0.47
2:B:203:ILE:HG23	2:B:205:PRO:HD3	1.97	0.47
2:B:268:LYS:HE2	2:B:268:LYS:HB2	1.81	0.47
1:C:40:ALA:HA	1:C:43:LEU:HD12	1.96	0.47
1:C:122(A):LYS:HD3	1:C:122(A):LYS:HA	1.60	0.47
1:C:292:ILE:HG13	1:C:309:ALA:HA	1.95	0.47
1:C:318:SER:OG	1:C:319:GLN:OE1	2.32	0.47
1:E:37:VAL:HG13	1:E:59:ILE:CG2	2.44	0.47
1:E:96:THR:OG1	1:E:98:VAL:HG22	2.13	0.47
1:E:227:GLY:HA3	1:G:306:LYS:HZ3	1.79	0.47
2:F:227:GLY:HA3	2:H:306:LYS:HZ2	1.80	0.47
1:G:210:ALA:HA	1:G:213:ALA:HB3	1.96	0.47
2:H:85:GLY:N	2:H:112:GLY:HA3	2.30	0.47
2:H:168:ILE:N	2:H:245:GLN:O	2.48	0.47
2:H:317:TYR:O	2:H:321:VAL:HG23	2.15	0.47
1:I:187:ALA:CA	2:L:43:LEU:HD11	2.45	0.47
1:I:272:ASP:HB3	1:I:290:SER:O	2.14	0.47
1:I:349:CYS:SG	1:I:353:PRO:HA	2.55	0.47
1:K:11:ILE:C	1:K:14:ASN:HD22	2.17	0.47
1:K:79:PRO:CB	1:K:107:LYS:HZ2	2.28	0.47
1:K:159:LYS:HG2	1:K:163:GLU:CD	2.34	0.47
1:K:201:LEU:N	1:K:201:LEU:HD22	2.29	0.47
2:L:63:ALA:HA	2:L:72:LYS:HA	1.97	0.47
2:L:236:ASN:OD1	2:L:284:ARG:NH1	2.48	0.47
1:O:135:LYS:HG3	1:O:136:ASP:OD1	2.13	0.47
1:O:183:ARG:HH21	1:O:190:HIS:HA	1.79	0.47
1:O:274:CYS:N	1:O:292:ILE:O	2.33	0.47
2:P:8:PHE:H	2:P:32:ASP:CB	2.27	0.47
2:P:101:ASP:HB2	2:P:103:ASP:OD1	2.14	0.47
2:P:239:VAL:HG13	2:P:310:TRP:CD2	2.49	0.47
1:Q:72:LYS:HG2	1:Q:73:VAL:N	2.28	0.47
1:Q:190:HIS:CE1	1:Q:195:ARG:H	2.32	0.47
2:R:130:VAL:HG13	2:R:324:LEU:HD12	1.96	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:R:177:SER:OG	2:R:234:THR:O	2.18	0.47
2:R:281:ILE:O	2:R:283:PHE:N	2.46	0.47
1:A:28:VAL:O	1:A:71:ILE:HG23	2.15	0.47
1:A:316:GLY:O	1:A:320:ARG:HG2	2.15	0.47
1:A:349:CYS:SG	1:A:353:PRO:HA	2.55	0.47
2:B:3:VAL:HG13	2:B:91:LEU:O	2.15	0.47
2:B:25:LEU:HD11	2:B:326:ASP:HA	1.96	0.47
2:B:32:ASP:OD1	2:B:33:THR:N	2.48	0.47
1:C:85:ALA:C	1:C:88:GLY:H	2.17	0.47
1:C:176:HIS:N	1:C:230:LEU:O	2.48	0.47
1:C:253:GLU:OE1	1:C:254:ASP:N	2.48	0.47
2:D:169:LYS:HB2	2:D:245:GLN:HB3	1.96	0.47
2:D:190:HIS:CG	2:D:191:ARG:N	2.82	0.47
2:F:7:GLY:N	2:F:31:ASN:O	2.47	0.47
2:F:59:THR:CA	2:F:64:ILE:HA	2.30	0.47
2:F:100:VAL:HG22	2:F:122(A):LYS:N	2.29	0.47
2:F:270:ILE:O	2:F:271:LEU:HD13	2.14	0.47
1:G:118:ILE:O	1:G:145:SER:OG	2.20	0.47
1:G:177:SER:HA	1:G:234:THR:HG23	1.96	0.47
1:G:323:ASP:O	1:G:327:LEU:HG	2.13	0.47
2:H:1:LEU:H	2:H:26:ASP:H	1.63	0.47
2:H:45:LYS:HG2	2:H:57:VAL:HG11	1.96	0.47
2:H:94:GLU:CD	2:H:96:THR:HG1	2.17	0.47
1:I:271:LEU:HA	1:I:289:SER:HB3	1.97	0.47
1:K:204:VAL:HG13	1:K:231:ARG:HB2	1.95	0.47
1:K:253:GLU:HA	1:K:256:ASN:HD21	1.79	0.47
2:L:87:MET:N	2:L:87:MET:SD	2.87	0.47
2:L:115:LYS:HA	2:L:142:THR:OG1	2.14	0.47
2:L:256:ASN:HA	2:L:259:PHE:CD2	2.50	0.47
1:O:175:THR:HG23	1:O:239:VAL:O	2.15	0.47
1:O:214:VAL:HG21	1:O:225:LEU:HD12	1.96	0.47
1:O:226:ASN:HD22	1:Q:298:MET:HG2	1.78	0.47
1:O:264:ALA:HA	1:O:268:LYS:NZ	2.30	0.47
2:P:1:LEU:HD13	2:P:329:ALA:HA	1.96	0.47
2:P:31:ASN:HA	2:P:73:VAL:HG23	1.96	0.47
2:P:77:ARG:HB3	3:P:401:NAD:N6A	2.28	0.47
2:P:102:ARG:HH21	2:P:125:ILE:HG13	1.80	0.47
2:P:270:ILE:O	2:P:289:SER:OG	2.25	0.47
1:Q:147:ALA:O	1:Q:152:ASN:ND2	2.48	0.47
1:Q:190:HIS:NE2	1:Q:195:ARG:HB2	2.30	0.47
1:Q:201:LEU:HD23	1:Q:201:LEU:H	1.79	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:R:116:VAL:HG12	2:R:144:ILE:O	2.15	0.47
2:R:122(A):LYS:HD2	2:R:122(A):LYS:HA	1.62	0.47
2:R:293:ASP:O	2:R:297:THR:HG23	2.15	0.47
1:A:10:ARG:N	3:A:401:NAD:O2N	2.48	0.47
1:A:27:VAL:HG23	1:A:71:ILE:HD11	1.96	0.47
1:A:169:LYS:N	1:A:245:ASN:OD1	2.47	0.47
1:A:221:LEU:C	1:A:224:LYS:HD3	2.35	0.47
2:B:104:GLY:HA2	2:B:107:LYS:HD2	1.95	0.47
2:B:161:LEU:O	2:B:165:PHE:N	2.45	0.47
2:B:274:CYS:O	2:B:294:SER:N	2.39	0.47
1:C:139:HIS:HB3	1:C:331:LYS:HE2	1.96	0.47
1:C:263:ALA:O	1:C:268:LYS:NZ	2.28	0.47
2:D:1:LEU:HD11	2:D:332:TRP:CE3	2.50	0.47
2:D:82:LEU:O	2:D:111:ALA:HB1	2.15	0.47
2:D:128:TYR:HA	2:D:133:ASN:ND2	2.30	0.47
2:D:135:GLU:CD	2:D:135:GLU:H	2.17	0.47
2:D:236:ASN:OD1	2:D:284:ARG:NH1	2.48	0.47
1:E:11:ILE:HD11	3:E:401:NAD:O5D	2.15	0.47
1:E:57:VAL:HG13	1:E:64:PHE:CD1	2.49	0.47
1:E:79:PRO:HB3	1:E:108:HIS:CE1	2.50	0.47
1:E:103:PRO:O	1:E:107:LYS:HG3	2.15	0.47
1:E:175:THR:O	1:E:175:THR:OG1	2.26	0.47
1:E:214:VAL:HG23	1:E:215:SER:H	1.79	0.47
2:F:1:LEU:HD13	2:F:329:ALA:HA	1.97	0.47
2:F:11:ILE:HG12	3:F:401:NAD:PN	2.55	0.47
2:F:90:ASP:HA	2:F:114:LYS:HE2	1.97	0.47
2:F:162:ASP:O	2:F:166:GLY:N	2.47	0.47
1:G:44:LEU:HD21	1:G:66:ILE:HG12	1.96	0.47
1:G:134:GLU:HB2	1:G:327:LEU:HD13	1.97	0.47
1:G:139:HIS:HB2	1:G:331:LYS:CB	2.41	0.47
1:G:162:ASP:O	1:G:166:GLY:HA2	2.15	0.47
2:H:57:VAL:HA	2:H:66:VAL:HG22	1.97	0.47
2:H:116:VAL:HG12	2:H:144:ILE:O	2.15	0.47
2:H:173:THR:OG1	2:H:228:ILE:HG13	2.15	0.47
2:H:221:LEU:HA	2:H:224:LYS:HE2	1.97	0.47
1:I:236:ASN:OD1	1:I:313:ASN:N	2.48	0.47
2:J:20:ARG:HE	2:J:319:GLN:HE22	1.63	0.47
2:J:49:ILE:HG23	2:J:284:ARG:NH1	2.30	0.47
2:J:115:LYS:HA	2:J:142:THR:OG1	2.15	0.47
2:J:139:HIS:CE1	2:J:332:TRP:HA	2.50	0.47
2:J:160:VAL:HA	2:J:163:GLN:HB2	1.95	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:J:170:GLY:HA2	2:J:244:VAL:HA	1.97	0.47
2:J:239:VAL:HA	2:J:310:TRP:HA	1.97	0.47
1:K:2:LYS:HB3	1:K:90:ASP:OD1	2.15	0.47
1:K:10:ARG:HG2	3:K:401:NAD:O2A	2.15	0.47
1:K:96:THR:OG1	1:K:97:GLY:N	2.47	0.47
2:L:192:ASP:HB3	2:L:195:ARG:HB2	1.96	0.47
1:O:53:PHE:HD1	1:O:54:LYS:HZ1	1.62	0.47
1:Q:5:ILE:HD12	1:Q:30:VAL:HG22	1.97	0.47
1:Q:199:ALA:O	1:Q:233:PRO:HG3	2.14	0.47
1:Q:242:LEU:N	1:Q:307:VAL:O	2.48	0.47
2:R:247:SER:OG	2:R:248:LYS:N	2.48	0.47
2:R:267:LEU:HA	2:R:270:ILE:HB	1.96	0.47
1:A:84:TRP:HE3	1:A:89:ILE:HG21	1.79	0.47
1:A:149:CYS:HB3	1:A:317:TYR:CG	2.50	0.47
1:A:168:VAL:HB	1:A:245:ASN:CG	2.36	0.47
2:B:139:HIS:CE1	2:B:332:TRP:HA	2.50	0.47
2:B:320:ARG:HE	2:B:320:ARG:N	2.11	0.47
1:E:46:TYR:CD1	2:F:278:LEU:HD21	2.50	0.47
2:F:176:HIS:CG	2:F:177:SER:N	2.83	0.47
1:G:0:LYS:HD3	1:G:0:LYS:H1	1.79	0.47
1:G:202:ASN:ND2	1:G:204:VAL:HG23	2.30	0.47
2:H:18(B):HIS:CE1	2:H:66:VAL:HG12	2.50	0.47
1:I:236:ASN:HD21	1:I:314:GLU:H	1.63	0.47
2:J:102:ARG:NH2	2:J:125:ILE:HA	2.30	0.47
2:J:244:VAL:O	2:J:304:MET:HA	2.15	0.47
2:J:312:ASP:OD2	2:J:315:TRP:HB3	2.15	0.47
2:J:320:ARG:HE	2:J:320:ARG:N	2.12	0.47
1:K:11:ILE:HG21	1:K:119:THR:HG21	1.96	0.47
1:K:94:GLU:OE2	1:K:99:PHE:N	2.38	0.47
2:L:126:PRO:HD2	2:L:143:ILE:O	2.14	0.47
2:L:324:LEU:HA	2:L:327:ILE:HD12	1.97	0.47
1:O:20:ARG:HA	1:O:21:LYS:HZ3	1.80	0.47
2:P:173:THR:HB	2:P:241:ASP:OD2	2.15	0.47
2:R:135:GLU:H	2:R:135:GLU:CD	2.17	0.47
2:R:139:HIS:HB2	2:R:333:GLN:HB2	1.95	0.47
2:R:174:THR:OG1	2:R:175:THR:N	2.47	0.47
1:A:49:ILE:HG13	1:A:284:ARG:NH2	2.29	0.47
1:A:204:VAL:HB	1:A:231:ARG:CB	2.38	0.47
1:A:256:ASN:HA	1:A:259:PHE:HB2	1.97	0.47
2:B:45:LYS:HZ3	2:B:55:ALA:C	2.18	0.47
2:B:194:ARG:NH2	2:D:278:LEU:H	2.13	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:237:VAL:HG22	2:B:312:ASP:HA	1.96	0.47
2:B:257:ALA:O	2:B:260:ARG:HB2	2.14	0.47
2:B:260:ARG:HE	2:B:273:VAL:HG13	1.80	0.47
2:D:115:LYS:HA	2:D:142:THR:OG1	2.14	0.47
2:D:126:PRO:HD2	2:D:143:ILE:O	2.14	0.47
1:E:193:LEU:HD21	2:H:42:HIS:CE1	2.50	0.47
2:F:64:ILE:N	2:F:71:ILE:O	2.48	0.47
1:G:45:LYS:HG3	1:G:52:THR:HG23	1.97	0.47
1:G:190:HIS:HE1	1:G:195:ARG:HB2	1.80	0.47
1:G:290:SER:HA	1:G:310:TRP:O	2.15	0.47
2:H:2:LYS:HA	2:H:26:ASP:O	2.14	0.47
2:H:59:THR:HA	2:H:64:ILE:HG23	1.97	0.47
2:H:292:ILE:HG23	2:H:308:ILE:O	2.15	0.47
1:I:184:LEU:HD23	1:I:184:LEU:H	1.79	0.47
2:J:0:LYS:NZ	2:J:1:LEU:HD13	2.30	0.47
2:J:259:PHE:HA	2:J:262:SER:HB3	1.96	0.47
1:K:56:ASP:OD1	1:K:57:VAL:N	2.48	0.47
1:K:259:PHE:HA	1:K:262:ALA:HB3	1.97	0.47
2:L:90:ASP:OD1	2:L:114:LYS:NZ	2.30	0.47
1:O:13:ARG:CA	1:O:44:LEU:HD11	2.35	0.47
1:O:154:LEU:HA	1:O:157:PHE:CZ	2.49	0.47
1:O:208:THR:OG1	1:O:209:GLY:N	2.47	0.47
1:O:281:VAL:O	1:O:284:ARG:HB2	2.14	0.47
1:Q:16:LEU:HD21	1:Q:66:ILE:HD11	1.97	0.47
1:Q:176:HIS:N	1:Q:230:LEU:O	2.43	0.47
1:Q:248:LYS:HD3	1:Q:250:VAL:CG2	2.45	0.47
2:R:90:ASP:HA	2:R:114:LYS:HE2	1.97	0.47
2:B:272:SER:OG	2:B:290:SER:O	2.23	0.47
1:C:272:ASP:HB2	1:C:288:PHE:CD1	2.50	0.47
2:D:47:ASP:OD1	2:D:48:SER:N	2.48	0.47
2:D:149:CYS:HA	2:D:152:ASN:HB3	1.95	0.47
2:D:159:LYS:HB2	2:D:218:LEU:HD13	1.97	0.47
1:E:171:THR:O	1:E:242:LEU:HD12	2.15	0.47
2:F:78:ASN:HD22	2:F:81:ASN:CG	2.19	0.47
2:F:287:ASP:OD1	2:F:315:TRP:NE1	2.44	0.47
1:G:11:ILE:N	3:G:401:NAD:O2N	2.45	0.47
1:G:101:ASP:OD2	1:G:104:GLY:N	2.48	0.47
1:G:126:PRO:CG	1:G:144:ILE:HG22	2.44	0.47
1:G:234:THR:HG21	1:G:237:VAL:HB	1.97	0.47
1:G:252:ALA:O	1:G:255:VAL:N	2.48	0.47
2:H:77:ARG:H	2:H:77:ARG:HG2	1.55	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:147:ALA:O	2:H:317:TYR:OH	2.33	0.47
1:I:100:VAL:HB	1:I:122(A):LYS:HE3	1.96	0.47
1:K:25:LEU:HD13	1:K:329:ALA:HB2	1.96	0.47
1:K:92:VAL:H	1:K:116:VAL:HG22	1.79	0.47
1:K:145:SER:OG	1:K:146:ASN:N	2.47	0.47
2:L:2:LYS:N	2:L:90:ASP:OD2	2.48	0.47
1:O:50:LEU:HD21	1:O:315:TRP:CH2	2.50	0.46
1:O:312:ASP:OD1	1:O:314:GLU:N	2.45	0.46
2:P:84:TRP:NE1	2:P:108:HIS:HA	2.29	0.46
2:P:218:LEU:HB3	2:P:221:LEU:HB2	1.96	0.46
1:Q:164:GLU:CD	1:Q:258:ALA:HB1	2.36	0.46
1:Q:219:PRO:HB3	1:Q:222:LYS:HZ3	1.80	0.46
2:R:179:THR:H	2:R:182:GLN:CD	2.18	0.46
1:A:95:GLY:O	3:A:401:NAD:H4D	2.15	0.46
1:A:188:SER:HB2	1:A:196:ALA:HA	1.97	0.46
2:B:107:LYS:HA	2:B:110:GLN:CD	2.35	0.46
2:B:239:VAL:HG13	2:B:310:TRP:CG	2.50	0.46
2:B:259:PHE:HA	2:B:262:SER:HB3	1.97	0.46
2:D:47:ASP:CG	2:D:50:LEU:H	2.16	0.46
1:E:116:VAL:O	1:E:144:ILE:HG23	2.15	0.46
1:E:139:HIS:CG	1:E:333:PRO:HD3	2.50	0.46
1:E:279:VAL:HB	1:G:202:ASN:ND2	2.30	0.46
2:F:139:HIS:HB3	2:F:333:GLN:CD	2.35	0.46
2:F:199:ALA:O	2:F:202:ASN:N	2.46	0.46
2:H:80:VAL:HA	2:H:111:ALA:HB2	1.98	0.46
1:I:176:HIS:CD2	1:I:231:ARG:HG2	2.50	0.46
2:J:39:GLN:O	2:J:43:LEU:HG	2.16	0.46
1:K:139:HIS:HB3	1:K:333:PRO:HD2	1.96	0.46
2:L:10:ARG:HG3	3:L:401:NAD:O1N	2.15	0.46
2:L:78:ASN:ND2	2:L:81:ASN:OD1	2.37	0.46
2:L:236:ASN:O	2:L:313:ASN:ND2	2.33	0.46
1:O:58:LYS:HA	1:O:58:LYS:HD2	1.70	0.46
2:P:11:ILE:HG22	2:P:318:SER:HB3	1.97	0.46
2:P:28:VAL:O	2:P:72:LYS:NZ	2.24	0.46
2:P:190:HIS:CG	2:P:191:ARG:N	2.82	0.46
1:Q:252:ALA:HB1	1:Q:297:THR:HB	1.97	0.46
2:R:122:GLY:HA3	2:R:125:ILE:HG12	1.97	0.46
2:R:183:ARG:HH21	2:R:190:HIS:HA	1.80	0.46
1:A:190:HIS:HE1	1:A:191:ARG:NH2	2.09	0.46
1:A:202:ASN:HD21	1:C:281:VAL:H	1.63	0.46
2:B:12:GLY:O	2:B:16:LEU:N	2.38	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:15:PHE:CG	2:B:322:VAL:HG22	2.50	0.46
2:B:29:VAL:N	2:B:71:ILE:HG23	2.31	0.46
2:B:38:LYS:NZ	2:B:39:GLN:HG3	2.30	0.46
2:B:272:SER:O	2:B:291:THR:HA	2.15	0.46
1:C:129:VAL:CA	1:C:324:LEU:HD21	2.45	0.46
1:C:186:ASP:OD1	1:C:198:ALA:HB2	2.15	0.46
2:D:316:GLY:HA2	2:D:319:GLN:HB2	1.96	0.46
1:E:60:ILE:HG12	1:E:60(A):ASP:N	2.31	0.46
1:E:244:VAL:O	1:E:305:VAL:HG13	2.15	0.46
1:E:252:ALA:O	1:E:255:VAL:N	2.48	0.46
1:E:293:ASP:O	1:E:297:THR:HG23	2.14	0.46
2:F:107:LYS:HA	2:F:110:GLN:CD	2.36	0.46
2:F:152:ASN:ND2	2:F:317:TYR:HA	2.30	0.46
2:F:190:HIS:CE1	2:F:192:ASP:HB3	2.51	0.46
2:F:228:ILE:HG23	2:H:306:LYS:HD2	1.97	0.46
1:G:38:LYS:O	1:G:41:THR:OG1	2.33	0.46
1:G:274:CYS:SG	1:G:275:ASP:N	2.88	0.46
2:H:41:SER:OG	2:H:42:HIS:N	2.47	0.46
1:I:5:ILE:HG13	1:I:30:VAL:HG22	1.97	0.46
1:I:201:LEU:HD12	1:I:201:LEU:HA	1.64	0.46
2:J:14:ASN:ND2	2:J:314:GLU:HB3	2.30	0.46
2:J:16:LEU:HD13	2:J:44:LEU:HD13	1.96	0.46
2:J:25:LEU:HD11	2:J:326:ASP:HA	1.98	0.46
2:J:249:LYS:NZ	2:J:301:GLY:O	2.31	0.46
2:J:273:VAL:HA	2:J:292:ILE:H	1.80	0.46
2:L:78:ASN:OD1	2:L:80:VAL:HG23	2.14	0.46
2:L:83:PRO:HB2	2:L:86:ASP:OD2	2.14	0.46
2:L:169:LYS:HB2	2:L:245:GLN:HB3	1.97	0.46
1:O:18:CYS:O	1:O:18(A):TRP:C	2.54	0.46
1:O:33:SER:OG	1:O:77:ARG:CD	2.63	0.46
1:O:42:HIS:CG	2:R:193:LEU:HD22	2.50	0.46
1:O:186:ASP:OD1	1:O:198:ALA:N	2.48	0.46
1:O:222:LYS:HA	1:O:222:LYS:HD2	1.60	0.46
2:P:14:ASN:ND2	2:P:315:TRP:HA	2.30	0.46
2:P:72:LYS:NZ	2:P:72:LYS:HB2	2.29	0.46
1:Q:135:LYS:HG2	1:Q:136:ASP:N	2.29	0.46
2:R:58:LYS:O	2:R:59:THR:C	2.52	0.46
2:R:317:TYR:O	2:R:321:VAL:HG23	2.15	0.46
1:A:45:LYS:O	1:A:52:THR:OG1	2.18	0.46
1:A:112:GLY:O	1:A:114:LYS:NZ	2.49	0.46
2:B:102:ARG:NH2	2:B:125:ILE:HA	2.30	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:316:GLY:HA2	2:B:320:ARG:HH21	1.79	0.46
1:C:202:ASN:HD22	1:C:202:ASN:N	2.14	0.46
1:C:249:GLY:O	1:C:250:VAL:C	2.53	0.46
2:D:20:ARG:HH22	2:D:323:ASP:CG	2.19	0.46
2:D:117:LEU:HA	2:D:144:ILE:O	2.14	0.46
2:D:243:VAL:HA	2:D:305:VAL:O	2.15	0.46
1:E:43:LEU:HD22	2:H:186:ASP:HB2	1.95	0.46
1:E:356:GLU:CA	1:K:183:ARG:HH22	2.27	0.46
2:F:168:ILE:N	2:F:245:GLN:O	2.48	0.46
2:F:174:THR:OG1	2:F:311:TYR:OH	2.11	0.46
1:G:219:PRO:O	1:G:222:LYS:HG2	2.15	0.46
1:G:238:SER:HB2	1:G:311:TYR:O	2.14	0.46
1:G:299:VAL:HG23	1:G:305:VAL:HG12	1.98	0.46
1:I:4:ALA:HB1	1:I:29:VAL:HB	1.98	0.46
1:I:263:ALA:O	1:I:268:LYS:HB2	2.13	0.46
1:I:301:GLY:HA3	1:K:169:LYS:HE2	1.96	0.46
2:J:107:LYS:HA	2:J:110:GLN:CD	2.36	0.46
1:K:40:ALA:O	1:K:44:LEU:N	2.47	0.46
1:K:296:LEU:HA	1:K:296:LEU:HD13	1.79	0.46
2:L:47:ASP:OD1	2:L:48:SER:N	2.48	0.46
2:L:117:LEU:HA	2:L:144:ILE:O	2.15	0.46
2:L:255:VAL:HG23	2:L:256:ASN:ND2	2.30	0.46
1:O:345:LEU:H	1:C:191:ARG:NH1	2.11	0.46
2:P:2:LYS:HE3	2:P:87:MET:HB3	1.98	0.46
2:P:287:ASP:OD1	2:P:315:TRP:NE1	2.40	0.46
2:R:18(A):TRP:HZ3	2:R:18(B):HIS:CE1	2.33	0.46
2:R:221:LEU:HA	2:R:224:LYS:HE2	1.97	0.46
2:R:232:VAL:O	2:R:234:THR:N	2.41	0.46
2:B:173:THR:HG1	2:D:306:LYS:NZ	2.11	0.46
1:C:152:ASN:HD21	1:C:320:ARG:HB2	1.80	0.46
1:C:183:ARG:HG2	1:C:187:ALA:H	1.79	0.46
1:C:186:ASP:H	1:C:198:ALA:HB2	1.80	0.46
2:D:83:PRO:HB2	2:D:86:ASP:OD2	2.14	0.46
2:D:100:VAL:HG22	2:D:122(A):LYS:N	2.31	0.46
2:D:124:ASP:OD1	2:D:124:ASP:N	2.48	0.46
2:D:160:VAL:HA	2:D:163:GLN:HB2	1.97	0.46
1:E:122(A):LYS:NZ	1:E:122(A):LYS:HA	2.30	0.46
1:E:154:LEU:HD11	1:E:172:MET:HG3	1.97	0.46
1:E:176:HIS:CD2	1:E:231:ARG:HG3	2.50	0.46
2:F:183:ARG:HH22	2:F:191:ARG:NH1	2.14	0.46
2:F:251:PHE:N	2:F:254:GLU:OE1	2.23	0.46

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:1:LEU:HG	1:G:332:TRP:CD2	2.50	0.46
1:G:10:ARG:NH1	1:G:13:ARG:HH21	2.13	0.46
1:G:72:LYS:HD2	1:G:87:LEU:HD11	1.97	0.46
1:G:128:TYR:HB2	1:G:145:SER:O	2.15	0.46
1:G:134:GLU:OE1	1:G:134:GLU:N	2.48	0.46
1:G:270:VAL:HA	1:G:320:ARG:NH1	2.30	0.46
1:G:293:ASP:OD2	1:G:295:SER:OG	2.32	0.46
2:H:197:ARG:NH2	2:H:198:ALA:HB3	2.29	0.46
2:H:264:ASP:O	2:H:268:LYS:NZ	2.46	0.46
1:I:0:LYS:N	1:I:24:PRO:O	2.40	0.46
1:I:228:ILE:HD11	1:I:230:LEU:HD21	1.97	0.46
2:J:79:PRO:HA	2:J:82:LEU:HD12	1.97	0.46
2:J:118:ILE:HD13	2:J:118:ILE:HA	1.69	0.46
2:L:181:ASP:HB3	2:L:182:GLN:NE2	2.28	0.46
1:O:66:ILE:CG1	1:O:69:LYS:HB2	2.41	0.46
1:O:171:THR:OG1	1:O:227:GLY:HA3	2.15	0.46
2:P:7:GLY:N	2:P:31:ASN:O	2.48	0.46
2:P:168:ILE:HG22	2:P:169:LYS:HG3	1.95	0.46
2:P:218:LEU:HB3	2:P:221:LEU:HD13	1.96	0.46
2:P:279:VAL:HG23	2:P:282:ASP:OD1	2.14	0.46
2:P:326:ASP:HA	2:P:329:ALA:HB3	1.98	0.46
1:Q:190:HIS:CD2	1:Q:191:ARG:N	2.83	0.46
1:Q:191:ARG:HE	1:I:358:CYS:HB2	1.80	0.46
2:R:13:ARG:HE	2:R:43:LEU:HD22	1.80	0.46
2:R:114:LYS:O	2:R:142:THR:OG1	2.23	0.46
2:R:292:ILE:HG23	2:R:308:ILE:O	2.15	0.46
1:A:129:VAL:HG12	1:A:133:ASN:ND2	2.28	0.46
1:A:176:HIS:ND1	1:A:177:SER:N	2.64	0.46
1:A:179:THR:N	1:A:182:GLN:OE1	2.33	0.46
1:A:238:SER:HB3	1:A:311:TYR:CE1	2.51	0.46
2:B:77:ARG:HH11	3:B:401:NAD:C6A	2.29	0.46
2:B:312:ASP:OD2	2:B:315:TRP:HB3	2.15	0.46
1:C:6:ASN:HD21	1:C:96:THR:H	1.64	0.46
1:C:128:TYR:HD2	1:C:144:ILE:HD13	1.79	0.46
1:C:150:THR:O	1:C:154:LEU:HG	2.15	0.46
1:C:326:ASP:O	1:C:329:ALA:N	2.48	0.46
2:D:281:ILE:HD12	2:D:284:ARG:HH21	1.79	0.46
1:E:41:THR:HG23	1:E:57:VAL:HG12	1.98	0.46
1:E:264:ALA:HA	1:E:268:LYS:NZ	2.30	0.46
1:E:273:VAL:HA	1:E:292:ILE:N	2.29	0.46
2:F:94:GLU:OE2	2:F:98:VAL:N	2.49	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:F:118:ILE:HB	2:F:145:SER:HB2	1.96	0.46
2:F:168:ILE:HG22	2:F:169:LYS:HG3	1.97	0.46
2:F:281:ILE:CD1	2:F:284:ARG:HE	2.29	0.46
1:G:6:ASN:N	1:G:93:ILE:O	2.48	0.46
3:G:401:NAD:H3D	3:G:401:NAD:O5B	2.15	0.46
2:H:247:SER:OG	2:H:248:LYS:N	2.49	0.46
1:I:204:VAL:HG11	1:I:231:ARG:NH1	2.30	0.46
1:I:222:LYS:O	1:I:224:LYS:HG3	2.16	0.46
2:J:1:LEU:HD23	2:J:25:LEU:HD12	1.98	0.46
1:K:44:LEU:HG	1:K:45:LYS:N	2.29	0.46
1:K:45:LYS:NZ	1:K:56:ASP:OD1	2.44	0.46
1:K:109:ILE:HD12	1:K:113:ALA:HB3	1.97	0.46
1:K:313:ASN:ND2	1:K:313:ASN:H	2.14	0.46
2:L:6:ASN:HB3	2:L:94:GLU:HA	1.98	0.46
2:L:220:ASN:HD22	2:L:221:LEU:HD12	1.81	0.46
2:L:253:GLU:OE2	2:L:257:ALA:N	2.49	0.46
2:L:316:GLY:HA2	2:L:319:GLN:HB2	1.96	0.46
1:O:46:TYR:HD1	1:O:52:THR:HG1	1.61	0.46
1:O:81:LYS:HE3	1:O:81:LYS:HB2	1.81	0.46
1:O:90:ASP:HA	1:O:114:LYS:NZ	2.30	0.46
1:O:190:HIS:CE1	1:O:195:ARG:N	2.84	0.46
2:P:107:LYS:HA	2:P:110:GLN:CD	2.36	0.46
2:P:168:ILE:N	2:P:245:GLN:O	2.48	0.46
2:P:208:THR:HG22	2:P:229:ALA:HB2	1.97	0.46
2:P:228:ILE:N	2:R:306:LYS:HZ2	2.10	0.46
1:Q:18(A):TRP:NE1	1:Q:25:LEU:O	2.49	0.46
1:Q:109:ILE:HD13	1:Q:113:ALA:HB3	1.98	0.46
2:R:193:LEU:HA	2:R:196:ALA:HB3	1.97	0.46
1:A:135:LYS:HZ2	1:A:135:LYS:H	1.64	0.46
2:B:28:VAL:HG22	2:B:69:LYS:HZ3	1.80	0.46
2:B:115:LYS:HA	2:B:142:THR:OG1	2.15	0.46
2:B:137:TYR:OH	2:B:139:HIS:ND1	2.49	0.46
2:B:204:VAL:N	2:B:231:ARG:O	2.48	0.46
1:C:94:GLU:N	1:C:117:ILE:O	2.44	0.46
2:D:190:HIS:ND1	2:D:195:ARG:HB2	2.31	0.46
1:G:29:VAL:HA	1:G:72:LYS:O	2.16	0.46
1:G:159:LYS:HE2	1:G:267:LEU:HD11	1.97	0.46
2:H:84:TRP:HB2	2:H:111:ALA:C	2.35	0.46
2:H:185:LEU:O	2:H:187:ALA:N	2.47	0.46
2:H:274:CYS:HB3	2:H:276:GLU:CD	2.35	0.46
1:I:11:ILE:HB	3:I:401:NAD:H52N	1.96	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:I:20:ARG:NE	1:I:322:VAL:HG11	2.27	0.46
1:I:47:ASP:OD2	1:I:50:LEU:N	2.27	0.46
1:I:65:SER:HA	1:I:71:ILE:HG13	1.98	0.46
1:I:165:LEU:O	1:I:248:LYS:HG3	2.16	0.46
1:I:293:ASP:OD2	1:I:295:SER:OG	2.21	0.46
1:K:240:VAL:HG13	1:K:311:TYR:HE1	1.79	0.46
2:L:135:GLU:CD	2:L:135:GLU:H	2.18	0.46
1:O:211:ALA:HB1	1:O:226:ASN:HA	1.98	0.46
1:O:241:ASP:OD1	1:O:242:LEU:N	2.48	0.46
2:P:11:ILE:CD1	3:P:401:NAD:H2N	2.46	0.46
2:P:78:ASN:HD22	2:P:81:ASN:CG	2.18	0.46
2:P:176:HIS:CG	2:P:177:SER:N	2.83	0.46
2:P:192:ASP:OD2	2:P:195:ARG:N	2.34	0.46
2:P:270:ILE:O	2:P:271:LEU:HD13	2.15	0.46
1:Q:5:ILE:HG21	1:Q:8:PHE:HD1	1.81	0.46
1:Q:128:TYR:HD2	1:Q:144:ILE:HD12	1.79	0.46
1:Q:241:ASP:HA	1:Q:308:VAL:HA	1.97	0.46
2:R:32:ASP:O	2:R:75:SER:HA	2.16	0.46
2:R:218:LEU:HA	2:R:218:LEU:HD23	1.83	0.46
2:R:242:LEU:HD23	2:R:307:VAL:HG21	1.96	0.46
1:A:194:ARG:HH21	1:C:277:PRO:HA	1.80	0.46
2:B:31:ASN:OD1	2:B:74:VAL:HG23	2.16	0.46
2:D:218:LEU:HD23	2:D:218:LEU:HA	1.81	0.46
2:D:313:ASN:N	2:D:313:ASN:OD1	2.48	0.46
1:E:171:THR:HG23	1:E:243:VAL:HG23	1.96	0.46
2:F:44:LEU:O	2:F:53:PHE:HB2	2.16	0.46
1:G:130:VAL:HG21	1:G:270:VAL:HG11	1.97	0.46
1:G:169:LYS:HD3	1:G:224:LYS:HB3	1.98	0.46
1:G:247:GLU:OE1	1:G:248:LYS:N	2.38	0.46
1:G:332:TRP:CD1	1:G:333:PRO:HD2	2.50	0.46
1:I:172:MET:SD	1:I:173:THR:N	2.89	0.46
2:J:312:ASP:CG	2:J:315:TRP:HB3	2.36	0.46
1:K:41:THR:HG21	1:K:59:ILE:CG1	2.46	0.46
1:K:85:ALA:N	1:K:112:GLY:HA3	2.31	0.46
1:K:173:THR:OG1	1:K:228:ILE:HD11	2.16	0.46
2:L:17:ARG:HG2	2:L:53:PHE:CE2	2.51	0.46
1:O:41:THR:HG22	1:O:42:HIS:N	2.30	0.46
1:O:83:PRO:HB3	1:O:86:GLU:HB2	1.98	0.46
2:P:190:HIS:CE1	2:P:192:ASP:HB3	2.51	0.46
2:P:237:VAL:HG13	2:P:312:ASP:HA	1.97	0.46
1:Q:153:CYS:HB2	1:Q:311:TYR:CD2	2.51	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:R:36:GLY:H	2:R:39:GLN:NE2	2.14	0.46
2:R:253:GLU:OE2	2:R:257:ALA:N	2.48	0.46
1:C:89:ILE:HA	1:C:89:ILE:HD13	1.80	0.46
2:D:181:ASP:HB3	2:D:182:GLN:HE21	1.79	0.46
2:D:194:ARG:O	2:D:197:ARG:N	2.49	0.46
2:D:232:VAL:O	2:D:234:THR:N	2.47	0.46
1:E:168:VAL:O	1:E:169:LYS:HD2	2.15	0.46
1:E:297:THR:HG22	1:E:307:VAL:HA	1.96	0.46
1:E:329:ALA:HA	1:E:332:TRP:HD1	1.80	0.46
1:E:346:GLU:HA	1:K:191:ARG:HH12	1.79	0.46
1:G:271:LEU:HA	1:G:290:SER:OG	2.16	0.46
2:H:45:LYS:O	2:H:53:PHE:N	2.39	0.46
1:I:114:LYS:O	1:I:115:LYS:HD3	2.16	0.46
1:I:272:ASP:HB2	1:I:288:PHE:HB2	1.97	0.46
2:J:3:VAL:HG13	2:J:91:LEU:O	2.14	0.46
2:J:82:LEU:HB2	2:J:84:TRP:CD1	2.51	0.46
2:J:183:ARG:CZ	2:J:190:HIS:HB2	2.45	0.46
2:J:286:THR:HG22	2:J:288:VAL:HG13	1.96	0.46
1:O:124:ASP:N	1:C:142:ASN:HD21	2.13	0.46
1:O:139:HIS:NE2	1:O:332:TRP:HA	2.31	0.46
2:P:58:LYS:O	2:P:65:SER:N	2.49	0.46
2:P:279:VAL:O	2:P:282:ASP:N	2.48	0.46
2:R:194:ARG:HD3	2:R:205:PRO:HD2	1.97	0.46
1:A:260:ARG:HA	1:A:263:ALA:HB3	1.98	0.46
1:A:293:ASP:OD1	1:A:295:SER:N	2.48	0.46
1:A:346:GLU:O	1:A:350:LYS:N	2.46	0.46
2:B:33:THR:H	3:B:401:NAD:H2A	1.81	0.46
2:B:226:ASN:HB3	2:D:300:MET:HE1	1.98	0.46
2:B:279:VAL:HB	2:D:202:ASN:HB3	1.97	0.46
1:C:10:ARG:H	3:C:401:NAD:PA	2.39	0.46
1:C:57:VAL:HG22	1:C:66:ILE:HG23	1.98	0.46
1:C:97:GLY:HA3	3:C:401:NAD:O3D	2.16	0.46
1:C:313:ASN:ND2	1:C:313:ASN:H	2.12	0.46
2:D:3:VAL:HG13	2:D:91:LEU:O	2.16	0.46
1:E:169:LYS:HG2	1:E:245:ASN:HD21	1.81	0.46
1:E:194:ARG:HD2	1:E:205:PRO:HD2	1.97	0.46
1:E:246:ILE:HG22	1:E:303:ASP:C	2.35	0.46
1:E:314:GLU:O	1:E:317:TYR:HB3	2.16	0.46
2:F:218:LEU:CB	2:F:221:LEU:HB2	2.46	0.46
2:F:293:ASP:HB3	2:F:308:ILE:HG13	1.98	0.46
2:F:306:LYS:NZ	2:H:173:THR:HG1	2.12	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:4:ALA:O	1:G:93:ILE:HG12	2.16	0.46
1:G:6:ASN:HD22	1:G:95:GLY:N	2.14	0.46
1:G:10:ARG:NH1	1:G:13:ARG:HE	2.12	0.46
1:G:10:ARG:HG3	1:G:11:ILE:N	2.31	0.46
1:G:202:ASN:HD21	1:G:204:VAL:HG23	1.81	0.46
2:H:172:MET:SD	2:H:227:GLY:N	2.88	0.46
2:H:183:ARG:HH22	2:H:191:ARG:HH12	1.62	0.46
1:I:131:GLY:HA2	1:I:267:LEU:HD22	1.98	0.46
1:I:174:THR:HA	1:I:240:VAL:HA	1.97	0.46
2:J:0:LYS:HZ2	2:J:1:LEU:HD22	1.80	0.46
2:J:84:TRP:CD1	2:J:111:ALA:HB3	2.50	0.46
2:J:137:TYR:OH	2:J:139:HIS:ND1	2.48	0.46
2:J:154:LEU:HA	2:J:157:PHE:CZ	2.51	0.46
2:J:190:HIS:CE1	2:J:195:ARG:HB2	2.50	0.46
2:J:239:VAL:HG13	2:J:310:TRP:CG	2.51	0.46
2:J:317:TYR:O	2:J:321:VAL:HG23	2.16	0.46
2:L:82:LEU:O	2:L:111:ALA:HB1	2.15	0.46
1:O:148:SER:OG	1:O:151:THR:HG23	2.16	0.46
1:O:276:ILE:O	1:O:278:LEU:HG	2.16	0.46
2:P:64:ILE:N	2:P:71:ILE:H	2.09	0.46
2:P:120:ALA:HA	3:P:401:NAD:H6N	1.96	0.46
2:P:185:LEU:HD11	1:Q:178:TYR:CE1	2.51	0.46
1:Q:3:VAL:N	1:Q:26:ASP:O	2.48	0.46
1:Q:50:LEU:HD21	1:Q:54:LYS:NZ	2.31	0.46
1:Q:274:CYS:N	1:Q:292:ILE:O	2.45	0.46
1:Q:315:TRP:O	1:Q:319:GLN:HG3	2.15	0.46
2:R:32:ASP:OD1	2:R:33:THR:N	2.49	0.46
2:R:287:ASP:OD1	2:R:287:ASP:N	2.49	0.46
1:A:132:VAL:HG22	1:A:159:LYS:HD2	1.98	0.46
1:A:172:MET:HG2	1:A:242:LEU:HB2	1.97	0.46
1:A:202:ASN:ND2	1:C:279:VAL:HG23	2.13	0.46
1:A:287:ASP:OD1	1:A:315:TRP:NE1	2.46	0.46
2:B:236:ASN:CG	2:B:237:VAL:H	2.17	0.46
1:C:214:VAL:HG23	1:C:215:SER:H	1.80	0.46
2:D:16:LEU:HD13	2:D:44:LEU:HD13	1.97	0.46
2:D:44:LEU:O	2:D:53:PHE:HB2	2.16	0.46
2:D:285:CYS:O	2:D:315:TRP:NE1	2.49	0.46
1:E:107:LYS:HA	1:E:110:GLN:HB2	1.97	0.46
1:E:137:TYR:CE2	1:E:331:LYS:HD2	2.51	0.46
1:E:222:LYS:HD3	1:E:222:LYS:HA	1.68	0.46
1:E:230:LEU:O	1:E:232:VAL:HG22	2.16	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:F:28:VAL:C	2:F:71:ILE:HG23	2.35	0.46
1:G:174:THR:H	1:G:229:ALA:HA	1.81	0.46
1:G:248:LYS:CA	1:G:248(A):VAL:HG13	2.41	0.46
1:G:248(A):VAL:HG23	1:G:250:VAL:HG22	1.98	0.46
3:G:401:NAD:O2A	3:G:401:NAD:H4B	2.16	0.46
2:H:90:ASP:HA	2:H:114:LYS:HE2	1.97	0.46
2:H:181:ASP:HB3	2:H:182:GLN:NE2	2.31	0.46
2:H:258:ALA:HA	2:H:261:GLU:HG3	1.96	0.46
2:H:297:THR:HG22	2:H:307:VAL:HA	1.98	0.46
1:I:59:ILE:HA	1:I:64:PHE:HB2	1.98	0.46
1:I:84:TRP:HB2	1:I:112:GLY:C	2.36	0.46
1:I:132:VAL:N	1:I:134:GLU:OE1	2.49	0.46
1:I:165:LEU:HD21	1:I:255:VAL:HG22	1.98	0.46
1:I:179:THR:HG23	1:I:231:ARG:HD3	1.98	0.46
1:I:262:ALA:C	1:I:265:GLY:H	2.20	0.46
2:J:77:ARG:HD2	3:J:401:NAD:H62A	1.78	0.46
2:J:173:THR:OG1	2:J:228:ILE:HG13	2.16	0.46
2:J:175:THR:C	2:J:238:SER:HG	2.18	0.46
2:L:55:ALA:HB1	2:L:67:ASP:OD1	2.16	0.46
2:L:149:CYS:HA	2:L:152:ASN:HB3	1.98	0.46
2:L:279:VAL:N	2:L:282:ASP:OD2	2.25	0.46
1:O:2:LYS:HD3	1:O:88:GLY:HA3	1.98	0.45
1:O:10:ARG:CZ	2:R:185:LEU:HB3	2.46	0.45
1:O:46:TYR:HA	1:O:52:THR:HA	1.96	0.45
1:O:77:ARG:HA	3:O:401:NAD:N1A	2.31	0.45
1:O:92:VAL:O	1:O:116:VAL:HA	2.16	0.45
1:O:221:LEU:HA	1:O:221:LEU:HD13	1.80	0.45
1:O:323:ASP:HA	1:O:326:ASP:OD2	2.16	0.45
2:P:183:ARG:HH22	2:P:191:ARG:NH2	2.13	0.45
2:P:194:ARG:NE	2:P:205:PRO:O	2.49	0.45
2:P:218:LEU:CB	2:P:221:LEU:HB2	2.46	0.45
2:P:228:ILE:HG23	2:R:306:LYS:HD2	1.98	0.45
1:A:165:LEU:O	1:A:248:LYS:N	2.49	0.45
1:C:42:HIS:NE2	2:D:277:PRO:O	2.48	0.45
1:C:230:LEU:O	1:C:232:VAL:HG12	2.16	0.45
1:C:237:VAL:HG11	1:C:280:SER:CB	2.26	0.45
1:C:359:LYS:O	1:C:361:TYR:N	2.49	0.45
2:D:2:LYS:H	2:D:2:LYS:HG2	1.62	0.45
2:D:134:GLU:HB2	2:D:327:ILE:HD13	1.98	0.45
2:D:204:VAL:HB	2:D:231:ARG:HB2	1.98	0.45
1:E:84:TRP:CD1	1:E:111:ALA:HB3	2.51	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:218:LEU:HD13	1:E:219:PRO:HD2	1.99	0.45
2:F:293:ASP:O	2:F:297:THR:HG23	2.16	0.45
1:G:203:ILE:HD12	1:G:233:PRO:HD3	1.97	0.45
2:H:287:ASP:OD1	2:H:287:ASP:N	2.49	0.45
1:I:18(A):TRP:CE2	1:I:27:VAL:HG12	2.51	0.45
2:J:115:LYS:HE3	2:J:334:UNK:C	2.46	0.45
2:J:121:PRO:HG3	2:J:148:SER:H	1.80	0.45
2:J:154:LEU:HA	2:J:157:PHE:CE1	2.51	0.45
2:J:197:ARG:HD2	2:J:197:ARG:HA	1.76	0.45
1:K:0:LYS:N	1:K:24:PRO:O	2.39	0.45
1:K:94:GLU:HB3	1:K:118:ILE:HG12	1.98	0.45
1:K:107:LYS:HA	1:K:110:GLN:HB2	1.98	0.45
2:L:44:LEU:HD23	2:L:57:VAL:CG2	2.46	0.45
2:L:115:LYS:HE2	2:L:142:THR:HB	1.97	0.45
2:L:128:TYR:HA	2:L:133:ASN:ND2	2.31	0.45
2:L:157:PHE:CD2	2:L:158:VAL:HG13	2.51	0.45
2:P:13:ARG:HA	2:P:16:LEU:HB2	1.99	0.45
2:P:246:VAL:HG22	2:P:303:ASP:HA	1.98	0.45
1:Q:256:ASN:O	1:Q:260:ARG:NE	2.34	0.45
2:R:84:TRP:HA	2:R:89:ILE:HG12	1.98	0.45
2:R:85:GLY:N	2:R:112:GLY:HA3	2.31	0.45
2:R:168:ILE:N	2:R:245:GLN:O	2.49	0.45
2:R:243:VAL:HA	2:R:306:LYS:HA	1.99	0.45
2:B:206:THR:HG23	2:B:229:ALA:HB3	1.98	0.45
2:D:20:ARG:NH2	2:D:323:ASP:OD1	2.49	0.45
2:D:215:ALA:HB1	2:D:222:LYS:HD3	1.99	0.45
1:E:45:LYS:HB3	1:E:46:TYR:CE1	2.51	0.45
1:E:123(A):SER:HB3	1:K:141:ALA:HA	1.98	0.45
2:F:137:TYR:OH	2:F:328:VAL:HA	2.16	0.45
2:F:208:THR:HG22	2:F:229:ALA:HB2	1.99	0.45
1:G:244:VAL:O	1:G:304:MET:HA	2.16	0.45
2:H:7:GLY:N	2:H:31:ASN:O	2.49	0.45
2:H:84:TRP:CD1	2:H:111:ALA:HB3	2.52	0.45
2:H:135:GLU:H	2:H:135:GLU:CD	2.17	0.45
2:H:253:GLU:OE2	2:H:257:ALA:N	2.50	0.45
2:J:12:GLY:O	2:J:16:LEU:N	2.38	0.45
2:J:193:LEU:HA	2:J:196:ALA:HB3	1.99	0.45
2:L:33:THR:HA	2:L:75:SER:HB3	1.98	0.45
2:L:243:VAL:HA	2:L:305:VAL:O	2.15	0.45
1:O:186:ASP:HA	1:O:196:ALA:O	2.17	0.45
1:O:293:ASP:OD2	1:O:308:VAL:HG11	2.16	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:P:38:LYS:HZ2	2:P:38:LYS:H	1.63	0.45
2:P:79:PRO:HB3	2:P:108:HIS:ND1	2.31	0.45
2:P:137:TYR:CE2	2:P:327:ILE:HG22	2.52	0.45
2:P:331:LYS:O	2:P:333:GLN:HG3	2.17	0.45
1:Q:148:SER:HA	3:Q:401:NAD:H5N	1.99	0.45
2:R:17:ARG:HD3	2:R:50:LEU:HD12	1.99	0.45
2:R:152:ASN:OD1	2:R:320:ARG:HG3	2.16	0.45
1:A:1:LEU:O	1:A:3:VAL:HG23	2.17	0.45
1:A:123(A):SER:CB	1:G:124:ASP:HB3	2.46	0.45
2:B:115:LYS:HE3	2:B:334:UNK:C	2.46	0.45
2:B:154:LEU:HA	2:B:157:PHE:CE1	2.51	0.45
2:B:167:ILE:HG23	2:B:246:VAL:HG12	1.98	0.45
1:C:67:ASP:OD1	1:C:67:ASP:N	2.49	0.45
1:C:77:ARG:HA	3:C:401:NAD:N1A	2.32	0.45
1:C:252:ALA:O	1:C:255:VAL:N	2.50	0.45
2:D:65:SER:HA	2:D:70:VAL:N	2.30	0.45
1:E:206:THR:O	1:E:228:ILE:HB	2.17	0.45
1:E:362:GLU:O	3:K:401:NAD:H2D	2.17	0.45
2:F:47:ASP:HB3	2:F:51:GLY:O	2.17	0.45
2:F:154:LEU:O	2:F:158:VAL:HG22	2.17	0.45
2:F:281:ILE:HD13	2:F:284:ARG:HH21	1.81	0.45
1:G:101:ASP:HB2	1:G:103:PRO:HG2	1.97	0.45
1:G:139(A):ASP:OD2	1:G:139(A):ASP:N	2.49	0.45
1:G:324:LEU:O	1:G:327:LEU:HB2	2.17	0.45
2:H:251:PHE:CE2	2:H:253:GLU:HB3	2.51	0.45
2:H:257:ALA:HA	2:H:260:ARG:HB2	1.98	0.45
1:I:8:PHE:CG	1:I:13:ARG:HG2	2.51	0.45
1:I:17:ARG:NH2	1:I:53:PHE:HA	2.31	0.45
1:I:176:HIS:O	1:I:232:VAL:HG13	2.16	0.45
1:I:224:LYS:HA	1:K:300:MET:HE2	1.98	0.45
2:J:278:LEU:C	2:L:194:ARG:HH12	2.19	0.45
1:K:236:ASN:HD21	1:K:314:GLU:H	1.64	0.45
2:L:100:VAL:HG22	2:L:122(A):LYS:N	2.31	0.45
2:L:237:VAL:HG13	2:L:311:TYR:O	2.15	0.45
2:L:273:VAL:HG23	2:L:292:ILE:O	2.17	0.45
1:O:84:TRP:CD1	1:O:111:ALA:HB3	2.52	0.45
2:P:190:HIS:HE1	2:P:192:ASP:HB3	1.82	0.45
2:R:32:ASP:HA	3:R:401:NAD:C2A	2.44	0.45
1:A:105:ALA:HA	1:A:108:HIS:CD2	2.51	0.45
2:B:131:GLY:N	2:B:134:GLU:OE2	2.49	0.45
2:B:154:LEU:HA	2:B:157:PHE:CZ	2.51	0.45

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:170:GLY:HA2	2:B:244:VAL:HA	1.99	0.45
1:C:15:PHE:O	1:C:18(A):TRP:HB3	2.17	0.45
1:C:30:VAL:HG12	1:C:31:ASN:H	1.81	0.45
1:C:278:LEU:HD22	1:C:282:ASP:HB3	1.97	0.45
2:D:17:ARG:CZ	2:D:53:PHE:HA	2.46	0.45
2:D:117:LEU:HD11	2:D:146:ASN:HB2	1.97	0.45
1:E:6:ASN:O	1:E:95:GLY:N	2.49	0.45
1:E:20:ARG:NH2	1:E:21:LYS:HB2	2.30	0.45
1:E:160:VAL:HG12	1:E:164:GLU:OE2	2.17	0.45
2:F:64:ILE:HG12	2:F:71:ILE:O	2.16	0.45
2:F:173:THR:HB	2:F:241:ASP:OD2	2.15	0.45
1:G:316:GLY:HA2	1:G:319:GLN:OE1	2.17	0.45
2:H:36:GLY:HA3	2:H:38:LYS:HZ1	1.81	0.45
2:H:122:GLY:C	2:H:125:ILE:HG12	2.37	0.45
2:H:198:ALA:O	2:H:200:CYS:N	2.50	0.45
1:I:37:VAL:HG13	1:I:38:LYS:H	1.81	0.45
1:I:92:VAL:O	1:I:117:ILE:HG22	2.17	0.45
1:I:142:ASN:O	1:I:144:ILE:HG12	2.16	0.45
1:I:279:VAL:O	1:I:283:PHE:N	2.49	0.45
1:I:280:SER:O	1:I:284:ARG:N	2.49	0.45
2:J:215:ALA:HB1	2:J:222:LYS:HZ2	1.80	0.45
2:J:297:THR:HA	2:J:307:VAL:HA	1.99	0.45
1:K:320:ARG:HA	1:K:323:ASP:OD2	2.15	0.45
2:L:87:MET:HE3	2:L:89:ILE:HD11	1.99	0.45
1:O:21:LYS:HB2	1:O:21:LYS:HE2	1.85	0.45
1:O:41:THR:O	1:O:57:VAL:HG21	2.16	0.45
1:O:104:GLY:HA2	1:O:107:LYS:HD2	1.99	0.45
1:O:128:TYR:O	1:O:146:ASN:HB2	2.17	0.45
1:O:168:VAL:HB	1:O:245:ASN:ND2	2.31	0.45
1:O:175:THR:N	1:O:239:VAL:O	2.44	0.45
1:O:256:ASN:HD22	1:O:260:ARG:HH12	1.65	0.45
2:P:63:ALA:HA	2:P:71:ILE:C	2.36	0.45
2:P:107:LYS:HA	2:P:110:GLN:HB2	1.99	0.45
1:Q:54:LYS:N	1:Q:54:LYS:HZ2	2.15	0.45
1:Q:243:VAL:HG22	1:Q:306:LYS:HG3	1.97	0.45
1:Q:248:LYS:HD3	1:Q:250:VAL:HG21	1.97	0.45
2:R:251:PHE:CE2	2:R:253:GLU:HB3	2.51	0.45
2:R:257:ALA:HA	2:R:260:ARG:HB2	1.98	0.45
2:B:94:GLU:OE2	2:B:98:VAL:N	2.50	0.45
2:B:193:LEU:HA	2:B:196:ALA:HB3	1.99	0.45
1:C:107:LYS:HB3	1:C:107:LYS:HE2	1.58	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:173:THR:O	1:C:241:ASP:N	2.42	0.45
1:C:244:VAL:O	1:C:304:MET:HA	2.17	0.45
1:C:323:ASP:HA	1:C:326:ASP:OD2	2.16	0.45
2:D:117:LEU:HG	2:D:145:SER:HA	1.98	0.45
2:D:220:ASN:HD22	2:D:221:LEU:HD12	1.81	0.45
1:E:45:LYS:NZ	1:E:57:VAL:H	2.14	0.45
1:E:116:VAL:C	1:E:144:ILE:HG23	2.37	0.45
1:E:132:VAL:HB	1:E:217:VAL:HG21	1.98	0.45
2:F:7:GLY:O	2:F:9:GLY:N	2.49	0.45
2:F:31:ASN:OD1	2:F:74:VAL:HG23	2.16	0.45
2:F:300:MET:HB3	2:H:169:LYS:HD2	1.99	0.45
1:G:11:ILE:HG22	3:G:401:NAD:PN	2.57	0.45
1:G:168:VAL:HB	1:G:245:ASN:O	2.17	0.45
2:H:10:ARG:HD2	2:H:314:GLU:OE2	2.16	0.45
1:I:39:SER:O	1:I:43:LEU:N	2.32	0.45
1:I:106:GLY:HA2	1:I:109:ILE:HB	1.98	0.45
1:I:166:GLY:HA3	1:I:247:GLU:HB2	1.98	0.45
1:I:243:VAL:HG12	1:I:306:LYS:HB2	1.98	0.45
1:I:282:ASP:CG	2:J:46:TYR:HB3	2.36	0.45
1:I:283:PHE:HD2	1:I:310:TRP:CZ3	2.35	0.45
2:J:29:VAL:N	2:J:71:ILE:HG23	2.31	0.45
2:J:82:LEU:O	2:J:84:TRP:N	2.46	0.45
1:K:179:THR:N	1:K:182:GLN:HE22	2.14	0.45
1:K:293:ASP:OD1	1:K:296:LEU:N	2.33	0.45
2:L:174:THR:HG23	2:L:230:LEU:H	1.80	0.45
2:L:204:VAL:HB	2:L:231:ARG:H	1.82	0.45
1:O:84:TRP:HD1	1:O:108:HIS:O	2.00	0.45
1:O:84:TRP:HA	1:O:89:ILE:HB	1.98	0.45
2:P:58:LYS:HG3	2:P:60:ALA:H	1.82	0.45
2:P:91:LEU:HD21	2:P:93:ILE:HD11	1.99	0.45
1:A:49:ILE:HA	1:A:284:ARG:NH1	2.31	0.45
1:A:184:LEU:HG	1:A:185:LEU:HG	1.97	0.45
1:A:216:LEU:HD11	1:G:124:ASP:HB2	1.97	0.45
1:A:313:ASN:O	1:A:317:TYR:HB2	2.17	0.45
1:A:359:LYS:O	1:G:181:ASP:HB2	2.17	0.45
2:B:18:CYS:O	2:B:20:ARG:HG2	2.17	0.45
2:B:18:CYS:CB	2:B:322:VAL:HG21	2.47	0.45
2:D:1:LEU:HD12	2:D:1:LEU:HA	1.82	0.45
1:E:16:LEU:CG	1:E:44:LEU:CD1	2.94	0.45
1:E:41:THR:HG23	1:E:57:VAL:CG1	2.46	0.45
1:E:77:ARG:HA	3:E:401:NAD:N1A	2.31	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:134:GLU:OE1	1:E:134:GLU:N	2.36	0.45
1:E:155:ALA:O	1:E:158:VAL:HG22	2.16	0.45
1:E:329:ALA:HA	1:E:332:TRP:HB2	1.99	0.45
1:E:329:ALA:HA	1:E:332:TRP:CD1	2.52	0.45
2:F:171:THR:O	2:F:243:VAL:N	2.35	0.45
1:G:18:CYS:O	1:G:20:ARG:NH1	2.50	0.45
1:G:123(A):SER:O	1:G:124:ASP:C	2.54	0.45
1:G:194:ARG:CZ	1:G:204:VAL:HG11	2.47	0.45
1:G:212:LYS:H	1:G:212:LYS:HG3	1.63	0.45
2:H:32:ASP:OD1	2:H:33:THR:N	2.49	0.45
2:H:64:ILE:H	2:H:71:ILE:H	1.65	0.45
2:J:6:ASN:HB2	2:J:84:TRP:HZ2	1.80	0.45
2:J:32:ASP:OD1	2:J:33:THR:N	2.50	0.45
2:J:126:PRO:HG2	2:J:144:ILE:HG22	1.99	0.45
1:K:58:LYS:O	1:K:65:SER:N	2.49	0.45
1:K:79:PRO:HA	1:K:82:LEU:CD1	2.47	0.45
1:K:82:LEU:HB3	1:K:84:TRP:CD2	2.51	0.45
1:K:125:ILE:HG23	1:K:144:ILE:HA	1.99	0.45
1:K:174:THR:HG22	1:K:228:ILE:O	2.17	0.45
1:K:291:THR:HG23	1:K:310:TRP:HB2	1.99	0.45
2:L:17:ARG:CZ	2:L:53:PHE:HA	2.47	0.45
2:L:156:PRO:HD2	2:L:157:PHE:CE1	2.52	0.45
2:P:129:VAL:N	2:P:133:ASN:OD1	2.50	0.45
2:P:197:ARG:HH22	1:Q:46:TYR:C	2.20	0.45
1:Q:58:LYS:HA	1:Q:58:LYS:NZ	2.31	0.45
1:Q:146:ASN:HD21	1:Q:152:ASN:HB3	1.81	0.45
1:A:13:ARG:NH1	1:A:43:LEU:O	2.49	0.45
1:A:69:LYS:HD3	1:A:69:LYS:HA	1.70	0.45
1:A:154:LEU:HA	1:A:157:PHE:CZ	2.52	0.45
2:B:134:GLU:O	2:B:137:TYR:HB3	2.17	0.45
2:B:173:THR:OG1	2:B:228:ILE:HG13	2.17	0.45
2:D:33:THR:HG23	2:D:77:ARG:HD3	1.99	0.45
2:D:45:LYS:HA	2:D:45:LYS:HD2	1.69	0.45
2:D:94:GLU:HG3	2:D:99:PHE:HD2	1.81	0.45
2:D:287:ASP:O	2:D:320:ARG:NH1	2.50	0.45
1:E:45:LYS:HD2	1:E:45:LYS:HA	1.66	0.45
1:E:94:GLU:HG3	1:E:99:PHE:HB2	1.99	0.45
1:E:118:ILE:HD13	1:E:120:ALA:N	2.32	0.45
1:E:281:VAL:HG23	1:E:284:ARG:HG2	1.98	0.45
2:F:72:LYS:NZ	2:F:72:LYS:HB2	2.32	0.45
2:F:184:LEU:HB2	1:G:184:LEU:HB2	1.98	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:11:ILE:HG22	3:G:401:NAD:O2N	2.16	0.45
1:G:42:HIS:O	1:G:46:TYR:N	2.39	0.45
1:I:60:ILE:CB	1:I:64:PHE:HA	2.46	0.45
1:I:251:THR:HG23	1:I:253:GLU:HB2	1.98	0.45
1:I:261:LYS:O	1:I:265:GLY:N	2.49	0.45
1:I:265:GLY:O	1:I:268:LYS:HE2	2.17	0.45
1:I:322:VAL:HG12	1:I:326:ASP:OD1	2.16	0.45
1:I:327:LEU:HA	1:I:330:ASN:OD1	2.16	0.45
2:J:66:VAL:H	2:J:69:LYS:C	2.20	0.45
2:J:94:GLU:HG3	2:J:99:PHE:HD2	1.82	0.45
2:J:131:GLY:N	2:J:134:GLU:OE2	2.49	0.45
1:K:4:ALA:O	1:K:92:VAL:HA	2.17	0.45
1:K:17:ARG:NH2	1:K:51:GLY:O	2.46	0.45
1:K:156:PRO:O	1:K:160:VAL:N	2.26	0.45
1:K:190:HIS:CE1	1:K:192:ASP:HB3	2.52	0.45
1:K:204:VAL:CG1	1:K:231:ARG:HB2	2.46	0.45
2:L:17:ARG:HG2	2:L:53:PHE:HE2	1.82	0.45
2:L:54:ASP:OD1	2:L:54:ASP:N	2.31	0.45
2:L:204:VAL:CG2	2:L:231:ARG:HB2	2.46	0.45
1:O:122(A):LYS:HD3	1:O:122(A):LYS:HA	1.74	0.45
1:O:154:LEU:HA	1:O:157:PHE:CE1	2.52	0.45
2:P:39:GLN:HA	2:P:42:HIS:ND1	2.30	0.45
2:R:312:ASP:OD2	2:R:315:TRP:HB3	2.17	0.45
1:A:169:LYS:HD2	1:C:300:MET:SD	2.56	0.45
1:A:193:LEU:HD11	1:C:277:PRO:HG3	1.99	0.45
2:B:2:LYS:HZ3	2:B:28:VAL:HG23	1.82	0.45
2:B:214:VAL:O	2:B:218:LEU:N	2.49	0.45
2:B:317:TYR:O	2:B:321:VAL:HG23	2.16	0.45
1:C:107:LYS:HA	1:C:110:GLN:NE2	2.32	0.45
1:C:256:ASN:HB2	1:C:260:ARG:NH2	2.32	0.45
1:C:260:ARG:HD3	1:C:273:VAL:HB	1.98	0.45
2:D:156:PRO:HD2	2:D:157:PHE:CE1	2.51	0.45
2:D:251:PHE:HE2	2:D:253:GLU:HB3	1.81	0.45
2:F:76:ASP:HB3	2:F:82:LEU:HD23	1.97	0.45
2:F:129:VAL:N	2:F:133:ASN:OD1	2.49	0.45
2:F:137:TYR:CE2	2:F:327:ILE:HG22	2.51	0.45
2:F:174:THR:HA	2:F:240:VAL:CB	2.47	0.45
2:F:184:LEU:HD12	2:F:200:CYS:SG	2.57	0.45
2:F:217:VAL:HG23	2:F:218:LEU:HG	1.99	0.45
1:G:177:SER:N	1:G:237:VAL:HG12	2.32	0.45
1:I:269:GLY:O	1:I:288:PHE:HB3	2.17	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:J:23:SER:HA	2:J:25:LEU:HD22	1.99	0.45
2:J:125:ILE:HD11	2:J:143:ILE:HG22	1.98	0.45
2:J:190:HIS:HB3	2:J:196:ALA:CA	2.47	0.45
1:K:130:VAL:HA	1:K:134:GLU:HB3	1.98	0.45
2:L:109:LEU:HD21	2:L:116:VAL:HG23	1.99	0.45
2:L:194:ARG:O	2:L:197:ARG:N	2.48	0.45
1:O:17:ARG:NH2	1:O:51:GLY:O	2.34	0.45
1:O:114:LYS:HB3	1:O:115:LYS:HZ2	1.82	0.45
2:P:89:ILE:O	2:P:113:ALA:HA	2.16	0.45
2:P:123:GLY:O	2:P:125:ILE:N	2.47	0.45
2:P:243:VAL:HA	2:P:305:VAL:O	2.17	0.45
2:R:118:ILE:HG22	2:R:145:SER:OG	2.17	0.45
1:A:3:VAL:HG22	1:A:91:ILE:HB	1.99	0.45
1:A:172:MET:O	1:A:228:ILE:N	2.46	0.45
1:A:181:ASP:HB3	1:G:362:GLU:CB	2.46	0.45
2:B:16:LEU:HD13	2:B:44:LEU:HD13	1.98	0.45
2:B:20:ARG:HE	2:B:319:GLN:HE22	1.65	0.45
2:B:94:GLU:HG2	2:B:96:THR:H	1.82	0.45
1:C:50:LEU:HD13	1:C:285:CYS:SG	2.57	0.45
1:C:91:ILE:HA	1:C:115:LYS:O	2.16	0.45
1:C:160:VAL:HA	1:C:163:GLU:HB2	1.99	0.45
1:E:158:VAL:HA	1:E:161:LEU:HB2	1.99	0.45
1:E:165:LEU:O	1:E:248:LYS:HB2	2.17	0.45
1:E:195:ARG:HD3	1:E:195:ARG:HA	1.79	0.45
2:F:215:ALA:HA	2:F:222:LYS:HG2	1.99	0.45
1:G:135:LYS:HZ1	1:G:135:LYS:H	1.65	0.45
2:H:114:LYS:O	2:H:142:THR:OG1	2.23	0.45
2:H:173:THR:HA	2:H:228:ILE:O	2.17	0.45
2:H:237:VAL:HG13	2:H:311:TYR:O	2.17	0.45
2:H:293:ASP:O	2:H:297:THR:HG23	2.16	0.45
2:J:139:HIS:HB3	2:J:333:GLN:CD	2.37	0.45
2:J:279:VAL:H	2:J:282:ASP:CG	2.18	0.45
1:K:58:LYS:HE2	1:K:60:ILE:HA	1.99	0.45
1:K:269:GLY:O	1:K:288:PHE:HA	2.16	0.45
2:L:149:CYS:SG	2:L:176:HIS:HE1	2.40	0.45
2:L:179:THR:H	2:L:182:GLN:NE2	2.15	0.45
1:O:319:GLN:HA	1:O:322:VAL:HB	1.98	0.45
2:P:31:ASN:OD1	2:P:74:VAL:HG23	2.17	0.45
1:Q:157:PHE:HB2	1:Q:161:LEU:HD21	1.98	0.45
2:R:6:ASN:OD1	2:R:7:GLY:N	2.50	0.45
2:R:109:LEU:HD11	2:R:143:ILE:HG23	1.98	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:2:LYS:HB2	1:A:90:ASP:N	2.27	0.45
1:A:58:LYS:NZ	1:A:59:ILE:H	2.15	0.45
1:A:122:ALA:HB1	1:A:125:ILE:HD12	1.99	0.45
1:A:149:CYS:HB3	1:A:317:TYR:HB2	1.99	0.45
2:B:14:ASN:HD21	2:B:314:GLU:C	2.20	0.45
2:B:49:ILE:HG23	2:B:284:ARG:NH1	2.31	0.45
2:B:197:ARG:HH11	1:C:42:HIS:CE1	2.35	0.45
2:B:205:PRO:HA	2:B:230:LEU:HD23	1.99	0.45
2:B:257:ALA:HA	2:B:260:ARG:HB2	1.99	0.45
2:B:312:ASP:CG	2:B:316:GLY:H	2.20	0.45
1:C:18(A):TRP:CH2	1:C:26:ASP:HB2	2.52	0.45
1:C:211:ALA:HB1	1:C:226:ASN:HA	1.98	0.45
2:D:239:VAL:HG12	2:D:309:ALA:O	2.16	0.45
1:G:160:VAL:HG22	1:G:164:GLU:HG3	1.99	0.45
1:G:242:LEU:HG	1:G:244:VAL:HG22	1.99	0.45
1:G:272:ASP:N	1:G:290:SER:O	2.47	0.45
2:H:13:ARG:NE	2:H:43:LEU:HD22	2.32	0.45
2:H:118:ILE:HG22	2:H:145:SER:OG	2.16	0.45
2:H:159:LYS:O	2:H:163:GLN:N	2.34	0.45
1:I:193:LEU:HD12	1:K:277:PRO:HG2	1.99	0.45
1:K:119:THR:OG1	3:K:401:NAD:O4D	2.35	0.45
1:K:169:LYS:HZ3	1:K:245:ASN:HD21	1.63	0.45
1:K:171:THR:OG1	1:K:172:MET:N	2.50	0.45
1:K:174:THR:CG2	1:K:230:LEU:H	2.30	0.45
1:K:210:ALA:O	1:K:214:VAL:HG13	2.17	0.45
2:L:10:ARG:O	2:L:13:ARG:HD2	2.17	0.45
2:L:38:LYS:O	2:L:41:SER:OG	2.14	0.45
2:L:239:VAL:HG12	2:L:309:ALA:O	2.17	0.45
2:L:251:PHE:CE1	2:L:254:GLU:HB2	2.51	0.45
2:L:276:GLU:H	2:L:276:GLU:CD	2.15	0.45
1:O:118:ILE:HG12	1:O:122:ALA:HB2	1.98	0.44
1:O:190:HIS:C	1:O:192:ASP:H	2.19	0.44
1:O:328:VAL:O	1:O:333:PRO:HD2	2.17	0.44
2:P:92:VAL:HG11	2:P:108:HIS:CD2	2.52	0.44
2:P:204:VAL:O	2:P:230:LEU:HA	2.17	0.44
2:R:11:ILE:HG12	3:R:401:NAD:PN	2.56	0.44
2:R:204:VAL:O	2:R:206:THR:HG22	2.16	0.44
2:R:249:LYS:HD2	2:R:302:ASP:HB2	1.99	0.44
2:R:297:THR:HG22	2:R:307:VAL:HA	1.99	0.44
2:R:331:LYS:HE3	2:R:333:GLN:HE22	1.82	0.44
1:A:11:ILE:HB	3:A:401:NAD:N7N	2.32	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:160:VAL:O	1:A:163:GLU:HG2	2.16	0.44
1:A:181:ASP:HA	1:G:359:LYS:CB	2.47	0.44
2:B:126:PRO:HG2	2:B:144:ILE:HG22	1.98	0.44
2:B:139:HIS:HB3	2:B:333:GLN:CD	2.37	0.44
2:B:175:THR:N	2:B:239:VAL:O	2.36	0.44
1:C:281:VAL:HA	1:C:284:ARG:HG3	1.99	0.44
2:D:15:PHE:CE2	2:D:321:VAL:HG12	2.52	0.44
2:D:78:ASN:OD1	2:D:80:VAL:HG23	2.17	0.44
2:D:84:TRP:CE3	2:D:84:TRP:HA	2.53	0.44
1:E:126:PRO:O	1:E:145:SER:OG	2.34	0.44
1:E:261:LYS:HA	1:E:261:LYS:HD3	1.55	0.44
2:F:157:PHE:HB2	2:F:259:PHE:CE1	2.51	0.44
2:F:173:THR:HG1	2:H:306:LYS:NZ	2.15	0.44
2:F:204:VAL:O	2:F:230:LEU:HA	2.17	0.44
2:F:208:THR:HG23	2:F:210:ALA:HB3	2.00	0.44
1:G:3:VAL:HA	1:G:91:ILE:HG12	1.99	0.44
1:G:106:GLY:O	1:G:110:GLN:N	2.33	0.44
1:G:121:PRO:O	1:G:122(A):LYS:N	2.41	0.44
1:G:172:MET:O	1:G:227:GLY:HA3	2.17	0.44
1:G:236:ASN:OD1	1:G:238:SER:OG	2.30	0.44
2:H:99:PHE:CE1	2:H:104:GLY:HA3	2.52	0.44
2:H:183:ARG:HD2	2:H:187:ALA:HB3	1.99	0.44
2:J:55:ALA:HB1	2:J:67:ASP:OD1	2.17	0.44
2:J:312:ASP:CG	2:J:316:GLY:H	2.21	0.44
1:K:7:GLY:H	1:K:31:ASN:H	1.64	0.44
1:K:318:SER:O	1:K:320:ARG:N	2.50	0.44
1:K:323:ASP:OD1	1:K:323:ASP:N	2.50	0.44
2:L:124:ASP:OD1	2:L:124:ASP:N	2.49	0.44
2:L:184:LEU:HG	2:L:185:LEU:HD22	1.98	0.44
1:O:82:LEU:HD13	1:O:84:TRP:CZ2	2.52	0.44
1:O:124:ASP:H	1:C:142:ASN:HD21	1.64	0.44
1:O:142:ASN:OD1	1:O:142:ASN:N	2.50	0.44
1:O:174:THR:OG1	1:O:175:THR:N	2.50	0.44
1:O:184:LEU:HD23	1:O:185:LEU:H	1.82	0.44
1:O:230:LEU:HD13	1:O:230:LEU:HA	1.78	0.44
2:P:29:VAL:HA	2:P:72:LYS:O	2.17	0.44
2:P:66:VAL:C	2:P:68:GLY:N	2.70	0.44
2:P:323:ASP:O	2:P:327:ILE:HG13	2.18	0.44
1:Q:89:ILE:O	1:Q:113:ALA:HA	2.17	0.44
1:Q:292:ILE:HG13	1:Q:309:ALA:HA	1.98	0.44
2:R:11:ILE:HG12	3:R:401:NAD:O2N	2.17	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:R:118:ILE:O	2:R:146:ASN:N	2.39	0.44
1:A:186:ASP:CG	1:A:197:ARG:HE	2.20	0.44
1:A:264:ALA:HA	1:A:268:LYS:NZ	2.32	0.44
2:B:27:VAL:O	2:B:69:LYS:NZ	2.32	0.44
2:B:218:LEU:HA	2:B:218:LEU:HD23	1.72	0.44
2:D:100:VAL:O	2:D:122(A):LYS:N	2.35	0.44
2:D:265:ASN:OD1	2:D:266:GLU:N	2.50	0.44
1:E:49:ILE:HG22	1:E:50:LEU:HD22	1.99	0.44
1:E:92:VAL:HG12	1:E:93:ILE:N	2.32	0.44
1:E:179:THR:OG1	1:E:180:GLY:N	2.46	0.44
2:F:185:LEU:HD11	1:G:178:TYR:CD1	2.52	0.44
2:F:202:ASN:HD22	2:H:280:SER:N	2.14	0.44
1:G:115:LYS:HE2	1:G:115:LYS:HB2	1.75	0.44
1:G:300:MET:HB3	1:G:304:MET:HB3	1.99	0.44
2:H:313:ASN:OD1	2:H:313:ASN:N	2.49	0.44
1:I:169:LYS:HA	1:I:169:LYS:HD3	1.64	0.44
2:J:169:LYS:HD3	2:L:301:GLY:HA3	1.98	0.44
1:K:291:THR:OG1	1:K:310:TRP:HB2	2.17	0.44
2:L:20:ARG:HH22	2:L:323:ASP:CG	2.20	0.44
3:L:401:NAD:H2N	3:L:401:NAD:H52N	1.99	0.44
1:O:6:ASN:ND2	1:O:96:THR:HG23	2.32	0.44
1:O:346:GLU:H	1:C:191:ARG:HD2	1.83	0.44
2:P:47:ASP:HB3	2:P:51:GLY:O	2.18	0.44
2:P:78:ASN:OD1	2:P:80:VAL:HG13	2.17	0.44
2:P:148:SER:HA	3:P:401:NAD:C5N	2.38	0.44
2:P:300:MET:HB3	2:R:169:LYS:HD2	2.00	0.44
1:Q:332:TRP:CG	1:Q:333:PRO:HD2	2.52	0.44
2:R:165:PHE:CD2	2:R:248:LYS:HD3	2.52	0.44
2:R:197:ARG:NH2	2:R:199:ALA:H	2.12	0.44
1:A:171:THR:O	1:A:243:VAL:N	2.38	0.44
1:A:192:ASP:OD1	1:A:192:ASP:N	2.50	0.44
2:B:76:ASP:OD1	2:B:78:ASN:N	2.50	0.44
1:C:129:VAL:HA	1:C:324:LEU:HD21	1.98	0.44
1:C:361:TYR:O	1:C:362:GLU:CB	2.65	0.44
2:D:86:ASP:HB2	2:D:87:MET:SD	2.57	0.44
2:D:208:THR:H	2:D:229:ALA:HB2	1.82	0.44
1:E:176:HIS:O	1:E:231:ARG:HA	2.18	0.44
1:E:280:SER:HG	1:G:203:ILE:H	1.65	0.44
2:F:4:ALA:HB2	2:F:29:VAL:HG13	1.98	0.44
2:F:39:GLN:O	2:F:43:LEU:HG	2.16	0.44
2:F:172:MET:O	2:F:173:THR:OG1	2.34	0.44

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:F:183:ARG:HH22	2:F:191:ARG:NH2	2.15	0.44
2:F:278:LEU:O	2:H:194:ARG:NH2	2.40	0.44
1:G:10:ARG:NH2	1:G:13:ARG:HE	2.16	0.44
1:G:82:LEU:CB	1:G:84:TRP:NE1	2.77	0.44
1:G:224:LYS:HB3	1:G:224:LYS:HE3	1.53	0.44
1:I:191:ARG:HA	2:L:39:GLN:NE2	2.32	0.44
1:I:193:LEU:O	1:I:197:ARG:HG2	2.17	0.44
1:I:194:ARG:NH2	1:K:277:PRO:HA	2.31	0.44
1:I:207:SER:HA	1:I:228:ILE:HB	1.98	0.44
2:J:14:ASN:HD21	2:J:315:TRP:CA	2.28	0.44
2:J:257:ALA:HA	2:J:260:ARG:HB2	1.98	0.44
1:K:13:ARG:HD3	1:K:43:LEU:O	2.17	0.44
1:K:281:VAL:O	1:K:284:ARG:N	2.48	0.44
1:K:293:ASP:OD1	1:K:295:SER:OG	2.22	0.44
1:K:317:TYR:HD1	1:K:320:ARG:NH2	2.14	0.44
2:L:158:VAL:O	2:L:162:ASP:N	2.28	0.44
2:L:161:LEU:HD12	2:L:165:PHE:CD1	2.52	0.44
2:L:208:THR:H	2:L:229:ALA:HB2	1.82	0.44
1:O:239:VAL:HB	1:O:310:TRP:CG	2.53	0.44
2:P:45:LYS:HA	2:P:45:LYS:HD2	1.71	0.44
2:P:133:ASN:O	2:P:137:TYR:N	2.51	0.44
2:P:202:ASN:HD22	2:R:280:SER:N	2.15	0.44
2:P:243:VAL:HG22	2:P:306:LYS:HA	2.00	0.44
2:P:274:CYS:SG	2:P:276:GLU:HG2	2.57	0.44
1:Q:8:PHE:HD1	1:Q:8:PHE:HA	1.61	0.44
1:Q:135:LYS:HZ1	1:Q:136:ASP:H	1.65	0.44
1:Q:183:ARG:CZ	1:Q:187:ALA:HB3	2.47	0.44
1:A:133:ASN:HA	1:A:136:ASP:OD2	2.16	0.44
2:B:312:ASP:CG	2:B:315:TRP:HB3	2.38	0.44
2:D:247:SER:OG	2:D:248:LYS:N	2.51	0.44
1:E:21:LYS:O	1:E:22:ASP:C	2.55	0.44
1:E:236:ASN:H	1:E:284:ARG:NH2	2.09	0.44
1:E:267:LEU:O	1:E:271:LEU:N	2.39	0.44
1:E:282:ASP:OD1	2:F:52:THR:N	2.51	0.44
1:E:318:SER:O	1:E:321:VAL:HG22	2.18	0.44
1:E:356:GLU:C	1:K:183:ARG:HH22	2.20	0.44
1:G:105:ALA:HA	1:G:108:HIS:HD2	1.82	0.44
1:G:256:ASN:HB2	1:G:260:ARG:HH21	1.83	0.44
2:H:13:ARG:HE	2:H:43:LEU:HD22	1.81	0.44
2:H:32:ASP:HA	3:H:401:NAD:H2A	1.98	0.44
2:H:204:VAL:O	2:H:206:THR:HG22	2.18	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:I:238:SER:O	1:I:311:TYR:N	2.50	0.44
2:J:129:VAL:HG21	2:J:152:ASN:HA	2.00	0.44
2:J:268:LYS:HE2	2:J:268:LYS:HB2	1.81	0.44
1:K:84:TRP:O	1:K:89:ILE:N	2.48	0.44
1:K:101:ASP:CG	1:K:104:GLY:H	2.20	0.44
1:K:157:PHE:HD1	1:K:271:LEU:HD12	1.82	0.44
1:K:178:TYR:CE1	1:K:235:PRO:HA	2.53	0.44
2:L:45:LYS:HB2	2:L:57:VAL:HG11	1.99	0.44
1:O:153:CYS:O	1:O:290:SER:OG	2.35	0.44
1:O:210:ALA:O	1:O:214:VAL:HG13	2.17	0.44
2:P:109:LEU:HD22	2:P:114:LYS:C	2.37	0.44
1:Q:135:LYS:NZ	1:Q:136:ASP:H	2.15	0.44
1:Q:156:PRO:HG2	1:Q:290:SER:OG	2.18	0.44
1:Q:165:LEU:HB3	1:Q:246:ILE:HG12	1.99	0.44
1:Q:195:ARG:HH11	1:Q:195:ARG:H	1.64	0.44
1:Q:205:PRO:HA	1:Q:229:ALA:O	2.17	0.44
1:Q:211:ALA:HB3	1:Q:212:LYS:NZ	2.32	0.44
1:A:28:VAL:C	1:A:71:ILE:HG23	2.38	0.44
1:A:125:ILE:H	1:A:125:ILE:HG13	1.42	0.44
1:A:217:VAL:HG23	1:A:218:LEU:HD23	1.99	0.44
1:A:327:LEU:HA	1:A:330:ASN:ND2	2.32	0.44
2:B:6:ASN:HB2	2:B:84:TRP:HZ2	1.83	0.44
2:B:101:ASP:CG	2:B:104:GLY:H	2.21	0.44
1:C:119:THR:HG23	3:C:401:NAD:H1D	1.99	0.44
2:D:91:LEU:HB2	2:D:115:LYS:HB2	1.99	0.44
2:D:255:VAL:HG23	2:D:256:ASN:ND2	2.31	0.44
1:E:41:THR:HG22	1:E:45:LYS:HG2	1.99	0.44
1:E:125:ILE:H	1:E:125:ILE:HD12	1.82	0.44
1:E:132:VAL:HG11	1:E:155:ALA:HB1	1.98	0.44
1:E:236:ASN:HB3	1:E:284:ARG:CZ	2.48	0.44
2:F:246:VAL:HG22	2:F:303:ASP:HA	1.98	0.44
2:F:272:SER:O	2:F:291:THR:HA	2.18	0.44
1:G:39:SER:O	1:G:43:LEU:HG	2.18	0.44
1:G:193:LEU:HD12	1:G:193:LEU:H	1.82	0.44
1:G:253:GLU:O	1:G:257:ASN:ND2	2.50	0.44
2:H:312:ASP:OD2	2:H:315:TRP:HB3	2.17	0.44
1:I:63:THR:OG1	1:I:72:LYS:HD3	2.17	0.44
1:I:139:HIS:HD2	1:I:333:PRO:HD3	1.80	0.44
1:I:157:PHE:O	1:I:161:LEU:HG	2.18	0.44
2:J:13:ARG:HG2	2:J:43:LEU:C	2.38	0.44
2:J:102:ARG:O	2:J:106:GLY:N	2.36	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:J:134:GLU:O	2:J:137:TYR:HB3	2.17	0.44
2:J:237:VAL:HG13	2:J:311:TYR:O	2.17	0.44
1:K:6:ASN:HB3	1:K:94:GLU:HA	1.98	0.44
2:L:86:ASP:HB2	2:L:87:MET:SD	2.57	0.44
2:L:94:GLU:HG3	2:L:99:PHE:HD2	1.81	0.44
2:L:276:GLU:OE1	2:L:276:GLU:N	2.45	0.44
1:O:114:LYS:O	1:O:115:LYS:NZ	2.41	0.44
1:O:181:ASP:OD2	1:C:362:GLU:CB	2.65	0.44
1:O:239:VAL:HB	1:O:310:TRP:CD2	2.53	0.44
2:P:39:GLN:NE2	1:Q:190:HIS:O	2.48	0.44
2:P:157:PHE:HB2	2:P:259:PHE:CE1	2.52	0.44
2:P:173:THR:HG1	2:R:306:LYS:NZ	2.14	0.44
2:P:184:LEU:HD12	2:P:200:CYS:SG	2.57	0.44
2:P:278:LEU:HD23	2:P:282:ASP:HB3	1.99	0.44
1:Q:190:HIS:CE1	1:Q:195:ARG:HB2	2.53	0.44
2:R:4:ALA:HA	2:R:29:VAL:HG13	1.99	0.44
1:A:214:VAL:HG23	1:A:215:SER:H	1.83	0.44
1:A:280:SER:HA	1:A:310:TRP:CZ3	2.52	0.44
2:B:55:ALA:HB1	2:B:67:ASP:OD1	2.18	0.44
2:B:278:LEU:H	2:D:194:ARG:NH2	2.16	0.44
2:B:291:THR:O	2:B:310:TRP:N	2.31	0.44
1:C:99:PHE:C	1:C:101:ASP:H	2.21	0.44
1:C:116:VAL:HG12	1:C:117:ILE:N	2.33	0.44
1:C:126:PRO:HG2	1:C:128:TYR:OH	2.17	0.44
1:C:174:THR:HA	1:C:240:VAL:HA	1.99	0.44
1:C:347:ASP:O	1:C:351:ASP:N	2.48	0.44
2:D:17:ARG:HG2	2:D:53:PHE:CE2	2.52	0.44
2:D:90:ASP:OD1	2:D:90:ASP:N	2.51	0.44
2:D:293:ASP:O	2:D:297:THR:HG23	2.17	0.44
1:E:160:VAL:HA	1:E:163:GLU:OE1	2.17	0.44
2:F:228:ILE:N	2:H:306:LYS:HZ2	2.15	0.44
2:F:267:LEU:HA	2:F:270:ILE:HB	1.99	0.44
1:G:105:ALA:HA	1:G:108:HIS:HB2	2.00	0.44
2:H:41:SER:HG	2:H:42:HIS:N	2.15	0.44
2:H:193:LEU:H	2:H:193:LEU:HD12	1.83	0.44
2:H:331:LYS:HE3	2:H:333:GLN:HE22	1.82	0.44
1:I:203:ILE:HG13	1:I:231:ARG:C	2.38	0.44
1:I:218:LEU:HA	1:I:218:LEU:HD12	1.70	0.44
2:J:85:GLY:HA3	2:J:112:GLY:HA3	1.98	0.44
2:J:194:ARG:NH1	2:L:279:VAL:HG13	2.33	0.44
2:J:227:GLY:HA2	2:L:298:MET:SD	2.58	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:L:20:ARG:NH2	2:L:323:ASP:OD1	2.51	0.44
2:L:237:VAL:HA	2:L:313:ASN:OD1	2.17	0.44
2:L:267:LEU:HA	2:L:270:ILE:HB	1.99	0.44
1:O:82:LEU:HD12	1:O:108:HIS:HE1	1.81	0.44
2:P:271:LEU:HD13	2:P:289:SER:HG	1.82	0.44
1:Q:3:VAL:HG11	1:Q:27:VAL:HG12	1.99	0.44
1:Q:56:ASP:OD1	1:Q:58:LYS:NZ	2.47	0.44
1:Q:104:GLY:HA2	1:Q:107:LYS:HG3	2.00	0.44
1:Q:139:HIS:HE1	1:Q:333:PRO:HA	1.81	0.44
1:Q:139(A):ASP:CG	1:Q:333:PRO:HG3	2.38	0.44
1:Q:346:GLU:O	1:Q:350:LYS:N	2.50	0.44
2:R:13:ARG:NE	2:R:43:LEU:HD22	2.33	0.44
2:R:21:LYS:H	2:R:21:LYS:NZ	2.15	0.44
1:A:154:LEU:HD11	1:A:210:ALA:HB1	1.99	0.44
2:B:1:LEU:HD23	2:B:25:LEU:HD12	1.98	0.44
2:B:116:VAL:O	2:B:144:ILE:HG12	2.18	0.44
2:B:305:VAL:HG12	2:B:307:VAL:HG12	1.99	0.44
1:C:94:GLU:CB	1:C:118:ILE:HG13	2.48	0.44
1:C:245:ASN:OD1	1:C:245:ASN:N	2.50	0.44
2:D:1:LEU:HG	2:D:3:VAL:HG23	1.98	0.44
2:D:165:PHE:HA	2:D:248:LYS:NZ	2.32	0.44
1:E:5:ILE:HG12	1:E:93:ILE:HG13	2.00	0.44
1:E:174:THR:H	1:E:229:ALA:HA	1.83	0.44
2:F:2:LYS:NZ	2:F:26:ASP:OD2	2.44	0.44
2:F:11:ILE:HG12	3:F:401:NAD:O2N	2.18	0.44
2:F:14:ASN:ND2	2:F:315:TRP:HA	2.30	0.44
2:F:99:PHE:HD1	2:F:104:GLY:HA3	1.83	0.44
1:G:39:SER:O	1:G:43:LEU:N	2.29	0.44
1:G:199:ALA:CB	1:G:231:ARG:HH11	1.96	0.44
1:I:1:LEU:HD22	1:I:329:ALA:HA	2.00	0.44
1:I:214:VAL:HG23	1:I:215:SER:H	1.83	0.44
2:J:11:ILE:HA	2:J:14:ASN:HB3	2.00	0.44
2:J:214:VAL:O	2:J:218:LEU:N	2.49	0.44
1:K:28:VAL:O	1:K:72:LYS:N	2.51	0.44
2:L:15:PHE:CE2	2:L:321:VAL:HG12	2.53	0.44
2:L:305:VAL:HG12	2:L:307:VAL:HG12	1.99	0.44
1:O:18(B):HIS:CD2	1:O:53:PHE:HZ	2.36	0.44
1:O:114:LYS:HZ2	1:O:114:LYS:N	2.15	0.44
1:O:182:GLN:HG3	1:O:195:ARG:HD3	2.00	0.44
1:O:236:ASN:ND2	1:O:314:GLU:OE1	2.51	0.44
1:O:241:ASP:HA	1:O:307:VAL:O	2.18	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:O:244:VAL:HG23	1:O:305:VAL:HG23	1.99	0.44
1:O:256:ASN:CA	1:O:259:PHE:HB2	2.41	0.44
2:P:137:TYR:OH	2:P:328:VAL:HA	2.18	0.44
2:P:217:VAL:HG23	2:P:218:LEU:HG	2.00	0.44
1:Q:11:ILE:N	3:Q:401:NAD:O1N	2.51	0.44
1:Q:15:PHE:CD2	1:Q:322:VAL:HG23	2.52	0.44
2:R:181:ASP:HB3	2:R:182:GLN:NE2	2.27	0.44
1:A:0:LYS:HG3	1:A:24:PRO:O	2.18	0.44
1:A:129:VAL:N	1:A:133:ASN:OD1	2.32	0.44
1:A:208:THR:HG23	1:A:210:ALA:H	1.82	0.44
1:A:273:VAL:HA	1:A:292:ILE:H	1.81	0.44
1:A:332:TRP:CE3	1:A:333:PRO:HD2	2.53	0.44
2:B:29:VAL:O	2:B:30:ILE:HD13	2.18	0.44
2:B:116:VAL:HB	2:B:143:ILE:HG12	1.99	0.44
2:B:118:ILE:HD13	2:B:118:ILE:HA	1.78	0.44
2:B:119:THR:OG1	2:B:120:ALA:N	2.51	0.44
2:B:193:LEU:HD22	2:D:277:PRO:HG2	1.98	0.44
2:D:38:LYS:HZ2	2:D:38:LYS:N	2.15	0.44
2:D:305:VAL:HG12	2:D:307:VAL:HG12	2.00	0.44
1:E:84:TRP:HB2	1:E:111:ALA:O	2.18	0.44
1:E:183:ARG:CZ	1:E:190:HIS:HB2	2.48	0.44
1:E:218:LEU:HA	1:E:218:LEU:HD22	1.68	0.44
2:F:323:ASP:O	2:F:327:ILE:HG13	2.17	0.44
1:G:14:ASN:HA	1:G:17:ARG:HB2	1.99	0.44
1:G:128:TYR:HD1	1:G:128:TYR:HA	1.50	0.44
1:G:215:SER:OG	1:G:222:LYS:HD2	2.17	0.44
1:G:330:ASN:ND2	1:G:330:ASN:H	2.16	0.44
1:I:1:LEU:O	1:I:3:VAL:HG23	2.18	0.44
1:I:63:THR:HG23	1:I:72:LYS:HA	2.00	0.44
1:I:69:LYS:O	1:I:71:ILE:HG13	2.18	0.44
1:I:91:ILE:HA	1:I:115:LYS:O	2.17	0.44
2:J:14:ASN:HD22	2:J:314:GLU:HB3	1.83	0.44
2:L:160:VAL:HA	2:L:163:GLN:HB2	1.98	0.44
2:L:176:HIS:HB3	2:L:231:ARG:HG2	2.00	0.44
1:O:79:PRO:HG2	1:O:107:LYS:HD2	2.00	0.44
1:O:89:ILE:HG22	1:O:92:VAL:HG22	1.99	0.44
1:O:172:MET:HB2	1:O:242:LEU:HD12	2.00	0.44
1:O:267:LEU:HB3	1:O:271:LEU:HG	2.00	0.44
2:P:1:LEU:O	2:P:3:VAL:N	2.50	0.44
2:P:154:LEU:O	2:P:158:VAL:HG22	2.17	0.44
2:P:208:THR:HG23	2:P:210:ALA:HB3	1.99	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:Q:220:GLN:H	1:Q:220:GLN:CD	2.12	0.44
2:R:18:CYS:HB3	2:R:322:VAL:HG21	2.00	0.44
2:R:179:THR:N	2:R:182:GLN:HE22	2.13	0.44
1:A:13:ARG:NE	1:A:43:LEU:HB3	2.32	0.44
2:B:40:ALA:HA	2:B:43:LEU:HB2	2.00	0.44
2:B:44:LEU:HD23	2:B:57:VAL:CB	2.48	0.44
2:B:84:TRP:CD1	2:B:111:ALA:HB3	2.53	0.44
1:C:279:VAL:O	1:C:282:ASP:N	2.51	0.44
1:E:59:ILE:O	1:E:59:ILE:CG1	2.65	0.44
1:E:164:GLU:OE1	1:E:165:LEU:HG	2.17	0.44
1:E:204:VAL:HG21	1:E:231:ARG:HB2	2.00	0.44
2:F:36:GLY:H	2:F:39:GLN:CD	2.21	0.44
2:F:78:ASN:OD1	2:F:80:VAL:HG13	2.18	0.44
2:F:183:ARG:NH2	2:F:190:HIS:HA	2.33	0.44
2:F:316:GLY:O	2:F:320:ARG:HG2	2.18	0.44
2:H:160:VAL:HA	2:H:163:GLN:OE1	2.18	0.44
2:H:221:LEU:H	2:H:221:LEU:HD12	1.83	0.44
1:I:176:HIS:HA	1:I:238:SER:HB2	2.00	0.44
2:J:203:ILE:HG12	2:J:204:VAL:H	1.82	0.44
1:K:37:VAL:O	1:K:41:THR:N	2.28	0.44
1:K:154:LEU:HA	1:K:157:PHE:CZ	2.53	0.44
2:L:109:LEU:HD11	2:L:143:ILE:HG12	2.00	0.44
2:L:148:SER:HG	2:L:151:THR:H	1.65	0.44
2:L:232:VAL:O	2:L:234:THR:N	2.49	0.44
2:P:99:PHE:HD1	2:P:104:GLY:HA3	1.83	0.43
2:P:103:ASP:OD1	2:P:103:ASP:N	2.37	0.43
2:P:151:THR:HG21	2:P:213:ALA:HB3	2.00	0.43
2:P:237:VAL:HG13	2:P:311:TYR:O	2.18	0.43
1:Q:1:LEU:O	1:Q:3:VAL:HG23	2.18	0.43
2:R:119:THR:O	2:R:317:TYR:OH	2.36	0.43
1:A:114:LYS:HB3	1:A:115:LYS:HD2	1.99	0.43
1:A:130:VAL:HG11	1:A:320:ARG:HD3	1.99	0.43
2:B:128:TYR:HD2	2:B:144:ILE:HB	1.83	0.43
2:B:297:THR:HA	2:B:307:VAL:HA	2.00	0.43
1:C:9:GLY:O	1:C:13:ARG:NH1	2.51	0.43
1:C:17:ARG:HG2	1:C:53:PHE:CE2	2.53	0.43
1:C:82:LEU:HB2	1:C:111:ALA:HB1	1.99	0.43
1:C:102:GLY:N	1:C:103:PRO:HD2	2.33	0.43
1:C:298:MET:O	1:C:305:VAL:HG23	2.18	0.43
2:D:171:THR:N	2:D:243:VAL:O	2.40	0.43
2:D:234:THR:OG1	2:D:236:ASN:N	2.49	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:267:LEU:HA	2:D:270:ILE:HB	2.00	0.43
2:D:313:ASN:O	3:D:401:NAD:N7N	2.51	0.43
1:E:52:THR:O	1:E:54:LYS:NZ	2.39	0.43
1:E:197:ARG:HD2	1:E:197:ARG:HA	1.90	0.43
1:E:211:ALA:HB3	1:E:212:LYS:NZ	2.33	0.43
2:F:33:THR:OG1	2:F:77:ARG:NH1	2.51	0.43
2:F:190:HIS:HE1	2:F:192:ASP:HB3	1.83	0.43
2:F:305:VAL:HG12	2:F:307:VAL:HG12	1.99	0.43
1:G:77:ARG:HD2	3:G:401:NAD:N1A	2.33	0.43
1:G:324:LEU:HA	1:G:327:LEU:HD12	2.00	0.43
2:H:165:PHE:CD2	2:H:248:LYS:HD3	2.53	0.43
1:I:148:SER:OG	1:I:151:THR:HG23	2.17	0.43
2:J:18:CYS:CB	2:J:322:VAL:HG21	2.47	0.43
2:J:38:LYS:H	2:J:38:LYS:HD3	1.82	0.43
2:J:246:VAL:N	2:J:303:ASP:O	2.35	0.43
1:K:82:LEU:HB3	1:K:84:TRP:CE3	2.53	0.43
1:K:167:ILE:HA	1:K:247:GLU:H	1.83	0.43
1:K:259:PHE:O	1:K:263:ALA:N	2.30	0.43
2:L:58:LYS:O	2:L:65:SER:N	2.51	0.43
1:O:18(A):TRP:CA	1:O:20:ARG:HB3	2.47	0.43
1:O:28:VAL:HA	1:O:71:ILE:HG12	1.99	0.43
1:O:203:ILE:O	1:O:205:PRO:HD3	2.19	0.43
2:P:152:ASN:ND2	2:P:317:TYR:HA	2.33	0.43
2:P:312:ASP:OD2	2:P:315:TRP:HB3	2.18	0.43
1:Q:3:VAL:HB	1:Q:27:VAL:HA	1.99	0.43
1:Q:17:ARG:NH2	1:Q:53:PHE:HB2	2.33	0.43
1:Q:194:ARG:HH21	1:Q:205:PRO:HD2	1.81	0.43
1:Q:236:ASN:ND2	1:Q:313:ASN:OD1	2.51	0.43
2:R:160:VAL:HA	2:R:163:GLN:OE1	2.18	0.43
1:A:165:LEU:HG	1:A:248:LYS:NZ	2.29	0.43
2:B:23:SER:HA	2:B:25:LEU:HD22	1.99	0.43
2:B:190:HIS:HB3	2:B:196:ALA:CA	2.48	0.43
2:B:192:ASP:OD2	2:B:194:ARG:HB2	2.18	0.43
2:B:227:GLY:HA2	2:D:298:MET:SD	2.58	0.43
1:C:84:TRP:O	1:C:88:GLY:N	2.51	0.43
2:D:273:VAL:HG23	2:D:292:ILE:O	2.18	0.43
1:E:0:LYS:HB3	1:E:0:LYS:HE3	1.69	0.43
1:E:92:VAL:O	1:E:116:VAL:HG13	2.18	0.43
1:E:139:HIS:HD2	1:E:139(A):ASP:H	1.66	0.43
1:E:156:PRO:O	1:E:160:VAL:HG23	2.18	0.43
1:E:272:ASP:HB2	1:E:288:PHE:CD2	2.53	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:133:ASN:ND2	1:G:217:VAL:HG13	2.33	0.43
1:G:263:ALA:O	1:G:268:LYS:HA	2.18	0.43
2:H:213:ALA:HA	2:H:216:LEU:HD13	2.00	0.43
2:H:249:LYS:HD2	2:H:302:ASP:HB2	1.99	0.43
1:I:271:LEU:HA	1:I:289:SER:CB	2.49	0.43
1:I:299:VAL:HA	1:I:305:VAL:HA	2.01	0.43
2:J:171:THR:O	2:J:242:LEU:HD12	2.18	0.43
1:K:6:ASN:HD22	1:K:95:GLY:N	2.14	0.43
1:K:10:ARG:HB3	1:K:314:GLU:OE2	2.17	0.43
1:K:91:ILE:HD11	1:K:115:LYS:HE2	1.98	0.43
1:K:167:ILE:HB	1:K:224:LYS:HZ1	1.84	0.43
1:K:169:LYS:N	1:K:245:ASN:OD1	2.48	0.43
1:K:281:VAL:HA	1:K:284:ARG:HG3	2.00	0.43
2:L:40:ALA:HA	2:L:43:LEU:HB2	1.99	0.43
2:L:117:LEU:HG	2:L:145:SER:HA	1.99	0.43
2:L:193:LEU:HD12	2:L:193:LEU:H	1.82	0.43
2:L:250:THR:N	2:L:302:ASP:HB3	2.18	0.43
1:O:190:HIS:CE1	1:O:196:ALA:N	2.86	0.43
1:O:191:ARG:HB3	1:O:191:ARG:HE	1.48	0.43
1:O:300:MET:CG	1:O:304:MET:HB2	2.49	0.43
3:O:401:NAD:O3D	1:C:362:GLU:HA	2.18	0.43
2:P:159:LYS:HG3	2:P:218:LEU:HD22	2.00	0.43
1:Q:174:THR:HB	1:Q:240:VAL:CB	2.48	0.43
1:Q:221:LEU:HD13	1:Q:221:LEU:HA	1.85	0.43
2:R:15:PHE:CE2	2:R:321:VAL:HG12	2.53	0.43
2:R:47:ASP:N	2:R:51:GLY:O	2.51	0.43
2:R:102:ARG:NH2	2:R:126:PRO:HD3	2.30	0.43
2:R:104:GLY:HA2	2:R:107:LYS:HE2	2.00	0.43
1:A:3:VAL:HG21	1:A:25:LEU:HB3	2.00	0.43
1:A:117:ILE:HD13	1:A:321:VAL:HG13	1.98	0.43
1:A:135:LYS:HE2	1:A:135:LYS:HB2	1.65	0.43
2:B:1:LEU:O	2:B:3:VAL:HG23	2.18	0.43
2:B:324:LEU:HD12	2:B:327:ILE:HB	2.00	0.43
1:C:239:VAL:CG2	1:C:308:VAL:HG23	2.49	0.43
1:C:341:SER:C	1:C:343:ASP:H	2.21	0.43
2:D:134:GLU:O	2:D:137:TYR:HB3	2.19	0.43
1:E:245:ASN:HA	1:E:304:MET:HA	1.99	0.43
2:F:1:LEU:O	2:F:26:ASP:N	2.51	0.43
2:F:78:ASN:ND2	2:F:80:VAL:HG22	2.34	0.43
2:F:191:ARG:H	2:F:191:ARG:CZ	2.32	0.43
1:G:3:VAL:HG22	1:G:91:ILE:HD11	2.00	0.43

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:244:VAL:HB	1:G:246:ILE:HD11	2.00	0.43
2:H:18:CYS:HB3	2:H:322:VAL:HG21	2.00	0.43
2:H:152:ASN:OD1	2:H:320:ARG:HG3	2.17	0.43
2:H:289:SER:O	2:H:311:TYR:HA	2.18	0.43
1:I:186:ASP:HA	1:I:196:ALA:O	2.18	0.43
1:I:218:LEU:HG	1:I:220:GLN:NE2	2.33	0.43
1:I:290:SER:HG	1:I:291:THR:N	2.16	0.43
2:J:64:ILE:O	2:J:71:ILE:N	2.51	0.43
2:J:183:ARG:HH22	2:J:191:ARG:HH12	1.65	0.43
2:J:267:LEU:HB3	2:J:271:LEU:HB2	2.00	0.43
1:K:117:ILE:HA	1:K:144:ILE:O	2.18	0.43
2:L:91:LEU:HB2	2:L:115:LYS:HB2	2.01	0.43
2:L:285:CYS:O	2:L:315:TRP:NE1	2.50	0.43
1:O:139(A):ASP:OD1	1:O:139(A):ASP:N	2.51	0.43
1:O:175:THR:OG1	1:O:239:VAL:HG13	2.18	0.43
1:O:190:HIS:O	1:O:191:ARG:HB3	2.18	0.43
2:P:316:GLY:O	2:P:320:ARG:HG2	2.18	0.43
1:Q:82:LEU:HD12	1:Q:108:HIS:ND1	2.34	0.43
1:Q:138:GLY:HA3	1:Q:140:VAL:HB	2.00	0.43
1:Q:249:GLY:HA3	1:Q:302:GLY:CA	2.48	0.43
1:Q:255:VAL:HA	1:Q:258:ALA:HB3	2.01	0.43
1:Q:324:LEU:HD12	1:Q:325:ALA:N	2.33	0.43
2:R:122:GLY:CA	2:R:125:ILE:HG12	2.49	0.43
2:R:122:GLY:C	2:R:125:ILE:HG12	2.38	0.43
2:R:173:THR:HA	2:R:228:ILE:O	2.18	0.43
1:A:137:TYR:CZ	1:A:139:HIS:HA	2.53	0.43
1:A:254:ASP:OD1	1:A:255:VAL:HG23	2.19	0.43
1:A:330:ASN:OD1	1:A:330:ASN:N	2.51	0.43
2:B:129:VAL:HG21	2:B:152:ASN:HA	1.99	0.43
1:C:31:ASN:HA	1:C:74:VAL:O	2.18	0.43
1:C:38:LYS:HE3	1:C:38:LYS:HB2	1.79	0.43
1:E:9:GLY:O	1:E:13:ARG:N	2.43	0.43
2:F:13:ARG:HA	2:F:16:LEU:HB2	2.00	0.43
2:F:89:ILE:HB	2:F:113:ALA:HB2	2.00	0.43
1:G:9:GLY:O	1:G:13:ARG:HG3	2.18	0.43
1:G:77:ARG:HG2	3:G:401:NAD:N6A	2.33	0.43
2:H:69:LYS:NZ	2:H:71:ILE:HG13	2.34	0.43
2:H:85:GLY:CA	2:H:112:GLY:HA3	2.48	0.43
2:H:243:VAL:HA	2:H:306:LYS:HA	1.99	0.43
2:H:303:ASP:OD1	2:H:303:ASP:N	2.51	0.43
1:I:84:TRP:N	1:I:111:ALA:O	2.51	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:I:172:MET:O	1:I:227:GLY:HA3	2.18	0.43
1:K:17:ARG:NH1	1:K:44:LEU:O	2.44	0.43
1:K:31:ASN:HD21	1:K:76:ASN:C	2.21	0.43
1:K:84:TRP:HD1	1:K:113:ALA:HB2	1.83	0.43
1:K:91:ILE:HG13	1:K:115:LYS:H	1.83	0.43
2:L:3:VAL:O	2:L:27:VAL:HG13	2.18	0.43
2:L:16:LEU:HD13	2:L:44:LEU:HD13	2.00	0.43
2:L:176:HIS:CE1	2:L:311:TYR:HH	2.35	0.43
1:O:56:ASP:O	1:O:66:ILE:HA	2.18	0.43
1:O:192:ASP:CG	1:O:194:ARG:H	2.22	0.43
3:O:401:NAD:H2N	3:O:401:NAD:PN	2.58	0.43
2:P:15:PHE:HD2	2:P:318:SER:HB2	1.83	0.43
1:Q:96:THR:HG22	3:Q:401:NAD:C4A	2.48	0.43
2:R:237:VAL:HG13	2:R:311:TYR:O	2.18	0.43
1:A:139:HIS:HD2	1:A:139(A):ASP:OD1	2.02	0.43
1:C:116:VAL:HB	1:C:143:ILE:HG23	2.00	0.43
1:E:18(B):HIS:CG	1:E:66:ILE:HG21	2.53	0.43
1:E:68:GLY:O	1:E:70:PRO:HD3	2.19	0.43
1:E:81:LYS:HD3	1:E:81:LYS:HA	1.65	0.43
1:E:201:LEU:C	1:E:202:ASN:HD22	2.22	0.43
1:E:273:VAL:HG12	1:E:292:ILE:HB	2.01	0.43
2:F:304:MET:HE1	2:H:170:GLY:HA2	2.00	0.43
1:G:1:LEU:HB3	1:G:90:ASP:OD2	2.17	0.43
1:G:81:LYS:HD2	1:G:81:LYS:HA	1.91	0.43
1:G:246:ILE:H	1:G:303:ASP:CA	2.31	0.43
2:H:28:VAL:HG13	2:H:69:LYS:NZ	2.33	0.43
2:H:28:VAL:HA	2:H:71:ILE:HG13	2.00	0.43
2:H:164:LYS:HB3	2:H:165:PHE:CD1	2.53	0.43
2:H:331:LYS:HB2	2:H:333:GLN:NE2	2.32	0.43
1:I:45:LYS:HD2	1:I:53:PHE:H	1.84	0.43
1:I:159:LYS:HG3	1:I:218:LEU:HD21	2.00	0.43
1:I:289:SER:OG	1:I:290:SER:N	2.51	0.43
2:J:263:ALA:O	2:J:268:LYS:HG3	2.19	0.43
2:J:288:VAL:HG21	2:J:291:THR:HG1	1.83	0.43
1:K:18(A):TRP:NE1	1:K:23:SER:OG	2.52	0.43
1:K:66:ILE:HB	1:K:69:LYS:HB2	2.00	0.43
1:K:213:ALA:O	1:K:216:LEU:HB2	2.18	0.43
2:L:293:ASP:O	2:L:297:THR:HG23	2.17	0.43
2:P:174:THR:HA	2:P:240:VAL:CB	2.47	0.43
1:Q:214:VAL:O	1:Q:217:VAL:HB	2.18	0.43
1:Q:245:ASN:N	1:Q:245:ASN:OD1	2.49	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:Q:349:CYS:O	1:Q:353:PRO:N	2.52	0.43
2:R:208:THR:HG23	2:R:210:ALA:HB3	2.01	0.43
2:R:213:ALA:HA	2:R:216:LEU:HD13	2.00	0.43
2:R:230:LEU:O	2:R:232:VAL:HG13	2.19	0.43
1:A:45:LYS:NZ	1:A:56:ASP:HA	2.32	0.43
1:A:175:THR:HG22	1:A:230:LEU:HD21	2.00	0.43
1:A:193:LEU:HD21	1:C:277:PRO:HG3	2.01	0.43
1:A:276:ILE:O	1:A:278:LEU:HG	2.19	0.43
1:A:318:SER:O	1:A:322:VAL:HG23	2.19	0.43
2:B:20:ARG:HG3	2:B:322:VAL:CG1	2.49	0.43
2:B:263:ALA:O	2:B:268:LYS:HG3	2.19	0.43
1:C:31:ASN:OD1	1:C:74:VAL:HB	2.19	0.43
1:C:69:LYS:HD2	1:C:69:LYS:HA	1.82	0.43
1:C:132:VAL:HA	1:C:159:LYS:HD2	2.00	0.43
1:C:176:HIS:H	1:C:232:VAL:CG1	2.31	0.43
1:C:214:VAL:HG21	1:C:225:LEU:HD23	2.00	0.43
1:C:229:ALA:O	1:C:230:LEU:HD13	2.19	0.43
1:C:294:SER:O	1:C:297:THR:OG1	2.23	0.43
1:C:324:LEU:HD23	1:C:327:LEU:HD11	2.00	0.43
2:D:55:ALA:HB1	2:D:67:ASP:OD1	2.19	0.43
2:D:192:ASP:HB3	2:D:195:ARG:HB2	2.00	0.43
2:D:218:LEU:HA	2:D:219:PRO:HD3	1.91	0.43
1:E:192:ASP:OD2	1:E:194:ARG:HB2	2.19	0.43
2:F:13:ARG:NE	2:F:43:LEU:HB3	2.34	0.43
2:F:117:LEU:HA	2:F:144:ILE:O	2.18	0.43
2:F:326:ASP:HA	2:F:329:ALA:HB3	2.00	0.43
1:G:126:PRO:CD	1:G:144:ILE:HG22	2.49	0.43
1:G:283:PHE:N	1:G:283:PHE:CD1	2.86	0.43
2:H:21:LYS:H	2:H:21:LYS:NZ	2.15	0.43
1:I:10:ARG:HD2	1:I:13:ARG:HH12	1.83	0.43
1:I:60:ILE:H	1:I:64:PHE:HB2	1.84	0.43
1:I:121:PRO:HG3	1:I:148:SER:H	1.82	0.43
1:I:184:LEU:HB3	2:L:184:LEU:HD13	2.01	0.43
2:J:10:ARG:NH1	1:K:186:ASP:O	2.52	0.43
2:J:167:ILE:HG23	2:J:246:VAL:HG12	1.99	0.43
2:J:192:ASP:OD2	2:J:195:ARG:HG3	2.19	0.43
2:J:194:ARG:NH2	2:L:277:PRO:HA	2.34	0.43
2:J:197:ARG:NH2	1:K:46:TYR:O	2.52	0.43
2:J:221:LEU:HG	2:J:225:LEU:HG	2.00	0.43
2:J:311:TYR:CE2	2:J:313:ASN:HB3	2.53	0.43
1:K:55:ALA:HB1	1:K:67:ASP:OD2	2.18	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:84:TRP:HA	1:K:89:ILE:HG13	2.00	0.43
1:K:176:HIS:C	1:K:231:ARG:HA	2.39	0.43
1:K:263:ALA:HB2	1:K:271:LEU:HD22	1.99	0.43
1:O:160:VAL:HA	1:O:163:GLU:OE2	2.18	0.43
1:O:172:MET:HG2	1:O:173:THR:N	2.34	0.43
1:O:274:CYS:SG	1:O:276:ILE:N	2.87	0.43
2:P:185:LEU:HD12	2:P:185:LEU:HA	1.65	0.43
2:P:185:LEU:O	2:P:187:ALA:N	2.51	0.43
2:P:191:ARG:H	2:P:191:ARG:CZ	2.32	0.43
2:P:267:LEU:HA	2:P:270:ILE:HB	2.01	0.43
2:P:297:THR:HG22	2:P:307:VAL:HA	2.00	0.43
2:P:300:MET:HE1	2:R:226:ASN:HB3	2.00	0.43
1:Q:2:LYS:O	1:Q:90:ASP:HB2	2.19	0.43
1:Q:31:ASN:CA	1:Q:74:VAL:HG12	2.38	0.43
1:Q:168:VAL:HG22	1:Q:169:LYS:HG3	2.01	0.43
1:Q:173:THR:HG23	1:Q:230:LEU:HD23	2.01	0.43
1:Q:256:ASN:O	1:Q:259:PHE:HB2	2.18	0.43
1:Q:281:VAL:HA	1:Q:284:ARG:NH2	2.32	0.43
2:R:7:GLY:O	2:R:95:GLY:HA3	2.18	0.43
1:A:17:ARG:NH1	1:A:44:LEU:O	2.52	0.43
1:A:32:ASP:O	1:A:75:SER:OG	2.20	0.43
1:A:128:TYR:HD1	1:A:128:TYR:HA	1.62	0.43
1:A:165:LEU:HD23	1:A:248:LYS:HD2	2.00	0.43
1:A:202:ASN:HD22	1:C:279:VAL:CG2	2.15	0.43
1:A:243:VAL:HA	1:A:306:LYS:HA	2.00	0.43
1:A:296:LEU:HD11	1:A:310:TRP:HE1	1.83	0.43
2:B:1:LEU:HD21	2:B:328:VAL:HB	2.01	0.43
2:B:11:ILE:O	2:B:14:ASN:HB3	2.18	0.43
1:C:105:ALA:HB1	1:C:143:ILE:HG12	2.00	0.43
1:C:200:ALA:HB3	1:C:201:LEU:HD22	2.01	0.43
2:D:214:VAL:O	2:D:217:VAL:HG22	2.19	0.43
1:E:41:THR:O	1:E:42:HIS:C	2.57	0.43
1:E:62:GLU:HB2	1:E:72:LYS:NZ	2.34	0.43
1:E:89:ILE:O	1:E:113:ALA:HA	2.19	0.43
1:E:254:ASP:OD2	1:E:254:ASP:N	2.49	0.43
1:E:323:ASP:HA	1:E:326:ASP:OD2	2.18	0.43
2:F:42:HIS:O	2:F:46:TYR:N	2.50	0.43
2:F:232:VAL:O	2:F:234:THR:N	2.50	0.43
2:F:264:ASP:HA	2:F:268:LYS:NZ	2.34	0.43
1:G:20:ARG:HD3	1:G:21:LYS:HZ3	1.83	0.43
1:G:175:THR:N	1:G:239:VAL:O	2.49	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:I:3:VAL:HA	1:I:91:ILE:O	2.19	0.43
1:I:84:TRP:HE1	1:I:108:HIS:HA	1.84	0.43
1:I:182:GLN:OE1	1:I:182:GLN:N	2.49	0.43
2:J:161:LEU:O	2:J:165:PHE:N	2.45	0.43
2:J:263:ALA:O	2:J:268:LYS:N	2.51	0.43
1:K:92:VAL:O	1:K:93:ILE:HD13	2.19	0.43
1:K:167:ILE:HD13	1:K:244:VAL:HG11	1.99	0.43
2:L:84:TRP:CE3	2:L:84:TRP:HA	2.53	0.43
2:L:190:HIS:HE1	2:L:195:ARG:HD2	1.83	0.43
1:O:18(A):TRP:HA	1:O:20:ARG:CB	2.48	0.43
1:O:82:LEU:O	1:O:84:TRP:N	2.50	0.43
1:O:236:ASN:HD21	1:O:312:ASP:CG	2.22	0.43
2:P:117:LEU:HA	2:P:144:ILE:O	2.18	0.43
2:P:291:THR:HB	2:P:310:TRP:CD1	2.54	0.43
1:Q:279:VAL:HG22	1:Q:280:SER:H	1.84	0.43
1:A:221:LEU:HD22	1:A:221:LEU:HA	1.83	0.43
1:A:283:PHE:CD1	1:A:283:PHE:N	2.86	0.43
1:A:320:ARG:HA	1:A:323:ASP:OD2	2.18	0.43
2:B:39:GLN:HE22	1:C:191:ARG:HE	1.67	0.43
1:C:107:LYS:HA	1:C:110:GLN:CD	2.39	0.43
1:C:139:HIS:HE2	1:C:333:PRO:HB3	1.84	0.43
1:C:151:THR:HG22	1:C:214:VAL:HG13	2.00	0.43
2:D:171:THR:O	2:D:242:LEU:HD12	2.18	0.43
2:D:237:VAL:HA	2:D:313:ASN:OD1	2.19	0.43
1:E:204:VAL:HB	1:E:231:ARG:HB2	2.00	0.43
2:F:2:LYS:HE3	2:F:87:MET:HB3	2.00	0.43
2:H:7:GLY:O	2:H:95:GLY:HA3	2.18	0.43
2:H:15:PHE:CE2	2:H:321:VAL:HG12	2.53	0.43
2:H:291:THR:O	2:H:292:ILE:HD13	2.19	0.43
1:I:139:HIS:CE1	1:I:331:LYS:HE3	2.53	0.43
2:J:29:VAL:O	2:J:30:ILE:HD13	2.18	0.43
2:J:116:VAL:O	2:J:144:ILE:HG12	2.18	0.43
2:J:272:SER:OG	2:J:290:SER:O	2.25	0.43
2:J:300:MET:HB2	2:J:304:MET:HG2	2.01	0.43
3:J:401:NAD:O2N	3:J:401:NAD:H4D	2.18	0.43
1:K:2:LYS:HE3	1:K:2:LYS:HB2	1.74	0.43
1:K:31:ASN:OD1	1:K:76:ASN:N	2.51	0.43
1:K:246:ILE:N	1:K:303:ASP:HB2	2.33	0.43
1:O:23:SER:OG	1:O:25:LEU:O	2.35	0.43
1:O:186:ASP:HB2	2:R:10:ARG:HH12	1.83	0.43
1:O:237:VAL:HG11	1:O:280:SER:HB3	2.00	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:P:154:LEU:H	2:P:154:LEU:HG	1.60	0.43
1:Q:10:ARG:N	1:Q:13:ARG:HH21	2.17	0.43
1:Q:74:VAL:HG22	1:Q:75:SER:H	1.84	0.43
1:Q:267:LEU:HB3	1:Q:271:LEU:HB3	2.00	0.43
2:R:13:ARG:HB3	2:R:44:LEU:HD12	1.99	0.43
2:R:85:GLY:CA	2:R:112:GLY:HA3	2.49	0.43
2:R:221:LEU:H	2:R:221:LEU:HD12	1.83	0.43
2:R:313:ASN:OD1	2:R:313:ASN:N	2.52	0.43
1:A:132:VAL:N	1:A:134:GLU:OE1	2.52	0.43
1:A:152:ASN:OD1	1:A:152:ASN:N	2.52	0.43
1:A:239:VAL:HB	1:A:310:TRP:CE2	2.53	0.43
1:A:246:ILE:HB	1:A:305:VAL:CG1	2.49	0.43
2:B:6:ASN:ND2	2:B:108:HIS:HE1	2.16	0.43
2:B:38:LYS:HZ2	2:B:38:LYS:H	1.65	0.43
1:C:151:THR:HG1	1:C:152:ASN:H	1.67	0.43
1:C:242:LEU:O	1:C:306:LYS:HA	2.18	0.43
1:C:332:TRP:CG	1:C:333:PRO:HD2	2.54	0.43
2:D:10:ARG:O	2:D:13:ARG:HD2	2.18	0.43
2:D:161:LEU:HD12	2:D:165:PHE:CD1	2.54	0.43
2:D:181:ASP:HB3	2:D:182:GLN:NE2	2.34	0.43
2:D:182:GLN:HG3	2:D:195:ARG:HG2	2.01	0.43
1:E:0:LYS:H2	1:E:26:ASP:N	2.16	0.43
1:E:71:ILE:HG22	1:E:72:LYS:O	2.19	0.43
1:E:121:PRO:HG3	1:E:148:SER:HB3	2.00	0.43
1:E:134:GLU:HG2	1:E:135:LYS:H	1.84	0.43
1:E:257:ASN:ND2	1:E:260:ARG:HH11	2.16	0.43
2:F:47:ASP:C	1:G:197:ARG:HH22	2.22	0.43
2:F:283:PHE:N	2:F:283:PHE:CD1	2.87	0.43
1:G:79:PRO:HB3	1:G:108:HIS:CG	2.54	0.43
1:G:100:VAL:CG2	1:G:122(A):LYS:HG2	2.49	0.43
1:G:178:TYR:CE1	1:G:235:PRO:HA	2.54	0.43
1:G:267:LEU:O	1:G:271:LEU:HB3	2.19	0.43
2:H:90:ASP:HB3	2:H:332:TRP:CH2	2.53	0.43
2:H:208:THR:HG23	2:H:210:ALA:HB3	2.01	0.43
1:I:154:LEU:HA	1:I:157:PHE:CZ	2.53	0.43
2:J:79:PRO:HG2	2:J:107:LYS:HB2	2.01	0.43
1:K:11:ILE:HG22	3:K:401:NAD:O2N	2.18	0.43
2:L:45:LYS:NZ	2:L:53:PHE:HB3	2.34	0.43
2:L:69:LYS:HZ3	2:L:71:ILE:HG12	1.84	0.43
1:O:149:CYS:HB2	1:O:313:ASN:HA	2.01	0.43
1:O:162:ASP:O	1:O:165:LEU:N	2.52	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:O:170:GLY:O	1:O:225:LEU:HA	2.18	0.43
1:O:197:ARG:HG3	1:Q:279:VAL:HB	2.01	0.43
2:P:1:LEU:O	2:P:26:ASP:N	2.52	0.43
2:P:226:ASN:HB3	2:R:300:MET:HE1	2.01	0.43
2:P:326:ASP:O	2:P:330:ASN:N	2.29	0.43
1:Q:63:THR:HG23	1:Q:72:LYS:HA	2.01	0.43
1:A:53:PHE:CE2	1:A:55:ALA:HB3	2.54	0.43
2:B:38:LYS:H	2:B:38:LYS:HD3	1.84	0.43
2:B:240:VAL:HG13	2:B:309:ALA:CB	2.48	0.43
1:C:285:CYS:HA	1:C:315:TRP:CD2	2.54	0.43
1:C:293:ASP:O	1:C:297:THR:HG23	2.19	0.43
1:C:300:MET:HG3	1:C:301:GLY:N	2.34	0.43
2:D:109:LEU:HD11	2:D:143:ILE:HG12	2.00	0.43
2:D:172:MET:SD	2:D:227:GLY:HA3	2.59	0.43
2:D:204:VAL:CG2	2:D:231:ARG:HB2	2.48	0.43
1:E:38:LYS:HG3	1:E:39:SER:N	2.27	0.43
1:E:129:VAL:N	1:E:133:ASN:OD1	2.32	0.43
1:E:221:LEU:C	1:E:224:LYS:HZ2	2.22	0.43
2:F:31:ASN:OD1	2:F:76:ASP:N	2.51	0.43
2:F:237:VAL:HG13	2:F:311:TYR:O	2.18	0.43
2:F:243:VAL:HA	2:F:305:VAL:O	2.18	0.43
1:G:14:ASN:OD1	1:G:14:ASN:N	2.52	0.43
2:H:18:CYS:SG	2:H:318:SER:OG	2.77	0.43
1:I:65:SER:HB2	1:I:70:PRO:HA	2.01	0.43
1:I:89:ILE:HA	1:I:89:ILE:HD13	1.87	0.43
1:I:179:THR:H	1:I:182:GLN:HE22	1.67	0.43
1:I:194:ARG:HG3	1:I:194:ARG:NH1	2.32	0.43
1:I:202:ASN:CB	1:K:279:VAL:HB	2.49	0.43
1:I:270:VAL:HG13	1:I:320:ARG:NH1	2.34	0.43
2:J:10:ARG:HH21	1:K:185:LEU:HB3	1.84	0.43
1:K:42:HIS:CG	1:K:46:TYR:HE2	2.36	0.43
1:K:221:LEU:HD22	1:K:221:LEU:HA	1.82	0.43
2:L:92:VAL:HG21	2:L:108:HIS:HB3	1.99	0.43
1:O:82:LEU:HD13	1:O:84:TRP:HZ2	1.84	0.42
1:O:271:LEU:CA	1:O:288:PHE:HB3	2.49	0.42
1:Q:96:THR:HA	3:Q:401:NAD:C1B	2.48	0.42
1:Q:100:VAL:HB	1:Q:122(A):LYS:HB2	2.01	0.42
1:Q:127:THR:HG21	1:Q:216:LEU:HB3	2.01	0.42
1:Q:160:VAL:HA	1:Q:163:GLU:OE2	2.18	0.42
1:Q:242:LEU:O	1:Q:306:LYS:HA	2.19	0.42
2:R:14:ASN:OD1	2:R:315:TRP:HA	2.19	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:R:117:LEU:HA	2:R:145:SER:HA	2.01	0.42
1:A:258:ALA:HA	1:A:261:LYS:HB2	2.01	0.42
2:B:85:GLY:HA3	2:B:112:GLY:HA3	2.00	0.42
2:B:118:ILE:HG22	2:B:120:ALA:N	2.34	0.42
2:B:221:LEU:HG	2:B:225:LEU:HG	2.00	0.42
2:B:230:LEU:O	2:B:232:VAL:HG13	2.19	0.42
1:C:45:LYS:O	1:C:53:PHE:N	2.52	0.42
1:C:152:ASN:HD21	1:C:320:ARG:CB	2.32	0.42
1:C:161:LEU:O	1:C:165:LEU:N	2.43	0.42
1:C:312:ASP:OD2	1:C:314:GLU:N	2.52	0.42
1:E:96:THR:O	1:E:98:VAL:HG13	2.19	0.42
1:E:179:THR:OG1	1:E:181:ASP:OD2	2.37	0.42
1:E:232:VAL:HB	1:E:233:PRO:HD2	2.00	0.42
1:E:298:MET:HG2	1:E:306:LYS:HD3	2.00	0.42
1:E:329:ALA:O	1:E:332:TRP:HB2	2.18	0.42
2:F:29:VAL:HA	2:F:72:LYS:O	2.19	0.42
2:F:29:VAL:O	2:F:30:ILE:HD13	2.19	0.42
2:F:109:LEU:HA	2:F:113:ALA:HB3	2.01	0.42
2:F:129:VAL:HG13	2:F:130:VAL:O	2.19	0.42
2:F:262:SER:HA	2:F:265:ASN:ND2	2.34	0.42
2:F:280:SER:N	2:H:202:ASN:HD22	2.16	0.42
2:F:287:ASP:O	2:F:320:ARG:NH1	2.51	0.42
2:F:297:THR:HG22	2:F:307:VAL:HA	2.00	0.42
1:G:321:VAL:HA	1:G:324:LEU:HG	2.00	0.42
1:I:8:PHE:HZ	1:I:16:LEU:HD13	1.83	0.42
1:I:126:PRO:O	1:I:128:TYR:N	2.51	0.42
1:I:171:THR:HA	1:I:226:ASN:H	1.84	0.42
2:J:20:ARG:HG3	2:J:322:VAL:CG1	2.49	0.42
2:J:194:ARG:NH2	2:L:278:LEU:H	2.17	0.42
1:K:262:ALA:HA	1:K:266:PRO:HD2	2.02	0.42
2:L:89:ILE:HD13	2:L:89:ILE:HA	1.77	0.42
1:O:188:SER:OG	2:R:39:GLN:NE2	2.52	0.42
1:O:228:ILE:HG21	1:Q:296:LEU:HD22	2.01	0.42
2:P:77:ARG:CB	3:P:401:NAD:H62A	2.29	0.42
2:P:94:GLU:OE2	2:P:98:VAL:N	2.52	0.42
2:P:159:LYS:HE3	2:P:159:LYS:HB3	1.86	0.42
2:P:193:LEU:HB2	2:R:277:PRO:HG2	1.99	0.42
1:Q:37:VAL:CG2	1:Q:62:GLU:HA	2.49	0.42
1:Q:55:ALA:HB1	1:Q:67:ASP:OD1	2.19	0.42
1:A:185:LEU:HD12	2:D:10:ARG:HH12	1.74	0.42
2:B:59:THR:HA	2:B:64:ILE:HA	2.00	0.42

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:193:LEU:O	2:B:197:ARG:HG2	2.19	0.42
2:B:278:LEU:HB3	2:B:283:PHE:HE1	1.84	0.42
2:B:288:VAL:HG21	2:B:291:THR:HG1	1.85	0.42
1:C:6:ASN:ND2	1:C:96:THR:H	2.17	0.42
1:C:72:LYS:HB3	1:C:72:LYS:HE2	1.36	0.42
2:D:10:ARG:CG	3:D:401:NAD:O1N	2.67	0.42
2:D:92:VAL:HG21	2:D:108:HIS:HB3	2.01	0.42
1:E:139:HIS:CE1	1:E:333:PRO:HD2	2.55	0.42
1:E:149:CYS:HA	1:E:152:ASN:HB2	2.01	0.42
1:E:300:MET:SD	1:G:171:THR:OG1	2.76	0.42
2:F:95:GLY:HA2	2:F:119:THR:HG21	2.01	0.42
2:F:159:LYS:HG3	2:F:218:LEU:HD22	2.01	0.42
2:F:226:ASN:HB3	2:H:300:MET:HE1	2.00	0.42
1:G:9:GLY:HA2	3:G:401:NAD:H4B	2.01	0.42
1:G:24:PRO:HB2	1:G:329:ALA:HB1	2.01	0.42
1:G:58:LYS:HE2	1:G:68:GLY:N	2.34	0.42
1:G:79:PRO:HG2	1:G:107:LYS:HB2	2.01	0.42
1:G:281:VAL:HA	1:G:284:ARG:HG3	2.00	0.42
2:H:271:LEU:HD13	2:H:271:LEU:HA	1.84	0.42
1:I:1:LEU:HD21	1:I:332:TRP:NE1	2.33	0.42
2:J:119:THR:OG1	2:J:120:ALA:N	2.52	0.42
2:J:168:ILE:N	2:J:245:GLN:O	2.52	0.42
2:J:176:HIS:CG	2:J:231:ARG:HG2	2.54	0.42
2:J:205:PRO:HA	2:J:230:LEU:HD23	2.01	0.42
1:K:9:GLY:HA2	3:K:401:NAD:O3B	2.19	0.42
1:K:84:TRP:NE1	1:K:92:VAL:HG21	2.35	0.42
1:K:151:THR:HA	1:K:154:LEU:HG	2.01	0.42
2:L:145:SER:OG	2:L:146:ASN:N	2.52	0.42
2:L:162:ASP:OD1	2:L:166:GLY:HA2	2.19	0.42
2:L:190:HIS:HB3	2:L:196:ALA:HB2	2.01	0.42
2:L:190:HIS:ND1	2:L:195:ARG:HB2	2.33	0.42
2:L:253:GLU:O	2:L:256:ASN:N	2.51	0.42
1:O:47:ASP:H	1:O:51:GLY:C	2.23	0.42
2:P:29:VAL:O	2:P:30:ILE:HD13	2.19	0.42
2:P:103:ASP:HB2	2:P:107:LYS:HZ3	1.84	0.42
2:P:283:PHE:N	2:P:283:PHE:CD1	2.87	0.42
1:Q:230:LEU:HD13	1:Q:230:LEU:HA	1.63	0.42
2:R:20:ARG:NH2	2:R:319:GLN:O	2.53	0.42
2:R:195:ARG:HH21	2:R:231:ARG:HH21	1.66	0.42
2:R:289:SER:O	2:R:311:TYR:HA	2.19	0.42
1:A:139:HIS:CE1	1:A:328:VAL:HG13	2.54	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:190:HIS:HE1	1:A:191:ARG:HE	1.67	0.42
2:B:102:ARG:HA	2:B:105:ALA:HB3	2.02	0.42
2:B:171:THR:O	2:B:242:LEU:HD12	2.18	0.42
2:B:234:THR:OG1	2:B:236:ASN:N	2.45	0.42
2:B:277:PRO:HG3	2:D:193:LEU:HD13	2.02	0.42
3:B:401:NAD:H2D	3:B:401:NAD:H6N	1.72	0.42
1:C:77:ARG:CZ	3:C:401:NAD:C4A	2.97	0.42
1:C:134:GLU:HB3	1:C:327:LEU:HD13	2.00	0.42
1:C:271:LEU:HD11	1:C:273:VAL:HG22	2.01	0.42
2:D:84:TRP:HA	2:D:84:TRP:HE3	1.84	0.42
2:D:106:GLY:O	2:D:110:GLN:NE2	2.52	0.42
2:D:165:PHE:HZ	2:D:254:GLU:HG2	1.83	0.42
2:D:192:ASP:OD2	2:D:194:ARG:HB2	2.20	0.42
2:D:204:VAL:HB	2:D:231:ARG:H	1.84	0.42
2:D:240:VAL:HG12	2:D:311:TYR:HD1	1.84	0.42
1:E:202:ASN:OD1	1:G:281:VAL:HG22	2.20	0.42
2:F:6:ASN:HB2	2:F:84:TRP:CH2	2.52	0.42
2:F:45:LYS:HD3	2:F:57:VAL:CB	2.48	0.42
2:F:49:ILE:HG23	2:F:284:ARG:NH1	2.34	0.42
2:F:55:ALA:O	2:F:57:VAL:N	2.52	0.42
2:F:109:LEU:HD22	2:F:114:LYS:C	2.39	0.42
2:F:296:LEU:HB2	2:F:308:ILE:HG13	2.00	0.42
1:G:17:ARG:CZ	1:G:53:PHE:HB2	2.49	0.42
1:G:154:LEU:HG	1:G:158:VAL:HG11	2.01	0.42
1:G:242:LEU:HB3	1:G:307:VAL:HG12	2.02	0.42
1:G:264:ALA:HA	1:G:268:LYS:NZ	2.35	0.42
1:G:300:MET:N	1:G:304:MET:O	2.52	0.42
2:H:14:ASN:OD1	2:H:315:TRP:HA	2.19	0.42
2:H:109:LEU:HD11	2:H:143:ILE:HG23	2.00	0.42
2:H:119:THR:O	2:H:317:TYR:OH	2.37	0.42
2:H:179:THR:N	2:H:182:GLN:HE22	2.17	0.42
2:H:179:THR:N	2:H:182:GLN:OE1	2.50	0.42
1:I:0:LYS:N	1:I:26:ASP:OD1	2.47	0.42
2:J:18:CYS:O	2:J:20:ARG:HG2	2.18	0.42
2:J:59:THR:HA	2:J:64:ILE:HG23	2.01	0.42
1:K:166:GLY:HA3	1:K:247:GLU:OE1	2.19	0.42
1:K:239:VAL:HA	1:K:309:ALA:O	2.19	0.42
1:K:243:VAL:O	1:K:244:VAL:HG13	2.19	0.42
2:L:176:HIS:HB3	2:L:231:ARG:HA	2.01	0.42
1:O:1:LEU:HD23	1:O:91:ILE:HG13	2.00	0.42
1:Q:15:PHE:O	1:Q:18:CYS:HB2	2.19	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:Q:18(B):HIS:CE1	1:Q:69:LYS:HD2	2.54	0.42
1:Q:58:LYS:HD3	1:Q:59:ILE:N	2.34	0.42
2:B:66:VAL:N	2:B:69:LYS:O	2.38	0.42
2:B:135:GLU:CD	2:B:135:GLU:H	2.21	0.42
2:B:176:HIS:ND1	2:B:231:ARG:HG2	2.34	0.42
1:C:234:THR:CB	1:C:237:VAL:HG12	2.49	0.42
2:D:148:SER:HG	2:D:151:THR:H	1.59	0.42
2:D:224:LYS:HZ1	2:D:225:LEU:HD23	1.84	0.42
1:E:0:LYS:HE3	1:E:24:PRO:O	2.19	0.42
1:E:9:GLY:O	1:E:13:ARG:HG3	2.19	0.42
1:E:18(A):TRP:CH2	1:E:71:ILE:HD11	2.55	0.42
2:F:28:VAL:HG13	2:F:70:VAL:O	2.19	0.42
2:F:139:HIS:HD2	2:F:333:GLN:HB2	1.84	0.42
2:F:151:THR:HG21	2:F:213:ALA:HB3	2.01	0.42
1:G:300:MET:HB3	1:G:304:MET:CB	2.48	0.42
1:G:300:MET:HG2	1:G:304:MET:HE2	2.01	0.42
2:H:137:TYR:CZ	2:H:328:VAL:HA	2.55	0.42
2:H:319:GLN:HB3	2:H:320:ARG:HH21	1.83	0.42
1:I:306:LYS:HD2	1:K:228:ILE:HD13	2.01	0.42
2:J:128:TYR:HD2	2:J:144:ILE:HB	1.84	0.42
2:J:153:CYS:HG	2:J:290:SER:HG	1.68	0.42
1:K:137:TYR:CG	1:K:138:GLY:N	2.87	0.42
2:L:84:TRP:HA	2:L:84:TRP:HE3	1.85	0.42
2:L:205:PRO:HA	2:L:230:LEU:HD23	2.00	0.42
1:O:116:VAL:O	1:O:144:ILE:HG23	2.19	0.42
1:O:132:VAL:HG11	1:O:155:ALA:HB1	2.01	0.42
2:P:139:HIS:HB3	2:P:333:GLN:CD	2.40	0.42
2:R:251:PHE:CE1	2:R:254:GLU:HB2	2.54	0.42
2:R:291:THR:O	2:R:292:ILE:HD13	2.19	0.42
1:A:5:ILE:HB	1:A:30:VAL:HG13	2.02	0.42
1:A:211:ALA:CB	1:A:227:GLY:H	2.33	0.42
1:A:250:VAL:HG23	1:A:251:THR:O	2.20	0.42
2:B:14:ASN:ND2	2:B:314:GLU:HB3	2.34	0.42
2:B:194:ARG:NH1	2:D:279:VAL:HG13	2.35	0.42
1:C:37:VAL:HG11	1:C:64:PHE:HB3	2.01	0.42
1:C:60(A):ASP:OD1	1:C:62:GLU:HG2	2.19	0.42
1:C:118:ILE:HB	1:C:145:SER:HB2	2.02	0.42
2:D:145:SER:OG	2:D:146:ASN:N	2.51	0.42
1:E:53:PHE:CE2	1:E:55:ALA:HB3	2.54	0.42
1:E:90:ASP:OD1	1:E:90:ASP:N	2.52	0.42
1:E:149:CYS:HB3	1:E:317:TYR:CD1	2.54	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:204:VAL:CG2	1:E:231:ARG:HB2	2.49	0.42
1:E:246:ILE:N	1:E:303:ASP:O	2.53	0.42
2:F:31:ASN:HA	2:F:73:VAL:HG23	2.00	0.42
2:F:140:ALA:N	2:F:333:GLN:OE1	2.52	0.42
1:G:21:LYS:HE2	1:G:21:LYS:HB2	1.84	0.42
1:G:83:PRO:HB2	1:G:86:GLU:HB3	2.02	0.42
2:H:53:PHE:HD1	2:H:54:ASP:N	2.18	0.42
2:H:255:VAL:O	2:H:258:ALA:HB3	2.20	0.42
2:H:293:ASP:HB3	2:H:308:ILE:HG13	2.00	0.42
3:H:401:NAD:HO3N	3:H:401:NAD:PA	2.42	0.42
1:I:40:ALA:HA	1:I:43:LEU:HD12	2.02	0.42
2:J:94:GLU:HG3	2:J:99:PHE:CD2	2.55	0.42
2:J:208:THR:HG22	2:J:229:ALA:HB2	2.01	0.42
2:J:240:VAL:HG13	2:J:309:ALA:CB	2.48	0.42
1:K:129:VAL:HG13	1:K:132:VAL:HB	2.00	0.42
1:K:276:ILE:HD13	1:K:276:ILE:H	1.84	0.42
2:L:172:MET:SD	2:L:227:GLY:HA3	2.60	0.42
2:L:247:SER:OG	2:L:248:LYS:N	2.52	0.42
1:O:37:VAL:CG1	1:O:62:GLU:HA	2.21	0.42
1:O:166:GLY:O	1:O:246:ILE:HD12	2.19	0.42
1:O:172:MET:HG3	1:O:242:LEU:HB2	2.02	0.42
1:O:186:ASP:H	2:R:10:ARG:NH2	2.17	0.42
1:O:195:ARG:HH21	1:O:231:ARG:CZ	2.33	0.42
1:O:202:ASN:OD1	1:Q:280:SER:HB2	2.19	0.42
2:P:6:ASN:HB2	2:P:84:TRP:HH2	1.84	0.42
2:P:12:GLY:O	2:P:16:LEU:HG	2.20	0.42
2:P:13:ARG:HB3	2:P:44:LEU:HB2	2.01	0.42
2:P:31:ASN:OD1	2:P:76:ASP:N	2.52	0.42
2:P:120:ALA:HB2	3:P:401:NAD:H2D	2.01	0.42
1:Q:20:ARG:HA	1:Q:20:ARG:CZ	2.50	0.42
2:R:60:ALA:H	2:R:64:ILE:HA	1.85	0.42
2:R:99:PHE:HD1	2:R:104:GLY:HA3	1.81	0.42
1:A:191:ARG:C	2:D:39:GLN:HE22	2.22	0.42
1:A:272:ASP:HB3	1:A:291:THR:OG1	2.20	0.42
1:A:306:LYS:NZ	1:C:228:ILE:HG22	2.35	0.42
2:B:237:VAL:HG13	2:B:311:TYR:O	2.19	0.42
2:B:253:GLU:HA	2:B:256:ASN:OD1	2.19	0.42
1:C:14:ASN:H	1:C:14:ASN:HD22	1.67	0.42
1:C:28:VAL:HA	1:C:71:ILE:CG1	2.49	0.42
1:C:229:ALA:C	1:C:230:LEU:HD22	2.40	0.42
1:E:155:ALA:N	1:E:156:PRO:HD2	2.35	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:0:LYS:H3	1:G:24:PRO:C	2.22	0.42
1:G:57:VAL:HG23	1:G:65:SER:O	2.20	0.42
1:G:248:LYS:HA	1:G:248(A):VAL:CG1	2.44	0.42
2:H:1:LEU:HA	2:H:1:LEU:HD12	1.86	0.42
2:H:38:LYS:H	2:H:38:LYS:HZ2	1.66	0.42
2:H:251:PHE:CE1	2:H:254:GLU:HB2	2.54	0.42
2:H:311:TYR:CE2	2:H:313:ASN:HB3	2.54	0.42
1:I:1:LEU:HD21	1:I:332:TRP:HE1	1.85	0.42
2:J:1:LEU:O	2:J:3:VAL:HG23	2.19	0.42
2:J:7:GLY:O	2:J:95:GLY:HA3	2.19	0.42
2:J:179:THR:N	2:J:182:GLN:OE1	2.47	0.42
1:K:20:ARG:HA	1:K:21:LYS:NZ	2.34	0.42
1:K:81:LYS:HE2	1:K:81:LYS:HB2	1.58	0.42
1:K:89:ILE:O	1:K:113:ALA:HA	2.20	0.42
1:K:133:ASN:N	1:K:134:GLU:OE1	2.52	0.42
1:K:279:VAL:N	1:K:282:ASP:OD2	2.41	0.42
2:L:268:LYS:O	2:L:270:ILE:HG12	2.19	0.42
1:O:18(B):HIS:O	1:O:19:GLY:C	2.57	0.42
1:O:83:PRO:HA	1:O:86:GLU:HB2	2.00	0.42
1:O:100:VAL:O	1:O:122:ALA:HB1	2.19	0.42
1:O:139:HIS:ND1	1:O:139(A):ASP:N	2.66	0.42
2:P:289:SER:HG	2:P:289:SER:H	1.49	0.42
2:R:255:VAL:O	2:R:258:ALA:HB3	2.20	0.42
2:R:293:ASP:HB3	2:R:308:ILE:HG13	2.02	0.42
1:A:29:VAL:HG13	1:A:72:LYS:HB2	2.02	0.42
1:A:183:ARG:HH22	1:G:357:GLU:HA	1.85	0.42
1:A:211:ALA:HB1	1:A:227:GLY:H	1.84	0.42
1:C:77:ARG:HA	1:C:77:ARG:HD2	1.87	0.42
2:D:29:VAL:HA	2:D:72:LYS:HB2	2.00	0.42
1:E:171:THR:OG1	1:G:306:LYS:NZ	2.25	0.42
1:E:246:ILE:N	1:E:304:MET:HA	2.31	0.42
2:F:123:GLY:O	2:F:125:ILE:N	2.48	0.42
1:G:327:LEU:HA	1:G:330:ASN:HD21	1.84	0.42
2:H:30:ILE:HG22	2:H:31:ASN:H	1.85	0.42
2:H:44:LEU:O	2:H:53:PHE:HB2	2.19	0.42
2:H:64:ILE:O	2:H:71:ILE:N	2.53	0.42
2:J:183:ARG:HD2	2:J:187:ALA:HB3	2.02	0.42
2:J:190:HIS:HB3	2:J:196:ALA:HB2	2.02	0.42
2:J:285:CYS:HA	2:J:315:TRP:CD1	2.54	0.42
2:J:311:TYR:HE2	2:J:313:ASN:HB3	1.85	0.42
1:K:30:VAL:HG22	1:K:73:VAL:CG2	2.45	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:119:THR:OG1	1:K:119:THR:O	2.34	0.42
1:K:283:PHE:HD1	1:K:291:THR:HG1	1.63	0.42
2:L:3:VAL:HG22	2:L:91:LEU:HB3	2.00	0.42
2:L:159:LYS:HB2	2:L:218:LEU:HD13	2.00	0.42
2:L:190:HIS:CE1	2:L:195:ARG:HB2	2.55	0.42
1:O:83:PRO:O	1:O:87:LEU:HB2	2.20	0.42
1:O:175:THR:O	1:O:238:SER:HA	2.20	0.42
1:O:204:VAL:CG2	1:O:231:ARG:HB2	2.50	0.42
2:P:11:ILE:H	2:P:11:ILE:HG12	1.45	0.42
2:P:38:LYS:H	2:P:38:LYS:HD3	1.83	0.42
2:P:215:ALA:HA	2:P:222:LYS:HG2	2.01	0.42
2:P:264:ASP:HA	2:P:268:LYS:NZ	2.34	0.42
2:P:267:LEU:HD13	2:P:271:LEU:HB2	2.02	0.42
2:P:281:ILE:HD13	2:P:284:ARG:HH21	1.85	0.42
1:Q:157:PHE:O	1:Q:161:LEU:HG	2.20	0.42
1:Q:215:SER:CB	1:Q:222:LYS:HA	2.49	0.42
2:R:89:ILE:HD13	2:R:89:ILE:HA	1.86	0.42
2:R:164:LYS:HB3	2:R:165:PHE:CD1	2.54	0.42
2:R:275:ASP:OD1	2:R:295:SER:N	2.27	0.42
2:B:37:VAL:HG23	2:B:38:LYS:HD3	2.01	0.42
2:B:320:ARG:O	2:B:324:LEU:N	2.42	0.42
1:C:109:ILE:HD12	1:C:113:ALA:HB3	2.01	0.42
1:E:178:TYR:CE1	1:E:235:PRO:HA	2.54	0.42
2:F:118:ILE:HB	2:F:145:SER:CB	2.50	0.42
2:F:135:GLU:OE1	2:F:136:GLY:N	2.44	0.42
1:G:1:LEU:O	1:G:3:VAL:HG23	2.19	0.42
1:G:94:GLU:HB2	1:G:118:ILE:HG12	2.01	0.42
1:G:122(A):LYS:C	1:G:123(A):SER:H	2.23	0.42
2:H:267:LEU:HA	2:H:267:LEU:HD23	1.82	0.42
1:I:243:VAL:HA	1:I:306:LYS:HA	2.02	0.42
1:I:254:ASP:OD1	1:I:255:VAL:N	2.53	0.42
2:J:1:LEU:HD21	2:J:328:VAL:HB	2.01	0.42
2:J:14:ASN:ND2	2:J:315:TRP:HA	2.35	0.42
2:J:101:ASP:CG	2:J:104:GLY:H	2.22	0.42
2:J:105:ALA:HA	2:J:108:HIS:CD2	2.54	0.42
2:J:159:LYS:HE3	2:J:159:LYS:HB3	1.85	0.42
2:J:238:SER:OG	2:J:311:TYR:OH	2.35	0.42
2:J:324:LEU:HD12	2:J:327:ILE:HB	2.02	0.42
1:K:211:ALA:O	1:K:214:VAL:HG22	2.19	0.42
2:L:28:VAL:O	2:L:28:VAL:HG12	2.20	0.42
2:L:183:ARG:CZ	2:L:190:HIS:HB2	2.50	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:L:239:VAL:HG13	2:L:310:TRP:CD2	2.55	0.42
1:O:93:ILE:HA	1:O:117:ILE:HG22	2.01	0.42
1:O:161:LEU:HD11	1:O:167:ILE:HD11	2.02	0.42
1:O:237:VAL:HG21	1:O:280:SER:HB3	2.02	0.42
2:P:118:ILE:HB	2:P:145:SER:CB	2.50	0.42
2:P:129:VAL:HG13	2:P:130:VAL:O	2.19	0.42
1:Q:109:ILE:HA	1:Q:113:ALA:HB3	2.02	0.42
2:R:76:ASP:OD1	2:R:77:ARG:N	2.53	0.42
2:R:101:ASP:HB2	2:R:103:ASP:OD1	2.20	0.42
2:R:175:THR:O	2:R:238:SER:OG	2.37	0.42
2:R:319:GLN:HB3	2:R:320:ARG:HH21	1.84	0.42
1:A:10:ARG:HD2	1:A:13:ARG:NH2	2.35	0.42
1:A:92:VAL:O	1:A:117:ILE:HG22	2.19	0.42
1:A:192:ASP:O	1:A:196:ALA:HB2	2.20	0.42
1:A:246:ILE:HD12	1:A:246:ILE:HA	1.91	0.42
2:B:0:LYS:H2	2:B:26:ASP:CG	2.19	0.42
1:C:1:LEU:O	1:C:3:VAL:HG23	2.20	0.42
1:C:4:ALA:O	1:C:93:ILE:N	2.53	0.42
1:C:291:THR:CB	1:C:310:TRP:HB2	2.50	0.42
2:D:15:PHE:CE1	2:D:322:VAL:HG22	2.55	0.42
2:D:109:LEU:HD21	2:D:116:VAL:HG23	2.01	0.42
2:D:175:THR:OG1	2:D:239:VAL:N	2.48	0.42
2:D:239:VAL:HG13	2:D:310:TRP:CD2	2.55	0.42
1:E:42:HIS:CG	2:H:193:LEU:HD22	2.54	0.42
1:E:103:PRO:N	1:K:110:GLN:HG2	2.34	0.42
1:E:129:VAL:HG11	1:E:152:ASN:OD1	2.20	0.42
1:E:202:ASN:OD1	1:G:280:SER:N	2.52	0.42
1:E:325:ALA:HA	1:E:328:VAL:HB	2.01	0.42
2:H:12:GLY:O	2:H:16:LEU:HB2	2.20	0.42
2:H:60:ALA:H	2:H:64:ILE:HA	1.85	0.42
2:H:84:TRP:CE3	2:H:89:ILE:HG21	2.55	0.42
2:H:122:GLY:CA	2:H:125:ILE:HG12	2.49	0.42
2:H:169:LYS:NZ	2:H:245:GLN:OE1	2.32	0.42
1:I:129:VAL:HG21	1:I:152:ASN:HA	2.00	0.42
1:I:137:TYR:OH	1:I:139:HIS:HA	2.19	0.42
2:J:38:LYS:HZ2	2:J:39:GLN:H	1.66	0.42
2:J:102:ARG:HA	2:J:105:ALA:HB3	2.01	0.42
2:J:218:LEU:HA	2:J:218:LEU:HD23	1.72	0.42
2:J:253:GLU:HA	2:J:256:ASN:OD1	2.19	0.42
1:K:30:VAL:O	1:K:74:VAL:N	2.38	0.42
1:K:62:GLU:HB2	1:K:73: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:K:257:ASN:HA	1:K:260:ARG:CD	2.50	0.42
1:K:321:VAL:HA	1:K:324:LEU:HD12	2.01	0.42
2:L:58:LYS:HE2	2:L:59:THR:N	2.35	0.42
2:L:90:ASP:HA	2:L:114:LYS:HE2	2.02	0.42
2:L:169:LYS:HD2	2:L:245:GLN:OE1	2.20	0.42
1:O:246:ILE:HB	1:O:303:ASP:HA	2.02	0.42
1:O:253:GLU:O	1:O:255:VAL:N	2.48	0.42
1:O:254:ASP:HA	1:O:257:ASN:HD22	1.84	0.42
1:O:285:CYS:HB3	1:O:315:TRP:CZ2	2.54	0.42
2:P:183:ARG:HH22	2:P:191:ARG:NH1	2.17	0.42
2:P:296:LEU:HB2	2:P:308:ILE:HG13	2.01	0.42
1:Q:218:LEU:HD22	1:Q:220:GLN:NE2	2.35	0.42
2:R:90:ASP:HB3	2:R:332:TRP:CH2	2.54	0.42
2:R:272:SER:O	2:R:291:THR:HA	2.20	0.42
1:A:100:VAL:HG12	1:A:122:ALA:HA	2.01	0.42
1:A:126:PRO:HB2	1:A:128:TYR:CD1	2.55	0.42
1:A:164:GLU:HB3	1:A:165:LEU:HD12	2.01	0.42
2:B:7:GLY:HA3	2:B:96:THR:N	2.34	0.42
2:B:159:LYS:HD2	2:B:160:VAL:HG23	2.02	0.42
1:C:31:ASN:OD1	1:C:76:ASN:N	2.52	0.42
2:D:59:THR:HA	2:D:64:ILE:HA	2.02	0.42
2:D:253:GLU:OE2	2:D:257:ALA:N	2.53	0.42
1:E:105:ALA:O	1:E:109:ILE:N	2.33	0.42
1:E:109:ILE:HD13	1:E:113:ALA:HB3	2.02	0.42
1:E:298:MET:O	1:E:306:LYS:HB3	2.20	0.42
2:F:3:VAL:HA	2:F:91:LEU:H	1.85	0.42
2:F:197:ARG:HH22	1:G:47:ASP:N	2.17	0.42
2:F:321:VAL:O	2:F:325:ALA:N	2.46	0.42
1:G:65:SER:HA	1:G:69:LYS:O	2.20	0.42
1:G:254:ASP:OD1	1:G:255:VAL:HG23	2.20	0.42
1:G:256:ASN:C	1:G:260:ARG:HE	2.19	0.42
2:H:94:GLU:OE1	2:H:118:ILE:HD11	2.19	0.42
2:H:218:LEU:O	2:H:222:LYS:NZ	2.35	0.42
2:H:239:VAL:HG13	2:H:310:TRP:HA	2.02	0.42
1:I:38:LYS:O	1:I:41:THR:HB	2.20	0.42
1:I:57:VAL:HG23	1:I:64:PHE:CE2	2.55	0.42
1:I:164:GLU:O	1:I:248:LYS:NZ	2.46	0.42
1:I:221:LEU:HD13	1:I:224:LYS:HD2	2.02	0.42
2:J:2:LYS:HB3	2:J:2:LYS:HE3	1.80	0.42
2:J:89:ILE:O	2:J:114:LYS:HG3	2.20	0.42
2:J:298:MET:HE1	2:L:226:ASN:HB3	2.00	0.42

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:J:320:ARG:O	2:J:324:LEU:N	2.42	0.42
1:K:118:ILE:HD12	1:K:144:ILE:O	2.20	0.42
1:K:171:THR:HG1	1:K:226:ASN:C	2.22	0.42
1:K:194:ARG:HB3	1:K:204:VAL:CG2	2.49	0.42
1:O:281:VAL:HG11	2:P:48:SER:HA	2.02	0.41
2:P:20:ARG:HE	2:P:319:GLN:NE2	2.18	0.41
2:P:59:THR:HA	2:P:64:ILE:HG23	2.01	0.41
2:P:187:ALA:O	2:P:196:ALA:HB1	2.19	0.41
2:P:252:ALA:O	2:P:255:VAL:HG22	2.20	0.41
2:P:262:SER:HA	2:P:265:ASN:ND2	2.35	0.41
1:Q:81:LYS:HA	1:Q:81:LYS:HD2	1.85	0.41
1:Q:107:LYS:HA	1:Q:110:GLN:HB2	2.01	0.41
1:Q:139:HIS:CE1	1:Q:333:PRO:HA	2.55	0.41
1:Q:167:ILE:O	1:Q:221:LEU:HD11	2.19	0.41
1:Q:254:ASP:OD1	1:Q:255:VAL:HG23	2.20	0.41
1:Q:329:ALA:O	1:Q:332:TRP:HB2	2.20	0.41
2:R:128:TYR:CD2	2:R:144:ILE:HD12	2.55	0.41
2:R:137:TYR:CZ	2:R:328:VAL:HA	2.55	0.41
2:R:159:LYS:O	2:R:163:GLN:N	2.35	0.41
2:R:168:ILE:H	2:R:168:ILE:HG13	1.61	0.41
2:R:281:ILE:C	2:R:283:PHE:H	2.24	0.41
2:R:331:LYS:HB2	2:R:333:GLN:NE2	2.32	0.41
1:A:124:ASP:O	1:G:103:PRO:HD3	2.20	0.41
1:A:239:VAL:HG23	1:A:309:ALA:O	2.20	0.41
2:B:66:VAL:HB	2:B:69:LYS:HB3	2.02	0.41
2:B:105:ALA:HA	2:B:108:HIS:CD2	2.55	0.41
2:B:194:ARG:NH2	2:D:277:PRO:HA	2.34	0.41
2:B:263:ALA:O	2:B:268:LYS:N	2.52	0.41
1:C:78:ASP:OD2	1:C:81:LYS:N	2.31	0.41
1:C:83:PRO:C	1:C:84:TRP:HE3	2.23	0.41
1:C:139:HIS:NE2	1:C:139(A):ASP:OD1	2.53	0.41
1:C:183:ARG:HA	1:C:183:ARG:HH11	1.83	0.41
2:D:183:ARG:CZ	2:D:190:HIS:HB2	2.50	0.41
2:D:265:ASN:OD1	2:D:266:GLU:HG2	2.20	0.41
2:F:0:LYS:H3	2:F:24:PRO:C	2.22	0.41
2:F:150:THR:O	2:F:154:LEU:HG	2.20	0.41
2:F:157:PHE:CE2	2:F:158:VAL:HG13	2.55	0.41
2:F:285:CYS:HA	2:F:315:TRP:CD1	2.55	0.41
1:G:20:ARG:HG2	1:G:20:ARG:HH11	1.85	0.41
1:G:78:ASP:O	1:G:82:LEU:HG	2.20	0.41
1:G:205:PRO:HG2	1:G:228:ILE:HD12	2.02	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:222:LYS:HD2	1:G:222:LYS:HA	1.82	0.41
2:H:29:VAL:HA	2:H:72:LYS:O	2.20	0.41
2:H:272:SER:O	2:H:291:THR:HA	2.20	0.41
1:I:5:ILE:O	1:I:31:ASN:N	2.51	0.41
1:I:40:ALA:HA	1:I:43:LEU:HB2	2.02	0.41
1:I:69:LYS:HA	1:I:69:LYS:HD3	1.76	0.41
1:I:153:CYS:O	1:I:156:PRO:HD2	2.20	0.41
2:J:165:PHE:CZ	2:J:255:VAL:HB	2.54	0.41
2:J:173:THR:HG1	2:L:306:LYS:NZ	2.14	0.41
1:K:3:VAL:O	1:K:28:VAL:HG12	2.20	0.41
1:K:64:PHE:HE2	1:K:66:ILE:HD11	1.84	0.41
2:L:11:ILE:HG12	3:L:401:NAD:O2N	2.20	0.41
2:L:158:VAL:HA	2:L:161:LEU:HD23	2.01	0.41
1:O:33:SER:CB	1:O:77:ARG:NH1	2.67	0.41
1:O:154:LEU:HD13	1:O:214:VAL:HG12	2.02	0.41
1:O:214:VAL:HG23	1:O:215:SER:H	1.84	0.41
1:O:252:ALA:HB2	1:O:299:VAL:HG23	2.02	0.41
1:O:285:CYS:HA	1:O:315:TRP:CD2	2.54	0.41
2:P:232:VAL:O	2:P:234:THR:N	2.51	0.41
2:P:303:ASP:OD1	2:P:303:ASP:N	2.48	0.41
1:Q:186:ASP:HA	1:Q:196:ALA:O	2.20	0.41
1:Q:204:VAL:HB	1:Q:231:ARG:HB2	2.01	0.41
1:Q:256:ASN:C	1:Q:260:ARG:HE	2.17	0.41
1:Q:312:ASP:CG	1:Q:315:TRP:HB3	2.41	0.41
1:Q:325:ALA:O	1:Q:329:ALA:N	2.36	0.41
2:R:10:ARG:H	2:R:10:ARG:HG2	1.55	0.41
2:R:12:GLY:O	2:R:16:LEU:HB2	2.20	0.41
2:R:177:SER:CA	2:R:234:THR:HG23	2.42	0.41
3:R:401:NAD:H6N	3:R:401:NAD:H2D	1.81	0.41
1:A:53:PHE:HB3	1:A:55:ALA:O	2.20	0.41
2:B:37:VAL:HG12	2:B:64:ILE:HD11	2.02	0.41
2:B:96:THR:HB	3:B:401:NAD:N7A	2.35	0.41
1:C:20:ARG:HE	1:C:21:LYS:HD3	1.85	0.41
1:C:77:ARG:HD2	3:C:401:NAD:N1A	2.35	0.41
1:C:84:TRP:HB3	1:C:89:ILE:HB	2.00	0.41
1:C:157:PHE:O	1:C:160:VAL:HG13	2.20	0.41
2:D:90:ASP:HA	2:D:114:LYS:HE2	2.02	0.41
2:D:186:ASP:N	2:D:198:ALA:HB2	2.36	0.41
2:D:199:ALA:HA	2:D:202:ASN:OD1	2.19	0.41
2:D:268:LYS:O	2:D:270:ILE:HG12	2.20	0.41
1:E:79:PRO:HB3	1:E:108:HIS:CG	2.55	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:F:213:ALA:HA	2:F:216:LEU:HD13	2.02	0.41
2:F:251:PHE:CE2	2:F:253:GLU:HB3	2.55	0.41
1:G:116:VAL:HB	1:G:144:ILE:N	2.27	0.41
1:G:154:LEU:HD23	1:G:214:VAL:HG11	2.01	0.41
1:G:197:ARG:HD2	1:G:197:ARG:HA	1.79	0.41
2:H:94:GLU:OE2	2:H:96:THR:OG1	2.30	0.41
2:H:126:PRO:HG2	2:H:144:ILE:HG22	2.03	0.41
1:I:17:ARG:CZ	1:I:53:PHE:HA	2.50	0.41
1:I:46:TYR:HD2	1:I:52:THR:OG1	2.02	0.41
1:I:193:LEU:HB2	1:K:277:PRO:HG2	2.02	0.41
1:I:316:GLY:O	1:I:320:ARG:HD3	2.20	0.41
2:J:115:LYS:NZ	2:J:139:HIS:O	2.31	0.41
2:J:124:ASP:N	2:J:124:ASP:OD1	2.53	0.41
1:K:28:VAL:C	1:K:71:ILE:HG23	2.40	0.41
1:K:62:GLU:O	1:K:73:VAL:N	2.52	0.41
1:K:347:ASP:O	1:K:351:ASP:N	2.29	0.41
2:L:2:LYS:H	2:L:2:LYS:HG2	1.63	0.41
2:L:106:GLY:O	2:L:110:GLN:NE2	2.53	0.41
2:L:165:PHE:HA	2:L:248:LYS:NZ	2.36	0.41
2:L:244:VAL:O	2:L:246:VAL:HG13	2.20	0.41
2:P:150:THR:O	2:P:154:LEU:HG	2.20	0.41
2:P:183:ARG:NH2	2:P:190:HIS:HA	2.35	0.41
2:P:213:ALA:HA	2:P:216:LEU:HD13	2.02	0.41
2:P:251:PHE:CE2	2:P:253:GLU:HB3	2.55	0.41
2:R:183:ARG:NE	2:R:190:HIS:HB2	2.34	0.41
1:A:10:ARG:O	1:A:14:ASN:ND2	2.23	0.41
1:A:46:TYR:CE2	2:B:278:LEU:HD11	2.55	0.41
1:A:148:SER:OG	1:A:150:THR:HB	2.20	0.41
2:B:94:GLU:HG3	2:B:99:PHE:HD2	1.85	0.41
2:B:176:HIS:O	2:B:232:VAL:HG22	2.20	0.41
1:C:11:ILE:C	1:C:14:ASN:HD22	2.24	0.41
1:C:18(A):TRP:CG	1:C:18(B):HIS:N	2.87	0.41
1:C:57:VAL:HG13	1:C:66:ILE:HA	2.01	0.41
1:C:165:LEU:HD12	1:C:248:LYS:HZ3	1.86	0.41
1:C:165:LEU:HD13	1:C:255:VAL:HG13	2.01	0.41
1:C:253:GLU:H	1:C:253:GLU:HG3	1.69	0.41
2:D:213:ALA:HA	2:D:216:LEU:HD13	2.02	0.41
2:D:276:GLU:OE1	2:D:276:GLU:N	2.45	0.41
1:E:84:TRP:HA	1:E:89:ILE:HB	2.03	0.41
2:F:37:VAL:HG11	2:F:61:ASP:O	2.19	0.41
2:F:41:SER:OG	2:F:42:HIS:N	2.53	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:F:187:ALA:O	2:F:196:ALA:HB1	2.20	0.41
2:F:243:VAL:HG22	2:F:306:LYS:HA	2.01	0.41
1:G:45:LYS:NZ	1:G:53:PHE:HB3	2.35	0.41
1:G:58:LYS:HG3	1:G:67:ASP:H	1.84	0.41
1:G:65:SER:OG	1:G:66:ILE:N	2.53	0.41
1:G:84:TRP:O	1:G:88:GLY:N	2.53	0.41
1:G:272:ASP:HB2	1:G:288:PHE:CG	2.55	0.41
2:H:20:ARG:NH2	2:H:319:GLN:O	2.53	0.41
2:H:49:ILE:HA	2:H:284:ARG:NH1	2.35	0.41
1:I:100:VAL:HG12	1:I:122:ALA:HA	2.03	0.41
1:I:176:HIS:O	1:I:231:ARG:HA	2.21	0.41
1:I:218:LEU:HB3	1:I:220:GLN:HE22	1.84	0.41
2:J:278:LEU:H	2:L:194:ARG:NH2	2.17	0.41
1:K:193:LEU:O	1:K:197:ARG:HG2	2.20	0.41
2:L:76:ASP:OD1	2:L:77:ARG:N	2.53	0.41
2:L:199:ALA:C	2:L:201:LEU:N	2.73	0.41
1:O:84:TRP:HE3	1:O:89:ILE:HG13	1.84	0.41
1:O:132:VAL:HG21	1:O:155:ALA:HB3	2.01	0.41
1:O:169:LYS:HZ3	1:Q:304:MET:HG3	1.85	0.41
1:O:170:GLY:HA2	1:Q:304:MET:HE2	2.01	0.41
1:O:212:LYS:HZ2	1:O:212:LYS:N	2.17	0.41
1:Q:148:SER:HG	1:Q:150:THR:HG1	1.63	0.41
1:Q:153:CYS:SG	1:Q:154:LEU:N	2.93	0.41
1:Q:176:HIS:O	1:Q:231:ARG:HA	2.20	0.41
2:R:10:ARG:HG2	3:R:401:NAD:O2N	2.20	0.41
2:R:126:PRO:HG2	2:R:144:ILE:HG22	2.02	0.41
2:R:154:LEU:HA	2:R:157:PHE:CE1	2.55	0.41
1:A:1:LEU:HD21	1:A:332:TRP:NE1	2.36	0.41
1:A:175:THR:HB	1:A:232:VAL:HG11	2.02	0.41
1:A:246:ILE:HG13	1:A:248:LYS:H	1.86	0.41
1:A:285:CYS:HA	1:A:315:TRP:CD1	2.55	0.41
2:B:41:SER:HG	2:B:42:HIS:H	1.67	0.41
2:B:63:ALA:HA	2:B:72:LYS:HA	2.02	0.41
2:B:89:ILE:O	2:B:114:LYS:HG3	2.20	0.41
2:B:150:THR:OG1	2:B:151:THR:N	2.53	0.41
2:B:181:ASP:OD1	2:B:195:ARG:HD3	2.20	0.41
2:B:203:ILE:HG12	2:B:204:VAL:N	2.36	0.41
2:B:246:VAL:N	2:B:303:ASP:O	2.35	0.41
2:B:299:VAL:HG13	2:B:305:VAL:HG22	2.03	0.41
1:C:218:LEU:HD12	1:C:220:GLN:HE21	1.85	0.41
1:C:331:LYS:HE2	1:C:331:LYS:HB3	1.78	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:219:PRO:HA	2:D:222:LYS:HZ3	1.84	0.41
1:E:148:SER:O	1:E:151:THR:N	2.54	0.41
1:E:158:VAL:HA	1:E:161:LEU:HG	2.02	0.41
1:E:267:LEU:HB3	1:E:271:LEU:CB	2.46	0.41
1:E:325:ALA:O	1:E:328:VAL:HB	2.20	0.41
1:G:58:LYS:HB2	1:G:65:SER:HB3	2.02	0.41
1:G:82:LEU:HA	1:G:83:PRO:HD3	1.84	0.41
2:H:287:ASP:OD1	2:H:288:VAL:N	2.51	0.41
1:I:131:GLY:O	1:I:159:LYS:NZ	2.37	0.41
1:I:179:THR:N	1:I:182:GLN:HE22	2.17	0.41
2:J:102:ARG:HE	2:J:102:ARG:HB2	1.55	0.41
2:J:159:LYS:HD2	2:J:160:VAL:HG23	2.02	0.41
2:J:222:LYS:O	2:J:224:LYS:HG2	2.21	0.41
1:K:185:LEU:O	1:K:187:ALA:N	2.53	0.41
1:K:264:ALA:HA	1:K:268:LYS:HZ1	1.83	0.41
2:L:174:THR:OG1	2:L:175:THR:N	2.52	0.41
2:L:240:VAL:HG12	2:L:311:TYR:HD1	1.85	0.41
1:O:123(A):SER:CB	1:C:141:ALA:HA	2.50	0.41
1:O:131:GLY:HA3	1:O:270:VAL:HG11	2.02	0.41
1:O:206:THR:H	1:O:228:ILE:HD12	1.84	0.41
1:O:288:PHE:HB2	1:O:291:THR:HG23	2.01	0.41
1:O:306:LYS:HZ3	1:Q:228:ILE:HG12	1.85	0.41
1:O:310:TRP:CD1	1:O:310:TRP:N	2.88	0.41
2:P:0:LYS:HZ2	2:P:1:LEU:HD13	1.83	0.41
2:P:157:PHE:CE2	2:P:158:VAL:HG13	2.55	0.41
2:P:250:THR:N	2:P:302:ASP:HB3	2.34	0.41
1:Q:20:ARG:HE	1:Q:21:LYS:NZ	2.19	0.41
1:Q:257:ASN:N	1:Q:260:ARG:HH21	2.19	0.41
2:R:160:VAL:HA	2:R:163:GLN:HB2	2.02	0.41
2:R:182:GLN:HA	2:R:195:ARG:O	2.20	0.41
1:A:169:LYS:HD3	1:A:169:LYS:HA	1.60	0.41
2:B:208:THR:HG22	2:B:229:ALA:HB2	2.03	0.41
2:B:238:SER:O	2:B:311:TYR:N	2.54	0.41
1:C:150:THR:HG1	1:C:151:THR:H	1.69	0.41
1:C:171:THR:HA	1:C:225:LEU:HD12	2.03	0.41
2:D:11:ILE:HG12	3:D:401:NAD:O2N	2.21	0.41
2:D:172:MET:HB3	2:D:242:LEU:HD13	2.02	0.41
1:E:105:ALA:HA	1:E:108:HIS:HD2	1.84	0.41
1:E:194:ARG:H	1:E:194:ARG:HG2	1.68	0.41
1:G:45:LYS:O	1:G:53:PHE:N	2.39	0.41
1:G:125:ILE:H	1:G:125:ILE:HD12	1.84	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:230:LEU:O	1:G:232:VAL:HG23	2.21	0.41
1:G:238:SER:HB3	1:G:311:TYR:CE2	2.54	0.41
2:H:154:LEU:HA	2:H:157:PHE:CE1	2.55	0.41
2:H:160:VAL:HA	2:H:163:GLN:HB2	2.03	0.41
2:H:315:TRP:O	2:H:319:GLN:N	2.37	0.41
1:I:58:LYS:HB3	1:I:65:SER:C	2.40	0.41
1:I:176:HIS:HA	1:I:238:SER:CB	2.50	0.41
1:I:190:HIS:O	1:I:196:ALA:HB2	2.20	0.41
2:J:20:ARG:HH21	2:J:319:GLN:NE2	2.19	0.41
2:J:101:ASP:OD1	2:J:101:ASP:N	2.50	0.41
2:J:135:GLU:CD	2:J:135:GLU:H	2.22	0.41
2:J:150:THR:OG1	2:J:151:THR:N	2.53	0.41
2:J:190:HIS:ND1	2:J:192:ASP:N	2.68	0.41
2:J:193:LEU:HB2	2:L:277:PRO:HG2	2.03	0.41
2:J:204:VAL:N	2:J:231:ARG:O	2.54	0.41
2:J:215:ALA:C	2:J:222:LYS:HZ3	2.24	0.41
2:J:230:LEU:O	2:J:232:VAL:HG13	2.21	0.41
2:J:239:VAL:HG13	2:J:310:TRP:CD2	2.55	0.41
2:J:245:GLN:HG2	2:J:304:MET:HB2	2.03	0.41
1:K:157:PHE:CD2	1:K:158:VAL:HG13	2.56	0.41
1:K:232:VAL:O	1:K:234:THR:N	2.48	0.41
2:L:44:LEU:O	2:L:53:PHE:HB2	2.21	0.41
2:L:118:ILE:HB	2:L:145:SER:CB	2.50	0.41
2:L:176:HIS:O	2:L:231:ARG:HA	2.21	0.41
2:L:218:LEU:HA	2:L:219:PRO:HD3	1.92	0.41
2:L:287:ASP:O	2:L:320:ARG:NH1	2.53	0.41
1:O:5:ILE:HG23	1:O:93:ILE:HB	2.03	0.41
1:O:192:ASP:OD1	1:O:194:ARG:HG2	2.20	0.41
2:P:44:LEU:O	2:P:53:PHE:HB2	2.21	0.41
2:P:92:VAL:HG21	2:P:108:HIS:HB2	2.02	0.41
2:P:304:MET:HB2	2:R:169:LYS:HZ3	1.84	0.41
2:P:305:VAL:HG12	2:P:307:VAL:HG12	2.03	0.41
1:Q:30:VAL:HG12	1:Q:32:ASP:H	1.85	0.41
1:Q:63:THR:OG1	1:Q:72:LYS:HG3	2.20	0.41
1:Q:159:LYS:HG2	1:Q:163:GLU:OE1	2.21	0.41
1:Q:219:PRO:O	1:Q:222:LYS:N	2.43	0.41
1:Q:231:ARG:HD3	1:Q:231:ARG:HA	1.79	0.41
1:Q:267:LEU:H	1:Q:267:LEU:HD22	1.86	0.41
2:R:30:ILE:HG22	2:R:31:ASN:H	1.85	0.41
2:R:192:ASP:OD2	2:R:194:ARG:HB2	2.21	0.41
2:R:256:ASN:HA	2:R:259:PHE:CD2	2.55	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1:LEU:HD12	1:A:1:LEU:HA	1.68	0.41
2:B:5:ILE:O	2:B:31:ASN:N	2.49	0.41
2:B:15:PHE:CD2	2:B:322:VAL:HG22	2.56	0.41
1:C:298:MET:HG2	1:C:306:LYS:CE	2.51	0.41
2:D:32:ASP:OD1	2:D:34:GLY:N	2.45	0.41
2:D:39:GLN:C	2:D:43:LEU:HG	2.40	0.41
2:D:153:CYS:SG	2:D:311:TYR:HB3	2.60	0.41
1:E:1:LEU:O	1:E:3:VAL:HG23	2.20	0.41
1:E:58:LYS:HD2	1:E:58:LYS:HA	1.84	0.41
1:E:139:HIS:O	1:E:140:VAL:HG23	2.21	0.41
2:F:8:PHE:H	2:F:32:ASP:CB	2.30	0.41
2:F:331:LYS:O	2:F:333:GLN:HG3	2.20	0.41
1:G:1:LEU:HG	1:G:332:TRP:CE2	2.56	0.41
2:H:268:LYS:HE2	2:H:268:LYS:HB2	1.95	0.41
1:I:11:ILE:HD11	1:I:318:SER:N	2.35	0.41
1:I:94:GLU:OE1	1:I:119:THR:N	2.53	0.41
1:I:184:LEU:HG	1:I:185:LEU:N	2.36	0.41
1:I:211:ALA:O	1:I:225:LEU:HB3	2.20	0.41
2:J:30:ILE:HG22	2:J:31:ASN:N	2.36	0.41
2:J:204:VAL:O	2:J:206:THR:HG22	2.21	0.41
2:J:232:VAL:O	2:J:234:THR:N	2.52	0.41
2:J:277:PRO:HB2	2:L:194:ARG:CG	2.51	0.41
1:K:84:TRP:CE3	1:K:89:ILE:HD12	2.55	0.41
2:L:20:ARG:NH2	2:L:319:GLN:O	2.54	0.41
2:L:139:HIS:CD2	2:L:333:GLN:H	2.38	0.41
2:L:203:ILE:HG23	2:L:205:PRO:HD3	2.02	0.41
2:L:213:ALA:HA	2:L:216:LEU:HD13	2.02	0.41
2:L:312:ASP:HB3	2:L:316:GLY:H	1.86	0.41
1:O:57:VAL:O	1:O:58:LYS:C	2.58	0.41
1:O:115:LYS:HD3	1:O:328:VAL:CG1	2.51	0.41
1:O:171:THR:HG21	1:Q:306:LYS:HD2	2.03	0.41
1:O:320:ARG:C	1:O:324:LEU:HG	2.41	0.41
2:P:18(A):TRP:CH2	2:P:69:LYS:HG2	2.56	0.41
2:P:293:ASP:O	2:P:297:THR:HG23	2.20	0.41
1:Q:149:CYS:HA	1:Q:152:ASN:OD1	2.20	0.41
1:Q:174:THR:CA	1:Q:240:VAL:HA	2.48	0.41
2:R:190:HIS:HB3	2:R:196:ALA:CB	2.47	0.41
2:R:270:ILE:O	2:R:289:SER:N	2.34	0.41
1:A:203:ILE:HD12	1:A:204:VAL:H	1.86	0.41
2:B:2:LYS:HB2	2:B:90:ASP:OD1	2.20	0.41
2:B:94:GLU:HG2	2:B:96:THR:HG23	2.02	0.41

*Continued on next page...*

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:267:LEU:HB3	2:B:271:LEU:HB2	2.02	0.41
1:C:24:PRO:O	1:C:25:LEU:HD13	2.20	0.41
1:C:218:LEU:HA	1:C:220:GLN:NE2	2.35	0.41
1:C:253:GLU:HA	1:C:256:ASN:ND2	2.34	0.41
1:C:270:VAL:HA	1:C:320:ARG:NH1	2.36	0.41
1:E:25:LEU:N	1:E:25:LEU:HD22	2.36	0.41
1:E:49:ILE:HD13	1:E:49:ILE:HA	1.89	0.41
1:E:211:ALA:CB	1:E:226:ASN:HA	2.49	0.41
1:E:271:LEU:HD13	1:E:290:SER:HB3	2.03	0.41
1:E:328:VAL:HG12	1:E:332:TRP:CD1	2.56	0.41
2:F:0:LYS:HZ2	2:F:1:LEU:HD13	1.85	0.41
2:F:1:LEU:HD12	2:F:1:LEU:HA	1.92	0.41
2:F:20:ARG:HE	2:F:319:GLN:NE2	2.19	0.41
2:F:38:LYS:H	2:F:38:LYS:HD3	1.85	0.41
2:F:58:LYS:HD2	2:F:58:LYS:HA	1.42	0.41
2:F:292:ILE:HG23	2:F:308:ILE:O	2.20	0.41
1:G:3:VAL:HG21	1:G:25:LEU:HB3	2.03	0.41
1:G:47:ASP:OD1	1:G:49:ILE:HB	2.20	0.41
1:G:216:LEU:HD13	1:G:216:LEU:HA	1.82	0.41
2:H:56:ASP:OD1	2:H:57:VAL:N	2.54	0.41
2:H:139:HIS:CG	2:H:333:GLN:HB2	2.56	0.41
2:H:256:ASN:HA	2:H:259:PHE:CD2	2.55	0.41
2:H:281:ILE:C	2:H:283:PHE:H	2.23	0.41
1:I:31:ASN:HD21	1:I:76:ASN:C	2.23	0.41
1:I:32:ASP:O	1:I:75:SER:OG	2.16	0.41
1:I:105:ALA:HA	1:I:108:HIS:HD2	1.85	0.41
1:I:328:VAL:HG13	1:I:331:LYS:HE2	2.02	0.41
2:J:291:THR:O	2:J:310:TRP:N	2.33	0.41
1:K:56:ASP:N	1:K:67:ASP:OD1	2.53	0.41
1:O:279:VAL:HG23	1:Q:202:ASN:OD1	2.20	0.41
1:O:306:LYS:NZ	1:Q:228:ILE:HG12	2.35	0.41
2:P:250:THR:HG1	2:P:254:GLU:HB2	1.86	0.41
1:Q:171:THR:O	1:Q:242:LEU:HD12	2.21	0.41
2:R:67:ASP:OD1	2:R:67:ASP:N	2.53	0.41
2:R:139:HIS:CG	2:R:333:GLN:HB2	2.56	0.41
2:R:264:ASP:O	2:R:268:LYS:HB2	2.20	0.41
1:A:13:ARG:HH11	1:A:13:ARG:HB3	1.86	0.41
1:A:187:ALA:HA	2:D:43:LEU:HD22	2.01	0.41
1:A:265:GLY:HA3	1:A:266:PRO:HD3	1.87	0.41
2:B:168:ILE:H	2:B:168:ILE:HG13	1.69	0.41
2:B:171:THR:HB	2:D:306:LYS:HE3	2.02	0.41

Continued on next page...



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:13:ARG:H	1:C:13:ARG:NH1	2.19	0.41
1:C:15:PHE:O	1:C:18(A):TRP:N	2.27	0.41
2:D:82:LEU:O	2:D:84:TRP:N	2.54	0.41
1:E:18(B):HIS:HD2	1:E:53:PHE:CZ	2.38	0.41
1:E:56:ASP:N	1:E:67:ASP:OD1	2.39	0.41
1:E:82:LEU:HA	1:E:83:PRO:HD3	1.78	0.41
1:E:271:LEU:HB3	1:E:290:SER:OG	2.20	0.41
2:F:18:CYS:CB	2:F:322:VAL:HG21	2.50	0.41
2:F:28:VAL:HG22	2:F:69:LYS:NZ	2.36	0.41
2:F:63:ALA:HA	2:F:72:LYS:HA	2.02	0.41
2:F:300:MET:HE1	2:H:226:ASN:HB3	2.02	0.41
1:G:15:PHE:O	1:G:18(A):TRP:N	2.29	0.41
1:G:32:ASP:OD2	1:G:36:GLY:N	2.54	0.41
1:G:84:TRP:CD1	1:G:84:TRP:N	2.88	0.41
1:G:169:LYS:HB2	1:G:245:ASN:ND2	2.36	0.41
1:G:183:ARG:HB3	1:G:185:LEU:O	2.21	0.41
2:H:33:THR:H	3:H:401:NAD:H2A	1.86	0.41
2:H:80:VAL:HG12	2:H:110:GLN:HE22	1.85	0.41
2:H:117:LEU:HA	2:H:145:SER:HA	2.02	0.41
1:I:10:ARG:HB3	1:I:10:ARG:HH11	1.85	0.41
1:I:38:LYS:H	1:I:38:LYS:HG3	1.58	0.41
2:J:41:SER:OG	2:J:42:HIS:N	2.53	0.41
2:J:47:ASP:HB3	2:J:51:GLY:O	2.20	0.41
2:J:294:SER:H	2:J:294:SER:HG	1.48	0.41
2:J:320:ARG:HA	2:J:320:ARG:HD3	1.80	0.41
1:K:134:GLU:CD	1:K:134:GLU:N	2.74	0.41
1:K:311:TYR:N	1:K:311:TYR:CD1	2.89	0.41
2:L:204:VAL:HB	2:L:231:ARG:HB2	2.03	0.41
1:O:5:ILE:HB	1:O:30:VAL:HG22	2.02	0.41
1:O:20:ARG:HD3	1:O:21:LYS:N	2.35	0.41
1:O:38:LYS:HG3	1:O:39:SER:N	2.27	0.41
1:O:119:THR:O	1:O:119:THR:OG1	2.33	0.41
1:O:166:GLY:HA3	1:O:247:GLU:OE2	2.21	0.41
1:O:174:THR:HG23	1:O:176:HIS:H	1.85	0.41
1:O:253:GLU:C	1:O:255:VAL:H	2.24	0.41
1:O:358:CYS:O	1:C:190:HIS:NE2	2.54	0.41
2:P:64:ILE:HG12	2:P:71:ILE:O	2.21	0.41
2:P:203:ILE:HD11	2:P:230:LEU:HD22	2.03	0.41
2:P:275:ASP:OD1	2:P:294:SER:N	2.53	0.41
1:Q:8:PHE:CG	1:Q:32:ASP:OD2	2.72	0.41
1:Q:49:ILE:HD12	1:Q:50: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:Q:136:ASP:N	1:Q:136:ASP:OD1	2.54	0.41
1:Q:267:LEU:O	1:Q:271:LEU:HB3	2.21	0.41
2:R:29:VAL:HG11	2:R:89:ILE:HD11	2.03	0.41
2:R:47:ASP:OD2	2:R:49:ILE:HB	2.20	0.41
2:R:80:VAL:HG12	2:R:110:GLN:HE22	1.86	0.41
2:R:84:TRP:CE3	2:R:89:ILE:HG21	2.56	0.41
2:R:148:SER:HA	2:R:317:TYR:OH	2.21	0.41
2:R:208:THR:HG22	2:R:229:ALA:HB2	2.02	0.41
2:R:239:VAL:HG13	2:R:310:TRP:HA	2.02	0.41
2:R:264:ASP:O	2:R:268:LYS:NZ	2.47	0.41
1:A:49:ILE:HG22	1:A:50:LEU:HD13	2.02	0.41
1:A:362:GLU:HA	1:G:181:ASP:HB3	2.01	0.41
2:B:14:ASN:ND2	2:B:315:TRP:HA	2.36	0.41
2:B:62:SER:HA	2:B:73:VAL:O	2.20	0.41
2:B:94:GLU:HG3	2:B:99:PHE:CD2	2.55	0.41
2:B:121:PRO:HG3	2:B:148:SER:H	1.83	0.41
2:B:192:ASP:OD2	2:B:195:ARG:HG3	2.20	0.41
2:B:222:LYS:O	2:B:224:LYS:HG2	2.21	0.41
2:B:280:SER:HB2	2:D:202:ASN:HD22	1.85	0.41
2:B:320:ARG:HA	2:B:320:ARG:HD3	1.80	0.41
1:C:8:PHE:HZ	1:C:13:ARG:HB3	1.81	0.41
1:C:45:LYS:HZ2	1:C:53:PHE:C	2.20	0.41
1:C:127:THR:OG1	1:C:128:TYR:N	2.54	0.41
1:C:153:CYS:SG	1:C:311:TYR:HB3	2.61	0.41
1:C:269:GLY:O	1:C:288:PHE:HA	2.21	0.41
3:C:401:NAD:O1N	3:C:401:NAD:H2N	2.20	0.41
2:D:25:LEU:HD13	2:D:25:LEU:HA	1.80	0.41
2:D:39:GLN:HA	2:D:42:HIS:ND1	2.36	0.41
2:D:87:MET:HE3	2:D:89:ILE:HD11	2.02	0.41
2:D:118:ILE:HB	2:D:145:SER:CB	2.50	0.41
2:D:162:ASP:OD1	2:D:166:GLY:HA2	2.21	0.41
2:D:167:ILE:HG12	2:D:246:VAL:HG12	2.03	0.41
2:D:185:LEU:O	2:D:187:ALA:N	2.46	0.41
2:D:190:HIS:HD2	2:D:191:ARG:NH2	2.18	0.41
1:E:23:SER:O	1:E:25:LEU:N	2.54	0.41
1:E:72:LYS:NZ	1:E:73:VAL:H	2.18	0.41
1:E:90:ASP:O	1:E:115:LYS:N	2.44	0.41
1:E:209:GLY:O	1:E:212:LYS:HG2	2.21	0.41
1:E:239:VAL:HB	1:E:310:TRP:CE3	2.55	0.41
1:E:251:THR:OG1	1:E:252:ALA:N	2.54	0.41
1:E:270:VAL:O	1:E:271:LEU:HD23	2.21	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:F:20:ARG:HH21	2:F:319:GLN:NE2	2.19	0.41
2:F:38:LYS:NZ	2:F:39:GLN:HG3	2.36	0.41
2:F:185:LEU:O	2:F:187:ALA:N	2.52	0.41
2:F:274:CYS:SG	2:F:276:GLU:HG2	2.61	0.41
2:F:292:ILE:HD13	2:F:309:ALA:HA	2.03	0.41
2:F:311:TYR:CE2	2:F:313:ASN:HB3	2.56	0.41
2:F:326:ASP:O	2:F:330:ASN:N	2.31	0.41
1:G:167:ILE:HA	1:G:246:ILE:CD1	2.51	0.41
1:G:252:ALA:O	1:G:256:ASN:N	2.41	0.41
1:G:283:PHE:HA	1:G:286:SER:OG	2.21	0.41
1:G:308:VAL:HG22	1:G:309:ALA:H	1.86	0.41
2:H:17:ARG:NH2	2:H:53:PHE:HA	2.36	0.41
2:H:67:ASP:N	2:H:67:ASP:OD1	2.54	0.41
2:H:82:LEU:HD12	2:H:84:TRP:HE1	1.86	0.41
2:H:118:ILE:O	2:H:146:ASN:N	2.39	0.41
2:H:120:ALA:O	2:H:145:SER:OG	2.38	0.41
2:H:128:TYR:CD2	2:H:144:ILE:HD12	2.56	0.41
1:I:39:SER:HA	2:L:193:LEU:HD23	2.03	0.41
1:I:125:ILE:HA	1:I:126:PRO:HD2	1.94	0.41
1:I:169:LYS:O	1:I:244:VAL:HG13	2.21	0.41
1:I:267:LEU:O	1:I:271:LEU:N	2.52	0.41
1:I:306:LYS:HZ1	1:K:228:ILE:HG12	1.85	0.41
2:J:2:LYS:HB2	2:J:90:ASP:OD1	2.21	0.41
2:J:11:ILE:O	2:J:14:ASN:HB3	2.21	0.41
2:J:238:SER:OG	2:J:239:VAL:N	2.54	0.41
2:J:245:GLN:HA	2:J:304:MET:HA	2.03	0.41
2:J:289:SER:HB3	2:J:320:ARG:HG2	2.03	0.41
1:K:3:VAL:HG13	1:K:91:ILE:O	2.20	0.41
1:K:23:SER:OG	1:K:25:LEU:O	2.28	0.41
1:K:47:ASP:OD1	1:K:48:SER:N	2.54	0.41
1:K:57:VAL:HG13	1:K:66:ILE:HG12	2.03	0.41
1:K:94:GLU:O	1:K:118:ILE:HG23	2.20	0.41
1:K:118:ILE:HB	1:K:145:SER:HB2	2.03	0.41
1:K:139:HIS:HB2	1:K:331:LYS:O	2.21	0.41
2:L:29:VAL:O	2:L:30:ILE:HD13	2.21	0.41
2:L:38:LYS:H	2:L:38:LYS:NZ	2.18	0.41
2:L:82:LEU:O	2:L:84:TRP:N	2.54	0.41
2:L:153:CYS:SG	2:L:311:TYR:HB3	2.61	0.41
2:L:214:VAL:O	2:L:217:VAL:HG22	2.20	0.41
2:L:253:GLU:OE2	2:L:256:ASN:HB2	2.21	0.41
2:L:265:ASN:OD1	2:L:266:GLU:N	2.49	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:O:13:ARG:HG3	1:O:44:LEU:HD13	2.03	0.41
1:O:58:LYS:O	1:O:64:PHE:HA	2.21	0.41
1:O:153:CYS:HB2	1:O:289:SER:O	2.20	0.41
1:O:174:THR:HA	1:O:240:VAL:HA	2.03	0.41
1:O:300:MET:SD	1:Q:169:LYS:HB3	2.61	0.41
2:P:36:GLY:HA3	2:P:38:LYS:HZ1	1.85	0.41
2:P:199:ALA:O	2:P:202:ASN:N	2.47	0.41
1:Q:65:SER:HA	1:Q:69:LYS:O	2.21	0.41
2:R:84:TRP:CE3	2:R:113:ALA:HB2	2.56	0.41
2:R:124:ASP:OD1	2:R:124:ASP:N	2.54	0.41
1:A:7:GLY:HA2	3:A:401:NAD:H1B	2.02	0.41
1:A:11:ILE:HG23	1:A:12:GLY:H	1.85	0.41
1:A:84:TRP:CD1	1:A:111:ALA:HB3	2.56	0.41
1:A:203:ILE:N	1:C:280:SER:OG	2.54	0.41
1:A:239:VAL:HB	1:A:310:TRP:CE3	2.56	0.41
2:B:186:ASP:HB3	2:B:197:ARG:HA	2.03	0.41
2:B:220:ASN:HD22	2:B:221:LEU:HD12	1.86	0.41
2:B:226:ASN:OD1	2:B:227:GLY:N	2.54	0.41
1:C:83:PRO:CA	1:C:86:GLU:HB2	2.51	0.41
1:C:176:HIS:O	1:C:231:ARG:HD3	2.21	0.41
2:D:158:VAL:O	2:D:162:ASP:N	2.28	0.41
2:D:207:SER:HA	2:D:229:ALA:N	2.35	0.41
2:D:253:GLU:CD	2:D:256:ASN:HB2	2.41	0.41
1:E:46:TYR:HD1	1:E:52:THR:HG1	1.68	0.41
2:F:29:VAL:HG11	2:F:89:ILE:HD11	2.02	0.41
2:F:159:LYS:HE3	2:F:159:LYS:HB3	1.87	0.41
2:F:185:LEU:HD12	2:F:185:LEU:HA	1.72	0.41
2:F:275:ASP:OD1	2:F:295:SER:N	2.41	0.41
2:F:277:PRO:HG2	2:H:193:LEU:HD13	2.02	0.41
1:G:173:THR:C	1:G:240:VAL:HG23	2.42	0.41
1:G:190:HIS:HD1	1:G:190:HIS:H	1.69	0.41
1:G:245:ASN:O	1:G:246:ILE:HD13	2.20	0.41
1:G:257:ASN:N	1:G:260:ARG:HH21	2.19	0.41
2:H:37:VAL:HG23	2:H:38:LYS:HD3	2.02	0.41
2:H:104:GLY:HA2	2:H:107:LYS:HE2	2.03	0.41
2:H:173:THR:HB	2:H:241:ASP:OD2	2.21	0.41
2:H:230:LEU:O	2:H:232:VAL:HG13	2.20	0.41
2:H:250:THR:N	2:H:302:ASP:HB3	2.31	0.41
2:H:253:GLU:OE1	2:H:260:ARG:NH1	2.54	0.41
1:I:47:ASP:CG	1:I:50:LEU:H	2.15	0.41
1:I:191:ARG:H	1:I:191:ARG:HG3	1.48	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:I:194:ARG:HG2	1:K:277:PRO:HB2	2.03	0.41
2:J:10:ARG:NH2	1:K:186:ASP:H	2.19	0.41
2:J:15:PHE:CD1	2:J:322:VAL:HG22	2.56	0.41
2:J:28:VAL:HG22	2:J:69:LYS:HZ3	1.86	0.41
2:J:220:ASN:HD22	2:J:221:LEU:HD12	1.85	0.41
1:K:248:LYS:HG2	1:K:248(A):VAL:H	1.86	0.41
1:K:260:ARG:HG2	1:K:273:VAL:HG21	2.03	0.41
1:K:317:TYR:O	1:K:321:VAL:HG22	2.21	0.41
1:K:320:ARG:O	1:K:323:ASP:N	2.54	0.41
1:O:119:THR:HG21	3:O:401:NAD:H51N	2.03	0.40
1:O:127:THR:OG1	1:O:147:ALA:N	2.54	0.40
1:O:154:LEU:O	1:O:158:VAL:HG22	2.21	0.40
1:O:175:THR:OG1	1:O:175:THR:O	2.39	0.40
1:O:186:ASP:OD1	1:O:186:ASP:N	2.54	0.40
1:O:190:HIS:CE1	1:O:192:ASP:O	2.75	0.40
1:O:211:ALA:HB1	1:O:226:ASN:CA	2.51	0.40
1:Q:72:LYS:HG2	1:Q:73:VAL:H	1.85	0.40
1:Q:191:ARG:NE	1:I:358:CYS:O	2.54	0.40
1:Q:332:TRP:O	1:Q:334:GLY:N	2.49	0.40
2:R:94:GLU:OE1	2:R:118:ILE:HD11	2.21	0.40
2:R:149:CYS:CA	2:R:152:ASN:HD22	2.34	0.40
1:A:13:ARG:O	1:A:16:LEU:HB3	2.21	0.40
1:A:134:GLU:HG2	1:A:135:LYS:H	1.86	0.40
1:A:151:THR:OG1	1:A:152:ASN:N	2.55	0.40
1:A:202:ASN:OD1	1:C:280:SER:HB2	2.21	0.40
1:A:293:ASP:CB	1:A:296:LEU:HG	2.50	0.40
2:B:29:VAL:HA	2:B:72:LYS:O	2.22	0.40
1:C:60:ILE:HB	1:C:64:PHE:HA	2.04	0.40
1:C:137:TYR:OH	1:C:139:HIS:HB2	2.20	0.40
2:D:17:ARG:NH1	2:D:53:PHE:HA	2.37	0.40
2:D:169:LYS:HD2	2:D:245:GLN:OE1	2.21	0.40
1:E:291:THR:HG1	1:E:310:TRP:HD1	1.66	0.40
2:F:190:HIS:CD2	2:F:191:ARG:H	2.40	0.40
2:F:250:THR:HG1	2:F:254:GLU:HB2	1.86	0.40
2:F:252:ALA:O	2:F:255:VAL:HG22	2.20	0.40
1:G:8:PHE:CD2	1:G:13:ARG:HD3	2.55	0.40
1:G:96:THR:HA	3:G:401:NAD:O4B	2.21	0.40
1:G:236:ASN:HD22	1:G:314:GLU:HB2	1.86	0.40
1:G:272:ASP:HB2	1:G:288:PHE:CE2	2.55	0.40
2:H:102:ARG:HD2	2:H:143:ILE:HD12	2.02	0.40
2:H:139:HIS:HE1	2:H:332:TRP:HA	1.86	0.40

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:320:ARG:NE	2:H:323:ASP:OD2	2.55	0.40
1:I:39:SER:O	1:I:43:LEU:HG	2.21	0.40
2:J:10:ARG:HB2	2:J:314:GLU:OE1	2.21	0.40
2:J:89:ILE:HD13	2:J:89:ILE:HA	1.90	0.40
2:J:283:PHE:CD1	2:J:283:PHE:N	2.89	0.40
1:K:1:LEU:HD21	1:K:332:TRP:CE3	2.55	0.40
2:L:17:ARG:NH2	2:L:53:PHE:HA	2.36	0.40
2:L:261:GLU:O	2:L:264:ASP:HB2	2.21	0.40
2:L:272:SER:O	2:L:291:THR:HA	2.21	0.40
1:O:10:ARG:NH2	2:R:186:ASP:OD1	2.54	0.40
1:O:206:THR:O	1:O:228:ILE:HB	2.20	0.40
1:O:248:LYS:HG2	1:O:248(A):VAL:H	1.86	0.40
2:P:272:SER:O	2:P:291:THR:HA	2.20	0.40
3:P:401:NAD:H52A	3:P:401:NAD:H8A	2.03	0.40
1:Q:109:ILE:H	1:Q:109:ILE:HG12	1.67	0.40
1:Q:171:THR:O	1:Q:243:VAL:N	2.37	0.40
1:Q:179:THR:OG1	1:Q:182:GLN:HB3	2.22	0.40
2:R:269:GLY:HA2	2:R:288:VAL:HG12	2.03	0.40
2:R:311:TYR:CE2	2:R:313:ASN:HB3	2.56	0.40
1:A:47:ASP:HB3	1:A:51:GLY:N	2.35	0.40
1:A:141:ALA:HB2	1:G:107:LYS:NZ	2.36	0.40
1:A:190:HIS:CE1	1:A:192:ASP:H	2.39	0.40
1:A:246:ILE:HG23	1:A:248:LYS:N	2.36	0.40
1:C:47:ASP:O	1:C:51:GLY:HA2	2.21	0.40
1:C:127:THR:HA	1:C:145:SER:O	2.21	0.40
1:C:289:SER:HB3	1:C:320:ARG:HH11	1.86	0.40
2:D:21:LYS:HD2	2:D:21:LYS:H	1.86	0.40
2:D:30:ILE:N	2:D:72:LYS:O	2.51	0.40
2:D:168:ILE:H	2:D:168:ILE:HG13	1.51	0.40
2:D:192:ASP:HB3	2:D:195:ARG:HD2	2.03	0.40
2:D:323:ASP:O	2:D:327:ILE:HG13	2.20	0.40
1:E:7:GLY:HA2	3:E:401:NAD:N3A	2.36	0.40
1:E:43:LEU:HD23	1:E:43:LEU:HA	1.93	0.40
1:E:47:ASP:HB3	1:E:51:GLY:N	2.35	0.40
1:E:105:ALA:O	1:E:108:HIS:HB2	2.22	0.40
2:F:0:LYS:H2	2:F:26:ASP:HB2	1.85	0.40
2:F:1:LEU:HD11	2:F:332:TRP:CE3	2.56	0.40
2:F:159:LYS:O	2:F:163:GLN:HG3	2.21	0.40
1:G:107:LYS:HA	1:G:110:GLN:HB2	2.02	0.40
1:G:219:PRO:HA	1:G:222:LYS:CD	2.52	0.40
1:G:349:CYS:O	1:G:353:PRO:N	2.54	0.40

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:63:ALA:O	2:H:64:ILE:HD13	2.21	0.40
2:H:78:ASN:OD1	2:H:80:VAL:HG22	2.21	0.40
2:H:115:LYS:HA	2:H:142:THR:OG1	2.21	0.40
2:H:149:CYS:CA	2:H:152:ASN:HD22	2.34	0.40
2:H:257:ALA:O	2:H:261:GLU:HG3	2.22	0.40
1:I:139:HIS:HD2	1:I:332:TRP:HA	1.84	0.40
1:I:313:ASN:OD1	1:I:314:GLU:HG3	2.21	0.40
2:J:86:ASP:N	2:J:86:ASP:OD1	2.54	0.40
1:K:84:TRP:HB2	1:K:111:ALA:O	2.22	0.40
1:K:114:LYS:HB3	1:K:115:LYS:NZ	2.37	0.40
2:L:1:LEU:HG	2:L:3:VAL:HG23	2.04	0.40
2:L:41:SER:HG	2:L:42:HIS:H	1.69	0.40
2:L:96:THR:HA	3:L:401:NAD:O4B	2.21	0.40
2:L:165:PHE:HZ	2:L:254:GLU:HG2	1.86	0.40
1:O:10:ARG:HA	1:O:13:ARG:HD3	2.03	0.40
1:O:160:VAL:HG13	1:O:164:GLU:OE1	2.20	0.40
1:O:166:GLY:O	1:O:247:GLU:HG3	2.21	0.40
1:O:190:HIS:O	1:O:190:HIS:CG	2.74	0.40
1:O:268:LYS:C	1:O:270:VAL:H	2.25	0.40
2:P:20:ARG:HH21	2:P:319:GLN:NE2	2.20	0.40
1:Q:169:LYS:HG2	1:Q:224:LYS:HE3	2.03	0.40
1:Q:232:VAL:O	1:Q:234:THR:N	2.53	0.40
2:R:198:ALA:O	2:R:200:CYS:N	2.53	0.40
2:R:256:ASN:O	2:R:259:PHE:HB2	2.22	0.40
2:R:287:ASP:OD1	2:R:288:VAL:N	2.51	0.40
1:A:321:VAL:HA	1:A:324:LEU:HB2	2.02	0.40
2:B:3:VAL:CG2	2:B:91:LEU:HB3	2.48	0.40
2:B:30:ILE:HG22	2:B:31:ASN:H	1.86	0.40
2:B:321:VAL:O	2:B:325:ALA:N	2.52	0.40
1:C:32:ASP:N	1:C:74:VAL:O	2.45	0.40
1:C:64:PHE:O	1:C:71:ILE:N	2.53	0.40
1:C:175:THR:OG1	1:C:238:SER:HA	2.21	0.40
1:C:190:HIS:CD2	1:C:192:ASP:HB3	2.56	0.40
2:D:96:THR:HB	3:D:401:NAD:C5A	2.51	0.40
2:F:94:GLU:HB2	2:F:118:ILE:HD13	2.03	0.40
1:G:162:ASP:HB3	1:G:167:ILE:HD12	2.03	0.40
1:G:172:MET:SD	1:G:172:MET:N	2.95	0.40
1:G:192:ASP:CG	1:G:194:ARG:HB2	2.42	0.40
1:G:320:ARG:HA	1:G:320:ARG:HD3	1.95	0.40
2:H:192:ASP:OD2	2:H:194:ARG:HB2	2.22	0.40
1:I:182:GLN:HG2	1:I:199:ALA:HB2	2.02	0.40

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:I:193:LEU:CG	1:K:277:PRO:HG2	2.52	0.40
2:J:105:ALA:HA	2:J:108:HIS:HD2	1.86	0.40
2:J:168:ILE:H	2:J:168:ILE:HG13	1.71	0.40
1:K:197:ARG:HA	1:K:197:ARG:HD2	1.83	0.40
1:K:323:ASP:HA	1:K:326:ASP:CB	2.37	0.40
2:L:249:LYS:CD	2:L:302:ASP:HB2	2.49	0.40
1:O:91:ILE:HD13	1:O:325:ALA:HB1	2.02	0.40
1:O:107:LYS:O	1:O:111:ALA:N	2.49	0.40
1:O:283:PHE:O	1:O:284:ARG:NH2	2.51	0.40
2:P:94:GLU:HB2	2:P:118:ILE:HD13	2.03	0.40
2:P:130:VAL:HG21	2:P:320:ARG:HD3	2.03	0.40
1:Q:81:LYS:HZ2	1:Q:81:LYS:HG3	1.47	0.40
1:Q:117:ILE:HD13	1:Q:145:SER:HA	2.04	0.40
1:Q:194:ARG:NE	1:Q:204:VAL:HG22	2.36	0.40
1:Q:216:LEU:HA	1:Q:216:LEU:HD13	1.85	0.40
1:Q:259:PHE:HA	1:Q:262:ALA:HB3	2.03	0.40
2:R:139:HIS:HE1	2:R:332:TRP:HA	1.87	0.40
2:R:150:THR:HG1	2:R:151:THR:H	1.70	0.40
1:A:280:SER:N	1:C:202:ASN:OD1	2.54	0.40
1:A:354:ALA:HB2	3:G:401:NAD:N7A	2.36	0.40
2:B:176:HIS:CG	2:B:231:ARG:HG2	2.56	0.40
2:B:184:LEU:HD11	1:C:178:TYR:CD1	2.56	0.40
2:B:190:HIS:HB3	2:B:196:ALA:CB	2.51	0.40
2:B:268:LYS:HZ3	2:B:268:LYS:H	1.67	0.40
1:C:162:ASP:O	1:C:166:GLY:N	2.55	0.40
2:D:29:VAL:O	2:D:30:ILE:HD13	2.22	0.40
2:D:30:ILE:HB	2:D:73:VAL:HG23	2.03	0.40
1:E:37:VAL:HG23	1:E:61:ASN:O	2.20	0.40
2:F:104:GLY:O	2:F:108:HIS:N	2.47	0.40
2:F:202:ASN:HB3	2:H:279:VAL:HB	2.03	0.40
1:G:3:VAL:C	1:G:27:VAL:HA	2.42	0.40
1:G:76:ASN:OD1	1:G:77:ARG:N	2.55	0.40
2:H:45:LYS:NZ	2:H:55:ALA:H	2.20	0.40
2:H:264:ASP:O	2:H:268:LYS:HB2	2.21	0.40
1:I:197:ARG:HH22	2:L:48:SER:HA	1.86	0.40
1:I:281:VAL:HG21	2:J:48:SER:HA	2.03	0.40
2:J:15:PHE:CD2	2:J:322:VAL:HG22	2.56	0.40
2:J:29:VAL:HA	2:J:72:LYS:O	2.21	0.40
2:J:93:ILE:HD13	2:J:117:LEU:O	2.21	0.40
2:J:152:ASN:HD22	2:J:317:TYR:HD1	1.69	0.40
2:J:198:ALA:C	2:J:200:CYS:H	2.25	0.40

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:79:PRO:HB2	1:K:107:LYS:NZ	2.36	0.40
1:K:82:LEU:HA	1:K:83:PRO:HD3	1.79	0.40
1:K:83:PRO:CA	1:K:86:GLU:HB2	2.52	0.40
1:K:83:PRO:C	1:K:84:TRP:HE3	2.24	0.40
1:K:120:ALA:HA	3:K:401:NAD:O2D	2.22	0.40
1:K:172:MET:HE2	1:K:172:MET:HB3	1.93	0.40
1:K:332:TRP:CZ3	1:K:334:GLY:HA3	2.57	0.40
2:L:167:ILE:HG12	2:L:246:VAL:HG12	2.03	0.40
2:L:171:THR:O	2:L:243:VAL:N	2.42	0.40
1:O:20:ARG:HA	1:O:20:ARG:NE	2.36	0.40
1:O:62:GLU:O	1:O:73:VAL:HB	2.21	0.40
1:O:107:LYS:HA	1:O:110:GLN:CD	2.42	0.40
1:O:120:ALA:N	1:O:317:TYR:OH	2.55	0.40
1:O:156:PRO:HG2	1:O:271:LEU:HD23	2.03	0.40
1:O:212:LYS:O	1:O:216:LEU:HD23	2.21	0.40
2:P:39:GLN:O	2:P:43:LEU:HG	2.21	0.40
2:P:49:ILE:HG23	2:P:284:ARG:NH1	2.36	0.40
2:P:150:THR:HG1	2:P:151:THR:H	1.68	0.40
2:P:238:SER:O	2:P:311:TYR:N	2.50	0.40
1:Q:29:VAL:HB	1:Q:72:LYS:HB3	2.02	0.40
1:Q:287:ASP:O	1:Q:320:ARG:NH1	2.51	0.40
2:R:15:PHE:CZ	2:R:322:VAL:HG22	2.56	0.40
2:R:18:CYS:SG	2:R:318:SER:OG	2.78	0.40
2:R:45:LYS:NZ	2:R:55:ALA:O	2.50	0.40
2:R:320:ARG:NE	2:R:323:ASP:OD2	2.54	0.40
1:A:159:LYS:HE2	1:A:218:LEU:HD21	2.04	0.40
2:B:105:ALA:HA	2:B:108:HIS:HD2	1.87	0.40
2:B:322:VAL:O	2:B:325:ALA:HB3	2.22	0.40
1:C:45:LYS:O	1:C:52:THR:HA	2.22	0.40
1:C:204:VAL:HG12	1:C:206:THR:OG1	2.22	0.40
1:C:248:LYS:O	1:C:248(A):VAL:C	2.60	0.40
2:D:27:VAL:O	2:D:69:LYS:NZ	2.55	0.40
2:D:69:LYS:NZ	2:D:71:ILE:HG12	2.37	0.40
2:D:182:GLN:HA	2:D:195:ARG:HB3	2.03	0.40
2:D:192:ASP:CG	2:D:195:ARG:H	2.25	0.40
2:D:256:ASN:O	2:D:259:PHE:HB2	2.22	0.40
1:E:60:ILE:HG12	1:E:60(A):ASP:H	1.86	0.40
1:E:207:SER:HA	1:E:228:ILE:HG22	2.03	0.40
2:F:84:TRP:HB3	2:F:89:ILE:HG12	2.04	0.40
2:F:186:ASP:OD2	1:G:10:ARG:HD2	2.22	0.40
1:G:10:ARG:NH2	1:G:13:ARG:HB2	2.36	0.40

*Continued on next page...*

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:77:ARG:H	1:G:77:ARG:NH1	2.18	0.40
2:H:169:LYS:HG2	2:H:224:LYS:HB2	2.04	0.40
1:I:46:TYR:HA	1:I:52:THR:HA	2.02	0.40
1:I:105:ALA:HA	1:I:108:HIS:CD2	2.56	0.40
1:I:128:TYR:HA	1:I:133:ASN:CG	2.42	0.40
1:I:272:ASP:HB2	1:I:288:PHE:CB	2.52	0.40
1:K:12:GLY:N	1:K:13:ARG:HH12	2.19	0.40
1:K:199:ALA:C	1:K:201:LEU:H	2.24	0.40
1:K:239:VAL:HG23	1:K:309:ALA:C	2.42	0.40
2:L:103:ASP:HB2	2:L:107:LYS:NZ	2.37	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 PDB entries followed by that with respect to all EM entries.

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

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles
1	A	366/451 (81%)	278 (76%)	85 (23%)	3 (1%)	16 54
1	C	366/451 (81%)	262 (72%)	100 (27%)	4 (1%)	12 46
1	E	366/451 (81%)	286 (78%)	71 (19%)	9 (2%)	4 26
1	G	366/451 (81%)	257 (70%)	104 (28%)	5 (1%)	9 40
1	I	366/451 (81%)	268 (73%)	94 (26%)	4 (1%)	12 46
1	K	366/451 (81%)	264 (72%)	100 (27%)	2 (0%)	25 64
1	O	366/451 (81%)	265 (72%)	94 (26%)	7 (2%)	6 32
1	Q	366/451 (81%)	273 (75%)	87 (24%)	6 (2%)	8 37
2	B	335/402 (83%)	263 (78%)	72 (22%)	0	100 100
2	D	335/402 (83%)	254 (76%)	80 (24%)	1 (0%)	37 72
2	F	335/402 (83%)	251 (75%)	82 (24%)	2 (1%)	22 60
2	H	335/402 (83%)	259 (77%)	76 (23%)	0	100 100

Continued on next page...

*Continued from previous page...*

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
2	J	335/402 (83%)	263 (78%)	72 (22%)	0	100	100
2	L	335/402 (83%)	256 (76%)	78 (23%)	1 (0%)	37	72
2	P	335/402 (83%)	248 (74%)	86 (26%)	1 (0%)	37	72
2	R	335/402 (83%)	257 (77%)	77 (23%)	1 (0%)	37	72
All	All	5608/6824 (82%)	4204 (75%)	1358 (24%)	46 (1%)	19	54

All (46) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	O	18(A)	TRP
1	O	61	ASN
1	Q	60	ILE
1	Q	352	ASN
1	A	352	ASN
1	C	352	ASN
1	G	248(A)	VAL
1	G	343	ASP
1	I	344	PRO
1	I	352	ASN
1	K	344	PRO
1	K	353	PRO
1	C	248(A)	VAL
2	D	61	ASP
1	G	344	PRO
2	L	60	ALA
2	P	61	ASP
1	Q	249	GLY
1	E	33	SER
2	F	56	ASP
1	G	122	ALA
1	O	34	GLY
1	Q	33	SER
2	R	59	THR
1	A	60(A)	ASP
1	A	343	ASP
1	E	34	GLY
1	O	38	LYS
1	Q	34	GLY
1	Q	343	ASP
1	E	24	PRO
1	E	38	LYS

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
1	E	356	GLU
1	G	124	ASP
1	I	60(A)	ASP
1	I	141	ALA
1	O	83	PRO
1	O	343	ASP
1	E	355	ASP
1	C	237	VAL
1	O	235	PRO
1	C	334	GLY
1	E	344	PRO
2	F	66	VAL
1	E	59	ILE
1	E	339	VAL

### 5.3.2 Protein sidechains [i](#)

In the following table, the Percentiles column shows the percent sidechain outliers of the chain as a percentile score with respect to all PDB entries followed by that with respect to all EM entries.

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

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
1	A	282/370 (76%)	228 (81%)	54 (19%)	1 7
1	C	282/370 (76%)	210 (74%)	72 (26%)	0 3
1	E	282/370 (76%)	212 (75%)	70 (25%)	0 3
1	G	282/370 (76%)	219 (78%)	63 (22%)	1 5
1	I	282/370 (76%)	224 (79%)	58 (21%)	1 6
1	K	282/370 (76%)	222 (79%)	60 (21%)	1 5
1	O	282/370 (76%)	211 (75%)	71 (25%)	0 3
1	Q	282/370 (76%)	226 (80%)	56 (20%)	1 6
2	B	279/332 (84%)	217 (78%)	62 (22%)	1 5
2	D	279/332 (84%)	223 (80%)	56 (20%)	1 6
2	F	279/332 (84%)	222 (80%)	57 (20%)	1 6
2	H	279/332 (84%)	218 (78%)	61 (22%)	1 5
2	J	279/332 (84%)	221 (79%)	58 (21%)	1 6

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
2	L	279/332 (84%)	218 (78%)	61 (22%)	1	5
2	P	279/332 (84%)	220 (79%)	59 (21%)	1	5
2	R	279/332 (84%)	214 (77%)	65 (23%)	0	4
All	All	4488/5616 (80%)	3505 (78%)	983 (22%)	2	5

All (983) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	O	0	LYS
1	O	6	ASN
1	O	10	ARG
1	O	13	ARG
1	O	14	ASN
1	O	21	LYS
1	O	25	LEU
1	O	41	THR
1	O	42	HIS
1	O	46	TYR
1	O	54	LYS
1	O	56	ASP
1	O	58	LYS
1	O	59	ILE
1	O	60	ILE
1	O	60(A)	ASP
1	O	61	ASN
1	O	62	GLU
1	O	64	PHE
1	O	66	ILE
1	O	67	ASP
1	O	72	LYS
1	O	74	VAL
1	O	78	ASP
1	O	81	LYS
1	O	92	VAL
1	O	98	VAL
1	O	114	LYS
1	O	115	LYS
1	O	117	ILE
1	O	119	THR
1	O	122(A)	LYS
1	O	127	THR

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
1	O	134	GLU
1	O	136	ASP
1	O	142	ASN
1	O	144	ILE
1	O	146	ASN
1	O	148	SER
1	O	153	CYS
1	O	154	LEU
1	O	164	GLU
1	O	169	LYS
1	O	172	MET
1	O	173	THR
1	O	182	GLN
1	O	191	ARG
1	O	192	ASP
1	O	201	LEU
1	O	212	LYS
1	O	214	VAL
1	O	216	LEU
1	O	218	LEU
1	O	234	THR
1	O	239	VAL
1	O	242	LEU
1	O	256	ASN
1	O	261	LYS
1	O	282	ASP
1	O	284	ARG
1	O	287	ASP
1	O	289	SER
1	O	293	ASP
1	O	308	VAL
1	O	312	ASP
1	O	313	ASN
1	O	315	TRP
1	O	317	TYR
1	O	319	GLN
1	O	323	ASP
1	O	326	ASP
2	P	0	LYS
2	P	5	ILE
2	P	11	ILE
2	P	13	ARG

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
2	P	15	PHE
2	P	21	LYS
2	P	23	SER
2	P	25	LEU
2	P	29	VAL
2	P	37	VAL
2	P	38	LYS
2	P	44	LEU
2	P	53	PHE
2	P	54	ASP
2	P	58	LYS
2	P	65	SER
2	P	72	LYS
2	P	77	ARG
2	P	80	VAL
2	P	96	THR
2	P	98	VAL
2	P	103	ASP
2	P	122(A)	LYS
2	P	127	THR
2	P	133	ASN
2	P	135	GLU
2	P	137	TYR
2	P	142	THR
2	P	151	THR
2	P	153	CYS
2	P	154	LEU
2	P	159	LYS
2	P	172	MET
2	P	185	LEU
2	P	186	ASP
2	P	191	ARG
2	P	192	ASP
2	P	201	LEU
2	P	212	LYS
2	P	214	VAL
2	P	220	ASN
2	P	225	LEU
2	P	234	THR
2	P	239	VAL
2	P	240	VAL
2	P	244	VAL

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
2	P	250	THR
2	P	259	PHE
2	P	279	VAL
2	P	280	SER
2	P	281	ILE
2	P	282	ASP
2	P	286	THR
2	P	288	VAL
2	P	289	SER
2	P	291	THR
2	P	294	SER
2	P	302	ASP
2	P	307	VAL
1	Q	0	LYS
1	Q	8	PHE
1	Q	10	ARG
1	Q	13	ARG
1	Q	14	ASN
1	Q	15	PHE
1	Q	39	SER
1	Q	54	LYS
1	Q	56	ASP
1	Q	62	GLU
1	Q	78	ASP
1	Q	81	LYS
1	Q	110	GLN
1	Q	114	LYS
1	Q	117	ILE
1	Q	119	THR
1	Q	125	ILE
1	Q	128	TYR
1	Q	135	LYS
1	Q	137	TYR
1	Q	139(A)	ASP
1	Q	148	SER
1	Q	152	ASN
1	Q	153	CYS
1	Q	161	LEU
1	Q	167	ILE
1	Q	168	VAL
1	Q	172	MET
1	Q	173	THR

*Continued on next page...*



*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
1	Q	182	GLN
1	Q	183	ARG
1	Q	185	LEU
1	Q	186	ASP
1	Q	193	LEU
1	Q	195	ARG
1	Q	203	ILE
1	Q	208	THR
1	Q	212	LYS
1	Q	220	GLN
1	Q	230	LEU
1	Q	234	THR
1	Q	239	VAL
1	Q	244	VAL
1	Q	247	GLU
1	Q	248	LYS
1	Q	260	ARG
1	Q	261	LYS
1	Q	279	VAL
1	Q	282	ASP
1	Q	293	ASP
1	Q	305	VAL
1	Q	308	VAL
1	Q	317	TYR
1	Q	322	VAL
1	Q	327	LEU
1	Q	349	CYS
2	R	0	LYS
2	R	10	ARG
2	R	13	ARG
2	R	15	PHE
2	R	18(B)	HIS
2	R	21	LYS
2	R	37	VAL
2	R	43	LEU
2	R	53	PHE
2	R	56	ASP
2	R	57	VAL
2	R	58	LYS
2	R	59	THR
2	R	64	ILE
2	R	65	SER

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
2	R	77	ARG
2	R	80	VAL
2	R	86	ASP
2	R	90	ASP
2	R	94	GLU
2	R	98	VAL
2	R	100	VAL
2	R	103	ASP
2	R	110	GLN
2	R	118	ILE
2	R	119	THR
2	R	127	THR
2	R	139	HIS
2	R	141	ASP
2	R	142	THR
2	R	143	ILE
2	R	152	ASN
2	R	159	LYS
2	R	172	MET
2	R	174	THR
2	R	178	TYR
2	R	179	THR
2	R	182	GLN
2	R	185	LEU
2	R	186	ASP
2	R	191	ARG
2	R	193	LEU
2	R	197	ARG
2	R	200	CYS
2	R	201	LEU
2	R	208	THR
2	R	214	VAL
2	R	228	ILE
2	R	234	THR
2	R	239	VAL
2	R	240	VAL
2	R	244	VAL
2	R	246	VAL
2	R	250	THR
2	R	255	VAL
2	R	264	ASP
2	R	265	ASN

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
2	R	282	ASP
2	R	294	SER
2	R	302	ASP
2	R	307	VAL
2	R	314	GLU
2	R	315	TRP
2	R	317	TYR
2	R	330	ASN
1	A	0	LYS
1	A	1	LEU
1	A	8	PHE
1	A	21	LYS
1	A	22	ASP
1	A	25	LEU
1	A	26	ASP
1	A	38	LYS
1	A	39	SER
1	A	42	HIS
1	A	52	THR
1	A	54	LYS
1	A	60(A)	ASP
1	A	74	VAL
1	A	78	ASP
1	A	98	VAL
1	A	100	VAL
1	A	114	LYS
1	A	119	THR
1	A	125	ILE
1	A	128	TYR
1	A	133	ASN
1	A	135	LYS
1	A	136	ASP
1	A	139(A)	ASP
1	A	152	ASN
1	A	157	PHE
1	A	171	THR
1	A	179	THR
1	A	191	ARG
1	A	195	ARG
1	A	214	VAL
1	A	217	VAL
1	A	218	LEU

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
1	A	221	LEU
1	A	222	LYS
1	A	234	THR
1	A	256	ASN
1	A	273	VAL
1	A	282	ASP
1	A	288	PHE
1	A	289	SER
1	A	290	SER
1	A	293	ASP
1	A	299	VAL
1	A	300	MET
1	A	305	VAL
1	A	307	VAL
1	A	312	ASP
1	A	317	TYR
1	A	323	ASP
1	A	327	LEU
1	A	330	ASN
1	A	332	TRP
2	B	0	LYS
2	B	2	LYS
2	B	13	ARG
2	B	21	LYS
2	B	25	LEU
2	B	26	ASP
2	B	33	THR
2	B	38	LYS
2	B	53	PHE
2	B	54	ASP
2	B	56	ASP
2	B	57	VAL
2	B	58	LYS
2	B	59	THR
2	B	67	ASP
2	B	70	VAL
2	B	81	ASN
2	B	90	ASP
2	B	94	GLU
2	B	98	VAL
2	B	103	ASP
2	B	115	LYS

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
2	B	125	ILE
2	B	135	GLU
2	B	137	TYR
2	B	138	THR
2	B	141	ASP
2	B	142	THR
2	B	151	THR
2	B	159	LYS
2	B	164	LYS
2	B	172	MET
2	B	178	TYR
2	B	181	ASP
2	B	182	GLN
2	B	185	LEU
2	B	186	ASP
2	B	191	ARG
2	B	201	LEU
2	B	208	THR
2	B	228	ILE
2	B	234	THR
2	B	240	VAL
2	B	244	VAL
2	B	250	THR
2	B	264	ASP
2	B	265	ASN
2	B	271	LEU
2	B	274	CYS
2	B	278	LEU
2	B	282	ASP
2	B	283	PHE
2	B	289	SER
2	B	293	ASP
2	B	294	SER
2	B	302	ASP
2	B	303	ASP
2	B	304	MET
2	B	313	ASN
2	B	320	ARG
2	B	331	LYS
2	B	332	TRP
1	C	0	LYS
1	C	1	LEU

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
1	C	5	ILE
1	C	6	ASN
1	C	8	PHE
1	C	13	ARG
1	C	14	ASN
1	C	18(A)	TRP
1	C	20	ARG
1	C	21	LYS
1	C	23	SER
1	C	26	ASP
1	C	44	LEU
1	C	46	TYR
1	C	53	PHE
1	C	56	ASP
1	C	67	ASP
1	C	78	ASP
1	C	84	TRP
1	C	87	LEU
1	C	109	ILE
1	C	119	THR
1	C	122(A)	LYS
1	C	127	THR
1	C	129	VAL
1	C	133	ASN
1	C	135	LYS
1	C	136	ASP
1	C	137	TYR
1	C	142	ASN
1	C	149	CYS
1	C	150	THR
1	C	158	VAL
1	C	160	VAL
1	C	164	GLU
1	C	176	HIS
1	C	186	ASP
1	C	191	ARG
1	C	192	ASP
1	C	193	LEU
1	C	202	ASN
1	C	203	ILE
1	C	206	THR
1	C	208	THR

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
1	C	217	VAL
1	C	220	GLN
1	C	232	VAL
1	C	234	THR
1	C	238	SER
1	C	239	VAL
1	C	242	LEU
1	C	244	VAL
1	C	247	GLU
1	C	251	THR
1	C	253	GLU
1	C	254	ASP
1	C	256	ASN
1	C	260	ARG
1	C	268	LYS
1	C	271	LEU
1	C	275	ASP
1	C	282	ASP
1	C	291	THR
1	C	300	MET
1	C	306	LYS
1	C	308	VAL
1	C	312	ASP
1	C	313	ASN
1	C	317	TYR
1	C	327	LEU
1	C	332	TRP
1	C	349	CYS
2	D	0	LYS
2	D	2	LYS
2	D	13	ARG
2	D	29	VAL
2	D	37	VAL
2	D	38	LYS
2	D	45	LYS
2	D	58	LYS
2	D	59	THR
2	D	67	ASP
2	D	70	VAL
2	D	80	VAL
2	D	86	ASP
2	D	87	MET

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
2	D	96	THR
2	D	98	VAL
2	D	102	ARG
2	D	103	ASP
2	D	110	GLN
2	D	127	THR
2	D	135	GLU
2	D	137	TYR
2	D	142	THR
2	D	144	ILE
2	D	151	THR
2	D	157	PHE
2	D	159	LYS
2	D	164	LYS
2	D	171	THR
2	D	172	MET
2	D	185	LEU
2	D	186	ASP
2	D	191	ARG
2	D	201	LEU
2	D	208	THR
2	D	212	LYS
2	D	224	LYS
2	D	225	LEU
2	D	228	ILE
2	D	234	THR
2	D	239	VAL
2	D	240	VAL
2	D	244	VAL
2	D	248	LYS
2	D	250	THR
2	D	271	LEU
2	D	273	VAL
2	D	279	VAL
2	D	281	ILE
2	D	288	VAL
2	D	289	SER
2	D	291	THR
2	D	294	SER
2	D	302	ASP
2	D	307	VAL
2	D	313	ASN

*Continued on next page...*



*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
1	E	0	LYS
1	E	1	LEU
1	E	8	PHE
1	E	11	ILE
1	E	14	ASN
1	E	15	PHE
1	E	17	ARG
1	E	18	CYS
1	E	20	ARG
1	E	21	LYS
1	E	22	ASP
1	E	25	LEU
1	E	46	TYR
1	E	56	ASP
1	E	58	LYS
1	E	60	ILE
1	E	62	GLU
1	E	67	ASP
1	E	72	LYS
1	E	73	VAL
1	E	78	ASP
1	E	81	LYS
1	E	90	ASP
1	E	93	ILE
1	E	96	THR
1	E	100	VAL
1	E	114	LYS
1	E	118	ILE
1	E	122(A)	LYS
1	E	125	ILE
1	E	127	THR
1	E	132	VAL
1	E	135	LYS
1	E	136	ASP
1	E	139(A)	ASP
1	E	144	ILE
1	E	154	LEU
1	E	158	VAL
1	E	163	GLU
1	E	164	GLU
1	E	173	THR
1	E	179	THR

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
1	E	181	ASP
1	E	185	LEU
1	E	192	ASP
1	E	201	LEU
1	E	202	ASN
1	E	203	ILE
1	E	212	LYS
1	E	214	VAL
1	E	218	LEU
1	E	220	GLN
1	E	232	VAL
1	E	234	THR
1	E	236	ASN
1	E	237	VAL
1	E	240	VAL
1	E	261	LYS
1	E	278	LEU
1	E	284	ARG
1	E	288	PHE
1	E	290	SER
1	E	305	VAL
1	E	307	VAL
1	E	308	VAL
1	E	310	TRP
1	E	312	ASP
1	E	314	GLU
1	E	321	VAL
1	E	332	TRP
2	F	0	LYS
2	F	5	ILE
2	F	13	ARG
2	F	15	PHE
2	F	21	LYS
2	F	25	LEU
2	F	29	VAL
2	F	38	LYS
2	F	53	PHE
2	F	54	ASP
2	F	58	LYS
2	F	59	THR
2	F	65	SER
2	F	67	ASP

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
2	F	70	VAL
2	F	72	LYS
2	F	77	ARG
2	F	80	VAL
2	F	96	THR
2	F	98	VAL
2	F	103	ASP
2	F	122(A)	LYS
2	F	127	THR
2	F	133	ASN
2	F	135	GLU
2	F	137	TYR
2	F	142	THR
2	F	151	THR
2	F	153	CYS
2	F	154	LEU
2	F	159	LYS
2	F	172	MET
2	F	185	LEU
2	F	191	ARG
2	F	192	ASP
2	F	201	LEU
2	F	208	THR
2	F	212	LYS
2	F	214	VAL
2	F	220	ASN
2	F	225	LEU
2	F	234	THR
2	F	239	VAL
2	F	240	VAL
2	F	244	VAL
2	F	250	THR
2	F	259	PHE
2	F	280	SER
2	F	281	ILE
2	F	282	ASP
2	F	286	THR
2	F	288	VAL
2	F	289	SER
2	F	291	THR
2	F	294	SER
2	F	302	ASP

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
2	F	307	VAL
1	G	0	LYS
1	G	6	ASN
1	G	10	ARG
1	G	13	ARG
1	G	14	ASN
1	G	15	PHE
1	G	25	LEU
1	G	26	ASP
1	G	42	HIS
1	G	45	LYS
1	G	47	ASP
1	G	54	LYS
1	G	57	VAL
1	G	74	VAL
1	G	77	ARG
1	G	78	ASP
1	G	90	ASP
1	G	91	ILE
1	G	110	GLN
1	G	114	LYS
1	G	117	ILE
1	G	119	THR
1	G	122(A)	LYS
1	G	128	TYR
1	G	135	LYS
1	G	136	ASP
1	G	137	TYR
1	G	139	HIS
1	G	139(A)	ASP
1	G	143	ILE
1	G	144	ILE
1	G	148	SER
1	G	152	ASN
1	G	153	CYS
1	G	154	LEU
1	G	160	VAL
1	G	176	HIS
1	G	177	SER
1	G	178	TYR
1	G	183	ARG
1	G	186	ASP

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
1	G	190	HIS
1	G	194	ARG
1	G	201	LEU
1	G	204	VAL
1	G	208	THR
1	G	212	LYS
1	G	224	LYS
1	G	230	LEU
1	G	234	THR
1	G	239	VAL
1	G	244	VAL
1	G	247	GLU
1	G	248(A)	VAL
1	G	260	ARG
1	G	267	LEU
1	G	273	VAL
1	G	280	SER
1	G	282	ASP
1	G	293	ASP
1	G	317	TYR
1	G	320	ARG
1	G	322	VAL
2	H	0	LYS
2	H	13	ARG
2	H	15	PHE
2	H	18(B)	HIS
2	H	21	LYS
2	H	38	LYS
2	H	43	LEU
2	H	53	PHE
2	H	56	ASP
2	H	58	LYS
2	H	59	THR
2	H	70	VAL
2	H	77	ARG
2	H	80	VAL
2	H	86	ASP
2	H	90	ASP
2	H	94	GLU
2	H	98	VAL
2	H	100	VAL
2	H	103	ASP

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
2	H	110	GLN
2	H	118	ILE
2	H	119	THR
2	H	127	THR
2	H	139	HIS
2	H	141	ASP
2	H	142	THR
2	H	143	ILE
2	H	152	ASN
2	H	159	LYS
2	H	172	MET
2	H	174	THR
2	H	178	TYR
2	H	179	THR
2	H	182	GLN
2	H	185	LEU
2	H	191	ARG
2	H	193	LEU
2	H	197	ARG
2	H	200	CYS
2	H	201	LEU
2	H	208	THR
2	H	214	VAL
2	H	228	ILE
2	H	234	THR
2	H	239	VAL
2	H	240	VAL
2	H	244	VAL
2	H	246	VAL
2	H	250	THR
2	H	255	VAL
2	H	264	ASP
2	H	265	ASN
2	H	282	ASP
2	H	294	SER
2	H	302	ASP
2	H	307	VAL
2	H	314	GLU
2	H	315	TRP
2	H	317	TYR
2	H	330	ASN
1	I	0	LYS

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
1	I	1	LEU
1	I	5	ILE
1	I	8	PHE
1	I	10	ARG
1	I	13	ARG
1	I	15	PHE
1	I	16	LEU
1	I	21	LYS
1	I	25	LEU
1	I	26	ASP
1	I	32	ASP
1	I	38	LYS
1	I	53	PHE
1	I	56	ASP
1	I	57	VAL
1	I	59	ILE
1	I	60(A)	ASP
1	I	61	ASN
1	I	74	VAL
1	I	78	ASP
1	I	81	LYS
1	I	86	GLU
1	I	92	VAL
1	I	114	LYS
1	I	115	LYS
1	I	119	THR
1	I	135	LYS
1	I	136	ASP
1	I	139(A)	ASP
1	I	142	ASN
1	I	144	ILE
1	I	157	PHE
1	I	171	THR
1	I	173	THR
1	I	181	ASP
1	I	184	LEU
1	I	190	HIS
1	I	191	ARG
1	I	206	THR
1	I	214	VAL
1	I	221	LEU
1	I	234	THR

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
1	I	239	VAL
1	I	240	VAL
1	I	256	ASN
1	I	268	LYS
1	I	271	LEU
1	I	279	VAL
1	I	284	ARG
1	I	287	ASP
1	I	288	PHE
1	I	291	THR
1	I	293	ASP
1	I	307	VAL
1	I	312	ASP
1	I	317	TYR
1	I	323	ASP
2	J	0	LYS
2	J	2	LYS
2	J	10	ARG
2	J	13	ARG
2	J	21	LYS
2	J	25	LEU
2	J	26	ASP
2	J	38	LYS
2	J	42	HIS
2	J	53	PHE
2	J	54	ASP
2	J	56	ASP
2	J	57	VAL
2	J	58	LYS
2	J	59	THR
2	J	67	ASP
2	J	70	VAL
2	J	81	ASN
2	J	90	ASP
2	J	94	GLU
2	J	98	VAL
2	J	103	ASP
2	J	115	LYS
2	J	125	ILE
2	J	135	GLU
2	J	137	TYR
2	J	138	THR

*Continued on next page...*



*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
2	J	141	ASP
2	J	142	THR
2	J	151	THR
2	J	159	LYS
2	J	164	LYS
2	J	172	MET
2	J	181	ASP
2	J	182	GLN
2	J	191	ARG
2	J	201	LEU
2	J	208	THR
2	J	228	ILE
2	J	234	THR
2	J	240	VAL
2	J	244	VAL
2	J	250	THR
2	J	264	ASP
2	J	265	ASN
2	J	271	LEU
2	J	276	GLU
2	J	278	LEU
2	J	280	SER
2	J	282	ASP
2	J	289	SER
2	J	293	ASP
2	J	294	SER
2	J	302	ASP
2	J	303	ASP
2	J	320	ARG
2	J	331	LYS
2	J	332	TRP
1	K	0	LYS
1	K	5	ILE
1	K	6	ASN
1	K	8	PHE
1	K	13	ARG
1	K	14	ASN
1	K	16	LEU
1	K	25	LEU
1	K	26	ASP
1	K	44	LEU
1	K	46	TYR

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
1	K	50	LEU
1	K	53	PHE
1	K	58	LYS
1	K	65	SER
1	K	73	VAL
1	K	78	ASP
1	K	84	TRP
1	K	87	LEU
1	K	90	ASP
1	K	96	THR
1	K	100	VAL
1	K	107	LYS
1	K	109	ILE
1	K	119	THR
1	K	124	ASP
1	K	129	VAL
1	K	136	ASP
1	K	137	TYR
1	K	139(A)	ASP
1	K	142	ASN
1	K	148	SER
1	K	149	CYS
1	K	165	LEU
1	K	172	MET
1	K	192	ASP
1	K	203	ILE
1	K	204	VAL
1	K	206	THR
1	K	220	GLN
1	K	221	LEU
1	K	231	ARG
1	K	234	THR
1	K	242	LEU
1	K	244	VAL
1	K	247	GLU
1	K	251	THR
1	K	261	LYS
1	K	276	ILE
1	K	278	LEU
1	K	281	VAL
1	K	282	ASP
1	K	289	SER

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
1	K	291	THR
1	K	308	VAL
1	K	312	ASP
1	K	313	ASN
1	K	317	TYR
1	K	320	ARG
1	K	323	ASP
2	L	0	LYS
2	L	2	LYS
2	L	13	ARG
2	L	29	VAL
2	L	33	THR
2	L	38	LYS
2	L	45	LYS
2	L	57	VAL
2	L	58	LYS
2	L	59	THR
2	L	67	ASP
2	L	70	VAL
2	L	80	VAL
2	L	86	ASP
2	L	87	MET
2	L	96	THR
2	L	98	VAL
2	L	102	ARG
2	L	103	ASP
2	L	110	GLN
2	L	127	THR
2	L	135	GLU
2	L	137	TYR
2	L	142	THR
2	L	144	ILE
2	L	151	THR
2	L	157	PHE
2	L	159	LYS
2	L	164	LYS
2	L	171	THR
2	L	172	MET
2	L	176	HIS
2	L	179	THR
2	L	182	GLN
2	L	191	ARG

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
2	L	201	LEU
2	L	208	THR
2	L	212	LYS
2	L	217	VAL
2	L	222	LYS
2	L	224	LYS
2	L	225	LEU
2	L	228	ILE
2	L	234	THR
2	L	239	VAL
2	L	240	VAL
2	L	244	VAL
2	L	248	LYS
2	L	250	THR
2	L	261	GLU
2	L	271	LEU
2	L	273	VAL
2	L	279	VAL
2	L	281	ILE
2	L	288	VAL
2	L	289	SER
2	L	291	THR
2	L	294	SER
2	L	302	ASP
2	L	307	VAL
2	L	313	ASN

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (98) such sidechains are listed below:

Mol	Chain	Res	Type
1	O	6	ASN
1	O	14	ASN
1	O	42	HIS
1	O	61	ASN
1	O	176	HIS
1	O	226	ASN
1	O	236	ASN
1	O	256	ASN
2	P	18(B)	HIS
2	P	78	ASN
2	P	81	ASN
2	P	108	HIS

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
2	P	146	ASN
2	P	202	ASN
2	P	256	ASN
2	P	319	GLN
2	P	330	ASN
1	Q	6	ASN
1	Q	14	ASN
1	Q	18(B)	HIS
1	Q	110	GLN
1	Q	176	HIS
1	Q	257	ASN
1	Q	319	GLN
2	R	81	ASN
2	R	182	GLN
2	R	202	ASN
1	A	61	ASN
1	A	202	ASN
1	A	226	ASN
1	A	319	GLN
2	B	39	GLN
2	B	152	ASN
2	B	190	HIS
2	B	202	ASN
2	B	220	ASN
2	B	256	ASN
2	B	319	GLN
1	C	6	ASN
1	C	14	ASN
1	C	142	ASN
1	C	146	ASN
1	C	152	ASN
1	C	257	ASN
2	D	110	GLN
2	D	190	HIS
2	D	202	ASN
2	D	220	ASN
2	D	245	GLN
2	D	319	GLN
2	D	330	ASN
1	E	139	HIS
1	E	176	HIS
1	E	256	ASN

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
1	E	330	ASN
2	F	78	ASN
2	F	81	ASN
2	F	108	HIS
2	F	146	ASN
2	F	190	HIS
2	F	202	ASN
2	F	256	ASN
2	F	319	GLN
2	F	330	ASN
1	G	6	ASN
1	G	18(B)	HIS
1	G	142	ASN
1	G	257	ASN
1	G	330	ASN
2	H	81	ASN
2	H	202	ASN
1	I	14	ASN
1	I	61	ASN
1	I	152	ASN
1	I	220	GLN
1	I	226	ASN
1	I	313	ASN
1	I	319	GLN
2	J	152	ASN
2	J	202	ASN
2	J	220	ASN
2	J	256	ASN
2	J	319	GLN
1	K	6	ASN
1	K	14	ASN
1	K	108	HIS
1	K	110	GLN
1	K	146	ASN
1	K	152	ASN
1	K	176	HIS
1	K	257	ASN
2	L	39	GLN
2	L	110	GLN
2	L	202	ASN
2	L	220	ASN
2	L	245	GLN

*Continued on next page...*

Continued from previous page...

Mol	Chain	Res	Type
2	L	319	GLN
2	L	330	ASN

### 5.3.3 RNA [i](#)

There are no RNA molecules in this entry.

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

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

### 5.5 Carbohydrates [i](#)

There are no oligosaccharides in this entry.

### 5.6 Ligand geometry [i](#)

16 ligands are modelled in this entry.

In the following table, the Counts columns list the number of bonds (or angles) for which Mogul statistics could be retrieved, the number of bonds (or angles) that are observed in the model and the number of bonds (or angles) that are defined in the Chemical Component Dictionary. The Link column lists molecule types, if any, to which the group is linked. The Z score for a bond length (or angle) is the number of standard deviations the observed value is removed from the expected value. A bond length (or angle) with  $|Z| > 2$  is considered an outlier worth inspection. RMSZ is the root-mean-square of all Z scores of the bond lengths (or angles).

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
3	NAD	R	401	-	42,48,48	0.64	1 (2%)	50,73,73	0.83	4 (8%)
3	NAD	E	401	-	42,48,48	3.80	16 (38%)	50,73,73	2.34	10 (20%)
3	NAD	B	401	-	42,48,48	3.85	18 (42%)	50,73,73	2.29	9 (18%)
3	NAD	D	401	-	42,48,48	3.88	18 (42%)	50,73,73	2.28	8 (16%)
3	NAD	A	401	-	42,48,48	0.65	0	50,73,73	0.81	3 (6%)
3	NAD	G	401	-	42,48,48	3.85	17 (40%)	50,73,73	2.15	7 (14%)
3	NAD	J	401	-	42,48,48	0.63	1 (2%)	50,73,73	0.78	3 (6%)
3	NAD	K	401	-	42,48,48	0.67	1 (2%)	50,73,73	0.92	4 (8%)
3	NAD	L	401	-	42,48,48	3.88	19 (45%)	50,73,73	2.28	7 (14%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
3	NAD	O	401	-	42,48,48	0.67	1 (2%)	50,73,73	0.69	2 (4%)
3	NAD	H	401	-	42,48,48	3.84	17 (40%)	50,73,73	2.24	7 (14%)
3	NAD	P	401	-	42,48,48	0.64	1 (2%)	50,73,73	0.75	2 (4%)
3	NAD	C	401	-	42,48,48	3.82	15 (35%)	50,73,73	2.33	10 (20%)
3	NAD	I	401	-	42,48,48	0.65	1 (2%)	50,73,73	0.75	2 (4%)
3	NAD	F	401	-	42,48,48	3.86	18 (42%)	50,73,73	2.28	8 (16%)
3	NAD	Q	401	-	42,48,48	3.84	17 (40%)	50,73,73	2.31	9 (18%)

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

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
3	NAD	R	401	-	-	15/26/62/62	0/5/5/5
3	NAD	E	401	-	-	10/26/62/62	0/5/5/5
3	NAD	B	401	-	-	12/26/62/62	0/5/5/5
3	NAD	D	401	-	-	12/26/62/62	0/5/5/5
3	NAD	A	401	-	-	15/26/62/62	0/5/5/5
3	NAD	G	401	-	-	12/26/62/62	0/5/5/5
3	NAD	J	401	-	-	9/26/62/62	0/5/5/5
3	NAD	K	401	-	-	14/26/62/62	0/5/5/5
3	NAD	L	401	-	-	12/26/62/62	0/5/5/5
3	NAD	O	401	-	-	15/26/62/62	0/5/5/5
3	NAD	H	401	-	-	13/26/62/62	0/5/5/5
3	NAD	P	401	-	-	14/26/62/62	0/5/5/5
3	NAD	C	401	-	-	11/26/62/62	0/5/5/5
3	NAD	I	401	-	-	13/26/62/62	0/5/5/5
3	NAD	F	401	-	-	12/26/62/62	0/5/5/5
3	NAD	Q	401	-	-	9/26/62/62	0/5/5/5

All (161) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	D	401	NAD	O4D-C1D	-10.40	1.26	1.41
3	L	401	NAD	O4D-C1D	-10.39	1.26	1.41
3	B	401	NAD	O4D-C1D	-10.20	1.26	1.41

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	F	401	NAD	O4D-C1D	-10.19	1.26	1.41
3	H	401	NAD	O4D-C1D	-10.05	1.27	1.41
3	G	401	NAD	O4D-C1D	-10.02	1.27	1.41
3	Q	401	NAD	O4D-C1D	-9.98	1.27	1.41
3	C	401	NAD	O4D-C1D	-9.88	1.27	1.41
3	E	401	NAD	O4D-C1D	-9.67	1.27	1.41
3	E	401	NAD	C3B-C4B	-9.47	1.28	1.53
3	G	401	NAD	C3B-C4B	-9.38	1.29	1.53
3	L	401	NAD	C3B-C4B	-9.35	1.29	1.53
3	D	401	NAD	C3B-C4B	-9.33	1.29	1.53
3	H	401	NAD	C3B-C4B	-9.26	1.29	1.53
3	B	401	NAD	C3B-C4B	-9.24	1.29	1.53
3	Q	401	NAD	C3B-C4B	-9.14	1.29	1.53
3	C	401	NAD	C3B-C4B	-9.11	1.29	1.53
3	F	401	NAD	C3B-C4B	-9.06	1.29	1.53
3	D	401	NAD	C3D-C4D	-8.67	1.30	1.53
3	B	401	NAD	C3D-C4D	-8.64	1.30	1.53
3	L	401	NAD	C3D-C4D	-8.64	1.30	1.53
3	E	401	NAD	C3D-C4D	-8.60	1.31	1.53
3	C	401	NAD	C3D-C4D	-8.60	1.31	1.53
3	C	401	NAD	C7N-N7N	8.60	1.49	1.33
3	F	401	NAD	C3D-C4D	-8.56	1.31	1.53
3	Q	401	NAD	C7N-N7N	8.52	1.49	1.33
3	H	401	NAD	C7N-N7N	8.44	1.49	1.33
3	G	401	NAD	C3D-C4D	-8.44	1.31	1.53
3	G	401	NAD	C7N-N7N	8.43	1.49	1.33
3	F	401	NAD	C7N-N7N	8.40	1.49	1.33
3	Q	401	NAD	C3D-C4D	-8.37	1.31	1.53
3	E	401	NAD	C7N-N7N	8.37	1.48	1.33
3	B	401	NAD	C7N-N7N	8.35	1.48	1.33
3	H	401	NAD	C3D-C4D	-8.29	1.31	1.53
3	L	401	NAD	C7N-N7N	8.28	1.48	1.33
3	D	401	NAD	C7N-N7N	8.26	1.48	1.33
3	H	401	NAD	O4D-C4D	7.53	1.61	1.45
3	B	401	NAD	O4B-C4B	7.51	1.61	1.45
3	Q	401	NAD	O4D-C4D	7.50	1.61	1.45
3	H	401	NAD	O4B-C4B	7.49	1.61	1.45
3	F	401	NAD	O4B-C4B	7.48	1.61	1.45
3	C	401	NAD	O4D-C4D	7.47	1.61	1.45
3	G	401	NAD	O4D-C4D	7.46	1.61	1.45
3	E	401	NAD	O4B-C4B	7.40	1.61	1.45
3	L	401	NAD	O4D-C4D	7.38	1.61	1.45

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	D	401	NAD	O4B-C4B	7.37	1.61	1.45
3	B	401	NAD	O4D-C4D	7.37	1.61	1.45
3	L	401	NAD	O4B-C4B	7.36	1.61	1.45
3	G	401	NAD	O4B-C4B	7.36	1.61	1.45
3	F	401	NAD	O4D-C4D	7.35	1.61	1.45
3	Q	401	NAD	O4B-C4B	7.34	1.61	1.45
3	D	401	NAD	O4D-C4D	7.34	1.61	1.45
3	C	401	NAD	O4B-C4B	7.31	1.61	1.45
3	E	401	NAD	O4D-C4D	7.27	1.61	1.45
3	F	401	NAD	O4B-C1B	-6.94	1.31	1.41
3	C	401	NAD	O4B-C1B	-6.93	1.31	1.41
3	Q	401	NAD	O4B-C1B	-6.92	1.31	1.41
3	L	401	NAD	O4B-C1B	-6.74	1.31	1.41
3	G	401	NAD	O4B-C1B	-6.68	1.31	1.41
3	H	401	NAD	O4B-C1B	-6.67	1.31	1.41
3	E	401	NAD	O4B-C1B	-6.63	1.31	1.41
3	D	401	NAD	O4B-C1B	-6.63	1.31	1.41
3	B	401	NAD	O4B-C1B	-6.62	1.31	1.41
3	D	401	NAD	C3N-C7N	4.82	1.57	1.50
3	B	401	NAD	C3N-C7N	4.73	1.57	1.50
3	L	401	NAD	C3N-C7N	4.73	1.57	1.50
3	G	401	NAD	C3N-C7N	4.63	1.57	1.50
3	F	401	NAD	C3N-C7N	4.59	1.57	1.50
3	H	401	NAD	O3D-C3D	4.59	1.53	1.43
3	Q	401	NAD	C3N-C7N	4.57	1.57	1.50
3	H	401	NAD	C3N-C7N	4.52	1.57	1.50
3	D	401	NAD	O3D-C3D	4.52	1.53	1.43
3	L	401	NAD	O3D-C3D	4.51	1.53	1.43
3	Q	401	NAD	O3D-C3D	4.51	1.53	1.43
3	G	401	NAD	O3D-C3D	4.45	1.53	1.43
3	F	401	NAD	O3D-C3D	4.44	1.53	1.43
3	E	401	NAD	O3D-C3D	4.40	1.53	1.43
3	B	401	NAD	O3D-C3D	4.38	1.53	1.43
3	C	401	NAD	O3D-C3D	4.35	1.53	1.43
3	C	401	NAD	C3N-C7N	4.17	1.56	1.50
3	B	401	NAD	C6A-N6A	4.17	1.49	1.34
3	H	401	NAD	C6A-N6A	4.15	1.49	1.34
3	F	401	NAD	C6A-N6A	4.14	1.49	1.34
3	L	401	NAD	C6A-N6A	4.14	1.49	1.34
3	D	401	NAD	C6A-N6A	4.13	1.49	1.34
3	E	401	NAD	C6A-N6A	4.11	1.49	1.34
3	C	401	NAD	C6A-N6A	4.11	1.49	1.34

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	G	401	NAD	C6A-N6A	4.09	1.49	1.34
3	Q	401	NAD	C6A-N6A	4.07	1.48	1.34
3	E	401	NAD	C3N-C7N	4.06	1.56	1.50
3	C	401	NAD	O3B-C3B	3.25	1.50	1.43
3	G	401	NAD	O3B-C3B	3.25	1.50	1.43
3	Q	401	NAD	O3B-C3B	3.24	1.50	1.43
3	D	401	NAD	O3B-C3B	3.09	1.50	1.43
3	B	401	NAD	O3B-C3B	3.09	1.50	1.43
3	E	401	NAD	O3B-C3B	3.07	1.50	1.43
3	L	401	NAD	O3B-C3B	3.05	1.50	1.43
3	H	401	NAD	O3B-C3B	3.00	1.50	1.43
3	F	401	NAD	C2N-N1N	2.94	1.38	1.35
3	F	401	NAD	O3B-C3B	2.92	1.49	1.43
3	E	401	NAD	O2B-C2B	-2.85	1.36	1.43
3	E	401	NAD	C5A-C4A	-2.85	1.33	1.40
3	B	401	NAD	O2B-C2B	-2.83	1.36	1.43
3	L	401	NAD	O2B-C2B	-2.83	1.36	1.43
3	F	401	NAD	O2B-C2B	-2.83	1.36	1.43
3	C	401	NAD	C5A-C4A	-2.81	1.33	1.40
3	H	401	NAD	O2B-C2B	-2.80	1.36	1.43
3	Q	401	NAD	C5A-C4A	-2.79	1.33	1.40
3	Q	401	NAD	O2B-C2B	-2.76	1.36	1.43
3	D	401	NAD	O2B-C2B	-2.75	1.36	1.43
3	B	401	NAD	C5A-C4A	-2.74	1.33	1.40
3	G	401	NAD	O2B-C2B	-2.74	1.36	1.43
3	C	401	NAD	O2B-C2B	-2.72	1.36	1.43
3	H	401	NAD	C5A-C4A	-2.72	1.33	1.40
3	G	401	NAD	C5A-C4A	-2.72	1.33	1.40
3	L	401	NAD	C5A-C4A	-2.70	1.33	1.40
3	D	401	NAD	C2N-N1N	2.69	1.38	1.35
3	D	401	NAD	C5A-C4A	-2.68	1.33	1.40
3	L	401	NAD	C2N-N1N	2.64	1.38	1.35
3	F	401	NAD	C5A-C4A	-2.64	1.34	1.40
3	D	401	NAD	C2A-N1A	2.61	1.38	1.33
3	Q	401	NAD	C2N-N1N	2.59	1.38	1.35
3	L	401	NAD	C2A-N1A	2.56	1.38	1.33
3	L	401	NAD	O7N-C7N	-2.55	1.19	1.24
3	G	401	NAD	C2N-N1N	2.52	1.38	1.35
3	B	401	NAD	C2A-N1A	2.50	1.38	1.33
3	D	401	NAD	O7N-C7N	-2.50	1.19	1.24
3	C	401	NAD	C2A-N1A	2.46	1.38	1.33
3	E	401	NAD	O7N-C7N	-2.45	1.19	1.24

*Continued on next page...*

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	F	401	NAD	C2A-N1A	2.45	1.38	1.33
3	H	401	NAD	C2A-N1A	2.42	1.38	1.33
3	E	401	NAD	C2A-N1A	2.42	1.38	1.33
3	Q	401	NAD	C2D-C1D	2.41	1.57	1.53
3	Q	401	NAD	C2A-N1A	2.41	1.38	1.33
3	G	401	NAD	C2D-C1D	2.39	1.57	1.53
3	H	401	NAD	C2N-N1N	2.38	1.37	1.35
3	G	401	NAD	O7N-C7N	-2.37	1.19	1.24
3	B	401	NAD	C2N-N1N	2.37	1.37	1.35
3	C	401	NAD	O7N-C7N	-2.33	1.19	1.24
3	K	401	NAD	C2N-N1N	2.31	1.37	1.35
3	H	401	NAD	O7N-C7N	-2.31	1.19	1.24
3	G	401	NAD	C2A-N1A	2.26	1.38	1.33
3	D	401	NAD	C2D-C1D	2.26	1.57	1.53
3	F	401	NAD	O7N-C7N	-2.25	1.19	1.24
3	O	401	NAD	C2N-N1N	2.25	1.37	1.35
3	L	401	NAD	C2D-C1D	2.24	1.57	1.53
3	B	401	NAD	O7N-C7N	-2.24	1.19	1.24
3	F	401	NAD	C2D-C1D	2.21	1.57	1.53
3	F	401	NAD	C2A-N3A	2.21	1.35	1.32
3	Q	401	NAD	O7N-C7N	-2.20	1.19	1.24
3	L	401	NAD	C2A-N3A	2.18	1.35	1.32
3	P	401	NAD	C2N-N1N	2.14	1.37	1.35
3	D	401	NAD	C2A-N3A	2.11	1.35	1.32
3	R	401	NAD	C2N-N1N	2.10	1.37	1.35
3	E	401	NAD	C2D-C1D	2.09	1.56	1.53
3	J	401	NAD	C2N-N1N	2.07	1.37	1.35
3	B	401	NAD	PA-O5B	2.04	1.67	1.59
3	B	401	NAD	C2D-C1D	2.03	1.56	1.53
3	I	401	NAD	C2N-N1N	2.02	1.37	1.35
3	H	401	NAD	C2D-C1D	2.01	1.56	1.53
3	L	401	NAD	PA-O5B	2.00	1.67	1.59

All (95) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	C	401	NAD	C1B-N9A-C4A	-9.63	109.73	126.64
3	E	401	NAD	C1B-N9A-C4A	-9.49	109.96	126.64
3	L	401	NAD	C1B-N9A-C4A	-9.43	110.06	126.64
3	D	401	NAD	C1B-N9A-C4A	-9.43	110.08	126.64
3	H	401	NAD	C1B-N9A-C4A	-9.20	110.47	126.64
3	F	401	NAD	C1B-N9A-C4A	-9.06	110.72	126.64

Continued on next page...

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	Q	401	NAD	C1B-N9A-C4A	-8.86	111.08	126.64
3	B	401	NAD	C1B-N9A-C4A	-8.86	111.08	126.64
3	H	401	NAD	C5A-C6A-N6A	8.12	132.69	120.35
3	L	401	NAD	C5A-C6A-N6A	8.07	132.62	120.35
3	D	401	NAD	C5A-C6A-N6A	8.07	132.61	120.35
3	G	401	NAD	C5A-C6A-N6A	7.90	132.36	120.35
3	G	401	NAD	C1B-N9A-C4A	-7.83	112.88	126.64
3	Q	401	NAD	C5A-C6A-N6A	7.83	132.25	120.35
3	F	401	NAD	C5A-C6A-N6A	7.82	132.23	120.35
3	C	401	NAD	C5A-C6A-N6A	7.81	132.22	120.35
3	E	401	NAD	C5A-C6A-N6A	7.66	131.99	120.35
3	B	401	NAD	C5A-C6A-N6A	7.56	131.84	120.35
3	G	401	NAD	N3A-C2A-N1A	-5.82	119.58	128.68
3	B	401	NAD	N3A-C2A-N1A	-5.77	119.65	128.68
3	F	401	NAD	N3A-C2A-N1A	-5.64	119.86	128.68
3	Q	401	NAD	N3A-C2A-N1A	-5.61	119.92	128.68
3	C	401	NAD	N3A-C2A-N1A	-5.60	119.93	128.68
3	E	401	NAD	N3A-C2A-N1A	-5.58	119.95	128.68
3	L	401	NAD	N3A-C2A-N1A	-5.52	120.05	128.68
3	D	401	NAD	N3A-C2A-N1A	-5.48	120.11	128.68
3	H	401	NAD	N6A-C6A-N1A	-5.38	107.41	118.57
3	L	401	NAD	N6A-C6A-N1A	-5.36	107.44	118.57
3	D	401	NAD	N6A-C6A-N1A	-5.35	107.46	118.57
3	F	401	NAD	N6A-C6A-N1A	-5.25	107.69	118.57
3	Q	401	NAD	N6A-C6A-N1A	-5.22	107.74	118.57
3	H	401	NAD	N3A-C2A-N1A	-5.20	120.55	128.68
3	C	401	NAD	N6A-C6A-N1A	-5.15	107.89	118.57
3	G	401	NAD	N6A-C6A-N1A	-5.11	107.97	118.57
3	E	401	NAD	N6A-C6A-N1A	-5.08	108.03	118.57
3	B	401	NAD	N6A-C6A-N1A	-5.01	108.18	118.57
3	B	401	NAD	C3B-C2B-C1B	3.87	106.81	100.98
3	E	401	NAD	C6N-N1N-C2N	-3.74	118.57	121.97
3	K	401	NAD	C3D-C2D-C1D	3.63	106.44	100.98
3	C	401	NAD	C3B-C2B-C1B	3.43	106.14	100.98
3	E	401	NAD	PN-O3-PA	-3.41	121.12	132.83
3	Q	401	NAD	PN-O3-PA	-3.28	121.56	132.83
3	E	401	NAD	C2N-C3N-C4N	3.23	121.92	118.26
3	C	401	NAD	PN-O3-PA	-3.06	122.31	132.83
3	Q	401	NAD	C3D-C2D-C1D	2.98	105.46	100.98
3	B	401	NAD	PN-O3-PA	-2.93	122.76	132.83
3	A	401	NAD	C3N-C2N-N1N	-2.81	117.68	120.43
3	H	401	NAD	PN-O3-PA	-2.77	123.30	132.83

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	A	401	NAD	C6N-N1N-C2N	-2.76	119.46	121.97
3	C	401	NAD	C2N-C3N-C4N	2.74	121.36	118.26
3	Q	401	NAD	C6N-N1N-C2N	-2.73	119.49	121.97
3	I	401	NAD	C6N-N1N-C2N	-2.73	119.49	121.97
3	L	401	NAD	PN-O3-PA	-2.71	123.52	132.83
3	R	401	NAD	C3D-C2D-C1D	2.71	105.06	100.98
3	D	401	NAD	PN-O3-PA	-2.70	123.54	132.83
3	R	401	NAD	C6N-N1N-C2N	-2.70	119.51	121.97
3	K	401	NAD	C6N-N1N-C2N	-2.68	119.53	121.97
3	J	401	NAD	C6N-N1N-C2N	-2.62	119.59	121.97
3	O	401	NAD	C6N-N1N-C2N	-2.61	119.60	121.97
3	P	401	NAD	C6N-N1N-C2N	-2.59	119.62	121.97
3	E	401	NAD	C5N-C4N-C3N	-2.58	117.29	120.34
3	F	401	NAD	C3D-C2D-C1D	2.55	104.82	100.98
3	G	401	NAD	PN-O3-PA	-2.45	124.42	132.83
3	B	401	NAD	C2B-C3B-C4B	2.40	107.30	102.64
3	C	401	NAD	C2B-C3B-C4B	2.32	107.15	102.64
3	D	401	NAD	C3B-C2B-C1B	2.32	104.47	100.98
3	F	401	NAD	O4B-C1B-C2B	-2.31	103.56	106.93
3	L	401	NAD	C3B-C2B-C1B	2.29	104.43	100.98
3	R	401	NAD	C3N-C2N-N1N	-2.27	118.20	120.43
3	A	401	NAD	C5A-C6A-N6A	2.25	123.77	120.35
3	J	401	NAD	C3D-C2D-C1D	2.22	104.33	100.98
3	I	401	NAD	C5A-C6A-N6A	2.22	123.73	120.35
3	H	401	NAD	C3B-C2B-C1B	2.22	104.32	100.98
3	R	401	NAD	C5A-C6A-N6A	2.22	123.73	120.35
3	K	401	NAD	C5A-C6A-N6A	2.22	123.72	120.35
3	P	401	NAD	C5A-C6A-N6A	2.20	123.69	120.35
3	G	401	NAD	C2N-C3N-C4N	2.18	120.73	118.26
3	H	401	NAD	C2N-C3N-C4N	2.18	120.73	118.26
3	L	401	NAD	C3D-C2D-C1D	2.17	104.24	100.98
3	D	401	NAD	C3D-C2D-C1D	2.16	104.23	100.98
3	O	401	NAD	C5A-C6A-N6A	2.16	123.64	120.35
3	E	401	NAD	C3D-C2D-C1D	2.16	104.23	100.98
3	Q	401	NAD	C3B-C2B-C1B	2.15	104.22	100.98
3	Q	401	NAD	C2N-C3N-C4N	2.15	120.69	118.26
3	E	401	NAD	C3B-C2B-C1B	2.12	104.17	100.98
3	K	401	NAD	C3N-C2N-N1N	-2.12	118.36	120.43
3	J	401	NAD	C5A-C6A-N6A	2.11	123.55	120.35
3	F	401	NAD	C6N-N1N-C2N	-2.10	120.06	121.97
3	B	401	NAD	C2N-C3N-C4N	2.07	120.61	118.26
3	G	401	NAD	C6N-N1N-C2N	-2.06	120.10	121.97

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	B	401	NAD	C6N-N1N-C2N	-2.03	120.12	121.97
3	F	401	NAD	C2B-C3B-C4B	2.03	106.59	102.64
3	D	401	NAD	O7N-C7N-N7N	-2.03	119.70	122.58
3	C	401	NAD	C6N-N1N-C2N	-2.02	120.14	121.97
3	C	401	NAD	O4B-C4B-C3B	2.00	109.08	105.11

There are no chirality outliers.

All (198) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
3	O	401	NAD	C5B-O5B-PA-O2A
3	O	401	NAD	C5B-O5B-PA-O3
3	O	401	NAD	O4B-C4B-C5B-O5B
3	O	401	NAD	C3B-C4B-C5B-O5B
3	O	401	NAD	C5D-O5D-PN-O3
3	O	401	NAD	C5D-O5D-PN-O1N
3	O	401	NAD	C5D-O5D-PN-O2N
3	O	401	NAD	O4D-C1D-N1N-C2N
3	O	401	NAD	O4D-C1D-N1N-C6N
3	O	401	NAD	C2D-C1D-N1N-C2N
3	O	401	NAD	C2D-C1D-N1N-C6N
3	P	401	NAD	C5B-O5B-PA-O3
3	P	401	NAD	O4B-C4B-C5B-O5B
3	P	401	NAD	C3B-C4B-C5B-O5B
3	P	401	NAD	C5D-O5D-PN-O3
3	P	401	NAD	C4D-C5D-O5D-PN
3	Q	401	NAD	C5B-O5B-PA-O3
3	Q	401	NAD	C3B-C4B-C5B-O5B
3	Q	401	NAD	O4D-C1D-N1N-C2N
3	Q	401	NAD	O4D-C1D-N1N-C6N
3	Q	401	NAD	C2D-C1D-N1N-C2N
3	Q	401	NAD	C2D-C1D-N1N-C6N
3	R	401	NAD	C5B-O5B-PA-O1A
3	R	401	NAD	C3B-C4B-C5B-O5B
3	R	401	NAD	C5D-O5D-PN-O1N
3	R	401	NAD	C4D-C5D-O5D-PN
3	R	401	NAD	O4D-C4D-C5D-O5D
3	R	401	NAD	C3D-C4D-C5D-O5D
3	R	401	NAD	C2D-C1D-N1N-C2N
3	R	401	NAD	C2D-C1D-N1N-C6N
3	R	401	NAD	C2N-C3N-C7N-O7N
3	R	401	NAD	C2N-C3N-C7N-N7N

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms
3	A	401	NAD	C5B-O5B-PA-O3
3	A	401	NAD	O4B-C4B-C5B-O5B
3	A	401	NAD	O4D-C1D-N1N-C2N
3	A	401	NAD	O4D-C1D-N1N-C6N
3	B	401	NAD	C4B-C5B-O5B-PA
3	B	401	NAD	C5D-O5D-PN-O3
3	B	401	NAD	C4D-C5D-O5D-PN
3	B	401	NAD	O4D-C4D-C5D-O5D
3	B	401	NAD	C3D-C4D-C5D-O5D
3	B	401	NAD	C2D-C1D-N1N-C2N
3	B	401	NAD	C2D-C1D-N1N-C6N
3	C	401	NAD	O4D-C4D-C5D-O5D
3	C	401	NAD	C2D-C1D-N1N-C2N
3	C	401	NAD	C2D-C1D-N1N-C6N
3	D	401	NAD	C3B-C4B-C5B-O5B
3	D	401	NAD	C5D-O5D-PN-O3
3	D	401	NAD	C5D-O5D-PN-O2N
3	D	401	NAD	C4D-C5D-O5D-PN
3	D	401	NAD	C3D-C4D-C5D-O5D
3	E	401	NAD	C3B-C4B-C5B-O5B
3	E	401	NAD	C5D-O5D-PN-O3
3	E	401	NAD	O4D-C1D-N1N-C2N
3	F	401	NAD	C5B-O5B-PA-O3
3	F	401	NAD	C5D-O5D-PN-O3
3	F	401	NAD	C5D-O5D-PN-O2N
3	F	401	NAD	C4D-C5D-O5D-PN
3	F	401	NAD	O4D-C1D-N1N-C2N
3	G	401	NAD	C4B-C5B-O5B-PA
3	G	401	NAD	C3B-C4B-C5B-O5B
3	G	401	NAD	O4D-C1D-N1N-C2N
3	G	401	NAD	O4D-C1D-N1N-C6N
3	G	401	NAD	C2D-C1D-N1N-C2N
3	G	401	NAD	C2D-C1D-N1N-C6N
3	H	401	NAD	C3B-C4B-C5B-O5B
3	H	401	NAD	C5D-O5D-PN-O3
3	H	401	NAD	C5D-O5D-PN-O2N
3	H	401	NAD	C4D-C5D-O5D-PN
3	H	401	NAD	O4D-C4D-C5D-O5D
3	H	401	NAD	C3D-C4D-C5D-O5D
3	H	401	NAD	C2D-C1D-N1N-C2N
3	H	401	NAD	C2D-C1D-N1N-C6N
3	I	401	NAD	C5B-O5B-PA-O1A

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms
3	I	401	NAD	C5B-O5B-PA-O2A
3	I	401	NAD	C4B-C5B-O5B-PA
3	I	401	NAD	C3B-C4B-C5B-O5B
3	I	401	NAD	C5D-O5D-PN-O3
3	I	401	NAD	C4D-C5D-O5D-PN
3	I	401	NAD	O4D-C4D-C5D-O5D
3	J	401	NAD	O4B-C4B-C5B-O5B
3	J	401	NAD	C3B-C4B-C5B-O5B
3	J	401	NAD	C4D-C5D-O5D-PN
3	J	401	NAD	C3D-C4D-C5D-O5D
3	J	401	NAD	C2D-C1D-N1N-C2N
3	J	401	NAD	C2D-C1D-N1N-C6N
3	K	401	NAD	C5D-O5D-PN-O1N
3	K	401	NAD	C3D-C4D-C5D-O5D
3	K	401	NAD	C2N-C3N-C7N-O7N
3	K	401	NAD	C2N-C3N-C7N-N7N
3	L	401	NAD	C3B-C4B-C5B-O5B
3	L	401	NAD	C5D-O5D-PN-O3
3	L	401	NAD	C5D-O5D-PN-O2N
3	L	401	NAD	C4D-C5D-O5D-PN
3	L	401	NAD	C3D-C4D-C5D-O5D
3	K	401	NAD	C4N-C3N-C7N-O7N
3	K	401	NAD	C4N-C3N-C7N-N7N
3	R	401	NAD	C4N-C3N-C7N-O7N
3	R	401	NAD	C4N-C3N-C7N-N7N
3	B	401	NAD	O4B-C4B-C5B-O5B
3	B	401	NAD	C3B-C4B-C5B-O5B
3	C	401	NAD	O4B-C4B-C5B-O5B
3	C	401	NAD	C3B-C4B-C5B-O5B
3	C	401	NAD	C3D-C4D-C5D-O5D
3	E	401	NAD	O4B-C4B-C5B-O5B
3	E	401	NAD	O4D-C4D-C5D-O5D
3	I	401	NAD	C3D-C4D-C5D-O5D
3	K	401	NAD	O4B-C4B-C5B-O5B
3	K	401	NAD	C3B-C4B-C5B-O5B
3	Q	401	NAD	O4B-C4B-C5B-O5B
3	R	401	NAD	O4B-C4B-C5B-O5B
3	A	401	NAD	C3B-C4B-C5B-O5B
3	D	401	NAD	O4B-C4B-C5B-O5B
3	G	401	NAD	O4B-C4B-C5B-O5B
3	H	401	NAD	O4B-C4B-C5B-O5B
3	J	401	NAD	O4D-C4D-C5D-O5D

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms
3	L	401	NAD	O4B-C4B-C5B-O5B
3	D	401	NAD	O4D-C4D-C5D-O5D
3	Q	401	NAD	C4B-C5B-O5B-PA
3	E	401	NAD	C4B-C5B-O5B-PA
3	I	401	NAD	O4B-C4B-C5B-O5B
3	L	401	NAD	O4D-C4D-C5D-O5D
3	C	401	NAD	C4B-C5B-O5B-PA
3	K	401	NAD	O4D-C4D-C5D-O5D
3	K	401	NAD	C4B-C5B-O5B-PA
3	Q	401	NAD	PA-O3-PN-O1N
3	H	401	NAD	PN-O3-PA-O1A
3	A	401	NAD	C4B-C5B-O5B-PA
3	E	401	NAD	C3D-C4D-C5D-O5D
3	O	401	NAD	C4B-C5B-O5B-PA
3	O	401	NAD	C4D-C5D-O5D-PN
3	R	401	NAD	C4B-C5B-O5B-PA
3	A	401	NAD	C4N-C3N-C7N-N7N
3	A	401	NAD	C4N-C3N-C7N-O7N
3	P	401	NAD	PN-O3-PA-O5B
3	C	401	NAD	PN-O3-PA-O5B
3	F	401	NAD	PN-O3-PA-O5B
3	I	401	NAD	PN-O3-PA-O5B
3	K	401	NAD	PN-O3-PA-O5B
3	K	401	NAD	PA-O3-PN-O5D
3	C	401	NAD	C4D-C5D-O5D-PN
3	H	401	NAD	C4B-C5B-O5B-PA
3	J	401	NAD	C4B-C5B-O5B-PA
3	R	401	NAD	C5D-O5D-PN-O3
3	O	401	NAD	PA-O3-PN-O1N
3	C	401	NAD	PA-O3-PN-O1N
3	G	401	NAD	PN-O3-PA-O1A
3	D	401	NAD	C4B-C5B-O5B-PA
3	E	401	NAD	C4D-C5D-O5D-PN
3	L	401	NAD	C4B-C5B-O5B-PA
3	P	401	NAD	C5B-O5B-PA-O1A
3	P	401	NAD	C5D-O5D-PN-O1N
3	A	401	NAD	C5B-O5B-PA-O2A
3	B	401	NAD	C5D-O5D-PN-O1N
3	B	401	NAD	C5D-O5D-PN-O2N
3	D	401	NAD	C5B-O5B-PA-O1A
3	D	401	NAD	C5D-O5D-PN-O1N
3	E	401	NAD	C5D-O5D-PN-O1N

*Continued on next page...*

*Continued from previous page...*

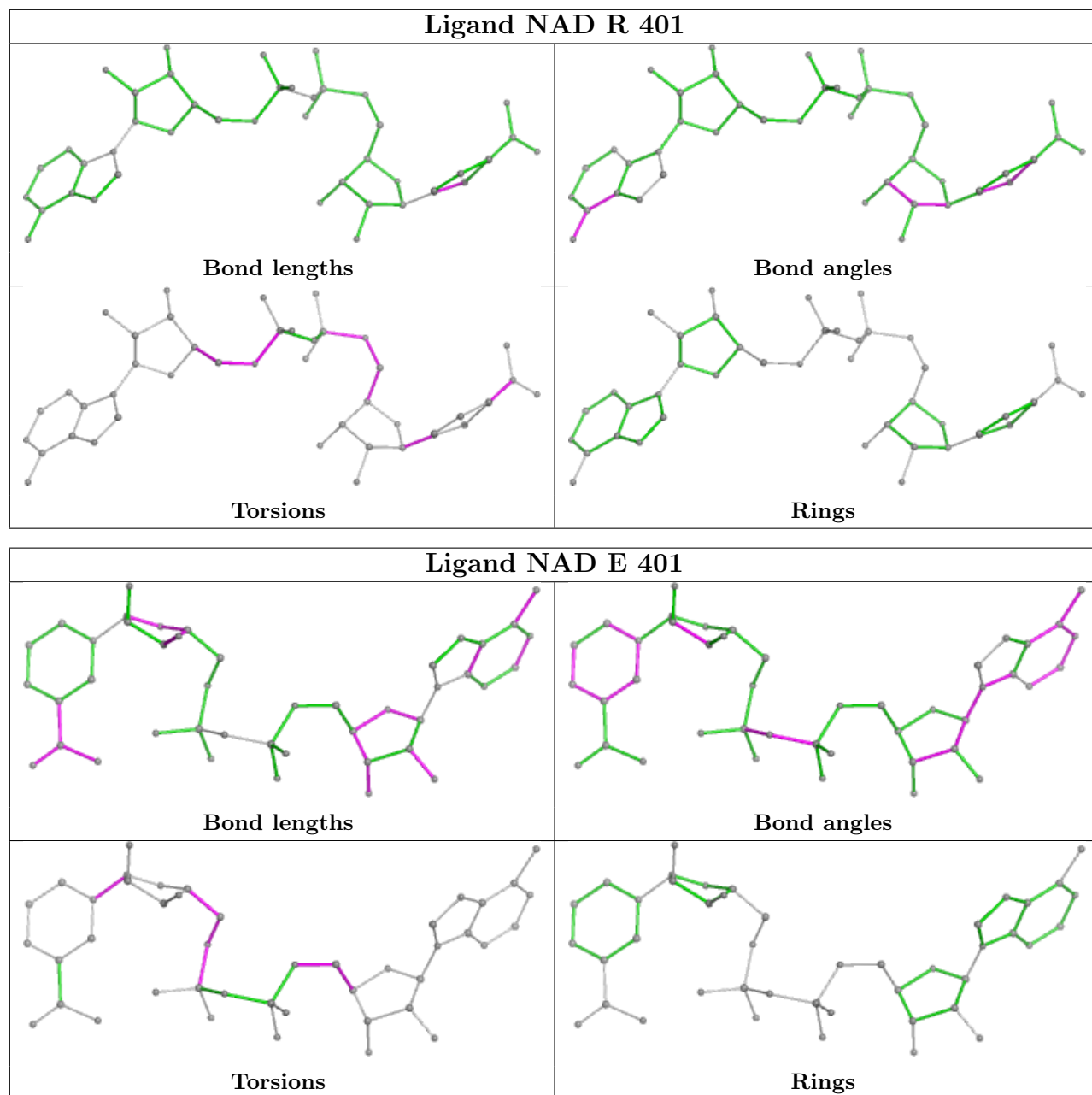
Mol	Chain	Res	Type	Atoms
3	E	401	NAD	C5D-O5D-PN-O2N
3	F	401	NAD	C5B-O5B-PA-O2A
3	F	401	NAD	C5D-O5D-PN-O1N
3	H	401	NAD	C5D-O5D-PN-O1N
3	I	401	NAD	C5D-O5D-PN-O2N
3	L	401	NAD	C5D-O5D-PN-O1N
3	A	401	NAD	C2N-C3N-C7N-N7N
3	F	401	NAD	C4B-C5B-O5B-PA
3	O	401	NAD	PA-O3-PN-O2N
3	P	401	NAD	PN-O3-PA-O1A
3	D	401	NAD	PN-O3-PA-O1A
3	G	401	NAD	PA-O3-PN-O2N
3	K	401	NAD	PN-O3-PA-O1A
3	A	401	NAD	C2N-C3N-C7N-O7N
3	A	401	NAD	PN-O3-PA-O1A
3	C	401	NAD	PN-O3-PA-O1A
3	G	401	NAD	PN-O3-PA-O2A
3	H	401	NAD	PN-O3-PA-O2A
3	L	401	NAD	PN-O3-PA-O1A
3	A	401	NAD	C2D-C1D-N1N-C6N
3	B	401	NAD	C5B-O5B-PA-O3
3	I	401	NAD	C5B-O5B-PA-O3
3	J	401	NAD	C5D-O5D-PN-O3
3	K	401	NAD	C5D-O5D-PN-O3
3	P	401	NAD	C3D-C4D-C5D-O5D
3	A	401	NAD	PN-O3-PA-O2A
3	A	401	NAD	PA-O3-PN-O2N
3	D	401	NAD	PN-O3-PA-O2A
3	F	401	NAD	PN-O3-PA-O1A
3	F	401	NAD	PA-O3-PN-O2N
3	G	401	NAD	PA-O3-PN-O1N
3	I	401	NAD	PN-O3-PA-O2A
3	L	401	NAD	PN-O3-PA-O2A
3	P	401	NAD	C4B-C5B-O5B-PA
3	P	401	NAD	C5D-O5D-PN-O2N
3	L	401	NAD	C5B-O5B-PA-O1A
3	F	401	NAD	O4B-C4B-C5B-O5B
3	G	401	NAD	C4D-C5D-O5D-PN
3	P	401	NAD	C4N-C3N-C7N-N7N
3	P	401	NAD	C4N-C3N-C7N-O7N

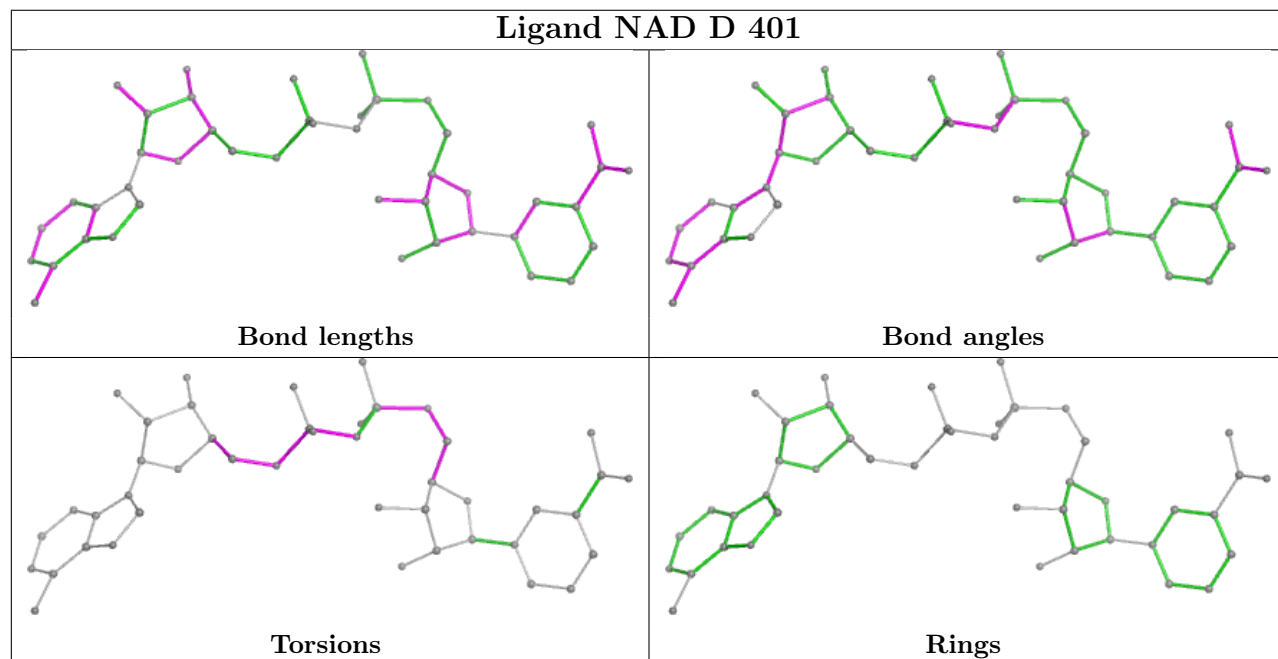
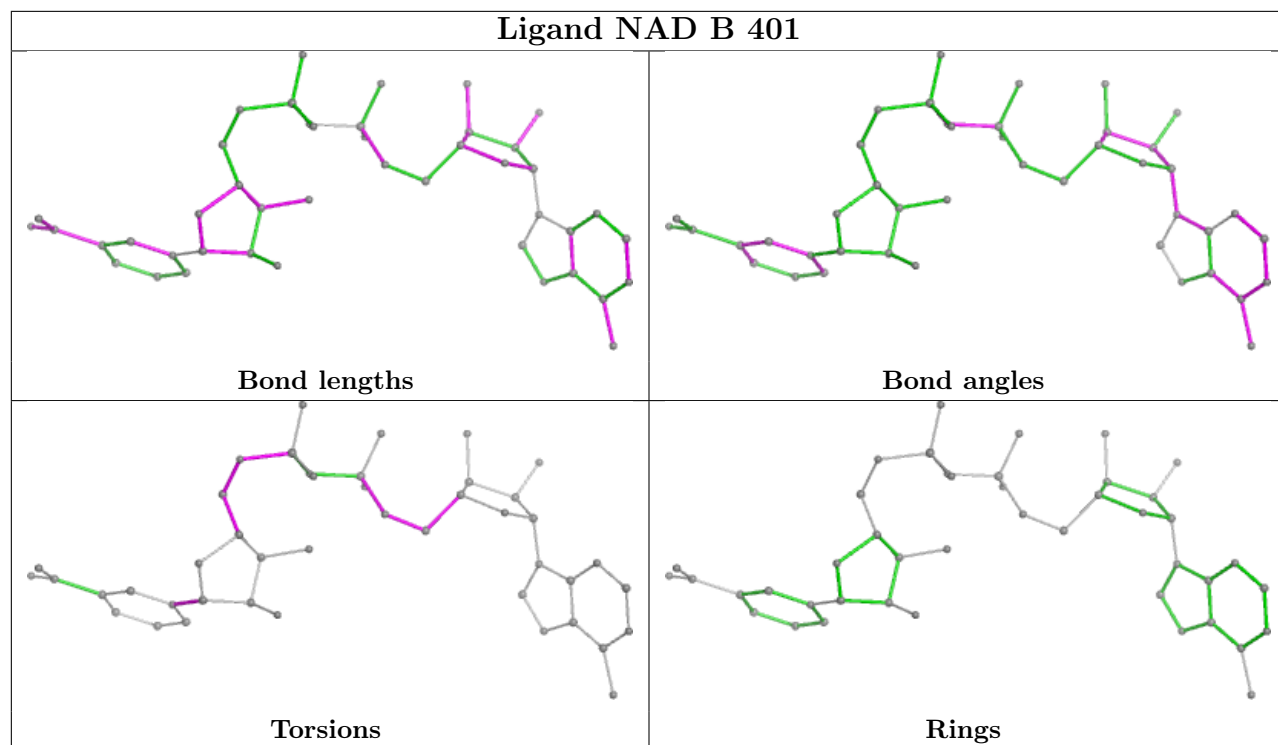
There are no ring outliers.

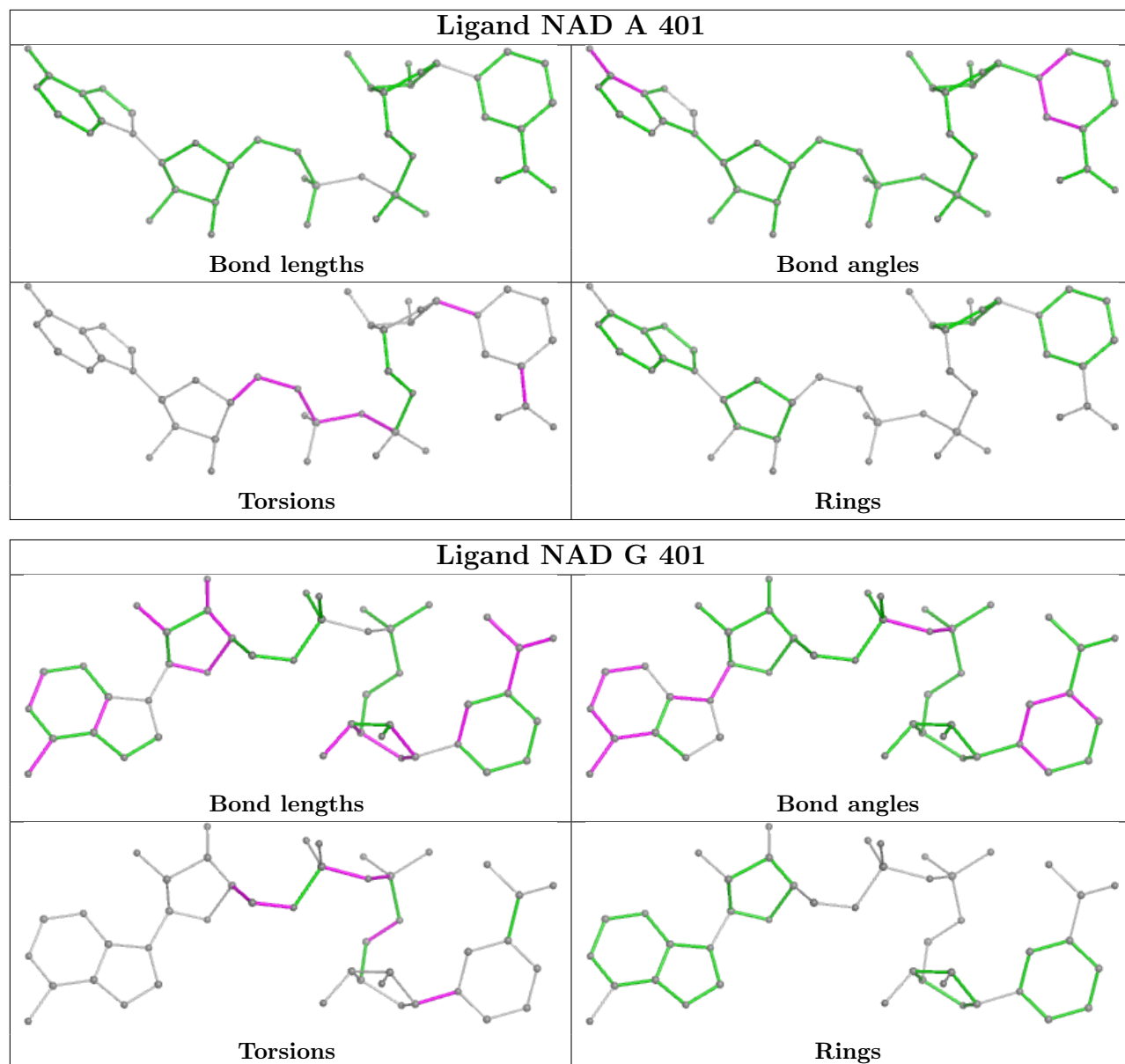
16 monomers are involved in 176 short contacts:

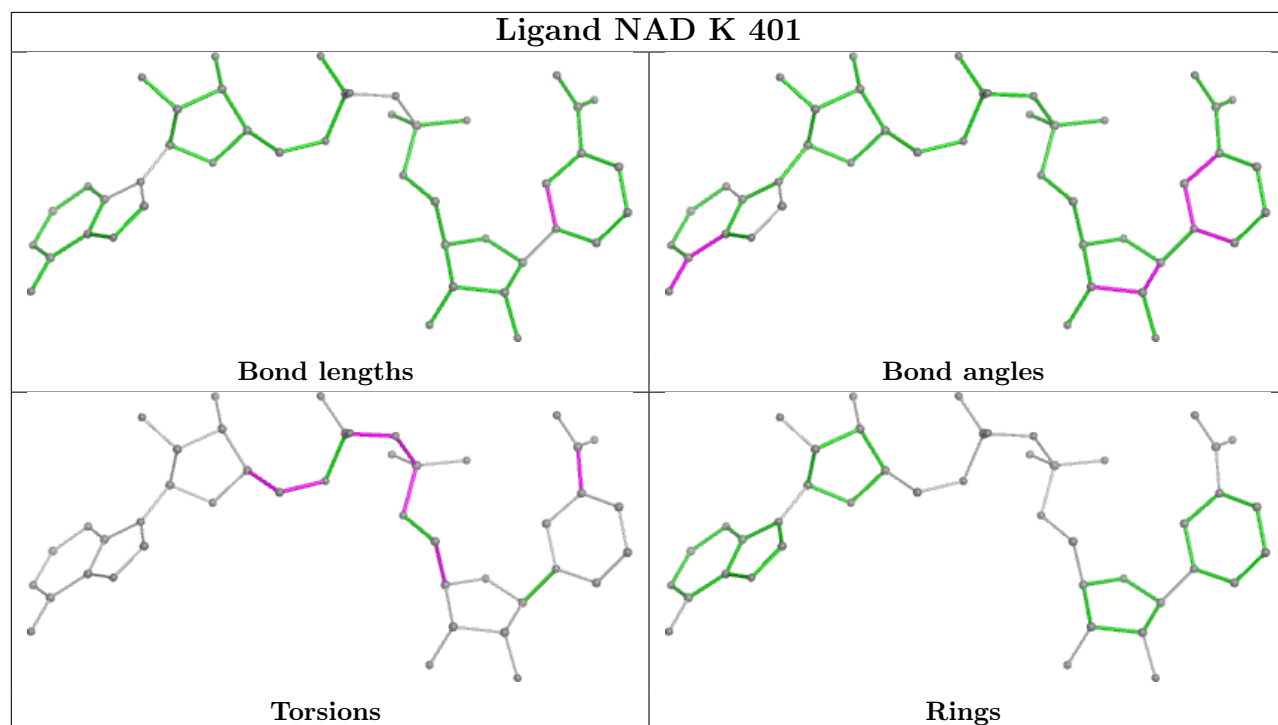
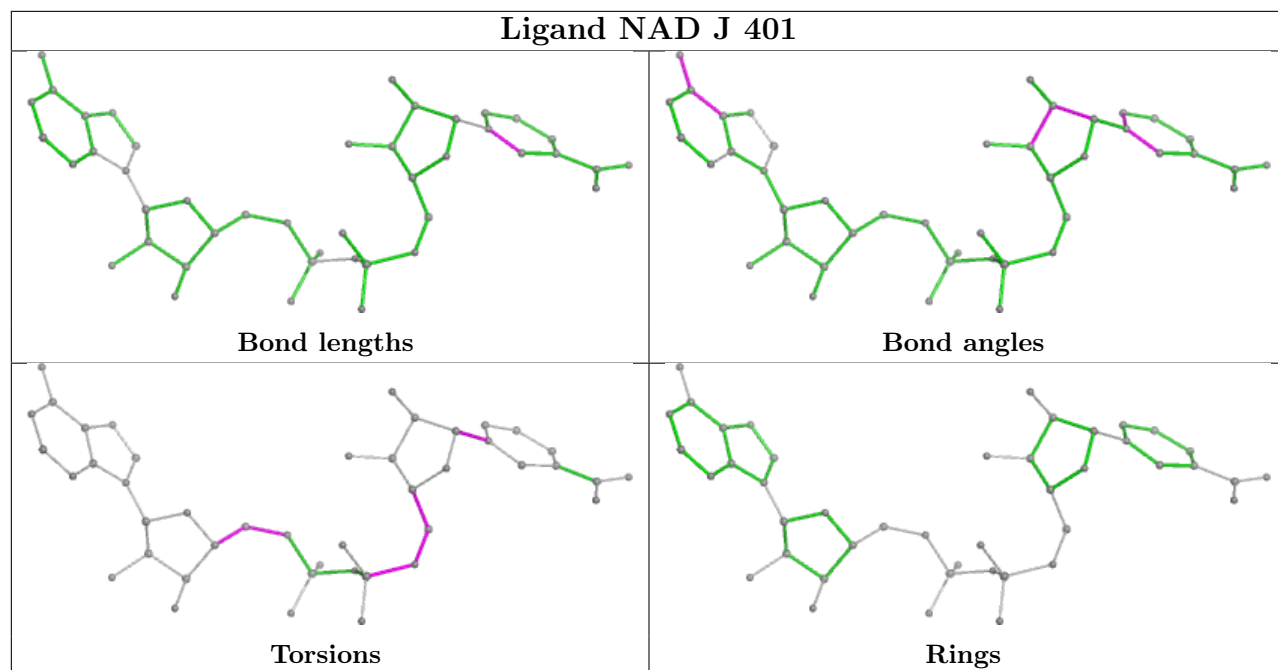
Mol	Chain	Res	Type	Clashes	Symm-Clashes
3	R	401	NAD	13	0
3	E	401	NAD	9	0
3	B	401	NAD	11	0
3	D	401	NAD	12	0
3	A	401	NAD	7	0
3	G	401	NAD	16	0
3	J	401	NAD	9	0
3	K	401	NAD	11	0
3	L	401	NAD	10	0
3	O	401	NAD	10	0
3	H	401	NAD	11	0
3	P	401	NAD	14	0
3	C	401	NAD	12	0
3	I	401	NAD	9	0
3	F	401	NAD	10	0
3	Q	401	NAD	12	0

The following is a two-dimensional graphical depiction of Mogul quality analysis of bond lengths, bond angles, torsion angles, and ring geometry for all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the validation Tables will also be included. For torsion angles, if less than 5% of the Mogul distribution of torsion angles is within 10 degrees of the torsion angle in question, then that torsion angle is considered an outlier. Any bond that is central to one or more torsion angles identified as an outlier by Mogul will be highlighted in the graph. For rings, the root-mean-square deviation (RMSD) between the ring in question and similar rings identified by Mogul is calculated over all ring torsion angles. If the average RMSD is greater than 60 degrees and the minimal RMSD between the ring in question and any Mogul-identified rings is also greater than 60 degrees, then that ring is considered an outlier. The outliers are highlighted in purple. The color gray indicates Mogul did not find sufficient equivalents in the CSD to analyse the geometry.

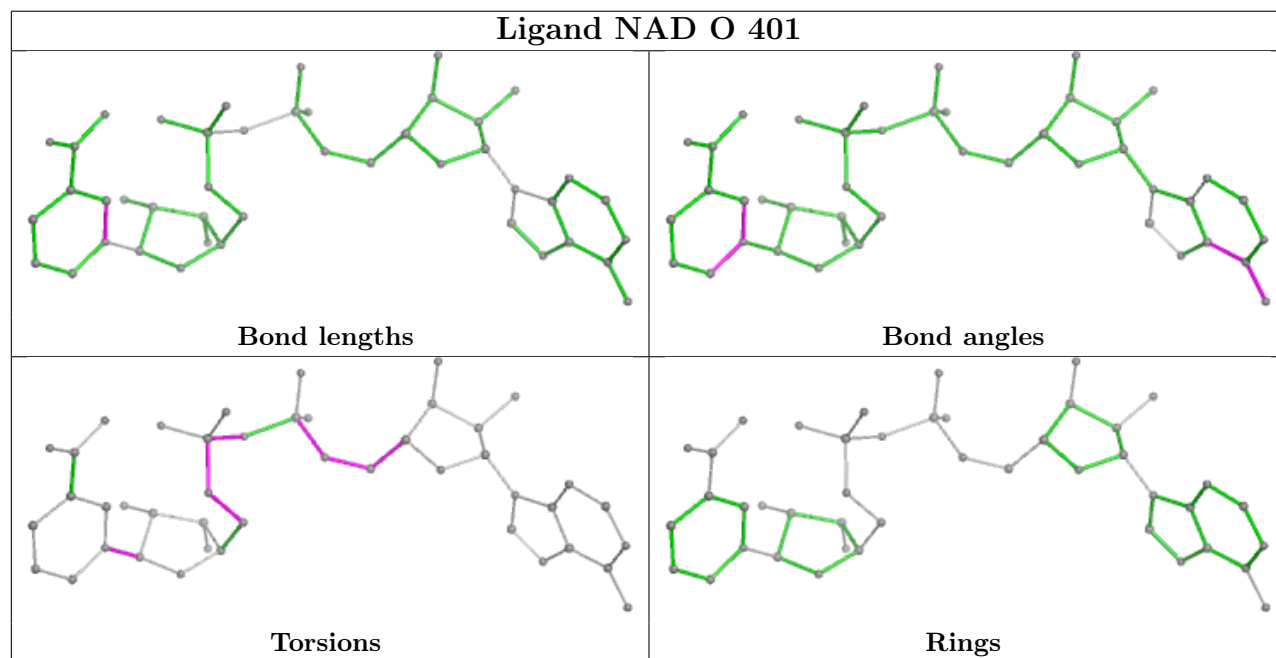
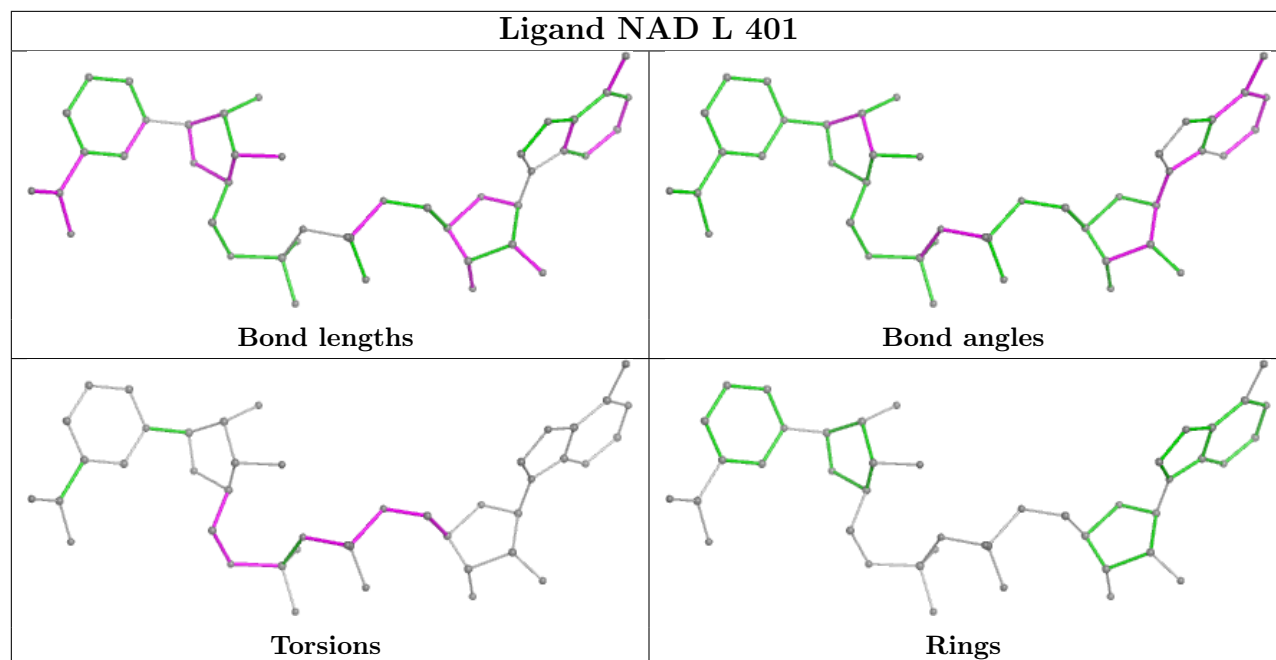


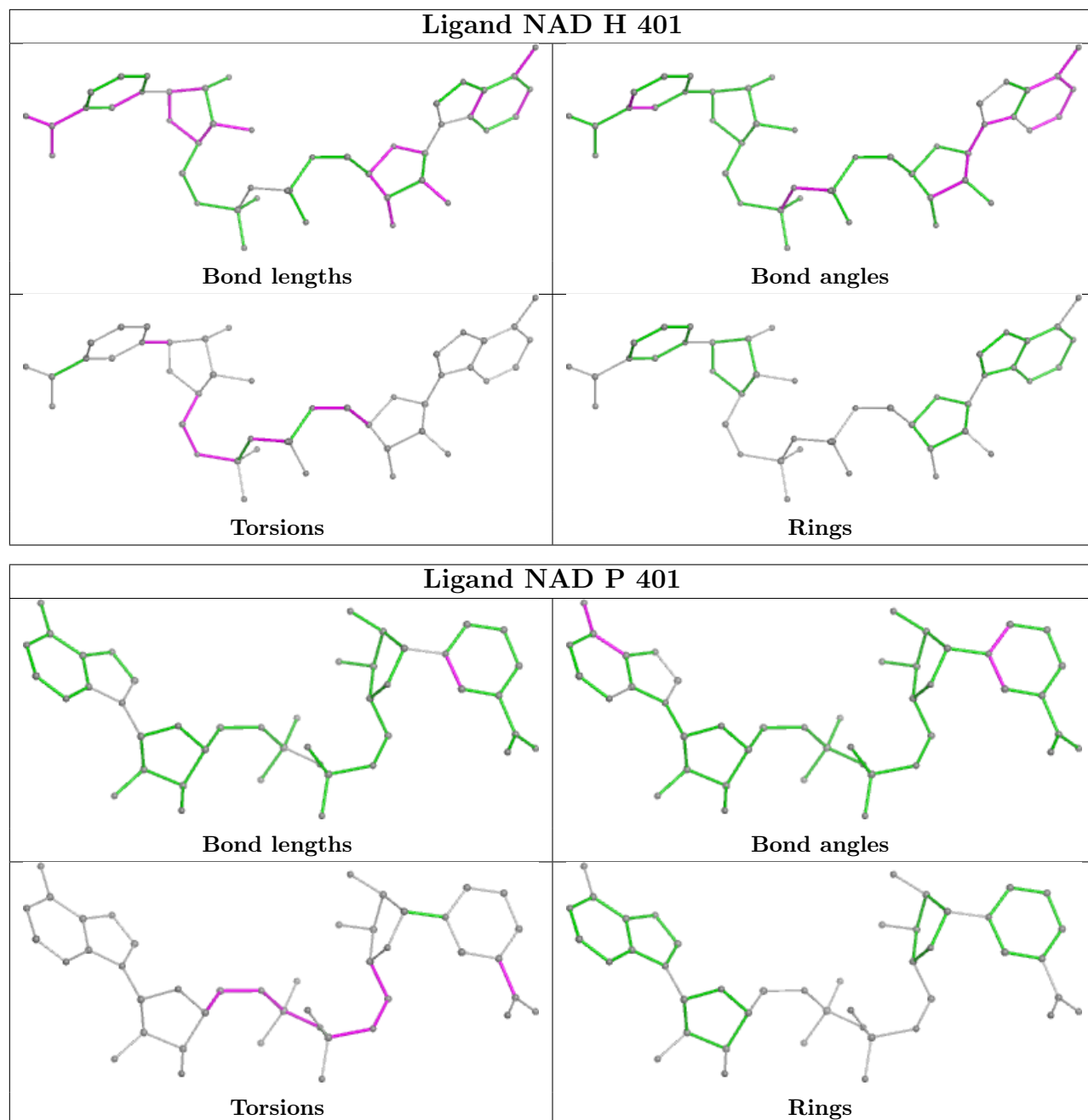


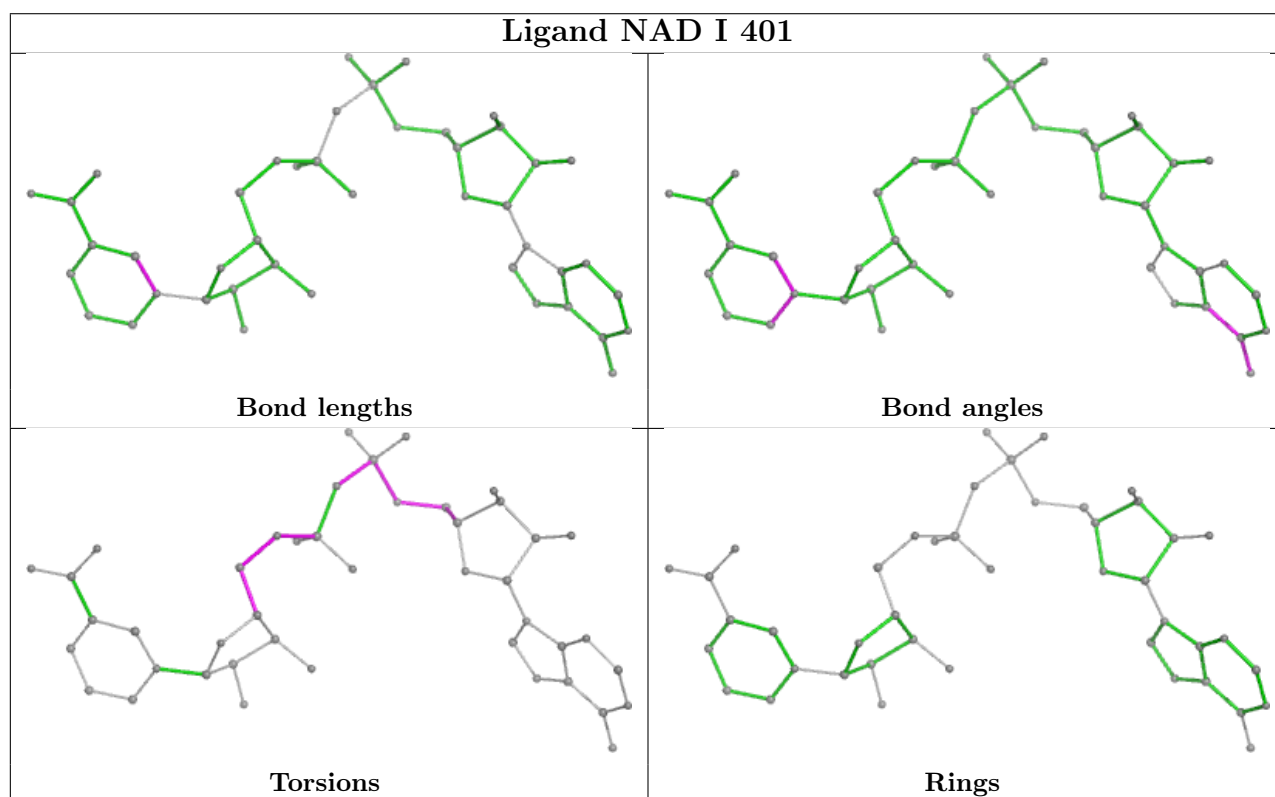
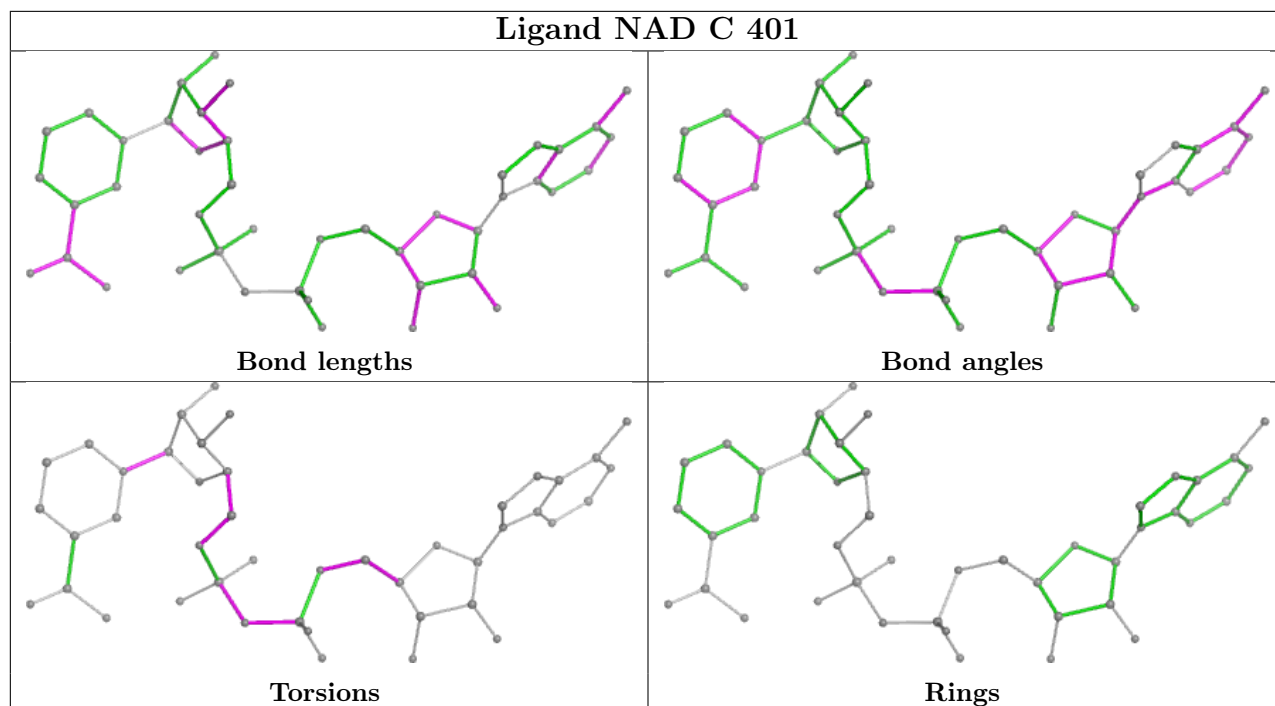


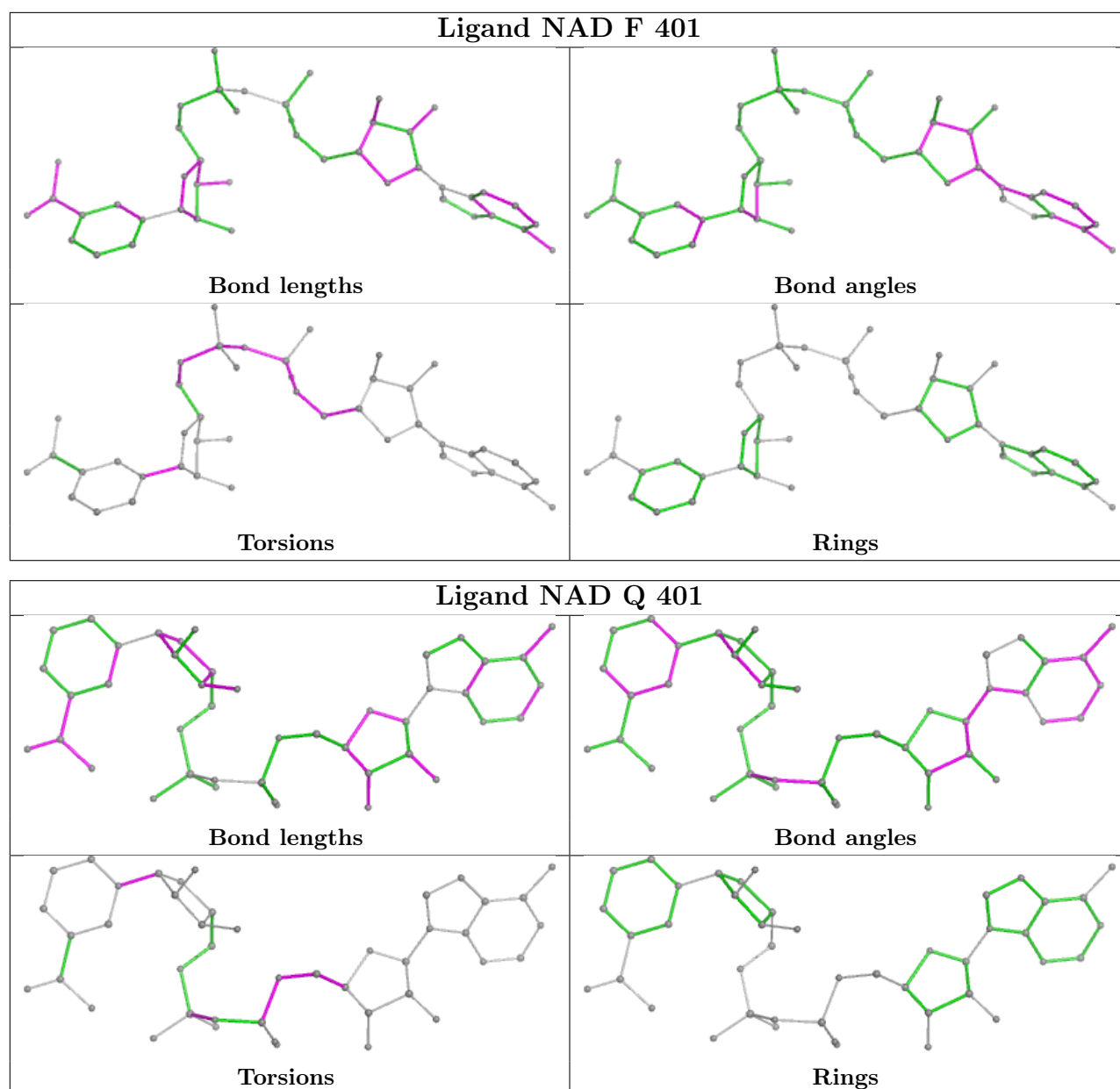












## 5.7 Other polymers [\(i\)](#)

There are no such residues in this entry.

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

There are no chain breaks in this entry.

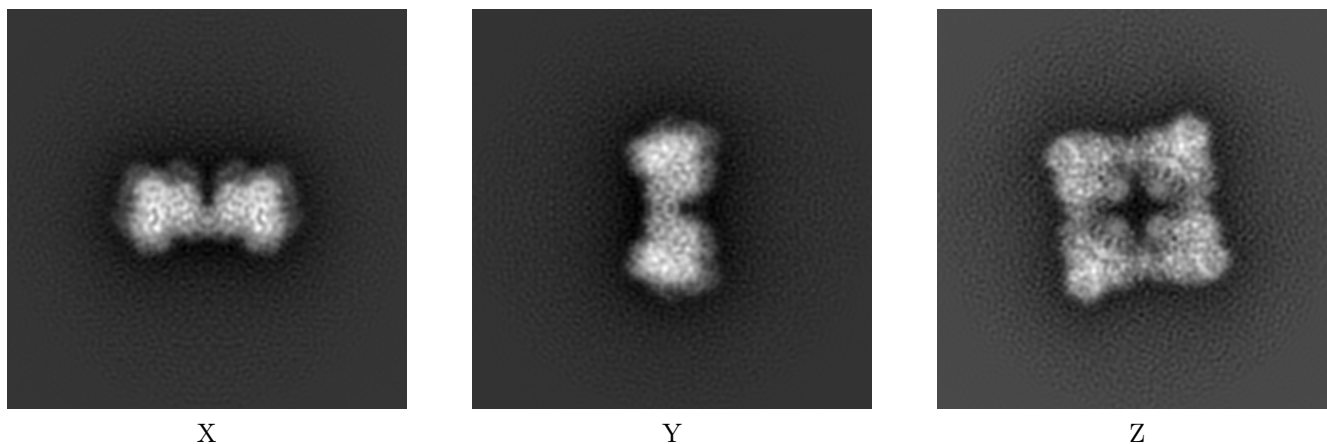
## 6 Map visualisation [i](#)

This section contains visualisations of the EMDB entry EMD-13826. These allow visual inspection of the internal detail of the map and identification of artifacts.

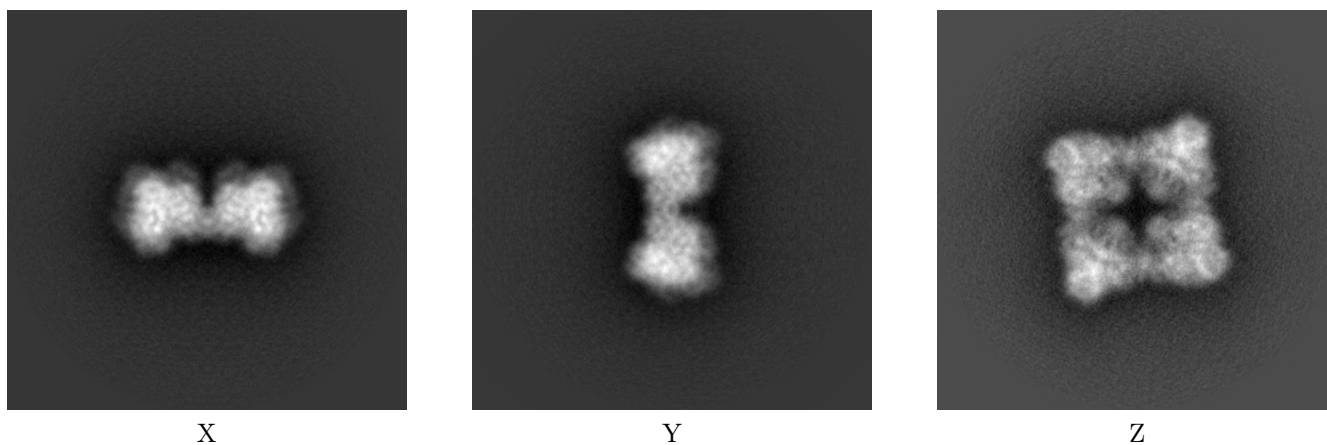
Images derived from a raw map, generated by summing the deposited half-maps, are presented below the corresponding image components of the primary map to allow further visual inspection and comparison with those of the primary map.

### 6.1 Orthogonal projections [i](#)

#### 6.1.1 Primary map



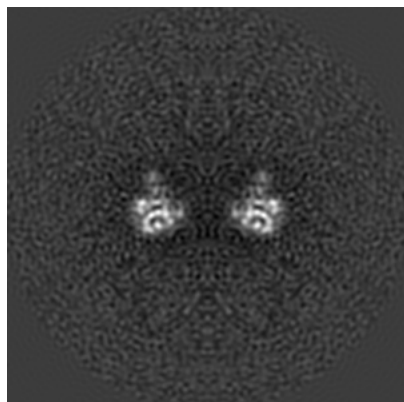
#### 6.1.2 Raw map



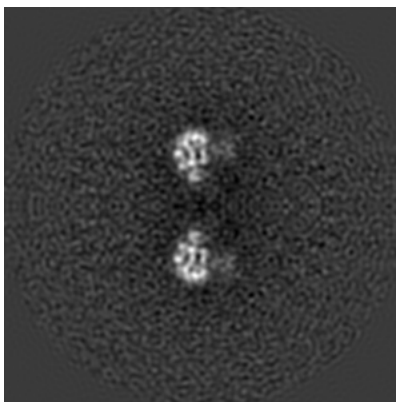
The images above show the map projected in three orthogonal directions.

## 6.2 Central slices [i](#)

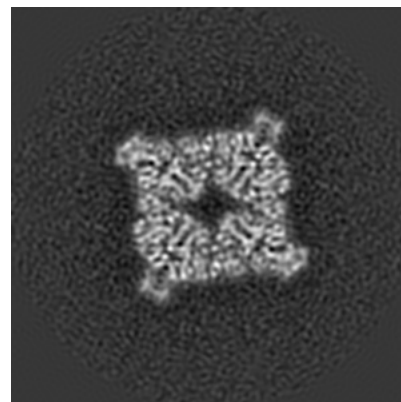
### 6.2.1 Primary map



X Index: 150

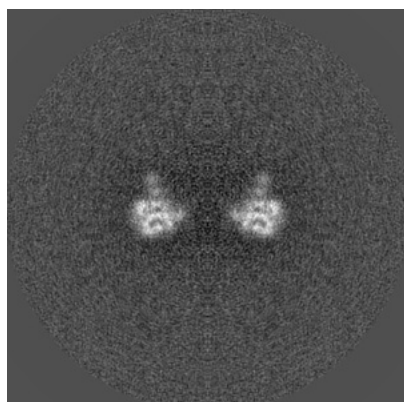


Y Index: 150

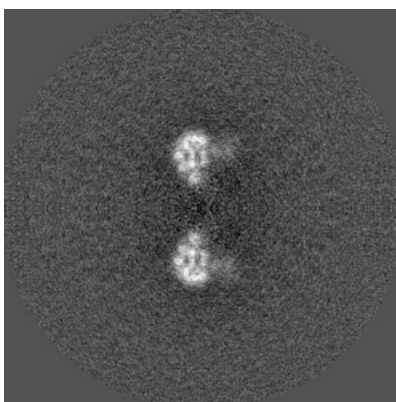


Z Index: 150

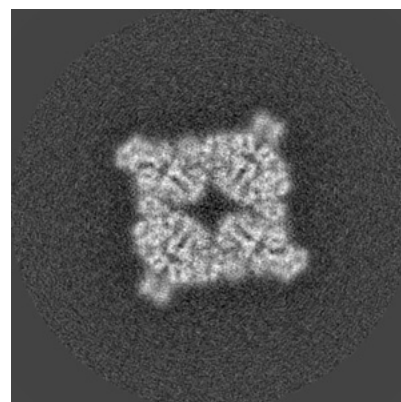
### 6.2.2 Raw map



X Index: 150



Y Index: 150

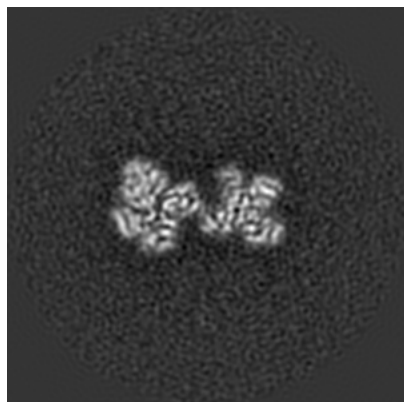


Z Index: 150

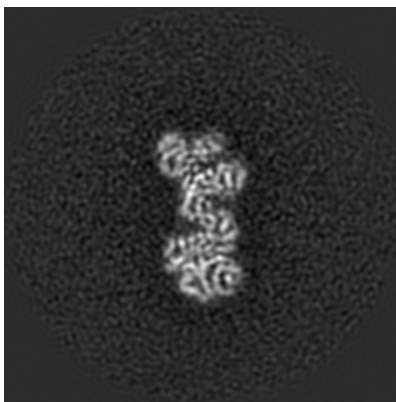
The images above show central slices of the map in three orthogonal directions.

## 6.3 Largest variance slices [i](#)

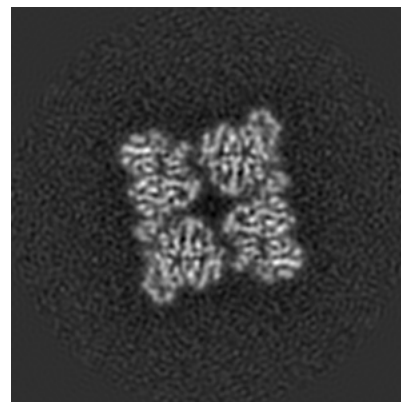
### 6.3.1 Primary map



X Index: 119

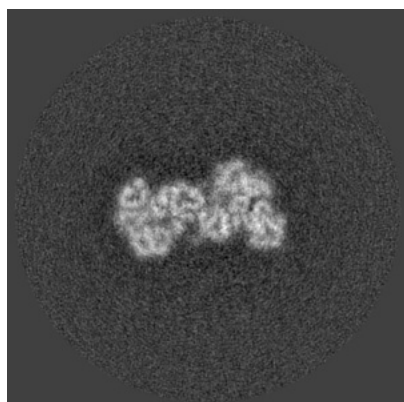


Y Index: 186

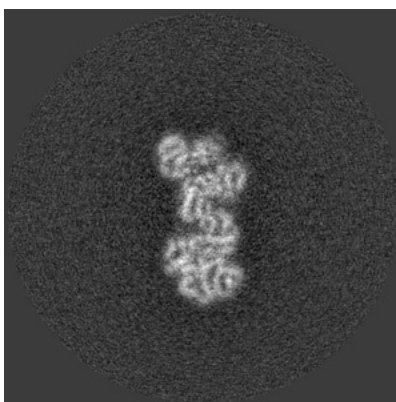


Z Index: 143

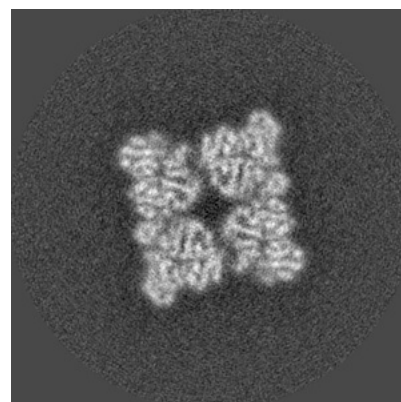
### 6.3.2 Raw map



X Index: 105



Y Index: 187

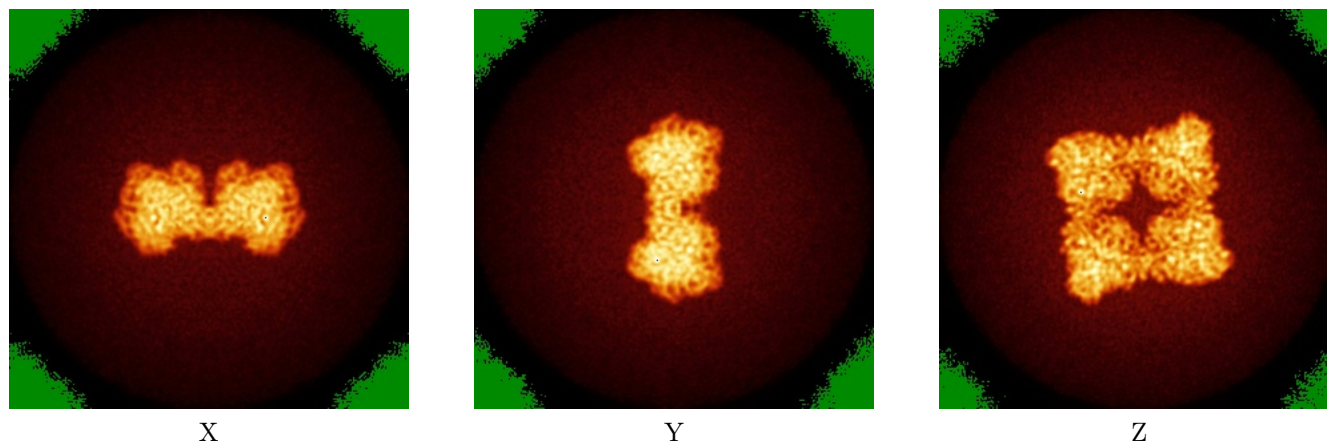


Z Index: 144

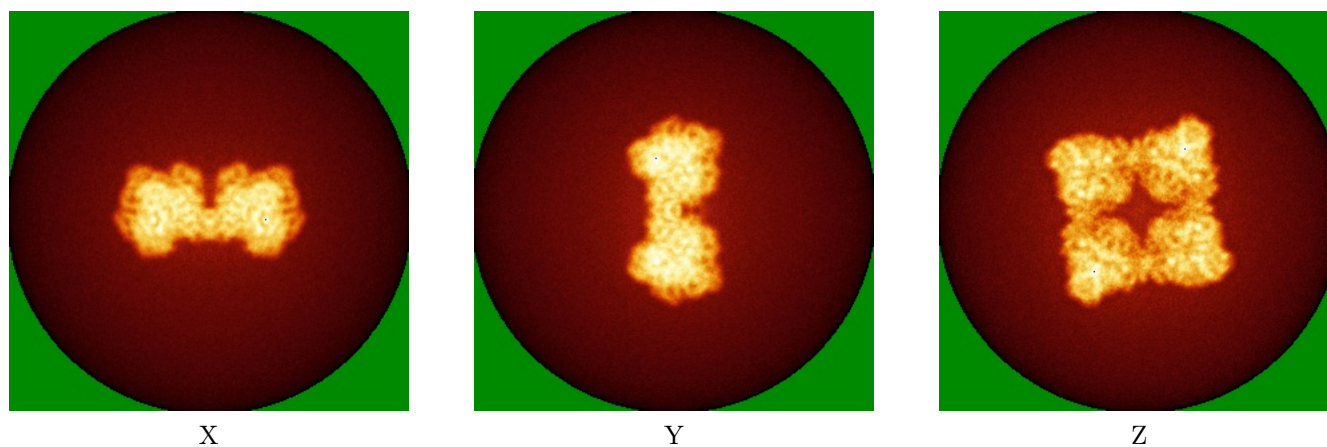
The images above show the largest variance slices of the map in three orthogonal directions.

## 6.4 Orthogonal standard-deviation projections (False-color) [i](#)

### 6.4.1 Primary map



### 6.4.2 Raw map

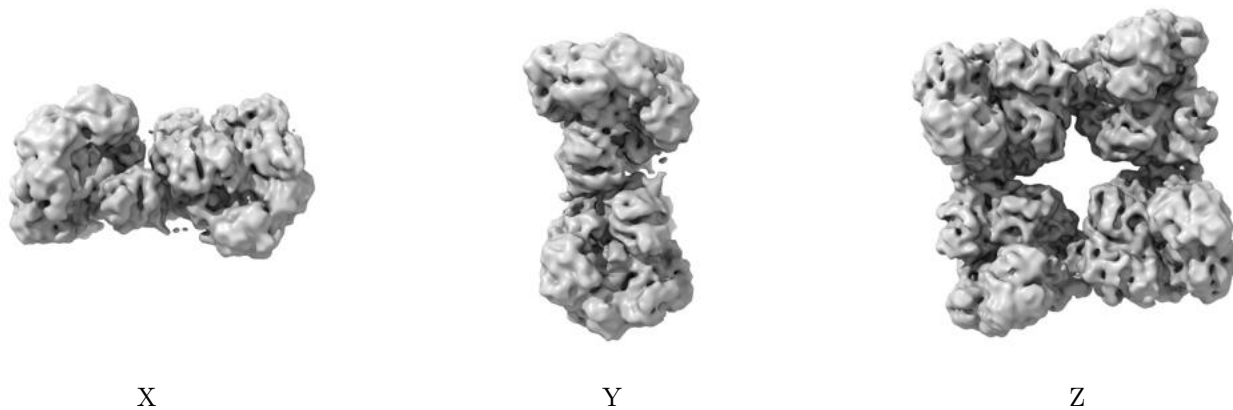


The images above show the map standard deviation projections with false color in three orthogonal directions. Minimum values are shown in green, max in blue, and dark to light orange shades represent small to large values respectively.



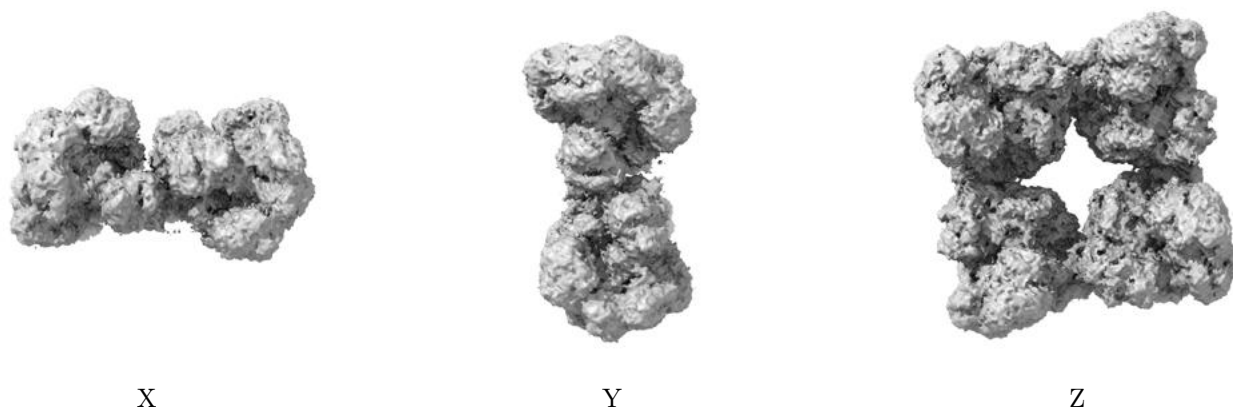
## 6.5 Orthogonal surface views [i](#)

### 6.5.1 Primary map



The images above show the 3D surface view of the map at the recommended contour level 0.012. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

### 6.5.2 Raw map



These images show the 3D surface of the raw map. The raw map's contour level was selected so that its surface encloses the same volume as the primary map does at its recommended contour level.

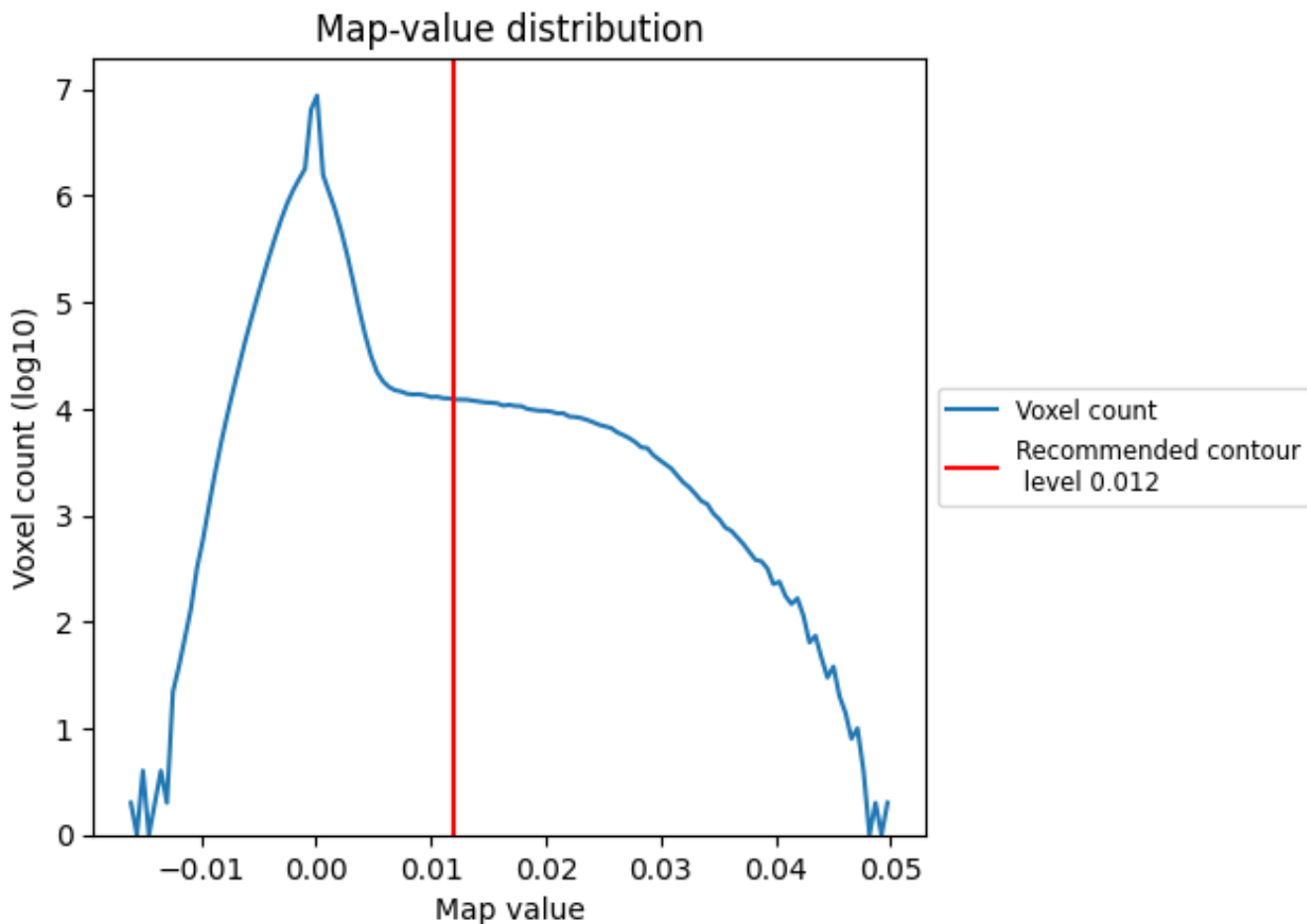
## 6.6 Mask visualisation [i](#)

This section was not generated. No masks/segmentation were deposited.

## 7 Map analysis [i](#)

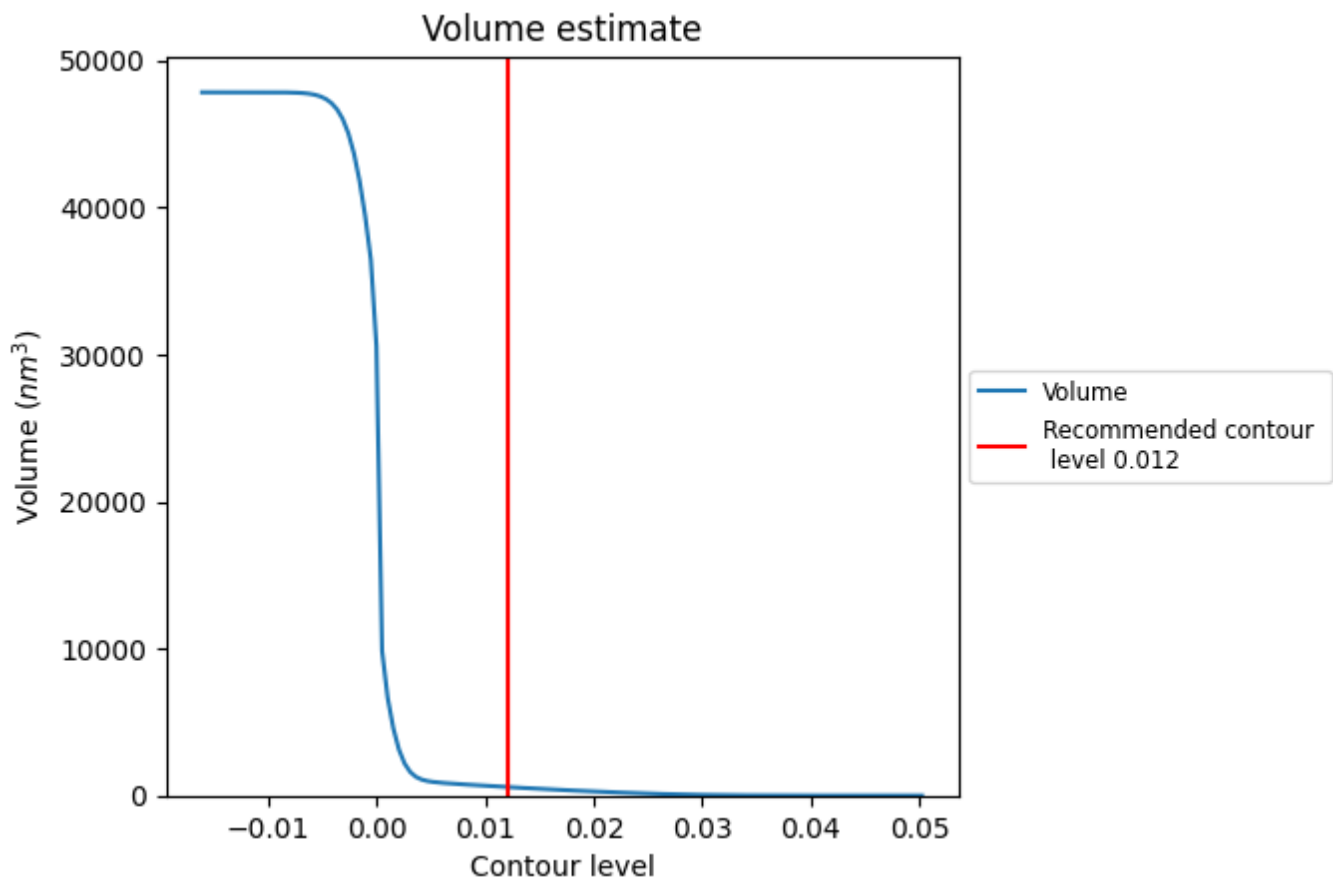
This section contains the results of statistical analysis of the map.

### 7.1 Map-value distribution [i](#)



The map-value distribution is plotted in 128 intervals along the x-axis. The y-axis is logarithmic. A spike in this graph at zero usually indicates that the volume has been masked.

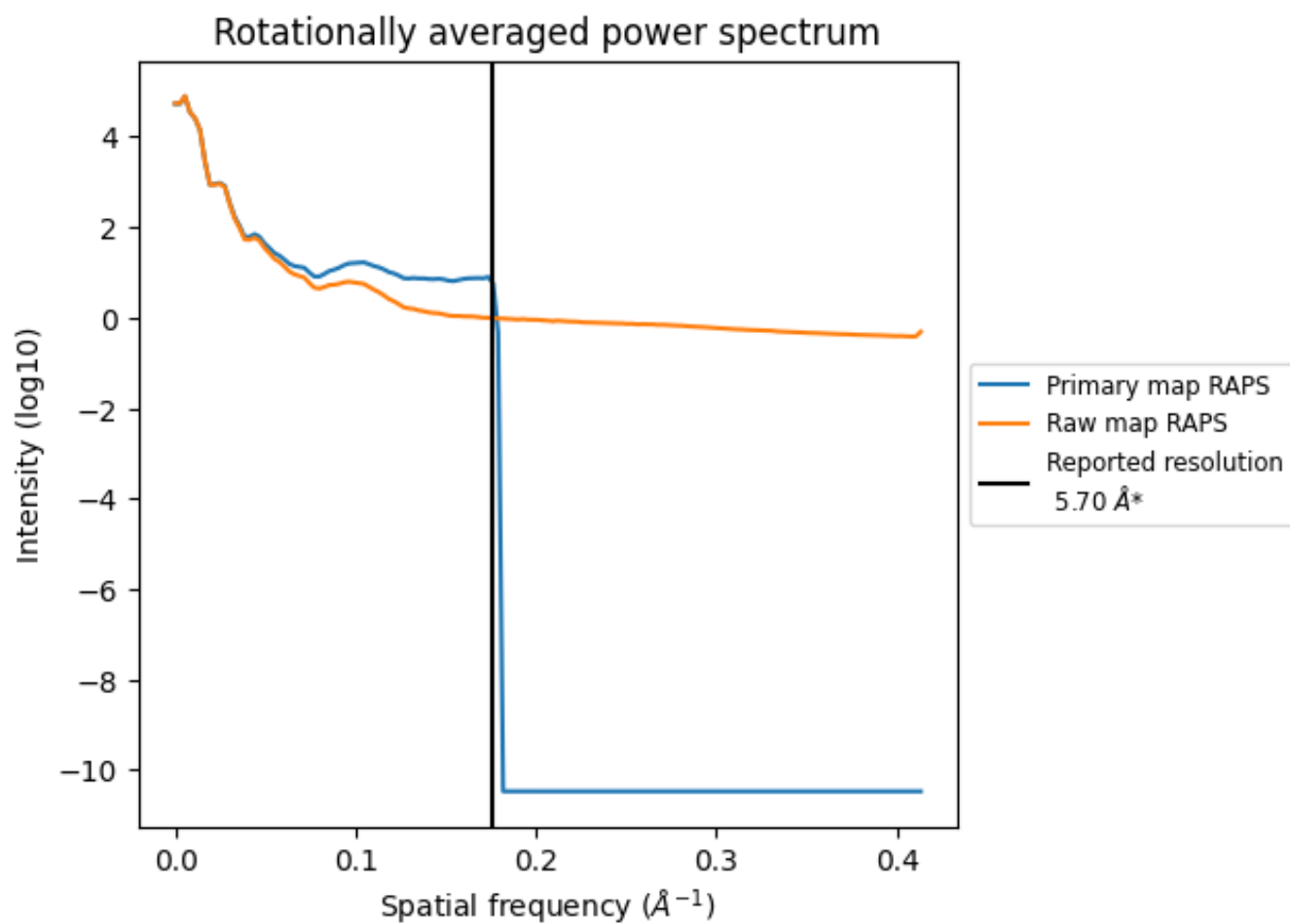
## 7.2 Volume estimate [i](#)



The volume at the recommended contour level is 581 nm<sup>3</sup>; this corresponds to an approximate mass of 525 kDa.

The volume estimate graph shows how the enclosed volume varies with the contour level. The recommended contour level is shown as a vertical line and the intersection between the line and the curve gives the volume of the enclosed surface at the given level.

### 7.3 Rotationally averaged power spectrum [i](#)

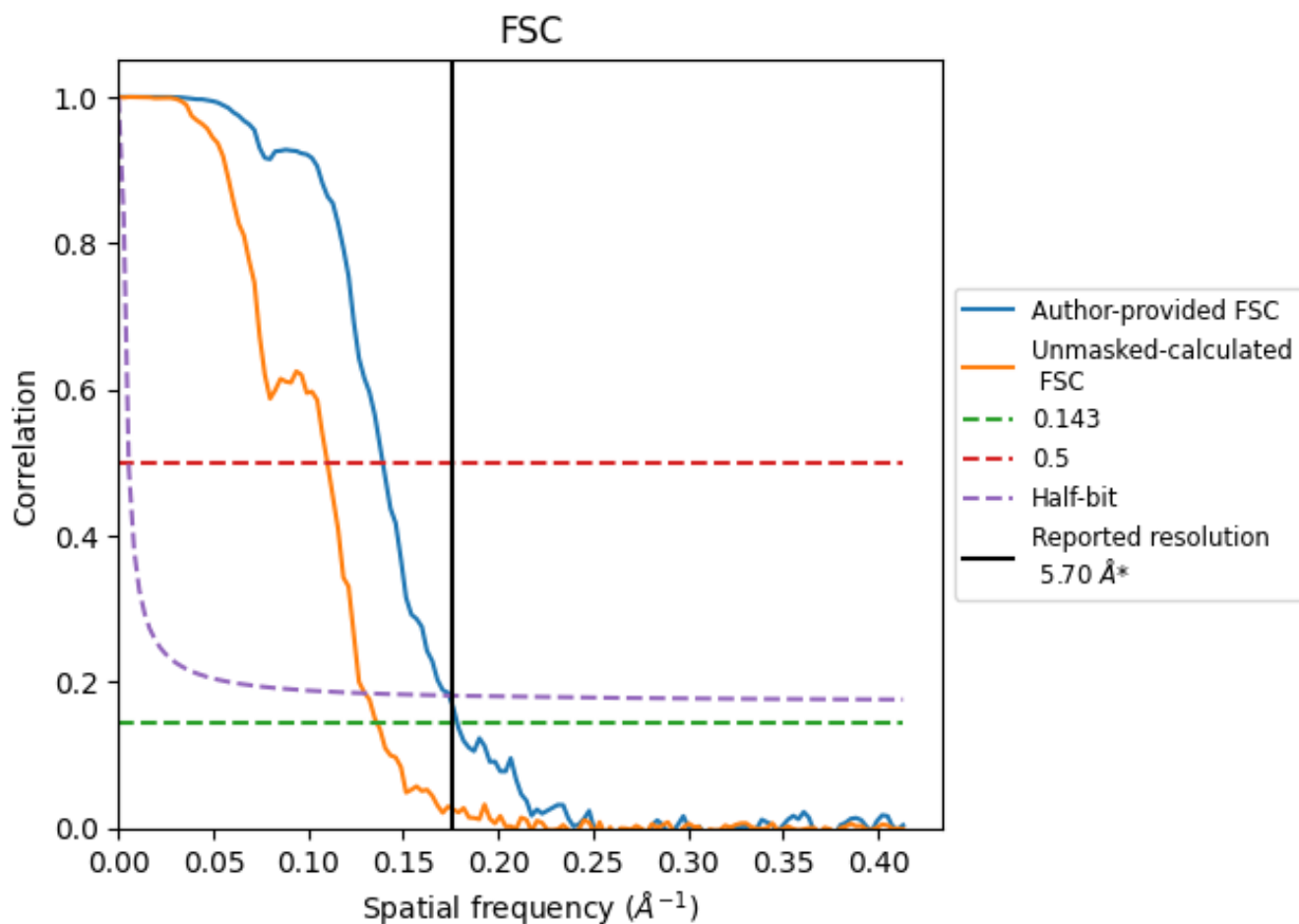


\*Reported resolution corresponds to spatial frequency of 0.175 Å<sup>-1</sup>

## 8 Fourier-Shell correlation [i](#)

Fourier-Shell Correlation (FSC) is the most commonly used method to estimate the resolution of single-particle and subtomogram-averaged maps. The shape of the curve depends on the imposed symmetry, mask and whether or not the two 3D reconstructions used were processed from a common reference. The reported resolution is shown as a black line. A curve is displayed for the half-bit criterion in addition to lines showing the 0.143 gold standard cut-off and 0.5 cut-off.

### 8.1 FSC [i](#)



\*Reported resolution corresponds to spatial frequency of 0.175 Å<sup>-1</sup>

## 8.2 Resolution estimates [i](#)

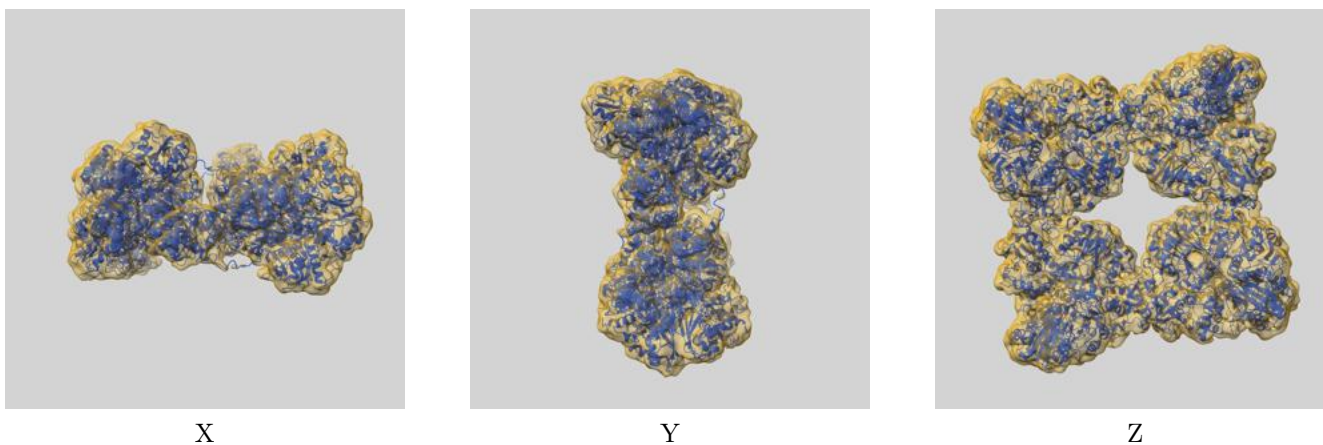
Resolution estimate (Å)	Estimation criterion (FSC cut-off)		
	0.143	0.5	Half-bit
Reported by author	5.70	-	-
Author-provided FSC curve	5.61	7.18	5.74
Unmasked-calculated*	7.34	9.09	7.70

\*Resolution estimate based on FSC curve calculated by comparison of deposited half-maps. The value from deposited half-maps intersecting FSC 0.143 CUT-OFF 7.34 differs from the reported value 5.7 by more than 10 %

## 9 Map-model fit [i](#)

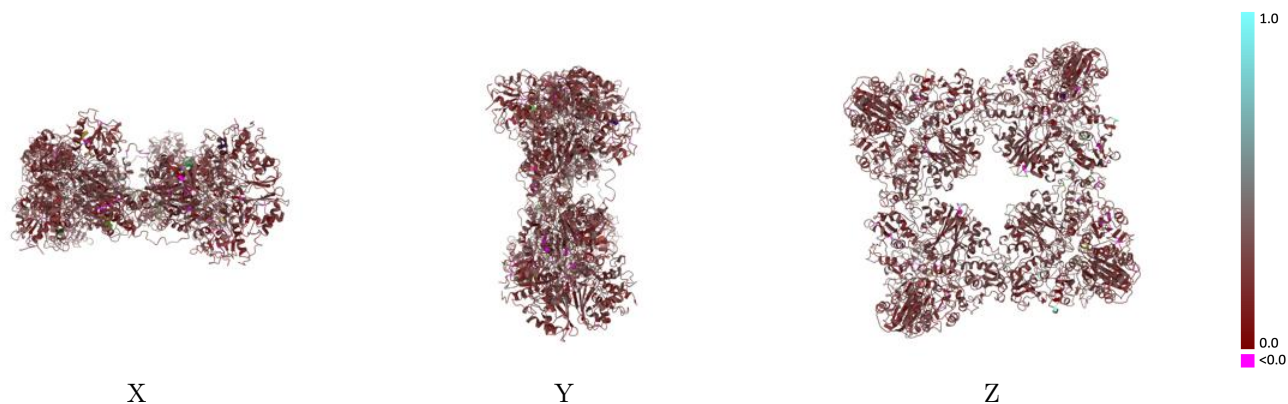
This section contains information regarding the fit between EMDB map EMD-13826 and PDB model 7Q55. Per-residue inclusion information can be found in section 3 on page 7.

### 9.1 Map-model overlay [i](#)



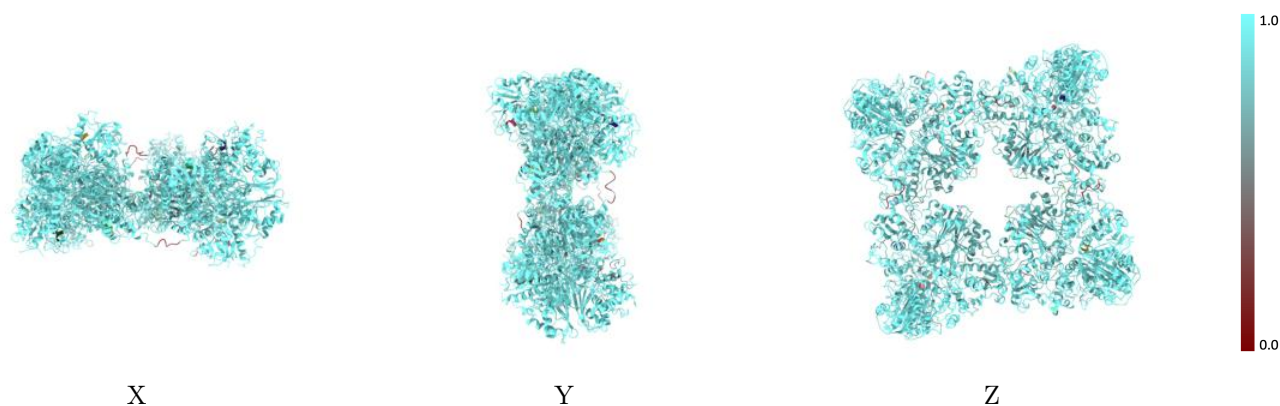
The images above show the 3D surface view of the map at the recommended contour level 0.012 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

## 9.2 Q-score mapped to coordinate model [i](#)



The images above show the model with each residue coloured according to its Q-score. This shows their resolvability in the map with higher Q-score values reflecting better resolvability. Please note: Q-score is calculating the resolvability of atoms, and thus high values are only expected at resolutions at which atoms can be resolved. Low Q-score values may therefore be expected for many entries.

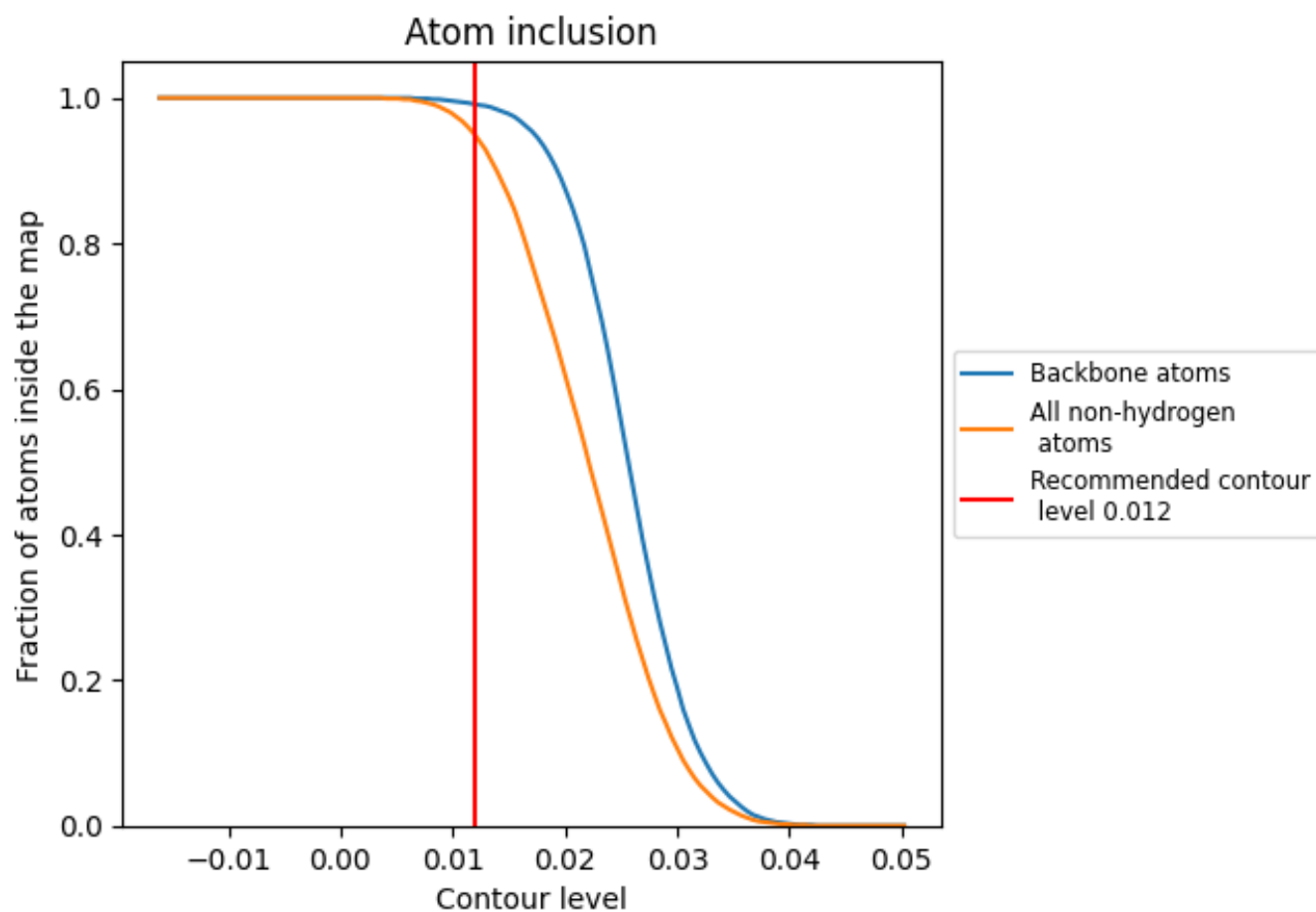
## 9.3 Atom inclusion mapped to coordinate model [i](#)



The images above show the model with each residue coloured according to its atom inclusion. This shows to what extent they are inside the map at the recommended contour level (0.012).





































## 9.4 Atom inclusion [i](#)



At the recommended contour level, 99% of all backbone atoms, 95% of all non-hydrogen atoms, are inside the map.

## 9.5 Map-model fit summary

The table lists the average atom inclusion at the recommended contour level (0.012) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	 0.9490	 0.2620
A	 0.9370	 0.2700
B	 0.9660	 0.2560
C	 0.9330	 0.2690
D	 0.9670	 0.2510
E	 0.9310	 0.2700
F	 0.9620	 0.2550
G	 0.9380	 0.2690
H	 0.9630	 0.2600
I	 0.9300	 0.2680
J	 0.9680	 0.2540
K	 0.9360	 0.2710
L	 0.9680	 0.2520
O	 0.9320	 0.2680
P	 0.9650	 0.2520
Q	 0.9300	 0.2670
R	 0.9650	 0.2610

