

# Integrative Structure Validation Report

July 22, 2024 - 05:40 PM PDT

The following software was used in the production of this report:

*Python-IHM Version 1.3*

*MolProbity Version 4.5.2*

*Integrative Modeling Validation Version 1.2*

PDB ID	9A86
PDB-Dev ID	PDBDEV_00000371
Structure Title	Elliptical 52-mer bacterial gasdermin pore model from Vitiosangium sp.
Structure Authors	Johnson, A.G.; Mayer, M.L.; Schaefer, S.L.; McNamara-Bordewick, N.K.; Hummer, G.; Kranzusch, P.J.

*This is a PDB-Dev IM Structure Validation Report for a publicly released PDB-Dev entry.*

*We welcome your comments at [pdb-dev@mail.wwpdb.org](mailto:pdb-dev@mail.wwpdb.org)*

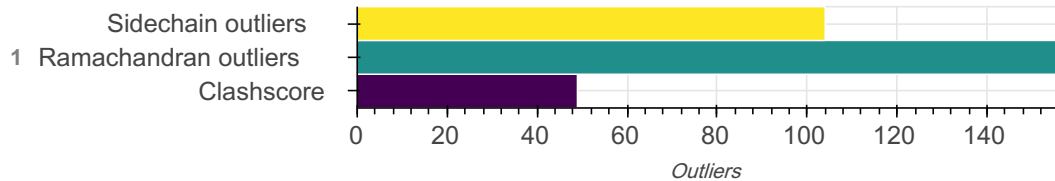
*A user guide is available at [https://pdb-dev.wwpdb.org/validation\\_help.html](https://pdb-dev.wwpdb.org/validation_help.html) with specific help available everywhere you see the  symbol.*

*List of references used to build this report is available [here](#).*

## Overall quality

*This validation report contains model quality assessments for all structures, data quality assessment for SAS datasets and fit to model assessments for SAS datasets. Data quality and fit to model assessments for other datasets and model uncertainty are under development. Number of plots is limited to 256.*

Model Quality: MolProbity Analysis



### Ensemble information ?

*This entry consists of 0 distinct ensemble(s).*

### Summary ?

*This entry consists of 1 unique models, with 52 subunits in each model. A total of 3 datasets or restraints were used to build this entry. Each model is represented by 0 rigid bodies and 52 flexible or non-rigid units.*

### Entry composition ?

*There is 1 unique type of models in this entry. This model is titled None/None.*

Model ID	Subunit number	Subunit ID	Subunit name	Chain ID	Chain ID [auth]	Total residues
1	1	1	Gasdermin bGSDM	AA	a	234
1	2	1	Gasdermin bGSDM	BA	b	234
1	3	1	Gasdermin bGSDM	CA	c	234
1	4	1	Gasdermin bGSDM	DA	d	234
1	5	1	Gasdermin bGSDM	EA	e	234
1	6	1	Gasdermin bGSDM	FA	f	234
1	7	1	Gasdermin bGSDM	GA	g	234

Model ID	Subunit number	Subunit ID	Subunit name	Chain ID	Chain ID [auth]	Total residues
1	8	1	Gasdermin bGSDM	HA	h	234
1	9	1	Gasdermin bGSDM	IA	i	234
1	10	1	Gasdermin bGSDM	JA	j	234
1	11	1	Gasdermin bGSDM	KA	k	234
1	12	1	Gasdermin bGSDM	LA	l	234
1	13	1	Gasdermin bGSDM	MA	m	234
1	14	1	Gasdermin bGSDM	NA	n	234
1	15	1	Gasdermin bGSDM	OA	o	234
1	16	1	Gasdermin bGSDM	PA	p	234
1	17	1	Gasdermin bGSDM	QA	q	234
1	18	1	Gasdermin bGSDM	RA	r	234
1	19	1	Gasdermin bGSDM	SA	s	234
1	20	1	Gasdermin bGSDM	TA	t	234
1	21	1	Gasdermin bGSDM	UA	u	234
1	22	1	Gasdermin bGSDM	VA	v	234

Model ID	Subunit number	Subunit ID	Subunit name	Chain ID	Chain ID [auth]	Total residues
1	23	1	Gasdermin bGSDM	WA	w	234
1	24	1	Gasdermin bGSDM	XA	x	234
1	25	1	Gasdermin bGSDM	YA	y	234
1	26	1	Gasdermin bGSDM	ZA	z	234
1	27	1	Gasdermin bGSDM	A	A	234
1	28	1	Gasdermin bGSDM	B	B	234
1	29	1	Gasdermin bGSDM	C	C	234
1	30	1	Gasdermin bGSDM	D	D	234
1	31	1	Gasdermin bGSDM	E	E	234
1	32	1	Gasdermin bGSDM	F	F	234
1	33	1	Gasdermin bGSDM	G	G	234
1	34	1	Gasdermin bGSDM	H	H	234
1	35	1	Gasdermin bGSDM	I	I	234
1	36	1	Gasdermin bGSDM	J	J	234
1	37	1	Gasdermin bGSDM	K	K	234

Model ID	Subunit number	Subunit ID	Subunit name	Chain ID	Chain ID [auth]	Total residues
1	38	1	Gasdermin bGSDM	L	L	234
1	39	1	Gasdermin bGSDM	M	M	234
1	40	1	Gasdermin bGSDM	N	N	234
1	41	1	Gasdermin bGSDM	O	O	234
1	42	1	Gasdermin bGSDM	P	P	234
1	43	1	Gasdermin bGSDM	Q	Q	234
1	44	1	Gasdermin bGSDM	R	R	234
1	45	1	Gasdermin bGSDM	S	S	234
1	46	1	Gasdermin bGSDM	T	T	234
1	47	1	Gasdermin bGSDM	U	U	234
1	48	1	Gasdermin bGSDM	V	V	234
1	49	1	Gasdermin bGSDM	W	W	234
1	50	1	Gasdermin bGSDM	X	X	234
1	51	1	Gasdermin bGSDM	Y	Y	234
1	52	1	Gasdermin bGSDM	Z	Z	234

## Datasets used for modeling

*There are 3 unique datasets used to build the models in this entry.*

ID	Dataset type	Database name	Data access code
3	2DEM class average	File	10.5281/zenodo.10570209
1	Experimental model	PDB	8sl0
2	3DEM volume	EMDB	EMD-43510

## Representation

*This entry has only one representation and includes 0 rigid bodies and 52 flexible units*

Chain ID	Rigid bodies	Non-rigid segments
AA	-	1-234
BA	-	1-234
CA	-	1-234
DA	-	1-234
EA	-	1-234
FA	-	1-234
GA	-	1-234
HA	-	1-234
IA	-	1-234
JA	-	1-234
KA	-	1-234
LA	-	1-234
MA	-	1-234
NA	-	1-234

Chain ID	Rigid bodies	Non-rigid segments
OA	-	1-234
PA	-	1-234
QA	-	1-234
RA	-	1-234
SA	-	1-234
TA	-	1-234
UA	-	1-234
VA	-	1-234
WA	-	1-234
XA	-	1-234
YA	-	1-234
ZA	-	1-234
A	-	1-234
B	-	1-234
C	-	1-234
D	-	1-234
E	-	1-234
F	-	1-234
G	-	1-234
H	-	1-234
I	-	1-234
J	-	1-234
K	-	1-234

Chain ID	Rigid bodies	Non-rigid segments
L	-	1-234
M	-	1-234
N	-	1-234
O	-	1-234
P	-	1-234
Q	-	1-234
R	-	1-234
S	-	1-234
T	-	1-234
U	-	1-234
V	-	1-234
W	-	1-234
X	-	1-234
Y	-	1-234
Z	-	1-234

### Methodology and software

*This entry is a result of 1 distinct protocol(s).*

Step number	Protocol ID	Method name	Method type	Method description	Number of computed models	Multi state modeling	Multi scale modeling
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Step number	Protocol ID	Method name	Method type	Method description	Number of computed models	Multi state modeling	Multi scale modeling
1	1	None	None	To make the 52-mer pore model, protomer models (PDB 8SL0) were realigned using a custom script and a geometric model based on the number of protomers observed in the major 2D classes (52) and the eccentricity of a cryo-EM map of an oval pore (0.86, EMD-43510). Protomers were realigned to preserve the inter-subunit hydrogen bonding pattern observed in the slinky-like oligomer.	None	False	False

*There are 2 software packages reported in this entry.*

ID	Software name	Software version	Software classification	Software location
1	<a href="https://www.python.org/">Python</a>	v3.9.7	model building	<a href="https://www.python.org/">https://www.python.org/</a>
2	<a href="https://www.mdanalysis.org/">MDAnalysis</a>	v2.4.2	model building	<a href="https://www.mdanalysis.org/">https://www.mdanalysis.org/</a>

## Data quality

### 2DEM class average

Validation for this section is under development.

### 3DEM volume

Validation for this section is under development.

## Model quality

For models with atomic structures, molprobability analysis is performed. For models with coarse-grained or multi-scale structures, excluded volume analysis is performed.

## Standard geometry: bond outliers?

There are 93184 bond outliers in this entry. A summary is provided below, and a detailed list of outliers can be found [here](#).

Bond type	Observed distance (Å)	Ideal distance (Å)	Number of outliers
CA--HA2	1.07	0.97	156
CA--HA	1.07	0.97	1086
CA--HA1	1.07	0.97	400
CA--HA	1.08	0.97	8818
CA--HA1	1.08	0.97	801
CA--HA2	1.08	0.97	1040
N--HN2	1.00	0.89	52
N--HN1	1.00	0.89	52
CA--HA	1.09	0.97	912
CA--HA1	1.09	0.97	47
OG1--HG1	0.96	0.84	504
CA--HA2	1.09	0.97	52
OH--HH	0.96	0.84	357
OH--HH	0.97	0.84	7
OG1--HG1	0.97	0.84	16
N--HN	0.99	0.86	4040
NH2--2HH2	0.99	0.86	57
NH2--1HH2	0.99	0.86	52
CG2--3HG2	1.10	0.97	352
CD--HD2	1.10	0.97	278
CD1--2HD1	1.10	0.97	52

Bond type	Observed distance (Å)	Ideal distance (Å)	Number of outliers
CG--HG1	1.10	0.97	218
SG--HG1	1.33	1.20	52
CD--HD1	1.10	0.97	275
CB--HB	1.10	0.97	183
CE--HE2	1.10	0.97	208
CB--HB2	1.10	0.97	989
CG2--2HG2	1.10	0.97	111
NE2--2HE2	0.99	0.86	59
CB--HB1	1.10	0.97	562
CD2--3HD2	1.10	0.97	104
CG1--2HG1	1.10	0.97	106
CG--HG2	1.10	0.97	414
CG1--1HG1	1.10	0.97	107
CD1--3HD1	1.10	0.97	52
CG2--1HG2	1.10	0.97	178
CG--HG	1.10	0.97	207
NH1--2HH1	0.99	0.86	52
ND2--2HD2	0.99	0.86	84
CB--HB3	1.10	0.97	104
CG1--3HG1	1.10	0.97	212
ND2--1HD2	0.99	0.86	52
CD2--2HD2	1.10	0.97	204
CD2--1HD2	1.10	0.97	45

Bond type	Observed distance (Å)	Ideal distance (Å)	Number of outliers
NE2--1HE2	0.99	0.86	48
CD1--1HD1	1.10	0.97	36
NE--HE	0.99	0.86	14
CE--HE1	1.10	0.97	7
CD--HD3	1.10	0.97	8
CB--HB1	1.11	0.97	6399
CB--HB	1.11	0.97	2058
CG--HG2	1.11	0.97	2859
N--HN	1.00	0.86	7304
CB--HB2	1.11	0.97	6198
CG2--1HG2	1.11	0.97	1996
CD--HD2	1.11	0.97	2036
NE--HE	1.00	0.86	402
CD--HD1	1.11	0.97	2119
CG1--3HG1	1.11	0.97	880
CD2--1HD2	1.11	0.97	870
CD2--2HD2	1.11	0.97	888
ND2--2HD2	1.00	0.86	436
CD1--1HD1	1.11	0.97	1047
CG--HG1	1.11	0.97	2839
CE--HE1	1.11	0.97	814
NE2--1HE2	1.00	0.86	834
CD--HD3	1.11	0.97	708

Bond type	Observed distance (Å)	Ideal distance (Å)	Number of outliers
CG2--3HG2	1.11	0.97	1892
NE2--2HE2	1.00	0.86	711
NH2--2HH2	1.00	0.86	307
CG1--1HG1	1.11	0.97	1261
CG2--2HG2	1.11	0.97	1598
ND2--1HD2	1.00	0.86	322
CG--HG	1.11	0.97	729
CD2--3HD2	1.11	0.97	988
CG1--2HG1	1.11	0.97	1466
CD1--3HD1	1.11	0.97	1092
CE--HE2	1.11	0.97	663
CD1--2HD1	1.11	0.97	933
NH2--1HH2	1.00	0.86	364
NH1--1HH1	1.00	0.86	221
NH1--2HH1	1.00	0.86	312
CZ--HZ	1.07	0.93	58
CB--HB3	1.11	0.97	703
CD1--HD1	1.07	0.93	144
CD2--HD2	1.07	0.93	215
CE2--HE2	1.07	0.93	217
CE--HE3	1.11	0.97	52
NZ--HZ2	1.03	0.89	95
ND1--HD1	1.00	0.86	52

Bond type	Observed distance (Å)	Ideal distance (Å)	Number of outliers
NZ--HZ3	1.03	0.89	73
CE1--HE1	1.07	0.93	81
CD--HD3	1.12	0.97	64
CB--HB1	1.12	0.97	1411
CB--HB2	1.12	0.97	1185
CG--HG1	1.12	0.97	479
CE2--HE2	1.08	0.93	609
CG1--2HG1	1.12	0.97	352
CE1--HE1	1.08	0.93	699
CD1--HD1	1.08	0.93	629
N--HN	1.01	0.86	148
CG1--1HG1	1.12	0.97	556
CG2--2HG2	1.12	0.97	735
NE2--2HE2	1.01	0.86	114
CG2--1HG2	1.12	0.97	270
CE--HE1	1.12	0.97	63
CD--HD1	1.12	0.97	154
ND2--1HD2	1.01	0.86	146
CG2--3HG2	1.12	0.97	200
CD1--2HD1	1.12	0.97	159
CB--HB	1.12	0.97	203
NZ--HZ3	1.04	0.89	759
NH1--2HH1	1.01	0.86	52

Bond type	Observed distance (Å)	Ideal distance (Å)	Number of outliers
CG--HG2	1.12	0.97	263
NH1--1HH1	1.01	0.86	195
CE--HE2	1.12	0.97	13
CD1--1HD1	1.12	0.97	61
NE2--1HE2	1.01	0.86	2
CD2--HD2	1.08	0.93	707
CD--HD2	1.12	0.97	234
CB--HB3	1.12	0.97	129
CD2--1HD2	1.12	0.97	229
NZ--HZ2	1.04	0.89	615
CZ--HZ	1.08	0.93	410
CG1--3HG1	1.12	0.97	52
N--H2	1.04	0.89	52
NZ--HZ1	1.04	0.89	681
CG--HG	1.12	0.97	260
NH2--2HH2	1.01	0.86	52
N--H1	1.04	0.89	52
CD2--2HD2	1.12	0.97	52
CD2--3HD2	1.12	0.97	52
N--H3	1.04	0.89	52
CD1--HD1	1.09	0.93	111
NZ--HZ2	1.05	0.89	122
CD2--HD2	1.09	0.93	14

Bond type	Observed distance (Å)	Ideal distance (Å)	Number of outliers
CE2--HE2	1.09	0.93	58
NZ--HZ1	1.05	0.89	151
CE1--HE1	1.09	0.93	156
CZ--HZ	1.09	0.93	52
CD1--3HD1	2.65	0.97	52
CD2--3HD2	2.74	0.97	52
CD2--1HD2	2.77	0.97	52
CD1--2HD1	2.83	0.97	20
CD1--2HD1	2.84	0.97	32
CD1--1HD1	3.46	0.97	20
CD1--1HD1	3.47	0.97	32
CD2--2HD2	3.48	0.97	52

### Standard geometry: angle outliers

There are 850 angle outliers in this entry. A summary is provided below, and a detailed list of outliers can be found [here](#).

Angle type	Observed angle (°)	Ideal angle (°)	Number of outliers
SG-C7-C8	109.23	88.62	2
SG-C7-C8	109.23	88.63	3
SG-C7-C8	109.23	88.64	18
SG-C7-C8	109.23	88.65	24
SG-C7-C8	109.23	88.66	4
SG-C7-C8	109.23	88.68	1
CA-CB-CG	112.60	117.85	3
CA-CB-CG	112.60	117.84	5



Angle type	Observed angle (°)	Ideal angle (°)	Number of outliers
CA-CB-CG	112.60	117.83	9
CA-CB-CG	112.60	117.82	13
CA-CB-CG	112.60	117.81	13
CA-CB-CG	112.60	117.80	8
CA-CB-CG	112.60	117.78	1
CA-C-N	116.90	123.33	2
CA-C-N	116.90	123.32	6
CA-C-N	116.90	123.31	11
CA-C-N	116.90	123.30	11
CA-C-N	116.90	123.29	6
CA-C-N	116.90	123.28	10
CA-C-N	116.90	123.27	5
CA-C-N	116.90	123.26	1
CA-CB-CG	112.60	116.64	1
CA-CB-CG	112.60	116.63	4
CA-CB-CG	112.60	116.62	2
CA-CB-CG	112.60	116.61	4
CA-CB-CG	112.60	116.60	7
HN1-N-HN2	122.50	103.16	1
HN1-N-HN2	122.51	103.16	2
HN1-N-HN2	122.52	103.16	4
HN1-N-HN2	122.53	103.16	5
HN1-N-HN2	122.54	103.16	1

Angle type	Observed angle (°)	Ideal angle (°)	Number of outliers
HN1-N-HN2	122.55	103.16	5
HN1-N-HN2	122.56	103.16	15
HN1-N-HN2	122.57	103.16	3
HN1-N-HN2	122.58	103.16	3
HN1-N-HN2	122.59	103.16	2
HN1-N-HN2	122.60	103.16	2
HN1-N-HN2	122.61	103.16	4
HN1-N-HN2	122.62	103.16	4
HN1-N-HN2	122.63	103.16	1
CG-CD1-3HD1	55.47	109.00	2
CG-CD1-3HD1	55.46	109.00	3
CG-CD1-3HD1	55.45	109.00	7
CG-CD1-3HD1	55.44	109.00	14
CG-CD1-3HD1	55.43	109.00	19
CG-CD1-3HD1	55.42	109.00	6
CG-CD1-3HD1	55.41	109.00	1
CG-CD2-3HD2	53.32	109.00	7
CG-CD2-3HD2	53.31	109.00	17
CG-CD2-3HD2	53.30	109.00	14
CG-CD2-3HD2	53.29	109.00	13
CG-CD2-3HD2	53.28	109.00	1
CG-CD2-1HD2	51.95	109.00	2
CG-CD2-1HD2	51.94	109.00	6

Angle type	Observed angle (°)	Ideal angle (°)	Number of outliers
CG-CD2-1HD2	51.93	109.00	10
CG-CD2-1HD2	51.92	109.00	14
CG-CD2-1HD2	51.91	109.00	12
CG-CD2-1HD2	51.90	109.00	3
CG-CD2-1HD2	51.89	109.00	4
CG-CD2-1HD2	51.88	109.00	1
CG-CD1-2HD1	49.51	109.00	1
CG-CD1-2HD1	49.50	109.00	4
CG-CD1-2HD1	49.49	109.00	10
CG-CD1-2HD1	49.48	109.00	23
CG-CD1-2HD1	49.47	109.00	10
CG-CD1-2HD1	49.46	109.00	1
CG-CD1-2HD1	49.45	109.00	3
1HD2-CD2-3HD2	38.17	110.00	1
1HD2-CD2-3HD2	38.16	110.00	10
1HD2-CD2-3HD2	38.15	110.00	26
1HD2-CD2-3HD2	38.14	110.00	12
1HD2-CD2-3HD2	38.13	110.00	3
2HD1-CD1-3HD1	38.13	110.00	10
2HD1-CD1-3HD1	38.12	110.00	27
2HD1-CD1-3HD1	38.11	110.00	13
2HD1-CD1-3HD1	38.10	110.00	2
1HD1-CD1-2HD1	31.57	110.00	16

Angle type	Observed angle (°)	Ideal angle (°)	Number of outliers
1HD1-CD1-2HD1	31.56	110.00	13
1HD1-CD1-2HD1	31.55	110.00	22
1HD1-CD1-2HD1	31.54	110.00	1
2HD2-CD2-3HD2	30.90	110.00	27
2HD2-CD2-3HD2	30.89	110.00	24
2HD2-CD2-3HD2	30.88	110.00	1
1HD2-CD2-2HD2	30.84	110.00	5
1HD2-CD2-2HD2	30.83	110.00	16
1HD2-CD2-2HD2	30.82	110.00	23
1HD2-CD2-2HD2	30.81	110.00	8
1HD1-CD1-3HD1	30.48	110.00	28
1HD1-CD1-3HD1	30.47	110.00	22
1HD1-CD1-3HD1	30.46	110.00	2
CG-CD1-1HD1	25.87	109.00	1
CG-CD1-1HD1	25.86	109.00	3
CG-CD1-1HD1	25.85	109.00	12
CG-CD1-1HD1	25.84	109.00	26
CG-CD1-1HD1	25.83	109.00	8
CG-CD1-1HD1	25.82	109.00	2
CG-CD2-2HD2	25.34	109.00	7
CG-CD2-2HD2	25.33	109.00	17
CG-CD2-2HD2	25.32	109.00	18
CG-CD2-2HD2	25.31	109.00	8

Angle type	Observed angle (°)	Ideal angle (°)	Number of outliers
CG-CD2-2HD2	25.30	109.00	2

### Too-close contacts

The following all-atom clashscore is based on a MolProbity analysis. All-atom clashscore is defined as the number of clashes found per 1000 atoms (including hydrogen atoms). The table below contains clashscores for all the models in this entry.

Model ID	Clash score	Number of clashes
1	48.93	8973

All 8973 close contacts within the same asymmetric unit are listed below, sorted by their clash magnitude.

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	OA:230:PHE:CE1	PA:141:VAL:HG12	1.707
1	A:230:PHE:CE1	B:141:VAL:HG12	1.702
1	P:15:LEU:HG	Q:203:VAL:CG2	1.692
1	QA:230:PHE:CE1	RA:141:VAL:HG12	1.676
1	O:230:PHE:CE1	P:141:VAL:HG12	1.670
1	YA:230:PHE:CE1	ZA:141:VAL:HG12	1.669
1	N:230:PHE:CE1	O:141:VAL:HG12	1.664
1	V:87:LYS:HD2	W:186:VAL:CB	1.661
1	EA:15:LEU:HD11	FA:203:VAL:CG2	1.658
1	P:230:PHE:CE1	Q:141:VAL:HG12	1.656
1	EA:124:LEU:HD21	FA:45:SER:CB	1.654
1	V:89:VAL:HB	W:187:VAL:CG1	1.652
1	SA:230:PHE:CE1	TA:141:VAL:HG12	1.652
1	AA:218:PHE:CE2	BA:42:TYR:CD2	1.651
1	PA:230:PHE:CE1	QA:141:VAL:HG12	1.651
1	WA:230:PHE:CE1	XA:141:VAL:HG12	1.647

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	U:218:PHE:CE2	V:42:TYR:CD2	1.644
1	JA:67:ALA:HB3	KA:205:TYR:CE1	1.643
1	D:15:LEU:CD1	E:203:VAL:HG21	1.642
1	AA:230:PHE:CE1	BA:141:VAL:HG12	1.641
1	UA:230:PHE:CE1	VA:141:VAL:HG12	1.641
1	SA:89:VAL:HB	TA:187:VAL:CG1	1.640
1	NA:230:PHE:CE1	OA:141:VAL:HG12	1.639
1	V:230:PHE:CZ	W:141:VAL:HG12	1.635
1	Q:230:PHE:CE1	R:141:VAL:HG12	1.634
1	RA:230:PHE:CE1	SA:141:VAL:HG12	1.630
1	A:141:VAL:HG12	ZA:230:PHE:CE1	1.626
1	C:69:ILE:CD	D:204:THR:H	1.624
1	R:86:LEU:HD21	S:188:GLY:CA	1.623
1	J:228:THR:HG21	K:140:PRO:CG	1.621
1	Z:230:PHE:CZ	AA:141:VAL:HG12	1.621
1	EA:124:LEU:CD2	FA:45:SER:HB3	1.621
1	UA:230:PHE:CZ	VA:141:VAL:HG12	1.621
1	R:230:PHE:CE1	S:141:VAL:HG12	1.619
1	U:87:LYS:CE	V:186:VAL:HG13	1.619
1	VA:89:VAL:CG1	WA:187:VAL:HG11	1.615
1	Y:230:PHE:CE1	Z:141:VAL:HG12	1.614
1	V:87:LYS:CE	W:186:VAL:HG13	1.613
1	AA:230:PHE:CE1	BA:141:VAL:CG1	1.613

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	PA:15:LEU:HG	QA:203:VAL:CG2	1.612
1	SA:14:ARG:HG3	TA:203:VAL:CG1	1.612
1	CA:69:ILE:CD	DA:204:THR:H	1.611
1	TA:89:VAL:CB	UA:187:VAL:CG1	1.610
1	VA:230:PHE:CZ	WA:141:VAL:HG12	1.610
1	E:124:LEU:CD2	F:45:SER:HB3	1.609
1	U:230:PHE:CZ	V:141:VAL:HG12	1.609
1	E:124:LEU:CD1	F:45:SER:HB2	1.608
1	S:230:PHE:CE1	T:141:VAL:HG12	1.608
1	A:141:VAL:HG12	ZA:230:PHE:CZ	1.603
1	X:89:VAL:CG1	Y:187:VAL:HG11	1.603
1	NA:230:PHE:CE1	OA:141:VAL:CG1	1.603
1	A:230:PHE:CE1	B:141:VAL:CB	1.601
1	TA:230:PHE:CE1	UA:141:VAL:HG12	1.601
1	A:218:PHE:CE2	B:42:TYR:CD2	1.600
1	A:230:PHE:CZ	B:141:VAL:HG12	1.599
1	W:230:PHE:CE1	X:141:VAL:HG12	1.599
1	N:86:LEU:CD2	O:188:GLY:H	1.599
1	S:86:LEU:HD21	T:188:GLY:CA	1.598
1	XA:230:PHE:CE1	YA:141:VAL:HG12	1.598
1	U:230:PHE:CE1	V:141:VAL:HG12	1.597
1	LA:67:ALA:HB2	MA:207:GLY:CA	1.597
1	A:218:PHE:HE2	B:42:TYR:CD2	1.597

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	NA:230:PHE:HE1	OA:141:VAL:CG1	1.596
1	J:67:ALA:HB3	K:205:TYR:CE1	1.595
1	W:89:VAL:CG1	X:187:VAL:HG11	1.595
1	UA:218:PHE:CE2	VA:42:TYR:CD2	1.595
1	N:230:PHE:HE1	O:141:VAL:CG1	1.595
1	QA:15:LEU:CG	RA:203:VAL:HG23	1.593
1	QA:86:LEU:HD21	RA:188:GLY:CA	1.593
1	S:14:ARG:HG3	T:203:VAL:CG1	1.589
1	UA:87:LYS:HD2	VA:186:VAL:CB	1.589
1	F:124:LEU:HD21	G:45:SER:CB	1.588
1	VA:89:VAL:HB	WA:187:VAL:CG1	1.588
1	P:86:LEU:HD21	Q:188:GLY:CA	1.586
1	DA:15:LEU:CD1	EA:203:VAL:HG21	1.586
1	Z:230:PHE:CE1	AA:141:VAL:HG12	1.585
1	IA:86:LEU:HD21	JA:187:VAL:C	1.585
1	A:230:PHE:CE1	B:141:VAL:CG1	1.584
1	OA:230:PHE:HE1	PA:141:VAL:CG1	1.584
1	W:230:PHE:CZ	X:141:VAL:HG12	1.582
1	T:230:PHE:CE1	U:141:VAL:HG12	1.581
1	RA:124:LEU:CD2	SA:45:SER:HB2	1.581
1	E:15:LEU:HD11	F:203:VAL:CG2	1.580
1	GA:124:LEU:HD21	HA:45:SER:CB	1.580
1	VA:230:PHE:CE1	WA:141:VAL:HG12	1.580



Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	AA:230:PHE:CE1	BA:141:VAL:CB	1.579
1	TA:124:LEU:CD2	UA:45:SER:CB	1.578
1	YA:65:ALA:CB	ZA:208:GLU:CD	1.577
1	AA:218:PHE:HE2	BA:42:TYR:CD2	1.576
1	T:89:VAL:CB	U:187:VAL:CG1	1.575
1	RA:86:LEU:CD2	SA:188:GLY:HA3	1.575
1	Y:230:PHE:CZ	Z:141:VAL:HG12	1.573
1	U:87:LYS:HD2	V:186:VAL:CB	1.572
1	FA:124:LEU:HD21	GA:45:SER:CB	1.572
1	SA:86:LEU:HD21	TA:188:GLY:CA	1.572
1	K:228:THR:HG21	L:140:PRO:CG	1.571
1	IA:228:THR:CG2	JA:140:PRO:CD	1.569
1	XA:89:VAL:CG1	YA:187:VAL:HG11	1.569
1	S:89:VAL:HB	T:187:VAL:CG1	1.568
1	VA:87:LYS:HD2	WA:186:VAL:CB	1.568
1	DA:67:ALA:HA	EA:207:GLY:CA	1.567
1	FA:124:LEU:CD2	GA:45:SER:HB3	1.567
1	KA:228:THR:HG21	LA:140:PRO:CG	1.567
1	VA:87:LYS:CE	WA:186:VAL:HG13	1.567
1	B:218:PHE:HE2	C:42:TYR:CD2	1.567
1	E:124:LEU:HD21	F:45:SER:CB	1.566
1	RA:14:ARG:HG3	SA:203:VAL:CG1	1.566
1	D:67:ALA:HA	E:207:GLY:CA	1.565

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	UA:87:LYS:CE	VA:186:VAL:HG13	1.565
1	WA:230:PHE:CZ	XA:141:VAL:HG12	1.565
1	R:124:LEU:CD2	S:45:SER:HB2	1.564
1	WA:89:VAL:CG1	XA:187:VAL:HG11	1.564
1	YA:230:PHE:CZ	ZA:141:VAL:HG12	1.563
1	L:67:ALA:HB2	M:207:GLY:CA	1.562
1	EA:124:LEU:CD1	FA:45:SER:HB2	1.562
1	MA:67:ALA:HB2	NA:207:GLY:CA	1.562
1	R:89:VAL:HB	S:187:VAL:CG1	1.561
1	Z:230:PHE:CE1	AA:141:VAL:CG1	1.560
1	A:141:VAL:CG1	ZA:230:PHE:CE1	1.559
1	JA:228:THR:HG21	KA:140:PRO:CG	1.559
1	VA:89:VAL:CB	WA:187:VAL:CG1	1.559
1	N:230:PHE:CE1	O:141:VAL:CG1	1.557
1	V:89:VAL:CG1	W:187:VAL:HG11	1.557
1	V:230:PHE:CE1	W:141:VAL:HG12	1.556
1	W:87:LYS:CE	X:186:VAL:HG13	1.556
1	XA:230:PHE:CZ	YA:141:VAL:HG12	1.556
1	Q:86:LEU:HD21	R:188:GLY:CA	1.555
1	PA:86:LEU:HD21	QA:188:GLY:CA	1.555
1	X:230:PHE:CE1	Y:141:VAL:HG12	1.554
1	O:230:PHE:HE1	P:141:VAL:CG1	1.553
1	S:64:GLN:CB	T:209:LYS:HZ3	1.551

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	F:124:LEU:CD2	G:45:SER:HB3	1.550
1	UA:218:PHE:CZ	VA:42:TYR:HD2	1.550
1	BA:218:PHE:HE2	CA:42:TYR:CD2	1.549
1	L:67:ALA:CB	M:207:GLY:HA3	1.548
1	T:124:LEU:CD2	U:45:SER:CB	1.548
1	U:218:PHE:CZ	V:42:TYR:HD2	1.548
1	RA:86:LEU:HD21	SA:188:GLY:CA	1.547
1	TA:14:ARG:HG3	UA:203:VAL:CG1	1.547
1	FA:89:VAL:HA	GA:185:LYS:CD	1.546
1	M:67:ALA:CB	N:207:GLY:N	1.544
1	T:14:ARG:HG3	U:203:VAL:CG1	1.544
1	AA:230:PHE:CZ	BA:141:VAL:HG12	1.543
1	S:124:LEU:CD2	T:45:SER:HB2	1.542
1	I:228:THR:CG2	J:140:PRO:HD2	1.541
1	N:90:LEU:CD2	O:185:LYS:NZ	1.540
1	R:86:LEU:CD2	S:188:GLY:HA3	1.539
1	NA:86:LEU:CD2	OA:188:GLY:H	1.539
1	SA:64:GLN:CB	TA:209:LYS:HZ3	1.539
1	SA:124:LEU:CD2	TA:45:SER:HB2	1.538
1	I:86:LEU:HD21	J:187:VAL:C	1.536
1	OA:86:LEU:HD21	PA:188:GLY:CA	1.535
1	Q:15:LEU:CG	R:203:VAL:HG23	1.534
1	U:14:ARG:CG	V:203:VAL:HG12	1.534

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	D:69:ILE:CD	E:204:THR:H	1.533
1	I:228:THR:CG2	J:140:PRO:CD	1.531
1	T:89:VAL:HB	U:187:VAL:CG1	1.530
1	V:89:VAL:CB	W:187:VAL:CG1	1.529
1	M:67:ALA:CB	N:207:GLY:CA	1.528
1	R:14:ARG:HG3	S:203:VAL:CG1	1.528
1	X:230:PHE:CZ	Y:141:VAL:HG12	1.528
1	S:64:GLN:C	T:209:LYS:HD2	1.527
1	DA:67:ALA:CA	EA:207:GLY:HA3	1.527
1	LA:67:ALA:CB	MA:207:GLY:HA3	1.527
1	I:86:LEU:CD2	J:188:GLY:CA	1.526
1	MA:67:ALA:CB	NA:207:GLY:CA	1.526
1	S:86:LEU:CD2	T:188:GLY:HA3	1.525
1	I:228:THR:HG21	J:140:PRO:CD	1.523
1	G:89:VAL:HA	H:185:LYS:CD	1.522
1	AA:228:THR:HG23	BA:140:PRO:CD	1.522
1	DA:69:ILE:CD	EA:204:THR:H	1.522
1	Y:65:ALA:CB	Z:208:GLU:CD	1.521
1	Y:230:PHE:CE1	Z:141:VAL:CG1	1.521
1	IA:86:LEU:CD2	JA:188:GLY:CA	1.521
1	WA:87:LYS:CE	XA:186:VAL:HG13	1.521
1	D:67:ALA:CB	E:207:GLY:N	1.519
1	K:67:ALA:CB	L:207:GLY:HA3	1.519

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	Y:230:PHE:CZ	Z:141:VAL:CG1	1.519
1	O:230:PHE:CE1	P:141:VAL:CG1	1.517
1	QA:15:LEU:HG	RA:203:VAL:CG2	1.517
1	TA:89:VAL:HB	UA:187:VAL:CG1	1.516
1	NA:90:LEU:CD2	OA:185:LYS:NZ	1.515
1	G:124:LEU:HD21	H:45:SER:CB	1.513
1	H:124:LEU:HD21	I:45:SER:CB	1.513
1	R:64:GLN:C	S:209:LYS:HD2	1.513
1	Q:216:LYS:NZ	R:24:ARG:HD3	1.512
1	G:124:LEU:CD2	H:45:SER:HB3	1.511
1	RA:89:VAL:HB	SA:187:VAL:CG1	1.511
1	J:67:ALA:HB3	K:205:TYR:CZ	1.510
1	M:67:ALA:HB2	N:207:GLY:CA	1.510
1	R:65:ALA:HB3	S:208:GLU:CD	1.510
1	I:86:LEU:CG	J:188:GLY:N	1.509
1	V:89:VAL:CB	W:187:VAL:HG11	1.508
1	P:230:PHE:CE1	Q:141:VAL:CG1	1.507
1	IA:228:THR:CG2	JA:140:PRO:HD2	1.507
1	A:228:THR:HG23	B:140:PRO:CD	1.506
1	A:141:VAL:CG1	ZA:230:PHE:CZ	1.505
1	Q:15:LEU:HG	R:203:VAL:CG2	1.505
1	SA:86:LEU:CD2	TA:188:GLY:HA3	1.505
1	EA:89:VAL:HA	FA:185:LYS:CD	1.504

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	IA:86:LEU:CG	JA:188:GLY:N	1.504
1	DA:89:VAL:CA	EA:185:LYS:HD2	1.503
1	PA:230:PHE:CE1	QA:141:VAL:CG1	1.503
1	TA:230:PHE:CZ	UA:141:VAL:HG12	1.502
1	S:89:VAL:CB	T:187:VAL:CG1	1.500
1	U:218:PHE:CE2	V:42:TYR:HD2	1.500
1	T:14:ARG:CG	U:203:VAL:HG12	1.498
1	GA:89:VAL:HA	HA:185:LYS:CD	1.498
1	KA:67:ALA:CB	LA:207:GLY:HA3	1.498
1	UA:14:ARG:CG	VA:203:VAL:HG12	1.497
1	A:141:VAL:CB	ZA:230:PHE:CE1	1.496
1	O:86:LEU:HD21	P:188:GLY:CA	1.496
1	MA:67:ALA:CB	NA:207:GLY:N	1.496
1	T:230:PHE:CZ	U:141:VAL:HG12	1.495
1	Z:230:PHE:CE1	AA:141:VAL:CB	1.495
1	GA:124:LEU:CD2	HA:45:SER:HB3	1.495
1	RA:64:GLN:C	SA:209:LYS:HD2	1.495
1	Q:14:ARG:HG3	R:203:VAL:CG1	1.494
1	Y:89:VAL:CG1	Z:187:VAL:HG11	1.494
1	DA:67:ALA:CB	EA:207:GLY:N	1.494
1	RA:64:GLN:HB3	SA:209:LYS:NZ	1.494
1	X:86:LEU:HD23	Y:188:GLY:N	1.493
1	N:86:LEU:HD21	O:188:GLY:CA	1.492

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	OA:15:LEU:HG	PA:203:VAL:CG2	1.492
1	YA:230:PHE:CZ	ZA:141:VAL:CG1	1.492
1	D:67:ALA:CA	E:207:GLY:HA3	1.491
1	OA:230:PHE:CE1	PA:141:VAL:CG1	1.491
1	UA:14:ARG:HG3	VA:203:VAL:CG1	1.491
1	UA:87:LYS:CE	VA:186:VAL:CG1	1.491
1	L:67:ALA:CB	M:207:GLY:CA	1.490
1	F:89:VAL:HA	G:185:LYS:CD	1.489
1	E:89:VAL:HA	F:185:LYS:CD	1.487
1	F:124:LEU:CD1	G:45:SER:HB2	1.485
1	J:67:ALA:HB1	K:207:GLY:N	1.485
1	O:15:LEU:HG	P:203:VAL:CG2	1.483
1	JA:67:ALA:HB3	KA:205:TYR:CZ	1.483
1	EA:124:LEU:CD2	FA:45:SER:CB	1.482
1	D:89:VAL:CA	E:185:LYS:HD2	1.480
1	SA:64:GLN:C	TA:209:LYS:HD2	1.480
1	EA:124:LEU:HD11	FA:45:SER:CB	1.478
1	PA:230:PHE:HE1	QA:141:VAL:CG1	1.478
1	E:124:LEU:HD11	F:45:SER:CB	1.477
1	Y:15:LEU:HA	Z:23:PRO:CD	1.477
1	TA:231:ALA:CB	UA:42:TYR:H	1.477
1	HA:124:LEU:HD21	IA:45:SER:CB	1.475
1	MA:67:ALA:CB	NA:207:GLY:HA3	1.474

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	XA:230:PHE:CZ	YA:141:VAL:CG1	1.474
1	T:231:ALA:CB	U:42:TYR:N	1.473
1	SA:124:LEU:HD21	TA:45:SER:CB	1.471
1	BA:218:PHE:CE2	CA:42:TYR:CD2	1.470
1	IA:228:THR:HG21	JA:140:PRO:CG	1.469
1	G:90:LEU:N	H:185:LYS:HZ3	1.469
1	E:124:LEU:CD2	F:45:SER:CB	1.468
1	I:228:THR:HG21	J:140:PRO:CG	1.468
1	KA:67:ALA:CB	LA:207:GLY:CA	1.468
1	YA:15:LEU:HA	ZA:23:PRO:CD	1.468
1	YA:89:VAL:CG1	ZA:187:VAL:HG11	1.468
1	YA:230:PHE:CE1	ZA:141:VAL:CG1	1.468
1	VA:89:VAL:CG1	WA:187:VAL:CG1	1.467
1	OA:86:LEU:HD21	PA:188:GLY:N	1.466
1	RA:65:ALA:HB3	SA:208:GLU:CD	1.465
1	A:218:PHE:CE2	B:42:TYR:HD2	1.465
1	C:69:ILE:CD	D:204:THR:N	1.463
1	X:230:PHE:CE1	Y:141:VAL:CG1	1.462
1	KA:67:ALA:HB3	LA:205:TYR:CE1	1.462
1	TA:124:LEU:HD21	UA:45:SER:CB	1.462
1	C:67:ALA:HB3	D:205:TYR:CD2	1.461
1	E:89:VAL:CA	F:185:LYS:HD2	1.461
1	NA:86:LEU:HD21	OA:188:GLY:CA	1.460



Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	M:14:ARG:O	N:22:LEU:CA	1.459
1	JA:67:ALA:HB1	KA:207:GLY:N	1.459
1	X:230:PHE:CZ	Y:141:VAL:CG1	1.458
1	TA:14:ARG:CG	UA:203:VAL:HG12	1.458
1	K:67:ALA:HB3	L:205:TYR:CE1	1.457
1	XA:230:PHE:CE1	YA:141:VAL:CG1	1.457
1	K:67:ALA:CB	L:207:GLY:CA	1.456
1	U:14:ARG:HG3	V:203:VAL:CG1	1.456
1	T:64:GLN:C	U:209:LYS:CD	1.455
1	HA:89:VAL:HA	IA:185:LYS:CD	1.455
1	TA:89:VAL:CB	UA:187:VAL:HG11	1.454
1	CA:67:ALA:HB3	DA:205:TYR:CD2	1.453
1	SA:89:VAL:CB	TA:187:VAL:CG1	1.453
1	B:218:PHE:CE2	C:42:TYR:CD2	1.452
1	UA:218:PHE:CE2	VA:42:TYR:HD2	1.452
1	C:89:VAL:CA	D:185:LYS:HD2	1.450
1	FA:124:LEU:CD1	GA:45:SER:HB2	1.450
1	LA:67:ALA:CB	MA:207:GLY:CA	1.450
1	TA:64:GLN:C	UA:209:LYS:CD	1.450
1	U:87:LYS:CG	V:186:VAL:HG12	1.449
1	MA:216:LYS:NZ	NA:24:ARG:HH11	1.448
1	L:67:ALA:HB1	M:207:GLY:N	1.447
1	S:124:LEU:HD21	T:45:SER:CB	1.447

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	T:124:LEU:HD21	U:45:SER:CB	1.446
1	WA:87:LYS:HD2	XA:186:VAL:CB	1.446
1	E:124:LEU:CG	F:45:SER:HB3	1.445
1	Q:230:PHE:CE1	R:141:VAL:CG1	1.445
1	W:89:VAL:HB	X:187:VAL:CG1	1.444
1	LA:216:LYS:NZ	MA:24:ARG:NH1	1.444
1	M:67:ALA:CB	N:207:GLY:HA3	1.442
1	LA:67:ALA:HB1	MA:207:GLY:N	1.442
1	JA:67:ALA:CB	KA:205:TYR:CZ	1.441
1	WA:89:VAL:HB	XA:187:VAL:CG1	1.441
1	MA:90:LEU:HD23	NA:185:LYS:NZ	1.440
1	QA:14:ARG:HG3	RA:203:VAL:CG1	1.440
1	QA:230:PHE:CE1	RA:141:VAL:CG1	1.439
1	WA:230:PHE:CZ	XA:141:VAL:CG1	1.439
1	L:67:ALA:CB	M:207:GLY:N	1.438
1	P:230:PHE:HE1	Q:141:VAL:CG1	1.437
1	S:65:ALA:O	T:209:LYS:CG	1.436
1	CA:89:VAL:CA	DA:185:LYS:HD2	1.436
1	E:67:ALA:CA	F:207:GLY:HA3	1.435
1	B:89:VAL:C	C:185:LYS:HD2	1.434
1	H:89:VAL:HA	I:185:LYS:CD	1.434
1	K:67:ALA:HB2	L:207:GLY:CA	1.434
1	T:124:LEU:CD2	U:45:SER:HB2	1.434

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	SA:65:ALA:O	TA:209:LYS:CG	1.434
1	M:90:LEU:HD23	N:185:LYS:NZ	1.433
1	CA:17:TYR:N	DA:22:LEU:HD23	1.433
1	IA:124:LEU:HD21	JA:45:SER:CB	1.433
1	A:231:ALA:O	B:41:GLU:CB	1.432
1	I:124:LEU:HD21	J:45:SER:CB	1.431
1	Q:124:LEU:CD2	R:45:SER:HB2	1.431
1	TA:231:ALA:CB	UA:42:TYR:N	1.431
1	I:231:ALA:CB	J:42:TYR:O	1.430
1	QA:86:LEU:CD2	RA:188:GLY:HA3	1.430
1	Z:230:PHE:CZ	AA:141:VAL:CG1	1.429
1	JA:67:ALA:CB	KA:207:GLY:HA3	1.429
1	T:218:PHE:CZ	U:42:TYR:HD2	1.429
1	EA:89:VAL:CA	FA:185:LYS:HD2	1.428
1	V:14:ARG:CG	W:203:VAL:HG12	1.427
1	IA:231:ALA:CB	JA:42:TYR:O	1.427
1	UA:90:LEU:N	VA:185:LYS:HD3	1.427
1	J:67:ALA:CB	K:207:GLY:HA3	1.426
1	EA:15:LEU:CD1	FA:203:VAL:HG21	1.426
1	TA:124:LEU:CD2	UA:45:SER:HB2	1.426
1	E:67:ALA:CB	F:207:GLY:N	1.425
1	P:15:LEU:CG	Q:203:VAL:HG23	1.425
1	R:64:GLN:HB3	S:209:LYS:NZ	1.425

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	J:67:ALA:CB	K:205:TYR:CZ	1.424
1	X:89:VAL:HA	Y:185:LYS:CB	1.424
1	UA:87:LYS:CG	VA:186:VAL:HG12	1.424
1	WA:230:PHE:CE1	XA:141:VAL:CG1	1.424
1	A:228:THR:CG2	B:140:PRO:CD	1.422
1	W:230:PHE:CZ	X:141:VAL:CG1	1.422
1	CA:69:ILE:CD	DA:204:THR:N	1.422
1	EA:124:LEU:CG	FA:45:SER:HB3	1.422
1	MA:14:ARG:O	NA:22:LEU:CA	1.422
1	VA:89:VAL:CB	WA:187:VAL:HG11	1.422
1	WA:89:VAL:CG1	XA:187:VAL:CG1	1.422
1	XA:86:LEU:HD23	YA:188:GLY:N	1.421
1	R:64:GLN:CB	S:209:LYS:HZ3	1.421
1	WA:90:LEU:N	XA:185:LYS:CD	1.421
1	J:124:LEU:HD21	K:45:SER:CB	1.420
1	VA:14:ARG:CG	WA:203:VAL:HG12	1.420
1	AA:218:PHE:CE2	BA:42:TYR:HD2	1.420
1	GA:90:LEU:N	HA:185:LYS:HZ3	1.420
1	C:67:ALA:CB	D:205:TYR:CE2	1.419
1	PA:86:LEU:HD21	QA:188:GLY:N	1.419
1	Q:86:LEU:CD2	R:188:GLY:HA3	1.418
1	W:16:GLY:CA	X:22:LEU:CB	1.418
1	RA:65:ALA:O	SA:209:LYS:CG	1.418

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	IA:67:ALA:HB1	JA:207:GLY:N	1.417
1	H:124:LEU:CD2	I:45:SER:HB3	1.415
1	FA:87:LYS:CB	GA:187:VAL:HG13	1.415
1	I:67:ALA:HB1	J:207:GLY:N	1.414
1	JA:124:LEU:HD21	KA:45:SER:CB	1.414
1	KA:67:ALA:HB1	LA:207:GLY:N	1.414
1	L:216:LYS:NZ	M:24:ARG:NH1	1.414
1	E:124:LEU:CD1	F:45:SER:CB	1.412
1	D:15:LEU:HD11	E:203:VAL:CG2	1.411
1	S:86:LEU:CD2	T:188:GLY:CA	1.411
1	IA:228:THR:HG21	JA:140:PRO:CD	1.411
1	DA:15:LEU:HD11	EA:203:VAL:CG2	1.410
1	EA:67:ALA:CA	FA:207:GLY:HA3	1.410
1	F:87:LYS:CB	G:187:VAL:HG13	1.409
1	TA:218:PHE:CZ	UA:42:TYR:HD2	1.408
1	E:15:LEU:CD1	F:203:VAL:HG21	1.407
1	RA:124:LEU:HD21	SA:45:SER:CB	1.407
1	H:67:ALA:HB1	I:207:GLY:N	1.406
1	R:65:ALA:O	S:209:LYS:CG	1.406
1	W:89:VAL:CB	X:187:VAL:CG1	1.406
1	Y:65:ALA:HB2	Z:208:GLU:CD	1.406
1	M:216:LYS:NZ	N:24:ARG:HH11	1.406
1	F:15:LEU:HD11	G:203:VAL:CG2	1.405

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	W:89:VAL:CG1	X:187:VAL:CG1	1.405
1	HA:124:LEU:CD2	IA:45:SER:HB3	1.405
1	D:89:VAL:HA	E:185:LYS:CD	1.404
1	K:67:ALA:HB1	L:207:GLY:N	1.404
1	J:67:ALA:CB	K:207:GLY:CA	1.403
1	V:90:LEU:N	W:185:LYS:HD3	1.403
1	XA:89:VAL:HA	YA:185:LYS:CB	1.403
1	H:90:LEU:N	I:185:LYS:HZ3	1.403
1	S:124:LEU:CD2	T:45:SER:CB	1.402
1	AA:228:THR:CG2	BA:140:PRO:CD	1.402
1	QA:124:LEU:CD2	RA:45:SER:HB2	1.400
1	A:230:PHE:CE1	B:141:VAL:CA	1.399
1	W:89:VAL:HA	X:185:LYS:CB	1.399
1	LA:67:ALA:CB	MA:207:GLY:N	1.399
1	SA:14:ARG:CG	TA:203:VAL:HG12	1.399
1	PA:15:LEU:CG	QA:203:VAL:HG23	1.398
1	B:67:ALA:CB	C:205:TYR:CE2	1.397
1	B:17:TYR:N	C:22:LEU:CD2	1.397
1	F:64:GLN:C	G:209:LYS:HZ3	1.397
1	DA:89:VAL:HA	EA:185:LYS:CD	1.397
1	BA:89:VAL:C	CA:185:LYS:HD2	1.396
1	C:79:PHE:CB	D:194:GLU:O	1.395
1	S:69:ILE:CD	T:204:THR:OG1	1.395

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	T:231:ALA:CB	U:42:TYR:H	1.395
1	AA:230:PHE:CE1	BA:141:VAL:CA	1.395
1	RA:65:ALA:CB	SA:208:GLU:OE2	1.395
1	V:89:VAL:CG1	W:187:VAL:CG1	1.394
1	S:14:ARG:CG	T:203:VAL:HG12	1.393
1	SA:69:ILE:CD	TA:204:THR:OG1	1.393
1	RA:64:GLN:CB	SA:209:LYS:HZ3	1.393
1	X:69:ILE:CD	Y:204:THR:N	1.392
1	Y:89:VAL:HA	Z:185:LYS:CB	1.392
1	RA:230:PHE:CE1	SA:141:VAL:CG1	1.392
1	H:87:LYS:HB2	I:187:VAL:CG1	1.391
1	G:87:LYS:CB	H:187:VAL:HG13	1.391
1	O:86:LEU:HD21	P:188:GLY:N	1.391
1	KA:67:ALA:HB2	LA:207:GLY:CA	1.391
1	EA:67:ALA:CB	FA:207:GLY:H	1.391
1	GA:87:LYS:HB2	HA:187:VAL:CG1	1.390
1	W:230:PHE:CE1	X:141:VAL:CG1	1.389
1	BA:233:GLN:OE1	CA:39:THR:CB	1.389
1	W:89:VAL:CB	X:187:VAL:HG11	1.388
1	DA:89:VAL:CA	EA:185:LYS:CD	1.388
1	WA:89:VAL:CB	XA:187:VAL:CG1	1.388
1	E:67:ALA:CB	F:207:GLY:H	1.388
1	CA:79:PHE:CB	DA:194:GLU:O	1.387

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	YA:86:LEU:HD23	ZA:188:GLY:N	1.387
1	G:87:LYS:HB2	H:187:VAL:CG1	1.386
1	T:218:PHE:CE2	U:42:TYR:CD2	1.386
1	EA:89:VAL:CA	FA:185:LYS:CD	1.386
1	YA:231:ALA:O	ZA:41:GLU:CB	1.386
1	QA:216:LYS:NZ	RA:24:ARG:HD3	1.385
1	W:90:LEU:N	X:185:LYS:CD	1.385
1	B:90:LEU:N	C:185:LYS:CD	1.384
1	G:67:ALA:HB1	H:207:GLY:N	1.384
1	Q:64:GLN:HB3	R:209:LYS:NZ	1.384
1	BA:67:ALA:CB	CA:205:TYR:CE2	1.384
1	BA:233:GLN:OE1	CA:39:THR:CG2	1.384
1	EA:67:ALA:CB	FA:207:GLY:N	1.384
1	OA:86:LEU:CD2	PA:188:GLY:H	1.384
1	FA:15:LEU:HD11	GA:203:VAL:CG2	1.383
1	A:208:GLU:CD	ZA:65:ALA:CB	1.382
1	HA:67:ALA:HB1	IA:207:GLY:N	1.382
1	R:124:LEU:HD21	S:45:SER:CB	1.381
1	U:218:PHE:CZ	V:42:TYR:CD2	1.381
1	A:231:ALA:CA	B:42:TYR:O	1.380
1	L:228:THR:HG21	M:140:PRO:CG	1.380
1	SA:230:PHE:CE1	TA:141:VAL:CG1	1.380
1	YA:89:VAL:HA	ZA:185:LYS:CB	1.379



Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	GA:87:LYS:CB	HA:187:VAL:HG13	1.378
1	VA:230:PHE:CE1	WA:141:VAL:CG1	1.378
1	YA:65:ALA:HB2	ZA:208:GLU:CD	1.378
1	B:67:ALA:HB3	C:205:TYR:CD2	1.377
1	U:87:LYS:CE	V:186:VAL:CG1	1.377
1	K:124:LEU:HD21	L:45:SER:CB	1.376
1	CA:89:VAL:CA	DA:185:LYS:CD	1.376
1	GA:67:ALA:HB1	HA:207:GLY:N	1.376
1	O:86:LEU:CD2	P:188:GLY:H	1.375
1	BA:67:ALA:HB3	CA:205:TYR:CD2	1.375
1	HA:87:LYS:HB2	IA:187:VAL:CG1	1.375
1	NA:14:ARG:O	OA:22:LEU:HA	1.375
1	XA:69:ILE:CD	YA:204:THR:N	1.375
1	GA:90:LEU:N	HA:185:LYS:NZ	1.375
1	C:17:TYR:N	D:22:LEU:HD23	1.374
1	R:230:PHE:CE1	S:141:VAL:CG1	1.374
1	Z:65:ALA:CB	AA:208:GLU:CD	1.374
1	AA:231:ALA:CA	BA:42:TYR:O	1.373
1	Q:124:LEU:HD21	R:45:SER:CB	1.372
1	VA:90:LEU:N	WA:185:LYS:HD3	1.372
1	D:67:ALA:CB	E:207:GLY:H	1.371
1	QA:124:LEU:HD21	RA:45:SER:CB	1.371
1	WA:89:VAL:CB	XA:187:VAL:HG11	1.371

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	R:65:ALA:CB	S:208:GLU:OE2	1.370
1	X:16:GLY:CA	Y:22:LEU:HB3	1.370
1	WA:16:GLY:CA	XA:22:LEU:CB	1.370
1	BA:17:TYR:H	CA:22:LEU:CD2	1.370
1	J:228:THR:CG2	K:140:PRO:HD2	1.369
1	S:89:VAL:CB	T:187:VAL:HG11	1.369
1	AA:230:PHE:CZ	BA:141:VAL:HA	1.369
1	QA:64:GLN:HB3	RA:209:LYS:NZ	1.369
1	B:233:GLN:OE1	C:39:THR:CB	1.368
1	BA:17:TYR:N	CA:22:LEU:CD2	1.368
1	JA:67:ALA:CB	KA:207:GLY:CA	1.367
1	QA:216:LYS:NZ	RA:24:ARG:CD	1.367
1	TA:218:PHE:CE2	UA:42:TYR:CD2	1.367
1	T:231:ALA:HB3	U:42:TYR:N	1.366
1	EA:89:VAL:N	FA:185:LYS:HD3	1.366
1	S:64:GLN:HB3	T:209:LYS:NZ	1.365
1	TA:230:PHE:CE1	UA:141:VAL:CG1	1.365
1	A:228:THR:CG2	B:140:PRO:HD2	1.364
1	C:89:VAL:CA	D:185:LYS:CD	1.364
1	HA:90:LEU:N	IA:185:LYS:HZ3	1.364
1	Y:231:ALA:O	Z:41:GLU:CB	1.363
1	LA:228:THR:HG21	MA:140:PRO:CG	1.363
1	WA:89:VAL:HA	XA:185:LYS:CB	1.363

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	A:230:PHE:CZ	B:141:VAL:HA	1.362
1	XA:16:GLY:CA	YA:22:LEU:CB	1.362
1	B:17:TYR:H	C:22:LEU:CD2	1.362
1	F:67:ALA:CB	G:207:GLY:H	1.362
1	A:230:PHE:CD1	B:141:VAL:HG12	1.361
1	X:15:LEU:HA	Y:23:PRO:CD	1.361
1	SA:124:LEU:CD2	TA:45:SER:CB	1.361
1	Q:216:LYS:NZ	R:24:ARG:CD	1.360
1	KA:124:LEU:HD21	LA:45:SER:CB	1.360
1	A:23:PRO:CD	ZA:15:LEU:HA	1.359
1	IA:228:THR:CG2	JA:140:PRO:CG	1.359
1	E:16:GLY:N	F:22:LEU:O	1.359
1	FA:67:ALA:CB	GA:207:GLY:H	1.359
1	T:89:VAL:CB	U:187:VAL:HG11	1.358
1	Q:15:LEU:CD1	R:203:VAL:HG23	1.357
1	U:90:LEU:N	V:185:LYS:HD3	1.357
1	QA:15:LEU:CD1	RA:203:VAL:HG23	1.357
1	VA:230:PHE:CZ	WA:141:VAL:CG1	1.357
1	V:230:PHE:CE1	W:141:VAL:CG1	1.356
1	PA:14:ARG:HG3	QA:203:VAL:CG1	1.356
1	B:233:GLN:OE1	C:39:THR:CG2	1.355
1	P:86:LEU:HD21	Q:188:GLY:N	1.355
1	SA:64:GLN:HB3	TA:209:LYS:NZ	1.355

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	I:89:VAL:HA	J:185:LYS:CD	1.353
1	PA:124:LEU:HD21	QA:45:SER:CB	1.353
1	XA:16:GLY:CA	YA:22:LEU:HB3	1.353
1	A:218:PHE:HE2	B:42:TYR:CE2	1.353
1	D:89:VAL:CA	E:185:LYS:CD	1.352
1	EA:16:GLY:N	FA:22:LEU:O	1.351
1	K:67:ALA:CB	L:207:GLY:N	1.350
1	Y:86:LEU:HD23	Z:188:GLY:N	1.350
1	UA:230:PHE:CE1	VA:141:VAL:CG1	1.350
1	A:68:GLY:O	B:205:TYR:HA	1.349
1	E:87:LYS:CB	F:187:VAL:HG13	1.349
1	F:87:LYS:HB2	G:187:VAL:CG1	1.349
1	E:89:VAL:N	F:185:LYS:HD3	1.348
1	FA:124:LEU:HD11	GA:45:SER:CB	1.348
1	D:15:LEU:CD1	E:203:VAL:CG2	1.346
1	F:67:ALA:HB1	G:207:GLY:N	1.346
1	I:67:ALA:CB	J:207:GLY:HA3	1.346
1	S:230:PHE:CE1	T:141:VAL:CG1	1.346
1	CA:67:ALA:HB3	DA:205:TYR:CE2	1.346
1	DA:89:VAL:N	EA:185:LYS:HD3	1.346
1	D:67:ALA:HB1	E:207:GLY:N	1.345
1	D:89:VAL:N	E:185:LYS:HD3	1.345
1	N:14:ARG:O	O:22:LEU:HA	1.345

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	P:124:LEU:HD21	Q:45:SER:CB	1.345
1	EA:87:LYS:CB	FA:187:VAL:HG13	1.345
1	FA:67:ALA:HB1	GA:207:GLY:N	1.345
1	YA:65:ALA:CB	ZA:208:GLU:OE2	1.345
1	YA:73:LYS:HG3	ZA:200:GLN:O	1.344
1	F:67:ALA:CB	G:207:GLY:N	1.344
1	B:69:ILE:CD	C:204:THR:O	1.343
1	BA:69:ILE:CD	CA:204:THR:O	1.343
1	FA:64:GLN:C	GA:209:LYS:HZ3	1.343
1	VA:14:ARG:HG3	WA:203:VAL:CG1	1.342
1	AA:218:PHE:HE2	BA:42:TYR:CE2	1.342
1	V:14:ARG:HG3	W:203:VAL:CG1	1.341
1	BA:218:PHE:CE2	CA:42:TYR:HD2	1.341
1	JA:228:THR:CG2	KA:140:PRO:HD2	1.341
1	AA:230:PHE:CZ	BA:141:VAL:CG1	1.340
1	FA:87:LYS:HB2	GA:187:VAL:CG1	1.340
1	QA:89:VAL:HB	RA:187:VAL:CG1	1.340
1	G:90:LEU:N	H:185:LYS:NZ	1.340
1	U:230:PHE:CE1	V:141:VAL:CG1	1.339
1	Z:15:LEU:HA	AA:23:PRO:CD	1.339
1	LA:124:LEU:HD21	MA:45:SER:CB	1.339
1	C:69:ILE:CD	D:204:THR:O	1.338
1	P:14:ARG:HG3	Q:203:VAL:CG1	1.338

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	V:230:PHE:CZ	W:141:VAL:CG1	1.338
1	IA:67:ALA:CB	JA:207:GLY:HA3	1.338
1	X:231:ALA:N	Y:42:TYR:O	1.338
1	T:230:PHE:CE1	U:141:VAL:CG1	1.337
1	CA:69:ILE:CD	DA:204:THR:O	1.337
1	EA:124:LEU:CD1	FA:45:SER:CB	1.337
1	Y:231:ALA:N	Z:42:TYR:O	1.337
1	IA:86:LEU:HD22	JA:188:GLY:CA	1.336
1	AA:230:PHE:CD1	BA:141:VAL:HG12	1.335
1	DA:67:ALA:HB1	EA:207:GLY:N	1.335
1	DA:17:TYR:N	EA:22:LEU:HD23	1.335
1	PA:65:ALA:HB3	QA:208:GLU:OE2	1.335
1	YA:231:ALA:N	ZA:42:TYR:O	1.335
1	DA:15:LEU:CD1	EA:203:VAL:CG2	1.334
1	KA:67:ALA:CB	LA:207:GLY:N	1.334
1	MA:67:ALA:HB1	NA:207:GLY:N	1.334
1	B:231:ALA:O	C:41:GLU:CB	1.333
1	D:17:TYR:N	E:22:LEU:HD23	1.333
1	L:90:LEU:HD23	M:185:LYS:NZ	1.333
1	X:73:LYS:HG3	Y:200:GLN:O	1.332
1	Z:82:GLY:O	AA:191:LEU:HA	1.332
1	AA:228:THR:CG2	BA:140:PRO:HD2	1.332
1	IA:89:VAL:HA	JA:185:LYS:CD	1.332

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	MA:124:LEU:HD21	NA:45:SER:CB	1.331
1	CA:231:ALA:CB	DA:42:TYR:N	1.331
1	B:67:ALA:HB3	C:205:TYR:CE2	1.330
1	M:124:LEU:HD21	N:45:SER:CB	1.330
1	C:231:ALA:CB	D:42:TYR:N	1.330
1	L:124:LEU:HD21	M:45:SER:CB	1.329
1	O:86:LEU:CD2	P:188:GLY:N	1.328
1	A:230:PHE:CE1	B:141:VAL:HA	1.327
1	E:89:VAL:CA	F:185:LYS:CD	1.327
1	F:89:VAL:CA	G:185:LYS:CD	1.327
1	I:87:LYS:HB2	J:187:VAL:CG1	1.324
1	AA:230:PHE:CE1	BA:141:VAL:HA	1.324
1	CA:67:ALA:CB	DA:205:TYR:CE2	1.324
1	WA:14:ARG:CG	XA:203:VAL:HG12	1.324
1	E:67:ALA:HB1	F:207:GLY:N	1.323
1	F:124:LEU:HD11	G:45:SER:CB	1.323
1	I:67:ALA:CB	J:207:GLY:CA	1.323
1	W:14:ARG:CG	X:203:VAL:HG12	1.323
1	GA:233:GLN:OE1	HA:39:THR:CG2	1.323
1	IA:67:ALA:CB	JA:207:GLY:CA	1.323
1	XA:15:LEU:HA	YA:23:PRO:CD	1.323
1	F:124:LEU:HA	G:48:LYS:CE	1.322
1	S:230:PHE:CZ	T:141:VAL:HG12	1.322

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	T:15:LEU:HD21	U:204:THR:O	1.322
1	XA:228:THR:HB	YA:141:VAL:CG1	1.322
1	N:124:LEU:HD21	O:45:SER:CB	1.321
1	T:64:GLN:C	U:209:LYS:HD2	1.321
1	B:89:VAL:CA	C:185:LYS:HD2	1.320
1	X:228:THR:HB	Y:141:VAL:CG1	1.320
1	JA:67:ALA:CB	KA:205:TYR:CE1	1.320
1	XA:89:VAL:CG1	YA:187:VAL:CG1	1.320
1	A:230:PHE:CZ	B:141:VAL:CG1	1.319
1	F:67:ALA:CA	G:207:GLY:HA3	1.319
1	FA:67:ALA:CA	GA:207:GLY:HA3	1.319
1	OA:124:LEU:HD21	PA:45:SER:CB	1.319
1	WA:79:PHE:CB	XA:194:GLU:O	1.319
1	YA:230:PHE:CE1	ZA:141:VAL:CB	1.319
1	N:15:LEU:HG	O:203:VAL:CG2	1.318
1	FA:89:VAL:CA	GA:185:LYS:HD2	1.318
1	YA:16:GLY:CA	ZA:22:LEU:HB3	1.318
1	E:124:LEU:HA	F:48:LYS:CE	1.317
1	G:233:GLN:OE1	H:39:THR:CG2	1.317
1	W:79:PHE:CB	X:194:GLU:O	1.315
1	Y:230:PHE:CE1	Z:141:VAL:CB	1.315
1	FA:124:LEU:HA	GA:48:LYS:CE	1.315
1	SA:230:PHE:CZ	TA:141:VAL:HG12	1.315



Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	J:67:ALA:CB	K:205:TYR:CE1	1.313
1	BA:231:ALA:O	CA:41:GLU:CB	1.313
1	JA:228:THR:CG2	KA:140:PRO:CD	1.313
1	OA:86:LEU:CD2	PA:188:GLY:N	1.313
1	X:89:VAL:CG1	Y:187:VAL:CG1	1.312
1	EA:67:ALA:HB1	FA:207:GLY:N	1.312
1	EA:124:LEU:HA	FA:48:LYS:CE	1.312
1	NA:124:LEU:HD21	OA:45:SER:CB	1.312
1	Y:82:GLY:O	Z:191:LEU:HA	1.311
1	Q:89:VAL:HB	R:187:VAL:CG1	1.310
1	CA:218:PHE:HE2	DA:42:TYR:CD2	1.310
1	XA:231:ALA:N	YA:42:TYR:O	1.310
1	Q:64:GLN:C	R:209:LYS:HD2	1.309
1	BA:89:VAL:CA	CA:185:LYS:HD2	1.309
1	FA:89:VAL:CA	GA:185:LYS:CD	1.309
1	TA:64:GLN:C	UA:209:LYS:HD2	1.309
1	C:218:PHE:HE2	D:42:TYR:CD2	1.309
1	YA:14:ARG:O	ZA:22:LEU:N	1.309
1	F:89:VAL:CA	G:185:LYS:HD2	1.308
1	QA:86:LEU:CD2	RA:188:GLY:CA	1.308
1	G:67:ALA:CB	H:207:GLY:H	1.308
1	F:89:VAL:N	G:185:LYS:HD3	1.307
1	W:87:LYS:HD2	X:186:VAL:CB	1.306

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	UA:16:GLY:N	VA:22:LEU:C	1.306
1	F:64:GLN:O	G:209:LYS:HE2	1.305
1	J:228:THR:CG2	K:140:PRO:CD	1.305
1	U:16:GLY:N	V:22:LEU:C	1.305
1	IA:87:LYS:HB2	JA:187:VAL:CG1	1.305
1	UA:218:PHE:CZ	VA:42:TYR:CD2	1.305
1	Y:65:ALA:CB	Z:208:GLU:OE2	1.305
1	O:124:LEU:HD21	P:45:SER:CB	1.304
1	Y:228:THR:HB	Z:141:VAL:CG1	1.304
1	SA:89:VAL:CB	TA:187:VAL:HG11	1.304
1	H:87:LYS:CB	I:187:VAL:HG13	1.303
1	Y:231:ALA:O	Z:41:GLU:HB3	1.303
1	E:15:LEU:CD1	F:203:VAL:CG2	1.302
1	W:73:LYS:HG3	X:200:GLN:O	1.302
1	P:216:LYS:NZ	Q:24:ARG:HD3	1.301
1	OA:14:ARG:O	PA:22:LEU:HA	1.301
1	W:16:GLY:HA2	X:22:LEU:CB	1.300
1	NA:15:LEU:HG	OA:203:VAL:CG2	1.300
1	JA:228:THR:CG2	KA:140:PRO:CG	1.299
1	YA:128:GLN:OE1	ZA:48:LYS:NZ	1.299
1	Y:16:GLY:CA	Z:22:LEU:HB3	1.298
1	GA:67:ALA:CB	HA:207:GLY:H	1.298
1	HA:67:ALA:CB	IA:207:GLY:H	1.298

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	R:89:VAL:CB	S:187:VAL:CG1	1.297
1	EA:69:ILE:CD	FA:204:THR:H	1.296
1	QA:65:ALA:HB3	RA:208:GLU:CD	1.296
1	YA:228:THR:HB	ZA:141:VAL:CG1	1.296
1	A:42:TYR:O	ZA:231:ALA:N	1.296
1	E:67:ALA:HA	F:207:GLY:CA	1.295
1	F:64:GLN:C	G:209:LYS:NZ	1.295
1	LA:90:LEU:HD23	MA:185:LYS:NZ	1.295
1	QA:64:GLN:C	RA:209:LYS:HD2	1.295
1	SA:66:ALA:HA	TA:205:TYR:OH	1.295
1	WA:73:LYS:HG3	XA:200:GLN:O	1.295
1	N:86:LEU:CD2	O:188:GLY:N	1.294
1	CA:231:ALA:O	DA:41:GLU:HB3	1.294
1	TA:15:LEU:HD21	UA:204:THR:O	1.294
1	Y:14:ARG:O	Z:22:LEU:N	1.294
1	Q:86:LEU:CD2	R:188:GLY:CA	1.293
1	EA:67:ALA:HA	FA:207:GLY:CA	1.293
1	H:67:ALA:CB	I:207:GLY:H	1.292
1	DA:12:LEU:O	EA:22:LEU:HD22	1.291
1	IA:124:LEU:CD2	JA:45:SER:HB3	1.291
1	AA:231:ALA:CB	BA:42:TYR:O	1.291
1	A:185:LYS:CB	ZA:89:VAL:HA	1.290
1	V:90:LEU:N	W:185:LYS:CD	1.290

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	RA:89:VAL:CB	SA:187:VAL:CG1	1.290
1	U:218:PHE:HE2	V:42:TYR:CD2	1.289
1	XA:73:LYS:HG3	YA:200:GLN:O	1.289
1	FA:124:LEU:CD2	GA:45:SER:CB	1.288
1	SA:86:LEU:CD2	TA:188:GLY:CA	1.288
1	E:69:ILE:CD	F:204:THR:H	1.286
1	AA:82:GLY:O	BA:191:LEU:HA	1.286
1	EA:124:LEU:HD21	FA:45:SER:OG	1.286
1	QA:65:ALA:HB3	RA:208:GLU:OE2	1.286
1	G:67:ALA:CB	H:207:GLY:N	1.286
1	C:231:ALA:O	D:41:GLU:HB3	1.285
1	H:67:ALA:CB	I:207:GLY:CA	1.285
1	I:124:LEU:CD2	J:45:SER:HB3	1.285
1	J:67:ALA:CB	K:207:GLY:N	1.285
1	TA:64:GLN:O	UA:209:LYS:HD2	1.285
1	BA:12:LEU:O	CA:22:LEU:HD22	1.284
1	JA:67:ALA:CB	KA:207:GLY:N	1.284
1	Q:230:PHE:HE1	R:141:VAL:CG1	1.284
1	I:86:LEU:HD22	J:188:GLY:CA	1.283
1	N:14:ARG:O	O:22:LEU:CA	1.283
1	Y:128:GLN:OE1	Z:48:LYS:NZ	1.283
1	FA:67:ALA:CB	GA:207:GLY:N	1.282
1	HA:87:LYS:CB	IA:187:VAL:HG13	1.282

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	TA:218:PHE:CE2	UA:42:TYR:HD2	1.282
1	J:228:THR:CG2	K:140:PRO:CG	1.281
1	BA:67:ALA:HB3	CA:205:TYR:CE2	1.281
1	I:67:ALA:CB	J:207:GLY:H	1.280
1	KA:231:ALA:HB2	LA:42:TYR:O	1.279
1	YA:86:LEU:CG	ZA:188:GLY:CA	1.279
1	M:216:LYS:CE	N:24:ARG:HH11	1.279
1	F:124:LEU:CD2	G:45:SER:CB	1.278
1	CA:12:LEU:O	DA:22:LEU:HD22	1.278
1	IA:67:ALA:CB	JA:207:GLY:H	1.278
1	C:12:LEU:O	D:22:LEU:CD2	1.277
1	J:228:THR:HG21	K:140:PRO:CD	1.277
1	P:64:GLN:HB3	Q:209:LYS:NZ	1.277
1	R:65:ALA:O	S:209:LYS:CD	1.277
1	NA:14:ARG:O	OA:22:LEU:CA	1.277
1	VA:90:LEU:N	WA:185:LYS:CD	1.277
1	Y:86:LEU:CG	Z:188:GLY:CA	1.276
1	BA:90:LEU:N	CA:185:LYS:CD	1.276
1	K:231:ALA:HB2	L:42:TYR:O	1.275
1	Q:65:ALA:HB3	R:208:GLU:CD	1.275
1	Y:73:LYS:HG3	Z:200:GLN:O	1.275
1	AA:69:ILE:CD	BA:204:THR:O	1.275
1	AA:230:PHE:CD1	BA:141:VAL:CG1	1.275

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	HA:67:ALA:CB	IA:207:GLY:CA	1.275
1	PA:64:GLN:HB3	QA:209:LYS:NZ	1.275
1	Z:231:ALA:N	AA:42:TYR:O	1.275
1	MA:216:LYS:CE	NA:24:ARG:HH11	1.275
1	MA:90:LEU:CD2	NA:185:LYS:HZ2	1.275
1	B:65:ALA:HB2	C:208:GLU:OE2	1.274
1	C:67:ALA:HB3	D:205:TYR:CE2	1.274
1	D:12:LEU:O	E:22:LEU:HD22	1.274
1	B:89:VAL:CA	C:185:LYS:CD	1.273
1	E:87:LYS:HB2	F:187:VAL:CG1	1.273
1	T:218:PHE:CZ	U:42:TYR:CD2	1.273
1	BA:89:VAL:CA	CA:185:LYS:CD	1.273
1	FA:64:GLN:O	GA:209:LYS:HE2	1.273
1	YA:82:GLY:O	ZA:191:LEU:HA	1.273
1	Z:87:LYS:N	AA:187:VAL:HA	1.272
1	C:12:LEU:O	D:22:LEU:HD22	1.271
1	B:218:PHE:CE2	C:42:TYR:HD2	1.270
1	P:124:LEU:CD2	Q:45:SER:HB2	1.270
1	CA:16:GLY:O	DA:24:ARG:HD3	1.270
1	M:90:LEU:CD2	N:185:LYS:NZ	1.269
1	DA:69:ILE:CD	EA:204:THR:N	1.269
1	EA:15:LEU:CD1	FA:203:VAL:CG2	1.269
1	UA:87:LYS:CG	VA:186:VAL:CG1	1.268

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	E:124:LEU:HD21	F:45:SER:OG	1.267
1	DA:67:ALA:CA	EA:207:GLY:CA	1.267
1	DA:69:ILE:CD	EA:204:THR:O	1.267
1	T:218:PHE:CE2	U:42:TYR:HD2	1.267
1	A:69:ILE:CD	B:204:THR:O	1.266
1	S:64:GLN:C	T:209:LYS:CD	1.266
1	JA:228:THR:HG21	KA:140:PRO:CD	1.266
1	OA:65:ALA:HB3	PA:208:GLU:OE2	1.266
1	D:67:ALA:CA	E:207:GLY:CA	1.265
1	Q:65:ALA:CB	R:208:GLU:OE2	1.265
1	Q:65:ALA:HB3	R:208:GLU:OE2	1.265
1	MA:90:LEU:CD2	NA:185:LYS:NZ	1.265
1	VA:89:VAL:HA	WA:185:LYS:CB	1.265
1	C:86:LEU:C	D:187:VAL:HA	1.264
1	R:65:ALA:HB3	S:208:GLU:OE2	1.264
1	AA:68:GLY:O	BA:205:TYR:HA	1.264
1	DA:87:LYS:CB	EA:187:VAL:HG13	1.264
1	QA:65:ALA:CB	RA:208:GLU:OE2	1.264
1	UA:15:LEU:HD21	VA:204:THR:O	1.264
1	D:69:ILE:CD	E:204:THR:O	1.263
1	I:228:THR:CG2	J:140:PRO:CG	1.263
1	CA:86:LEU:C	DA:187:VAL:HA	1.263
1	R:14:ARG:CG	S:203:VAL:HG12	1.262

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	T:89:VAL:CG1	U:187:VAL:HG11	1.262
1	BA:65:ALA:HB2	CA:208:GLU:OE2	1.262
1	CA:12:LEU:O	DA:22:LEU:CD2	1.262
1	FA:64:GLN:C	GA:209:LYS:NZ	1.262
1	RA:65:ALA:O	SA:209:LYS:CD	1.262
1	NA:216:LYS:NZ	OA:24:ARG:HH11	1.262
1	Z:228:THR:HG23	AA:140:PRO:CD	1.261
1	AA:233:GLN:OE1	BA:39:THR:HG22	1.261
1	BA:16:GLY:O	CA:24:ARG:HD3	1.261
1	T:64:GLN:O	U:209:LYS:HD2	1.260
1	Z:89:VAL:HA	AA:185:LYS:CB	1.260
1	G:233:GLN:OE1	H:39:THR:CB	1.259
1	KA:67:ALA:HB3	LA:205:TYR:CZ	1.259
1	RA:65:ALA:HB3	SA:208:GLU:OE2	1.259
1	A:233:GLN:OE1	B:39:THR:CG2	1.258
1	W:16:GLY:CA	X:22:LEU:HB3	1.258
1	GA:67:ALA:CB	HA:207:GLY:CA	1.258
1	FA:89:VAL:N	GA:185:LYS:HD3	1.258
1	RA:64:GLN:CB	SA:209:LYS:NZ	1.258
1	SA:64:GLN:C	TA:209:LYS:CD	1.258
1	A:208:GLU:OE2	ZA:65:ALA:CB	1.258
1	K:67:ALA:HB3	L:205:TYR:CZ	1.257
1	Z:89:VAL:CG1	AA:187:VAL:HG11	1.257



Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	RA:86:LEU:CD2	SA:188:GLY:CA	1.257
1	B:12:LEU:O	C:22:LEU:CD2	1.256
1	NA:86:LEU:CD2	OA:188:GLY:N	1.256
1	A:191:LEU:HA	ZA:82:GLY:O	1.255
1	D:69:ILE:CD	E:204:THR:N	1.255
1	XA:69:ILE:CD	YA:204:THR:H	1.255
1	YA:231:ALA:O	ZA:41:GLU:HB3	1.255
1	D:87:LYS:CB	E:187:VAL:HG13	1.254
1	J:67:ALA:CB	K:207:GLY:H	1.254
1	W:87:LYS:CD	X:186:VAL:CB	1.254
1	PA:124:LEU:CD2	QA:45:SER:HB2	1.254
1	TA:89:VAL:CG1	UA:187:VAL:HG11	1.254
1	A:230:PHE:CD1	B:141:VAL:CG1	1.253
1	B:16:GLY:O	C:24:ARG:HD3	1.253
1	EA:87:LYS:HB2	FA:187:VAL:CG1	1.253
1	A:140:PRO:CD	ZA:228:THR:HG23	1.252
1	H:67:ALA:CB	I:207:GLY:N	1.252
1	W:228:THR:HB	X:141:VAL:CG1	1.252
1	LA:216:LYS:CE	MA:24:ARG:NH1	1.251
1	A:82:GLY:O	B:191:LEU:HA	1.250
1	O:14:ARG:O	P:22:LEU:HA	1.249
1	A:65:ALA:HB2	B:208:GLU:OE2	1.248
1	G:67:ALA:CB	H:207:GLY:CA	1.248

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	P:86:LEU:CD2	Q:188:GLY:HA3	1.248
1	A:188:GLY:H	ZA:86:LEU:N	1.248
1	N:216:LYS:NZ	O:24:ARG:HH11	1.248
1	S:66:ALA:HA	T:205:TYR:OH	1.247
1	PA:86:LEU:CD2	QA:188:GLY:HA3	1.247
1	M:14:ARG:O	N:22:LEU:CB	1.247
1	P:65:ALA:HB3	Q:208:GLU:OE2	1.246
1	U:15:LEU:HD21	V:204:THR:O	1.246
1	Z:68:GLY:O	AA:205:TYR:HA	1.246
1	CA:89:VAL:HA	DA:185:LYS:CD	1.246
1	JA:67:ALA:CB	KA:207:GLY:H	1.246
1	PA:216:LYS:NZ	QA:24:ARG:HD3	1.246
1	TA:231:ALA:HB3	UA:42:TYR:N	1.246
1	B:12:LEU:O	C:22:LEU:HD22	1.245
1	I:67:ALA:CB	J:207:GLY:N	1.245
1	L:216:LYS:CE	M:24:ARG:NH1	1.245
1	PA:14:ARG:O	QA:22:LEU:HA	1.245
1	WA:87:LYS:CD	XA:186:VAL:CB	1.245
1	A:205:TYR:HA	ZA:68:GLY:O	1.244
1	V:89:VAL:HA	W:185:LYS:CB	1.244
1	BA:82:GLY:O	CA:191:LEU:HA	1.244
1	XA:228:THR:CB	YA:141:VAL:HG13	1.244
1	GA:67:ALA:CB	HA:207:GLY:N	1.244

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	A:187:VAL:HG11	ZA:89:VAL:CG1	1.243
1	L:67:ALA:HB3	M:205:TYR:CE1	1.243
1	Z:65:ALA:HB2	AA:208:GLU:CD	1.243
1	GA:233:GLN:OE1	HA:39:THR:CB	1.243
1	UA:230:PHE:CZ	VA:141:VAL:CG1	1.243
1	B:82:GLY:O	C:191:LEU:HA	1.242
1	H:67:ALA:CB	I:207:GLY:HA3	1.242
1	BA:12:LEU:O	CA:22:LEU:CD2	1.242
1	PA:86:LEU:CD2	QA:188:GLY:CA	1.242
1	VA:87:LYS:CG	WA:186:VAL:CG1	1.242
1	U:16:GLY:H	V:22:LEU:C	1.241
1	QA:15:LEU:CG	RA:203:VAL:CG2	1.241
1	TA:218:PHE:CZ	UA:42:TYR:CD2	1.240
1	WA:228:THR:HB	XA:141:VAL:CG1	1.240
1	NA:216:LYS:CE	OA:24:ARG:HH11	1.240
1	AA:233:GLN:OE1	BA:39:THR:CG2	1.239
1	BA:17:TYR:N	CA:22:LEU:HD23	1.239
1	BA:68:GLY:O	CA:205:TYR:HA	1.239
1	JA:231:ALA:CB	KA:42:TYR:O	1.239
1	RA:14:ARG:CG	SA:203:VAL:HG12	1.239
1	X:89:VAL:HB	Y:187:VAL:CG1	1.238
1	FA:67:ALA:CB	GA:207:GLY:CA	1.237
1	NA:86:LEU:HD21	OA:188:GLY:N	1.237

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	XA:89:VAL:HB	YA:187:VAL:CG1	1.237
1	J:231:ALA:CB	K:42:TYR:O	1.236
1	Q:216:LYS:CE	R:24:ARG:HD2	1.236
1	DA:86:LEU:C	EA:187:VAL:HA	1.236
1	YA:86:LEU:CD2	ZA:188:GLY:N	1.236
1	A:233:GLN:OE1	B:39:THR:HG22	1.234
1	D:86:LEU:C	E:187:VAL:HA	1.234
1	M:67:ALA:HB1	N:207:GLY:N	1.234
1	Z:230:PHE:CE2	AA:141:VAL:HG12	1.234
1	A:141:VAL:HG12	ZA:230:PHE:CE2	1.233
1	U:87:LYS:CG	V:186:VAL:CG1	1.233
1	O:65:ALA:HB3	P:208:GLU:OE2	1.232
1	P:86:LEU:CD2	Q:188:GLY:CA	1.232
1	X:75:GLU:HB2	Y:198:SER:O	1.232
1	Y:69:ILE:CD	Z:204:THR:OG1	1.232
1	LA:67:ALA:HB3	MA:205:TYR:CE1	1.232
1	VA:87:LYS:CD	WA:186:VAL:CB	1.232
1	X:228:THR:CB	Y:141:VAL:HG13	1.230
1	Z:86:LEU:N	AA:188:GLY:H	1.230
1	C:16:GLY:O	D:24:ARG:HD3	1.229
1	Q:15:LEU:CG	R:203:VAL:CG2	1.229
1	QA:216:LYS:CE	RA:24:ARG:HD2	1.229
1	B:17:TYR:N	C:22:LEU:HD23	1.228

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	Y:86:LEU:HD23	Z:188:GLY:C	1.228
1	VA:87:LYS:CG	WA:186:VAL:HG12	1.228
1	V:87:LYS:CG	W:186:VAL:CG1	1.227
1	A:67:ALA:HB3	B:205:TYR:CE2	1.226
1	GA:67:ALA:CA	HA:207:GLY:HA3	1.226
1	J:89:VAL:HA	K:185:LYS:CD	1.225
1	UA:16:GLY:H	VA:22:LEU:C	1.225
1	J:231:ALA:HB2	K:42:TYR:O	1.224
1	AA:67:ALA:CB	BA:205:TYR:CE2	1.224
1	AA:230:PHE:CE2	BA:141:VAL:HG12	1.224
1	QA:86:LEU:HD21	RA:188:GLY:N	1.224
1	A:67:ALA:HB3	B:205:TYR:CD2	1.223
1	Z:233:GLN:OE1	AA:39:THR:HG22	1.223
1	DA:124:LEU:HA	EA:48:LYS:CE	1.223
1	N:216:LYS:CE	O:24:ARG:HH11	1.223
1	G:89:VAL:CA	H:185:LYS:CD	1.222
1	P:86:LEU:CD2	Q:188:GLY:N	1.222
1	RA:65:ALA:CB	SA:208:GLU:CD	1.222
1	N:86:LEU:HD21	O:188:GLY:N	1.221
1	CA:231:ALA:HB1	DA:42:TYR:N	1.221
1	JA:89:VAL:HA	KA:185:LYS:CD	1.221
1	YA:86:LEU:HD23	ZA:188:GLY:C	1.221
1	S:128:GLN:OE1	T:48:LYS:NZ	1.221

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	BA:231:ALA:O	CA:41:GLU:HB3	1.220
1	A:208:GLU:CD	ZA:65:ALA:HB2	1.220
1	C:231:ALA:CB	D:41:GLU:C	1.219
1	C:89:VAL:N	D:185:LYS:HD3	1.219
1	B:90:LEU:H	C:185:LYS:CD	1.218
1	V:87:LYS:CD	W:186:VAL:CB	1.218
1	EA:124:LEU:CG	FA:45:SER:CB	1.218
1	G:67:ALA:CA	H:207:GLY:HA3	1.217
1	CA:231:ALA:CB	DA:41:GLU:C	1.217
1	CA:89:VAL:N	DA:185:LYS:HD3	1.217
1	EA:67:ALA:CB	FA:207:GLY:CA	1.217
1	UA:218:PHE:HE2	VA:42:TYR:CD2	1.217
1	WA:16:GLY:CA	XA:22:LEU:HB3	1.217
1	YA:228:THR:CB	ZA:141:VAL:HG13	1.217
1	XA:231:ALA:O	YA:41:GLU:CB	1.216
1	P:14:ARG:O	Q:22:LEU:HA	1.215
1	Z:230:PHE:CZ	AA:141:VAL:HA	1.215
1	AA:15:LEU:HA	BA:23:PRO:CD	1.215
1	FA:124:LEU:CG	GA:45:SER:HB3	1.215
1	XA:89:VAL:CB	YA:187:VAL:HG11	1.215
1	Y:228:THR:CB	Z:141:VAL:HG13	1.214
1	AA:65:ALA:HB2	BA:208:GLU:OE2	1.214
1	B:87:LYS:NZ	C:186:VAL:CG1	1.213

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	YA:69:ILE:CD	ZA:204:THR:OG1	1.213
1	A:230:PHE:CE2	B:141:VAL:HG12	1.212
1	F:67:ALA:CB	G:207:GLY:CA	1.212
1	Q:14:ARG:O	R:22:LEU:HA	1.212
1	U:230:PHE:CZ	V:141:VAL:CG1	1.212
1	BA:87:LYS:N	CA:187:VAL:HA	1.211
1	GA:124:LEU:HA	HA:48:LYS:CE	1.211
1	NA:90:LEU:HD23	OA:185:LYS:NZ	1.211
1	Q:86:LEU:HD21	R:188:GLY:N	1.210
1	S:15:LEU:HD21	T:204:THR:O	1.210
1	QA:14:ARG:O	RA:22:LEU:HA	1.210
1	O:216:LYS:CE	P:24:ARG:HH11	1.209
1	W:231:ALA:N	X:42:TYR:O	1.209
1	D:231:ALA:HB1	E:42:TYR:N	1.208
1	W:79:PHE:HB2	X:194:GLU:O	1.208
1	T:89:VAL:CG1	U:187:VAL:CG1	1.207
1	Z:65:ALA:CB	AA:208:GLU:OE2	1.207
1	L:67:ALA:CB	M:207:GLY:H	1.206
1	P:216:LYS:NZ	Q:24:ARG:CD	1.206
1	V:87:LYS:CG	W:186:VAL:HG12	1.206
1	KA:67:ALA:CB	LA:207:GLY:H	1.206
1	VA:87:LYS:CE	WA:186:VAL:CG1	1.206
1	WA:231:ALA:N	XA:42:TYR:O	1.206

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	A:141:VAL:HA	ZA:230:PHE:CZ	1.205
1	B:68:GLY:O	C:205:TYR:HA	1.205
1	C:89:VAL:HA	D:185:LYS:CD	1.204
1	N:90:LEU:HD23	O:185:LYS:NZ	1.204
1	S:64:GLN:CB	T:209:LYS:NZ	1.204
1	E:124:LEU:CG	F:45:SER:CB	1.203
1	Z:73:LYS:HG3	AA:200:GLN:O	1.203
1	BA:87:LYS:NZ	CA:186:VAL:CG1	1.203
1	PA:216:LYS:NZ	QA:24:ARG:CD	1.203
1	E:67:ALA:CB	F:207:GLY:CA	1.202
1	X:231:ALA:O	Y:41:GLU:CB	1.202
1	AA:67:ALA:HB3	BA:205:TYR:CD2	1.202
1	AA:67:ALA:HB3	BA:205:TYR:CE2	1.202
1	CA:89:VAL:C	DA:185:LYS:HD2	1.202
1	GA:124:LEU:CD1	HA:45:SER:HB2	1.202
1	JA:87:LYS:HB2	KA:187:VAL:CG1	1.202
1	OA:15:LEU:CG	PA:203:VAL:HG23	1.202
1	PA:86:LEU:CD2	QA:188:GLY:N	1.202
1	SA:128:GLN:OE1	TA:48:LYS:NZ	1.202
1	P:15:LEU:CG	Q:203:VAL:CG2	1.201
1	JA:231:ALA:HB2	KA:42:TYR:O	1.201
1	A:231:ALA:C	B:41:GLU:HB3	1.200
1	Y:75:GLU:HB2	Z:198:SER:O	1.200



Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	TA:231:ALA:HB2	UA:42:TYR:CA	1.200
1	DA:67:ALA:CB	EA:207:GLY:CA	1.199
1	YA:15:LEU:CA	ZA:23:PRO:HD2	1.199
1	A:231:ALA:CB	B:42:TYR:O	1.199
1	B:231:ALA:O	C:41:GLU:HB3	1.198
1	R:65:ALA:CB	S:208:GLU:CD	1.198
1	HA:67:ALA:CB	IA:207:GLY:HA3	1.198
1	JA:67:ALA:HB2	KA:207:GLY:CA	1.198
1	NA:90:LEU:CD2	OA:185:LYS:HZ3	1.198
1	S:218:PHE:CZ	T:42:TYR:HD2	1.198
1	C:17:TYR:N	D:22:LEU:CD2	1.198
1	D:124:LEU:HA	E:48:LYS:CE	1.197
1	GA:89:VAL:CA	HA:185:LYS:CD	1.197
1	Y:15:LEU:CA	Z:23:PRO:HD2	1.196
1	X:89:VAL:CB	Y:187:VAL:HG11	1.196
1	F:124:LEU:CG	G:45:SER:HB3	1.195
1	MA:216:LYS:NZ	NA:24:ARG:NH1	1.195
1	CA:17:TYR:N	DA:22:LEU:CD2	1.194
1	PA:15:LEU:CG	QA:203:VAL:CG2	1.194
1	D:12:LEU:O	E:22:LEU:CD2	1.193
1	G:124:LEU:HA	H:48:LYS:CE	1.193
1	T:231:ALA:HB2	U:42:TYR:CA	1.193
1	J:87:LYS:HB2	K:187:VAL:CG1	1.192

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	K:67:ALA:CB	L:207:GLY:H	1.192
1	Z:12:LEU:C	AA:22:LEU:HD13	1.192
1	FA:124:LEU:CD1	GA:45:SER:CB	1.192
1	QA:230:PHE:HE1	RA:141:VAL:CG1	1.192
1	D:67:ALA:CB	E:207:GLY:CA	1.191
1	G:124:LEU:CD1	H:45:SER:HB2	1.191
1	R:65:ALA:O	S:209:LYS:HG3	1.191
1	SA:218:PHE:CZ	TA:42:TYR:HD2	1.191
1	S:231:ALA:CB	T:42:TYR:H	1.190
1	YA:75:GLU:HB2	ZA:198:SER:O	1.190
1	A:87:LYS:N	B:187:VAL:HA	1.189
1	O:86:LEU:CD2	P:188:GLY:CA	1.189
1	A:200:GLN:O	ZA:73:LYS:HG3	1.189
1	A:67:ALA:CB	B:205:TYR:CE2	1.188
1	J:67:ALA:HB2	K:207:GLY:CA	1.188
1	O:15:LEU:CG	P:203:VAL:HG23	1.188
1	DA:231:ALA:HB1	EA:42:TYR:N	1.188
1	MA:14:ARG:O	NA:22:LEU:HA	1.188
1	TA:89:VAL:CG1	UA:187:VAL:CG1	1.187
1	U:16:GLY:HA3	V:22:LEU:O	1.186
1	FA:64:GLN:C	GA:209:LYS:CE	1.186
1	XA:82:GLY:O	YA:191:LEU:HA	1.186
1	M:228:THR:HG21	N:140:PRO:CG	1.185

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	Z:228:THR:HB	AA:141:VAL:CG1	1.185
1	DA:12:LEU:O	EA:22:LEU:CD2	1.185
1	OA:216:LYS:CE	PA:24:ARG:HH11	1.185
1	C:231:ALA:HB1	D:42:TYR:N	1.184
1	S:231:ALA:CB	T:42:TYR:N	1.184
1	A:22:LEU:HD13	ZA:12:LEU:C	1.182
1	F:64:GLN:C	G:209:LYS:CE	1.182
1	X:82:GLY:O	Y:191:LEU:HA	1.182
1	CA:218:PHE:CE2	DA:42:TYR:CD2	1.182
1	OA:14:ARG:HG3	PA:203:VAL:CG1	1.182
1	SA:231:ALA:CB	TA:42:TYR:H	1.182
1	MA:228:THR:HG21	NA:140:PRO:HG2	1.181
1	B:17:TYR:HB2	C:22:LEU:HD21	1.180
1	D:15:LEU:CG	E:203:VAL:HG21	1.180
1	X:69:ILE:CD	Y:204:THR:H	1.180
1	Y:230:PHE:CE2	Z:141:VAL:HG12	1.180
1	SA:231:ALA:CB	TA:42:TYR:N	1.180
1	MA:228:THR:HG21	NA:140:PRO:CG	1.179
1	OA:86:LEU:CD2	PA:188:GLY:CA	1.177
1	XA:16:GLY:HA2	YA:22:LEU:CB	1.177
1	JA:124:LEU:CD2	KA:45:SER:HB3	1.176
1	C:218:PHE:CE2	D:42:TYR:CD2	1.175
1	DA:15:LEU:CG	EA:203:VAL:HG21	1.175

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	D:16:GLY:O	E:24:ARG:HD3	1.174
1	DA:15:LEU:H	EA:22:LEU:CD1	1.173
1	Y:86:LEU:CD2	Z:188:GLY:C	1.172
1	Y:68:GLY:O	Z:205:TYR:HA	1.172
1	KA:67:ALA:CB	LA:205:TYR:CZ	1.172
1	YA:127:GLY:HA3	ZA:48:LYS:HE3	1.172
1	A:39:THR:HG22	ZA:233:GLN:OE1	1.171
1	A:187:VAL:HG12	ZA:87:LYS:O	1.171
1	A:87:LYS:O	B:187:VAL:HG12	1.171
1	A:15:LEU:HA	B:23:PRO:CD	1.170
1	Z:228:THR:CG2	AA:140:PRO:CD	1.170
1	HA:67:ALA:CB	IA:207:GLY:N	1.170
1	RA:89:VAL:CB	SA:187:VAL:HG11	1.170
1	A:127:GLY:HA3	B:48:LYS:HE3	1.169
1	A:141:VAL:CG1	ZA:228:THR:HB	1.169
1	B:231:ALA:C	C:41:GLU:HB3	1.169
1	B:89:VAL:H	C:185:LYS:HB3	1.169
1	R:89:VAL:CB	S:187:VAL:HG11	1.169
1	T:66:ALA:CA	U:205:TYR:OH	1.169
1	SA:89:VAL:CG2	TA:187:VAL:HG11	1.169
1	A:140:PRO:CD	ZA:228:THR:CG2	1.167
1	PA:65:ALA:CB	QA:208:GLU:OE2	1.167
1	Y:16:GLY:HA2	Z:22:LEU:CB	1.166

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	CA:79:PHE:HB2	DA:194:GLU:O	1.166
1	SA:15:LEU:HD21	TA:204:THR:O	1.166
1	XA:75:GLU:HB2	YA:198:SER:O	1.166
1	XA:231:ALA:O	YA:41:GLU:HB3	1.166
1	A:231:ALA:N	B:42:TYR:O	1.166
1	J:124:LEU:CD2	K:45:SER:HB3	1.165
1	K:67:ALA:CB	L:205:TYR:CZ	1.165
1	O:64:GLN:HB3	P:209:LYS:NZ	1.165
1	AA:87:LYS:O	BA:187:VAL:HG12	1.165
1	IA:67:ALA:CB	JA:207:GLY:N	1.165
1	QA:15:LEU:HG	RA:203:VAL:HG22	1.165
1	RA:65:ALA:O	SA:209:LYS:HD3	1.165
1	A:23:PRO:HD2	ZA:15:LEU:CA	1.164
1	P:15:LEU:CD1	Q:203:VAL:HG23	1.164
1	P:86:LEU:CD2	Q:188:GLY:H	1.164
1	Z:87:LYS:O	AA:187:VAL:HG12	1.164
1	BA:233:GLN:OE1	CA:39:THR:HG22	1.164
1	M:216:LYS:NZ	N:24:ARG:NH1	1.164
1	MA:14:ARG:O	NA:22:LEU:CB	1.164
1	P:216:LYS:CE	Q:24:ARG:HH11	1.163
1	V:89:VAL:CB	W:187:VAL:HG13	1.163
1	PA:15:LEU:CD1	QA:203:VAL:HG23	1.163
1	BA:218:PHE:HE2	CA:42:TYR:CE2	1.163

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	B:87:LYS:N	C:187:VAL:HA	1.162
1	T:231:ALA:HB2	U:42:TYR:CB	1.162
1	T:90:LEU:N	U:185:LYS:HD3	1.162
1	RA:124:LEU:CD2	SA:45:SER:CB	1.162
1	YA:16:GLY:HA2	ZA:22:LEU:CB	1.162
1	H:233:GLN:OE1	I:39:THR:CG2	1.161
1	I:67:ALA:HB1	J:207:GLY:CA	1.161
1	B:218:PHE:HE2	C:42:TYR:CE2	1.161
1	M:216:LYS:HZ1	N:24:ARG:NH1	1.161
1	A:16:GLY:O	B:24:ARG:HD3	1.160
1	C:87:LYS:N	D:187:VAL:HA	1.160
1	S:89:VAL:CG2	T:187:VAL:HG11	1.160
1	R:65:ALA:O	S:209:LYS:HD3	1.160
1	DA:16:GLY:O	EA:24:ARG:HD3	1.160
1	B:86:LEU:C	C:187:VAL:HA	1.159
1	P:65:ALA:CB	Q:208:GLU:OE2	1.159
1	X:89:VAL:CB	Y:187:VAL:CG1	1.159
1	Y:231:ALA:O	Z:41:GLU:CG	1.159
1	YA:230:PHE:CE2	ZA:141:VAL:HG12	1.159
1	Q:216:LYS:HE2	R:24:ARG:HD2	1.158
1	BA:86:LEU:C	CA:187:VAL:HA	1.158
1	WA:118:ALA:HB3	XA:209:LYS:HE2	1.158
1	A:187:VAL:HA	ZA:87:LYS:N	1.157

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	W:14:ARG:HG3	X:203:VAL:CG1	1.157
1	Z:69:ILE:CD	AA:204:THR:O	1.157
1	AA:16:GLY:O	BA:24:ARG:HD3	1.157
1	XA:86:LEU:HD23	YA:188:GLY:C	1.157
1	YA:228:THR:HG23	ZA:140:PRO:HD2	1.157
1	W:89:VAL:HA	X:185:LYS:HB2	1.156
1	LA:67:ALA:CB	MA:207:GLY:H	1.156
1	LA:89:VAL:HA	MA:185:LYS:HD3	1.156
1	XA:86:LEU:CD2	YA:188:GLY:N	1.156
1	F:15:LEU:CD1	G:203:VAL:HG21	1.155
1	I:89:VAL:HA	J:185:LYS:HD3	1.155
1	O:14:ARG:HG3	P:203:VAL:CG1	1.155
1	PA:216:LYS:CE	QA:24:ARG:HH11	1.155
1	A:65:ALA:CB	B:208:GLU:OE2	1.155
1	A:12:LEU:O	B:22:LEU:CD2	1.154
1	AA:77:LEU:HA	BA:196:SER:O	1.154
1	BA:231:ALA:C	CA:41:GLU:HB3	1.154
1	WA:228:THR:CB	XA:141:VAL:HG13	1.154
1	Z:231:ALA:CA	AA:42:TYR:O	1.153
1	CA:17:TYR:H	DA:22:LEU:CD2	1.153
1	OA:64:GLN:HB3	PA:209:LYS:NZ	1.153
1	R:64:GLN:CB	S:209:LYS:NZ	1.152
1	V:15:LEU:HD21	W:204:THR:O	1.152

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	X:16:GLY:CA	Y:22:LEU:CB	1.152
1	BA:67:ALA:HB2	CA:207:GLY:O	1.152
1	WA:14:ARG:HG3	XA:203:VAL:CG1	1.152
1	X:86:LEU:HD23	Y:188:GLY:C	1.151
1	Y:87:LYS:N	Z:187:VAL:HA	1.151
1	Z:230:PHE:CE1	AA:141:VAL:CA	1.151
1	NA:86:LEU:CD2	OA:188:GLY:CA	1.151
1	TA:231:ALA:HB2	UA:42:TYR:CB	1.151
1	H:67:ALA:HB1	I:207:GLY:CA	1.150
1	R:14:ARG:HB3	S:203:VAL:HB	1.150
1	R:86:LEU:CD2	S:188:GLY:CA	1.150
1	Y:228:THR:HG23	Z:140:PRO:HD2	1.150
1	AA:12:LEU:O	BA:22:LEU:CD2	1.150
1	AA:87:LYS:N	BA:187:VAL:HA	1.150
1	XA:15:LEU:CA	YA:23:PRO:HD2	1.150
1	AA:65:ALA:CB	BA:208:GLU:OE2	1.150
1	M:14:ARG:O	N:22:LEU:HA	1.149
1	N:228:THR:HG21	O:140:PRO:HG2	1.149
1	V:73:LYS:HG3	W:200:GLN:O	1.149
1	W:228:THR:CB	X:141:VAL:HG13	1.149
1	M:216:LYS:CE	N:24:ARG:NH1	1.148
1	FA:15:LEU:CD1	GA:203:VAL:HG21	1.148
1	TA:90:LEU:N	UA:185:LYS:HD3	1.148



Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	AA:231:ALA:N	BA:42:TYR:O	1.148
1	A:218:PHE:CE2	B:42:TYR:CE2	1.147
1	GA:67:ALA:HA	HA:207:GLY:HA3	1.147
1	UA:16:GLY:HA3	VA:22:LEU:O	1.147
1	A:82:GLY:O	B:191:LEU:CA	1.146
1	D:15:LEU:H	E:22:LEU:CD1	1.146
1	G:15:LEU:HD11	H:203:VAL:CG2	1.146
1	G:67:ALA:HA	H:207:GLY:HA3	1.146
1	Z:15:LEU:CA	AA:23:PRO:HD2	1.146
1	RA:14:ARG:HB3	SA:203:VAL:HB	1.146
1	C:17:TYR:H	D:22:LEU:CD2	1.146
1	A:185:LYS:HB3	ZA:89:VAL:H	1.145
1	C:79:PHE:HB2	D:194:GLU:O	1.145
1	N:65:ALA:HB3	O:208:GLU:OE2	1.145
1	X:231:ALA:O	Y:41:GLU:HB3	1.145
1	AA:65:ALA:CB	BA:208:GLU:CD	1.145
1	EA:69:ILE:CD	FA:204:THR:O	1.145
1	HA:233:GLN:OE1	IA:39:THR:CG2	1.145
1	IA:86:LEU:HD21	JA:188:GLY:CA	1.145
1	YA:68:GLY:O	ZA:205:TYR:HA	1.145
1	A:48:LYS:HE3	ZA:127:GLY:HA3	1.144
1	W:15:LEU:HA	X:23:PRO:CD	1.144
1	IA:89:VAL:HA	JA:185:LYS:HD3	1.144

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	WA:69:ILE:CD	XA:204:THR:N	1.144
1	YA:233:GLN:OE1	ZA:39:THR:HG22	1.144
1	A:12:LEU:C	B:22:LEU:HD13	1.143
1	AA:233:GLN:OE1	BA:39:THR:CB	1.143
1	E:17:TYR:N	F:22:LEU:HD23	1.142
1	V:87:LYS:CG	W:186:VAL:CA	1.142
1	X:157:GLN:HE22	Y:25:GLU:HB3	1.142
1	TA:66:ALA:CA	UA:205:TYR:OH	1.142
1	VA:89:VAL:HA	WA:185:LYS:HB3	1.142
1	V:157:GLN:HE22	W:25:GLU:HB3	1.141
1	V:87:LYS:CE	W:186:VAL:CG1	1.141
1	A:141:VAL:CA	ZA:230:PHE:CE1	1.140
1	K:228:THR:CG2	L:140:PRO:CG	1.140
1	R:69:ILE:CD	S:204:THR:OG1	1.140
1	X:16:GLY:HA2	Y:22:LEU:CB	1.140
1	SA:15:LEU:N	TA:203:VAL:HG21	1.140
1	VA:118:ALA:HB3	WA:209:LYS:HE2	1.140
1	XA:89:VAL:CB	YA:187:VAL:CG1	1.140
1	W:14:ARG:HG3	X:203:VAL:HG12	1.139
1	EA:17:TYR:N	FA:22:LEU:HD23	1.139
1	GA:15:LEU:HD11	HA:203:VAL:CG2	1.139
1	GA:89:VAL:N	HA:185:LYS:HD3	1.139
1	U:89:VAL:HA	V:185:LYS:HB3	1.138

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	YA:86:LEU:CD2	ZA:188:GLY:C	1.138
1	A:233:GLN:OE1	B:39:THR:CB	1.137
1	C:65:ALA:HB2	D:208:GLU:OE2	1.137
1	L:89:VAL:HA	M:185:LYS:HD3	1.137
1	X:14:ARG:CG	Y:203:VAL:HG12	1.137
1	Y:233:GLN:OE1	Z:39:THR:HG22	1.137
1	RA:230:PHE:CZ	SA:141:VAL:HG12	1.137
1	WA:14:ARG:HG3	XA:203:VAL:HG12	1.137
1	B:89:VAL:HA	C:185:LYS:CD	1.136
1	E:12:LEU:O	F:22:LEU:HD22	1.136
1	G:89:VAL:N	H:185:LYS:HD3	1.136
1	AA:81:ILE:HA	BA:192:LYS:O	1.136
1	EA:15:LEU:HD12	FA:22:LEU:HD12	1.136
1	KA:67:ALA:CB	LA:205:TYR:CE1	1.136
1	KA:228:THR:CG2	LA:140:PRO:CG	1.136
1	YA:231:ALA:O	ZA:41:GLU:CG	1.136
1	A:77:LEU:HA	B:196:SER:O	1.135
1	R:230:PHE:CZ	S:141:VAL:HG12	1.135
1	AA:12:LEU:C	BA:22:LEU:HD13	1.135
1	H:90:LEU:N	I:185:LYS:NZ	1.135
1	YA:86:LEU:N	ZA:188:GLY:H	1.135
1	B:89:VAL:C	C:185:LYS:CD	1.134
1	D:79:PHE:CB	E:194:GLU:O	1.134

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	L:124:LEU:HD21	M:45:SER:HB3	1.134
1	W:118:ALA:HB3	X:209:LYS:HE2	1.134
1	Y:12:LEU:C	Z:22:LEU:HD13	1.134
1	BA:89:VAL:HA	CA:185:LYS:CD	1.134
1	RA:69:ILE:CD	SA:204:THR:OG1	1.134
1	Y:86:LEU:N	Z:188:GLY:H	1.134
1	G:90:LEU:CA	H:185:LYS:HZ3	1.133
1	H:15:LEU:HA	I:22:LEU:C	1.133
1	Y:86:LEU:CG	Z:188:GLY:HA3	1.133
1	FA:15:LEU:HD12	GA:22:LEU:HD12	1.133
1	GA:89:VAL:CA	HA:185:LYS:HD2	1.132
1	XA:14:ARG:CG	YA:203:VAL:HG12	1.132
1	F:124:LEU:HA	G:48:LYS:HE2	1.131
1	VA:15:LEU:HD21	WA:204:THR:O	1.131
1	WA:89:VAL:C	XA:185:LYS:CD	1.131
1	O:86:LEU:HD21	P:188:GLY:HA3	1.130
1	V:118:ALA:HB3	W:209:LYS:HE2	1.130
1	BA:90:LEU:H	CA:185:LYS:HD3	1.130
1	A:65:ALA:CB	B:208:GLU:CD	1.129
1	E:69:ILE:CD	F:204:THR:O	1.129
1	E:87:LYS:H	F:187:VAL:HG12	1.129
1	R:124:LEU:CD2	S:45:SER:CB	1.129
1	DA:87:LYS:HB2	EA:187:VAL:CG1	1.129

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	QA:216:LYS:HE3	RA:24:ARG:HH11	1.129
1	SA:64:GLN:CB	TA:209:LYS:NZ	1.129
1	SA:231:ALA:HB3	TA:42:TYR:N	1.129
1	WA:79:PHE:HB2	XA:194:GLU:O	1.129
1	I:90:LEU:N	J:185:LYS:HZ3	1.129
1	C:231:ALA:H	D:43:LEU:HD23	1.128
1	NA:65:ALA:HB3	OA:208:GLU:OE2	1.128
1	NA:65:ALA:N	OA:209:LYS:HD2	1.128
1	VA:87:LYS:CG	WA:186:VAL:CA	1.128
1	A:15:LEU:HA	B:23:PRO:HD2	1.127
1	AA:89:VAL:HA	BA:185:LYS:HB2	1.127
1	BA:233:GLN:CD	CA:39:THR:HG22	1.127
1	DA:228:THR:OG1	EA:140:PRO:HG2	1.127
1	GA:124:LEU:HD11	HA:45:SER:CB	1.127
1	D:87:LYS:HB2	E:187:VAL:CG1	1.126
1	K:90:LEU:HD23	L:185:LYS:HZ1	1.126
1	O:14:ARG:O	P:22:LEU:CA	1.126
1	MA:90:LEU:HB3	NA:185:LYS:HZ1	1.126
1	B:87:LYS:N	C:187:VAL:CA	1.126
1	BA:233:GLN:OE1	CA:39:THR:HB	1.125
1	IA:87:LYS:CB	JA:187:VAL:HG13	1.125
1	KA:228:THR:HG22	LA:140:PRO:HD2	1.125
1	PA:86:LEU:CD2	QA:188:GLY:H	1.125

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	VA:73:LYS:HG3	WA:200:GLN:O	1.125
1	YA:87:LYS:N	ZA:187:VAL:HA	1.125
1	A:185:LYS:HB3	ZA:89:VAL:N	1.124
1	D:87:LYS:N	E:187:VAL:HA	1.124
1	I:67:ALA:HB2	J:207:GLY:CA	1.124
1	P:64:GLN:C	Q:209:LYS:HD2	1.124
1	Z:67:ALA:HB3	AA:205:TYR:CE2	1.124
1	AA:230:PHE:CZ	BA:141:VAL:CA	1.124
1	CA:15:LEU:H	DA:22:LEU:HD12	1.124
1	RA:14:ARG:CG	SA:203:VAL:CG1	1.124
1	HA:90:LEU:N	IA:185:LYS:NZ	1.124
1	I:87:LYS:CB	J:187:VAL:HG13	1.123
1	M:15:LEU:HG	N:203:VAL:CG2	1.123
1	S:14:ARG:CG	T:203:VAL:CG1	1.123
1	Z:230:PHE:CE1	AA:141:VAL:HB	1.123
1	LA:228:THR:HG21	MA:140:PRO:HG2	1.123
1	PA:64:GLN:C	QA:209:LYS:HD2	1.122
1	A:87:LYS:N	B:187:VAL:CA	1.122
1	GA:90:LEU:CA	HA:185:LYS:HZ3	1.122
1	A:141:VAL:HG12	ZA:230:PHE:CD1	1.121
1	D:87:LYS:H	E:187:VAL:HG12	1.121
1	Z:81:ILE:HA	AA:192:LYS:O	1.121
1	Z:228:THR:CG2	AA:140:PRO:HD2	1.121

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	MA:15:LEU:HG	NA:203:VAL:CG2	1.121
1	MA:216:LYS:CE	NA:24:ARG:NH1	1.121
1	VA:14:ARG:HB3	WA:203:VAL:HB	1.121
1	WA:15:LEU:HA	XA:23:PRO:CD	1.121
1	WA:89:VAL:HA	XA:185:LYS:HB2	1.121
1	G:89:VAL:CA	H:185:LYS:HD2	1.120
1	X:15:LEU:CA	Y:23:PRO:HD2	1.120
1	W:157:GLN:HE22	X:25:GLU:HB3	1.120
1	AA:89:VAL:HA	BA:185:LYS:CB	1.120
1	A:141:VAL:HB	ZA:230:PHE:CE1	1.119
1	A:205:TYR:CE2	ZA:67:ALA:HB3	1.119
1	L:228:THR:HG21	M:140:PRO:HG2	1.119
1	S:65:ALA:O	T:209:LYS:HG3	1.119
1	X:230:PHE:CE1	Y:141:VAL:CB	1.119
1	AA:230:PHE:CE1	BA:141:VAL:HB	1.119
1	DA:79:PHE:CB	EA:194:GLU:O	1.119
1	Q:216:LYS:HE3	R:24:ARG:HH11	1.118
1	BA:77:LEU:HA	CA:196:SER:O	1.118
1	XA:230:PHE:CE1	YA:141:VAL:CB	1.118
1	A:192:LYS:O	ZA:81:ILE:HA	1.118
1	QA:216:LYS:CE	RA:24:ARG:HH11	1.117
1	Q:64:GLN:CB	R:209:LYS:HZ3	1.117
1	A:231:ALA:O	B:41:GLU:HB3	1.116

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	A:230:PHE:HE1	B:141:VAL:CA	1.116
1	B:90:LEU:H	C:185:LYS:HD3	1.116
1	C:15:LEU:H	D:22:LEU:HD12	1.116
1	M:228:THR:HG21	N:140:PRO:HG2	1.116
1	W:228:THR:HB	X:141:VAL:HG13	1.116
1	TA:89:VAL:CB	UA:187:VAL:HG13	1.116
1	C:231:ALA:O	D:41:GLU:CB	1.115
1	C:228:THR:OG1	D:140:PRO:HG2	1.115
1	I:86:LEU:HD21	J:188:GLY:CA	1.115
1	K:67:ALA:CB	L:205:TYR:CE1	1.115
1	V:14:ARG:HB3	W:203:VAL:HB	1.115
1	AA:15:LEU:HA	BA:23:PRO:HD2	1.115
1	AA:82:GLY:O	BA:191:LEU:CA	1.115
1	GA:15:LEU:HD11	HA:203:VAL:HG23	1.115
1	OA:14:ARG:O	PA:22:LEU:CA	1.115
1	A:89:VAL:HA	B:185:LYS:CB	1.114
1	B:233:GLN:CD	C:39:THR:HG22	1.114
1	F:15:LEU:CD1	G:203:VAL:CG2	1.114
1	X:89:VAL:HG11	Y:187:VAL:HG11	1.114
1	RA:89:VAL:CG2	SA:187:VAL:HG11	1.114
1	A:89:VAL:HA	B:185:LYS:HB2	1.113
1	I:89:VAL:HA	J:185:LYS:HD2	1.113
1	R:89:VAL:CG2	S:187:VAL:HG11	1.113



Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	G:233:GLN:OE1	H:39:THR:HB	1.112
1	K:89:VAL:HA	L:185:LYS:HD3	1.112
1	X:86:LEU:CD2	Y:188:GLY:N	1.112
1	Z:75:GLU:HB2	AA:198:SER:O	1.112
1	QA:14:ARG:HG3	RA:203:VAL:HG12	1.112
1	QA:86:LEU:CD2	RA:188:GLY:N	1.112
1	Z:230:PHE:CD1	AA:141:VAL:HG12	1.111
1	BA:89:VAL:HA	CA:185:LYS:HD2	1.111
1	EA:86:LEU:C	FA:187:VAL:HA	1.111
1	VA:15:LEU:HA	WA:23:PRO:HD2	1.111
1	WA:16:GLY:HA2	XA:22:LEU:CB	1.111
1	K:228:THR:HG22	L:140:PRO:HD2	1.110
1	S:218:PHE:CE2	T:42:TYR:CD2	1.110
1	T:230:PHE:CZ	U:141:VAL:CG1	1.110
1	QA:89:VAL:HB	RA:187:VAL:HG13	1.110
1	RA:14:ARG:O	SA:22:LEU:HA	1.110
1	XA:89:VAL:HB	YA:187:VAL:HG13	1.110
1	C:218:PHE:CE2	D:42:TYR:HD2	1.109
1	E:15:LEU:HD12	F:22:LEU:HD12	1.109
1	Q:216:LYS:CE	R:24:ARG:HH11	1.109
1	DA:87:LYS:N	EA:187:VAL:HA	1.109
1	LA:90:LEU:HB3	MA:185:LYS:HZ3	1.109
1	WA:87:LYS:HD3	XA:186:VAL:HG11	1.109

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	A:140:PRO:HD2	ZA:228:THR:CG2	1.108
1	G:124:LEU:HD11	H:45:SER:CB	1.108
1	AA:67:ALA:HB2	BA:207:GLY:O	1.108
1	RA:65:ALA:O	SA:209:LYS:HG3	1.108
1	F:16:GLY:N	G:22:LEU:O	1.108
1	K:228:THR:CG2	L:140:PRO:HD2	1.107
1	W:89:VAL:C	X:185:LYS:HD3	1.107
1	GA:90:LEU:HB3	HA:185:LYS:HZ1	1.107
1	HA:67:ALA:CA	IA:207:GLY:HA3	1.107
1	SA:65:ALA:O	TA:209:LYS:CD	1.107
1	WA:157:GLN:HE22	XA:25:GLU:HB3	1.107
1	D:231:ALA:O	E:41:GLU:HB3	1.106
1	S:216:LYS:HE3	T:24:ARG:NH1	1.106
1	S:65:ALA:O	T:209:LYS:CD	1.106
1	W:75:GLU:HB2	X:198:SER:O	1.106
1	Z:89:VAL:N	AA:185:LYS:HB3	1.106
1	SA:216:LYS:HE3	TA:24:ARG:NH1	1.106
1	YA:86:LEU:CG	ZA:188:GLY:HA3	1.106
1	FA:16:GLY:N	GA:22:LEU:O	1.106
1	FA:65:ALA:N	GA:209:LYS:HZ3	1.106
1	F:86:LEU:O	G:186:VAL:O	1.106
1	B:233:GLN:OE1	C:39:THR:HG22	1.105
1	LA:231:ALA:HB2	MA:42:TYR:O	1.105

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	A:230:PHE:CE1	B:141:VAL:HB	1.104
1	G:124:LEU:HD23	H:47:GLU:OE2	1.104
1	Z:228:THR:CB	AA:141:VAL:HG13	1.104
1	FA:15:LEU:CD1	GA:203:VAL:CG2	1.104
1	QA:216:LYS:HE2	RA:24:ARG:HD2	1.104
1	XA:86:LEU:CG	YA:188:GLY:CA	1.104
1	A:81:ILE:HA	B:192:LYS:O	1.103
1	D:231:ALA:H	E:43:LEU:HD23	1.103
1	G:15:LEU:HD12	H:22:LEU:CD1	1.103
1	G:124:LEU:CD2	H:45:SER:CB	1.103
1	I:86:LEU:HG	J:187:VAL:HA	1.103
1	O:65:ALA:N	P:209:LYS:HD2	1.103
1	Q:15:LEU:HG	R:203:VAL:HG22	1.103
1	CA:231:ALA:H	DA:43:LEU:HD23	1.103
1	EA:67:ALA:C	FA:205:TYR:CE1	1.103
1	IA:89:VAL:HA	JA:185:LYS:HD2	1.103
1	YA:67:ALA:HB2	ZA:207:GLY:O	1.103
1	B:77:LEU:HA	C:196:SER:O	1.102
1	E:86:LEU:C	F:187:VAL:HA	1.102
1	G:89:VAL:CA	H:185:LYS:HD3	1.102
1	Q:86:LEU:CD2	R:188:GLY:N	1.102
1	W:89:VAL:C	X:185:LYS:CD	1.102
1	X:86:LEU:CG	Y:188:GLY:HA3	1.102

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	CA:231:ALA:O	DA:41:GLU:CB	1.102
1	KA:90:LEU:HD23	LA:185:LYS:HZ1	1.102
1	MA:124:LEU:HD21	NA:45:SER:HB2	1.102
1	TA:89:VAL:CG2	UA:187:VAL:HG11	1.102
1	V:14:ARG:CG	W:203:VAL:CG1	1.101
1	AA:89:VAL:H	BA:185:LYS:HB3	1.101
1	EA:12:LEU:O	FA:22:LEU:HD22	1.101
1	PA:65:ALA:N	QA:209:LYS:HD2	1.101
1	VA:89:VAL:CB	WA:187:VAL:HG13	1.101
1	YA:12:LEU:C	ZA:22:LEU:HD13	1.101
1	YA:89:VAL:CA	ZA:185:LYS:CB	1.101
1	YA:12:LEU:O	ZA:22:LEU:CD1	1.101
1	I:228:THR:HG21	J:140:PRO:HG2	1.100
1	J:89:VAL:HA	K:185:LYS:HD3	1.100
1	K:228:THR:HG21	L:140:PRO:HG2	1.100
1	T:124:LEU:HD23	U:45:SER:CB	1.100
1	CA:65:ALA:HB2	DA:208:GLU:OE2	1.100
1	WA:89:VAL:C	XA:185:LYS:HD3	1.100
1	A:218:PHE:HZ	B:44:GLY:N	1.100
1	B:233:GLN:OE1	C:39:THR:HB	1.099
1	V:216:LYS:HE3	W:24:ARG:NH1	1.099
1	Y:89:VAL:HG11	Z:187:VAL:HG11	1.099
1	Z:89:VAL:HA	AA:185:LYS:HB2	1.099

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	AA:12:LEU:O	BA:22:LEU:HD22	1.099
1	KA:89:VAL:HA	LA:185:LYS:HD3	1.099
1	A:204:THR:O	ZA:69:ILE:CD	1.099
1	D:15:LEU:H	E:22:LEU:HD12	1.098
1	F:124:LEU:CD1	G:45:SER:CB	1.098
1	J:228:THR:HG21	K:140:PRO:HG2	1.098
1	Z:127:GLY:HA3	AA:48:LYS:HE3	1.098
1	SA:218:PHE:CE2	TA:42:TYR:CD2	1.098
1	J:67:ALA:HB2	K:207:GLY:HA3	1.097
1	HA:15:LEU:HA	IA:22:LEU:C	1.097
1	IA:86:LEU:HG	JA:187:VAL:CA	1.097
1	JA:67:ALA:HB2	KA:205:TYR:CZ	1.097
1	OA:86:LEU:HD21	PA:188:GLY:HA3	1.097
1	TA:218:PHE:HE2	UA:42:TYR:CD2	1.097
1	UA:89:VAL:HA	VA:185:LYS:HB3	1.097
1	I:86:LEU:HG	J:187:VAL:CA	1.096
1	J:228:THR:HG21	K:140:PRO:HG3	1.096
1	M:124:LEU:HD21	N:45:SER:HB2	1.096
1	W:69:ILE:CD	X:204:THR:N	1.096
1	BA:17:TYR:HB2	CA:22:LEU:HD21	1.096
1	KA:228:THR:CG2	LA:140:PRO:HD2	1.096
1	SA:124:LEU:HD23	TA:45:SER:CB	1.096
1	YA:89:VAL:CG1	ZA:187:VAL:CG1	1.096

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	H:67:ALA:CA	I:207:GLY:HA3	1.095
1	O:124:LEU:CD2	P:45:SER:HB2	1.095
1	RA:216:LYS:CE	SA:24:ARG:HH11	1.095
1	A:39:THR:CG2	ZA:233:GLN:OE1	1.094
1	A:141:VAL:HG13	ZA:228:THR:CB	1.094
1	P:89:VAL:HB	Q:187:VAL:CG1	1.094
1	R:14:ARG:O	S:22:LEU:HA	1.094
1	IA:86:LEU:HG	JA:187:VAL:HA	1.094
1	SA:64:GLN:CB	TA:209:LYS:CE	1.094
1	F:15:LEU:HD12	G:22:LEU:HD12	1.093
1	N:86:LEU:CD2	O:188:GLY:CA	1.093
1	Q:89:VAL:HB	R:187:VAL:HG13	1.093
1	U:89:VAL:HA	V:185:LYS:CB	1.093
1	V:15:LEU:HA	W:23:PRO:HD2	1.093
1	Y:89:VAL:CG1	Z:187:VAL:CG1	1.093
1	YA:89:VAL:N	ZA:185:LYS:HB3	1.093
1	T:89:VAL:CG2	U:187:VAL:HG11	1.092
1	W:89:VAL:HA	X:185:LYS:HB3	1.092
1	CA:87:LYS:N	DA:187:VAL:HA	1.092
1	EA:87:LYS:H	FA:187:VAL:HG12	1.092
1	GA:124:LEU:CD2	HA:45:SER:CB	1.092
1	PA:15:LEU:HG	QA:203:VAL:HG21	1.092
1	YA:86:LEU:CG	ZA:188:GLY:N	1.092

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	V:89:VAL:HA	W:185:LYS:HB3	1.091
1	GA:89:VAL:CA	HA:185:LYS:HD3	1.091
1	V:87:LYS:CD	W:186:VAL:HG11	1.090
1	W:87:LYS:HD3	X:186:VAL:HG11	1.090
1	W:90:LEU:N	X:185:LYS:HD3	1.090
1	C:124:LEU:HA	D:48:LYS:HE2	1.089
1	T:218:PHE:HE2	U:42:TYR:CD2	1.089
1	AA:228:THR:HB	BA:141:VAL:HG13	1.089
1	GA:124:LEU:HD23	HA:47:GLU:OE2	1.089
1	OA:15:LEU:HG	PA:203:VAL:HG23	1.089
1	WA:75:GLU:HB2	XA:198:SER:O	1.089
1	WA:228:THR:HB	XA:141:VAL:HG13	1.089
1	A:207:GLY:O	ZA:67:ALA:HB2	1.089
1	S:64:GLN:CB	T:209:LYS:CE	1.088
1	CA:124:LEU:HA	DA:48:LYS:HE2	1.088
1	G:15:LEU:HD11	H:203:VAL:HG23	1.087
1	Q:14:ARG:HG3	R:203:VAL:HG12	1.087
1	Y:127:GLY:HA3	Z:48:LYS:HE3	1.087
1	Z:230:PHE:CE1	AA:141:VAL:HA	1.087
1	YA:89:VAL:HG11	ZA:187:VAL:HG11	1.087
1	A:89:VAL:H	B:185:LYS:HB3	1.086
1	G:90:LEU:HB3	H:185:LYS:HZ1	1.086
1	H:124:LEU:HD23	I:47:GLU:OE2	1.086

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	L:231:ALA:HB2	M:42:TYR:O	1.086
1	Q:64:GLN:CB	R:209:LYS:NZ	1.086
1	Y:12:LEU:O	Z:22:LEU:CD1	1.086
1	CA:68:GLY:O	DA:205:TYR:HA	1.086
1	YA:89:VAL:H	ZA:185:LYS:HB3	1.086
1	Z:128:GLN:OE1	AA:48:LYS:NZ	1.086
1	AA:87:LYS:N	BA:187:VAL:CA	1.086
1	B:124:LEU:HA	C:48:LYS:HE2	1.085
1	C:216:LYS:HD2	D:24:ARG:HD2	1.085
1	Y:89:VAL:CA	Z:185:LYS:CB	1.085
1	DA:87:LYS:HB2	EA:187:VAL:HG13	1.085
1	KA:87:LYS:HB2	LA:187:VAL:HG13	1.085
1	OA:124:LEU:CD2	PA:45:SER:HB2	1.085
1	A:191:LEU:CA	ZA:82:GLY:O	1.084
1	Q:15:LEU:HG	R:203:VAL:HG21	1.084
1	S:231:ALA:HB3	T:42:TYR:N	1.084
1	W:14:ARG:CG	X:203:VAL:CG1	1.084
1	BA:90:LEU:H	CA:185:LYS:CD	1.084
1	BA:89:VAL:H	CA:185:LYS:HB3	1.084
1	DA:87:LYS:HG3	EA:185:LYS:O	1.084
1	UA:89:VAL:HA	VA:185:LYS:CB	1.084
1	TA:64:GLN:O	UA:209:LYS:CD	1.084
1	F:65:ALA:N	G:209:LYS:HZ3	1.084



Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	IA:86:LEU:HD23	JA:188:GLY:N	1.084
1	C:67:ALA:HB2	D:205:TYR:CE2	1.083
1	Z:233:GLN:OE1	AA:39:THR:CG2	1.083
1	AA:127:GLY:HA3	BA:48:LYS:HE3	1.083
1	GA:67:ALA:CB	HA:207:GLY:HA3	1.083
1	GA:124:LEU:HD11	HA:45:SER:HB2	1.083
1	HA:124:LEU:HD23	IA:47:GLU:OE2	1.083
1	MA:124:LEU:HD21	NA:45:SER:HB3	1.083
1	OA:65:ALA:N	PA:209:LYS:HD2	1.083
1	XA:231:ALA:O	YA:41:GLU:CG	1.083
1	B:89:VAL:HA	C:185:LYS:HD2	1.082
1	D:87:LYS:HG3	E:185:LYS:O	1.082
1	G:64:GLN:O	H:209:LYS:HE2	1.082
1	X:86:LEU:CG	Y:188:GLY:CA	1.082
1	BA:89:VAL:C	CA:185:LYS:CD	1.082
1	CA:218:PHE:CE2	DA:42:TYR:HD2	1.082
1	DA:231:ALA:O	EA:41:GLU:HB3	1.082
1	VA:89:VAL:C	WA:185:LYS:HD3	1.082
1	XA:86:LEU:CG	YA:188:GLY:HA3	1.082
1	AA:218:PHE:HZ	BA:44:GLY:N	1.082
1	A:48:LYS:NZ	ZA:128:GLN:OE1	1.082
1	O:216:LYS:NZ	P:24:ARG:HD3	1.081
1	DA:67:ALA:CA	EA:207:GLY:N	1.081

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	DA:15:LEU:H	EA:22:LEU:HD12	1.081
1	JA:228:THR:HG21	KA:140:PRO:HG3	1.081
1	UA:87:LYS:CD	VA:186:VAL:CB	1.081
1	A:231:ALA:O	B:41:GLU:CG	1.080
1	B:228:THR:HB	C:141:VAL:HG13	1.080
1	D:87:LYS:HB2	E:187:VAL:HG13	1.080
1	J:86:LEU:HG	K:187:VAL:HA	1.080
1	R:216:LYS:CE	S:24:ARG:HH11	1.080
1	GA:15:LEU:HD12	HA:22:LEU:CD1	1.080
1	FA:233:GLN:HE22	GA:39:THR:HG22	1.080
1	SA:64:GLN:HB2	TA:209:LYS:CE	1.080
1	B:87:LYS:O	C:187:VAL:HG12	1.079
1	CA:87:LYS:CB	DA:187:VAL:HG13	1.079
1	LA:90:LEU:CD2	MA:185:LYS:HZ1	1.079
1	A:141:VAL:HA	ZA:230:PHE:CE1	1.078
1	E:87:LYS:N	F:187:VAL:HG12	1.078
1	N:65:ALA:N	O:209:LYS:HD2	1.078
1	X:231:ALA:O	Y:41:GLU:CG	1.078
1	Z:82:GLY:O	AA:191:LEU:CA	1.078
1	HA:89:VAL:CA	IA:185:LYS:CD	1.078
1	A:228:THR:HB	B:141:VAL:HG13	1.077
1	R:86:LEU:CD2	S:188:GLY:N	1.077
1	V:89:VAL:C	W:185:LYS:HD3	1.077

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	AA:218:PHE:CZ	BA:44:GLY:N	1.077
1	MA:89:VAL:HA	NA:185:LYS:HD3	1.077
1	NA:228:THR:HG21	OA:140:PRO:HG2	1.077
1	SA:65:ALA:N	TA:209:LYS:HD2	1.077
1	XA:14:ARG:O	YA:22:LEU:N	1.077
1	B:82:GLY:O	C:191:LEU:CA	1.076
1	R:216:LYS:HE3	S:24:ARG:HH11	1.076
1	T:64:GLN:O	U:209:LYS:CD	1.076
1	U:218:PHE:CE2	V:42:TYR:CE2	1.076
1	SA:64:GLN:O	TA:209:LYS:HD2	1.076
1	UA:14:ARG:HB3	VA:203:VAL:HB	1.076
1	BA:87:LYS:N	CA:187:VAL:CA	1.076
1	E:67:ALA:C	F:205:TYR:CE1	1.075
1	O:228:THR:HG21	P:140:PRO:HG2	1.075
1	S:124:LEU:HD23	T:45:SER:CB	1.075
1	S:64:GLN:O	T:209:LYS:HD2	1.075
1	X:89:VAL:HA	Y:185:LYS:HB2	1.075
1	Z:89:VAL:H	AA:185:LYS:HB3	1.075
1	XA:89:VAL:HG12	YA:187:VAL:CG1	1.075
1	CA:82:GLY:O	DA:191:LEU:CB	1.074
1	DA:87:LYS:H	EA:187:VAL:HG12	1.074
1	QA:64:GLN:CB	RA:209:LYS:NZ	1.074
1	VA:228:THR:HB	WA:141:VAL:CG1	1.074

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	XA:14:ARG:HB3	YA:203:VAL:CG1	1.074
1	K:87:LYS:HB2	L:187:VAL:HG13	1.073
1	R:14:ARG:CG	S:203:VAL:CG1	1.073
1	BA:124:LEU:HA	CA:48:LYS:HE2	1.073
1	EA:15:LEU:CG	FA:203:VAL:HG21	1.073
1	HA:67:ALA:HB1	IA:207:GLY:CA	1.073
1	JA:86:LEU:HG	KA:187:VAL:HA	1.073
1	QA:14:ARG:CG	RA:203:VAL:HG12	1.073
1	RA:15:LEU:HD21	SA:204:THR:O	1.073
1	B:75:GLU:HA	C:198:SER:O	1.072
1	H:89:VAL:HA	I:185:LYS:HD3	1.072
1	U:87:LYS:CD	V:186:VAL:CB	1.072
1	X:118:ALA:HB3	Y:209:LYS:HE2	1.072
1	Y:89:VAL:N	Z:185:LYS:HB3	1.072
1	FA:89:VAL:CA	GA:185:LYS:HD3	1.072
1	VA:89:VAL:HG11	WA:187:VAL:HG11	1.072
1	K:90:LEU:HD23	L:185:LYS:NZ	1.071
1	P:65:ALA:N	Q:209:LYS:HD2	1.071
1	R:15:LEU:HD21	S:204:THR:O	1.071
1	V:228:THR:HB	W:141:VAL:CG1	1.071
1	X:12:LEU:O	Y:22:LEU:CD1	1.071
1	Y:86:LEU:CG	Z:188:GLY:N	1.071
1	Y:86:LEU:CD2	Z:188:GLY:N	1.071

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	RA:65:ALA:N	SA:209:LYS:HD2	1.071
1	UA:218:PHE:CE2	VA:42:TYR:CE2	1.071
1	F:15:LEU:HD12	G:22:LEU:CD1	1.070
1	I:228:THR:HG21	J:140:PRO:HG3	1.070
1	U:14:ARG:HB3	V:203:VAL:HB	1.070
1	BA:75:GLU:HA	CA:198:SER:O	1.070
1	FA:124:LEU:HD23	GA:47:GLU:OE2	1.070
1	FA:64:GLN:O	GA:209:LYS:CE	1.070
1	SA:231:ALA:HB2	TA:42:TYR:HB3	1.070
1	TA:65:ALA:N	UA:209:LYS:HD2	1.070
1	WA:87:LYS:CG	XA:186:VAL:CG1	1.070
1	A:208:GLU:OE2	ZA:65:ALA:HB2	1.070
1	K:87:LYS:HB2	L:187:VAL:CG1	1.069
1	P:15:LEU:HG	Q:203:VAL:HG21	1.069
1	X:14:ARG:HB3	Y:203:VAL:CG1	1.069
1	AA:230:PHE:HE1	BA:141:VAL:CA	1.069
1	BA:228:THR:HB	CA:141:VAL:HG13	1.069
1	SA:65:ALA:O	TA:209:LYS:HG3	1.069
1	F:124:LEU:HD23	G:47:GLU:OE2	1.068
1	O:15:LEU:HG	P:203:VAL:HG21	1.068
1	T:65:ALA:N	U:209:LYS:HD2	1.068
1	W:15:LEU:HA	X:23:PRO:HD2	1.068
1	Z:65:ALA:HB2	AA:208:GLU:OE2	1.068

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	CA:87:LYS:HB2	DA:187:VAL:HG13	1.068
1	BA:82:GLY:O	CA:191:LEU:CA	1.068
1	SA:86:LEU:HD23	TA:188:GLY:CA	1.068
1	A:12:LEU:O	B:22:LEU:HD22	1.067
1	C:68:GLY:O	D:205:TYR:HA	1.067
1	IA:228:THR:HG21	JA:140:PRO:HG2	1.067
1	KA:228:THR:CG2	LA:140:PRO:CD	1.067
1	LA:124:LEU:HD21	MA:45:SER:HB3	1.067
1	VA:14:ARG:CG	WA:203:VAL:CG1	1.067
1	A:198:SER:O	ZA:75:GLU:HB2	1.067
1	X:14:ARG:O	Y:22:LEU:N	1.067
1	A:185:LYS:HB2	ZA:89:VAL:HA	1.066
1	C:231:ALA:HB3	D:41:GLU:C	1.066
1	CA:216:LYS:HD2	DA:24:ARG:HD2	1.066
1	CA:228:THR:OG1	DA:140:PRO:HG2	1.066
1	JA:89:VAL:HA	KA:185:LYS:HD3	1.066
1	PA:89:VAL:HB	QA:187:VAL:CG1	1.066
1	WA:90:LEU:N	XA:185:LYS:HD3	1.066
1	XA:89:VAL:CA	YA:185:LYS:CB	1.066
1	DA:231:ALA:CB	EA:42:TYR:N	1.066
1	D:228:THR:OG1	E:140:PRO:HG2	1.065
1	Q:14:ARG:CG	R:203:VAL:HG12	1.065
1	KA:228:THR:HG21	LA:140:PRO:HG2	1.065

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	TA:230:PHE:CZ	UA:141:VAL:CG1	1.065
1	WA:89:VAL:HG12	XA:187:VAL:CG1	1.065
1	XA:12:LEU:O	YA:22:LEU:CD1	1.065
1	XA:157:GLN:HE22	YA:25:GLU:HB3	1.065
1	E:15:LEU:CG	F:203:VAL:HG21	1.064
1	G:64:GLN:C	H:209:LYS:HZ3	1.064
1	S:14:ARG:HB3	T:203:VAL:HB	1.064
1	R:15:LEU:N	S:203:VAL:HG21	1.064
1	Z:15:LEU:HA	AA:23:PRO:HD2	1.064
1	CA:67:ALA:HB2	DA:205:TYR:CE2	1.064
1	HA:89:VAL:CA	IA:185:LYS:HD3	1.064
1	GA:64:GLN:O	HA:209:LYS:HE2	1.064
1	VA:14:ARG:C	WA:203:VAL:HG11	1.064
1	WA:14:ARG:CG	XA:203:VAL:CG1	1.064
1	XA:89:VAL:HG11	YA:187:VAL:HG11	1.064
1	B:67:ALA:HB2	C:207:GLY:O	1.063
1	C:87:LYS:CB	D:187:VAL:HG13	1.063
1	C:87:LYS:HB2	D:187:VAL:HG13	1.063
1	H:89:VAL:CA	I:185:LYS:CD	1.063
1	K:228:THR:CG2	L:140:PRO:CD	1.063
1	R:65:ALA:N	S:209:LYS:HD2	1.063
1	W:87:LYS:CG	X:186:VAL:CG1	1.063
1	RA:64:GLN:C	SA:209:LYS:CD	1.063

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	SA:14:ARG:CG	TA:203:VAL:CG1	1.063
1	TA:124:LEU:HD23	UA:45:SER:CB	1.063
1	A:230:PHE:CZ	B:141:VAL:CA	1.062
1	D:67:ALA:CA	E:207:GLY:N	1.062
1	C:82:GLY:O	D:191:LEU:CB	1.062
1	K:231:ALA:CB	L:42:TYR:O	1.062
1	R:64:GLN:C	S:209:LYS:CD	1.062
1	S:86:LEU:HD22	T:188:GLY:HA3	1.062
1	EA:67:ALA:CA	FA:207:GLY:CA	1.062
1	SA:216:LYS:HE3	TA:24:ARG:HH11	1.062
1	WA:87:LYS:HE3	XA:186:VAL:HG13	1.062
1	N:15:LEU:HG	O:203:VAL:HG23	1.061
1	P:86:LEU:HD21	Q:188:GLY:HA3	1.061
1	IA:228:THR:HG21	JA:140:PRO:HG3	1.061
1	OA:15:LEU:CG	PA:203:VAL:CG2	1.061
1	WA:89:VAL:HA	XA:185:LYS:HB3	1.061
1	I:86:LEU:HD23	J:188:GLY:N	1.061
1	V:231:ALA:N	W:42:TYR:O	1.061
1	D:79:PHE:HB2	E:194:GLU:O	1.060
1	H:233:GLN:OE1	I:39:THR:HG21	1.060
1	K:89:VAL:HA	L:185:LYS:CD	1.060
1	GA:124:LEU:HA	HA:48:LYS:HE2	1.060
1	KA:87:LYS:HB2	LA:187:VAL:CG1	1.060



Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	QA:14:ARG:CG	RA:203:VAL:CG1	1.060
1	XA:118:ALA:HB3	YA:209:LYS:HE2	1.060
1	RA:230:PHE:HE1	SA:141:VAL:CG1	1.060
1	D:231:ALA:CB	E:42:TYR:N	1.060
1	A:218:PHE:CZ	B:44:GLY:N	1.059
1	GA:64:GLN:C	HA:209:LYS:HZ3	1.059
1	A:204:THR:O	ZA:69:ILE:HB	1.059
1	S:218:PHE:CE2	T:42:TYR:HD2	1.059
1	G:124:LEU:HA	H:48:LYS:HE2	1.058
1	O:15:LEU:HG	P:203:VAL:HG23	1.058
1	S:231:ALA:HB2	T:42:TYR:HB3	1.058
1	B:218:PHE:HZ	C:44:GLY:N	1.058
1	C:89:VAL:C	D:185:LYS:HD2	1.057
1	G:124:LEU:HD11	H:45:SER:HB2	1.057
1	W:87:LYS:HE3	X:186:VAL:HG13	1.057
1	A:228:THR:CG2	B:140:PRO:N	1.056
1	B:89:VAL:N	C:185:LYS:HD3	1.056
1	F:87:LYS:H	G:187:VAL:HG12	1.056
1	J:87:LYS:HB2	K:187:VAL:HG13	1.056
1	S:64:GLN:HB2	T:209:LYS:CE	1.056
1	T:231:ALA:HB2	U:42:TYR:HB3	1.056
1	X:89:VAL:HB	Y:187:VAL:HG13	1.056
1	CA:231:ALA:HB3	DA:41:GLU:C	1.056

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	FA:15:LEU:HD12	GA:22:LEU:CD1	1.056
1	HA:89:VAL:HA	IA:185:LYS:HD3	1.056
1	HA:233:GLN:OE1	IA:39:THR:HG21	1.056
1	KA:89:VAL:HA	LA:185:LYS:CD	1.056
1	TA:231:ALA:HB2	UA:42:TYR:HB3	1.056
1	FA:86:LEU:O	GA:186:VAL:O	1.056
1	Z:230:PHE:CD1	AA:141:VAL:CG1	1.055
1	DA:218:PHE:HE2	EA:42:TYR:CD2	1.055
1	FA:124:LEU:HA	GA:48:LYS:HE2	1.055
1	VA:157:GLN:HE22	WA:25:GLU:HB3	1.055
1	SA:216:LYS:CE	TA:24:ARG:HH11	1.055
1	BA:13:LYS:C	CA:22:LEU:HB2	1.054
1	VA:231:ALA:N	WA:42:TYR:O	1.054
1	G:67:ALA:CB	H:207:GLY:HA3	1.053
1	O:216:LYS:NZ	P:24:ARG:CD	1.053
1	Y:87:LYS:O	Z:187:VAL:HG12	1.053
1	DA:89:VAL:N	EA:185:LYS:CD	1.053
1	HA:67:ALA:HA	IA:207:GLY:HA3	1.053
1	UA:14:ARG:HB3	VA:203:VAL:CB	1.053
1	UA:216:LYS:HE3	VA:24:ARG:NH1	1.053
1	H:89:VAL:CA	I:185:LYS:HD3	1.052
1	L:124:LEU:HD21	M:45:SER:HB2	1.052
1	Y:89:VAL:HG12	Z:187:VAL:HG11	1.052

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	BA:87:LYS:O	CA:187:VAL:HG12	1.052
1	KA:231:ALA:CB	LA:42:TYR:O	1.052
1	OA:86:LEU:CD2	PA:188:GLY:HA3	1.052
1	OA:216:LYS:NZ	PA:24:ARG:CD	1.052
1	RA:86:LEU:CD2	SA:188:GLY:N	1.052
1	XA:89:VAL:HG12	YA:187:VAL:HG11	1.052
1	A:185:LYS:CB	ZA:89:VAL:CA	1.051
1	U:14:ARG:HB3	V:203:VAL:CB	1.051
1	W:69:ILE:CD	X:204:THR:H	1.051
1	Y:81:ILE:HA	Z:192:LYS:O	1.051
1	DA:216:LYS:HD2	EA:24:ARG:HD2	1.051
1	QA:89:VAL:CB	RA:187:VAL:CG1	1.051
1	QA:64:GLN:CB	RA:209:LYS:HZ3	1.051
1	B:231:ALA:H	C:43:LEU:HD23	1.050
1	M:124:LEU:HD21	N:45:SER:HB3	1.050
1	R:66:ALA:HA	S:205:TYR:OH	1.050
1	EA:12:LEU:O	FA:22:LEU:CD2	1.050
1	EA:87:LYS:N	FA:187:VAL:HG12	1.050
1	JA:87:LYS:HB2	KA:187:VAL:HG13	1.050
1	E:228:THR:OG1	F:140:PRO:HG2	1.049
1	AA:87:LYS:O	BA:187:VAL:CG1	1.049
1	IA:67:ALA:HB1	JA:207:GLY:CA	1.049
1	OA:228:THR:HG21	PA:140:PRO:HG2	1.049

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	RA:86:LEU:HD21	SA:188:GLY:N	1.049
1	A:87:LYS:O	B:187:VAL:CG1	1.048
1	E:231:ALA:HB1	F:42:TYR:N	1.048
1	S:86:LEU:CD2	T:188:GLY:N	1.048
1	GA:233:GLN:OE1	HA:39:THR:HB	1.048
1	YA:228:THR:HG21	ZA:141:VAL:H	1.048
1	A:23:PRO:HD2	ZA:15:LEU:HA	1.048
1	A:42:TYR:O	ZA:231:ALA:CA	1.048
1	S:65:ALA:N	T:209:LYS:HD2	1.047
1	V:14:ARG:C	W:203:VAL:HG11	1.047
1	X:89:VAL:CA	Y:185:LYS:CB	1.047
1	Z:89:VAL:CA	AA:185:LYS:CB	1.047
1	DA:15:LEU:N	EA:22:LEU:CD1	1.047
1	FA:69:ILE:CD	GA:204:THR:H	1.047
1	SA:14:ARG:HB3	TA:203:VAL:HB	1.047
1	UA:16:GLY:CA	VA:22:LEU:O	1.047
1	VA:79:PHE:CB	WA:194:GLU:O	1.047
1	F:87:LYS:N	G:187:VAL:HG12	1.046
1	G:233:GLN:OE1	H:39:THR:HG21	1.046
1	K:124:LEU:CD2	L:45:SER:HB3	1.046
1	P:65:ALA:HB3	Q:208:GLU:CD	1.046
1	KA:90:LEU:HD23	LA:185:LYS:NZ	1.046
1	OA:216:LYS:NZ	PA:24:ARG:HD3	1.046

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	A:67:ALA:HB2	B:207:GLY:O	1.045
1	S:218:PHE:CZ	T:42:TYR:CD2	1.045
1	BA:89:VAL:N	CA:185:LYS:HD3	1.045
1	GA:67:ALA:HB1	HA:207:GLY:CA	1.045
1	D:67:ALA:CA	E:207:GLY:H	1.045
1	B:127:GLY:HA3	C:48:LYS:HE3	1.044
1	A:89:VAL:N	B:185:LYS:HB3	1.044
1	V:79:PHE:CB	W:194:GLU:O	1.044
1	W:14:ARG:HB3	X:203:VAL:CG1	1.044
1	AA:228:THR:HG21	BA:140:PRO:N	1.044
1	FA:87:LYS:N	GA:187:VAL:HG12	1.044
1	RA:216:LYS:HE3	SA:24:ARG:HH11	1.044
1	H:124:LEU:HD11	I:45:SER:HB2	1.043
1	O:86:LEU:CD2	P:188:GLY:HA3	1.043
1	T:14:ARG:HB3	U:203:VAL:HB	1.043
1	JA:228:THR:HG21	KA:140:PRO:HG2	1.043
1	NA:216:LYS:CE	OA:24:ARG:NH1	1.043
1	QA:15:LEU:HG	RA:203:VAL:HG21	1.043
1	BA:218:PHE:HZ	CA:44:GLY:N	1.043
1	F:69:ILE:CD	G:204:THR:H	1.042
1	DA:231:ALA:H	EA:43:LEU:HD23	1.042
1	IA:67:ALA:HB2	JA:207:GLY:CA	1.042
1	KA:124:LEU:CD2	LA:45:SER:HB3	1.042

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	NA:15:LEU:HG	OA:203:VAL:HG21	1.042
1	Z:87:LYS:N	AA:187:VAL:CA	1.042
1	IA:90:LEU:N	JA:185:LYS:HZ3	1.042
1	B:218:PHE:CZ	C:44:GLY:N	1.041
1	DA:79:PHE:HB2	EA:194:GLU:O	1.041
1	EA:231:ALA:HB1	FA:42:TYR:N	1.041
1	HA:15:LEU:HD11	IA:203:VAL:HG23	1.041
1	YA:87:LYS:O	ZA:187:VAL:HG12	1.041
1	S:216:LYS:CE	T:24:ARG:HH11	1.041
1	A:228:THR:CG2	B:140:PRO:CG	1.040
1	B:13:LYS:C	C:22:LEU:HB2	1.040
1	F:15:LEU:CD1	G:22:LEU:HD12	1.040
1	Q:89:VAL:CB	R:187:VAL:CG1	1.040
1	S:216:LYS:HE3	T:24:ARG:HH11	1.040
1	Z:67:ALA:HB2	AA:207:GLY:O	1.040
1	CA:231:ALA:HB1	DA:41:GLU:C	1.040
1	H:67:ALA:HA	I:207:GLY:HA3	1.039
1	U:14:ARG:C	V:203:VAL:HG11	1.039
1	V:15:LEU:N	W:203:VAL:HG21	1.039
1	X:230:PHE:CE2	Y:141:VAL:HG12	1.039
1	Y:230:PHE:CE1	Z:141:VAL:HB	1.039
1	A:141:VAL:CG1	ZA:230:PHE:CD1	1.038
1	A:228:THR:HG21	B:140:PRO:CD	1.038

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	B:65:ALA:CB	C:208:GLU:OE2	1.038
1	Q:14:ARG:CG	R:203:VAL:CG1	1.038
1	U:16:GLY:CA	V:22:LEU:O	1.038
1	CA:17:TYR:HB2	DA:22:LEU:HD21	1.038
1	FA:15:LEU:CD1	GA:22:LEU:HD12	1.038
1	QA:14:ARG:HB3	RA:203:VAL:HB	1.038
1	RA:66:ALA:HA	SA:205:TYR:OH	1.038
1	TA:14:ARG:HB3	UA:203:VAL:HB	1.038
1	WA:14:ARG:HB3	XA:203:VAL:CG1	1.038
1	D:218:PHE:HE2	E:42:TYR:CD2	1.037
1	F:15:LEU:HD11	G:203:VAL:HG23	1.037
1	N:64:GLN:HB3	O:209:LYS:NZ	1.037
1	Y:65:ALA:HB1	Z:208:GLU:CD	1.037
1	WA:15:LEU:HA	XA:23:PRO:HD2	1.037
1	WA:69:ILE:CD	XA:204:THR:H	1.037
1	XA:230:PHE:CE2	YA:141:VAL:HG12	1.037
1	K:228:THR:HG21	L:140:PRO:CD	1.036
1	P:14:ARG:HG3	Q:203:VAL:HG12	1.036
1	OA:65:ALA:CB	PA:208:GLU:OE2	1.036
1	F:67:ALA:HA	G:207:GLY:CA	1.035
1	J:67:ALA:HB2	K:205:TYR:CZ	1.035
1	Z:12:LEU:O	AA:22:LEU:CD1	1.035
1	AA:228:THR:CG2	BA:140:PRO:N	1.035

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	CA:69:ILE:CD	DA:204:THR:C	1.035
1	TA:89:VAL:HA	UA:185:LYS:HB3	1.035
1	OA:216:LYS:NZ	PA:24:ARG:HH11	1.035
1	C:231:ALA:C	D:41:GLU:HB3	1.034
1	R:65:ALA:C	S:209:LYS:HD3	1.034
1	S:14:ARG:O	T:22:LEU:HA	1.034
1	W:89:VAL:HB	X:187:VAL:HG13	1.034
1	AA:89:VAL:N	BA:185:LYS:HB3	1.034
1	BA:218:PHE:CZ	CA:44:GLY:N	1.034
1	FA:15:LEU:HD11	GA:203:VAL:HG23	1.034
1	JA:67:ALA:HB1	KA:207:GLY:CA	1.034
1	NA:15:LEU:HG	OA:203:VAL:HG23	1.034
1	OA:15:LEU:HG	PA:203:VAL:HG21	1.034
1	A:44:GLY:N	ZA:218:PHE:HZ	1.034
1	O:65:ALA:CB	P:208:GLU:OE2	1.033
1	W:89:VAL:HG12	X:187:VAL:CG1	1.033
1	Z:77:LEU:HA	AA:196:SER:O	1.033
1	JA:67:ALA:HB2	KA:207:GLY:HA3	1.033
1	SA:86:LEU:CD2	TA:188:GLY:N	1.033
1	YA:81:ILE:HA	ZA:192:LYS:O	1.033
1	Z:218:PHE:HZ	AA:44:GLY:N	1.033
1	C:69:ILE:CD	D:204:THR:C	1.032
1	W:15:LEU:CA	X:22:LEU:HA	1.032



Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	V:89:VAL:HG11	W:187:VAL:HG11	1.032
1	CA:75:GLU:HA	DA:198:SER:O	1.032
1	CA:231:ALA:C	DA:41:GLU:HB3	1.032
1	GA:233:GLN:OE1	HA:39:THR:HG21	1.032
1	SA:14:ARG:O	TA:22:LEU:HA	1.032
1	C:69:ILE:CD	D:204:THR:CA	1.031
1	E:12:LEU:O	F:22:LEU:CD2	1.031
1	H:15:LEU:HD11	I:203:VAL:HG23	1.031
1	CA:124:LEU:HA	DA:48:LYS:CE	1.031
1	UA:14:ARG:C	VA:203:VAL:HG11	1.031
1	SA:218:PHE:CE2	TA:42:TYR:HD2	1.031
1	A:187:VAL:CA	ZA:87:LYS:N	1.031
1	N:216:LYS:CE	O:24:ARG:NH1	1.030
1	T:16:GLY:N	U:22:LEU:C	1.030
1	Y:89:VAL:HA	Z:185:LYS:HB2	1.030
1	AA:218:PHE:CE2	BA:42:TYR:CE2	1.030
1	PA:65:ALA:HB3	QA:208:GLU:CD	1.030
1	XA:89:VAL:HA	YA:185:LYS:HB2	1.030
1	A:23:PRO:CD	ZA:15:LEU:CA	1.029
1	B:15:LEU:H	C:22:LEU:HD12	1.029
1	M:89:VAL:HA	N:185:LYS:HD3	1.029
1	Z:69:ILE:HB	AA:204:THR:O	1.029
1	CA:13:LYS:C	DA:22:LEU:HB2	1.029

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	CA:216:LYS:CD	DA:24:ARG:HD2	1.029
1	HA:89:VAL:HA	IA:185:LYS:HD2	1.029
1	VA:87:LYS:CD	WA:186:VAL:HG11	1.029
1	YA:230:PHE:CE1	ZA:141:VAL:HB	1.029
1	E:69:ILE:CD	F:204:THR:N	1.028
1	U:118:ALA:HB3	V:209:LYS:HE2	1.028
1	X:89:VAL:HG12	Y:187:VAL:CG1	1.028
1	AA:65:ALA:HB2	BA:208:GLU:CD	1.028
1	FA:67:ALA:HA	GA:207:GLY:CA	1.028
1	WA:89:VAL:HG11	XA:187:VAL:HG11	1.028
1	O:216:LYS:NZ	P:24:ARG:HH11	1.028
1	MA:216:LYS:HZ1	NA:24:ARG:NH1	1.028
1	UA:90:LEU:N	VA:185:LYS:CD	1.028
1	GA:86:LEU:O	HA:186:VAL:O	1.028
1	B:87:LYS:O	C:187:VAL:CG1	1.027
1	D:67:ALA:C	E:205:TYR:CE1	1.027
1	BA:87:LYS:O	CA:187:VAL:CG1	1.027
1	PA:86:LEU:HD21	QA:188:GLY:HA3	1.027
1	RA:15:LEU:N	SA:203:VAL:HG21	1.027
1	WA:89:VAL:HB	XA:187:VAL:HG13	1.027
1	X:228:THR:HB	Y:141:VAL:HG13	1.026
1	FA:124:LEU:HD21	GA:45:SER:OG	1.026
1	SA:86:LEU:HD22	TA:188:GLY:HA3	1.026

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	U:16:GLY:N	V:22:LEU:CA	1.026
1	C:17:TYR:HB2	D:22:LEU:HD21	1.025
1	TA:216:LYS:HE3	UA:24:ARG:NH1	1.025
1	XA:233:GLN:OE1	YA:39:THR:HG22	1.025
1	YA:89:VAL:HG12	ZA:187:VAL:HG11	1.025
1	A:188:GLY:N	ZA:86:LEU:H	1.025
1	H:15:LEU:HD12	I:22:LEU:CD1	1.024
1	S:15:LEU:N	T:203:VAL:HG21	1.024
1	V:14:ARG:HB3	W:203:VAL:CB	1.024
1	DA:82:GLY:O	EA:191:LEU:CB	1.024
1	TA:216:LYS:CE	UA:24:ARG:HH11	1.024
1	A:22:LEU:CD1	ZA:12:LEU:O	1.023
1	C:75:GLU:HA	D:198:SER:O	1.023
1	F:67:ALA:CA	G:207:GLY:CA	1.023
1	F:67:ALA:C	G:205:TYR:CE1	1.023
1	T:15:LEU:CD2	U:204:THR:O	1.023
1	QA:65:ALA:N	RA:209:LYS:HD2	1.023
1	WA:87:LYS:CD	XA:186:VAL:HG11	1.023
1	XA:228:THR:HB	YA:141:VAL:HG13	1.023
1	YA:81:ILE:HG22	ZA:193:VAL:HA	1.023
1	A:196:SER:O	ZA:77:LEU:HA	1.023
1	T:216:LYS:CE	U:24:ARG:HH11	1.023
1	A:65:ALA:HB2	B:208:GLU:CD	1.022

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	T:14:ARG:CG	U:203:VAL:CG1	1.022
1	NA:64:GLN:HB3	OA:209:LYS:NZ	1.022
1	TA:15:LEU:CD2	UA:204:THR:O	1.022
1	YA:14:ARG:HB3	ZA:203:VAL:CG1	1.022
1	N:124:LEU:HD21	O:45:SER:HB2	1.021
1	S:86:LEU:HD23	T:188:GLY:CA	1.021
1	V:87:LYS:HD3	W:186:VAL:HG11	1.021
1	W:89:VAL:CB	X:187:VAL:HG13	1.021
1	AA:228:THR:CG2	BA:140:PRO:CG	1.021
1	NA:86:LEU:HD23	OA:188:GLY:H	1.021
1	F:124:LEU:HD21	G:45:SER:OG	1.020
1	F:233:GLN:HE22	G:39:THR:HG22	1.020
1	G:64:GLN:C	H:209:LYS:NZ	1.020
1	L:90:LEU:CD2	M:185:LYS:NZ	1.020
1	EA:69:ILE:CD	FA:204:THR:N	1.020
1	GA:64:GLN:C	HA:209:LYS:CE	1.020
1	RA:65:ALA:C	SA:209:LYS:HD3	1.020
1	A:75:GLU:HA	B:198:SER:O	1.019
1	GA:15:LEU:HD12	HA:22:LEU:HD12	1.019
1	IA:231:ALA:HB2	JA:42:TYR:O	1.019
1	SA:218:PHE:CZ	TA:42:TYR:CD2	1.019
1	VA:14:ARG:HB3	WA:203:VAL:CB	1.019
1	VA:87:LYS:HD3	WA:186:VAL:HG11	1.019

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	T:231:ALA:HB2	U:42:TYR:N	1.019
1	A:15:LEU:CA	B:23:PRO:HD2	1.018
1	A:69:ILE:HB	B:204:THR:O	1.018
1	E:15:LEU:CD1	F:22:LEU:HD12	1.018
1	D:15:LEU:N	E:22:LEU:HD12	1.018
1	G:67:ALA:HB1	H:207:GLY:CA	1.018
1	F:64:GLN:O	G:209:LYS:CE	1.018
1	J:67:ALA:HB1	K:207:GLY:CA	1.018
1	Q:216:LYS:CE	R:24:ARG:CD	1.018
1	BA:65:ALA:CB	CA:208:GLU:OE2	1.018
1	CA:69:ILE:CD	DA:204:THR:CA	1.018
1	C:82:GLY:O	D:191:LEU:HA	1.017
1	I:86:LEU:CD1	J:188:GLY:N	1.017
1	Q:65:ALA:N	R:209:LYS:HD2	1.017
1	Y:14:ARG:C	Z:22:LEU:CA	1.017
1	BA:127:GLY:HA3	CA:48:LYS:HE3	1.017
1	BA:74:THR:O	CA:199:SER:HA	1.017
1	BA:231:ALA:H	CA:43:LEU:HD23	1.016
1	NA:124:LEU:HD21	OA:45:SER:HB2	1.016
1	CA:87:LYS:N	DA:187:VAL:CA	1.016
1	N:15:LEU:HG	O:203:VAL:HG21	1.015
1	Q:216:LYS:HZ1	R:24:ARG:CD	1.015
1	AA:75:GLU:HA	BA:198:SER:O	1.015

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	TA:16:GLY:N	UA:22:LEU:C	1.015
1	VA:15:LEU:N	WA:203:VAL:HG21	1.015
1	U:90:LEU:N	V:185:LYS:CD	1.015
1	C:124:LEU:HA	D:48:LYS:CE	1.014
1	T:16:GLY:H	U:22:LEU:C	1.014
1	Y:14:ARG:HB3	Z:203:VAL:CG1	1.014
1	Z:230:PHE:CZ	AA:141:VAL:CA	1.014
1	YA:89:VAL:HA	ZA:185:LYS:HB2	1.014
1	C:216:LYS:CD	D:24:ARG:HD2	1.013
1	D:216:LYS:HD2	E:24:ARG:HD2	1.013
1	E:67:ALA:CA	F:207:GLY:CA	1.013
1	E:231:ALA:H	F:43:LEU:HD23	1.013
1	F:89:VAL:CA	G:185:LYS:HD3	1.013
1	Y:89:VAL:H	Z:185:LYS:HB3	1.013
1	AA:13:LYS:C	BA:22:LEU:HB2	1.013
1	AA:69:ILE:HB	BA:204:THR:O	1.013
1	EA:15:LEU:CD1	FA:22:LEU:HD12	1.013
1	IA:86:LEU:CD2	JA:187:VAL:C	1.013
1	WA:79:PHE:HB3	XA:194:GLU:O	1.013
1	G:86:LEU:O	H:186:VAL:O	1.013
1	E:124:LEU:CA	F:48:LYS:HE2	1.012
1	HA:15:LEU:HD12	IA:22:LEU:CD1	1.012
1	JA:228:THR:HG22	KA:140:PRO:HD2	1.012

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	RA:89:VAL:HB	SA:187:VAL:HG13	1.012
1	C:13:LYS:C	D:22:LEU:HB2	1.011
1	X:233:GLN:OE1	Y:39:THR:HG22	1.011
1	AA:228:THR:HG21	BA:140:PRO:CD	1.011
1	CA:87:LYS:HG3	DA:185:LYS:O	1.011
1	DA:15:LEU:HD12	EA:22:LEU:HD12	1.011
1	YA:14:ARG:C	ZA:22:LEU:CA	1.011
1	V:79:PHE:HB2	W:194:GLU:O	1.010
1	W:89:VAL:HG11	X:187:VAL:HG11	1.010
1	Y:231:ALA:CA	Z:42:TYR:O	1.010
1	Y:12:LEU:O	Z:22:LEU:HD13	1.010
1	IA:233:GLN:OE1	JA:39:THR:HG21	1.010
1	YA:228:THR:HG23	ZA:140:PRO:CD	1.010
1	I:89:VAL:CA	J:185:LYS:HD3	1.009
1	Q:14:ARG:HB3	R:203:VAL:HB	1.009
1	X:87:LYS:N	Y:187:VAL:HA	1.009
1	AA:230:PHE:CG	BA:141:VAL:HG12	1.009
1	HA:124:LEU:HA	IA:48:LYS:CE	1.009
1	HA:124:LEU:HD11	IA:45:SER:HB2	1.009
1	PA:228:THR:HG21	QA:140:PRO:HG2	1.009
1	WA:14:ARG:CB	XA:203:VAL:CG1	1.009
1	XA:86:LEU:CD2	YA:188:GLY:C	1.009
1	Z:86:LEU:H	AA:188:GLY:N	1.009

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	D:82:GLY:O	E:191:LEU:CB	1.008
1	CA:124:LEU:HD23	DA:47:GLU:HG3	1.008
1	DA:67:ALA:C	EA:205:TYR:CE1	1.008
1	G:64:GLN:C	H:209:LYS:CE	1.007
1	H:89:VAL:HA	I:185:LYS:HD2	1.007
1	Z:218:PHE:CZ	AA:44:GLY:N	1.007
1	CA:77:LEU:HA	DA:196:SER:O	1.007
1	BA:82:GLY:O	CA:191:LEU:CB	1.007
1	EA:16:GLY:O	FA:24:ARG:HD3	1.007
1	EA:89:VAL:N	FA:185:LYS:CD	1.007
1	FA:233:GLN:NE2	GA:39:THR:HG22	1.007
1	NA:230:PHE:CE1	OA:141:VAL:HG13	1.007
1	XA:69:ILE:CD	YA:204:THR:C	1.007
1	C:77:LEU:HA	D:196:SER:O	1.006
1	T:14:ARG:HB3	U:203:VAL:CB	1.006
1	V:87:LYS:HD2	W:186:VAL:CA	1.006
1	Y:81:ILE:HG22	Z:193:VAL:HA	1.006
1	DA:17:TYR:N	EA:22:LEU:CD2	1.006
1	SA:89:VAL:CB	TA:187:VAL:HG13	1.006
1	TA:16:GLY:H	UA:22:LEU:C	1.006
1	EA:86:LEU:O	FA:186:VAL:O	1.006
1	A:24:ARG:HD3	ZA:16:GLY:O	1.005
1	I:86:LEU:CD2	J:187:VAL:C	1.005



Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	Y:228:THR:HG23	Z:140:PRO:CD	1.005
1	IA:86:LEU:CD1	JA:188:GLY:N	1.005
1	KA:67:ALA:HB1	LA:207:GLY:CA	1.005
1	A:230:PHE:CG	B:141:VAL:HG12	1.004
1	B:218:PHE:HZ	C:43:LEU:C	1.004
1	C:218:PHE:HZ	D:43:LEU:C	1.004
1	R:86:LEU:HD21	S:188:GLY:N	1.004
1	Y:67:ALA:HB2	Z:207:GLY:O	1.004
1	CA:89:VAL:H	DA:185:LYS:HB3	1.004
1	CA:82:GLY:O	DA:191:LEU:HA	1.004
1	EA:124:LEU:CA	FA:48:LYS:HE2	1.004
1	X:86:LEU:CD2	Y:188:GLY:C	1.003
1	BA:81:ILE:HA	CA:192:LYS:O	1.003
1	GA:64:GLN:C	HA:209:LYS:NZ	1.003
1	KA:228:THR:HG21	LA:140:PRO:CD	1.003
1	VA:79:PHE:HB2	WA:194:GLU:O	1.003
1	A:44:GLY:N	ZA:218:PHE:CZ	1.003
1	C:87:LYS:N	D:187:VAL:CA	1.003
1	O:86:LEU:HD23	P:188:GLY:H	1.003
1	E:16:GLY:O	F:24:ARG:HD3	1.002
1	N:15:LEU:CG	O:203:VAL:HG23	1.002
1	S:231:ALA:HB2	T:42:TYR:CB	1.002
1	PA:14:ARG:HG3	QA:203:VAL:HG12	1.002

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	PA:216:LYS:HZ1	QA:24:ARG:CD	1.002
1	VA:87:LYS:HD2	WA:186:VAL:CA	1.002
1	I:231:ALA:HB2	J:42:TYR:O	1.001
1	J:228:THR:HG22	K:140:PRO:HD2	1.001
1	N:90:LEU:CD2	O:185:LYS:HZ3	1.001
1	N:228:THR:HG21	O:140:PRO:CG	1.001
1	T:216:LYS:HE3	U:24:ARG:NH1	1.001
1	BA:12:LEU:C	CA:22:LEU:HD13	1.001
1	SA:231:ALA:HB2	TA:42:TYR:CB	1.001
1	UA:89:VAL:C	VA:185:LYS:HD3	1.001
1	TA:15:LEU:N	UA:203:VAL:CG2	1.001
1	B:82:GLY:O	C:191:LEU:CB	1.000
1	D:17:TYR:N	E:22:LEU:CD2	1.000
1	G:90:LEU:CB	H:185:LYS:NZ	1.000
1	N:230:PHE:CE1	O:141:VAL:HG13	1.000
1	VA:14:ARG:CB	WA:203:VAL:CG1	1.000
1	VA:228:THR:HB	WA:141:VAL:HG13	1.000
1	B:228:THR:OG1	C:140:PRO:HG2	0.999
1	E:87:LYS:HG3	F:185:LYS:O	0.999
1	I:67:ALA:CA	J:207:GLY:HA3	0.999
1	P:14:ARG:O	Q:22:LEU:CA	0.999
1	Q:124:LEU:CD2	R:45:SER:CB	0.999
1	T:89:VAL:HG11	U:187:VAL:HG11	0.999

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	W:87:LYS:CE	X:186:VAL:CG1	0.999
1	IA:67:ALA:CA	JA:207:GLY:HA3	0.999
1	XA:87:LYS:N	YA:187:VAL:HA	0.999
1	A:205:TYR:CE2	ZA:67:ALA:CB	0.998
1	K:67:ALA:HB1	L:207:GLY:CA	0.998
1	Q:65:ALA:CB	R:208:GLU:CD	0.998
1	Q:86:LEU:CD2	R:188:GLY:H	0.998
1	V:14:ARG:HG3	W:203:VAL:HG12	0.998
1	X:12:LEU:O	Y:22:LEU:HD13	0.998
1	IA:89:VAL:CA	JA:185:LYS:HD3	0.998
1	QA:216:LYS:HZ3	RA:24:ARG:CD	0.998
1	Y:86:LEU:H	Z:188:GLY:N	0.998
1	A:228:THR:HG21	B:140:PRO:N	0.997
1	A:233:GLN:CD	B:39:THR:HG22	0.997
1	H:233:GLN:OE1	I:39:THR:CB	0.997
1	M:15:LEU:HG	N:203:VAL:HG21	0.997
1	Y:230:PHE:CZ	Z:141:VAL:HA	0.997
1	Y:230:PHE:HA	Z:43:LEU:HD23	0.997
1	Z:228:THR:HB	AA:141:VAL:HG13	0.997
1	UA:118:ALA:HB3	VA:209:LYS:HE2	0.997
1	VA:87:LYS:HE3	WA:186:VAL:HG13	0.997
1	S:66:ALA:HB1	T:205:TYR:HE1	0.997
1	D:15:LEU:N	E:22:LEU:CD1	0.996

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	D:87:LYS:N	E:187:VAL:HG12	0.996
1	R:216:LYS:HE3	S:24:ARG:NH1	0.996
1	T:89:VAL:HA	U:185:LYS:HB3	0.996
1	W:14:ARG:CB	X:203:VAL:CG1	0.996
1	GA:90:LEU:CB	HA:185:LYS:NZ	0.996
1	HA:233:GLN:OE1	IA:39:THR:CB	0.996
1	LA:124:LEU:HD21	MA:45:SER:HB2	0.996
1	RA:14:ARG:HG3	SA:203:VAL:HG11	0.996
1	YA:89:VAL:HB	ZA:187:VAL:CG1	0.996
1	U:216:LYS:CE	V:24:ARG:HH11	0.996
1	A:13:LYS:C	B:22:LEU:HB2	0.995
1	A:205:TYR:CD2	ZA:67:ALA:HB3	0.995
1	B:12:LEU:C	C:22:LEU:HD13	0.995
1	C:87:LYS:H	D:187:VAL:HG12	0.995
1	X:67:ALA:HB2	Y:207:GLY:O	0.995
1	BA:218:PHE:HZ	CA:43:LEU:C	0.995
1	D:15:LEU:HD12	E:22:LEU:HD12	0.994
1	H:67:ALA:HB2	I:207:GLY:CA	0.994
1	O:15:LEU:CD1	P:203:VAL:HG23	0.994
1	N:14:ARG:O	O:22:LEU:CB	0.994
1	EA:124:LEU:HA	FA:48:LYS:HE2	0.994
1	EA:231:ALA:H	FA:43:LEU:HD23	0.994
1	LA:67:ALA:HB3	MA:205:TYR:CZ	0.994

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	TA:216:LYS:HE3	UA:24:ARG:HH11	0.994
1	YA:86:LEU:H	ZA:188:GLY:N	0.994
1	T:66:ALA:CA	U:205:TYR:HH	0.994
1	R:89:VAL:HB	S:187:VAL:HG13	0.993
1	U:14:ARG:CG	V:203:VAL:CG1	0.993
1	Y:230:PHE:HE1	Z:141:VAL:CB	0.993
1	BA:228:THR:OG1	CA:140:PRO:HG2	0.993
1	OA:15:LEU:CD1	PA:203:VAL:HG23	0.993
1	VA:14:ARG:HG3	WA:203:VAL:HG12	0.993
1	WA:89:VAL:CB	XA:187:VAL:HG13	0.993
1	AA:218:PHE:CD2	BA:42:TYR:HD2	0.993
1	UA:16:GLY:N	VA:22:LEU:CA	0.993
1	G:90:LEU:HB3	H:185:LYS:NZ	0.992
1	S:14:ARG:CB	T:203:VAL:HB	0.992
1	U:89:VAL:C	V:185:LYS:HD3	0.992
1	GA:90:LEU:HB3	HA:185:LYS:NZ	0.992
1	IA:67:ALA:HB2	JA:207:GLY:HA3	0.992
1	IA:233:GLN:OE1	JA:39:THR:CG2	0.992
1	UA:15:LEU:CD2	VA:204:THR:O	0.992
1	TA:15:LEU:N	UA:203:VAL:HG21	0.992
1	N:86:LEU:HD23	O:188:GLY:H	0.992
1	C:231:ALA:HB1	D:41:GLU:C	0.991
1	F:124:LEU:CG	G:45:SER:CB	0.991

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	K:228:THR:HG21	L:140:PRO:HG3	0.991
1	V:228:THR:CB	W:141:VAL:HG13	0.991
1	Z:67:ALA:HB3	AA:205:TYR:CD2	0.991
1	Z:87:LYS:H	AA:187:VAL:HA	0.991
1	QA:89:VAL:CB	RA:187:VAL:HG11	0.991
1	TA:14:ARG:HB3	UA:203:VAL:CB	0.991
1	VA:228:THR:CB	WA:141:VAL:HG13	0.991
1	YA:75:GLU:CB	ZA:198:SER:O	0.991
1	YA:65:ALA:HB1	ZA:208:GLU:CD	0.991
1	A:187:VAL:CG1	ZA:87:LYS:O	0.990
1	AA:15:LEU:CA	BA:23:PRO:HD2	0.990
1	CA:89:VAL:N	DA:185:LYS:CD	0.990
1	DA:87:LYS:N	EA:187:VAL:HG12	0.990
1	EA:228:THR:OG1	FA:140:PRO:HG2	0.990
1	SA:66:ALA:CA	TA:205:TYR:OH	0.990
1	SA:14:ARG:CB	TA:203:VAL:HB	0.990
1	YA:230:PHE:CZ	ZA:141:VAL:HA	0.990
1	RA:128:GLN:OE1	SA:48:LYS:NZ	0.990
1	G:15:LEU:CD1	H:22:LEU:CD1	0.989
1	P:216:LYS:HE2	Q:24:ARG:HD2	0.989
1	R:231:ALA:HB2	S:42:TYR:HB3	0.989
1	GA:15:LEU:CD1	HA:22:LEU:CD1	0.989
1	XA:12:LEU:O	YA:22:LEU:HD13	0.989

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	P:216:LYS:HE3	Q:24:ARG:HH11	0.988
1	YA:14:ARG:C	ZA:22:LEU:H	0.988
1	A:193:VAL:HA	ZA:81:ILE:HG22	0.987
1	F:89:VAL:H	G:185:LYS:HD3	0.987
1	P:228:THR:HG21	Q:140:PRO:HG2	0.987
1	T:15:LEU:N	U:203:VAL:CG2	0.987
1	V:228:THR:HB	W:141:VAL:HG13	0.987
1	W:89:VAL:CA	X:185:LYS:HB3	0.987
1	X:69:ILE:CD	Y:204:THR:C	0.987
1	AA:233:GLN:CD	BA:39:THR:HG22	0.987
1	V:216:LYS:CE	W:24:ARG:NH1	0.987
1	O:15:LEU:CG	P:203:VAL:CG2	0.986
1	W:79:PHE:HB3	X:194:GLU:O	0.986
1	Z:87:LYS:O	AA:187:VAL:CG1	0.986
1	SA:89:VAL:CG1	TA:187:VAL:HG11	0.986
1	D:89:VAL:N	E:185:LYS:CD	0.985
1	H:124:LEU:HA	I:48:LYS:CE	0.985
1	V:87:LYS:HE3	W:186:VAL:HG13	0.985
1	AA:15:LEU:CA	BA:23:PRO:CD	0.985
1	DA:89:VAL:C	EA:185:LYS:HD2	0.985
1	EA:87:LYS:HG3	FA:185:LYS:O	0.985
1	PA:14:ARG:O	QA:22:LEU:CA	0.985
1	RA:231:ALA:HB2	SA:42:TYR:HB3	0.985

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	UA:218:PHE:HZ	VA:42:TYR:CD2	0.985
1	WA:15:LEU:CA	XA:23:PRO:HD2	0.985
1	C:67:ALA:HB2	D:207:GLY:O	0.984
1	C:74:THR:O	D:199:SER:HA	0.984
1	M:67:ALA:HB3	N:205:TYR:CE1	0.984
1	N:90:LEU:CG	O:185:LYS:NZ	0.984
1	U:15:LEU:CD2	V:204:THR:O	0.984
1	CA:89:VAL:HA	DA:185:LYS:HD2	0.984
1	PA:216:LYS:HE2	QA:24:ARG:HD2	0.984
1	YA:230:PHE:HA	ZA:43:LEU:HD23	0.984
1	B:81:ILE:HA	C:192:LYS:O	0.983
1	F:67:ALA:HB1	G:207:GLY:CA	0.983
1	I:233:GLN:OE1	J:39:THR:CG2	0.983
1	T:15:LEU:N	U:203:VAL:HG21	0.983
1	W:87:LYS:CG	X:186:VAL:HG12	0.983
1	Z:15:LEU:CA	AA:23:PRO:CD	0.983
1	AA:89:VAL:CG1	BA:187:VAL:HG11	0.983
1	PA:64:GLN:HB3	QA:209:LYS:HZ3	0.983
1	PA:216:LYS:CE	QA:24:ARG:HD2	0.983
1	RA:216:LYS:HE3	SA:24:ARG:NH1	0.983
1	XA:127:GLY:HA3	YA:48:LYS:HE3	0.983
1	A:218:PHE:CD2	B:42:TYR:HD2	0.983
1	N:216:LYS:HZ1	O:24:ARG:HH11	0.983



Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	A:87:LYS:H	B:187:VAL:HA	0.982
1	Y:89:VAL:HB	Z:187:VAL:CG1	0.982
1	Z:12:LEU:O	AA:22:LEU:CD2	0.982
1	CA:218:PHE:HZ	DA:43:LEU:C	0.982
1	MA:15:LEU:HG	NA:203:VAL:HG21	0.982
1	B:74:THR:O	C:199:SER:HA	0.981
1	V:14:ARG:CB	W:203:VAL:CG1	0.981
1	Y:228:THR:HG21	Z:141:VAL:H	0.981
1	Z:16:GLY:O	AA:24:ARG:HD3	0.981
1	DA:231:ALA:CB	EA:41:GLU:C	0.981
1	NA:228:THR:HG21	OA:140:PRO:CG	0.981
1	NA:14:ARG:O	OA:22:LEU:CB	0.981
1	C:87:LYS:HG3	D:185:LYS:O	0.980
1	B:87:LYS:NZ	C:186:VAL:HG12	0.980
1	D:124:LEU:CA	E:48:LYS:HE2	0.980
1	I:233:GLN:OE1	J:39:THR:HG21	0.980
1	Q:14:ARG:HG3	R:203:VAL:HG11	0.980
1	S:14:ARG:HG3	T:203:VAL:HG11	0.980
1	S:89:VAL:CG1	T:187:VAL:CG1	0.980
1	SA:89:VAL:CG1	TA:187:VAL:CG1	0.980
1	XA:89:VAL:HA	YA:185:LYS:HB3	0.980
1	R:128:GLN:OE1	S:48:LYS:NZ	0.980
1	D:89:VAL:C	E:185:LYS:HD2	0.979

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	L:67:ALA:HB3	M:205:TYR:CZ	0.979
1	Z:228:THR:HG21	AA:141:VAL:H	0.979
1	BA:15:LEU:H	CA:22:LEU:HD12	0.979
1	CA:74:THR:O	DA:199:SER:HA	0.979
1	FA:87:LYS:H	GA:187:VAL:HG12	0.979
1	NA:14:ARG:HG3	OA:203:VAL:CG1	0.979
1	TA:218:PHE:HZ	UA:42:TYR:CD2	0.979
1	YA:89:VAL:CB	ZA:187:VAL:HG11	0.979
1	C:89:VAL:HA	D:185:LYS:HD2	0.978
1	N:14:ARG:HG3	O:203:VAL:CG1	0.978
1	Q:89:VAL:CB	R:187:VAL:HG11	0.978
1	Z:228:THR:HG23	AA:140:PRO:HD2	0.978
1	P:64:GLN:CB	Q:209:LYS:HZ3	0.978
1	OA:86:LEU:HD23	PA:188:GLY:H	0.978
1	A:140:PRO:HD2	ZA:228:THR:HG23	0.977
1	A:141:VAL:CA	ZA:230:PHE:CZ	0.977
1	A:141:VAL:HG13	ZA:228:THR:HB	0.977
1	A:15:LEU:CA	B:23:PRO:CD	0.977
1	Q:230:PHE:CZ	R:141:VAL:HG12	0.977
1	S:66:ALA:CA	T:205:TYR:OH	0.977
1	A:86:LEU:H	B:188:GLY:H	0.977
1	Y:14:ARG:C	Z:22:LEU:H	0.977
1	A:228:THR:HB	B:141:VAL:CG1	0.976

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	D:68:GLY:N	E:205:TYR:CE1	0.976
1	F:15:LEU:CD1	G:22:LEU:CD1	0.976
1	F:69:ILE:CD	G:204:THR:O	0.976
1	Z:81:ILE:HG22	AA:193:VAL:HA	0.976
1	NA:90:LEU:CG	OA:185:LYS:NZ	0.976
1	UA:216:LYS:HE3	VA:24:ARG:HH11	0.976
1	WA:89:VAL:CA	XA:185:LYS:HB3	0.976
1	WA:231:ALA:O	XA:41:GLU:CB	0.976
1	G:15:LEU:HD12	H:22:LEU:HD12	0.975
1	U:216:LYS:HE3	V:24:ARG:HH11	0.975
1	Z:89:VAL:CA	AA:185:LYS:HB2	0.975
1	SA:66:ALA:HB1	TA:205:TYR:CE1	0.975
1	UA:15:LEU:N	VA:203:VAL:HG21	0.975
1	YA:89:VAL:HG12	ZA:187:VAL:CG1	0.975
1	S:66:ALA:HB1	T:205:TYR:CE1	0.974
1	T:89:VAL:CB	U:187:VAL:HG13	0.974
1	X:89:VAL:N	Y:185:LYS:HB3	0.974
1	DA:124:LEU:CA	EA:48:LYS:HE2	0.974
1	LA:228:THR:CG2	MA:140:PRO:CG	0.974
1	QA:230:PHE:CZ	RA:141:VAL:HG12	0.974
1	WA:14:ARG:C	XA:203:VAL:HG11	0.974
1	C:124:LEU:HD23	D:47:GLU:HG3	0.973
1	C:89:VAL:H	D:185:LYS:HB3	0.973

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	J:90:LEU:HD23	K:185:LYS:HZ1	0.973
1	W:14:ARG:C	X:203:VAL:HG11	0.973
1	LA:15:LEU:HG	MA:203:VAL:HG21	0.973
1	TA:66:ALA:HA	UA:205:TYR:OH	0.973
1	A:89:VAL:CG1	B:187:VAL:HG11	0.972
1	O:124:LEU:CD2	P:45:SER:CB	0.972
1	P:14:ARG:HG3	Q:203:VAL:HG11	0.972
1	Y:75:GLU:CB	Z:198:SER:O	0.972
1	BA:16:GLY:C	CA:22:LEU:HD23	0.972
1	DA:124:LEU:HA	EA:48:LYS:HE2	0.972
1	QA:14:ARG:HG3	RA:203:VAL:HG11	0.972
1	UA:14:ARG:CG	VA:203:VAL:CG1	0.972
1	XA:89:VAL:CA	YA:185:LYS:HB3	0.972
1	YA:12:LEU:O	ZA:22:LEU:HD13	0.972
1	A:141:VAL:H	ZA:228:THR:HG21	0.972
1	N:89:VAL:HA	O:185:LYS:HD3	0.971
1	R:65:ALA:CB	S:208:GLU:OE1	0.971
1	W:89:VAL:C	X:185:LYS:HD2	0.971
1	X:12:LEU:C	Y:22:LEU:HD13	0.971
1	Y:89:VAL:CB	Z:187:VAL:HG11	0.971
1	AA:228:THR:HB	BA:141:VAL:CG1	0.971
1	BA:87:LYS:HZ2	CA:186:VAL:HG12	0.971
1	LA:90:LEU:CD2	MA:185:LYS:NZ	0.971

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	NA:15:LEU:CG	OA:203:VAL:HG23	0.971
1	WA:89:VAL:C	XA:185:LYS:HD2	0.971
1	SA:66:ALA:HB1	TA:205:TYR:HE1	0.971
1	CA:67:ALA:O	DA:207:GLY:N	0.971
1	C:68:GLY:N	D:205:TYR:CE1	0.970
1	P:216:LYS:CE	Q:24:ARG:HD2	0.970
1	T:216:LYS:HE3	U:24:ARG:HH11	0.970
1	U:15:LEU:N	V:203:VAL:CG2	0.970
1	X:14:ARG:HG3	Y:203:VAL:CG1	0.970
1	W:231:ALA:O	X:41:GLU:CB	0.970
1	AA:73:LYS:HG3	BA:200:GLN:O	0.970
1	AA:86:LEU:C	BA:187:VAL:HA	0.970
1	KA:228:THR:HG21	LA:140:PRO:HG3	0.970
1	GA:65:ALA:N	HA:209:LYS:HZ3	0.970
1	A:141:VAL:CB	ZA:230:PHE:HE1	0.969
1	S:89:VAL:CG1	T:187:VAL:HG11	0.969
1	MA:65:ALA:HB3	NA:208:GLU:OE2	0.969
1	SA:65:ALA:O	TA:209:LYS:HD3	0.969
1	XA:67:ALA:HB2	YA:207:GLY:O	0.969
1	VA:216:LYS:CE	WA:24:ARG:NH1	0.969
1	A:86:LEU:C	B:187:VAL:HA	0.968
1	E:124:LEU:HA	F:48:LYS:HE2	0.968
1	Y:157:GLN:HE22	Z:25:GLU:HB3	0.968

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	MA:67:ALA:HB3	NA:205:TYR:CE1	0.968
1	PA:14:ARG:HG3	QA:203:VAL:HG11	0.968
1	QA:65:ALA:CB	RA:208:GLU:CD	0.968
1	SA:66:ALA:CB	TA:205:TYR:CE1	0.968
1	YA:69:ILE:CD	ZA:204:THR:O	0.968
1	D:231:ALA:CB	E:41:GLU:C	0.967
1	L:228:THR:CG2	M:140:PRO:CG	0.967
1	OA:216:LYS:CE	PA:24:ARG:NH1	0.967
1	S:66:ALA:CB	T:205:TYR:HE1	0.967
1	A:187:VAL:HG11	ZA:89:VAL:HG12	0.966
1	X:68:GLY:O	Y:205:TYR:HA	0.966
1	CA:67:ALA:HB2	DA:207:GLY:O	0.966
1	FA:69:ILE:CD	GA:204:THR:O	0.966
1	OA:64:GLN:HB3	PA:209:LYS:HZ3	0.966
1	QA:124:LEU:CD2	RA:45:SER:CB	0.966
1	G:65:ALA:N	H:209:LYS:HZ3	0.966
1	D:67:ALA:HB1	E:206:LYS:C	0.965
1	Q:89:VAL:CG2	R:187:VAL:HG11	0.965
1	U:157:GLN:HE22	V:25:GLU:HB3	0.965
1	Z:230:PHE:HA	AA:43:LEU:HD23	0.965
1	RA:14:ARG:CB	SA:203:VAL:HB	0.965
1	XA:68:GLY:O	YA:205:TYR:HA	0.965
1	A:230:PHE:CD2	B:141:VAL:HG12	0.964

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	B:16:GLY:C	C:22:LEU:HD23	0.964
1	X:127:GLY:HA3	Y:48:LYS:HE3	0.964
1	CA:68:GLY:N	DA:205:TYR:CE1	0.964
1	XA:17:TYR:O	YA:22:LEU:HD22	0.964
1	R:89:VAL:HG21	S:187:VAL:HG11	0.963
1	Z:89:VAL:HG12	AA:187:VAL:HG11	0.963
1	AA:228:THR:HG21	BA:140:PRO:CG	0.963
1	CA:87:LYS:H	DA:187:VAL:HG12	0.963
1	PA:216:LYS:HE3	QA:24:ARG:HH11	0.963
1	XA:14:ARG:HG3	YA:203:VAL:CG1	0.963
1	YA:69:ILE:HB	ZA:204:THR:O	0.963
1	A:22:LEU:CD2	ZA:12:LEU:O	0.962
1	A:73:LYS:HG3	B:200:GLN:O	0.962
1	B:90:LEU:N	C:185:LYS:HD3	0.962
1	M:90:LEU:CD2	N:185:LYS:HZ1	0.962
1	W:14:ARG:HB3	X:203:VAL:HB	0.962
1	DA:124:LEU:HD23	EA:47:GLU:HG3	0.962
1	QA:216:LYS:CE	RA:24:ARG:CD	0.962
1	DA:67:ALA:HB1	EA:206:LYS:C	0.961
1	RA:64:GLN:CB	SA:209:LYS:CE	0.961
1	XA:228:THR:HG21	YA:141:VAL:H	0.961
1	S:65:ALA:O	T:209:LYS:CB	0.960
1	T:231:ALA:HB3	U:41:GLU:C	0.960

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	XA:89:VAL:N	YA:185:LYS:HB3	0.960
1	C:218:PHE:HE2	D:42:TYR:CE2	0.960
1	B:17:TYR:CA	C:22:LEU:HD23	0.959
1	M:65:ALA:HB3	N:208:GLU:OE2	0.959
1	R:14:ARG:HG3	S:203:VAL:HG11	0.959
1	R:64:GLN:CB	S:209:LYS:CE	0.959
1	Z:67:ALA:CB	AA:205:TYR:CE2	0.959
1	HA:67:ALA:HB2	IA:207:GLY:CA	0.959
1	QA:89:VAL:CG2	RA:187:VAL:HG11	0.959
1	TA:230:PHE:HE1	UA:141:VAL:HG12	0.959
1	WA:87:LYS:CG	XA:186:VAL:HG12	0.959
1	YA:231:ALA:CA	ZA:42:TYR:O	0.959
1	V:89:VAL:HG12	W:187:VAL:CG1	0.958
1	W:89:VAL:CA	X:185:LYS:CB	0.958
1	FA:67:ALA:HB1	GA:207:GLY:CA	0.958
1	HA:124:LEU:CD2	IA:45:SER:CB	0.958
1	F:67:ALA:N	G:205:TYR:OH	0.958
1	I:86:LEU:HD22	J:188:GLY:N	0.958
1	S:66:ALA:CA	T:205:TYR:CZ	0.957
1	U:15:LEU:N	V:203:VAL:HG21	0.957
1	BA:87:LYS:NZ	CA:186:VAL:HG12	0.957
1	DA:68:GLY:N	EA:205:TYR:CE1	0.957
1	OA:124:LEU:CD2	PA:45:SER:CB	0.957



Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	R:14:ARG:CB	S:203:VAL:HB	0.956
1	W:15:LEU:CA	X:23:PRO:HD2	0.956
1	AA:230:PHE:CD2	BA:141:VAL:HG12	0.956
1	DA:17:TYR:H	EA:22:LEU:CD2	0.956
1	SA:65:ALA:O	TA:209:LYS:CB	0.956
1	YA:228:THR:HB	ZA:141:VAL:HG13	0.956
1	X:89:VAL:HG12	Y:187:VAL:HG11	0.955
1	GA:15:LEU:CD1	HA:22:LEU:HD12	0.955
1	IA:124:LEU:HD23	JA:47:GLU:OE2	0.955
1	WA:15:LEU:CA	XA:22:LEU:HA	0.955
1	YA:65:ALA:HB3	ZA:208:GLU:CD	0.955
1	N:216:LYS:NZ	O:24:ARG:NH1	0.955
1	X:86:LEU:N	Y:188:GLY:H	0.955
1	T:16:GLY:HA3	U:22:LEU:O	0.954
1	S:65:ALA:O	T:209:LYS:HD3	0.954
1	XA:14:ARG:CG	YA:203:VAL:CG1	0.954
1	A:198:SER:O	ZA:75:GLU:CB	0.954
1	I:86:LEU:CD2	J:188:GLY:N	0.953
1	I:124:LEU:HD23	J:47:GLU:OE2	0.953
1	H:89:VAL:N	I:185:LYS:HD3	0.953
1	S:64:GLN:HB2	T:209:LYS:HE2	0.953
1	X:89:VAL:HA	Y:185:LYS:HB3	0.953
1	CA:15:LEU:H	DA:22:LEU:CD1	0.953

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	IA:86:LEU:CD2	JA:188:GLY:N	0.953
1	VA:216:LYS:HE3	WA:24:ARG:NH1	0.953
1	XA:12:LEU:C	YA:22:LEU:HD13	0.953
1	C:124:LEU:O	D:48:LYS:NZ	0.953
1	X:73:LYS:CG	Y:200:GLN:O	0.953
1	B:231:ALA:O	C:41:GLU:CG	0.952
1	E:89:VAL:N	F:185:LYS:CD	0.952
1	FA:15:LEU:CG	GA:203:VAL:HG21	0.952
1	FA:15:LEU:HD11	GA:203:VAL:HG21	0.952
1	TA:231:ALA:HB3	UA:41:GLU:C	0.952
1	TA:14:ARG:CB	UA:203:VAL:HB	0.952
1	NA:216:LYS:NZ	OA:24:ARG:NH1	0.952
1	D:124:LEU:HA	E:48:LYS:HE2	0.951
1	H:124:LEU:CD2	I:45:SER:CB	0.951
1	I:124:LEU:CD2	J:45:SER:CB	0.951
1	N:86:LEU:HD21	O:188:GLY:HA3	0.951
1	S:65:ALA:C	T:209:LYS:HD3	0.951
1	X:14:ARG:CG	Y:203:VAL:CG1	0.951
1	X:89:VAL:CA	Y:185:LYS:HB3	0.951
1	Y:69:ILE:HB	Z:204:THR:O	0.951
1	DA:15:LEU:N	EA:22:LEU:HD12	0.951
1	DA:15:LEU:HD12	EA:203:VAL:HG21	0.951
1	OA:216:LYS:HZ1	PA:24:ARG:CD	0.951

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	UA:216:LYS:CE	VA:24:ARG:HH11	0.951
1	D:17:TYR:H	E:22:LEU:CD2	0.950
1	X:14:ARG:CB	Y:203:VAL:CG1	0.950
1	KA:124:LEU:HD21	LA:45:SER:HB3	0.950
1	SA:15:LEU:CD2	TA:204:THR:O	0.950
1	TA:14:ARG:CG	UA:203:VAL:CG1	0.950
1	TA:89:VAL:HG11	UA:187:VAL:HG11	0.950
1	TA:14:ARG:O	UA:22:LEU:HA	0.950
1	XA:83:ILE:CD	YA:191:LEU:HB3	0.950
1	YA:15:LEU:HA	ZA:23:PRO:HD2	0.950
1	A:204:THR:OG1	ZA:69:ILE:CD	0.950
1	CA:124:LEU:O	DA:48:LYS:NZ	0.950
1	F:17:TYR:N	G:22:LEU:HD23	0.949
1	J:67:ALA:HB3	K:205:TYR:CD1	0.949
1	O:216:LYS:CE	P:24:ARG:NH1	0.949
1	R:65:ALA:HB2	S:208:GLU:OE2	0.949
1	R:230:PHE:HE1	S:141:VAL:CG1	0.949
1	T:14:ARG:CB	U:203:VAL:HB	0.949
1	X:15:LEU:HA	Y:23:PRO:HD2	0.949
1	GA:233:GLN:HE22	HA:39:THR:HG22	0.949
1	QA:228:THR:HG21	RA:140:PRO:HG2	0.949
1	SA:64:GLN:HB2	TA:209:LYS:NZ	0.949
1	SA:15:LEU:N	TA:203:VAL:CG2	0.949

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	YA:65:ALA:HB2	ZA:208:GLU:OE2	0.949
1	H:90:LEU:HB3	I:185:LYS:HZ1	0.948
1	L:15:LEU:HG	M:203:VAL:HG21	0.948
1	T:124:LEU:CG	U:45:SER:HB2	0.948
1	W:12:LEU:O	X:22:LEU:CD1	0.948
1	Y:65:ALA:HB2	Z:208:GLU:OE2	0.948
1	Z:69:ILE:CD	AA:204:THR:OG1	0.948
1	RA:65:ALA:CB	SA:208:GLU:OE1	0.948
1	SA:14:ARG:HG3	TA:203:VAL:HG11	0.948
1	RA:86:LEU:HD22	SA:188:GLY:HA3	0.948
1	XA:15:LEU:HA	YA:23:PRO:HD2	0.948
1	XA:73:LYS:CG	YA:200:GLN:O	0.948
1	A:43:LEU:HD23	ZA:230:PHE:HA	0.947
1	F:124:LEU:CA	G:48:LYS:HE2	0.947
1	G:15:LEU:CD1	H:22:LEU:HD12	0.947
1	LA:15:LEU:HG	MA:203:VAL:CG2	0.947
1	NA:89:VAL:HA	OA:185:LYS:HD3	0.947
1	PA:86:LEU:HD23	QA:188:GLY:H	0.947
1	QA:86:LEU:CD2	RA:188:GLY:H	0.947
1	SA:65:ALA:C	TA:209:LYS:HD3	0.947
1	CA:218:PHE:HE2	DA:42:TYR:CE2	0.947
1	U:218:PHE:HZ	V:42:TYR:CD2	0.946
1	W:14:ARG:C	X:22:LEU:HA	0.946

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	BA:231:ALA:O	CA:41:GLU:CG	0.946
1	DA:87:LYS:CA	EA:187:VAL:HG13	0.946
1	OA:64:GLN:C	PA:209:LYS:HD2	0.946
1	AA:89:VAL:H	BA:185:LYS:CB	0.946
1	A:228:THR:HG21	B:140:PRO:CG	0.945
1	L:15:LEU:HG	M:203:VAL:CG2	0.945
1	O:64:GLN:C	P:209:LYS:HD2	0.945
1	Y:15:LEU:HA	Z:23:PRO:HD2	0.945
1	FA:67:ALA:C	GA:205:TYR:CE1	0.945
1	RA:65:ALA:HB2	SA:208:GLU:OE2	0.945
1	UA:87:LYS:CD	VA:186:VAL:HG11	0.945
1	WA:14:ARG:C	XA:22:LEU:HA	0.945
1	C:67:ALA:O	D:207:GLY:N	0.945
1	YA:82:GLY:O	ZA:191:LEU:CA	0.945
1	O:14:ARG:HG3	P:203:VAL:HG11	0.944
1	V:87:LYS:CD	W:186:VAL:CA	0.944
1	RA:89:VAL:HG21	SA:187:VAL:HG11	0.944
1	XA:14:ARG:CB	YA:203:VAL:CG1	0.944
1	YA:15:LEU:CA	ZA:23:PRO:CD	0.944
1	XA:86:LEU:N	YA:188:GLY:H	0.944
1	P:15:LEU:HG	Q:203:VAL:HG23	0.943
1	S:15:LEU:CD2	T:204:THR:O	0.943
1	S:64:GLN:HB2	T:209:LYS:NZ	0.943

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	R:86:LEU:HD22	S:188:GLY:HA3	0.943
1	T:230:PHE:HE1	U:141:VAL:HG12	0.943
1	V:87:LYS:CG	W:186:VAL:HA	0.943
1	V:87:LYS:HG3	W:186:VAL:HA	0.943
1	Y:228:THR:HB	Z:141:VAL:HG13	0.943
1	Z:12:LEU:O	AA:22:LEU:HD13	0.943
1	TA:64:GLN:CA	UA:209:LYS:HD2	0.943
1	B:73:LYS:HA	C:200:GLN:O	0.942
1	F:15:LEU:CG	G:203:VAL:HG21	0.942
1	G:124:LEU:CG	H:45:SER:HB3	0.942
1	K:124:LEU:HD21	L:45:SER:HB3	0.942
1	S:89:VAL:HG21	T:187:VAL:HG11	0.942
1	W:87:LYS:HD2	X:186:VAL:CG2	0.942
1	HA:89:VAL:N	IA:185:LYS:HD3	0.942
1	NA:86:LEU:CD2	OA:188:GLY:HA3	0.942
1	SA:64:GLN:CG	TA:209:LYS:HZ3	0.942
1	P:124:LEU:CD2	Q:45:SER:CB	0.941
1	S:15:LEU:N	T:203:VAL:CG2	0.941
1	DA:13:LYS:C	EA:22:LEU:HB2	0.941
1	TA:124:LEU:CG	UA:45:SER:HB2	0.941
1	VA:89:VAL:HG12	WA:187:VAL:CG1	0.941
1	WA:15:LEU:HD21	XA:204:THR:O	0.941
1	WA:82:GLY:O	XA:191:LEU:HA	0.941

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	N:216:LYS:HZ1	O:24:ARG:NH1	0.941
1	S:66:ALA:HA	T:205:TYR:HH	0.940
1	FA:124:LEU:CA	GA:48:LYS:CE	0.940
1	GA:124:LEU:CG	HA:45:SER:HB3	0.940
1	I:67:ALA:HB2	J:207:GLY:HA3	0.939
1	X:83:ILE:CD	Y:191:LEU:HB3	0.939
1	EA:124:LEU:HD23	FA:47:GLU:OE2	0.939
1	VA:87:LYS:HG3	WA:186:VAL:HA	0.939
1	L:216:LYS:HZ2	M:24:ARG:NH1	0.939
1	D:13:LYS:C	E:22:LEU:HB2	0.938
1	D:87:LYS:CA	E:187:VAL:HG13	0.938
1	W:230:PHE:CE1	X:141:VAL:CB	0.938
1	Y:15:LEU:CA	Z:23:PRO:CD	0.938
1	IA:86:LEU:CG	JA:187:VAL:C	0.938
1	SA:64:GLN:HB3	TA:209:LYS:CE	0.938
1	WA:14:ARG:HB3	XA:203:VAL:HB	0.938
1	AA:86:LEU:N	BA:188:GLY:H	0.938
1	HA:90:LEU:CA	IA:185:LYS:HZ3	0.938
1	A:187:VAL:HA	ZA:87:LYS:H	0.937
1	W:231:ALA:O	X:41:GLU:CG	0.937
1	BA:17:TYR:CA	CA:22:LEU:HD23	0.937
1	FA:17:TYR:N	GA:22:LEU:HD23	0.937
1	UA:15:LEU:N	VA:203:VAL:CG2	0.937

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	YA:89:VAL:CA	ZA:185:LYS:HB2	0.937
1	A:89:VAL:H	B:185:LYS:CB	0.937
1	H:90:LEU:CA	I:185:LYS:HZ3	0.937
1	BA:76:ASN:OD1	CA:198:SER:OG	0.937
1	D:65:ALA:HB2	E:208:GLU:OE2	0.936
1	I:15:LEU:HA	J:22:LEU:C	0.936
1	R:218:PHE:CZ	S:42:TYR:HD2	0.936
1	Y:69:ILE:CD	Z:204:THR:O	0.936
1	Y:231:ALA:C	Z:41:GLU:HB3	0.936
1	AA:89:VAL:CA	BA:185:LYS:CB	0.936
1	FA:15:LEU:CD1	GA:22:LEU:CD1	0.936
1	WA:87:LYS:CE	XA:186:VAL:CG1	0.936
1	F:124:LEU:CA	G:48:LYS:CE	0.935
1	F:233:GLN:NE2	G:39:THR:HG22	0.935
1	Q:216:LYS:HZ3	R:24:ARG:HD3	0.935
1	R:231:ALA:CB	S:42:TYR:N	0.935
1	EA:124:LEU:HD13	FA:45:SER:HB2	0.935
1	WA:12:LEU:O	XA:22:LEU:CD1	0.935
1	WA:231:ALA:O	XA:41:GLU:CG	0.935
1	A:230:PHE:HZ	B:141:VAL:HA	0.934
1	P:216:LYS:HZ3	Q:24:ARG:HD3	0.934
1	Y:83:ILE:CD	Z:191:LEU:HB3	0.934
1	BA:89:VAL:CA	CA:185:LYS:HD3	0.934



Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	GA:87:LYS:N	HA:187:VAL:HG12	0.934
1	OA:14:ARG:HG3	PA:203:VAL:HG11	0.934
1	VA:89:VAL:C	WA:185:LYS:CD	0.934
1	B:76:ASN:OD1	C:198:SER:OG	0.934
1	BA:124:LEU:O	CA:48:LYS:NZ	0.934
1	C:89:VAL:CA	D:185:LYS:HD3	0.933
1	N:124:LEU:CD2	O:45:SER:HB2	0.933
1	P:216:LYS:HZ1	Q:24:ARG:HD3	0.933
1	S:66:ALA:HA	T:205:TYR:CZ	0.933
1	T:14:ARG:O	U:22:LEU:HA	0.933
1	W:15:LEU:HD21	X:204:THR:O	0.933
1	VA:15:LEU:H	WA:203:VAL:HG21	0.933
1	XA:81:ILE:HG22	YA:193:VAL:HA	0.933
1	YA:118:ALA:HB3	ZA:209:LYS:HE2	0.933
1	YA:231:ALA:C	ZA:41:GLU:HB3	0.933
1	A:86:LEU:H	B:188:GLY:N	0.933
1	GA:90:LEU:CB	HA:185:LYS:HZ1	0.933
1	NA:216:LYS:HZ1	OA:24:ARG:NH1	0.933
1	Y:73:LYS:CG	Z:200:GLN:O	0.933
1	A:89:VAL:CA	B:185:LYS:CB	0.932
1	J:87:LYS:CB	K:187:VAL:HG13	0.932
1	BA:124:LEU:HD23	CA:47:GLU:HG3	0.932
1	DA:65:ALA:HB2	EA:208:GLU:OE2	0.932

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	HA:90:LEU:HB3	IA:185:LYS:HZ1	0.932
1	IA:15:LEU:HD11	JA:203:VAL:HG23	0.932
1	YA:83:ILE:CD	ZA:191:LEU:HB3	0.932
1	BA:89:VAL:H	CA:185:LYS:CB	0.932
1	A:185:LYS:HB2	ZA:89:VAL:CA	0.931
1	D:15:LEU:HB2	E:22:LEU:CD1	0.931
1	Q:228:THR:HG21	R:140:PRO:HG2	0.931
1	Y:14:ARG:CG	Z:203:VAL:HG12	0.931
1	Z:75:GLU:CB	AA:198:SER:O	0.931
1	EA:15:LEU:HD12	FA:22:LEU:CD1	0.931
1	JA:67:ALA:HB3	KA:205:TYR:CD1	0.931
1	LA:124:LEU:CD2	MA:45:SER:HB3	0.931
1	WA:230:PHE:CE1	XA:141:VAL:CB	0.931
1	A:69:ILE:CB	B:204:THR:O	0.930
1	A:208:GLU:CD	ZA:65:ALA:HB1	0.930
1	C:67:ALA:C	D:205:TYR:CE1	0.930
1	E:89:VAL:CA	F:185:LYS:HD3	0.930
1	U:216:LYS:HE3	V:24:ARG:NH1	0.930
1	X:17:TYR:O	Y:22:LEU:HD22	0.930
1	BA:73:LYS:HA	CA:200:GLN:O	0.930
1	AA:74:THR:O	BA:199:SER:HA	0.930
1	FA:124:LEU:CA	GA:48:LYS:HE2	0.930
1	UA:157:GLN:HE22	VA:25:GLU:HB3	0.930

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	VA:89:VAL:HA	WA:185:LYS:HB2	0.930
1	JA:90:LEU:N	KA:185:LYS:HZ3	0.930
1	A:74:THR:O	B:199:SER:HA	0.929
1	E:15:LEU:HD12	F:22:LEU:CD1	0.929
1	S:231:ALA:HB2	T:42:TYR:CA	0.929
1	V:89:VAL:CA	W:185:LYS:HB3	0.929
1	CA:218:PHE:CZ	DA:44:GLY:N	0.929
1	IA:216:LYS:HZ3	JA:24:ARG:CD	0.929
1	YA:230:PHE:HE1	ZA:141:VAL:CB	0.929
1	F:64:GLN:CA	G:209:LYS:HZ3	0.929
1	AA:86:LEU:H	BA:188:GLY:N	0.929
1	E:86:LEU:O	F:186:VAL:O	0.929
1	L:124:LEU:CD2	M:45:SER:HB3	0.928
1	BA:17:TYR:CB	CA:22:LEU:HD21	0.928
1	GA:15:LEU:CG	HA:22:LEU:HD12	0.928
1	MA:64:GLN:HB3	NA:209:LYS:NZ	0.928
1	WA:87:LYS:HD2	XA:186:VAL:CG2	0.928
1	B:17:TYR:CA	C:22:LEU:CD2	0.927
1	C:15:LEU:N	D:22:LEU:HD12	0.927
1	E:124:LEU:HD23	F:47:GLU:OE2	0.927
1	I:15:LEU:HD11	J:203:VAL:HG23	0.927
1	N:86:LEU:CD2	O:188:GLY:HA3	0.927
1	T:14:ARG:HG3	U:203:VAL:HG11	0.927

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	U:90:LEU:H	V:185:LYS:HD3	0.927
1	X:81:ILE:HG22	Y:193:VAL:HA	0.927
1	W:82:GLY:O	X:191:LEU:HA	0.927
1	Y:83:ILE:CD	Z:191:LEU:CB	0.927
1	Y:89:VAL:HG12	Z:187:VAL:CG1	0.927
1	GA:86:LEU:C	HA:186:VAL:O	0.927
1	NA:124:LEU:CD2	OA:45:SER:HB2	0.927
1	TA:16:GLY:HA3	UA:22:LEU:O	0.927
1	NA:216:LYS:HZ1	OA:24:ARG:HH11	0.927
1	YA:73:LYS:CG	ZA:200:GLN:O	0.927
1	D:124:LEU:HD23	E:47:GLU:HG3	0.926
1	C:87:LYS:HB2	D:187:VAL:CG1	0.926
1	C:82:GLY:O	D:191:LEU:CA	0.926
1	H:124:LEU:CD1	I:45:SER:HB2	0.926
1	P:86:LEU:HD23	Q:188:GLY:H	0.926
1	V:15:LEU:H	W:203:VAL:HG21	0.926
1	IA:86:LEU:CG	JA:187:VAL:HA	0.926
1	PA:15:LEU:HG	QA:203:VAL:HG23	0.926
1	TA:14:ARG:HG3	UA:203:VAL:HG11	0.926
1	TA:65:ALA:N	UA:209:LYS:CD	0.926
1	UA:87:LYS:HE3	VA:186:VAL:HG13	0.926
1	YA:14:ARG:CG	ZA:203:VAL:HG12	0.926
1	C:15:LEU:H	D:22:LEU:CD1	0.926

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	A:69:ILE:CG1	B:204:THR:O	0.925
1	B:17:TYR:CB	C:22:LEU:HD21	0.925
1	E:17:TYR:H	F:22:LEU:HD23	0.925
1	X:228:THR:HG21	Y:141:VAL:H	0.925
1	X:230:PHE:HA	Y:43:LEU:HD23	0.925
1	FA:124:LEU:CG	GA:45:SER:CB	0.925
1	NA:124:LEU:HD21	OA:45:SER:HB3	0.925
1	RA:218:PHE:CZ	SA:42:TYR:HD2	0.925
1	AA:86:LEU:H	BA:188:GLY:H	0.925
1	Y:82:GLY:O	Z:191:LEU:CA	0.925
1	A:22:LEU:HB2	ZA:13:LYS:C	0.924
1	G:89:VAL:HA	H:185:LYS:HD3	0.924
1	G:87:LYS:N	H:187:VAL:HG12	0.924
1	I:216:LYS:HZ3	J:24:ARG:CD	0.924
1	K:15:LEU:HG	L:203:VAL:HG21	0.924
1	BA:90:LEU:N	CA:185:LYS:HD3	0.924
1	FA:89:VAL:H	GA:185:LYS:HD3	0.924
1	IA:15:LEU:HA	JA:22:LEU:C	0.924
1	VA:14:ARG:HB3	WA:203:VAL:CG1	0.924
1	WA:14:ARG:HB3	XA:203:VAL:CB	0.924
1	YA:157:GLN:HE22	ZA:25:GLU:HB3	0.924
1	A:228:THR:CB	B:141:VAL:HG13	0.923
1	I:86:LEU:CG	J:187:VAL:HA	0.923

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	T:14:ARG:C	U:203:VAL:HG11	0.923
1	U:87:LYS:CD	V:186:VAL:HG11	0.923
1	SA:64:GLN:HB2	TA:209:LYS:HE2	0.923
1	WA:87:LYS:CD	XA:186:VAL:CG1	0.923
1	B:89:VAL:H	C:185:LYS:CB	0.923
1	G:233:GLN:HE22	H:39:THR:HG22	0.922
1	V:14:ARG:HB3	W:203:VAL:CG1	0.922
1	Z:230:PHE:HE1	AA:141:VAL:CB	0.922
1	AA:228:THR:CB	BA:141:VAL:HG13	0.922
1	CA:65:ALA:CB	DA:208:GLU:OE2	0.922
1	GA:233:GLN:CD	HA:39:THR:CG2	0.922
1	JA:67:ALA:CA	KA:207:GLY:HA3	0.922
1	MA:231:ALA:HB2	NA:42:TYR:O	0.922
1	SA:89:VAL:HG21	TA:187:VAL:HG11	0.922
1	C:218:PHE:HZ	D:44:GLY:N	0.922
1	Q:86:LEU:HD23	R:188:GLY:H	0.921
1	BA:17:TYR:CA	CA:22:LEU:CD2	0.921
1	CA:82:GLY:O	DA:191:LEU:CA	0.921
1	NA:216:LYS:NZ	OA:24:ARG:CD	0.921
1	RA:231:ALA:CB	SA:42:TYR:H	0.921
1	G:90:LEU:H	H:185:LYS:HZ3	0.921
1	TA:231:ALA:HB2	UA:42:TYR:N	0.921
1	TA:231:ALA:HB1	UA:42:TYR:H	0.921

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	E:124:LEU:CA	F:48:LYS:CE	0.920
1	N:216:LYS:NZ	O:24:ARG:CD	0.920
1	P:14:ARG:CG	Q:203:VAL:CG1	0.920
1	W:87:LYS:CD	X:186:VAL:CG1	0.920
1	AA:69:ILE:CG1	BA:204:THR:O	0.920
1	EA:15:LEU:HD11	FA:203:VAL:HG23	0.920
1	RA:64:GLN:HB3	SA:209:LYS:CE	0.920
1	SA:231:ALA:HB2	TA:42:TYR:CA	0.920
1	YA:87:LYS:H	ZA:187:VAL:HA	0.920
1	A:22:LEU:CD1	ZA:12:LEU:C	0.919
1	B:89:VAL:CA	C:185:LYS:HD3	0.919
1	N:124:LEU:HD21	O:45:SER:HB3	0.919
1	V:89:VAL:HA	W:185:LYS:HB2	0.919
1	W:231:ALA:O	X:41:GLU:HB3	0.919
1	AA:69:ILE:CB	BA:204:THR:O	0.919
1	NA:65:ALA:CB	OA:208:GLU:OE2	0.919
1	A:68:GLY:O	B:205:TYR:CA	0.919
1	G:86:LEU:C	H:186:VAL:O	0.918
1	J:67:ALA:CA	K:207:GLY:HA3	0.918
1	M:64:GLN:HB3	N:209:LYS:NZ	0.918
1	N:124:LEU:CD2	O:45:SER:CB	0.918
1	W:14:ARG:HB3	X:203:VAL:CB	0.918
1	CA:67:ALA:C	DA:205:TYR:CE1	0.918

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	DA:67:ALA:HB2	EA:207:GLY:C	0.918
1	PA:124:LEU:CD2	QA:45:SER:CB	0.918
1	RA:231:ALA:CB	SA:42:TYR:N	0.918
1	A:141:VAL:HA	ZA:230:PHE:HZ	0.917
1	S:218:PHE:HE2	T:42:TYR:CD2	0.917
1	Z:69:ILE:CG1	AA:204:THR:O	0.917
1	WA:231:ALA:O	XA:41:GLU:HB3	0.917
1	XA:86:LEU:CG	YA:188:GLY:N	0.917
1	CA:218:PHE:HZ	DA:44:GLY:N	0.917
1	SA:66:ALA:CB	TA:205:TYR:HE1	0.917
1	N:65:ALA:CB	O:208:GLU:OE2	0.916
1	S:90:LEU:N	T:185:LYS:HD3	0.916
1	DA:15:LEU:CD1	EA:22:LEU:HD12	0.916
1	A:86:LEU:N	B:188:GLY:H	0.916
1	WA:86:LEU:H	XA:188:GLY:H	0.916
1	D:15:LEU:CD1	E:22:LEU:HD12	0.915
1	G:233:GLN:CD	H:39:THR:CG2	0.915
1	K:124:LEU:HD21	L:45:SER:HB2	0.915
1	L:89:VAL:HA	M:185:LYS:CD	0.915
1	DA:15:LEU:HB2	EA:22:LEU:CD1	0.915
1	PA:216:LYS:HZ3	QA:24:ARG:HD3	0.915
1	RA:65:ALA:C	SA:209:LYS:CD	0.915
1	WA:89:VAL:CA	XA:185:LYS:CB	0.915



Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	G:67:ALA:N	H:205:TYR:OH	0.915
1	T:66:ALA:HA	U:205:TYR:OH	0.914
1	V:89:VAL:C	W:185:LYS:CD	0.914
1	X:86:LEU:CG	Y:188:GLY:N	0.914
1	Y:118:ALA:HB3	Z:209:LYS:HE2	0.914
1	Z:12:LEU:C	AA:22:LEU:CD1	0.914
1	BA:87:LYS:C	CA:187:VAL:HG13	0.914
1	NA:86:LEU:HD21	OA:188:GLY:HA3	0.914
1	OA:216:LYS:HZ1	PA:24:ARG:HD3	0.914
1	TA:14:ARG:C	UA:203:VAL:HG11	0.914
1	XA:75:GLU:CB	YA:198:SER:O	0.914
1	YA:83:ILE:CD	ZA:191:LEU:CB	0.914
1	YA:228:THR:CG2	ZA:140:PRO:CD	0.914
1	VA:216:LYS:CE	WA:24:ARG:HH11	0.914
1	P:216:LYS:HZ3	Q:24:ARG:CD	0.913
1	X:83:ILE:CD	Y:191:LEU:CB	0.913
1	DA:218:PHE:CE2	EA:42:TYR:CD2	0.913
1	RA:124:LEU:HD23	SA:45:SER:CB	0.913
1	VA:89:VAL:CA	WA:185:LYS:HB3	0.913
1	C:65:ALA:CB	D:208:GLU:OE2	0.912
1	H:15:LEU:CD1	I:22:LEU:CD1	0.912
1	J:89:VAL:CA	K:185:LYS:HD3	0.912
1	K:90:LEU:HB3	L:185:LYS:HZ3	0.912

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	Z:13:LYS:C	AA:22:LEU:HB2	0.912
1	IA:86:LEU:HD22	JA:188:GLY:C	0.912
1	PA:15:LEU:HG	QA:203:VAL:HG22	0.912
1	C:218:PHE:CZ	D:44:GLY:N	0.911
1	D:67:ALA:HB2	E:207:GLY:C	0.911
1	D:218:PHE:CE2	E:42:TYR:CD2	0.911
1	I:86:LEU:HD22	J:188:GLY:C	0.911
1	R:64:GLN:HB3	S:209:LYS:CE	0.911
1	X:75:GLU:CB	Y:198:SER:O	0.911
1	Y:228:THR:CG2	Z:140:PRO:CD	0.911
1	AA:87:LYS:H	BA:187:VAL:HA	0.911
1	FA:86:LEU:C	GA:187:VAL:HA	0.911
1	EA:87:LYS:CA	FA:187:VAL:HG13	0.911
1	UA:14:ARG:CB	VA:203:VAL:CG1	0.911
1	A:86:LEU:N	B:188:GLY:N	0.911
1	V:75:GLU:HB2	W:198:SER:O	0.910
1	BA:89:VAL:HA	CA:185:LYS:CB	0.910
1	HA:15:LEU:HD11	IA:203:VAL:CG2	0.910
1	JA:89:VAL:CA	KA:185:LYS:HD3	0.910
1	LA:89:VAL:HA	MA:185:LYS:CD	0.910
1	MA:90:LEU:CB	NA:185:LYS:HZ1	0.910
1	BA:67:ALA:HB2	CA:205:TYR:CE2	0.909
1	CA:73:LYS:HA	DA:200:GLN:O	0.909

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	WA:228:THR:HB	XA:141:VAL:HG11	0.909
1	XA:230:PHE:HA	YA:43:LEU:HD23	0.909
1	LA:216:LYS:HZ2	MA:24:ARG:NH1	0.909
1	B:65:ALA:CB	C:208:GLU:CD	0.908
1	D:15:LEU:HD12	E:203:VAL:HG21	0.908
1	F:67:ALA:HA	G:207:GLY:HA3	0.908
1	L:87:LYS:HB2	M:187:VAL:CG1	0.908
1	Y:14:ARG:C	Z:22:LEU:N	0.908
1	CA:231:ALA:N	DA:43:LEU:HD23	0.908
1	FA:67:ALA:CA	GA:207:GLY:CA	0.908
1	MA:14:ARG:O	NA:22:LEU:HB2	0.908
1	SA:230:PHE:CZ	TA:141:VAL:CG1	0.908
1	YA:233:GLN:OE1	ZA:39:THR:CG2	0.908
1	A:204:THR:O	ZA:69:ILE:CG1	0.908
1	B:87:LYS:HZ1	C:186:VAL:CG1	0.907
1	E:87:LYS:CA	F:187:VAL:HG13	0.907
1	V:87:LYS:HG3	W:186:VAL:CA	0.907
1	Z:65:ALA:HB1	AA:208:GLU:CD	0.907
1	KA:124:LEU:CD2	LA:45:SER:CB	0.907
1	PA:216:LYS:CE	QA:24:ARG:NH1	0.907
1	SA:90:LEU:N	TA:185:LYS:HD3	0.907
1	XA:228:THR:HG23	YA:140:PRO:HD2	0.907
1	B:124:LEU:O	C:48:LYS:NZ	0.907

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	T:231:ALA:HB1	U:42:TYR:H	0.907
1	D:87:LYS:CA	E:187:VAL:CG1	0.906
1	T:64:GLN:CA	U:209:LYS:HD2	0.906
1	W:228:THR:HB	X:141:VAL:HG11	0.906
1	CA:15:LEU:N	DA:22:LEU:HD12	0.906
1	CA:16:GLY:C	DA:22:LEU:HD23	0.906
1	HA:124:LEU:CD1	IA:45:SER:HB2	0.906
1	NA:14:ARG:HG3	OA:203:VAL:HG11	0.906
1	NA:124:LEU:CD2	OA:45:SER:CB	0.906
1	YA:230:PHE:CD1	ZA:141:VAL:HG12	0.906
1	B:124:LEU:HD23	C:47:GLU:HG3	0.905
1	G:15:LEU:CD1	H:203:VAL:CG2	0.905
1	F:12:LEU:O	G:22:LEU:HD22	0.905
1	S:230:PHE:CZ	T:141:VAL:CG1	0.905
1	U:14:ARG:CB	V:203:VAL:CG1	0.905
1	V:87:LYS:HD2	W:186:VAL:CG2	0.905
1	Y:233:GLN:OE1	Z:39:THR:CG2	0.905
1	AA:230:PHE:HZ	BA:141:VAL:HA	0.905
1	KA:15:LEU:HG	LA:203:VAL:HG21	0.905
1	A:204:THR:O	ZA:69:ILE:CB	0.905
1	U:218:PHE:HE2	V:42:TYR:CE2	0.905
1	GA:90:LEU:H	HA:185:LYS:HZ3	0.905
1	A:187:VAL:HG11	ZA:89:VAL:HG11	0.904

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	B:87:LYS:C	C:187:VAL:HG13	0.904
1	E:15:LEU:HD11	F:203:VAL:HG23	0.904
1	H:15:LEU:HD11	I:203:VAL:CG2	0.904
1	M:14:ARG:O	N:22:LEU:HB2	0.904
1	X:228:THR:HG23	Y:140:PRO:HD2	0.904
1	Y:230:PHE:CD1	Z:141:VAL:HG12	0.904
1	GA:15:LEU:CD1	HA:203:VAL:HG21	0.904
1	V:216:LYS:CE	W:24:ARG:HH11	0.904
1	O:230:PHE:CE1	P:141:VAL:HG11	0.903
1	R:231:ALA:HB3	S:42:TYR:N	0.903
1	S:86:LEU:HD23	T:188:GLY:N	0.903
1	T:124:LEU:HD23	U:45:SER:HB3	0.903
1	CA:81:ILE:HG22	DA:193:VAL:HG22	0.903
1	FA:67:ALA:HA	GA:207:GLY:HA3	0.903
1	C:89:VAL:N	D:185:LYS:CD	0.902
1	G:124:LEU:CD1	H:45:SER:CB	0.902
1	F:229:LEU:O	G:141:VAL:HG11	0.902
1	L:67:ALA:CB	M:205:TYR:CE1	0.902
1	N:230:PHE:CE1	O:141:VAL:HG11	0.902
1	Y:65:ALA:HB3	Z:208:GLU:CD	0.902
1	BA:218:PHE:CE2	CA:42:TYR:CE2	0.902
1	JA:90:LEU:HD23	KA:185:LYS:HZ1	0.902
1	OA:230:PHE:CE1	PA:141:VAL:HG11	0.902

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	VA:87:LYS:CD	WA:186:VAL:CA	0.902
1	UA:218:PHE:HE2	VA:42:TYR:CE2	0.902
1	B:69:ILE:HB	C:204:THR:O	0.901
1	T:218:PHE:HZ	U:42:TYR:CD2	0.901
1	AA:75:GLU:HB2	BA:198:SER:O	0.901
1	EA:17:TYR:H	FA:22:LEU:HD23	0.901
1	VA:75:GLU:HB2	WA:198:SER:O	0.901
1	XA:83:ILE:CD	YA:191:LEU:CB	0.901
1	B:89:VAL:HA	C:185:LYS:CB	0.900
1	M:231:ALA:HB2	N:42:TYR:O	0.900
1	N:216:LYS:HZ1	O:24:ARG:CD	0.900
1	U:73:LYS:HG3	V:200:GLN:O	0.900
1	Z:228:THR:CG2	AA:141:VAL:H	0.900
1	GA:15:LEU:CD1	HA:203:VAL:CG2	0.900
1	IA:90:LEU:N	JA:185:LYS:NZ	0.900
1	B:67:ALA:HB2	C:205:TYR:CE2	0.899
1	E:89:VAL:H	F:185:LYS:HD3	0.899
1	J:15:LEU:HG	K:203:VAL:HG21	0.899
1	P:216:LYS:CE	Q:24:ARG:NH1	0.899
1	AA:228:THR:CG2	BA:140:PRO:HG2	0.899
1	AA:15:LEU:H	BA:22:LEU:HD12	0.899
1	CA:87:LYS:O	DA:187:VAL:CG1	0.899
1	EA:124:LEU:CA	FA:48:LYS:CE	0.899

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	FA:229:LEU:O	GA:141:VAL:HG11	0.899
1	C:231:ALA:N	D:43:LEU:HD23	0.898
1	C:87:LYS:O	D:187:VAL:CG1	0.898
1	N:14:ARG:HG3	O:203:VAL:HG11	0.898
1	Q:230:PHE:CE1	R:141:VAL:HG11	0.898
1	S:64:GLN:HB3	T:209:LYS:CE	0.898
1	W:157:GLN:NE2	X:25:GLU:HB3	0.898
1	X:228:THR:HG22	Y:141:VAL:HG22	0.898
1	PA:14:ARG:CG	QA:203:VAL:CG1	0.898
1	TA:89:VAL:C	UA:185:LYS:HD3	0.898
1	DA:124:LEU:O	EA:48:LYS:NZ	0.898
1	Z:89:VAL:HG11	AA:187:VAL:HG11	0.897
1	BA:65:ALA:CB	CA:208:GLU:CD	0.897
1	JA:124:LEU:CD2	KA:45:SER:CB	0.897
1	LA:87:LYS:HB2	MA:187:VAL:CG1	0.897
1	PA:64:GLN:CB	QA:209:LYS:NZ	0.897
1	A:141:VAL:H	ZA:228:THR:CG2	0.897
1	A:228:THR:CG2	B:140:PRO:HG2	0.896
1	A:15:LEU:H	B:22:LEU:HD12	0.896
1	F:86:LEU:C	G:187:VAL:HA	0.896
1	L:90:LEU:HD23	M:185:LYS:HZ1	0.896
1	Y:87:LYS:H	Z:187:VAL:HA	0.896
1	EA:124:LEU:CD2	FA:45:SER:OG	0.896

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	GA:229:LEU:O	HA:141:VAL:HG11	0.896
1	PA:230:PHE:CE1	QA:141:VAL:HG11	0.896
1	N:15:LEU:CG	O:203:VAL:CG2	0.895
1	P:230:PHE:CE1	Q:141:VAL:HG11	0.895
1	Q:216:LYS:HE3	R:24:ARG:NH1	0.895
1	AA:218:PHE:HZ	BA:43:LEU:C	0.895
1	FA:64:GLN:CA	GA:209:LYS:HZ3	0.895
1	LA:67:ALA:CB	MA:205:TYR:CZ	0.895
1	PA:216:LYS:HZ1	QA:24:ARG:HD3	0.895
1	SA:66:ALA:HA	TA:205:TYR:CZ	0.895
1	UA:73:LYS:HG3	VA:200:GLN:O	0.895
1	A:76:ASN:OD1	B:198:SER:OG	0.895
1	AA:76:ASN:OD1	BA:198:SER:OG	0.895
1	C:16:GLY:C	D:22:LEU:HD23	0.894
1	T:124:LEU:HD23	U:45:SER:HB2	0.894
1	IA:228:THR:HG22	JA:140:PRO:CD	0.894
1	JA:15:LEU:HG	KA:203:VAL:HG21	0.894
1	Z:69:ILE:CB	AA:204:THR:O	0.894
1	D:75:GLU:HA	E:198:SER:O	0.893
1	W:15:LEU:H	X:203:VAL:HG21	0.893
1	LA:67:ALA:CB	MA:205:TYR:CE1	0.893
1	A:218:PHE:HZ	B:43:LEU:C	0.893
1	Y:218:PHE:HZ	Z:44:GLY:N	0.893



Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	W:86:LEU:H	X:188:GLY:H	0.893
1	AA:86:LEU:N	BA:188:GLY:N	0.893
1	GA:67:ALA:N	HA:205:TYR:OH	0.893
1	C:87:LYS:O	D:187:VAL:HG12	0.892
1	L:87:LYS:HB2	M:187:VAL:HG13	0.892
1	BA:89:VAL:N	CA:185:LYS:HB3	0.892
1	M:124:LEU:CD2	N:45:SER:CB	0.891
1	Y:14:ARG:O	Z:22:LEU:CA	0.891
1	SA:86:LEU:HD23	TA:188:GLY:N	0.891
1	L:67:ALA:CB	M:205:TYR:CZ	0.890
1	R:231:ALA:CB	S:42:TYR:H	0.890
1	JA:233:GLN:OE1	KA:39:THR:HG21	0.890
1	C:73:LYS:HA	D:200:GLN:O	0.889
1	C:81:ILE:HG22	D:193:VAL:HG22	0.889
1	D:15:LEU:CD1	E:203:VAL:HG23	0.889
1	G:15:LEU:CD1	H:203:VAL:HG21	0.889
1	H:90:LEU:HB3	I:185:LYS:NZ	0.889
1	Q:216:LYS:HE2	R:24:ARG:CD	0.889
1	X:87:LYS:O	Y:187:VAL:HG12	0.889
1	Y:228:THR:CG2	Z:141:VAL:H	0.889
1	CA:87:LYS:O	DA:187:VAL:HG12	0.889
1	FA:15:LEU:CG	GA:22:LEU:HD12	0.889
1	NA:216:LYS:HZ1	OA:24:ARG:CD	0.889

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	OA:124:LEU:HD21	PA:45:SER:HB2	0.889
1	WA:157:GLN:NE2	XA:25:GLU:HB3	0.889
1	XA:228:THR:HG22	YA:141:VAL:HG22	0.889
1	B:218:PHE:CE2	C:42:TYR:CE2	0.888
1	D:218:PHE:HZ	E:43:LEU:C	0.888
1	R:124:LEU:HD23	S:45:SER:CB	0.888
1	T:89:VAL:C	U:185:LYS:HD3	0.888
1	Z:14:ARG:HB3	AA:203:VAL:CG1	0.888
1	HA:90:LEU:HB3	IA:185:LYS:NZ	0.888
1	RA:231:ALA:HB3	SA:42:TYR:N	0.888
1	VA:87:LYS:HD2	WA:186:VAL:CG2	0.888
1	YA:228:THR:CG2	ZA:141:VAL:H	0.888
1	A:75:GLU:HB2	B:198:SER:O	0.887
1	S:14:ARG:HB3	T:203:VAL:CB	0.887
1	W:87:LYS:CD	X:186:VAL:HG11	0.887
1	AA:15:LEU:N	BA:22:LEU:HD12	0.887
1	DA:87:LYS:CA	EA:187:VAL:CG1	0.887
1	XA:230:PHE:CE1	YA:141:VAL:HB	0.887
1	XA:157:GLN:NE2	YA:25:GLU:HB3	0.887
1	A:22:LEU:HD13	ZA:12:LEU:O	0.886
1	E:87:LYS:N	F:187:VAL:CG1	0.886
1	G:229:LEU:O	H:141:VAL:HG11	0.886
1	Y:89:VAL:CA	Z:185:LYS:HB2	0.886

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	CA:79:PHE:HB3	DA:194:GLU:O	0.886
1	TA:124:LEU:HD23	UA:45:SER:HB3	0.886
1	VA:15:LEU:CD2	WA:204:THR:O	0.886
1	A:89:VAL:CA	B:185:LYS:HB2	0.885
1	S:89:VAL:CB	T:187:VAL:HG13	0.885
1	X:157:GLN:NE2	Y:25:GLU:HB3	0.885
1	CA:124:LEU:HD23	DA:47:GLU:CG	0.885
1	MA:216:LYS:HZ1	NA:24:ARG:CD	0.885
1	YA:17:TYR:O	ZA:22:LEU:HD22	0.885
1	J:233:GLN:OE1	K:39:THR:HG21	0.884
1	N:216:LYS:NZ	O:24:ARG:HD3	0.884
1	O:216:LYS:HZ1	P:24:ARG:HD3	0.884
1	Q:14:ARG:O	R:22:LEU:CA	0.884
1	T:65:ALA:N	U:209:LYS:CD	0.884
1	Z:216:LYS:HB3	AA:24:ARG:NH1	0.884
1	WA:233:GLN:OE1	XA:39:THR:HG22	0.884
1	U:16:GLY:N	V:22:LEU:O	0.884
1	Q:89:VAL:HG21	R:187:VAL:HG11	0.883
1	NA:64:GLN:HB3	OA:209:LYS:HZ1	0.883
1	NA:15:LEU:CG	OA:203:VAL:CG2	0.883
1	VA:87:LYS:CG	WA:186:VAL:HA	0.883
1	WA:12:LEU:O	XA:22:LEU:HD13	0.883
1	LA:90:LEU:CB	MA:185:LYS:HZ3	0.883

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	WA:233:GLN:NE2	XA:21:ARG:HH12	0.883
1	A:203:VAL:CG1	ZA:14:ARG:HB3	0.882
1	B:87:LYS:CB	C:187:VAL:HG13	0.882
1	G:89:VAL:H	H:185:LYS:HD3	0.882
1	K:124:LEU:CD2	L:45:SER:CB	0.882
1	DA:15:LEU:CB	EA:22:LEU:CD1	0.882
1	DA:89:VAL:CA	EA:185:LYS:HD3	0.882
1	MA:124:LEU:CD2	NA:45:SER:CB	0.882
1	WA:17:TYR:O	XA:22:LEU:HD22	0.882
1	XA:87:LYS:O	YA:187:VAL:HG12	0.882
1	B:89:VAL:HA	C:185:LYS:HB2	0.881
1	D:231:ALA:HB1	E:41:GLU:C	0.881
1	X:14:ARG:C	Y:22:LEU:HA	0.881
1	W:233:GLN:OE1	X:39:THR:HG22	0.881
1	Y:89:VAL:CB	Z:187:VAL:CG1	0.881
1	Y:228:THR:CG2	Z:140:PRO:HD2	0.881
1	BA:87:LYS:HG3	CA:185:LYS:O	0.881
1	CA:15:LEU:N	DA:22:LEU:CD1	0.881
1	JA:89:VAL:HA	KA:185:LYS:HD2	0.881
1	QA:86:LEU:HD23	RA:188:GLY:H	0.881
1	SA:218:PHE:HE2	TA:42:TYR:CD2	0.881
1	X:230:PHE:CE1	Y:141:VAL:HB	0.880
1	FA:12:LEU:O	GA:22:LEU:HD22	0.880

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	KA:124:LEU:HD21	LA:45:SER:HB2	0.880
1	A:188:GLY:H	ZA:86:LEU:CA	0.880
1	I:90:LEU:N	J:185:LYS:NZ	0.880
1	A:12:LEU:O	B:22:LEU:CD1	0.879
1	V:15:LEU:HA	W:23:PRO:CD	0.879
1	AA:12:LEU:O	BA:22:LEU:CD1	0.879
1	CA:87:LYS:CA	DA:187:VAL:HG13	0.879
1	QA:216:LYS:HE3	RA:24:ARG:NH1	0.879
1	YA:65:ALA:HB3	ZA:208:GLU:CG	0.879
1	X:86:LEU:H	Y:188:GLY:N	0.879
1	HA:90:LEU:H	IA:185:LYS:HZ3	0.879
1	IA:86:LEU:HD22	JA:188:GLY:N	0.879
1	CA:76:ASN:OD1	DA:198:SER:OG	0.879
1	A:124:LEU:HA	B:48:LYS:HE2	0.878
1	B:89:VAL:N	C:185:LYS:HB3	0.878
1	E:87:LYS:CA	F:187:VAL:CG1	0.878
1	D:87:LYS:N	E:187:VAL:CG1	0.878
1	U:87:LYS:HE3	V:186:VAL:CG1	0.878
1	BA:69:ILE:HB	CA:204:THR:O	0.878
1	BA:87:LYS:CB	CA:187:VAL:HG13	0.878
1	HA:15:LEU:CD1	IA:22:LEU:CD1	0.878
1	LA:231:ALA:CB	MA:42:TYR:O	0.878
1	XA:86:LEU:CD2	YA:188:GLY:HA3	0.878

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	YA:15:LEU:N	ZA:22:LEU:HD12	0.878
1	YA:218:PHE:HZ	ZA:44:GLY:N	0.878
1	C:79:PHE:HB3	D:194:GLU:O	0.877
1	R:86:LEU:HD23	S:188:GLY:H	0.877
1	U:87:LYS:HE3	V:186:VAL:HG13	0.877
1	RA:86:LEU:HD23	SA:188:GLY:H	0.877
1	D:124:LEU:O	E:48:LYS:NZ	0.877
1	A:188:GLY:N	ZA:86:LEU:N	0.877
1	C:76:ASN:OD1	D:198:SER:OG	0.877
1	AA:68:GLY:O	BA:205:TYR:CA	0.877
1	A:73:LYS:HA	B:200:GLN:O	0.876
1	B:68:GLY:N	C:205:TYR:CE1	0.876
1	E:124:LEU:CD2	F:45:SER:OG	0.876
1	E:229:LEU:O	F:141:VAL:HG11	0.876
1	G:67:ALA:HB2	H:207:GLY:CA	0.876
1	G:89:VAL:C	H:185:LYS:HZ2	0.876
1	I:86:LEU:CG	J:187:VAL:C	0.876
1	X:89:VAL:H	Y:185:LYS:HB3	0.876
1	EA:89:VAL:H	FA:185:LYS:HD3	0.876
1	IA:86:LEU:CG	JA:187:VAL:CA	0.876
1	LA:87:LYS:HB2	MA:187:VAL:HG13	0.876
1	QA:14:ARG:O	RA:22:LEU:CA	0.876
1	SA:65:ALA:C	TA:209:LYS:HG3	0.876

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	A:12:LEU:C	B:22:LEU:CD1	0.875
1	A:22:LEU:HD22	ZA:12:LEU:O	0.875
1	Y:17:TYR:O	Z:22:LEU:HD22	0.875
1	AA:73:LYS:HA	BA:200:GLN:O	0.875
1	RA:228:THR:HG21	SA:140:PRO:HG2	0.875
1	XA:14:ARG:C	YA:22:LEU:HA	0.875
1	YA:89:VAL:CB	ZA:187:VAL:CG1	0.875
1	K:90:LEU:CD2	L:185:LYS:HZ1	0.875
1	B:87:LYS:C	C:187:VAL:CG1	0.874
1	W:87:LYS:CD	X:186:VAL:HG13	0.874
1	Y:65:ALA:HB3	Z:208:GLU:CG	0.874
1	Y:67:ALA:HB3	Z:205:TYR:CE2	0.874
1	AA:233:GLN:OE1	BA:39:THR:HB	0.874
1	EA:87:LYS:N	FA:187:VAL:HA	0.874
1	HA:89:VAL:CA	IA:185:LYS:HD2	0.874
1	QA:216:LYS:HE2	RA:24:ARG:CD	0.874
1	UA:216:LYS:CE	VA:24:ARG:NH1	0.874
1	E:124:LEU:HD13	F:45:SER:HB2	0.873
1	I:15:LEU:HG	J:203:VAL:HG21	0.873
1	U:87:LYS:HD2	V:186:VAL:CA	0.873
1	X:228:THR:HB	Y:141:VAL:HG11	0.873
1	Z:230:PHE:HE1	AA:141:VAL:CA	0.873
1	DA:15:LEU:CB	EA:22:LEU:HD12	0.873

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	EA:87:LYS:N	FA:187:VAL:CG1	0.873
1	JA:87:LYS:CB	KA:187:VAL:HG13	0.873
1	A:24:ARG:NH1	ZA:216:LYS:HB3	0.873
1	D:15:LEU:CB	E:22:LEU:CD1	0.872
1	D:87:LYS:CB	E:187:VAL:CG1	0.872
1	F:15:LEU:CG	G:22:LEU:HD12	0.872
1	Y:228:THR:HG21	Z:141:VAL:N	0.872
1	AA:89:VAL:CA	BA:185:LYS:HB2	0.872
1	BA:87:LYS:C	CA:187:VAL:CG1	0.872
1	YA:89:VAL:CA	ZA:185:LYS:HB3	0.872
1	I:89:VAL:CA	J:185:LYS:CD	0.871
1	S:65:ALA:C	T:209:LYS:HG3	0.871
1	U:14:ARG:O	V:22:LEU:HA	0.871
1	W:118:ALA:HB3	X:209:LYS:CE	0.871
1	Y:230:PHE:CE1	Z:141:VAL:CA	0.871
1	Z:228:THR:CG2	AA:140:PRO:CG	0.871
1	NA:230:PHE:CE1	OA:141:VAL:HG11	0.871
1	H:90:LEU:H	I:185:LYS:HZ3	0.871
1	E:87:LYS:N	F:187:VAL:HA	0.870
1	L:231:ALA:CB	M:42:TYR:O	0.870
1	AA:12:LEU:C	BA:22:LEU:CD1	0.870
1	AA:82:GLY:O	BA:191:LEU:CB	0.870
1	DA:231:ALA:HB1	EA:41:GLU:C	0.870



Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	FA:64:GLN:HB3	GA:209:LYS:HZ1	0.870
1	YA:230:PHE:CE1	ZA:141:VAL:CA	0.870
1	AA:67:ALA:CB	BA:207:GLY:O	0.870
1	A:140:PRO:CG	ZA:228:THR:CG2	0.869
1	D:74:THR:O	E:199:SER:HA	0.869
1	Y:216:LYS:HB3	Z:24:ARG:NH1	0.869
1	AA:124:LEU:HA	BA:48:LYS:HE2	0.869
1	BA:89:VAL:HA	CA:185:LYS:HB2	0.869
1	DA:75:GLU:HA	EA:198:SER:O	0.869
1	GA:89:VAL:H	HA:185:LYS:HD3	0.869
1	UA:14:ARG:O	VA:22:LEU:HA	0.869
1	XA:228:THR:HB	YA:141:VAL:HG11	0.869
1	C:79:PHE:CA	D:194:GLU:O	0.869
1	B:87:LYS:NZ	C:186:VAL:HG13	0.868
1	G:233:GLN:NE2	H:39:THR:HG22	0.868
1	H:90:LEU:CB	I:185:LYS:NZ	0.868
1	P:64:GLN:HB3	Q:209:LYS:HZ3	0.868
1	Q:69:ILE:CD	R:204:THR:OG1	0.868
1	R:65:ALA:C	S:209:LYS:CD	0.868
1	Y:89:VAL:CA	Z:185:LYS:HB3	0.868
1	Y:15:LEU:N	Z:22:LEU:HD12	0.868
1	Z:230:PHE:HZ	AA:141:VAL:HA	0.868
1	AA:218:PHE:CD2	BA:42:TYR:CD2	0.868

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	DA:218:PHE:HZ	EA:43:LEU:C	0.868
1	DA:87:LYS:N	EA:187:VAL:CG1	0.868
1	QA:216:LYS:CE	RA:24:ARG:NH1	0.868
1	RA:230:PHE:CE1	SA:141:VAL:HG11	0.868
1	SA:65:ALA:C	TA:209:LYS:CD	0.868
1	WA:87:LYS:CD	XA:186:VAL:HG13	0.868
1	YA:216:LYS:HB3	ZA:24:ARG:NH1	0.868
1	WA:14:ARG:O	XA:22:LEU:N	0.868
1	B:15:LEU:HB3	C:23:PRO:O	0.867
1	F:87:LYS:HG3	G:185:LYS:O	0.867
1	BA:15:LEU:HB3	CA:23:PRO:O	0.867
1	BA:15:LEU:N	CA:22:LEU:HD12	0.867
1	DA:124:LEU:HD23	EA:47:GLU:CG	0.867
1	TA:89:VAL:HA	UA:185:LYS:CB	0.867
1	VA:15:LEU:CA	WA:22:LEU:HA	0.867
1	YA:14:ARG:O	ZA:22:LEU:CA	0.867
1	F:65:ALA:N	G:209:LYS:NZ	0.867
1	C:15:LEU:HB3	D:23:PRO:O	0.866
1	J:124:LEU:CD2	K:45:SER:CB	0.866
1	Q:216:LYS:CE	R:24:ARG:NH1	0.866
1	R:228:THR:HG21	S:140:PRO:HG2	0.866
1	V:15:LEU:CD2	W:204:THR:O	0.866
1	W:12:LEU:O	X:22:LEU:HD13	0.866

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	Y:15:LEU:HA	Z:23:PRO:N	0.866
1	Z:233:GLN:OE1	AA:39:THR:CB	0.866
1	CA:15:LEU:HB2	DA:22:LEU:CD1	0.866
1	EA:15:LEU:CD1	FA:203:VAL:HG23	0.866
1	LA:228:THR:CG2	MA:140:PRO:HD2	0.866
1	Z:86:LEU:CA	AA:188:GLY:H	0.866
1	A:233:GLN:OE1	B:39:THR:HB	0.865
1	A:82:GLY:O	B:191:LEU:CB	0.865
1	B:15:LEU:N	C:22:LEU:HD12	0.865
1	C:216:LYS:HD2	D:24:ARG:CD	0.865
1	X:81:ILE:HA	Y:192:LYS:O	0.865
1	X:231:ALA:CA	Y:42:TYR:O	0.865
1	Y:218:PHE:CZ	Z:44:GLY:N	0.865
1	EA:87:LYS:CA	FA:187:VAL:CG1	0.865
1	HA:90:LEU:CB	IA:185:LYS:NZ	0.865
1	WA:87:LYS:HD3	XA:186:VAL:CG1	0.865
1	W:233:GLN:NE2	X:21:ARG:HH12	0.865
1	C:87:LYS:CA	D:187:VAL:HG13	0.864
1	E:124:LEU:HD11	F:45:SER:CA	0.864
1	DA:218:PHE:CE2	EA:42:TYR:HD2	0.864
1	XA:81:ILE:HA	YA:192:LYS:O	0.864
1	YA:228:THR:CG2	ZA:140:PRO:HD2	0.864
1	A:89:VAL:N	B:185:LYS:CB	0.863

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	E:124:LEU:HG	F:45:SER:HB3	0.863
1	F:124:LEU:HD11	G:45:SER:HB2	0.863
1	N:90:LEU:HB3	O:185:LYS:NZ	0.863
1	Q:14:ARG:CB	R:203:VAL:HB	0.863
1	Q:86:LEU:HD21	R:188:GLY:HA3	0.863
1	U:14:ARG:HG3	V:203:VAL:HG11	0.863
1	QA:64:GLN:C	RA:209:LYS:CD	0.863
1	UA:15:LEU:H	VA:203:VAL:HG21	0.863
1	D:218:PHE:CE2	E:42:TYR:HD2	0.862
1	I:86:LEU:CD2	J:188:GLY:C	0.862
1	U:87:LYS:HD2	V:186:VAL:CG2	0.862
1	X:86:LEU:CD2	Y:188:GLY:HA3	0.862
1	Z:12:LEU:O	AA:22:LEU:HD22	0.862
1	BA:87:LYS:HB2	CA:187:VAL:HG13	0.862
1	HA:124:LEU:HD11	IA:45:SER:CB	0.862
1	HA:64:GLN:O	IA:209:LYS:HE2	0.862
1	QA:14:ARG:C	RA:22:LEU:CD1	0.862
1	QA:230:PHE:CE1	RA:141:VAL:HG11	0.862
1	RA:14:ARG:HG3	SA:203:VAL:HG12	0.862
1	QA:86:LEU:HD22	RA:188:GLY:HA3	0.862
1	UA:87:LYS:HD2	VA:186:VAL:CG2	0.862
1	WA:83:ILE:CD	XA:191:LEU:HB3	0.862
1	WA:118:ALA:HB3	XA:209:LYS:CE	0.862

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	XA:89:VAL:H	YA:185:LYS:HB3	0.862
1	A:231:ALA:H	B:43:LEU:HD23	0.861
1	C:124:LEU:HD23	D:47:GLU:CG	0.861
1	C:228:THR:HB	D:141:VAL:HG13	0.861
1	E:68:GLY:N	F:205:TYR:CE1	0.861
1	Q:15:LEU:HD21	R:204:THR:O	0.861
1	DA:231:ALA:N	EA:43:LEU:HD23	0.861
1	DA:74:THR:O	EA:199:SER:HA	0.861
1	EA:82:GLY:O	FA:191:LEU:CB	0.861
1	IA:86:LEU:CD2	JA:188:GLY:C	0.861
1	UA:90:LEU:H	VA:185:LYS:HD3	0.861
1	YA:218:PHE:CZ	ZA:44:GLY:N	0.861
1	Z:86:LEU:N	AA:188:GLY:N	0.861
1	FA:67:ALA:N	GA:205:TYR:OH	0.861
1	XA:86:LEU:H	YA:188:GLY:H	0.861
1	A:39:THR:CB	ZA:233:GLN:OE1	0.860
1	A:231:ALA:HA	B:42:TYR:O	0.860
1	E:15:LEU:CD1	F:22:LEU:CD1	0.860
1	J:67:ALA:HB2	K:205:TYR:OH	0.860
1	J:89:VAL:HA	K:185:LYS:HD2	0.860
1	W:17:TYR:O	X:22:LEU:HD22	0.860
1	BA:87:LYS:H	CA:187:VAL:HA	0.860
1	GA:233:GLN:NE2	HA:39:THR:HG22	0.860

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	NA:90:LEU:HB3	OA:185:LYS:NZ	0.860
1	QA:69:ILE:CD	RA:204:THR:OG1	0.860
1	TA:124:LEU:HD23	UA:45:SER:HB2	0.860
1	UA:87:LYS:HD2	VA:186:VAL:CA	0.860
1	VA:15:LEU:HA	WA:23:PRO:CD	0.860
1	WA:69:ILE:CD	XA:204:THR:C	0.860
1	VA:90:LEU:H	WA:185:LYS:HD3	0.860
1	YA:218:PHE:HZ	ZA:44:GLY:H	0.860
1	X:86:LEU:H	Y:188:GLY:H	0.860
1	A:22:LEU:HD12	ZA:15:LEU:N	0.859
1	B:81:ILE:HG22	C:193:VAL:HG22	0.859
1	L:228:THR:CG2	M:140:PRO:HD2	0.859
1	R:14:ARG:HG3	S:203:VAL:HG12	0.859
1	V:69:ILE:CD	W:204:THR:N	0.859
1	Z:230:PHE:HA	AA:43:LEU:CD2	0.859
1	AA:87:LYS:C	BA:187:VAL:HG13	0.859
1	CA:216:LYS:HD2	DA:24:ARG:CD	0.859
1	NA:216:LYS:NZ	OA:24:ARG:HD3	0.859
1	YA:67:ALA:HB3	ZA:205:TYR:CE2	0.859
1	YA:228:THR:HG21	ZA:141:VAL:N	0.859
1	Z:111:PHE:HZ	AA:202:THR:O	0.859
1	W:14:ARG:O	X:22:LEU:N	0.859
1	A:67:ALA:CB	B:207:GLY:O	0.859

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	Z:68:GLY:O	AA:205:TYR:CA	0.859
1	B:87:LYS:HG3	C:185:LYS:O	0.858
1	S:86:LEU:HD21	T:188:GLY:N	0.858
1	X:14:ARG:HG3	Y:203:VAL:HG12	0.858
1	CA:87:LYS:C	DA:187:VAL:HG13	0.858
1	CA:228:THR:HB	DA:141:VAL:HG13	0.858
1	EA:229:LEU:O	FA:141:VAL:HG11	0.858
1	EA:68:GLY:N	FA:205:TYR:CE1	0.858
1	GA:67:ALA:HB2	HA:207:GLY:CA	0.858
1	GA:124:LEU:CA	HA:48:LYS:CE	0.858
1	KA:67:ALA:HB2	LA:205:TYR:CZ	0.858
1	QA:14:ARG:CB	RA:203:VAL:HB	0.858
1	UA:230:PHE:HZ	VA:141:VAL:HG12	0.858
1	A:43:LEU:CD2	ZA:230:PHE:HA	0.857
1	D:15:LEU:CB	E:22:LEU:HD12	0.857
1	E:82:GLY:O	F:191:LEU:CB	0.857
1	H:15:LEU:CD1	I:22:LEU:HD11	0.857
1	P:64:GLN:CB	Q:209:LYS:NZ	0.857
1	V:230:PHE:HZ	W:141:VAL:HG12	0.857
1	W:15:LEU:N	X:22:LEU:HA	0.857
1	X:118:ALA:HB3	Y:209:LYS:CE	0.857
1	X:15:LEU:N	Y:22:LEU:HD12	0.857
1	A:198:SER:O	ZA:75:GLU:HA	0.857

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	XA:86:LEU:H	YA:188:GLY:N	0.857
1	B:89:VAL:N	C:185:LYS:CD	0.856
1	I:86:LEU:CG	J:187:VAL:CA	0.856
1	U:228:THR:HB	V:141:VAL:CG1	0.856
1	Y:77:LEU:HA	Z:196:SER:O	0.856
1	CA:79:PHE:CA	DA:194:GLU:O	0.856
1	QA:89:VAL:HG21	RA:187:VAL:HG11	0.856
1	SA:14:ARG:HB3	TA:203:VAL:CB	0.856
1	XA:231:ALA:CA	YA:42:TYR:O	0.856
1	XA:84:ASN:O	YA:188:GLY:O	0.856
1	C:87:LYS:C	D:187:VAL:HG13	0.855
1	H:64:GLN:O	I:209:LYS:HE2	0.855
1	K:67:ALA:CA	L:207:GLY:HA3	0.855
1	Z:228:THR:CG2	AA:140:PRO:HG2	0.855
1	CA:15:LEU:HB3	DA:23:PRO:O	0.855
1	CA:86:LEU:C	DA:187:VAL:CA	0.855
1	BA:68:GLY:N	CA:205:TYR:CE1	0.855
1	IA:15:LEU:HG	JA:203:VAL:HG21	0.855
1	TA:218:PHE:CE2	UA:42:TYR:CE2	0.855
1	S:218:PHE:HZ	T:42:TYR:HD2	0.855
1	CA:231:ALA:H	DA:43:LEU:CD2	0.855
1	GA:16:GLY:N	HA:22:LEU:O	0.855
1	A:185:LYS:CB	ZA:89:VAL:N	0.854



Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	E:67:ALA:HB2	F:207:GLY:C	0.854
1	F:124:LEU:HB3	G:48:LYS:HZ3	0.854
1	H:15:LEU:HG	I:203:VAL:HG21	0.854
1	X:86:LEU:CD2	Y:188:GLY:CA	0.854
1	X:230:PHE:HE1	Y:141:VAL:HB	0.854
1	DA:231:ALA:O	EA:41:GLU:CB	0.854
1	EA:124:LEU:HD11	FA:45:SER:CA	0.854
1	IA:89:VAL:CA	JA:185:LYS:CD	0.854
1	M:216:LYS:HZ1	N:24:ARG:HH11	0.854
1	XA:233:GLN:NE2	YA:21:ARG:HH12	0.854
1	A:87:LYS:C	B:187:VAL:HG13	0.853
1	E:79:PHE:CB	F:194:GLU:O	0.853
1	O:124:LEU:HD21	P:45:SER:HB2	0.853
1	FA:124:LEU:HD11	GA:45:SER:HB2	0.853
1	QA:86:LEU:HD21	RA:188:GLY:HA3	0.853
1	F:89:VAL:N	G:185:LYS:CD	0.853
1	PA:64:GLN:CB	QA:209:LYS:HZ3	0.853
1	B:87:LYS:HB2	C:187:VAL:HG13	0.852
1	L:228:THR:HG22	M:140:PRO:HD2	0.852
1	N:15:LEU:CD1	O:203:VAL:HG23	0.852
1	T:89:VAL:HA	U:185:LYS:CB	0.852
1	W:69:ILE:CD	X:204:THR:C	0.852
1	B:231:ALA:N	C:43:LEU:HD23	0.851

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	C:87:LYS:CA	D:187:VAL:CG1	0.851
1	D:17:TYR:HB2	E:22:LEU:HD21	0.851
1	D:231:ALA:O	E:41:GLU:CB	0.851
1	K:228:THR:CG2	L:140:PRO:HG2	0.851
1	V:15:LEU:CA	W:22:LEU:HA	0.851
1	Z:228:THR:HG21	AA:141:VAL:N	0.851
1	SA:64:GLN:O	TA:209:LYS:CD	0.851
1	J:90:LEU:N	K:185:LYS:HZ3	0.851
1	A:75:GLU:CA	B:198:SER:O	0.850
1	A:230:PHE:CD1	B:141:VAL:CB	0.850
1	L:90:LEU:HD23	M:185:LYS:HZ2	0.850
1	W:14:ARG:CB	X:203:VAL:HG12	0.850
1	AA:231:ALA:HA	BA:42:TYR:O	0.850
1	BA:81:ILE:HG22	CA:193:VAL:HG22	0.850
1	DA:228:THR:OG1	EA:140:PRO:CG	0.850
1	KA:67:ALA:CA	LA:207:GLY:HA3	0.850
1	NA:15:LEU:CD1	OA:203:VAL:HG23	0.850
1	QA:15:LEU:HD21	RA:204:THR:O	0.850
1	UA:228:THR:HB	VA:141:VAL:CG1	0.850
1	WA:15:LEU:N	XA:22:LEU:HA	0.850
1	XA:86:LEU:CD2	YA:188:GLY:CA	0.850
1	G:90:LEU:N	H:185:LYS:HZ2	0.850
1	X:84:ASN:O	Y:188:GLY:O	0.850

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	A:15:LEU:N	B:22:LEU:HD12	0.849
1	R:64:GLN:HB2	S:209:LYS:CE	0.849
1	AA:89:VAL:N	BA:185:LYS:CB	0.849
1	PA:89:VAL:HB	QA:187:VAL:HG13	0.849
1	TA:118:ALA:HB3	UA:209:LYS:HE2	0.849
1	XA:118:ALA:HB3	YA:209:LYS:CE	0.849
1	YA:86:LEU:HG	ZA:188:GLY:N	0.849
1	A:231:ALA:O	B:41:GLU:HG2	0.848
1	Q:64:GLN:C	R:209:LYS:CD	0.848
1	Q:15:LEU:N	R:203:VAL:HG21	0.848
1	S:230:PHE:HE1	T:141:VAL:HG12	0.848
1	Z:15:LEU:N	AA:22:LEU:HD12	0.848
1	AA:87:LYS:C	BA:187:VAL:CG1	0.848
1	BA:231:ALA:N	CA:43:LEU:HD23	0.848
1	VA:69:ILE:CD	WA:204:THR:N	0.848
1	VA:14:ARG:HG2	WA:203:VAL:HG12	0.848
1	WA:15:LEU:H	XA:203:VAL:HG21	0.848
1	X:233:GLN:NE2	Y:21:ARG:HH12	0.848
1	D:124:LEU:HD23	E:47:GLU:CG	0.847
1	Q:14:ARG:C	R:22:LEU:CD1	0.847
1	S:89:VAL:HA	T:185:LYS:HB3	0.847
1	T:118:ALA:HB3	U:209:LYS:HE2	0.847
1	U:15:LEU:H	V:203:VAL:HG21	0.847

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	W:228:THR:HG22	X:141:VAL:HG22	0.847
1	Y:86:LEU:HG	Z:188:GLY:N	0.847
1	DA:69:ILE:CD	EA:204:THR:C	0.847
1	EA:79:PHE:CB	FA:194:GLU:O	0.847
1	IA:124:LEU:CD2	JA:45:SER:CB	0.847
1	OA:89:VAL:HB	PA:187:VAL:CG1	0.847
1	QA:15:LEU:N	RA:203:VAL:HG21	0.847
1	V:15:LEU:N	W:203:VAL:CG2	0.847
1	A:87:LYS:C	B:187:VAL:CG1	0.846
1	A:140:PRO:HG2	ZA:228:THR:CG2	0.846
1	K:67:ALA:HB2	L:207:GLY:HA3	0.846
1	P:14:ARG:CG	Q:203:VAL:HG12	0.846
1	AA:231:ALA:H	BA:43:LEU:HD23	0.846
1	HA:233:GLN:OE1	IA:39:THR:HB	0.846
1	YA:230:PHE:CD1	ZA:141:VAL:CG1	0.846
1	A:187:VAL:CG1	ZA:89:VAL:CG1	0.846
1	S:64:GLN:CG	T:209:LYS:HZ3	0.846
1	XA:157:GLN:HE22	YA:25:GLU:CB	0.846
1	HA:86:LEU:O	IA:186:VAL:O	0.846
1	D:69:ILE:CD	E:204:THR:C	0.845
1	D:17:TYR:H	E:22:LEU:HD23	0.845
1	KA:67:ALA:HB2	LA:207:GLY:HA3	0.845
1	H:233:GLN:OE1	I:39:THR:HB	0.844

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	L:64:GLN:HB3	M:209:LYS:NZ	0.844
1	S:66:ALA:CB	T:205:TYR:CE1	0.844
1	S:64:GLN:O	T:209:LYS:CD	0.844
1	U:87:LYS:HE2	V:186:VAL:HG13	0.844
1	W:83:ILE:CD	X:191:LEU:HB3	0.844
1	EA:67:ALA:HB2	FA:207:GLY:C	0.844
1	HA:15:LEU:CD1	IA:22:LEU:HD11	0.844
1	QA:216:LYS:HZ3	RA:24:ARG:HD3	0.844
1	YA:14:ARG:C	ZA:22:LEU:N	0.844
1	YA:77:LEU:HA	ZA:196:SER:O	0.844
1	F:233:GLN:NE2	G:39:THR:CG2	0.844
1	B:69:ILE:CG1	C:204:THR:O	0.843
1	E:87:LYS:HB2	F:187:VAL:HG13	0.843
1	G:87:LYS:H	H:187:VAL:HG12	0.843
1	Q:64:GLN:HB3	R:209:LYS:CE	0.843
1	X:230:PHE:HE1	Y:141:VAL:CB	0.843
1	CA:87:LYS:CA	DA:187:VAL:CG1	0.843
1	DA:231:ALA:C	EA:41:GLU:HB3	0.843
1	DA:15:LEU:CD1	EA:203:VAL:HG23	0.843
1	EA:228:THR:OG1	FA:140:PRO:CG	0.843
1	EA:89:VAL:CA	FA:185:LYS:HD3	0.843
1	IA:67:ALA:HA	JA:207:GLY:HA3	0.843
1	LA:64:GLN:HB3	MA:209:LYS:NZ	0.843

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	MA:124:LEU:CD2	NA:45:SER:HB3	0.843
1	NA:230:PHE:CD1	OA:141:VAL:CG1	0.843
1	RA:64:GLN:HB2	SA:209:LYS:CE	0.843
1	SA:64:GLN:CA	TA:209:LYS:HD2	0.843
1	VA:216:LYS:HE3	WA:24:ARG:HH11	0.843
1	XA:230:PHE:HE1	YA:141:VAL:CB	0.843
1	A:81:ILE:HG22	B:193:VAL:HA	0.842
1	B:83:ILE:CD	C:191:LEU:HD13	0.842
1	D:228:THR:OG1	E:140:PRO:CG	0.842
1	H:124:LEU:HD11	I:45:SER:CB	0.842
1	J:86:LEU:HG	K:187:VAL:CA	0.842
1	DA:124:LEU:CD2	EA:47:GLU:HG3	0.842
1	QA:64:GLN:HB3	RA:209:LYS:CE	0.842
1	Y:218:PHE:HZ	Z:44:GLY:H	0.842
1	A:230:PHE:CZ	B:141:VAL:HG13	0.841
1	A:218:PHE:CD2	B:42:TYR:CD2	0.841
1	D:231:ALA:N	E:43:LEU:HD23	0.841
1	K:67:ALA:HB2	L:205:TYR:CZ	0.841
1	V:14:ARG:HG2	W:203:VAL:HG12	0.841
1	Y:228:THR:HG22	Z:141:VAL:HG22	0.841
1	DA:87:LYS:N	EA:187:VAL:CA	0.841
1	IA:15:LEU:HD12	JA:22:LEU:CD1	0.841
1	UA:14:ARG:HG3	VA:203:VAL:HG11	0.841

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	YA:230:PHE:HZ	ZA:141:VAL:HA	0.841
1	A:202:THR:O	ZA:111:PHE:HZ	0.841
1	U:231:ALA:N	V:42:TYR:O	0.841
1	UA:231:ALA:N	VA:42:TYR:O	0.841
1	D:68:GLY:O	E:205:TYR:HA	0.840
1	R:230:PHE:CE1	S:141:VAL:HG11	0.840
1	V:228:THR:HB	W:141:VAL:HG11	0.840
1	AA:75:GLU:CA	BA:198:SER:O	0.840
1	FA:12:LEU:O	GA:22:LEU:CD2	0.840
1	JA:67:ALA:HB2	KA:205:TYR:OH	0.840
1	TA:65:ALA:N	UA:209:LYS:CG	0.840
1	VA:228:THR:CG2	WA:141:VAL:HG13	0.840
1	C:15:LEU:HB2	D:22:LEU:CD1	0.839
1	D:81:ILE:HG22	E:193:VAL:HG22	0.839
1	I:15:LEU:HD12	J:22:LEU:CD1	0.839
1	O:64:GLN:HB3	P:209:LYS:HZ1	0.839
1	R:86:LEU:CD2	S:188:GLY:H	0.839
1	S:64:GLN:CA	T:209:LYS:HD2	0.839
1	T:218:PHE:CE2	U:42:TYR:CE2	0.839
1	V:90:LEU:H	W:185:LYS:HD3	0.839
1	Z:75:GLU:HA	AA:198:SER:O	0.839
1	Z:83:ILE:CD	AA:191:LEU:CB	0.839
1	DA:68:GLY:O	EA:205:TYR:HA	0.839

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	LA:228:THR:HG22	MA:140:PRO:HD2	0.839
1	YA:65:ALA:CB	ZA:208:GLU:CG	0.839
1	YA:87:LYS:O	ZA:187:VAL:CG1	0.839
1	MA:216:LYS:HZ1	NA:24:ARG:HH11	0.839
1	D:89:VAL:CA	E:185:LYS:HD3	0.838
1	K:90:LEU:CB	L:185:LYS:HZ3	0.838
1	Y:65:ALA:CB	Z:208:GLU:CG	0.838
1	AA:81:ILE:HG22	BA:193:VAL:HA	0.838
1	DA:16:GLY:C	EA:22:LEU:HD23	0.838
1	GA:124:LEU:CD1	HA:45:SER:CB	0.838
1	RA:230:PHE:CZ	SA:141:VAL:CG1	0.838
1	UA:15:LEU:HA	VA:23:PRO:HD2	0.838
1	S:231:ALA:HB2	T:42:TYR:N	0.838
1	AA:128:GLN:OE1	BA:48:LYS:NZ	0.838
1	A:228:THR:HG21	B:141:VAL:H	0.837
1	B:69:ILE:CB	C:204:THR:O	0.837
1	G:15:LEU:HG	H:203:VAL:HG21	0.837
1	V:228:THR:CG2	W:141:VAL:HG13	0.837
1	GA:89:VAL:C	HA:185:LYS:NZ	0.837
1	FA:67:ALA:CB	GA:207:GLY:HA3	0.837
1	IA:90:LEU:HB3	JA:185:LYS:NZ	0.837
1	A:128:GLN:OE1	B:48:LYS:NZ	0.837
1	G:16:GLY:N	H:22:LEU:O	0.837



Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	M:124:LEU:CD2	N:45:SER:HB3	0.836
1	N:230:PHE:CD1	O:141:VAL:HG12	0.836
1	AA:228:THR:HG23	BA:140:PRO:CG	0.836
1	WA:230:PHE:HZ	XA:141:VAL:HG12	0.836
1	A:141:VAL:N	ZA:228:THR:HG21	0.836
1	OA:216:LYS:HE3	PA:24:ARG:HH11	0.836
1	A:230:PHE:HE1	B:141:VAL:CB	0.835
1	C:231:ALA:HB1	D:42:TYR:H	0.835
1	E:67:ALA:CA	F:207:GLY:N	0.835
1	P:89:VAL:HB	Q:187:VAL:HG13	0.835
1	Q:15:LEU:CA	R:203:VAL:HG21	0.835
1	S:86:LEU:HD23	T:188:GLY:H	0.835
1	T:65:ALA:N	U:209:LYS:CG	0.835
1	Z:89:VAL:CG1	AA:187:VAL:CG1	0.835
1	BA:69:ILE:CG1	CA:204:THR:O	0.835
1	BA:87:LYS:HZ1	CA:186:VAL:CG1	0.835
1	EA:17:TYR:N	FA:22:LEU:CD2	0.835
1	HA:15:LEU:HG	IA:203:VAL:HG21	0.835
1	OA:89:VAL:HA	PA:185:LYS:HD3	0.835
1	B:68:GLY:O	C:205:TYR:CA	0.835
1	F:12:LEU:O	G:22:LEU:CD2	0.834
1	M:90:LEU:HD23	N:185:LYS:HZ1	0.834
1	P:15:LEU:HG	Q:203:VAL:HG22	0.834

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	V:14:ARG:CB	W:203:VAL:HG12	0.834
1	EA:67:ALA:HB1	FA:207:GLY:CA	0.834
1	GA:89:VAL:HA	HA:185:LYS:HD3	0.834
1	JA:67:ALA:CA	KA:205:TYR:CE1	0.834
1	JA:228:THR:CG2	KA:140:PRO:HG2	0.834
1	Z:86:LEU:H	AA:188:GLY:H	0.834
1	G:64:GLN:HB3	H:209:LYS:HZ1	0.833
1	K:86:LEU:HG	L:187:VAL:HA	0.833
1	N:230:PHE:CD1	O:141:VAL:CG1	0.833
1	BA:83:ILE:CD	CA:191:LEU:HD13	0.833
1	BA:233:GLN:CD	CA:39:THR:CG2	0.833
1	WA:228:THR:HG22	XA:141:VAL:HG22	0.833
1	DA:67:ALA:O	EA:207:GLY:N	0.833
1	Y:84:ASN:O	Z:188:GLY:O	0.833
1	YA:17:TYR:O	ZA:22:LEU:CD2	0.833
1	A:191:LEU:HB3	ZA:83:ILE:CD	0.832
1	I:90:LEU:HB3	J:185:LYS:NZ	0.832
1	K:89:VAL:CA	L:185:LYS:HD3	0.832
1	Y:89:VAL:HB	Z:187:VAL:HG13	0.832
1	DA:81:ILE:HG22	EA:193:VAL:HG22	0.832
1	KA:228:THR:CG2	LA:140:PRO:HG2	0.832
1	OA:230:PHE:CE1	PA:141:VAL:HG13	0.832
1	QA:15:LEU:CA	RA:203:VAL:HG21	0.832

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	F:64:GLN:HB3	G:209:LYS:HZ1	0.831
1	G:15:LEU:CD1	H:22:LEU:HD11	0.831
1	G:124:LEU:CA	H:48:LYS:CE	0.831
1	BA:89:VAL:N	CA:185:LYS:CD	0.831
1	FA:233:GLN:NE2	GA:39:THR:CG2	0.831
1	JA:15:LEU:HD11	KA:203:VAL:HG23	0.831
1	KA:86:LEU:HG	LA:187:VAL:HA	0.831
1	MA:65:ALA:CB	NA:208:GLU:OE2	0.831
1	QA:216:LYS:HZ1	RA:24:ARG:HD3	0.831
1	RA:86:LEU:HD23	SA:188:GLY:CA	0.831
1	UA:87:LYS:HE3	VA:186:VAL:CG1	0.831
1	YA:14:ARG:HB3	ZA:203:VAL:HG11	0.831
1	YA:228:THR:HG22	ZA:141:VAL:HG22	0.831
1	X:157:GLN:HE22	Y:25:GLU:CB	0.831
1	H:86:LEU:O	I:186:VAL:O	0.831
1	YA:84:ASN:O	ZA:188:GLY:O	0.831
1	A:203:VAL:HG11	ZA:14:ARG:HB3	0.830
1	B:89:VAL:HA	C:185:LYS:CG	0.830
1	D:229:LEU:C	E:141:VAL:HG11	0.830
1	D:231:ALA:C	E:41:GLU:HB3	0.830
1	E:89:VAL:C	F:185:LYS:HD2	0.830
1	E:228:THR:OG1	F:140:PRO:CG	0.830
1	O:64:GLN:HB3	P:209:LYS:HZ3	0.830

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	R:218:PHE:CE2	S:42:TYR:CD2	0.830
1	AA:228:THR:HG21	BA:141:VAL:H	0.830
1	DA:17:TYR:HB2	EA:22:LEU:HD21	0.830
1	DA:17:TYR:H	EA:22:LEU:HD23	0.830
1	GA:15:LEU:CG	HA:203:VAL:HG21	0.830
1	SA:89:VAL:HA	TA:185:LYS:HB3	0.830
1	UA:87:LYS:HE2	VA:186:VAL:HG13	0.830
1	XA:89:VAL:CA	YA:185:LYS:HB2	0.830
1	A:191:LEU:CB	ZA:83:ILE:CD	0.829
1	A:89:VAL:N	B:185:LYS:HD3	0.829
1	D:87:LYS:N	E:187:VAL:CA	0.829
1	G:89:VAL:C	H:185:LYS:NZ	0.829
1	I:67:ALA:HA	J:207:GLY:HA3	0.829
1	O:216:LYS:HZ3	P:24:ARG:HD3	0.829
1	R:64:GLN:HB2	S:209:LYS:HE2	0.829
1	Y:14:ARG:CB	Z:203:VAL:CG1	0.829
1	BA:89:VAL:HA	CA:185:LYS:CG	0.829
1	EA:15:LEU:CD1	FA:22:LEU:CD1	0.829
1	PA:14:ARG:CG	QA:203:VAL:HG12	0.829
1	D:67:ALA:O	E:207:GLY:N	0.829
1	B:75:GLU:CA	C:198:SER:O	0.828
1	C:15:LEU:CB	D:22:LEU:HD12	0.828
1	C:87:LYS:C	D:187:VAL:CG1	0.828

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	J:228:THR:CG2	K:140:PRO:HG2	0.828
1	Q:86:LEU:HD22	R:188:GLY:HA3	0.828
1	V:89:VAL:CG1	W:187:VAL:HG12	0.828
1	Y:65:ALA:HB3	Z:208:GLU:HG2	0.828
1	Z:89:VAL:N	AA:185:LYS:CB	0.828
1	EA:87:LYS:HB2	FA:187:VAL:HG13	0.828
1	GA:124:LEU:HA	HA:48:LYS:HE3	0.828
1	DA:231:ALA:H	EA:43:LEU:CD2	0.828
1	M:14:ARG:HG3	N:203:VAL:HG11	0.827
1	M:65:ALA:CB	N:208:GLU:OE2	0.827
1	N:90:LEU:HD23	O:185:LYS:HZ3	0.827
1	O:216:LYS:HZ3	P:24:ARG:CD	0.827
1	Y:69:ILE:CG1	Z:204:THR:O	0.827
1	Z:233:GLN:CD	AA:39:THR:HG22	0.827
1	BA:69:ILE:CB	CA:204:THR:O	0.827
1	CA:87:LYS:C	DA:187:VAL:CG1	0.827
1	KA:67:ALA:HB3	LA:205:TYR:CD1	0.827
1	KA:89:VAL:CA	LA:185:LYS:HD3	0.827
1	QA:231:ALA:HB2	RA:42:TYR:HB3	0.827
1	RA:66:ALA:HA	SA:205:TYR:CZ	0.827
1	X:17:TYR:O	Y:22:LEU:CD2	0.827
1	A:39:THR:HG22	ZA:233:GLN:CD	0.826
1	D:16:GLY:C	E:22:LEU:HD23	0.826

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	E:231:ALA:O	F:41:GLU:HB3	0.826
1	J:15:LEU:HD11	K:203:VAL:HG23	0.826
1	O:89:VAL:HB	P:187:VAL:CG1	0.826
1	Y:13:LYS:O	Z:22:LEU:HB2	0.826
1	Z:83:ILE:CD	AA:191:LEU:HB3	0.826
1	Y:87:LYS:O	Z:187:VAL:CG1	0.826
1	DA:66:ALA:HA	EA:209:LYS:HB2	0.826
1	EA:67:ALA:CA	FA:207:GLY:N	0.826
1	YA:14:ARG:CG	ZA:203:VAL:CG1	0.826
1	D:67:ALA:C	E:207:GLY:H	0.826
1	BA:68:GLY:O	CA:205:TYR:CA	0.826
1	B:228:THR:HG22	C:139:ASN:HB2	0.825
1	K:67:ALA:HB3	L:205:TYR:CD1	0.825
1	O:216:LYS:HZ1	P:24:ARG:CD	0.825
1	AA:230:PHE:CZ	BA:141:VAL:HG13	0.825
1	EA:231:ALA:O	FA:41:GLU:HB3	0.825
1	HA:64:GLN:C	IA:209:LYS:CE	0.825
1	JA:86:LEU:HG	KA:187:VAL:CA	0.825
1	LA:228:THR:HG21	MA:140:PRO:HG3	0.825
1	XA:230:PHE:HE1	YA:141:VAL:HB	0.825
1	A:188:GLY:H	ZA:86:LEU:H	0.825
1	O:228:THR:HG21	P:140:PRO:CG	0.824
1	V:69:ILE:CD	W:204:THR:H	0.824

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	AA:230:PHE:HA	BA:43:LEU:CD2	0.824
1	DA:231:ALA:HB3	EA:41:GLU:C	0.824
1	WA:14:ARG:CB	XA:203:VAL:HG12	0.824
1	YA:14:ARG:CB	ZA:203:VAL:CG1	0.824
1	A:228:THR:CG2	B:141:VAL:H	0.823
1	D:231:ALA:HB3	E:41:GLU:C	0.823
1	G:15:LEU:CG	H:203:VAL:HG21	0.823
1	G:69:ILE:CD	H:204:THR:H	0.823
1	M:216:LYS:HZ1	N:24:ARG:CD	0.823
1	S:65:ALA:C	T:209:LYS:CD	0.823
1	DA:65:ALA:CB	EA:208:GLU:OE2	0.823
1	GA:69:ILE:CD	HA:204:THR:H	0.823
1	HA:67:ALA:HB2	IA:207:GLY:HA3	0.823
1	RA:64:GLN:HB2	SA:209:LYS:HE2	0.823
1	RA:89:VAL:CB	SA:187:VAL:HG13	0.823
1	PA:216:LYS:NZ	QA:24:ARG:HH11	0.823
1	C:15:LEU:N	D:22:LEU:CD1	0.822
1	T:89:VAL:HG21	U:187:VAL:HG11	0.822
1	X:13:LYS:O	Y:22:LEU:HB2	0.822
1	BA:81:ILE:CG2	CA:193:VAL:HG22	0.822
1	CA:87:LYS:N	DA:187:VAL:HG12	0.822
1	A:140:PRO:N	ZA:228:THR:CG2	0.822
1	SA:231:ALA:HB2	TA:42:TYR:N	0.822

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	C:87:LYS:N	D:187:VAL:HG12	0.821
1	F:15:LEU:HG	G:203:VAL:HG21	0.821
1	G:67:ALA:C	H:205:TYR:CE1	0.821
1	H:229:LEU:O	I:141:VAL:HG11	0.821
1	H:89:VAL:CA	I:185:LYS:HD2	0.821
1	L:228:THR:HG21	M:140:PRO:HG3	0.821
1	U:15:LEU:HA	V:23:PRO:HD2	0.821
1	W:87:LYS:HD3	X:186:VAL:CG1	0.821
1	EA:89:VAL:C	FA:185:LYS:HD2	0.821
1	GA:64:GLN:HB3	HA:209:LYS:HZ1	0.821
1	HA:229:LEU:O	IA:141:VAL:HG11	0.821
1	RA:218:PHE:CE2	SA:42:TYR:CD2	0.821
1	VA:14:ARG:C	WA:22:LEU:HA	0.821
1	P:216:LYS:NZ	Q:24:ARG:HH11	0.821
1	B:87:LYS:HB2	C:187:VAL:CG1	0.820
1	D:65:ALA:CB	E:208:GLU:OE2	0.820
1	E:216:LYS:HD2	F:24:ARG:HD2	0.820
1	V:14:ARG:C	W:22:LEU:HA	0.820
1	BA:75:GLU:CA	CA:198:SER:O	0.820
1	QA:216:LYS:HZ1	RA:24:ARG:CD	0.820
1	SA:230:PHE:CE1	TA:141:VAL:HG11	0.820
1	YA:65:ALA:HB3	ZA:208:GLU:HG2	0.820
1	O:216:LYS:HE3	P:24:ARG:HH11	0.820



Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	Y:14:ARG:CG	Z:203:VAL:CG1	0.819
1	TA:89:VAL:CG1	UA:187:VAL:HG12	0.819
1	XA:233:GLN:CD	YA:21:ARG:HH22	0.819
1	B:231:ALA:O	C:41:GLU:HG2	0.818
1	P:14:ARG:HB3	Q:203:VAL:HB	0.818
1	CA:89:VAL:H	DA:185:LYS:CB	0.818
1	MA:14:ARG:HG3	NA:203:VAL:HG11	0.818
1	RA:86:LEU:HD23	SA:188:GLY:N	0.818
1	VA:89:VAL:HG21	WA:187:VAL:HG21	0.818
1	B:67:ALA:CB	C:207:GLY:O	0.818
1	A:205:TYR:CA	ZA:68:GLY:O	0.818
1	D:124:LEU:CD2	E:47:GLU:HG3	0.817
1	D:124:LEU:CA	E:48:LYS:CE	0.817
1	H:64:GLN:C	I:209:LYS:CE	0.817
1	I:86:LEU:HD22	J:188:GLY:HA3	0.817
1	O:89:VAL:HA	P:185:LYS:HD3	0.817
1	T:89:VAL:CG1	U:187:VAL:HG12	0.817
1	V:79:PHE:HB3	W:194:GLU:O	0.817
1	Z:13:LYS:O	AA:22:LEU:HB2	0.817
1	AA:230:PHE:HA	BA:43:LEU:HD23	0.817
1	A:75:GLU:CB	B:198:SER:O	0.816
1	G:124:LEU:CD2	H:47:GLU:OE2	0.816
1	R:231:ALA:HB2	S:42:TYR:CB	0.816

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	T:231:ALA:CB	U:42:TYR:HB3	0.816
1	X:14:ARG:C	Y:22:LEU:CA	0.816
1	Y:67:ALA:O	Z:206:LYS:C	0.816
1	GA:15:LEU:HG	HA:203:VAL:HG21	0.816
1	YA:69:ILE:CG1	ZA:204:THR:O	0.816
1	T:216:LYS:CE	U:24:ARG:NH1	0.816
1	KA:90:LEU:CD2	LA:185:LYS:HZ1	0.816
1	E:13:LYS:C	F:22:LEU:HB2	0.815
1	R:218:PHE:CE2	S:42:TYR:HD2	0.815
1	LA:65:ALA:HB3	MA:208:GLU:OE2	0.815
1	MA:15:LEU:HG	NA:203:VAL:HG23	0.815
1	MA:216:LYS:NZ	NA:24:ARG:CD	0.815
1	SA:86:LEU:HD23	TA:188:GLY:H	0.815
1	XA:15:LEU:N	YA:22:LEU:HD12	0.815
1	E:231:ALA:CB	F:42:TYR:N	0.815
1	M:216:LYS:NZ	N:24:ARG:CD	0.814
1	DA:229:LEU:C	EA:141:VAL:HG11	0.814
1	GA:15:LEU:CD1	HA:22:LEU:HD11	0.814
1	RA:231:ALA:HB2	SA:42:TYR:CB	0.814
1	YA:13:LYS:O	ZA:22:LEU:HB2	0.814
1	YA:73:LYS:NZ	ZA:201:SER:HB3	0.814
1	B:86:LEU:N	C:188:GLY:N	0.814
1	C:12:LEU:O	D:22:LEU:HD21	0.813

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	D:87:LYS:HB2	E:187:VAL:CB	0.813
1	C:89:VAL:H	D:185:LYS:CB	0.813
1	E:229:LEU:C	F:141:VAL:HG11	0.813
1	G:233:GLN:CD	H:39:THR:HG21	0.813
1	M:228:THR:CG2	N:140:PRO:CG	0.813
1	P:216:LYS:HZ1	Q:24:ARG:CD	0.813
1	T:231:ALA:CB	U:42:TYR:CB	0.813
1	AA:228:THR:OG1	BA:140:PRO:HG2	0.813
1	CA:15:LEU:CB	DA:22:LEU:HD12	0.813
1	CA:89:VAL:CA	DA:185:LYS:HD3	0.813
1	EA:13:LYS:C	FA:22:LEU:HB2	0.813
1	EA:216:LYS:HD2	FA:24:ARG:HD2	0.813
1	FA:228:THR:OG1	GA:140:PRO:HG2	0.813
1	TA:231:ALA:CB	UA:42:TYR:HB3	0.813
1	VA:228:THR:HB	WA:141:VAL:HG11	0.813
1	XA:14:ARG:HG3	YA:203:VAL:HG12	0.813
1	A:200:GLN:O	ZA:73:LYS:CG	0.813
1	C:127:GLY:HA3	D:48:LYS:HE3	0.812
1	D:66:ALA:HA	E:209:LYS:HB2	0.812
1	E:15:LEU:HG	F:203:VAL:HG21	0.812
1	H:67:ALA:HB2	I:207:GLY:HA3	0.812
1	L:90:LEU:HB3	M:185:LYS:HZ1	0.812
1	Z:228:THR:CG2	AA:140:PRO:N	0.812

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	AA:228:THR:CG2	BA:141:VAL:H	0.812
1	BA:228:THR:HG22	CA:139:ASN:HB2	0.812
1	MA:90:LEU:CG	NA:185:LYS:NZ	0.812
1	OA:228:THR:HG21	PA:140:PRO:CG	0.812
1	SA:69:ILE:CD	TA:204:THR:HG1	0.812
1	SA:230:PHE:HE1	TA:141:VAL:HG12	0.812
1	C:231:ALA:H	D:43:LEU:CD2	0.812
1	Z:70:ASN:H	AA:204:THR:HG1	0.812
1	B:81:ILE:CG2	C:193:VAL:HG22	0.811
1	F:87:LYS:N	G:187:VAL:CG1	0.811
1	X:86:LEU:HD23	Y:188:GLY:CA	0.811
1	X:233:GLN:CD	Y:21:ARG:HH22	0.811
1	AA:89:VAL:N	BA:185:LYS:HD3	0.811
1	FA:64:GLN:CB	GA:209:LYS:HZ1	0.811
1	NA:230:PHE:CD1	OA:141:VAL:HG12	0.811
1	XA:14:ARG:C	YA:22:LEU:CA	0.811
1	Y:17:TYR:O	Z:22:LEU:CD2	0.811
1	CA:12:LEU:O	DA:22:LEU:HD21	0.811
1	BA:67:ALA:CB	CA:207:GLY:O	0.811
1	C:86:LEU:C	D:187:VAL:CA	0.810
1	P:216:LYS:HE3	Q:24:ARG:NH1	0.810
1	Q:14:ARG:HG3	R:203:VAL:CB	0.810
1	V:89:VAL:HG21	W:187:VAL:HG21	0.810

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	Y:230:PHE:CE1	Z:141:VAL:HA	0.810
1	Y:230:PHE:CZ	Z:141:VAL:CA	0.810
1	Z:14:ARG:HB3	AA:203:VAL:HG11	0.810
1	BA:233:GLN:NE2	CA:39:THR:HG22	0.810
1	HA:124:LEU:HA	IA:48:LYS:HE2	0.810
1	WA:67:ALA:HB2	XA:207:GLY:O	0.810
1	XA:13:LYS:O	YA:22:LEU:HB2	0.810
1	A:230:PHE:HA	B:43:LEU:CD2	0.809
1	P:216:LYS:NZ	Q:24:ARG:HD2	0.809
1	X:89:VAL:CB	Y:187:VAL:HG13	0.809
1	GA:67:ALA:C	HA:205:TYR:CE1	0.809
1	D:77:LEU:HA	E:196:SER:O	0.808
1	G:90:LEU:CA	H:185:LYS:NZ	0.808
1	L:228:THR:CG2	M:140:PRO:CD	0.808
1	W:83:ILE:CD	X:191:LEU:CB	0.808
1	W:15:LEU:N	X:22:LEU:HD12	0.808
1	Y:230:PHE:HZ	Z:141:VAL:HA	0.808
1	EA:218:PHE:HE2	FA:42:TYR:CD2	0.808
1	UA:16:GLY:N	VA:22:LEU:O	0.808
1	B:233:GLN:CD	C:39:THR:CG2	0.807
1	B:233:GLN:NE2	C:39:THR:HG22	0.807
1	G:124:LEU:HD21	H:45:SER:OG	0.807
1	S:230:PHE:CE1	T:141:VAL:HG11	0.807

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	CA:127:GLY:HA3	DA:48:LYS:HE3	0.807
1	BA:87:LYS:HZ1	CA:186:VAL:HG13	0.807
1	IA:124:LEU:HD11	JA:45:SER:HB2	0.807
1	LA:228:THR:CG2	MA:140:PRO:HG2	0.807
1	WA:15:LEU:N	XA:22:LEU:HD12	0.807
1	YA:89:VAL:HB	ZA:187:VAL:HG13	0.807
1	YA:230:PHE:CE1	ZA:141:VAL:HA	0.807
1	BA:218:PHE:CD2	CA:42:TYR:HD2	0.807
1	M:216:LYS:HZ1	N:24:ARG:CZ	0.807
1	MA:216:LYS:HZ1	NA:24:ARG:CZ	0.807
1	XA:17:TYR:O	YA:22:LEU:CD2	0.807
1	A:230:PHE:HA	B:43:LEU:HD23	0.806
1	N:90:LEU:CB	O:185:LYS:NZ	0.806
1	R:64:GLN:O	S:209:LYS:HD2	0.806
1	S:228:THR:HG21	T:140:PRO:HG2	0.806
1	DA:67:ALA:CB	EA:207:GLY:C	0.806
1	EA:231:ALA:CB	FA:42:TYR:N	0.806
1	VA:230:PHE:HZ	WA:141:VAL:HG12	0.806
1	YA:87:LYS:N	ZA:187:VAL:CA	0.806
1	E:218:PHE:HE2	F:42:TYR:CD2	0.805
1	W:230:PHE:HZ	X:141:VAL:HG12	0.805
1	Y:230:PHE:CD1	Z:141:VAL:CG1	0.805
1	AA:75:GLU:CB	BA:198:SER:O	0.805

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	GA:87:LYS:H	HA:187:VAL:HG12	0.805
1	JA:90:LEU:HD23	KA:185:LYS:NZ	0.805
1	JA:233:GLN:OE1	KA:39:THR:CG2	0.805
1	PA:14:ARG:HB3	QA:203:VAL:HB	0.805
1	TA:89:VAL:HG21	UA:187:VAL:HG11	0.805
1	M:90:LEU:CD2	N:185:LYS:HZ2	0.805
1	G:89:VAL:HA	H:185:LYS:HD2	0.804
1	H:124:LEU:HA	I:48:LYS:HE2	0.804
1	Q:231:ALA:HB2	R:42:TYR:HB3	0.804
1	HA:15:LEU:HD12	IA:22:LEU:HD12	0.804
1	LA:124:LEU:CD2	MA:45:SER:CB	0.804
1	RA:218:PHE:CE2	SA:42:TYR:HD2	0.804
1	YA:230:PHE:HE1	ZA:141:VAL:HB	0.804
1	TA:216:LYS:CE	UA:24:ARG:NH1	0.804
1	Z:73:LYS:CG	AA:200:GLN:O	0.804
1	A:228:THR:OG1	B:140:PRO:HG2	0.803
1	K:15:LEU:HG	L:203:VAL:CG2	0.803
1	L:124:LEU:CD2	M:45:SER:CB	0.803
1	M:90:LEU:CG	N:185:LYS:NZ	0.803
1	L:67:ALA:CA	M:207:GLY:HA3	0.803
1	X:69:ILE:CD	Y:204:THR:O	0.803
1	NA:90:LEU:CB	OA:185:LYS:NZ	0.803
1	NA:216:LYS:HZ1	OA:24:ARG:HD3	0.803

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	SA:13:LYS:C	TA:22:LEU:HD13	0.803
1	VA:14:ARG:CB	WA:203:VAL:HG12	0.803
1	YA:12:LEU:C	ZA:22:LEU:CD1	0.803
1	E:17:TYR:N	F:22:LEU:CD2	0.802
1	J:233:GLN:OE1	K:39:THR:CG2	0.802
1	R:230:PHE:CZ	S:141:VAL:CG1	0.802
1	Y:73:LYS:NZ	Z:201:SER:HB3	0.802
1	BA:124:LEU:HD23	CA:47:GLU:CG	0.802
1	BA:218:PHE:CZ	CA:43:LEU:C	0.802
1	BA:231:ALA:O	CA:41:GLU:HG2	0.802
1	EA:124:LEU:HD23	FA:47:GLU:HG3	0.802
1	RA:64:GLN:O	SA:209:LYS:HD2	0.802
1	WA:228:THR:CG2	XA:141:VAL:HG13	0.802
1	XA:86:LEU:HD23	YA:188:GLY:CA	0.802
1	AA:111:PHE:HZ	BA:202:THR:O	0.802
1	BA:86:LEU:N	CA:188:GLY:N	0.802
1	A:22:LEU:HB2	ZA:13:LYS:O	0.801
1	B:87:LYS:H	C:187:VAL:HA	0.801
1	G:66:ALA:C	H:205:TYR:OH	0.801
1	J:67:ALA:CA	K:205:TYR:CE1	0.801
1	M:14:ARG:HG3	N:203:VAL:CG1	0.801
1	M:90:LEU:HB3	N:185:LYS:NZ	0.801
1	V:14:ARG:O	W:22:LEU:HA	0.801



Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	CA:81:ILE:HA	DA:192:LYS:O	0.801
1	FA:15:LEU:HG	GA:203:VAL:HG21	0.801
1	FA:87:LYS:N	GA:187:VAL:CG1	0.801
1	VA:15:LEU:N	WA:203:VAL:CG2	0.801
1	E:67:ALA:CA	F:207:GLY:H	0.801
1	AA:124:LEU:O	BA:48:LYS:NZ	0.801
1	GA:124:LEU:HD21	HA:45:SER:OG	0.800
1	MA:64:GLN:HB3	NA:209:LYS:HZ1	0.800
1	SA:228:THR:HG21	TA:140:PRO:HG2	0.800
1	YA:69:ILE:CB	ZA:204:THR:O	0.800
1	E:124:LEU:HB3	F:48:LYS:HZ3	0.799
1	I:87:LYS:HB2	J:187:VAL:HG13	0.799
1	I:228:THR:HG22	J:140:PRO:CD	0.799
1	R:15:LEU:N	S:203:VAL:CG2	0.799
1	Y:12:LEU:C	Z:22:LEU:CD1	0.799
1	CA:15:LEU:HD12	DA:22:LEU:HD12	0.799
1	EA:67:ALA:HB1	FA:206:LYS:C	0.799
1	EA:124:LEU:CD2	FA:47:GLU:HG3	0.799
1	EA:124:LEU:HG	FA:45:SER:HB3	0.799
1	GA:124:LEU:CD2	HA:47:GLU:OE2	0.799
1	A:83:ILE:CD	B:191:LEU:HD13	0.798
1	A:141:VAL:HG12	ZA:230:PHE:CD2	0.798
1	F:67:ALA:CB	G:207:GLY:HA3	0.798

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	I:124:LEU:HD11	J:45:SER:HB2	0.798
1	S:86:LEU:HD21	T:188:GLY:HA2	0.798
1	LA:228:THR:CG2	MA:140:PRO:CD	0.798
1	MA:90:LEU:HB3	NA:185:LYS:NZ	0.798
1	WA:15:LEU:N	XA:203:VAL:HG21	0.798
1	O:216:LYS:HZ1	P:24:ARG:HH11	0.798
1	M:15:LEU:HG	N:203:VAL:HG23	0.797
1	AA:81:ILE:CG2	BA:193:VAL:HG22	0.797
1	DA:15:LEU:HG	EA:203:VAL:HG21	0.797
1	EA:229:LEU:C	FA:141:VAL:HG11	0.797
1	QA:14:ARG:HG3	RA:203:VAL:CB	0.797
1	TA:231:ALA:CB	UA:42:TYR:CA	0.797
1	VA:69:ILE:CD	WA:204:THR:H	0.797
1	J:90:LEU:HD23	K:185:LYS:NZ	0.796
1	L:65:ALA:HB3	M:208:GLU:OE2	0.796
1	M:15:LEU:CG	N:203:VAL:HG23	0.796
1	Y:14:ARG:HB3	Z:203:VAL:HG11	0.796
1	Z:127:GLY:CA	AA:48:LYS:HE3	0.796
1	RA:15:LEU:N	SA:203:VAL:CG2	0.796
1	XA:69:ILE:HB	YA:204:THR:O	0.796
1	YA:230:PHE:CZ	ZA:141:VAL:CA	0.796
1	YA:230:PHE:HA	ZA:43:LEU:CD2	0.796
1	VA:233:GLN:NE2	WA:21:ARG:HH12	0.796

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	W:84:ASN:O	X:188:GLY:O	0.796
1	A:81:ILE:CG2	B:193:VAL:HG22	0.795
1	D:15:LEU:HG	E:203:VAL:HG21	0.795
1	H:64:GLN:HB3	I:209:LYS:HZ1	0.795
1	U:89:VAL:C	V:185:LYS:CD	0.795
1	U:16:GLY:CA	V:22:LEU:C	0.795
1	AA:83:ILE:CD	BA:191:LEU:HD13	0.795
1	MA:14:ARG:HG3	NA:203:VAL:CG1	0.795
1	UA:89:VAL:C	VA:185:LYS:CD	0.795
1	Y:111:PHE:HZ	Z:202:THR:O	0.795
1	GA:64:GLN:O	HA:209:LYS:CE	0.795
1	C:15:LEU:HD12	D:22:LEU:HD12	0.794
1	W:87:LYS:HD3	X:186:VAL:CB	0.794
1	W:228:THR:CG2	X:141:VAL:HG13	0.794
1	X:69:ILE:HB	Y:204:THR:O	0.794
1	X:14:ARG:O	Y:22:LEU:CA	0.794
1	Y:228:THR:CG2	Z:140:PRO:HG2	0.794
1	DA:77:LEU:HA	EA:196:SER:O	0.794
1	WA:83:ILE:CD	XA:191:LEU:CB	0.794
1	XA:89:VAL:CB	YA:187:VAL:HG13	0.794
1	Y:87:LYS:N	Z:187:VAL:CA	0.794
1	A:228:THR:HG22	B:139:ASN:HB2	0.793
1	C:231:ALA:O	D:41:GLU:CG	0.793

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	R:216:LYS:CE	S:24:ARG:NH1	0.793
1	FA:87:LYS:HG3	GA:185:LYS:O	0.793
1	GA:66:ALA:C	HA:205:TYR:OH	0.793
1	TA:89:VAL:HG11	UA:187:VAL:CG1	0.793
1	VA:118:ALA:HB3	WA:209:LYS:CE	0.793
1	A:111:PHE:HZ	B:202:THR:O	0.793
1	YA:111:PHE:HZ	ZA:202:THR:O	0.793
1	EA:67:ALA:CA	FA:207:GLY:H	0.793
1	M:124:LEU:CD2	N:45:SER:HB2	0.792
1	Z:75:GLU:CA	AA:198:SER:O	0.792
1	CA:231:ALA:HB1	DA:42:TYR:H	0.792
1	DA:87:LYS:HB2	EA:187:VAL:CB	0.792
1	PA:216:LYS:NZ	QA:24:ARG:HD2	0.792
1	RA:216:LYS:CE	SA:24:ARG:NH1	0.792
1	TA:16:GLY:CA	UA:22:LEU:O	0.792
1	VA:226:GLU:HB3	WA:140:PRO:HG3	0.792
1	XA:69:ILE:CD	YA:204:THR:O	0.792
1	R:65:ALA:O	S:209:LYS:CB	0.791
1	U:228:THR:HB	V:141:VAL:HG13	0.791
1	CA:231:ALA:O	DA:41:GLU:CG	0.791
1	FA:231:ALA:H	GA:43:LEU:HD23	0.791
1	KA:15:LEU:HG	LA:203:VAL:CG2	0.791
1	LA:67:ALA:CA	MA:207:GLY:HA3	0.791

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	MA:228:THR:CG2	NA:140:PRO:CG	0.791
1	NA:64:GLN:C	OA:209:LYS:HD2	0.791
1	WA:89:VAL:HG21	XA:187:VAL:HG21	0.791
1	D:231:ALA:H	E:43:LEU:CD2	0.791
1	A:141:VAL:CA	ZA:230:PHE:HE1	0.790
1	C:12:LEU:C	D:22:LEU:HD13	0.790
1	D:67:ALA:HB2	E:207:GLY:O	0.790
1	F:16:GLY:O	G:24:ARG:HD3	0.790
1	H:15:LEU:HD12	I:22:LEU:HD12	0.790
1	W:14:ARG:HG2	X:203:VAL:HG12	0.790
1	Z:228:THR:HG21	AA:140:PRO:CG	0.790
1	AA:13:LYS:O	BA:22:LEU:HB2	0.790
1	RA:65:ALA:O	SA:209:LYS:CB	0.790
1	XA:14:ARG:C	YA:203:VAL:HG11	0.790
1	Z:89:VAL:H	AA:185:LYS:CB	0.790
1	Y:69:ILE:CB	Z:204:THR:O	0.790
1	R:13:LYS:C	S:22:LEU:HD13	0.789
1	T:16:GLY:CA	U:22:LEU:O	0.789
1	V:226:GLU:HB3	W:140:PRO:HG3	0.789
1	CA:12:LEU:C	DA:22:LEU:HD13	0.789
1	FA:231:ALA:HB1	GA:42:TYR:N	0.789
1	QA:64:GLN:CB	RA:209:LYS:CE	0.789
1	RA:13:LYS:C	SA:22:LEU:HD13	0.789

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	TA:230:PHE:CE1	UA:141:VAL:HG11	0.789
1	VA:79:PHE:HB3	WA:194:GLU:O	0.789
1	A:140:PRO:CG	ZA:228:THR:HG21	0.788
1	C:81:ILE:HA	D:192:LYS:O	0.788
1	D:67:ALA:CB	E:207:GLY:C	0.788
1	G:124:LEU:HA	H:48:LYS:HE3	0.788
1	Q:64:GLN:CB	R:209:LYS:CE	0.788
1	S:65:ALA:C	T:209:LYS:CG	0.788
1	AA:216:LYS:HB3	BA:24:ARG:NH1	0.788
1	AA:228:THR:HG22	BA:139:ASN:HB2	0.788
1	BA:12:LEU:O	CA:22:LEU:HD21	0.788
1	MA:90:LEU:HD23	NA:185:LYS:HZ1	0.788
1	MA:15:LEU:CG	NA:203:VAL:CG2	0.788
1	XA:14:ARG:CB	YA:203:VAL:HG11	0.788
1	YA:13:LYS:C	ZA:22:LEU:HB2	0.788
1	A:198:SER:O	ZA:75:GLU:CA	0.788
1	W:17:TYR:O	X:22:LEU:CD2	0.788
1	S:124:LEU:HD23	T:45:SER:HB3	0.787
1	S:218:PHE:HZ	T:42:TYR:CD2	0.787
1	Y:157:GLN:NE2	Z:25:GLU:HB3	0.787
1	EA:79:PHE:HB2	FA:194:GLU:O	0.787
1	MA:124:LEU:CD2	NA:45:SER:HB2	0.787
1	RA:86:LEU:CD2	SA:188:GLY:H	0.787

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	UA:230:PHE:HE1	VA:141:VAL:CG1	0.787
1	D:12:LEU:O	E:22:LEU:HD21	0.786
1	N:64:GLN:C	O:209:LYS:HD2	0.786
1	S:13:LYS:C	T:22:LEU:HD13	0.786
1	S:89:VAL:C	T:185:LYS:HD3	0.786
1	V:14:ARG:HG3	W:203:VAL:HG11	0.786
1	W:67:ALA:HB2	X:207:GLY:O	0.786
1	W:89:VAL:HG21	X:187:VAL:HG21	0.786
1	Y:230:PHE:HA	Z:43:LEU:CD2	0.786
1	Z:67:ALA:O	AA:206:LYS:C	0.786
1	IA:228:THR:HG22	JA:140:PRO:HD2	0.786
1	MA:15:LEU:CG	NA:203:VAL:HG23	0.786
1	OA:65:ALA:HB3	PA:208:GLU:CD	0.786
1	V:233:GLN:NE2	W:21:ARG:HH12	0.786
1	A:187:VAL:CG1	ZA:89:VAL:HG12	0.785
1	A:13:LYS:O	B:22:LEU:HB2	0.785
1	E:124:LEU:CD2	F:47:GLU:HG3	0.785
1	S:230:PHE:HE1	T:141:VAL:CG1	0.785
1	X:14:ARG:C	Y:203:VAL:HG11	0.785
1	X:14:ARG:CB	Y:203:VAL:HG11	0.785
1	JA:90:LEU:HB3	KA:185:LYS:NZ	0.785
1	TA:231:ALA:CB	UA:42:TYR:CB	0.785
1	VA:14:ARG:O	WA:22:LEU:HA	0.785

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	YA:228:THR:CG2	ZA:140:PRO:HG2	0.785
1	YA:67:ALA:O	ZA:206:LYS:C	0.785
1	B:218:PHE:CZ	C:43:LEU:C	0.784
1	F:67:ALA:HB2	G:207:GLY:C	0.784
1	P:14:ARG:HG3	Q:203:VAL:CB	0.784
1	Q:230:PHE:CZ	R:141:VAL:CG1	0.784
1	W:233:GLN:CD	X:21:ARG:HH22	0.784
1	X:228:THR:HG21	Y:141:VAL:N	0.784
1	BA:124:LEU:HA	CA:48:LYS:CE	0.784
1	DA:15:LEU:HD11	EA:203:VAL:HG23	0.784
1	FA:87:LYS:CA	GA:187:VAL:HG13	0.784
1	VA:89:VAL:HB	WA:187:VAL:HG13	0.784
1	L:90:LEU:CD2	M:185:LYS:HZ2	0.784
1	B:124:LEU:HD23	C:47:GLU:CG	0.783
1	F:231:ALA:H	G:43:LEU:HD23	0.783
1	K:64:GLN:HB3	L:209:LYS:NZ	0.783
1	V:90:LEU:CA	W:185:LYS:HD3	0.783
1	Z:228:THR:HG21	AA:140:PRO:N	0.783
1	AA:65:ALA:HB1	BA:208:GLU:CD	0.783
1	EA:17:TYR:H	FA:22:LEU:CD2	0.783
1	FA:16:GLY:O	GA:24:ARG:HD3	0.783
1	GA:69:ILE:CD	HA:204:THR:O	0.783
1	RA:15:LEU:CD2	SA:204:THR:O	0.783



Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	RA:14:ARG:O	SA:22:LEU:CA	0.783
1	WA:226:GLU:HB3	XA:140:PRO:HG3	0.783
1	WA:84:ASN:O	XA:188:GLY:O	0.783
1	A:201:SER:HB3	ZA:73:LYS:HZ2	0.782
1	A:216:LYS:HB3	B:24:ARG:NH1	0.782
1	C:89:VAL:HA	D:185:LYS:CG	0.782
1	G:69:ILE:CD	H:204:THR:O	0.782
1	J:90:LEU:HB3	K:185:LYS:NZ	0.782
1	W:15:LEU:N	X:203:VAL:HG21	0.782
1	Y:13:LYS:C	Z:22:LEU:HB2	0.782
1	PA:89:VAL:CB	QA:187:VAL:CG1	0.782
1	SA:89:VAL:C	TA:185:LYS:HD3	0.782
1	UA:89:VAL:CA	VA:185:LYS:HB3	0.782
1	WA:233:GLN:CD	XA:21:ARG:HH22	0.782
1	WA:13:LYS:O	XA:22:LEU:HB2	0.782
1	XA:14:ARG:O	YA:22:LEU:CA	0.782
1	A:44:GLY:H	ZA:218:PHE:HZ	0.782
1	A:70:ASN:H	B:204:THR:HG1	0.782
1	AA:70:ASN:H	BA:204:THR:HG1	0.782
1	C:83:ILE:CD	D:191:LEU:HD13	0.781
1	U:230:PHE:HZ	V:141:VAL:HG12	0.781
1	CA:228:THR:HG22	DA:139:ASN:HB2	0.781
1	EA:15:LEU:HG	FA:203:VAL:HG21	0.781

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	FA:67:ALA:HB2	GA:207:GLY:C	0.781
1	JA:124:LEU:HD21	KA:45:SER:HB2	0.781
1	PA:216:LYS:HE3	QA:24:ARG:NH1	0.781
1	TA:14:ARG:HG2	UA:203:VAL:HG12	0.781
1	YA:14:ARG:HG3	ZA:203:VAL:CG1	0.781
1	A:206:LYS:C	ZA:67:ALA:O	0.780
1	D:89:VAL:HA	E:185:LYS:HD2	0.780
1	F:124:LEU:HA	G:48:LYS:HE3	0.780
1	N:64:GLN:HB3	O:209:LYS:HZ3	0.780
1	W:226:GLU:HB3	X:140:PRO:HG3	0.780
1	DA:124:LEU:CA	EA:48:LYS:CE	0.780
1	EA:16:GLY:C	FA:22:LEU:HD23	0.780
1	HA:64:GLN:HB3	IA:209:LYS:HZ1	0.780
1	UA:228:THR:CG2	VA:141:VAL:HG13	0.780
1	WA:157:GLN:HE22	XA:25:GLU:CB	0.780
1	E:67:ALA:HB1	F:206:LYS:C	0.779
1	E:124:LEU:HD23	F:47:GLU:HG3	0.779
1	E:17:TYR:H	F:22:LEU:CD2	0.779
1	F:64:GLN:HB3	G:209:LYS:NZ	0.779
1	H:124:LEU:HG	I:48:LYS:HE2	0.779
1	X:228:THR:CG2	Y:141:VAL:H	0.779
1	DA:67:ALA:HB2	EA:207:GLY:O	0.779
1	PA:14:ARG:HG3	QA:203:VAL:CB	0.779

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	TA:14:ARG:CB	UA:203:VAL:CG1	0.779
1	UA:79:PHE:CB	VA:194:GLU:O	0.779
1	UA:228:THR:HB	VA:141:VAL:HG13	0.779
1	A:89:VAL:HG12	B:187:VAL:HG11	0.778
1	E:87:LYS:CB	F:187:VAL:CG1	0.778
1	F:87:LYS:CA	G:187:VAL:HG13	0.778
1	U:228:THR:CG2	V:141:VAL:HG13	0.778
1	Z:89:VAL:HG12	AA:187:VAL:CG1	0.778
1	Z:230:PHE:CD2	AA:141:VAL:HG12	0.778
1	OA:216:LYS:HZ3	PA:24:ARG:HD3	0.778
1	PA:86:LEU:HD22	QA:188:GLY:HA3	0.778
1	YA:14:ARG:CB	ZA:203:VAL:HG11	0.778
1	B:12:LEU:O	C:22:LEU:HD21	0.777
1	BA:15:LEU:N	CA:22:LEU:CD1	0.777
1	DA:89:VAL:HA	EA:185:LYS:HD2	0.777
1	GA:89:VAL:HA	HA:185:LYS:HD2	0.777
1	GA:233:GLN:CD	HA:39:THR:HG21	0.777
1	QA:230:PHE:CZ	RA:141:VAL:CG1	0.777
1	UA:14:ARG:HG3	VA:203:VAL:HG12	0.777
1	XA:228:THR:CG2	YA:141:VAL:H	0.777
1	R:218:PHE:CZ	S:42:TYR:CD2	0.776
1	V:89:VAL:HB	W:187:VAL:HG13	0.776
1	U:89:VAL:CA	V:185:LYS:HB3	0.776

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	X:14:ARG:HB3	Y:203:VAL:CB	0.776
1	Y:16:GLY:O	Z:24:ARG:HD3	0.776
1	DA:15:LEU:HB3	EA:23:PRO:O	0.776
1	XA:12:LEU:O	YA:22:LEU:HD11	0.776
1	C:218:PHE:CZ	D:43:LEU:C	0.775
1	D:15:LEU:HB3	E:23:PRO:O	0.775
1	G:17:TYR:N	H:22:LEU:HD23	0.775
1	G:124:LEU:CA	H:48:LYS:HE2	0.775
1	L:228:THR:HG21	M:140:PRO:CD	0.775
1	P:216:LYS:CE	Q:24:ARG:CD	0.775
1	R:86:LEU:HD23	S:188:GLY:N	0.775
1	U:14:ARG:HG2	V:203:VAL:HG12	0.775
1	X:89:VAL:CA	Y:185:LYS:HB2	0.775
1	AA:230:PHE:HE1	BA:141:VAL:CB	0.775
1	AA:67:ALA:O	BA:206:LYS:C	0.775
1	CA:124:LEU:CD2	DA:47:GLU:HG3	0.775
1	VA:89:VAL:CG1	WA:187:VAL:HG12	0.775
1	WA:89:VAL:N	XA:185:LYS:HB3	0.775
1	A:65:ALA:HB1	B:208:GLU:CD	0.774
1	A:201:SER:HB3	ZA:73:LYS:NZ	0.774
1	D:86:LEU:C	E:187:VAL:CA	0.774
1	F:231:ALA:HB1	G:42:TYR:N	0.774
1	H:124:LEU:CD2	I:47:GLU:OE2	0.774

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	O:65:ALA:HB3	P:208:GLU:CD	0.774
1	Y:67:ALA:HB3	Z:205:TYR:CD2	0.774
1	FA:67:ALA:HB2	GA:207:GLY:CA	0.774
1	FA:87:LYS:CA	GA:187:VAL:CG1	0.774
1	FA:124:LEU:HA	GA:48:LYS:HE3	0.774
1	HA:64:GLN:C	IA:209:LYS:HZ3	0.774
1	SA:86:LEU:HD21	TA:188:GLY:N	0.774
1	UA:87:LYS:HD3	VA:186:VAL:HG11	0.774
1	UA:228:THR:CB	VA:141:VAL:HG13	0.774
1	YA:67:ALA:HB3	ZA:205:TYR:CD2	0.774
1	D:67:ALA:C	E:207:GLY:N	0.774
1	B:89:VAL:CA	C:185:LYS:CB	0.773
1	Q:66:ALA:HA	R:205:TYR:OH	0.773
1	P:230:PHE:CZ	Q:141:VAL:HG12	0.773
1	U:228:THR:CB	V:141:VAL:HG13	0.773
1	Z:230:PHE:CZ	AA:141:VAL:HG13	0.773
1	KA:64:GLN:HB3	LA:209:LYS:NZ	0.773
1	O:216:LYS:HZ1	P:24:ARG:NH1	0.773
1	A:15:LEU:HB3	B:23:PRO:O	0.772
1	R:65:ALA:N	S:209:LYS:CD	0.772
1	T:89:VAL:HG11	U:187:VAL:CG1	0.772
1	U:87:LYS:CD	V:186:VAL:CA	0.772
1	CA:83:ILE:CD	DA:191:LEU:HD13	0.772

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	GA:124:LEU:CA	HA:48:LYS:HE2	0.772
1	JA:124:LEU:HD21	KA:45:SER:HB3	0.772
1	TA:13:LYS:C	UA:22:LEU:HD13	0.772
1	XA:15:LEU:N	YA:203:VAL:HG21	0.772
1	YA:16:GLY:O	ZA:24:ARG:HD3	0.772
1	YA:157:GLN:NE2	ZA:25:GLU:HB3	0.772
1	Y:86:LEU:H	Z:188:GLY:H	0.772
1	G:64:GLN:O	H:209:LYS:CE	0.772
1	D:73:LYS:HA	E:200:GLN:O	0.771
1	E:79:PHE:HB2	F:194:GLU:O	0.771
1	F:64:GLN:CB	G:209:LYS:HZ1	0.771
1	F:87:LYS:CA	G:187:VAL:CG1	0.771
1	I:228:THR:HG22	J:140:PRO:HD2	0.771
1	L:90:LEU:CD2	M:185:LYS:HZ1	0.771
1	M:15:LEU:CG	N:203:VAL:CG2	0.771
1	W:157:GLN:HE22	X:25:GLU:CB	0.771
1	B:17:TYR:CZ	C:24:ARG:HB2	0.770
1	C:87:LYS:N	D:187:VAL:CG1	0.770
1	F:124:LEU:CD2	G:47:GLU:OE2	0.770
1	R:15:LEU:CD2	S:204:THR:O	0.770
1	T:13:LYS:C	U:22:LEU:HD13	0.770
1	Y:14:ARG:HG3	Z:203:VAL:CG1	0.770
1	AA:230:PHE:CD1	BA:141:VAL:CB	0.770

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	BA:12:LEU:C	CA:22:LEU:CD1	0.770
1	DA:67:ALA:C	EA:207:GLY:N	0.770
1	EA:124:LEU:HB3	FA:48:LYS:HZ3	0.770
1	DA:82:GLY:O	EA:191:LEU:HB3	0.770
1	HA:124:LEU:HG	IA:48:LYS:HE2	0.770
1	QA:66:ALA:HA	RA:205:TYR:OH	0.770
1	XA:228:THR:HG21	YA:141:VAL:N	0.770
1	D:82:GLY:O	E:191:LEU:HB3	0.769
1	L:90:LEU:HB3	M:185:LYS:NZ	0.769
1	P:89:VAL:CB	Q:187:VAL:CG1	0.769
1	T:14:ARG:CB	U:203:VAL:CG1	0.769
1	V:231:ALA:O	W:41:GLU:CG	0.769
1	W:13:LYS:O	X:22:LEU:HB2	0.769
1	AA:77:LEU:CA	BA:196:SER:O	0.769
1	BA:15:LEU:HB2	CA:22:LEU:CD1	0.769
1	IA:86:LEU:CD2	JA:187:VAL:CA	0.769
1	GA:90:LEU:CA	HA:185:LYS:NZ	0.769
1	E:16:GLY:C	F:22:LEU:HD23	0.768
1	F:64:GLN:CB	G:209:LYS:NZ	0.768
1	W:89:VAL:N	X:185:LYS:HB3	0.768
1	AA:15:LEU:HB3	BA:23:PRO:O	0.768
1	GA:17:TYR:N	HA:22:LEU:HD23	0.768
1	IA:90:LEU:HD23	JA:185:LYS:HZ1	0.768

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	SA:124:LEU:HD23	TA:45:SER:HB3	0.768
1	B:15:LEU:HB2	C:22:LEU:CD1	0.767
1	I:86:LEU:CD2	J:187:VAL:CA	0.767
1	U:79:PHE:CB	V:194:GLU:O	0.767
1	Y:231:ALA:O	Z:41:GLU:HG2	0.767
1	Z:228:THR:HG23	AA:140:PRO:CG	0.767
1	CA:89:VAL:HA	DA:185:LYS:CG	0.767
1	DA:66:ALA:CA	EA:209:LYS:HB2	0.767
1	HA:124:LEU:CD2	IA:47:GLU:OE2	0.767
1	HA:124:LEU:HA	IA:48:LYS:HE3	0.767
1	VA:231:ALA:O	WA:41:GLU:CG	0.767
1	XA:118:ALA:CB	YA:209:LYS:HE2	0.767
1	A:140:PRO:N	ZA:228:THR:HG21	0.767
1	B:218:PHE:CD2	C:42:TYR:HD2	0.767
1	B:87:LYS:H	C:187:VAL:HG12	0.766
1	H:124:LEU:HA	I:48:LYS:HE3	0.766
1	I:90:LEU:CB	J:185:LYS:NZ	0.766
1	R:66:ALA:HA	S:205:TYR:CZ	0.766
1	S:216:LYS:CE	T:24:ARG:NH1	0.766
1	DA:12:LEU:O	EA:22:LEU:HD21	0.766
1	IA:90:LEU:CB	JA:185:LYS:NZ	0.766
1	KA:90:LEU:CB	LA:185:LYS:HZ3	0.766
1	LA:90:LEU:HB3	MA:185:LYS:NZ	0.766



Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	WA:75:GLU:CB	XA:198:SER:O	0.766
1	XA:14:ARG:HB3	YA:203:VAL:CB	0.766
1	OA:216:LYS:HZ1	PA:24:ARG:HH11	0.766
1	A:124:LEU:O	B:48:LYS:NZ	0.766
1	D:15:LEU:HD11	E:203:VAL:HG23	0.765
1	D:68:GLY:O	E:205:TYR:CD1	0.765
1	K:90:LEU:HB3	L:185:LYS:NZ	0.765
1	M:67:ALA:CA	N:207:GLY:HA3	0.765
1	S:89:VAL:HB	T:187:VAL:HG13	0.765
1	Z:74:THR:O	AA:199:SER:HA	0.765
1	Z:73:LYS:NZ	AA:201:SER:HB3	0.765
1	FA:64:GLN:HB3	GA:209:LYS:NZ	0.765
1	LA:228:THR:HG21	MA:140:PRO:CD	0.765
1	SA:89:VAL:HG11	TA:187:VAL:HG11	0.765
1	A:79:PHE:HB3	B:195:ALA:HA	0.764
1	S:16:GLY:H	T:22:LEU:C	0.764
1	AA:79:PHE:HB3	BA:195:ALA:HA	0.764
1	BA:89:VAL:CA	CA:185:LYS:CB	0.764
1	BA:218:PHE:HZ	CA:43:LEU:CA	0.764
1	CA:87:LYS:N	DA:187:VAL:CG1	0.764
1	DA:68:GLY:O	EA:205:TYR:CD1	0.764
1	UA:77:LEU:HD12	VA:196:SER:O	0.764
1	VA:90:LEU:CA	WA:185:LYS:HD3	0.764

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	XA:15:LEU:CA	YA:23:PRO:CD	0.764
1	A:22:LEU:HD22	ZA:17:TYR:O	0.763
1	B:124:LEU:HA	C:48:LYS:CE	0.763
1	K:67:ALA:HB1	L:207:GLY:H	0.763
1	O:230:PHE:CE1	P:141:VAL:HG13	0.763
1	AA:12:LEU:O	BA:22:LEU:HD13	0.763
1	FA:64:GLN:CB	GA:209:LYS:NZ	0.763
1	WA:228:THR:HG21	XA:141:VAL:H	0.763
1	XA:73:LYS:NZ	YA:201:SER:HB3	0.763
1	YA:231:ALA:O	ZA:41:GLU:HG2	0.763
1	W:64:GLN:OE1	X:25:GLU:OE2	0.763
1	X:228:THR:HG23	Y:140:PRO:CD	0.762
1	Y:14:ARG:CB	Z:203:VAL:HG11	0.762
1	DA:229:LEU:O	EA:141:VAL:HG11	0.762
1	FA:16:GLY:CA	GA:22:LEU:HD23	0.762
1	YA:157:GLN:HE22	ZA:25:GLU:CB	0.762
1	YA:86:LEU:H	ZA:188:GLY:H	0.762
1	A:48:LYS:HE3	ZA:127:GLY:CA	0.761
1	A:199:SER:HA	ZA:74:THR:O	0.761
1	F:16:GLY:CA	G:22:LEU:HD23	0.761
1	U:14:ARG:HG3	V:203:VAL:HG12	0.761
1	W:14:ARG:CB	X:203:VAL:HG11	0.761
1	X:14:ARG:CB	Y:203:VAL:HG12	0.761

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	Z:228:THR:HG21	AA:140:PRO:CD	0.761
1	BA:17:TYR:CZ	CA:24:ARG:HB2	0.761
1	BA:87:LYS:H	CA:187:VAL:HG12	0.761
1	IA:87:LYS:HB2	JA:187:VAL:HG13	0.761
1	SA:218:PHE:HZ	TA:42:TYR:CD2	0.761
1	A:196:SER:O	ZA:77:LEU:CA	0.761
1	A:140:PRO:CD	ZA:228:THR:HG21	0.760
1	C:228:THR:HG22	D:139:ASN:HB2	0.760
1	F:87:LYS:CB	G:187:VAL:CG1	0.760
1	S:231:ALA:CB	T:42:TYR:HB3	0.760
1	AA:124:LEU:HD23	BA:47:GLU:HG3	0.760
1	LA:67:ALA:HB1	MA:207:GLY:CA	0.760
1	OA:14:ARG:HG3	PA:203:VAL:HG12	0.760
1	XA:228:THR:HG23	YA:140:PRO:CD	0.760
1	J:124:LEU:HD21	K:45:SER:HB3	0.759
1	X:14:ARG:HG2	Y:203:VAL:HG12	0.759
1	W:230:PHE:HE1	X:141:VAL:CB	0.759
1	JA:124:LEU:HD23	KA:47:GLU:OE2	0.759
1	MA:67:ALA:CA	NA:207:GLY:HA3	0.759
1	SA:89:VAL:HB	TA:187:VAL:HG13	0.759
1	SA:65:ALA:N	TA:209:LYS:CD	0.759
1	SA:218:PHE:HZ	TA:42:TYR:HD2	0.759
1	D:69:ILE:CD	E:204:THR:CA	0.758

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	D:89:VAL:H	E:185:LYS:HB3	0.758
1	J:90:LEU:CB	K:185:LYS:HZ3	0.758
1	V:118:ALA:HB3	W:209:LYS:CE	0.758
1	Z:89:VAL:CB	AA:187:VAL:HG11	0.758
1	CA:229:LEU:C	DA:141:VAL:HG11	0.758
1	DA:73:LYS:HA	EA:200:GLN:O	0.758
1	NA:231:ALA:HB2	OA:42:TYR:O	0.758
1	SA:16:GLY:H	TA:22:LEU:C	0.758
1	C:124:LEU:CD2	D:47:GLU:HG3	0.757
1	C:124:LEU:CA	D:48:LYS:HE2	0.757
1	H:86:LEU:C	I:186:VAL:O	0.757
1	L:67:ALA:HB1	M:207:GLY:CA	0.757
1	M:90:LEU:CB	N:185:LYS:HZ3	0.757
1	N:124:LEU:CD2	O:45:SER:HB3	0.757
1	R:66:ALA:HB1	S:205:TYR:HE1	0.757
1	Y:12:LEU:O	Z:22:LEU:CD2	0.757
1	KA:90:LEU:HB3	LA:185:LYS:HZ3	0.757
1	YA:15:LEU:HA	ZA:23:PRO:N	0.757
1	I:90:LEU:CA	J:185:LYS:HZ3	0.757
1	KA:90:LEU:CD2	LA:185:LYS:NZ	0.757
1	A:187:VAL:HG11	ZA:89:VAL:CB	0.756
1	G:124:LEU:CG	H:45:SER:CB	0.756
1	I:124:LEU:HG	J:48:LYS:HE2	0.756

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	P:89:VAL:CB	Q:187:VAL:HG11	0.756
1	V:77:LEU:HD12	W:196:SER:O	0.756
1	W:81:ILE:HG22	X:193:VAL:HA	0.756
1	X:73:LYS:NZ	Y:201:SER:HB3	0.756
1	CA:82:GLY:O	DA:191:LEU:HB3	0.756
1	IA:124:LEU:HA	JA:48:LYS:CE	0.756
1	KA:90:LEU:HB3	LA:185:LYS:NZ	0.756
1	RA:66:ALA:HB1	SA:205:TYR:HE1	0.756
1	SA:86:LEU:HD21	TA:188:GLY:HA2	0.756
1	SA:216:LYS:CE	TA:24:ARG:NH1	0.756
1	WA:14:ARG:CB	XA:203:VAL:HG11	0.756
1	C:229:LEU:C	D:141:VAL:HG11	0.755
1	X:216:LYS:HB3	Y:24:ARG:NH1	0.755
1	AA:89:VAL:HG12	BA:187:VAL:HG11	0.755
1	IA:90:LEU:CA	JA:185:LYS:HZ3	0.755
1	HA:89:VAL:H	IA:185:LYS:HD3	0.755
1	OA:124:LEU:HD21	PA:45:SER:HB3	0.755
1	QA:13:LYS:C	RA:22:LEU:HD13	0.755
1	VA:77:LEU:HD12	WA:196:SER:O	0.755
1	WA:81:ILE:HG22	XA:193:VAL:HA	0.755
1	X:218:PHE:HZ	Y:44:GLY:H	0.755
1	A:198:SER:OG	ZA:76:ASN:OD1	0.755
1	DA:89:VAL:H	EA:185:LYS:HB3	0.754

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	FA:124:LEU:CD2	GA:47:GLU:OE2	0.754
1	GA:230:PHE:CE1	HA:141:VAL:N	0.754
1	YA:12:LEU:O	ZA:22:LEU:CD2	0.754
1	U:216:LYS:CE	V:24:ARG:NH1	0.754
1	Z:76:ASN:OD1	AA:198:SER:OG	0.754
1	E:15:LEU:CD1	F:203:VAL:HG23	0.753
1	L:228:THR:CG2	M:140:PRO:HG2	0.753
1	T:230:PHE:CE1	U:141:VAL:HG11	0.753
1	Z:65:ALA:HB3	AA:208:GLU:HG2	0.753
1	JA:65:ALA:HB3	KA:209:LYS:CG	0.753
1	RA:89:VAL:CG2	SA:187:VAL:CG1	0.753
1	XA:15:LEU:H	YA:203:VAL:HG21	0.753
1	XA:218:PHE:HZ	YA:44:GLY:H	0.753
1	CA:228:THR:OG1	DA:140:PRO:CG	0.753
1	G:15:LEU:CG	H:22:LEU:HD12	0.752
1	R:65:ALA:HB1	S:208:GLU:OE1	0.752
1	T:228:THR:HG21	U:140:PRO:HG2	0.752
1	T:14:ARG:HG2	U:203:VAL:HG12	0.752
1	W:75:GLU:CB	X:198:SER:O	0.752
1	X:12:LEU:O	Y:22:LEU:HD11	0.752
1	BA:15:LEU:CB	CA:22:LEU:HD12	0.752
1	EA:124:LEU:HD23	FA:47:GLU:CG	0.752
1	EA:68:GLY:O	FA:205:TYR:CD1	0.752

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	HA:86:LEU:C	IA:186:VAL:O	0.752
1	B:12:LEU:C	C:22:LEU:CD1	0.751
1	D:229:LEU:O	E:141:VAL:HG11	0.751
1	J:124:LEU:HD21	K:45:SER:HB2	0.751
1	U:77:LEU:HD12	V:196:SER:O	0.751
1	CA:79:PHE:HA	DA:194:GLU:O	0.751
1	KA:233:GLN:OE1	LA:39:THR:HG21	0.751
1	PA:89:VAL:CG2	QA:187:VAL:HG11	0.751
1	WA:87:LYS:HD3	XA:186:VAL:CB	0.751
1	XA:14:ARG:HG2	YA:203:VAL:HG12	0.751
1	P:89:VAL:CG2	Q:187:VAL:HG11	0.750
1	O:14:ARG:CG	P:203:VAL:CG1	0.750
1	Y:118:ALA:HB3	Z:209:LYS:CE	0.750
1	Z:15:LEU:H	AA:22:LEU:HD12	0.750
1	Z:17:TYR:O	AA:22:LEU:HD22	0.750
1	FA:17:TYR:H	GA:22:LEU:HD23	0.750
1	LA:65:ALA:CB	MA:208:GLU:OE2	0.750
1	PA:89:VAL:CB	QA:187:VAL:HG11	0.750
1	OA:14:ARG:CG	PA:203:VAL:CG1	0.750
1	WA:14:ARG:HG2	XA:203:VAL:HG12	0.750
1	XA:216:LYS:HB3	YA:24:ARG:NH1	0.750
1	B:218:PHE:HZ	C:43:LEU:CA	0.750
1	B:86:LEU:H	C:188:GLY:N	0.750

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	V:86:LEU:H	W:188:GLY:H	0.750
1	OA:216:LYS:HZ1	PA:24:ARG:NH1	0.750
1	E:65:ALA:HB2	F:208:GLU:OE2	0.749
1	Y:65:ALA:HB1	Z:208:GLU:OE1	0.749
1	EA:65:ALA:HB2	FA:208:GLU:OE2	0.749
1	WA:12:LEU:C	XA:22:LEU:HD13	0.749
1	H:65:ALA:N	I:209:LYS:HZ3	0.749
1	FA:65:ALA:N	GA:209:LYS:NZ	0.749
1	YA:15:LEU:CA	ZA:23:PRO:N	0.749
1	D:86:LEU:O	E:186:VAL:O	0.749
1	C:82:GLY:O	D:191:LEU:HB2	0.748
1	E:124:LEU:HD23	F:47:GLU:CG	0.748
1	J:90:LEU:HB3	K:185:LYS:HZ3	0.748
1	L:65:ALA:CB	M:208:GLU:OE2	0.748
1	R:14:ARG:HG3	S:203:VAL:CB	0.748
1	W:230:PHE:HA	X:43:LEU:HD23	0.748
1	Z:89:VAL:HB	AA:187:VAL:CG1	0.748
1	Y:230:PHE:HE1	Z:141:VAL:HB	0.748
1	CA:81:ILE:CG2	DA:193:VAL:HG22	0.748
1	DA:15:LEU:CG	EA:203:VAL:CG2	0.748
1	GA:124:LEU:HB3	HA:48:LYS:NZ	0.748
1	JA:67:ALA:HB3	KA:205:TYR:CE2	0.748
1	RA:218:PHE:CZ	SA:42:TYR:CD2	0.748



Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	YA:233:GLN:CD	ZA:21:ARG:HH22	0.748
1	HA:65:ALA:N	IA:209:LYS:HZ3	0.748
1	A:187:VAL:CG1	ZA:89:VAL:HB	0.747
1	B:89:VAL:N	C:185:LYS:CB	0.747
1	H:64:GLN:C	I:209:LYS:NZ	0.747
1	J:65:ALA:HB3	K:209:LYS:CG	0.747
1	K:90:LEU:CD2	L:185:LYS:NZ	0.747
1	V:12:LEU:O	W:22:LEU:CD1	0.747
1	BA:86:LEU:C	CA:187:VAL:CA	0.747
1	KA:15:LEU:HD11	LA:203:VAL:HG23	0.747
1	WA:87:LYS:N	XA:187:VAL:HA	0.747
1	D:124:LEU:C	E:48:LYS:HZ1	0.747
1	WA:64:GLN:OE1	XA:25:GLU:OE2	0.747
1	A:230:PHE:CD1	B:141:VAL:HB	0.746
1	J:124:LEU:HD23	K:47:GLU:OE2	0.746
1	Q:13:LYS:C	R:22:LEU:HD13	0.746
1	S:16:GLY:N	T:22:LEU:C	0.746
1	W:87:LYS:N	X:187:VAL:HA	0.746
1	Y:157:GLN:HE22	Z:25:GLU:CB	0.746
1	DA:89:VAL:H	EA:185:LYS:HD3	0.746
1	RA:14:ARG:HG3	SA:203:VAL:CB	0.746
1	SA:64:GLN:HB3	TA:209:LYS:HZ2	0.746
1	TA:228:THR:HG21	UA:140:PRO:HG2	0.746

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	VA:230:PHE:CE1	WA:141:VAL:CB	0.746
1	Z:67:ALA:CB	AA:207:GLY:O	0.746
1	E:68:GLY:O	F:205:TYR:CD1	0.745
1	K:15:LEU:HD11	L:203:VAL:HG23	0.745
1	R:14:ARG:O	S:22:LEU:CA	0.745
1	U:87:LYS:HD3	V:186:VAL:HG11	0.745
1	U:230:PHE:CE1	V:141:VAL:HG11	0.745
1	W:228:THR:HG21	X:141:VAL:H	0.745
1	DA:69:ILE:CD	EA:204:THR:CA	0.745
1	IA:86:LEU:HD22	JA:188:GLY:HA3	0.745
1	NA:216:LYS:HE3	OA:24:ARG:NH1	0.745
1	YA:65:ALA:HB1	ZA:208:GLU:OE1	0.745
1	YA:118:ALA:HB3	ZA:209:LYS:CE	0.745
1	D:218:PHE:HZ	E:44:GLY:N	0.745
1	A:124:LEU:HD23	B:47:GLU:HG3	0.744
1	D:218:PHE:HE2	E:42:TYR:CE2	0.744
1	D:82:GLY:O	E:191:LEU:HA	0.744
1	F:17:TYR:H	G:22:LEU:HD23	0.744
1	I:15:LEU:CD1	J:22:LEU:CD1	0.744
1	I:15:LEU:CD1	J:22:LEU:HD11	0.744
1	I:124:LEU:HA	J:48:LYS:CE	0.744
1	N:231:ALA:HB2	O:42:TYR:O	0.744
1	O:124:LEU:HD21	P:45:SER:HB3	0.744

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	PA:64:GLN:HB3	QA:209:LYS:CE	0.744
1	VA:89:VAL:HG11	WA:187:VAL:CG1	0.744
1	XA:77:LEU:CG	YA:196:SER:O	0.744
1	A:81:ILE:HG22	B:193:VAL:HG22	0.743
1	H:64:GLN:C	I:209:LYS:HE2	0.743
1	I:64:GLN:HB3	J:209:LYS:HZ1	0.743
1	M:87:LYS:HB2	N:187:VAL:CG1	0.743
1	O:216:LYS:HE3	P:24:ARG:NH1	0.743
1	O:216:LYS:NZ	P:24:ARG:HD2	0.743
1	T:230:PHE:HE1	U:141:VAL:CG1	0.743
1	X:77:LEU:CG	Y:196:SER:O	0.743
1	Y:233:GLN:CD	Z:21:ARG:HH22	0.743
1	AA:14:ARG:HB3	BA:203:VAL:HG11	0.743
1	DA:86:LEU:CA	EA:187:VAL:HA	0.743
1	DA:218:PHE:HE2	EA:42:TYR:CE2	0.743
1	FA:69:ILE:CD	GA:204:THR:N	0.743
1	GA:233:GLN:NE2	HA:39:THR:CG2	0.743
1	H:67:ALA:N	I:205:TYR:OH	0.743
1	R:86:LEU:HD23	S:188:GLY:CA	0.742
1	Z:87:LYS:C	AA:187:VAL:CG1	0.742
1	DA:87:LYS:CB	EA:187:VAL:CG1	0.742
1	IA:124:LEU:HG	JA:48:LYS:HE2	0.742
1	VA:12:LEU:O	WA:22:LEU:CD1	0.742

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	V:64:GLN:OE1	W:25:GLU:OE2	0.742
1	QA:65:ALA:HB2	RA:208:GLU:OE2	0.742
1	B:15:LEU:CB	C:22:LEU:HD12	0.741
1	E:65:ALA:CB	F:208:GLU:OE2	0.741
1	E:66:ALA:HA	F:209:LYS:HB2	0.741
1	G:124:LEU:HB3	H:48:LYS:HZ3	0.741
1	K:233:GLN:OE1	L:39:THR:HG21	0.741
1	O:216:LYS:CE	P:24:ARG:HD2	0.741
1	X:83:ILE:CD	Y:191:LEU:HB2	0.741
1	LA:14:ARG:HG3	MA:203:VAL:HG11	0.741
1	MA:89:VAL:HA	NA:185:LYS:CD	0.741
1	OA:216:LYS:CE	PA:24:ARG:HD2	0.741
1	RA:65:ALA:HB3	SA:208:GLU:OE1	0.741
1	UA:14:ARG:HB3	VA:203:VAL:CG1	0.741
1	VA:90:LEU:CA	WA:185:LYS:CD	0.741
1	XA:83:ILE:CD	YA:191:LEU:HB2	0.741
1	Z:77:LEU:CA	AA:196:SER:O	0.741
1	A:17:TYR:CZ	B:24:ARG:HB2	0.740
1	C:231:ALA:O	D:41:GLU:HG2	0.740
1	D:124:LEU:HD23	E:47:GLU:OE2	0.740
1	D:89:VAL:H	E:185:LYS:HD3	0.740
1	I:90:LEU:HB3	J:185:LYS:HZ1	0.740
1	H:89:VAL:H	I:185:LYS:HD3	0.740

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	J:64:GLN:HB3	K:209:LYS:HZ1	0.740
1	L:216:LYS:NZ	M:24:ARG:CD	0.740
1	N:216:LYS:HE3	O:24:ARG:NH1	0.740
1	Z:73:LYS:HZ2	AA:201:SER:HB3	0.740
1	AA:230:PHE:CD1	BA:141:VAL:HB	0.740
1	HA:64:GLN:C	IA:209:LYS:NZ	0.740
1	IA:15:LEU:CD1	JA:22:LEU:HD11	0.740
1	IA:90:LEU:CB	JA:185:LYS:HZ3	0.740
1	LA:216:LYS:NZ	MA:24:ARG:CD	0.740
1	RA:65:ALA:HB1	SA:208:GLU:OE1	0.740
1	XA:14:ARG:CB	YA:203:VAL:HG12	0.740
1	XA:230:PHE:CZ	YA:141:VAL:HA	0.740
1	C:17:TYR:CB	D:22:LEU:HD21	0.739
1	D:86:LEU:CA	E:187:VAL:HA	0.739
1	H:64:GLN:C	I:209:LYS:HZ3	0.739
1	L:14:ARG:HG3	M:203:VAL:HG11	0.739
1	M:15:LEU:CD1	N:203:VAL:HG23	0.739
1	V:87:LYS:CD	W:186:VAL:CG1	0.739
1	MA:87:LYS:HB2	NA:187:VAL:CG1	0.739
1	VA:14:ARG:HG3	WA:203:VAL:HG11	0.739
1	XA:15:LEU:HA	YA:23:PRO:N	0.739
1	BA:15:LEU:H	CA:22:LEU:CD1	0.739
1	Z:84:ASN:O	AA:188:GLY:O	0.739

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	A:14:ARG:HB3	B:203:VAL:HG11	0.738
1	C:81:ILE:CG2	D:193:VAL:HG22	0.738
1	F:67:ALA:HB2	G:207:GLY:CA	0.738
1	S:89:VAL:HG11	T:187:VAL:HG11	0.738
1	X:233:GLN:OE1	Y:39:THR:CG2	0.738
1	BA:87:LYS:HB2	CA:187:VAL:CG1	0.738
1	HA:87:LYS:N	IA:187:VAL:HG12	0.738
1	MA:15:LEU:CD1	NA:203:VAL:HG23	0.738
1	SA:230:PHE:HE1	TA:141:VAL:CG1	0.738
1	VA:87:LYS:CD	WA:186:VAL:CG1	0.738
1	XA:233:GLN:OE1	YA:39:THR:CG2	0.738
1	XA:67:ALA:O	YA:206:LYS:C	0.738
1	NA:90:LEU:HD22	OA:185:LYS:HZ3	0.738
1	C:15:LEU:CB	D:22:LEU:CD1	0.737
1	F:69:ILE:CD	G:204:THR:N	0.737
1	W:12:LEU:C	X:22:LEU:HD13	0.737
1	V:233:GLN:OE1	W:39:THR:HG22	0.737
1	V:15:LEU:H	W:203:VAL:CG2	0.737
1	UA:14:ARG:HG2	VA:203:VAL:HG12	0.737
1	WA:127:GLY:HA3	XA:48:LYS:HE3	0.737
1	WA:14:ARG:O	XA:22:LEU:HA	0.737
1	G:90:LEU:CB	H:185:LYS:HZ1	0.737
1	VA:86:LEU:H	WA:188:GLY:H	0.737

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	A:188:GLY:O	ZA:84:ASN:O	0.737
1	D:82:GLY:O	E:191:LEU:HB2	0.736
1	U:79:PHE:HB2	V:194:GLU:O	0.736
1	V:230:PHE:CE1	W:141:VAL:CB	0.736
1	Y:216:LYS:CG	Z:24:ARG:HH11	0.736
1	BA:228:THR:HB	CA:141:VAL:CG1	0.736
1	VA:17:TYR:O	WA:22:LEU:HD22	0.736
1	A:228:THR:HG23	B:140:PRO:CG	0.735
1	F:16:GLY:C	G:22:LEU:HD23	0.735
1	H:89:VAL:C	I:185:LYS:NZ	0.735
1	Q:216:LYS:HZ1	R:24:ARG:HD3	0.735
1	T:230:PHE:HZ	U:141:VAL:HG12	0.735
1	V:90:LEU:CA	W:185:LYS:CD	0.735
1	BA:87:LYS:CA	CA:187:VAL:CG1	0.735
1	JA:64:GLN:HB3	KA:209:LYS:NZ	0.735
1	SA:231:ALA:CB	TA:42:TYR:HB3	0.735
1	WA:230:PHE:HA	XA:43:LEU:HD23	0.735
1	XA:14:ARG:HB3	YA:203:VAL:HB	0.735
1	WA:12:LEU:O	XA:22:LEU:HD11	0.735
1	A:22:LEU:HD12	ZA:15:LEU:H	0.734
1	A:218:PHE:CZ	B:43:LEU:C	0.734
1	G:124:LEU:HB3	H:48:LYS:NZ	0.734
1	J:64:GLN:HB3	K:209:LYS:NZ	0.734

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	J:67:ALA:HB3	K:205:TYR:CE2	0.734
1	N:64:GLN:HB3	O:209:LYS:HZ1	0.734
1	P:89:VAL:HB	Q:187:VAL:HG11	0.734
1	S:65:ALA:N	T:209:LYS:CD	0.734
1	W:127:GLY:HA3	X:48:LYS:HE3	0.734
1	X:230:PHE:CZ	Y:141:VAL:HA	0.734
1	AA:228:THR:HG21	BA:141:VAL:N	0.734
1	IA:15:LEU:CD1	JA:22:LEU:CD1	0.734
1	QA:15:LEU:CD1	RA:203:VAL:CG2	0.734
1	A:195:ALA:HA	ZA:79:PHE:HB3	0.733
1	A:67:ALA:O	B:206:LYS:C	0.733
1	G:233:GLN:NE2	H:39:THR:CG2	0.733
1	H:87:LYS:N	I:187:VAL:HG12	0.733
1	U:15:LEU:CA	V:22:LEU:HA	0.733
1	W:118:ALA:CB	X:209:LYS:HE2	0.733
1	X:15:LEU:H	Y:203:VAL:HG21	0.733
1	X:118:ALA:CB	Y:209:LYS:HE2	0.733
1	DA:124:LEU:HD23	EA:47:GLU:OE2	0.733
1	CA:82:GLY:O	DA:191:LEU:HB2	0.733
1	EA:65:ALA:CB	FA:208:GLU:OE2	0.733
1	EA:87:LYS:HB2	FA:187:VAL:CB	0.733
1	MA:67:ALA:HB3	NA:205:TYR:CZ	0.733
1	SA:16:GLY:N	TA:22:LEU:C	0.733



Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	VA:233:GLN:OE1	WA:39:THR:HG22	0.733
1	XA:14:ARG:HB3	YA:203:VAL:HG11	0.733
1	A:206:LYS:H	ZA:67:ALA:C	0.733
1	C:15:LEU:CD1	D:22:LEU:HD12	0.732
1	W:14:ARG:O	X:22:LEU:HA	0.732
1	W:12:LEU:O	X:22:LEU:HD11	0.732
1	Z:79:PHE:HB3	AA:195:ALA:HA	0.732
1	AA:17:TYR:CZ	BA:24:ARG:HB2	0.732
1	DA:218:PHE:CZ	EA:44:GLY:N	0.732
1	DA:82:GLY:O	EA:191:LEU:HA	0.732
1	FA:16:GLY:C	GA:22:LEU:HD23	0.732
1	OA:64:GLN:HB3	PA:209:LYS:HZ1	0.732
1	OA:216:LYS:HZ3	PA:24:ARG:CD	0.732
1	UA:89:VAL:HG21	VA:187:VAL:HG21	0.732
1	YA:83:ILE:CD	ZA:191:LEU:HB2	0.732
1	BA:86:LEU:H	CA:188:GLY:N	0.732
1	DA:86:LEU:O	EA:186:VAL:O	0.732
1	A:141:VAL:HG12	ZA:230:PHE:CG	0.731
1	A:208:GLU:CG	ZA:65:ALA:CB	0.731
1	A:228:THR:HG21	B:140:PRO:CA	0.731
1	D:15:LEU:CG	E:203:VAL:CG2	0.731
1	H:124:LEU:HB3	I:48:LYS:NZ	0.731
1	N:216:LYS:HZ1	O:24:ARG:HD3	0.731

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	X:14:ARG:HB3	Y:203:VAL:HB	0.731
1	CA:15:LEU:CD1	DA:22:LEU:HD12	0.731
1	HA:233:GLN:HE22	IA:39:THR:HG22	0.731
1	MA:216:LYS:HE3	NA:24:ARG:NH1	0.731
1	VA:13:LYS:O	WA:22:LEU:HB2	0.731
1	TA:218:PHE:HE2	UA:42:TYR:CE2	0.731
1	L:216:LYS:HE3	M:24:ARG:NH1	0.731
1	DA:124:LEU:C	EA:48:LYS:HZ1	0.731
1	A:187:VAL:CG1	ZA:87:LYS:C	0.730
1	A:208:GLU:HG2	ZA:65:ALA:HB3	0.730
1	R:66:ALA:CA	S:205:TYR:OH	0.730
1	T:89:VAL:CG2	U:187:VAL:CG1	0.730
1	HA:15:LEU:CD1	IA:203:VAL:CG2	0.730
1	LA:67:ALA:HB3	MA:207:GLY:H	0.730
1	A:77:LEU:CA	B:196:SER:O	0.729
1	D:218:PHE:CZ	E:44:GLY:N	0.729
1	G:64:GLN:HB3	H:209:LYS:NZ	0.729
1	H:15:LEU:CG	I:203:VAL:HG21	0.729
1	X:87:LYS:H	Y:187:VAL:HA	0.729
1	BA:13:LYS:O	CA:22:LEU:HB2	0.729
1	CA:231:ALA:O	DA:41:GLU:HG2	0.729
1	GA:67:ALA:HB2	HA:207:GLY:C	0.729
1	B:67:ALA:C	C:205:TYR:CE1	0.728

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	O:14:ARG:O	P:22:LEU:CB	0.728
1	P:64:GLN:HB3	Q:209:LYS:CE	0.728
1	S:65:ALA:O	T:209:LYS:HB2	0.728
1	EA:66:ALA:HA	FA:209:LYS:HB2	0.728
1	FA:87:LYS:CB	GA:187:VAL:CG1	0.728
1	HA:15:LEU:CD1	IA:22:LEU:HD12	0.728
1	GA:64:GLN:C	HA:209:LYS:HE2	0.728
1	PA:89:VAL:HB	QA:187:VAL:HG11	0.728
1	PA:216:LYS:CE	QA:24:ARG:CD	0.728
1	PA:230:PHE:CZ	QA:141:VAL:HG12	0.728
1	VA:64:GLN:OE1	WA:25:GLU:OE2	0.728
1	C:79:PHE:HA	D:194:GLU:O	0.727
1	D:124:LEU:CD2	E:47:GLU:CG	0.727
1	X:77:LEU:HG	Y:196:SER:O	0.727
1	X:228:THR:CG2	Y:140:PRO:HG2	0.727
1	Z:230:PHE:CG	AA:141:VAL:HG12	0.727
1	HA:89:VAL:C	IA:185:LYS:NZ	0.727
1	HA:124:LEU:HB3	IA:48:LYS:NZ	0.727
1	OA:216:LYS:NZ	PA:24:ARG:HD2	0.727
1	B:231:ALA:H	C:43:LEU:CD2	0.727
1	S:66:ALA:CA	T:205:TYR:HH	0.727
1	A:228:THR:HG21	B:141:VAL:N	0.726
1	B:13:LYS:O	C:22:LEU:HB2	0.726

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	C:82:GLY:O	D:191:LEU:HB3	0.726
1	R:89:VAL:CB	S:187:VAL:HG13	0.726
1	V:13:LYS:O	W:22:LEU:HB2	0.726
1	V:15:LEU:CA	W:23:PRO:HD2	0.726
1	X:86:LEU:HD22	Y:188:GLY:HA3	0.726
1	CA:218:PHE:CZ	DA:43:LEU:C	0.726
1	EA:82:GLY:O	FA:191:LEU:HB3	0.726
1	PA:230:PHE:CZ	QA:141:VAL:CG1	0.726
1	UA:15:LEU:CA	VA:22:LEU:HA	0.726
1	D:79:PHE:CA	E:194:GLU:O	0.726
1	B:87:LYS:HZ1	C:186:VAL:HG13	0.725
1	F:124:LEU:HD13	G:45:SER:HB2	0.725
1	G:67:ALA:HB2	H:207:GLY:C	0.725
1	P:86:LEU:HD22	Q:188:GLY:HA3	0.725
1	U:89:VAL:HG21	V:187:VAL:HG21	0.725
1	U:230:PHE:HE1	V:141:VAL:CG1	0.725
1	Y:83:ILE:CD	Z:191:LEU:HB2	0.725
1	SA:89:VAL:CG2	TA:187:VAL:CG1	0.725
1	DA:218:PHE:HZ	EA:44:GLY:N	0.725
1	H:15:LEU:CD1	I:22:LEU:HD12	0.724
1	O:86:LEU:HD22	P:188:GLY:HA3	0.724
1	S:64:GLN:CD	T:209:LYS:HZ1	0.724
1	V:89:VAL:C	W:185:LYS:HD2	0.724

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	DA:15:LEU:HD12	EA:22:LEU:CD1	0.724
1	XA:228:THR:CG2	YA:140:PRO:HG2	0.724
1	Z:218:PHE:HZ	AA:44:GLY:H	0.724
1	B:87:LYS:CA	C:187:VAL:CG1	0.723
1	B:228:THR:HB	C:141:VAL:CG1	0.723
1	C:218:PHE:CE2	D:42:TYR:CE2	0.723
1	E:67:ALA:CB	F:207:GLY:C	0.723
1	M:90:LEU:CB	N:185:LYS:NZ	0.723
1	Y:127:GLY:CA	Z:48:LYS:HE3	0.723
1	AA:228:THR:HG21	BA:140:PRO:CA	0.723
1	IA:89:VAL:N	JA:185:LYS:HD3	0.723
1	UA:79:PHE:HB2	VA:194:GLU:O	0.723
1	DA:79:PHE:CA	EA:194:GLU:O	0.723
1	H:15:LEU:CD1	I:203:VAL:CG2	0.722
1	Y:12:LEU:O	Z:22:LEU:HD11	0.722
1	MA:90:LEU:CB	NA:185:LYS:NZ	0.722
1	XA:77:LEU:HG	YA:196:SER:O	0.722
1	WA:230:PHE:HE1	XA:141:VAL:CB	0.722
1	F:228:THR:OG1	G:140:PRO:HG2	0.721
1	H:233:GLN:CD	I:39:THR:CG2	0.721
1	J:67:ALA:HB1	K:207:GLY:H	0.721
1	W:14:ARG:O	X:22:LEU:CA	0.721
1	Y:216:LYS:HB3	Z:24:ARG:HH11	0.721

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	AA:81:ILE:HG22	BA:193:VAL:HG22	0.721
1	DA:124:LEU:CD2	EA:47:GLU:CG	0.721
1	DA:82:GLY:O	EA:191:LEU:HB2	0.721
1	HA:64:GLN:C	IA:209:LYS:HE2	0.721
1	OA:14:ARG:O	PA:22:LEU:CB	0.721
1	UA:15:LEU:H	VA:203:VAL:CG2	0.721
1	XA:86:LEU:HD22	YA:188:GLY:HA3	0.721
1	YA:233:GLN:NE2	ZA:21:ARG:HH12	0.721
1	M:89:VAL:HA	N:185:LYS:CD	0.720
1	HA:15:LEU:CG	IA:203:VAL:HG21	0.720
1	PA:14:ARG:CG	QA:203:VAL:HB	0.720
1	L:216:LYS:HE2	M:24:ARG:NH1	0.720
1	Q:65:ALA:HB2	R:208:GLU:OE2	0.720
1	WA:17:TYR:O	XA:22:LEU:CD2	0.720
1	P:14:ARG:CG	Q:203:VAL:HB	0.719
1	AA:218:PHE:HZ	BA:43:LEU:CA	0.719
1	BA:89:VAL:N	CA:185:LYS:CB	0.719
1	CA:17:TYR:CB	DA:22:LEU:HD21	0.719
1	EA:14:ARG:N	FA:22:LEU:HB2	0.719
1	WA:14:ARG:O	XA:22:LEU:CA	0.719
1	YA:86:LEU:CD2	ZA:188:GLY:CA	0.719
1	YA:228:THR:CG2	ZA:140:PRO:CG	0.719
1	LA:216:LYS:HE2	MA:24:ARG:NH1	0.719

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	A:187:VAL:HA	ZA:86:LEU:C	0.718
1	D:87:LYS:C	E:187:VAL:HG13	0.718
1	V:17:TYR:O	W:22:LEU:HD22	0.718
1	Y:67:ALA:CB	Z:205:TYR:CE2	0.718
1	BA:87:LYS:CA	CA:187:VAL:HG13	0.718
1	DA:87:LYS:C	EA:187:VAL:CG1	0.718
1	FA:124:LEU:HB3	GA:48:LYS:HZ3	0.718
1	OA:216:LYS:HE2	PA:24:ARG:HD2	0.718
1	N:216:LYS:HE3	O:24:ARG:HH11	0.718
1	CA:87:LYS:H	DA:187:VAL:CG1	0.718
1	A:12:LEU:O	B:22:LEU:HD13	0.717
1	F:230:PHE:CE1	G:141:VAL:N	0.717
1	R:89:VAL:CG1	S:187:VAL:CG1	0.717
1	Y:86:LEU:CD2	Z:188:GLY:CA	0.717
1	HA:233:GLN:CD	IA:39:THR:CG2	0.717
1	XA:87:LYS:H	YA:187:VAL:HA	0.717
1	YA:216:LYS:HB3	ZA:24:ARG:HH11	0.717
1	Y:233:GLN:NE2	Z:21:ARG:HH12	0.717
1	D:79:PHE:HA	E:194:GLU:O	0.716
1	CA:218:PHE:HZ	DA:43:LEU:CA	0.716
1	DA:87:LYS:C	EA:187:VAL:HG13	0.716
1	L:67:ALA:HB3	M:207:GLY:H	0.716
1	M:67:ALA:HB3	N:205:TYR:CZ	0.715

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	M:216:LYS:NZ	N:24:ARG:HD3	0.715
1	O:216:LYS:HE2	P:24:ARG:HD2	0.715
1	S:14:ARG:C	T:203:VAL:HG11	0.715
1	U:14:ARG:C	V:22:LEU:HA	0.715
1	Z:65:ALA:CB	AA:208:GLU:CG	0.715
1	Z:87:LYS:C	AA:187:VAL:HG13	0.715
1	Z:157:GLN:HE22	AA:25:GLU:HB3	0.715
1	VA:15:LEU:CA	WA:23:PRO:HD2	0.715
1	YA:12:LEU:O	ZA:22:LEU:HD11	0.715
1	B:15:LEU:H	C:22:LEU:CD1	0.715
1	A:185:LYS:CB	ZA:89:VAL:H	0.715
1	A:230:PHE:CE2	B:141:VAL:CG1	0.714
1	D:87:LYS:C	E:187:VAL:CG1	0.714
1	W:230:PHE:HE1	X:141:VAL:HB	0.714
1	Y:228:THR:CG2	Z:140:PRO:CG	0.714
1	SA:14:ARG:O	TA:22:LEU:CA	0.714
1	SA:65:ALA:O	TA:209:LYS:HB2	0.714
1	YA:86:LEU:CD2	ZA:187:VAL:C	0.714
1	C:228:THR:OG1	D:140:PRO:CG	0.714
1	A:127:GLY:CA	B:48:LYS:HE3	0.713
1	F:228:THR:OG1	G:140:PRO:CG	0.713
1	I:89:VAL:N	J:185:LYS:HD3	0.713
1	T:157:GLN:HE22	U:25:GLU:HB3	0.713



Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	V:157:GLN:NE2	W:25:GLU:HB3	0.713
1	X:231:ALA:C	Y:41:GLU:HB3	0.713
1	Y:77:LEU:HG	Z:196:SER:O	0.713
1	EA:231:ALA:CB	FA:41:GLU:C	0.713
1	FA:229:LEU:C	GA:141:VAL:HG11	0.713
1	JA:65:ALA:HB3	KA:209:LYS:HG3	0.713
1	XA:216:LYS:HB3	YA:24:ARG:HH11	0.713
1	A:200:GLN:O	ZA:73:LYS:HA	0.713
1	A:141:VAL:HG13	ZA:230:PHE:CZ	0.713
1	A:187:VAL:HG13	ZA:87:LYS:C	0.712
1	F:229:LEU:C	G:141:VAL:HG11	0.712
1	S:89:VAL:CG2	T:187:VAL:CG1	0.712
1	Z:118:ALA:HB3	AA:209:LYS:HE2	0.712
1	BA:230:PHE:CD2	CA:141:VAL:CG1	0.712
1	DA:79:PHE:HA	EA:194:GLU:O	0.712
1	GA:64:GLN:HB3	HA:209:LYS:NZ	0.712
1	GA:124:LEU:CG	HA:45:SER:CB	0.712
1	IA:64:GLN:HB3	JA:209:LYS:NZ	0.712
1	IA:233:GLN:OE1	JA:39:THR:CB	0.712
1	YA:77:LEU:HG	ZA:196:SER:O	0.712
1	A:140:PRO:CG	ZA:228:THR:HG23	0.711
1	B:87:LYS:HZ2	C:186:VAL:HG12	0.711
1	E:231:ALA:CB	F:41:GLU:C	0.711

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	F:15:LEU:CD1	G:22:LEU:HD11	0.711
1	G:230:PHE:CE1	H:141:VAL:N	0.711
1	G:64:GLN:C	H:209:LYS:HE2	0.711
1	J:65:ALA:HB3	K:209:LYS:HG3	0.711
1	R:66:ALA:HB1	S:205:TYR:CE1	0.711
1	V:89:VAL:CG2	W:187:VAL:HG11	0.711
1	LA:216:LYS:HE3	MA:24:ARG:NH1	0.711
1	OA:216:LYS:HE3	PA:24:ARG:NH1	0.711
1	RA:65:ALA:C	SA:209:LYS:HG3	0.711
1	RA:89:VAL:CG1	SA:187:VAL:CG1	0.711
1	YA:228:THR:HB	ZA:141:VAL:HG11	0.711
1	T:90:LEU:N	U:185:LYS:CD	0.711
1	I:233:GLN:OE1	J:39:THR:CB	0.710
1	DA:86:LEU:C	EA:187:VAL:CA	0.710
1	JA:228:THR:HG22	KA:140:PRO:CD	0.710
1	BA:231:ALA:H	CA:43:LEU:CD2	0.710
1	A:203:VAL:HG11	ZA:14:ARG:CB	0.709
1	H:233:GLN:HE22	I:39:THR:HG22	0.709
1	J:67:ALA:CB	K:205:TYR:OH	0.709
1	R:66:ALA:CB	S:205:TYR:HE1	0.709
1	Z:67:ALA:C	AA:206:LYS:H	0.709
1	Z:89:VAL:HA	AA:185:LYS:CG	0.709
1	SA:14:ARG:C	TA:203:VAL:HG11	0.709

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	YA:67:ALA:CB	ZA:205:TYR:CE2	0.709
1	AA:218:PHE:HZ	BA:44:GLY:H	0.709
1	F:124:LEU:HD21	G:45:SER:HB3	0.708
1	FA:15:LEU:CD1	GA:22:LEU:HD11	0.708
1	GA:67:ALA:HA	HA:207:GLY:CA	0.708
1	UA:226:GLU:HB3	VA:140:PRO:HG3	0.708
1	VA:89:VAL:C	WA:185:LYS:HD2	0.708
1	A:218:PHE:HZ	B:43:LEU:CA	0.707
1	B:89:VAL:CA	C:185:LYS:HB2	0.707
1	T:231:ALA:CB	U:42:TYR:CA	0.707
1	Z:86:LEU:C	AA:187:VAL:HA	0.707
1	NA:124:LEU:CD2	OA:45:SER:HB3	0.707
1	OA:86:LEU:HD22	PA:188:GLY:HA3	0.707
1	WA:68:GLY:O	XA:205:TYR:HA	0.707
1	D:76:ASN:OD1	E:198:SER:OG	0.707
1	DA:76:ASN:OD1	EA:198:SER:OG	0.707
1	A:22:LEU:CD2	ZA:17:TYR:O	0.707
1	A:209:LYS:HE2	ZA:118:ALA:HB3	0.706
1	Q:65:ALA:CB	R:208:GLU:OE1	0.706
1	Y:86:LEU:CD2	Z:188:GLY:HA3	0.706
1	AA:230:PHE:CE2	BA:141:VAL:CG1	0.706
1	JA:67:ALA:CB	KA:205:TYR:OH	0.706
1	MA:231:ALA:CB	NA:42:TYR:O	0.706

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	A:231:ALA:N	B:43:LEU:HD23	0.705
1	B:86:LEU:C	C:187:VAL:CA	0.705
1	B:87:LYS:CA	C:187:VAL:HG13	0.705
1	H:64:GLN:HB3	I:209:LYS:NZ	0.705
1	I:64:GLN:HB3	J:209:LYS:NZ	0.705
1	I:87:LYS:CB	J:187:VAL:CG1	0.705
1	R:65:ALA:C	S:209:LYS:HG3	0.705
1	R:89:VAL:CG1	S:187:VAL:HG11	0.705
1	U:228:THR:HG21	V:140:PRO:HG2	0.705
1	Z:14:ARG:CB	AA:203:VAL:HG11	0.705
1	Z:73:LYS:HA	AA:200:GLN:O	0.705
1	FA:124:LEU:HD13	GA:45:SER:HB2	0.705
1	KA:87:LYS:HB2	LA:187:VAL:HG12	0.705
1	RA:66:ALA:HB1	SA:205:TYR:CE1	0.705
1	UA:14:ARG:C	VA:22:LEU:HA	0.705
1	XA:15:LEU:HD21	YA:204:THR:O	0.705
1	C:218:PHE:HZ	D:43:LEU:CA	0.705
1	WA:86:LEU:N	XA:188:GLY:H	0.705
1	E:124:LEU:O	F:48:LYS:NZ	0.705
1	A:141:VAL:HB	ZA:230:PHE:HE1	0.704
1	A:203:VAL:HG12	ZA:14:ARG:CG	0.704
1	M:90:LEU:HD23	N:185:LYS:HZ2	0.704
1	P:89:VAL:HA	Q:185:LYS:HD3	0.704

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	X:216:LYS:HB3	Y:24:ARG:HH11	0.704
1	CA:124:LEU:CA	DA:48:LYS:HE2	0.704
1	JA:90:LEU:CB	KA:185:LYS:HZ3	0.704
1	PA:65:ALA:CB	QA:208:GLU:CD	0.704
1	WA:77:LEU:CG	XA:196:SER:O	0.704
1	VA:89:VAL:CG2	WA:187:VAL:HG11	0.704
1	A:43:LEU:C	ZA:218:PHE:HZ	0.704
1	Z:17:TYR:O	AA:22:LEU:CD2	0.704
1	DA:82:GLY:O	EA:191:LEU:CA	0.704
1	C:17:TYR:CA	D:22:LEU:HD23	0.703
1	E:124:LEU:CD2	F:47:GLU:CG	0.703
1	D:82:GLY:O	E:191:LEU:CA	0.703
1	M:216:LYS:HE3	N:24:ARG:NH1	0.703
1	P:230:PHE:CZ	Q:141:VAL:CG1	0.703
1	U:13:LYS:C	V:22:LEU:HD13	0.703
1	W:231:ALA:CA	X:42:TYR:O	0.703
1	Z:218:PHE:HZ	AA:43:LEU:C	0.703
1	BA:67:ALA:O	CA:206:LYS:C	0.703
1	UA:13:LYS:C	VA:22:LEU:HD13	0.703
1	WA:89:VAL:HG11	XA:187:VAL:CG1	0.703
1	YA:127:GLY:CA	ZA:48:LYS:HE3	0.703
1	T:65:ALA:N	U:209:LYS:HG3	0.703
1	Y:15:LEU:CA	Z:23:PRO:N	0.703

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	B:73:LYS:HG3	C:200:GLN:O	0.702
1	B:218:PHE:CD2	C:42:TYR:CD2	0.702
1	D:15:LEU:HD12	E:22:LEU:CD1	0.702
1	O:14:ARG:HG3	P:203:VAL:HG12	0.702
1	P:14:ARG:CB	Q:203:VAL:HB	0.702
1	BA:84:ASN:O	CA:189:GLY:HA2	0.702
1	EA:12:LEU:O	FA:22:LEU:HD21	0.702
1	FA:230:PHE:CZ	GA:141:VAL:N	0.702
1	IA:15:LEU:HD11	JA:203:VAL:CG2	0.702
1	JA:90:LEU:CB	KA:185:LYS:NZ	0.702
1	UA:15:LEU:HD21	VA:204:THR:C	0.702
1	UA:218:PHE:CZ	VA:42:TYR:CE2	0.702
1	A:25:GLU:HB3	ZA:157:GLN:HE22	0.701
1	J:90:LEU:CB	K:185:LYS:NZ	0.701
1	X:15:LEU:HD21	Y:204:THR:O	0.701
1	FA:230:PHE:CE1	GA:141:VAL:N	0.701
1	VA:89:VAL:HG12	WA:187:VAL:HG12	0.701
1	YA:67:ALA:C	ZA:206:LYS:H	0.701
1	B:89:VAL:CG1	C:187:VAL:HG11	0.700
1	A:73:LYS:HZ2	B:201:SER:HB3	0.700
1	E:82:GLY:O	F:191:LEU:HB3	0.700
1	X:15:LEU:N	Y:203:VAL:HG21	0.700
1	EA:124:LEU:CD2	FA:47:GLU:CG	0.700

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	EA:15:LEU:CG	FA:22:LEU:HD12	0.700
1	FA:124:LEU:C	GA:48:LYS:HZ1	0.700
1	MA:67:ALA:HB1	NA:207:GLY:CA	0.700
1	NA:67:ALA:HB3	OA:205:TYR:CE1	0.700
1	RA:218:PHE:HE2	SA:42:TYR:CD2	0.700
1	R:124:LEU:HD23	S:45:SER:HB3	0.699
1	V:87:LYS:HE3	W:186:VAL:CG1	0.699
1	X:67:ALA:O	Y:206:LYS:C	0.699
1	Z:14:ARG:CG	AA:203:VAL:HG12	0.699
1	AA:89:VAL:HA	BA:185:LYS:CG	0.699
1	AA:231:ALA:N	BA:43:LEU:HD23	0.699
1	EA:86:LEU:CA	FA:187:VAL:HA	0.699
1	VA:231:ALA:O	WA:41:GLU:CB	0.699
1	K:216:LYS:NZ	L:24:ARG:CD	0.698
1	W:77:LEU:CG	X:196:SER:O	0.698
1	AA:218:PHE:CZ	BA:43:LEU:C	0.698
1	WA:230:PHE:HE1	XA:141:VAL:HB	0.698
1	XA:14:ARG:O	YA:22:LEU:HA	0.698
1	A:15:LEU:CB	B:22:LEU:HD12	0.697
1	B:84:ASN:O	C:189:GLY:HA2	0.697
1	M:64:GLN:HB3	N:209:LYS:HZ3	0.697
1	U:226:GLU:HB3	V:140:PRO:HG3	0.697
1	V:231:ALA:O	W:41:GLU:CB	0.697

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	IA:228:THR:CG2	JA:140:PRO:HG2	0.697
1	KA:216:LYS:NZ	LA:24:ARG:CD	0.697
1	QA:64:GLN:HB3	RA:209:LYS:HZ3	0.697
1	UA:230:PHE:CE1	VA:141:VAL:HG11	0.697
1	WA:14:ARG:HG3	XA:203:VAL:HG11	0.697
1	XA:218:PHE:HZ	YA:44:GLY:N	0.697
1	HA:67:ALA:N	IA:205:TYR:OH	0.697
1	TA:90:LEU:N	UA:185:LYS:CD	0.697
1	XA:14:ARG:C	YA:22:LEU:H	0.697
1	WA:231:ALA:CA	XA:42:TYR:O	0.697
1	M:228:THR:CG2	N:140:PRO:HG2	0.696
1	T:124:LEU:CD2	U:45:SER:OG	0.696
1	W:14:ARG:HG3	X:203:VAL:HG11	0.696
1	X:86:LEU:HG	Y:188:GLY:N	0.696
1	Z:228:THR:HG21	AA:140:PRO:HG2	0.696
1	CA:218:PHE:CE2	DA:42:TYR:CE2	0.696
1	MA:228:THR:CG2	NA:140:PRO:HG2	0.696
1	RA:66:ALA:CA	SA:205:TYR:OH	0.696
1	RA:124:LEU:HD23	SA:45:SER:HB3	0.696
1	TA:89:VAL:CG2	UA:187:VAL:CG1	0.696
1	VA:87:LYS:CD	WA:186:VAL:HG13	0.696
1	D:87:LYS:O	E:187:VAL:CG1	0.695
1	G:67:ALA:CA	H:207:GLY:CA	0.695



Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	M:64:GLN:HB3	N:209:LYS:HZ1	0.695
1	P:65:ALA:CB	Q:208:GLU:CD	0.695
1	S:231:ALA:HB3	T:41:GLU:C	0.695
1	V:83:ILE:CD	W:191:LEU:HB3	0.695
1	W:68:GLY:O	X:205:TYR:HA	0.695
1	BA:89:VAL:CG1	CA:187:VAL:HG11	0.695
1	RA:65:ALA:N	SA:209:LYS:CD	0.695
1	WA:89:VAL:HG12	XA:187:VAL:HG12	0.695
1	E:68:GLY:O	F:205:TYR:HD1	0.695
1	LA:216:LYS:NZ	MA:24:ARG:CZ	0.695
1	MA:14:ARG:O	NA:22:LEU:N	0.695
1	D:89:VAL:HA	E:185:LYS:CG	0.694
1	E:86:LEU:CA	F:187:VAL:HA	0.694
1	Q:231:ALA:CB	R:42:TYR:N	0.694
1	Z:65:ALA:HB3	AA:208:GLU:CG	0.694
1	CA:68:GLY:O	DA:205:TYR:CD1	0.694
1	MA:216:LYS:NZ	NA:24:ARG:HD3	0.694
1	QA:124:LEU:HD23	RA:45:SER:CB	0.694
1	TA:124:LEU:CD2	UA:45:SER:OG	0.694
1	WA:15:LEU:CD2	XA:204:THR:O	0.694
1	XA:231:ALA:C	YA:41:GLU:HB3	0.694
1	F:124:LEU:HD11	G:45:SER:CA	0.693
1	N:67:ALA:HB3	O:205:TYR:CE1	0.693

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	AA:15:LEU:CB	BA:22:LEU:HD12	0.693
1	BA:79:PHE:HB3	CA:195:ALA:HA	0.693
1	FA:124:LEU:HD11	GA:45:SER:CA	0.693
1	HA:64:GLN:HB3	IA:209:LYS:NZ	0.693
1	HA:233:GLN:CD	IA:39:THR:HG21	0.693
1	EA:68:GLY:O	FA:205:TYR:HD1	0.693
1	A:139:ASN:HB2	ZA:228:THR:HG22	0.692
1	F:68:GLY:N	G:205:TYR:CE1	0.692
1	Q:14:ARG:CG	R:203:VAL:HB	0.692
1	X:231:ALA:O	Y:41:GLU:HG2	0.692
1	BA:89:VAL:CA	CA:185:LYS:HB2	0.692
1	CA:15:LEU:CB	DA:22:LEU:CD1	0.692
1	IA:229:LEU:O	JA:141:VAL:HG11	0.692
1	OA:14:ARG:HG3	PA:203:VAL:CB	0.692
1	R:64:GLN:HB2	S:209:LYS:NZ	0.692
1	A:68:GLY:N	B:205:TYR:CE1	0.691
1	C:68:GLY:O	D:205:TYR:CD1	0.691
1	K:14:ARG:N	L:22:LEU:HD13	0.691
1	R:231:ALA:HB2	S:42:TYR:CA	0.691
1	AA:14:ARG:HB3	BA:203:VAL:CG1	0.691
1	AA:230:PHE:CG	BA:141:VAL:CG1	0.691
1	FA:17:TYR:N	GA:22:LEU:CD2	0.691
1	QA:14:ARG:CG	RA:203:VAL:HB	0.691

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	WA:233:GLN:NE2	XA:21:ARG:NH1	0.691
1	A:207:GLY:O	ZA:67:ALA:CB	0.691
1	F:230:PHE:CZ	G:141:VAL:N	0.690
1	V:228:THR:HG22	W:141:VAL:HG22	0.690
1	CA:86:LEU:CA	DA:187:VAL:HA	0.690
1	EA:124:LEU:HD11	FA:45:SER:HB2	0.690
1	DA:87:LYS:O	EA:187:VAL:CG1	0.690
1	RA:231:ALA:HB2	SA:42:TYR:CA	0.690
1	SA:14:ARG:HG3	TA:203:VAL:HG12	0.690
1	UA:228:THR:HG21	VA:140:PRO:HG2	0.690
1	EA:124:LEU:C	FA:48:LYS:HZ1	0.690
1	I:15:LEU:HD11	J:203:VAL:CG2	0.689
1	J:15:LEU:HA	K:22:LEU:C	0.689
1	J:216:LYS:NZ	K:24:ARG:CD	0.689
1	M:231:ALA:CB	N:42:TYR:O	0.689
1	P:89:VAL:HG21	Q:187:VAL:HG11	0.689
1	Q:15:LEU:CD1	R:203:VAL:CG2	0.689
1	Q:124:LEU:HD23	R:45:SER:CB	0.689
1	T:15:LEU:H	U:203:VAL:HG21	0.689
1	BA:73:LYS:HG3	CA:200:GLN:O	0.689
1	CA:17:TYR:CZ	DA:24:ARG:HB2	0.689
1	IA:64:GLN:HB3	JA:209:LYS:HZ1	0.689
1	JA:87:LYS:HB2	KA:187:VAL:HG12	0.689

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	XA:86:LEU:HG	YA:188:GLY:N	0.689
1	YA:86:LEU:HG	ZA:187:VAL:C	0.689
1	X:218:PHE:HZ	Y:44:GLY:N	0.689
1	KA:90:LEU:N	LA:185:LYS:HZ3	0.689
1	A:208:GLU:CG	ZA:65:ALA:HB3	0.688
1	I:228:THR:CG2	J:140:PRO:HG2	0.688
1	I:229:LEU:O	J:141:VAL:HG11	0.688
1	Y:77:LEU:CG	Z:196:SER:O	0.688
1	PA:14:ARG:CB	QA:203:VAL:HB	0.688
1	PA:89:VAL:HA	QA:185:LYS:HD3	0.688
1	QA:65:ALA:CB	RA:208:GLU:OE1	0.688
1	RA:89:VAL:CG1	SA:187:VAL:HG11	0.688
1	TA:230:PHE:HE1	UA:141:VAL:CG1	0.688
1	WA:228:THR:CG2	XA:140:PRO:HG2	0.688
1	YA:77:LEU:CG	ZA:196:SER:O	0.688
1	VA:14:ARG:O	WA:22:LEU:N	0.688
1	B:233:GLN:OE1	C:39:THR:CA	0.688
1	X:64:GLN:OE1	Y:25:GLU:OE2	0.688
1	E:124:LEU:HD11	F:45:SER:HB2	0.687
1	E:218:PHE:HZ	F:43:LEU:C	0.687
1	R:218:PHE:HE2	S:42:TYR:CD2	0.687
1	U:218:PHE:CZ	V:42:TYR:CE2	0.687
1	GA:233:GLN:HE22	HA:39:THR:CG2	0.687

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	E:15:LEU:CG	F:203:VAL:CG2	0.686
1	H:15:LEU:HD12	I:22:LEU:HD11	0.686
1	H:233:GLN:CD	I:39:THR:HG21	0.686
1	L:15:LEU:HD11	M:203:VAL:HG23	0.686
1	N:86:LEU:HD22	O:188:GLY:HA3	0.686
1	R:89:VAL:CG2	S:187:VAL:CG1	0.686
1	Y:86:LEU:HG	Z:187:VAL:C	0.686
1	CA:67:ALA:CB	DA:205:TYR:HE2	0.686
1	LA:15:LEU:HD11	MA:203:VAL:HG23	0.686
1	YA:89:VAL:HA	ZA:185:LYS:CG	0.686
1	GA:65:ALA:N	HA:209:LYS:NZ	0.686
1	MA:216:LYS:HZ1	NA:24:ARG:HD3	0.686
1	W:15:LEU:CD2	X:204:THR:O	0.685
1	AA:68:GLY:N	BA:205:TYR:CE1	0.685
1	DA:15:LEU:CD1	EA:22:LEU:CD1	0.685
1	DA:67:ALA:C	EA:205:TYR:CD1	0.685
1	EA:67:ALA:CB	FA:207:GLY:C	0.685
1	SA:231:ALA:HB3	TA:41:GLU:C	0.685
1	VA:15:LEU:H	WA:203:VAL:CG2	0.685
1	XA:12:LEU:C	YA:22:LEU:CD1	0.685
1	YA:86:LEU:CA	ZA:188:GLY:H	0.685
1	YA:216:LYS:CG	ZA:24:ARG:HH11	0.685
1	EA:124:LEU:O	FA:48:LYS:NZ	0.685

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	XA:64:GLN:OE1	YA:25:GLU:OE2	0.685
1	A:14:ARG:HB3	B:203:VAL:CG1	0.684
1	A:208:GLU:CD	ZA:65:ALA:HB3	0.684
1	C:17:TYR:CZ	D:24:ARG:HB2	0.684
1	D:66:ALA:CA	E:209:LYS:HB2	0.684
1	D:67:ALA:C	E:205:TYR:CD1	0.684
1	H:124:LEU:CG	I:45:SER:HB3	0.684
1	O:14:ARG:HG3	P:203:VAL:CB	0.684
1	S:14:ARG:HG3	T:203:VAL:HG12	0.684
1	S:14:ARG:O	T:22:LEU:CA	0.684
1	W:230:PHE:CE1	X:141:VAL:HB	0.684
1	BA:230:PHE:HA	CA:43:LEU:CD2	0.684
1	QA:64:GLN:HB2	RA:209:LYS:HE2	0.684
1	UA:87:LYS:CD	VA:186:VAL:CA	0.684
1	A:203:VAL:CG1	ZA:14:ARG:CG	0.683
1	Y:73:LYS:HZ3	Z:201:SER:HB3	0.683
1	Z:228:THR:HG22	AA:139:ASN:HB2	0.683
1	HA:124:LEU:HB3	IA:48:LYS:HZ1	0.683
1	KA:65:ALA:CB	LA:208:GLU:OE2	0.683
1	QA:231:ALA:CB	RA:42:TYR:N	0.683
1	VA:83:ILE:CD	WA:191:LEU:HB3	0.683
1	W:233:GLN:NE2	X:21:ARG:NH1	0.683
1	TA:65:ALA:N	UA:209:LYS:HG3	0.683

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	A:42:TYR:O	ZA:231:ALA:HA	0.683
1	C:69:ILE:HB	D:204:THR:O	0.682
1	D:15:LEU:CD1	E:22:LEU:CD1	0.682
1	G:124:LEU:HG	H:48:LYS:HE2	0.682
1	DA:89:VAL:HA	EA:185:LYS:CG	0.682
1	TA:157:GLN:HE22	UA:25:GLU:HB3	0.682
1	YA:86:LEU:CD2	ZA:188:GLY:HA3	0.682
1	B:79:PHE:HB3	C:195:ALA:HA	0.681
1	D:216:LYS:CD	E:24:ARG:HD2	0.681
1	K:65:ALA:CB	L:208:GLU:OE2	0.681
1	U:15:LEU:HD21	V:204:THR:C	0.681
1	Y:67:ALA:C	Z:206:LYS:H	0.681
1	AA:228:THR:HG21	BA:140:PRO:HG2	0.681
1	CA:69:ILE:HB	DA:204:THR:O	0.681
1	FA:228:THR:OG1	GA:140:PRO:CG	0.681
1	FA:68:GLY:N	GA:205:TYR:CE1	0.681
1	KA:14:ARG:N	LA:22:LEU:HD13	0.681
1	PA:13:LYS:C	QA:22:LEU:HD13	0.681
1	VA:15:LEU:HD21	WA:204:THR:C	0.681
1	YA:118:ALA:CB	ZA:209:LYS:HE2	0.681
1	TA:64:GLN:O	UA:209:LYS:HD3	0.681
1	A:193:VAL:HG22	ZA:81:ILE:CG2	0.680
1	B:66:ALA:CB	C:211:LEU:HD11	0.680

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	C:86:LEU:CA	D:187:VAL:HA	0.680
1	E:81:ILE:HG22	F:193:VAL:HG22	0.680
1	F:65:ALA:CB	G:208:GLU:OE2	0.680
1	I:90:LEU:HD23	J:185:LYS:HZ1	0.680
1	J:15:LEU:HG	K:203:VAL:CG2	0.680
1	S:89:VAL:CG1	T:187:VAL:HG12	0.680
1	Z:14:ARG:CG	AA:203:VAL:CG1	0.680
1	AA:67:ALA:HB2	BA:205:TYR:CE2	0.680
1	Y:86:LEU:CA	Z:188:GLY:H	0.680
1	K:87:LYS:HB2	L:187:VAL:HG12	0.679
1	L:124:LEU:CD2	M:45:SER:HB2	0.679
1	Q:216:LYS:HZ3	R:24:ARG:CD	0.679
1	V:216:LYS:HE3	W:24:ARG:HH11	0.679
1	X:228:THR:CG2	Y:140:PRO:CD	0.679
1	BA:66:ALA:CB	CA:211:LEU:HD11	0.679
1	EA:67:ALA:C	FA:205:TYR:CD1	0.679
1	HA:124:LEU:CA	IA:48:LYS:CE	0.679
1	VA:228:THR:HG22	WA:141:VAL:HG22	0.679
1	V:14:ARG:O	W:22:LEU:N	0.679
1	MA:216:LYS:HE2	NA:24:ARG:NH1	0.679
1	CA:69:ILE:CG1	DA:204:THR:O	0.679
1	V:228:THR:HG21	W:140:PRO:HG2	0.678
1	W:228:THR:CG2	X:140:PRO:HG2	0.678



Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	Y:228:THR:HG21	Z:140:PRO:HG2	0.678
1	Z:81:ILE:CG2	AA:193:VAL:HG22	0.678
1	CA:68:GLY:N	DA:205:TYR:CD1	0.678
1	EA:218:PHE:HZ	FA:43:LEU:C	0.678
1	EA:231:ALA:N	FA:43:LEU:HD23	0.678
1	QA:15:LEU:HD12	RA:203:VAL:HG23	0.678
1	VA:89:VAL:CG2	WA:187:VAL:HG21	0.678
1	T:218:PHE:HE2	U:42:TYR:CE2	0.678
1	M:14:ARG:O	N:22:LEU:N	0.678
1	C:68:GLY:N	D:205:TYR:CD1	0.677
1	E:12:LEU:O	F:22:LEU:HD21	0.677
1	F:17:TYR:N	G:22:LEU:CD2	0.677
1	H:124:LEU:HB3	I:48:LYS:HZ1	0.677
1	Q:64:GLN:HB2	R:209:LYS:HE2	0.677
1	V:15:LEU:HD21	W:204:THR:C	0.677
1	V:14:ARG:O	W:22:LEU:CA	0.677
1	IA:16:GLY:N	JA:22:LEU:HB3	0.677
1	LA:90:LEU:CB	MA:185:LYS:NZ	0.677
1	QA:15:LEU:HD11	RA:203:VAL:HG23	0.677
1	VA:14:ARG:CB	WA:203:VAL:HG11	0.677
1	A:140:PRO:HG2	ZA:228:THR:HG21	0.676
1	B:230:PHE:HA	C:43:LEU:CD2	0.676
1	E:75:GLU:HA	F:198:SER:O	0.676

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	I:86:LEU:HD11	J:188:GLY:N	0.676
1	L:90:LEU:CB	M:185:LYS:NZ	0.676
1	R:65:ALA:C	S:209:LYS:CG	0.676
1	AA:66:ALA:CB	BA:211:LEU:HD11	0.676
1	GA:124:LEU:HG	HA:48:LYS:HE2	0.676
1	LA:15:LEU:CG	MA:203:VAL:CG2	0.676
1	W:90:LEU:N	X:185:LYS:HD2	0.676
1	G:64:GLN:CB	H:209:LYS:HZ1	0.675
1	P:13:LYS:C	Q:22:LEU:HD13	0.675
1	R:64:GLN:CA	S:209:LYS:HD2	0.675
1	EA:124:LEU:CA	FA:48:LYS:NZ	0.675
1	HA:67:ALA:HB2	IA:207:GLY:C	0.675
1	PA:216:LYS:HZ3	QA:24:ARG:CD	0.675
1	X:14:ARG:C	Y:22:LEU:H	0.675
1	Y:68:GLY:O	Z:205:TYR:CA	0.675
1	A:230:PHE:CD1	B:141:VAL:HG11	0.674
1	E:231:ALA:N	F:43:LEU:HD23	0.674
1	F:124:LEU:CD2	G:45:SER:OG	0.674
1	N:90:LEU:HB3	O:185:LYS:HZ3	0.674
1	S:16:GLY:HA3	T:22:LEU:O	0.674
1	V:69:ILE:CD	W:204:THR:C	0.674
1	X:230:PHE:HD1	Y:43:LEU:CD2	0.674
1	BA:218:PHE:CZ	CA:43:LEU:CA	0.674

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	BA:218:PHE:CD2	CA:42:TYR:CD2	0.674
1	EA:81:ILE:HG22	FA:193:VAL:HG22	0.674
1	QA:90:LEU:HB3	RA:185:LYS:CE	0.674
1	Y:86:LEU:N	Z:188:GLY:N	0.674
1	OA:64:GLN:CB	PA:209:LYS:NZ	0.674
1	C:69:ILE:CG1	D:204:THR:O	0.674
1	A:67:ALA:C	B:206:LYS:H	0.673
1	E:124:LEU:CA	F:48:LYS:NZ	0.673
1	I:90:LEU:CB	J:185:LYS:HZ3	0.673
1	Y:86:LEU:CD2	Z:187:VAL:C	0.673
1	CA:65:ALA:CB	DA:208:GLU:CD	0.673
1	SA:16:GLY:HA3	TA:22:LEU:O	0.673
1	RA:231:ALA:CB	SA:42:TYR:HB3	0.673
1	XA:228:THR:CG2	YA:140:PRO:CD	0.673
1	A:67:ALA:HB2	B:205:TYR:CE2	0.672
1	E:87:LYS:HB2	F:187:VAL:CB	0.672
1	U:15:LEU:H	V:203:VAL:CG2	0.672
1	X:14:ARG:O	Y:22:LEU:HA	0.672
1	LA:124:LEU:CD2	MA:45:SER:HB2	0.672
1	OA:124:LEU:CD2	PA:45:SER:HB3	0.672
1	PA:89:VAL:HG21	QA:187:VAL:HG11	0.672
1	WA:118:ALA:CB	XA:209:LYS:HE2	0.672
1	B:218:PHE:CZ	C:43:LEU:CA	0.671

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	C:75:GLU:CA	D:198:SER:O	0.671
1	H:87:LYS:CB	I:187:VAL:CG1	0.671
1	S:231:ALA:CB	T:42:TYR:CB	0.671
1	U:14:ARG:HB3	V:203:VAL:CG1	0.671
1	W:230:PHE:HD1	X:43:LEU:CD2	0.671
1	Z:228:THR:HG22	AA:141:VAL:HG22	0.671
1	CA:89:VAL:HA	DA:185:LYS:CB	0.671
1	FA:65:ALA:CB	GA:208:GLU:OE2	0.671
1	GA:67:ALA:CA	HA:207:GLY:CA	0.671
1	LA:67:ALA:HB3	MA:205:TYR:CD1	0.671
1	TA:14:ARG:O	UA:22:LEU:CA	0.671
1	VA:157:GLN:NE2	WA:25:GLU:HB3	0.671
1	XA:228:THR:CG2	YA:141:VAL:HG13	0.671
1	C:87:LYS:H	D:187:VAL:CG1	0.671
1	A:66:ALA:CB	B:211:LEU:HD11	0.670
1	A:141:VAL:CG1	ZA:230:PHE:CE2	0.670
1	C:65:ALA:CB	D:208:GLU:CD	0.670
1	H:67:ALA:HB2	I:207:GLY:C	0.670
1	I:16:GLY:N	J:22:LEU:HB3	0.670
1	K:90:LEU:CB	L:185:LYS:NZ	0.670
1	V:89:VAL:HG12	W:187:VAL:HG12	0.670
1	VA:14:ARG:O	WA:22:LEU:CA	0.670
1	WA:89:VAL:CG2	XA:187:VAL:HG21	0.670

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	XA:230:PHE:HD1	YA:43:LEU:CD2	0.670
1	J:90:LEU:CD2	K:185:LYS:HZ1	0.670
1	W:86:LEU:N	X:188:GLY:H	0.670
1	C:89:VAL:HA	D:185:LYS:CB	0.669
1	E:14:ARG:N	F:22:LEU:HB2	0.669
1	EA:75:GLU:HA	FA:198:SER:O	0.669
1	WA:230:PHE:CE1	XA:141:VAL:HB	0.669
1	AA:67:ALA:O	BA:206:LYS:N	0.669
1	A:192:LYS:O	ZA:81:ILE:CA	0.669
1	BA:233:GLN:OE1	CA:39:THR:CA	0.669
1	A:69:ILE:CD	B:204:THR:OG1	0.668
1	A:203:VAL:CG1	ZA:14:ARG:CB	0.668
1	E:67:ALA:C	F:205:TYR:CD1	0.668
1	Q:14:ARG:CG	R:203:VAL:CB	0.668
1	Z:14:ARG:CB	AA:203:VAL:CG1	0.668
1	AA:69:ILE:CD	BA:204:THR:OG1	0.668
1	CA:87:LYS:CB	DA:187:VAL:CG1	0.668
1	FA:124:LEU:CA	GA:48:LYS:NZ	0.668
1	OA:14:ARG:CG	PA:203:VAL:HB	0.668
1	WA:87:LYS:O	XA:187:VAL:HG12	0.668
1	YA:230:PHE:CZ	ZA:141:VAL:CB	0.668
1	L:67:ALA:HB3	M:205:TYR:CD1	0.667
1	V:89:VAL:CG2	W:187:VAL:HG21	0.667

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	X:12:LEU:C	Y:22:LEU:CD1	0.667
1	AA:83:ILE:CD	BA:191:LEU:CB	0.667
1	AA:87:LYS:C	BA:187:VAL:HG12	0.667
1	DA:87:LYS:O	EA:187:VAL:HG12	0.667
1	KA:90:LEU:CB	LA:185:LYS:NZ	0.667
1	SA:64:GLN:CB	TA:209:LYS:CD	0.667
1	VA:233:GLN:CD	WA:21:ARG:HH22	0.667
1	E:231:ALA:H	F:43:LEU:CD2	0.667
1	C:17:TYR:CA	D:22:LEU:CD2	0.666
1	E:74:THR:O	F:199:SER:HA	0.666
1	O:14:ARG:CG	P:203:VAL:HB	0.666
1	Y:228:THR:HB	Z:141:VAL:HG11	0.666
1	DA:14:ARG:N	EA:22:LEU:HB2	0.666
1	FA:124:LEU:HB3	GA:48:LYS:NZ	0.666
1	UA:230:PHE:HE1	VA:141:VAL:HG12	0.666
1	VA:82:GLY:O	WA:191:LEU:HA	0.666
1	D:228:THR:HG22	E:139:ASN:HB2	0.665
1	Y:118:ALA:CB	Z:209:LYS:HE2	0.665
1	Z:67:ALA:O	AA:206:LYS:CA	0.665
1	AA:228:THR:HG23	BA:140:PRO:HD2	0.665
1	CA:124:LEU:CD2	DA:47:GLU:CG	0.665
1	BA:87:LYS:C	CA:187:VAL:HG12	0.665
1	JA:15:LEU:HG	KA:203:VAL:CG2	0.665

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	NA:216:LYS:NZ	OA:24:ARG:HD2	0.665
1	XA:73:LYS:HZ2	YA:201:SER:HB3	0.665
1	A:188:GLY:N	ZA:86:LEU:CA	0.665
1	R:218:PHE:HZ	S:42:TYR:HD2	0.665
1	S:64:GLN:CG	T:209:LYS:NZ	0.665
1	V:17:TYR:O	W:22:LEU:CD2	0.665
1	A:84:ASN:O	B:189:GLY:HA2	0.664
1	F:124:LEU:CA	G:48:LYS:NZ	0.664
1	R:86:LEU:HD21	S:188:GLY:HA3	0.664
1	V:87:LYS:HD3	W:186:VAL:CG1	0.664
1	W:87:LYS:O	X:187:VAL:HG12	0.664
1	Y:216:LYS:CB	Z:24:ARG:HH11	0.664
1	Z:15:LEU:N	AA:23:PRO:HD2	0.664
1	GA:64:GLN:CA	HA:209:LYS:HZ3	0.664
1	WA:67:ALA:O	XA:206:LYS:HB3	0.664
1	VA:84:ASN:O	WA:188:GLY:O	0.664
1	YA:68:GLY:O	ZA:205:TYR:CA	0.664
1	F:13:LYS:C	G:22:LEU:HB2	0.663
1	H:124:LEU:CA	I:48:LYS:CE	0.663
1	W:64:GLN:OE1	X:25:GLU:CD	0.663
1	AA:84:ASN:O	BA:189:GLY:HA2	0.663
1	LA:87:LYS:HB2	MA:187:VAL:HG12	0.663
1	SA:89:VAL:CG1	TA:187:VAL:HG12	0.663

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	VA:228:THR:HG21	WA:140:PRO:HG2	0.663
1	WA:230:PHE:HD1	XA:43:LEU:CD2	0.663
1	F:233:GLN:HE22	G:39:THR:CG2	0.663
1	A:141:VAL:HG22	ZA:228:THR:HG22	0.662
1	A:228:THR:HG23	B:140:PRO:HD2	0.662
1	J:14:ARG:N	K:22:LEU:HD13	0.662
1	R:14:ARG:CG	S:203:VAL:CB	0.662
1	X:69:ILE:CG1	Y:204:THR:O	0.662
1	X:228:THR:CG2	Y:141:VAL:HG13	0.662
1	X:228:THR:HG21	Y:140:PRO:HG2	0.662
1	CA:17:TYR:CA	DA:22:LEU:CD2	0.662
1	MA:87:LYS:HB2	NA:187:VAL:HG13	0.662
1	F:68:GLY:O	G:205:TYR:HD1	0.662
1	A:83:ILE:CD	B:191:LEU:CB	0.661
1	M:87:LYS:HB2	N:187:VAL:HG13	0.661
1	U:14:ARG:O	V:22:LEU:CA	0.661
1	U:13:LYS:O	V:22:LEU:HB2	0.661
1	W:89:VAL:HG12	X:187:VAL:HG12	0.661
1	W:73:LYS:HZ3	X:201:SER:HB3	0.661
1	FA:124:LEU:CD2	GA:47:GLU:HG3	0.661
1	FA:68:GLY:O	GA:205:TYR:CD1	0.661
1	HA:15:LEU:CD1	IA:203:VAL:HG21	0.661
1	KA:14:ARG:HG3	LA:203:VAL:HG11	0.661



Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	LA:90:LEU:CG	MA:185:LYS:NZ	0.661
1	TA:231:ALA:HB3	UA:41:GLU:CA	0.661
1	XA:226:GLU:HB3	YA:140:PRO:HG3	0.661
1	A:67:ALA:O	B:206:LYS:N	0.661
1	CA:75:GLU:CA	DA:198:SER:O	0.661
1	W:89:VAL:CG2	X:187:VAL:HG21	0.660
1	W:228:THR:HG21	X:140:PRO:HG2	0.660
1	BA:66:ALA:HB1	CA:211:LEU:HD11	0.660
1	FA:13:LYS:C	GA:22:LEU:HB2	0.660
1	EA:74:THR:O	FA:199:SER:HA	0.660
1	UA:13:LYS:O	VA:22:LEU:HB2	0.660
1	VA:230:PHE:CE1	WA:141:VAL:HG11	0.660
1	VA:12:LEU:O	WA:22:LEU:HD13	0.660
1	WA:77:LEU:HD12	XA:196:SER:O	0.660
1	CA:67:ALA:CB	DA:207:GLY:O	0.660
1	B:15:LEU:N	C:22:LEU:CD1	0.659
1	C:69:ILE:CB	D:204:THR:O	0.659
1	C:13:LYS:O	D:22:LEU:HB2	0.659
1	D:86:LEU:O	E:186:VAL:C	0.659
1	V:87:LYS:CD	W:186:VAL:HG13	0.659
1	JA:14:ARG:N	KA:22:LEU:HD13	0.659
1	NA:14:ARG:O	OA:22:LEU:HB2	0.659
1	TA:15:LEU:H	UA:203:VAL:CG2	0.659

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	YA:228:THR:HG21	ZA:140:PRO:HG2	0.659
1	YA:73:LYS:HZ2	ZA:201:SER:HB3	0.659
1	A:87:LYS:CB	B:187:VAL:HG13	0.658
1	A:191:LEU:HD13	ZA:83:ILE:CD	0.658
1	A:206:LYS:CA	ZA:67:ALA:O	0.658
1	B:12:LEU:O	C:22:LEU:CD1	0.658
1	L:15:LEU:CD1	M:203:VAL:HG23	0.658
1	Q:218:PHE:CZ	R:42:TYR:HD2	0.658
1	Z:216:LYS:CB	AA:24:ARG:NH1	0.658
1	IA:216:LYS:HZ3	JA:24:ARG:HD2	0.658
1	JA:216:LYS:NZ	KA:24:ARG:CD	0.658
1	WA:228:THR:HG23	XA:140:PRO:HD2	0.658
1	XA:69:ILE:CG1	YA:204:THR:O	0.658
1	XA:228:THR:CG2	YA:140:PRO:HD2	0.658
1	V:84:ASN:O	W:188:GLY:O	0.658
1	G:86:LEU:C	H:187:VAL:HA	0.657
1	K:14:ARG:HG3	L:203:VAL:HG11	0.657
1	U:228:THR:HB	V:141:VAL:HG11	0.657
1	AA:67:ALA:C	BA:206:LYS:H	0.657
1	CA:231:ALA:HB3	DA:41:GLU:O	0.657
1	IA:86:LEU:HD11	JA:188:GLY:N	0.657
1	UA:14:ARG:O	VA:22:LEU:CA	0.657
1	WA:64:GLN:OE1	XA:25:GLU:CD	0.657

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	Q:230:PHE:HE1	R:141:VAL:HG12	0.657
1	A:204:THR:HG1	ZA:70:ASN:H	0.657
1	A:15:LEU:HB2	B:22:LEU:CD1	0.656
1	D:228:THR:HG1	E:140:PRO:HG2	0.656
1	E:15:LEU:HD12	F:203:VAL:HG21	0.656
1	J:67:ALA:HA	K:207:GLY:HA3	0.656
1	L:90:LEU:CG	M:185:LYS:NZ	0.656
1	L:15:LEU:CG	M:203:VAL:CG2	0.656
1	R:90:LEU:N	S:185:LYS:HD3	0.656
1	T:89:VAL:C	U:185:LYS:CD	0.656
1	V:87:LYS:HD2	W:186:VAL:CG1	0.656
1	W:228:THR:HG23	X:140:PRO:HD2	0.656
1	X:226:GLU:HB3	Y:140:PRO:HG3	0.656
1	AA:127:GLY:CA	BA:48:LYS:HE3	0.656
1	BA:67:ALA:C	CA:205:TYR:CE1	0.656
1	IA:64:GLN:C	JA:209:LYS:CE	0.656
1	LA:15:LEU:CD1	MA:203:VAL:HG23	0.656
1	RA:89:VAL:C	SA:185:LYS:HD3	0.656
1	RA:64:GLN:CA	SA:209:LYS:HD2	0.656
1	YA:14:ARG:HG2	ZA:203:VAL:HG12	0.656
1	A:24:ARG:NH1	ZA:216:LYS:CB	0.656
1	FA:68:GLY:O	GA:205:TYR:HD1	0.656
1	VA:233:GLN:NE2	WA:21:ARG:NH1	0.656

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	AA:12:LEU:O	BA:22:LEU:HD21	0.656
1	F:124:LEU:HB3	G:48:LYS:NZ	0.655
1	I:64:GLN:C	J:209:LYS:CE	0.655
1	J:87:LYS:HB2	K:187:VAL:HG12	0.655
1	R:89:VAL:C	S:185:LYS:HD3	0.655
1	S:64:GLN:CB	T:209:LYS:CD	0.655
1	U:87:LYS:CB	V:186:VAL:HG12	0.655
1	JA:15:LEU:HA	KA:22:LEU:C	0.655
1	QA:231:ALA:HB3	RA:42:TYR:N	0.655
1	RA:90:LEU:N	SA:185:LYS:HD3	0.655
1	TA:77:LEU:HD12	UA:196:SER:O	0.655
1	TA:230:PHE:HZ	UA:141:VAL:HG12	0.655
1	YA:216:LYS:CB	ZA:24:ARG:HH11	0.655
1	D:87:LYS:O	E:187:VAL:HG12	0.654
1	H:15:LEU:CD1	I:203:VAL:HG21	0.654
1	I:15:LEU:CG	J:203:VAL:HG21	0.654
1	N:228:THR:CG2	O:140:PRO:CG	0.654
1	T:15:LEU:H	U:203:VAL:CG2	0.654
1	V:233:GLN:CD	W:21:ARG:HH22	0.654
1	GA:86:LEU:C	HA:187:VAL:HA	0.654
1	IA:124:LEU:CD1	JA:45:SER:HB2	0.654
1	UA:228:THR:HB	VA:141:VAL:HG11	0.654
1	XA:218:PHE:CZ	YA:44:GLY:N	0.654

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	B:17:TYR:HB2	C:22:LEU:CD2	0.653
1	E:218:PHE:CE2	F:42:TYR:CD2	0.653
1	F:15:LEU:CG	G:203:VAL:CG2	0.653
1	BA:12:LEU:O	CA:22:LEU:CD1	0.653
1	DA:228:THR:HG22	EA:139:ASN:HB2	0.653
1	DA:216:LYS:CD	EA:24:ARG:HD2	0.653
1	DA:86:LEU:O	EA:186:VAL:C	0.653
1	EA:218:PHE:CE2	FA:42:TYR:CD2	0.653
1	RA:69:ILE:CD	SA:204:THR:HG1	0.653
1	TA:89:VAL:C	UA:185:LYS:CD	0.653
1	XA:89:VAL:HG21	YA:187:VAL:HG21	0.653
1	S:231:ALA:HB1	T:42:TYR:H	0.653
1	C:231:ALA:HB3	D:41:GLU:O	0.652
1	I:124:LEU:CD1	J:45:SER:HB2	0.652
1	R:231:ALA:CB	S:42:TYR:HB3	0.652
1	V:12:LEU:O	W:22:LEU:HD13	0.652
1	W:89:VAL:H	X:185:LYS:HB3	0.652
1	Y:65:ALA:CB	Z:208:GLU:OE1	0.652
1	AA:83:ILE:CD	BA:191:LEU:HB3	0.652
1	AA:89:VAL:HG11	BA:187:VAL:HG11	0.652
1	EA:124:LEU:HD23	FA:47:GLU:CD	0.652
1	MA:228:THR:CG2	NA:140:PRO:HD2	0.652
1	NA:86:LEU:HD22	OA:188:GLY:HA3	0.652

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	VA:231:ALA:O	WA:41:GLU:HB3	0.652
1	XA:15:LEU:HD11	YA:203:VAL:CA	0.652
1	V:233:GLN:NE2	W:21:ARG:NH1	0.652
1	M:67:ALA:HB2	N:207:GLY:N	0.651
1	Q:231:ALA:HB3	R:42:TYR:N	0.651
1	S:89:VAL:HA	T:185:LYS:CB	0.651
1	U:75:GLU:HB2	V:198:SER:O	0.651
1	W:77:LEU:HD12	X:196:SER:O	0.651
1	AA:87:LYS:HG3	BA:185:LYS:O	0.651
1	CA:13:LYS:O	DA:22:LEU:HB2	0.651
1	KA:233:GLN:OE1	LA:39:THR:CG2	0.651
1	TA:14:ARG:HG3	UA:203:VAL:HG12	0.651
1	A:12:LEU:O	B:22:LEU:HD21	0.650
1	E:67:ALA:HB1	F:207:GLY:CA	0.650
1	F:124:LEU:CD2	G:47:GLU:HG3	0.650
1	L:64:GLN:HB3	M:209:LYS:HZ1	0.650
1	X:218:PHE:CZ	Y:44:GLY:N	0.650
1	Y:15:LEU:H	Z:22:LEU:HD12	0.650
1	Z:82:GLY:O	AA:191:LEU:CB	0.650
1	AA:73:LYS:NZ	BA:201:SER:HB3	0.650
1	FA:124:LEU:CD2	GA:45:SER:OG	0.650
1	FA:82:GLY:O	GA:191:LEU:CB	0.650
1	PA:124:LEU:CD2	QA:45:SER:HB3	0.650

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	YA:228:THR:HG23	ZA:140:PRO:CG	0.650
1	A:191:LEU:CB	ZA:82:GLY:O	0.649
1	B:230:PHE:CD2	C:141:VAL:CG1	0.649
1	L:87:LYS:HB2	M:187:VAL:HG12	0.649
1	M:67:ALA:HB1	N:206:LYS:C	0.649
1	P:124:LEU:HD21	Q:45:SER:HB2	0.649
1	S:86:LEU:HD21	T:188:GLY:HA3	0.649
1	T:231:ALA:HB3	U:41:GLU:CA	0.649
1	W:67:ALA:O	X:206:LYS:HB3	0.649
1	Z:83:ILE:CD	AA:191:LEU:HD13	0.649
1	Y:86:LEU:HD22	Z:188:GLY:HA3	0.649
1	GA:64:GLN:CB	HA:209:LYS:HZ1	0.649
1	QA:86:LEU:HD23	RA:188:GLY:N	0.649
1	Q:216:LYS:NZ	R:24:ARG:HD2	0.649
1	A:87:LYS:HG3	B:185:LYS:O	0.648
1	A:73:LYS:NZ	B:201:SER:HB3	0.648
1	E:124:LEU:HD23	F:47:GLU:CD	0.648
1	F:68:GLY:O	G:205:TYR:CD1	0.648
1	V:64:GLN:OE1	W:25:GLU:CD	0.648
1	W:15:LEU:N	X:203:VAL:HG11	0.648
1	AA:87:LYS:CB	BA:187:VAL:HG13	0.648
1	BA:228:THR:CG2	CA:141:VAL:H	0.648
1	EA:15:LEU:HD12	FA:203:VAL:HG21	0.648

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	GA:124:LEU:HB3	HA:48:LYS:HZ3	0.648
1	IA:124:LEU:CD2	JA:47:GLU:OE2	0.648
1	LA:67:ALA:HB2	MA:207:GLY:HA3	0.648
1	LA:90:LEU:HD23	MA:185:LYS:HZ1	0.648
1	CA:124:LEU:C	DA:48:LYS:HZ1	0.648
1	DA:79:PHE:HB3	EA:194:GLU:O	0.648
1	A:23:PRO:HD2	ZA:15:LEU:N	0.647
1	H:66:ALA:C	I:205:TYR:OH	0.647
1	M:228:THR:CG2	N:140:PRO:HD2	0.647
1	Q:90:LEU:HB3	R:185:LYS:CE	0.647
1	X:89:VAL:HG21	Y:187:VAL:HG21	0.647
1	KA:65:ALA:HB3	LA:208:GLU:OE2	0.647
1	KA:67:ALA:HB1	LA:207:GLY:H	0.647
1	WA:83:ILE:CD	XA:191:LEU:HB2	0.647
1	WA:230:PHE:CE2	XA:141:VAL:HG12	0.647
1	WA:89:VAL:H	XA:185:LYS:HB3	0.647
1	XA:228:THR:HG21	YA:140:PRO:HG2	0.647
1	XA:231:ALA:O	YA:41:GLU:HG2	0.647
1	YA:70:ASN:H	ZA:204:THR:HG1	0.647
1	A:218:PHE:CZ	B:43:LEU:CA	0.646
1	G:64:GLN:CA	H:209:LYS:HZ3	0.646
1	I:216:LYS:HZ3	J:24:ARG:HD2	0.646
1	N:216:LYS:NZ	O:24:ARG:HD2	0.646



Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	Q:15:LEU:HD12	R:203:VAL:HG23	0.646
1	T:14:ARG:HG3	U:203:VAL:HG12	0.646
1	T:14:ARG:O	U:22:LEU:CA	0.646
1	V:82:GLY:O	W:191:LEU:HA	0.646
1	Z:230:PHE:CE2	AA:141:VAL:CG1	0.646
1	CA:87:LYS:HB3	DA:185:LYS:C	0.646
1	HA:66:ALA:C	IA:205:TYR:OH	0.646
1	VA:228:THR:CG2	WA:140:PRO:HG2	0.646
1	YA:230:PHE:HE1	ZA:141:VAL:CA	0.646
1	N:216:LYS:HZ1	O:24:ARG:CZ	0.646
1	QA:65:ALA:N	RA:209:LYS:CD	0.646
1	T:64:GLN:O	U:209:LYS:HD3	0.646
1	B:66:ALA:HB1	C:211:LEU:HD11	0.645
1	CA:69:ILE:CB	DA:204:THR:O	0.645
1	JA:67:ALA:HA	KA:207:GLY:HA3	0.645
1	RA:64:GLN:CD	SA:209:LYS:HZ1	0.645
1	UA:75:GLU:HB2	VA:198:SER:O	0.645
1	VA:64:GLN:OE1	WA:25:GLU:CD	0.645
1	YA:228:THR:HG21	ZA:140:PRO:CG	0.645
1	J:90:LEU:N	K:185:LYS:NZ	0.645
1	NA:216:LYS:HZ1	OA:24:ARG:CZ	0.645
1	D:14:ARG:N	E:22:LEU:HB2	0.644
1	J:67:ALA:CB	K:205:TYR:CE2	0.644

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	W:77:LEU:HG	X:196:SER:O	0.644
1	V:230:PHE:HE1	W:141:VAL:CB	0.644
1	Y:228:THR:HG23	Z:140:PRO:CG	0.644
1	AA:15:LEU:HB2	BA:22:LEU:CD1	0.644
1	LA:64:GLN:HB3	MA:209:LYS:HZ3	0.644
1	QA:14:ARG:CG	RA:203:VAL:CB	0.644
1	QA:124:LEU:CD2	RA:45:SER:HB3	0.644
1	UA:87:LYS:CB	VA:186:VAL:HG12	0.644
1	YA:86:LEU:HD22	ZA:188:GLY:HA3	0.644
1	A:89:VAL:HG11	B:187:VAL:HG11	0.643
1	A:191:LEU:HB2	ZA:83:ILE:CD	0.643
1	B:82:GLY:O	C:191:LEU:HB2	0.643
1	F:82:GLY:O	G:191:LEU:CB	0.643
1	H:124:LEU:CD1	I:45:SER:CB	0.643
1	K:233:GLN:OE1	L:39:THR:CG2	0.643
1	N:14:ARG:O	O:22:LEU:HB2	0.643
1	U:89:VAL:HA	V:185:LYS:HB2	0.643
1	X:83:ILE:HA	Y:190:LYS:O	0.643
1	JA:67:ALA:HB1	KA:207:GLY:H	0.643
1	IA:15:LEU:CG	JA:203:VAL:HG21	0.643
1	QA:14:ARG:C	RA:22:LEU:HD13	0.643
1	YA:77:LEU:CB	ZA:196:SER:O	0.643
1	YA:83:ILE:HA	ZA:190:LYS:O	0.643

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	F:124:LEU:C	G:48:LYS:HZ1	0.642
1	K:65:ALA:HB3	L:208:GLU:OE2	0.642
1	V:231:ALA:O	W:41:GLU:HB3	0.642
1	BA:75:GLU:HB2	CA:198:SER:O	0.642
1	FA:124:LEU:HD23	GA:47:GLU:CD	0.642
1	IA:64:GLN:O	JA:209:LYS:HE2	0.642
1	TA:90:LEU:H	UA:185:LYS:HD3	0.642
1	WA:228:THR:HG21	XA:140:PRO:HG2	0.642
1	BA:111:PHE:HZ	CA:202:THR:O	0.642
1	TA:16:GLY:N	UA:22:LEU:O	0.642
1	I:67:ALA:HB2	J:207:GLY:C	0.641
1	M:15:LEU:HD11	N:203:VAL:HG23	0.641
1	S:89:VAL:HG11	T:187:VAL:CG1	0.641
1	Y:14:ARG:HG2	Z:203:VAL:HG12	0.641
1	Y:67:ALA:O	Z:206:LYS:CA	0.641
1	TA:228:THR:CG2	UA:141:VAL:HG13	0.641
1	UA:228:THR:HG21	VA:141:VAL:HG13	0.641
1	XA:83:ILE:HA	YA:190:LYS:O	0.641
1	YA:87:LYS:HB3	ZA:186:VAL:N	0.641
1	Y:70:ASN:H	Z:204:THR:HG1	0.641
1	B:87:LYS:CB	C:187:VAL:CG1	0.640
1	B:228:THR:CG2	C:141:VAL:H	0.640
1	Y:15:LEU:N	Z:23:PRO:HD2	0.640

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	EA:67:ALA:HA	FA:207:GLY:HA3	0.640
1	HA:124:LEU:CG	IA:45:SER:HB3	0.640
1	IA:90:LEU:HB3	JA:185:LYS:HZ3	0.640
1	MA:15:LEU:HD11	NA:203:VAL:HG23	0.640
1	QA:231:ALA:CB	RA:42:TYR:H	0.640
1	WA:15:LEU:N	XA:203:VAL:HG11	0.640
1	T:16:GLY:N	U:22:LEU:O	0.640
1	Y:77:LEU:CA	Z:196:SER:O	0.640
1	A:15:LEU:N	B:22:LEU:CD1	0.639
1	L:64:GLN:HB3	M:209:LYS:HZ3	0.639
1	V:228:THR:CG2	W:140:PRO:HG2	0.639
1	X:15:LEU:CA	Y:23:PRO:CD	0.639
1	Y:75:GLU:CA	Z:198:SER:O	0.639
1	EA:218:PHE:CE2	FA:42:TYR:HD2	0.639
1	GA:89:VAL:C	HA:185:LYS:HZ2	0.639
1	QA:218:PHE:CZ	RA:42:TYR:HD2	0.639
1	A:185:LYS:CG	ZA:89:VAL:HA	0.639
1	B:111:PHE:HZ	C:202:THR:O	0.639
1	U:64:GLN:OE1	V:25:GLU:OE2	0.639
1	BA:77:LEU:CA	CA:196:SER:O	0.639
1	L:67:ALA:HB2	M:207:GLY:HA3	0.638
1	M:67:ALA:CB	N:205:TYR:CE1	0.638
1	V:230:PHE:CE1	W:141:VAL:HG11	0.638

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	AA:218:PHE:CZ	BA:43:LEU:CA	0.638
1	BA:87:LYS:CB	CA:187:VAL:CG1	0.638
1	FA:17:TYR:H	GA:22:LEU:CD2	0.638
1	M:67:ALA:HB3	N:207:GLY:N	0.638
1	MA:67:ALA:HB3	NA:207:GLY:N	0.638
1	A:83:ILE:CD	B:191:LEU:HB3	0.637
1	F:124:LEU:HD23	G:47:GLU:CD	0.637
1	O:124:LEU:CD2	P:45:SER:HB3	0.637
1	CA:67:ALA:HB3	DA:205:TYR:CG	0.637
1	JA:90:LEU:HB3	KA:185:LYS:HZ3	0.637
1	WA:14:ARG:C	XA:22:LEU:CA	0.637
1	XA:14:ARG:C	YA:22:LEU:N	0.637
1	XA:230:PHE:HZ	YA:141:VAL:HA	0.637
1	YA:15:LEU:H	ZA:22:LEU:HD12	0.637
1	QA:216:LYS:NZ	RA:24:ARG:HH11	0.637
1	SA:64:GLN:HB3	TA:209:LYS:HZ3	0.637
1	G:65:ALA:CB	H:208:GLU:OE2	0.636
1	J:124:LEU:HG	K:48:LYS:HE2	0.636
1	I:64:GLN:O	J:209:LYS:HE2	0.636
1	Y:228:THR:HG21	Z:140:PRO:CG	0.636
1	EA:15:LEU:CG	FA:203:VAL:CG2	0.636
1	GA:87:LYS:N	HA:187:VAL:CG1	0.636
1	JA:65:ALA:CB	KA:208:GLU:OE2	0.636

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	A:23:PRO:O	ZA:15:LEU:HB3	0.636
1	L:216:LYS:NZ	M:24:ARG:CZ	0.636
1	EA:231:ALA:H	FA:43:LEU:CD2	0.636
1	Z:231:ALA:HA	AA:42:TYR:O	0.636
1	M:90:LEU:HB3	N:185:LYS:HZ1	0.635
1	U:14:ARG:CB	V:203:VAL:HB	0.635
1	W:14:ARG:C	X:22:LEU:CA	0.635
1	Y:77:LEU:CB	Z:196:SER:O	0.635
1	Z:15:LEU:HB3	AA:23:PRO:O	0.635
1	EA:15:LEU:HB3	FA:23:PRO:O	0.635
1	FA:67:ALA:CB	GA:207:GLY:C	0.635
1	FA:89:VAL:HA	GA:185:LYS:HD2	0.635
1	KA:64:GLN:HB3	LA:209:LYS:HZ1	0.635
1	SA:89:VAL:HA	TA:185:LYS:CB	0.635
1	TA:15:LEU:HD11	UA:203:VAL:HA	0.635
1	VA:228:THR:HG21	WA:141:VAL:HG13	0.635
1	Q:216:LYS:NZ	R:24:ARG:HH11	0.635
1	EA:67:ALA:O	FA:207:GLY:N	0.635
1	A:87:LYS:HB2	B:187:VAL:HG13	0.634
1	G:16:GLY:C	H:22:LEU:HD23	0.634
1	G:12:LEU:O	H:22:LEU:HD22	0.634
1	J:65:ALA:CB	K:208:GLU:OE2	0.634
1	K:64:GLN:HB3	L:209:LYS:HZ1	0.634

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	AA:124:LEU:HD23	BA:47:GLU:CG	0.634
1	DA:12:LEU:C	EA:22:LEU:HD22	0.634
1	FA:124:LEU:HD21	GA:45:SER:HB3	0.634
1	IA:67:ALA:HB2	JA:207:GLY:C	0.634
1	LA:64:GLN:HB3	MA:209:LYS:HZ1	0.634
1	RA:14:ARG:CG	SA:203:VAL:CB	0.634
1	SA:14:ARG:CB	TA:203:VAL:CB	0.634
1	YA:75:GLU:CA	ZA:198:SER:O	0.634
1	E:68:GLY:N	F:205:TYR:HE1	0.634
1	UA:64:GLN:OE1	VA:25:GLU:OE2	0.634
1	F:17:TYR:H	G:22:LEU:CD2	0.633
1	Q:231:ALA:CB	R:42:TYR:H	0.633
1	T:14:ARG:C	U:22:LEU:HA	0.633
1	T:77:LEU:HD12	U:196:SER:O	0.633
1	W:73:LYS:NZ	X:201:SER:HB3	0.633
1	Y:83:ILE:HA	Z:190:LYS:O	0.633
1	VA:87:LYS:HD3	WA:186:VAL:CG1	0.633
1	YA:67:ALA:O	ZA:206:LYS:CA	0.633
1	M:216:LYS:HE2	N:24:ARG:NH1	0.633
1	E:66:ALA:CA	F:209:LYS:HB2	0.632
1	R:14:ARG:C	S:22:LEU:CD1	0.632
1	X:13:LYS:C	Y:22:LEU:HB2	0.632
1	Z:83:ILE:CD	AA:191:LEU:HB2	0.632

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	AA:230:PHE:CD1	BA:141:VAL:HG11	0.632
1	IA:228:THR:CB	JA:140:PRO:HG2	0.632
1	SA:118:ALA:HB3	TA:209:LYS:HE2	0.632
1	XA:111:PHE:HZ	YA:202:THR:O	0.632
1	OA:216:LYS:NZ	PA:24:ARG:NH1	0.632
1	C:87:LYS:CB	D:187:VAL:CG1	0.631
1	T:228:THR:CG2	U:141:VAL:HG13	0.631
1	MA:67:ALA:HB1	NA:206:LYS:C	0.631
1	RA:89:VAL:HA	SA:185:LYS:HB3	0.631
1	FA:64:GLN:CA	GA:209:LYS:NZ	0.631
1	A:216:LYS:CB	B:24:ARG:NH1	0.630
1	B:75:GLU:HB2	C:198:SER:O	0.630
1	R:65:ALA:HB3	S:208:GLU:OE1	0.630
1	X:228:THR:CG2	Y:140:PRO:HD2	0.630
1	X:73:LYS:HZ3	Y:201:SER:HB3	0.630
1	Y:230:PHE:CZ	Z:141:VAL:HG13	0.630
1	SA:231:ALA:CB	TA:42:TYR:CB	0.630
1	X:111:PHE:HZ	Y:202:THR:O	0.630
1	Y:81:ILE:CA	Z:192:LYS:O	0.630
1	B:17:TYR:CB	C:22:LEU:CD2	0.629
1	C:124:LEU:CD2	D:47:GLU:CG	0.629
1	E:17:TYR:HB2	F:22:LEU:HD21	0.629
1	N:90:LEU:HD23	O:185:LYS:CE	0.629



Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	T:64:GLN:C	U:209:LYS:CG	0.629
1	X:230:PHE:HZ	Y:141:VAL:HA	0.629
1	AA:87:LYS:HB2	BA:187:VAL:HG13	0.629
1	BA:68:GLY:N	CA:205:TYR:CD1	0.629
1	EA:17:TYR:HB2	FA:22:LEU:HD21	0.629
1	GA:65:ALA:CB	HA:208:GLU:OE2	0.629
1	RA:86:LEU:HD21	SA:188:GLY:HA3	0.629
1	SA:86:LEU:HD21	TA:188:GLY:HA3	0.629
1	TA:124:LEU:HD21	UA:45:SER:HB2	0.629
1	VA:69:ILE:CD	WA:204:THR:C	0.629
1	UA:14:ARG:CB	VA:203:VAL:HB	0.629
1	HA:65:ALA:N	IA:209:LYS:NZ	0.629
1	A:124:LEU:HD23	B:47:GLU:CG	0.628
1	B:67:ALA:O	C:206:LYS:C	0.628
1	C:14:ARG:N	D:22:LEU:HB2	0.628
1	E:16:GLY:CA	F:22:LEU:HD23	0.628
1	D:15:LEU:CG	E:22:LEU:HD12	0.628
1	D:89:VAL:H	E:185:LYS:CB	0.628
1	D:68:GLY:N	E:205:TYR:CD1	0.628
1	E:218:PHE:CE2	F:42:TYR:HD2	0.628
1	G:233:GLN:CD	H:39:THR:HG22	0.628
1	H:230:PHE:CE1	I:141:VAL:N	0.628
1	V:228:THR:HG21	W:141:VAL:HG13	0.628

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	V:12:LEU:O	W:22:LEU:HD11	0.628
1	W:83:ILE:CD	X:191:LEU:HB2	0.628
1	EA:231:ALA:HB1	FA:41:GLU:C	0.628
1	QA:14:ARG:C	RA:22:LEU:HD12	0.628
1	SA:89:VAL:HG11	TA:187:VAL:CG1	0.628
1	XA:13:LYS:C	YA:22:LEU:HB2	0.628
1	YA:77:LEU:CA	ZA:196:SER:O	0.628
1	D:68:GLY:H	E:205:TYR:HE1	0.628
1	E:67:ALA:O	F:207:GLY:N	0.628
1	Q:65:ALA:N	R:209:LYS:CD	0.628
1	I:124:LEU:CD2	J:47:GLU:OE2	0.628
1	B:75:GLU:CB	C:198:SER:O	0.627
1	F:67:ALA:CB	G:207:GLY:C	0.627
1	S:14:ARG:CB	T:203:VAL:CB	0.627
1	AA:66:ALA:HB1	BA:211:LEU:HD11	0.627
1	BA:229:LEU:C	CA:141:VAL:HG11	0.627
1	CA:84:ASN:O	DA:189:GLY:HA2	0.627
1	WA:77:LEU:HG	XA:196:SER:O	0.627
1	A:15:LEU:HB2	B:22:LEU:HD12	0.626
1	B:68:GLY:N	C:205:TYR:CD1	0.626
1	G:87:LYS:CB	H:187:VAL:CG1	0.626
1	F:89:VAL:C	G:185:LYS:HD2	0.626
1	I:228:THR:CB	J:140:PRO:HG2	0.626

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	S:118:ALA:HB3	T:209:LYS:HE2	0.626
1	DA:89:VAL:H	EA:185:LYS:CB	0.626
1	DA:68:GLY:N	EA:205:TYR:CD1	0.626
1	GA:64:GLN:CB	HA:209:LYS:NZ	0.626
1	KA:87:LYS:CB	LA:187:VAL:HG13	0.626
1	TA:73:LYS:HG3	UA:200:GLN:O	0.626
1	YA:15:LEU:N	ZA:23:PRO:HD2	0.626
1	Q:124:LEU:CD2	R:45:SER:HB3	0.625
1	V:87:LYS:CD	W:186:VAL:HA	0.625
1	Y:79:PHE:HB3	Z:195:ALA:HA	0.625
1	X:67:ALA:O	Y:206:LYS:HB3	0.625
1	BA:65:ALA:HB1	CA:208:GLU:CD	0.625
1	EA:16:GLY:CA	FA:22:LEU:HD23	0.625
1	JA:67:ALA:CB	KA:205:TYR:CE2	0.625
1	WA:73:LYS:NZ	XA:201:SER:HB3	0.625
1	XA:228:THR:CG2	YA:141:VAL:HG22	0.625
1	XA:64:GLN:OE1	YA:25:GLU:CD	0.625
1	BA:67:ALA:O	CA:206:LYS:N	0.625
1	B:229:LEU:C	C:141:VAL:HG11	0.624
1	E:15:LEU:HB3	F:23:PRO:O	0.624
1	O:14:ARG:CG	P:203:VAL:HG12	0.624
1	P:64:GLN:C	Q:209:LYS:CD	0.624
1	Y:16:GLY:HA2	Z:22:LEU:HB3	0.624

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	Z:15:LEU:CB	AA:22:LEU:HD12	0.624
1	Z:84:ASN:HB2	AA:190:LYS:HB3	0.624
1	CA:17:TYR:CA	DA:22:LEU:HD23	0.624
1	MA:67:ALA:CB	NA:205:TYR:CE1	0.624
1	NA:15:LEU:HD11	OA:203:VAL:HG23	0.624
1	WA:89:VAL:HB	XA:187:VAL:CB	0.624
1	WA:216:LYS:HB3	XA:24:ARG:HH11	0.624
1	YA:16:GLY:HA2	ZA:22:LEU:HB3	0.624
1	G:233:GLN:HE22	H:39:THR:CG2	0.624
1	DA:68:GLY:N	EA:205:TYR:HE1	0.624
1	FA:233:GLN:HE22	GA:39:THR:CG2	0.624
1	C:84:ASN:O	D:189:GLY:HA2	0.623
1	P:64:GLN:CB	Q:209:LYS:CE	0.623
1	R:89:VAL:HB	S:187:VAL:HG12	0.623
1	X:228:THR:CG2	Y:141:VAL:HG22	0.623
1	X:64:GLN:OE1	Y:25:GLU:CD	0.623
1	DA:15:LEU:CG	EA:22:LEU:HD12	0.623
1	DA:228:THR:HB	EA:141:VAL:HG13	0.623
1	NA:14:ARG:CG	OA:203:VAL:CG1	0.623
1	PA:64:GLN:CB	QA:209:LYS:CE	0.623
1	TA:14:ARG:C	UA:22:LEU:HA	0.623
1	VA:230:PHE:HE1	WA:141:VAL:CB	0.623
1	YA:75:GLU:HA	ZA:198:SER:O	0.623

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	XA:67:ALA:O	YA:206:LYS:HB3	0.623
1	C:68:GLY:H	D:205:TYR:HE1	0.623
1	C:86:LEU:N	D:188:GLY:N	0.623
1	CA:86:LEU:N	DA:188:GLY:N	0.623
1	E:124:LEU:HA	F:48:LYS:NZ	0.622
1	E:82:GLY:O	F:191:LEU:HB2	0.622
1	N:216:LYS:HZ3	O:24:ARG:HD3	0.622
1	P:124:LEU:CD2	Q:45:SER:HB3	0.622
1	R:89:VAL:HA	S:185:LYS:HB3	0.622
1	U:228:THR:HG21	V:141:VAL:HG13	0.622
1	V:83:ILE:CD	W:191:LEU:CB	0.622
1	FA:89:VAL:C	GA:185:LYS:CD	0.622
1	D:68:GLY:O	E:205:TYR:HD1	0.622
1	H:90:LEU:CB	I:185:LYS:HZ1	0.622
1	P:216:LYS:HZ1	Q:24:ARG:HH11	0.622
1	S:231:ALA:HB3	T:42:TYR:H	0.622
1	A:89:VAL:HA	B:185:LYS:CG	0.621
1	B:15:LEU:HB2	C:22:LEU:HD12	0.621
1	D:228:THR:HB	E:141:VAL:HG13	0.621
1	D:231:ALA:O	E:41:GLU:HG2	0.621
1	I:86:LEU:HD11	J:187:VAL:C	0.621
1	T:124:LEU:HD21	U:45:SER:HB2	0.621
1	BA:87:LYS:HB3	CA:185:LYS:C	0.621

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	DA:83:ILE:CD	EA:191:LEU:HD13	0.621
1	GA:124:LEU:CB	HA:48:LYS:NZ	0.621
1	HA:15:LEU:HD12	IA:22:LEU:HD11	0.621
1	LA:14:ARG:HG3	MA:203:VAL:CG1	0.621
1	VA:15:LEU:N	WA:22:LEU:HA	0.621
1	WA:81:ILE:HA	XA:192:LYS:O	0.621
1	TA:231:ALA:N	UA:42:TYR:O	0.621
1	D:79:PHE:HB3	E:194:GLU:O	0.621
1	H:17:TYR:N	I:22:LEU:HD23	0.620
1	AA:15:LEU:HB2	BA:22:LEU:HD12	0.620
1	EA:69:ILE:CD	FA:204:THR:C	0.620
1	IA:90:LEU:HB3	JA:185:LYS:HZ1	0.620
1	JA:124:LEU:HG	KA:48:LYS:HE2	0.620
1	PA:64:GLN:C	QA:209:LYS:CD	0.620
1	SA:64:GLN:CD	TA:209:LYS:HZ1	0.620
1	DA:68:GLY:H	EA:205:TYR:HE1	0.620
1	H:233:GLN:NE2	I:39:THR:HG22	0.619
1	K:67:ALA:HB2	L:205:TYR:OH	0.619
1	Q:87:LYS:HB2	R:187:VAL:HA	0.619
1	T:15:LEU:HD11	U:203:VAL:HA	0.619
1	FA:87:LYS:CA	GA:187:VAL:HG12	0.619
1	YA:79:PHE:HB3	ZA:195:ALA:HA	0.619
1	A:24:ARG:NH1	ZA:216:LYS:CG	0.619

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	DA:68:GLY:O	EA:205:TYR:HD1	0.619
1	A:206:LYS:N	ZA:67:ALA:O	0.619
1	T:231:ALA:N	U:42:TYR:O	0.619
1	E:86:LEU:O	F:186:VAL:C	0.618
1	W:81:ILE:HA	X:192:LYS:O	0.618
1	W:216:LYS:HB3	X:24:ARG:HH11	0.618
1	X:15:LEU:HA	Y:23:PRO:N	0.618
1	X:230:PHE:HA	Y:43:LEU:CD2	0.618
1	Y:228:THR:CG2	Z:141:VAL:HG22	0.618
1	Z:77:LEU:HD12	AA:197:VAL:HB	0.618
1	CA:88:SER:C	DA:185:LYS:HD3	0.618
1	FA:15:LEU:CG	GA:203:VAL:CG2	0.618
1	GA:87:LYS:CA	HA:187:VAL:CG1	0.618
1	IA:14:ARG:N	JA:22:LEU:HD13	0.618
1	PA:124:LEU:HD21	QA:45:SER:HB2	0.618
1	QA:87:LYS:HB2	RA:187:VAL:HA	0.618
1	Z:67:ALA:O	AA:206:LYS:N	0.618
1	JA:90:LEU:CD2	KA:185:LYS:HZ1	0.618
1	UA:233:GLN:NE2	VA:21:ARG:HH12	0.618
1	A:66:ALA:HB1	B:211:LEU:HD11	0.617
1	C:15:LEU:HG	D:23:PRO:HD2	0.617
1	D:83:ILE:CD	E:191:LEU:HD13	0.617
1	M:67:ALA:CB	N:205:TYR:CZ	0.617

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	M:228:THR:HG22	N:140:PRO:HD2	0.617
1	X:89:VAL:HB	Y:187:VAL:CG2	0.617
1	Y:75:GLU:HA	Z:198:SER:O	0.617
1	Y:87:LYS:HB3	Z:186:VAL:N	0.617
1	Y:230:PHE:HE1	Z:141:VAL:CA	0.617
1	BA:81:ILE:HG22	CA:193:VAL:HA	0.617
1	CA:87:LYS:CB	DA:185:LYS:C	0.617
1	EA:66:ALA:CA	FA:209:LYS:HB2	0.617
1	IA:64:GLN:C	JA:209:LYS:HE2	0.617
1	NA:90:LEU:HD23	OA:185:LYS:CE	0.617
1	UA:89:VAL:HA	VA:185:LYS:HB2	0.617
1	PA:65:ALA:N	QA:209:LYS:CD	0.617
1	A:87:LYS:HB2	B:187:VAL:CG1	0.616
1	HA:17:TYR:N	IA:22:LEU:HD23	0.616
1	JA:67:ALA:HB2	KA:207:GLY:C	0.616
1	JA:124:LEU:HB3	KA:48:LYS:HZ1	0.616
1	MA:67:ALA:CB	NA:205:TYR:CZ	0.616
1	MA:228:THR:HG22	NA:140:PRO:HD2	0.616
1	NA:228:THR:CG2	OA:140:PRO:CG	0.616
1	OA:231:ALA:HB2	PA:42:TYR:O	0.616
1	SA:64:GLN:CD	TA:209:LYS:NZ	0.616
1	A:209:LYS:N	ZA:65:ALA:HB3	0.616
1	B:67:ALA:O	C:206:LYS:N	0.616



Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	HA:16:GLY:N	IA:22:LEU:O	0.616
1	B:65:ALA:HB1	C:208:GLU:CD	0.615
1	B:81:ILE:HG22	C:193:VAL:HA	0.615
1	G:124:LEU:CB	H:48:LYS:NZ	0.615
1	O:15:LEU:HD11	P:203:VAL:HG23	0.615
1	V:13:LYS:C	W:22:LEU:HD13	0.615
1	QA:66:ALA:HA	RA:205:TYR:CZ	0.615
1	CA:68:GLY:O	DA:205:TYR:CA	0.615
1	E:69:ILE:CD	F:204:THR:C	0.614
1	G:64:GLN:CB	H:209:LYS:NZ	0.614
1	I:64:GLN:C	J:209:LYS:HE2	0.614
1	N:14:ARG:N	O:22:LEU:HD13	0.614
1	Z:124:LEU:HA	AA:48:LYS:HE2	0.614
1	BA:75:GLU:CB	CA:198:SER:O	0.614
1	BA:82:GLY:O	CA:191:LEU:HB2	0.614
1	EA:86:LEU:O	FA:186:VAL:C	0.614
1	GA:12:LEU:O	HA:22:LEU:HD22	0.614
1	HA:233:GLN:NE2	IA:39:THR:HG22	0.614
1	NA:216:LYS:HZ3	OA:24:ARG:HD3	0.614
1	UA:228:THR:CG2	VA:140:PRO:HG2	0.614
1	VA:13:LYS:C	WA:22:LEU:HD13	0.614
1	VA:83:ILE:CD	WA:191:LEU:CB	0.614
1	YA:226:GLU:HB3	ZA:140:PRO:HD3	0.614

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	S:64:GLN:OE1	T:209:LYS:NZ	0.614
1	A:24:ARG:HB2	ZA:17:TYR:CZ	0.613
1	A:190:LYS:HB3	ZA:84:ASN:HB2	0.613
1	A:230:PHE:CG	B:141:VAL:CG1	0.613
1	B:87:LYS:CB	C:185:LYS:C	0.613
1	C:67:ALA:CB	D:207:GLY:O	0.613
1	E:231:ALA:HB1	F:41:GLU:C	0.613
1	G:87:LYS:CA	H:187:VAL:CG1	0.613
1	G:124:LEU:HD21	H:45:SER:HB3	0.613
1	H:65:ALA:CB	I:208:GLU:OE2	0.613
1	I:15:LEU:HD12	J:22:LEU:HD11	0.613
1	L:67:ALA:HB2	M:205:TYR:CZ	0.613
1	S:124:LEU:CG	T:45:SER:HB2	0.613
1	T:73:LYS:HG3	U:200:GLN:O	0.613
1	DA:231:ALA:O	EA:41:GLU:HG2	0.613
1	FA:87:LYS:HB2	GA:187:VAL:HG13	0.613
1	GA:124:LEU:HD21	HA:45:SER:HB3	0.613
1	GA:90:LEU:N	HA:185:LYS:CE	0.613
1	SA:64:GLN:OE1	TA:209:LYS:NZ	0.613
1	E:124:LEU:CB	F:48:LYS:HZ3	0.612
1	F:89:VAL:HA	G:185:LYS:HD2	0.612
1	I:65:ALA:CB	J:208:GLU:OE2	0.612
1	Q:15:LEU:HD11	R:203:VAL:HG23	0.612

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	CA:89:VAL:N	DA:185:LYS:CB	0.612
1	EA:87:LYS:CA	FA:187:VAL:HG12	0.612
1	IA:86:LEU:HD11	JA:187:VAL:C	0.612
1	IA:87:LYS:CB	JA:187:VAL:CG1	0.612
1	UA:14:ARG:C	VA:203:VAL:CG1	0.612
1	YA:86:LEU:HD23	ZA:188:GLY:CA	0.612
1	YA:228:THR:CG2	ZA:141:VAL:HG22	0.612
1	B:70:ASN:H	C:204:THR:HG1	0.612
1	A:233:GLN:CD	B:39:THR:CG2	0.611
1	C:67:ALA:C	D:205:TYR:CD1	0.611
1	K:15:LEU:CD1	L:203:VAL:HG23	0.611
1	P:231:ALA:HB2	Q:42:TYR:HB3	0.611
1	V:15:LEU:N	W:22:LEU:HA	0.611
1	Z:65:ALA:HB3	AA:209:LYS:N	0.611
1	IA:65:ALA:CB	JA:208:GLU:OE2	0.611
1	W:90:LEU:H	X:185:LYS:CD	0.611
1	RA:64:GLN:HB2	SA:209:LYS:NZ	0.611
1	C:88:SER:C	D:185:LYS:HD3	0.610
1	F:67:ALA:CA	G:207:GLY:N	0.610
1	I:14:ARG:N	J:22:LEU:HD13	0.610
1	Q:64:GLN:HB2	R:209:LYS:CE	0.610
1	S:64:GLN:CD	T:209:LYS:NZ	0.610
1	U:69:ILE:CD	V:204:THR:N	0.610

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	W:87:LYS:HD2	X:186:VAL:CG1	0.610
1	W:228:THR:HG21	X:141:VAL:N	0.610
1	IA:124:LEU:HB3	JA:48:LYS:NZ	0.610
1	SA:218:PHE:CE2	TA:42:TYR:CE2	0.610
1	SA:231:ALA:CB	TA:42:TYR:CA	0.610
1	SA:124:LEU:CG	TA:45:SER:HB2	0.610
1	SA:65:ALA:N	TA:209:LYS:CG	0.610
1	H:16:GLY:N	I:22:LEU:O	0.610
1	A:48:LYS:HE2	ZA:124:LEU:HA	0.609
1	A:228:THR:HG21	B:140:PRO:HG2	0.609
1	C:218:PHE:CZ	D:43:LEU:CA	0.609
1	P:15:LEU:HD21	Q:204:THR:O	0.609
1	X:230:PHE:CD1	Y:141:VAL:CG1	0.609
1	Z:77:LEU:HG	AA:196:SER:O	0.609
1	Z:89:VAL:CB	AA:187:VAL:CG1	0.609
1	Y:86:LEU:HD22	Z:188:GLY:CA	0.609
1	Z:231:ALA:H	AA:43:LEU:HD23	0.609
1	BA:216:LYS:HB3	CA:24:ARG:NH1	0.609
1	PA:14:ARG:CG	QA:203:VAL:CB	0.609
1	PA:15:LEU:HD11	QA:203:VAL:HG23	0.609
1	XA:67:ALA:HB3	YA:205:TYR:CE2	0.609
1	Z:81:ILE:CA	AA:192:LYS:O	0.609
1	XA:69:ILE:CB	YA:204:THR:O	0.609

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	E:67:ALA:HA	F:207:GLY:HA3	0.608
1	F:66:ALA:HA	G:209:LYS:HB2	0.608
1	O:64:GLN:CB	P:209:LYS:HZ1	0.608
1	O:231:ALA:HB2	P:42:TYR:O	0.608
1	V:89:VAL:HG11	W:187:VAL:CG1	0.608
1	X:67:ALA:HB3	Y:205:TYR:CE2	0.608
1	Y:226:GLU:HB3	Z:140:PRO:HD3	0.608
1	AA:15:LEU:N	BA:22:LEU:CD1	0.608
1	HA:65:ALA:CB	IA:208:GLU:OE2	0.608
1	NA:64:GLN:HB3	OA:209:LYS:HZ3	0.608
1	RA:14:ARG:C	SA:22:LEU:CD1	0.608
1	VA:12:LEU:O	WA:22:LEU:HD11	0.608
1	J:15:LEU:HD12	K:22:LEU:CD1	0.607
1	S:65:ALA:N	T:209:LYS:CG	0.607
1	CA:15:LEU:HG	DA:23:PRO:HD2	0.607
1	CA:218:PHE:CZ	DA:43:LEU:CA	0.607
1	CA:124:LEU:CA	DA:48:LYS:CE	0.607
1	KA:15:LEU:CD1	LA:203:VAL:HG23	0.607
1	XA:65:ALA:C	YA:209:LYS:H	0.607
1	WA:73:LYS:HZ3	XA:201:SER:HB3	0.607
1	F:124:LEU:CB	G:48:LYS:HZ3	0.607
1	U:233:GLN:NE2	V:21:ARG:HH12	0.607
1	A:43:LEU:HD23	ZA:231:ALA:H	0.606

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	B:216:LYS:HB3	C:24:ARG:NH1	0.606
1	C:67:ALA:HB2	D:205:TYR:HE2	0.606
1	Z:230:PHE:CA	AA:43:LEU:HD23	0.606
1	CA:17:TYR:H	DA:22:LEU:HD23	0.606
1	G:90:LEU:N	H:185:LYS:CE	0.606
1	AA:89:VAL:N	BA:185:LYS:CD	0.606
1	JA:90:LEU:N	KA:185:LYS:NZ	0.606
1	X:87:LYS:O	Y:187:VAL:CG1	0.606
1	AA:73:LYS:CG	BA:200:GLN:O	0.606
1	A:65:ALA:HB3	B:208:GLU:HG2	0.605
1	F:87:LYS:HB2	G:187:VAL:CB	0.605
1	N:89:VAL:HB	O:187:VAL:CG1	0.605
1	U:228:THR:CG2	V:140:PRO:HG2	0.605
1	W:69:ILE:CD	X:204:THR:O	0.605
1	X:77:LEU:HA	Y:196:SER:O	0.605
1	Y:86:LEU:CD2	Z:188:GLY:HA2	0.605
1	CA:229:LEU:O	DA:141:VAL:HG11	0.605
1	HA:230:PHE:CE1	IA:141:VAL:N	0.605
1	OA:14:ARG:HB3	PA:203:VAL:HB	0.605
1	TA:14:ARG:CB	UA:203:VAL:CB	0.605
1	UA:69:ILE:CD	VA:204:THR:N	0.605
1	A:21:ARG:HH22	ZA:233:GLN:CD	0.605
1	E:124:LEU:C	F:48:LYS:HZ1	0.605

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	IA:16:GLY:N	JA:22:LEU:CB	0.605
1	B:228:THR:HG21	C:141:VAL:H	0.604
1	C:12:LEU:C	D:22:LEU:CD1	0.604
1	G:67:ALA:HA	H:207:GLY:CA	0.604
1	I:124:LEU:HB3	J:48:LYS:NZ	0.604
1	S:218:PHE:CE2	T:42:TYR:CE2	0.604
1	V:15:LEU:N	W:203:VAL:HG11	0.604
1	W:228:THR:CG2	X:141:VAL:H	0.604
1	Y:14:ARG:CB	Z:203:VAL:HG12	0.604
1	Y:73:LYS:HZ2	Z:201:SER:HB3	0.604
1	BA:228:THR:HG21	CA:141:VAL:H	0.604
1	FA:89:VAL:N	GA:185:LYS:CD	0.604
1	I:124:LEU:HA	J:48:LYS:HE3	0.603
1	L:14:ARG:HG3	M:203:VAL:CG1	0.603
1	S:14:ARG:CB	T:203:VAL:CG1	0.603
1	R:230:PHE:HE1	S:141:VAL:HG12	0.603
1	Y:84:ASN:HB2	Z:190:LYS:HB3	0.603
1	EA:89:VAL:HA	FA:185:LYS:HD2	0.603
1	FA:87:LYS:HB2	GA:187:VAL:CB	0.603
1	LA:15:LEU:CG	MA:203:VAL:HG23	0.603
1	PA:228:THR:HG21	QA:140:PRO:CG	0.603
1	TA:16:GLY:CA	UA:22:LEU:C	0.603
1	VA:77:LEU:CD1	WA:196:SER:O	0.603

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	YA:12:LEU:O	ZA:22:LEU:HD22	0.603
1	A:73:LYS:CG	B:200:GLN:O	0.603
1	B:77:LEU:CA	C:196:SER:O	0.603
1	A:187:VAL:CG1	ZA:89:VAL:CB	0.602
1	E:89:VAL:HA	F:185:LYS:HD2	0.602
1	E:12:LEU:C	F:22:LEU:HD22	0.602
1	V:89:VAL:HB	W:187:VAL:CB	0.602
1	X:86:LEU:CD2	Y:188:GLY:HA2	0.602
1	Y:12:LEU:O	Z:22:LEU:HD22	0.602
1	AA:73:LYS:HZ2	BA:201:SER:HB3	0.602
1	HA:124:LEU:CG	IA:48:LYS:HE2	0.602
1	WA:69:ILE:CD	XA:204:THR:O	0.602
1	I:86:LEU:O	J:186:VAL:O	0.602
1	IA:86:LEU:O	JA:186:VAL:O	0.602
1	C:17:TYR:H	D:22:LEU:HD23	0.601
1	H:124:LEU:CG	I:48:LYS:HE2	0.601
1	M:67:ALA:HB1	N:207:GLY:CA	0.601
1	Z:14:ARG:HG3	AA:203:VAL:CG1	0.601
1	BA:17:TYR:CA	CA:22:LEU:HD21	0.601
1	JA:15:LEU:HD12	KA:22:LEU:CD1	0.601
1	NA:89:VAL:HB	OA:187:VAL:CG1	0.601
1	SA:14:ARG:CB	TA:203:VAL:CG1	0.601
1	BA:70:ASN:H	CA:204:THR:HG1	0.601



Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	C:229:LEU:O	D:141:VAL:HG11	0.600
1	Q:14:ARG:C	R:22:LEU:HD13	0.600
1	T:89:VAL:HB	U:187:VAL:HG13	0.600
1	X:14:ARG:C	Y:22:LEU:N	0.600
1	W:87:LYS:HD2	X:186:VAL:HG13	0.600
1	Z:89:VAL:N	AA:185:LYS:HD3	0.600
1	IA:124:LEU:CG	JA:48:LYS:HE2	0.600
1	TA:89:VAL:HB	UA:187:VAL:HG13	0.600
1	UA:79:PHE:HB3	VA:194:GLU:O	0.600
1	VA:15:LEU:N	WA:203:VAL:HG11	0.600
1	A:196:SER:O	ZA:77:LEU:HG	0.600
1	E:16:GLY:N	F:22:LEU:C	0.600
1	X:233:GLN:NE2	Y:21:ARG:NH1	0.600
1	YA:86:LEU:N	ZA:188:GLY:N	0.600
1	F:124:LEU:HA	G:48:LYS:NZ	0.599
1	I:67:ALA:HB1	J:207:GLY:H	0.599
1	AA:216:LYS:CB	BA:24:ARG:NH1	0.599
1	CA:67:ALA:C	DA:205:TYR:CD1	0.599
1	EA:82:GLY:O	FA:191:LEU:HB2	0.599
1	TA:124:LEU:HD21	UA:45:SER:OG	0.599
1	UA:69:ILE:CD	VA:204:THR:H	0.599
1	XA:77:LEU:HA	YA:196:SER:O	0.599
1	G:87:LYS:N	H:187:VAL:CG1	0.599

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	WA:231:ALA:CB	XA:42:TYR:O	0.599
1	I:124:LEU:HB3	J:48:LYS:HZ1	0.598
1	L:15:LEU:CG	M:203:VAL:HG23	0.598
1	T:228:THR:HB	U:141:VAL:CG1	0.598
1	X:77:LEU:CB	Y:196:SER:O	0.598
1	DA:87:LYS:CA	EA:187:VAL:HG12	0.598
1	FA:65:ALA:HB2	GA:208:GLU:OE2	0.598
1	FA:66:ALA:HA	GA:209:LYS:HB2	0.598
1	IA:86:LEU:HD21	JA:188:GLY:N	0.598
1	XA:89:VAL:HB	YA:187:VAL:CG2	0.598
1	XA:230:PHE:CD1	YA:141:VAL:CG1	0.598
1	P:216:LYS:HZ1	Q:24:ARG:NH1	0.598
1	EA:124:LEU:CD2	FA:47:GLU:OE2	0.598
1	C:89:VAL:N	D:185:LYS:CB	0.597
1	G:12:LEU:O	H:22:LEU:CD2	0.597
1	H:69:ILE:CD	I:204:THR:H	0.597
1	P:15:LEU:N	Q:203:VAL:HG21	0.597
1	U:87:LYS:CD	V:186:VAL:CG1	0.597
1	HA:67:ALA:C	IA:205:TYR:CE1	0.597
1	JA:86:LEU:CG	KA:187:VAL:CA	0.597
1	WA:13:LYS:CA	XA:22:LEU:HD13	0.597
1	M:216:LYS:HZ1	N:24:ARG:HD3	0.597
1	A:185:LYS:HD3	ZA:89:VAL:N	0.596

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	N:14:ARG:C	O:22:LEU:CB	0.596
1	T:90:LEU:H	U:185:LYS:HD3	0.596
1	Z:17:TYR:CZ	AA:24:ARG:HB2	0.596
1	AA:65:ALA:HB3	BA:208:GLU:HG2	0.596
1	HA:69:ILE:CD	IA:204:THR:H	0.596
1	JA:14:ARG:HG3	KA:203:VAL:HG11	0.596
1	LA:67:ALA:HB2	MA:205:TYR:CZ	0.596
1	QA:124:LEU:HD23	RA:45:SER:HB3	0.596
1	VA:87:LYS:HD2	WA:186:VAL:HA	0.596
1	XA:230:PHE:CE1	YA:141:VAL:CA	0.596
1	N:216:LYS:HE2	O:24:ARG:NH1	0.596
1	P:65:ALA:N	Q:209:LYS:CD	0.596
1	A:197:VAL:HB	ZA:77:LEU:HD12	0.595
1	D:124:LEU:HD11	E:45:SER:CA	0.595
1	E:124:LEU:HD21	F:45:SER:HB3	0.595
1	I:124:LEU:CG	J:48:LYS:HE2	0.595
1	K:14:ARG:CA	L:22:LEU:HD13	0.595
1	N:14:ARG:CG	O:203:VAL:CG1	0.595
1	N:15:LEU:HD11	O:203:VAL:HG23	0.595
1	U:69:ILE:CD	V:204:THR:H	0.595
1	Y:86:LEU:CB	Z:188:GLY:HA3	0.595
1	EA:79:PHE:HA	FA:194:GLU:O	0.595
1	IA:124:LEU:HA	JA:48:LYS:HE3	0.595

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	OA:89:VAL:HB	PA:187:VAL:HG11	0.595
1	SA:14:ARG:CG	TA:203:VAL:CB	0.595
1	RA:230:PHE:HE1	SA:141:VAL:HG12	0.595
1	XA:230:PHE:HA	YA:43:LEU:CD2	0.595
1	YA:73:LYS:HZ3	ZA:201:SER:HB3	0.595
1	JA:90:LEU:CA	KA:185:LYS:HZ3	0.595
1	A:12:LEU:O	B:22:LEU:CG	0.595
1	YA:81:ILE:CA	ZA:192:LYS:O	0.595
1	A:231:ALA:CA	B:41:GLU:HB3	0.594
1	O:14:ARG:HB3	P:203:VAL:HB	0.594
1	P:69:ILE:CD	Q:204:THR:OG1	0.594
1	R:64:GLN:CD	S:209:LYS:HZ1	0.594
1	W:13:LYS:CA	X:22:LEU:HD13	0.594
1	V:14:ARG:O	W:23:PRO:HD2	0.594
1	V:14:ARG:CB	W:203:VAL:HG11	0.594
1	X:15:LEU:HD11	Y:203:VAL:CA	0.594
1	Y:230:PHE:CZ	Z:141:VAL:CB	0.594
1	Z:230:PHE:CZ	AA:141:VAL:CB	0.594
1	AA:15:LEU:N	BA:23:PRO:HD2	0.594
1	GA:233:GLN:CD	HA:39:THR:HG22	0.594
1	OA:14:ARG:CG	PA:203:VAL:HG12	0.594
1	OA:64:GLN:HB3	PA:209:LYS:CE	0.594
1	VA:14:ARG:CG	WA:203:VAL:HG11	0.594

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	VA:87:LYS:HE3	WA:186:VAL:CG1	0.594
1	XA:77:LEU:CB	YA:196:SER:O	0.594
1	A:230:PHE:HE1	B:141:VAL:HB	0.594
1	SA:231:ALA:HB1	TA:42:TYR:H	0.594
1	C:89:VAL:HA	D:185:LYS:HB2	0.593
1	H:67:ALA:C	I:205:TYR:CE1	0.593
1	O:89:VAL:HB	P:187:VAL:HG11	0.593
1	W:230:PHE:CE2	X:141:VAL:HG12	0.593
1	W:90:LEU:H	X:185:LYS:HD3	0.593
1	W:87:LYS:CD	X:186:VAL:HG12	0.593
1	EA:67:ALA:HB1	FA:207:GLY:H	0.593
1	EA:124:LEU:HD21	FA:45:SER:HB3	0.593
1	FA:87:LYS:N	GA:187:VAL:HA	0.593
1	GA:12:LEU:O	HA:22:LEU:CD2	0.593
1	KA:15:LEU:CG	LA:203:VAL:CG2	0.593
1	KA:67:ALA:HB2	LA:205:TYR:OH	0.593
1	PA:15:LEU:HD21	QA:204:THR:O	0.593
1	PA:231:ALA:HB2	QA:42:TYR:HB3	0.593
1	PA:15:LEU:N	QA:203:VAL:HG21	0.593
1	VA:14:ARG:O	WA:23:PRO:HD2	0.593
1	WA:90:LEU:H	XA:185:LYS:HD3	0.593
1	YA:86:LEU:CB	ZA:188:GLY:HA3	0.593
1	O:64:GLN:CB	P:209:LYS:NZ	0.593

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	A:39:THR:HB	ZA:233:GLN:OE1	0.592
1	C:87:LYS:CB	D:185:LYS:C	0.592
1	D:12:LEU:C	E:22:LEU:HD22	0.592
1	M:228:THR:CG2	N:140:PRO:CD	0.592
1	U:79:PHE:HB3	V:194:GLU:O	0.592
1	Y:14:ARG:HB3	Z:203:VAL:CB	0.592
1	DA:124:LEU:CA	EA:48:LYS:NZ	0.592
1	GA:16:GLY:C	HA:22:LEU:HD23	0.592
1	IA:124:LEU:HD21	JA:45:SER:HB3	0.592
1	WA:228:THR:CG2	XA:141:VAL:H	0.592
1	YA:66:ALA:HA	ZA:209:LYS:HB2	0.592
1	Q:66:ALA:HA	R:205:TYR:CZ	0.591
1	Q:14:ARG:C	R:22:LEU:HD12	0.591
1	R:64:GLN:O	S:209:LYS:CD	0.591
1	Z:216:LYS:CG	AA:24:ARG:NH1	0.591
1	Z:233:GLN:CD	AA:21:ARG:HH22	0.591
1	DA:13:LYS:O	EA:22:LEU:HB2	0.591
1	TA:228:THR:CG2	UA:140:PRO:HG2	0.591
1	VA:87:LYS:CD	WA:186:VAL:HG12	0.591
1	E:87:LYS:N	F:187:VAL:CA	0.591
1	NA:216:LYS:HE2	OA:24:ARG:NH1	0.591
1	I:124:LEU:HD21	J:45:SER:HB3	0.590
1	O:64:GLN:HB3	P:209:LYS:CE	0.590

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	V:77:LEU:CD1	W:196:SER:O	0.590
1	AA:77:LEU:HD12	BA:197:VAL:HB	0.590
1	KA:89:VAL:HA	LA:185:LYS:HD2	0.590
1	UA:15:LEU:HA	VA:23:PRO:CD	0.590
1	X:69:ILE:CB	Y:204:THR:O	0.590
1	E:231:ALA:C	F:41:GLU:HB3	0.589
1	I:15:LEU:CD1	J:203:VAL:CG2	0.589
1	Q:124:LEU:HD23	R:45:SER:HB3	0.589
1	Q:218:PHE:CE2	R:42:TYR:HD2	0.589
1	Q:15:LEU:N	R:203:VAL:CG2	0.589
1	Z:118:ALA:HB3	AA:209:LYS:CE	0.589
1	Z:157:GLN:NE2	AA:25:GLU:HB3	0.589
1	FA:231:ALA:CB	GA:42:TYR:N	0.589
1	IA:15:LEU:CD1	JA:203:VAL:CG2	0.589
1	JA:65:ALA:CB	KA:209:LYS:CG	0.589
1	OA:230:PHE:CZ	PA:141:VAL:CG1	0.589
1	UA:87:LYS:CD	VA:186:VAL:CG1	0.589
1	UA:89:VAL:CG2	VA:187:VAL:HG21	0.589
1	J:90:LEU:CA	K:185:LYS:HZ3	0.589
1	A:43:LEU:CA	ZA:218:PHE:HZ	0.588
1	C:124:LEU:CA	D:48:LYS:CE	0.588
1	F:67:ALA:C	G:205:TYR:CD1	0.588
1	R:14:ARG:CG	S:203:VAL:HB	0.588

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	T:66:ALA:HA	U:205:TYR:HH	0.588
1	BA:230:PHE:HA	CA:43:LEU:HD23	0.588
1	EA:231:ALA:C	FA:41:GLU:HB3	0.588
1	FA:124:LEU:CD2	GA:47:GLU:CG	0.588
1	RA:89:VAL:HB	SA:187:VAL:HG12	0.588
1	YA:84:ASN:HB2	ZA:190:LYS:HB3	0.588
1	YA:233:GLN:OE1	ZA:39:THR:CB	0.588
1	YA:86:LEU:HD22	ZA:188:GLY:CA	0.588
1	P:65:ALA:HB2	Q:208:GLU:OE2	0.588
1	B:14:ARG:HB3	C:203:VAL:HG11	0.587
1	B:17:TYR:CA	C:22:LEU:HD21	0.587
1	C:86:LEU:O	D:186:VAL:C	0.587
1	E:79:PHE:HA	F:194:GLU:O	0.587
1	H:69:ILE:CD	I:204:THR:O	0.587
1	J:14:ARG:HG3	K:203:VAL:HG11	0.587
1	Q:89:VAL:CG2	R:187:VAL:CG1	0.587
1	U:15:LEU:HA	V:23:PRO:CD	0.587
1	T:13:LYS:O	U:22:LEU:HB2	0.587
1	X:65:ALA:C	Y:209:LYS:H	0.587
1	X:15:LEU:N	Y:203:VAL:HG11	0.587
1	Z:230:PHE:HE1	AA:141:VAL:HB	0.587
1	CA:12:LEU:C	DA:22:LEU:CD1	0.587
1	CA:66:ALA:CA	DA:211:LEU:HD11	0.587



Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	IA:67:ALA:HB1	JA:207:GLY:H	0.587
1	IA:89:VAL:C	JA:185:LYS:NZ	0.587
1	QA:218:PHE:CE2	RA:42:TYR:HD2	0.587
1	QA:231:ALA:HB2	RA:42:TYR:CB	0.587
1	QA:228:THR:CG2	RA:140:PRO:HG2	0.587
1	RA:218:PHE:HZ	SA:42:TYR:HD2	0.587
1	C:124:LEU:C	D:48:LYS:HZ1	0.587
1	WA:15:LEU:H	XA:203:VAL:CG2	0.587
1	A:209:LYS:CE	ZA:118:ALA:HB3	0.586
1	F:65:ALA:HB2	G:208:GLU:OE2	0.586
1	F:218:PHE:HE2	G:42:TYR:CD2	0.586
1	S:14:ARG:CG	T:203:VAL:CB	0.586
1	U:14:ARG:C	V:203:VAL:CG1	0.586
1	X:228:THR:CG2	Y:140:PRO:CG	0.586
1	Y:233:GLN:CD	Z:39:THR:HG22	0.586
1	Y:66:ALA:HA	Z:209:LYS:HB2	0.586
1	GA:15:LEU:CG	HA:203:VAL:CG2	0.586
1	NA:90:LEU:HD23	OA:185:LYS:HZ3	0.586
1	OA:13:LYS:C	PA:22:LEU:HD13	0.586
1	PA:69:ILE:CD	QA:204:THR:OG1	0.586
1	AA:12:LEU:O	BA:22:LEU:CG	0.586
1	A:22:LEU:HD12	ZA:15:LEU:CB	0.585
1	A:25:GLU:CB	ZA:157:GLN:HE22	0.585

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	B:87:LYS:N	C:187:VAL:HG12	0.585
1	F:87:LYS:HB2	G:187:VAL:HG13	0.585
1	N:216:LYS:HZ3	O:24:ARG:CD	0.585
1	T:231:ALA:HB2	U:42:TYR:C	0.585
1	W:14:ARG:O	X:23:PRO:HD2	0.585
1	Z:218:PHE:HZ	AA:43:LEU:CA	0.585
1	HA:124:LEU:CA	IA:48:LYS:HE2	0.585
1	IA:233:GLN:OE1	JA:39:THR:HB	0.585
1	NA:216:LYS:HZ3	OA:24:ARG:CD	0.585
1	SA:14:ARG:HG2	TA:203:VAL:HG12	0.585
1	TA:228:THR:HB	UA:141:VAL:CG1	0.585
1	A:196:SER:O	ZA:77:LEU:CB	0.585
1	CA:68:GLY:H	DA:205:TYR:HE1	0.585
1	A:203:VAL:CG1	ZA:14:ARG:HG3	0.584
1	B:218:PHE:CZ	C:43:LEU:HA	0.584
1	F:79:PHE:CB	G:194:GLU:O	0.584
1	V:87:LYS:HD2	W:186:VAL:HA	0.584
1	V:87:LYS:CD	W:186:VAL:HG12	0.584
1	X:14:ARG:HG3	Y:203:VAL:HG11	0.584
1	X:230:PHE:CE1	Y:141:VAL:CA	0.584
1	AA:67:ALA:O	BA:206:LYS:CA	0.584
1	CA:14:ARG:N	DA:22:LEU:HB2	0.584
1	FA:79:PHE:CB	GA:194:GLU:O	0.584

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	TA:13:LYS:O	UA:22:LEU:HB2	0.584
1	VA:87:LYS:CD	WA:186:VAL:HA	0.584
1	XA:230:PHE:CD1	YA:141:VAL:HG12	0.584
1	W:231:ALA:CB	X:42:TYR:O	0.584
1	WA:231:ALA:O	XA:41:GLU:HG3	0.584
1	B:87:LYS:N	C:187:VAL:CG1	0.583
1	F:87:LYS:N	G:187:VAL:HA	0.583
1	J:86:LEU:CG	K:187:VAL:HA	0.583
1	J:15:LEU:CD1	K:203:VAL:HG23	0.583
1	T:228:THR:CG2	U:140:PRO:HG2	0.583
1	V:13:LYS:CA	W:22:LEU:HD13	0.583
1	AA:87:LYS:HB2	BA:187:VAL:CG1	0.583
1	BA:218:PHE:CZ	CA:43:LEU:HA	0.583
1	MA:216:LYS:NZ	NA:24:ARG:HD2	0.583
1	NA:87:LYS:HB2	OA:187:VAL:CG1	0.583
1	VA:13:LYS:CA	WA:22:LEU:HD13	0.583
1	WA:216:LYS:HD2	XA:24:ARG:HB2	0.583
1	XA:14:ARG:HG3	YA:203:VAL:HG11	0.583
1	XA:86:LEU:HD21	YA:188:GLY:CA	0.583
1	YA:233:GLN:CD	ZA:39:THR:HG22	0.583
1	W:218:PHE:HZ	X:44:GLY:H	0.583
1	FA:67:ALA:CA	GA:207:GLY:N	0.583
1	A:233:GLN:OE1	B:39:THR:CA	0.583

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	D:124:LEU:CA	E:48:LYS:NZ	0.582
1	J:65:ALA:CB	K:209:LYS:CG	0.582
1	Q:218:PHE:CE2	R:42:TYR:CD2	0.582
1	Y:233:GLN:OE1	Z:39:THR:CB	0.582
1	AA:65:ALA:HB3	BA:209:LYS:N	0.582
1	LA:233:GLN:OE1	MA:39:THR:HG21	0.582
1	XA:67:ALA:C	YA:206:LYS:H	0.582
1	YA:14:ARG:HB3	ZA:203:VAL:CB	0.582
1	WA:218:PHE:HZ	XA:44:GLY:H	0.582
1	A:22:LEU:HD13	ZA:13:LYS:N	0.581
1	C:218:PHE:CZ	D:43:LEU:HA	0.581
1	O:13:LYS:C	P:22:LEU:HD13	0.581
1	W:87:LYS:HA	X:186:VAL:HG12	0.581
1	W:89:VAL:HG11	X:187:VAL:CG1	0.581
1	Z:77:LEU:CB	AA:196:SER:O	0.581
1	CA:17:TYR:HB2	DA:22:LEU:CD2	0.581
1	CA:66:ALA:CB	DA:211:LEU:HD11	0.581
1	CA:86:LEU:O	DA:186:VAL:C	0.581
1	FA:67:ALA:C	GA:205:TYR:CD1	0.581
1	FA:218:PHE:HE2	GA:42:TYR:CD2	0.581
1	JA:15:LEU:CD1	KA:203:VAL:HG23	0.581
1	MA:228:THR:CG2	NA:140:PRO:CD	0.581
1	NA:14:ARG:C	OA:22:LEU:CB	0.581

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	WA:226:GLU:HB3	XA:140:PRO:CG	0.581
1	WA:228:THR:HG21	XA:141:VAL:N	0.581
1	YA:230:PHE:HD1	ZA:43:LEU:CD2	0.581
1	QA:230:PHE:HE1	RA:141:VAL:HG12	0.581
1	XA:233:GLN:NE2	YA:21:ARG:NH1	0.581
1	A:67:ALA:O	B:206:LYS:CA	0.580
1	C:66:ALA:CA	D:211:LEU:HD11	0.580
1	F:124:LEU:CB	G:48:LYS:NZ	0.580
1	K:15:LEU:CG	L:203:VAL:CG2	0.580
1	J:14:ARG:CA	K:22:LEU:HD13	0.580
1	DA:218:PHE:HZ	EA:43:LEU:CA	0.580
1	JA:64:GLN:HB3	KA:209:LYS:HZ1	0.580
1	RA:14:ARG:CG	SA:203:VAL:HB	0.580
1	UA:233:GLN:OE1	VA:39:THR:HG22	0.580
1	XA:228:THR:CG2	YA:140:PRO:CG	0.580
1	YA:14:ARG:HB3	ZA:203:VAL:HG12	0.580
1	XA:15:LEU:N	YA:203:VAL:HG11	0.580
1	A:84:ASN:O	B:188:GLY:O	0.580
1	A:25:GLU:HB3	ZA:157:GLN:NE2	0.579
1	A:65:ALA:HB3	B:209:LYS:N	0.579
1	A:15:LEU:N	B:23:PRO:HD2	0.579
1	D:81:ILE:CG2	E:193:VAL:HG22	0.579
1	G:17:TYR:N	H:22:LEU:CD2	0.579

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	L:233:GLN:OE1	M:39:THR:HG21	0.579
1	S:14:ARG:HG2	T:203:VAL:HG12	0.579
1	U:233:GLN:OE1	V:39:THR:HG22	0.579
1	X:67:ALA:C	Y:206:LYS:H	0.579
1	Z:233:GLN:OE1	AA:39:THR:HB	0.579
1	AA:230:PHE:CD2	BA:141:VAL:CG1	0.579
1	CA:89:VAL:HA	DA:185:LYS:HB2	0.579
1	DA:81:ILE:CG2	EA:193:VAL:HG22	0.579
1	GA:17:TYR:N	HA:22:LEU:CD2	0.579
1	PA:216:LYS:HE2	QA:24:ARG:CD	0.579
1	WA:87:LYS:HA	XA:186:VAL:HG12	0.579
1	WA:14:ARG:O	XA:23:PRO:HD2	0.579
1	BA:87:LYS:CG	CA:185:LYS:O	0.579
1	H:89:VAL:C	I:185:LYS:HZ2	0.578
1	H:87:LYS:H	I:187:VAL:HG12	0.578
1	J:67:ALA:HB2	K:207:GLY:C	0.578
1	Q:231:ALA:HB2	R:42:TYR:CB	0.578
1	S:69:ILE:CD	T:204:THR:HG1	0.578
1	BA:87:LYS:N	CA:187:VAL:CG1	0.578
1	CA:218:PHE:CZ	DA:43:LEU:HA	0.578
1	FA:12:LEU:O	GA:22:LEU:HD21	0.578
1	HA:69:ILE:CD	IA:204:THR:O	0.578
1	HA:87:LYS:H	IA:187:VAL:HG12	0.578

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	KA:67:ALA:CA	LA:205:TYR:CE1	0.578
1	SA:228:THR:CG2	TA:140:PRO:HG2	0.578
1	TA:64:GLN:OE1	UA:209:LYS:NZ	0.578
1	Z:12:LEU:O	AA:22:LEU:CG	0.578
1	A:14:ARG:CB	B:203:VAL:HG11	0.577
1	N:87:LYS:HB2	O:187:VAL:CG1	0.577
1	U:89:VAL:CG2	V:187:VAL:HG21	0.577
1	Z:157:GLN:HE22	AA:25:GLU:CB	0.577
1	BA:14:ARG:HB3	CA:203:VAL:HG11	0.577
1	BA:82:GLY:O	CA:191:LEU:HB3	0.577
1	DA:124:LEU:C	EA:48:LYS:NZ	0.577
1	JA:16:GLY:N	KA:22:LEU:HB3	0.577
1	TA:231:ALA:HB2	UA:42:TYR:C	0.577
1	C:87:LYS:CG	D:185:LYS:O	0.577
1	W:231:ALA:O	X:41:GLU:HG2	0.577
1	I:87:LYS:HB2	J:187:VAL:HG12	0.576
1	L:216:LYS:NZ	M:24:ARG:HD3	0.576
1	O:89:VAL:HB	P:187:VAL:HG13	0.576
1	Z:15:LEU:HB2	AA:22:LEU:HD12	0.576
1	BA:124:LEU:CD2	CA:47:GLU:HG3	0.576
1	DA:87:LYS:CB	EA:185:LYS:C	0.576
1	DA:124:LEU:HD23	EA:47:GLU:CD	0.576
1	FA:124:LEU:CB	GA:48:LYS:NZ	0.576

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	HA:67:ALA:CA	IA:207:GLY:CA	0.576
1	JA:15:LEU:CD1	KA:22:LEU:HD11	0.576
1	LA:67:ALA:HB1	MA:207:GLY:H	0.576
1	NA:14:ARG:N	OA:22:LEU:HD13	0.576
1	TA:15:LEU:H	UA:203:VAL:HG21	0.576
1	VA:67:ALA:O	WA:206:LYS:HB3	0.576
1	R:231:ALA:HB2	S:42:TYR:N	0.576
1	C:68:GLY:O	D:205:TYR:CA	0.576
1	D:13:LYS:O	E:22:LEU:HB2	0.575
1	P:216:LYS:HE2	Q:24:ARG:CD	0.575
1	P:228:THR:HG21	Q:140:PRO:CG	0.575
1	T:14:ARG:CB	U:203:VAL:CB	0.575
1	U:87:LYS:HD2	V:186:VAL:CG1	0.575
1	X:87:LYS:HA	Y:186:VAL:HG12	0.575
1	Y:86:LEU:HD23	Z:188:GLY:CA	0.575
1	Y:230:PHE:HD1	Z:43:LEU:CD2	0.575
1	BA:15:LEU:HB2	CA:22:LEU:HD12	0.575
1	CA:66:ALA:HB1	DA:211:LEU:HD11	0.575
1	JA:90:LEU:HB3	KA:185:LYS:HZ1	0.575
1	VA:89:VAL:HB	WA:187:VAL:CB	0.575
1	VA:216:LYS:HD2	WA:24:ARG:HB2	0.575
1	F:124:LEU:CD2	G:47:GLU:CG	0.574
1	I:86:LEU:HD21	J:188:GLY:N	0.574



Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	W:216:LYS:HD2	X:24:ARG:HB2	0.574
1	CA:89:VAL:CA	DA:185:LYS:CB	0.574
1	HA:124:LEU:CD1	IA:45:SER:CB	0.574
1	QA:64:GLN:HB2	RA:209:LYS:CE	0.574
1	UA:64:GLN:OE1	VA:25:GLU:CD	0.574
1	SA:64:GLN:CG	TA:209:LYS:NZ	0.574
1	C:66:ALA:CB	D:211:LEU:HD11	0.573
1	B:87:LYS:C	C:187:VAL:HG12	0.573
1	D:231:ALA:O	E:41:GLU:CG	0.573
1	J:65:ALA:CB	K:209:LYS:HG3	0.573
1	J:16:GLY:N	K:22:LEU:HB3	0.573
1	R:66:ALA:CB	S:205:TYR:CE1	0.573
1	Z:66:ALA:CB	AA:211:LEU:HD11	0.573
1	BA:87:LYS:N	CA:187:VAL:HG12	0.573
1	DA:231:ALA:O	EA:41:GLU:CG	0.573
1	EA:12:LEU:C	FA:22:LEU:HD22	0.573
1	QA:218:PHE:CE2	RA:42:TYR:CD2	0.573
1	UA:118:ALA:HB3	VA:209:LYS:CE	0.573
1	TA:14:ARG:O	UA:203:VAL:HG11	0.573
1	UA:14:ARG:CB	VA:203:VAL:HG12	0.573
1	I:216:LYS:HZ3	J:24:ARG:HD3	0.573
1	AA:84:ASN:O	BA:188:GLY:O	0.573
1	E:124:LEU:CD2	F:47:GLU:OE2	0.572

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	I:89:VAL:C	J:185:LYS:NZ	0.572
1	K:87:LYS:CB	L:187:VAL:HG13	0.572
1	M:216:LYS:NZ	N:24:ARG:HD2	0.572
1	U:64:GLN:OE1	V:25:GLU:CD	0.572
1	AA:14:ARG:CB	BA:203:VAL:HG11	0.572
1	AA:86:LEU:C	BA:187:VAL:CA	0.572
1	FA:89:VAL:C	GA:185:LYS:HD2	0.572
1	HA:89:VAL:C	IA:185:LYS:HZ2	0.572
1	SA:66:ALA:CA	TA:205:TYR:CZ	0.572
1	YA:14:ARG:CB	ZA:203:VAL:HG12	0.572
1	W:231:ALA:O	X:41:GLU:HG3	0.572
1	AA:233:GLN:OE1	BA:39:THR:CA	0.572
1	F:231:ALA:CB	G:42:TYR:N	0.571
1	G:90:LEU:H	H:185:LYS:CE	0.571
1	K:67:ALA:HB2	L:207:GLY:C	0.571
1	R:14:ARG:CB	S:203:VAL:CB	0.571
1	T:16:GLY:CA	U:22:LEU:C	0.571
1	V:67:ALA:O	W:206:LYS:HB3	0.571
1	CA:228:THR:HG22	DA:139:ASN:CB	0.571
1	JA:65:ALA:CB	KA:209:LYS:HG3	0.571
1	LA:27:ILE:HB	LA:212:VAL:HG21	0.571
1	NA:27:ILE:HB	NA:212:VAL:HG21	0.571
1	A:111:PHE:CZ	B:202:THR:O	0.571

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	AA:111:PHE:CZ	BA:202:THR:O	0.571
1	A:43:LEU:HD23	ZA:230:PHE:CA	0.570
1	D:218:PHE:HZ	E:43:LEU:CA	0.570
1	E:124:LEU:C	F:48:LYS:NZ	0.570
1	N:231:ALA:CB	O:42:TYR:O	0.570
1	S:228:THR:CG2	T:140:PRO:HG2	0.570
1	Y:89:VAL:HB	Z:187:VAL:CG2	0.570
1	X:86:LEU:HD22	Y:188:GLY:CA	0.570
1	EA:68:GLY:O	FA:205:TYR:HA	0.570
1	JA:27:ILE:HB	JA:212:VAL:HG21	0.570
1	KA:64:GLN:HB3	LA:209:LYS:HZ3	0.570
1	RA:64:GLN:CB	SA:209:LYS:HZ1	0.570
1	VA:77:LEU:CG	WA:196:SER:O	0.570
1	RA:231:ALA:HB2	SA:42:TYR:N	0.570
1	VA:17:TYR:O	WA:22:LEU:CD2	0.570
1	A:22:LEU:CG	ZA:12:LEU:O	0.570
1	C:67:ALA:HB3	D:205:TYR:CG	0.569
1	C:67:ALA:CB	D:205:TYR:CD2	0.569
1	W:216:LYS:HB3	X:24:ARG:NH1	0.569
1	AA:83:ILE:CD	BA:191:LEU:CD1	0.569
1	CA:66:ALA:HA	DA:211:LEU:HD11	0.569
1	IA:89:VAL:C	JA:185:LYS:HZ2	0.569
1	LA:17:TYR:N	MA:22:LEU:CD2	0.569

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	OA:89:VAL:HB	PA:187:VAL:HG13	0.569
1	YA:87:LYS:C	ZA:187:VAL:CG1	0.569
1	PA:216:LYS:HZ1	QA:24:ARG:HH11	0.569
1	X:231:ALA:O	Y:41:GLU:HG3	0.569
1	B:15:LEU:HG	C:23:PRO:HD2	0.568
1	D:124:LEU:HD23	E:47:GLU:CD	0.568
1	J:124:LEU:HB3	K:48:LYS:HZ1	0.568
1	BA:231:ALA:CA	CA:41:GLU:HB3	0.568
1	CA:87:LYS:HB2	DA:187:VAL:CG1	0.568
1	PA:27:ILE:HB	PA:212:VAL:HG21	0.568
1	TA:15:LEU:HA	UA:23:PRO:HD2	0.568
1	UA:27:ILE:HB	UA:212:VAL:HG21	0.568
1	WA:15:LEU:HD21	XA:204:THR:C	0.568
1	VA:230:PHE:HD1	WA:43:LEU:CD2	0.568
1	A:77:LEU:HD12	B:197:VAL:HB	0.567
1	A:211:LEU:HD11	ZA:66:ALA:CB	0.567
1	E:73:LYS:HA	F:200:GLN:O	0.567
1	P:14:ARG:CG	Q:203:VAL:CB	0.567
1	S:64:GLN:HB3	T:209:LYS:CD	0.567
1	W:89:VAL:HB	X:187:VAL:CG2	0.567
1	X:127:GLY:CA	Y:48:LYS:HE3	0.567
1	BA:17:TYR:CB	CA:22:LEU:CD2	0.567
1	BA:17:TYR:HB2	CA:22:LEU:CD2	0.567

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	HA:27:ILE:HB	HA:212:VAL:HG21	0.567
1	JA:64:GLN:HB3	KA:209:LYS:HZ3	0.567
1	SA:27:ILE:HB	SA:212:VAL:HG21	0.567
1	XA:87:LYS:O	YA:187:VAL:CG1	0.567
1	G:90:LEU:H	H:185:LYS:NZ	0.567
1	T:64:GLN:OE1	U:209:LYS:NZ	0.567
1	F:64:GLN:CA	G:209:LYS:NZ	0.566
1	E:229:LEU:O	F:141:VAL:HG21	0.566
1	I:86:LEU:CD1	J:188:GLY:CA	0.566
1	I:233:GLN:OE1	J:39:THR:HB	0.566
1	K:89:VAL:HA	L:185:LYS:HD2	0.566
1	M:87:LYS:HB2	N:187:VAL:HG12	0.566
1	Q:89:VAL:HA	R:185:LYS:HD3	0.566
1	S:65:ALA:CA	T:209:LYS:HG3	0.566
1	T:15:LEU:HA	U:23:PRO:HD2	0.566
1	W:69:ILE:HB	X:204:THR:O	0.566
1	Y:87:LYS:C	Z:187:VAL:CG1	0.566
1	UA:87:LYS:HD2	VA:186:VAL:CG1	0.566
1	WA:77:LEU:CD1	XA:196:SER:O	0.566
1	WA:233:GLN:CD	XA:21:ARG:NH2	0.566
1	XA:87:LYS:HA	YA:186:VAL:HG12	0.566
1	XA:89:VAL:CG2	YA:187:VAL:HG21	0.566
1	W:15:LEU:H	X:203:VAL:CG2	0.566

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	EA:87:LYS:N	FA:187:VAL:CA	0.566
1	WA:15:LEU:N	XA:203:VAL:CG2	0.566
1	F:124:LEU:HD23	G:47:GLU:CG	0.565
1	W:15:LEU:HD21	X:204:THR:C	0.565
1	DA:229:LEU:O	EA:141:VAL:HG21	0.565
1	FA:124:LEU:HD23	GA:47:GLU:HG3	0.565
1	EA:229:LEU:O	FA:141:VAL:HG21	0.565
1	FA:82:GLY:O	GA:191:LEU:HB3	0.565
1	LA:89:VAL:CA	MA:185:LYS:HD3	0.565
1	SA:65:ALA:CA	TA:209:LYS:HG3	0.565
1	RA:64:GLN:O	SA:209:LYS:CD	0.565
1	WA:27:ILE:HB	WA:212:VAL:HG21	0.565
1	A:140:PRO:HG2	ZA:228:THR:OG1	0.564
1	E:68:GLY:O	F:205:TYR:HA	0.564
1	F:216:LYS:HD2	G:24:ARG:HD2	0.564
1	T:14:ARG:O	U:203:VAL:HG11	0.564
1	CA:27:ILE:HB	CA:212:VAL:HG21	0.564
1	HA:124:LEU:CB	IA:48:LYS:NZ	0.564
1	HA:233:GLN:NE2	IA:39:THR:CG2	0.564
1	QA:27:ILE:HB	QA:212:VAL:HG21	0.564
1	QA:89:VAL:HA	RA:185:LYS:HD3	0.564
1	RA:27:ILE:HB	RA:212:VAL:HG21	0.564
1	XA:230:PHE:CZ	YA:141:VAL:CA	0.564

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	YA:14:ARG:HG3	ZA:203:VAL:HG11	0.564
1	YA:27:ILE:HB	YA:212:VAL:HG21	0.564
1	B:82:GLY:O	C:191:LEU:HB3	0.564
1	E:67:ALA:HB2	F:207:GLY:O	0.563
1	F:12:LEU:O	G:22:LEU:HD21	0.563
1	O:14:ARG:N	P:22:LEU:HD13	0.563
1	R:228:THR:CG2	S:140:PRO:HG2	0.563
1	U:231:ALA:O	V:41:GLU:CG	0.563
1	Y:65:ALA:C	Z:209:LYS:H	0.563
1	EA:27:ILE:HB	EA:212:VAL:HG21	0.563
1	FA:27:ILE:HB	FA:212:VAL:HG21	0.563
1	IA:86:LEU:CD1	JA:187:VAL:C	0.563
1	IA:124:LEU:HD11	JA:45:SER:CB	0.563
1	PA:15:LEU:CA	QA:203:VAL:HG21	0.563
1	PA:228:THR:CG2	QA:140:PRO:HG2	0.563
1	SA:14:ARG:C	TA:22:LEU:HA	0.563
1	YA:65:ALA:HB3	ZA:209:LYS:N	0.563
1	EA:68:GLY:N	FA:205:TYR:HE1	0.563
1	K:90:LEU:N	L:185:LYS:HZ3	0.563
1	X:216:LYS:CB	Y:24:ARG:HH11	0.563
1	WA:90:LEU:H	XA:185:LYS:CD	0.563
1	A:140:PRO:HD3	ZA:226:GLU:HB3	0.562
1	A:233:GLN:NE2	B:39:THR:HG22	0.562

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	A:230:PHE:CA	B:43:LEU:HD23	0.562
1	E:231:ALA:O	F:41:GLU:CB	0.562
1	U:14:ARG:O	V:23:PRO:HD2	0.562
1	Z:228:THR:OG1	AA:140:PRO:HG2	0.562
1	EA:124:LEU:C	FA:48:LYS:NZ	0.562
1	FA:124:LEU:HD23	GA:47:GLU:CG	0.562
1	FA:216:LYS:HD2	GA:24:ARG:HD2	0.562
1	GA:27:ILE:HB	GA:212:VAL:HG21	0.562
1	IA:90:LEU:HD23	JA:185:LYS:NZ	0.562
1	A:27:ILE:HB	A:212:VAL:HG21	0.561
1	A:87:LYS:CA	B:187:VAL:CG1	0.561
1	B:230:PHE:HA	C:43:LEU:HD23	0.561
1	F:82:GLY:O	G:191:LEU:HB3	0.561
1	O:27:ILE:HB	O:212:VAL:HG21	0.561
1	P:15:LEU:CA	Q:203:VAL:HG21	0.561
1	V:77:LEU:CG	W:196:SER:O	0.561
1	V:216:LYS:HD2	W:24:ARG:HB2	0.561
1	W:77:LEU:CD1	X:196:SER:O	0.561
1	Y:14:ARG:CG	Z:203:VAL:HG11	0.561
1	Y:14:ARG:HG3	Z:203:VAL:HG11	0.561
1	Z:89:VAL:HB	AA:187:VAL:HG13	0.561
1	AA:27:ILE:HB	AA:212:VAL:HG21	0.561
1	EA:67:ALA:HB2	FA:207:GLY:O	0.561



Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	SA:64:GLN:HB3	TA:209:LYS:CD	0.561
1	C:66:ALA:HA	D:211:LEU:HD11	0.560
1	D:231:ALA:CB	E:41:GLU:HB3	0.560
1	I:90:LEU:HD23	J:185:LYS:NZ	0.560
1	P:27:ILE:HB	P:212:VAL:HG21	0.560
1	Y:228:THR:CG2	Z:140:PRO:N	0.560
1	Z:14:ARG:HG2	AA:203:VAL:HG12	0.560
1	BA:15:LEU:HG	CA:23:PRO:HD2	0.560
1	OA:15:LEU:HD11	PA:203:VAL:HG23	0.560
1	RA:228:THR:CG2	SA:140:PRO:HG2	0.560
1	TA:27:ILE:HB	TA:212:VAL:HG21	0.560
1	VA:87:LYS:HD2	WA:186:VAL:CG1	0.560
1	B:230:PHE:CZ	C:141:VAL:N	0.559
1	L:17:TYR:N	M:22:LEU:CD2	0.559
1	N:230:PHE:CD1	O:141:VAL:HG11	0.559
1	V:230:PHE:HD1	W:43:LEU:CD2	0.559
1	X:89:VAL:CG2	Y:187:VAL:HG21	0.559
1	HA:124:LEU:HD21	IA:45:SER:OG	0.559
1	IA:27:ILE:HB	IA:212:VAL:HG21	0.559
1	IA:124:LEU:HD23	JA:48:LYS:HZ3	0.559
1	OA:27:ILE:HB	OA:212:VAL:HG21	0.559
1	OA:228:THR:CG2	PA:140:PRO:HG2	0.559
1	UA:231:ALA:O	VA:41:GLU:CG	0.559

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	XA:86:LEU:CD2	YA:188:GLY:HA2	0.559
1	YA:65:ALA:C	ZA:209:LYS:H	0.559
1	YA:13:LYS:N	ZA:22:LEU:HD13	0.559
1	A:231:ALA:H	B:43:LEU:CD2	0.559
1	D:228:THR:HG22	E:139:ASN:CA	0.558
1	F:231:ALA:O	G:41:GLU:HB3	0.558
1	H:27:ILE:HB	H:212:VAL:HG21	0.558
1	H:124:LEU:HD21	I:45:SER:OG	0.558
1	I:27:ILE:HB	I:212:VAL:HG21	0.558
1	N:27:ILE:HB	N:212:VAL:HG21	0.558
1	Q:27:ILE:HB	Q:212:VAL:HG21	0.558
1	R:27:ILE:HB	R:212:VAL:HG21	0.558
1	T:124:LEU:HD21	U:45:SER:OG	0.558
1	U:230:PHE:CE1	V:141:VAL:CB	0.558
1	Y:27:ILE:HB	Y:212:VAL:HG21	0.558
1	DA:66:ALA:HA	EA:211:LEU:HD11	0.558
1	DA:124:LEU:HD11	EA:45:SER:CA	0.558
1	OA:14:ARG:N	PA:22:LEU:HD13	0.558
1	WA:216:LYS:HB3	XA:24:ARG:NH1	0.558
1	YA:65:ALA:CB	ZA:208:GLU:OE1	0.558
1	BA:87:LYS:H	CA:187:VAL:CG1	0.558
1	IA:216:LYS:HZ3	JA:24:ARG:HD3	0.558
1	B:87:LYS:HB3	C:185:LYS:C	0.557

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	C:66:ALA:HB1	D:211:LEU:HD11	0.557
1	H:233:GLN:NE2	I:39:THR:CG2	0.557
1	I:124:LEU:HD11	J:45:SER:CB	0.557
1	J:27:ILE:HB	J:212:VAL:HG21	0.557
1	K:27:ILE:HB	K:212:VAL:HG21	0.557
1	S:27:ILE:HB	S:212:VAL:HG21	0.557
1	W:16:GLY:HA2	X:22:LEU:HB3	0.557
1	Y:15:LEU:H	Z:203:VAL:HG21	0.557
1	BA:87:LYS:CB	CA:185:LYS:C	0.557
1	IA:86:LEU:C	JA:186:VAL:O	0.557
1	JA:124:LEU:HD11	KA:45:SER:HB2	0.557
1	LA:216:LYS:NZ	MA:24:ARG:HD3	0.557
1	WA:69:ILE:HB	XA:204:THR:O	0.557
1	XA:86:LEU:HD23	YA:188:GLY:H	0.557
1	A:43:LEU:C	ZA:218:PHE:CZ	0.556
1	B:228:THR:CB	C:141:VAL:HG13	0.556
1	D:229:LEU:O	E:141:VAL:HG21	0.556
1	E:15:LEU:CG	F:22:LEU:HD12	0.556
1	G:27:ILE:HB	G:212:VAL:HG21	0.556
1	J:15:LEU:CD1	K:22:LEU:HD11	0.556
1	M:27:ILE:HB	M:212:VAL:HG21	0.556
1	X:73:LYS:HZ2	Y:201:SER:HB3	0.556
1	Z:81:ILE:HG22	AA:193:VAL:HG22	0.556

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	DA:27:ILE:HB	DA:212:VAL:HG21	0.556
1	CA:87:LYS:C	DA:187:VAL:HG12	0.556
1	DA:228:THR:HG22	EA:139:ASN:CA	0.556
1	MA:27:ILE:HB	MA:212:VAL:HG21	0.556
1	WA:65:ALA:C	XA:209:LYS:H	0.556
1	GA:228:THR:OG1	HA:140:PRO:HG2	0.556
1	A:187:VAL:HG13	ZA:89:VAL:HB	0.555
1	A:203:VAL:HG12	ZA:14:ARG:HG2	0.555
1	C:27:ILE:HB	C:212:VAL:HG21	0.555
1	C:89:VAL:CA	D:185:LYS:CB	0.555
1	E:77:LEU:HA	F:196:SER:O	0.555
1	D:89:VAL:H	E:185:LYS:CD	0.555
1	E:231:ALA:HB3	F:41:GLU:C	0.555
1	G:124:LEU:CA	H:48:LYS:NZ	0.555
1	L:27:ILE:HB	L:212:VAL:HG21	0.555
1	T:27:ILE:HB	T:212:VAL:HG21	0.555
1	HA:14:ARG:N	IA:22:LEU:HD13	0.555
1	KA:27:ILE:HB	KA:212:VAL:HG21	0.555
1	EA:124:LEU:CB	FA:48:LYS:HZ3	0.555
1	NA:216:LYS:HE3	OA:24:ARG:HH11	0.555
1	G:87:LYS:HG3	H:185:LYS:O	0.555
1	A:65:ALA:CB	B:208:GLU:CG	0.554
1	F:27:ILE:HB	F:212:VAL:HG21	0.554

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	F:86:LEU:CA	G:187:VAL:HA	0.554
1	F:124:LEU:HD23	G:47:GLU:HG3	0.554
1	H:124:LEU:CB	I:48:LYS:NZ	0.554
1	L:86:LEU:HG	M:187:VAL:HA	0.554
1	S:64:GLN:CB	T:209:LYS:HD2	0.554
1	W:27:ILE:HB	W:212:VAL:HG21	0.554
1	DA:231:ALA:CB	EA:41:GLU:HB3	0.554
1	KA:65:ALA:HB3	LA:209:LYS:HG3	0.554
1	MA:67:ALA:HB2	NA:207:GLY:HA3	0.554
1	WA:16:GLY:HA2	XA:22:LEU:HB3	0.554
1	VA:230:PHE:HE1	WA:141:VAL:HB	0.554
1	XA:226:GLU:HB3	YA:140:PRO:HD3	0.554
1	A:22:LEU:HD12	ZA:15:LEU:HB2	0.553
1	D:15:LEU:HB2	E:22:LEU:HD11	0.553
1	W:89:VAL:HB	X:187:VAL:CB	0.553
1	W:226:GLU:HB3	X:140:PRO:CG	0.553
1	X:14:ARG:HB3	Y:203:VAL:HG11	0.553
1	X:15:LEU:HD11	Y:203:VAL:HA	0.553
1	X:226:GLU:HB3	Y:140:PRO:HD3	0.553
1	X:230:PHE:CZ	Y:141:VAL:CA	0.553
1	Z:218:PHE:CZ	AA:43:LEU:C	0.553
1	EA:73:LYS:HA	FA:200:GLN:O	0.553
1	NA:231:ALA:CB	OA:42:TYR:O	0.553

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	VA:27:ILE:HB	VA:212:VAL:HG21	0.553
1	YA:89:VAL:CB	ZA:187:VAL:HG13	0.553
1	YA:230:PHE:CZ	ZA:141:VAL:HG13	0.553
1	A:141:VAL:CB	ZA:230:PHE:CZ	0.553
1	EA:67:ALA:C	FA:207:GLY:H	0.553
1	Z:111:PHE:CZ	AA:202:THR:O	0.553
1	XA:230:PHE:C	YA:42:TYR:O	0.553
1	B:27:ILE:HB	B:212:VAL:HG21	0.552
1	A:228:THR:CB	B:140:PRO:HG2	0.552
1	D:27:ILE:HB	D:212:VAL:HG21	0.552
1	D:88:SER:C	E:185:LYS:HD3	0.552
1	H:124:LEU:CA	I:48:LYS:HE2	0.552
1	M:67:ALA:HB2	N:207:GLY:HA3	0.552
1	R:65:ALA:O	S:209:LYS:HB2	0.552
1	CA:67:ALA:CB	DA:205:TYR:CD2	0.552
1	GA:124:LEU:CA	HA:48:LYS:NZ	0.552
1	GA:16:GLY:O	HA:24:ARG:HD3	0.552
1	MA:228:THR:HG21	NA:140:PRO:HG3	0.552
1	OA:14:ARG:HG3	PA:203:VAL:HB	0.552
1	QA:15:LEU:N	RA:203:VAL:CG2	0.552
1	SA:64:GLN:CB	TA:209:LYS:HD2	0.552
1	WA:87:LYS:HD2	XA:186:VAL:CG1	0.552
1	XA:13:LYS:CA	YA:22:LEU:HD13	0.552

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	YA:89:VAL:HB	ZA:187:VAL:CG2	0.552
1	YA:228:THR:CG2	ZA:140:PRO:N	0.552
1	YA:15:LEU:H	ZA:203:VAL:HG21	0.552
1	GA:87:LYS:HG3	HA:185:LYS:O	0.552
1	D:12:LEU:C	E:22:LEU:HD13	0.551
1	D:124:LEU:HA	E:48:LYS:NZ	0.551
1	D:218:PHE:CZ	E:43:LEU:C	0.551
1	G:16:GLY:O	H:24:ARG:HD3	0.551
1	V:230:PHE:HE1	W:141:VAL:HB	0.551
1	Y:65:ALA:HB3	Z:209:LYS:N	0.551
1	AA:65:ALA:CB	BA:208:GLU:CG	0.551
1	E:67:ALA:C	F:207:GLY:H	0.551
1	HA:90:LEU:CB	IA:185:LYS:HZ3	0.551
1	BA:128:GLN:OE1	CA:48:LYS:NZ	0.551
1	D:124:LEU:C	E:48:LYS:NZ	0.550
1	E:27:ILE:HB	E:212:VAL:HG21	0.550
1	L:90:LEU:CB	M:185:LYS:HZ3	0.550
1	U:27:ILE:HB	U:212:VAL:HG21	0.550
1	V:27:ILE:HB	V:212:VAL:HG21	0.550
1	EA:231:ALA:HB3	FA:41:GLU:C	0.550
1	LA:86:LEU:HG	MA:187:VAL:HA	0.550
1	ZA:27:ILE:HB	ZA:212:VAL:HG21	0.550
1	YA:230:PHE:C	ZA:42:TYR:O	0.550

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	A:48:LYS:NZ	ZA:124:LEU:O	0.550
1	B:66:ALA:CA	C:211:LEU:HD11	0.549
1	H:15:LEU:CG	I:203:VAL:CG2	0.549
1	G:17:TYR:H	H:22:LEU:HD23	0.549
1	I:124:LEU:HA	J:48:LYS:HE2	0.549
1	W:83:ILE:HA	X:190:LYS:O	0.549
1	X:27:ILE:HB	X:212:VAL:HG21	0.549
1	Y:77:LEU:HD12	Z:197:VAL:HB	0.549
1	Z:86:LEU:CA	AA:188:GLY:N	0.549
1	BA:27:ILE:HB	BA:212:VAL:HG21	0.549
1	FA:87:LYS:HB3	GA:185:LYS:HB3	0.549
1	FA:231:ALA:O	GA:41:GLU:HB3	0.549
1	GA:87:LYS:CB	HA:187:VAL:CG1	0.549
1	RA:218:PHE:HZ	SA:42:TYR:CD2	0.549
1	TA:228:THR:HB	UA:141:VAL:HG13	0.549
1	WA:12:LEU:C	XA:22:LEU:CD1	0.549
1	WA:89:VAL:HB	XA:187:VAL:CG2	0.549
1	YA:14:ARG:C	ZA:203:VAL:HG11	0.549
1	A:196:SER:O	ZA:77:LEU:CG	0.549
1	JA:90:LEU:CD2	KA:185:LYS:NZ	0.549
1	PA:216:LYS:HZ1	QA:24:ARG:NH1	0.549
1	E:87:LYS:C	F:187:VAL:CG1	0.548
1	F:87:LYS:HB3	G:185:LYS:HB3	0.548



Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	N:14:ARG:CG	O:203:VAL:HB	0.548
1	Z:226:GLU:HB3	AA:140:PRO:HD3	0.548
1	DA:216:LYS:HD2	EA:24:ARG:CD	0.548
1	EA:231:ALA:O	FA:41:GLU:CB	0.548
1	GA:90:LEU:H	HA:185:LYS:CE	0.548
1	IA:124:LEU:HA	JA:48:LYS:HE2	0.548
1	TA:15:LEU:HD21	UA:204:THR:C	0.548
1	UA:14:ARG:O	VA:23:PRO:HD2	0.548
1	XA:73:LYS:HZ3	YA:201:SER:HB3	0.548
1	AA:231:ALA:H	BA:43:LEU:CD2	0.548
1	BA:73:LYS:CA	CA:200:GLN:O	0.548
1	B:88:SER:C	C:185:LYS:HD3	0.547
1	D:66:ALA:CA	E:211:LEU:HD11	0.547
1	D:81:ILE:HA	E:192:LYS:O	0.547
1	G:229:LEU:C	H:141:VAL:HG11	0.547
1	H:14:ARG:N	I:22:LEU:HD13	0.547
1	O:14:ARG:HG3	P:203:VAL:HB	0.547
1	W:233:GLN:CD	X:21:ARG:NH2	0.547
1	AA:87:LYS:CA	BA:187:VAL:CG1	0.547
1	BA:66:ALA:CA	CA:211:LEU:HD11	0.547
1	AA:228:THR:CB	BA:140:PRO:HG2	0.547
1	BA:228:THR:HG21	CA:141:VAL:N	0.547
1	BA:88:SER:C	CA:185:LYS:HD3	0.547

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	DA:87:LYS:HB3	EA:185:LYS:C	0.547
1	KA:14:ARG:CA	LA:22:LEU:HD13	0.547
1	VA:87:LYS:CB	WA:186:VAL:HG12	0.547
1	XA:27:ILE:HB	XA:212:VAL:HG21	0.547
1	YA:77:LEU:HD12	ZA:197:VAL:HB	0.547
1	EA:89:VAL:H	FA:185:LYS:CD	0.547
1	B:86:LEU:O	C:186:VAL:O	0.547
1	B:228:THR:HG21	C:141:VAL:N	0.546
1	C:231:ALA:CB	D:41:GLU:HB3	0.546
1	D:216:LYS:HD2	E:24:ARG:CD	0.546
1	G:87:LYS:CA	H:187:VAL:HG13	0.546
1	X:13:LYS:CA	Y:22:LEU:HD13	0.546
1	Z:27:ILE:HB	Z:212:VAL:HG21	0.546
1	AA:87:LYS:HB3	BA:185:LYS:C	0.546
1	AA:216:LYS:HB3	BA:24:ARG:HH12	0.546
1	MA:87:LYS:HB2	NA:187:VAL:HG12	0.546
1	A:204:THR:OG1	ZA:70:ASN:N	0.546
1	A:209:LYS:HE2	ZA:118:ALA:CB	0.545
1	C:228:THR:HG22	D:139:ASN:CB	0.545
1	D:15:LEU:HG	E:23:PRO:HD2	0.545
1	D:127:GLY:HA3	E:48:LYS:HE3	0.545
1	U:230:PHE:HE1	V:141:VAL:CB	0.545
1	Y:228:THR:HG22	Z:139:ASN:HB2	0.545

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	Z:228:THR:HG21	AA:140:PRO:CA	0.545
1	AA:14:ARG:CG	BA:203:VAL:CG1	0.545
1	DA:81:ILE:HA	EA:192:LYS:O	0.545
1	GA:229:LEU:C	HA:141:VAL:HG11	0.545
1	HA:15:LEU:CG	IA:203:VAL:CG2	0.545
1	HA:87:LYS:CB	IA:187:VAL:CG1	0.545
1	QA:64:GLN:CB	RA:209:LYS:HZ1	0.545
1	SA:15:LEU:H	TA:203:VAL:CG2	0.545
1	YA:228:THR:HG22	ZA:139:ASN:HB2	0.545
1	H:64:GLN:CB	I:209:LYS:HZ1	0.545
1	WA:90:LEU:N	XA:185:LYS:HD2	0.545
1	E:124:LEU:HD22	F:45:SER:OG	0.545
1	A:193:VAL:HG22	ZA:81:ILE:HG22	0.544
1	D:66:ALA:HA	E:211:LEU:HD11	0.544
1	I:86:LEU:C	J:186:VAL:O	0.544
1	I:228:THR:CG2	J:140:PRO:HG3	0.544
1	J:124:LEU:HD11	K:45:SER:HB2	0.544
1	N:89:VAL:HA	O:185:LYS:CD	0.544
1	Q:15:LEU:CG	R:203:VAL:HG21	0.544
1	T:228:THR:HB	U:141:VAL:HG13	0.544
1	W:65:ALA:C	X:209:LYS:H	0.544
1	DA:127:GLY:HA3	EA:48:LYS:HE3	0.544
1	HA:233:GLN:HE22	IA:39:THR:CG2	0.544

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	RA:14:ARG:CB	SA:203:VAL:CB	0.544
1	TA:89:VAL:HG21	UA:187:VAL:HG21	0.544
1	A:190:LYS:O	ZA:83:ILE:HA	0.544
1	Z:70:ASN:N	AA:204:THR:OG1	0.544
1	A:14:ARG:CG	B:203:VAL:CG1	0.543
1	A:83:ILE:CD	B:191:LEU:CD1	0.543
1	Y:231:ALA:CA	Z:41:GLU:HB3	0.543
1	Z:13:LYS:N	AA:22:LEU:HD13	0.543
1	DA:66:ALA:CA	EA:211:LEU:HD11	0.543
1	DA:124:LEU:HB3	EA:47:GLU:OE2	0.543
1	EA:231:ALA:CB	FA:41:GLU:HB3	0.543
1	GA:17:TYR:H	HA:22:LEU:HD23	0.543
1	KA:67:ALA:HB2	LA:207:GLY:C	0.543
1	QA:14:ARG:HE	RA:201:SER:HB2	0.543
1	SA:69:ILE:CD	TA:204:THR:CB	0.543
1	VA:89:VAL:N	WA:185:LYS:HB3	0.543
1	WA:87:LYS:HE3	XA:186:VAL:CG1	0.543
1	G:65:ALA:N	H:209:LYS:NZ	0.543
1	RA:231:ALA:HB3	SA:42:TYR:H	0.543
1	YA:64:GLN:OE1	ZA:25:GLU:OE2	0.543
1	G:231:ALA:HB1	H:42:TYR:N	0.542
1	H:233:GLN:HE22	I:39:THR:CG2	0.542
1	M:90:LEU:CG	N:185:LYS:HZ3	0.542

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	O:230:PHE:CD1	P:141:VAL:CG1	0.542
1	Z:83:ILE:HA	AA:190:LYS:O	0.542
1	CA:231:ALA:CB	DA:41:GLU:HB3	0.542
1	DA:12:LEU:C	EA:22:LEU:HD13	0.542
1	IA:86:LEU:CD1	JA:188:GLY:CA	0.542
1	JA:15:LEU:CG	KA:203:VAL:CG2	0.542
1	YA:231:ALA:CA	ZA:41:GLU:HB3	0.542
1	YA:15:LEU:N	ZA:203:VAL:HG21	0.542
1	A:86:LEU:C	B:187:VAL:CA	0.541
1	B:216:LYS:CB	C:24:ARG:NH1	0.541
1	K:64:GLN:HB3	L:209:LYS:HZ3	0.541
1	J:15:LEU:CG	K:203:VAL:HG21	0.541
1	Q:86:LEU:HD23	R:188:GLY:N	0.541
1	P:228:THR:CG2	Q:140:PRO:HG2	0.541
1	AA:233:GLN:NE2	BA:39:THR:HG22	0.541
1	GA:231:ALA:HB1	HA:42:TYR:N	0.541
1	GA:231:ALA:HB3	HA:41:GLU:HB3	0.541
1	KA:90:LEU:CG	LA:185:LYS:NZ	0.541
1	YA:230:PHE:CD2	ZA:141:VAL:HG12	0.541
1	A:140:PRO:CA	ZA:228:THR:HG21	0.540
1	C:87:LYS:H	D:187:VAL:HA	0.540
1	T:89:VAL:HG21	U:187:VAL:HG21	0.540
1	S:15:LEU:H	T:203:VAL:CG2	0.540

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	V:89:VAL:N	W:185:LYS:HB3	0.540
1	X:230:PHE:CE1	Y:141:VAL:HA	0.540
1	BA:68:GLY:O	CA:205:TYR:CD1	0.540
1	DA:16:GLY:CA	EA:22:LEU:HD23	0.540
1	EA:87:LYS:CB	FA:187:VAL:CG1	0.540
1	FA:231:ALA:HB3	GA:41:GLU:HB3	0.540
1	HA:124:LEU:HD21	IA:45:SER:HB3	0.540
1	WA:83:ILE:HA	XA:190:LYS:O	0.540
1	XA:228:THR:HG23	YA:140:PRO:CG	0.540
1	XA:230:PHE:CE1	YA:141:VAL:HA	0.540
1	N:90:LEU:HD22	O:185:LYS:HZ3	0.540
1	UA:14:ARG:O	VA:22:LEU:N	0.540
1	XA:216:LYS:CB	YA:24:ARG:HH11	0.540
1	EA:15:LEU:C	FA:22:LEU:O	0.540
1	RA:64:GLN:OE1	SA:209:LYS:NZ	0.540
1	A:189:GLY:HA2	ZA:84:ASN:O	0.539
1	B:17:TYR:CE2	C:24:ARG:CB	0.539
1	A:17:TYR:O	B:22:LEU:HD22	0.539
1	D:87:LYS:CB	E:185:LYS:C	0.539
1	D:124:LEU:HB3	E:47:GLU:OE2	0.539
1	C:87:LYS:C	D:187:VAL:HG12	0.539
1	K:90:LEU:CG	L:185:LYS:NZ	0.539
1	X:228:THR:HG23	Y:140:PRO:CG	0.539

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	Y:14:ARG:C	Z:203:VAL:HG11	0.539
1	Z:77:LEU:CG	AA:196:SER:O	0.539
1	Y:15:LEU:N	Z:203:VAL:HG21	0.539
1	NA:14:ARG:CG	OA:203:VAL:HB	0.539
1	RA:65:ALA:O	SA:209:LYS:HB2	0.539
1	XA:86:LEU:HD21	YA:188:GLY:HA2	0.539
1	YA:233:GLN:HG3	ZA:21:ARG:NH2	0.539
1	UA:233:GLN:NE2	VA:21:ARG:NH1	0.539
1	A:230:PHE:CZ	B:141:VAL:CB	0.538
1	T:15:LEU:CA	U:22:LEU:HA	0.538
1	T:218:PHE:CZ	U:42:TYR:CE2	0.538
1	Z:84:ASN:O	AA:189:GLY:HA2	0.538
1	AA:86:LEU:O	BA:186:VAL:HG12	0.538
1	VA:87:LYS:HG3	WA:186:VAL:CA	0.538
1	WA:231:ALA:O	XA:41:GLU:HG2	0.538
1	W:15:LEU:N	X:203:VAL:CG2	0.538
1	A:202:THR:O	ZA:111:PHE:CZ	0.538
1	A:141:VAL:HG22	ZA:228:THR:CG2	0.537
1	O:216:LYS:CE	P:24:ARG:CD	0.537
1	O:228:THR:CG2	P:140:PRO:HG2	0.537
1	X:233:GLN:HG3	Y:21:ARG:NH2	0.537
1	Y:64:GLN:OE1	Z:25:GLU:CD	0.537
1	BA:17:TYR:CE2	CA:24:ARG:CB	0.537

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	EA:87:LYS:C	FA:187:VAL:CG1	0.537
1	Y:64:GLN:OE1	Z:25:GLU:OE2	0.537
1	C:17:TYR:CE2	D:24:ARG:CB	0.536
1	B:68:GLY:O	C:205:TYR:CD1	0.536
1	J:15:LEU:CG	K:203:VAL:CG2	0.536
1	K:65:ALA:HB3	L:209:LYS:HG3	0.536
1	X:86:LEU:HD21	Y:188:GLY:HA2	0.536
1	UA:230:PHE:CE1	VA:141:VAL:CB	0.536
1	UA:87:LYS:CD	VA:186:VAL:HG12	0.536
1	YA:228:THR:HG21	ZA:140:PRO:CD	0.536
1	GA:68:GLY:O	HA:205:TYR:HD1	0.536
1	J:90:LEU:CD2	K:185:LYS:NZ	0.536
1	L:90:LEU:N	M:185:LYS:HZ3	0.536
1	N:14:ARG:HG3	O:203:VAL:CB	0.535
1	O:230:PHE:CZ	P:141:VAL:CG1	0.535
1	EA:77:LEU:HA	FA:196:SER:O	0.535
1	HA:231:ALA:HB3	IA:41:GLU:HB3	0.535
1	NA:14:ARG:HG3	OA:203:VAL:CB	0.535
1	A:73:LYS:CA	B:200:GLN:O	0.535
1	YA:76:ASN:OD1	ZA:198:SER:OG	0.535
1	A:13:LYS:N	B:22:LEU:HD13	0.534
1	C:87:LYS:HB3	D:185:LYS:C	0.534
1	D:16:GLY:CA	E:22:LEU:HD23	0.534



Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	L:89:VAL:CA	M:185:LYS:HD3	0.534
1	P:15:LEU:HD11	Q:203:VAL:HG23	0.534
1	X:14:ARG:HB3	Y:203:VAL:HG12	0.534
1	Y:233:GLN:HG3	Z:21:ARG:NH2	0.534
1	AA:17:TYR:O	BA:22:LEU:HD22	0.534
1	DA:15:LEU:HG	EA:23:PRO:HD2	0.534
1	QA:231:ALA:CB	RA:42:TYR:HB3	0.534
1	WA:89:VAL:CA	XA:185:LYS:CD	0.534
1	N:14:ARG:O	O:22:LEU:N	0.534
1	WA:233:GLN:OE1	XA:39:THR:CG2	0.534
1	U:14:ARG:CB	V:203:VAL:HG11	0.533
1	X:230:PHE:CZ	Y:141:VAL:CB	0.533
1	BA:86:LEU:O	CA:186:VAL:HG12	0.533
1	IA:64:GLN:C	JA:209:LYS:HZ3	0.533
1	KA:86:LEU:HG	LA:187:VAL:CA	0.533
1	NA:216:LYS:CE	OA:24:ARG:HD2	0.533
1	RA:16:GLY:H	SA:22:LEU:C	0.533
1	Y:76:ASN:OD1	Z:198:SER:OG	0.533
1	BA:86:LEU:O	CA:186:VAL:O	0.533
1	A:22:LEU:CD1	ZA:15:LEU:HB2	0.532
1	A:84:ASN:HB2	B:190:LYS:HB3	0.532
1	E:124:LEU:HD11	F:45:SER:N	0.532
1	F:231:ALA:HB3	G:41:GLU:HB3	0.532

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	Z:228:THR:CG2	AA:141:VAL:HG22	0.532
1	BA:15:LEU:HD12	CA:22:LEU:HD12	0.532
1	BA:64:GLN:HB2	CA:25:GLU:OE1	0.532
1	FA:86:LEU:CA	GA:187:VAL:HA	0.532
1	G:68:GLY:O	H:205:TYR:HD1	0.532
1	BA:74:THR:O	CA:199:SER:CA	0.532
1	B:228:THR:HG22	C:139:ASN:CB	0.531
1	B:231:ALA:CA	C:41:GLU:HB3	0.531
1	D:17:TYR:CZ	E:24:ARG:HB2	0.531
1	D:87:LYS:HB3	E:185:LYS:C	0.531
1	I:15:LEU:CG	J:203:VAL:CG2	0.531
1	X:16:GLY:O	Y:24:ARG:HD3	0.531
1	Z:15:LEU:HB2	AA:22:LEU:CD1	0.531
1	Z:218:PHE:CZ	AA:43:LEU:CA	0.531
1	BA:83:ILE:CD	CA:191:LEU:CD1	0.531
1	CA:124:LEU:C	DA:48:LYS:NZ	0.531
1	BA:228:THR:CB	CA:141:VAL:HG13	0.531
1	BA:90:LEU:N	CA:185:LYS:HD2	0.531
1	TA:218:PHE:CZ	UA:42:TYR:CE2	0.531
1	XA:226:GLU:HB3	YA:140:PRO:CG	0.531
1	NA:230:PHE:HE1	OA:141:VAL:HG12	0.531
1	S:64:GLN:HB3	T:209:LYS:HZ3	0.531
1	G:15:LEU:CG	H:203:VAL:CG2	0.530

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	Q:14:ARG:HE	R:201:SER:HB2	0.530
1	S:69:ILE:CD	T:204:THR:CB	0.530
1	S:14:ARG:C	T:22:LEU:HA	0.530
1	Y:14:ARG:HB3	Z:203:VAL:HB	0.530
1	AA:84:ASN:HB2	BA:190:LYS:HB3	0.530
1	DA:218:PHE:CZ	EA:43:LEU:C	0.530
1	IA:89:VAL:H	JA:185:LYS:HD3	0.530
1	NA:230:PHE:CD1	OA:141:VAL:HG11	0.530
1	SA:124:LEU:HD21	TA:45:SER:HB2	0.530
1	YA:15:LEU:CB	ZA:22:LEU:HD12	0.530
1	AA:230:PHE:HE1	BA:141:VAL:C	0.530
1	U:14:ARG:O	V:22:LEU:N	0.530
1	X:69:ILE:CG1	Y:204:THR:H	0.530
1	B:15:LEU:HD12	C:22:LEU:HD12	0.529
1	B:64:GLN:HB2	C:25:GLU:OE1	0.529
1	B:86:LEU:CA	C:187:VAL:HA	0.529
1	E:231:ALA:CB	F:41:GLU:HB3	0.529
1	N:216:LYS:CE	O:24:ARG:HD2	0.529
1	Q:90:LEU:HB3	R:185:LYS:HE2	0.529
1	V:228:THR:CB	W:141:VAL:CG1	0.529
1	EA:231:ALA:HB3	FA:41:GLU:HB3	0.529
1	GA:231:ALA:H	HA:43:LEU:HD23	0.529
1	TA:226:GLU:HB3	UA:140:PRO:HG3	0.529

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	TA:228:THR:HG21	UA:141:VAL:HG13	0.529
1	XA:233:GLN:HG3	YA:21:ARG:NH2	0.529
1	XA:14:ARG:O	YA:23:PRO:CD	0.529
1	B:128:GLN:OE1	C:48:LYS:NZ	0.529
1	X:82:GLY:O	Y:191:LEU:CA	0.529
1	CA:67:ALA:O	DA:206:LYS:C	0.529
1	A:89:VAL:HG12	B:187:VAL:CG1	0.528
1	K:124:LEU:HD23	L:47:GLU:OE2	0.528
1	U:230:PHE:HE1	V:141:VAL:HG12	0.528
1	EA:87:LYS:HB3	FA:185:LYS:HB3	0.528
1	EA:124:LEU:HA	FA:48:LYS:HE3	0.528
1	GA:87:LYS:CA	HA:187:VAL:HG12	0.528
1	JA:14:ARG:CA	KA:22:LEU:HD13	0.528
1	KA:124:LEU:HD23	LA:47:GLU:OE2	0.528
1	MA:64:GLN:HB3	NA:209:LYS:HZ3	0.528
1	YA:64:GLN:OE1	ZA:25:GLU:CD	0.528
1	YA:228:THR:HG23	ZA:140:PRO:HG2	0.528
1	W:233:GLN:OE1	X:39:THR:CG2	0.528
1	C:17:TYR:CB	D:22:LEU:CD2	0.527
1	H:124:LEU:HD21	I:45:SER:HB3	0.527
1	S:86:LEU:CD2	T:188:GLY:H	0.527
1	S:124:LEU:HD21	T:45:SER:HB2	0.527
1	Y:230:PHE:HD1	Z:43:LEU:HD22	0.527

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	AA:230:PHE:CA	BA:43:LEU:HD23	0.527
1	JA:229:LEU:O	KA:141:VAL:HG11	0.527
1	XA:67:ALA:HB3	YA:205:TYR:CD2	0.527
1	XA:228:THR:CB	YA:141:VAL:CG1	0.527
1	FA:68:GLY:N	GA:205:TYR:HE1	0.527
1	C:79:PHE:HB3	D:195:ALA:HA	0.526
1	D:124:LEU:HB3	E:48:LYS:HZ3	0.526
1	E:87:LYS:CA	F:187:VAL:HG12	0.526
1	J:15:LEU:CD1	K:22:LEU:CD1	0.526
1	I:233:GLN:CD	J:39:THR:HG21	0.526
1	K:67:ALA:CA	L:205:TYR:CE1	0.526
1	R:16:GLY:H	S:22:LEU:C	0.526
1	Z:118:ALA:CB	AA:209:LYS:HE2	0.526
1	Y:74:THR:O	Z:199:SER:HA	0.526
1	CA:17:TYR:CE2	DA:24:ARG:CB	0.526
1	EA:124:LEU:HD11	FA:45:SER:N	0.526
1	LA:17:TYR:N	MA:22:LEU:HD21	0.526
1	SA:16:GLY:CA	TA:22:LEU:O	0.526
1	TA:15:LEU:CA	UA:22:LEU:HA	0.526
1	UA:230:PHE:HE1	VA:141:VAL:CB	0.526
1	N:230:PHE:HE1	O:141:VAL:HG12	0.526
1	PA:230:PHE:HE1	QA:141:VAL:HG12	0.526
1	U:233:GLN:NE2	V:21:ARG:NH1	0.526

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	YA:233:GLN:NE2	ZA:21:ARG:HH22	0.526
1	Q:15:LEU:CD2	R:204:THR:O	0.526
1	A:22:LEU:HD21	ZA:12:LEU:O	0.526
1	A:43:LEU:CA	ZA:218:PHE:CZ	0.525
1	B:89:VAL:HG12	C:187:VAL:HG11	0.525
1	H:231:ALA:HB3	I:41:GLU:HB3	0.525
1	I:124:LEU:HD23	J:48:LYS:HZ3	0.525
1	M:14:ARG:C	N:22:LEU:HA	0.525
1	T:14:ARG:C	U:203:VAL:CG1	0.525
1	T:228:THR:HG21	U:141:VAL:HG13	0.525
1	Y:230:PHE:CD2	Z:141:VAL:HG12	0.525
1	BA:81:ILE:HG22	CA:193:VAL:CG2	0.525
1	CA:79:PHE:HB3	DA:195:ALA:HA	0.525
1	GA:17:TYR:H	HA:22:LEU:CD2	0.525
1	IA:15:LEU:CG	JA:203:VAL:CG2	0.525
1	VA:89:VAL:CG2	WA:187:VAL:CG2	0.525
1	D:67:ALA:CB	E:207:GLY:O	0.525
1	YA:70:ASN:N	ZA:204:THR:OG1	0.525
1	B:67:ALA:C	C:206:LYS:H	0.524
1	A:86:LEU:O	B:186:VAL:HG12	0.524
1	I:14:ARG:HG3	J:203:VAL:HG11	0.524
1	I:15:LEU:HD12	J:22:LEU:HD12	0.524
1	P:66:ALA:HA	Q:205:TYR:OH	0.524

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	T:15:LEU:HD21	U:204:THR:C	0.524
1	Y:13:LYS:N	Z:22:LEU:HD13	0.524
1	Z:89:VAL:HB	AA:187:VAL:HG11	0.524
1	DA:17:TYR:CZ	EA:24:ARG:HB2	0.524
1	GA:124:LEU:C	HA:48:LYS:HZ1	0.524
1	YA:14:ARG:HB3	ZA:203:VAL:HB	0.524
1	AA:17:TYR:O	BA:22:LEU:CD2	0.524
1	Z:70:ASN:N	AA:204:THR:HG1	0.524
1	B:86:LEU:O	C:186:VAL:HG12	0.523
1	X:226:GLU:HB3	Y:140:PRO:CG	0.523
1	X:14:ARG:O	Y:23:PRO:CD	0.523
1	X:15:LEU:N	Y:23:PRO:HD2	0.523
1	Y:89:VAL:CB	Z:187:VAL:HG13	0.523
1	CA:67:ALA:HB2	DA:205:TYR:HE2	0.523
1	DA:15:LEU:HB2	EA:22:LEU:HD11	0.523
1	HA:16:GLY:C	IA:22:LEU:HD23	0.523
1	IA:15:LEU:HD12	JA:22:LEU:HD11	0.523
1	YA:230:PHE:HD1	ZA:43:LEU:HD22	0.523
1	YA:74:THR:O	ZA:199:SER:HA	0.523
1	E:87:LYS:HB3	F:185:LYS:HB3	0.522
1	E:228:THR:HG22	F:139:ASN:CA	0.522
1	G:231:ALA:H	H:43:LEU:HD23	0.522
1	J:229:LEU:O	K:141:VAL:HG11	0.522

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	X:67:ALA:HB3	Y:205:TYR:CD2	0.522
1	AA:89:VAL:HB	BA:187:VAL:CG1	0.522
1	BA:67:ALA:C	CA:206:LYS:H	0.522
1	BA:127:GLY:CA	CA:48:LYS:HE3	0.522
1	NA:89:VAL:HA	OA:185:LYS:CD	0.522
1	UA:13:LYS:CA	VA:22:LEU:HD13	0.522
1	YA:86:LEU:CD2	ZA:188:GLY:HA2	0.522
1	B:87:LYS:H	C:187:VAL:CG1	0.522
1	C:67:ALA:O	D:206:LYS:C	0.521
1	X:89:VAL:HG11	Y:187:VAL:CG1	0.521
1	AA:230:PHE:HZ	BA:141:VAL:CA	0.521
1	EA:218:PHE:HE2	FA:42:TYR:CE2	0.521
1	FA:79:PHE:HB2	GA:194:GLU:O	0.521
1	KA:124:LEU:CD2	LA:45:SER:HB2	0.521
1	XA:228:THR:HG21	YA:140:PRO:CG	0.521
1	YA:230:PHE:CE2	ZA:141:VAL:CG1	0.521
1	C:86:LEU:O	D:186:VAL:O	0.521
1	A:89:VAL:HB	B:187:VAL:CG1	0.520
1	E:87:LYS:C	F:187:VAL:HG13	0.520
1	O:89:VAL:CB	P:187:VAL:HG11	0.520
1	T:228:THR:CB	U:141:VAL:HG13	0.520
1	X:14:ARG:O	Y:23:PRO:HD2	0.520
1	AA:89:VAL:CB	BA:187:VAL:HG11	0.520



Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	BA:87:LYS:HB2	CA:187:VAL:CG2	0.520
1	SA:65:ALA:CA	TA:209:LYS:CD	0.520
1	TA:228:THR:CB	UA:141:VAL:HG13	0.520
1	XA:127:GLY:CA	YA:48:LYS:HE3	0.520
1	XA:228:THR:HG23	YA:140:PRO:HG2	0.520
1	YA:14:ARG:O	ZA:23:PRO:CD	0.520
1	BA:230:PHE:HZ	CA:141:VAL:N	0.520
1	Y:233:GLN:NE2	Z:21:ARG:HH22	0.520
1	A:216:LYS:HB3	B:24:ARG:HH12	0.519
1	G:17:TYR:H	H:22:LEU:CD2	0.519
1	H:124:LEU:CB	I:48:LYS:HZ1	0.519
1	G:228:THR:OG1	H:140:PRO:CG	0.519
1	K:65:ALA:HB3	L:209:LYS:CG	0.519
1	W:12:LEU:C	X:22:LEU:CD1	0.519
1	CA:87:LYS:HB2	DA:187:VAL:CG2	0.519
1	IA:14:ARG:HG3	JA:203:VAL:HG11	0.519
1	WA:230:PHE:CE1	XA:141:VAL:HG11	0.519
1	A:141:VAL:HG11	ZA:230:PHE:CD1	0.519
1	Q:128:GLN:OE1	R:48:LYS:NZ	0.519
1	Y:70:ASN:N	Z:204:THR:OG1	0.519
1	A:188:GLY:HA3	ZA:86:LEU:HB3	0.518
1	F:79:PHE:HB2	G:194:GLU:O	0.518
1	G:231:ALA:HB3	H:41:GLU:HB3	0.518

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	I:89:VAL:H	J:185:LYS:HD3	0.518
1	L:17:TYR:N	M:22:LEU:HD21	0.518
1	S:65:ALA:CA	T:209:LYS:CD	0.518
1	X:228:THR:HG23	Y:140:PRO:HG2	0.518
1	Z:230:PHE:CD1	AA:141:VAL:HB	0.518
1	VA:67:ALA:HB2	WA:207:GLY:O	0.518
1	S:218:PHE:HE2	T:42:TYR:CE2	0.518
1	EA:218:PHE:HZ	FA:44:GLY:N	0.518
1	C:228:THR:HG22	D:139:ASN:CA	0.517
1	T:226:GLU:HB3	U:140:PRO:HG3	0.517
1	U:15:LEU:N	V:203:VAL:CB	0.517
1	U:14:ARG:O	V:203:VAL:HG11	0.517
1	X:67:ALA:O	Y:206:LYS:CA	0.517
1	DA:124:LEU:HB3	EA:48:LYS:HZ3	0.517
1	SA:14:ARG:O	TA:203:VAL:HG11	0.517
1	XA:15:LEU:HD11	YA:203:VAL:HA	0.517
1	A:208:GLU:OE1	ZA:65:ALA:HB1	0.517
1	F:68:GLY:N	G:205:TYR:HE1	0.517
1	R:64:GLN:OE1	S:209:LYS:NZ	0.517
1	IA:90:LEU:CD2	JA:185:LYS:HZ1	0.517
1	A:17:TYR:O	B:22:LEU:CD2	0.517
1	NA:14:ARG:O	OA:22:LEU:N	0.517
1	E:218:PHE:HE2	F:42:TYR:CE2	0.516

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	F:87:LYS:CA	G:187:VAL:HG12	0.516
1	U:13:LYS:CA	V:22:LEU:HD13	0.516
1	T:15:LEU:N	U:203:VAL:CB	0.516
1	W:89:VAL:CA	X:185:LYS:CD	0.516
1	X:233:GLN:CD	Y:21:ARG:NH2	0.516
1	Y:14:ARG:O	Z:23:PRO:CD	0.516
1	Z:124:LEU:HD23	AA:47:GLU:HG3	0.516
1	CA:87:LYS:HB2	DA:187:VAL:HG22	0.516
1	DA:228:THR:HG22	EA:139:ASN:CB	0.516
1	DA:88:SER:C	EA:185:LYS:HD3	0.516
1	UA:15:LEU:N	VA:203:VAL:CB	0.516
1	XA:14:ARG:O	YA:23:PRO:HD2	0.516
1	CA:218:PHE:CD2	DA:42:TYR:HD2	0.516
1	AA:81:ILE:CA	BA:192:LYS:O	0.516
1	C:124:LEU:O	D:48:LYS:CE	0.515
1	H:15:LEU:HA	I:22:LEU:O	0.515
1	EA:13:LYS:O	FA:22:LEU:HB2	0.515
1	HA:124:LEU:CG	IA:45:SER:CB	0.515
1	KA:65:ALA:HB3	LA:209:LYS:CG	0.515
1	OA:14:ARG:CB	PA:203:VAL:HB	0.515
1	OA:89:VAL:CB	PA:187:VAL:HG11	0.515
1	O:216:LYS:NZ	P:24:ARG:NH1	0.515
1	Q:64:GLN:HB3	R:209:LYS:HZ3	0.515

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	AA:73:LYS:CA	BA:200:GLN:O	0.515
1	XA:231:ALA:O	YA:41:GLU:HG3	0.515
1	A:230:PHE:CD2	B:141:VAL:CG1	0.514
1	G:124:LEU:C	H:48:LYS:HZ1	0.514
1	P:14:ARG:N	Q:22:LEU:HD13	0.514
1	Q:89:VAL:C	R:185:LYS:HD3	0.514
1	U:118:ALA:HB3	V:209:LYS:CE	0.514
1	X:230:PHE:HD1	Y:43:LEU:HD22	0.514
1	CA:17:TYR:CB	DA:22:LEU:CD2	0.514
1	EA:228:THR:HG22	FA:139:ASN:CA	0.514
1	MA:90:LEU:CG	NA:185:LYS:HZ3	0.514
1	E:79:PHE:CA	F:194:GLU:O	0.514
1	A:22:LEU:HD11	ZA:12:LEU:O	0.514
1	A:203:VAL:HG11	ZA:14:ARG:CG	0.513
1	S:16:GLY:CA	T:22:LEU:O	0.513
1	V:67:ALA:HB2	W:207:GLY:O	0.513
1	Z:65:ALA:HB1	AA:208:GLU:OE1	0.513
1	Z:66:ALA:HB1	AA:211:LEU:HD11	0.513
1	AA:17:TYR:CZ	BA:24:ARG:CB	0.513
1	HA:17:TYR:N	IA:22:LEU:CD2	0.513
1	QA:89:VAL:C	RA:185:LYS:HD3	0.513
1	HA:64:GLN:CB	IA:209:LYS:HZ1	0.513
1	B:231:ALA:CB	C:41:GLU:HB3	0.512

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	E:13:LYS:O	F:22:LEU:HB2	0.512
1	V:81:ILE:HG22	W:193:VAL:HA	0.512
1	V:89:VAL:CG2	W:187:VAL:CG2	0.512
1	CA:216:LYS:CD	DA:24:ARG:CD	0.512
1	DA:218:PHE:CE2	EA:42:TYR:CE2	0.512
1	GA:230:PHE:CZ	HA:141:VAL:N	0.512
1	VA:228:THR:HG21	WA:141:VAL:H	0.512
1	E:68:GLY:H	F:205:TYR:HE1	0.512
1	A:206:LYS:N	ZA:67:ALA:CB	0.512
1	X:15:LEU:CA	Y:23:PRO:N	0.512
1	U:77:LEU:CD1	V:196:SER:O	0.512
1	A:89:VAL:CB	B:187:VAL:HG11	0.511
1	O:65:ALA:CB	P:208:GLU:CD	0.511
1	X:86:LEU:HD23	Y:188:GLY:H	0.511
1	AA:230:PHE:HE1	BA:141:VAL:HB	0.511
1	HA:15:LEU:HA	IA:22:LEU:O	0.511
1	A:21:ARG:HH12	ZA:233:GLN:NE2	0.511
1	SA:14:ARG:NE	TA:201:SER:OG	0.511
1	C:87:LYS:HB2	D:187:VAL:HG22	0.510
1	H:17:TYR:N	I:22:LEU:CD2	0.510
1	I:124:LEU:CD2	J:45:SER:HB2	0.510
1	X:228:THR:HG21	Y:140:PRO:CG	0.510
1	GA:124:LEU:CG	HA:48:LYS:HE2	0.510

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	XA:233:GLN:CD	YA:21:ARG:NH2	0.510
1	XA:12:LEU:O	YA:22:LEU:CD2	0.510
1	XA:67:ALA:O	YA:206:LYS:CA	0.510
1	Y:128:GLN:CD	Z:48:LYS:NZ	0.510
1	EA:67:ALA:C	FA:207:GLY:N	0.510
1	QA:15:LEU:CD2	RA:204:THR:O	0.510
1	E:231:ALA:HB3	F:41:GLU:HB3	0.509
1	G:230:PHE:CZ	H:141:VAL:N	0.509
1	K:17:TYR:N	L:22:LEU:CD2	0.509
1	O:228:THR:CG2	P:140:PRO:CG	0.509
1	S:14:ARG:O	T:203:VAL:HG11	0.509
1	W:228:THR:HG23	X:140:PRO:CD	0.509
1	X:12:LEU:O	Y:22:LEU:CD2	0.509
1	AA:87:LYS:CB	BA:187:VAL:CG1	0.509
1	AA:13:LYS:N	BA:22:LEU:HD13	0.509
1	BA:66:ALA:HA	CA:211:LEU:HD11	0.509
1	BA:231:ALA:CB	CA:41:GLU:HB3	0.509
1	NA:228:THR:CG2	OA:140:PRO:HG2	0.509
1	RA:64:GLN:CB	SA:209:LYS:CD	0.509
1	VA:81:ILE:HG22	WA:193:VAL:HA	0.509
1	UA:14:ARG:O	VA:203:VAL:HG11	0.509
1	I:67:ALA:N	J:205:TYR:OH	0.509
1	U:65:ALA:O	V:205:TYR:OH	0.509

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	EA:79:PHE:CA	FA:194:GLU:O	0.509
1	A:47:GLU:HG3	ZA:124:LEU:HD23	0.508
1	B:81:ILE:HG22	C:193:VAL:CG2	0.508
1	G:87:LYS:CA	H:187:VAL:HG12	0.508
1	O:14:ARG:CB	P:203:VAL:HB	0.508
1	R:64:GLN:CB	S:209:LYS:CD	0.508
1	T:79:PHE:CB	U:194:GLU:O	0.508
1	X:230:PHE:CD1	Y:141:VAL:HG12	0.508
1	BA:89:VAL:C	CA:185:LYS:HD3	0.508
1	O:216:LYS:HE2	P:24:ARG:NH1	0.508
1	S:14:ARG:NE	T:201:SER:OG	0.508
1	Z:233:GLN:NE2	AA:21:ARG:HH12	0.508
1	J:86:LEU:CG	K:187:VAL:CA	0.507
1	O:14:ARG:CG	P:203:VAL:CB	0.507
1	U:87:LYS:CD	V:186:VAL:HG12	0.507
1	X:226:GLU:HB3	Y:140:PRO:CD	0.507
1	Y:14:ARG:HB3	Z:203:VAL:HG12	0.507
1	BA:89:VAL:HG12	CA:187:VAL:HG11	0.507
1	CA:124:LEU:O	DA:48:LYS:CE	0.507
1	IA:14:ARG:CA	JA:22:LEU:HD13	0.507
1	PA:66:ALA:HA	QA:205:TYR:OH	0.507
1	RA:231:ALA:CB	SA:42:TYR:CB	0.507
1	WA:89:VAL:CA	XA:185:LYS:HD3	0.507

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	Z:124:LEU:O	AA:48:LYS:NZ	0.507
1	CA:86:LEU:O	DA:186:VAL:O	0.507
1	A:87:LYS:HB3	B:185:LYS:C	0.506
1	B:124:LEU:CD2	C:47:GLU:HG3	0.506
1	C:124:LEU:C	D:48:LYS:NZ	0.506
1	G:124:LEU:CG	H:48:LYS:HE2	0.506
1	Q:218:PHE:HE2	R:42:TYR:CD2	0.506
1	BA:17:TYR:CE2	CA:24:ARG:HB3	0.506
1	BA:17:TYR:CZ	CA:24:ARG:CB	0.506
1	IA:15:LEU:CD1	JA:22:LEU:HD12	0.506
1	WA:228:THR:HG21	XA:141:VAL:HG13	0.506
1	YA:87:LYS:C	ZA:187:VAL:HG13	0.506
1	A:21:ARG:HH22	ZA:233:GLN:NE2	0.506
1	XA:69:ILE:CG1	YA:204:THR:H	0.506
1	I:15:LEU:HG	J:203:VAL:CG2	0.505
1	K:124:LEU:CD2	L:45:SER:HB2	0.505
1	Z:86:LEU:HB3	AA:188:GLY:HA3	0.505
1	CA:12:LEU:C	DA:22:LEU:HD22	0.505
1	EA:87:LYS:C	FA:187:VAL:HG13	0.505
1	IA:228:THR:HG23	JA:140:PRO:CD	0.505
1	SA:13:LYS:O	TA:22:LEU:HB2	0.505
1	WA:13:LYS:C	XA:22:LEU:HD13	0.505
1	E:218:PHE:HZ	F:44:GLY:N	0.505



Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	D:68:GLY:N	E:205:TYR:HE1	0.505
1	F:67:ALA:CA	G:207:GLY:H	0.505
1	Z:233:GLN:NE2	AA:21:ARG:HH22	0.505
1	YA:128:GLN:CD	ZA:48:LYS:NZ	0.505
1	V:65:ALA:O	W:205:TYR:OH	0.505
1	A:211:LEU:HD11	ZA:66:ALA:HB1	0.504
1	C:124:LEU:HD23	D:47:GLU:OE2	0.504
1	H:124:LEU:CG	I:45:SER:CB	0.504
1	J:124:LEU:CG	K:48:LYS:HE2	0.504
1	Q:86:LEU:HD23	R:188:GLY:CA	0.504
1	AA:68:GLY:N	BA:205:TYR:CD1	0.504
1	CA:13:LYS:HA	DA:22:LEU:HD22	0.504
1	GA:124:LEU:CB	HA:48:LYS:HE2	0.504
1	PA:231:ALA:HB2	QA:42:TYR:O	0.504
1	QA:65:ALA:HB1	RA:208:GLU:OE1	0.504
1	UA:87:LYS:CD	VA:186:VAL:HG13	0.504
1	WA:228:THR:HG23	XA:140:PRO:CD	0.504
1	WA:87:LYS:NZ	XA:186:VAL:CG1	0.504
1	MA:216:LYS:HZ1	NA:24:ARG:NE	0.504
1	X:230:PHE:C	Y:42:TYR:O	0.504
1	EA:124:LEU:HD22	FA:45:SER:OG	0.504
1	A:87:LYS:CB	B:187:VAL:CG1	0.503
1	B:17:TYR:CE2	C:24:ARG:HB3	0.503

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	B:87:LYS:HB2	C:187:VAL:HG22	0.503
1	J:16:GLY:N	K:22:LEU:CB	0.503
1	AA:14:ARG:CG	BA:203:VAL:HG12	0.503
1	UA:12:LEU:O	VA:22:LEU:CD1	0.503
1	UA:17:TYR:O	VA:22:LEU:HD22	0.503
1	O:216:LYS:HZ1	P:24:ARG:CZ	0.503
1	Y:230:PHE:C	Z:42:TYR:O	0.503
1	QA:128:GLN:OE1	RA:48:LYS:NZ	0.503
1	A:141:VAL:HB	ZA:230:PHE:CD1	0.502
1	A:68:GLY:N	B:205:TYR:CD1	0.502
1	C:64:GLN:HB2	D:25:GLU:OE1	0.502
1	P:231:ALA:HB2	Q:42:TYR:O	0.502
1	Y:228:THR:HG21	Z:140:PRO:N	0.502
1	AA:64:GLN:HB3	BA:25:GLU:OE2	0.502
1	BA:87:LYS:HB2	CA:187:VAL:HG22	0.502
1	OA:230:PHE:CD1	PA:141:VAL:CG1	0.502
1	TA:14:ARG:C	UA:203:VAL:CG1	0.502
1	NA:64:GLN:CB	OA:209:LYS:HZ1	0.502
1	BA:12:LEU:O	CA:22:LEU:CG	0.502
1	C:13:LYS:HA	D:22:LEU:HD22	0.501
1	V:230:PHE:HA	W:43:LEU:HD23	0.501
1	CA:64:GLN:HB2	DA:25:GLU:OE1	0.501
1	CA:124:LEU:HD23	DA:47:GLU:OE2	0.501

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	JA:124:LEU:CG	KA:48:LYS:HE2	0.501
1	JA:228:THR:CG2	KA:140:PRO:HG3	0.501
1	TA:79:PHE:CB	UA:194:GLU:O	0.501
1	TA:15:LEU:N	UA:203:VAL:CB	0.501
1	UA:77:LEU:CD1	VA:196:SER:O	0.501
1	Q:87:LYS:HB2	R:187:VAL:CA	0.500
1	U:12:LEU:O	V:22:LEU:CD1	0.500
1	V:233:GLN:CD	W:21:ARG:NH2	0.500
1	V:87:LYS:HA	W:186:VAL:HG12	0.500
1	V:73:LYS:HZ3	W:201:SER:HB3	0.500
1	EA:228:THR:HG22	FA:139:ASN:HB2	0.500
1	CA:86:LEU:H	DA:188:GLY:N	0.500
1	A:14:ARG:CG	B:203:VAL:HG12	0.499
1	A:17:TYR:CZ	B:24:ARG:CB	0.499
1	C:76:ASN:O	D:197:VAL:HA	0.499
1	E:218:PHE:CZ	F:44:GLY:N	0.499
1	G:124:LEU:CB	H:48:LYS:HE2	0.499
1	I:231:ALA:HB3	J:41:GLU:HB3	0.499
1	M:216:LYS:HZ3	N:24:ARG:HD3	0.499
1	V:87:LYS:CE	W:186:VAL:HG11	0.499
1	Z:14:ARG:CG	AA:203:VAL:HG11	0.499
1	CA:228:THR:HG22	DA:139:ASN:CA	0.499
1	EA:124:LEU:HB3	FA:47:GLU:OE2	0.499

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	FA:124:LEU:CA	GA:48:LYS:HZ1	0.499
1	JA:65:ALA:HB3	KA:208:GLU:OE2	0.499
1	LA:216:LYS:NZ	MA:24:ARG:HD2	0.499
1	UA:89:VAL:C	VA:185:LYS:HD2	0.499
1	XA:230:PHE:HD1	YA:43:LEU:HD22	0.499
1	C:86:LEU:H	D:188:GLY:N	0.499
1	A:81:ILE:CA	B:192:LYS:O	0.499
1	Z:12:LEU:O	AA:22:LEU:HD11	0.499
1	IA:66:ALA:C	JA:205:TYR:OH	0.499
1	A:191:LEU:CD1	ZA:83:ILE:CD	0.498
1	B:66:ALA:HA	C:211:LEU:HD11	0.498
1	B:124:LEU:CD2	C:47:GLU:CG	0.498
1	D:228:THR:HG22	E:139:ASN:CB	0.498
1	U:17:TYR:O	V:22:LEU:HD22	0.498
1	V:226:GLU:HB3	W:140:PRO:CG	0.498
1	BA:216:LYS:CB	CA:24:ARG:NH1	0.498
1	BA:86:LEU:CA	CA:187:VAL:HA	0.498
1	KA:17:TYR:N	LA:22:LEU:CD2	0.498
1	VA:87:LYS:CB	WA:186:VAL:CB	0.498
1	D:218:PHE:CZ	E:43:LEU:HA	0.497
1	I:16:GLY:N	J:22:LEU:CB	0.497
1	S:13:LYS:O	T:22:LEU:HB2	0.497
1	T:124:LEU:HD21	U:45:SER:CA	0.497

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	Y:67:ALA:O	Z:206:LYS:HB3	0.497
1	CA:76:ASN:O	DA:197:VAL:HA	0.497
1	FA:124:LEU:HD11	GA:45:SER:N	0.497
1	QA:89:VAL:CG2	RA:187:VAL:CG1	0.497
1	VA:12:LEU:C	WA:22:LEU:HD13	0.497
1	VA:87:LYS:CE	WA:186:VAL:HG11	0.497
1	XA:15:LEU:N	YA:23:PRO:HD2	0.497
1	YA:228:THR:HG21	ZA:140:PRO:N	0.497
1	YA:67:ALA:O	ZA:206:LYS:HB3	0.497
1	F:231:ALA:CB	G:41:GLU:HB3	0.496
1	I:86:LEU:CD1	J:187:VAL:C	0.496
1	J:64:GLN:C	K:209:LYS:CE	0.496
1	Q:228:THR:CG2	R:140:PRO:HG2	0.496
1	R:89:VAL:HG11	S:187:VAL:HG11	0.496
1	EA:15:LEU:CD1	FA:22:LEU:HD11	0.496
1	FA:231:ALA:CB	GA:41:GLU:HB3	0.496
1	HA:64:GLN:CB	IA:209:LYS:NZ	0.496
1	IA:228:THR:CG2	JA:140:PRO:HG3	0.496
1	QA:218:PHE:HE2	RA:42:TYR:CD2	0.496
1	RA:64:GLN:HB3	SA:209:LYS:CD	0.496
1	RA:14:ARG:HE	SA:201:SER:HB2	0.496
1	XA:226:GLU:HB3	YA:140:PRO:CD	0.496
1	I:66:ALA:C	J:205:TYR:OH	0.496

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	B:83:ILE:CD	C:191:LEU:CD1	0.495
1	A:87:LYS:CA	B:187:VAL:HG13	0.495
1	B:124:LEU:O	C:48:LYS:CE	0.495
1	D:124:LEU:HD11	E:45:SER:N	0.495
1	D:218:PHE:CE2	E:42:TYR:CE2	0.495
1	W:13:LYS:C	X:22:LEU:HD13	0.495
1	W:228:THR:CG2	X:141:VAL:HG22	0.495
1	W:67:ALA:O	X:206:LYS:C	0.495
1	X:216:LYS:CG	Y:24:ARG:HH11	0.495
1	EA:218:PHE:CZ	FA:44:GLY:N	0.495
1	GA:68:GLY:O	HA:205:TYR:CD1	0.495
1	VA:226:GLU:HB3	WA:140:PRO:CG	0.495
1	VA:87:LYS:N	WA:187:VAL:HA	0.495
1	A:209:LYS:H	ZA:65:ALA:CB	0.495
1	EA:68:GLY:H	FA:205:TYR:HE1	0.495
1	OA:216:LYS:HZ1	PA:24:ARG:CZ	0.495
1	WA:79:PHE:CG	XA:194:GLU:O	0.495
1	A:186:VAL:HG12	ZA:86:LEU:O	0.494
1	B:13:LYS:HA	C:22:LEU:HD22	0.494
1	M:216:LYS:HZ3	N:24:ARG:CD	0.494
1	X:67:ALA:O	Y:206:LYS:CB	0.494
1	KA:67:ALA:HA	LA:207:GLY:HA3	0.494
1	OA:228:THR:CG2	PA:140:PRO:CG	0.494

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	RA:89:VAL:HG11	SA:187:VAL:HG11	0.494
1	XA:16:GLY:HA2	YA:22:LEU:HB3	0.494
1	Y:216:LYS:CB	Z:24:ARG:NH1	0.494
1	A:87:LYS:H	B:187:VAL:HG12	0.493
1	D:87:LYS:CA	E:187:VAL:HG12	0.493
1	E:231:ALA:O	F:41:GLU:HG2	0.493
1	F:124:LEU:HG	G:48:LYS:HE2	0.493
1	L:216:LYS:NZ	M:24:ARG:HD2	0.493
1	V:12:LEU:C	W:22:LEU:HD13	0.493
1	W:89:VAL:CA	X:185:LYS:HD3	0.493
1	Z:230:PHE:CG	AA:141:VAL:CG1	0.493
1	E:67:ALA:C	F:207:GLY:N	0.493
1	RA:64:GLN:CG	SA:209:LYS:NZ	0.493
1	B:12:LEU:O	C:22:LEU:CG	0.493
1	D:231:ALA:HB3	E:41:GLU:HB3	0.492
1	J:15:LEU:HD12	K:22:LEU:HD11	0.492
1	M:14:ARG:CG	N:203:VAL:CG1	0.492
1	Q:231:ALA:CB	R:42:TYR:HB3	0.492
1	V:87:LYS:N	W:187:VAL:HA	0.492
1	X:13:LYS:N	Y:22:LEU:HD13	0.492
1	AA:218:PHE:CZ	BA:43:LEU:HA	0.492
1	BA:228:THR:HG22	CA:139:ASN:CB	0.492
1	FA:124:LEU:HG	GA:48:LYS:HE2	0.492

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	IA:15:LEU:HD12	JA:22:LEU:HD12	0.492
1	PA:124:LEU:HD23	QA:45:SER:HB3	0.492
1	VA:231:ALA:O	WA:41:GLU:HG3	0.492
1	I:65:ALA:N	J:209:LYS:HZ3	0.492
1	DA:87:LYS:H	EA:187:VAL:CG1	0.492
1	OA:64:GLN:CB	PA:209:LYS:HZ1	0.492
1	A:87:LYS:C	B:187:VAL:HG12	0.491
1	E:67:ALA:HB1	F:207:GLY:H	0.491
1	I:64:GLN:C	J:209:LYS:HZ3	0.491
1	O:89:VAL:CG2	P:187:VAL:HG11	0.491
1	Y:15:LEU:HD11	Z:203:VAL:CA	0.491
1	Z:65:ALA:CB	AA:209:LYS:H	0.491
1	DA:218:PHE:CZ	EA:43:LEU:HA	0.491
1	EA:231:ALA:O	FA:41:GLU:HG2	0.491
1	GA:124:LEU:CA	HA:48:LYS:HZ1	0.491
1	JA:15:LEU:HD12	KA:22:LEU:HD11	0.491
1	IA:87:LYS:N	JA:187:VAL:HG12	0.491
1	OA:89:VAL:CG2	PA:187:VAL:HG11	0.491
1	PA:14:ARG:N	QA:22:LEU:HD13	0.491
1	PA:14:ARG:HE	QA:201:SER:HB2	0.491
1	SA:218:PHE:HE2	TA:42:TYR:CE2	0.491
1	Y:89:VAL:N	Z:185:LYS:CB	0.491
1	IA:67:ALA:N	JA:205:TYR:OH	0.491



Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	A:218:PHE:CZ	B:43:LEU:HA	0.490
1	E:228:THR:HG22	F:139:ASN:HB2	0.490
1	E:89:VAL:H	F:185:LYS:HB3	0.490
1	E:68:GLY:N	F:205:TYR:CD1	0.490
1	K:86:LEU:HG	L:187:VAL:CA	0.490
1	P:64:GLN:HB2	Q:209:LYS:HE2	0.490
1	R:65:ALA:CA	S:209:LYS:CD	0.490
1	W:14:ARG:O	X:23:PRO:CD	0.490
1	EA:89:VAL:H	FA:185:LYS:HB3	0.490
1	IA:231:ALA:HB3	JA:41:GLU:HB3	0.490
1	JA:64:GLN:C	KA:209:LYS:CE	0.490
1	MA:14:ARG:C	NA:22:LEU:HA	0.490
1	NA:65:ALA:HB3	OA:208:GLU:CD	0.490
1	RA:14:ARG:HG2	SA:203:VAL:HG12	0.490
1	VA:230:PHE:HA	WA:43:LEU:HD23	0.490
1	VA:89:VAL:CA	WA:187:VAL:HG13	0.490
1	A:209:LYS:N	ZA:65:ALA:CB	0.490
1	RA:64:GLN:HB3	SA:209:LYS:HZ3	0.490
1	A:203:VAL:HG11	ZA:14:ARG:HG3	0.489
1	B:15:LEU:CD1	C:22:LEU:HD12	0.489
1	F:124:LEU:HD11	G:45:SER:N	0.489
1	V:14:ARG:CG	W:203:VAL:HG11	0.489
1	V:228:THR:HG21	W:141:VAL:H	0.489

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	AA:118:ALA:HB3	BA:209:LYS:HE2	0.489
1	BA:13:LYS:HA	CA:22:LEU:HD22	0.489
1	AA:87:LYS:H	BA:187:VAL:HG12	0.489
1	BA:233:GLN:HE22	CA:39:THR:HG22	0.489
1	BA:124:LEU:CD2	CA:47:GLU:CG	0.489
1	RA:65:ALA:CA	SA:209:LYS:CD	0.489
1	DA:16:GLY:O	EA:24:ARG:CD	0.489
1	I:87:LYS:N	J:187:VAL:HG12	0.488
1	L:233:GLN:OE1	M:39:THR:CG2	0.488
1	R:14:ARG:HE	S:201:SER:HB2	0.488
1	U:89:VAL:C	V:185:LYS:HD2	0.488
1	Y:81:ILE:CG2	Z:193:VAL:HG22	0.488
1	Z:226:GLU:O	AA:140:PRO:HG3	0.488
1	BA:15:LEU:CD1	CA:22:LEU:HD12	0.488
1	BA:230:PHE:CZ	CA:141:VAL:N	0.488
1	DA:231:ALA:HB3	EA:41:GLU:HB3	0.488
1	JA:89:VAL:N	KA:185:LYS:HD3	0.488
1	WA:14:ARG:O	XA:23:PRO:CD	0.488
1	WA:228:THR:CG2	XA:141:VAL:HG22	0.488
1	A:230:PHE:HE1	B:141:VAL:C	0.488
1	U:86:LEU:H	V:188:GLY:H	0.488
1	YA:67:ALA:O	ZA:206:LYS:N	0.488
1	C:16:GLY:O	D:24:ARG:CD	0.488

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	V:231:ALA:CB	W:42:TYR:O	0.488
1	BA:124:LEU:O	CA:48:LYS:CE	0.488
1	XA:82:GLY:O	YA:191:LEU:CA	0.488
1	A:43:LEU:HD23	ZA:231:ALA:N	0.487
1	A:64:GLN:HB3	B:25:GLU:OE2	0.487
1	A:118:ALA:HB3	B:209:LYS:HE2	0.487
1	C:17:TYR:CE2	D:24:ARG:HB3	0.487
1	J:64:GLN:C	K:209:LYS:HE2	0.487
1	Q:87:LYS:HB3	R:186:VAL:HB	0.487
1	V:77:LEU:HG	W:196:SER:O	0.487
1	Y:15:LEU:CB	Z:22:LEU:HD12	0.487
1	Y:15:LEU:HB2	Z:22:LEU:HD12	0.487
1	Y:87:LYS:C	Z:187:VAL:HG13	0.487
1	HA:87:LYS:HB2	IA:187:VAL:HG13	0.487
1	GA:228:THR:OG1	HA:140:PRO:CG	0.487
1	IA:233:GLN:CD	JA:39:THR:HG21	0.487
1	VA:233:GLN:CD	WA:21:ARG:NH2	0.487
1	YA:15:LEU:HB2	ZA:22:LEU:HD12	0.487
1	YA:81:ILE:CG2	ZA:193:VAL:HG22	0.487
1	X:87:LYS:N	Y:187:VAL:CA	0.487
1	TA:14:ARG:NE	UA:201:SER:OG	0.487
1	A:13:LYS:HA	B:22:LEU:HD22	0.486
1	A:87:LYS:CB	B:185:LYS:C	0.486

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	B:17:TYR:OH	C:24:ARG:HB2	0.486
1	W:228:THR:HG21	X:141:VAL:HG13	0.486
1	Z:65:ALA:CB	AA:209:LYS:N	0.486
1	AA:233:GLN:CD	BA:39:THR:CG2	0.486
1	AA:226:GLU:O	BA:140:PRO:HG3	0.486
1	CA:17:TYR:CE2	DA:24:ARG:HB3	0.486
1	CA:87:LYS:H	DA:187:VAL:HA	0.486
1	LA:233:GLN:OE1	MA:39:THR:CG2	0.486
1	QA:87:LYS:HB3	RA:186:VAL:HB	0.486
1	VA:87:LYS:HA	WA:186:VAL:HG12	0.486
1	BA:68:GLY:H	CA:205:TYR:HE1	0.486
1	J:15:LEU:CD1	K:203:VAL:CG2	0.485
1	M:67:ALA:HB3	N:205:TYR:CD1	0.485
1	M:89:VAL:CA	N:185:LYS:HD3	0.485
1	AA:89:VAL:HG12	BA:187:VAL:CG1	0.485
1	BA:64:GLN:HB3	CA:25:GLU:OE2	0.485
1	AA:87:LYS:CA	BA:187:VAL:HG13	0.485
1	EA:68:GLY:N	FA:205:TYR:CD1	0.485
1	OA:65:ALA:CB	PA:208:GLU:CD	0.485
1	QA:90:LEU:HB3	RA:185:LYS:HE2	0.485
1	YA:73:LYS:HA	ZA:200:GLN:O	0.485
1	MA:90:LEU:CG	NA:185:LYS:HZ1	0.485
1	XA:16:GLY:O	YA:24:ARG:HD3	0.485

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	A:140:PRO:HG3	ZA:226:GLU:O	0.484
1	B:127:GLY:CA	C:48:LYS:HE3	0.484
1	D:87:LYS:HB2	E:187:VAL:CG2	0.484
1	E:124:LEU:HB3	F:47:GLU:OE2	0.484
1	J:89:VAL:N	K:185:LYS:HD3	0.484
1	Q:66:ALA:HB1	R:205:TYR:HE1	0.484
1	X:16:GLY:HA2	Y:22:LEU:HB3	0.484
1	Y:231:ALA:C	Z:41:GLU:CB	0.484
1	Z:83:ILE:CD	AA:191:LEU:CD1	0.484
1	Z:230:PHE:CD1	AA:141:VAL:CB	0.484
1	IA:124:LEU:HB3	JA:48:LYS:HZ1	0.484
1	JA:15:LEU:CD1	KA:203:VAL:CG2	0.484
1	K:67:ALA:HB3	L:207:GLY:H	0.484
1	FA:89:VAL:H	GA:185:LYS:CD	0.484
1	GA:90:LEU:H	HA:185:LYS:NZ	0.484
1	A:74:THR:O	B:199:SER:CA	0.484
1	B:17:TYR:CZ	C:24:ARG:CB	0.483
1	W:87:LYS:NZ	X:186:VAL:CG1	0.483
1	Y:87:LYS:HA	Z:186:VAL:HG12	0.483
1	CA:231:ALA:HB3	DA:41:GLU:CB	0.483
1	GA:124:LEU:HD23	HA:47:GLU:CD	0.483
1	JA:64:GLN:C	KA:209:LYS:HE2	0.483
1	XA:216:LYS:CG	YA:24:ARG:HH11	0.483

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	P:230:PHE:HE1	Q:141:VAL:HG12	0.483
1	Y:67:ALA:O	Z:206:LYS:N	0.483
1	VA:231:ALA:CB	WA:42:TYR:O	0.483
1	N:67:ALA:HB3	O:205:TYR:CZ	0.482
1	Q:15:LEU:CB	R:203:VAL:CG2	0.482
1	AA:64:GLN:HB2	BA:25:GLU:OE1	0.482
1	MA:14:ARG:CG	NA:203:VAL:CG1	0.482
1	XA:216:LYS:HD2	YA:24:ARG:HB2	0.482
1	R:64:GLN:HB3	S:209:LYS:HZ3	0.482
1	C:124:LEU:HB3	D:47:GLU:OE2	0.481
1	E:15:LEU:CD1	F:22:LEU:HD11	0.481
1	PA:64:GLN:HB2	QA:209:LYS:HE2	0.481
1	QA:67:ALA:HB3	RA:206:LYS:H	0.481
1	T:14:ARG:NE	U:201:SER:OG	0.481
1	PA:216:LYS:NZ	QA:24:ARG:NH1	0.481
1	A:64:GLN:HB2	B:25:GLU:OE1	0.480
1	G:14:ARG:N	H:22:LEU:HD13	0.480
1	Q:65:ALA:HB1	R:208:GLU:OE1	0.480
1	Q:64:GLN:O	R:209:LYS:HD2	0.480
1	R:124:LEU:HD21	S:45:SER:HB2	0.480
1	Z:14:ARG:HG3	AA:203:VAL:HG11	0.480
1	Z:67:ALA:CB	AA:206:LYS:N	0.480
1	IA:64:GLN:C	JA:209:LYS:NZ	0.480

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	JA:124:LEU:CD2	KA:45:SER:HB2	0.480
1	JA:15:LEU:CG	KA:203:VAL:HG21	0.480
1	VA:77:LEU:HG	WA:196:SER:O	0.480
1	B:74:THR:O	C:199:SER:CA	0.480
1	E:76:ASN:OD1	F:198:SER:OG	0.480
1	E:89:VAL:H	F:185:LYS:CD	0.479
1	H:64:GLN:CB	I:209:LYS:NZ	0.479
1	P:231:ALA:CB	Q:42:TYR:N	0.479
1	Q:66:ALA:CB	R:205:TYR:HE1	0.479
1	NA:67:ALA:HB3	OA:205:TYR:CZ	0.479
1	WA:87:LYS:HD2	XA:186:VAL:HG13	0.479
1	M:216:LYS:HZ1	N:24:ARG:NE	0.479
1	QA:216:LYS:NZ	RA:24:ARG:HD2	0.479
1	RA:216:LYS:NZ	SA:24:ARG:HH11	0.479
1	A:218:PHE:CE2	B:42:TYR:HE2	0.478
1	A:226:GLU:O	B:140:PRO:HG3	0.478
1	D:87:LYS:C	E:187:VAL:HG12	0.478
1	G:124:LEU:CD2	H:45:SER:OG	0.478
1	R:64:GLN:HB3	S:209:LYS:CD	0.478
1	X:84:ASN:HB2	Y:190:LYS:HB3	0.478
1	Z:73:LYS:CA	AA:200:GLN:O	0.478
1	BA:231:ALA:HB3	CA:41:GLU:CB	0.478
1	GA:14:ARG:N	HA:22:LEU:HD13	0.478

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	IA:17:TYR:N	JA:22:LEU:HD23	0.478
1	QA:87:LYS:HB2	RA:187:VAL:CA	0.478
1	XA:84:ASN:HB2	YA:190:LYS:HB3	0.478
1	XA:89:VAL:HG11	YA:187:VAL:CG1	0.478
1	XA:13:LYS:N	YA:22:LEU:HD13	0.478
1	Z:15:LEU:N	AA:22:LEU:CD1	0.478
1	GA:233:GLN:OE1	HA:39:THR:HG22	0.478
1	B:64:GLN:HB3	C:25:GLU:OE2	0.477
1	A:230:PHE:HZ	B:141:VAL:CA	0.477
1	P:14:ARG:HE	Q:201:SER:HB2	0.477
1	U:89:VAL:CG2	V:187:VAL:CG2	0.477
1	U:87:LYS:CB	V:186:VAL:CG1	0.477
1	X:124:LEU:HG	Y:45:SER:H	0.477
1	Z:86:LEU:O	AA:186:VAL:HG12	0.477
1	AA:218:PHE:CE2	BA:42:TYR:HE2	0.477
1	CA:124:LEU:HB3	DA:47:GLU:OE2	0.477
1	DA:65:ALA:CB	EA:208:GLU:CD	0.477
1	GA:124:LEU:CD2	HA:45:SER:OG	0.477
1	OA:216:LYS:CE	PA:24:ARG:CD	0.477
1	QA:15:LEU:CB	RA:203:VAL:HG21	0.477
1	TA:14:ARG:O	UA:23:PRO:HD2	0.477
1	YA:66:ALA:CA	ZA:209:LYS:HB2	0.477
1	A:89:VAL:N	B:185:LYS:CD	0.477



Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	J:231:ALA:HB3	K:42:TYR:O	0.477
1	V:75:GLU:CB	W:198:SER:O	0.477
1	E:69:ILE:CD	F:204:THR:CA	0.476
1	G:68:GLY:O	H:205:TYR:CD1	0.476
1	I:17:TYR:N	J:22:LEU:HD23	0.476
1	T:79:PHE:HB2	U:194:GLU:O	0.476
1	X:216:LYS:HD2	Y:24:ARG:HB2	0.476
1	DA:87:LYS:C	EA:187:VAL:HG12	0.476
1	KA:90:LEU:HD23	LA:185:LYS:HZ2	0.476
1	NA:13:LYS:C	OA:22:LEU:HD13	0.476
1	PA:231:ALA:CB	QA:42:TYR:N	0.476
1	TA:79:PHE:HB2	UA:194:GLU:O	0.476
1	XA:89:VAL:HG12	YA:187:VAL:HG12	0.476
1	WA:228:THR:CG2	XA:140:PRO:HD2	0.476
1	UA:65:ALA:O	VA:205:TYR:OH	0.476
1	I:17:TYR:N	J:22:LEU:CD2	0.475
1	J:17:TYR:N	K:22:LEU:CD2	0.475
1	Q:15:LEU:CB	R:203:VAL:HG21	0.475
1	W:65:ALA:HB1	X:208:GLU:H	0.475
1	W:230:PHE:CE1	X:141:VAL:HG11	0.475
1	X:65:ALA:HB1	Y:208:GLU:H	0.475
1	IA:15:LEU:HG	JA:203:VAL:CG2	0.475
1	JA:124:LEU:HA	KA:48:LYS:CE	0.475

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	QA:66:ALA:HB1	RA:205:TYR:HE1	0.475
1	UA:89:VAL:CG2	VA:187:VAL:CG2	0.475
1	WA:15:LEU:HA	XA:23:PRO:N	0.475
1	WA:87:LYS:H	XA:187:VAL:HA	0.475
1	YA:15:LEU:HD11	ZA:203:VAL:CA	0.475
1	XA:67:ALA:O	YA:206:LYS:CB	0.475
1	OA:216:LYS:HE2	PA:24:ARG:NH1	0.475
1	U:84:ASN:O	V:188:GLY:O	0.475
1	EA:76:ASN:OD1	FA:198:SER:OG	0.475
1	B:77:LEU:HD12	C:197:VAL:HB	0.474
1	I:64:GLN:C	J:209:LYS:NZ	0.474
1	Y:73:LYS:HA	Z:200:GLN:O	0.474
1	AA:13:LYS:HA	BA:22:LEU:HD22	0.474
1	DA:87:LYS:HE3	EA:186:VAL:HG22	0.474
1	GA:13:LYS:C	HA:22:LEU:HB2	0.474
1	GA:65:ALA:HB2	HA:208:GLU:OE2	0.474
1	GA:87:LYS:HB3	HA:185:LYS:HB3	0.474
1	WA:228:THR:CB	XA:141:VAL:CG1	0.474
1	UA:86:LEU:H	VA:188:GLY:H	0.474
1	V:231:ALA:CA	W:42:TYR:O	0.474
1	J:65:ALA:HB3	K:208:GLU:OE2	0.473
1	DA:17:TYR:CB	EA:22:LEU:HD21	0.473
1	FA:81:ILE:HG22	GA:193:VAL:HG22	0.473

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	FA:229:LEU:O	GA:141:VAL:HG21	0.473
1	IA:17:TYR:N	JA:22:LEU:CD2	0.473
1	XA:124:LEU:HG	YA:45:SER:H	0.473
1	X:233:GLN:NE2	Y:21:ARG:HH22	0.473
1	B:73:LYS:CA	C:200:GLN:O	0.473
1	D:16:GLY:O	E:24:ARG:CD	0.473
1	F:229:LEU:O	G:141:VAL:HG21	0.472
1	J:124:LEU:HA	K:48:LYS:CE	0.472
1	R:218:PHE:HZ	S:42:TYR:CD2	0.472
1	W:15:LEU:HA	X:23:PRO:N	0.472
1	Z:118:ALA:N	AA:209:LYS:HE2	0.472
1	BA:17:TYR:OH	CA:24:ARG:HB2	0.472
1	CA:230:PHE:HA	DA:43:LEU:CD2	0.472
1	QA:218:PHE:CZ	RA:42:TYR:CD2	0.472
1	UA:87:LYS:CE	VA:186:VAL:HG11	0.472
1	HA:124:LEU:CB	IA:48:LYS:HZ1	0.472
1	YA:86:LEU:CB	ZA:188:GLY:N	0.472
1	UA:84:ASN:O	VA:188:GLY:O	0.472
1	A:209:LYS:HE2	ZA:118:ALA:N	0.471
1	J:231:ALA:HB3	K:41:GLU:HB3	0.471
1	P:124:LEU:HD23	Q:45:SER:HB3	0.471
1	R:16:GLY:N	S:22:LEU:C	0.471
1	DA:87:LYS:HB2	EA:187:VAL:CG2	0.471

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	DA:124:LEU:HD11	EA:45:SER:N	0.471
1	HA:86:LEU:HG	IA:187:VAL:HA	0.471
1	QA:64:GLN:CD	RA:209:LYS:HZ1	0.471
1	WA:89:VAL:CG2	XA:187:VAL:CG2	0.471
1	XA:86:LEU:HD22	YA:188:GLY:CA	0.471
1	V:231:ALA:O	W:41:GLU:HG3	0.471
1	B:14:ARG:N	C:22:LEU:HB2	0.470
1	C:81:ILE:HG22	D:193:VAL:CG2	0.470
1	B:76:ASN:O	C:197:VAL:HA	0.470
1	E:86:LEU:C	F:187:VAL:CA	0.470
1	W:87:LYS:HD2	X:186:VAL:HG22	0.470
1	W:228:THR:CG2	X:140:PRO:CG	0.470
1	Y:230:PHE:CA	Z:43:LEU:HD23	0.470
1	Z:216:LYS:HB3	AA:24:ARG:HH12	0.470
1	BA:76:ASN:O	CA:197:VAL:HA	0.470
1	DA:218:PHE:CZ	EA:43:LEU:CA	0.470
1	HA:124:LEU:CB	IA:48:LYS:HE2	0.470
1	MA:90:LEU:CD2	NA:185:LYS:HZ1	0.470
1	QA:15:LEU:CB	RA:203:VAL:CG2	0.470
1	A:141:VAL:CA	ZA:230:PHE:HZ	0.470
1	Y:12:LEU:O	Z:22:LEU:CG	0.470
1	CA:16:GLY:O	DA:24:ARG:CD	0.470
1	CA:87:LYS:CG	DA:185:LYS:O	0.470

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	A:14:ARG:CG	B:203:VAL:HG11	0.469
1	D:65:ALA:CB	E:208:GLU:CD	0.469
1	H:124:LEU:CB	I:48:LYS:HE2	0.469
1	N:228:THR:CG2	O:140:PRO:HD2	0.469
1	R:14:ARG:HG2	S:203:VAL:HG12	0.469
1	U:87:LYS:CE	V:186:VAL:HG11	0.469
1	EA:66:ALA:HA	FA:211:LEU:HD11	0.469
1	TA:89:VAL:HG12	UA:187:VAL:HG12	0.469
1	YA:87:LYS:HA	ZA:186:VAL:HG12	0.469
1	FA:67:ALA:CA	GA:207:GLY:H	0.469
1	IA:65:ALA:N	JA:209:LYS:HZ3	0.469
1	A:65:ALA:CB	B:209:LYS:N	0.468
1	C:231:ALA:HB3	D:41:GLU:HB3	0.468
1	C:86:LEU:O	D:186:VAL:HG12	0.468
1	E:66:ALA:HA	F:211:LEU:HD11	0.468
1	I:233:GLN:CD	J:39:THR:CG2	0.468
1	N:13:LYS:C	O:22:LEU:HD13	0.468
1	T:64:GLN:OE1	U:25:GLU:CD	0.468
1	W:87:LYS:HE3	X:186:VAL:CG1	0.468
1	AA:65:ALA:CB	BA:209:LYS:N	0.468
1	BA:77:LEU:HD12	CA:197:VAL:HB	0.468
1	DA:216:LYS:CD	EA:24:ARG:CD	0.468
1	IA:87:LYS:HB2	JA:187:VAL:HG12	0.468

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	JA:231:ALA:HB3	KA:41:GLU:HB3	0.468
1	JA:17:TYR:N	KA:22:LEU:CD2	0.468
1	VA:83:ILE:CD	WA:191:LEU:HB2	0.468
1	G:228:THR:OG1	H:140:PRO:HG2	0.468
1	C:231:ALA:HB3	D:41:GLU:CB	0.467
1	G:89:VAL:C	H:185:LYS:CD	0.467
1	U:87:LYS:HD3	V:186:VAL:CG1	0.467
1	Z:230:PHE:CD1	AA:141:VAL:HG11	0.467
1	BA:89:VAL:CA	CA:185:LYS:CG	0.467
1	WA:65:ALA:HB1	XA:208:GLU:H	0.467
1	XA:14:ARG:HB3	YA:203:VAL:HG12	0.467
1	XA:77:LEU:HD12	YA:196:SER:O	0.467
1	B:230:PHE:HZ	C:141:VAL:N	0.467
1	I:90:LEU:H	J:185:LYS:HZ3	0.467
1	BA:76:ASN:CG	CA:198:SER:OG	0.467
1	BA:111:PHE:CZ	CA:202:THR:O	0.467
1	TA:65:ALA:O	UA:205:TYR:OH	0.467
1	A:228:THR:CG2	B:139:ASN:C	0.466
1	A:228:THR:HG21	B:140:PRO:C	0.466
1	C:89:VAL:N	D:185:LYS:HB3	0.466
1	D:17:TYR:CB	E:22:LEU:HD21	0.466
1	G:13:LYS:C	H:22:LEU:HB2	0.466
1	T:14:ARG:O	U:23:PRO:HD2	0.466

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	AA:14:ARG:CB	BA:203:VAL:CG1	0.466
1	QA:231:ALA:HB2	RA:42:TYR:CA	0.466
1	RA:124:LEU:HD21	SA:45:SER:HB2	0.466
1	TA:64:GLN:OE1	UA:25:GLU:CD	0.466
1	XA:124:LEU:HG	YA:45:SER:N	0.466
1	Y:86:LEU:CB	Z:188:GLY:N	0.466
1	AA:70:ASN:N	BA:204:THR:OG1	0.466
1	PA:14:ARG:O	QA:22:LEU:CB	0.466
1	PA:65:ALA:HB2	QA:208:GLU:OE2	0.466
1	TA:64:GLN:OE1	UA:25:GLU:OE2	0.466
1	B:231:ALA:HB3	C:41:GLU:CB	0.465
1	K:67:ALA:HA	L:207:GLY:HA3	0.465
1	S:89:VAL:C	T:185:LYS:CD	0.465
1	AA:79:PHE:HB3	BA:195:ALA:CA	0.465
1	Z:81:ILE:HG21	AA:193:VAL:HG22	0.465
1	BA:65:ALA:HB3	CA:209:LYS:N	0.465
1	CA:86:LEU:O	DA:186:VAL:HG12	0.465
1	IA:124:LEU:CD2	JA:45:SER:HB2	0.465
1	QA:15:LEU:HA	RA:203:VAL:HG21	0.465
1	T:230:PHE:HE1	U:141:VAL:CB	0.465
1	XA:233:GLN:NE2	YA:21:ARG:HH22	0.465
1	A:23:PRO:CD	ZA:14:ARG:O	0.464
1	F:66:ALA:CA	G:209:LYS:HB2	0.464

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	Q:67:ALA:HB3	R:206:LYS:H	0.464
1	Z:231:ALA:N	AA:43:LEU:HD23	0.464
1	CA:231:ALA:HB3	DA:41:GLU:HB3	0.464
1	NA:228:THR:CG2	OA:140:PRO:HD2	0.464
1	UA:15:LEU:HD11	VA:203:VAL:HA	0.464
1	XA:65:ALA:HB1	YA:208:GLU:H	0.464
1	XA:15:LEU:H	YA:22:LEU:HD12	0.464
1	I:231:ALA:HB3	J:42:TYR:O	0.464
1	VA:65:ALA:O	WA:205:TYR:OH	0.464
1	A:65:ALA:HB3	B:208:GLU:CG	0.463
1	C:89:VAL:CA	D:185:LYS:HB2	0.463
1	G:124:LEU:HD11	H:45:SER:CA	0.463
1	H:14:ARG:HG3	I:203:VAL:HG11	0.463
1	Q:231:ALA:HB2	R:42:TYR:CA	0.463
1	R:64:GLN:CB	S:209:LYS:HD2	0.463
1	X:77:LEU:HD12	Y:196:SER:O	0.463
1	AA:14:ARG:CG	BA:203:VAL:HG11	0.463
1	AA:228:THR:HG21	BA:140:PRO:C	0.463
1	RA:14:ARG:C	SA:22:LEU:HA	0.463
1	WA:87:LYS:CD	XA:186:VAL:HG12	0.463
1	A:24:ARG:HH12	ZA:216:LYS:HB3	0.463
1	KA:67:ALA:HB3	LA:207:GLY:H	0.463
1	C:230:PHE:HA	D:43:LEU:CD2	0.462



Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	F:81:ILE:HG22	G:193:VAL:HG22	0.462
1	R:14:ARG:C	S:203:VAL:HG11	0.462
1	Q:15:LEU:HA	R:203:VAL:HG21	0.462
1	AA:89:VAL:CG1	BA:187:VAL:CG1	0.462
1	BA:73:LYS:NZ	CA:201:SER:HB3	0.462
1	CA:65:ALA:HB1	DA:208:GLU:CD	0.462
1	SA:231:ALA:HB3	TA:41:GLU:CA	0.462
1	TA:124:LEU:HD21	UA:45:SER:CA	0.462
1	UA:216:LYS:HD2	VA:24:ARG:HB2	0.462
1	AA:74:THR:O	BA:199:SER:CA	0.462
1	D:67:ALA:HB1	E:207:GLY:H	0.461
1	F:231:ALA:CB	G:41:GLU:C	0.461
1	T:15:LEU:HD11	U:203:VAL:CA	0.461
1	U:83:ILE:CD	V:191:LEU:HB3	0.461
1	W:228:THR:HG23	X:140:PRO:HG2	0.461
1	Y:13:LYS:CA	Z:22:LEU:HD13	0.461
1	Z:14:ARG:O	AA:23:PRO:CD	0.461
1	BA:216:LYS:HB3	CA:24:ARG:HH12	0.461
1	DA:89:VAL:HA	EA:185:LYS:CB	0.461
1	EA:124:LEU:HB3	FA:48:LYS:NZ	0.461
1	HA:90:LEU:CB	IA:185:LYS:HZ1	0.461
1	B:73:LYS:NZ	C:201:SER:HB3	0.460
1	D:13:LYS:HA	E:22:LEU:HD22	0.460

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	D:87:LYS:HE3	E:186:VAL:HG22	0.460
1	G:65:ALA:HB2	H:208:GLU:OE2	0.460
1	G:87:LYS:HB3	H:185:LYS:HB3	0.460
1	U:228:THR:HG22	V:141:VAL:HG22	0.460
1	U:233:GLN:CD	V:21:ARG:HH22	0.460
1	W:228:THR:CG2	X:140:PRO:CD	0.460
1	Y:86:LEU:CA	Z:188:GLY:N	0.460
1	Z:81:ILE:HG22	AA:193:VAL:CA	0.460
1	FA:231:ALA:CB	GA:41:GLU:C	0.460
1	IA:233:GLN:HE22	JA:39:THR:HG22	0.460
1	UA:233:GLN:CD	VA:21:ARG:HH22	0.460
1	WA:77:LEU:CB	XA:196:SER:O	0.460
1	WA:230:PHE:CZ	XA:141:VAL:HA	0.460
1	YA:13:LYS:CA	ZA:22:LEU:HD13	0.460
1	YA:226:GLU:HB3	ZA:140:PRO:HG3	0.460
1	RA:14:ARG:NE	SA:201:SER:OG	0.460
1	W:79:PHE:CG	X:194:GLU:O	0.460
1	GA:15:LEU:CA	HA:22:LEU:O	0.460
1	YA:12:LEU:O	ZA:22:LEU:CG	0.460
1	N:65:ALA:HB3	O:208:GLU:CD	0.459
1	BA:66:ALA:HA	CA:211:LEU:CD1	0.459
1	BA:14:ARG:N	CA:22:LEU:HB2	0.459
1	DA:84:ASN:O	EA:189:GLY:HA2	0.459

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	SA:77:LEU:HD12	TA:196:SER:O	0.459
1	VA:127:GLY:HA3	WA:48:LYS:HE3	0.459
1	VA:233:GLN:HE22	WA:21:ARG:HH12	0.459
1	A:22:LEU:CD1	ZA:15:LEU:N	0.459
1	A:83:ILE:CD	B:191:LEU:HB2	0.458
1	B:67:ALA:C	C:205:TYR:CD1	0.458
1	D:15:LEU:HD21	E:203:VAL:HG22	0.458
1	F:12:LEU:C	G:22:LEU:HD22	0.458
1	S:231:ALA:HB3	T:41:GLU:CA	0.458
1	W:89:VAL:CG2	X:187:VAL:CG2	0.458
1	V:89:VAL:CA	W:187:VAL:HG13	0.458
1	BA:14:ARG:HB3	CA:203:VAL:CG1	0.458
1	BA:67:ALA:C	CA:205:TYR:CD1	0.458
1	CA:16:GLY:CA	DA:22:LEU:HD23	0.458
1	FA:124:LEU:CB	GA:48:LYS:HE2	0.458
1	SA:89:VAL:C	TA:185:LYS:CD	0.458
1	VA:90:LEU:CB	WA:185:LYS:CD	0.458
1	WA:67:ALA:O	XA:206:LYS:C	0.458
1	KA:90:LEU:CA	LA:185:LYS:HZ3	0.458
1	VA:231:ALA:CA	WA:42:TYR:O	0.458
1	A:17:TYR:CE2	B:24:ARG:CB	0.457
1	V:127:GLY:HA3	W:48:LYS:HE3	0.457
1	W:77:LEU:CB	X:196:SER:O	0.457

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	X:124:LEU:HG	Y:45:SER:N	0.457
1	Y:228:THR:HG23	Z:140:PRO:HG2	0.457
1	Z:17:TYR:HB2	AA:22:LEU:HD21	0.457
1	BA:83:ILE:HA	CA:191:LEU:HB3	0.457
1	CA:89:VAL:CA	DA:185:LYS:HB2	0.457
1	CA:231:ALA:CB	DA:41:GLU:O	0.457
1	EA:69:ILE:CD	FA:204:THR:CA	0.457
1	IA:86:LEU:HD22	JA:188:GLY:O	0.457
1	NA:216:LYS:HE2	OA:24:ARG:HD2	0.457
1	WA:89:VAL:HA	XA:185:LYS:CD	0.457
1	R:216:LYS:NZ	S:24:ARG:HH11	0.457
1	AA:76:ASN:CG	BA:198:SER:OG	0.457
1	VA:75:GLU:CB	WA:198:SER:O	0.457
1	A:15:LEU:HD21	B:203:VAL:HG22	0.456
1	B:66:ALA:HA	C:209:LYS:HB2	0.456
1	D:89:VAL:HA	E:185:LYS:CB	0.456
1	D:216:LYS:CD	E:24:ARG:CD	0.456
1	D:218:PHE:CZ	E:43:LEU:CA	0.456
1	E:82:GLY:O	F:191:LEU:HA	0.456
1	S:15:LEU:HD11	T:203:VAL:HA	0.456
1	W:228:THR:CG2	X:140:PRO:HD2	0.456
1	X:15:LEU:H	Y:22:LEU:HD12	0.456
1	GA:89:VAL:C	HA:185:LYS:CD	0.456

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	RA:89:VAL:CG1	SA:187:VAL:HG12	0.456
1	UA:83:ILE:CD	VA:191:LEU:HB3	0.456
1	WA:228:THR:CG2	XA:140:PRO:CD	0.456
1	T:231:ALA:HB3	U:42:TYR:H	0.456
1	AA:74:THR:O	BA:200:GLN:N	0.456
1	DA:124:LEU:O	EA:48:LYS:CE	0.456
1	B:66:ALA:HA	C:211:LEU:CD1	0.455
1	V:83:ILE:CD	W:191:LEU:HB2	0.455
1	GA:124:LEU:CB	HA:48:LYS:CE	0.455
1	MA:67:ALA:HB3	NA:205:TYR:CD1	0.455
1	RA:89:VAL:HA	SA:185:LYS:HD3	0.455
1	WA:228:THR:CG2	XA:140:PRO:CG	0.455
1	XA:79:PHE:HB3	YA:195:ALA:HA	0.455
1	WA:88:SER:H	XA:186:VAL:HB	0.455
1	WA:14:ARG:CA	XA:203:VAL:HG11	0.455
1	B:87:LYS:CG	C:185:LYS:O	0.455
1	B:65:ALA:HB3	C:209:LYS:N	0.454
1	C:12:LEU:C	D:22:LEU:HD22	0.454
1	M:228:THR:HG21	N:140:PRO:HG3	0.454
1	W:226:GLU:HB3	X:140:PRO:CD	0.454
1	AA:81:ILE:HG22	BA:193:VAL:CA	0.454
1	AA:81:ILE:HG22	BA:193:VAL:CG2	0.454
1	NA:87:LYS:HB2	OA:187:VAL:HG13	0.454

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	OA:14:ARG:CG	PA:203:VAL:CB	0.454
1	PA:87:LYS:HB2	QA:187:VAL:HA	0.454
1	F:231:ALA:H	G:43:LEU:CD2	0.454
1	D:124:LEU:O	E:48:LYS:CE	0.454
1	Q:66:ALA:CA	R:205:TYR:OH	0.454
1	Z:12:LEU:O	AA:22:LEU:HD21	0.454
1	B:14:ARG:HB3	C:203:VAL:CG1	0.453
1	R:231:ALA:CB	S:42:TYR:CB	0.453
1	U:216:LYS:HD2	V:24:ARG:HB2	0.453
1	W:230:PHE:CZ	X:141:VAL:HA	0.453
1	AA:83:ILE:HA	BA:191:LEU:HB3	0.453
1	CA:66:ALA:HA	DA:211:LEU:CD1	0.453
1	DA:67:ALA:CB	EA:207:GLY:O	0.453
1	VA:228:THR:CB	WA:141:VAL:CG1	0.453
1	TA:230:PHE:HE1	UA:141:VAL:CB	0.453
1	T:64:GLN:OE1	U:25:GLU:OE2	0.453
1	A:65:ALA:CB	B:209:LYS:H	0.452
1	A:67:ALA:C	B:205:TYR:CE1	0.452
1	A:187:VAL:HG12	ZA:87:LYS:C	0.452
1	A:205:TYR:CE1	ZA:68:GLY:N	0.452
1	C:231:ALA:CA	D:41:GLU:HB3	0.452
1	G:124:LEU:CB	H:48:LYS:CE	0.452
1	G:68:GLY:N	H:205:TYR:CE1	0.452

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	I:216:LYS:NZ	J:24:ARG:CD	0.452
1	N:87:LYS:HB2	O:187:VAL:HG12	0.452
1	N:89:VAL:HB	O:187:VAL:HG11	0.452
1	N:216:LYS:HE2	O:24:ARG:HD2	0.452
1	O:231:ALA:CB	P:42:TYR:O	0.452
1	AA:65:ALA:CB	BA:209:LYS:H	0.452
1	EA:82:GLY:O	FA:191:LEU:HA	0.452
1	NA:87:LYS:HB2	OA:187:VAL:HG12	0.452
1	R:14:ARG:NE	S:201:SER:OG	0.452
1	B:111:PHE:CZ	C:202:THR:O	0.452
1	R:64:GLN:CB	S:209:LYS:HZ1	0.451
1	W:88:SER:H	X:186:VAL:HB	0.451
1	Y:67:ALA:O	Z:206:LYS:CB	0.451
1	AA:17:TYR:CE2	BA:24:ARG:CB	0.451
1	BA:73:LYS:HZ3	CA:201:SER:HB3	0.451
1	DA:13:LYS:HA	EA:22:LEU:HD22	0.451
1	CA:229:LEU:O	DA:141:VAL:HG21	0.451
1	FA:66:ALA:CA	GA:209:LYS:HB2	0.451
1	IA:233:GLN:CD	JA:39:THR:CG2	0.451
1	LA:17:TYR:H	MA:22:LEU:CD2	0.451
1	RA:64:GLN:CB	SA:209:LYS:HD2	0.451
1	WA:226:GLU:HB3	XA:140:PRO:CD	0.451
1	YA:65:ALA:CB	ZA:209:LYS:H	0.451

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	I:90:LEU:CD2	J:185:LYS:HZ1	0.451
1	CA:218:PHE:CE2	DA:44:GLY:N	0.451
1	A:14:ARG:CB	B:203:VAL:CG1	0.450
1	I:15:LEU:HG	J:22:LEU:HD12	0.450
1	V:15:LEU:HD11	W:204:THR:N	0.450
1	X:14:ARG:CG	Y:203:VAL:HG11	0.450
1	Y:226:GLU:HB3	Z:140:PRO:HG3	0.450
1	AA:65:ALA:HB3	BA:208:GLU:CG	0.450
1	AA:67:ALA:C	BA:205:TYR:CE1	0.450
1	DA:15:LEU:HD21	EA:203:VAL:HG22	0.450
1	EA:124:LEU:CB	FA:48:LYS:NZ	0.450
1	IA:3:LEU:H	IA:3:LEU:HD13	0.450
1	NA:3:LEU:H	NA:3:LEU:HD13	0.450
1	RA:14:ARG:C	SA:203:VAL:HG11	0.450
1	SA:15:LEU:HD11	TA:203:VAL:HA	0.450
1	C:218:PHE:CE2	D:44:GLY:N	0.450
1	B:233:GLN:HE22	C:39:THR:HG22	0.449
1	C:16:GLY:CA	D:22:LEU:HD23	0.449
1	C:17:TYR:OH	D:24:ARG:HB2	0.449
1	J:90:LEU:CG	K:185:LYS:NZ	0.449
1	J:124:LEU:HD23	K:48:LYS:HZ3	0.449
1	Q:124:LEU:HD21	R:45:SER:HB2	0.449
1	Y:228:THR:HG21	Z:140:PRO:CD	0.449



Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	Z:68:GLY:N	AA:205:TYR:CE1	0.449
1	EA:3:LEU:H	EA:3:LEU:HD13	0.449
1	FA:3:LEU:H	FA:3:LEU:HD13	0.449
1	GA:3:LEU:H	GA:3:LEU:HD13	0.449
1	GA:124:LEU:CD2	HA:47:GLU:HG3	0.449
1	HA:3:LEU:H	HA:3:LEU:HD13	0.449
1	JA:3:LEU:H	JA:3:LEU:HD13	0.449
1	KA:3:LEU:H	KA:3:LEU:HD13	0.449
1	LA:3:LEU:H	LA:3:LEU:HD13	0.449
1	MA:3:LEU:H	MA:3:LEU:HD13	0.449
1	PA:3:LEU:H	PA:3:LEU:HD13	0.449
1	A:193:VAL:CA	ZA:81:ILE:HG22	0.449
1	YA:67:ALA:O	ZA:206:LYS:CB	0.449
1	KA:216:LYS:NZ	LA:24:ARG:HD3	0.449
1	B:76:ASN:CG	C:198:SER:OG	0.449
1	F:86:LEU:O	G:186:VAL:C	0.449
1	E:87:LYS:O	F:187:VAL:CG1	0.448
1	J:86:LEU:HD11	K:187:VAL:C	0.448
1	R:89:VAL:CG1	S:187:VAL:HG12	0.448
1	S:231:ALA:HB2	T:42:TYR:C	0.448
1	V:87:LYS:CB	W:186:VAL:CB	0.448
1	Y:67:ALA:C	Z:206:LYS:N	0.448
1	Z:87:LYS:CB	AA:187:VAL:HG13	0.448

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	Z:230:PHE:HD1	AA:43:LEU:HD22	0.448
1	DA:3:LEU:H	DA:3:LEU:HD13	0.448
1	DA:15:LEU:CD2	EA:203:VAL:CG2	0.448
1	GA:66:ALA:HA	HA:209:LYS:HB2	0.448
1	VA:15:LEU:HD11	WA:204:THR:N	0.448
1	VA:73:LYS:HZ3	WA:201:SER:HB3	0.448
1	R:64:GLN:CG	S:209:LYS:NZ	0.448
1	Y:233:GLN:NE2	Z:21:ARG:NH1	0.448
1	SA:86:LEU:CD2	TA:188:GLY:H	0.448
1	FA:86:LEU:O	GA:186:VAL:C	0.448
1	A:43:LEU:HD22	ZA:230:PHE:HD1	0.447
1	A:141:VAL:CG1	ZA:230:PHE:CG	0.447
1	D:16:GLY:HA2	E:22:LEU:HB3	0.447
1	F:124:LEU:CB	G:48:LYS:HE2	0.447
1	G:66:ALA:HA	H:209:LYS:HB2	0.447
1	R:89:VAL:HA	S:185:LYS:HD3	0.447
1	V:25:GLU:CD	V:209:LYS:HZ2	0.447
1	W:89:VAL:HA	X:185:LYS:CD	0.447
1	W:13:LYS:C	X:22:LEU:HB2	0.447
1	CA:3:LEU:H	CA:3:LEU:HD13	0.447
1	CA:81:ILE:HG22	DA:193:VAL:CG2	0.447
1	EA:87:LYS:O	FA:187:VAL:CG1	0.447
1	HA:14:ARG:HG3	IA:203:VAL:HG11	0.447

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	JA:90:LEU:CG	KA:185:LYS:NZ	0.447
1	JA:86:LEU:CG	KA:187:VAL:HA	0.447
1	OA:3:LEU:H	OA:3:LEU:HD13	0.447
1	QA:3:LEU:H	QA:3:LEU:HD13	0.447
1	RA:3:LEU:H	RA:3:LEU:HD13	0.447
1	SA:3:LEU:H	SA:3:LEU:HD13	0.447
1	UA:228:THR:HG22	VA:141:VAL:HG22	0.447
1	SA:231:ALA:HB3	TA:42:TYR:H	0.447
1	EA:16:GLY:O	FA:24:ARG:CD	0.447
1	C:66:ALA:HA	D:211:LEU:CD1	0.446
1	P:87:LYS:HB2	Q:187:VAL:HA	0.446
1	U:12:LEU:O	V:22:LEU:HD11	0.446
1	Z:3:LEU:H	Z:3:LEU:HD13	0.446
1	AA:3:LEU:H	AA:3:LEU:HD13	0.446
1	BA:3:LEU:H	BA:3:LEU:HD13	0.446
1	VA:25:GLU:CD	VA:209:LYS:HZZ	0.446
1	XA:67:ALA:CB	YA:205:TYR:CE2	0.446
1	YA:226:GLU:HB3	ZA:140:PRO:CD	0.446
1	V:233:GLN:HE22	W:21:ARG:HH12	0.446
1	GA:87:LYS:N	HA:186:VAL:O	0.446
1	T:65:ALA:O	U:205:TYR:OH	0.446
1	A:14:ARG:HG2	B:203:VAL:HG12	0.445
1	C:87:LYS:CA	D:187:VAL:HG12	0.445

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	I:228:THR:HG23	J:140:PRO:CD	0.445
1	N:87:LYS:HB2	O:187:VAL:HG13	0.445
1	R:64:GLN:CD	S:209:LYS:NZ	0.445
1	T:233:GLN:OE1	U:39:THR:HG22	0.445
1	W:69:ILE:CG1	X:204:THR:O	0.445
1	Z:73:LYS:HZ3	AA:201:SER:HB3	0.445
1	BA:17:TYR:C	CA:22:LEU:CD2	0.445
1	IA:124:LEU:CA	JA:48:LYS:CE	0.445
1	TA:3:LEU:H	TA:3:LEU:HD13	0.445
1	UA:3:LEU:H	UA:3:LEU:HD13	0.445
1	WA:69:ILE:CG1	XA:204:THR:O	0.445
1	WA:13:LYS:C	XA:22:LEU:HB2	0.445
1	WA:218:PHE:HZ	XA:44:GLY:N	0.445
1	I:15:LEU:CD1	J:203:VAL:HG21	0.444
1	L:17:TYR:H	M:22:LEU:CD2	0.444
1	X:3:LEU:H	X:3:LEU:HD13	0.444
1	Y:3:LEU:H	Y:3:LEU:HD13	0.444
1	DA:231:ALA:HB1	EA:42:TYR:H	0.444
1	MA:89:VAL:CA	NA:185:LYS:HD3	0.444
1	RA:16:GLY:N	SA:22:LEU:C	0.444
1	SA:231:ALA:HB2	TA:42:TYR:C	0.444
1	VA:3:LEU:H	VA:3:LEU:HD13	0.444
1	YA:230:PHE:CG	ZA:141:VAL:HG12	0.444

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	A:21:ARG:NH2	ZA:233:GLN:HG3	0.444
1	D:87:LYS:H	E:187:VAL:CG1	0.444
1	IA:230:PHE:CE1	JA:141:VAL:N	0.444
1	S:66:ALA:C	T:205:TYR:OH	0.444
1	EA:82:GLY:O	FA:191:LEU:CA	0.444
1	B:83:ILE:HA	C:191:LEU:HB3	0.443
1	D:84:ASN:O	E:189:GLY:HA2	0.443
1	O:230:PHE:CD1	P:141:VAL:HG11	0.443
1	W:3:LEU:H	W:3:LEU:HD13	0.443
1	AA:228:THR:CG2	BA:139:ASN:C	0.443
1	BA:12:LEU:O	CA:22:LEU:HD13	0.443
1	CA:15:LEU:CG	DA:22:LEU:HD12	0.443
1	EA:89:VAL:HA	FA:185:LYS:CG	0.443
1	KA:90:LEU:HB3	LA:185:LYS:HZ1	0.443
1	RA:216:LYS:CE	SA:24:ARG:CZ	0.443
1	SA:65:ALA:N	TA:209:LYS:HG3	0.443
1	UA:15:LEU:HD11	VA:204:THR:H	0.443
1	UA:12:LEU:O	VA:22:LEU:HD11	0.443
1	WA:3:LEU:H	WA:3:LEU:HD13	0.443
1	Y:218:PHE:HZ	Z:43:LEU:C	0.443
1	K:216:LYS:NZ	L:24:ARG:HD2	0.443
1	A:74:THR:O	B:200:GLN:N	0.443
1	J:233:GLN:OE1	K:39:THR:CB	0.443

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	P:14:ARG:O	Q:22:LEU:CB	0.443
1	C:17:TYR:CE2	D:24:ARG:HB2	0.442
1	D:230:PHE:HZ	E:140:PRO:C	0.442
1	G:124:LEU:HD23	H:47:GLU:CD	0.442
1	V:3:LEU:H	V:3:LEU:HD13	0.442
1	X:89:VAL:HB	Y:187:VAL:CB	0.442
1	Y:15:LEU:HB3	Z:23:PRO:O	0.442
1	Z:17:TYR:CZ	AA:24:ARG:CB	0.442
1	Z:79:PHE:HB3	AA:195:ALA:CA	0.442
1	HA:17:TYR:H	IA:22:LEU:CD2	0.442
1	JA:64:GLN:O	KA:209:LYS:HE2	0.442
1	XA:88:SER:H	YA:186:VAL:HB	0.442
1	A:83:ILE:HA	B:191:LEU:HB3	0.441
1	A:187:VAL:HG13	ZA:87:LYS:CB	0.441
1	G:124:LEU:CA	H:48:LYS:HZ1	0.441
1	J:90:LEU:HB3	K:185:LYS:HZ1	0.441
1	J:124:LEU:CD2	K:45:SER:HB2	0.441
1	O:89:VAL:HG21	P:187:VAL:HG11	0.441
1	U:3:LEU:H	U:3:LEU:HD13	0.441
1	X:79:PHE:HB3	Y:195:ALA:HA	0.441
1	VA:15:LEU:HD11	WA:204:THR:H	0.441
1	XA:3:LEU:H	XA:3:LEU:HD13	0.441
1	YA:83:ILE:CD	ZA:191:LEU:HD13	0.441

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	ZA:3:LEU:H	ZA:3:LEU:HD13	0.441
1	C:218:PHE:CD2	D:42:TYR:HD2	0.441
1	X:77:LEU:CA	Y:196:SER:O	0.441
1	UA:17:TYR:O	VA:22:LEU:CD2	0.441
1	WA:230:PHE:C	XA:42:TYR:O	0.441
1	A:24:ARG:CB	ZA:17:TYR:CZ	0.440
1	C:15:LEU:CG	D:22:LEU:HD12	0.440
1	O:67:ALA:HB3	P:205:TYR:CE1	0.440
1	T:3:LEU:H	T:3:LEU:HD13	0.440
1	V:14:ARG:C	W:203:VAL:CG1	0.440
1	V:90:LEU:HD23	W:185:LYS:CD	0.440
1	V:87:LYS:CB	W:186:VAL:HG12	0.440
1	X:67:ALA:CB	Y:205:TYR:CE2	0.440
1	Y:65:ALA:CB	Z:209:LYS:H	0.440
1	Y:226:GLU:HB3	Z:140:PRO:CD	0.440
1	Y:230:PHE:CG	Z:141:VAL:HG12	0.440
1	AA:229:LEU:C	BA:141:VAL:HG11	0.440
1	BA:230:PHE:HA	CA:43:LEU:HD22	0.440
1	DA:69:ILE:HB	EA:204:THR:O	0.440
1	CA:87:LYS:CA	DA:187:VAL:HG12	0.440
1	JA:233:GLN:OE1	KA:39:THR:CB	0.440
1	NA:89:VAL:HB	OA:187:VAL:HG11	0.440
1	YA:3:LEU:H	YA:3:LEU:HD13	0.440

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	B:64:GLN:HB3	C:209:LYS:HZ2	0.440
1	BA:64:GLN:HB3	CA:209:LYS:HZ2	0.440
1	FA:231:ALA:H	GA:43:LEU:CD2	0.440
1	XA:87:LYS:N	YA:187:VAL:CA	0.440
1	XA:81:ILE:CA	YA:192:LYS:O	0.440
1	A:3:LEU:H	A:3:LEU:HD13	0.439
1	B:3:LEU:H	B:3:LEU:HD13	0.439
1	C:3:LEU:H	C:3:LEU:HD13	0.439
1	N:14:ARG:HG3	O:203:VAL:HB	0.439
1	Q:3:LEU:H	Q:3:LEU:HD13	0.439
1	S:3:LEU:H	S:3:LEU:HD13	0.439
1	S:77:LEU:HD12	T:196:SER:O	0.439
1	T:87:LYS:HG3	U:186:VAL:HA	0.439
1	V:15:LEU:HD11	W:204:THR:H	0.439
1	U:87:LYS:HD3	V:186:VAL:HG12	0.439
1	U:15:LEU:HD11	V:203:VAL:HA	0.439
1	Z:233:GLN:HG3	AA:21:ARG:NH2	0.439
1	AA:14:ARG:HG3	BA:203:VAL:CG1	0.439
1	GA:124:LEU:HD11	HA:45:SER:CA	0.439
1	KA:231:ALA:HB3	LA:41:GLU:HB3	0.439
1	UA:25:GLU:CD	UA:209:LYS:HZ1	0.439
1	TA:233:GLN:OE1	UA:39:THR:HG22	0.439
1	UA:87:LYS:HD3	VA:186:VAL:CG1	0.439



Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	WA:228:THR:HG23	XA:140:PRO:HG2	0.439
1	YA:89:VAL:HG21	ZA:187:VAL:HG21	0.439
1	Z:84:ASN:N	AA:190:LYS:O	0.439
1	A:70:ASN:N	B:204:THR:OG1	0.439
1	C:216:LYS:CD	D:24:ARG:CD	0.438
1	H:67:ALA:CA	I:207:GLY:CA	0.438
1	O:3:LEU:H	O:3:LEU:HD13	0.438
1	P:3:LEU:H	P:3:LEU:HD13	0.438
1	P:64:GLN:CB	Q:209:LYS:HE2	0.438
1	R:3:LEU:H	R:3:LEU:HD13	0.438
1	U:15:LEU:HD11	V:204:THR:H	0.438
1	Y:218:PHE:CZ	Z:42:TYR:C	0.438
1	Z:86:LEU:CB	AA:188:GLY:HA3	0.438
1	FA:12:LEU:C	GA:22:LEU:HD22	0.438
1	QA:64:GLN:O	RA:209:LYS:HD2	0.438
1	YA:86:LEU:CA	ZA:188:GLY:N	0.438
1	A:230:PHE:CZ	B:141:VAL:N	0.437
1	D:3:LEU:H	D:3:LEU:HD13	0.437
1	E:3:LEU:H	E:3:LEU:HD13	0.437
1	G:124:LEU:CD2	H:47:GLU:HG3	0.437
1	I:233:GLN:HE22	J:39:THR:HG22	0.437
1	K:231:ALA:HB3	L:41:GLU:HB3	0.437
1	N:3:LEU:H	N:3:LEU:HD13	0.437

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	AA:157:GLN:HE22	BA:25:GLU:HB3	0.437
1	QA:89:VAL:CG1	RA:187:VAL:CG1	0.437
1	RA:14:ARG:C	SA:22:LEU:HD12	0.437
1	VA:216:LYS:HB3	WA:24:ARG:HH11	0.437
1	VA:228:THR:HG23	WA:140:PRO:HD2	0.437
1	YA:15:LEU:HB3	ZA:23:PRO:O	0.437
1	A:140:PRO:C	ZA:228:THR:HG21	0.437
1	Y:230:PHE:HZ	Z:141:VAL:CA	0.437
1	R:64:GLN:CG	S:209:LYS:HZ3	0.437
1	V:15:LEU:N	W:203:VAL:CB	0.437
1	D:69:ILE:HB	E:204:THR:O	0.436
1	C:229:LEU:O	D:141:VAL:HG21	0.436
1	E:89:VAL:HA	F:185:LYS:CG	0.436
1	G:3:LEU:H	G:3:LEU:HD13	0.436
1	F:82:GLY:O	G:191:LEU:HB2	0.436
1	I:3:LEU:H	I:3:LEU:HD13	0.436
1	K:3:LEU:H	K:3:LEU:HD13	0.436
1	J:64:GLN:O	K:209:LYS:HE2	0.436
1	L:3:LEU:H	L:3:LEU:HD13	0.436
1	M:3:LEU:H	M:3:LEU:HD13	0.436
1	U:87:LYS:CD	V:186:VAL:HG13	0.436
1	V:228:THR:HG23	W:140:PRO:HD2	0.436
1	Y:83:ILE:CD	Z:191:LEU:HD13	0.436

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	Y:15:LEU:N	Z:203:VAL:HG11	0.436
1	AA:228:THR:HG22	BA:141:VAL:HG22	0.436
1	EA:230:PHE:HZ	FA:140:PRO:C	0.436
1	FA:218:PHE:CE2	GA:42:TYR:HD2	0.436
1	HA:64:GLN:CA	IA:209:LYS:HZ3	0.436
1	KA:15:LEU:CG	LA:203:VAL:HG23	0.436
1	VA:68:GLY:O	WA:205:TYR:HA	0.436
1	I:230:PHE:CE1	J:141:VAL:N	0.436
1	TA:14:ARG:O	UA:22:LEU:N	0.436
1	A:157:GLN:HE22	B:25:GLU:HB3	0.435
1	F:3:LEU:H	F:3:LEU:HD13	0.435
1	H:3:LEU:H	H:3:LEU:HD13	0.435
1	H:124:LEU:CB	I:48:LYS:CE	0.435
1	H:17:TYR:H	I:22:LEU:CD2	0.435
1	I:86:LEU:HD22	J:188:GLY:O	0.435
1	J:3:LEU:H	J:3:LEU:HD13	0.435
1	S:65:ALA:N	T:209:LYS:HG3	0.435
1	U:25:GLU:CD	U:209:LYS:HZ1	0.435
1	V:73:LYS:NZ	W:201:SER:HB3	0.435
1	Z:89:VAL:HB	AA:187:VAL:CG2	0.435
1	BA:83:ILE:CD	CA:191:LEU:CB	0.435
1	AA:66:ALA:HA	BA:209:LYS:HB2	0.435
1	FA:15:LEU:HB3	GA:23:PRO:O	0.435

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	FA:218:PHE:HZ	GA:43:LEU:C	0.435
1	VA:73:LYS:NZ	WA:201:SER:HB3	0.435
1	YA:15:LEU:HD21	ZA:204:THR:O	0.435
1	YA:230:PHE:CA	ZA:43:LEU:HD23	0.435
1	YA:233:GLN:HE21	ZA:21:ARG:HH12	0.435
1	X:15:LEU:CD2	Y:204:THR:O	0.435
1	CA:67:ALA:O	DA:206:LYS:N	0.435
1	XA:77:LEU:CD1	YA:196:SER:O	0.435
1	A:14:ARG:HG3	B:203:VAL:CG1	0.434
1	A:229:LEU:C	B:141:VAL:HG11	0.434
1	B:17:TYR:C	C:22:LEU:CD2	0.434
1	B:89:VAL:C	C:185:LYS:HD3	0.434
1	D:17:TYR:CE2	E:24:ARG:CB	0.434
1	I:14:ARG:CA	J:22:LEU:HD13	0.434
1	O:64:GLN:CB	P:209:LYS:CE	0.434
1	Q:90:LEU:N	R:185:LYS:HD3	0.434
1	V:14:ARG:CA	W:203:VAL:HG11	0.434
1	Y:89:VAL:HG21	Z:187:VAL:HG21	0.434
1	AA:87:LYS:CB	BA:185:LYS:C	0.434
1	GA:15:LEU:HB2	HA:22:LEU:HD11	0.434
1	OA:67:ALA:HB3	PA:205:TYR:CE1	0.434
1	OA:89:VAL:HG21	PA:187:VAL:HG11	0.434
1	YA:14:ARG:C	ZA:23:PRO:HD2	0.434

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	XA:66:ALA:HA	YA:209:LYS:HB2	0.434
1	G:90:LEU:CB	H:185:LYS:HZ3	0.434
1	A:77:LEU:CB	B:196:SER:O	0.434
1	EA:79:PHE:HB3	FA:194:GLU:O	0.434
1	A:81:ILE:HG22	B:193:VAL:CA	0.433
1	A:81:ILE:HG22	B:193:VAL:CG2	0.433
1	A:187:VAL:CG2	ZA:89:VAL:HB	0.433
1	A:81:ILE:HG21	B:193:VAL:HG22	0.433
1	B:231:ALA:HB3	C:41:GLU:HB3	0.433
1	F:13:LYS:O	G:22:LEU:HB2	0.433
1	J:65:ALA:N	K:209:LYS:CE	0.433
1	S:228:THR:CG2	T:141:VAL:HG13	0.433
1	T:89:VAL:HG12	U:187:VAL:HG12	0.433
1	U:15:LEU:N	V:203:VAL:HG11	0.433
1	X:15:LEU:HD11	Y:203:VAL:C	0.433
1	Y:15:LEU:HD21	Z:204:THR:O	0.433
1	Z:64:GLN:HB3	AA:25:GLU:OE2	0.433
1	OA:87:LYS:HB2	PA:187:VAL:CG1	0.433
1	QA:90:LEU:N	RA:185:LYS:HD3	0.433
1	UA:15:LEU:N	VA:203:VAL:HG11	0.433
1	OA:230:PHE:HE1	PA:141:VAL:HG12	0.433
1	A:190:LYS:O	ZA:84:ASN:N	0.433
1	C:67:ALA:O	D:206:LYS:N	0.433

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	XA:231:ALA:O	YA:41:GLU:CA	0.433
1	A:77:LEU:HG	B:196:SER:O	0.432
1	A:118:ALA:N	B:209:LYS:HE2	0.432
1	D:231:ALA:HB3	E:41:GLU:CB	0.432
1	D:15:LEU:CD2	E:203:VAL:CG2	0.432
1	F:15:LEU:HB3	G:23:PRO:O	0.432
1	F:218:PHE:CE2	G:42:TYR:HD2	0.432
1	F:124:LEU:HG	G:45:SER:HB3	0.432
1	K:216:LYS:NZ	L:24:ARG:HD3	0.432
1	N:14:ARG:CG	O:203:VAL:HG12	0.432
1	Q:14:ARG:N	R:22:LEU:HD13	0.432
1	R:216:LYS:CE	S:24:ARG:CZ	0.432
1	S:231:ALA:CB	T:42:TYR:CA	0.432
1	V:68:GLY:O	W:205:TYR:HA	0.432
1	EA:90:LEU:CG	FA:185:LYS:H22	0.432
1	NA:14:ARG:C	OA:22:LEU:HB2	0.432
1	XA:14:ARG:CG	YA:203:VAL:HG11	0.432
1	YA:15:LEU:N	ZA:203:VAL:HG11	0.432
1	Y:124:LEU:HG	Z:45:SER:H	0.432
1	C:68:GLY:O	D:205:TYR:HD1	0.432
1	X:77:LEU:CD1	Y:196:SER:O	0.432
1	BA:67:ALA:O	CA:206:LYS:CA	0.432
1	B:83:ILE:CD	C:191:LEU:CB	0.431

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	C:17:TYR:HB2	D:22:LEU:CD2	0.431
1	S:87:LYS:HB2	T:187:VAL:HA	0.431
1	V:230:PHE:CE1	W:141:VAL:HB	0.431
1	W:15:LEU:HD11	X:204:THR:N	0.431
1	V:89:VAL:CA	W:185:LYS:HD3	0.431
1	Y:14:ARG:O	Z:22:LEU:HA	0.431
1	AA:14:ARG:HG2	BA:203:VAL:HG12	0.431
1	CA:17:TYR:OH	DA:24:ARG:HB2	0.431
1	CA:231:ALA:CA	DA:41:GLU:HB3	0.431
1	GA:124:LEU:HB3	HA:48:LYS:HZ1	0.431
1	QA:87:LYS:CB	RA:186:VAL:HB	0.431
1	RA:14:ARG:C	SA:203:VAL:HG21	0.431
1	YA:218:PHE:CZ	ZA:42:TYR:C	0.431
1	O:230:PHE:HE1	P:141:VAL:HG12	0.431
1	G:64:GLN:CA	H:209:LYS:NZ	0.431
1	GA:64:GLN:CA	HA:209:LYS:NZ	0.431
1	A:76:ASN:CG	B:198:SER:OG	0.431
1	E:82:GLY:O	F:191:LEU:CA	0.431
1	A:201:SER:HB3	ZA:73:LYS:HZ3	0.430
1	A:228:THR:HG22	B:141:VAL:HG22	0.430
1	A:230:PHE:HA	B:43:LEU:HD22	0.430
1	A:17:TYR:OH	B:24:ARG:HB2	0.430
1	H:124:LEU:CA	I:48:LYS:HZ1	0.430

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	V:89:VAL:HB	W:187:VAL:CG2	0.430
1	W:233:GLN:HG3	X:21:ARG:NH2	0.430
1	X:231:ALA:CA	Y:41:GLU:HB3	0.430
1	AA:77:LEU:HG	BA:196:SER:O	0.430
1	DA:17:TYR:CE2	EA:24:ARG:CB	0.430
1	DA:230:PHE:HZ	EA:140:PRO:C	0.430
1	GA:68:GLY:N	HA:205:TYR:CE1	0.430
1	QA:89:VAL:CG1	RA:187:VAL:HG11	0.430
1	SA:228:THR:CG2	TA:141:VAL:HG13	0.430
1	WA:15:LEU:HD11	XA:204:THR:N	0.430
1	VA:15:LEU:N	WA:203:VAL:CB	0.430
1	VA:14:ARG:CA	WA:203:VAL:HG11	0.430
1	YA:67:ALA:C	ZA:206:LYS:N	0.430
1	A:14:ARG:HG3	B:203:VAL:HG11	0.429
1	A:193:VAL:HG22	ZA:81:ILE:HG21	0.429
1	B:216:LYS:HB3	C:24:ARG:HH12	0.429
1	B:67:ALA:O	C:206:LYS:CA	0.429
1	I:124:LEU:CA	J:48:LYS:CE	0.429
1	K:14:ARG:HG3	L:203:VAL:CG1	0.429
1	Q:218:PHE:CZ	R:42:TYR:CD2	0.429
1	S:157:GLN:HE22	T:25:GLU:HB3	0.429
1	Y:14:ARG:C	Z:23:PRO:HD2	0.429
1	Z:228:THR:HG21	AA:140:PRO:C	0.429



Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	DA:231:ALA:HB3	EA:41:GLU:CB	0.429
1	RA:64:GLN:CD	SA:209:LYS:NZ	0.429
1	TA:15:LEU:HD11	UA:203:VAL:CA	0.429
1	UA:14:ARG:CG	VA:203:VAL:HG11	0.429
1	IA:90:LEU:H	JA:185:LYS:HZ3	0.429
1	AA:82:GLY:O	BA:191:LEU:HB2	0.429
1	YA:231:ALA:O	ZA:41:GLU:HG3	0.429
1	C:89:VAL:CG1	D:187:VAL:HG11	0.428
1	G:124:LEU:HD11	H:45:SER:N	0.428
1	K:15:LEU:HA	L:22:LEU:C	0.428
1	Z:13:LYS:HA	AA:22:LEU:HD22	0.428
1	QA:14:ARG:N	RA:22:LEU:HD13	0.428
1	TA:87:LYS:HB2	UA:187:VAL:HA	0.428
1	UA:69:ILE:CD	VA:204:THR:C	0.428
1	VA:230:PHE:CE1	WA:141:VAL:HB	0.428
1	XA:15:LEU:HD11	YA:203:VAL:C	0.428
1	K:90:LEU:CA	L:185:LYS:HZ3	0.428
1	NA:86:LEU:CG	OA:188:GLY:N	0.428
1	BA:233:GLN:OE1	CA:39:THR:HA	0.428
1	A:17:TYR:CE2	B:24:ARG:HB3	0.427
1	K:124:LEU:HB3	L:48:LYS:HZ1	0.427
1	K:124:LEU:HG	L:48:LYS:HE2	0.427
1	X:65:ALA:HB3	Y:209:LYS:N	0.427

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	X:88:SER:H	Y:186:VAL:HB	0.427
1	AA:83:ILE:CD	BA:191:LEU:HB2	0.427
1	CA:228:THR:CG2	DA:141:VAL:H	0.427
1	CA:86:LEU:N	DA:187:VAL:HA	0.427
1	HA:124:LEU:CB	IA:48:LYS:CE	0.427
1	JA:16:GLY:C	KA:22:LEU:CD2	0.427
1	OA:231:ALA:CB	PA:42:TYR:O	0.427
1	OA:64:GLN:CB	PA:209:LYS:CE	0.427
1	S:16:GLY:N	T:22:LEU:O	0.427
1	A:187:VAL:HG13	ZA:87:LYS:HB2	0.426
1	C:65:ALA:HB1	D:208:GLU:CD	0.426
1	G:231:ALA:CB	H:41:GLU:HB3	0.426
1	O:87:LYS:HB2	P:187:VAL:CG1	0.426
1	R:90:LEU:HB3	S:185:LYS:HE2	0.426
1	CA:89:VAL:CG1	DA:187:VAL:HG11	0.426
1	CA:89:VAL:N	DA:185:LYS:HB3	0.426
1	CA:87:LYS:HE3	DA:186:VAL:HG22	0.426
1	MA:216:LYS:HZ3	NA:24:ARG:HD3	0.426
1	KA:216:LYS:NZ	LA:24:ARG:HD2	0.426
1	BA:86:LEU:O	CA:186:VAL:C	0.426
1	XA:77:LEU:CA	YA:196:SER:O	0.426
1	R:231:ALA:HB3	S:41:GLU:C	0.425
1	W:87:LYS:H	X:187:VAL:HA	0.425

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	AA:17:TYR:CE2	BA:24:ARG:HB3	0.425
1	AA:230:PHE:CZ	BA:141:VAL:N	0.425
1	BA:14:ARG:CG	CA:203:VAL:HG11	0.425
1	EA:86:LEU:C	FA:187:VAL:CA	0.425
1	GA:124:LEU:HD11	HA:45:SER:N	0.425
1	KA:15:LEU:HA	LA:22:LEU:C	0.425
1	NA:14:ARG:HG3	OA:203:VAL:HB	0.425
1	A:25:GLU:OE2	ZA:64:GLN:HB3	0.425
1	A:200:GLN:O	ZA:73:LYS:CA	0.425
1	U:17:TYR:O	V:22:LEU:CD2	0.425
1	U:64:GLN:OE1	V:209:LYS:NZ	0.425
1	X:231:ALA:O	Y:41:GLU:CA	0.425
1	X:75:GLU:CA	Y:198:SER:O	0.425
1	AA:77:LEU:CB	BA:196:SER:O	0.425
1	D:69:ILE:CB	E:204:THR:O	0.424
1	E:230:PHE:HZ	F:140:PRO:C	0.424
1	F:218:PHE:HZ	G:43:LEU:C	0.424
1	I:89:VAL:C	J:185:LYS:HZ2	0.424
1	S:66:ALA:C	T:207:GLY:HA3	0.424
1	X:66:ALA:HA	Y:209:LYS:HB2	0.424
1	Y:87:LYS:C	Z:187:VAL:HG12	0.424
1	AA:17:TYR:OH	BA:24:ARG:HB2	0.424
1	DA:76:ASN:O	EA:197:VAL:HA	0.424

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	FA:75:GLU:HA	GA:198:SER:O	0.424
1	FA:13:LYS:O	GA:22:LEU:HB2	0.424
1	MA:233:GLN:OE1	NA:39:THR:HG21	0.424
1	I:90:LEU:CB	J:185:LYS:HZ1	0.424
1	R:67:ALA:HB3	S:206:LYS:H	0.424
1	A:233:GLN:OE1	B:39:THR:HA	0.424
1	B:86:LEU:O	C:186:VAL:C	0.424
1	G:15:LEU:CA	H:22:LEU:O	0.424
1	W:230:PHE:C	X:42:TYR:O	0.424
1	WA:67:ALA:O	XA:206:LYS:CB	0.424
1	A:15:LEU:HG	B:23:PRO:HD2	0.423
1	A:70:ASN:O	B:204:THR:CG2	0.423
1	D:76:ASN:O	E:197:VAL:HA	0.423
1	Q:66:ALA:HB1	R:205:TYR:CE1	0.423
1	R:69:ILE:CD	S:204:THR:HG1	0.423
1	R:13:LYS:O	S:22:LEU:HB2	0.423
1	V:216:LYS:HB3	W:24:ARG:HH11	0.423
1	AA:66:ALA:CA	BA:211:LEU:HD11	0.423
1	CA:124:LEU:CA	DA:48:LYS:NZ	0.423
1	QA:124:LEU:HD21	RA:45:SER:HB2	0.423
1	WA:233:GLN:HG3	XA:21:ARG:NH2	0.423
1	YA:14:ARG:O	ZA:23:PRO:HD2	0.423
1	W:218:PHE:HZ	X:44:GLY:N	0.423

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	B:68:GLY:H	C:205:TYR:HE1	0.423
1	SA:16:GLY:N	TA:22:LEU:O	0.423
1	E:79:PHE:HB3	F:194:GLU:O	0.423
1	Z:74:THR:O	AA:200:GLN:N	0.423
1	C:124:LEU:CA	D:48:LYS:NZ	0.422
1	U:231:ALA:O	V:41:GLU:CB	0.422
1	AA:70:ASN:O	BA:204:THR:CG2	0.422
1	FA:74:THR:O	GA:199:SER:HA	0.422
1	QA:231:ALA:HB2	RA:42:TYR:O	0.422
1	VA:89:VAL:HB	WA:187:VAL:CG2	0.422
1	XA:14:ARG:C	YA:23:PRO:HD2	0.422
1	XA:231:ALA:CA	YA:41:GLU:HB3	0.422
1	F:89:VAL:H	G:185:LYS:CD	0.422
1	H:87:LYS:HB2	I:187:VAL:HG13	0.421
1	H:87:LYS:CA	I:187:VAL:CG1	0.421
1	Q:231:ALA:HB2	R:42:TYR:O	0.421
1	T:13:LYS:CA	U:22:LEU:HD13	0.421
1	BA:13:LYS:N	CA:22:LEU:HD13	0.421
1	CA:17:TYR:CE2	DA:24:ARG:HB2	0.421
1	LA:67:ALA:HB2	MA:207:GLY:C	0.421
1	PA:65:ALA:CB	QA:208:GLU:OE1	0.421
1	OA:230:PHE:CD1	PA:141:VAL:HG11	0.421
1	PA:231:ALA:HB3	QA:42:TYR:N	0.421

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	TA:89:VAL:CG2	UA:187:VAL:HG21	0.421
1	X:230:PHE:HE1	Y:141:VAL:CA	0.421
1	AA:233:GLN:NE2	BA:21:ARG:HH22	0.421
1	XA:15:LEU:CA	YA:23:PRO:N	0.421
1	AA:233:GLN:OE1	BA:39:THR:HA	0.421
1	M:233:GLN:OE1	N:39:THR:HG21	0.420
1	O:89:VAL:CB	P:187:VAL:CG1	0.420
1	P:231:ALA:HB3	Q:42:TYR:N	0.420
1	Z:16:GLY:HA2	AA:22:LEU:HB3	0.420
1	BA:229:LEU:O	CA:141:VAL:HG11	0.420
1	DA:87:LYS:HB2	EA:187:VAL:HG22	0.420
1	JA:86:LEU:HD11	KA:187:VAL:C	0.420
1	RA:14:ARG:HE	SA:201:SER:CB	0.420
1	TA:87:LYS:HG3	UA:186:VAL:HA	0.420
1	TA:15:LEU:CD1	UA:203:VAL:HA	0.420
1	XA:89:VAL:HB	YA:187:VAL:CB	0.420
1	XA:230:PHE:CZ	YA:141:VAL:CB	0.420
1	B:14:ARG:CB	C:203:VAL:HG11	0.419
1	N:64:GLN:HB3	O:209:LYS:CE	0.419
1	N:14:ARG:C	O:22:LEU:HB2	0.419
1	W:89:VAL:HA	X:185:LYS:CG	0.419
1	AA:118:ALA:N	BA:209:LYS:HE2	0.419
1	IA:15:LEU:CD1	JA:203:VAL:HG21	0.419

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	JA:15:LEU:HG	KA:22:LEU:HD12	0.419
1	RA:13:LYS:O	SA:22:LEU:HB2	0.419
1	WA:216:LYS:HD2	XA:24:ARG:CB	0.419
1	XA:87:LYS:HB3	YA:186:VAL:N	0.419
1	BA:89:VAL:N	CA:185:LYS:CG	0.419
1	EA:15:LEU:H	FA:22:LEU:HD12	0.419
1	YA:233:GLN:NE2	ZA:21:ARG:NH1	0.419
1	TA:64:GLN:OE1	UA:25:GLU:OE1	0.419
1	B:14:ARG:CG	C:203:VAL:CG1	0.418
1	E:87:LYS:O	F:187:VAL:HG12	0.418
1	H:65:ALA:HB3	I:209:LYS:HG2	0.418
1	T:228:THR:HB	U:141:VAL:HG11	0.418
1	CA:78:SER:O	DA:195:ALA:HA	0.418
1	EA:66:ALA:CA	FA:211:LEU:HD11	0.418
1	GA:231:ALA:CB	HA:41:GLU:HB3	0.418
1	TA:64:GLN:C	UA:209:LYS:CG	0.418
1	C:73:LYS:HG3	D:200:GLN:O	0.417
1	D:67:ALA:C	E:207:GLY:CA	0.417
1	F:74:THR:O	G:199:SER:HA	0.417
1	K:228:THR:CG2	L:140:PRO:HG3	0.417
1	R:14:ARG:C	S:22:LEU:HA	0.417
1	Y:230:PHE:CE2	Z:141:VAL:CG1	0.417
1	BA:83:ILE:CD	CA:191:LEU:HB3	0.417

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	AA:89:VAL:HB	BA:187:VAL:HG11	0.417
1	DA:87:LYS:HB3	EA:185:LYS:HB3	0.417
1	SA:14:ARG:C	TA:22:LEU:CD1	0.417
1	YA:86:LEU:HD21	ZA:188:GLY:HA2	0.417
1	T:14:ARG:O	U:22:LEU:N	0.417
1	B:14:ARG:CG	C:203:VAL:HG11	0.416
1	D:87:LYS:HB2	E:187:VAL:HG22	0.416
1	U:69:ILE:CD	V:204:THR:C	0.416
1	Z:87:LYS:HB2	AA:187:VAL:HG13	0.416
1	Y:86:LEU:HD21	Z:188:GLY:HA2	0.416
1	CA:124:LEU:HD23	DA:47:GLU:CD	0.416
1	DA:78:SER:O	EA:195:ALA:HA	0.416
1	UA:231:ALA:O	VA:41:GLU:CB	0.416
1	WA:87:LYS:HD2	XA:186:VAL:HG22	0.416
1	WA:89:VAL:HA	XA:185:LYS:CG	0.416
1	XA:86:LEU:HG	YA:187:VAL:C	0.416
1	HA:90:LEU:CA	IA:185:LYS:NZ	0.416
1	C:228:THR:CG2	D:141:VAL:H	0.415
1	X:14:ARG:C	Y:23:PRO:HD2	0.415
1	AA:14:ARG:HG3	BA:203:VAL:HG11	0.415
1	AA:15:LEU:HG	BA:23:PRO:HD2	0.415
1	CA:73:LYS:HG3	DA:200:GLN:O	0.415
1	EA:87:LYS:O	FA:187:VAL:HG12	0.415



Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	SA:157:GLN:HE22	TA:25:GLU:HB3	0.415
1	VA:69:ILE:CD	WA:204:THR:O	0.415
1	XA:65:ALA:HB3	YA:209:LYS:N	0.415
1	XA:77:LEU:HD12	YA:197:VAL:HB	0.415
1	C:111:PHE:HZ	D:202:THR:O	0.415
1	L:90:LEU:CB	M:185:LYS:HZ1	0.415
1	T:64:GLN:OE1	U:25:GLU:OE1	0.415
1	A:226:GLU:HB3	B:140:PRO:HD3	0.414
1	B:229:LEU:O	C:141:VAL:HG11	0.414
1	B:90:LEU:N	C:185:LYS:HD2	0.414
1	D:87:LYS:HB3	E:185:LYS:HB3	0.414
1	C:86:LEU:N	D:187:VAL:HA	0.414
1	D:17:TYR:CA	E:22:LEU:CD2	0.414
1	F:75:GLU:HA	G:198:SER:O	0.414
1	G:65:ALA:HB1	H:209:LYS:HG3	0.414
1	P:65:ALA:CB	Q:208:GLU:OE1	0.414
1	T:87:LYS:HB2	U:187:VAL:HA	0.414
1	X:86:LEU:HD21	Y:188:GLY:CA	0.414
1	BA:85:ILE:HG22	CA:187:VAL:HG12	0.414
1	JA:228:THR:CB	KA:140:PRO:HG2	0.414
1	F:218:PHE:HE2	G:42:TYR:HD2	0.414
1	CA:111:PHE:HZ	DA:202:THR:O	0.414
1	I:124:LEU:CB	J:48:LYS:NZ	0.414

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	B:83:ILE:CD	C:191:LEU:HB3	0.413
1	H:90:LEU:HD23	I:185:LYS:HZ1	0.413
1	Q:89:VAL:CG1	R:187:VAL:CG1	0.413
1	S:14:ARG:CZ	T:201:SER:OG	0.413
1	X:86:LEU:HG	Y:187:VAL:C	0.413
1	JA:124:LEU:CD1	KA:45:SER:HB2	0.413
1	SA:14:ARG:C	TA:203:VAL:CG1	0.413
1	A:47:GLU:CG	ZA:124:LEU:HD23	0.413
1	RA:66:ALA:CB	SA:205:TYR:HE1	0.413
1	K:90:LEU:N	L:185:LYS:NZ	0.413
1	YA:65:ALA:CB	ZA:209:LYS:N	0.413
1	A:22:LEU:HD22	ZA:13:LYS:HA	0.412
1	C:78:SER:O	D:195:ALA:HA	0.412
1	E:66:ALA:CA	F:211:LEU:HD11	0.412
1	K:15:LEU:CD1	L:203:VAL:CG2	0.412
1	R:14:ARG:HE	S:201:SER:CB	0.412
1	V:87:LYS:O	W:187:VAL:HG12	0.412
1	X:77:LEU:HD12	Y:197:VAL:HB	0.412
1	BA:231:ALA:HB3	CA:41:GLU:HB3	0.412
1	EA:13:LYS:HA	FA:22:LEU:HD22	0.412
1	KA:124:LEU:HG	LA:48:LYS:HE2	0.412
1	LA:65:ALA:HB3	MA:209:LYS:HG3	0.412
1	UA:14:ARG:CB	VA:203:VAL:CB	0.412

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	YA:86:LEU:O	ZA:186:VAL:HG12	0.412
1	YA:218:PHE:HZ	ZA:43:LEU:C	0.412
1	E:15:LEU:H	F:22:LEU:HD12	0.412
1	J:89:VAL:C	K:185:LYS:NZ	0.412
1	S:15:LEU:N	T:203:VAL:CB	0.412
1	FA:67:ALA:O	GA:207:GLY:N	0.412
1	A:22:LEU:HB3	ZA:16:GLY:HA2	0.411
1	A:25:GLU:CD	ZA:64:GLN:OE1	0.411
1	B:85:ILE:HG22	C:187:VAL:HG12	0.411
1	C:87:LYS:HB2	D:187:VAL:CG2	0.411
1	D:78:SER:O	E:195:ALA:HA	0.411
1	J:124:LEU:CD1	K:45:SER:HB2	0.411
1	V:69:ILE:CD	W:204:THR:O	0.411
1	W:15:LEU:H	X:22:LEU:HD12	0.411
1	HA:87:LYS:CA	IA:187:VAL:CG1	0.411
1	KA:14:ARG:HG3	LA:203:VAL:CG1	0.411
1	TA:13:LYS:CA	UA:22:LEU:HD13	0.411
1	SA:14:ARG:CZ	TA:201:SER:OG	0.411
1	XA:15:LEU:CD2	YA:204:THR:O	0.411
1	YA:231:ALA:O	ZA:41:GLU:CA	0.411
1	A:43:LEU:CD2	ZA:230:PHE:HD1	0.410
1	C:66:ALA:HA	D:209:LYS:HB2	0.410
1	R:14:ARG:C	S:203:VAL:HG21	0.410

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	W:67:ALA:C	X:206:LYS:H	0.410
1	Y:14:ARG:O	Z:23:PRO:HD2	0.410
1	FA:15:LEU:HB2	GA:22:LEU:HD11	0.410
1	GA:67:ALA:C	HA:205:TYR:CD1	0.410
1	JA:89:VAL:C	KA:185:LYS:NZ	0.410
1	WA:228:THR:HG23	XA:140:PRO:CG	0.410
1	WA:14:ARG:CG	XA:203:VAL:HG11	0.410
1	YA:118:ALA:N	ZA:209:LYS:HE2	0.410
1	G:124:LEU:CB	H:48:LYS:HZ3	0.410
1	G:12:LEU:O	H:22:LEU:HD21	0.410
1	A:231:ALA:C	B:41:GLU:CB	0.409
1	C:231:ALA:CB	D:41:GLU:O	0.409
1	T:65:ALA:CA	U:209:LYS:CD	0.409
1	V:228:THR:HG23	W:140:PRO:HG2	0.409
1	X:87:LYS:HB3	Y:186:VAL:N	0.409
1	DA:16:GLY:HA2	EA:22:LEU:HB3	0.409
1	RA:124:LEU:CD2	SA:45:SER:HB3	0.409
1	H:64:GLN:CA	I:209:LYS:HZ3	0.409
1	A:82:GLY:O	B:191:LEU:HB2	0.409
1	DA:69:ILE:CB	EA:204:THR:O	0.409
1	VA:87:LYS:O	WA:187:VAL:HG12	0.409
1	XA:75:GLU:CA	YA:198:SER:O	0.409
1	A:200:GLN:N	ZA:74:THR:O	0.409

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	A:17:TYR:HB2	B:22:LEU:HD21	0.408
1	D:86:LEU:C	E:186:VAL:C	0.408
1	J:228:THR:CG2	K:140:PRO:HG3	0.408
1	U:87:LYS:HG3	V:186:VAL:HA	0.408
1	Y:118:ALA:N	Z:209:LYS:HE2	0.408
1	Z:218:PHE:CZ	AA:42:TYR:C	0.408
1	AA:17:TYR:HB2	BA:22:LEU:HD21	0.408
1	UA:15:LEU:N	VA:22:LEU:HA	0.408
1	WA:226:GLU:HB3	XA:140:PRO:HD3	0.408
1	YA:15:LEU:N	ZA:22:LEU:CD1	0.408
1	YA:124:LEU:HG	ZA:45:SER:H	0.408
1	I:16:GLY:N	J:22:LEU:O	0.408
1	S:64:GLN:OE1	T:25:GLU:OE1	0.408
1	U:73:LYS:NZ	V:200:GLN:O	0.408
1	FA:124:LEU:O	GA:48:LYS:NZ	0.408
1	A:123:PRO:HG2	B:42:TYR:HE2	0.407
1	Q:64:GLN:CB	R:209:LYS:HZ1	0.407
1	Q:89:VAL:HA	R:185:LYS:HB3	0.407
1	R:89:VAL:HG11	S:187:VAL:CG1	0.407
1	V:90:LEU:CA	W:185:LYS:CE	0.407
1	W:14:ARG:CA	X:203:VAL:HG11	0.407
1	X:16:GLY:O	Y:24:ARG:HB3	0.407
1	Z:124:LEU:HD23	AA:47:GLU:CG	0.407

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	BA:14:ARG:CG	CA:203:VAL:CG1	0.407
1	BA:15:LEU:HD21	CA:203:VAL:HG22	0.407
1	CA:15:LEU:CD1	DA:22:LEU:CD1	0.407
1	BA:14:ARG:CB	CA:203:VAL:HG11	0.407
1	DA:17:TYR:CA	EA:22:LEU:CD2	0.407
1	HA:124:LEU:CA	IA:48:LYS:HZ1	0.407
1	IA:13:LYS:C	JA:22:LEU:HD22	0.407
1	JA:124:LEU:HD23	KA:48:LYS:HZ3	0.407
1	RA:231:ALA:HB3	SA:41:GLU:C	0.407
1	SA:216:LYS:CE	TA:24:ARG:CZ	0.407
1	UA:67:ALA:O	VA:206:LYS:HB3	0.407
1	YA:17:TYR:CZ	ZA:24:ARG:HB2	0.407
1	F:67:ALA:O	G:207:GLY:N	0.407
1	H:90:LEU:CB	I:185:LYS:HZ3	0.407
1	W:218:PHE:CZ	X:44:GLY:N	0.407
1	OA:14:ARG:O	PA:22:LEU:N	0.407
1	A:42:TYR:C	ZA:218:PHE:CZ	0.406
1	A:89:VAL:HB	B:187:VAL:HG11	0.406
1	E:13:LYS:HA	F:22:LEU:HD22	0.406
1	G:14:ARG:HG3	H:203:VAL:HG11	0.406
1	I:90:LEU:HB3	J:185:LYS:HZ3	0.406
1	T:15:LEU:CD1	U:203:VAL:HA	0.406
1	W:228:THR:HG23	X:140:PRO:CG	0.406

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	BA:216:LYS:HD2	CA:24:ARG:HD2	0.406
1	DA:86:LEU:N	EA:187:VAL:HA	0.406
1	FA:90:LEU:CG	GA:185:LYS:HZ1	0.406
1	H:124:LEU:HD23	I:48:LYS:HZ3	0.406
1	Q:64:GLN:CD	R:209:LYS:HZ1	0.406
1	XA:233:GLN:CG	YA:21:ARG:NH2	0.406
1	G:87:LYS:N	H:186:VAL:O	0.406
1	A:66:ALA:CA	B:211:LEU:HD11	0.405
1	B:230:PHE:HA	C:43:LEU:HD22	0.405
1	AA:230:PHE:HA	BA:43:LEU:HD22	0.405
1	IA:50:ILE:HG23	IA:133:ALA:HB1	0.405
1	JA:16:GLY:N	KA:22:LEU:CB	0.405
1	LA:231:ALA:HB3	MA:41:GLU:HB3	0.405
1	VA:90:LEU:HD23	WA:185:LYS:CD	0.405
1	WA:231:ALA:C	XA:41:GLU:HB3	0.405
1	Z:230:PHE:HD1	AA:43:LEU:CD2	0.405
1	X:233:GLN:CG	Y:21:ARG:NH2	0.405
1	B:233:GLN:OE1	C:39:THR:HA	0.405
1	AA:124:LEU:O	BA:48:LYS:CE	0.405
1	UA:73:LYS:NZ	VA:200:GLN:O	0.405
1	A:23:PRO:HD2	ZA:14:ARG:C	0.404
1	C:124:LEU:HD23	D:47:GLU:CD	0.404
1	J:228:THR:CB	K:140:PRO:HG2	0.404

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	Q:89:VAL:CG1	R:187:VAL:HG11	0.404
1	T:50:ILE:HG23	T:133:ALA:HB1	0.404
1	V:50:ILE:HG23	V:133:ALA:HB1	0.404
1	Y:15:LEU:HB2	Z:22:LEU:CD1	0.404
1	Y:226:GLU:O	Z:140:PRO:HG3	0.404
1	Y:86:LEU:O	Z:186:VAL:HG12	0.404
1	AA:123:PRO:HG2	BA:42:TYR:HE2	0.404
1	GA:50:ILE:HG23	GA:133:ALA:HB1	0.404
1	HA:233:GLN:CD	IA:39:THR:HG22	0.404
1	KA:50:ILE:HG23	KA:133:ALA:HB1	0.404
1	RA:66:ALA:CB	SA:205:TYR:CE1	0.404
1	XA:16:GLY:O	YA:24:ARG:HB3	0.404
1	YA:87:LYS:HB3	ZA:185:LYS:C	0.404
1	YA:226:GLU:O	ZA:140:PRO:HG3	0.404
1	B:89:VAL:N	C:185:LYS:CG	0.404
1	A:124:LEU:O	B:48:LYS:CE	0.404
1	Y:231:ALA:O	Z:41:GLU:CA	0.404
1	BA:69:ILE:CD	CA:204:THR:OG1	0.404
1	SA:64:GLN:O	TA:209:LYS:HD3	0.404
1	SA:64:GLN:OE1	TA:25:GLU:OE1	0.404
1	D:15:LEU:HD21	E:203:VAL:CG2	0.403
1	D:231:ALA:HB3	E:41:GLU:O	0.403
1	I:16:GLY:C	J:22:LEU:HD23	0.403



Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	L:65:ALA:HB3	M:209:LYS:HG3	0.403
1	N:228:THR:CG2	O:140:PRO:HG2	0.403
1	R:50:ILE:HG23	R:133:ALA:HB1	0.403
1	T:89:VAL:CG2	U:187:VAL:HG21	0.403
1	X:50:ILE:HG23	X:133:ALA:HB1	0.403
1	X:216:LYS:HD2	Y:24:ARG:CB	0.403
1	AA:226:GLU:HB3	BA:140:PRO:HD3	0.403
1	EA:50:ILE:HG23	EA:133:ALA:HB1	0.403
1	FA:15:LEU:HD13	GA:22:LEU:HD11	0.403
1	MA:50:ILE:HG23	MA:133:ALA:HB1	0.403
1	QA:66:ALA:HB1	RA:205:TYR:CE1	0.403
1	RA:16:GLY:HA3	SA:22:LEU:O	0.403
1	XA:230:PHE:CE2	YA:141:VAL:CG1	0.403
1	J:216:LYS:NZ	K:24:ARG:HD2	0.403
1	C:12:LEU:O	D:22:LEU:CD1	0.403
1	V:14:ARG:O	W:23:PRO:CD	0.403
1	QA:66:ALA:CA	RA:205:TYR:OH	0.403
1	B:230:PHE:CA	C:43:LEU:HD23	0.402
1	L:231:ALA:HB3	M:41:GLU:HB3	0.402
1	U:67:ALA:O	V:206:LYS:HB3	0.402
1	X:15:LEU:CB	Y:22:LEU:HD12	0.402
1	W:15:LEU:CA	X:23:PRO:CD	0.402
1	X:86:LEU:CB	Y:188:GLY:HA3	0.402

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	Z:50:ILE:HG23	Z:133:ALA:HB1	0.402
1	BA:65:ALA:HB3	CA:208:GLU:HG2	0.402
1	DA:66:ALA:CB	EA:211:LEU:HD11	0.402
1	NA:230:PHE:CZ	OA:141:VAL:HG13	0.402
1	SA:66:ALA:C	TA:207:GLY:HA3	0.402
1	VA:90:LEU:CA	WA:185:LYS:CE	0.402
1	B:15:LEU:N	C:23:PRO:HD2	0.402
1	N:86:LEU:CG	O:188:GLY:N	0.402
1	SA:15:LEU:N	TA:203:VAL:CB	0.402
1	B:69:ILE:CD	C:204:THR:OG1	0.402
1	D:69:ILE:CG1	E:204:THR:O	0.402
1	Z:64:GLN:OE1	AA:25:GLU:CD	0.402
1	FA:82:GLY:O	GA:191:LEU:HB2	0.402
1	O:124:LEU:HD23	P:45:SER:HB3	0.401
1	W:226:GLU:HB3	X:140:PRO:HD3	0.401
1	BA:79:PHE:HB3	CA:195:ALA:CA	0.401
1	CA:50:ILE:HG23	CA:133:ALA:HB1	0.401
1	DA:15:LEU:HD21	EA:203:VAL:CG2	0.401
1	GA:14:ARG:HG3	HA:203:VAL:HG11	0.401
1	YA:14:ARG:CG	ZA:203:VAL:HG11	0.401
1	W:111:PHE:HZ	X:202:THR:O	0.401
1	A:233:GLN:NE2	B:21:ARG:HH22	0.401
1	W:86:LEU:H	X:188:GLY:N	0.401

Model ID	Atom-1	Atom-2	Clash overlap (Å)
1	IA:64:GLN:CB	JA:209:LYS:NZ	0.401
1	IA:16:GLY:N	JA:22:LEU:O	0.401
1	H:87:LYS:CA	I:187:VAL:HG12	0.400
1	BA:50:ILE:HG23	BA:133:ALA:HB1	0.400
1	CA:16:GLY:HA2	DA:22:LEU:HB3	0.400
1	GA:124:LEU:CD2	HA:47:GLU:CG	0.400
1	IA:69:ILE:CD	JA:204:THR:O	0.400
1	OA:50:ILE:HG23	OA:133:ALA:HB1	0.400
1	BA:123:PRO:HG2	CA:42:TYR:HE2	0.400
1	HA:87:LYS:N	IA:186:VAL:O	0.400

### Torsion angles: Protein backbone ?

In the following table, Ramachandran outliers are listed. The Analysed column shows the number of residues for which the backbone conformation was analysed.

Model ID	Analyzed	Favored	Allowed	Outliers
1	11856	10608	1092	156

Detailed list of outliers are tabulated below.

### Torsion angles: Protein sidechains ?

In the following table, sidechain outliers are listed. The Analysed column shows the number of residues for which the sidechain conformation was analysed.

Model ID	Analyzed	Favored	Allowed	Outliers
1	9100	7904	1092	104

Detailed list of outliers are tabulated below.

Model ID	Chain	Residue ID	Residue type
1	A	3	LEU
1	A	119	ASP
1	B	3	LEU

Model ID	Chain	Residue ID	Residue type
1	B	119	ASP
1	C	3	LEU
1	C	119	ASP
1	D	3	LEU
1	D	119	ASP
1	E	3	LEU
1	E	119	ASP
1	F	3	LEU
1	F	119	ASP
1	G	3	LEU
1	G	119	ASP
1	H	3	LEU
1	H	119	ASP
1	I	3	LEU
1	I	119	ASP
1	J	3	LEU
1	J	119	ASP
1	K	3	LEU
1	K	119	ASP
1	L	3	LEU
1	L	119	ASP
1	M	3	LEU
1	M	119	ASP

Model ID	Chain	Residue ID	Residue type
1	N	3	LEU
1	N	119	ASP
1	O	3	LEU
1	O	119	ASP
1	P	3	LEU
1	P	119	ASP
1	Q	3	LEU
1	Q	119	ASP
1	R	3	LEU
1	R	119	ASP
1	S	3	LEU
1	S	119	ASP
1	T	3	LEU
1	T	119	ASP
1	U	3	LEU
1	U	119	ASP
1	V	3	LEU
1	V	119	ASP
1	W	3	LEU
1	W	119	ASP
1	X	3	LEU
1	X	119	ASP
1	Y	3	LEU

Model ID	Chain	Residue ID	Residue type
1	Y	119	ASP
1	Z	3	LEU
1	Z	119	ASP
1	AA	3	LEU
1	AA	119	ASP
1	BA	3	LEU
1	BA	119	ASP
1	CA	3	LEU
1	CA	119	ASP
1	DA	3	LEU
1	DA	119	ASP
1	EA	3	LEU
1	EA	119	ASP
1	FA	3	LEU
1	FA	119	ASP
1	GA	3	LEU
1	GA	119	ASP
1	HA	3	LEU
1	HA	119	ASP
1	IA	3	LEU
1	IA	119	ASP
1	JA	3	LEU
1	JA	119	ASP

Model ID	Chain	Residue ID	Residue type
1	KA	3	LEU
1	KA	119	ASP
1	LA	3	LEU
1	LA	119	ASP
1	MA	3	LEU
1	MA	119	ASP
1	NA	3	LEU
1	NA	119	ASP
1	OA	3	LEU
1	OA	119	ASP
1	PA	3	LEU
1	PA	119	ASP
1	QA	3	LEU
1	QA	119	ASP
1	RA	3	LEU
1	RA	119	ASP
1	SA	3	LEU
1	SA	119	ASP
1	TA	3	LEU
1	TA	119	ASP
1	UA	3	LEU
1	UA	119	ASP
1	VA	3	LEU

Model ID	Chain	Residue ID	Residue type
1	VA	119	ASP
1	WA	3	LEU
1	WA	119	ASP
1	XA	3	LEU
1	XA	119	ASP
1	YA	3	LEU
1	YA	119	ASP
1	ZA	3	LEU
1	ZA	119	ASP

### Fit of model to data used for modeling ?

#### 2DEM class average

Validation for this section is under development.

#### 3DEM volume

Validation for this section is under development.

### Fit of model to data used for validation ?

Validation for this section is under development.

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