Full wwPDB NMR Structure Validation Report (i)

May 29, 2020 – 08:01 am BST

PDB ID	:	2MLR
Title	:	Membrane Bilayer complex with Matrix Metalloproteinase-12 at its Alpha-face
Authors	:	Koppisetti, R.K.; Fulcher, Y.G.; Prior, S.H.; Lenoir, M.; Overduin, M.; Van Doren, S.R.
Deposited on	:	2014-03-04

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

We welcome your comments at *validation@mail.wwpdb.org*
A user guide is available at
https://www.wwpdb.org/validation/2017/NMRValidationReportHelp
with specific help available everywhere you see the (i) symbol.

The following versions of software and data (see references (1)) were used in the production of this report:

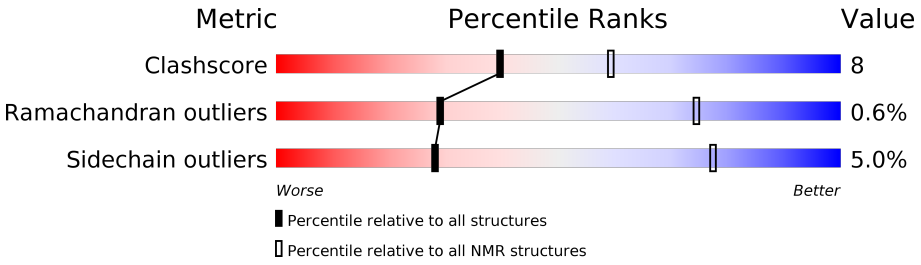
Cyrange	:	Kirchner and Güntert (2011)
NmrClust	:	Kelley et al. (1996)
MolProbity	:	4.02b-467
Mogul	:	1.8.5 (274361), CSD as541be (2020)
buster-report	:	1.1.7 (2018)
Percentile statistics	:	20191225.v01 (using entries in the PDB archive December 25th 2019)
RCI	:	v_1n_11_5_13_A (Berjanski et al., 2005)
PANAV	:	Wang et al. (2010)
ShiftChecker	:	2.11
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	2.11

1 Overall quality at a glance

The following experimental techniques were used to determine the structure:
SOLUTION NMR

The overall completeness of chemical shifts assignment is 83%.

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



Metric	Whole archive (#Entries)	NMR archive (#Entries)
Clashscore	158937	12864
Ramachandran outliers	154571	11451
Sidechain outliers	154315	11428

The table below summarises the geometric issues observed across the polymeric chains and their fit to the experimental data. The red, orange, yellow and green segments indicate the fraction of residues that contain outliers for >=3, 2, 1 and 0 types of geometric quality criteria. A cyan segment indicates the fraction of residues that are not part of the well-defined cores, and a grey segment represents the fraction of residues that are not modelled. The numeric value for each fraction is indicated below the corresponding segment, with a dot representing fractions <=5%

Mol	Chain	Length	Quality of chain
1	A	164	79% 18%

2 Ensemble composition and analysis

This entry contains 14 models. Model 3 is the overall representative, medoid model (most similar to other models). The authors have identified model 1 as representative, based on the following criterion: *lowest energy*.

The following residues are included in the computation of the global validation metrics.

Well-defined (core) protein residues			
Well-defined core	**Residue range (total)**	**Backbone RMSD (Å)**	**Medoid model**
1	A:100-A:187, A:192-A:263 (160)	0.38	3

Ill-defined regions of proteins are excluded from the global statistics.

Ligands and non-protein polymers are included in the analysis.

The models can be grouped into 4 clusters. No single-model clusters were found.

Cluster number	Models
1	8, 9, 10, 11, 13
2	1, 2, 3, 4, 5
3	6, 7
4	12, 14

3 Entry composition

There are 4 unique types of molecules in this entry. The entry contains 8263 atoms, of which 1221 are hydrogens and 0 are deuteriums.

- Molecule 1 is a protein called Macrophage metalloelastase.

Mol	Chain	Residues	Atoms						Trace
1	A	164	Total	C	H	N	O	S	0
			2508	824	1221	225	234	4	

There is a discrepancy between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
A	219	ALA	GLU	ENGINEERED MUTATION	UNP P39900

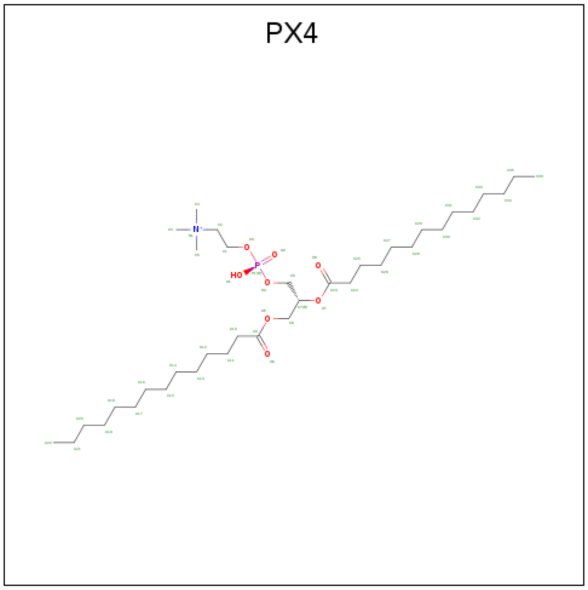
- Molecule 2 is ZINC ION (three-letter code: ZN) (formula: Zn).

Mol	Chain	Residues	Atoms	
2	A	2	Total	Zn
			2	2

- Molecule 3 is CALCIUM ION (three-letter code: CA) (formula: Ca).

Mol	Chain	Residues	Atoms	
3	A	3	Total	Ca
			3	3

- Molecule 4 is 1,2-DIMYRISTOYL-SN-GLYCERO-3-PHOSPHOCHOLINE (three-letter code: PX4) (formula: $C_{36}H_{73}NO_8P$).



Mol	Chain	Residues	Atoms
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4	A	1	Total C N O P 46 36 1 8 1
4	A	1	Total C N O P 46 36 1 8 1
4	A	1	Total C N O P 46 36 1 8 1
4	A	1	Total C N O P 46 36 1 8 1
4	A	1	Total C N O P 46 36 1 8 1
4	A	1	Total C N O P 46 36 1 8 1
4	A	1	Total C N O P 46 36 1 8 1
4	A	1	Total C N O P 46 36 1 8 1
4	A	1	Total C N O P 46 36 1 8 1
4	A	1	Total C N O P 46 36 1 8 1
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4	A	1	Total C N O P 46 36 1 8 1
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Mol	Chain	Residues	Atoms				
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			46	36	1	8	1
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			46	36	1	8	1
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4	A	1	Total	C	N	O	P
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4	A	1	Total	C	N	O	P
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4	A	1	Total	C	N	O	P
			46	36	1	8	1
4	A	1	Total	C	N	O	P
			46	36	1	8	1
4	A	1	Total	C	N	O	P
			46	36	1	8	1

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Mol	Chain	Residues	Atoms				
4	A	1	Total	C	N	O	P
			46	36	1	8	1
4	A	1	Total	C	N	O	P
			46	36	1	8	1
4	A	1	Total	C	N	O	P
			46	36	1	8	1
4	A	1	Total	C	N	O	P
			46	36	1	8	1
4	A	1	Total	C	N	O	P
			46	36	1	8	1
4	A	1	Total	C	N	O	P
			46	36	1	8	1

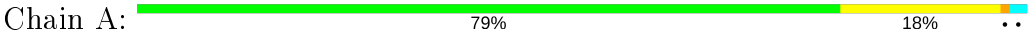
4 Residue-property plots

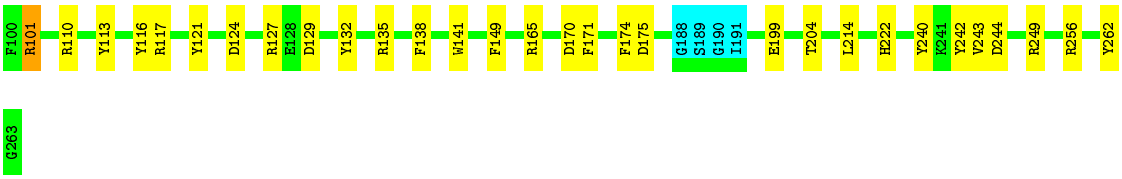
4.1 Average score per residue in the NMR ensemble

These plots are provided for all protein, RNA and DNA chains in the entry. The first graphic is the same as shown in the summary in section 1 of this report. The second graphic shows the sequence where residues are colour-coded according to the number of geometric quality criteria for which they contain at least one outlier: green = 0, yellow = 1, orange = 2 and red = 3 or more. Stretches of 2 or more consecutive residues without any outliers are shown as green connectors. Residues which are classified as ill-defined in the NMR ensemble, are shown in cyan with an underline colour-coded according to the previous scheme. Residues which were present in the experimental sample, but not modelled in the final structure are shown in grey.

- Molecule 1: Macrophage metalloelastase

Chain A:





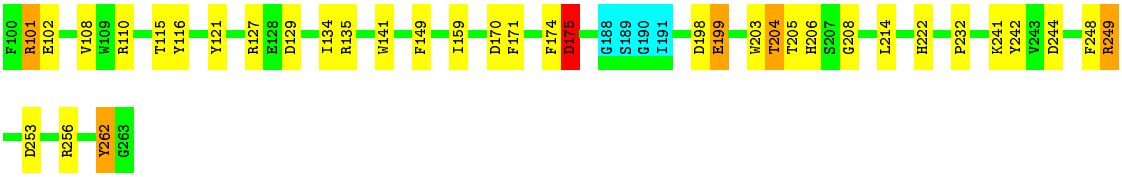
4.2 Scores per residue for each member of the ensemble

Colouring as in section 4.1 above.

4.2.1 Score per residue for model 1

- Molecule 1: Macrophage metalloelastase

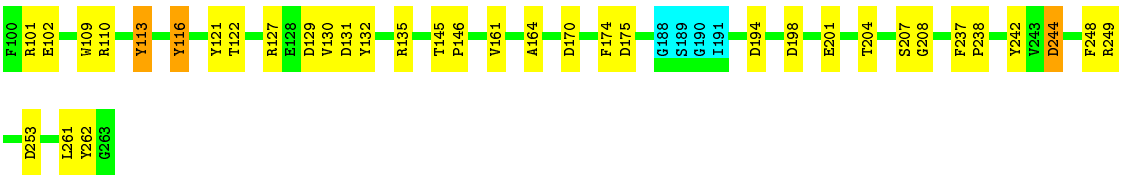
Chain A:



4.2.2 Score per residue for model 2

- Molecule 1: Macrophage metalloelastase

Chain A:



4.2.3 Score per residue for model 3 (medoid)

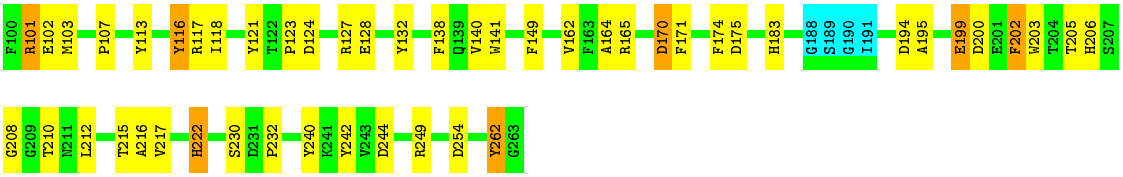
- Molecule 1: Macrophage metalloelastase

Chain A:

4.2.4 Score per residue for model 4

- Molecule 1: Macrophage metalloelastase

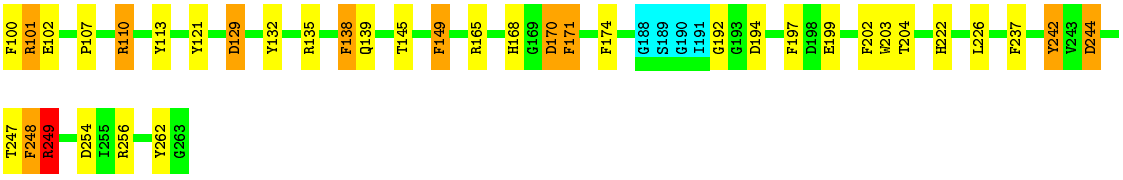
Chain A:



4.2.5 Score per residue for model 5

- Molecule 1: Macrophage metalloelastase

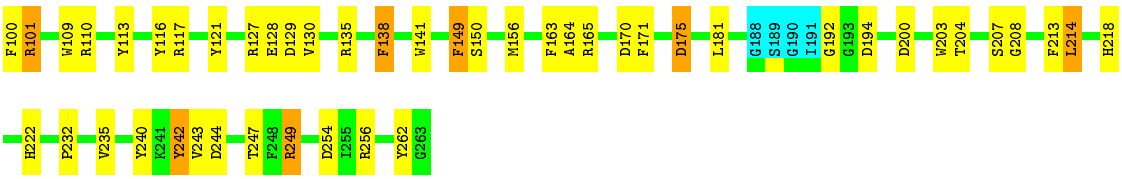
Chain A:



4.2.6 Score per residue for model 6

- Molecule 1: Macrophage metalloelastase

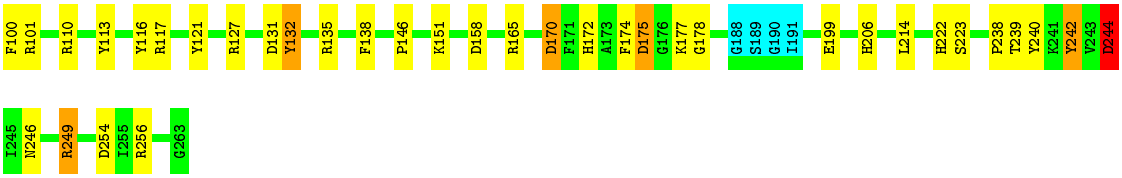
Chain A:



4.2.7 Score per residue for model 7

- Molecule 1: Macrophage metalloelastase

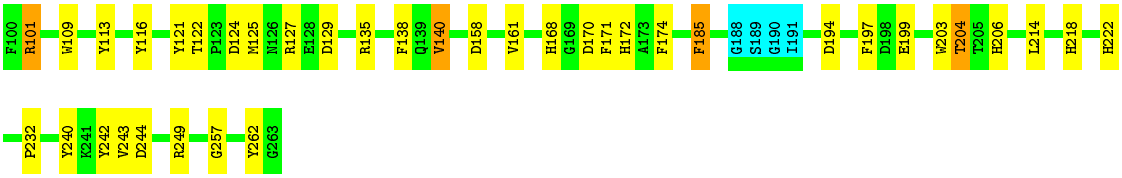
Chain A:



4.2.8 Score per residue for model 8

- Molecule 1: Macrophage metalloelastase

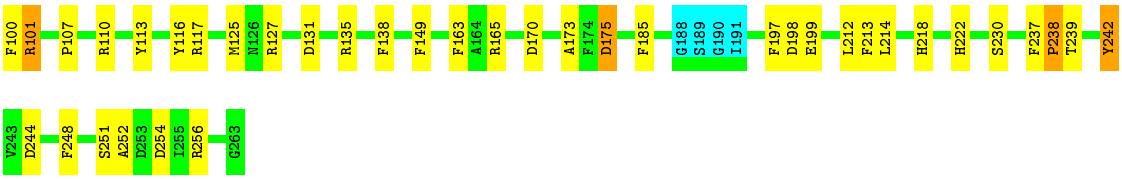
Chain A:



4.2.9 Score per residue for model 9

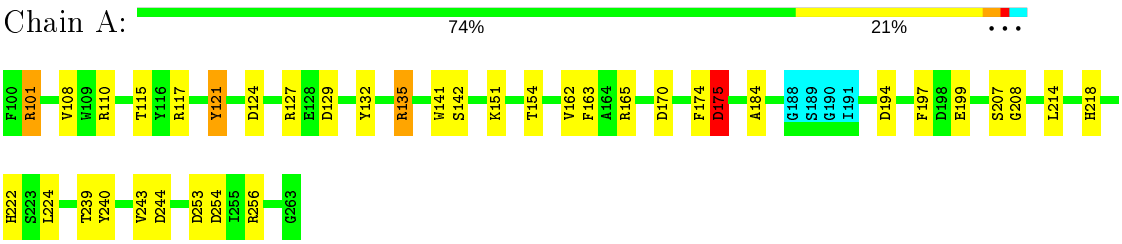
- Molecule 1: Macrophage metalloelastase

Chain A:



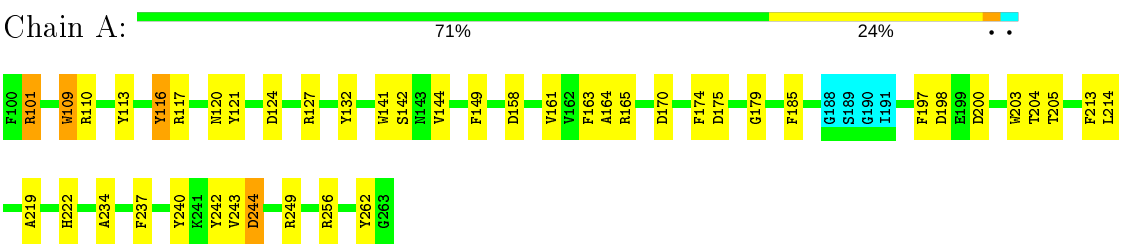
4.2.10 Score per residue for model 10

- Molecule 1: Macrophage metalloelastase



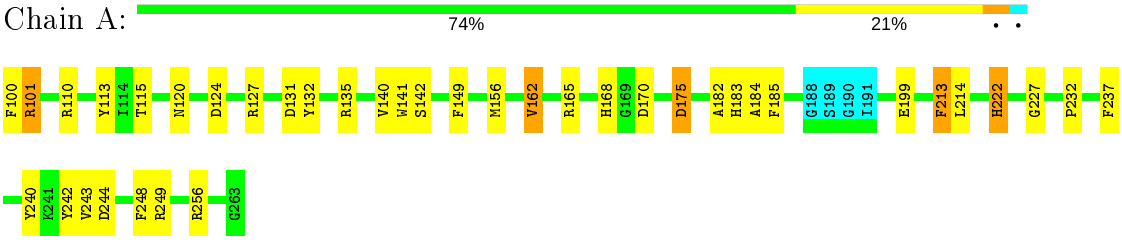
4.2.11 Score per residue for model 11

- Molecule 1: Macrophage metalloelastase



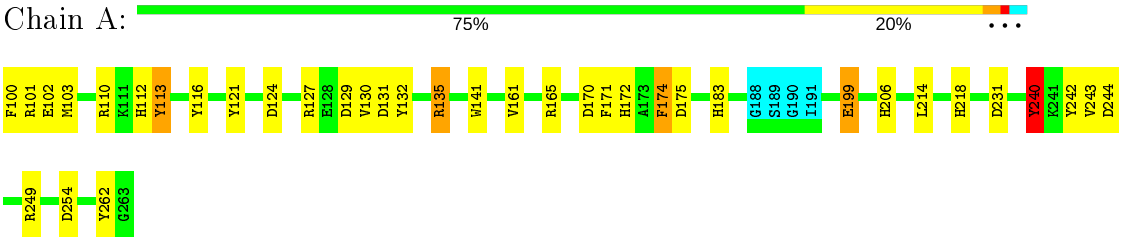
4.2.12 Score per residue for model 12

- Molecule 1: Macrophage metalloelastase



4.2.13 Score per residue for model 13

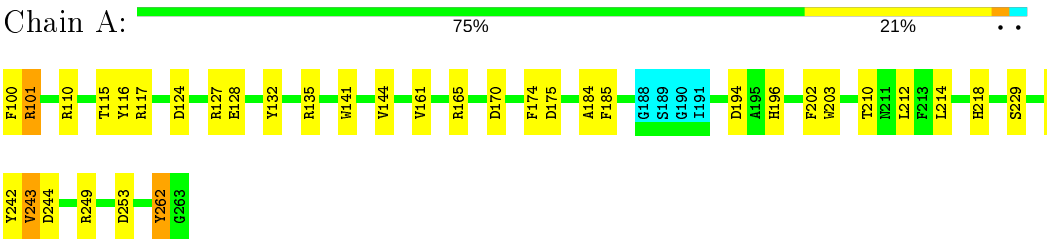
- Molecule 1: Macrophage metalloelastase



4.2.14 Score per residue for model 14

- Molecule 1: Macrophage metalloelastase

Chain A:



5 Refinement protocol and experimental data overview

The models were refined using the following method: *molecular dynamics*.

Of the 14 calculated structures, 14 were deposited, based on the following criterion: *structures with the lowest energy*.

The following table shows the software used for structure solution, optimisation and refinement.

Software name	Classification	Version
GROMACS	refinement	

The following table shows chemical shift validation statistics as aggregates over all chemical shift files. Detailed validation can be found in section 6 of this report.

Chemical shift file(s)	input_cs.cif
Number of chemical shift lists	1
Total number of shifts	1762
Number of shifts mapped to atoms	1762
Number of unparsed shifts	0
Number of shifts with mapping errors	0
Number of shifts with mapping warnings	0
Assignment completeness (well-defined parts)	83%

No validations of the models with respect to experimental NMR restraints is performed at this time.

COVALENT-GEOMETRY INFOmissingINFO

5.1 Too-close contacts

In the following table, the Non-H and H(model) columns list the number of non-hydrogen atoms and hydrogen atoms in each chain respectively. The H(added) column lists the number of hydrogen atoms added and optimized by MolProbity. The Clashes column lists the number of clashes averaged over the ensemble.

Mol	Chain	Non-H	H(model)	H(added)	Clashes
1	A	1265	1199	1196	2±1
4	A	5750	0	9000	131±13
All	All	98280	16786	142744	1846

The all-atom clashscore is defined as the number of clashes found per 1000 atoms (including hydrogen atoms). The all-atom clashscore for this structure is 8.

All unique clashes are listed below, sorted by their clash magnitude.

Atom-1	Atom-2	Clash(Å)	Distance(Å)	Models	
				Worst	Total
4:A:388:PX4:H39	4:A:411:PX4:H17	0.99	1.35	4	1
4:A:337:PX4:H47	4:A:353:PX4:H15	0.93	1.41	8	2
4:A:413:PX4:H24	4:A:430:PX4:H63	0.92	1.40	10	1
4:A:320:PX4:H20	4:A:359:PX4:H57	0.92	1.42	5	1
4:A:368:PX4:H22	4:A:369:PX4:H51	0.90	1.40	6	1
4:A:342:PX4:H24	4:A:352:PX4:H47	0.88	1.43	11	1
4:A:378:PX4:H16	4:A:417:PX4:H47	0.85	1.46	7	9
4:A:309:PX4:H59	4:A:324:PX4:H57	0.84	1.50	12	1
4:A:355:PX4:H48	4:A:356:PX4:H14	0.83	1.49	4	2
4:A:332:PX4:H61	4:A:349:PX4:H51	0.83	1.51	6	1
4:A:329:PX4:H70	4:A:382:PX4:H26	0.82	1.50	7	1
4:A:316:PX4:H20	4:A:364:PX4:H47	0.82	1.49	9	1
4:A:386:PX4:H28	4:A:394:PX4:H50	0.82	1.50	11	1
4:A:313:PX4:H18	4:A:318:PX4:H46	0.81	1.50	9	2
4:A:416:PX4:H21	4:A:425:PX4:H46	0.81	1.51	11	1
4:A:335:PX4:H21	4:A:343:PX4:H22	0.81	1.52	5	1
4:A:317:PX4:H17	4:A:325:PX4:H52	0.81	1.53	9	1
4:A:384:PX4:H60	4:A:385:PX4:H35	0.80	1.54	2	1
4:A:387:PX4:H47	4:A:411:PX4:H17	0.79	1.54	12	1
4:A:340:PX4:H66	4:A:340:PX4:H31	0.79	1.55	5	1
4:A:387:PX4:H24	4:A:394:PX4:H53	0.78	1.55	1	2
4:A:404:PX4:H34	4:A:419:PX4:H22	0.78	1.55	8	1
4:A:376:PX4:H54	4:A:385:PX4:H17	0.77	1.57	13	1
4:A:317:PX4:H47	4:A:342:PX4:H69	0.77	1.57	12	1
4:A:421:PX4:H31	4:A:422:PX4:H39	0.77	1.55	2	1
4:A:368:PX4:H25	4:A:425:PX4:H42	0.76	1.58	4	1
4:A:310:PX4:H16	4:A:363:PX4:H20	0.76	1.56	9	2
4:A:413:PX4:H50	4:A:422:PX4:H33	0.75	1.58	2	1
4:A:393:PX4:H22	4:A:394:PX4:H19	0.75	1.58	7	1
4:A:321:PX4:H20	4:A:354:PX4:H48	0.75	1.56	10	1
4:A:326:PX4:H50	4:A:351:PX4:H18	0.75	1.58	4	1
4:A:400:PX4:H51	4:A:409:PX4:H20	0.75	1.57	12	1
4:A:321:PX4:H41	4:A:354:PX4:H59	0.75	1.58	10	1
4:A:417:PX4:H31	4:A:426:PX4:H61	0.74	1.58	6	1
4:A:398:PX4:H16	4:A:407:PX4:H49	0.74	1.58	14	1
4:A:330:PX4:H22	4:A:335:PX4:H19	0.74	1.60	2	1
4:A:345:PX4:H48	4:A:353:PX4:H46	0.74	1.59	4	1
4:A:330:PX4:H60	4:A:357:PX4:H24	0.73	1.60	10	2
4:A:306:PX4:H23	4:A:321:PX4:H39	0.73	1.60	5	1
4:A:332:PX4:H31	4:A:332:PX4:H51	0.73	1.58	7	1
4:A:392:PX4:H18	4:A:393:PX4:H50	0.72	1.61	1	1
4:A:395:PX4:H53	4:A:405:PX4:H22	0.72	1.60	4	1

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Atom-1	Atom-2	Clash(Å)	Distance(Å)	Models	
				Worst	Total
4:A:317:PX4:H17	4:A:325:PX4:H49	0.72	1.60	1	1
4:A:403:PX4:H10	4:A:427:PX4:H49	0.72	1.61	3	2
4:A:325:PX4:H30	4:A:334:PX4:H18	0.72	1.60	4	1
4:A:376:PX4:H50	4:A:385:PX4:H17	0.72	1.60	11	2
4:A:383:PX4:H65	4:A:399:PX4:H31	0.72	1.60	8	1
4:A:317:PX4:H46	4:A:324:PX4:H17	0.72	1.60	8	1
4:A:371:PX4:H59	4:A:379:PX4:H33	0.72	1.61	4	1
4:A:367:PX4:H28	4:A:424:PX4:H52	0.72	1.62	4	1
4:A:323:PX4:H68	4:A:367:PX4:H40	0.72	1.62	3	1
4:A:378:PX4:H63	4:A:417:PX4:H62	0.72	1.62	11	1
4:A:321:PX4:H38	4:A:328:PX4:H57	0.72	1.61	13	1
4:A:385:PX4:H52	4:A:386:PX4:H26	0.71	1.61	14	1
4:A:383:PX4:H61	4:A:399:PX4:H29	0.71	1.60	6	1
4:A:402:PX4:H38	4:A:404:PX4:H62	0.71	1.59	14	1
4:A:376:PX4:H64	4:A:392:PX4:H29	0.71	1.60	5	1
4:A:387:PX4:H65	4:A:411:PX4:H54	0.71	1.63	8	1
4:A:409:PX4:H33	4:A:410:PX4:H46	0.71	1.60	2	1
4:A:332:PX4:H43	4:A:363:PX4:H72	0.71	1.63	12	1
4:A:402:PX4:H60	4:A:413:PX4:H41	0.71	1.63	7	1
4:A:363:PX4:H1	4:A:364:PX4:H20	0.71	1.61	11	1
4:A:391:PX4:H64	4:A:408:PX4:H55	0.71	1.63	7	1
4:A:321:PX4:H38	4:A:412:PX4:H43	0.70	1.62	14	1
4:A:370:PX4:H19	4:A:403:PX4:H17	0.70	1.63	11	2
4:A:419:PX4:H49	4:A:427:PX4:H49	0.70	1.63	13	1
4:A:308:PX4:H62	4:A:311:PX4:H41	0.70	1.64	13	1
4:A:325:PX4:H31	4:A:332:PX4:H25	0.70	1.63	11	1
4:A:306:PX4:H56	4:A:321:PX4:H55	0.69	1.64	13	1
4:A:384:PX4:H42	4:A:385:PX4:H43	0.69	1.62	8	1
4:A:317:PX4:H16	4:A:351:PX4:H24	0.69	1.64	14	1
4:A:408:PX4:H17	4:A:415:PX4:H20	0.69	1.64	8	1
4:A:322:PX4:H50	4:A:336:PX4:H27	0.69	1.63	1	1
4:A:332:PX4:H33	4:A:347:PX4:H62	0.69	1.64	11	1
4:A:374:PX4:H49	4:A:382:PX4:H46	0.69	1.62	8	2
4:A:358:PX4:H23	4:A:363:PX4:H53	0.69	1.64	9	1
4:A:315:PX4:H17	4:A:316:PX4:H49	0.69	1.64	13	1
4:A:360:PX4:H70	4:A:419:PX4:H41	0.69	1.62	4	1
4:A:399:PX4:H29	4:A:399:PX4:H63	0.69	1.64	2	1
4:A:368:PX4:H17	4:A:369:PX4:H53	0.69	1.63	9	1
4:A:331:PX4:H58	4:A:339:PX4:H22	0.69	1.63	4	1
4:A:396:PX4:H38	4:A:402:PX4:H41	0.69	1.64	12	1
4:A:422:PX4:H36	4:A:423:PX4:H23	0.68	1.65	5	1

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Atom-1	Atom-2	Clash(Å)	Distance(Å)	Models	
				Worst	Total
4:A:388:PX4:H54	4:A:395:PX4:H30	0.68	1.65	12	1
4:A:368:PX4:H47	4:A:369:PX4:H56	0.68	1.63	1	1
4:A:429:PX4:H30	4:A:429:PX4:H55	0.68	1.63	11	1
4:A:337:PX4:H50	4:A:353:PX4:H21	0.68	1.64	4	1
4:A:328:PX4:H70	4:A:412:PX4:H70	0.68	1.65	13	1
4:A:395:PX4:H55	4:A:404:PX4:H46	0.68	1.66	1	1
4:A:416:PX4:H55	4:A:418:PX4:H30	0.68	1.66	12	1
4:A:388:PX4:H38	4:A:411:PX4:H46	0.68	1.65	5	1
4:A:306:PX4:H14	4:A:321:PX4:H28	0.68	1.66	12	1
4:A:316:PX4:H14	4:A:320:PX4:H22	0.68	1.64	10	1
4:A:378:PX4:H51	4:A:418:PX4:H50	0.68	1.65	13	1
4:A:376:PX4:H67	4:A:385:PX4:H30	0.68	1.64	2	1
4:A:391:PX4:H40	4:A:408:PX4:H42	0.67	1.66	2	1
4:A:370:PX4:H22	4:A:403:PX4:H17	0.67	1.65	9	2
4:A:306:PX4:H20	4:A:329:PX4:H52	0.67	1.66	9	1
4:A:346:PX4:H22	4:A:354:PX4:H21	0.67	1.65	9	1
4:A:331:PX4:H63	4:A:340:PX4:H71	0.67	1.67	14	1
4:A:330:PX4:H44	4:A:344:PX4:H45	0.67	1.66	12	1
4:A:312:PX4:H16	4:A:359:PX4:H5	0.67	1.64	14	1
4:A:384:PX4:H2	4:A:385:PX4:H18	0.67	1.66	1	4
4:A:331:PX4:H33	4:A:340:PX4:H69	0.67	1.66	3	1
4:A:315:PX4:H42	4:A:425:PX4:H31	0.67	1.67	4	1
4:A:332:PX4:H25	4:A:390:PX4:H41	0.67	1.67	6	1
4:A:308:PX4:H38	4:A:311:PX4:H69	0.67	1.65	12	1
4:A:417:PX4:H19	4:A:426:PX4:H24	0.67	1.66	12	1
4:A:424:PX4:H53	4:A:425:PX4:H22	0.66	1.67	2	1
4:A:331:PX4:H35	4:A:397:PX4:H44	0.66	1.66	7	1
4:A:395:PX4:H49	4:A:396:PX4:H24	0.66	1.67	14	1
4:A:350:PX4:H56	4:A:364:PX4:H37	0.66	1.66	3	1
4:A:371:PX4:H61	4:A:372:PX4:H27	0.66	1.68	4	1
4:A:306:PX4:H56	4:A:361:PX4:H59	0.66	1.66	5	1
4:A:311:PX4:H53	4:A:316:PX4:H20	0.66	1.68	6	1
4:A:378:PX4:H56	4:A:417:PX4:H58	0.66	1.68	8	2
4:A:313:PX4:H49	4:A:328:PX4:H17	0.65	1.65	4	1
4:A:326:PX4:H28	4:A:350:PX4:H24	0.65	1.68	5	1
4:A:391:PX4:H28	4:A:414:PX4:H46	0.65	1.69	5	1
4:A:311:PX4:H65	4:A:359:PX4:H71	0.65	1.66	7	1
4:A:383:PX4:H50	4:A:399:PX4:H17	0.65	1.67	8	1
4:A:380:PX4:H56	4:A:387:PX4:H50	0.65	1.68	11	1
4:A:311:PX4:H10	4:A:359:PX4:H51	0.65	1.68	2	1
4:A:373:PX4:H26	4:A:381:PX4:H53	0.65	1.68	9	1

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Atom-1	Atom-2	Clash(Å)	Distance(Å)	Models	
				Worst	Total
4:A:345:PX4:H64	4:A:345:PX4:H40	0.65	1.69	4	1
4:A:321:PX4:H50	4:A:354:PX4:H27	0.65	1.66	6	1
4:A:316:PX4:H51	4:A:320:PX4:H27	0.65	1.69	12	1
4:A:417:PX4:H31	4:A:426:PX4:H37	0.65	1.67	13	1
4:A:387:PX4:H16	4:A:394:PX4:H9	0.65	1.69	2	1
4:A:356:PX4:H16	4:A:356:PX4:H10	0.65	1.68	8	1
4:A:333:PX4:H56	4:A:341:PX4:H54	0.65	1.68	12	1
4:A:382:PX4:H19	4:A:428:PX4:H23	0.64	1.69	1	1
4:A:388:PX4:H20	4:A:411:PX4:H14	0.64	1.70	3	1
4:A:421:PX4:H22	4:A:422:PX4:H26	0.64	1.68	6	1
4:A:306:PX4:H18	4:A:322:PX4:H51	0.64	1.69	13	1
4:A:317:PX4:H55	4:A:324:PX4:H31	0.64	1.69	14	1
4:A:354:PX4:H50	4:A:360:PX4:H55	0.64	1.69	4	1
4:A:371:PX4:H20	4:A:379:PX4:H21	0.64	1.68	14	1
4:A:385:PX4:H71	4:A:392:PX4:H30	0.64	1.69	5	1
4:A:326:PX4:O8	4:A:351:PX4:H17	0.64	1.91	6	1
4:A:314:PX4:H34	4:A:356:PX4:H33	0.64	1.67	7	1
4:A:403:PX4:H7	4:A:427:PX4:H52	0.64	1.68	9	1
4:A:418:PX4:H42	4:A:422:PX4:H59	0.64	1.68	1	1
4:A:307:PX4:H60	4:A:349:PX4:H45	0.64	1.69	14	1
4:A:360:PX4:H44	4:A:412:PX4:H60	0.64	1.69	4	1
4:A:335:PX4:H48	4:A:343:PX4:H21	0.64	1.67	11	1
4:A:406:PX4:H48	4:A:421:PX4:H53	0.64	1.69	12	1
4:A:311:PX4:H52	4:A:320:PX4:H24	0.64	1.68	5	1
4:A:317:PX4:H48	4:A:342:PX4:H54	0.64	1.69	5	1
4:A:391:PX4:H43	4:A:394:PX4:H34	0.64	1.70	5	1
4:A:371:PX4:H16	4:A:379:PX4:H20	0.64	1.70	14	2
4:A:391:PX4:H48	4:A:408:PX4:H16	0.64	1.69	2	3
4:A:306:PX4:H38	4:A:321:PX4:H43	0.64	1.68	12	1
4:A:403:PX4:H47	4:A:427:PX4:H48	0.64	1.68	12	1
4:A:345:PX4:H37	4:A:353:PX4:H64	0.64	1.68	1	1
4:A:395:PX4:H19	4:A:398:PX4:H54	0.64	1.68	4	1
4:A:387:PX4:H46	4:A:388:PX4:H37	0.64	1.68	6	1
4:A:308:PX4:H34	4:A:314:PX4:H58	0.64	1.70	8	1
4:A:404:PX4:H34	4:A:419:PX4:H48	0.63	1.70	3	1
4:A:409:PX4:H41	4:A:410:PX4:H24	0.63	1.70	4	1
4:A:404:PX4:H39	4:A:419:PX4:H30	0.63	1.68	9	1
4:A:385:PX4:H32	4:A:386:PX4:H32	0.63	1.70	7	1
4:A:350:PX4:H50	4:A:363:PX4:H51	0.63	1.68	11	2
4:A:421:PX4:H39	4:A:423:PX4:H33	0.63	1.68	11	1
4:A:404:PX4:H49	4:A:413:PX4:H21	0.63	1.68	5	1

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Atom-1	Atom-2	Clash(Å)	Distance(Å)	Models	
				Worst	Total
4:A:424:PX4:H48	4:A:425:PX4:H21	0.63	1.70	9	1
4:A:313:PX4:H22	4:A:318:PX4:H51	0.63	1.70	11	1
4:A:324:PX4:H48	4:A:341:PX4:H3	0.63	1.69	8	1
4:A:322:PX4:H17	4:A:336:PX4:H23	0.63	1.70	11	1
4:A:355:PX4:H72	4:A:356:PX4:H53	0.63	1.70	3	1
4:A:428:PX4:H61	4:A:430:PX4:H29	0.63	1.71	7	1
4:A:410:PX4:H62	4:A:426:PX4:H37	0.63	1.69	4	1
4:A:382:PX4:H22	4:A:428:PX4:H32	0.63	1.68	5	1
4:A:320:PX4:H17	4:A:359:PX4:H56	0.63	1.71	7	1
4:A:408:PX4:H47	4:A:415:PX4:H21	0.63	1.70	9	1
4:A:395:PX4:H47	4:A:396:PX4:H20	0.63	1.71	12	1
4:A:363:PX4:H20	4:A:364:PX4:H33	0.63	1.69	1	1
4:A:372:PX4:H38	4:A:378:PX4:H42	0.63	1.70	13	1
4:A:311:PX4:H50	4:A:316:PX4:H19	0.63	1.71	14	1
4:A:325:PX4:H24	4:A:340:PX4:H53	0.63	1.70	5	1
4:A:362:PX4:H13	4:A:362:PX4:O2	0.62	1.93	11	1
4:A:370:PX4:H54	4:A:411:PX4:H50	0.62	1.71	12	1
4:A:308:PX4:H22	4:A:364:PX4:H14	0.62	1.71	3	1
4:A:320:PX4:H68	4:A:417:PX4:H72	0.62	1.71	1	1
4:A:353:PX4:H39	4:A:366:PX4:H26	0.62	1.70	1	1
4:A:375:PX4:H55	4:A:429:PX4:H41	0.62	1.70	5	1
4:A:377:PX4:H4	4:A:418:PX4:H49	0.62	1.71	6	1
4:A:309:PX4:H40	4:A:372:PX4:H45	0.62	1.69	11	1
4:A:317:PX4:H55	4:A:324:PX4:H20	0.62	1.70	2	1
4:A:331:PX4:H66	4:A:373:PX4:H45	0.62	1.71	13	1
4:A:378:PX4:H21	4:A:417:PX4:H48	0.62	1.72	3	1
4:A:337:PX4:H58	4:A:353:PX4:H27	0.62	1.69	5	1
4:A:330:PX4:H64	4:A:357:PX4:H28	0.62	1.71	10	1
4:A:395:PX4:H63	4:A:421:PX4:H20	0.62	1.70	9	1
4:A:317:PX4:H63	4:A:325:PX4:H59	0.62	1.71	5	1
4:A:326:PX4:H17	4:A:351:PX4:O8	0.62	1.95	14	2
4:A:389:PX4:H69	4:A:397:PX4:H45	0.62	1.71	8	1
4:A:345:PX4:H29	4:A:362:PX4:H65	0.62	1.71	12	1
4:A:354:PX4:H39	4:A:362:PX4:H33	0.62	1.70	8	1
4:A:378:PX4:H22	4:A:417:PX4:H48	0.62	1.69	8	1
4:A:405:PX4:H17	4:A:406:PX4:H54	0.62	1.70	1	2
4:A:331:PX4:H28	4:A:347:PX4:H49	0.62	1.71	4	1
4:A:307:PX4:H28	4:A:349:PX4:H23	0.62	1.71	14	1
4:A:426:PX4:H38	4:A:426:PX4:H64	0.61	1.72	1	1
4:A:317:PX4:H16	4:A:342:PX4:H52	0.61	1.70	5	1
4:A:329:PX4:H18	4:A:336:PX4:H53	0.61	1.69	8	1

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Atom-1	Atom-2	Clash(Å)	Distance(Å)	Models	
				Worst	Total
4:A:314:PX4:H57	4:A:364:PX4:H53	0.61	1.71	9	1
4:A:417:PX4:O6	4:A:417:PX4:H4	0.61	1.95	5	1
4:A:306:PX4:H15	4:A:321:PX4:H42	0.61	1.70	10	1
4:A:369:PX4:H38	4:A:378:PX4:H68	0.61	1.72	14	1
4:A:380:PX4:H18	4:A:381:PX4:H15	0.61	1.71	4	3
4:A:376:PX4:H46	4:A:385:PX4:H17	0.61	1.71	10	1
4:A:316:PX4:H34	4:A:320:PX4:H37	0.61	1.71	3	1
4:A:391:PX4:H62	4:A:408:PX4:H52	0.61	1.72	4	1
4:A:320:PX4:H54	4:A:359:PX4:H26	0.61	1.70	6	1
4:A:307:PX4:H52	4:A:321:PX4:H59	0.61	1.72	13	1
4:A:403:PX4:H53	4:A:403:PX4:H32	0.61	1.73	12	1
4:A:376:PX4:H40	4:A:399:PX4:H64	0.61	1.73	1	1
4:A:368:PX4:H52	4:A:369:PX4:H64	0.61	1.73	3	1
4:A:386:PX4:O6	4:A:394:PX4:H18	0.61	1.94	7	1
4:A:398:PX4:H16	4:A:407:PX4:H48	0.61	1.72	9	1
4:A:423:PX4:H48	4:A:425:PX4:H18	0.61	1.73	12	1
4:A:369:PX4:H31	4:A:377:PX4:H62	0.61	1.73	13	1
4:A:360:PX4:H2	4:A:366:PX4:H16	0.61	1.71	6	2
4:A:380:PX4:H67	4:A:387:PX4:H65	0.61	1.73	12	1
4:A:306:PX4:H66	4:A:362:PX4:H45	0.61	1.71	10	1
1:A:214:LEU:HD12	1:A:240:TYR:CE1	0.61	2.30	13	1
4:A:347:PX4:H19	4:A:348:PX4:H14	0.61	1.72	13	1
4:A:367:PX4:H49	4:A:428:PX4:H51	0.60	1.73	1	1
4:A:391:PX4:H55	4:A:408:PX4:H55	0.60	1.72	3	1
4:A:317:PX4:H17	4:A:325:PX4:H46	0.60	1.73	7	2
4:A:371:PX4:H20	4:A:372:PX4:H17	0.60	1.71	7	1
4:A:406:PX4:O1	4:A:414:PX4:H9	0.60	1.95	8	1
4:A:363:PX4:H24	4:A:364:PX4:H37	0.60	1.71	1	1
4:A:329:PX4:H24	4:A:336:PX4:H60	0.60	1.73	3	1
4:A:393:PX4:O2	4:A:394:PX4:H17	0.60	1.96	10	2
4:A:347:PX4:H30	4:A:348:PX4:H19	0.60	1.72	14	1
4:A:404:PX4:H70	4:A:430:PX4:H65	0.60	1.73	11	1
4:A:306:PX4:H23	4:A:328:PX4:H54	0.60	1.73	13	1
4:A:325:PX4:H45	4:A:407:PX4:H29	0.60	1.72	7	1
4:A:371:PX4:H14	4:A:379:PX4:H20	0.60	1.71	11	1
4:A:401:PX4:H46	4:A:426:PX4:H56	0.60	1.72	13	1
4:A:398:PX4:H30	4:A:407:PX4:H18	0.60	1.72	10	1
4:A:350:PX4:H67	4:A:358:PX4:H33	0.60	1.71	3	1
4:A:378:PX4:H20	4:A:410:PX4:H52	0.60	1.73	12	2
4:A:395:PX4:H64	4:A:406:PX4:H56	0.60	1.72	1	2
1:A:244:ASP:OD2	4:A:349:PX4:H9	0.60	1.96	7	2

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Atom-1	Atom-2	Clash(Å)	Distance(Å)	Models	
				Worst	Total
4:A:348:PX4:H11	4:A:355:PX4:O2	0.60	1.95	5	2
4:A:311:PX4:H29	4:A:311:PX4:H60	0.60	1.74	9	1
4:A:321:PX4:H26	4:A:360:PX4:H61	0.60	1.72	12	1
4:A:327:PX4:H20	4:A:328:PX4:H16	0.60	1.72	7	2
4:A:381:PX4:H51	4:A:396:PX4:H46	0.60	1.73	14	1
4:A:380:PX4:H52	4:A:387:PX4:H49	0.60	1.73	6	1
4:A:315:PX4:H55	4:A:323:PX4:H46	0.59	1.74	1	1
4:A:400:PX4:H71	4:A:426:PX4:H43	0.59	1.73	2	1
4:A:328:PX4:H72	4:A:374:PX4:H43	0.59	1.74	5	1
4:A:424:PX4:H47	4:A:429:PX4:H21	0.59	1.74	2	1
4:A:347:PX4:H64	4:A:356:PX4:H56	0.59	1.72	3	1
4:A:422:PX4:H35	4:A:423:PX4:H32	0.59	1.74	3	1
4:A:413:PX4:O2	4:A:430:PX4:H18	0.59	1.96	3	1
4:A:347:PX4:H35	4:A:348:PX4:H24	0.59	1.73	4	1
4:A:403:PX4:H2	4:A:427:PX4:H46	0.59	1.73	14	1
4:A:316:PX4:O6	4:A:364:PX4:H12	0.59	1.98	3	1
4:A:335:PX4:H28	4:A:343:PX4:H56	0.59	1.74	6	1
4:A:331:PX4:H31	4:A:340:PX4:H56	0.59	1.73	8	1
4:A:371:PX4:H54	4:A:379:PX4:H25	0.59	1.73	11	1
4:A:306:PX4:H29	4:A:329:PX4:H51	0.59	1.73	3	1
4:A:350:PX4:H60	4:A:364:PX4:H41	0.59	1.73	3	1
4:A:416:PX4:H58	4:A:423:PX4:H60	0.59	1.74	6	1
4:A:388:PX4:O6	4:A:395:PX4:H5	0.59	1.97	8	2
4:A:351:PX4:H50	4:A:358:PX4:H55	0.59	1.74	10	1
4:A:330:PX4:H25	4:A:343:PX4:H54	0.59	1.75	14	1
4:A:342:PX4:H24	4:A:352:PX4:C24	0.59	2.24	11	1
4:A:345:PX4:H33	4:A:362:PX4:H69	0.59	1.73	12	1
4:A:400:PX4:H46	4:A:408:PX4:H64	0.59	1.74	12	1
4:A:393:PX4:H45	4:A:394:PX4:H37	0.59	1.72	5	1
4:A:369:PX4:H20	4:A:377:PX4:H51	0.59	1.75	14	1
4:A:327:PX4:H26	4:A:327:PX4:H57	0.59	1.73	1	1
4:A:421:PX4:H44	4:A:428:PX4:H58	0.59	1.74	2	1
4:A:371:PX4:H34	4:A:377:PX4:H36	0.59	1.74	5	1
4:A:375:PX4:H65	4:A:412:PX4:H38	0.59	1.74	9	1
4:A:334:PX4:H42	4:A:391:PX4:H43	0.58	1.75	2	1
4:A:416:PX4:H49	4:A:425:PX4:H57	0.58	1.75	9	1
4:A:347:PX4:H34	4:A:348:PX4:H22	0.58	1.73	14	1
4:A:383:PX4:H63	4:A:399:PX4:H67	0.58	1.74	3	1
4:A:312:PX4:H61	4:A:359:PX4:H33	0.58	1.73	6	1
4:A:377:PX4:H72	4:A:425:PX4:H68	0.58	1.74	6	1
4:A:409:PX4:H51	4:A:415:PX4:H21	0.58	1.74	8	1

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Atom-1	Atom-2	Clash(Å)	Distance(Å)	Models	
				Worst	Total
4:A:350:PX4:H9	4:A:358:PX4:O6	0.58	1.99	12	2
4:A:337:PX4:H71	4:A:353:PX4:H62	0.58	1.75	10	1
4:A:354:PX4:H51	4:A:360:PX4:H18	0.58	1.74	4	1
4:A:360:PX4:H62	4:A:360:PX4:H25	0.58	1.73	4	1
4:A:377:PX4:H34	4:A:379:PX4:H27	0.58	1.76	7	1
4:A:404:PX4:O2	4:A:413:PX4:H17	0.58	1.97	7	1
4:A:428:PX4:H52	4:A:430:PX4:H53	0.58	1.75	7	1
4:A:308:PX4:H24	4:A:364:PX4:H22	0.58	1.74	12	1
4:A:382:PX4:H69	4:A:412:PX4:H71	0.58	1.75	13	1
4:A:395:PX4:H67	4:A:406:PX4:H56	0.58	1.75	2	1
4:A:375:PX4:H42	4:A:424:PX4:H69	0.58	1.76	2	1
4:A:378:PX4:H20	4:A:410:PX4:H48	0.58	1.75	13	1
4:A:307:PX4:H56	4:A:362:PX4:H23	0.58	1.75	14	1
4:A:412:PX4:H55	4:A:427:PX4:H22	0.58	1.75	3	1
4:A:363:PX4:H24	4:A:365:PX4:H22	0.58	1.75	13	2
4:A:350:PX4:H54	4:A:415:PX4:H43	0.58	1.76	7	1
4:A:392:PX4:H66	4:A:415:PX4:H39	0.58	1.75	8	1
4:A:374:PX4:H31	4:A:427:PX4:H20	0.58	1.74	10	1
4:A:314:PX4:H34	4:A:362:PX4:H16	0.58	1.75	3	1
4:A:354:PX4:H60	4:A:360:PX4:H63	0.58	1.76	7	1
4:A:318:PX4:H53	4:A:359:PX4:H25	0.58	1.75	2	1
4:A:316:PX4:H61	4:A:323:PX4:H70	0.58	1.76	12	1
4:A:410:PX4:H51	4:A:426:PX4:H25	0.58	1.74	3	1
4:A:351:PX4:H28	4:A:352:PX4:H26	0.58	1.76	4	1
4:A:329:PX4:H69	4:A:382:PX4:H41	0.58	1.75	8	1
4:A:382:PX4:H21	4:A:428:PX4:H29	0.58	1.76	9	1
4:A:400:PX4:H17	4:A:408:PX4:H61	0.58	1.76	12	1
4:A:395:PX4:H49	4:A:396:PX4:H20	0.58	1.74	13	1
4:A:388:PX4:H20	4:A:411:PX4:H19	0.58	1.74	1	1
4:A:348:PX4:H5	4:A:355:PX4:O3	0.58	1.99	3	1
4:A:370:PX4:H35	4:A:403:PX4:H67	0.58	1.75	3	1
4:A:326:PX4:H16	4:A:351:PX4:H16	0.58	1.76	4	3
4:A:317:PX4:H60	4:A:325:PX4:H68	0.58	1.76	9	1
4:A:323:PX4:H34	4:A:323:PX4:H55	0.58	1.74	9	1
4:A:314:PX4:H49	4:A:364:PX4:H18	0.58	1.75	10	2
4:A:372:PX4:H62	4:A:379:PX4:H61	0.57	1.75	2	1
4:A:403:PX4:H50	4:A:404:PX4:H28	0.57	1.75	8	1
4:A:409:PX4:H29	4:A:425:PX4:H71	0.57	1.76	8	1
4:A:393:PX4:H11	4:A:401:PX4:H16	0.57	1.75	11	1
4:A:332:PX4:H67	4:A:349:PX4:H57	0.57	1.76	12	1
4:A:410:PX4:H58	4:A:426:PX4:H32	0.57	1.76	4	1

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Atom-1	Atom-2	Clash(Å)	Distance(Å)	Models	
				Worst	Total
4:A:352:PX4:H20	4:A:358:PX4:H15	0.57	1.75	9	1
4:A:340:PX4:H66	4:A:397:PX4:H31	0.57	1.74	11	1
4:A:402:PX4:H15	4:A:404:PX4:H14	0.57	1.75	2	1
4:A:349:PX4:H17	4:A:356:PX4:H21	0.57	1.76	7	2
4:A:337:PX4:H63	4:A:353:PX4:H56	0.57	1.77	8	1
4:A:420:PX4:H72	4:A:426:PX4:H40	0.57	1.76	8	1
4:A:391:PX4:H62	4:A:400:PX4:H32	0.57	1.76	9	1
4:A:378:PX4:H30	4:A:417:PX4:H56	0.57	1.76	10	1
4:A:367:PX4:O2	4:A:424:PX4:H1	0.57	1.99	3	1
4:A:334:PX4:H69	4:A:352:PX4:H32	0.57	1.77	6	1
4:A:400:PX4:H28	4:A:408:PX4:H52	0.57	1.75	7	1
4:A:318:PX4:H27	4:A:327:PX4:H56	0.57	1.75	12	1
4:A:319:PX4:H39	4:A:324:PX4:H37	0.57	1.77	14	1
4:A:333:PX4:H39	4:A:375:PX4:H28	0.57	1.76	1	1
4:A:393:PX4:H46	4:A:401:PX4:H19	0.57	1.75	4	1
4:A:330:PX4:H21	4:A:335:PX4:H22	0.57	1.75	12	1
4:A:352:PX4:H33	4:A:358:PX4:H64	0.57	1.74	4	1
4:A:388:PX4:H17	4:A:396:PX4:H22	0.57	1.75	8	1
4:A:334:PX4:H37	4:A:407:PX4:H43	0.57	1.75	12	1
4:A:351:PX4:H62	4:A:358:PX4:H30	0.57	1.76	13	1
4:A:331:PX4:H11	4:A:340:PX4:O1	0.57	1.99	2	1
4:A:314:PX4:H69	4:A:350:PX4:H55	0.57	1.77	5	1
4:A:326:PX4:H47	4:A:334:PX4:H56	0.57	1.77	8	1
4:A:376:PX4:H52	4:A:385:PX4:H21	0.57	1.77	8	1
4:A:342:PX4:O2	4:A:352:PX4:H4	0.57	1.99	14	1
4:A:345:PX4:H15	4:A:353:PX4:H16	0.57	1.76	2	1
4:A:344:PX4:H28	4:A:348:PX4:H21	0.57	1.76	3	1
4:A:337:PX4:H17	4:A:345:PX4:H46	0.57	1.76	4	2
4:A:320:PX4:H20	4:A:359:PX4:C29	0.57	2.26	5	1
4:A:371:PX4:H56	4:A:378:PX4:H62	0.57	1.75	5	1
4:A:312:PX4:H65	4:A:359:PX4:H37	0.57	1.76	6	1
4:A:311:PX4:H70	4:A:312:PX4:H69	0.56	1.77	3	1
4:A:424:PX4:H17	4:A:429:PX4:O6	0.56	2.00	3	1
4:A:380:PX4:H67	4:A:388:PX4:H62	0.56	1.77	10	1
4:A:367:PX4:H47	4:A:428:PX4:H48	0.56	1.76	11	1
4:A:349:PX4:H56	4:A:350:PX4:H30	0.56	1.77	12	1
4:A:362:PX4:H38	4:A:430:PX4:H69	0.56	1.76	12	1
4:A:375:PX4:H14	4:A:375:PX4:H10	0.56	1.77	14	1
1:A:207:SER:O	4:A:321:PX4:H4	0.56	2.00	2	1
4:A:317:PX4:H31	4:A:326:PX4:H62	0.56	1.76	5	1
4:A:393:PX4:H20	4:A:401:PX4:H16	0.56	1.77	5	2

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Atom-1	Atom-2	Clash(Å)	Distance(Å)	Models	
				Worst	Total
4:A:360:PX4:H33	4:A:366:PX4:H64	0.56	1.76	5	1
4:A:391:PX4:H21	4:A:392:PX4:H47	0.56	1.78	5	1
4:A:400:PX4:H59	4:A:426:PX4:H40	0.56	1.76	6	1
4:A:336:PX4:H70	4:A:382:PX4:H42	0.56	1.76	8	1
4:A:371:PX4:H68	4:A:379:PX4:H41	0.56	1.76	9	1
4:A:329:PX4:H26	4:A:336:PX4:H60	0.56	1.75	11	1
4:A:373:PX4:H31	4:A:381:PX4:H30	0.56	1.77	11	1
4:A:309:PX4:H63	4:A:316:PX4:H65	0.56	1.77	14	1
4:A:318:PX4:H27	4:A:359:PX4:H23	0.56	1.76	2	1
4:A:388:PX4:H23	4:A:402:PX4:H16	0.56	1.75	3	1
4:A:320:PX4:C10	4:A:359:PX4:H57	0.56	2.25	5	1
4:A:315:PX4:H29	4:A:361:PX4:H24	0.56	1.77	4	1
4:A:429:PX4:H53	4:A:429:PX4:H33	0.56	1.77	9	1
4:A:318:PX4:H64	4:A:318:PX4:H43	0.56	1.78	11	1
4:A:379:PX4:H58	4:A:420:PX4:H31	0.56	1.78	11	1
4:A:310:PX4:H20	4:A:365:PX4:H21	0.56	1.76	14	1
4:A:313:PX4:H58	4:A:327:PX4:H23	0.56	1.78	2	1
4:A:320:PX4:H19	4:A:359:PX4:H59	0.56	1.77	14	1
4:A:352:PX4:O8	4:A:365:PX4:H11	0.56	2.00	1	1
4:A:316:PX4:H48	4:A:320:PX4:H26	0.56	1.77	3	1
4:A:332:PX4:H56	4:A:349:PX4:H48	0.56	1.76	3	1
4:A:402:PX4:H3	4:A:404:PX4:O1	0.56	2.01	3	1
4:A:307:PX4:H65	4:A:349:PX4:H28	0.56	1.76	11	1
4:A:369:PX4:H56	4:A:416:PX4:H69	0.56	1.78	9	1
4:A:400:PX4:H53	4:A:410:PX4:H50	0.56	1.78	12	1
4:A:408:PX4:H43	4:A:414:PX4:H64	0.56	1.76	12	1
4:A:338:PX4:H71	4:A:395:PX4:H40	0.56	1.78	13	1
4:A:389:PX4:H30	4:A:397:PX4:H54	0.55	1.79	4	1
4:A:358:PX4:H19	4:A:363:PX4:H49	0.55	1.77	3	1
1:A:177:LYS:O	4:A:354:PX4:H13	0.55	2.01	7	1
4:A:337:PX4:H62	4:A:366:PX4:H53	0.55	1.77	8	1
4:A:377:PX4:H16	4:A:418:PX4:H7	0.55	1.78	8	1
4:A:309:PX4:H55	4:A:324:PX4:H53	0.55	1.77	12	1
4:A:381:PX4:H29	4:A:386:PX4:H58	0.55	1.77	12	1
4:A:330:PX4:H19	4:A:338:PX4:H19	0.55	1.77	1	1
4:A:380:PX4:H66	4:A:411:PX4:H22	0.55	1.77	2	1
4:A:375:PX4:H58	4:A:382:PX4:H71	0.55	1.78	6	1
4:A:395:PX4:H36	4:A:397:PX4:H61	0.55	1.76	6	1
4:A:347:PX4:H69	4:A:407:PX4:H68	0.55	1.77	11	1
4:A:349:PX4:H54	4:A:355:PX4:H34	0.55	1.76	11	1
4:A:412:PX4:H20	4:A:428:PX4:H46	0.55	1.77	11	1

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Atom-1	Atom-2	Clash(Å)	Distance(Å)	Models	
				Worst	Total
4:A:337:PX4:H55	4:A:353:PX4:H47	0.55	1.77	10	1
4:A:326:PX4:H18	4:A:334:PX4:H72	0.55	1.79	11	1
4:A:360:PX4:H47	4:A:366:PX4:H46	0.55	1.77	11	1
4:A:341:PX4:H34	4:A:399:PX4:H69	0.55	1.78	14	1
4:A:399:PX4:H25	4:A:399:PX4:H59	0.55	1.77	2	1
4:A:392:PX4:H35	4:A:399:PX4:H56	0.55	1.77	10	1
4:A:313:PX4:H64	4:A:328:PX4:H68	0.55	1.77	1	1
4:A:412:PX4:H19	4:A:428:PX4:H54	0.55	1.79	5	1
4:A:354:PX4:H56	4:A:360:PX4:H59	0.55	1.77	7	1
4:A:338:PX4:H34	4:A:357:PX4:H27	0.55	1.78	9	1
4:A:357:PX4:H29	4:A:365:PX4:H62	0.55	1.78	14	1
4:A:416:PX4:H25	4:A:422:PX4:H56	0.55	1.77	6	1
4:A:375:PX4:H68	4:A:428:PX4:H54	0.55	1.78	14	1
4:A:367:PX4:H2	4:A:428:PX4:O8	0.55	2.02	14	1
4:A:329:PX4:H46	4:A:336:PX4:H18	0.55	1.78	2	1
4:A:346:PX4:H70	4:A:357:PX4:H31	0.55	1.77	6	1
4:A:369:PX4:H38	4:A:416:PX4:H63	0.55	1.78	11	1
4:A:306:PX4:H49	4:A:321:PX4:H22	0.55	1.77	1	1
4:A:373:PX4:H20	4:A:381:PX4:H18	0.55	1.78	1	1
4:A:316:PX4:H36	4:A:364:PX4:H55	0.55	1.78	3	1
4:A:360:PX4:H45	4:A:404:PX4:H41	0.55	1.78	9	1
4:A:385:PX4:H45	4:A:386:PX4:H45	0.55	1.78	10	1
4:A:317:PX4:H51	4:A:324:PX4:H17	0.55	1.79	11	1
4:A:314:PX4:H46	4:A:364:PX4:H18	0.55	1.79	11	1
4:A:395:PX4:H19	4:A:396:PX4:H14	0.55	1.79	12	1
4:A:348:PX4:H69	4:A:355:PX4:H27	0.55	1.79	14	1
4:A:416:PX4:H30	4:A:423:PX4:H30	0.55	1.79	2	1
4:A:392:PX4:H60	4:A:408:PX4:H31	0.55	1.78	7	1
4:A:392:PX4:H2	4:A:392:PX4:O6	0.55	2.02	9	1
4:A:307:PX4:H31	4:A:364:PX4:H57	0.54	1.79	1	1
4:A:332:PX4:H17	4:A:356:PX4:H7	0.54	1.78	2	1
4:A:408:PX4:H72	4:A:426:PX4:H69	0.54	1.79	2	1
4:A:382:PX4:H45	4:A:428:PX4:H43	0.54	1.78	8	1
4:A:339:PX4:H50	4:A:339:PX4:H32	0.54	1.78	9	1
4:A:389:PX4:H63	4:A:397:PX4:H35	0.54	1.78	14	1
4:A:355:PX4:H52	4:A:356:PX4:H14	0.54	1.77	1	1
4:A:318:PX4:O2	4:A:359:PX4:H14	0.54	2.03	5	1
4:A:321:PX4:H71	4:A:322:PX4:H33	0.54	1.79	8	1
4:A:383:PX4:H57	4:A:407:PX4:H24	0.54	1.80	9	1
4:A:380:PX4:H32	4:A:381:PX4:H59	0.54	1.77	3	1
4:A:416:PX4:H20	4:A:422:PX4:H48	0.54	1.80	4	1

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Atom-1	Atom-2	Clash(Å)	Distance(Å)	Models	
				Worst	Total
4:A:330:PX4:H25	4:A:343:PX4:H51	0.54	1.77	6	1
4:A:323:PX4:H55	4:A:424:PX4:H70	0.54	1.77	6	1
4:A:307:PX4:H43	4:A:311:PX4:H43	0.54	1.78	12	1
4:A:372:PX4:H51	4:A:420:PX4:H19	0.54	1.78	3	1
4:A:308:PX4:H54	4:A:364:PX4:H31	0.54	1.79	4	1
4:A:403:PX4:H61	4:A:427:PX4:H62	0.54	1.78	6	1
4:A:383:PX4:H54	4:A:407:PX4:H20	0.54	1.78	9	1
4:A:404:PX4:H21	4:A:419:PX4:H10	0.54	1.79	9	1
4:A:317:PX4:H21	4:A:342:PX4:H68	0.54	1.78	10	1
4:A:325:PX4:H53	4:A:334:PX4:H36	0.54	1.78	12	1
4:A:332:PX4:O8	4:A:347:PX4:H52	0.54	2.03	13	1
4:A:428:PX4:H70	4:A:430:PX4:H32	0.54	1.79	1	1
4:A:331:PX4:H56	4:A:339:PX4:H22	0.54	1.80	2	1
4:A:351:PX4:H67	4:A:358:PX4:H36	0.54	1.79	2	1
4:A:354:PX4:H28	4:A:362:PX4:H17	0.54	1.79	5	1
4:A:372:PX4:H58	4:A:379:PX4:H57	0.54	1.80	5	1
4:A:386:PX4:H25	4:A:394:PX4:H20	0.54	1.79	9	1
4:A:338:PX4:H59	4:A:348:PX4:H57	0.54	1.78	12	1
4:A:369:PX4:H21	4:A:377:PX4:H56	0.54	1.78	1	1
4:A:419:PX4:H63	4:A:427:PX4:H60	0.54	1.80	2	1
4:A:327:PX4:H19	4:A:329:PX4:H23	0.54	1.78	5	1
4:A:373:PX4:H25	4:A:397:PX4:H15	0.54	1.79	7	1
4:A:406:PX4:H12	4:A:406:PX4:H15	0.54	1.80	9	1
4:A:423:PX4:H13	4:A:430:PX4:H46	0.54	1.80	10	1
4:A:377:PX4:H51	4:A:418:PX4:H52	0.54	1.79	13	1
4:A:416:PX4:H48	4:A:425:PX4:H49	0.54	1.79	14	1
4:A:307:PX4:H4	4:A:322:PX4:O8	0.54	2.03	3	1
4:A:384:PX4:O2	4:A:385:PX4:H18	0.54	2.03	8	2
4:A:372:PX4:H52	4:A:420:PX4:H21	0.54	1.80	4	1
4:A:370:PX4:H23	4:A:427:PX4:H59	0.54	1.80	9	1
4:A:308:PX4:H43	4:A:425:PX4:H68	0.54	1.79	13	1
4:A:391:PX4:H23	4:A:414:PX4:H51	0.53	1.80	1	1
1:A:208:GLY:HA3	4:A:307:PX4:H15	0.53	1.80	2	3
4:A:409:PX4:H16	4:A:410:PX4:H8	0.53	1.80	4	1
4:A:412:PX4:H48	4:A:419:PX4:H22	0.53	1.80	4	2
4:A:381:PX4:H57	4:A:397:PX4:H46	0.53	1.80	6	1
4:A:412:PX4:H54	4:A:427:PX4:H22	0.53	1.79	6	1
4:A:367:PX4:H22	4:A:424:PX4:H16	0.53	1.79	7	1
4:A:340:PX4:H63	4:A:397:PX4:H30	0.53	1.81	10	1
4:A:381:PX4:H35	4:A:381:PX4:H62	0.53	1.79	11	1
4:A:337:PX4:H64	4:A:345:PX4:H63	0.53	1.78	1	1

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Atom-1	Atom-2	Clash(Å)	Distance(Å)	Models	
				Worst	Total
4:A:378:PX4:H49	4:A:410:PX4:H23	0.53	1.80	6	1
4:A:307:PX4:H29	4:A:361:PX4:H28	0.53	1.80	8	1
4:A:317:PX4:H26	4:A:334:PX4:H40	0.53	1.80	9	1
4:A:400:PX4:H51	4:A:409:PX4:H21	0.53	1.80	9	1
4:A:393:PX4:H66	4:A:399:PX4:H69	0.53	1.79	12	1
4:A:332:PX4:H44	4:A:389:PX4:H57	0.53	1.79	13	1
4:A:371:PX4:H21	4:A:379:PX4:H20	0.53	1.80	13	1
4:A:328:PX4:H55	4:A:329:PX4:H47	0.53	1.79	1	1
4:A:421:PX4:H4	4:A:422:PX4:O6	0.53	2.03	1	1
4:A:311:PX4:O2	4:A:359:PX4:H13	0.53	2.03	5	1
4:A:406:PX4:H27	4:A:415:PX4:H59	0.53	1.80	7	1
4:A:430:PX4:H28	4:A:430:PX4:H71	0.53	1.79	11	1
4:A:329:PX4:H66	4:A:375:PX4:H35	0.53	1.79	1	1
4:A:352:PX4:H48	4:A:358:PX4:H50	0.53	1.79	3	1
4:A:367:PX4:H59	4:A:424:PX4:H21	0.53	1.81	4	1
4:A:311:PX4:H43	4:A:425:PX4:H68	0.53	1.78	5	1
4:A:389:PX4:H48	4:A:390:PX4:H49	0.53	1.79	5	2
4:A:311:PX4:H17	4:A:359:PX4:H51	0.53	1.79	6	2
4:A:363:PX4:H70	4:A:392:PX4:H66	0.53	1.81	7	1
4:A:388:PX4:H58	4:A:397:PX4:H54	0.53	1.78	9	1
4:A:345:PX4:H37	4:A:403:PX4:H45	0.53	1.80	14	1
4:A:384:PX4:H19	4:A:385:PX4:H23	0.53	1.79	1	1
4:A:386:PX4:H35	4:A:394:PX4:H36	0.53	1.81	3	1
4:A:429:PX4:H15	4:A:429:PX4:H10	0.53	1.80	3	1
4:A:395:PX4:H44	4:A:398:PX4:H69	0.53	1.81	4	1
4:A:345:PX4:H44	4:A:402:PX4:H67	0.53	1.81	6	1
4:A:388:PX4:H18	4:A:411:PX4:O2	0.53	2.04	6	1
4:A:350:PX4:H68	4:A:351:PX4:H58	0.53	1.81	2	1
4:A:308:PX4:H16	4:A:311:PX4:H20	0.53	1.78	5	1
4:A:338:PX4:H32	4:A:348:PX4:H33	0.53	1.81	6	1
4:A:395:PX4:H58	4:A:404:PX4:H48	0.53	1.79	6	1
4:A:398:PX4:H38	4:A:414:PX4:H47	0.53	1.80	6	1
4:A:391:PX4:H49	4:A:408:PX4:H16	0.53	1.80	7	1
4:A:317:PX4:H20	4:A:351:PX4:O6	0.53	2.04	11	1
4:A:351:PX4:H66	4:A:358:PX4:H32	0.53	1.79	3	1
4:A:311:PX4:H48	4:A:320:PX4:H21	0.53	1.79	4	1
4:A:325:PX4:H15	4:A:341:PX4:H17	0.53	1.79	5	1
4:A:358:PX4:H29	4:A:363:PX4:H26	0.53	1.79	10	1
4:A:345:PX4:H42	4:A:388:PX4:H40	0.53	1.79	12	1
4:A:370:PX4:H69	4:A:411:PX4:H65	0.53	1.80	2	1
4:A:416:PX4:H51	4:A:418:PX4:H26	0.53	1.79	4	1

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Atom-1	Atom-2	Clash(Å)	Distance(Å)	Models	
				Worst	Total
4:A:307:PX4:H37	4:A:423:PX4:H39	0.53	1.78	4	1
4:A:329:PX4:H30	4:A:336:PX4:H68	0.53	1.79	8	1
4:A:310:PX4:H65	4:A:312:PX4:H52	0.53	1.80	9	1
4:A:400:PX4:H28	4:A:426:PX4:H59	0.53	1.81	12	1
4:A:410:PX4:H16	4:A:418:PX4:H28	0.53	1.80	12	1
4:A:361:PX4:H34	4:A:423:PX4:H35	0.53	1.80	12	1
4:A:376:PX4:H26	4:A:399:PX4:H48	0.53	1.81	4	1
4:A:309:PX4:H51	4:A:316:PX4:H48	0.53	1.80	5	1
4:A:335:PX4:H31	4:A:343:PX4:H55	0.53	1.79	11	1
4:A:405:PX4:H22	4:A:406:PX4:H61	0.53	1.79	13	1
4:A:392:PX4:H68	4:A:400:PX4:H45	0.53	1.80	1	1
4:A:311:PX4:H24	4:A:311:PX4:H60	0.53	1.81	6	1
4:A:337:PX4:H40	4:A:338:PX4:H47	0.53	1.79	10	1
4:A:347:PX4:H20	4:A:348:PX4:H14	0.52	1.81	6	1
4:A:367:PX4:H64	4:A:375:PX4:H57	0.52	1.80	7	1
4:A:413:PX4:H61	4:A:430:PX4:H42	0.52	1.81	9	1
4:A:349:PX4:H58	4:A:356:PX4:H42	0.52	1.80	10	1
4:A:398:PX4:H39	4:A:414:PX4:H31	0.52	1.81	10	1
4:A:412:PX4:H12	4:A:419:PX4:O1	0.52	2.04	12	1
4:A:314:PX4:H53	4:A:364:PX4:H18	0.52	1.81	1	1
4:A:337:PX4:H56	4:A:345:PX4:H59	0.52	1.81	5	1
4:A:389:PX4:H32	4:A:397:PX4:H22	0.52	1.82	6	1
4:A:306:PX4:H47	4:A:322:PX4:H50	0.52	1.81	7	1
4:A:398:PX4:H21	4:A:407:PX4:H49	0.52	1.80	10	1
4:A:346:PX4:H19	4:A:354:PX4:H28	0.52	1.80	1	1
4:A:361:PX4:H26	4:A:364:PX4:H54	0.52	1.81	3	1
4:A:315:PX4:H10	4:A:315:PX4:O6	0.52	2.04	4	1
4:A:326:PX4:H48	4:A:334:PX4:H35	0.52	1.79	5	1
4:A:407:PX4:H30	4:A:414:PX4:H61	0.52	1.81	11	1
4:A:311:PX4:H44	4:A:314:PX4:H65	0.52	1.82	13	1
4:A:388:PX4:H49	4:A:396:PX4:H21	0.52	1.81	12	1
4:A:313:PX4:H56	4:A:327:PX4:H27	0.52	1.82	13	1
4:A:415:PX4:H56	4:A:422:PX4:H53	0.52	1.81	13	1
4:A:410:PX4:H67	4:A:417:PX4:H37	0.52	1.81	14	1
4:A:310:PX4:H34	4:A:365:PX4:H34	0.52	1.81	3	1
4:A:329:PX4:H56	4:A:336:PX4:H35	0.52	1.82	6	2
4:A:314:PX4:H33	4:A:362:PX4:O8	0.52	2.04	9	1
4:A:325:PX4:H55	4:A:334:PX4:H40	0.52	1.81	11	1
4:A:400:PX4:H46	4:A:409:PX4:H23	0.52	1.81	1	1
4:A:340:PX4:H22	4:A:341:PX4:H63	0.52	1.81	2	1
4:A:405:PX4:H51	4:A:406:PX4:H51	0.52	1.81	3	1

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Atom-1	Atom-2	Clash(Å)	Distance(Å)	Models	
				Worst	Total
4:A:308:PX4:H21	4:A:311:PX4:H55	0.52	1.82	7	1
4:A:329:PX4:H60	4:A:336:PX4:H40	0.52	1.82	8	1
4:A:313:PX4:H28	4:A:366:PX4:H21	0.52	1.81	9	1
4:A:404:PX4:H21	4:A:413:PX4:H30	0.52	1.81	10	1
4:A:393:PX4:H71	4:A:414:PX4:H53	0.52	1.81	11	1
4:A:340:PX4:H36	4:A:340:PX4:H59	0.52	1.79	12	1
4:A:307:PX4:H45	4:A:422:PX4:H39	0.52	1.80	13	1
4:A:317:PX4:H21	4:A:326:PX4:H53	0.52	1.81	13	1
4:A:390:PX4:H1	4:A:399:PX4:O6	0.52	2.05	13	1
4:A:354:PX4:H69	4:A:360:PX4:H27	0.52	1.81	2	1
4:A:405:PX4:H55	4:A:406:PX4:H51	0.52	1.82	2	1
4:A:312:PX4:H29	4:A:365:PX4:H24	0.52	1.82	3	1
4:A:348:PX4:H52	4:A:355:PX4:H67	0.52	1.81	5	1
4:A:342:PX4:H29	4:A:352:PX4:H60	0.52	1.82	9	1
4:A:306:PX4:H61	4:A:362:PX4:H37	0.52	1.82	9	1
4:A:331:PX4:H38	4:A:340:PX4:H40	0.52	1.82	10	1
4:A:380:PX4:H6	4:A:381:PX4:O1	0.52	2.04	11	1
4:A:383:PX4:H71	4:A:399:PX4:H67	0.52	1.80	5	1
4:A:419:PX4:H67	4:A:427:PX4:H69	0.52	1.81	5	1
4:A:370:PX4:H19	4:A:427:PX4:H55	0.52	1.82	9	1
4:A:410:PX4:H16	4:A:418:PX4:H31	0.52	1.81	10	1
4:A:310:PX4:H60	4:A:312:PX4:H53	0.52	1.82	4	2
4:A:371:PX4:H56	4:A:372:PX4:H23	0.52	1.82	4	1
4:A:341:PX4:H39	4:A:399:PX4:H72	0.52	1.81	5	1
4:A:306:PX4:H43	4:A:328:PX4:H67	0.52	1.82	8	1
4:A:327:PX4:H14	4:A:328:PX4:O2	0.52	2.05	7	1
4:A:308:PX4:H27	4:A:316:PX4:H27	0.52	1.81	8	1
4:A:361:PX4:H39	4:A:364:PX4:H65	0.52	1.81	9	1
4:A:314:PX4:H26	4:A:356:PX4:H25	0.52	1.82	12	1
4:A:313:PX4:H61	4:A:329:PX4:H25	0.52	1.81	13	1
4:A:354:PX4:H65	4:A:360:PX4:H20	0.51	1.81	1	1
4:A:409:PX4:H67	4:A:415:PX4:H33	0.51	1.81	3	1
4:A:377:PX4:H71	4:A:425:PX4:H19	0.51	1.81	8	1
4:A:324:PX4:H66	4:A:341:PX4:H32	0.51	1.82	9	1
4:A:393:PX4:H23	4:A:401:PX4:H16	0.51	1.81	4	1
4:A:421:PX4:H71	4:A:422:PX4:H32	0.51	1.81	4	1
4:A:321:PX4:H28	4:A:412:PX4:H41	0.51	1.80	5	1
4:A:387:PX4:H47	4:A:411:PX4:H54	0.51	1.80	5	1
4:A:360:PX4:H31	4:A:419:PX4:H42	0.51	1.80	7	1
4:A:338:PX4:H67	4:A:348:PX4:H58	0.51	1.82	10	1
4:A:416:PX4:H45	4:A:422:PX4:H67	0.51	1.81	12	1

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Atom-1	Atom-2	Clash(Å)	Distance(Å)	Models	
				Worst	Total
4:A:368:PX4:H10	4:A:369:PX4:O2	0.51	2.05	1	1
4:A:360:PX4:H43	4:A:403:PX4:H65	0.51	1.82	3	1
4:A:323:PX4:H38	4:A:361:PX4:H54	0.51	1.82	6	1
4:A:350:PX4:H51	4:A:363:PX4:H62	0.51	1.82	8	1
4:A:380:PX4:H32	4:A:380:PX4:H60	0.51	1.80	12	1
4:A:398:PX4:H44	4:A:415:PX4:H27	0.51	1.82	14	1
4:A:308:PX4:H27	4:A:311:PX4:H31	0.51	1.81	4	1
4:A:347:PX4:H56	4:A:356:PX4:H58	0.51	1.83	4	1
4:A:400:PX4:H59	4:A:410:PX4:H62	0.51	1.82	5	1
4:A:417:PX4:H31	4:A:426:PX4:H66	0.51	1.83	7	1
4:A:404:PX4:H15	4:A:413:PX4:H20	0.51	1.81	1	1
4:A:378:PX4:H29	4:A:420:PX4:H57	0.51	1.82	4	1
4:A:322:PX4:H49	4:A:336:PX4:H25	0.51	1.83	9	1
4:A:393:PX4:H18	4:A:401:PX4:H20	0.51	1.83	12	1
4:A:402:PX4:H21	4:A:404:PX4:H67	0.51	1.83	14	1
4:A:345:PX4:H15	4:A:353:PX4:H14	0.51	1.81	4	2
4:A:358:PX4:H23	4:A:363:PX4:H55	0.51	1.83	12	1
4:A:363:PX4:H71	4:A:392:PX4:H66	0.51	1.82	3	1
4:A:349:PX4:H26	4:A:356:PX4:H38	0.51	1.83	11	1
4:A:392:PX4:H57	4:A:401:PX4:H29	0.51	1.81	13	1
4:A:312:PX4:H31	4:A:365:PX4:H46	0.51	1.82	14	1
4:A:346:PX4:H68	4:A:362:PX4:H72	0.51	1.82	14	1
4:A:314:PX4:H47	4:A:350:PX4:H43	0.51	1.82	14	1
4:A:372:PX4:H34	4:A:420:PX4:H29	0.51	1.82	14	1
4:A:346:PX4:H19	4:A:354:PX4:H31	0.51	1.82	3	1
4:A:355:PX4:H36	4:A:356:PX4:H41	0.51	1.81	4	1
4:A:311:PX4:O1	4:A:359:PX4:H3	0.51	2.06	5	2
4:A:372:PX4:H23	4:A:417:PX4:H46	0.51	1.83	8	1
4:A:306:PX4:H22	4:A:321:PX4:H35	0.51	1.82	9	1
4:A:306:PX4:H60	4:A:362:PX4:H38	0.51	1.83	10	1
4:A:321:PX4:H56	4:A:361:PX4:H54	0.51	1.82	10	1
4:A:318:PX4:H53	4:A:328:PX4:H22	0.51	1.81	11	1
4:A:333:PX4:H14	4:A:340:PX4:H1	0.51	1.82	11	1
4:A:343:PX4:H33	4:A:344:PX4:H30	0.51	1.83	12	1
4:A:316:PX4:H20	4:A:364:PX4:H14	0.51	1.81	12	1
4:A:378:PX4:H59	4:A:410:PX4:H26	0.51	1.82	12	1
4:A:309:PX4:H3	4:A:320:PX4:O1	0.51	2.05	13	1
4:A:409:PX4:O6	4:A:410:PX4:H5	0.51	2.06	13	1
4:A:410:PX4:H42	4:A:418:PX4:H42	0.51	1.82	14	1
4:A:354:PX4:H49	4:A:360:PX4:H49	0.51	1.83	4	1
4:A:410:PX4:H16	4:A:418:PX4:H29	0.51	1.81	6	1

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Atom-1	Atom-2	Clash(Å)	Distance(Å)	Models	
				Worst	Total
4:A:333:PX4:H54	4:A:341:PX4:H54	0.51	1.83	11	1
4:A:319:PX4:H51	4:A:324:PX4:H16	0.51	1.83	1	1
4:A:395:PX4:H24	4:A:396:PX4:H64	0.51	1.83	4	1
4:A:320:PX4:H51	4:A:359:PX4:H25	0.51	1.81	8	1
4:A:388:PX4:H51	4:A:396:PX4:H48	0.51	1.81	10	1
4:A:390:PX4:H57	4:A:429:PX4:H60	0.51	1.82	11	1
4:A:400:PX4:H20	4:A:426:PX4:H50	0.51	1.82	12	1
4:A:327:PX4:H16	4:A:328:PX4:O6	0.50	2.05	5	1
4:A:313:PX4:H20	4:A:360:PX4:H15	0.50	1.82	7	1
4:A:344:PX4:H60	4:A:344:PX4:H25	0.50	1.83	14	1
4:A:363:PX4:H47	4:A:364:PX4:H37	0.50	1.81	14	1
1:A:206:HIS:ND1	4:A:314:PX4:H1	0.50	2.21	13	3
4:A:307:PX4:H42	4:A:350:PX4:H45	0.50	1.82	2	1
4:A:402:PX4:H21	4:A:403:PX4:H21	0.50	1.82	3	1
4:A:388:PX4:H29	4:A:411:PX4:H24	0.50	1.83	5	1
4:A:310:PX4:H48	4:A:365:PX4:H20	0.50	1.81	7	1
4:A:413:PX4:H63	4:A:430:PX4:H36	0.50	1.82	7	1
4:A:337:PX4:H39	4:A:338:PX4:H51	0.50	1.83	9	1
4:A:345:PX4:H70	4:A:370:PX4:H39	0.50	1.83	10	1
4:A:369:PX4:H19	4:A:418:PX4:H15	0.50	1.83	10	1
4:A:403:PX4:H3	4:A:427:PX4:H48	0.50	1.83	11	1
4:A:308:PX4:H18	4:A:311:PX4:O8	0.50	2.06	14	2
4:A:412:PX4:H47	4:A:419:PX4:H14	0.50	1.84	12	1
4:A:346:PX4:H12	4:A:360:PX4:H46	0.50	1.82	13	1
4:A:370:PX4:H17	4:A:403:PX4:O1	0.50	2.06	4	1
4:A:352:PX4:H61	4:A:358:PX4:H57	0.50	1.82	9	1
4:A:311:PX4:O4	4:A:359:PX4:H6	0.50	2.05	13	1
4:A:363:PX4:H25	4:A:365:PX4:H26	0.50	1.83	13	1
4:A:378:PX4:H35	4:A:410:PX4:H60	0.50	1.83	13	1
4:A:416:PX4:H53	4:A:418:PX4:H30	0.50	1.84	13	1
4:A:368:PX4:H32	4:A:425:PX4:H42	0.50	1.81	3	1
4:A:347:PX4:H35	4:A:348:PX4:H28	0.50	1.83	13	1
4:A:394:PX4:H9	4:A:394:PX4:O8	0.50	2.07	14	1
4:A:407:PX4:H9	4:A:414:PX4:H48	0.50	1.83	14	1
4:A:421:PX4:H13	4:A:423:PX4:O6	0.50	2.07	1	1
4:A:383:PX4:H46	4:A:399:PX4:H50	0.50	1.83	3	1
4:A:316:PX4:H65	4:A:320:PX4:H40	0.50	1.83	5	1
4:A:378:PX4:H50	4:A:418:PX4:H51	0.50	1.81	9	1
4:A:388:PX4:H24	4:A:402:PX4:O8	0.50	2.05	11	1
4:A:374:PX4:H22	4:A:428:PX4:H20	0.50	1.82	14	1
4:A:307:PX4:H67	4:A:307:PX4:H34	0.50	1.84	2	1

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Atom-1	Atom-2	Clash(Å)	Distance(Å)	Models	
				Worst	Total
4:A:384:PX4:H56	4:A:385:PX4:H32	0.50	1.82	3	1
4:A:409:PX4:H54	4:A:422:PX4:H62	0.50	1.82	3	1
4:A:408:PX4:H2	4:A:408:PX4:H18	0.50	1.84	6	1
4:A:422:PX4:H38	4:A:423:PX4:H40	0.50	1.83	6	1
1:A:237:PHE:CD1	1:A:238:PRO:HD2	0.50	2.42	9	1
4:A:392:PX4:H27	4:A:393:PX4:H61	0.50	1.84	9	1
4:A:402:PX4:H4	4:A:404:PX4:O2	0.50	2.06	11	2
4:A:395:PX4:H42	4:A:405:PX4:H36	0.50	1.81	13	1
4:A:400:PX4:H30	4:A:401:PX4:H57	0.50	1.83	1	1
4:A:408:PX4:H17	4:A:415:PX4:O6	0.50	2.07	1	1
4:A:369:PX4:H18	4:A:425:PX4:H9	0.50	1.82	4	1
4:A:416:PX4:H24	4:A:422:PX4:H17	0.50	1.83	10	1
4:A:345:PX4:H46	4:A:346:PX4:H56	0.50	1.84	12	1
4:A:371:PX4:H68	4:A:371:PX4:H35	0.50	1.83	12	1
4:A:322:PX4:O2	4:A:333:PX4:H9	0.50	2.07	13	1
4:A:321:PX4:H24	4:A:354:PX4:H53	0.50	1.81	2	2
4:A:306:PX4:H19	4:A:321:PX4:H42	0.50	1.84	6	1
4:A:380:PX4:H49	4:A:381:PX4:H13	0.50	1.83	12	1
4:A:338:PX4:H17	4:A:348:PX4:H17	0.49	1.84	1	1
4:A:356:PX4:H32	4:A:362:PX4:H27	0.49	1.82	1	1
4:A:395:PX4:H58	4:A:404:PX4:H50	0.49	1.83	1	1
4:A:308:PX4:H40	4:A:316:PX4:H41	0.49	1.84	4	1
4:A:428:PX4:H63	4:A:430:PX4:H32	0.49	1.84	8	1
4:A:400:PX4:H68	4:A:410:PX4:H67	0.49	1.84	10	1
4:A:409:PX4:H51	4:A:415:PX4:C11	0.49	2.36	8	1
4:A:306:PX4:H22	4:A:322:PX4:H57	0.49	1.84	1	1
4:A:347:PX4:H22	4:A:348:PX4:H56	0.49	1.83	5	1
4:A:393:PX4:H3	4:A:401:PX4:O2	0.49	2.08	5	1
4:A:374:PX4:H18	4:A:382:PX4:O7	0.49	2.06	8	1
4:A:390:PX4:H62	4:A:397:PX4:H42	0.49	1.84	9	1
4:A:312:PX4:H29	4:A:365:PX4:H22	0.49	1.84	12	1
4:A:421:PX4:H67	4:A:423:PX4:H45	0.49	1.83	3	1
4:A:393:PX4:H37	4:A:401:PX4:H70	0.49	1.84	7	1
4:A:308:PX4:O6	4:A:364:PX4:H3	0.49	2.07	12	1
4:A:372:PX4:H20	4:A:420:PX4:H16	0.49	1.84	13	2
4:A:317:PX4:H14	4:A:351:PX4:H20	0.49	1.85	5	1
4:A:337:PX4:H9	4:A:357:PX4:H2	0.49	1.84	11	1
4:A:316:PX4:H51	4:A:320:PX4:C14	0.49	2.37	12	1
4:A:312:PX4:H35	4:A:365:PX4:H46	0.49	1.83	13	1
4:A:377:PX4:H42	4:A:379:PX4:H56	0.49	1.84	13	1
4:A:313:PX4:H65	4:A:360:PX4:H70	0.49	1.85	1	1

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Atom-1	Atom-2	Clash(Å)	Distance(Å)	Models	
				Worst	Total
4:A:316:PX4:H29	4:A:361:PX4:H25	0.49	1.85	2	1
4:A:347:PX4:H21	4:A:348:PX4:H55	0.49	1.83	3	1
4:A:369:PX4:H20	4:A:377:PX4:H46	0.49	1.85	4	1
4:A:326:PX4:O6	4:A:363:PX4:H61	0.49	2.07	8	1
4:A:326:PX4:H19	4:A:334:PX4:H55	0.49	1.83	4	1
4:A:335:PX4:O6	4:A:343:PX4:H14	0.49	2.08	5	1
4:A:419:PX4:H42	4:A:427:PX4:H41	0.49	1.83	5	1
4:A:390:PX4:O1	4:A:399:PX4:H12	0.49	2.08	6	1
4:A:348:PX4:H35	4:A:380:PX4:H42	0.49	1.83	7	1
4:A:306:PX4:H59	4:A:361:PX4:H57	0.49	1.84	8	1
4:A:345:PX4:O1	4:A:346:PX4:H9	0.49	2.08	9	1
4:A:340:PX4:H42	4:A:389:PX4:H27	0.49	1.84	9	1
4:A:332:PX4:H53	4:A:356:PX4:H47	0.49	1.84	5	1
4:A:392:PX4:H70	4:A:415:PX4:H33	0.49	1.84	7	1
4:A:344:PX4:H56	4:A:347:PX4:H33	0.49	1.84	10	1
4:A:408:PX4:H4	4:A:414:PX4:O2	0.49	2.07	10	2
4:A:406:PX4:H23	4:A:415:PX4:H22	0.49	1.85	13	1
4:A:312:PX4:H25	4:A:365:PX4:H20	0.49	1.84	3	1
4:A:332:PX4:H52	4:A:347:PX4:H65	0.49	1.85	3	1
4:A:313:PX4:H51	4:A:354:PX4:H66	0.49	1.85	5	1
4:A:337:PX4:H42	4:A:347:PX4:H30	0.49	1.84	7	1
4:A:395:PX4:H19	4:A:396:PX4:H15	0.49	1.85	8	1
4:A:337:PX4:H31	4:A:338:PX4:H28	0.49	1.84	10	1
4:A:337:PX4:H48	4:A:345:PX4:H51	0.49	1.82	12	1
4:A:393:PX4:H32	4:A:401:PX4:H53	0.49	1.83	12	1
4:A:313:PX4:H15	4:A:360:PX4:C9	0.49	2.38	14	1
4:A:405:PX4:H64	4:A:406:PX4:H67	0.49	1.85	3	1
4:A:415:PX4:H56	4:A:421:PX4:H68	0.49	1.83	3	1
4:A:385:PX4:H49	4:A:393:PX4:H52	0.49	1.84	5	1
4:A:400:PX4:H39	4:A:401:PX4:H35	0.49	1.84	5	1
4:A:421:PX4:H26	4:A:423:PX4:H22	0.49	1.85	7	1
4:A:319:PX4:H17	4:A:324:PX4:O4	0.49	2.08	8	1
4:A:400:PX4:H57	4:A:408:PX4:H72	0.49	1.85	8	1
4:A:326:PX4:H69	4:A:393:PX4:H62	0.49	1.83	9	1
4:A:344:PX4:H52	4:A:347:PX4:H27	0.49	1.84	9	1
4:A:361:PX4:H37	4:A:423:PX4:H36	0.49	1.84	9	1
4:A:387:PX4:H47	4:A:411:PX4:C8	0.49	2.34	12	1
4:A:321:PX4:H34	4:A:322:PX4:H58	0.49	1.83	13	1
4:A:335:PX4:H1	4:A:344:PX4:O6	0.48	2.08	4	1
4:A:376:PX4:H59	4:A:385:PX4:H57	0.48	1.84	5	1
4:A:385:PX4:H23	4:A:386:PX4:H28	0.48	1.85	5	1

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Atom-1	Atom-2	Clash(Å)	Distance(Å)	Models	
				Worst	Total
4:A:355:PX4:H54	4:A:356:PX4:H47	0.48	1.85	8	1
4:A:367:PX4:H18	4:A:424:PX4:O3	0.48	2.08	8	1
4:A:373:PX4:O2	4:A:382:PX4:H9	0.48	2.08	12	1
4:A:316:PX4:H64	4:A:323:PX4:H69	0.48	1.84	14	1
4:A:376:PX4:H61	4:A:392:PX4:H32	0.48	1.85	14	1
4:A:308:PX4:H19	4:A:311:PX4:H52	0.48	1.85	2	1
4:A:322:PX4:H56	4:A:336:PX4:H31	0.48	1.85	3	1
4:A:404:PX4:H48	4:A:413:PX4:O6	0.48	2.08	4	1
4:A:406:PX4:H28	4:A:421:PX4:H63	0.48	1.86	5	1
4:A:385:PX4:H28	4:A:386:PX4:H28	0.48	1.85	7	1
4:A:369:PX4:H32	4:A:410:PX4:H21	0.48	1.83	2	1
4:A:332:PX4:H43	4:A:407:PX4:H61	0.48	1.85	3	1
4:A:372:PX4:H25	4:A:420:PX4:H50	0.48	1.84	4	1
4:A:421:PX4:H40	4:A:423:PX4:H53	0.48	1.85	7	1
4:A:311:PX4:H31	4:A:364:PX4:H27	0.48	1.86	11	1
4:A:307:PX4:H71	4:A:349:PX4:H45	0.48	1.84	1	1
4:A:376:PX4:H60	4:A:392:PX4:H25	0.48	1.84	5	1
4:A:316:PX4:H24	4:A:364:PX4:H47	0.48	1.86	8	1
4:A:320:PX4:H71	4:A:378:PX4:H40	0.48	1.85	8	1
4:A:357:PX4:H29	4:A:357:PX4:H71	0.48	1.84	10	1
4:A:345:PX4:H20	4:A:346:PX4:H15	0.48	1.85	11	1
4:A:307:PX4:H22	4:A:321:PX4:H64	0.48	1.83	13	1
4:A:389:PX4:H51	4:A:390:PX4:H24	0.48	1.85	13	1
4:A:378:PX4:H2	4:A:410:PX4:O6	0.48	2.09	13	1
4:A:400:PX4:H40	4:A:401:PX4:H45	0.48	1.85	1	1
4:A:309:PX4:H65	4:A:320:PX4:H36	0.48	1.85	2	1
4:A:326:PX4:H21	4:A:350:PX4:H17	0.48	1.85	9	1
4:A:349:PX4:H38	4:A:421:PX4:H42	0.48	1.85	10	1
4:A:400:PX4:H46	4:A:409:PX4:H20	0.48	1.85	10	1
4:A:346:PX4:H50	4:A:362:PX4:H56	0.48	1.86	11	1
4:A:354:PX4:H24	4:A:362:PX4:H17	0.48	1.84	11	1
4:A:310:PX4:O6	4:A:365:PX4:H11	0.48	2.08	12	1
4:A:400:PX4:H60	4:A:410:PX4:H54	0.48	1.85	13	1
4:A:331:PX4:O6	4:A:340:PX4:H4	0.48	2.08	1	1
4:A:330:PX4:C11	4:A:335:PX4:H19	0.48	2.36	2	1
4:A:393:PX4:H42	4:A:401:PX4:H40	0.48	1.84	2	1
4:A:353:PX4:H70	4:A:412:PX4:H37	0.48	1.86	5	1
4:A:377:PX4:H60	4:A:416:PX4:H62	0.48	1.85	5	1
4:A:388:PX4:H23	4:A:396:PX4:H30	0.48	1.84	11	1
4:A:392:PX4:H67	4:A:408:PX4:H36	0.48	1.84	12	1
4:A:369:PX4:H18	4:A:425:PX4:H1	0.48	1.86	1	1

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Atom-1	Atom-2	Clash(Å)	Distance(Å)	Models	
				Worst	Total
4:A:395:PX4:H48	4:A:405:PX4:H19	0.48	1.86	12	2
4:A:358:PX4:H27	4:A:363:PX4:H26	0.48	1.86	2	1
1:A:242:TYR:CD1	4:A:314:PX4:H19	0.48	2.43	4	1
4:A:337:PX4:H30	4:A:338:PX4:H48	0.48	1.86	5	1
4:A:319:PX4:H21	4:A:324:PX4:H19	0.48	1.84	6	1
4:A:374:PX4:H29	4:A:427:PX4:H31	0.48	1.86	7	1
4:A:390:PX4:H62	4:A:397:PX4:C21	0.48	2.38	9	1
4:A:337:PX4:H50	4:A:353:PX4:H25	0.48	1.84	10	1
1:A:145:THR:HB	1:A:146:PRO:HD2	0.48	1.85	2	1
4:A:318:PX4:O2	4:A:359:PX4:H18	0.48	2.07	4	1
4:A:323:PX4:H26	4:A:333:PX4:H17	0.48	1.85	4	1
4:A:331:PX4:H18	4:A:340:PX4:H21	0.48	1.84	5	1
4:A:346:PX4:H51	4:A:355:PX4:H14	0.48	1.85	6	1
4:A:406:PX4:H18	4:A:415:PX4:O1	0.48	2.09	11	1
4:A:326:PX4:H49	4:A:351:PX4:H18	0.48	1.84	1	1
4:A:307:PX4:H49	4:A:321:PX4:H56	0.48	1.86	5	1
4:A:348:PX4:H55	4:A:388:PX4:H71	0.48	1.84	6	1
4:A:315:PX4:H45	4:A:425:PX4:H27	0.48	1.85	7	1
4:A:326:PX4:H20	4:A:350:PX4:H48	0.48	1.86	8	1
4:A:404:PX4:H53	4:A:413:PX4:H24	0.48	1.86	14	1
4:A:416:PX4:O3	4:A:416:PX4:H10	0.48	2.09	1	1
4:A:347:PX4:H13	4:A:348:PX4:O1	0.48	2.08	6	3
4:A:404:PX4:H59	4:A:430:PX4:H40	0.48	1.86	4	1
4:A:351:PX4:C5	4:A:352:PX4:H24	0.48	2.39	9	1
4:A:325:PX4:H62	4:A:334:PX4:H45	0.48	1.86	11	1
4:A:321:PX4:H15	4:A:354:PX4:H15	0.48	1.85	12	1
4:A:337:PX4:H22	4:A:337:PX4:H8	0.48	1.85	12	1
4:A:421:PX4:H30	4:A:423:PX4:H19	0.48	1.86	12	1
4:A:373:PX4:H60	4:A:381:PX4:H25	0.47	1.85	3	1
4:A:357:PX4:H39	4:A:402:PX4:H41	0.47	1.84	4	1
4:A:308:PX4:O1	4:A:311:PX4:H14	0.47	2.10	7	1
4:A:349:PX4:H30	4:A:356:PX4:H38	0.47	1.86	7	1
4:A:424:PX4:H69	4:A:429:PX4:H67	0.47	1.86	7	1
4:A:325:PX4:H17	4:A:341:PX4:H47	0.47	1.85	14	1
4:A:388:PX4:H17	4:A:396:PX4:O6	0.47	2.09	1	2
4:A:331:PX4:H14	4:A:347:PX4:H14	0.47	1.86	5	1
4:A:421:PX4:H30	4:A:430:PX4:H19	0.47	1.84	5	1
4:A:402:PX4:O2	4:A:402:PX4:H10	0.47	2.09	7	1
4:A:413:PX4:H50	4:A:430:PX4:H23	0.47	1.86	7	1
4:A:338:PX4:H68	4:A:396:PX4:H38	0.47	1.85	2	1
4:A:314:PX4:H61	4:A:364:PX4:H71	0.47	1.86	7	1

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Atom-1	Atom-2	Clash(Å)	Distance(Å)	Models	
				Worst	Total
4:A:351:PX4:H55	4:A:358:PX4:H52	0.47	1.86	7	1
4:A:326:PX4:H35	4:A:350:PX4:H52	0.47	1.86	10	1
4:A:322:PX4:H25	4:A:361:PX4:H48	0.47	1.86	10	2
4:A:335:PX4:H24	4:A:344:PX4:H24	0.47	1.86	11	1
4:A:332:PX4:H3	4:A:356:PX4:O3	0.47	2.08	14	1
4:A:376:PX4:H68	4:A:385:PX4:H63	0.47	1.87	14	1
4:A:367:PX4:H28	4:A:423:PX4:H50	0.47	1.85	14	1
4:A:368:PX4:H1	4:A:369:PX4:O2	0.47	2.09	1	1
4:A:421:PX4:H5	4:A:423:PX4:O1	0.47	2.09	3	2
4:A:372:PX4:H55	4:A:379:PX4:H53	0.47	1.86	2	1
4:A:398:PX4:H40	4:A:414:PX4:H32	0.47	1.86	6	1
4:A:311:PX4:H69	4:A:320:PX4:H44	0.47	1.86	10	1
4:A:310:PX4:H48	4:A:312:PX4:H21	0.47	1.86	10	1
4:A:342:PX4:H54	4:A:351:PX4:H29	0.47	1.86	11	2
4:A:345:PX4:H19	4:A:346:PX4:H19	0.47	1.86	11	1
4:A:405:PX4:H54	4:A:414:PX4:H30	0.47	1.86	11	1
4:A:378:PX4:H52	4:A:410:PX4:H26	0.47	1.87	13	1
4:A:355:PX4:H20	4:A:362:PX4:H51	0.47	1.86	14	1
4:A:325:PX4:H17	4:A:341:PX4:H17	0.47	1.87	1	1
4:A:326:PX4:H51	4:A:334:PX4:H40	0.47	1.87	3	1
4:A:351:PX4:H56	4:A:358:PX4:H56	0.47	1.86	3	1
1:A:205:THR:O	4:A:314:PX4:H9	0.47	2.09	4	1
4:A:338:PX4:H70	4:A:362:PX4:H44	0.47	1.86	4	1
4:A:317:PX4:O1	4:A:351:PX4:H20	0.47	2.09	4	1
4:A:325:PX4:H12	4:A:325:PX4:H14	0.47	1.87	5	1
4:A:412:PX4:H5	4:A:427:PX4:O1	0.47	2.10	7	1
4:A:399:PX4:O1	4:A:407:PX4:H7	0.47	2.10	9	1
4:A:400:PX4:H47	4:A:426:PX4:H26	0.47	1.85	12	1
4:A:361:PX4:H31	4:A:367:PX4:H42	0.47	1.84	1	1
4:A:417:PX4:H64	4:A:420:PX4:H60	0.47	1.86	4	1
4:A:340:PX4:H47	4:A:341:PX4:H61	0.47	1.87	7	1
4:A:405:PX4:O2	4:A:406:PX4:H12	0.47	2.09	7	1
4:A:424:PX4:H48	4:A:425:PX4:H22	0.47	1.86	7	1
4:A:358:PX4:H20	4:A:363:PX4:H18	0.47	1.86	14	2
4:A:316:PX4:H61	4:A:323:PX4:C36	0.47	2.38	12	1
4:A:306:PX4:H29	4:A:336:PX4:H31	0.47	1.87	1	1
4:A:319:PX4:H12	4:A:342:PX4:O2	0.47	2.09	1	1
4:A:359:PX4:H44	4:A:372:PX4:H40	0.47	1.87	2	1
4:A:349:PX4:H12	4:A:349:PX4:O6	0.47	2.09	4	1
4:A:336:PX4:H36	4:A:361:PX4:H67	0.47	1.86	4	1
4:A:306:PX4:H70	4:A:349:PX4:H35	0.47	1.86	5	1

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Atom-1	Atom-2	Clash(Å)	Distance(Å)	Models	
				Worst	Total
4:A:346:PX4:H29	4:A:354:PX4:H19	0.47	1.86	5	1
4:A:322:PX4:H40	4:A:361:PX4:H54	0.47	1.84	5	1
4:A:395:PX4:H59	4:A:405:PX4:H42	0.47	1.84	5	1
4:A:310:PX4:H54	4:A:312:PX4:H22	0.47	1.87	5	1
4:A:308:PX4:H54	4:A:364:PX4:H30	0.47	1.85	5	1
4:A:345:PX4:O1	4:A:346:PX4:H13	0.47	2.08	6	1
4:A:360:PX4:H3	4:A:366:PX4:O4	0.47	2.10	6	1
4:A:403:PX4:H52	4:A:419:PX4:H55	0.47	1.86	6	1
1:A:214:LEU:HD23	1:A:214:LEU:H	0.47	1.69	7	1
4:A:390:PX4:H60	4:A:390:PX4:H29	0.47	1.86	7	1
4:A:309:PX4:O6	4:A:320:PX4:H4	0.47	2.09	9	1
4:A:358:PX4:H38	4:A:365:PX4:H34	0.47	1.86	9	1
4:A:396:PX4:H63	4:A:398:PX4:H50	0.47	1.86	9	1
4:A:400:PX4:O2	4:A:426:PX4:H14	0.47	2.09	9	1
4:A:346:PX4:H46	4:A:355:PX4:O1	0.47	2.10	10	1
4:A:405:PX4:H9	4:A:405:PX4:O6	0.47	2.10	11	1
4:A:388:PX4:H52	4:A:411:PX4:H28	0.47	1.87	11	1
4:A:335:PX4:H48	4:A:343:PX4:H22	0.47	1.86	12	1
4:A:402:PX4:H37	4:A:413:PX4:H36	0.47	1.86	13	1
4:A:391:PX4:H64	4:A:409:PX4:H62	0.47	1.87	13	1
4:A:331:PX4:H69	4:A:347:PX4:H42	0.47	1.85	14	1
4:A:381:PX4:H52	4:A:388:PX4:H46	0.47	1.86	14	1
4:A:392:PX4:H51	4:A:408:PX4:H24	0.47	1.85	14	1
4:A:323:PX4:H43	4:A:424:PX4:H27	0.47	1.86	1	1
4:A:413:PX4:H66	4:A:422:PX4:H41	0.47	1.87	1	1
4:A:389:PX4:H21	4:A:396:PX4:H71	0.47	1.87	5	1
4:A:315:PX4:H28	4:A:322:PX4:H40	0.47	1.87	9	1
4:A:400:PX4:H48	4:A:410:PX4:H46	0.47	1.87	10	1
4:A:412:PX4:H27	4:A:413:PX4:H38	0.47	1.84	10	1
4:A:376:PX4:H23	4:A:399:PX4:H49	0.47	1.86	11	1
4:A:371:PX4:H71	4:A:378:PX4:H62	0.47	1.87	14	1
4:A:326:PX4:H36	4:A:349:PX4:H71	0.47	1.87	1	1
4:A:307:PX4:H64	4:A:321:PX4:H67	0.47	1.87	4	1
4:A:375:PX4:H68	4:A:419:PX4:H32	0.47	1.86	4	1
4:A:369:PX4:H32	4:A:377:PX4:H61	0.47	1.86	4	1
4:A:334:PX4:H41	4:A:408:PX4:H41	0.47	1.87	5	1
4:A:350:PX4:H49	4:A:363:PX4:H50	0.47	1.87	5	1
4:A:400:PX4:H17	4:A:408:PX4:H53	0.47	1.85	7	1
4:A:398:PX4:H16	4:A:407:PX4:H46	0.47	1.85	7	1
4:A:312:PX4:H28	4:A:365:PX4:H46	0.47	1.85	8	1
4:A:355:PX4:H61	4:A:355:PX4:H17	0.47	1.85	9	1

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Atom-1	Atom-2	Clash(Å)	Distance(Å)	Models	
				Worst	Total
4:A:408:PX4:H72	4:A:426:PX4:H57	0.47	1.87	9	1
4:A:391:PX4:H41	4:A:408:PX4:H39	0.47	1.85	10	1
4:A:371:PX4:H39	4:A:420:PX4:H36	0.47	1.86	11	1
4:A:332:PX4:H37	4:A:390:PX4:H39	0.47	1.86	14	1
4:A:402:PX4:H51	4:A:404:PX4:H47	0.47	1.87	3	1
4:A:388:PX4:H34	4:A:402:PX4:H24	0.47	1.87	4	1
4:A:416:PX4:H57	4:A:423:PX4:H64	0.47	1.86	9	1
4:A:322:PX4:H25	4:A:361:PX4:H46	0.47	1.85	13	1
4:A:419:PX4:O8	4:A:427:PX4:H17	0.47	2.09	13	1
4:A:308:PX4:H62	4:A:363:PX4:H21	0.46	1.87	1	1
4:A:368:PX4:O2	4:A:369:PX4:H4	0.46	2.09	2	1
4:A:345:PX4:H20	4:A:346:PX4:H47	0.46	1.86	5	1
4:A:349:PX4:H41	4:A:422:PX4:H45	0.46	1.87	7	1
4:A:372:PX4:H26	4:A:378:PX4:H34	0.46	1.87	9	1
4:A:342:PX4:H19	4:A:352:PX4:H23	0.46	1.87	10	1
4:A:404:PX4:H41	4:A:412:PX4:H64	0.46	1.88	10	1
4:A:370:PX4:H68	4:A:403:PX4:H23	0.46	1.88	13	1
4:A:358:PX4:H31	4:A:364:PX4:H43	0.46	1.85	14	1
4:A:325:PX4:H47	4:A:341:PX4:H22	0.46	1.87	2	1
4:A:393:PX4:H38	4:A:401:PX4:H36	0.46	1.86	2	1
4:A:382:PX4:H59	4:A:428:PX4:H21	0.46	1.88	3	1
4:A:310:PX4:H71	4:A:311:PX4:H20	0.46	1.85	7	1
4:A:400:PX4:H31	4:A:426:PX4:H58	0.46	1.87	8	1
4:A:392:PX4:H18	4:A:393:PX4:H47	0.46	1.87	11	2
4:A:353:PX4:H27	4:A:366:PX4:H14	0.46	1.86	10	1
4:A:380:PX4:H52	4:A:387:PX4:H46	0.46	1.87	11	1
4:A:386:PX4:H29	4:A:387:PX4:H26	0.46	1.86	12	1
4:A:400:PX4:H29	4:A:401:PX4:H31	0.46	1.87	13	1
4:A:322:PX4:H38	4:A:413:PX4:H68	0.46	1.88	2	1
4:A:355:PX4:H40	4:A:356:PX4:H35	0.46	1.87	3	1
4:A:395:PX4:H35	4:A:397:PX4:H64	0.46	1.86	3	1
4:A:310:PX4:H72	4:A:311:PX4:H67	0.46	1.87	6	1
4:A:424:PX4:H40	4:A:429:PX4:H68	0.46	1.88	6	1
4:A:404:PX4:H15	4:A:413:PX4:O6	0.46	2.11	9	1
4:A:310:PX4:H63	4:A:311:PX4:H21	0.46	1.87	10	1
4:A:378:PX4:H19	4:A:410:PX4:H27	0.46	1.87	12	1
4:A:315:PX4:H5	4:A:361:PX4:O6	0.46	2.11	14	1
4:A:392:PX4:H49	4:A:393:PX4:H50	0.46	1.88	14	1
4:A:404:PX4:H69	4:A:412:PX4:H45	0.46	1.87	1	1
4:A:371:PX4:H60	4:A:378:PX4:H66	0.46	1.87	5	1
4:A:331:PX4:H42	4:A:397:PX4:H30	0.46	1.88	6	1

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Atom-1	Atom-2	Clash(Å)	Distance(Å)	Models	
				Worst	Total
4:A:315:PX4:H17	4:A:316:PX4:H54	0.46	1.87	7	1
4:A:353:PX4:O6	4:A:366:PX4:H3	0.46	2.10	8	1
4:A:383:PX4:H59	4:A:399:PX4:H17	0.46	1.87	9	1
4:A:398:PX4:H19	4:A:407:PX4:H19	0.46	1.86	9	1
4:A:330:PX4:H30	4:A:338:PX4:H29	0.46	1.87	10	1
4:A:390:PX4:H61	4:A:397:PX4:H36	0.46	1.87	10	1
4:A:315:PX4:H21	4:A:316:PX4:H32	0.46	1.88	12	1
4:A:407:PX4:H18	4:A:414:PX4:H49	0.46	1.85	12	1
4:A:410:PX4:H60	4:A:417:PX4:H62	0.46	1.87	14	1
4:A:322:PX4:H24	4:A:361:PX4:H48	0.46	1.85	2	1
4:A:347:PX4:H43	4:A:348:PX4:H31	0.46	1.86	3	1
4:A:378:PX4:H17	4:A:410:PX4:H22	0.46	1.86	3	1
4:A:378:PX4:H42	4:A:410:PX4:H71	0.46	1.85	5	1
4:A:321:PX4:H68	4:A:361:PX4:H49	0.46	1.88	7	1
4:A:417:PX4:H20	4:A:426:PX4:H23	0.46	1.87	7	1
4:A:349:PX4:H56	4:A:350:PX4:H28	0.46	1.86	10	1
4:A:321:PX4:H70	4:A:423:PX4:H41	0.46	1.88	12	1
4:A:307:PX4:H39	4:A:349:PX4:H69	0.46	1.86	13	1
4:A:391:PX4:H29	4:A:414:PX4:H46	0.46	1.87	13	1
4:A:367:PX4:H25	4:A:424:PX4:H26	0.46	1.87	1	1
4:A:350:PX4:H69	4:A:351:PX4:H69	0.46	1.87	3	1
4:A:331:PX4:H28	4:A:347:PX4:C25	0.46	2.40	4	1
4:A:387:PX4:H14	4:A:387:PX4:H6	0.46	1.86	6	1
4:A:402:PX4:H18	4:A:404:PX4:H20	0.46	1.85	6	1
4:A:347:PX4:H72	4:A:356:PX4:H65	0.46	1.87	9	1
4:A:307:PX4:H55	4:A:362:PX4:H27	0.46	1.86	11	1
4:A:369:PX4:H25	4:A:418:PX4:H25	0.46	1.87	11	1
4:A:349:PX4:H64	4:A:405:PX4:H70	0.46	1.87	11	1
4:A:346:PX4:H30	4:A:353:PX4:H65	0.46	1.86	13	1
4:A:421:PX4:H43	4:A:423:PX4:H41	0.46	1.87	7	1
4:A:337:PX4:H47	4:A:353:PX4:C6	0.46	2.29	8	1
4:A:331:PX4:H29	4:A:347:PX4:H52	0.46	1.87	8	1
4:A:340:PX4:H36	4:A:397:PX4:H65	0.46	1.85	9	1
4:A:313:PX4:C19	4:A:337:PX4:H64	0.46	2.41	10	1
4:A:423:PX4:H55	4:A:425:PX4:H28	0.46	1.88	10	1
4:A:321:PX4:H61	4:A:361:PX4:H46	0.46	1.88	12	1
4:A:308:PX4:H52	4:A:363:PX4:H24	0.46	1.86	12	1
4:A:340:PX4:H65	4:A:340:PX4:H28	0.46	1.86	13	1
4:A:407:PX4:H7	4:A:407:PX4:O6	0.46	2.11	1	1
4:A:396:PX4:H63	4:A:398:PX4:H51	0.46	1.88	11	1
4:A:337:PX4:H65	4:A:353:PX4:H40	0.46	1.86	12	1

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Atom-1	Atom-2	Clash(Å)	Distance(Å)	Models	
				Worst	Total
4:A:383:PX4:H20	4:A:392:PX4:H27	0.46	1.85	12	1
4:A:313:PX4:H60	4:A:327:PX4:H31	0.46	1.87	13	1
4:A:390:PX4:H57	4:A:397:PX4:H35	0.46	1.86	13	1
4:A:330:PX4:H13	4:A:338:PX4:O6	0.46	2.11	5	1
4:A:317:PX4:H42	4:A:342:PX4:H72	0.46	1.88	6	1
4:A:391:PX4:H17	4:A:408:PX4:H2	0.46	1.88	7	1
4:A:344:PX4:H31	4:A:348:PX4:H25	0.46	1.88	8	1
4:A:392:PX4:H68	4:A:408:PX4:H35	0.46	1.88	8	1
4:A:367:PX4:H48	4:A:428:PX4:H50	0.46	1.86	9	1
4:A:392:PX4:H29	4:A:393:PX4:H61	0.46	1.88	11	1
4:A:357:PX4:H43	4:A:358:PX4:H44	0.46	1.86	13	1
4:A:325:PX4:H42	4:A:334:PX4:H59	0.46	1.87	14	1
4:A:370:PX4:H42	4:A:403:PX4:H38	0.46	1.86	1	1
4:A:340:PX4:H37	4:A:397:PX4:H29	0.46	1.88	1	1
4:A:402:PX4:H20	4:A:411:PX4:O8	0.46	2.11	1	1
4:A:332:PX4:H29	4:A:347:PX4:H66	0.46	1.87	5	1
4:A:311:PX4:H51	4:A:359:PX4:H59	0.46	1.86	7	1
4:A:388:PX4:H14	4:A:396:PX4:H18	0.46	1.88	7	1
4:A:362:PX4:H26	4:A:413:PX4:H72	0.46	1.88	7	1
4:A:338:PX4:H47	4:A:348:PX4:C23	0.46	2.41	8	1
4:A:382:PX4:H60	4:A:412:PX4:H64	0.46	1.88	8	1
4:A:398:PX4:H32	4:A:414:PX4:H55	0.46	1.86	8	1
4:A:311:PX4:H20	4:A:311:PX4:H55	0.46	1.88	10	1
4:A:398:PX4:H48	4:A:407:PX4:H57	0.46	1.86	12	1
4:A:404:PX4:H26	4:A:419:PX4:H9	0.45	1.87	3	1
4:A:409:PX4:H64	4:A:415:PX4:H60	0.45	1.88	4	1
4:A:334:PX4:H33	4:A:407:PX4:H38	0.45	1.88	9	1
4:A:330:PX4:H19	4:A:330:PX4:C4	0.45	2.41	10	1
4:A:410:PX4:O2	4:A:416:PX4:H3	0.45	2.10	14	2
4:A:326:PX4:H55	4:A:408:PX4:H44	0.45	1.87	11	1
4:A:391:PX4:H16	4:A:392:PX4:H46	0.45	1.88	12	1
4:A:312:PX4:H32	4:A:357:PX4:H55	0.45	1.88	14	1
4:A:361:PX4:H19	4:A:364:PX4:H46	0.45	1.87	14	1
4:A:323:PX4:H4	4:A:333:PX4:O2	0.45	2.11	3	1
4:A:308:PX4:H16	4:A:311:PX4:C9	0.45	2.41	7	1
4:A:308:PX4:H21	4:A:311:PX4:H49	0.45	1.88	7	1
4:A:316:PX4:H48	4:A:320:PX4:H21	0.45	1.87	7	1
4:A:317:PX4:H51	4:A:341:PX4:H19	0.45	1.87	8	1
4:A:360:PX4:H43	4:A:382:PX4:H64	0.45	1.88	8	1
4:A:380:PX4:H62	4:A:388:PX4:H42	0.45	1.88	9	1
4:A:421:PX4:H7	4:A:422:PX4:O6	0.45	2.11	9	1

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Atom-1	Atom-2	Clash(Å)	Distance(Å)	Models	
				Worst	Total
4:A:413:PX4:H35	4:A:419:PX4:H27	0.45	1.87	10	1
4:A:333:PX4:H33	4:A:389:PX4:H45	0.45	1.88	11	1
4:A:367:PX4:H16	4:A:424:PX4:H14	0.45	1.87	14	1
4:A:403:PX4:H46	4:A:419:PX4:H51	0.45	1.88	1	1
4:A:383:PX4:O4	4:A:392:PX4:H1	0.45	2.10	3	1
4:A:393:PX4:H31	4:A:394:PX4:C11	0.45	2.41	3	1
4:A:354:PX4:H63	4:A:360:PX4:H63	0.45	1.88	4	1
4:A:422:PX4:H3	4:A:423:PX4:O2	0.45	2.10	4	1
4:A:331:PX4:C21	4:A:397:PX4:H30	0.45	2.41	6	1
4:A:391:PX4:H48	4:A:392:PX4:H46	0.45	1.87	8	1
4:A:351:PX4:H12	4:A:352:PX4:H24	0.45	1.88	9	1
4:A:345:PX4:C36	4:A:370:PX4:H39	0.45	2.41	10	1
4:A:390:PX4:H1	4:A:399:PX4:H18	0.45	1.88	12	1
4:A:317:PX4:H59	4:A:319:PX4:H56	0.45	1.88	14	1
4:A:348:PX4:H55	4:A:388:PX4:H70	0.45	1.88	1	1
4:A:405:PX4:H47	4:A:406:PX4:H48	0.45	1.88	4	1
4:A:310:PX4:H70	4:A:359:PX4:H59	0.45	1.88	5	1
4:A:331:PX4:H40	4:A:340:PX4:H63	0.45	1.88	5	1
4:A:313:PX4:H21	4:A:366:PX4:H18	0.45	1.88	5	1
4:A:307:PX4:H37	4:A:416:PX4:H42	0.45	1.88	5	1
4:A:337:PX4:H48	4:A:345:PX4:H49	0.45	1.88	6	1
4:A:328:PX4:H47	4:A:329:PX4:H28	0.45	1.89	9	1
4:A:380:PX4:H20	4:A:381:PX4:H48	0.45	1.89	9	1
4:A:348:PX4:H59	4:A:362:PX4:H54	0.45	1.89	13	1
4:A:338:PX4:H66	4:A:395:PX4:H38	0.45	1.89	4	1
4:A:381:PX4:H59	4:A:397:PX4:H47	0.45	1.87	7	1
4:A:369:PX4:H21	4:A:377:PX4:H71	0.45	1.87	10	1
4:A:323:PX4:H36	4:A:424:PX4:H67	0.45	1.87	4	1
4:A:313:PX4:H42	4:A:403:PX4:H62	0.45	1.87	5	1
4:A:421:PX4:H24	4:A:423:PX4:H19	0.45	1.87	5	1
4:A:307:PX4:H5	4:A:321:PX4:H48	0.45	1.87	8	1
4:A:412:PX4:O8	4:A:428:PX4:H17	0.45	2.11	8	1
4:A:349:PX4:O1	4:A:350:PX4:H14	0.45	2.11	10	1
4:A:391:PX4:H46	4:A:401:PX4:O6	0.45	2.12	11	1
4:A:378:PX4:H19	4:A:410:PX4:C14	0.45	2.42	12	1
4:A:375:PX4:H50	4:A:428:PX4:H14	0.45	1.88	13	1
4:A:371:PX4:H58	4:A:379:PX4:H32	0.45	1.89	13	1
4:A:322:PX4:H22	4:A:323:PX4:H19	0.45	1.89	1	1
4:A:393:PX4:H56	4:A:401:PX4:H35	0.45	1.89	1	1
4:A:313:PX4:H42	4:A:403:PX4:H66	0.45	1.89	2	1
4:A:368:PX4:H37	4:A:418:PX4:H72	0.45	1.89	4	1

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Atom-1	Atom-2	Clash(Å)	Distance(Å)	Models	
				Worst	Total
4:A:416:PX4:H27	4:A:423:PX4:H24	0.45	1.87	7	1
4:A:312:PX4:H62	4:A:320:PX4:H67	0.45	1.87	11	1
4:A:373:PX4:O6	4:A:397:PX4:H12	0.45	2.12	11	1
4:A:419:PX4:H12	4:A:419:PX4:H18	0.45	1.87	11	1
4:A:391:PX4:H40	4:A:392:PX4:H56	0.45	1.88	13	1
1:A:214:LEU:HD11	1:A:243:VAL:H	0.45	1.71	14	1
4:A:373:PX4:H36	4:A:381:PX4:H45	0.45	1.88	2	1
4:A:316:PX4:H25	4:A:320:PX4:H33	0.45	1.88	3	1
4:A:394:PX4:H34	4:A:401:PX4:H39	0.45	1.89	3	1
4:A:331:PX4:H53	4:A:340:PX4:H34	0.45	1.87	4	1
4:A:402:PX4:H57	4:A:404:PX4:H60	0.45	1.88	4	1
4:A:342:PX4:H27	4:A:358:PX4:H58	0.45	1.89	5	1
1:A:243:VAL:HG12	4:A:356:PX4:H23	0.45	1.88	6	1
4:A:331:PX4:H43	4:A:389:PX4:H29	0.45	1.88	6	1
4:A:367:PX4:H17	4:A:428:PX4:H54	0.45	1.88	9	1
4:A:330:PX4:H21	4:A:338:PX4:H22	0.45	1.87	10	1
4:A:370:PX4:H28	4:A:403:PX4:H57	0.45	1.89	1	1
4:A:306:PX4:H14	4:A:321:PX4:O6	0.45	2.12	3	1
4:A:337:PX4:H53	4:A:353:PX4:H25	0.45	1.89	4	1
4:A:398:PX4:H67	4:A:405:PX4:H57	0.45	1.88	6	1
4:A:378:PX4:H16	4:A:417:PX4:C24	0.45	2.33	7	1
4:A:330:PX4:H19	4:A:330:PX4:H7	0.45	1.87	11	1
4:A:310:PX4:H17	4:A:365:PX4:O5	0.45	2.11	13	1
4:A:392:PX4:H25	4:A:393:PX4:H66	0.45	1.87	13	1
4:A:417:PX4:H24	4:A:426:PX4:H26	0.45	1.89	4	1
4:A:383:PX4:H24	4:A:383:PX4:H31	0.45	1.89	5	1
4:A:384:PX4:H34	4:A:384:PX4:H61	0.45	1.89	5	1
4:A:369:PX4:H52	4:A:425:PX4:H21	0.45	1.89	11	1
4:A:350:PX4:H1	4:A:358:PX4:O2	0.45	2.12	12	1
4:A:389:PX4:O2	4:A:398:PX4:H4	0.45	2.12	14	1
4:A:383:PX4:H66	4:A:399:PX4:H69	0.44	1.89	1	1
4:A:380:PX4:H26	4:A:381:PX4:H36	0.44	1.87	8	1
4:A:412:PX4:H23	4:A:413:PX4:H31	0.44	1.89	9	1
4:A:347:PX4:H10	4:A:348:PX4:O1	0.44	2.13	10	1
4:A:352:PX4:H52	4:A:358:PX4:H50	0.44	1.89	10	1
4:A:369:PX4:H44	4:A:418:PX4:H68	0.44	1.87	11	1
4:A:398:PX4:H13	4:A:398:PX4:H15	0.44	1.90	11	1
4:A:322:PX4:H62	4:A:412:PX4:H42	0.44	1.88	11	1
4:A:306:PX4:H59	4:A:361:PX4:H54	0.44	1.89	13	1
4:A:406:PX4:H25	4:A:415:PX4:H22	0.44	1.88	14	1
4:A:319:PX4:H26	4:A:324:PX4:H24	0.44	1.88	5	1

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Atom-1	Atom-2	Clash(Å)	Distance(Å)	Models	
				Worst	Total
4:A:311:PX4:H53	4:A:359:PX4:H56	0.44	1.89	5	1
4:A:347:PX4:H19	4:A:347:PX4:H9	0.44	1.89	6	1
4:A:367:PX4:H48	4:A:424:PX4:H19	0.44	1.88	6	1
4:A:317:PX4:O2	4:A:325:PX4:H10	0.44	2.12	7	1
4:A:334:PX4:O6	4:A:334:PX4:H3	0.44	2.12	7	1
4:A:389:PX4:H30	4:A:396:PX4:H60	0.44	1.89	8	1
4:A:398:PX4:H45	4:A:414:PX4:H21	0.44	1.89	9	1
4:A:353:PX4:H20	4:A:366:PX4:H2	0.44	1.88	10	1
4:A:313:PX4:H47	4:A:328:PX4:H17	0.44	1.90	11	1
4:A:410:PX4:H66	4:A:426:PX4:H41	0.44	1.89	12	1
4:A:375:PX4:H21	4:A:429:PX4:H45	0.44	1.88	1	1
4:A:307:PX4:H51	4:A:362:PX4:H22	0.44	1.90	6	1
4:A:396:PX4:H31	4:A:411:PX4:H34	0.44	1.90	8	1
4:A:318:PX4:H18	4:A:328:PX4:H19	0.44	1.88	11	1
4:A:419:PX4:H60	4:A:427:PX4:H58	0.44	1.89	11	1
4:A:423:PX4:H16	4:A:425:PX4:O8	0.44	2.12	13	1
4:A:337:PX4:H15	4:A:353:PX4:O1	0.44	2.13	1	2
4:A:311:PX4:O3	4:A:311:PX4:H6	0.44	2.10	2	1
4:A:377:PX4:H10	4:A:418:PX4:O8	0.44	2.13	2	1
4:A:400:PX4:H47	4:A:409:PX4:H23	0.44	1.89	3	1
4:A:422:PX4:H34	4:A:423:PX4:H45	0.44	1.88	6	1
4:A:321:PX4:H68	4:A:322:PX4:H30	0.44	1.90	9	1
4:A:387:PX4:H54	4:A:388:PX4:H38	0.44	1.89	10	1
4:A:402:PX4:H54	4:A:404:PX4:H59	0.44	1.89	11	1
4:A:370:PX4:H26	4:A:427:PX4:H57	0.44	1.89	11	1
4:A:329:PX4:H67	4:A:424:PX4:H40	0.44	1.90	14	1
4:A:369:PX4:O1	4:A:425:PX4:H4	0.44	2.13	12	3
4:A:342:PX4:H29	4:A:351:PX4:H30	0.44	1.89	3	1
4:A:337:PX4:H52	4:A:345:PX4:H55	0.44	1.88	7	2
4:A:319:PX4:H66	4:A:324:PX4:H58	0.44	1.88	9	1
4:A:405:PX4:H53	4:A:414:PX4:H33	0.44	1.89	9	1
4:A:326:PX4:H66	4:A:399:PX4:H65	0.44	1.88	11	1
4:A:380:PX4:H46	4:A:387:PX4:H20	0.44	1.89	11	1
4:A:345:PX4:H35	4:A:346:PX4:H37	0.44	1.89	12	1
4:A:389:PX4:H48	4:A:398:PX4:H17	0.44	1.89	12	1
4:A:320:PX4:H54	4:A:359:PX4:H30	0.44	1.90	13	1
4:A:338:PX4:H55	4:A:348:PX4:H53	0.44	1.90	14	1
4:A:412:PX4:H27	4:A:430:PX4:H60	0.44	1.89	14	1
4:A:310:PX4:O6	4:A:365:PX4:H4	0.44	2.12	1	1
4:A:391:PX4:H25	4:A:393:PX4:H64	0.44	1.89	1	1
4:A:400:PX4:C24	4:A:409:PX4:H23	0.44	2.42	2	1

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Atom-1	Atom-2	Clash(Å)	Distance(Å)	Models	
				Worst	Total
4:A:355:PX4:H38	4:A:356:PX4:H44	0.44	1.88	7	1
4:A:315:PX4:H5	4:A:364:PX4:O8	0.44	2.11	7	1
4:A:389:PX4:H30	4:A:396:PX4:C31	0.44	2.42	8	1
4:A:390:PX4:H30	4:A:398:PX4:H19	0.44	1.89	8	1
4:A:321:PX4:H37	4:A:354:PX4:H59	0.44	1.90	9	1
1:A:207:SER:O	4:A:321:PX4:H6	0.44	2.13	10	1
4:A:331:PX4:H44	4:A:340:PX4:H71	0.44	1.89	3	1
4:A:315:PX4:H20	4:A:320:PX4:H28	0.44	1.89	4	1
4:A:338:PX4:H64	4:A:411:PX4:H36	0.44	1.89	4	1
4:A:333:PX4:H61	4:A:368:PX4:H72	0.44	1.90	4	1
4:A:346:PX4:H39	4:A:354:PX4:H31	0.44	1.89	5	1
4:A:393:PX4:H14	4:A:394:PX4:C9	0.44	2.43	8	1
4:A:391:PX4:H58	4:A:401:PX4:H36	0.44	1.89	13	1
4:A:402:PX4:H36	4:A:403:PX4:H35	0.44	1.89	1	1
4:A:318:PX4:H24	4:A:320:PX4:H46	0.44	1.90	2	1
4:A:393:PX4:O6	4:A:394:PX4:H15	0.44	2.13	2	1
4:A:406:PX4:H35	4:A:414:PX4:H32	0.44	1.90	3	1
4:A:392:PX4:H35	4:A:399:PX4:H61	0.44	1.89	4	1
4:A:322:PX4:H34	4:A:361:PX4:H22	0.44	1.88	6	1
4:A:400:PX4:H38	4:A:401:PX4:H38	0.44	1.87	7	1
4:A:344:PX4:H37	4:A:347:PX4:H45	0.44	1.90	8	1
4:A:377:PX4:H16	4:A:418:PX4:C3	0.44	2.42	8	1
4:A:403:PX4:H9	4:A:427:PX4:O8	0.44	2.13	8	1
4:A:312:PX4:H25	4:A:363:PX4:H32	0.44	1.90	9	1
4:A:393:PX4:H41	4:A:394:PX4:H40	0.44	1.89	10	1
4:A:338:PX4:H17	4:A:348:PX4:O6	0.44	2.13	13	1
4:A:358:PX4:H22	4:A:363:PX4:H53	0.44	1.89	13	1
4:A:313:PX4:H57	4:A:327:PX4:H21	0.44	1.87	14	1
4:A:310:PX4:H23	4:A:358:PX4:H49	0.44	1.89	14	1
4:A:323:PX4:H16	4:A:333:PX4:H51	0.44	1.90	1	1
4:A:382:PX4:H52	4:A:428:PX4:H28	0.44	1.88	3	1
4:A:413:PX4:H69	4:A:428:PX4:H70	0.44	1.88	4	1
4:A:367:PX4:H46	4:A:428:PX4:H47	0.44	1.90	7	1
4:A:314:PX4:H69	4:A:364:PX4:H45	0.44	1.89	10	1
4:A:326:PX4:H57	4:A:334:PX4:H34	0.44	1.90	11	1
4:A:352:PX4:H32	4:A:358:PX4:H62	0.44	1.90	14	1
4:A:370:PX4:H34	4:A:403:PX4:H67	0.44	1.90	14	1
4:A:340:PX4:H62	4:A:341:PX4:H66	0.43	1.90	1	1
4:A:351:PX4:O7	4:A:352:PX4:H23	0.43	2.13	2	1
4:A:416:PX4:O1	4:A:422:PX4:H10	0.43	2.13	2	1
4:A:351:PX4:H8	4:A:352:PX4:O1	0.43	2.13	4	1

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Atom-1	Atom-2	Clash(Å)	Distance(Å)	Models	
				Worst	Total
4:A:308:PX4:H44	4:A:311:PX4:H70	0.43	1.90	12	1
4:A:318:PX4:H35	4:A:327:PX4:H65	0.43	1.89	12	1
4:A:330:PX4:H52	4:A:338:PX4:H24	0.43	1.90	12	1
4:A:417:PX4:H28	4:A:426:PX4:H32	0.43	1.90	12	1
4:A:312:PX4:H69	4:A:359:PX4:H37	0.43	1.89	13	1
4:A:321:PX4:H67	4:A:361:PX4:H24	0.43	1.90	13	1
4:A:376:PX4:H66	4:A:385:PX4:H30	0.43	1.90	13	1
4:A:374:PX4:H32	4:A:427:PX4:H23	0.43	1.90	14	1
4:A:330:PX4:H63	4:A:338:PX4:H42	0.43	1.88	2	1
4:A:361:PX4:H40	4:A:423:PX4:H66	0.43	1.90	3	1
4:A:312:PX4:H44	4:A:365:PX4:H68	0.43	1.89	5	1
4:A:393:PX4:H45	4:A:401:PX4:H45	0.43	1.90	6	1
4:A:310:PX4:H43	4:A:365:PX4:H37	0.43	1.90	7	1
4:A:328:PX4:H25	4:A:328:PX4:H20	0.43	1.38	8	1
4:A:416:PX4:O8	4:A:418:PX4:H40	0.43	2.13	8	1
4:A:346:PX4:H46	4:A:362:PX4:H46	0.43	1.90	12	1
4:A:311:PX4:H5	4:A:320:PX4:O4	0.43	2.13	13	1
4:A:326:PX4:H37	4:A:350:PX4:H32	0.43	1.89	1	1
1:A:244:ASP:OD2	4:A:349:PX4:H3	0.43	2.14	2	1
4:A:378:PX4:H29	4:A:378:PX4:H23	0.43	1.63	2	1
4:A:418:PX4:O1	4:A:425:PX4:H5	0.43	2.13	3	1
4:A:347:PX4:O4	4:A:348:PX4:H6	0.43	2.13	5	1
4:A:386:PX4:H38	4:A:394:PX4:H67	0.43	1.89	10	1
4:A:430:PX4:H38	4:A:430:PX4:H44	0.43	1.51	11	1
4:A:395:PX4:H43	4:A:405:PX4:H40	0.43	1.89	13	1
4:A:315:PX4:H10	4:A:316:PX4:O6	0.43	2.13	2	1
4:A:334:PX4:H69	4:A:352:PX4:H37	0.43	1.89	2	1
4:A:389:PX4:H33	4:A:397:PX4:H21	0.43	1.90	2	1
4:A:418:PX4:H41	4:A:418:PX4:H36	0.43	1.56	5	1
4:A:341:PX4:H58	4:A:390:PX4:H72	0.43	1.89	7	1
4:A:320:PX4:H32	4:A:359:PX4:H63	0.43	1.90	8	1
4:A:307:PX4:H61	4:A:362:PX4:H27	0.43	1.91	10	1
4:A:378:PX4:O1	4:A:417:PX4:H17	0.43	2.12	10	1
4:A:314:PX4:H31	4:A:356:PX4:H28	0.43	1.90	11	1
4:A:363:PX4:H30	4:A:363:PX4:H35	0.43	1.61	6	1
4:A:306:PX4:H51	4:A:306:PX4:H56	0.43	1.58	7	1
4:A:331:PX4:H51	4:A:347:PX4:H22	0.43	1.91	8	1
4:A:410:PX4:O2	4:A:416:PX4:H10	0.43	2.14	9	1
4:A:387:PX4:H5	4:A:411:PX4:O3	0.43	2.13	12	1
4:A:314:PX4:H71	4:A:409:PX4:H31	0.43	1.90	13	1
4:A:369:PX4:H29	4:A:378:PX4:H51	0.43	1.89	1	1

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Atom-1	Atom-2	Clash(Å)	Distance(Å)	Models	
				Worst	Total
4:A:341:PX4:H72	4:A:397:PX4:H35	0.43	1.89	1	1
4:A:314:PX4:H37	4:A:362:PX4:H16	0.43	1.90	4	1
4:A:333:PX4:H53	4:A:341:PX4:H57	0.43	1.89	5	1
1:A:178:GLY:HA3	4:A:354:PX4:H1	0.43	1.89	7	1
4:A:376:PX4:H19	4:A:383:PX4:H19	0.43	1.90	7	1
4:A:374:PX4:H8	4:A:427:PX4:H20	0.43	1.91	8	1
4:A:338:PX4:H70	4:A:395:PX4:H38	0.43	1.90	10	1
4:A:352:PX4:O8	4:A:365:PX4:H3	0.43	2.13	10	1
4:A:407:PX4:O6	4:A:414:PX4:H49	0.43	2.13	10	1
4:A:342:PX4:C12	4:A:352:PX4:H47	0.43	2.31	11	1
4:A:374:PX4:H58	4:A:382:PX4:H50	0.43	1.91	11	1
4:A:423:PX4:H55	4:A:425:PX4:H27	0.43	1.90	11	1
4:A:410:PX4:H51	4:A:426:PX4:H33	0.43	1.90	11	1
4:A:316:PX4:H47	4:A:320:PX4:H23	0.43	1.90	12	1
4:A:393:PX4:H30	4:A:400:PX4:H31	0.43	1.91	13	1
4:A:412:PX4:H36	4:A:419:PX4:H28	0.43	1.90	2	1
4:A:309:PX4:H28	4:A:309:PX4:H62	0.43	1.89	3	1
4:A:331:PX4:H17	4:A:340:PX4:H5	0.43	1.89	3	1
4:A:346:PX4:O6	4:A:362:PX4:H15	0.43	2.14	3	1
4:A:384:PX4:O1	4:A:385:PX4:H10	0.43	2.13	4	1
4:A:349:PX4:H65	4:A:406:PX4:H68	0.43	1.88	5	1
4:A:412:PX4:H58	4:A:427:PX4:H30	0.43	1.90	5	1
4:A:325:PX4:H49	4:A:341:PX4:H19	0.43	1.89	6	1
4:A:345:PX4:H19	4:A:346:PX4:H22	0.43	1.90	6	1
4:A:387:PX4:H56	4:A:387:PX4:H50	0.43	1.43	6	1
4:A:391:PX4:H26	4:A:392:PX4:H46	0.43	1.89	6	1
4:A:395:PX4:O1	4:A:396:PX4:H17	0.43	2.14	7	1
4:A:333:PX4:H14	4:A:340:PX4:O2	0.43	2.14	9	1
4:A:353:PX4:H35	4:A:366:PX4:H22	0.43	1.91	10	1
4:A:334:PX4:H51	4:A:334:PX4:H56	0.43	1.42	11	1
4:A:356:PX4:H62	4:A:397:PX4:H71	0.43	1.90	11	1
4:A:330:PX4:H31	4:A:348:PX4:H30	0.43	1.89	13	1
4:A:333:PX4:H30	4:A:339:PX4:H28	0.43	1.90	14	1
4:A:398:PX4:H21	4:A:407:PX4:H46	0.43	1.91	14	1
4:A:326:PX4:H47	4:A:334:PX4:H60	0.43	1.90	1	1
4:A:373:PX4:H28	4:A:381:PX4:H57	0.43	1.91	1	1
4:A:381:PX4:H16	4:A:388:PX4:H12	0.43	1.90	2	1
4:A:308:PX4:H14	4:A:311:PX4:O8	0.43	2.14	3	1
4:A:350:PX4:H61	4:A:363:PX4:H23	0.43	1.89	3	1
4:A:330:PX4:H5	4:A:344:PX4:H16	0.43	1.91	4	1
4:A:314:PX4:H33	4:A:362:PX4:H16	0.43	1.89	7	1

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Atom-1	Atom-2	Clash(Å)	Distance(Å)	Models	
				Worst	Total
4:A:403:PX4:H3	4:A:427:PX4:H49	0.43	1.90	7	1
1:A:116:TYR:CD1	1:A:138:PHE:CE2	0.43	3.06	8	1
4:A:326:PX4:H61	4:A:334:PX4:H35	0.43	1.89	10	1
4:A:391:PX4:H23	4:A:392:PX4:H14	0.43	1.89	10	1
4:A:345:PX4:H71	4:A:403:PX4:H36	0.43	1.91	10	1
4:A:314:PX4:H44	4:A:355:PX4:H46	0.43	1.90	11	1
4:A:339:PX4:H68	4:A:339:PX4:H62	0.43	1.44	13	1
4:A:391:PX4:H37	4:A:393:PX4:H72	0.43	1.89	13	1
4:A:395:PX4:H9	4:A:411:PX4:O2	0.43	2.14	14	1
4:A:325:PX4:H28	4:A:407:PX4:H41	0.43	1.90	1	1
4:A:379:PX4:H71	4:A:379:PX4:H65	0.43	1.55	2	1
4:A:371:PX4:H46	4:A:371:PX4:H16	0.43	1.75	3	2
4:A:378:PX4:H19	4:A:426:PX4:H28	0.43	1.90	3	1
4:A:354:PX4:H65	4:A:360:PX4:H24	0.43	1.89	5	1
4:A:327:PX4:O3	4:A:327:PX4:H10	0.43	2.14	6	1
4:A:376:PX4:H36	4:A:376:PX4:H42	0.43	1.68	6	1
4:A:386:PX4:H17	4:A:394:PX4:O8	0.43	2.13	6	1
4:A:403:PX4:H32	4:A:404:PX4:H21	0.43	1.91	7	1
4:A:337:PX4:H45	4:A:338:PX4:H52	0.43	1.91	8	1
4:A:325:PX4:H32	4:A:332:PX4:H28	0.43	1.90	9	1
4:A:335:PX4:H42	4:A:343:PX4:H64	0.43	1.89	10	1
4:A:412:PX4:H51	4:A:419:PX4:H16	0.43	1.91	12	1
4:A:404:PX4:H71	4:A:404:PX4:H19	0.43	1.89	13	1
4:A:403:PX4:H47	4:A:427:PX4:H47	0.43	1.90	1	1
4:A:314:PX4:H71	4:A:364:PX4:H39	0.43	1.91	2	1
4:A:314:PX4:H38	4:A:355:PX4:H57	0.43	1.91	3	1
4:A:372:PX4:H54	4:A:379:PX4:H53	0.43	1.90	5	1
1:A:207:SER:O	4:A:321:PX4:H9	0.43	2.13	6	1
4:A:328:PX4:H56	4:A:354:PX4:H72	0.43	1.90	7	1
4:A:314:PX4:H47	4:A:349:PX4:H19	0.43	1.91	8	1
4:A:377:PX4:H72	4:A:425:PX4:O2	0.43	2.13	8	1
4:A:367:PX4:H20	4:A:424:PX4:H16	0.43	1.91	10	1
4:A:353:PX4:H58	4:A:360:PX4:H61	0.43	1.91	11	1
4:A:393:PX4:H17	4:A:401:PX4:H22	0.43	1.91	11	1
4:A:419:PX4:H60	4:A:427:PX4:H25	0.42	1.91	1	1
4:A:395:PX4:H62	4:A:413:PX4:O8	0.42	2.14	2	1
4:A:418:PX4:H33	4:A:418:PX4:H40	0.42	1.61	3	1
4:A:378:PX4:H23	4:A:378:PX4:H30	0.42	1.54	4	1
4:A:388:PX4:H63	4:A:397:PX4:H63	0.42	1.89	4	1
4:A:320:PX4:H17	4:A:359:PX4:C29	0.42	2.43	7	1
4:A:335:PX4:H41	4:A:335:PX4:H36	0.42	1.61	7	1

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Atom-1	Atom-2	Clash(Å)	Distance(Å)	Models	
				Worst	Total
4:A:348:PX4:H60	4:A:348:PX4:H67	0.42	1.52	9	1
4:A:316:PX4:O2	4:A:364:PX4:H12	0.42	2.13	12	1
4:A:398:PX4:H41	4:A:415:PX4:H20	0.42	1.90	1	1
4:A:317:PX4:H55	4:A:324:PX4:C10	0.42	2.42	2	1
4:A:344:PX4:H37	4:A:344:PX4:H45	0.42	1.62	3	1
4:A:412:PX4:H17	4:A:419:PX4:H20	0.42	1.89	5	1
4:A:315:PX4:H3	4:A:361:PX4:O1	0.42	2.14	6	1
4:A:342:PX4:H52	4:A:351:PX4:H27	0.42	1.91	8	1
4:A:349:PX4:H16	4:A:350:PX4:H30	0.42	1.90	9	1
4:A:331:PX4:H28	4:A:347:PX4:H51	0.42	1.91	11	1
4:A:308:PX4:H66	4:A:308:PX4:H61	0.42	1.59	12	1
4:A:308:PX4:H34	4:A:311:PX4:H65	0.42	1.89	12	1
4:A:330:PX4:C22	4:A:344:PX4:H45	0.42	2.40	12	1
4:A:376:PX4:H62	4:A:385:PX4:H30	0.42	1.90	12	1
4:A:354:PX4:H22	4:A:362:PX4:H21	0.42	1.90	13	1
4:A:392:PX4:O6	4:A:392:PX4:H10	0.42	2.13	13	1
4:A:369:PX4:H58	4:A:424:PX4:H50	0.42	1.91	1	1
4:A:380:PX4:O4	4:A:381:PX4:H15	0.42	2.14	4	1
4:A:314:PX4:O8	4:A:314:PX4:H15	0.42	2.13	5	1
4:A:310:PX4:H16	4:A:363:PX4:O6	0.42	2.14	5	1
4:A:429:PX4:H54	4:A:429:PX4:H27	0.42	1.91	7	1
4:A:378:PX4:H60	4:A:410:PX4:H70	0.42	1.90	8	1
4:A:333:PX4:H16	4:A:340:PX4:H15	0.42	1.90	9	1
4:A:351:PX4:H54	4:A:358:PX4:H22	0.42	1.90	9	1
4:A:314:PX4:H26	4:A:314:PX4:H19	0.42	1.66	10	1
4:A:361:PX4:C33	4:A:412:PX4:H40	0.42	2.44	11	1
4:A:423:PX4:H26	4:A:423:PX4:H57	0.42	1.91	11	1
4:A:317:PX4:H1	4:A:317:PX4:O6	0.42	2.14	13	1
4:A:310:PX4:H36	4:A:351:PX4:H65	0.42	1.91	14	1
4:A:332:PX4:H28	4:A:334:PX4:H53	0.42	1.90	14	1
4:A:316:PX4:H71	4:A:333:PX4:H67	0.42	1.92	2	1
4:A:381:PX4:H61	4:A:381:PX4:H40	0.42	1.91	3	1
4:A:355:PX4:H55	4:A:355:PX4:H49	0.42	1.69	4	1
4:A:357:PX4:H66	4:A:357:PX4:H61	0.42	1.65	5	1
4:A:382:PX4:H22	4:A:428:PX4:C16	0.42	2.42	5	1
4:A:416:PX4:H48	4:A:425:PX4:H48	0.42	1.91	5	1
4:A:332:PX4:H66	4:A:349:PX4:H67	0.42	1.91	8	1
4:A:320:PX4:H21	4:A:359:PX4:H60	0.42	1.91	9	1
4:A:361:PX4:H29	4:A:361:PX4:H24	0.42	1.61	9	1
4:A:391:PX4:H67	4:A:401:PX4:H33	0.42	1.91	9	1
4:A:358:PX4:H70	4:A:401:PX4:H37	0.42	1.91	10	1

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Atom-1	Atom-2	Clash(Å)	Distance(Å)	Models	
				Worst	Total
4:A:356:PX4:H42	4:A:356:PX4:H35	0.42	1.71	11	1
4:A:346:PX4:H25	4:A:354:PX4:H31	0.42	1.90	12	1
4:A:412:PX4:H20	4:A:428:PX4:H49	0.42	1.90	14	1
4:A:415:PX4:H11	4:A:422:PX4:H16	0.42	1.91	1	1
4:A:418:PX4:H34	4:A:425:PX4:H56	0.42	1.91	1	1
4:A:335:PX4:H6	4:A:344:PX4:O6	0.42	2.13	2	1
4:A:356:PX4:H42	4:A:405:PX4:H60	0.42	1.91	3	1
4:A:381:PX4:H54	4:A:388:PX4:H57	0.42	1.90	3	1
4:A:307:PX4:H16	4:A:307:PX4:H46	0.42	1.64	4	2
4:A:406:PX4:O1	4:A:414:PX4:H3	0.42	2.15	4	1
4:A:308:PX4:H16	4:A:311:PX4:C10	0.42	2.44	5	1
4:A:356:PX4:H16	4:A:356:PX4:O3	0.42	2.15	5	1
4:A:424:PX4:H17	4:A:429:PX4:H21	0.42	1.92	6	1
4:A:312:PX4:H59	4:A:359:PX4:H30	0.42	1.91	7	1
4:A:325:PX4:H64	4:A:341:PX4:H35	0.42	1.90	7	1
4:A:412:PX4:H24	4:A:430:PX4:H58	0.42	1.92	9	1
4:A:315:PX4:O3	4:A:361:PX4:H4	0.42	2.15	10	1
4:A:369:PX4:H48	4:A:377:PX4:H67	0.42	1.91	10	1
4:A:387:PX4:H17	4:A:411:PX4:H61	0.42	1.90	10	1
4:A:334:PX4:H22	4:A:334:PX4:H27	0.42	1.65	11	1
4:A:387:PX4:H17	4:A:411:PX4:H57	0.42	1.91	12	1
4:A:395:PX4:H27	4:A:405:PX4:H28	0.42	1.91	13	1
4:A:330:PX4:H49	4:A:343:PX4:H46	0.42	1.91	14	1
4:A:317:PX4:H66	4:A:342:PX4:H66	0.42	1.91	2	1
4:A:406:PX4:H33	4:A:414:PX4:H34	0.42	1.91	2	1
4:A:372:PX4:H29	4:A:420:PX4:H55	0.42	1.92	4	1
4:A:404:PX4:H54	4:A:405:PX4:H39	0.42	1.91	5	1
4:A:367:PX4:O6	4:A:423:PX4:H11	0.42	2.15	6	1
4:A:326:PX4:H44	4:A:416:PX4:H41	0.42	1.91	8	1
4:A:350:PX4:O2	4:A:363:PX4:H7	0.42	2.14	8	1
4:A:354:PX4:H50	4:A:360:PX4:H18	0.42	1.90	11	1
4:A:337:PX4:H20	4:A:346:PX4:H63	0.42	1.92	12	1
4:A:384:PX4:H3	4:A:385:PX4:H18	0.42	1.91	14	1
4:A:326:PX4:O6	4:A:350:PX4:H5	0.42	2.14	6	1
4:A:342:PX4:H37	4:A:352:PX4:H33	0.42	1.90	9	1
4:A:346:PX4:O4	4:A:362:PX4:H11	0.42	2.15	10	1
4:A:381:PX4:H53	4:A:397:PX4:H46	0.42	1.90	10	1
4:A:382:PX4:H22	4:A:428:PX4:H34	0.42	1.92	10	1
4:A:406:PX4:H17	4:A:414:PX4:H22	0.42	1.92	10	1
4:A:391:PX4:H71	4:A:415:PX4:H45	0.42	1.92	10	1
4:A:334:PX4:H29	4:A:414:PX4:H69	0.42	1.91	11	1

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Atom-1	Atom-2	Clash(Å)	Distance(Å)	Models	
				Worst	Total
4:A:338:PX4:H68	4:A:348:PX4:H58	0.42	1.90	11	1
4:A:349:PX4:O6	4:A:349:PX4:H7	0.42	2.15	11	1
4:A:332:PX4:H25	4:A:334:PX4:H49	0.42	1.90	14	1
4:A:321:PX4:H47	4:A:354:PX4:H20	0.42	1.91	2	1
4:A:371:PX4:H36	4:A:379:PX4:H60	0.42	1.91	3	1
4:A:375:PX4:H19	4:A:429:PX4:H45	0.42	1.90	3	1
4:A:402:PX4:H33	4:A:402:PX4:H28	0.42	1.57	4	1
4:A:391:PX4:H66	4:A:408:PX4:H57	0.42	1.92	4	1
4:A:307:PX4:H58	4:A:314:PX4:H17	0.42	1.92	5	1
4:A:337:PX4:O6	4:A:345:PX4:H49	0.42	2.15	5	1
4:A:347:PX4:H56	4:A:356:PX4:H56	0.42	1.92	5	1
4:A:416:PX4:H17	4:A:425:PX4:O8	0.42	2.14	5	1
4:A:344:PX4:H27	4:A:348:PX4:H21	0.42	1.92	6	1
4:A:398:PX4:H40	4:A:414:PX4:C16	0.42	2.45	6	1
4:A:384:PX4:H30	4:A:384:PX4:H57	0.42	1.91	7	1
4:A:370:PX4:H36	4:A:402:PX4:H40	0.42	1.92	8	1
4:A:331:PX4:H62	4:A:397:PX4:H59	0.42	1.92	10	1
4:A:333:PX4:O8	4:A:340:PX4:H15	0.42	2.15	11	1
4:A:338:PX4:H65	4:A:338:PX4:H58	0.42	1.68	13	1
4:A:367:PX4:O1	4:A:423:PX4:H3	0.42	2.15	2	1
4:A:354:PX4:H30	4:A:362:PX4:H17	0.42	1.90	3	1
4:A:372:PX4:H61	4:A:379:PX4:H59	0.42	1.91	3	1
4:A:353:PX4:H41	4:A:353:PX4:H35	0.42	1.58	4	1
4:A:375:PX4:H3	4:A:429:PX4:H17	0.42	1.91	4	1
4:A:382:PX4:H14	4:A:382:PX4:O6	0.42	2.14	4	1
4:A:337:PX4:H43	4:A:380:PX4:H39	0.42	1.91	6	1
4:A:324:PX4:H23	4:A:342:PX4:H55	0.42	1.91	7	1
4:A:388:PX4:H28	4:A:411:PX4:H16	0.42	1.91	7	1
4:A:363:PX4:H47	4:A:364:PX4:H33	0.42	1.91	9	1
4:A:395:PX4:H70	4:A:421:PX4:H58	0.42	1.91	10	1
4:A:403:PX4:H52	4:A:403:PX4:H47	0.42	1.50	11	1
4:A:408:PX4:H50	4:A:409:PX4:H19	0.42	1.92	11	1
4:A:308:PX4:H7	4:A:308:PX4:O3	0.42	2.15	12	1
4:A:318:PX4:H56	4:A:328:PX4:H33	0.42	1.90	12	1
4:A:335:PX4:H17	4:A:343:PX4:O1	0.42	2.15	12	1
4:A:317:PX4:H41	4:A:385:PX4:H65	0.42	1.92	13	1
4:A:325:PX4:H62	4:A:342:PX4:H70	0.42	1.90	13	1
4:A:332:PX4:H54	4:A:407:PX4:H70	0.42	1.90	13	1
4:A:391:PX4:H17	4:A:408:PX4:O5	0.42	2.15	13	1
4:A:424:PX4:H47	4:A:429:PX4:H19	0.42	1.91	1	1
4:A:372:PX4:H29	4:A:420:PX4:H26	0.42	1.91	2	1

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Atom-1	Atom-2	Clash(Å)	Distance(Å)	Models	
				Worst	Total
4:A:306:PX4:H40	4:A:329:PX4:H40	0.42	1.91	3	1
4:A:316:PX4:H34	4:A:320:PX4:C19	0.42	2.43	3	1
4:A:376:PX4:H26	4:A:399:PX4:C25	0.42	2.45	4	1
4:A:333:PX4:H23	4:A:340:PX4:H24	0.42	1.91	5	1
4:A:364:PX4:H69	4:A:364:PX4:H62	0.42	1.69	5	1
4:A:334:PX4:C35	4:A:352:PX4:H32	0.42	2.45	6	1
4:A:395:PX4:H40	4:A:397:PX4:H65	0.42	1.92	6	1
4:A:398:PX4:H48	4:A:405:PX4:H49	0.42	1.92	6	1
4:A:383:PX4:H13	4:A:399:PX4:O1	0.42	2.15	6	1
4:A:350:PX4:H36	4:A:415:PX4:H71	0.42	1.92	6	1
4:A:373:PX4:H22	4:A:397:PX4:O3	0.42	2.14	7	1
4:A:322:PX4:C27	4:A:336:PX4:H32	0.42	2.45	10	1
4:A:354:PX4:H32	4:A:354:PX4:H25	0.42	1.63	10	1
4:A:388:PX4:H6	4:A:396:PX4:O8	0.42	2.15	12	1
4:A:413:PX4:H17	4:A:430:PX4:C8	0.42	2.45	12	1
4:A:424:PX4:H48	4:A:424:PX4:H55	0.42	1.64	13	1
4:A:308:PX4:H69	4:A:426:PX4:H70	0.42	1.91	14	1
4:A:371:PX4:O8	4:A:377:PX4:H3	0.41	2.15	1	1
4:A:378:PX4:H28	4:A:420:PX4:H57	0.41	1.92	1	1
4:A:398:PX4:H51	4:A:405:PX4:C23	0.41	2.45	4	1
4:A:405:PX4:H58	4:A:414:PX4:H26	0.41	1.91	4	1
4:A:318:PX4:H39	4:A:359:PX4:H36	0.41	1.92	5	1
4:A:393:PX4:H10	4:A:393:PX4:O6	0.41	2.14	9	1
4:A:340:PX4:H35	4:A:397:PX4:H60	0.41	1.91	10	1
4:A:363:PX4:H62	4:A:363:PX4:H57	0.41	1.56	10	1
4:A:389:PX4:H68	4:A:390:PX4:H38	0.41	1.92	10	1
4:A:410:PX4:H57	4:A:417:PX4:H69	0.41	1.91	11	1
4:A:369:PX4:C19	4:A:416:PX4:H63	0.41	2.45	11	1
4:A:308:PX4:H41	4:A:410:PX4:H45	0.41	1.91	12	1
4:A:423:PX4:H40	4:A:430:PX4:H36	0.41	1.92	12	1
4:A:322:PX4:H37	4:A:361:PX4:H25	0.41	1.91	13	1
4:A:346:PX4:H24	4:A:360:PX4:H55	0.41	1.92	14	1
4:A:403:PX4:H48	4:A:419:PX4:H9	0.41	1.91	14	1
4:A:309:PX4:H23	4:A:320:PX4:H49	0.41	1.92	1	1
4:A:410:PX4:H14	4:A:418:PX4:H40	0.41	1.92	1	1
4:A:349:PX4:H27	4:A:356:PX4:H30	0.41	1.92	3	1
4:A:345:PX4:H68	4:A:345:PX4:H45	0.41	1.91	4	1
4:A:308:PX4:H32	4:A:364:PX4:H52	0.41	1.91	4	1
4:A:403:PX4:H49	4:A:404:PX4:H28	0.41	1.90	5	1
4:A:347:PX4:H20	4:A:348:PX4:O3	0.41	2.14	6	1
4:A:416:PX4:H22	4:A:425:PX4:H50	0.41	1.92	6	1

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Atom-1	Atom-2	Clash(Å)	Distance(Å)	Models	
				Worst	Total
4:A:421:PX4:H35	4:A:430:PX4:H48	0.41	1.92	6	1
4:A:378:PX4:H47	4:A:410:PX4:H19	0.41	1.93	7	1
4:A:308:PX4:H63	4:A:308:PX4:H68	0.41	1.64	11	1
4:A:337:PX4:H25	4:A:337:PX4:H5	0.41	1.92	11	1
4:A:335:PX4:H39	4:A:344:PX4:H39	0.41	1.92	11	1
4:A:372:PX4:H39	4:A:420:PX4:H34	0.41	1.92	12	1
4:A:308:PX4:H67	4:A:359:PX4:H70	0.41	1.91	13	1
4:A:352:PX4:H31	4:A:352:PX4:H38	0.41	1.60	14	1
4:A:398:PX4:H68	4:A:398:PX4:H63	0.41	1.73	14	1
4:A:313:PX4:H62	4:A:329:PX4:H32	0.41	1.90	1	1
4:A:383:PX4:O6	4:A:392:PX4:H3	0.41	2.14	1	1
4:A:314:PX4:H34	4:A:356:PX4:H41	0.41	1.91	8	1
4:A:373:PX4:H66	4:A:381:PX4:H44	0.41	1.92	10	1
4:A:421:PX4:H34	4:A:423:PX4:H23	0.41	1.93	12	1
4:A:322:PX4:H17	4:A:361:PX4:H56	0.41	1.92	13	1
4:A:376:PX4:H65	4:A:392:PX4:H35	0.41	1.92	14	1
4:A:368:PX4:H46	4:A:429:PX4:H20	0.41	1.90	1	1
4:A:367:PX4:H20	4:A:424:PX4:H22	0.41	1.93	2	1
4:A:331:PX4:H8	4:A:340:PX4:O1	0.41	2.14	3	1
4:A:378:PX4:H35	4:A:378:PX4:H42	0.41	1.61	3	1
4:A:389:PX4:H60	4:A:398:PX4:H17	0.41	1.93	5	1
4:A:393:PX4:H16	4:A:401:PX4:H18	0.41	1.91	5	1
4:A:337:PX4:H24	4:A:346:PX4:H69	0.41	1.91	6	1
4:A:347:PX4:H68	4:A:390:PX4:H39	0.41	1.92	6	1
4:A:352:PX4:H13	4:A:352:PX4:H2	0.41	1.76	6	1
4:A:346:PX4:H27	4:A:353:PX4:H58	0.41	1.93	6	1
4:A:348:PX4:H37	4:A:357:PX4:H36	0.41	1.92	7	1
4:A:421:PX4:H41	4:A:423:PX4:H35	0.41	1.91	7	1
4:A:316:PX4:O2	4:A:364:PX4:H11	0.41	2.15	8	1
4:A:380:PX4:H59	4:A:380:PX4:H25	0.41	1.91	8	1
4:A:403:PX4:H26	4:A:404:PX4:H21	0.41	1.92	8	1
4:A:366:PX4:H55	4:A:366:PX4:H60	0.41	1.70	9	1
4:A:372:PX4:O2	4:A:420:PX4:H9	0.41	2.15	9	1
4:A:420:PX4:H57	4:A:420:PX4:H50	0.41	1.68	9	1
4:A:341:PX4:H29	4:A:341:PX4:H24	0.41	1.63	10	1
4:A:367:PX4:H63	4:A:367:PX4:H68	0.41	1.51	14	1
4:A:407:PX4:H29	4:A:408:PX4:H41	0.41	1.90	14	1
4:A:413:PX4:H9	4:A:430:PX4:O1	0.41	2.16	2	1
4:A:314:PX4:H35	4:A:314:PX4:H41	0.41	1.64	3	1
4:A:359:PX4:H47	4:A:359:PX4:H53	0.41	1.64	3	1
4:A:405:PX4:H48	4:A:406:PX4:H52	0.41	1.92	4	1

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Atom-1	Atom-2	Clash(Å)	Distance(Å)	Models	
				Worst	Total
4:A:369:PX4:O1	4:A:425:PX4:H1	0.41	2.15	4	1
4:A:325:PX4:H27	4:A:334:PX4:H21	0.41	1.93	5	1
1:A:244:ASP:OD1	4:A:349:PX4:H3	0.41	2.15	5	1
4:A:406:PX4:H34	4:A:406:PX4:H39	0.41	1.55	7	1
1:A:214:LEU:HD22	1:A:243:VAL:CG2	0.41	2.45	8	1
4:A:347:PX4:O1	4:A:348:PX4:H3	0.41	2.15	8	1
4:A:362:PX4:H21	4:A:362:PX4:H28	0.41	1.65	8	1
4:A:337:PX4:H61	4:A:353:PX4:H48	0.41	1.93	9	1
4:A:340:PX4:H43	4:A:389:PX4:H27	0.41	1.93	12	1
4:A:423:PX4:H42	4:A:423:PX4:H36	0.41	1.54	12	1
4:A:306:PX4:H37	4:A:367:PX4:H72	0.41	1.92	14	1
4:A:392:PX4:H56	4:A:392:PX4:H63	0.41	1.65	14	1
4:A:332:PX4:H38	4:A:407:PX4:H61	0.41	1.93	14	1
4:A:321:PX4:H61	4:A:361:PX4:H57	0.41	1.93	1	1
4:A:308:PX4:H14	4:A:311:PX4:H16	0.41	1.92	2	1
4:A:408:PX4:H32	4:A:415:PX4:H42	0.41	1.92	2	1
4:A:345:PX4:O4	4:A:346:PX4:H10	0.41	2.15	3	1
4:A:308:PX4:H65	4:A:308:PX4:H72	0.41	1.59	4	1
4:A:369:PX4:O1	4:A:425:PX4:H13	0.41	2.16	4	1
4:A:385:PX4:H67	4:A:392:PX4:H26	0.41	1.90	5	1
1:A:138:PHE:CD1	1:A:149:PHE:CD1	0.41	3.08	6	2
4:A:383:PX4:H65	4:A:407:PX4:H27	0.41	1.92	6	1
4:A:420:PX4:H67	4:A:426:PX4:H38	0.41	1.92	8	1
4:A:367:PX4:H60	4:A:429:PX4:H41	0.41	1.91	8	1
4:A:360:PX4:H30	4:A:366:PX4:H61	0.41	1.91	9	1
4:A:398:PX4:H42	4:A:408:PX4:H26	0.41	1.92	9	1
4:A:355:PX4:H30	4:A:356:PX4:H51	0.41	1.91	10	1
4:A:350:PX4:H60	4:A:400:PX4:H44	0.41	1.93	11	1
4:A:418:PX4:H64	4:A:418:PX4:H72	0.41	1.59	12	1
4:A:388:PX4:H3	4:A:395:PX4:O1	0.41	2.15	13	1
4:A:338:PX4:H68	4:A:338:PX4:H63	0.41	1.58	14	1
4:A:344:PX4:H49	4:A:344:PX4:H54	0.41	1.71	14	1
4:A:337:PX4:H65	4:A:345:PX4:H71	0.41	1.92	14	1
4:A:308:PX4:H23	4:A:311:PX4:H54	0.41	1.92	1	1
4:A:311:PX4:H17	4:A:359:PX4:H50	0.41	1.93	2	1
4:A:382:PX4:H29	4:A:382:PX4:H36	0.41	1.73	2	1
4:A:409:PX4:H37	4:A:410:PX4:H53	0.41	1.93	3	1
4:A:323:PX4:H19	4:A:333:PX4:H47	0.41	1.92	4	1
4:A:363:PX4:H38	4:A:365:PX4:H30	0.41	1.92	4	1
4:A:391:PX4:H48	4:A:391:PX4:H54	0.41	1.60	4	1
4:A:416:PX4:H40	4:A:421:PX4:H70	0.41	1.92	5	1

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Atom-1	Atom-2	Clash(Å)	Distance(Å)	Models	
				Worst	Total
4:A:377:PX4:H44	4:A:377:PX4:H38	0.41	1.75	6	1
4:A:395:PX4:H56	4:A:402:PX4:H50	0.41	1.91	6	1
4:A:319:PX4:H60	4:A:324:PX4:H59	0.41	1.92	7	1
4:A:380:PX4:H59	4:A:388:PX4:H40	0.41	1.91	7	1
4:A:381:PX4:H42	4:A:381:PX4:H60	0.41	1.92	8	1
4:A:338:PX4:H38	4:A:338:PX4:H45	0.41	1.58	11	1
4:A:392:PX4:H65	4:A:392:PX4:H72	0.41	1.73	14	1
4:A:415:PX4:H55	4:A:421:PX4:H56	0.41	1.93	2	1
4:A:307:PX4:H10	4:A:322:PX4:O8	0.41	2.16	4	1
4:A:428:PX4:H38	4:A:428:PX4:H44	0.41	1.78	4	1
4:A:395:PX4:H54	4:A:395:PX4:H61	0.41	1.72	5	1
4:A:388:PX4:H34	4:A:388:PX4:H39	0.41	1.63	6	1
4:A:421:PX4:H52	4:A:421:PX4:H59	0.41	1.65	6	1
4:A:332:PX4:H14	4:A:356:PX4:H9	0.41	1.92	7	1
4:A:352:PX4:H16	4:A:358:PX4:H47	0.41	1.93	8	1
4:A:407:PX4:H17	4:A:414:PX4:O8	0.41	2.16	10	1
4:A:309:PX4:O8	4:A:316:PX4:H46	0.41	2.16	11	1
4:A:367:PX4:H42	4:A:423:PX4:H36	0.41	1.90	11	1
4:A:349:PX4:H45	4:A:355:PX4:H45	0.41	1.93	13	1
4:A:378:PX4:H63	4:A:418:PX4:H62	0.41	1.93	13	1
4:A:398:PX4:H21	4:A:407:PX4:H22	0.41	1.93	13	1
4:A:400:PX4:H56	4:A:409:PX4:H34	0.41	1.93	13	1
4:A:328:PX4:H20	4:A:328:PX4:H25	0.41	1.67	14	1
4:A:330:PX4:H16	4:A:343:PX4:H2	0.41	1.93	1	1
4:A:345:PX4:H69	4:A:388:PX4:H35	0.41	1.92	1	1
4:A:348:PX4:H68	4:A:348:PX4:H63	0.41	1.63	1	1
4:A:306:PX4:H56	4:A:354:PX4:C13	0.41	2.46	1	1
4:A:314:PX4:H47	4:A:350:PX4:H37	0.41	1.91	2	1
4:A:337:PX4:H45	4:A:338:PX4:H56	0.41	1.93	2	1
4:A:375:PX4:H67	4:A:375:PX4:H60	0.41	1.66	2	1
4:A:376:PX4:H46	4:A:384:PX4:H3	0.41	1.93	2	1
4:A:404:PX4:H52	4:A:404:PX4:H59	0.41	1.53	2	1
4:A:312:PX4:H39	4:A:365:PX4:H37	0.41	1.93	3	1
4:A:363:PX4:H55	4:A:363:PX4:H60	0.41	1.65	3	1
4:A:358:PX4:H35	4:A:365:PX4:H31	0.41	1.91	3	1
4:A:375:PX4:H18	4:A:382:PX4:O6	0.41	2.16	3	1
4:A:306:PX4:O2	4:A:329:PX4:H12	0.41	2.15	4	1
4:A:314:PX4:H42	4:A:362:PX4:H21	0.41	1.91	4	1
4:A:326:PX4:H29	4:A:350:PX4:H51	0.41	1.92	5	1
4:A:415:PX4:H5	4:A:421:PX4:H14	0.41	1.92	5	1
4:A:316:PX4:H26	4:A:364:PX4:H47	0.41	1.92	5	1

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Atom-1	Atom-2	Clash(Å)	Distance(Å)	Models	
				Worst	Total
4:A:345:PX4:H17	4:A:346:PX4:H6	0.41	1.93	5	1
4:A:375:PX4:H47	4:A:429:PX4:H40	0.41	1.92	6	1
4:A:404:PX4:H63	4:A:404:PX4:H68	0.41	1.65	7	1
4:A:372:PX4:H52	4:A:372:PX4:H47	0.41	1.71	8	1
4:A:423:PX4:H4	4:A:430:PX4:O8	0.41	2.16	8	1
4:A:315:PX4:H24	4:A:322:PX4:H36	0.41	1.92	9	1
4:A:416:PX4:H48	4:A:425:PX4:H53	0.41	1.92	9	1
4:A:363:PX4:H28	4:A:365:PX4:H21	0.41	1.92	9	1
4:A:391:PX4:H47	4:A:408:PX4:H16	0.41	1.93	9	1
4:A:429:PX4:H33	4:A:429:PX4:C27	0.41	2.46	9	1
4:A:366:PX4:H68	4:A:419:PX4:H38	0.41	1.93	10	1
4:A:335:PX4:H23	4:A:343:PX4:H53	0.41	1.91	12	1
4:A:390:PX4:H63	4:A:397:PX4:H40	0.41	1.92	12	1
4:A:383:PX4:H20	4:A:392:PX4:C14	0.41	2.46	12	1
4:A:325:PX4:H9	4:A:341:PX4:O6	0.41	2.15	13	1
4:A:307:PX4:H41	4:A:361:PX4:H42	0.41	1.92	13	1
4:A:338:PX4:H62	4:A:362:PX4:H62	0.41	1.93	13	1
4:A:331:PX4:O6	4:A:331:PX4:H7	0.41	2.16	14	1
4:A:424:PX4:H25	4:A:424:PX4:H32	0.41	1.37	14	1
4:A:326:PX4:H27	4:A:350:PX4:H21	0.41	1.92	3	1
4:A:325:PX4:H45	4:A:334:PX4:H40	0.41	1.93	4	1
4:A:341:PX4:H32	4:A:383:PX4:H70	0.41	1.93	6	1
4:A:330:PX4:H19	4:A:330:PX4:C3	0.41	2.46	7	1
4:A:354:PX4:H21	4:A:362:PX4:C5	0.41	2.46	7	1
4:A:332:PX4:O3	4:A:356:PX4:H4	0.41	2.16	7	1
4:A:309:PX4:H27	4:A:318:PX4:H28	0.41	1.93	8	1
4:A:382:PX4:H67	4:A:428:PX4:H20	0.41	1.93	9	1
4:A:388:PX4:H15	4:A:396:PX4:H18	0.41	1.92	9	1
4:A:424:PX4:H56	4:A:425:PX4:H31	0.41	1.93	9	1
4:A:349:PX4:H60	4:A:349:PX4:H66	0.41	1.58	10	1
4:A:388:PX4:H51	4:A:396:PX4:C25	0.41	2.45	10	1
4:A:353:PX4:H31	4:A:366:PX4:H25	0.41	1.93	11	1
4:A:311:PX4:H71	4:A:316:PX4:H38	0.41	1.93	12	1
4:A:369:PX4:H71	4:A:369:PX4:H65	0.41	1.47	12	1
4:A:319:PX4:H19	4:A:342:PX4:H50	0.41	1.92	14	1
4:A:326:PX4:H64	4:A:391:PX4:H43	0.41	1.92	14	1
4:A:345:PX4:H4	4:A:353:PX4:O4	0.41	2.16	14	1
4:A:405:PX4:H45	4:A:405:PX4:H37	0.41	1.61	14	1
4:A:387:PX4:H38	4:A:387:PX4:H31	0.40	1.72	1	1
4:A:403:PX4:O8	4:A:419:PX4:H8	0.40	2.15	1	1
4:A:316:PX4:O4	4:A:364:PX4:H5	0.40	2.16	2	1

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Atom-1	Atom-2	Clash(Å)	Distance(Å)	Models	
				Worst	Total
4:A:314:PX4:H64	4:A:314:PX4:H59	0.40	1.39	4	1
4:A:350:PX4:H56	4:A:363:PX4:H52	0.40	1.92	4	1
4:A:334:PX4:H65	4:A:363:PX4:H69	0.40	1.93	4	1
4:A:371:PX4:H65	4:A:417:PX4:H65	0.40	1.92	4	1
1:A:214:LEU:H	1:A:214:LEU:HD23	0.40	1.75	6	1
4:A:358:PX4:H27	4:A:364:PX4:H42	0.40	1.92	6	1
4:A:366:PX4:H41	4:A:366:PX4:H36	0.40	1.64	7	1
4:A:416:PX4:H35	4:A:421:PX4:H66	0.40	1.92	8	1
4:A:313:PX4:H18	4:A:318:PX4:C24	0.40	2.36	9	1
4:A:389:PX4:H61	4:A:389:PX4:H66	0.40	1.60	10	1
4:A:384:PX4:H46	4:A:386:PX4:H49	0.40	1.93	11	1
4:A:326:PX4:H55	4:A:326:PX4:H60	0.40	1.78	12	1
4:A:380:PX4:H31	4:A:381:PX4:H60	0.40	1.92	12	1
4:A:427:PX4:H37	4:A:427:PX4:H32	0.40	1.63	12	1
4:A:322:PX4:H69	4:A:322:PX4:H62	0.40	1.62	13	1
4:A:378:PX4:H17	4:A:410:PX4:O6	0.40	2.15	13	1
4:A:384:PX4:H17	4:A:385:PX4:H20	0.40	1.93	13	1
4:A:313:PX4:H15	4:A:360:PX4:O6	0.40	2.16	14	1
4:A:404:PX4:H8	4:A:412:PX4:O6	0.40	2.17	14	1
4:A:315:PX4:H43	4:A:425:PX4:H32	0.40	1.92	2	1
4:A:308:PX4:H41	4:A:316:PX4:H39	0.40	1.92	3	1
4:A:419:PX4:H71	4:A:427:PX4:H64	0.40	1.93	3	1
4:A:323:PX4:H58	4:A:323:PX4:H65	0.40	1.68	5	1
4:A:377:PX4:H62	4:A:416:PX4:H55	0.40	1.92	6	1
4:A:330:PX4:H14	4:A:338:PX4:H19	0.40	1.91	7	1
4:A:334:PX4:H59	4:A:334:PX4:H64	0.40	1.36	8	1
4:A:308:PX4:H51	4:A:363:PX4:H19	0.40	1.92	10	1
4:A:308:PX4:H25	4:A:311:PX4:H23	0.40	1.93	10	1
4:A:368:PX4:H20	4:A:377:PX4:H57	0.40	1.92	11	1
4:A:428:PX4:H65	4:A:430:PX4:H48	0.40	1.93	11	1
4:A:327:PX4:H43	4:A:374:PX4:H66	0.40	1.93	12	1
4:A:389:PX4:H52	4:A:389:PX4:H59	0.40	1.59	13	1
4:A:391:PX4:H31	4:A:408:PX4:H23	0.40	1.91	13	1
4:A:332:PX4:H45	4:A:407:PX4:H53	0.40	1.93	13	1
4:A:352:PX4:H7	4:A:352:PX4:H15	0.40	1.93	14	1
4:A:321:PX4:H45	4:A:360:PX4:H69	0.40	1.93	1	1
4:A:323:PX4:H14	4:A:323:PX4:H9	0.40	1.92	4	1
4:A:372:PX4:H38	4:A:372:PX4:H32	0.40	1.63	5	1
4:A:401:PX4:H38	4:A:401:PX4:H44	0.40	1.72	6	1
4:A:319:PX4:O2	4:A:324:PX4:H4	0.40	2.16	7	1
4:A:317:PX4:O5	4:A:351:PX4:H23	0.40	2.17	8	1

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Atom-1	Atom-2	Clash(Å)	Distance(Å)	Models	
				Worst	Total
4:A:405:PX4:H58	4:A:414:PX4:H30	0.40	1.93	8	1
1:A:109:TRP:CH2	1:A:158:ASP:HB3	0.40	2.51	11	1
4:A:348:PX4:H56	4:A:355:PX4:H72	0.40	1.93	11	1
4:A:383:PX4:H55	4:A:399:PX4:H17	0.40	1.92	13	1
4:A:404:PX4:H2	4:A:412:PX4:O1	0.40	2.16	13	1
4:A:417:PX4:H65	4:A:417:PX4:H58	0.40	1.62	14	1
4:A:410:PX4:H40	4:A:410:PX4:H61	0.40	1.92	2	1
4:A:326:PX4:H34	4:A:406:PX4:H36	0.40	1.93	3	1
4:A:345:PX4:H33	4:A:353:PX4:H61	0.40	1.94	5	1
4:A:416:PX4:H47	4:A:416:PX4:H52	0.40	1.75	5	1
4:A:410:PX4:O2	4:A:416:PX4:H4	0.40	2.17	8	1
4:A:388:PX4:H25	4:A:388:PX4:H32	0.40	1.65	9	1
4:A:375:PX4:H37	4:A:375:PX4:H32	0.40	1.68	10	1
4:A:412:PX4:H16	4:A:428:PX4:H16	0.40	1.93	10	1
4:A:307:PX4:C12	4:A:314:PX4:H16	0.40	2.47	11	1
4:A:362:PX4:H54	4:A:362:PX4:H60	0.40	1.39	11	1
4:A:381:PX4:H10	4:A:381:PX4:H14	0.40	1.93	11	1
4:A:321:PX4:H63	4:A:321:PX4:H68	0.40	1.68	12	1
4:A:402:PX4:H39	4:A:402:PX4:H34	0.40	1.45	12	1
4:A:336:PX4:H28	4:A:361:PX4:H63	0.40	1.93	13	1
4:A:378:PX4:H67	4:A:418:PX4:H66	0.40	1.93	13	1
4:A:380:PX4:H20	4:A:381:PX4:H6	0.40	1.93	13	1
4:A:395:PX4:H15	4:A:396:PX4:H15	0.40	1.93	13	1
4:A:378:PX4:H47	4:A:418:PX4:H46	0.40	1.92	13	1
4:A:394:PX4:H65	4:A:394:PX4:H71	0.40	1.66	14	1
4:A:364:PX4:H32	4:A:364:PX4:H25	0.40	1.68	1	1
4:A:380:PX4:H33	4:A:380:PX4:H28	0.40	1.75	1	1
4:A:345:PX4:H17	4:A:346:PX4:H10	0.40	1.91	2	1
4:A:374:PX4:H34	4:A:374:PX4:H27	0.40	1.72	3	1
4:A:320:PX4:H20	4:A:359:PX4:H58	0.40	1.94	4	1
4:A:316:PX4:H60	4:A:320:PX4:H36	0.40	1.93	5	1
4:A:344:PX4:H38	4:A:347:PX4:H38	0.40	1.93	5	1
4:A:429:PX4:H53	4:A:429:PX4:H29	0.40	1.93	5	1
4:A:319:PX4:H38	4:A:319:PX4:H44	0.40	1.70	6	1
4:A:353:PX4:H35	4:A:353:PX4:H30	0.40	1.62	7	1
4:A:385:PX4:O1	4:A:392:PX4:H8	0.40	2.17	8	1
4:A:319:PX4:H58	4:A:324:PX4:H30	0.40	1.94	11	1
4:A:332:PX4:H39	4:A:334:PX4:H57	0.40	1.92	11	1
4:A:398:PX4:H60	4:A:405:PX4:H29	0.40	1.94	13	1
4:A:355:PX4:C10	4:A:362:PX4:H51	0.40	2.47	14	1
4:A:374:PX4:H20	4:A:374:PX4:H25	0.40	1.49	14	1

5.2 Torsion angles (i)

5.2.1 Protein backbone (i)

In the following table, the Percentiles column shows the percent Ramachandran outliers of the chain as a percentile score with respect to all PDB entries followed by that with respect to all NMR entries. The Analysed column shows the number of residues for which the backbone conformation was analysed and the total number of residues.

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles
1	A	158/164 (96%)	145±3 (92±2%)	12±3 (8±2%)	1±1 (1±0%)	29 74
All	All	2212/2296 (96%)	2030 (92%)	168 (8%)	14 (1%)	29 74

All 7 unique Ramachandran outliers are listed below. They are sorted by the frequency of occurrence in the ensemble.

Mol	Chain	Res	Type	Models (Total)
1	A	171	PHE	5
1	A	175	ASP	3
1	A	107	PRO	2
1	A	213	PHE	1
1	A	179	GLY	1
1	A	146	PRO	1
1	A	183	HIS	1

5.2.2 Protein sidechains (i)

In the following table, the Percentiles column shows the percent sidechain outliers of the chain as a percentile score with respect to all PDB entries followed by that with respect to all NMR entries. The Analysed column shows the number of residues for which the sidechain conformation was analysed and the total number of residues.

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
1	A	129/131 (98%)	123±2 (95±2%)	6±2 (5±2%)	28 77
All	All	1806/1834 (98%)	1716 (95%)	90 (5%)	28 77

All 25 unique residues with a non-rotameric sidechain are listed below. They are sorted by the frequency of occurrence in the ensemble.

Mol	Chain	Res	Type	Models (Total)
1	A	244	ASP	14
1	A	101	ARG	14
1	A	199	GLU	9

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Mol	Chain	Res	Type	Models (Total)
1	A	222	HIS	8
1	A	249	ARG	7
1	A	214	LEU	6
1	A	175	ASP	5
1	A	243	VAL	4
1	A	142	SER	3
1	A	170	ASP	3
1	A	198	ASP	2
1	A	129	ASP	2
1	A	122	THR	1
1	A	200	ASP	1
1	A	139	GLN	1
1	A	115	THR	1
1	A	140	VAL	1
1	A	168	HIS	1
1	A	205	THR	1
1	A	156	MET	1
1	A	146	PRO	1
1	A	162	VAL	1
1	A	134	ILE	1
1	A	108	VAL	1
1	A	103	MET	1

5.2.3 RNA

There are no RNA molecules in this entry.

5.3 Non-standard residues in protein, DNA, RNA chains

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

5.4 Carbohydrates

There are no carbohydrates in this entry.

LIGAND-GEOMETRY INFOmissingINFO

5.5 Other polymers

There are no such molecules in this entry.

5.6 Polymer linkage issues

There are no chain breaks in this entry.

6 Chemical shift validation

The completeness of assignment taking into account all chemical shift lists is 83% for the well-defined parts and 83% for the entire structure.

6.1 Chemical shift list 1

File name: input_cs.cif

Chemical shift list name: *assigned_chem_shift_list_1*

6.1.1 Bookkeeping

The following table shows the results of parsing the chemical shift list and reports the number of nuclei with statistically unusual chemical shifts.

Total number of shifts	1762
Number of shifts mapped to atoms	1762
Number of unparsed shifts	0
Number of shifts with mapping errors	0
Number of shifts with mapping warnings	0
Number of shift outliers (ShiftChecker)	2

6.1.2 Chemical shift referencing

The following table shows the suggested chemical shift referencing corrections.

Nucleus	# values	Correction ± precision, *ppm*	Suggested action
$^{13}C_{\alpha}$	160	-0.26 ± 0.20	None needed (< 0.5 ppm)
$^{13}C_{\beta}$	138	0.11 ± 0.12	None needed (< 0.5 ppm)
$^{13}C'$	129	-0.17 ± 0.11	None needed (< 0.5 ppm)
^{15}N	154	-0.70 ± 0.28	Should be applied

6.1.3 Completeness of resonance assignments

The following table shows the completeness of the chemical shift assignments for the well-defined regions of the structure. The overall completeness is 83%, i.e. 1600 atoms were assigned a chemical shift out of a possible 1936. 15 out of 18 assigned methyl groups (LEU and VAL) were assigned stereospecifically.

	Total	^{1}H	^{13}C	^{15}N
Backbone	740/786 (94%)	306/313 (98%)	284/320 (89%)	150/153 (98%)
Sidechain	712/887 (80%)	443/521 (85%)	260/326 (80%)	9/40 (22%)

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	Total	^{1}H	^{13}C	^{15}N
Aromatic	148/263 (56%)	79/142 (56%)	66/109 (61%)	3/12 (25%)
Overall	1600/1936 (83%)	828/976 (85%)	610/755 (81%)	162/205 (79%)

The following table shows the completeness of the chemical shift assignments for the full structure. The overall completeness is 83%, i.e. 1629 atoms were assigned a chemical shift out of a possible 1968. 15 out of 18 assigned methyl groups (LEU and VAL) were assigned stereospecifically.

	Total	^{1}H	^{13}C	^{15}N
Backbone	757/806 (94%)	314/321 (98%)	289/328 (88%)	154/157 (98%)
Sidechain	724/899 (81%)	450/528 (85%)	265/331 (80%)	9/40 (22%)
Aromatic	148/263 (56%)	79/142 (56%)	66/109 (61%)	3/12 (25%)
Overall	1629/1968 (83%)	843/991 (85%)	620/768 (81%)	166/209 (79%)

6.1.4 Statistically unusual chemical shifts (i)

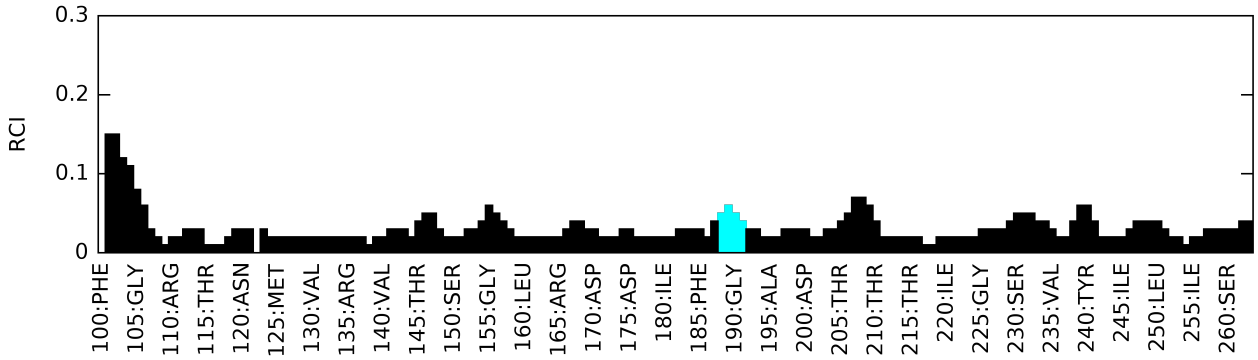
The following table lists the statistically unusual chemical shifts. These are statistical measures, and large deviations from the mean do not necessarily imply incorrect assignments. Molecules containing paramagnetic centres or hemes are expected to give rise to anomalous chemical shifts.

Mol	Chain	Res	Type	Atom	Shift, *ppm*	Expected range, *ppm*	Z-score
1	A	226	LEU	CG	33.00	32.55 – 21.05	5.4
1	A	214	LEU	CG	33.00	32.55 – 21.05	5.4

6.1.5 Random Coil Index (RCI) plots (i)

The image below reports *random coil index* values for the protein chains in the structure. The height of each bar gives a probability of a given residue to be disordered, as predicted from the available chemical shifts and the amino acid sequence. A value above 0.2 is an indication of significant predicted disorder. The colour of the bar shows whether the residue is in the well-defined core (black) or in the ill-defined residue ranges (cyan), as described in section 2 on ensemble composition.

Random coil index (RCI) for chain A:


RCI
0.3
0.2
0.1
0
100:PHE
105:GLY
110:ARG
115:THR
120:ASN
125:MET
130:VAL
135:ARG
140:VAL
145:THR
150:SER
155:GLY
160:LEU
165:ARG
170:ASP
175:ASP
180:ILE
185:PHE
190:GLY
195:ALA
200:ASP
205:THR
210:THR
215:THR
220:ILE
225:GLY
230:SER
235:VAL
240:TYR
245:ILE
250:LEU
255:ILE
260:SER