



Supporting Information

Putative Inhibitors of SARS-CoV-2 Main Protease from A Library of Marine Natural Products: A Virtual Screening and Molecular Modeling Study

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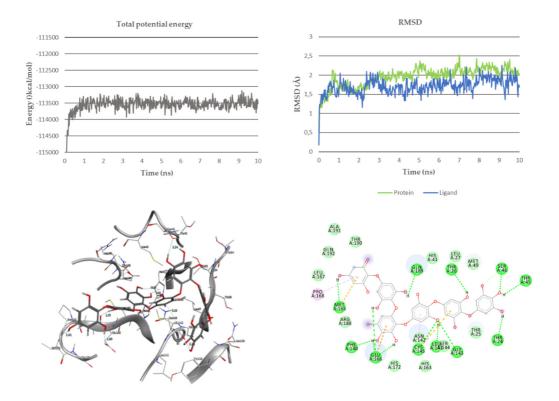


Figure S1. MNP ID 76265-30-0. Total energy (up-left) and RMSDs (up-right) of $M^{\rm pro}$ enzyme and its complexes with ligand. Docking binding pose (down-left) and Interaction (down-right) inside the binding pocket of $M^{\rm pro}$ enzyme.

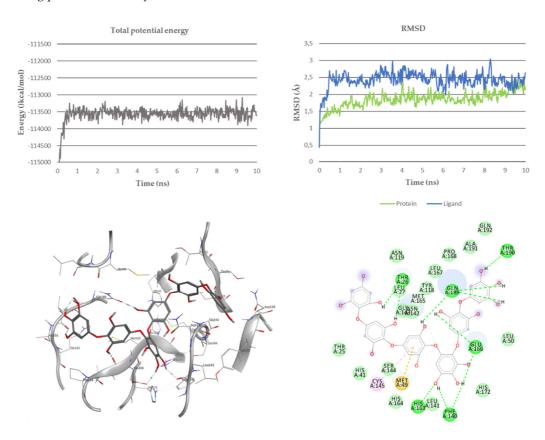


Figure S2. MNP ID 138551-15-2. Total energy (up-left) and RMSDs (up-right) of M^{pro} enzyme and its complexes with ligand. Docking binding pose (down-left) and Interaction (down-right) inside the binding pocket of M^{pro} enzyme.

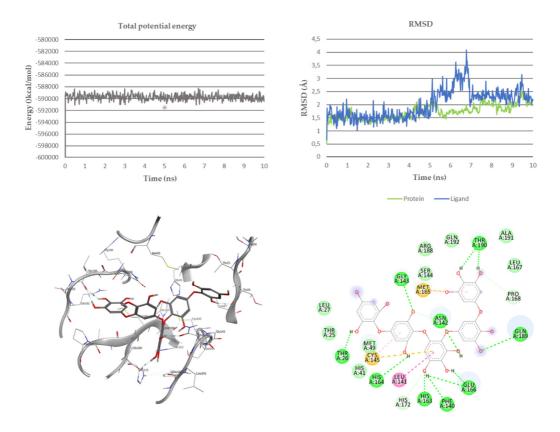


Figure S3. MNP ID 202211-82-3. Total energy (up-left) and RMSDs (up-right) of M^{pro} enzyme and its complexes with ligand. Docking binding pose (down-left) and Interaction (down-right) inside the binding pocket of M^{pro} enzyme.

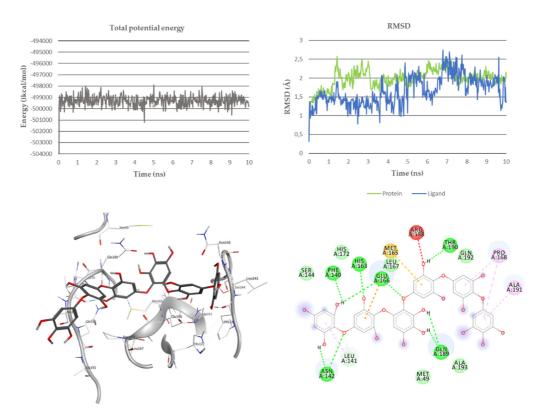


Figure S4. MNP ID 138529-06-3. Total energy (up-left) and RMSDs (up-right) of M^{pro} enzyme and its complexes with ligand. Docking binding pose (down-left) and Interaction (down-right) inside the binding pocket of M^{pro} enzyme.

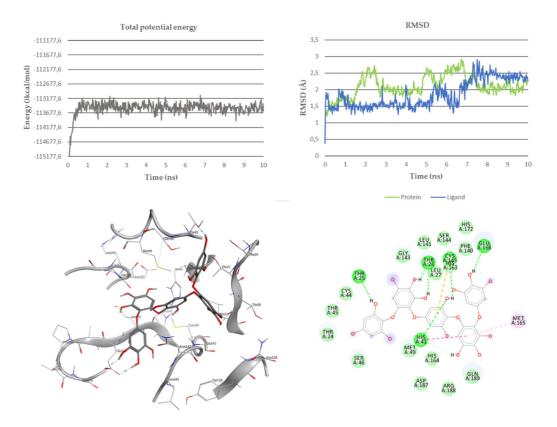


Figure S5. MNP ID 137809-92-8. Total energy (up-left) and RMSDs (up-right) of M^{pro} enzyme and its complexes with ligand. Docking binding pose (down-left) and Interaction (down-right) inside the binding pocket of M^{pro} enzyme.

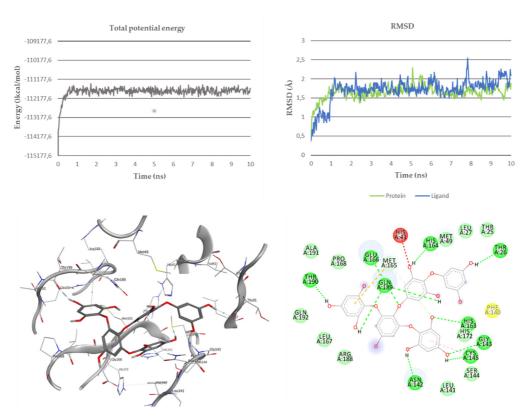


Figure S6. MNP ID Pentaphlorethol B. Total energy (up-left) and RMSDs (up-right) of M^{pro} enzyme and its complexes with ligand. Docking binding pose (down-left) and Interaction (down-right) inside the binding pocket of M^{pro} enzyme.

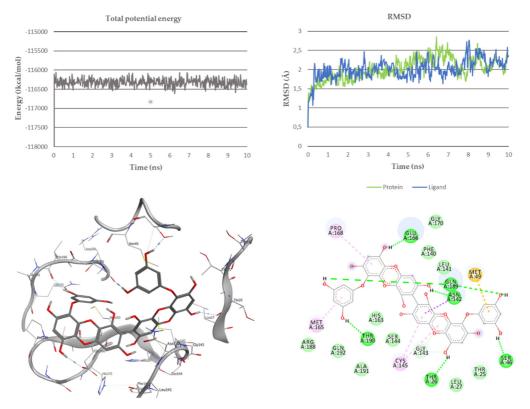


Figure S7. MNP ID 89445-12-5. Total energy (up-left) and RMSDs (up-right) of M^{pro} enzyme and its complexes with ligand. Docking binding pose (down-left) and Interaction (down-right) inside the binding pocket of M^{pro} enzyme.

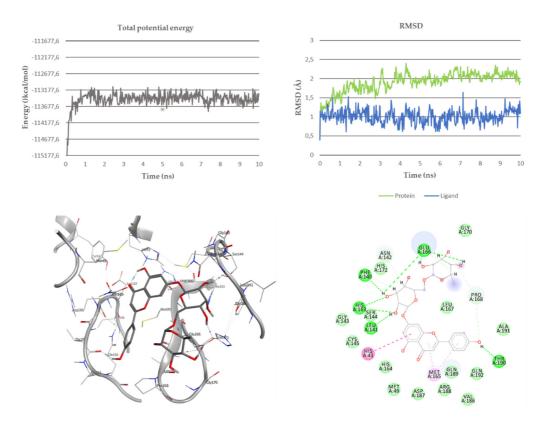


Figure S8. MNP ID 36790-49-5. Total energy (up-left) and RMSDs (up-right) of $M^{\rm pro}$ enzyme and its complexes with ligand. Docking binding pose (down-left) and Interaction (down-right) inside the binding pocket of $M^{\rm pro}$ enzyme.

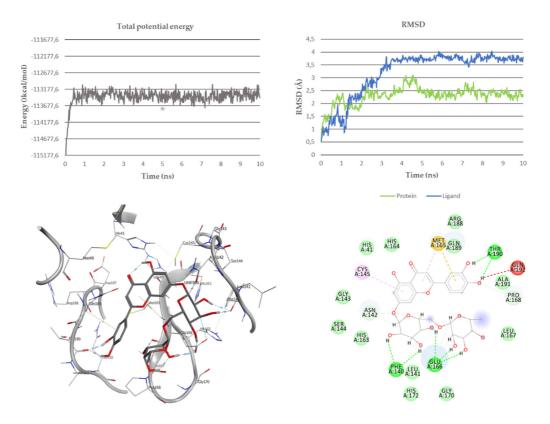


Figure S9. MNP ID 20633-84-5. Total energy (up-left) and RMSDs (up-right) of M^{pro} enzyme and its complexes with ligand. Docking binding pose (down-left) and Interaction (down-right) inside the binding pocket of M^{pro} enzyme.

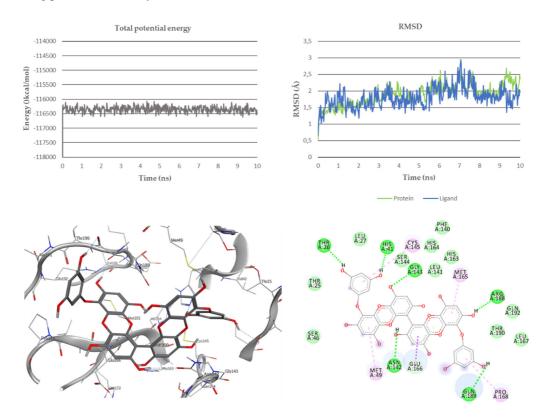


Figure S10. MNP ID 88095-81-2. Total energy (up-left) and RMSDs (up-right) of M^{pro} enzyme and its complexes with ligand. Docking binding pose (down-left) and Interaction (down-right) inside the binding pocket of M^{pro} enzyme.

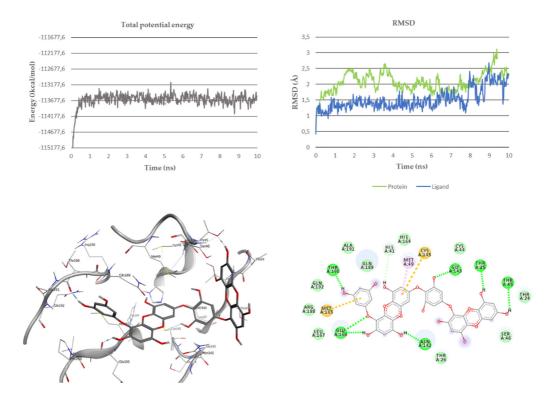


Figure S11. MNP ID 88095-81-2. Total energy (up-left) and RMSDs (up-right) of M^{pro} enzyme and its complexes with ligand. Docking binding pose (down-left) and Interaction (down-right) inside the binding pocket of M^{pro} enzyme.

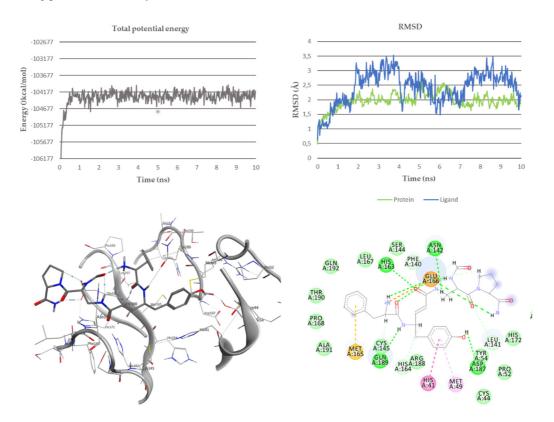


Figure S12. MNP ID 224577-36-0. Total energy (up-left) and RMSDs (up-right) of M^{pro} enzyme and its complexes with ligand. Docking binding pose (down-left) and Interaction (down-right) inside the binding pocket of M^{pro} enzyme.

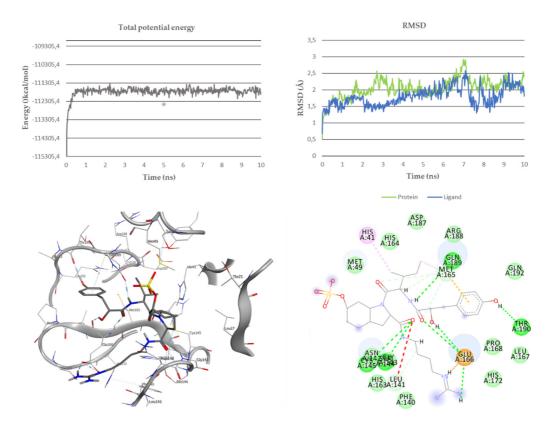


Figure S13. MNP ID 167228-01-5. Total energy (up-left) and RMSDs (up-right) of M^{pro} enzyme and its complexes with ligand. Docking binding pose (down-left) and Interaction (down-right) inside the binding pocket of M^{pro} enzyme.

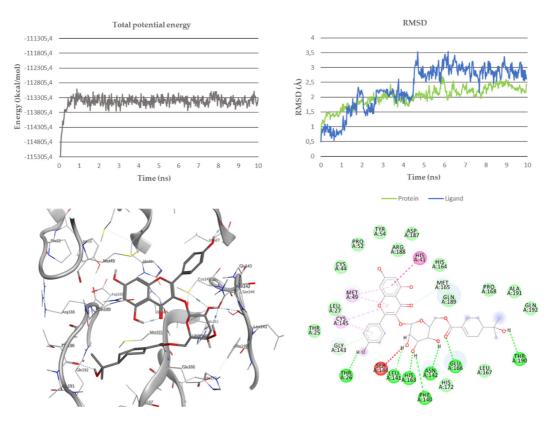


Figure S14. MNP ID 144027-79-2. Total energy (up-left) and RMSDs (up-right) of M^{pro} enzyme and its complexes with ligand. Docking binding pose (down-left) and Interaction (down-right) inside the binding pocket of M^{pro} enzyme.

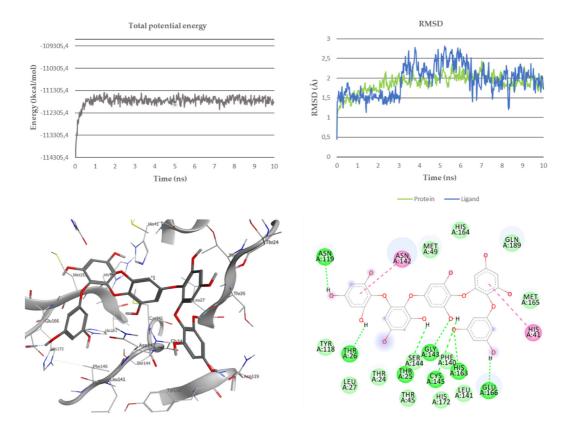


Figure S15. MNP ID 164176-23-2. Total energy (up-left) and RMSDs (up-right) of M^{pro} enzyme and its complexes with ligand. Docking binding pose (down-left) and Interaction (down-right) inside the binding pocket of M^{pro} enzyme.

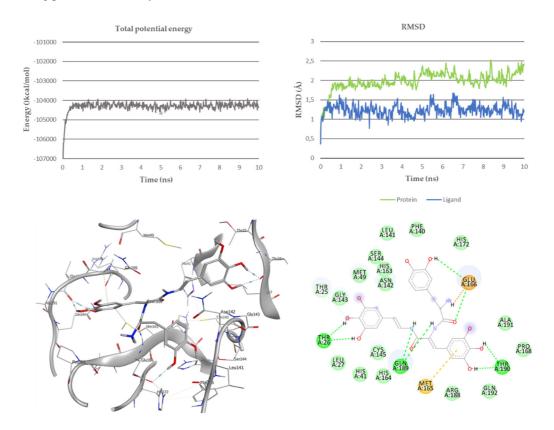


Figure S16. MNP ID 115982-31-5. Total energy (up-left) and RMSDs (up-right) of M^{pro} enzyme and its complexes with ligand. Docking binding pose (down-left) and Interaction (down-right) inside the binding pocket of M^{pro} enzyme.

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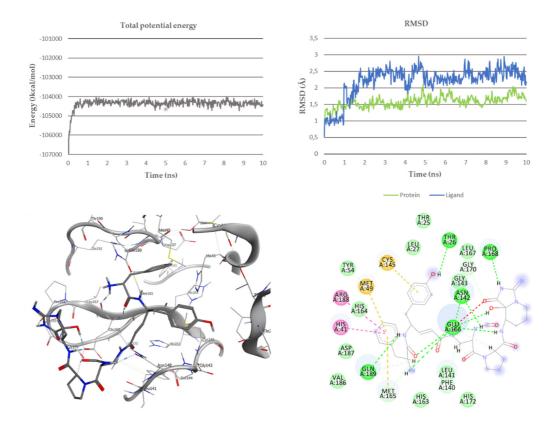


Figure S17. MNP ID 224577-35-9. Total energy (up-left) and RMSDs (up-right) of M^{pro} enzyme and its complexes with ligand. Docking binding pose (down-left) and Interaction (down-right) inside the binding pocket of M^{pro} enzyme.

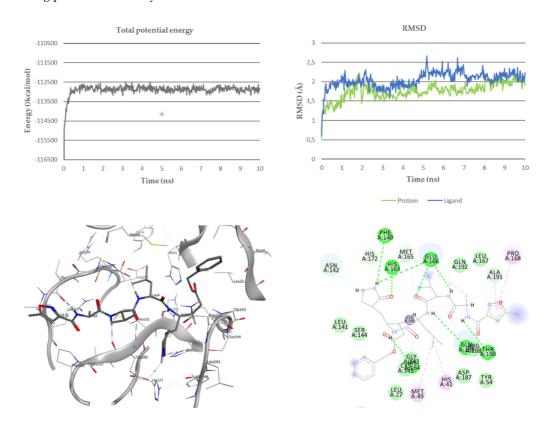


Figure S18. PRD_002214. Total energy (up-left) and RMSDs (up-right) of M^{pro} enzyme and its complexes with ligand. Docking binding pose (down-left) and Interaction (down-right) inside the binding pocket of M^{pro} enzyme.

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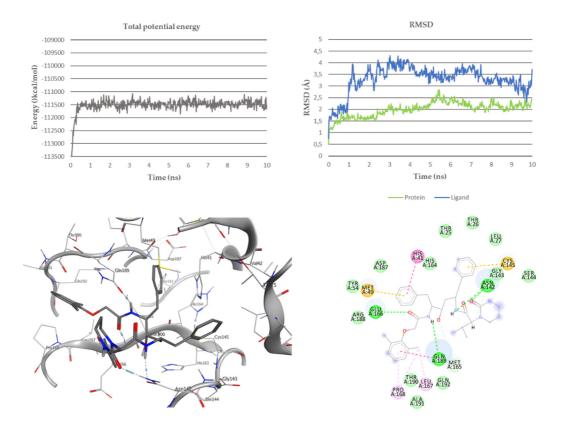


Figure S19. MNP ID 224577-35-9. Total energy (up-left) and RMSDs (up-right) of M^{pro} enzyme and its complexes with ligand. Docking binding pose (down-left) and Interaction (down-right) inside the binding pocket of M^{pro} enzyme.

Table S1. Virtual screening of chemical structures of the marine dataset that passed the pharmacophore filter including the contacting receptor residues and binding energy.

MNP IDa	Contacting receptor residues	Binding Energy (kcal/mol) Vina
78798-08-0	A THR 25 A THR 26 A LEU 27 A MET 49 A PHE 140 A LEU 141 A ASN 142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A LEU 167 A PRO 168 A HIS 172 A ARG 188 A GLN 189 A THR 190 A ALA 191 A GLN 192	-10.18
211686-51-0	A THR 24 A THR 25 A THR 26 A HIS 41 A MET 49 A TYR 118 A ASN 119 A PHE 140 A LEU 141 A ASN 142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A MET 165 A GLU 166 A LEU 167 A PRO 168 A HIS 172 A GLN 189 A THR 190 A ALA 191	-10.00
40663-80-7	A THR 24 A THR 25 A THR 26 A LEU 27 A HIS 41 A THR 45 A SER 46 A MET 49 A PHE 140 A LEU 141 A ASN 142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A LEU 167 A PRO 168 A HIS 172 A GLN 189 A THR 190 A ALA 191 A GLN 192	-9.95
1008752-06-	A PHE 140 A LEU 141 A ASN 142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A LEU 167 A PRO 168 A GLN 189 A THR 190	-9.62
104196-68-1	A HIS 41 A TYR 54 A PHE 140 A LEU 141 A ASN 142 A SER 144 A CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A PRO 168 A HIS 172 A ASP 187 A ARG 188 A GLN 189 A THR 190 A GLN 192	-9.61

07900-75-4	A PHE 140 A LEU 141 A ASN 142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A HIS 164 A	-9.61
	MET 165 A GLU 166 A LEU 167 A PRO 168 A GLN 189 A THR 190	
144027-79-2	A THR 25 A THR 26 A LEU 27 A HIS 41 A MET 49 A TYR 54 A PHE 140 A LEU 141 A ASN	-9.56
	142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A MET 165 A GLU 166 A LEU 167 A PRO	
	168 A HIS 172 A ASP 187 A ARG 188 A GLN 189 A THR 190 A ALA 191 A GLN 192	
858950-40-0	A THR 25 A THR 26 A LEU 27 A HIS 41 A MET 49 A ASN 142 A GLY 143 A SER 144 A CYS	-9.56
	145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A LEU 167 A PRO 168 A ARG 188 A GLN	
	189 A THR 190 A ALA 191 A GLN 192	
18115-90-7	A MET 49 A PHE 140 A LEU 141 A ASN 142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A	-9.43
	HIS 164 A MET 165 A GLU 166 A LEU 167 A PRO 168 A HIS 172 A ARG 188 A GLN 189	
152845-74-4	A THR 25 A THR 26 A LEU 27 A HIS 41 A MET 49 A LEU 141 A ASN 142 A GLY 143 A CYS	-9.35
	145 A MET 165 A GLU 166 A PRO 168 A ARG 188 A GLN 189 A THR 190 A GLN 192	
58950-46-6	A THR 25 A THR 26 A LEU 27 A HIS 41 A MET 49 A LEU 141 A ASN 142 A GLY 143 A SER	-9.31
	144 A CYS 145 A HIS 164 A MET 165 A GLU 166 A LEU 167 A PRO 168 A ARG 188 A GLN	
	189 A THR 190	
147716-81-2	A THR 24 A THR 25 A THR 26 A LEU 27 A HIS 41 A THR 45 A SER 46 A MET 49 A PHE 140	-9.29
	A LEU 141 A ASN 142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A MET 165 A GLU 166	
	A HIS 172 A GLN 189	
151379-39-4	A THR 24 A THR 25 A THR 26 A LEU 27 A HIS 41 A THR 45 A SER 46 A MET 49 A PHE 140	-9.28
	A LEU 141 A ASN 142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A MET 165 A GLU 166	
	A HIS 172 A GLN 189	
79849-37-9	A THR 25 A THR 26 A LEU 27 A HIS 41 A VAL 42 A MET 49 A ASN 142 A GLY 143 A SER	-9.22
	144 A CYS 145 A HIS 164 A MET 165 A GLU 166 A LEU 167 A PRO 168 A ARG 188 A GLN	
	189 A THR 190 A ALA 191 A GLN 192	
134458-00-7	A THR 25 A LEU 27 A HIS 41 A MET 49 A ASN 142 A GLY 143 A CYS 145 A HIS 164 A	-9.22
	MET 165 A GLU 166 A LEU 167 A PRO 168 A ARG 188 A GLN 189 A THR 190 A GLN 192	
65745-47-3	A THR 24 A THR 25 A THR 26 A LEU 27 A HIS 41 A SER 46 A MET 49 A PHE 140 A LEU	-9.14
	141 A ASN 142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU	
	166 A HIS 172 A GLN 189	
514830-04-7	A THR 25 A LEU 27 A HIS 41 A MET 49 A PHE 140 A LEU 141 A ASN 142 A GLY 143 A	-9.14
	SER 144 A CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A PRO 168 A HIS 172 A	
	ASP 187 A ARG 188 A GLN 189 A THR 190 A ALA 191	
113540-81-1	A THR 25 A LEU 27 A HIS 41 A MET 49 A PHE 140 A LEU 141 A ASN 142 A GLY 143 A	-9.13
	SER 144 A CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A PRO 168 A HIS 172 A	
	ASP 187 A ARG 188 A GLN 189 A THR 190 A ALA 191	
97888-14-7	A HIS 41 A CYS 44 A MET 49 A PRO 52 A TYR 54 A PHE 140 A LEU 141 A ASN 142 A GLY	-9.00
	143 A SER 144 A CYS 145 A HIS 164 A MET 165 A GLU 166 A LEU 167 A PRO 168 A VAL	
	186 A ASP 187 A ARG 188 A GLN 189 A THR 190 A ALA 191 A GLN 192	
144587-57-5	A THR 25 A THR 26 A LEU 27 A HIS 41 A MET 49 A PHE 140 A LEU 141 A ASN 142 A GLY	-8.94
	143 A SER 144 A CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A PRO 168 A GLN	
	189 A THR 190 A ALA 191	

757976-67-3 A THR 24 A THR 25 A THR 26 A LEU 27 A HIS 41 A CYS 44 A THR 45 A SER 46 A MET 49 A TYR 54 A ASN 142 A GLY 143 A CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A ASP 187 A ARG 188 A GLN 189 97948-90-8 A HIS 41 A CYS 44 A MET 49 A PRO 52 A TYR 54 A PHE 140 A LEU 141 A ASN 142 A GLY 143 A SER 144 A CYS 44 A MET 49 A PRO 52 A TYR 54 A PHE 140 A LEU 141 A ASN 142 A GLY 143 A SER 144 A CYS 145 A HIS 164 A MET 165 A GLU 166 A LEU 167 A PRO 168 A ASP 187 A ARG 188 A GLN 189 A THR 190 A GLN 192 9788-1-3-6 A HIS 25 A THR 26 A LEU 27 A HIS 41 A MET 49 A PHE 140 A LEU 141 A ASN 142 A SER 144 A CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A PRO 168 A ASP 187 A ARG 188 A GLN 189 A THR 190 A GLN 192 9788-1-3-6 A HIS 41 A CYS 44 A MET 49 A PRO 52 A TYR 54 A PHE 140 A LEU 141 A ASN 142 A GLY 143 A SER 144 A CYS 145 A HIS 164 A MET 165 A GLU 166 A LEU 167 A PRO 168 A ASP 187 A ARG 188 A GLN 189 A THR 190 A GLN 192 13727-01-0 A LEU 50 A PHE 140 A LEU 141 A ASN 142 A GLY 143 A CYS 145 A PRO 168 A HIS 172 A ARG 188 A GLN 189 A THR 190 A ALA 191 A GLN 192 175669-27-9 A HIS 31 A MET 49 A TYR 54 A PHE 140 A LEU 141 A ASN 142 A GLY 145 A CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A LEU 167 A PRO 168 A HIS 172 A ASP 187 A ARG 188 A GLN 189 A THR 190 A ALA 191 24577-34-8 A HIS 31 A CYS 44 A MET 49 A PRO 52 A TYR 54 A PHE 140 A LEU 141 A ASN 142 A CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A LEU 167 A PRO 168 A HIS 172 A ASP 187 A ARG 188 A GLN 189 A THR 190 A ALA 191 194427-76-4 A THR 25 A THR 26 A LEU 27 A HIS 41 A MET 49 A PHE 140 A LEU 141 A ASN 142 A GLY 170 A ASP 187 A ARG 188 A GLN 189 A THR 190 A ALA 191 A GLN 192 194427-76-1 A THR 25 A THR 26 A LEU 27 A HIS 41 A MET 49 A TYR 54 A ASN 142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A PRO 168 A HIS 172 A ARG 189 A THR 190 A ALA 191 13006-07-2 A THR 25 A THR 26 A LEU 27 A HIS 41 A MET 49 A PHE 140 A LEU 141 A ASN 142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A PRO 168 A HIS 172 A ARG 188 A GLN 1			
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194427-76-4 A THR 25 A THR 26 A LEU 27 A HIS 41 A MET 49 A PHE 140 A LEU 141 A ASN 142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A PRO 168 A HIS 172 A GLN 189 A THR 190 A ALA 191 144027-78-1 A THR 25 A THR 26 A LEU 27 A HIS 41 A MET 49 A TYR 54 A ASN 142 A GLY 143 A SER 144 A CYS 145 A HIS 164 A MET 165 A GLU 166 A LEU 167 A PRO 168 A ASP 187 A ARG 188 A GLN 189 A THR 190 A ALA 191 A GLN 192 133056-07-2 A THR 25 A THR 26 A LEU 27 A HIS 41 A VAL 42 A MET 49 A LEU 141 A ASN 142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A PRO 168 A HIS 172 A ARG 188 A GLN 189 A THR 190 A ALA 191 A GLN 192 105239-70-1 A THR 24 A THR 25 A THR 26 A LEU 27 A HIS 41 A CYS 44 A THR 45 A SER 46 A MET 49 A PRO 52 A TYR 54 A LEU 141 A ASN 142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A LEU 167 A PRO 168 A HIS 172 A ASP 187 A ARG 188 A GLN 189 345642-84-4 A THR 25 A THR 26 A LEU 27 A HIS 41 A MET 49 A PHE 140 A LEU 141 A ASN 142 A GLY -8.80 143 A SER 144 A CYS 145 A HIS 163 A MET 165 A GLU 166 A LEU 167 A PRO 168 A ARG 188 A GLN 189 A THR 190 A GLN 192 52645-09-7 A THR 25 A THR 26 A LEU 27 A HIS 41 A MET 49 A PHE 140 A LEU 141 A ASN 142 A GLY -8.79 143 A SER 144 A CYS 145 A HIS 163 A MET 165 A GLU 166 A LEU 167 A PRO 168 A ARG		145 A HIS 164 A MET 165 A GLU 166 A LEU 167 A PRO 168 A THR 169 A GLY 170 A ASP	
143 A SER 144 A CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A PRO 168 A HIS 172 A GLN 189 A THR 190 A ALA 191 144027-78-1 A THR 25 A THR 26 A LEU 27 A HIS 41 A MET 49 A TYR 54 A ASN 142 A GLY 143 A SER 188 A GLN 189 A THR 190 A ALA 191 A GLN 192 133056-07-2 A THR 25 A THR 26 A LEU 27 A HIS 41 A VAL 42 A MET 49 A LEU 141 A ASN 142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A HIS 163 A HIS 164 A MET 165 A GLU 166 A PRO 168 A HIS 172 A ARG 188 A GLN 189 A THR 190 A ALA 191 A GLN 192 105239-70-1 A THR 24 A THR 25 A THR 26 A LEU 27 A HIS 41 A CYS 44 A THR 45 A SER 46 A MET 49 A PRO 52 A TYR 54 A LEU 141 A ASN 142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A LEU 167 A PRO 168 A HIS 172 A ASP 187 A ARG 188 A GLN 189 345642-84-4 A THR 25 A THR 26 A LEU 27 A HIS 41 A MET 49 A PHE 140 A LEU 141 A ASN 142 A GLY -8.80 143 A SER 144 A CYS 145 A HIS 163 A MET 165 A GLU 166 A LEU 167 A PRO 168 A ARG 188 A GLN 189 A THR 190 A GLN 192 52645-09-7 A THR 25 A THR 26 A LEU 27 A HIS 41 A MET 49 A PHE 140 A LEU 141 A ASN 142 A GLY -8.79 143 A SER 144 A CYS 145 A HIS 163 A MET 165 A GLU 166 A LEU 167 A PRO 168 A ARG		187 A ARG 188 A GLN 189 A THR 190 A ALA 191 A GLN 192	
172 A GLN 189 A THR 190 A ALA 191 144027-78-1 A THR 25 A THR 26 A LEU 27 A HIS 41 A MET 49 A TYR 54 A ASN 142 A GLY 143 A SER -8.82 144 A CYS 145 A HIS 164 A MET 165 A GLU 166 A LEU 167 A PRO 168 A ASP 187 A ARG 188 A GLN 189 A THR 190 A ALA 191 A GLN 192 133056-07-2 A THR 25 A THR 26 A LEU 27 A HIS 41 A VAL 42 A MET 49 A LEU 141 A ASN 142 A GLY -8.81 143 A SER 144 A CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A PRO 168 A HIS 172 A ARG 188 A GLN 189 A THR 190 A ALA 191 A GLN 192 105239-70-1 A THR 24 A THR 25 A THR 26 A LEU 27 A HIS 41 A CYS 44 A THR 45 A SER 46 A MET 49 -8.81 A PRO 52 A TYR 54 A LEU 141 A ASN 142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A LEU 167 A PRO 168 A HIS 172 A ASP 187 A ARG 188 A GLN 189 345642-84-4 A THR 25 A THR 26 A LEU 27 A HIS 41 A MET 49 A PHE 140 A LEU 141 A ASN 142 A GLY -8.80 143 A SER 144 A CYS 145 A HIS 163 A MET 165 A GLU 166 A LEU 167 A PRO 168 A ARG 188 A GLN 189 A THR 190 A GLN 192 52645-09-7 A THR 25 A THR 26 A LEU 27 A HIS 41 A MET 49 A PHE 140 A LEU 141 A ASN 142 A GLY -8.79 143 A SER 144 A CYS 145 A HIS 163 A MET 165 A GLU 166 A LEU 167 A PRO 168 A ARG 188 A GLN 189 A THR 190 A GLN 192	194427-76-4	A THR 25 A THR 26 A LEU 27 A HIS 41 A MET 49 A PHE 140 A LEU 141 A ASN 142 A GLY	-8.84
144027-78-1 A THR 25 A THR 26 A LEU 27 A HIS 41 A MET 49 A TYR 54 A ASN 142 A GLY 143 A SER 144 A CYS 145 A HIS 164 A MET 165 A GLU 166 A LEU 167 A PRO 168 A ASP 187 A ARG 188 A GLN 189 A THR 190 A ALA 191 A GLN 192 133056-07-2 A THR 25 A THR 26 A LEU 27 A HIS 41 A VAL 42 A MET 49 A LEU 141 A ASN 142 A GLY -8.81 143 A SER 144 A CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A PRO 168 A HIS 172 A ARG 188 A GLN 189 A THR 190 A ALA 191 A GLN 192 105239-70-1 A THR 24 A THR 25 A THR 26 A LEU 27 A HIS 41 A CYS 44 A THR 45 A SER 46 A MET 49 A PRO 52 A TYR 54 A LEU 141 A ASN 142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A LEU 167 A PRO 168 A HIS 172 A ASP 187 A ARG 188 A GLN 189 345642-84-4 A THR 25 A THR 26 A LEU 27 A HIS 41 A MET 49 A PHE 140 A LEU 141 A ASN 142 A GLY -8.80 143 A SER 144 A CYS 145 A HIS 163 A MET 165 A GLU 166 A LEU 167 A PRO 168 A ARG 188 A GLN 189 A THR 190 A GLN 192 52645-09-7 A THR 25 A THR 26 A LEU 27 A HIS 41 A MET 49 A PHE 140 A LEU 141 A ASN 142 A GLY -8.79 143 A SER 144 A CYS 145 A HIS 163 A MET 165 A GLU 166 A LEU 167 A PRO 168 A ARG		143 A SER 144 A CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A PRO 168 A HIS	
144 A CYS 145 A HIS 164 A MET 165 A GLU 166 A LEU 167 A PRO 168 A ASP 187 A ARG 188 A GLN 189 A THR 190 A ALA 191 A GLN 192 133056-07-2 A THR 25 A THR 26 A LEU 27 A HIS 41 A VAL 42 A MET 49 A LEU 141 A ASN 142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A PRO 168 A HIS 172 A ARG 188 A GLN 189 A THR 190 A ALA 191 A GLN 192 105239-70-1 A THR 24 A THR 25 A THR 26 A LEU 27 A HIS 41 A CYS 44 A THR 45 A SER 46 A MET 49 A PRO 52 A TYR 54 A LEU 141 A ASN 142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A LEU 167 A PRO 168 A HIS 172 A ASP 187 A ARG 188 A GLN 189 345642-84-4 A THR 25 A THR 26 A LEU 27 A HIS 41 A MET 49 A PHE 140 A LEU 141 A ASN 142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A MET 165 A GLU 166 A LEU 167 A PRO 168 A ARG 188 A GLN 189 A THR 190 A GLN 192 52645-09-7 A THR 25 A THR 26 A LEU 27 A HIS 41 A MET 49 A PHE 140 A LEU 141 A ASN 142 A GLY -8.79 143 A SER 144 A CYS 145 A HIS 163 A MET 165 A GLU 166 A LEU 167 A PRO 168 A ARG		172 A GLN 189 A THR 190 A ALA 191	
188 A GLN 189 A THR 190 A ALA 191 A GLN 192 133056-07-2 A THR 25 A THR 26 A LEU 27 A HIS 41 A VAL 42 A MET 49 A LEU 141 A ASN 142 A GLY -8.81 143 A SER 144 A CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A PRO 168 A HIS 172 A ARG 188 A GLN 189 A THR 190 A ALA 191 A GLN 192 105239-70-1 A THR 24 A THR 25 A THR 26 A LEU 27 A HIS 41 A CYS 44 A THR 45 A SER 46 A MET 49 -8.81 A PRO 52 A TYR 54 A LEU 141 A ASN 142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A LEU 167 A PRO 168 A HIS 172 A ASP 187 A ARG 188 A GLN 189 345642-84-4 A THR 25 A THR 26 A LEU 27 A HIS 41 A MET 49 A PHE 140 A LEU 141 A ASN 142 A GLY -8.80 143 A SER 144 A CYS 145 A HIS 163 A MET 165 A GLU 166 A LEU 167 A PRO 168 A ARG 188 A GLN 189 A THR 190 A GLN 192 52645-09-7 A THR 25 A THR 26 A LEU 27 A HIS 41 A MET 49 A PHE 140 A LEU 141 A ASN 142 A GLY -8.79 143 A SER 144 A CYS 145 A HIS 163 A MET 165 A GLU 166 A LEU 167 A PRO 168 A ARG	144027-78-1	A THR 25 A THR 26 A LEU 27 A HIS 41 A MET 49 A TYR 54 A ASN 142 A GLY 143 A SER	-8.82
133056-07-2 A THR 25 A THR 26 A LEU 27 A HIS 41 A VAL 42 A MET 49 A LEU 141 A ASN 142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A PRO 168 A HIS 172 A ARG 188 A GLN 189 A THR 190 A ALA 191 A GLN 192 105239-70-1 A THR 24 A THR 25 A THR 26 A LEU 27 A HIS 41 A CYS 44 A THR 45 A SER 46 A MET 49 A PRO 52 A TYR 54 A LEU 141 A ASN 142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A LEU 167 A PRO 168 A HIS 172 A ASP 187 A ARG 188 A GLN 189 345642-84-4 A THR 25 A THR 26 A LEU 27 A HIS 41 A MET 49 A PHE 140 A LEU 141 A ASN 142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A MET 165 A GLU 166 A LEU 167 A PRO 168 A ARG 188 A GLN 189 A THR 190 A GLN 192 52645-09-7 A THR 25 A THR 26 A LEU 27 A HIS 41 A MET 49 A PHE 140 A LEU 141 A ASN 142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A MET 165 A GLU 166 A LEU 167 A PRO 168 A ARG 143 A SER 144 A CYS 145 A HIS 163 A MET 165 A GLU 166 A LEU 167 A PRO 168 A ARG		144 A CYS 145 A HIS 164 A MET 165 A GLU 166 A LEU 167 A PRO 168 A ASP 187 A ARG	
143 A SER 144 A CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A PRO 168 A HIS 172 A ARG 188 A GLN 189 A THR 190 A ALA 191 A GLN 192 105239-70-1 A THR 24 A THR 25 A THR 26 A LEU 27 A HIS 41 A CYS 44 A THR 45 A SER 46 A MET 49 A PRO 52 A TYR 54 A LEU 141 A ASN 142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A LEU 167 A PRO 168 A HIS 172 A ASP 187 A ARG 188 A GLN 189 345642-84-4 A THR 25 A THR 26 A LEU 27 A HIS 41 A MET 49 A PHE 140 A LEU 141 A ASN 142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A MET 165 A GLU 166 A LEU 167 A PRO 168 A ARG 188 A GLN 189 A THR 190 A GLN 192 52645-09-7 A THR 25 A THR 26 A LEU 27 A HIS 41 A MET 49 A PHE 140 A LEU 141 A ASN 142 A GLY -8.79 143 A SER 144 A CYS 145 A HIS 163 A MET 165 A GLU 166 A LEU 167 A PRO 168 A ARG		188 A GLN 189 A THR 190 A ALA 191 A GLN 192	
172 A ARG 188 A GLN 189 A THR 190 A ALA 191 A GLN 192 105239-70-1 A THR 24 A THR 25 A THR 26 A LEU 27 A HIS 41 A CYS 44 A THR 45 A SER 46 A MET 49 A PRO 52 A TYR 54 A LEU 141 A ASN 142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A LEU 167 A PRO 168 A HIS 172 A ASP 187 A ARG 188 A GLN 189 345642-84-4 A THR 25 A THR 26 A LEU 27 A HIS 41 A MET 49 A PHE 140 A LEU 141 A ASN 142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A MET 165 A GLU 166 A LEU 167 A PRO 168 A ARG 188 A GLN 189 A THR 190 A GLN 192 52645-09-7 A THR 25 A THR 26 A LEU 27 A HIS 41 A MET 49 A PHE 140 A LEU 141 A ASN 142 A GLY -8.79 143 A SER 144 A CYS 145 A HIS 163 A MET 165 A GLU 166 A LEU 167 A PRO 168 A ARG	133056-07-2	A THR 25 A THR 26 A LEU 27 A HIS 41 A VAL 42 A MET 49 A LEU 141 A ASN 142 A GLY	-8.81
105239-70-1 A THR 24 A THR 25 A THR 26 A LEU 27 A HIS 41 A CYS 44 A THR 45 A SER 46 A MET 49 A PRO 52 A TYR 54 A LEU 141 A ASN 142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A LEU 167 A PRO 168 A HIS 172 A ASP 187 A ARG 188 A GLN 189 345642-84-4 A THR 25 A THR 26 A LEU 27 A HIS 41 A MET 49 A PHE 140 A LEU 141 A ASN 142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A MET 165 A GLU 166 A LEU 167 A PRO 168 A ARG 188 A GLN 189 A THR 190 A GLN 192 52645-09-7 A THR 25 A THR 26 A LEU 27 A HIS 41 A MET 49 A PHE 140 A LEU 141 A ASN 142 A GLY -8.79 143 A SER 144 A CYS 145 A HIS 163 A MET 165 A GLU 166 A LEU 167 A PRO 168 A ARG		143 A SER 144 A CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A PRO 168 A HIS	
A PRO 52 A TYR 54 A LEU 141 A ASN 142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A LEU 167 A PRO 168 A HIS 172 A ASP 187 A ARG 188 A GLN 189 345642-84-4 A THR 25 A THR 26 A LEU 27 A HIS 41 A MET 49 A PHE 140 A LEU 141 A ASN 142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A MET 165 A GLU 166 A LEU 167 A PRO 168 A ARG 188 A GLN 189 A THR 190 A GLN 192 52645-09-7 A THR 25 A THR 26 A LEU 27 A HIS 41 A MET 49 A PHE 140 A LEU 141 A ASN 142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A MET 165 A GLU 166 A LEU 167 A PRO 168 A ARG		172 A ARG 188 A GLN 189 A THR 190 A ALA 191 A GLN 192	
HIS 164 A MET 165 A GLU 166 A LEU 167 A PRO 168 A HIS 172 A ASP 187 A ARG 188 A GLN 189 345642-84-4 A THR 25 A THR 26 A LEU 27 A HIS 41 A MET 49 A PHE 140 A LEU 141 A ASN 142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A MET 165 A GLU 166 A LEU 167 A PRO 168 A ARG 188 A GLN 189 A THR 190 A GLN 192 52645-09-7 A THR 25 A THR 26 A LEU 27 A HIS 41 A MET 49 A PHE 140 A LEU 141 A ASN 142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A MET 165 A GLU 166 A LEU 167 A PRO 168 A ARG	105239-70-1	A THR 24 A THR 25 A THR 26 A LEU 27 A HIS 41 A CYS 44 A THR 45 A SER 46 A MET 49	-8.81
GLN 189 345642-84-4 A THR 25 A THR 26 A LEU 27 A HIS 41 A MET 49 A PHE 140 A LEU 141 A ASN 142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A MET 165 A GLU 166 A LEU 167 A PRO 168 A ARG 188 A GLN 189 A THR 190 A GLN 192 52645-09-7 A THR 25 A THR 26 A LEU 27 A HIS 41 A MET 49 A PHE 140 A LEU 141 A ASN 142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A MET 165 A GLU 166 A LEU 167 A PRO 168 A ARG		A PRO 52 A TYR 54 A LEU 141 A ASN 142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A	
345642-84-4 A THR 25 A THR 26 A LEU 27 A HIS 41 A MET 49 A PHE 140 A LEU 141 A ASN 142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A MET 165 A GLU 166 A LEU 167 A PRO 168 A ARG 188 A GLN 189 A THR 190 A GLN 192 52645-09-7 A THR 25 A THR 26 A LEU 27 A HIS 41 A MET 49 A PHE 140 A LEU 141 A ASN 142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A MET 165 A GLU 166 A LEU 167 A PRO 168 A ARG		HIS 164 A MET 165 A GLU 166 A LEU 167 A PRO 168 A HIS 172 A ASP 187 A ARG 188 A	
143 A SER 144 A CYS 145 A HIS 163 A MET 165 A GLU 166 A LEU 167 A PRO 168 A ARG 188 A GLN 189 A THR 190 A GLN 192 52645-09-7 A THR 25 A THR 26 A LEU 27 A HIS 41 A MET 49 A PHE 140 A LEU 141 A ASN 142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A MET 165 A GLU 166 A LEU 167 A PRO 168 A ARG		GLN 189	
188 A GLN 189 A THR 190 A GLN 192 52645-09-7 A THR 25 A THR 26 A LEU 27 A HIS 41 A MET 49 A PHE 140 A LEU 141 A ASN 142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A MET 165 A GLU 166 A LEU 167 A PRO 168 A ARG	345642-84-4	A THR 25 A THR 26 A LEU 27 A HIS 41 A MET 49 A PHE 140 A LEU 141 A ASN 142 A GLY	-8.80
52645-09-7 A THR 25 A THR 26 A LEU 27 A HIS 41 A MET 49 A PHE 140 A LEU 141 A ASN 142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A MET 165 A GLU 166 A LEU 167 A PRO 168 A ARG		143 A SER 144 A CYS 145 A HIS 163 A MET 165 A GLU 166 A LEU 167 A PRO 168 A ARG	
143 A SER 144 A CYS 145 A HIS 163 A MET 165 A GLU 166 A LEU 167 A PRO 168 A ARG		188 A GLN 189 A THR 190 A GLN 192	
	52645-09-7	A THR 25 A THR 26 A LEU 27 A HIS 41 A MET 49 A PHE 140 A LEU 141 A ASN 142 A GLY	-8.79
188 A GLN 189 A THR 190 A GLN 192		143 A SER 144 A CYS 145 A HIS 163 A MET 165 A GLU 166 A LEU 167 A PRO 168 A ARG	
		188 A GLN 189 A THR 190 A GLN 192	

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105815-90-5	A HIS 41 A PHE 140 A LEU 141 A ASN 142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A	-8.73
	HIS 164 A MET 165 A GLU 166 A PRO 168 A HIS 172 A VAL 186 A ASP 187 A ARG 188 A	
	GLN 189 A THR 190	
17991-67-2	A THR 24 A THR 25 A THR 26 A LEU 27 A MET 49 A PHE 140 A LEU 141 A ASN 142 A	-8.72
	GLY 143 A SER 144 A CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A HIS 172 A	
	GLN 189	
224577-31-5	A HIS 41 A CYS 44 A MET 49 A PRO 52 A TYR 54 A PHE 140 A LEU 141 A ASN 142 A GLY	-8.72
	143 A CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A LEU 167 A PRO 168 A THR	
	169 A GLY 170 A ASP 187 A ARG 188 A GLN 189 A THR 190 A ALA 191 A GLN 192	
224577-33-7	A HIS 41 A CYS 44 A MET 49 A PRO 52 A TYR 54 A PHE 140 A LEU 141 A ASN 142 A GLY	-8.72
	143 A CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A LEU 167 A PRO 168 A THR	
	169 A GLY 170 A ASP 187 A ARG 188 A GLN 189 A THR 190 A ALA 191 A GLN 192	
50335-04-1	A HIS 41 A MET 49 A PHE 140 A LEU 141 A ASN 142 A SER 144 A CYS 145 A HIS 163 A	-8.71
	HIS 164 A MET 165 A GLU 166 A HIS 172 A VAL 186 A ASP 187 A ARG 188 A GLN 189 A	
	THR 190 A GLN 192	
445430-65-9	A THR 24 A THR 25 A THR 26 A LEU 27 A HIS 41 A MET 49 A TYR 118 A ASN 119 A PHE	-8.68
	140 A LEU 141 A ASN 142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A HIS 164 A MET	
	165 A GLU 166 A LEU 167 A PRO 168 A ASP 187 A ARG 188 A GLN 189 A THR 190 A GLN	
	192	
935841-71-7	A THR 25 A HIS 41 A MET 49 A PHE 140 A LEU 141 A ASN 142 A GLY 143 A SER 144 A	-8.66
	CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A LEU 167 A PRO 168 A HIS 172 A	
	ASP 187 A ARG 188 A GLN 189 A THR 190 A ALA 191 A GLN 192	
136024-80-1	A THR 24 A THR 25 A THR 26 A HIS 41 A MET 49 A PHE 140 A LEU 141 A ASN 142 A GLY	-8.62
	143 A SER 144 A CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A HIS 172 A ARG	
	188 A GLN 189	
852872-93-6	A THR 25 A THR 26 A LEU 27 A HIS 41 A VAL 42 A MET 49 A PHE 140 A LEU 141 A ASN	-8.61
	142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A LEU	
	167 A PRO 168 A GLY 170 A ASP 187 A ARG 188 A GLN 189 A THR 190 A ALA 191 A GLN	
	192	
104758-18-1	A SER 46 A GLU 47 A MET 49 A LEU 50 A PHE 140 A LEU 141 A ASN 142 A SER 144 A	-8.58
	CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A LEU 167 A PRO 168 A HIS 172 A	
	ARG 188 A GLN 189 A THR 190 A ALA 191 A GLN 192	
97915-31-6	A THR 24 A THR 25 A THR 26 A LEU 27 A HIS 41 A THR 45 A MET 49 A PHE 140 A LEU	-8.58
	141 A ASN 142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU	
	166 A LEU 167 A PRO 168 A GLY 170 A HIS 172 A VAL 186 A ARG 188 A GLN 189 A THR	
	190 A ALA	
35906-51-5	A SER 46 A GLU 47 A MET 49 A LEU 50 A PHE 140 A LEU 141 A ASN 142 A SER 144 A	-8.57
	CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A LEU 167 A PRO 168 A HIS 172 A	
	ARG 188 A GLN 189 A THR 190 A ALA 191 A GLN 192	

208927-15-5	A THR 24 A THR 25 A THR 26 A LEU 27 A HIS 41 A MET 49 A PHE 140 A LEU 141 A ASN	-8.56
	142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A LEU	
	167 A PRO 168 A HIS 172 A GLN 189 A THR 190 A ALA 191 A GLN 192	
55544-35-9	A THR 25 A THR 26 A LEU 27 A HIS 41 A MET 49 A LEU 141 A ASN 142 A GLY 143 A SER	-8.56
	144 A CYS 145 A HIS 163 A MET 165 A GLU 166 A LEU 167 A PRO 168 A ARG 188 A GLN	
	189 A THR 190 A ALA 191 A GLN 192	
194234-73-6	A THR 24 A THR 25 A THR 26 A LEU 27 A HIS 41 A MET 49 A PHE 140 A LEU 141 A ASN	-8.56
	142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A LEU	
	167 A HIS 172 A VAL 186 A ASP 187 A ARG 188 A GLN 189	
104759-19-5	A SER 46 A GLU 47 A MET 49 A LEU 50 A PHE 140 A LEU 141 A ASN 142 A SER 144 A	-8.55
	CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A LEU 167 A PRO 168 A HIS 172 A	
	ARG 188 A GLN 189 A THR 190 A ALA 191 A GLN 192	
133613-77-1	A LEU 27 A HIS 41 A MET 49 A PHE 140 A LEU 141 A ASN 142 A GLY 143 A SER 144 A	-8.55
	CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A LEU 167 A PRO 168 A ARG 188 A	
	GLN 189 A THR 190 A ALA 191 A GLN 192	
273410-51-8	A THR 24 A THR 25 A THR 26 A LEU 27 A HIS 41 A MET 49 A PHE 140 A LEU 141 A ASN	-8.54
	142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A LEU	
	167 A VAL 186 A ASP 187 A ARG 188 A GLN 189	
115982-32-6	A THR 24 A THR 25 A THR 26 A HIS 41 A SER 46 A MET 49 A PHE 140 A LEU 141 A ASN	-8.50
	142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A HIS	
	172 A VAL 186 A ASP 187 A ARG 188 A GLN 189	
81657-79-6	A THR 24 A THR 25 A THR 26 A LEU 27 A HIS 41 A SER 46 A MET 49 A TYR 54 A LEU	-8.50
	141 A ASN 142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU	
	166 A VAL 186 A ASP 187 A ARG 188 A GLN 189 A GLN 192	
36119-03-6	A THR 25 A THR 26 A LEU 27 A HIS 41 A CYS 44 A MET 49 A PRO 52 A TYR 54 A PHE	-8.47
	140 A LEU 141 A ASN 142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A HIS 164 A MET	
	165 A GLU 166 A PRO 168 A HIS 172 A ASP 187 A ARG 188 A GLN 189 A THR 190 A GLN	
	192	
83481-23-6	A MET 49 A PHE 140 A LEU 141 A ASN 142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A	-8.47
	HIS 164 A MET 165 A GLU 166 A LEU 167 A PRO 168 A HIS 172 A ARG 188 A GLN 189 A	
	THR 190 A ALA 191 A GLN 192	
80680-43-9	A HIS 41 A MET 49 A TYR 54 A ASN 142 A CYS 145 A HIS 163 A HIS 164 A MET 165 A	-8.47
	GLU 166 A LEU 167 A PRO 168 A ASP 187 A ARG 188 A GLN 189 A THR 190 A ALA 191	
18097-67-1	A THR 25 A THR 26 A LEU 27 A HIS 41 A CYS 44 A MET 49 A PRO 52 A TYR 54 A PHE	-8.46
	140 A LEU 141 A ASN 142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A HIS 164 A MET	
	165 A GLU 166 A LEU 167 A PRO 168 A ASP 187 A ARG 188 A GLN 189	
138529-07-4	A THR 24 A THR 25 A THR 26 A LEU 27 A HIS 41 A CYS 44 A THR 45 A SER 46 A GLU 47	-8.45
	A ASP 48 A MET 49 A LEU 50 A TYR 54 A ASN 142 A GLY 143 A CYS 145 A HIS 163 A HIS	
	164 A MET 165 A GLU 166 A PRO 168 A ASP 187 A ARG 188 A GLN 189 A THR 190 A ALA	
	191 A	

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61369-27-5	A THR 24 A THR 25 A THR 26 A HIS 41 A CYS 44 A THR 45 A SER 46 A MET 49 A TYR 54	-8.45
	A ASN 142 A GLY 143 A CYS 145 A HIS 164 A MET 165 A GLU 166 A PRO 168 A ASP 187	
	A ARG 188 A GLN 189 A THR 190 A ALA 191	
70022-71-8	A THR 25 A LEU 27 A HIS 41 A MET 49 A LEU 141 A ASN 142 A GLY 143 A SER 144 A	-8.45
	CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A LEU 167 A PRO 168 A ARG 188 A	
	GLN 189 A THR 190 A ALA 191 A GLN 192	
55482-27-4	A THR 24 A THR 25 A THR 26 A HIS 41 A CYS 44 A THR 45 A SER 46 A MET 49 A PRO 52	-8.44
	A TYR 54 A PHE 140 A LEU 141 A ASN 142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A	
	HIS 164 A MET 165 A GLU 166 A LEU 167 A PRO 168 A ASP 187 A ARG 188 A GLN 189 A	
	THR 190	
138529-05-2	A THR 24 A THR 25 A THR 26 A LEU 27 A HIS 41 A CYS 44 A THR 45 A SER 46 A MET 49	-8.40
	A ASN 142 A GLY 143 A CYS 145 A HIS 164 A MET 165 A GLU 166 A LEU 167 A PRO 168	
	A VAL 186 A ASP 187 A ARG 188 A GLN 189 A THR 190 A GLN 192	
690627-61-3	A THR 24 A THR 25 A THR 26 A LEU 27 A HIS 41 A MET 49 A PHE 140 A LEU 141 A ASN	-8.40
	142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A LEU	
	167 A PRO 168 A HIS 172 A ARG 188 A GLN 189 A THR 190 A ALA 191 A GLN 192	
213547-25-2	A THR 24 A THR 25 A THR 26 A LEU 27 A HIS 41 A THR 45 A SER 46 A MET 49 A PHE 140	-8.40
	A LEU 141 A ASN 142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A HIS 164 A MET 165 A	
	GLU 166 A HIS 172 A GLN 189	
52796-14-2	A THR 25 A LEU 27 A HIS 41 A MET 49 A PHE 140 A LEU 141 A ASN 142 A GLY 143 A	-8.38
	SER 144 A CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A LEU 167 A PRO 168 A	
	HIS 172 A ARG 188 A GLN 189 A THR 190 A ALA 191 A GLN 192	
207385-07-7	A THR 25 A LEU 27 A HIS 41 A MET 49 A PHE 140 A LEU 141 A ASN 142 A GLY 143 A	-8.38
	SER 144 A CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A LEU 167 A PRO 168 A	
	HIS 172 A ARG 188 A GLN 189 A THR 190 A ALA 191 A GLN 192	
102506-55-8	A THR 24 A THR 25 A THR 26 A LEU 27 A HIS 41 A CYS 44 A THR 45 A SER 46 A MET 49	-8.38
	A LEU 141 A ASN 142 A GLY 143 A SER 144 A CYS 145 A MET 165 A GLU 166 A LEU 167	
	A PRO 168 A ARG 188 A GLN 189 A THR 190 A GLN 192	
188558-97-6	A THR 24 A THR 25 A THR 26 A HIS 41 A MET 49 A ASN 142 A GLY 143 A CYS 145 A HIS	-8.36
	164 A MET 165 A GLU 166 A LEU 167 A PRO 168 A ASP 187 A ARG 188 A GLN 189 A THR	
	190 A ALA 191 A GLN 192	
256649-68-0	A MET 49 A PHE 140 A LEU 141 A ASN 142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A	-8.36
	HIS 164 A MET 165 A GLU 166 A LEU 167 A PRO 168 A HIS 172 A ARG 188 A GLN 189 A	
	THR 190 A GLN 192	
55945-74-9	A HIS 41 A MET 49 A PHE 140 A LEU 141 A ASN 142 A GLY 143 A SER 144 A CYS 145 A	-8.34
	HIS 163 A HIS 164 A MET 165 A GLU 166 A LEU 167 A PRO 168 A GLN 189 A THR 190 A	
	ALA 191	
65773-98-0	A THR 25 A THR 26 A LEU 27 A HIS 41 A MET 49 A PHE 140 A LEU 141 A ASN 142 A GLY	-8.34
	143 A SER 144 A CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A LEU 167 A PRO	
	168 A HIS 172 A GLN 189	

137809-94-0	A THR 24 A THR 25 A THR 26 A LEU 27 A HIS 41 A CYS 44 A MET 49 A LEU 50 A TYR 54	-8.33
	A PHE 140 A LEU 141 A ASN 142 A GLY 143 A SER 144 A CYS 145 A HIS 164 A MET 165	
	A GLU 166 A LEU 167 A PRO 168 A GLY 170 A ASP 187 A ARG 188 A GLN 189 A THR 190	
	A GLN 1	
137844-97-4	A THR 24 A THR 25 A THR 26 A LEU 27 A THR 45 A SER 46 A MET 49 A PHE 140 A LEU	-8.32
	141 A ASN 142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU	
	166 A LEU 167 A PRO 168 A HIS 172 A ARG 188 A GLN 189 A THR 190 A GLN 192	
36011-19-5	A THR 24 A THR 25 A THR 26 A LEU 27 A HIS 41 A VAL 42 A CYS 44 A THR 45 A SER 46	-8.30
	A MET 49 A PHE 140 A LEU 141 A ASN 142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A	
	HIS 164 A MET 165 A GLU 166 A HIS 172 A GLN 189	
54854-92-1	A THR 25 A THR 26 A LEU 27 A HIS 41 A MET 49 A PHE 140 A LEU 141 A ASN 142 A GLY	-8.29
	143 A SER 144 A CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A LEU 167 A PRO	
	168 A HIS 172 A ARG 188 A GLN 189 A THR 190 A GLN 192	
656250-28-1	A THR 24 A THR 25 A THR 26 A HIS 41 A CYS 44 A THR 45 A SER 46 A MET 49 A PHE 140	-8.29
	A LEU 141 A ASN 142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A HIS 164 A MET 165 A	
	GLU 166 A HIS 172 A GLN 189	
798575-31-2	A THR 24 A THR 25 A THR 26 A HIS 41 A CYS 44 A THR 45 A SER 46 A MET 49 A PHE 140	-8.29
	A LEU 141 A ASN 142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A HIS 164 A MET 165 A	
	GLU 166 A HIS 172 A GLN 189	
128129-56-6	A THR 25 A THR 26 A LEU 27 A HIS 41 A MET 49 A ASN 142 A GLY 143 A CYS 145 A MET	-8.28
	165 A GLU 166 A VAL 186 A ASP 187 A ARG 188 A GLN 189 A THR 190 A GLN 192	
144587-58-6	A THR 25 A THR 26 A LEU 27 A HIS 41 A MET 49 A ASN 142 A GLY 143 A CYS 145 A MET	-8.27
	165 A GLU 166 A LEU 167 A PRO 168 A GLN 189 A THR 190 A ALA 191 A GLN 192	
72380-13-3	A THR 25 A THR 26 A LEU 27 A HIS 41 A VAL 42 A MET 49 A PHE 140 A LEU 141 A ASN	-8.24
	142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A MET 165 A GLU 166 A LEU 167 A PRO	
	168 A ARG 188 A GLN 189 A THR 190 A GLN 192	
83903-60-0	A THR 25 A THR 26 A CYS 44 A THR 45 A SER 46 A MET 49 A PHE 140 A LEU 141 A ASN	-8.23
	142 A SER 144 A CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A LEU 167 A PRO	
	168 A HIS 172 A ARG 188 A GLN 189 A THR 190 A ALA 191 A GLN 192	
50611-86-4	A HIS 41 A CYS 44 A MET 49 A PRO 52 A TYR 54 A PHE 140 A LEU 141 A ASN 142 A SER	-8.23
	144 A CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A HIS 172 A ASP 187 A ARG	
	188 A GLN 189	
164176-22-1	A THR 24 A THR 25 A LEU 27 A HIS 41 A CYS 44 A THR 45 A SER 46 A MET 49 A PRO 52	-8.23
	A TYR 54 A ASN 142 A GLY 143 A CYS 145 A HIS 164 A MET 165 A GLU 166 A PHE 181	0.20
	A ASP 187 A ARG 188 A GLN 189	
164176-24-3	A THR 24 A THR 25 A THR 26 A HIS 41 A CYS 44 A THR 45 A SER 46 A MET 49 A PRO 52	-8.21
1011/0240	A TYR 54 A ASN 119 A ASN 142 A GLY 143 A CYS 145 A HIS 164 A MET 165 A GLU 166	0.21
	A ASP 187 A ARG 188 A GLN 189	
70938-59-9	A HIS 41 A MET 49 A PHE 140 A LEU 141 A ASN 142 A GLY 143 A SER 144 A CYS 145 A	-8.21
70730-37-7		0.21
	HIS 163 A HIS 164 A MET 165 A GLU 166 A LEU 167 A PRO 168 A HIS 172 A ASP 187 A	
	ARG 188 A GLN 189 A THR 190 A ALA 191 A GLN 192	

114-25-0	THR 24 A THR 25 A THR 26 A HIS 41 A CYS 44 A THR 45 A SER 46 A MET 49 A PRO 52 A	-8.21
	TYR 54 A PHE 140 A LEU 141 A ASN 142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A	
	HIS 164 A MET 165 A GLU 166 A LEU 167 A PRO 168 A ASP 187 A ARG 188 A GLN 189 A	
	THR 190 A	
174630-08-1	A THR 24 A THR 25 A THR 26 A LEU 27 A HIS 41 A CYS 44 A THR 45 A SER 46 A MET 49	-8.21
	A LEU 141 A ASN 142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A HIS 164 A MET 165 A	
	GLU 166 A LEU 167 A PRO 168 A ARG 188 A GLN 189 A THR 190 A ALA 191 A GLN 192	
72509-61-6	A THR 25 A THR 26 A MET 49 A PHE 140 A LEU 141 A ASN 142 A GLY 143 A SER 144 A	-8.20
	CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A LEU 167 A PRO 168 A ARG 188 A	
	GLN 189	
184348-39-8	A THR 25 A THR 26 A HIS 41 A MET 49 A TYR 118 A ASN 119 A ASN 142 A GLY 143 A	-8.19
	CYS 145 A HIS 164 A MET 165 A GLU 166 A GLN 189	
137809-89-3	A THR 24 A THR 25 A LEU 27 A HIS 41 A CYS 44 A THR 45 A SER 46 A MET 49 A TYR 54	-8.17
	A PHE 140 A ASN 142 A GLY 143 A CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166	
	A HIS 172 A ASP 187 A ARG 188 A GLN 189	
111036-40-9	A LEU 27 A HIS 41 A MET 49 A PHE 140 A LEU 141 A ASN 142 A GLY 143 A SER 144 A	-8.15
	CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A LEU 167 A PRO 168 A HIS 172 A	
	ASP 187 A ARG 188 A GLN 189 A THR 190 A ALA 191 A GLN 192	
164176-23-2	A THR 24 A THR 25 A THR 26 A HIS 41 A CYS 44 A SER 46 A MET 49 A PRO 52 A TYR 54	-8.15
	A ASN 119 A ASN 142 A GLY 143 A SER 144 A CYS 145 A HIS 164 A MET 165 A GLU 166	
	A PHE 181 A ASP 187 A ARG 188 A GLN 189	
137824-59-0	A HIS 41 A CYS 44 A MET 49 A PRO 52 A TYR 54 A PHE 140 A LEU 141 A ASN 142 A GLY	-8.15
	143 A SER 144 A CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A LEU 167 A PRO	
	168 A HIS 172 A ASP 187 A ARG 188 A GLN 189 A THR 190 A ALA 191 A GLN 192	
76689-96-8	A THR 24 A THR 25 A LEU 27 A HIS 41 A CYS 44 A THR 45 A SER 46 A MET 49 A PRO 52	-8.15
	A TYR 54 A ASN 142 A GLY 143 A CYS 145 A HIS 164 A MET 165 A GLU 166 A PHE 181	
	A ASP 187 A ARG 188 A GLN 189	
142925-51-7	A HIS 41 A CYS 44 A MET 49 A PRO 52 A TYR 54 A PHE 140 A LEU 141 A ASN 142 A SER	-8.14
	144 A CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A LEU 167 A PRO 168 A THR	
	169 A GLY 170 A HIS 172 A ASP 187 A ARG 188 A GLN 189 A THR 190 A ALA 191 A GLN	
	192	
172854-77-2	A MET 49 A PHE 140 A LEU 141 A ASN 142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A	-8.14
	HIS 164 A MET 165 A GLU 166 A LEU 167 A PRO 168 A HIS 172 A ARG 188 A GLN 189 A	
	THR 190 A GLN 192	
329050-25-1	A THR 24 A THR 25 A THR 26 A LEU 27 A HIS 41 A VAL 42 A MET 49 A TYR 54 A ASN	-8.10
	142 A GLY 143 A CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A PHE 181 A ASP	
	187 A ARG 188 A GLN 189	
137809-88-2	A HIS 41 A CYS 44 A MET 49 A TYR 54 A PHE 140 A LEU 141 A ASN 142 A GLY 143 A	-8.09
	SER 144 A CYS 145 A HIS 163 A MET 165 A GLU 166 A PRO 168 A HIS 172 A VAL 186 A	
	ASP 187 A ARG 188 A GLN 189 A THR 190 A GLN 192	

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86425-61-8	A THR 24 A THR 25 A THR 26 A LEU 27 A HIS 41 A VAL 42 A SER 46 A MET 49 A ASN	-8.06
	119 A PHE 140 A LEU 141 A ASN 142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A HIS	
	164 A MET 165 A GLU 166 A HIS 172 A ASP 187 A ARG 188 A GLN 189	
823808-55-5	A THR 25 A LEU 27 A HIS 41 A MET 49 A ASN 142 A GLY 143 A SER 144 A CYS 145 A HIS	-8.06
	163 A HIS 164 A MET 165 A GLU 166 A LEU 167 A PRO 168 A HIS 172 A ARG 188 A GLN	
	189 A THR 190 A ALA 191 A GLN 192	
145613-82-7	A LEU 27 A HIS 41 A MET 49 A PHE 140 A LEU 141 A ASN 142 A GLY 143 A SER 144 A	-8.05
	CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A LEU 167 A PRO 168 A HIS 172 A	
	ASP 187 A ARG 188 A GLN 189 A THR 190 A ALA 191 A GLN 192	
858950-52-4	A THR 25 A THR 26 A LEU 27 A HIS 41 A MET 49 A ASN 142 A GLY 143 A SER 144 A CYS	-8.05
	145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A PRO 168 A GLN 189	
80442-78-0	A MET 49 A LEU 141 A ASN 142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A HIS 164 A	-8.04
	MET 165 A GLU 166 A LEU 167 A PRO 168 A GLN 189 A THR 190	
80442-79-1	A MET 49 A LEU 141 A ASN 142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A HIS 164 A	-8.04
	MET 165 A GLU 166 A LEU 167 A PRO 168 A GLN 189 A THR 190	
115268-43-4	A HIS 41 A MET 49 A LEU 141 A ASN 142 A CYS 145 A HIS 163 A HIS 164 A MET 165 A	-8.04
	GLU 166 A LEU 167 A PRO 168 A ARG 188 A GLN 189	
364344-14-9	A THR 24 A THR 25 A THR 26 A LEU 27 A HIS 41 A MET 49 A LEU 141 A ASN 142 A GLY	-8.04
	143 A SER 144 A CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A LEU 167 A PRO	
	168 A ARG 188 A GLN 189 A THR 190 A GLN 192	
105404-85-1	A THR 24 A THR 25 A THR 26 A HIS 41 A CYS 44 A THR 45 A SER 46 A MET 49 A LEU	-8.04
	141 A ASN 142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU	
	166 A LEU 167 A PRO 168 A ARG 188 A GLN 189 A THR 190	
137824-58-9	A THR 25 A THR 26 A LEU 27 A MET 49 A PHE 140 A LEU 141 A ASN 142 A GLY 143 A	-8.04
	SER 144 A CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A PRO 168 A HIS 172 A	
	ARG 188 A GLN 189 A THR 190 A ALA 191 A GLN 192	
99102-40-6	A THR 24 A THR 25 A THR 26 A LEU 27 A HIS 41 A VAL 42 A THR 45 A SER 46 A MET 49	-8.02
	A TYR 118 A ASN 142 A GLY 143 A CYS 145 A MET 165 A GLU 166 A GLN 189	
100244-36-8	A THR 24 A THR 25 A THR 26 A LEU 27 A HIS 41 A MET 49 A LEU 141 A ASN 142 A GLY	-8.02
	143 A SER 144 A CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A GLN 189	
157207-91-5	A MET 49 A PHE 140 A LEU 141 A ASN 142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A	-8.02
	HIS 164 A MET 165 A GLU 166 A LEU 167 A PRO 168 A HIS 172 A ASP 187 A ARG 188 A	
	GLN 189 A THR 190 A ALA 191	
329197-89-9	A THR 24 A THR 25 A THR 26 A LEU 27 A HIS 41 A MET 49 A LEU 141 A ASN 142 A GLY	-8.01
	143 A SER 144 A CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A GLN 189	
2643-02-9	THR 24 A THR 25 A THR 26 A LEU 27 A HIS 41 A THR 45 A SER 46 A MET 49 A LEU 141	-8.01
	A ASN 142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166	
	A ARG 188 A GLN 189 A GLN 192	
143346-97-8	A HIS 41 A MET 49 A PHE 140 A LEU 141 A ASN 142 A GLY 143 A SER 144 A CYS 145 A	-8.01
	HIS 164 A MET 165 A GLU 166 A LEU 167 A PRO 168 A ARG 188 A GLN 189 A THR 190 A	
	ALA 191 A GLN 192	
	MER 1/1 /1 QUA 1/2	

A HIS 41 A MET 49 A LEU 50 A PHE 140 A LEU 141 A ASN 142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A LEU 167 A PRO 168 A HIS 172 A GLN 189 A THR 190 A ALA 191 A GLN 192 143113-32-0 A THR 24 A THR 25 A THR 26 A LEU 27 A HIS 41 A THR 45 A SER 46 A MET 49 A PHE 140 A LEU 141 A ASN 142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A LEU 167 A PRO 168 A GLY 170 A HIS 172 A GLN 189 77658-95-8 A THR 24 A THR 25 A THR 26 A LEU 27 A HIS 41 A CYS 44 A MET 49 A TYR 54 A PHE 165 A GLU 166 A HIS 172 A ASP 187 A ARG 188 A GLN 189 858950-36-4 A PHE 140 A LEU 141 A ASN 142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A PRO 168 A HIS 172 A GLN 189 A THR 190 A ALA 191 A GLN 192 79206-71-6 A THR 25 A HIS 41 A MET 49 A PHE 140 A LEU 141 A ASN 142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A HIS 164 A CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A LEU 167 A PRO 168 A HIS 172 A ARG 188 A GLN 189 A THR 190 A ALA 191 A GLN 192 724462-47-9 A THR 25 A THR 26 A LEU 27 A HIS 41 A MET 49 A TYR 54 A PHE 140 A LEU 141 A ASN -7.97 142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A HIS 172 A GLN 189 2122-98-7 THR 25 A THR 26 A LEU 27 A HIS 41 A MET 49 A LEU 141 A ASN 142 A GLY 143 A SER -7.96 144 A CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A HIS 172 A GLN 189 A THR 190
GLN 189 A THR 190 A ALA 191 A GLN 192 143113-32-0 A THR 24 A THR 25 A THR 26 A LEU 27 A HIS 41 A THR 45 A SER 46 A MET 49 A PHE 140 -7.99 A LEU 141 A ASN 142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A LEU 167 A PRO 168 A GLY 170 A HIS 172 A GLN 189 77658-95-8 A THR 24 A THR 25 A THR 26 A LEU 27 A HIS 41 A CYS 44 A MET 49 A TYR 54 A PHE 165 A GLU 164 A HIS 172 A ASP 187 A ARG 188 A GLN 189 858950-36-4 A PHE 140 A LEU 141 A ASN 142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A PRO 168 A HIS 172 A GLN 189 A THR 190 A ALA 191 A GLN 192 79206-71-6 A THR 25 A HIS 41 A MET 49 A PHE 140 A LEU 141 A ASN 142 A GLY 143 A SER 144 A -7.98 CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A LEU 167 A PRO 168 A HIS 172 A ARG 188 A GLN 189 A THR 190 A ALA 191 A GLN 192 724462-47-9 A THR 25 A THR 26 A LEU 27 A HIS 41 A MET 49 A TYR 54 A PHE 140 A LEU 141 A ASN 1-7.97 142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A HIS 172 A ASP 187 A ARG 188 A GLN 189 2122-98-7 THR 25 A THR 26 A LEU 27 A HIS 41 A MET 49 A LEU 141 A ASN 142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A HIS 172 A GLN 189 A THR 190 A ALA 191 A GLN 192 7-7.96 144 A CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A HIS 172 A GLN 189 A THR
143113-32-0 A THR 24 A THR 25 A THR 26 A LEU 27 A HIS 41 A THR 45 A SER 46 A MET 49 A PHE 140
A LEU 141 A ASN 142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A LEU 167 A PRO 168 A GLY 170 A HIS 172 A GLN 189 77658-95-8 A THR 24 A THR 25 A THR 26 A LEU 27 A HIS 41 A CYS 44 A MET 49 A TYR 54 A PHE 165 A GLU 166 A HIS 172 A ASP 187 A ARG 188 A GLN 189 858950-36-4 A PHE 140 A LEU 141 A ASN 142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A PRO 168 A HIS 172 A GLN 189 A THR 190 A ALA 191 A GLN 192 79206-71-6 A THR 25 A HIS 41 A MET 49 A PHE 140 A LEU 141 A ASN 142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A HIS 172 A ARG 188 A GLN 189 A THR 190 A ALA 191 A GLN 192 724462-47-9 A THR 25 A THR 26 A LEU 27 A HIS 41 A MET 49 A TYR 54 A PHE 140 A LEU 141 A ASN 142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A MET 165 A GLU 166 A HIS 172 A ASP 187 A ARG 188 A GLN 189 2122-98-7 THR 25 A THR 26 A LEU 27 A HIS 41 A MET 49 A LEU 141 A ASN 142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A HIS 172 A ASP 187 A ARG 188 A GLN 189 2122-98-7 THR 25 A THR 26 A LEU 27 A HIS 41 A MET 49 A LEU 141 A ASN 142 A GLY 143 A SER 7-96 144 A CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A HIS 172 A GLN 189 A THR
GLU 166 A LEU 167 A PRO 168 A GLY 170 A HIS 172 A GLN 189 77658-95-8 A THR 24 A THR 25 A THR 26 A LEU 27 A HIS 41 A CYS 44 A MET 49 A TYR 54 A PHE 140 A LEU 141 A ASN 142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A HIS 172 A ASP 187 A ARG 188 A GLN 189 858950-36-4 A PHE 140 A LEU 141 A ASN 142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A PRO 168 A HIS 172 A GLN 189 A THR 190 A ALA 191 A GLN 192 79206-71-6 A THR 25 A HIS 41 A MET 49 A PHE 140 A LEU 141 A ASN 142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A LEU 167 A PRO 168 A HIS 172 A ARG 188 A GLN 189 A THR 190 A ALA 191 A GLN 192 724462-47-9 A THR 25 A THR 26 A LEU 27 A HIS 41 A MET 49 A TYR 54 A PHE 140 A LEU 141 A ASN 172 A ASP 187 A ARG 188 A GLN 189 2122-98-7 THR 25 A THR 26 A LEU 27 A HIS 41 A MET 49 A LEU 141 A ASN 142 A GLY 143 A SER 174 A CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A HIS 172 A GLN 189 A THR -7.96 144 A CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A HIS 172 A GLN 189 A THR
77658-95-8 A THR 24 A THR 25 A THR 26 A LEU 27 A HIS 41 A CYS 44 A MET 49 A TYR 54 A PHE 140 A LEU 141 A ASN 142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A HIS 172 A ASP 187 A ARG 188 A GLN 189 858950-36-4 A PHE 140 A LEU 141 A ASN 142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A PRO 168 A HIS 172 A GLN 189 A THR 190 A ALA 191 A GLN 192 79206-71-6 A THR 25 A HIS 41 A MET 49 A PHE 140 A LEU 141 A ASN 142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A LEU 167 A PRO 168 A HIS 172 A ARG 188 A GLN 189 A THR 190 A ALA 191 A GLN 192 724462-47-9 A THR 25 A THR 26 A LEU 27 A HIS 41 A MET 49 A TYR 54 A PHE 140 A LEU 141 A ASN -7.97 142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A HIS 172 A ASP 187 A ARG 188 A GLN 189 2122-98-7 THR 25 A THR 26 A LEU 27 A HIS 41 A MET 49 A LEU 141 A ASN 142 A GLY 143 A SER -7.96
140 A LEU 141 A ASN 142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A HIS 172 A ASP 187 A ARG 188 A GLN 189 858950-36-4 A PHE 140 A LEU 141 A ASN 142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A PRO 168 A HIS 172 A GLN 189 A THR 190 A ALA 191 A GLN 192 79206-71-6 A THR 25 A HIS 41 A MET 49 A PHE 140 A LEU 141 A ASN 142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A LEU 167 A PRO 168 A HIS 172 A ARG 188 A GLN 189 A THR 190 A ALA 191 A GLN 192 724462-47-9 A THR 25 A THR 26 A LEU 27 A HIS 41 A MET 49 A TYR 54 A PHE 140 A LEU 141 A ASN -7.97 142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A HIS 172 A ASP 187 A ARG 188 A GLN 189 2122-98-7 THR 25 A THR 26 A LEU 27 A HIS 41 A MET 49 A LEU 141 A ASN 142 A GLY 143 A SER -7.96
858950-36-4 A PHE 140 A LEU 141 A ASN 142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A HIS 164 A -7.98 MET 165 A GLU 166 A PRO 168 A HIS 172 A GLN 189 A THR 190 A ALA 191 A GLN 192 79206-71-6 A THR 25 A HIS 41 A MET 49 A PHE 140 A LEU 141 A ASN 142 A GLY 143 A SER 144 A -7.98 CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A LEU 167 A PRO 168 A HIS 172 A ARG 188 A GLN 189 A THR 190 A ALA 191 A GLN 192 724462-47-9 A THR 25 A THR 26 A LEU 27 A HIS 41 A MET 49 A TYR 54 A PHE 140 A LEU 141 A ASN -7.97 142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A HIS 172 A ASP 187 A ARG 188 A GLN 189 2122-98-7 THR 25 A THR 26 A LEU 27 A HIS 41 A MET 49 A LEU 141 A ASN 142 A GLY 143 A SER -7.96 144 A CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A HIS 172 A GLN 189 A THR
858950-36-4 A PHE 140 A LEU 141 A ASN 142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A PRO 168 A HIS 172 A GLN 189 A THR 190 A ALA 191 A GLN 192 79206-71-6 A THR 25 A HIS 41 A MET 49 A PHE 140 A LEU 141 A ASN 142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A LEU 167 A PRO 168 A HIS 172 A ARG 188 A GLN 189 A THR 190 A ALA 191 A GLN 192 724462-47-9 A THR 25 A THR 26 A LEU 27 A HIS 41 A MET 49 A TYR 54 A PHE 140 A LEU 141 A ASN -7.97 142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A HIS 172 A ASP 187 A ARG 188 A GLN 189 2122-98-7 THR 25 A THR 26 A LEU 27 A HIS 41 A MET 49 A LEU 141 A ASN 142 A GLY 143 A SER -7.96 144 A CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A HIS 172 A GLN 189 A THR
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79206-71-6 A THR 25 A HIS 41 A MET 49 A PHE 140 A LEU 141 A ASN 142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A LEU 167 A PRO 168 A HIS 172 A ARG 188 A GLN 189 A THR 190 A ALA 191 A GLN 192 724462-47-9 A THR 25 A THR 26 A LEU 27 A HIS 41 A MET 49 A TYR 54 A PHE 140 A LEU 141 A ASN -7.97 142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A HIS 172 A ASP 187 A ARG 188 A GLN 189 2122-98-7 THR 25 A THR 26 A LEU 27 A HIS 41 A MET 49 A LEU 141 A ASN 142 A GLY 143 A SER -7.96 144 A CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A HIS 172 A GLN 189 A THR
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724462-47-9 A THR 25 A THR 26 A LEU 27 A HIS 41 A MET 49 A TYR 54 A PHE 140 A LEU 141 A ASN -7.97 142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A HIS 172 A ASP 187 A ARG 188 A GLN 189 2122-98-7 THR 25 A THR 26 A LEU 27 A HIS 41 A MET 49 A LEU 141 A ASN 142 A GLY 143 A SER -7.96 144 A CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A HIS 172 A GLN 189 A THR
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172 A ASP 187 A ARG 188 A GLN 189 2122-98-7 THR 25 A THR 26 A LEU 27 A HIS 41 A MET 49 A LEU 141 A ASN 142 A GLY 143 A SER
2122-98-7 THR 25 A THR 26 A LEU 27 A HIS 41 A MET 49 A LEU 141 A ASN 142 A GLY 143 A SER -7.96 144 A CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A HIS 172 A GLN 189 A THR
144 A CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A HIS 172 A GLN 189 A THR
190
79067-75-7 A THR 24 A THR 25 A THR 26 A LEU 27 A SER 46 A MET 49 A ASN 119 A PHE 140 A LEU -7.92
141 A ASN 142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A GLU 166 A GLN 189
603125-81-1 A THR 25 A THR 26 A LEU 27 A HIS 41 A MET 49 A ASN 142 A GLY 143 A SER 144 A CYS -7.90
145 A HIS 164 A MET 165 A GLU 166 A PRO 168 A ARG 188 A GLN 189 A THR 190 A GLN
192
134985-04-9 A HIS 41 A CYS 44 A MET 49 A LEU 50 A PRO 52 A TYR 54 A PHE 140 A LEU 141 A ASN -7.90
142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A LEU
167 A PRO 168 A HIS 172 A ASP 187 A ARG 188 A GLN 189 A THR 190 A ALA 191
94513-77-6 A THR 24 A THR 25 A THR 26 A LEU 27 A HIS 41 A CYS 44 A THR 45 A SER 46 A MET 49 -7.90
A LEU 50 A TYR 54 A CYS 145 A HIS 164 A MET 165 A GLU 166 A LEU 167 A ASP 187 A
ARG 188 A GLN 189 A THR 190 A ALA 191 A GLN 192
92679-03-3 A THR 24 A THR 25 A THR 26 A LEU 27 A HIS 41 A MET 49 A TYR 54 A ASN 142 A GLY -7.89
143 A CYS 145 A HIS 164 A MET 165 A GLU 166 A ASP 187 A ARG 188 A GLN 189
65604-87-7 A PHE 140 A LEU 141 A ASN 142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A HIS 164 A -7.89
MET 165 A GLU 166 A LEU 167 A PRO 168 A GLY 170 A HIS 172 A ASP 187 A ARG 188 A
GLN 189 A THR 190 A GLN 192
304902-16-7 A HIS 41 A MET 49 A PHE 140 A LEU 141 A ASN 142 A GLY 143 A SER 144 A CYS 145 A -7.88
HIS 163 A HIS 164 A MET 165 A GLU 166 A LEU 167 A PRO 168 A ARG 188 A GLN 189 A
THR 190 A ALA 191 A GLN 192

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181034-78-6	A HIS 41 A CYS 44 A MET 49 A PRO 52 A TYR 54 A ASN 142 A CYS 145 A HIS 164 A MET	-7.87
	165 A GLU 166 A LEU 167 A PRO 168 A GLY 170 A ASP 187 A ARG 188 A GLN 189 A THR	
	190 A ALA 191 A GLN 192	
221290-77-3	A THR 24 A THR 25 A THR 26 A LEU 27 A HIS 41 A MET 49 A TYR 54 A ASN 119 A ASN	-7.87
	142 A GLY 143 A CYS 145 A HIS 164 A MET 165 A GLU 166 A LEU 167 A PRO 168 A ASP	
	187 A ARG 188 A GLN 189 A THR 190 A ALA 191 A GLN 192	
76689-97-9	A HIS 41 A MET 49 A PHE 140 A LEU 141 A ASN 142 A GLY 143 A SER 144 A CYS 145 A	-7.86
	HIS 163 A HIS 164 A MET 165 A GLU 166 A LEU 167 A PRO 168 A HIS 172 A ASP 187 A	
	ARG 188 A GLN 189 A THR 190 A ALA 191	
92679-02-2	A THR 24 A THR 25 A THR 26 A LEU 27 A HIS 41 A CYS 44 A MET 49 A PRO 52 A TYR 54	-7.86
	A ASN 142 A GLY 143 A CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A PHE 181	
	A ASP 187 A ARG 188 A GLN 189	
170894-36-7	A THR 25 A THR 26 A LEU 27 A HIS 41 A MET 49 A LEU 50 A ASN 142 A GLY 143 A CYS	-7.85
	145 A HIS 164 A MET 165 A GLU 166 A LEU 167 A PRO 168 A GLN 189 A THR 190 A ALA	
	191 A GLN 192	
170894-37-8	A THR 25 A THR 26 A LEU 27 A HIS 41 A MET 49 A ASN 142 A GLY 143 A CYS 145 A HIS	-7.84
	164 A MET 165 A GLU 166 A LEU 167 A PRO 168 A GLN 189 A THR 190 A ALA 191 A GLN	
	192	
564-16-9	MET 49 A PHE 140 A LEU 141 A ASN 142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A	-7.84
	HIS 164 A MET 165 A GLU 166 A LEU 167 A PRO 168 A HIS 172 A GLN 189 A THR 190 A	
	ALA 191 A GLN 192	
129602-18-2	A THR 25 A THR 26 A LEU 27 A HIS 41 A VAL 42 A MET 49 A PHE 140 A LEU 141 A ASN	-7.84
	142 A GLY 143 A CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A LEU 167 A PRO	
	168 A HIS 172 A GLN 189 A THR 190 A ALA 191 A GLN 192	
142797-28-2	A PHE 140 A LEU 141 A ASN 142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A HIS 164 A	-7.83
	MET 165 A GLU 166 A LEU 167 A PRO 168 A HIS 172 A ARG 188 A GLN 189 A THR 190 A	
	GLN 192	
58115-30-3	A THR 25 A THR 26 A LEU 27 A HIS 41 A MET 49 A PHE 140 A LEU 141 A ASN 142 A GLY	-7.83
	143 A SER 144 A CYS 145 A HIS 163 A MET 165 A GLU 166 A LEU 167 A PRO 168 A ARG	
	188 A GLN 189 A THR 190 A ALA 191 A GLN 192	
53755-56-9	A THR 25 A THR 26 A LEU 27 A HIS 41 A MET 49 A PHE 140 A LEU 141 A ASN 142 A GLY	-7.83
	143 A SER 144 A CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A LEU 167 A PRO	
	168 A HIS 172 A VAL 186 A ASP 187 A ARG 188 A GLN 189 A THR 190 A ALA 191 A GLN	
	192	
123167-01-1	A THR 24 A THR 25 A THR 26 A LEU 27 A HIS 41 A THR 45 A SER 46 A MET 49 A LEU	-7.83
	141 A ASN 142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU	
	166 A LEU 167 A PRO 168 A ARG 188 A GLN 189 A THR 190 A ALA 191 A GLN 192	
603125-80-0	A THR 25 A THR 26 A LEU 27 A HIS 41 A MET 49 A ASN 142 A GLY 143 A SER 144 A CYS	-7.83
	145 A HIS 164 A MET 165 A GLU 166 A LEU 167 A PRO 168 A ARG 188 A GLN 189 A THR	
	190 A ALA 191 A GLN 192	

207683-70-3	A THR 25 A THR 26 A LEU 27 A HIS 41 A SER 46 A MET 49 A LEU 141 A ASN 142 A GLY	-7.83
	143 A SER 144 A CYS 145 A HIS 163 A MET 165 A GLU 166 A LEU 167 A PRO 168 A ARG	
	188 A GLN 189 A THR 190 A GLN 192	
129893-35-2	A PHE 140 A LEU 141 A ASN 142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A HIS 164 A	-7.83
	MET 165 A GLU 166 A LEU 167 A PRO 168 A HIS 172 A ARG 188 A GLN 189 A THR 190 A	
	GLN 192	
137571-30-3	A THR 24 A THR 25 A THR 26 A LEU 27 A HIS 41 A SER 46 A MET 49 A LEU 141 A ASN	-7.82
	142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A ARG	
	188 A GLN 189 A THR 190	
79005-82-6	A THR 24 A THR 25 A THR 26 A LEU 27 A HIS 41 A CYS 44 A THR 45 A SER 46 A MET 49	-7.82
	A PHE 140 A LEU 141 A ASN 142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A HIS 164 A	
	MET 165 A GLU 166 A HIS 172 A GLN 189	
128298-63-5	A PHE 140 A LEU 141 A ASN 142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A HIS 164 A	-7.82
	MET 165 A GLU 166 A LEU 167 A PRO 168 A HIS 172 A ARG 188 A GLN 189 A THR 190 A	
	GLN 192	
64108-85-6	A THR 24 A THR 25 A THR 26 A LEU 27 A HIS 41 A CYS 44 A SER 46 A MET 49 A PRO 52	-7.82
	A TYR 54 A ASN 142 A GLY 143 A CYS 145 A HIS 164 A MET 165 A GLU 166 A ASP 187 A	
	ARG 188 A GLN 189	
123154-33-6	A THR 25 A LEU 27 A HIS 41 A MET 49 A PHE 140 A LEU 141 A ASN 142 A GLY 143 A	-7.82
	SER 144 A CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A LEU 167 A PRO 168 A	
	GLY 170 A ASP 187 A ARG 188 A GLN 189 A THR 190 A ALA 191 A GLN 192	
100019-24-7	A PHE 140 A LEU 141 A ASN 142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A HIS 164 A	-7.81
	MET 165 A GLU 166 A LEU 167 A PRO 168 A HIS 172 A ARG 188 A GLN 189 A THR 190 A	
	GLN 192	
128733-04-0	A MET 49 A PHE 140 A LEU 141 A ASN 142 A SER 144 A CYS 145 A HIS 163 A HIS 164 A	-7.79
	MET 165 A GLU 166 A PRO 168 A HIS 172 A ARG 188 A GLN 189 A THR 190 A ALA 191 A	
	GLN 192	
137809-87-1	A THR 24 A THR 25 A THR 26 A HIS 41 A CYS 44 A THR 45 A SER 46 A MET 49 A PHE 140	-7.78
	A LEU 141 A ASN 142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A HIS 164 A MET 165 A	
	GLU 166 A HIS 172	
128819-90-9	A MET 49 A PHE 140 A LEU 141 A ASN 142 A SER 144 A CYS 145 A HIS 163 A HIS 164 A	-7.78
	MET 165 A GLU 166 A HIS 172 A ARG 188 A GLN 189 A THR 190 A ALA 191 A GLN 192	
80764-19-8	A THR 25 A HIS 41 A MET 49 A TYR 54 A PHE 140 A LEU 141 A ASN 142 A GLY 143 A	-7.78
	SER 144 A CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A LEU 167 A PRO 168 A	
	HIS 172 A ASP 187 A ARG 188 A GLN 189 A THR 190 A ALA 191 A GLN 192	
160796-24-7	A THR 25 A THR 26 A LEU 27 A HIS 41 A CYS 44 A THR 45 A SER 46 A MET 49 A PHE 140	-7.77
	A LEU 141 A ASN 142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A HIS 164 A MET 165 A	
	GLU 166 A HIS 172 A GLN 189	
133056-09-4	A THR 24 A THR 25 A THR 26 A LEU 27 A HIS 41 A THR 45 A SER 46 A MET 49 A ASN	-7.77
100000 07 4	142 A GLY 143 A CYS 145 A MET 165 A GLU 166 A LEU 167 A PRO 168 A GLN 189	,.,,
	172 A GET 173 A GTS 173 A MET 103 A GEU 100 A LEU 107 A FRO 100 A GEN 109	

23235-67-8 A HIS 41 A MET 49 A PHE 140 A LEU 141 A ASN 142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A LEU 167 A PRO 168 A HIS 172 A ASP 187 A ARG 188 A GLN 189 A THR 190 A GLN 192 681260-09-3 A HIS 41 A MET 49 A ASN 142 A GLY 143 A CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A PRO 168 A ARG 188 A GLN 189 A THR 190 A ALA 191 A GLN 192 33579-63-4 A THR 25 A THR 26 A LEU 27 A HIS 41 A VAL 42 A MET 49 A PHE 140 A LEU 141 A ASN 142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A HIS 172 A ARG 188 A GLN 189 648883-31-2 A THR 25 A THR 26 A LEU 27 A HIS 41 A MET 49 A LEU 141 A ASN 142 A GLY 143 A SER 144 A CYS 145 A HIS 164 A MET 165 A GLU 166 A PRO 168 A ARG 188 A GLN 189 A THR 190 A GLN 192 143572-73-0 A THR 24 A THR 25 A THR 26 A LEU 27 A HIS 41 A MET 49 A PRO 168 A ARG 188 A GLN 189 A THR 191 A ASN 142 A GLY 143 A CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A PHE 181 A ASP 187 A ARG 188 A GLN 189 159334-35-7 A HIS 41 A MET 49 A PHE 140 A LEU 141 A ASN 142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A PRO 168 A HIS 172 A GLN 189 A THR 190 A ALA 191 A GLN 192 184885-91-4 A THR 25 A THR 26 A LEU 27 A HIS 41 A CYS 44 A THR 45 A SER 46 A MET 49 A PHE 140 A LEU 141 A ASN 142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A HIS 172 A GLN 189 133883-22-4 A THR 25 A THR 26 A LEU 27 A MET 49 A PHE 140 A LEU 141 A ASN 142 A GLY 143 A SER 144 A CYS 145 A HIS 163 A HIS 164 A MET 165 A GLU 166 A LEU 167 A PRO 168 A HIS 172 A ARG 188 A GLN 189 A THR 190 A ALA 191 A GLN 192	-		
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