

# Phyre<sup>2</sup>

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Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	d1te5a_	Alignment		100.0	60	<b>Fold:</b> Ntn hydrolase-like <b>Superfamily:</b> N-terminal nucleophile aminohydrolases (Ntn hydrolases) <b>Family:</b> Class II glutamine amidotransferases
2	c3mdnD_	Alignment		100.0	21	<b>PDB header:</b> transferase <b>Chain:</b> D: <b>PDB Molecule:</b> glutamine aminotransferase class-ii domain protein; <b>PDBTitle:</b> structure of glutamine aminotransferase class-ii domain protein2 (spo2029) from silicibacter pomeroyi
3	d1ecfa2	Alignment		100.0	22	<b>Fold:</b> Ntn hydrolase-like <b>Superfamily:</b> N-terminal nucleophile aminohydrolases (Ntn hydrolases) <b>Family:</b> Class II glutamine amidotransferases
4	c1ecjB_	Alignment		100.0	23	<b>PDB header:</b> transferase <b>Chain:</b> B: <b>PDB Molecule:</b> glutamine phosphoribosylpyrophosphate <b>PDBTitle:</b> escherichia coli glutamine phosphoribosylpyrophosphate2 (prpp) amidotransferase complexed with 2 amp per tetramer
5	d1gph12	Alignment		100.0	20	<b>Fold:</b> Ntn hydrolase-like <b>Superfamily:</b> N-terminal nucleophile aminohydrolases (Ntn hydrolases) <b>Family:</b> Class II glutamine amidotransferases
6	c1gph1_	Alignment		100.0	21	<b>PDB header:</b> transferase(glutamine amidotransferase) <b>Chain:</b> 1: <b>PDB Molecule:</b> glutamine phosphoribosyl-pyrophosphate amidotransferase; <b>PDBTitle:</b> structure of the allosteric regulatory enzyme of purine biosynthesis
7	d1xffa_	Alignment		100.0	21	<b>Fold:</b> Ntn hydrolase-like <b>Superfamily:</b> N-terminal nucleophile aminohydrolases (Ntn hydrolases) <b>Family:</b> Class II glutamine amidotransferases
8	c1jxaA_	Alignment		100.0	20	<b>PDB header:</b> transferase <b>Chain:</b> A: <b>PDB Molecule:</b> glucosamine 6-phosphate synthase; <b>PDBTitle:</b> glucosamine 6-phosphate synthase with glucose 6-phosphate
9	c1ct9D_	Alignment		99.9	17	<b>PDB header:</b> ligase <b>Chain:</b> D: <b>PDB Molecule:</b> asparagine synthetase b; <b>PDBTitle:</b> crystal structure of asparagine synthetase b from2 escherichia coli
10	d1ofda3	Alignment		99.9	18	<b>Fold:</b> Ntn hydrolase-like <b>Superfamily:</b> N-terminal nucleophile aminohydrolases (Ntn hydrolases) <b>Family:</b> Class II glutamine amidotransferases
11	d1ct9a2	Alignment		99.8	16	<b>Fold:</b> Ntn hydrolase-like <b>Superfamily:</b> N-terminal nucleophile aminohydrolases (Ntn hydrolases) <b>Family:</b> Class II glutamine amidotransferases

12	<a href="#">d1ea0a3</a>			99.8	17	<b>Fold:</b> Ntn hydrolase-like <b>Superfamily:</b> N-terminal nucleophile aminohydrolases (Ntn hydrolases) <b>Family:</b> Class II glutamine amidotransferases
13	<a href="#">d1jgta2</a>			99.7	17	<b>Fold:</b> Ntn hydrolase-like <b>Superfamily:</b> N-terminal nucleophile aminohydrolases (Ntn hydrolases) <b>Family:</b> Class II glutamine amidotransferases
14	<a href="#">c1mlzB</a>			99.6	16	<b>PDB header:</b> hydrolase <b>Chain:</b> B; <b>PDB Molecule:</b> beta-lactam synthetase; <b>PDBTitle:</b> beta-lactam synthetase apo enzyme
15	<a href="#">c2vdcF</a>			99.5	21	<b>PDB header:</b> oxidoreductase <b>Chain:</b> F; <b>PDB Molecule:</b> glutamate synthase [nadph] large chain; <b>PDBTitle:</b> the 9.5 a resolution structure of glutamate synthase from2 cryo-electron microscopy and its oligomerization behavior3 in solution: functional implications.
16	<a href="#">c1lm1A</a>			99.5	20	<b>PDB header:</b> oxidoreductase <b>Chain:</b> A; <b>PDB Molecule:</b> ferredoxin-dependent glutamate synthase; <b>PDBTitle:</b> structural studies on the synchronization of catalytic centers in2 glutamate synthase: native enzyme
17	<a href="#">c1q15A</a>			99.4	15	<b>PDB header:</b> biosynthetic protein <b>Chain:</b> A; <b>PDB Molecule:</b> cara; <b>PDBTitle:</b> carbapenam synthetase
18	<a href="#">d1q15a2</a>			99.3	14	<b>Fold:</b> Ntn hydrolase-like <b>Superfamily:</b> N-terminal nucleophile aminohydrolases (Ntn hydrolases) <b>Family:</b> Class II glutamine amidotransferases
19	<a href="#">c2rprA</a>			33.4	13	<b>PDB header:</b> metal binding protein <b>Chain:</b> A; <b>PDB Molecule:</b> flywch-type zinc finger-containing protein 1; <b>PDBTitle:</b> solution structure of the fifth flywch domain of flywch-type2 zinc finger-containing protein 1
20	<a href="#">c2oqbA</a>			26.4	32	<b>PDB header:</b> transferase, gene regulation <b>Chain:</b> A; <b>PDB Molecule:</b> histone-arginine methyltransferase carm1; <b>PDBTitle:</b> crystal structure of the n-terminal domain of coactivator-associated2 methyltransferase 1 (carm1)
21	<a href="#">c2jraB</a>		not modelled	17.6	21	<b>PDB header:</b> structural genomics, unknown function <b>Chain:</b> B; <b>PDB Molecule:</b> protein rpa2121; <b>PDBTitle:</b> a novel domain-swapped solution nmr structure of protein rpa2121 from2 rhodopseudomonas palustris. northeast structural genomics target rpt6
22	<a href="#">d2ot2a1</a>		not modelled	15.5	19	<b>Fold:</b> OB-fold <b>Superfamily:</b> HupF/HypC-like <b>Family:</b> HupF/HypC-like
23	<a href="#">c3pubA</a>		not modelled	14.1	22	<b>PDB header:</b> unknown function <b>Chain:</b> A; <b>PDB Molecule:</b> 30kda protein; <b>PDBTitle:</b> crystal structure of the bombyx mori low molecular weight lipoprotein2 7 (bmlp7)
24	<a href="#">c2je2A</a>		not modelled	13.3	5	<b>PDB header:</b> metal binding protein <b>Chain:</b> A; <b>PDB Molecule:</b> cytochrome p460; <b>PDBTitle:</b> cytochrome p460 from nitrosomonas europaea - probable2 nonphysiological oxidized form
25	<a href="#">d2gu2a1</a>		not modelled	11.8	19	<b>Fold:</b> Phosphorylase/hydrolase-like <b>Superfamily:</b> Zn-dependent exopeptidases <b>Family:</b> Aste/AspA-like
26	<a href="#">d1qvpa</a>		not modelled	11.2	33	<b>Fold:</b> SH3-like barrel <b>Superfamily:</b> C-terminal domain of transcriptional repressors <b>Family:</b> FeoA-like
27	<a href="#">c3nh8A</a>		not modelled	11.0	29	<b>PDB header:</b> hydrolase <b>Chain:</b> A; <b>PDB Molecule:</b> aspartoacylase-2; <b>PDBTitle:</b> crystal structure of murine aminoacylase 3 in complex with n-acetyl-s-2,1,2-dichlorovinyl-l-cysteine
28	<a href="#">c3mlhA</a>		not modelled	10.8	35	<b>PDB header:</b> viral protein <b>Chain:</b> A; <b>PDB Molecule:</b> hemagglutinin; <b>PDBTitle:</b> crystal structure of the 2009 h1n1 influenza virus hemagglutinin2 receptor-binding domain

29	<a href="#">d2i3ca1</a>	 Alignment	not modelled	10.8	24	<b>Fold:</b> Phosphorylase/hydrolase-like <b>Superfamily:</b> Zn-dependent exopeptidases <b>Family:</b> Aste/AspA-like
30	<a href="#">d1toga_</a>	 Alignment	not modelled	10.8	13	<b>Fold:</b> Cytochrome b5-like heme/steroid binding domain <b>Superfamily:</b> Cytochrome b5-like heme/steroid binding domain <b>Family:</b> Steroid-binding domain
31	<a href="#">c1y8aA_</a>	 Alignment	not modelled	10.5	15	<b>PDB header:</b> structural genomics, unknown function <b>Chain:</b> A: <b>PDB Molecule:</b> hypothetical protein af1437; <b>PDBTitle:</b> structure of gene product af1437 from archaeoglobus fulgidus
32	<a href="#">d2z1ca1</a>	 Alignment	not modelled	10.1	27	<b>Fold:</b> OB-fold <b>Superfamily:</b> HupF/HypC-like <b>Family:</b> HupF/HypC-like
33	<a href="#">d2visc_</a>	 Alignment	not modelled	9.9	20	<b>Fold:</b> Viral protein domain <b>Superfamily:</b> Viral protein domain <b>Family:</b> Influenza hemagglutinin headpiece
34	<a href="#">c2hc8A_</a>	 Alignment	not modelled	9.3	17	<b>PDB header:</b> transport protein <b>Chain:</b> A: <b>PDB Molecule:</b> cation-transporting atpase, p-type; <b>PDBTitle:</b> structure of the a. fulgidus copa a-domain
35	<a href="#">c3hshA_</a>	 Alignment	not modelled	8.7	13	<b>PDB header:</b> protein binding <b>Chain:</b> A: <b>PDB Molecule:</b> collagen alpha-1(xviii) chain; <b>PDBTitle:</b> crystal structure of human collagen xviii trimerization domain2 (tetragonal crystal form)
36	<a href="#">c3bb01_</a>	 Alignment	not modelled	8.5	25	<b>PDB header:</b> ribosome <b>Chain:</b> 1: <b>PDB Molecule:</b> ribosomal protein l31; <b>PDBTitle:</b> homology model for the spinach chloroplast 50s subunit2 fitted to 9.4a cryo-em map of the 70s chlororibosome
37	<a href="#">c3d3rA_</a>	 Alignment	not modelled	8.3	22	<b>PDB header:</b> chaperone <b>Chain:</b> A: <b>PDB Molecule:</b> hydrogenase assembly chaperone hycp/hupf; <b>PDBTitle:</b> crystal structure of the hydrogenase assembly chaperone hycp/hupf2 family protein from shewanella oneidensis mr-1
38	<a href="#">d3d3ra1</a>	 Alignment	not modelled	8.1	20	<b>Fold:</b> OB-fold <b>Superfamily:</b> HupF/HypC-like <b>Family:</b> HupF/HypC-like
39	<a href="#">d1rvxa_</a>	 Alignment	not modelled	7.1	25	<b>Fold:</b> Viral protein domain <b>Superfamily:</b> Viral protein domain <b>Family:</b> Influenza hemagglutinin headpiece
40	<a href="#">d2viua_</a>	 Alignment	not modelled	7.1	20	<b>Fold:</b> Viral protein domain <b>Superfamily:</b> Viral protein domain <b>Family:</b> Influenza hemagglutinin headpiece
41	<a href="#">d1mqma_</a>	 Alignment	not modelled	6.9	20	<b>Fold:</b> Viral protein domain <b>Superfamily:</b> Viral protein domain <b>Family:</b> Influenza hemagglutinin headpiece
42	<a href="#">d1mjta_</a>	 Alignment	not modelled	6.8	14	<b>Fold:</b> Nitric oxide (NO) synthase oxygenase domain <b>Superfamily:</b> Nitric oxide (NO) synthase oxygenase domain <b>Family:</b> Nitric oxide (NO) synthase oxygenase domain
43	<a href="#">c3eykA_</a>	 Alignment	not modelled	6.8	25	<b>PDB header:</b> viral protein <b>Chain:</b> A: <b>PDB Molecule:</b> hemagglutinin ha1 chain; <b>PDBTitle:</b> structure of influenza haemagglutinin in complex with an2 inhibitor of membrane fusion
44	<a href="#">c2aukA_</a>	 Alignment	not modelled	6.8	31	<b>PDB header:</b> transferase <b>Chain:</b> A: <b>PDB Molecule:</b> dna-directed rna polymerase beta' chain; <b>PDBTitle:</b> structure of e. coli rna polymerase beta' g/g' insert
45	<a href="#">c2j034_</a>	 Alignment	not modelled	6.7	43	<b>PDB header:</b> ribosome <b>Chain:</b> 4: <b>PDB Molecule:</b> 50s ribosomal protein l31; <b>PDBTitle:</b> structure of the thermus thermophilus 70s ribosome2 complexed with mrna, tRNA and paromomycin (part 4 of 4).3 this file contains the 50s subunit from molecule ii.
46	<a href="#">d2j0141</a>	 Alignment	not modelled	6.7	43	<b>Fold:</b> L28p-like <b>Superfamily:</b> L28p-like <b>Family:</b> Ribosomal protein L31p
47	<a href="#">d1jsda_</a>	 Alignment	not modelled	6.7	20	<b>Fold:</b> Viral protein domain <b>Superfamily:</b> Viral protein domain <b>Family:</b> Influenza hemagglutinin headpiece
48	<a href="#">d1rv0h_</a>	 Alignment	not modelled	6.6	30	<b>Fold:</b> Viral protein domain <b>Superfamily:</b> Viral protein domain <b>Family:</b> Influenza hemagglutinin headpiece
49	<a href="#">d1rd8a_</a>	 Alignment	not modelled	6.5	25	<b>Fold:</b> Viral protein domain <b>Superfamily:</b> Viral protein domain <b>Family:</b> Influenza hemagglutinin headpiece
50	<a href="#">c3qqiB_</a>	 Alignment	not modelled	6.4	15	<b>PDB header:</b> viral protein <b>Chain:</b> B: <b>PDB Molecule:</b> hemagglutinin; <b>PDBTitle:</b> crystal structure of the ha1 receptor binding domain of h22 hemagglutinin
51	<a href="#">d1xl7a2</a>	 Alignment	not modelled	6.3	13	<b>Fold:</b> CoA-dependent acyltransferases <b>Superfamily:</b> CoA-dependent acyltransferases <b>Family:</b> Choline/Carnitine O-acyltransferase
52	<a href="#">d1pj5a3</a>	 Alignment	not modelled	6.2	21	<b>Fold:</b> FAD-linked reductases, C-terminal domain <b>Superfamily:</b> FAD-linked reductases, C-terminal domain <b>Family:</b> L-aminoacid/polyamine oxidase
53	<a href="#">d2ibxa1</a>	 Alignment	not modelled	6.1	20	<b>Fold:</b> Viral protein domain <b>Superfamily:</b> Viral protein domain <b>Family:</b> Influenza hemagglutinin headpiece
54	<a href="#">d1jsma_</a>	 Alignment	not modelled	6.0	20	<b>Fold:</b> Viral protein domain <b>Superfamily:</b> Viral protein domain <b>Family:</b> Influenza hemagglutinin headpiece
55	<a href="#">d1tlua2</a>	 Alignment	not modelled	6.0	19	<b>Fold:</b> CoA-dependent acyltransferases <b>Superfamily:</b> CoA-dependent acyltransferases <b>Family:</b> Choline/Carnitine O-acyltransferase

56	<a href="#">c2q82A</a>	Alignment	not modelled	6.0	30	<b>PDB header:</b> structural protein <b>Chain:</b> A: <b>PDB Molecule:</b> core protein p7; <b>PDBTitle:</b> crystal structure of core protein p7 from pseudomonas phage2 phi12. northeast structural genomics target oc1
57	<a href="#">d1soxa2</a>	Alignment	not modelled	5.9	6	<b>Fold:</b> Cytochrome b5-like heme/steroid binding domain <b>Superfamily:</b> Cytochrome b5-like heme/steroid binding domain <b>Family:</b> Cytochrome b5
58	<a href="#">d3b55a1</a>	Alignment	not modelled	5.8	29	<b>Fold:</b> EreA/ChaN-like <b>Superfamily:</b> EreA/ChaN-like <b>Family:</b> EreA-like
59	<a href="#">d1vs6z1</a>	Alignment	not modelled	5.7	43	<b>Fold:</b> L28p-like <b>Superfamily:</b> L28p-like <b>Family:</b> Ribosomal protein L31p
60	<a href="#">d1ti8a1</a>	Alignment	not modelled	5.7	20	<b>Fold:</b> Viral protein domain <b>Superfamily:</b> Viral protein domain <b>Family:</b> Influenza hemagglutinin headpiece
61	<a href="#">d1gmua1</a>	Alignment	not modelled	5.7	19	<b>Fold:</b> Urease metallochaperone UreE, N-terminal domain <b>Superfamily:</b> Urease metallochaperone UreE, N-terminal domain <b>Family:</b> Urease metallochaperone UreE, N-terminal domain
62	<a href="#">c2b664</a>	Alignment	not modelled	5.6	43	<b>PDB header:</b> ribosome <b>Chain:</b> 4: <b>PDB Molecule:</b> 50s ribosomal protein I31; <b>PDBTitle:</b> 50s ribosomal subunit from a crystal structure of release factor rf1,2 trnas and mrna bound to the ribosome. this file contains the 50s3 subunit from a crystal structure of release factor rf1, trnas and4 mrna bound to the ribosome and is described in remark 400
63	<a href="#">d1nm8a2</a>	Alignment	not modelled	5.6	17	<b>Fold:</b> CoA-dependent acyltransferases <b>Superfamily:</b> CoA-dependent acyltransferases <b>Family:</b> Choline/Carnitine O-acyltransferase
64	<a href="#">c2radB</a>	Alignment	not modelled	5.6	29	<b>PDB header:</b> biosynthetic protein <b>Chain:</b> B: <b>PDB Molecule:</b> succinoglycan biosynthesis protein; <b>PDBTitle:</b> crystal structure of the succinoglycan biosynthesis2 protein. northeast structural genomics consortium target3 bcr135
65	<a href="#">c2a45L</a>	Alignment	not modelled	5.6	13	<b>PDB header:</b> hydrolase/hydrolase inhibitor <b>Chain:</b> L: <b>PDB Molecule:</b> fibrinogen gamma chain; <b>PDBTitle:</b> crystal structure of the complex between thrombin and the central "e"2 region of fibrin
66	<a href="#">c2rfuA</a>	Alignment	not modelled	5.6	10	<b>PDB header:</b> viral protein <b>Chain:</b> A: <b>PDB Molecule:</b> influenza b hemagglutinin (ha); <b>PDBTitle:</b> crystal structure of influenza b virus hemagglutinin in complex with2 ltc receptor analog
67	<a href="#">c2kijA</a>	Alignment	not modelled	5.5	13	<b>PDB header:</b> hydrolase <b>Chain:</b> A: <b>PDB Molecule:</b> copper-transporting atpase 1; <b>PDBTitle:</b> solution structure of the actuator domain of the copper-2 transporting atpase atp7a
68	<a href="#">c1nh1A</a>	Alignment	not modelled	5.3	23	<b>PDB header:</b> avirulence protein <b>Chain:</b> A: <b>PDB Molecule:</b> avirulence b protein; <b>PDBTitle:</b> crystal structure of the type iii effector avrb from2 pseudomonas syringae.
69	<a href="#">d1nh1a</a>	Alignment	not modelled	5.3	23	<b>Fold:</b> Antivirulence factor <b>Superfamily:</b> Antivirulence factor <b>Family:</b> Antivirulence factor
70	<a href="#">d1m7va</a>	Alignment	not modelled	5.2	26	<b>Fold:</b> Nitric oxide (NO) synthase oxygenase domain <b>Superfamily:</b> Nitric oxide (NO) synthase oxygenase domain <b>Family:</b> Nitric oxide (NO) synthase oxygenase domain
71	<a href="#">d1ewqa3</a>	Alignment	not modelled	5.2	50	<b>Fold:</b> Ribonuclease H-like motif <b>Superfamily:</b> DNA repair protein MutS, domain II <b>Family:</b> DNA repair protein MutS, domain II
72	<a href="#">d1nosa</a>	Alignment	not modelled	5.2	24	<b>Fold:</b> Nitric oxide (NO) synthase oxygenase domain <b>Superfamily:</b> Nitric oxide (NO) synthase oxygenase domain <b>Family:</b> Nitric oxide (NO) synthase oxygenase domain