



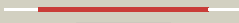






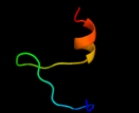

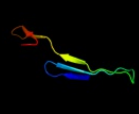







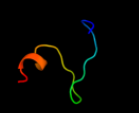



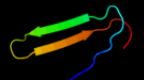







# Phyre2

Email	l.a.kelley@imperial.ac.uk
Description	P27838
Date	Thu Jan 5 11:44:15 GMT 2012
Unique Job ID	3c422c0c60364a98

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	<a href="#">d1ew4a_</a>	 Alignment		100.0	100	<b>Fold:</b> N domain of copper amine oxidase-like <b>Superfamily:</b> Frataxin/Nqo15-like <b>Family:</b> Frataxin-like
2	<a href="#">d1ekga_</a>	 Alignment		100.0	25	<b>Fold:</b> N domain of copper amine oxidase-like <b>Superfamily:</b> Frataxin/Nqo15-like <b>Family:</b> Frataxin-like
3	<a href="#">d2ga5a1</a>	 Alignment		100.0	27	<b>Fold:</b> N domain of copper amine oxidase-like <b>Superfamily:</b> Frataxin/Nqo15-like <b>Family:</b> Frataxin-like
4	<a href="#">d2fq1a1</a>	 Alignment		100.0	28	<b>Fold:</b> N domain of copper amine oxidase-like <b>Superfamily:</b> Frataxin/Nqo15-like <b>Family:</b> Frataxin-like
5	<a href="#">d1xkpb1</a>	 Alignment		61.4	11	<b>Fold:</b> Secretion chaperone-like <b>Superfamily:</b> Type III secretory system chaperone-like <b>Family:</b> Type III secretory system chaperone
6	<a href="#">c1q40C_</a>	 Alignment		32.2	43	<b>PDB header:</b> translation <b>Chain:</b> C: <b>PDB Molecule:</b> mrna transport regulator mtr2; <b>PDBTitle:</b> crystal structure of the c. albicans mtr2-mex67 m domain complex
7	<a href="#">d1mbya_</a>	 Alignment		29.1	13	<b>Fold:</b> Polo-box domain <b>Superfamily:</b> Polo-box domain <b>Family:</b> Swapped Polo-box domain
8	<a href="#">d2ebsa1</a>	 Alignment		23.9	24	<b>Fold:</b> 7-bladed beta-propeller <b>Superfamily:</b> Oligoxyloglucan reducing end-specific cellobiohydrolase <b>Family:</b> Oligoxyloglucan reducing end-specific cellobiohydrolase
9	<a href="#">d2ogqa2</a>	 Alignment		22.1	26	<b>Fold:</b> Polo-box domain <b>Superfamily:</b> Polo-box domain <b>Family:</b> Polo-box duplicated region
10	<a href="#">d3e11a1</a>	 Alignment		21.0	15	<b>Fold:</b> Zincin-like <b>Superfamily:</b> Metalloproteases ("zincins"), catalytic domain <b>Family:</b> TTHA0227-like
11	<a href="#">d1q42a_</a>	 Alignment		20.4	43	<b>Fold:</b> Cystatin-like <b>Superfamily:</b> NTF2-like <b>Family:</b> NTF2-like

12	<a href="#">c1umwB_</a>	Alignment		19.5	22	<b>PDB header:</b> kinase <b>Chain:</b> B: <b>PDB Molecule:</b> serine/threonine-protein kinase plk; <b>PDBTitle:</b> structure of a human plk1 polo-box domain/phosphopeptide2 complex
13	<a href="#">c2bsgA_</a>	Alignment		18.8	20	<b>PDB header:</b> viral protein <b>Chain:</b> A: <b>PDB Molecule:</b> fibrinin; <b>PDBTitle:</b> the modeled structure of fibrinin (gpwac) of bacteriophage2 t4 based on cryo-em reconstruction of the extended tail of3 bacteriophage t4
14	<a href="#">c2v5iA_</a>	Alignment		18.1	24	<b>PDB header:</b> viral protein <b>Chain:</b> A: <b>PDB Molecule:</b> salmonella typhimurium db7155 bacteriophage det7 <b>PDBTitle:</b> structure of the receptor-binding protein of bacteriophage2 det7: a podoviral tailspike in a myovirus
15	<a href="#">d2azeb1</a>	Alignment		14.4	23	<b>Fold:</b> E2F-DP heterodimerization region <b>Superfamily:</b> E2F-DP heterodimerization region <b>Family:</b> E2F dimerization segment
16	<a href="#">c3aabA_</a>	Alignment		12.9	32	<b>PDB header:</b> chaperone <b>Chain:</b> A: <b>PDB Molecule:</b> putative uncharacterized protein st1653; <b>PDBTitle:</b> small heat shock protein hsp14.0 with the mutations of i120f and i122f2 in the form i crystal
17	<a href="#">d2h50a1</a>	Alignment		12.7	26	<b>Fold:</b> HSP20-like chaperones <b>Superfamily:</b> HSP20-like chaperones <b>Family:</b> HSP20
18	<a href="#">c2v1lA_</a>	Alignment		12.4	19	<b>PDB header:</b> unknown function <b>Chain:</b> A: <b>PDB Molecule:</b> hypothetical protein; <b>PDBTitle:</b> structure of the conserved hypothetical protein vc1805 from2 pathogenicity island vpi-2 of vibrio cholerae o1 biovar3 eltor str. n16961 shares structural homology with the4 human p32 protein
19	<a href="#">d1gmea_</a>	Alignment		11.6	26	<b>Fold:</b> HSP20-like chaperones <b>Superfamily:</b> HSP20-like chaperones <b>Family:</b> HSP20
20	<a href="#">c3nrlB_</a>	Alignment		11.6	50	<b>PDB header:</b> structural genomics, unknown function <b>Chain:</b> B: <b>PDB Molecule:</b> uncharacterized protein rumgna_01417; <b>PDBTitle:</b> crystal structure of protein rumgna_01417 from ruminococcus gnavus,2 northeast structural genomics consortium target ugr76
21	<a href="#">c2qlvB_</a>	Alignment	not modelled	11.3	16	<b>PDB header:</b> transferase/protein binding <b>Chain:</b> B: <b>PDB Molecule:</b> protein sip2; <b>PDBTitle:</b> crystal structure of the heterotrimer core of the s.2 cerevisiae ampk homolog snf1
22	<a href="#">c3nmeA_</a>	Alignment	not modelled	11.3	16	<b>PDB header:</b> hydrolase <b>Chain:</b> A: <b>PDB Molecule:</b> sex4 glucan phosphatase; <b>PDBTitle:</b> structure of a plant phosphatase
23	<a href="#">c3btpA_</a>	Alignment	not modelled	11.1	33	<b>PDB header:</b> dna binding protein, chaperone <b>Chain:</b> A: <b>PDB Molecule:</b> single-strand dna-binding protein; <b>PDBTitle:</b> crystal structure of agrobacterium tumefaciens vire2 in complex with2 its chaperone vire1: a novel fold and implications for dna binding
24	<a href="#">d2qlvb1</a>	Alignment	not modelled	11.0	16	<b>Fold:</b> Immunoglobulin-like beta-sandwich <b>Superfamily:</b> E set domains <b>Family:</b> AMPK-beta glycogen binding domain-like
25	<a href="#">c3igmA_</a>	Alignment	not modelled	11.0	10	<b>PDB header:</b> transcription/dna <b>Chain:</b> A: <b>PDB Molecule:</b> pf14_0633 protein; <b>PDBTitle:</b> a 2.2a crystal structure of the ap2 domain of pf14_0633 from p.2 falciparum, bound as a domain-swapped dimer to its cognate dna
26	<a href="#">d1gmeb_</a>	Alignment	not modelled	10.6	26	<b>Fold:</b> HSP20-like chaperones <b>Superfamily:</b> HSP20-like chaperones <b>Family:</b> HSP20
27	<a href="#">d2f15a1</a>	Alignment	not modelled	10.2	18	<b>Fold:</b> Immunoglobulin-like beta-sandwich <b>Superfamily:</b> E set domains <b>Family:</b> AMPK-beta glycogen binding domain-like
28	<a href="#">d2je8a2</a>	Alignment	not modelled	9.5	6	<b>Fold:</b> Immunoglobulin-like beta-sandwich <b>Superfamily:</b> beta-Galactosidase/glucuronidase domain <b>Family:</b> beta-Galactosidase/glucuronidase domain

29	<a href="#">d1yuaa2</a>	Alignment	not modelled	8.9	18	<b>Fold:</b> Rubredoxin-like <b>Superfamily:</b> Zinc beta-ribbon <b>Family:</b> Prokaryotic DNA topoisomerase I, a C-terminal fragment
30	<a href="#">d1z0mb1</a>	Alignment	not modelled	8.7	21	<b>Fold:</b> Immunoglobulin-like beta-sandwich <b>Superfamily:</b> E set domains <b>Family:</b> AMPK-beta glycogen binding domain-like
31	<a href="#">c2euzA</a>	Alignment	not modelled	8.6	33	<b>PDB header:</b> cell cycle/dna <b>Chain:</b> A: <b>PDB Molecule:</b> ndt80 protein; <b>PDBTitle:</b> structure of a ndt80-dna complex (mse mutant mc5t)
32	<a href="#">d1mnna</a>	Alignment	not modelled	8.6	33	<b>Fold:</b> Common fold of diphtheria toxin/transcription factors/cytochrome f <b>Superfamily:</b> p53-like transcription factors <b>Family:</b> DNA-binding domain from NDT80
33	<a href="#">c3glaA</a>	Alignment	not modelled	8.3	26	<b>PDB header:</b> chaperone <b>Chain:</b> A: <b>PDB Molecule:</b> low molecular weight heat shock protein; <b>PDBTitle:</b> crystal structure of the hspa from xanthomonas axonopodis
34	<a href="#">c1yuaA</a>	Alignment	not modelled	7.8	18	<b>PDB header:</b> dna binding protein <b>Chain:</b> A: <b>PDB Molecule:</b> topoisomerase i; <b>PDBTitle:</b> c-terminal domain of escherichia coli topoisomerase i
35	<a href="#">d1z0na1</a>	Alignment	not modelled	7.6	18	<b>Fold:</b> Immunoglobulin-like beta-sandwich <b>Superfamily:</b> E set domains <b>Family:</b> AMPK-beta glycogen binding domain-like
36	<a href="#">c2yz0A</a>	Alignment	not modelled	7.5	10	<b>PDB header:</b> transferase <b>Chain:</b> A: <b>PDB Molecule:</b> serine/threonine-protein kinase gc2; <b>PDBTitle:</b> solution structure of rwd/gi domain of saccharomyces2 cerevisiae gc2
37	<a href="#">c2vecA</a>	Alignment	not modelled	7.4	19	<b>PDB header:</b> cytosolic protein <b>Chain:</b> A: <b>PDB Molecule:</b> pirin-like protein yhak; <b>PDBTitle:</b> the crystal structure of the protein yhak from escherichia2 coli
38	<a href="#">d1veha</a>	Alignment	not modelled	6.8	18	<b>Fold:</b> Alpha-lytic protease prodomain-like <b>Superfamily:</b> Fe-S cluster assembly (FSCA) domain-like <b>Family:</b> NifU C-terminal domain-like
39	<a href="#">d1xhja</a>	Alignment	not modelled	6.7	8	<b>Fold:</b> Alpha-lytic protease prodomain-like <b>Superfamily:</b> Fe-S cluster assembly (FSCA) domain-like <b>Family:</b> NifU C-terminal domain-like
40	<a href="#">c2pmzQ</a>	Alignment	not modelled	6.1	28	<b>PDB header:</b> translation, transferase <b>Chain:</b> Q: <b>PDB Molecule:</b> dna-directed rna polymerase subunit a; <b>PDBTitle:</b> archaeal rna polymerase from sulfolobus solfataricus
41	<a href="#">d2p3ya1</a>	Alignment	not modelled	6.1	19	<b>Fold:</b> VPA0735-like <b>Superfamily:</b> VPA0735-like <b>Family:</b> VPA0735-like
42	<a href="#">c2p3yA</a>	Alignment	not modelled	6.1	19	<b>PDB header:</b> structural genomics, unknown function <b>Chain:</b> A: <b>PDB Molecule:</b> hypothetical protein vpa0735; <b>PDBTitle:</b> crystal structure of vpa0735 from vibrio parahaemolyticus. northeast2 structural genomics target vpr109
43	<a href="#">c3q9qB</a>	Alignment	not modelled	6.0	16	<b>PDB header:</b> chaperone <b>Chain:</b> B: <b>PDB Molecule:</b> heat shock protein beta-1; <b>PDBTitle:</b> hspb1 fragment second crystal form
44	<a href="#">d1shsa</a>	Alignment	not modelled	6.0	16	<b>Fold:</b> HSP20-like chaperones <b>Superfamily:</b> HSP20-like chaperones <b>Family:</b> HSP20
45	<a href="#">c1shsD</a>	Alignment	not modelled	6.0	16	<b>PDB header:</b> heat shock protein <b>Chain:</b> D: <b>PDB Molecule:</b> small heat shock protein; <b>PDBTitle:</b> small heat shock protein from methanococcus jannaschii
46	<a href="#">c3n23E</a>	Alignment	not modelled	5.6	17	<b>PDB header:</b> hydrolase <b>Chain:</b> E: <b>PDB Molecule:</b> na+/k+ atpase gamma subunit transcript variant a; <b>PDBTitle:</b> crystal structure of the high affinity complex between ouabain and the2 e2p form of the sodium-potassium pump
47	<a href="#">c2wj5A</a>	Alignment	not modelled	5.5	21	<b>PDB header:</b> chaperone <b>Chain:</b> A: <b>PDB Molecule:</b> heat shock protein beta-6; <b>PDBTitle:</b> rat alpha crystallin domain
48	<a href="#">c2k38A</a>	Alignment	not modelled	5.5	40	<b>PDB header:</b> antimicrobial protein <b>Chain:</b> A: <b>PDB Molecule:</b> cupiennin-1a; <b>PDBTitle:</b> cupiennin 1a, nmr, minimized average structure
49	<a href="#">d1j1la</a>	Alignment	not modelled	5.4	20	<b>Fold:</b> Double-stranded beta-helix <b>Superfamily:</b> RmlC-like cupins <b>Family:</b> Pirin-like
50	<a href="#">c3k6qB</a>	Alignment	not modelled	5.4	7	<b>PDB header:</b> ligand binding protein <b>Chain:</b> B: <b>PDB Molecule:</b> putative ligand binding protein; <b>PDBTitle:</b> crystal structure of an antitoxin part of a putative toxin/antitoxin2 system (swol_0700) from syntrophomonas wolfei subsp. wolfei at 1.80 a3 resolution
51	<a href="#">d1ro0a</a>	Alignment	not modelled	5.3	36	<b>Fold:</b> Prim-pol domain <b>Superfamily:</b> Prim-pol domain <b>Family:</b> Bifunctional DNA primase/polymerase N-terminal domain
52	<a href="#">c2x6vB</a>	Alignment	not modelled	5.2	7	<b>PDB header:</b> transcription/dna <b>Chain:</b> B: <b>PDB Molecule:</b> t-box transcription factor tbx5; <b>PDBTitle:</b> crystal structure of human tbx5 in the dna-bound and dna-2 free form
53	<a href="#">d1p5ta</a>	Alignment	not modelled	5.1	21	<b>Fold:</b> PH domain-like barrel <b>Superfamily:</b> PH domain-like <b>Family:</b> Phosphotyrosine-binding domain (PTB)