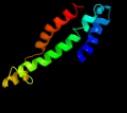
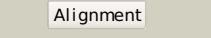
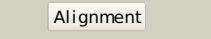


# Phyre<sup>2</sup>

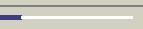
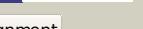
Email	I.a.kelley@imperial.ac.uk
Description	P69831
Date	Thu Jan 5 12:12:12 GMT 2012
Unique Job ID	62e86fc840183265

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	<a href="#">c2nscA_</a>	 Alignment		40.8	25	<b>PDB header:</b> chaperone <b>Chain:</b> A; <b>PDB Molecule:</b> trigger factor; <b>PDBTitle:</b> structures of and interactions between domains of trigger factor from <i>thermotoga maritima</i>
2	<a href="#">d1w26a2</a>	 Alignment		35.3	20	<b>Fold:</b> Ribosome binding domain-like <b>Superfamily:</b> Trigger factor ribosome-binding domain <b>Family:</b> Trigger factor ribosome-binding domain
3	<a href="#">d1p9ya_</a>	 Alignment		34.3	20	<b>Fold:</b> Ribosome binding domain-like <b>Superfamily:</b> Trigger factor ribosome-binding domain <b>Family:</b> Trigger factor ribosome-binding domain
4	<a href="#">d1t11a2</a>	 Alignment		33.7	15	<b>Fold:</b> Ribosome binding domain-like <b>Superfamily:</b> Trigger factor ribosome-binding domain <b>Family:</b> Trigger factor ribosome-binding domain
5	<a href="#">c2d3o1_</a>	 Alignment		30.3	25	<b>PDB header:</b> ribosome <b>Chain:</b> 1; <b>PDB Molecule:</b> trigger factor; <b>PDBTitle:</b> structure of ribosome binding domain of the trigger factor2 on the 50s ribosomal subunit from <i>d. radiodurans</i>
6	<a href="#">c2yvxD_</a>	 Alignment		30.2	17	<b>PDB header:</b> transport protein <b>Chain:</b> D; <b>PDB Molecule:</b> mg2+ transporter mgtc; <b>PDBTitle:</b> crystal structure of magnesium transporter mgtc
7	<a href="#">c1t11A_</a>	 Alignment		27.4	15	<b>PDB header:</b> chaperone <b>Chain:</b> A; <b>PDB Molecule:</b> trigger factor; <b>PDBTitle:</b> trigger factor
8	<a href="#">c2qgoA_</a>	 Alignment		25.7	13	<b>PDB header:</b> biosynthetic protein <b>Chain:</b> A; <b>PDB Molecule:</b> putative fe-s biosynthesis protein; <b>PDBTitle:</b> crystal structure of a putative fe-s biosynthesis protein from <i>lactobacillus acidophilus</i>
9	<a href="#">d1osda_</a>	 Alignment		21.7	21	<b>Fold:</b> Ferrodoxin-like <b>Superfamily:</b> HMA, heavy metal-associated domain <b>Family:</b> HMA, heavy metal-associated domain
10	<a href="#">d1cpza_</a>	 Alignment		20.6	21	<b>Fold:</b> Ferrodoxin-like <b>Superfamily:</b> HMA, heavy metal-associated domain <b>Family:</b> HMA, heavy metal-associated domain
11	<a href="#">c2k2pA_</a>	 Alignment		18.7	21	<b>PDB header:</b> structural genomics, unknown function <b>Chain:</b> A; <b>PDB Molecule:</b> uncharacterized protein atu1203; <b>PDBTitle:</b> solution nmr structure of protein atu1203 from <i>agrobacterium tumefaciens</i> . northeast structural genomics consortium (nesg) target3 att10, ontario center for structural proteomics target atc1183

12	<a href="#">c1yg0A</a>			18.7	24	<b>PDB header:</b> metal transport <b>Chain:</b> A: <b>PDB Molecule:</b> cop associated protein; <b>PDBTitle:</b> solution structure of apo-copp from helicobacter pylori
13	<a href="#">d1mwza</a>			18.7	21	<b>Fold:</b> Ferredoxin-like <b>Superfamily:</b> HMA, heavy metal-associated domain <b>Family:</b> HMA, heavy metal-associated domain
14	<a href="#">c1y3kA</a>			16.7	12	<b>PDB header:</b> hydrolase <b>Chain:</b> A: <b>PDB Molecule:</b> copper-transferring atpase 1; <b>PDBTitle:</b> solution structure of the apo form of the fifth domain of2 menkes protein
15	<a href="#">c2ga7A</a>			16.3	18	<b>PDB header:</b> hydrolase <b>Chain:</b> A: <b>PDB Molecule:</b> copper-transferring atpase 1; <b>PDBTitle:</b> solution structure of the copper(i) form of the third metal-2 binding domain of atp7a protein (menkes disease protein)
16	<a href="#">d1qb2a</a>			16.2	25	<b>Fold:</b> Signal peptide-binding domain <b>Superfamily:</b> Signal peptide-binding domain <b>Family:</b> Signal peptide-binding domain
17	<a href="#">d2p2ea1</a>			15.5	19	<b>Fold:</b> HesB-like domain <b>Superfamily:</b> HesB-like domain <b>Family:</b> HesB-like domain
18	<a href="#">d1p6ta1</a>			14.0	18	<b>Fold:</b> Ferredoxin-like <b>Superfamily:</b> HMA, heavy metal-associated domain <b>Family:</b> HMA, heavy metal-associated domain
19	<a href="#">d1jw2a</a>			13.9	27	<b>Fold:</b> Open three-helical up-and-down bundle <b>Superfamily:</b> Hemolysin expression modulating protein HHA <b>Family:</b> Hemolysin expression modulating protein HHA
20	<a href="#">c1vf5R</a>			13.5	26	<b>PDB header:</b> photosynthesis <b>Chain:</b> R: <b>PDB Molecule:</b> protein petI; <b>PDBTitle:</b> crystal structure of cytochrome b6f complex from m.laminosus
21	<a href="#">c2e75E</a>		not modelled	13.5	26	<b>PDB header:</b> photosynthesis <b>Chain:</b> E: <b>PDB Molecule:</b> cytochrome b6-f complex subunit 6; <b>PDBTitle:</b> crystal structure of the cytochrome b6f complex with 2-nonyl-4-2 hydroxyquinoline n-oxide (nqno) from m.laminosus
22	<a href="#">c2e74E</a>		not modelled	13.5	26	<b>PDB header:</b> photosynthesis <b>Chain:</b> E: <b>PDB Molecule:</b> cytochrome b6-f complex subunit 6; <b>PDBTitle:</b> crystal structure of the cytochrome b6f complex from m.laminosus
23	<a href="#">c2e76E</a>		not modelled	13.5	26	<b>PDB header:</b> photosynthesis <b>Chain:</b> E: <b>PDB Molecule:</b> cytochrome b6-f complex subunit 6; <b>PDBTitle:</b> crystal structure of the cytochrome b6f complex with tridecyl-2 stigmatellin (tds) from m.laminosus
24	<a href="#">d2e74e1</a>		not modelled	13.5	26	<b>Fold:</b> Single transmembrane helix <b>Superfamily:</b> PetL subunit of the cytochrome b6f complex <b>Family:</b> PetL subunit of the cytochrome b6f complex
25	<a href="#">d1qzxa2</a>		not modelled	13.2	25	<b>Fold:</b> Signal peptide-binding domain <b>Superfamily:</b> Signal peptide-binding domain <b>Family:</b> Signal peptide-binding domain
26	<a href="#">c2ofhX</a>		not modelled	13.1	15	<b>PDB header:</b> hydrolase, membrane protein <b>Chain:</b> X: <b>PDB Molecule:</b> zinc-transferring atpase; <b>PDBTitle:</b> solution structure of the n-terminal domain of the zinc(ii) atpase2 ziaa in its apo form
27	<a href="#">c2aj1A</a>		not modelled	13.1	15	<b>PDB header:</b> hydrolase <b>Chain:</b> A: <b>PDB Molecule:</b> probable cadmium-transferring atpase; <b>PDBTitle:</b> solution structure of apocada
28	<a href="#">d2aw0a</a>		not modelled	12.6	26	<b>Fold:</b> Ferredoxin-like <b>Superfamily:</b> HMA, heavy metal-associated domain <b>Family:</b> HMA, heavy metal-associated domain
						<b>Fold:</b> Peripheral subunit-binding domain of 2-oxo acid

29	<a href="#">d1w4ha1</a>		Alignment	not modelled	12.1	19	dehydrogenase complex <b>Superfamily:</b> Peripheral subunit-binding domain of 2-oxo acid dehydrogenase complex <b>Family:</b> Peripheral subunit-binding domain of 2-oxo acid dehydrogenase complex
30	<a href="#">d1afia_</a>		Alignment	not modelled	11.7	18	<b>Fold:</b> Ferredoxin-like <b>Superfamily:</b> HMA, heavy metal-associated domain <b>Family:</b> HMA, heavy metal-associated domain
31	<a href="#">c3bdIA_</a>		Alignment	not modelled	11.2	28	<b>PDB header:</b> hydrolase <b>Chain:</b> A: <b>PDB Molecule:</b> staphylococcal nuclease domain-containing <b>PDBTitle:</b> crystal structure of a truncated human tudor-sn
32	<a href="#">d1vyva2</a>		Alignment	not modelled	11.1	29	<b>Fold:</b> P-loop containing nucleoside triphosphate hydrolases <b>Superfamily:</b> P-loop containing nucleoside triphosphate hydrolases <b>Family:</b> Nucleotide and nucleoside kinases
							<b>Fold:</b> Peripheral subunit-binding domain of 2-oxo acid dehydrogenase complex
33	<a href="#">d2cyua1</a>		Alignment	not modelled	10.8	18	<b>Superfamily:</b> Peripheral subunit-binding domain of 2-oxo acid dehydrogenase complex <b>Family:</b> Peripheral subunit-binding domain of 2-oxo acid dehydrogenase complex
34	<a href="#">d2c4ka1</a>		Alignment	not modelled	10.7	27	<b>Fold:</b> PRTase-like <b>Superfamily:</b> PRTase-like <b>Family:</b> Phosphoribosylpyrophosphate synthetase-like
35	<a href="#">c2kt2A_</a>		Alignment	not modelled	10.2	29	<b>PDB header:</b> oxidoreductase <b>Chain:</b> A: <b>PDB Molecule:</b> mercuric reductase; <b>PDBTitle:</b> structure of nmera, the n-terminal hma domain of tn501 mercuric2 reductase
36	<a href="#">d2ffha2</a>		Alignment	not modelled	9.9	29	<b>Fold:</b> Signal peptide-binding domain <b>Superfamily:</b> Signal peptide-binding domain <b>Family:</b> Signal peptide-binding domain
37	<a href="#">c2kkhA_</a>		Alignment	not modelled	9.8	21	<b>PDB header:</b> metal transport <b>Chain:</b> A: <b>PDB Molecule:</b> putative heavy metal transporter; <b>PDBTitle:</b> structure of the zinc binding domain of the atpase hma4
38	<a href="#">c1w26B_</a>		Alignment	not modelled	9.8	20	<b>PDB header:</b> chaperone <b>Chain:</b> B: <b>PDB Molecule:</b> trigger factor; <b>PDBTitle:</b> trigger factor in complex with the ribosome forms a2 molecular cradle for nascent proteins
39	<a href="#">c2iy3A_</a>		Alignment	not modelled	9.6	25	<b>PDB header:</b> rna-binding <b>Chain:</b> A: <b>PDB Molecule:</b> signal recognition particle protein ffh; <b>PDBTitle:</b> structure of the e. coli signal recognition particle2 bound to a translating ribosome
40	<a href="#">d1kvja_</a>		Alignment	not modelled	9.3	29	<b>Fold:</b> Ferredoxin-like <b>Superfamily:</b> HMA, heavy metal-associated domain <b>Family:</b> HMA, heavy metal-associated domain
41	<a href="#">d1vs6z1</a>		Alignment	not modelled	9.3	25	<b>Fold:</b> L28p-like <b>Superfamily:</b> L28p-like <b>Family:</b> Ribosomal protein L31p
42	<a href="#">c2vzkD_</a>		Alignment	not modelled	8.8	26	<b>PDB header:</b> transferase <b>Chain:</b> D: <b>PDB Molecule:</b> glutamate n-acetyltransferase 2 beta chain; <b>PDBTitle:</b> structure of the acyl-enzyme complex of an n-terminal2 nucleophile (ntn) hydrolase, oat2
43	<a href="#">c2oarA_</a>		Alignment	not modelled	8.6	18	<b>PDB header:</b> membrane protein <b>Chain:</b> A: <b>PDB Molecule:</b> large-conductance mechanosensitive channel; <b>PDBTitle:</b> mechanosensitive channel of large conductance (mscl)
44	<a href="#">d1sb6a_</a>		Alignment	not modelled	8.6	15	<b>Fold:</b> Ferredoxin-like <b>Superfamily:</b> HMA, heavy metal-associated domain <b>Family:</b> HMA, heavy metal-associated domain
45	<a href="#">d1s6ua_</a>		Alignment	not modelled	8.4	35	<b>Fold:</b> Ferredoxin-like <b>Superfamily:</b> HMA, heavy metal-associated domain <b>Family:</b> HMA, heavy metal-associated domain
46	<a href="#">d1uwda_</a>		Alignment	not modelled	8.4	25	<b>Fold:</b> Alpha-lytic protease prodomain-like <b>Superfamily:</b> Fe-S cluster assembly (FSCA) domain-like <b>Family:</b> PaaD-like
47	<a href="#">d1p6ta2</a>		Alignment	not modelled	8.3	21	<b>Fold:</b> Ferredoxin-like <b>Superfamily:</b> HMA, heavy metal-associated domain <b>Family:</b> HMA, heavy metal-associated domain
48	<a href="#">d2oara1</a>		Alignment	not modelled	7.5	18	<b>Fold:</b> Gated mechanosensitive channel <b>Superfamily:</b> Gated mechanosensitive channel <b>Family:</b> Gated mechanosensitive channel
49	<a href="#">c3bvsA_</a>		Alignment	not modelled	7.4	10	<b>PDB header:</b> hydrolase <b>Chain:</b> A: <b>PDB Molecule:</b> alkylpurine dna glycosylase alkd; <b>PDBTitle:</b> crystal structure of bacillus cereus alkylpurine dna glycosylase alkd
50	<a href="#">c2kelB_</a>		Alignment	not modelled	7.2	29	<b>PDB header:</b> transcription repressor <b>Chain:</b> B: <b>PDB Molecule:</b> uncharacterized protein 56b; <b>PDBTitle:</b> structure of the transcription regulator svtr from the2 hyperthermophilic archaeal virus sirv1
51	<a href="#">c1vf5E_</a>		Alignment	not modelled	7.2	23	<b>PDB header:</b> photosynthesis <b>Chain:</b> E: <b>PDB Molecule:</b> protein petI; <b>PDBTitle:</b> crystal structure of cytochrome b6f complex from m.laminosus
52	<a href="#">c1qzwC_</a>		Alignment	not modelled	7.1	25	<b>PDB header:</b> signaling protein/rna <b>Chain:</b> C: <b>PDB Molecule:</b> signal recognition 54 kda protein; <b>PDBTitle:</b> crystal structure of the complete core of archaeal srp and2 implications for inter-domain communication
53	<a href="#">c3k3gA_</a>		Alignment	not modelled	7.1	10	<b>PDB header:</b> transport protein <b>Chain:</b> A: <b>PDB Molecule:</b> urea transporter; <b>PDBTitle:</b> crystal structure of the urea transporter from desulfovibrio vulgaris2 bound to 1,3-dimethylurea
54	<a href="#">d2qifa1</a>		Alignment	not modelled	7.1	13	<b>Fold:</b> Ferredoxin-like <b>Superfamily:</b> HMA, heavy metal-associated domain

					<b>Family:</b> HMA, heavy metal-associated domain
55	<a href="#">d3elga1</a>		not modelled	7.0	19 <b>Fold:</b> BLIP-like <b>Superfamily:</b> BT0923-like <b>Family:</b> BT0923-like
56	<a href="#">d1mn8a</a>		not modelled	7.0	21 <b>Fold:</b> Retroviral matrix proteins <b>Superfamily:</b> Retroviral matrix proteins <b>Family:</b> MMLV matrix protein-like
57	<a href="#">d2aq0a1</a>		not modelled	6.8	24 <b>Fold:</b> SAM domain-like <b>Superfamily:</b> RuvA domain 2-like <b>Family:</b> Hef domain-like
58	<a href="#">c2ksdA</a>		not modelled	6.6	10 <b>PDB header:</b> transferase <b>Chain:</b> A: <b>PDB Molecule:</b> aerobic respiration control sensor protein arcB; <b>PDB Title:</b> backbone structure of the membrane domain of e. coli2 histidine kinase receptor arcB, center for structures of3 membrane proteins (csmP) target 4310c <b>Fold:</b> Ferrodoxin-like <b>Superfamily:</b> Formylmethanofuran:tetrahydromethanopterin formyltransferase <b>Family:</b> Formylmethanofuran:tetrahydromethanopterin formyltransferase
59	<a href="#">d1ftra1</a>		not modelled	6.1	24 <b>Fold:</b> P-loop containing nucleoside triphosphate hydrolases <b>Superfamily:</b> P-loop containing nucleoside triphosphate hydrolases <b>Family:</b> Nucleotide and nucleoside kinases
60	<a href="#">d1t3la2</a>		not modelled	5.6	29 <b>Fold:</b> Aminoacid dehydrogenase-like, N-terminal domain <b>Superfamily:</b> Aminoacid dehydrogenase-like, N-terminal domain <b>Family:</b> Shikimate dehydrogenase-like
61	<a href="#">d1nyta2</a>		not modelled	5.3	33 <b>Fold:</b> BLIP-like <b>Superfamily:</b> BT0923-like <b>Family:</b> BT0923-like
62	<a href="#">d3duea1</a>		not modelled	5.1	13 <b>PDB header:</b> ribosome <b>Chain:</b> J: <b>PDB Molecule:</b> 60s ribosomal protein l19; <b>PDB Title:</b> cryo-em structure of idle yeast ssh1 complex bound to the2 yeast 80s ribosome <b>PDB header:</b> oxidoreductase/transferase <b>Chain:</b> I: <b>PDB Molecule:</b> dihydrolipoyllysine-residue acetyltransferase <b>PDB Title:</b> snapshots of catalysis in the e1 subunit of the pyruvate2 dehydrogenase multi-enzyme complex
63	<a href="#">c2wwaJ</a>		not modelled	5.1	7 <b>PDB header:</b> ribosome <b>Chain:</b> J: <b>PDB Molecule:</b> 60s ribosomal protein l19; <b>PDB Title:</b> cryo-em structure of idle yeast ssh1 complex bound to the2 yeast 80s ribosome <b>PDB header:</b> oxidoreductase/transferase <b>Chain:</b> I: <b>PDB Molecule:</b> dihydrolipoyllysine-residue acetyltransferase <b>PDB Title:</b> snapshots of catalysis in the e1 subunit of the pyruvate2 dehydrogenase multi-enzyme complex
64	<a href="#">c3dv0I</a>		not modelled	5.1	13 <b>PDB header:</b> oxidoreductase/transferase <b>Chain:</b> I: <b>PDB Molecule:</b> dihydrolipoyllysine-residue acetyltransferase <b>PDB Title:</b> snapshots of catalysis in the e1 subunit of the pyruvate2 dehydrogenase multi-enzyme complex