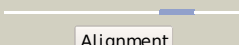

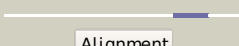

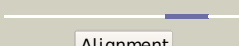

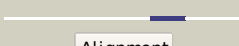

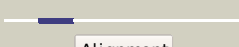
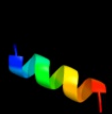

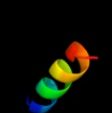




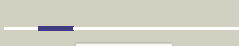
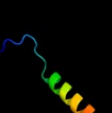



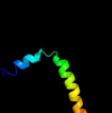






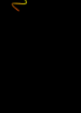

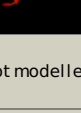


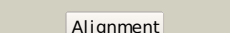


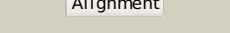
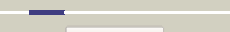
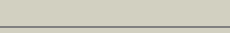
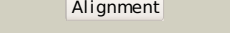
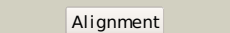

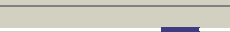
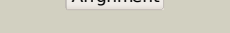
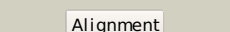
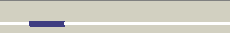
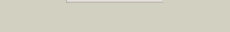

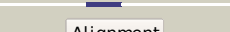
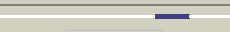

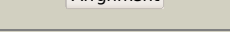



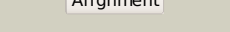
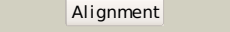
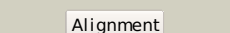

# Phyre2

Email	I.a.kelley@imperial.ac.uk
Description	P21365
Date	Thu Jan 5 11:38:11 GMT 2012
Unique Job ID	2a8dc698076db141

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	<a href="#">c2kvlA_</a>	 Alignment		23.2	26	<b>PDB header:</b> viral protein <b>Chain:</b> A: <b>PDB Molecule:</b> major outer capsid protein vp7; <b>PDBTitle:</b> nmr structure of the c-terminal domain of vp7
2	<a href="#">c3hd7A_</a>	 Alignment		17.8	8	<b>PDB header:</b> exocytosis <b>Chain:</b> A: <b>PDB Molecule:</b> vesicle-associated membrane protein 2; <b>PDBTitle:</b> helical extension of the neuronal snare complex into the membrane,2 spacegroup c 1 2 1
3	<a href="#">c1ciiA_</a>	 Alignment		13.5	18	<b>PDB header:</b> transmembrane protein <b>Chain:</b> A: <b>PDB Molecule:</b> colicin ia; <b>PDBTitle:</b> colicin ia
4	<a href="#">d1k8rb_</a>	 Alignment		9.5	30	<b>Fold:</b> beta-Grasp (ubiquitin-like) <b>Superfamily:</b> Ubiquitin-like <b>Family:</b> Ras-binding domain, RBD
5	<a href="#">d2hgca1</a>	 Alignment		9.0	21	<b>Fold:</b> DNA/RNA-binding 3-helical bundle <b>Superfamily:</b> "Winged helix" DNA-binding domain <b>Family:</b> YjcQ-like
6	<a href="#">c2hgca_</a>	 Alignment		9.0	21	<b>PDB header:</b> structural genomics, unknown function <b>Chain:</b> A: <b>PDB Molecule:</b> yjcq protein; <b>PDBTitle:</b> solution nmr structure of the yjcq protein from bacillus2 subtilis. northeast structural genomics target sr346.
7	<a href="#">d1k8ke_</a>	 Alignment		8.7	8	<b>Fold:</b> Arp2/3 complex 21 kDa subunit ARPC3 <b>Superfamily:</b> Arp2/3 complex 21 kDa subunit ARPC3 <b>Family:</b> Arp2/3 complex 21 kDa subunit ARPC3
8	<a href="#">c1rh5C_</a>	 Alignment		8.6	17	<b>PDB header:</b> protein transport <b>Chain:</b> C: <b>PDB Molecule:</b> secbeta; <b>PDBTitle:</b> the structure of a protein conducting channel
9	<a href="#">d1rh5c_</a>	 Alignment		8.6	17	<b>Fold:</b> Single transmembrane helix <b>Superfamily:</b> Sec-beta subunit <b>Family:</b> Sec-beta subunit
10	<a href="#">c3go5A_</a>	 Alignment		8.2	0	<b>PDB header:</b> gene regulation <b>Chain:</b> A: <b>PDB Molecule:</b> multidomain protein with s1 rna-binding domains; <b>PDBTitle:</b> crystal structure of a multidomain protein with nucleic acid binding2 domains (sp_0946) from streptococcus pneumoniae tigr4 at 1.40 a3 resolution
11	<a href="#">d1pf4a2</a>	 Alignment		8.2	5	<b>Fold:</b> ABC transporter transmembrane region <b>Superfamily:</b> ABC transporter transmembrane region <b>Family:</b> ABC transporter transmembrane region

12	<a href="#">c1m45B_</a>	Alignment		8.2	6	<b>PDB header:</b> cell cycle protein <b>Chain:</b> B: <b>PDB Molecule:</b> iq2 motif from myo2p, a class v myosin; <b>PDBTitle:</b> crystal structure of mlc1p bound to iq2 of myo2p, a class v2 myosin
13	<a href="#">c1q2iA_</a>	Alignment		7.7	0	<b>PDB header:</b> antitumor protein <b>Chain:</b> A: <b>PDB Molecule:</b> pnc27; <b>PDBTitle:</b> nmr solution structure of a peptide from the mdm-2 binding2 domain of the p53 protein that is selectively cytotoxic to3 cancer cells
14	<a href="#">c1unhD_</a>	Alignment		7.4	71	<b>PDB header:</b> cell cycle <b>Chain:</b> D: <b>PDB Molecule:</b> cyclin-dependent kinase 5 activator 1; <b>PDBTitle:</b> structural mechanism for the inhibition of cdk5-p25 by2 roscovitine, aloisine and indirubin.
15	<a href="#">d1unld_</a>	Alignment		7.4	71	<b>Fold:</b> Cyclin-like <b>Superfamily:</b> Cyclin-like <b>Family:</b> Cyclin
16	<a href="#">c1kq8A_</a>	Alignment		7.3	19	<b>PDB header:</b> transcription <b>Chain:</b> A: <b>PDB Molecule:</b> hepatocyte nuclear factor 3 forkhead homolog 1; <b>PDBTitle:</b> solution structure of winged helix protein hfh-1
17	<a href="#">d1kq8a_</a>	Alignment		7.3	19	<b>Fold:</b> DNA/RNA-binding 3-helical bundle <b>Superfamily:</b> "Winged helix" DNA-binding domain <b>Family:</b> Forkhead DNA-binding domain
18	<a href="#">c3jqoV_</a>	Alignment		7.0	11	<b>PDB header:</b> transport protein <b>Chain:</b> V: <b>PDB Molecule:</b> traf protein; <b>PDBTitle:</b> crystal structure of the outer membrane complex of a type iv2 secretion system
19	<a href="#">c4a1aM_</a>	Alignment		7.0	5	<b>PDB header:</b> ribosome <b>Chain:</b> M: <b>PDB Molecule:</b> 60s ribosomal protein l5; <b>PDBTitle:</b> t.thermophila 60s ribosomal subunit in complex with2 initiation factor 6. this file contains 5s rrna,3 5.8s rrna and proteins of molecule 3.
20	<a href="#">c1zp0D_</a>	Alignment		6.9	13	<b>PDB header:</b> oxidoreductase <b>Chain:</b> D: <b>PDB Molecule:</b> small cytochrome binding protein; <b>PDBTitle:</b> crystal structure of mitochondrial respiratory complex ii2 bound with 3-nitropropionate and 2-thenoyltrifluoroacetone
21	<a href="#">d1cg5a_</a>	Alignment	not modelled	6.8	21	<b>Fold:</b> Globin-like <b>Superfamily:</b> Globin-like <b>Family:</b> Globins
22	<a href="#">c3mkuA_</a>	Alignment	not modelled	6.6	13	<b>PDB header:</b> transport protein <b>Chain:</b> A: <b>PDB Molecule:</b> multi antimicrobial extrusion protein (na(+)/drug <b>PDBTitle:</b> structure of a cation-bound multidrug and toxin compound extrusion2 (mate) transporter
23	<a href="#">c1e17A_</a>	Alignment	not modelled	6.4	10	<b>PDB header:</b> dna binding domain <b>Chain:</b> A: <b>PDB Molecule:</b> afx; <b>PDBTitle:</b> solution structure of the dna binding domain of the human2 forkhead transcription factor afx (foxo4)
24	<a href="#">c3co7C_</a>	Alignment	not modelled	6.2	16	<b>PDB header:</b> transcription/dna <b>Chain:</b> C: <b>PDB Molecule:</b> forkhead box protein o1; <b>PDBTitle:</b> crystal structure of foxo1 dbd bound to dbe2 dna
25	<a href="#">d1myta_</a>	Alignment	not modelled	6.2	19	<b>Fold:</b> Globin-like <b>Superfamily:</b> Globin-like <b>Family:</b> Globins
26	<a href="#">d2fx0a2</a>	Alignment	not modelled	6.1	0	<b>Fold:</b> Tetracyclin repressor-like, C-terminal domain <b>Superfamily:</b> Tetracyclin repressor-like, C-terminal domain <b>Family:</b> Tetracyclin repressor-like, C-terminal domain
27	<a href="#">d1hdsa_</a>	Alignment	not modelled	6.1	7	<b>Fold:</b> Globin-like <b>Superfamily:</b> Globin-like <b>Family:</b> Globins
28	<a href="#">c2lkeA_</a>	Alignment	not modelled	5.9	30	<b>PDB header:</b> cell adhesion <b>Chain:</b> A: <b>PDB Molecule:</b> integrin alpha-m; <b>PDBTitle:</b> structures and interaction analyses of the integrin alpha-m beta-22 cytoplasmic tails

29	<a href="#">c3g73A_</a>	 <div>Alignment</div>	not modelled	5.9	10	<b>PDB header:</b> transcription/dna <b>Chain:</b> A: <b>PDB Molecule:</b> forkhead box protein m1; <b>PDBTitle:</b> structure of the foxm1 dna binding
30	<a href="#">c1geaA_</a>	 <div>Alignment</div>	not modelled	5.9	25	<b>PDB header:</b> neuropeptide <b>Chain:</b> A: <b>PDB Molecule:</b> pituitary adenylate cyclase activating <b>PDBTitle:</b> receptor-bound conformation of pacap21
31	<a href="#">c2ciuA_</a>	 <div>Alignment</div>	not modelled	5.9	0	<b>PDB header:</b> protein transport <b>Chain:</b> A: <b>PDB Molecule:</b> import inner membrane translocase subunit tim21 <b>PDBTitle:</b> structure of the ims domain of the mitochondrial import2 protein tim21 from s. cerevisiae
32	<a href="#">c1n2dC_</a>	 <div>Alignment</div>	not modelled	5.8	6	<b>PDB header:</b> cell cycle <b>Chain:</b> C: <b>PDB Molecule:</b> iq2 and iq3 motifs from myo2p, a class v myosin; <b>PDBTitle:</b> ternary complex of mlc1p bound to iq2 and iq3 of myo2p, a2 class v myosin
33	<a href="#">c2lkjA_</a>	 <div>Alignment</div>	not modelled	5.6	33	<b>PDB header:</b> cell adhesion <b>Chain:</b> A: <b>PDB Molecule:</b> integrin alpha-m; <b>PDBTitle:</b> structures and interaction analyses of the integrin alpha-m beta-22 cytoplasmic tails
34	<a href="#">d2lhba_</a>	 <div>Alignment</div>	not modelled	5.6	7	<b>Fold:</b> Globin-like <b>Superfamily:</b> Globin-like <b>Family:</b> Globins
35	<a href="#">d1d5va_</a>	 <div>Alignment</div>	not modelled	5.6	6	<b>Fold:</b> DNA/RNA-binding 3-helical bundle <b>Superfamily:</b> "Winged helix" DNA-binding domain <b>Family:</b> Forkhead DNA-binding domain
36	<a href="#">c2wwbB_</a>	 <div>Alignment</div>	not modelled	5.6	7	<b>PDB header:</b> ribosome <b>Chain:</b> B: <b>PDB Molecule:</b> protein transport protein sec61 subunit gamma; <b>PDBTitle:</b> cryo-em structure of the mammalian sec61 complex bound to the2 actively translating wheat germ 80s ribosome
37	<a href="#">c2rlwA_</a>	 <div>Alignment</div>	not modelled	5.6	14	<b>PDB header:</b> toxin <b>Chain:</b> A: <b>PDB Molecule:</b> plnf; <b>PDBTitle:</b> three-dimensional structure of the two peptides that2 constitute the two-peptide bacteriocin plantaracin ef
38	<a href="#">c2qq4A_</a>	 <div>Alignment</div>	not modelled	5.5	20	<b>PDB header:</b> metal binding protein <b>Chain:</b> A: <b>PDB Molecule:</b> iron-sulfur cluster biosynthesis protein iscu; <b>PDBTitle:</b> crystal structure of iron-sulfur cluster biosynthesis2 protein iscu (ttha1736) from thermus thermophilus hb8
39	<a href="#">c1yhuW_</a>	 <div>Alignment</div>	not modelled	5.5	14	<b>PDB header:</b> oxygen storage/transport <b>Chain:</b> W: <b>PDB Molecule:</b> hemoglobin b1a chain; <b>PDBTitle:</b> crystal structure of riftia pachyptila c1 hemoglobin reveals novel2 assembly of 24 subunits.
40	<a href="#">d3bpya1</a>	 <div>Alignment</div>	not modelled	5.5	10	<b>Fold:</b> DNA/RNA-binding 3-helical bundle <b>Superfamily:</b> "Winged helix" DNA-binding domain <b>Family:</b> Forkhead DNA-binding domain
41	<a href="#">d1scta_</a>	 <div>Alignment</div>	not modelled	5.5	23	<b>Fold:</b> Globin-like <b>Superfamily:</b> Globin-like <b>Family:</b> Globins
42	<a href="#">d2hfha_</a>	 <div>Alignment</div>	not modelled	5.4	13	<b>Fold:</b> DNA/RNA-binding 3-helical bundle <b>Superfamily:</b> "Winged helix" DNA-binding domain <b>Family:</b> Forkhead DNA-binding domain
43	<a href="#">c2zs1D_</a>	 <div>Alignment</div>	not modelled	5.4	8	<b>PDB header:</b> oxygen storage, oxygen transport <b>Chain:</b> D: <b>PDB Molecule:</b> extracellular giant hemoglobin major globin subunit b1; <b>PDBTitle:</b> structural basis for the heterotropic and homotropic interactions of2 invertebrate giant hemoglobin
44	<a href="#">d1sxja1</a>	 <div>Alignment</div>	not modelled	5.4	9	<b>Fold:</b> post-AAA+ oligomerization domain-like <b>Superfamily:</b> post-AAA+ oligomerization domain-like <b>Family:</b> DNA polymerase III clamp loader subunits, C-terminal domain
45	<a href="#">d1c17m_</a>	 <div>Alignment</div>	not modelled	5.4	11	<b>Fold:</b> F1F0 ATP synthase subunit A <b>Superfamily:</b> F1F0 ATP synthase subunit A <b>Family:</b> F1F0 ATP synthase subunit A
46	<a href="#">c1g2cN_</a>	 <div>Alignment</div>	not modelled	5.3	13	<b>PDB header:</b> viral protein <b>Chain:</b> N: <b>PDB Molecule:</b> fusion protein (f); <b>PDBTitle:</b> human respiratory syncytial virus fusion protein core
47	<a href="#">d2a07f1</a>	 <div>Alignment</div>	not modelled	5.3	6	<b>Fold:</b> DNA/RNA-binding 3-helical bundle <b>Superfamily:</b> "Winged helix" DNA-binding domain <b>Family:</b> Forkhead DNA-binding domain
48	<a href="#">c2wukD_</a>	 <div>Alignment</div>	not modelled	5.3	17	<b>PDB header:</b> cell cycle <b>Chain:</b> D: <b>PDB Molecule:</b> septum site-determining protein diviva; <b>PDBTitle:</b> diviva n-terminal domain, f17a mutant
49	<a href="#">c2nq2A_</a>	 <div>Alignment</div>	not modelled	5.3	16	<b>PDB header:</b> metal transport <b>Chain:</b> A: <b>PDB Molecule:</b> hypothetical abc transporter permease protein <b>PDBTitle:</b> an inward-facing conformation of a putative metal-chelate2 type abc transporter.
50	<a href="#">d1hbra_</a>	 <div>Alignment</div>	not modelled	5.3	0	<b>Fold:</b> Globin-like <b>Superfamily:</b> Globin-like <b>Family:</b> Globins
51	<a href="#">c2c0kB_</a>	 <div>Alignment</div>	not modelled	5.3	11	<b>PDB header:</b> oxygen transport <b>Chain:</b> B: <b>PDB Molecule:</b> hemoglobin; <b>PDBTitle:</b> the structure of hemoglobin from the botfly gasterophilus2 intestinalis
52	<a href="#">c3gztF_</a>	 <div>Alignment</div>	not modelled	5.2	28	<b>PDB header:</b> virus <b>Chain:</b> F: <b>PDB Molecule:</b> outer capsid glycoprotein vp7; <b>PDBTitle:</b> vp7 recoated rotavirus dlp
53	<a href="#">c3bjqA_</a>	 <div>Alignment</div>	not modelled	5.2	14	<b>PDB header:</b> viral protein <b>Chain:</b> A: <b>PDB Molecule:</b> phage-related protein; <b>PDBTitle:</b> crystal structure of a phage-related protein (bb3626) from bordetella2 bronchiseptica rb50 at 2.05 a resolution
		 <div>Alignment</div>				<b>Fold:</b> Globin-like

54	<a href="#">d2gdma_</a>	<div>Alignment</div>	not modelled	5.2	9	<b>Superfamily:</b> Globin-like <b>Family:</b> Globins
55	<a href="#">c3h8aF_</a>	<div>Alignment</div>	not modelled	5.1	40	<b>PDB header:</b> lyase/protein binding <b>Chain:</b> F: <b>PDB Molecule:</b> rnase e; <b>PDBTitle:</b> crystal structure of e. coli enolase bound to its cognate rnase e2 recognition domain