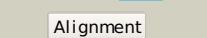
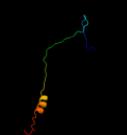
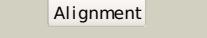
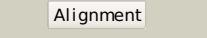
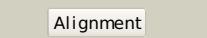
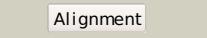
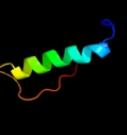
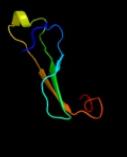
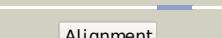
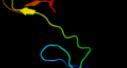
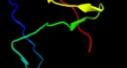
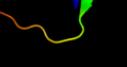
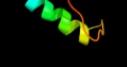
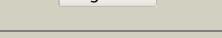
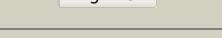


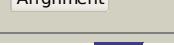
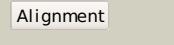
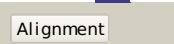
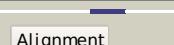
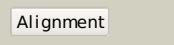
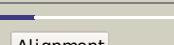
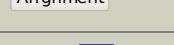
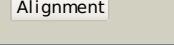
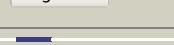
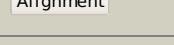
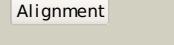
# Phyre<sup>2</sup>

Email	i.a.kelley@imperial.ac.uk
Description	P76498
Date	Thu Jan 5 12:23:34 GMT 2012
Unique Job ID	aec17e4e8f8d947f

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	d1aqta2	 Alignment		37.3	21	<b>Fold:</b> Epsilon subunit of F1F0-ATP synthase N-terminal domain <b>Superfamily:</b> Epsilon subunit of F1F0-ATP synthase N-terminal domain <b>Family:</b> Epsilon subunit of F1F0-ATP synthase N-terminal domain
2	c1s3rA_	 Alignment		35.3	27	<b>PDB header:</b> toxin <b>Chain:</b> A: <b>PDB Molecule:</b> intermedilysin; <b>PDBTitle:</b> crystal structure of the human-specific toxin intermedilysin
3	c1pfoA_	 Alignment		33.1	20	<b>PDB header:</b> toxin <b>Chain:</b> A: <b>PDB Molecule:</b> perfringolysin o; <b>PDBTitle:</b> perfringolysin o
4	d1pfoa_	 Alignment		33.1	20	<b>Fold:</b> Perfringolysin <b>Superfamily:</b> Perfringolysin <b>Family:</b> Perfringolysin
5	c1fs0E_	 Alignment		30.3	13	<b>PDB header:</b> hydrolase <b>Chain:</b> E: <b>PDB Molecule:</b> atp synthase epsilon subunit; <b>PDBTitle:</b> complex of gamma/epsilon atp synthase from e.coli
6	c2rq7A_	 Alignment		29.8	7	<b>PDB header:</b> hydrolase <b>Chain:</b> A: <b>PDB Molecule:</b> atp synthase epsilon chain; <b>PDBTitle:</b> solution structure of the epsilon subunit chimera combining2 the n-terminal beta-sandwich domain from t. elongatus bp-13 f1 and the c-terminal alpha-helical domain from spinach4 chloroplast f1
7	d2p02a3	 Alignment		29.2	30	<b>Fold:</b> S-adenosylmethionine synthetase <b>Superfamily:</b> S-adenosylmethionine synthetase <b>Family:</b> S-adenosylmethionine synthetase
8	d1g94a1	 Alignment		28.2	20	<b>Fold:</b> Glycosyl hydrolase domain <b>Superfamily:</b> Glycosyl hydrolase domain <b>Family:</b> alpha-Amylases, C-terminal beta-sheet domain
9	d1qm4a3	 Alignment		27.6	30	<b>Fold:</b> S-adenosylmethionine synthetase <b>Superfamily:</b> S-adenosylmethionine synthetase <b>Family:</b> S-adenosylmethionine synthetase
10	d3dhpa1	 Alignment		27.2	24	<b>Fold:</b> Glycosyl hydrolase domain <b>Superfamily:</b> Glycosyl hydrolase domain <b>Family:</b> alpha-Amylases, C-terminal beta-sheet domain
11	c3b5wE_	 Alignment		25.2	19	<b>PDB header:</b> membrane protein <b>Chain:</b> E: <b>PDB Molecule:</b> lipid a export atp-binding/permease protein msba; <b>PDBTitle:</b> crystal structure of escherichia coli msba

12	<a href="#">c2xu8B</a>			22.5	27	<b>PDB header:</b> structural genomics <b>Chain:</b> B: <b>PDB Molecule:</b> pa1645; <b>PDBTitle:</b> structure of pa1645
13	<a href="#">d2e74d1</a>			22.5	23	<b>Fold:</b> ISP domain <b>Superfamily:</b> ISP domain <b>Family:</b> Rieske iron-sulfur protein (ISP)
14	<a href="#">c3so4C</a>			21.0	27	<b>PDB header:</b> transferase <b>Chain:</b> C: <b>PDB Molecule:</b> methionine-adenosyltransferase; <b>PDBTitle:</b> methionine-adenosyltransferase from entamoeba histolytica
15	<a href="#">c3hvnA</a>			20.2	20	<b>PDB header:</b> toxin <b>Chain:</b> A: <b>PDB Molecule:</b> hemolysin; <b>PDBTitle:</b> crystal structure of cytotoxin protein suilysin from streptococcus suis
16	<a href="#">c2e5yA</a>			19.9	18	<b>PDB header:</b> hydrolase <b>Chain:</b> A: <b>PDB Molecule:</b> atp synthase epsilon chain; <b>PDBTitle:</b> epsilon subunit and atp complex of f1f0-atp synthase from the thermophilic bacillus ps3
17	<a href="#">d1v58a2</a>			19.8	44	<b>Fold:</b> Cystatin-like <b>Superfamily:</b> DsbC/DsbG N-terminal domain-like <b>Family:</b> DsbC/DsbG N-terminal domain-like
18	<a href="#">c2obvA</a>			19.7	30	<b>PDB header:</b> transferase <b>Chain:</b> A: <b>PDB Molecule:</b> s-adenosylmethionine synthetase isoform type-1; <b>PDBTitle:</b> crystal structure of the human s-adenosylmethionine synthetase 1 in2 complex with the product
19	<a href="#">c1rg9D</a>			19.2	34	<b>PDB header:</b> transferase <b>Chain:</b> D: <b>PDB Molecule:</b> s-adenosylmethionine synthetase; <b>PDBTitle:</b> s-adenosylmethionine synthetase complexed with sam and ppnp
20	<a href="#">c3imlB</a>			18.9	24	<b>PDB header:</b> transferase <b>Chain:</b> B: <b>PDB Molecule:</b> s-adenosylmethionine synthetase; <b>PDBTitle:</b> crystal structure of s-adenosylmethionine synthetase from burkholderia2 pseudomallei
21	<a href="#">c3rv2B</a>		not modelled	17.6	27	<b>PDB header:</b> transferase <b>Chain:</b> B: <b>PDB Molecule:</b> s-adenosylmethionine synthetase; <b>PDBTitle:</b> crystal structure of s-adenosylmethionine synthetase from mycobacterium marinum
22	<a href="#">c2wanA</a>		not modelled	16.2	25	<b>PDB header:</b> hydrolase <b>Chain:</b> A: <b>PDB Molecule:</b> pullulanase; <b>PDBTitle:</b> pullulanase from bacillus acidopullulyticus
23	<a href="#">c2i92A</a>		not modelled	13.6	50	<b>PDB header:</b> dna binding protein <b>Chain:</b> A: <b>PDB Molecule:</b> histone family protein nucleoid-structuring protein h-ns; <b>PDBTitle:</b> solution structure of the c-terminal domain of h-ns like protein bv3f
24	<a href="#">c1h8eH</a>		not modelled	13.3	14	<b>PDB header:</b> hydrolase <b>Chain:</b> H: <b>PDB Molecule:</b> bovine mitochondrial f1-atpase; <b>PDBTitle:</b> (adp.alf4)2(adp.so4) bovine f1-atpase2 (all three catalytic sites occupied)
25	<a href="#">c3ebeA</a>		not modelled	11.8	24	<b>PDB header:</b> replication <b>Chain:</b> A: <b>PDB Molecule:</b> protein mcm10 homolog; <b>PDBTitle:</b> crystal structure of xenopus laevis replication initiation factor2 mcm10 internal domain
26	<a href="#">d2j07a1</a>		not modelled	11.8	23	<b>Fold:</b> Cryptochrome/photolyase FAD-binding domain <b>Superfamily:</b> Cryptochrome/photolyase FAD-binding domain <b>Family:</b> Cryptochrome/photolyase FAD-binding domain
27	<a href="#">d1ig4a</a>		not modelled	10.6	50	<b>Fold:</b> DNA-binding domain <b>Superfamily:</b> DNA-binding domain <b>Family:</b> Methyl-CpG-binding domain, MBD
28	<a href="#">d1e6vb2</a>		not modelled	10.5	18	<b>Fold:</b> Ferrodoxin-like <b>Superfamily:</b> Methyl-coenzyme M reductase subunits <b>Family:</b> Methyl-coenzyme M reductase alpha and beta chain N-terminal domain

29	<a href="#">c2qe7H</a>		Alignment	not modelled	10.3	27	<b>PDB header:</b> hydrolase <b>Chain:</b> H: <b>PDB Molecule:</b> atp synthase subunit epsilon; <b>PDBTitle:</b> crystal structure of the f1-atpase from the thermoalkaliphilic2 bacterium bacillus sp. ta2.a1
30	<a href="#">d1lik0a</a>		Alignment	not modelled	9.9	35	<b>Fold:</b> 4-helical cytokines <b>Superfamily:</b> 4-helical cytokines <b>Family:</b> Short-chain cytokines
31	<a href="#">d1hbnb2</a>		Alignment	not modelled	9.4	45	<b>Fold:</b> Ferredoxin-like <b>Superfamily:</b> Methyl-coenzyme M reductase subunits <b>Family:</b> Methyl-coenzyme M reductase alpha and beta chain N-terminal domain
32	<a href="#">d1mxaa3</a>		Alignment	not modelled	9.2	30	<b>Fold:</b> S-adenosylmethionine synthetase <b>Superfamily:</b> S-adenosylmethionine synthetase <b>Family:</b> S-adenosylmethionine synthetase
33	<a href="#">d1jaea1</a>		Alignment	not modelled	9.1	26	<b>Fold:</b> Glycosyl hydrolase domain <b>Superfamily:</b> Glycosyl hydrolase domain <b>Family:</b> alpha-Amylases, C-terminal beta-sheet domain
34	<a href="#">c1dvaY</a>		Alignment	not modelled	8.9	40	<b>PDB header:</b> hydrolase/hydrolase inhibitor <b>Chain:</b> Y: <b>PDB Molecule:</b> peptide e-76; <b>PDBTitle:</b> crystal structure of the complex between the peptide exosite inhibitor2 e-76 and coagulation factor viia
35	<a href="#">c1dvaX</a>		Alignment	not modelled	8.9	40	<b>PDB header:</b> hydrolase/hydrolase inhibitor <b>Chain:</b> X: <b>PDB Molecule:</b> peptide e-76; <b>PDBTitle:</b> crystal structure of the complex between the peptide exosite inhibitor2 e-76 and coagulation factor viia
36	<a href="#">d1r44a</a>		Alignment	not modelled	8.8	20	<b>Fold:</b> Hedgehog/DD-peptidase <b>Superfamily:</b> Hedgehog/DD-peptidase <b>Family:</b> VanX-like
37	<a href="#">d2j2ja1</a>		Alignment	not modelled	8.6	33	<b>Fold:</b> Virus attachment protein globular domain <b>Superfamily:</b> Virus attachment protein globular domain <b>Family:</b> Adenovirus fiber protein "knob" domain
38	<a href="#">c2e76D</a>		Alignment	not modelled	8.6	25	<b>PDB header:</b> photosynthesis <b>Chain:</b> D: <b>PDB Molecule:</b> cytochrome b6-f complex iron-sulfur subunit; <b>PDBTitle:</b> crystal structure of the cytochrome b6f complex with tridecyl-2 stigmatellin (tds) from m.laminosus
39	<a href="#">c3ideD</a>		Alignment	not modelled	8.5	21	<b>PDB header:</b> virus like particle <b>Chain:</b> D: <b>PDB Molecule:</b> capsid protein vp2; <b>PDBTitle:</b> structure of ipnv subviral particle
40	<a href="#">c2df7H</a>		Alignment	not modelled	8.5	43	<b>PDB header:</b> virus like particle <b>Chain:</b> H: <b>PDB Molecule:</b> structural polyprotein vp2; <b>PDBTitle:</b> crystal structure of infectious bursal disease virus vp2 subviral2 particle
41	<a href="#">c2wstE</a>		Alignment	not modelled	8.4	50	<b>PDB header:</b> viral protein <b>Chain:</b> E: <b>PDB Molecule:</b> putative fiber protein; <b>PDBTitle:</b> head domain of porcine adenovirus type 4 nadc-1 isolate2 fibre
42	<a href="#">d2df7a1</a>		Alignment	not modelled	8.3	43	<b>Fold:</b> Nucleoplasmin-like/VP (viral coat and capsid proteins) <b>Superfamily:</b> Positive stranded ssRNA viruses <b>Family:</b> Birnaviridae-like VP
43	<a href="#">c2rkca</a>		Alignment	not modelled	8.2	20	<b>PDB header:</b> viral protein <b>Chain:</b> A: <b>PDB Molecule:</b> hemagglutinin; <b>PDBTitle:</b> crystal structure of the measles virus hemagglutinin
44	<a href="#">c3m05A</a>		Alignment	not modelled	8.0	29	<b>PDB header:</b> structural genomics, unknown function <b>Chain:</b> A: <b>PDB Molecule:</b> uncharacterized protein pepe_1480; <b>PDBTitle:</b> the crystal structure of a functionally unknown protein2 pepe_1480 from pediococcus pentosaceus atcc 25745
45	<a href="#">c2ky8A</a>		Alignment	not modelled	7.7	60	<b>PDB header:</b> transcription/dna <b>Chain:</b> A: <b>PDB Molecule:</b> methyl-cpg-binding domain protein 2; <b>PDBTitle:</b> solution structure and dynamic analysis of chicken mbd2 methyl binding2 domain bound to a target methylated dna sequence
46	<a href="#">d1vlhal</a>		Alignment	not modelled	7.6	25	<b>Fold:</b> Triple beta-spiral <b>Superfamily:</b> Fibre shaft of virus attachment proteins <b>Family:</b> Adenovirus
47	<a href="#">c2yxhB</a>		Alignment	not modelled	7.4	75	<b>PDB header:</b> structural genomics, unknown function <b>Chain:</b> B: <b>PDB Molecule:</b> mazg-related protein; <b>PDBTitle:</b> crystal structure of mazg-related protein from thermotoga maritima
48	<a href="#">d1ua7a1</a>		Alignment	not modelled	7.4	17	<b>Fold:</b> Glycosyl hydrolase domain <b>Superfamily:</b> Glycosyl hydrolase domain <b>Family:</b> alpha-Amylases, C-terminal beta-sheet domain
49	<a href="#">d1wi9a</a>		Alignment	not modelled	7.4	24	<b>Fold:</b> DNA/RNA-binding 3-helical bundle <b>Superfamily:</b> "Winged helix" DNA-binding domain <b>Family:</b> PCI domain (PINT motif)
50	<a href="#">c3oqcB</a>		Alignment	not modelled	7.3	25	<b>PDB header:</b> hydrolase <b>Chain:</b> B: <b>PDB Molecule:</b> ufm1-specific protease 2; <b>PDBTitle:</b> ubiquitin-fold modifier 1 specific protease, ufsp2
51	<a href="#">c1z8rA</a>		Alignment	not modelled	7.3	34	<b>PDB header:</b> hydrolase <b>Chain:</b> A: <b>PDB Molecule:</b> coxsackievirus b4 polyprotein; <b>PDBTitle:</b> 2a cysteine proteinase from human coxsackievirus b4 (strain2 jvb / benschoten / new york / 51)
52	<a href="#">c2z84A</a>		Alignment	not modelled	7.2	67	<b>PDB header:</b> hydrolase <b>Chain:</b> A: <b>PDB Molecule:</b> ufm1-specific protease 1; <b>PDBTitle:</b> insights from crystal and solution structures of mouse ufsp1
53	<a href="#">c3crcB</a>		Alignment	not modelled	7.0	25	<b>PDB header:</b> hydrolase <b>Chain:</b> B: <b>PDB Molecule:</b> protein mazg; <b>PDBTitle:</b> crystal structure of escherichia coli mazg, the regulator2 of nutritional stress response
54	<a href="#">d2j4wd1</a>		Alignment	not modelled	6.7	80	<b>Fold:</b> Apical membrane antigen 1 <b>Superfamily:</b> Apical membrane antigen 1 <b>Family:</b> Apical membrane antigen 1
55	<a href="#">c2i4wd</a>		Alignment	not modelled	6.7	80	<b>PDB header:</b> immune system <b>Chain:</b> D: <b>PDB Molecule:</b> apical membrane antigen 1;

55	<a href="#">c2j4wD_</a>	Alignment	not modelled	6.7	80	<b>PDBTitle:</b> structure of a plasmodium vivax apical membrane antigen 1-2 fab f8.12.19 complex
56	<a href="#">d2ysca1</a>	Alignment	not modelled	6.0	71	<b>Fold:</b> WW domain-like <b>Superfamily:</b> WW domain <b>Family:</b> WW domain
57	<a href="#">c2i5pO_</a>	Alignment	not modelled	5.9	21	<b>PDB header:</b> oxidoreductase <b>Chain:</b> O: <b>PDB Molecule:</b> glyceraldehyde-3-phosphate dehydrogenase 1; <b>PDBTitle:</b> crystal structure of glyceraldehyde-3-phosphate2 dehydrogenase isoform 1 from k. marxianus
58	<a href="#">c2l1qA_</a>	Alignment	not modelled	5.9	42	<b>PDB header:</b> anti microbial protein <b>Chain:</b> A: <b>PDB Molecule:</b> liver-expressed antimicrobial peptide 2; <b>PDBTitle:</b> solution structure of human liver expressed antimicrobial peptide 2
59	<a href="#">c3obhA_</a>	Alignment	not modelled	5.9	28	<b>PDB header:</b> structural genomics, unknown function <b>Chain:</b> A: <b>PDB Molecule:</b> uncharacterized protein; <b>PDBTitle:</b> x-ray crystal structure of protein sp_0782 (7-79) from streptococcus2 pneumoniae. northeast structural genomics consortium target spr104
60	<a href="#">c2pbDV_</a>	Alignment	not modelled	5.9	75	<b>PDB header:</b> structural protein <b>Chain:</b> V: <b>PDB Molecule:</b> vasodilator-stimulated phosphoprotein; <b>PDBTitle:</b> ternary complex of profilin-actin with the poly-pro-gab2 domain of wasp*
61	<a href="#">c2yyB_</a>	Alignment	not modelled	5.9	23	<b>PDB header:</b> oxidoreductase <b>Chain:</b> B: <b>PDB Molecule:</b> glyceraldehyde-3-phosphate dehydrogenase; <b>PDBTitle:</b> crystal structure of glyceraldehyde-3-phosphate2 dehydrogenase
62	<a href="#">c2j5IA_</a>	Alignment	not modelled	5.7	100	<b>PDB header:</b> immune system <b>Chain:</b> A: <b>PDB Molecule:</b> apical membrane antigen 1; <b>PDBTitle:</b> structure of a plasmodium falciparum apical membrane2 antigen 1-fab f8.12.19 complex
63	<a href="#">d2j5la1</a>	Alignment	not modelled	5.7	100	<b>Fold:</b> Apical membrane antigen 1 <b>Superfamily:</b> Apical membrane antigen 1 <b>Family:</b> Apical membrane antigen 1
64	<a href="#">d1obfo2</a>	Alignment	not modelled	5.7	21	<b>Fold:</b> FwdE/GAPDH domain-like <b>Superfamily:</b> Glyceraldehyde-3-phosphate dehydrogenase-like, C-terminal domain <b>Family:</b> GAPDH-like
65	<a href="#">d1rm4a2</a>	Alignment	not modelled	5.2	27	<b>Fold:</b> FwdE/GAPDH domain-like <b>Superfamily:</b> Glyceraldehyde-3-phosphate dehydrogenase-like, C-terminal domain <b>Family:</b> GAPDH-like