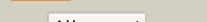
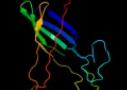
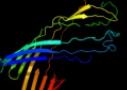
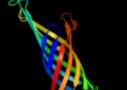
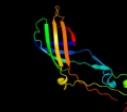
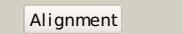
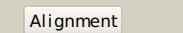
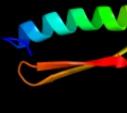
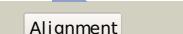
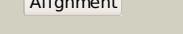
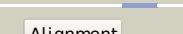
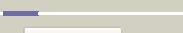


# Phyre<sup>2</sup>

Email	i.a.kelley@imperial.ac.uk
Description	P32689
Date	Thu Jan 5 11:50:13 GMT 2012
Unique Job ID	e9c80fe6158140ce

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c2k0IA_	 Alignment		95.5	21	<b>PDB header:</b> membrane protein <b>Chain:</b> A; <b>PDB Molecule:</b> outer membrane protein a; <b>PDBTitle:</b> nmr structure of the transmembrane domain of the outer2 membrane protein a from klebsiella pneumoniae in dhpc3 micelles.
2	d1p4ta_	 Alignment		88.3	18	<b>Fold:</b> Transmembrane beta-barrels <b>Superfamily:</b> OMPA-like <b>Family:</b> Outer membrane protein
3	d1g90a_	 Alignment		85.6	19	<b>Fold:</b> Transmembrane beta-barrels <b>Superfamily:</b> OMPA-like <b>Family:</b> Outer membrane protein
4	c3bryB_	 Alignment		79.6	17	<b>PDB header:</b> transport protein <b>Chain:</b> B; <b>PDB Molecule:</b> tbox; <b>PDBTitle:</b> crystal structure of the ralstonia picketii toluene2 transporter tbox
5	d1phoa_	 Alignment		75.0	14	<b>Fold:</b> Transmembrane beta-barrels <b>Superfamily:</b> Porins <b>Family:</b> Porin
6	c3nb3C_	 Alignment		62.8	26	<b>PDB header:</b> virus <b>Chain:</b> C; <b>PDB Molecule:</b> outer membrane protein a; <b>PDBTitle:</b> the host outer membrane proteins ompa and ompc are packed at specific2 sites in the shigella phage sf6 virion as structural components
7	c3dwoX_	 Alignment		60.9	12	<b>PDB header:</b> membrane protein <b>Chain:</b> X; <b>PDB Molecule:</b> probable outer membrane protein; <b>PDBTitle:</b> crystal structure of a pseudomonas aeruginosa fadl homologue
8	c3graA_	 Alignment		55.2	24	<b>PDB header:</b> cell invasion <b>Chain:</b> A; <b>PDB Molecule:</b> attachment invasion locus protein; <b>PDBTitle:</b> the crystal structure of ail, the attachment invasion locus protein of2 yersinia pestis
9	c2jmmA_	 Alignment		52.0	16	<b>PDB header:</b> membrane protein <b>Chain:</b> A; <b>PDB Molecule:</b> outer membrane protein a; <b>PDBTitle:</b> nmr solution structure of a minimal transmembrane beta-2 barrel platform protein
10	d1t16a_	 Alignment		50.4	13	<b>Fold:</b> Transmembrane beta-barrels <b>Superfamily:</b> Porins <b>Family:</b> Outer membrane protein transport protein
11	d1qjpa_	 Alignment		47.7	22	<b>Fold:</b> Transmembrane beta-barrels <b>Superfamily:</b> OMPA-like <b>Family:</b> Outer membrane protein

12	<a href="#">c2f1tB</a>			46.3	19	<b>PDB header:</b> membrane protein <b>Chain:</b> B: <b>PDB Molecule:</b> outer membrane protein w; <b>PDBTitle:</b> outer membrane protein ompw
13	<a href="#">d2zfga1</a>			40.5	16	<b>Fold:</b> Transmembrane beta-barrels <b>Superfamily:</b> Porins <b>Family:</b> Porin
14	<a href="#">c2x27X</a>			37.5	14	<b>PDB header:</b> membrane protein <b>Chain:</b> X: <b>PDB Molecule:</b> outer membrane protein oprg; <b>PDBTitle:</b> crystal structure of the outer membrane protein oprg from2 pseudomonas aeruginosa
15	<a href="#">d1ynja1</a>			37.3	18	<b>Fold:</b> DCoH-like <b>Superfamily:</b> RBP11-like subunits of RNA polymerase <b>Family:</b> RNA polymerase alpha subunit dimerisation domain
16	<a href="#">c2jvfA</a>			36.4	12	<b>PDB header:</b> de novo protein <b>Chain:</b> A: <b>PDB Molecule:</b> de novo protein m7; <b>PDBTitle:</b> solution structure of m7, a computationally-designed2 artificial protein
17	<a href="#">c2lhfA</a>			33.6	20	<b>PDB header:</b> membrane protein <b>Chain:</b> A: <b>PDB Molecule:</b> outer membrane protein h1; <b>PDBTitle:</b> solution structure of outer membrane protein h (oprh) from p.2 aeruginosa in dhpc micelles
18	<a href="#">c1qysA</a>			29.3	22	<b>PDB header:</b> de novo protein <b>Chain:</b> A: <b>PDB Molecule:</b> top7; <b>PDBTitle:</b> crystal structure of top7: a computationally designed2 protein with a novel fold
19	<a href="#">c3brzA</a>			28.0	13	<b>PDB header:</b> transport protein <b>Chain:</b> A: <b>PDB Molecule:</b> todx; <b>PDBTitle:</b> crystal structure of the pseudomonas putida toluene2 transporter todx
20	<a href="#">c2e0gA</a>			25.9	11	<b>PDB header:</b> replication <b>Chain:</b> A: <b>PDB Molecule:</b> chromosomal replication initiator protein dnaa; <b>PDBTitle:</b> dnaa n-terminal domain
21	<a href="#">c3a2rX</a>		not modelled	25.5	14	<b>PDB header:</b> membrane protein <b>Chain:</b> X: <b>PDB Molecule:</b> outer membrane protein ii; <b>PDBTitle:</b> crystal structure of outer membrane protein porb from neisseria2 meningitidis
22	<a href="#">d2fgqx1</a>		not modelled	21.5	16	<b>Fold:</b> Transmembrane beta-barrels <b>Superfamily:</b> Porins <b>Family:</b> Porin
23	<a href="#">c2i9zB</a>		not modelled	20.2	22	<b>PDB header:</b> structural genomics, unknown function <b>Chain:</b> B: <b>PDB Molecule:</b> putative septation protein spovg; <b>PDBTitle:</b> structural genomics, the crystal structure of full-length spovg from2 staphylococcus epidermidis atcc 12228
24	<a href="#">d2i9xa1</a>		not modelled	20.2	22	<b>Fold:</b> SpoVG-like <b>Superfamily:</b> SpoVG-like <b>Family:</b> SpoVG-like
25	<a href="#">d1uynx</a>		not modelled	15.9	11	<b>Fold:</b> Transmembrane beta-barrels <b>Superfamily:</b> Autotransporter <b>Family:</b> Autotransporter
26	<a href="#">d1bdfa1</a>		not modelled	14.0	33	<b>Fold:</b> DCoH-like <b>Superfamily:</b> RBP11-like subunits of RNA polymerase <b>Family:</b> RNA polymerase alpha subunit dimerisation domain
27	<a href="#">d1umha</a>		not modelled	10.3	25	<b>Fold:</b> Galactose-binding domain-like <b>Superfamily:</b> Galactose-binding domain-like <b>Family:</b> F-box associated region, FBA
28	<a href="#">d1u69a</a>		not modelled	10.3	23	<b>Fold:</b> Glyoxalase/Bleomycin resistance protein/Dihydroxybiphenyl dioxygenase <b>Superfamily:</b> Glyoxalase/Bleomycin resistance protein/Dihydroxybiphenyl dioxygenase <b>Family:</b> 3-demethylubiquinone-9 3-methyltransferase

29	<a href="#">d1kpta_</a>	Alignment	not modelled	9.5	35	<b>Fold:</b> Yeast killer toxins <b>Superfamily:</b> Yeast killer toxins <b>Family:</b> Virally encoded KP4 toxin
30	<a href="#">c2gjhA_</a>	Alignment	not modelled	9.1	30	<b>PDB header:</b> de novo protein <b>Chain:</b> A: <b>PDB Molecule:</b> designed protein; <b>PDBTitle:</b> nmr structure of cfr (c-terminal fragment of 2 computationally designed novel-topology protein top7)
31	<a href="#">d2gufa1</a>	Alignment	not modelled	9.0	18	<b>Fold:</b> Transmembrane beta-barrels <b>Superfamily:</b> Porins <b>Family:</b> Ligand-gated protein channel
32	<a href="#">c2x4mD_</a>	Alignment	not modelled	8.6	19	<b>PDB header:</b> hydrolase <b>Chain:</b> D: <b>PDB Molecule:</b> coagulase/fibrinolysin; <b>PDBTitle:</b> yersinia pestis plasminogen activator pla
33	<a href="#">c3qwnC_</a>	Alignment	not modelled	8.5	23	<b>PDB header:</b> antitoxin <b>Chain:</b> C: <b>PDB Molecule:</b> hypothetical nigr-like protein; <b>PDBTitle:</b> crystal structure of a hypothetical nigr-like protein (baccac_03262)2 from bacteroides caccae at 2.42 a resolution
34	<a href="#">d1tdha3</a>	Alignment	not modelled	8.0	20	<b>Fold:</b> Glucocorticoid receptor-like (DNA-binding domain) <b>Superfamily:</b> Glucocorticoid receptor-like (DNA-binding domain) <b>Family:</b> C-terminal, Zn-finger domain of MutM-like DNA repair proteins
35	<a href="#">c2djmA_</a>	Alignment	not modelled	7.7	16	<b>PDB header:</b> sugar binding protein <b>Chain:</b> A: <b>PDB Molecule:</b> glucoamylase a; <b>PDBTitle:</b> solution structure of n-terminal starch-binding domain of2 glucoamylase from rhizopus oryzae
36	<a href="#">c3qv0A_</a>	Alignment	not modelled	7.7	16	<b>PDB header:</b> protein binding <b>Chain:</b> A: <b>PDB Molecule:</b> mitochondrial acidic protein mam33; <b>PDBTitle:</b> crystal structure of saccharomyces cerevisiae mam33
37	<a href="#">d1smya1</a>	Alignment	not modelled	7.7	20	<b>Fold:</b> DCoH-like <b>Superfamily:</b> RBP11-like subunits of RNA polymerase <b>Family:</b> RNA polymerase alpha subunit dimerisation domain
38	<a href="#">d1f2va_</a>	Alignment	not modelled	7.6	18	<b>Fold:</b> Flavodoxin-like <b>Superfamily:</b> Precorrin-8X methylmutase CbiC/CobH <b>Family:</b> Precorrin-8X methylmutase CbiC/CobH
39	<a href="#">d1txka2</a>	Alignment	not modelled	7.0	18	<b>Fold:</b> Supersandwich <b>Superfamily:</b> Galactose mutarotase-like <b>Family:</b> MdoG-like
40	<a href="#">d1kke2</a>	Alignment	not modelled	7.0	20	<b>Fold:</b> Virus attachment protein globular domain <b>Superfamily:</b> Virus attachment protein globular domain <b>Family:</b> Reovirus attachment protein sigma 1 head domain
41	<a href="#">d1smyc_</a>	Alignment	not modelled	6.9	32	<b>Fold:</b> beta and beta-prime subunits of DNA dependent RNA-polymerase <b>Superfamily:</b> beta and beta-prime subunits of DNA dependent RNA-polymerase <b>Family:</b> RNA-polymerase beta
42	<a href="#">c3e7dC_</a>	Alignment	not modelled	6.9	18	<b>PDB header:</b> isomerase <b>Chain:</b> C: <b>PDB Molecule:</b> cobh, precorrin-8x methylmutase; <b>PDBTitle:</b> crystal structure of precorrin-8x methyl mutase cbic/cobh from2 brucella melitensis
43	<a href="#">c2r28D_</a>	Alignment	not modelled	6.9	18	<b>PDB header:</b> metal binding protein/hydrolase <b>Chain:</b> D: <b>PDB Molecule:</b> serine/threonine-protein phosphatase 2b <b>PDBTitle:</b> the complex structure of calmodulin bound to a calcineurin2 peptide
44	<a href="#">c1txkA_</a>	Alignment	not modelled	6.7	18	<b>PDB header:</b> biosynthetic protein <b>Chain:</b> A: <b>PDB Molecule:</b> glucans biosynthesis protein g; <b>PDBTitle:</b> crystal structure of escherichia coli opgg
45	<a href="#">c2jziB_</a>	Alignment	not modelled	6.7	20	<b>PDB header:</b> metal binding protein <b>Chain:</b> B: <b>PDB Molecule:</b> serine/threonine-protein phosphatase 2b <b>PDBTitle:</b> structure of calmodulin complexed with the calmodulin2 binding domain of calcineurin
46	<a href="#">c3cjtp_</a>	Alignment	not modelled	6.5	23	<b>PDB header:</b> transferase/ribosomal protein <b>Chain:</b> P: <b>PDB Molecule:</b> 50s ribosomal protein l11; <b>PDBTitle:</b> ribosomal protein l11 methyltransferase (prma) in complex with2 dimethylated ribosomal protein l11
47	<a href="#">d1kk1a2</a>	Alignment	not modelled	6.5	25	<b>Fold:</b> Elongation factor/aminomethyltransferase common domain <b>Superfamily:</b> EF-Tu/eEF-1alpha/eIF2-gamma C-terminal domain <b>Family:</b> EF-Tu/eEF-1alpha/eIF2-gamma C-terminal domain
48	<a href="#">c2rqea_</a>	Alignment	not modelled	6.4	75	<b>PDB header:</b> sugar binding protein <b>Chain:</b> A: <b>PDB Molecule:</b> beta-1,3-glucan-binding protein; <b>PDBTitle:</b> solution structure of the silkworm bgrp/gnbp3 n-terminal2 domain reveals the mechanism for b-1,3-glucan specific3 recognition
49	<a href="#">c3fhha_</a>	Alignment	not modelled	6.4	6	<b>PDB header:</b> membrane protein <b>Chain:</b> A: <b>PDB Molecule:</b> outer membrane heme receptor shua; <b>PDBTitle:</b> crystal structure of the heme/hemoglobin outer membrane2 transporter shua from shigella dysenteriae
50	<a href="#">c2afvB_</a>	Alignment	not modelled	6.3	24	<b>PDB header:</b> isomerase <b>Chain:</b> B: <b>PDB Molecule:</b> cobalamin biosynthesis precorrin isomerase; <b>PDBTitle:</b> the crystal structure of putative precorrin isomerase cbic2 in cobalamin biosynthesis
51	<a href="#">cluv7A_</a>	Alignment	not modelled	6.2	10	<b>PDB header:</b> transport <b>Chain:</b> A: <b>PDB Molecule:</b> general secretion pathway protein m; <b>PDBTitle:</b> periplasmic domain of epsm from vibrio cholerae
52	<a href="#">d1uv7a_</a>	Alignment	not modelled	6.2	10	<b>Fold:</b> RRF/tRNA synthetase additional domain-like <b>Superfamily:</b> General secretion pathway protein M, EpsM <b>Family:</b> General secretion pathway protein M, EpsM
53	<a href="#">d2cura2</a>	Alignment	not modelled	6.2	55	<b>Fold:</b> Glucocorticoid receptor-like (DNA-binding domain) <b>Superfamily:</b> Glucocorticoid receptor-like (DNA-binding domain) <b>Family:</b> LIM domain
54	<a href="#">c3ie4A_</a>	Alignment	not modelled	6.2	63	<b>PDB header:</b> immune system <b>Chain:</b> A: <b>PDB Molecule:</b> gram-negative binding protein 3; <b>PDBTitle:</b> b-glucan binding domain of drosophila gnbp3 defines a novel2 family of pattern recognition receptor

55	<a href="#">d2jnaa1</a>	Alignment	not modelled	6.0	24	<b>Fold:</b> Dodecen subunit-like <b>Superfamily:</b> YdgH-like <b>Family:</b> YdgH-like
56	<a href="#">c3iydC_</a>	Alignment	not modelled	5.7	27	<b>PDB header:</b> transcription/dna <b>Chain:</b> C: <b>PDB Molecule:</b> dna-directed rna polymerase subunit beta; <b>PDBTitle:</b> three-dimensional em structure of an intact activator-dependent2 transcription initiation complex
57	<a href="#">c2khaA_</a>	Alignment	not modelled	5.5	44	<b>PDB header:</b> sugar binding protein <b>Chain:</b> A: <b>PDB Molecule:</b> beta-1,3-glucan-binding protein; <b>PDBTitle:</b> solution structure of a pathogen recognition domain from a2 lepidopteran insect, plodia interpunctella
58	<a href="#">c1kkeA_</a>	Alignment	not modelled	5.4	20	<b>PDB header:</b> viral protein <b>Chain:</b> A: <b>PDB Molecule:</b> sigma 1 protein; <b>PDBTitle:</b> crystal structure of reovirus attachment protein sigma12 trimer
59	<a href="#">d2d8za1</a>	Alignment	not modelled	5.4	55	<b>Fold:</b> Glucocorticoid receptor-like (DNA-binding domain) <b>Superfamily:</b> Glucocorticoid receptor-like (DNA-binding domain) <b>Family:</b> LIM domain
60	<a href="#">d2cnaa_</a>	Alignment	not modelled	5.4	19	<b>Fold:</b> Concanavalin A-like lectins/glucanases <b>Superfamily:</b> Concanavalin A-like lectins/glucanases <b>Family:</b> Legume lectins
61	<a href="#">d2gr8a1</a>	Alignment	not modelled	5.4	18	<b>Fold:</b> Pili subunits <b>Superfamily:</b> Pili subunits <b>Family:</b> YadA C-terminal domain-like
62	<a href="#">c3jsrA_</a>	Alignment	not modelled	5.4	33	<b>PDB header:</b> structural genomics, unknown function <b>Chain:</b> A: <b>PDB Molecule:</b> all0216 protein; <b>PDBTitle:</b> x-ray structure of all0216 protein from nostoc sp. pcc 7120 at the 2 resolution 1.8a. northeast structural genomics consortium target3 nsr236
63	<a href="#">d2pwwa1</a>	Alignment	not modelled	5.3	21	<b>Fold:</b> TBP-like <b>Superfamily:</b> YugN-like <b>Family:</b> YugN-like
64	<a href="#">c3e8vA_</a>	Alignment	not modelled	5.2	35	<b>PDB header:</b> structural genomics, unknown function <b>Chain:</b> A: <b>PDB Molecule:</b> possible transglutaminase-family protein; <b>PDBTitle:</b> crystal structure of a possible transglutaminase-family2 protein proteolytic fragment from bacteroides fragilis
65	<a href="#">d1ou0a_</a>	Alignment	not modelled	5.2	35	<b>Fold:</b> Flavodoxin-like <b>Superfamily:</b> Precorrin-8X methylmutase CbiC/CobH <b>Family:</b> Precorrin-8X methylmutase CbiC/CobH
66	<a href="#">c3nsgA_</a>	Alignment	not modelled	5.2	15	<b>PDB header:</b> membrane protein <b>Chain:</b> A: <b>PDB Molecule:</b> outer membrane protein f; <b>PDBTitle:</b> crystal structure of ompf, an outer membrane protein from salmonella2 typhi
67	<a href="#">c3o27B_</a>	Alignment	not modelled	5.2	17	<b>PDB header:</b> dna binding protein <b>Chain:</b> B: <b>PDB Molecule:</b> putative uncharacterized protein; <b>PDBTitle:</b> the crystal structure of c68 from the hybrid virus-plasmid pssvx
68	<a href="#">c3qq2C_</a>	Alignment	not modelled	5.2	15	<b>PDB header:</b> membrane protein/protein transport <b>Chain:</b> C: <b>PDB Molecule:</b> brka autotransporter; <b>PDBTitle:</b> crystal structure of the beta domain of the bordetella autotransporter2 brka
69	<a href="#">d3prna_</a>	Alignment	not modelled	5.1	11	<b>Fold:</b> Transmembrane beta-barrels <b>Superfamily:</b> Porins <b>Family:</b> Porin
70	<a href="#">d3cjsb1</a>	Alignment	not modelled	5.1	27	<b>Fold:</b> Ribosomal L11/L12e N-terminal domain <b>Superfamily:</b> Ribosomal L11/L12e N-terminal domain <b>Family:</b> Ribosomal L11/L12e N-terminal domain
71	<a href="#">d1h9wa_</a>	Alignment	not modelled	5.0	19	<b>Fold:</b> Concanavalin A-like lectins/glucanases <b>Superfamily:</b> Concanavalin A-like lectins/glucanases <b>Family:</b> Legume lectins
72	<a href="#">d2okga1</a>	Alignment	not modelled	5.0	13	<b>Fold:</b> NagB/RpiA/CoA transferase-like <b>Superfamily:</b> NagB/RpiA/CoA transferase-like <b>Family:</b> SorC sugar-binding domain-like