
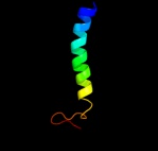
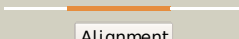
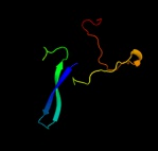

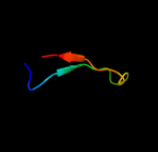
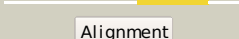
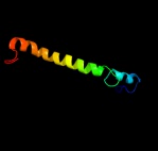

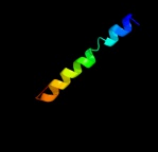
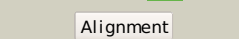
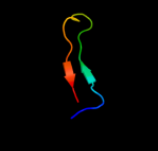


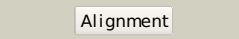
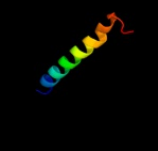
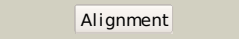
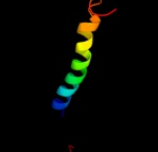

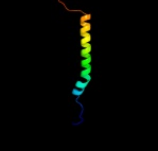








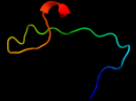




# Phyre2

Email	I.a.kelley@imperial.ac.uk
Description	P75962
Date	Thu Jan 5 12:16:31 GMT 2012
Unique Job ID	59e0f300f52ffc77

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	<a href="#">c2kluA_</a>	 Alignment		87.9	20	<b>PDB header:</b> immune system, membrane protein <b>Chain:</b> A; <b>PDB Molecule:</b> t-cell surface glycoprotein cd4; <b>PDBTitle:</b> nmr structure of the transmembrane and cytoplasmic domains2 of human cd4
2	<a href="#">c3db3A_</a>	 Alignment		86.2	17	<b>PDB header:</b> ligase <b>Chain:</b> A; <b>PDB Molecule:</b> e3 ubiquitin-protein ligase uhrf1; <b>PDBTitle:</b> crystal structure of the tandem tudor domains of the e3 ubiquitin-2 protein ligase uhrf1 in complex with trimethylated histone h3-k93 peptide
3	<a href="#">d1bcoa1</a>	 Alignment		79.3	19	<b>Fold:</b> mu transposase, C-terminal domain <b>Superfamily:</b> mu transposase, C-terminal domain <b>Family:</b> mu transposase, C-terminal domain
4	<a href="#">c2jp3A_</a>	 Alignment		76.4	14	<b>PDB header:</b> transcription <b>Chain:</b> A; <b>PDB Molecule:</b> fxyd domain-containing ion transport regulator 4; <b>PDBTitle:</b> solution structure of the human fxyd4 (chif) protein in sds2 micelles
5	<a href="#">c2l2tA_</a>	 Alignment		50.6	28	<b>PDB header:</b> membrane protein <b>Chain:</b> A; <b>PDB Molecule:</b> receptor tyrosine-protein kinase erbb-4; <b>PDBTitle:</b> solution nmr structure of the erbb4 dimeric membrane domain
6	<a href="#">c1bcoA_</a>	 Alignment		50.2	19	<b>PDB header:</b> transposase <b>Chain:</b> A; <b>PDB Molecule:</b> bacteriophage mu transposase; <b>PDBTitle:</b> bacteriophage mu transposase core domain
7	<a href="#">c2jqoA_</a>	 Alignment		32.2	19	<b>PDB header:</b> structural genomics <b>Chain:</b> A; <b>PDB Molecule:</b> hypothetical protein yoba; <b>PDBTitle:</b> nmr solution structure of bacillus subtilis yoba 21-120:2 northeast structural genomics consortium target sr547
8	<a href="#">c1afoB_</a>	 Alignment		31.9	18	<b>PDB header:</b> integral membrane protein <b>Chain:</b> B; <b>PDB Molecule:</b> glycophorin a; <b>PDBTitle:</b> dimeric transmembrane domain of human glycophorin a, nmr,2 20 structures
9	<a href="#">c2jo1A_</a>	 Alignment		29.2	17	<b>PDB header:</b> hydrolase regulator <b>Chain:</b> A; <b>PDB Molecule:</b> phospholemman; <b>PDBTitle:</b> structure of the na,k-atpase regulatory protein fxyd1 in2 micelles
10	<a href="#">c1kqfB_</a>	 Alignment		25.9	12	<b>PDB header:</b> oxidoreductase <b>Chain:</b> B; <b>PDB Molecule:</b> formate dehydrogenase, nitrate-inducible, iron-sulfur <b>PDBTitle:</b> formate dehydrogenase n from e. coli
11	<a href="#">c2k52A_</a>	 Alignment		22.6	18	<b>PDB header:</b> structural genomics, unknown function <b>Chain:</b> A; <b>PDB Molecule:</b> uncharacterized protein mj1198; <b>PDBTitle:</b> structure of uncharacterized protein mj1198 from2 methanocaldococcus jannaschii. northeast structural3 genomics target mjr117b

12	<a href="#">d1v43a2</a>	Alignment		21.8	13	<b>Fold:</b> OB-fold <b>Superfamily:</b> MOP-like <b>Family:</b> ABC-transporter additional domain
13	<a href="#">c3flzF_</a>	Alignment		20.6	31	<b>PDB header:</b> dna binding protein <b>Chain:</b> F: <b>PDB Molecule:</b> putative nucleic acid-binding lipoprotein; <b>PDBTitle:</b> crystal structure of putative nucleic acid-binding lipoprotein2 (yp_001337197.1) from klebsiella pneumoniae subsp. pneumoniae mgh3 78578 at 2.46 a resolution
14	<a href="#">d1ugpb_</a>	Alignment		19.5	18	<b>Fold:</b> SH3-like barrel <b>Superfamily:</b> Electron transport accessory proteins <b>Family:</b> Nitrile hydratase beta chain
15	<a href="#">c3dwqD_</a>	Alignment		16.5	43	<b>PDB header:</b> toxin <b>Chain:</b> D: <b>PDB Molecule:</b> subtilase cytotoxin, subunit b; <b>PDBTitle:</b> crystal structure of the a-subunit of the ab5 toxin from e.2 coli with neu5gc-2,3gal-1,3glcnac
16	<a href="#">c2l0cA_</a>	Alignment		16.5	13	<b>PDB header:</b> structural genomics, unknown function <b>Chain:</b> A: <b>PDB Molecule:</b> putative membrane protein; <b>PDBTitle:</b> solution nmr structure of protein sty4237 (residues 36-120) from2 salmonella enterica, northeast structural genomics consortium target3 slr115
17	<a href="#">d1v5ic1</a>	Alignment		15.7	18	<b>Fold:</b> Heme-binding four-helical bundle <b>Superfamily:</b> Respiratory nitrate reductase 1 gamma chain <b>Family:</b> Respiratory nitrate reductase 1 gamma chain
18	<a href="#">c3qz9D_</a>	Alignment		15.6	18	<b>PDB header:</b> lyase <b>Chain:</b> D: <b>PDB Molecule:</b> co-type nitrile hydratase beta subunit; <b>PDBTitle:</b> crystal structure of co-type nitrile hydratase beta-y215f from2 pseudomonas putida.
19	<a href="#">d2ahob2</a>	Alignment		14.8	13	<b>Fold:</b> OB-fold <b>Superfamily:</b> Nucleic acid-binding proteins <b>Family:</b> Cold shock DNA-binding domain-like
20	<a href="#">c2dxcG_</a>	Alignment		14.3	11	<b>PDB header:</b> hydrolase <b>Chain:</b> G: <b>PDB Molecule:</b> thiocyanate hydrolase subunit alpha; <b>PDBTitle:</b> recombinant thiocyanate hydrolase, fully-matured form
21	<a href="#">c3kdpH_</a>	Alignment	not modelled	14.1	26	<b>PDB header:</b> hydrolase <b>Chain:</b> H: <b>PDB Molecule:</b> na+/k+ atpase gamma subunit transcript variant a; <b>PDBTitle:</b> crystal structure of the sodium-potassium pump
22	<a href="#">c3kdpG_</a>	Alignment	not modelled	14.1	26	<b>PDB header:</b> hydrolase <b>Chain:</b> G: <b>PDB Molecule:</b> na+/k+ atpase gamma subunit transcript variant a; <b>PDBTitle:</b> crystal structure of the sodium-potassium pump
23	<a href="#">d1v29b_</a>	Alignment	not modelled	13.5	7	<b>Fold:</b> SH3-like barrel <b>Superfamily:</b> Electron transport accessory proteins <b>Family:</b> Nitrile hydratase beta chain
24	<a href="#">c2ky9A_</a>	Alignment	not modelled	13.3	19	<b>PDB header:</b> structural genomics, unknown function <b>Chain:</b> A: <b>PDB Molecule:</b> uncharacterized protein ydhk; <b>PDBTitle:</b> solution nmr structure of ydhk c-terminal domain from b.subtilis,2 northeast structural genomics consortium target target sr518
25	<a href="#">d2qdyb1</a>	Alignment	not modelled	12.6	15	<b>Fold:</b> SH3-like barrel <b>Superfamily:</b> Electron transport accessory proteins <b>Family:</b> Nitrile hydratase beta chain
26	<a href="#">d1vqqq1</a>	Alignment	not modelled	12.2	31	<b>Fold:</b> SH3-like barrel <b>Superfamily:</b> Translation proteins SH3-like domain <b>Family:</b> Ribosomal proteins L24p and L21e
27	<a href="#">d2e74f1</a>	Alignment	not modelled	11.9	20	<b>Fold:</b> Single transmembrane helix <b>Superfamily:</b> PetM subunit of the cytochrome b6f complex <b>Family:</b> PetM subunit of the cytochrome b6f complex
28	<a href="#">c2kpeB_</a>	Alignment	not modelled	11.0	17	<b>PDB header:</b> membrane protein <b>Chain:</b> B: <b>PDB Molecule:</b> glycophorin-a; <b>PDBTitle:</b> refined structure of glycophorin a transmembrane segment dimer in dpc2 micelles

29	<a href="#">c2kpeA</a>	Alignment	not modelled	11.0	17	<b>PDB header:</b> membrane protein <b>Chain:</b> A: <b>PDB Molecule:</b> glycophorin-a; <b>PDBTitle:</b> refined structure of glycophorin a transmembrane segment dimer in dpc2 micelles
30	<a href="#">c1s1iQ</a>	Alignment	not modelled	10.9	14	<b>PDB header:</b> ribosome <b>Chain:</b> Q: <b>PDB Molecule:</b> 60s ribosomal protein l21-a; <b>PDBTitle:</b> structure of the ribosomal 80s-eef2-sordarin complex from2 yeast obtained by docking atomic models for rna and protein3 components into a 11.7 a cryo-em map. this file, 1s1i,4 contains 60s subunit. the 40s ribosomal subunit is in file5 1s1h.
31	<a href="#">c3i4oA</a>	Alignment	not modelled	10.3	32	<b>PDB header:</b> translation <b>Chain:</b> A: <b>PDB Molecule:</b> translation initiation factor if-1; <b>PDBTitle:</b> crystal structure of translation initiation factor 1 from2 mycobacterium tuberculosis
32	<a href="#">d1wjsa</a>	Alignment	not modelled	10.3	19	<b>Fold:</b> SH3-like barrel <b>Superfamily:</b> Tudor/PWWP/MBT <b>Family:</b> MBT repeat
33	<a href="#">c2qtsA</a>	Alignment	not modelled	10.3	12	<b>PDB header:</b> membrane protein <b>Chain:</b> A: <b>PDB Molecule:</b> acid-sensing ion channel; <b>PDBTitle:</b> structure of an acid-sensing ion channel 1 at 1.9 a resolution and low2 ph
34	<a href="#">d3d31a1</a>	Alignment	not modelled	10.3	9	<b>Fold:</b> OB-fold <b>Superfamily:</b> MOP-like <b>Family:</b> ABC-transporter additional domain
35	<a href="#">c2zkrq</a>	Alignment	not modelled	9.3	20	<b>PDB header:</b> ribosomal protein/rna <b>Chain:</b> Q: <b>PDB Molecule:</b> rna expansion segment es31 part ii; <b>PDBTitle:</b> structure of a mammalian ribosomal 60s subunit within an2 80s complex obtained by docking homology models of the rna3 and proteins into an 8.7 a cryo-em map
36	<a href="#">d1hr0w</a>	Alignment	not modelled	9.2	37	<b>Fold:</b> OB-fold <b>Superfamily:</b> Nucleic acid-binding proteins <b>Family:</b> Cold shock DNA-binding domain-like
37	<a href="#">c2kncA</a>	Alignment	not modelled	9.0	23	<b>PDB header:</b> cell adhesion <b>Chain:</b> A: <b>PDB Molecule:</b> integrin alpha-iib; <b>PDBTitle:</b> platelet integrin alfaiib-beta3 transmembrane-cytoplasmic2 heterocomplex
38	<a href="#">c3cm1C</a>	Alignment	not modelled	8.4	19	<b>PDB header:</b> cell cycle <b>Chain:</b> C: <b>PDB Molecule:</b> ssga-like sporulation-specific cell division protein; <b>PDBTitle:</b> crystal structure of ssga-like sporulation-specific cell division2 protein (yp_290167.1) from thermobifida fusca yx-er1 at 2.60 a3 resolution
39	<a href="#">d2k5qa1</a>	Alignment	not modelled	8.3	9	<b>Fold:</b> OB-fold <b>Superfamily:</b> BC4932-like <b>Family:</b> BC4932-like
40	<a href="#">d1fvia1</a>	Alignment	not modelled	8.0	16	<b>Fold:</b> OB-fold <b>Superfamily:</b> Nucleic acid-binding proteins <b>Family:</b> DNA ligase/mRNA capping enzyme postcatalytic domain
41	<a href="#">d1fftb2</a>	Alignment	not modelled	7.6	11	<b>Fold:</b> Transmembrane helix hairpin <b>Superfamily:</b> Cytochrome c oxidase subunit II-like, transmembrane region <b>Family:</b> Cytochrome c oxidase subunit II-like, transmembrane region
42	<a href="#">c2ahoB</a>	Alignment	not modelled	7.6	11	<b>PDB header:</b> translation <b>Chain:</b> B: <b>PDB Molecule:</b> translation initiation factor 2 alpha subunit; <b>PDBTitle:</b> structure of the archaeal initiation factor eif2 alpha-2 gamma heterodimer from sulfolobus solfataricus complexed3 with gdpnp
43	<a href="#">c2k1aA</a>	Alignment	not modelled	7.6	23	<b>PDB header:</b> cell adhesion <b>Chain:</b> A: <b>PDB Molecule:</b> integrin alpha-iib; <b>PDBTitle:</b> bicelle-embedded integrin alpha(iib) transmembrane segment
44	<a href="#">d1h9ra2</a>	Alignment	not modelled	7.5	15	<b>Fold:</b> OB-fold <b>Superfamily:</b> MOP-like <b>Family:</b> BiMOP, duplicated molybdate-binding domain
45	<a href="#">c2jwaA</a>	Alignment	not modelled	7.5	9	<b>PDB header:</b> transferase <b>Chain:</b> A: <b>PDB Molecule:</b> receptor tyrosine-protein kinase erbb2-2; <b>PDBTitle:</b> erbb2 transmembrane segment dimer spatial structure
46	<a href="#">c3j0cH</a>	Alignment	not modelled	7.5	11	<b>PDB header:</b> virus <b>Chain:</b> H: <b>PDB Molecule:</b> e2 envelope glycoprotein; <b>PDBTitle:</b> models of e1, e2 and cp of venezuelan equine encephalitis virus tc-832 strain restrained by a near atomic resolution cryo-em map
47	<a href="#">d1qcsa1</a>	Alignment	not modelled	7.3	32	<b>Fold:</b> Double psi beta-barrel <b>Superfamily:</b> ADC-like <b>Family:</b> Cdc48 N-terminal domain-like
48	<a href="#">d1f20a1</a>	Alignment	not modelled	7.1	11	<b>Fold:</b> Reductase/isomerase/elongation factor common domain <b>Superfamily:</b> Riboflavin synthase domain-like <b>Family:</b> NADPH-cytochrome p450 reductase FAD-binding domain-like
49	<a href="#">c2zxeG</a>	Alignment	not modelled	6.7	17	<b>PDB header:</b> hydrolase/transport protein <b>Chain:</b> G: <b>PDB Molecule:</b> phospholemman-like protein; <b>PDBTitle:</b> crystal structure of the sodium - potassium pump in the e2.2k+.pi2 state
50	<a href="#">c2e6zA</a>	Alignment	not modelled	6.7	31	<b>PDB header:</b> transcription <b>Chain:</b> A: <b>PDB Molecule:</b> transcription elongation factor spt5; <b>PDBTitle:</b> solution structure of the second kow motif of human2 transcription elongation factor spt5
51	<a href="#">c2xzn2</a>	Alignment	not modelled	6.5	27	<b>PDB header:</b> ribosome <b>Chain:</b> 2: <b>PDB Molecule:</b> 40s ribosomal protein s8; <b>PDBTitle:</b> crystal structure of the eukaryotic 40s ribosomal2 subunit in complex with initiation factor 1. this file3 contains the 40s subunit and initiation factor for4 molecule 2
52	<a href="#">d1y14b1</a>	Alignment	not modelled	6.3	16	<b>Fold:</b> OB-fold <b>Superfamily:</b> Nucleic acid-binding proteins <b>Family:</b> Cold shock DNA-binding domain-like

53	<a href="#">c2zkIA</a>	Alignment	not modelled	6.3	17	<b>PDB header:</b> isomerase <b>Chain:</b> A: <b>PDB Molecule:</b> capsular polysaccharide synthesis enzyme cap5f; <b>PDBTitle:</b> crystal structure of capsular polysaccharide assembling protein capf2 from staphylococcus aureus
54	<a href="#">d1h9ma2</a>	Alignment	not modelled	6.3	6	<b>Fold:</b> OB-fold <b>Superfamily:</b> MOP-like <b>Family:</b> BiMOP, duplicated molybdate-binding domain
55	<a href="#">c2ks1B</a>	Alignment	not modelled	6.2	11	<b>PDB header:</b> transferase <b>Chain:</b> B: <b>PDB Molecule:</b> epidermal growth factor receptor; <b>PDBTitle:</b> heterodimeric association of transmembrane domains of erb1 and erb22 receptors enabling kinase activation
56	<a href="#">d1h6la</a>	Alignment	not modelled	6.2	18	<b>Fold:</b> 6-bladed beta-propeller <b>Superfamily:</b> Thermostable phytase (3-phytase) <b>Family:</b> Thermostable phytase (3-phytase)
57	<a href="#">c3u5cl</a>	Alignment	not modelled	6.0	36	<b>PDB header:</b> ribosome <b>Chain:</b> I: <b>PDB Molecule:</b> 40s ribosomal protein s8-a; <b>PDBTitle:</b> the structure of the eukaryotic ribosome at 3.0 a resolution
58	<a href="#">c4a1aP</a>	Alignment	not modelled	6.0	14	<b>PDB header:</b> ribosome <b>Chain:</b> P: <b>PDB Molecule:</b> 60s ribosomal protein l21; <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.
59	<a href="#">c3iz5U</a>	Alignment	not modelled	6.0	21	<b>PDB header:</b> ribosome <b>Chain:</b> U: <b>PDB Molecule:</b> 60s ribosomal protein l21 (l21e); <b>PDBTitle:</b> localization of the large subunit ribosomal proteins into a 5.5 a2 cryo-em map of triticum aestivum translating 80s ribosome
60	<a href="#">c1vf5G</a>	Alignment	not modelled	5.8	21	<b>PDB header:</b> photosynthesis <b>Chain:</b> G: <b>PDB Molecule:</b> protein pet g; <b>PDBTitle:</b> crystal structure of cytochrome b6f complex from m.laminosus
61	<a href="#">d1vf5g</a>	Alignment	not modelled	5.8	21	<b>Fold:</b> Single transmembrane helix <b>Superfamily:</b> PetG subunit of the cytochrome b6f complex <b>Family:</b> PetG subunit of the cytochrome b6f complex
62	<a href="#">c1ddiA</a>	Alignment	not modelled	5.7	8	<b>PDB header:</b> oxidoreductase <b>Chain:</b> A: <b>PDB Molecule:</b> sulfite reductase [nadph] flavoprotein alpha- <b>PDBTitle:</b> crystal structure of sir-fp60
63	<a href="#">c2k21A</a>	Alignment	not modelled	5.6	13	<b>PDB header:</b> membrane protein <b>Chain:</b> A: <b>PDB Molecule:</b> potassium voltage-gated channel subfamily e <b>PDBTitle:</b> nmr structure of human kcne1 in lmpg micelles at ph 6.0 and2 40 degree c
64	<a href="#">d3bn0a1</a>	Alignment	not modelled	5.5	15	<b>Fold:</b> Ribosomal protein S16 <b>Superfamily:</b> Ribosomal protein S16 <b>Family:</b> Ribosomal protein S16
65	<a href="#">c2kcyA</a>	Alignment	not modelled	5.5	25	<b>PDB header:</b> ribosomal protein <b>Chain:</b> A: <b>PDB Molecule:</b> 30s ribosomal protein s8e; <b>PDBTitle:</b> solution structure of ribosomal protein s8e from2 methanothermobacter thermautotrophicus,3 northeaststructural genomics consortium (nesg) target tr71d
66	<a href="#">c2kcoA</a>	Alignment	not modelled	5.5	18	<b>PDB header:</b> ribosomal protein <b>Chain:</b> A: <b>PDB Molecule:</b> 30s ribosomal protein s8e; <b>PDBTitle:</b> solution nmr structure of ribosomal protein sso0164 from2 sulfobolbus solfataricus. northeast structural genomics3 consortium (nesg) target sst4.
67	<a href="#">c1fftG</a>	Alignment	not modelled	5.4	14	<b>PDB header:</b> oxidoreductase <b>Chain:</b> G: <b>PDB Molecule:</b> ubiquinol oxidase; <b>PDBTitle:</b> the structure of ubiquinol oxidase from escherichia coli
68	<a href="#">c3izcU</a>	Alignment	not modelled	5.3	21	<b>PDB header:</b> ribosome <b>Chain:</b> U: <b>PDB Molecule:</b> 60s ribosomal protein rpl21 (l21e); <b>PDBTitle:</b> localization of the large subunit ribosomal proteins into a 6.1 a2 cryo-em map of saccharomyces cerevisiae translating 80s ribosome
69	<a href="#">d1q46a2</a>	Alignment	not modelled	5.3	18	<b>Fold:</b> OB-fold <b>Superfamily:</b> Nucleic acid-binding proteins <b>Family:</b> Cold shock DNA-binding domain-like
70	<a href="#">d1oi1a2</a>	Alignment	not modelled	5.3	12	<b>Fold:</b> SH3-like barrel <b>Superfamily:</b> Tudor/PWWP/MBT <b>Family:</b> MBT repeat
71	<a href="#">d1g2914</a>	Alignment	not modelled	5.2	16	<b>Fold:</b> OB-fold <b>Superfamily:</b> MOP-like <b>Family:</b> ABC-transporter additional domain
72	<a href="#">c2khjA</a>	Alignment	not modelled	5.2	21	<b>PDB header:</b> ribosomal protein <b>Chain:</b> A: <b>PDB Molecule:</b> 30s ribosomal protein s1; <b>PDBTitle:</b> nmr structure of the domain 6 of the e. coli ribosomal2 protein s1
73	<a href="#">d2e74g1</a>	Alignment	not modelled	5.2	19	<b>Fold:</b> Single transmembrane helix <b>Superfamily:</b> PetG subunit of the cytochrome b6f complex <b>Family:</b> PetG subunit of the cytochrome b6f complex
74	<a href="#">c2khiA</a>	Alignment	not modelled	5.1	29	<b>PDB header:</b> ribosomal protein <b>Chain:</b> A: <b>PDB Molecule:</b> 30s ribosomal protein s1; <b>PDBTitle:</b> nmr structure of the domain 4 of the e. coli ribosomal2 protein s1