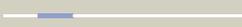
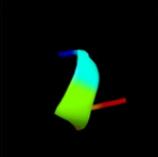
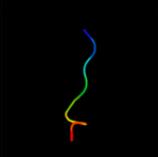
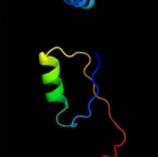


# Phyre2

Email	l.a.kelley@imperial.ac.uk
Description	Q46899
Date	Thu Jan 5 12:35:39 GMT 2012
Unique Job ID	d5c3a8c701afa583

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	<a href="#">c3ps0C_</a>	 Alignment		58.6	17	<b>PDB header:</b> rna binding protein <b>Chain:</b> C: <b>PDB Molecule:</b> crispr-associated protein, csa2; <b>PDBTitle:</b> the structure of the crispr-associated protein, csa2, from <i>sulfolobus2 solfataricus</i>
2	<a href="#">c3myfB_</a>	 Alignment		51.3	17	<b>PDB header:</b> transferase <b>Chain:</b> B: <b>PDB Molecule:</b> sensor protein; <b>PDBTitle:</b> the crystal structure of the hpt domain from the hpt sensor hybrid2 histidine kinase from <i>shewanella</i> to 1.80a
3	<a href="#">c3igtA_</a>	 Alignment		51.2	11	<b>PDB header:</b> transferase <b>Chain:</b> A: <b>PDB Molecule:</b> signal transduction histidine-protein kinase bara; <b>PDBTitle:</b> structure of the hpt domain of sensor protein bara from <i>escherichia2 coli</i> cft073.
4	<a href="#">c3itcA_</a>	 Alignment		46.1	12	<b>PDB header:</b> hydrolase <b>Chain:</b> A: <b>PDB Molecule:</b> renal dipeptidase; <b>PDBTitle:</b> crystal structure of sco3058 with bound citrate and glycerol
5	<a href="#">d2ooca1</a>	 Alignment		45.5	17	<b>Fold:</b> Four-helical up-and-down bundle <b>Superfamily:</b> Histidine-containing phosphotransfer domain, HPT domain <b>Family:</b> SphA-like
6	<a href="#">c1byvA_</a>	 Alignment		35.0	33	<b>PDB header:</b> hormone/growth factor <b>Chain:</b> A: <b>PDB Molecule:</b> protein (calcitonin); <b>PDBTitle:</b> glycosylated eel calcitonin
7	<a href="#">d1i4pa1</a>	 Alignment		28.8	33	<b>Fold:</b> OB-fold <b>Superfamily:</b> Bacterial enterotoxins <b>Family:</b> Superantigen toxins, N-terminal domain
8	<a href="#">d2aq2b1</a>	 Alignment		27.0	33	<b>Fold:</b> OB-fold <b>Superfamily:</b> Bacterial enterotoxins <b>Family:</b> Superantigen toxins, N-terminal domain
9	<a href="#">c2q25C_</a>	 Alignment		25.9	8	<b>PDB header:</b> virus,hydrolase/rna <b>Chain:</b> C: <b>PDB Molecule:</b> protein alpha; <b>PDBTitle:</b> flock house virus coat protein d75n mutant
10	<a href="#">c2i5gB_</a>	 Alignment		23.8	16	<b>PDB header:</b> hydrolase <b>Chain:</b> B: <b>PDB Molecule:</b> amidohydrolase; <b>PDBTitle:</b> crystal strcuture of amidohydrolase from <i>pseudomonas2 aeruginosa</i>
11	<a href="#">c2ragB_</a>	 Alignment		23.0	13	<b>PDB header:</b> hydrolase <b>Chain:</b> B: <b>PDB Molecule:</b> dipeptidase; <b>PDBTitle:</b> crystal structure of aminohydrolase from <i>caulobacter crescentus</i>

12	<a href="#">d1bxta1</a>	Alignment		22.6	33	<b>Fold:</b> OB-fold <b>Superfamily:</b> Bacterial enterotoxins <b>Family:</b> Superantigen toxins, N-terminal domain
13	<a href="#">d1fnua1</a>	Alignment		20.7	21	<b>Fold:</b> OB-fold <b>Superfamily:</b> Bacterial enterotoxins <b>Family:</b> Superantigen toxins, N-terminal domain
14	<a href="#">d2brja1</a>	Alignment		20.5	17	<b>Fold:</b> AOC barrel-like <b>Superfamily:</b> Allene oxide cyclase-like <b>Family:</b> Allene oxide cyclase-like
15	<a href="#">d1esfa1</a>	Alignment		19.3	22	<b>Fold:</b> OB-fold <b>Superfamily:</b> Bacterial enterotoxins <b>Family:</b> Superantigen toxins, N-terminal domain
16	<a href="#">d2bbvc</a>	Alignment		18.6	8	<b>Fold:</b> Nucleoplasmin-like/VP (viral coat and capsid proteins) <b>Superfamily:</b> Positive stranded ssRNA viruses <b>Family:</b> Nodaviridae-like VP
17	<a href="#">d2bmta</a>	Alignment		17.9	60	<b>Fold:</b> Knottins (small inhibitors, toxins, lectins) <b>Superfamily:</b> Scorpion toxin-like <b>Family:</b> Short-chain scorpion toxins
18	<a href="#">d1enfai1</a>	Alignment		17.9	22	<b>Fold:</b> OB-fold <b>Superfamily:</b> Bacterial enterotoxins <b>Family:</b> Superantigen toxins, N-terminal domain
19	<a href="#">c3b40A</a>	Alignment		16.6	13	<b>PDB header:</b> hydrolase <b>Chain:</b> A: <b>PDB Molecule:</b> probable dipeptidase; <b>PDBTitle:</b> crystal structure of the probable dipeptidase pvdm from2 pseudomonas aeruginosa
20	<a href="#">d1nh8a2</a>	Alignment		16.0	14	<b>Fold:</b> Ferredoxin-like <b>Superfamily:</b> GlnB-like <b>Family:</b> ATP phosphoribosyltransferase (ATP-PRTase, HisG), regulatory C-terminal domain
21	<a href="#">d1itua</a>	Alignment	not modelled	15.6	9	<b>Fold:</b> TIM beta/alpha-barrel <b>Superfamily:</b> Metallo-dependent hydrolases <b>Family:</b> Renal dipeptidase
22	<a href="#">d1h3da2</a>	Alignment	not modelled	15.5	22	<b>Fold:</b> Ferredoxin-like <b>Superfamily:</b> GlnB-like <b>Family:</b> ATP phosphoribosyltransferase (ATP-PRTase, HisG), regulatory C-terminal domain
23	<a href="#">d1klud1</a>	Alignment	not modelled	14.8	25	<b>Fold:</b> OB-fold <b>Superfamily:</b> Bacterial enterotoxins <b>Family:</b> Superantigen toxins, N-terminal domain
24	<a href="#">c3faja</a>	Alignment	not modelled	14.8	22	<b>PDB header:</b> structural protein <b>Chain:</b> A: <b>PDB Molecule:</b> putative uncharacterized protein; <b>PDBTitle:</b> structure of the structural protein p131 of the archaeal virus2 acidianus two-tailed virus (atv)
25	<a href="#">d1hywa</a>	Alignment	not modelled	14.6	17	<b>Fold:</b> gpW/XkdW-like <b>Superfamily:</b> Head-to-tail joining protein W, gpW <b>Family:</b> Head-to-tail joining protein W, gpW
26	<a href="#">c3fdgA</a>	Alignment	not modelled	14.5	11	<b>PDB header:</b> hydrolase <b>Chain:</b> A: <b>PDB Molecule:</b> dipeptidase ac. metallo peptidase. merops family m19; <b>PDBTitle:</b> the crystal structure of the dipeptidase ac, metallo peptidase. merops2 family m19
27	<a href="#">d1r46a1</a>	Alignment	not modelled	14.0	10	<b>Fold:</b> Glycosyl hydrolase domain <b>Superfamily:</b> Glycosyl hydrolase domain <b>Family:</b> alpha-Amylases, C-terminal beta-sheet domain
28	<a href="#">d2bbva</a>	Alignment	not modelled	13.7	8	<b>Fold:</b> Nucleoplasmin-like/VP (viral coat and capsid proteins) <b>Superfamily:</b> Positive stranded ssRNA viruses <b>Family:</b> Nodaviridae-like VP

29	<a href="#">d1g0da1</a>	Alignment	not modelled	13.5	13	<b>Fold:</b> Immunoglobulin-like beta-sandwich <b>Superfamily:</b> E set domains <b>Family:</b> Transglutaminase N-terminal domain
30	<a href="#">c3oo2B_</a>	Alignment	not modelled	12.9	37	<b>PDB header:</b> isomerase <b>Chain:</b> B: <b>PDB Molecule:</b> alanine racemase 1; <b>PDBTitle:</b> 2.37 angstrom resolution crystal structure of an alanine racemase2 (alr) from staphylococcus aureus subsp. aureus col
31	<a href="#">c2ov7C_</a>	Alignment	not modelled	12.4	13	<b>PDB header:</b> ribosomal protein <b>Chain:</b> C: <b>PDB Molecule:</b> 50s ribosomal protein l11; <b>PDBTitle:</b> the first domain of the ribosomal protein l1 from thermus2 thermophilus
32	<a href="#">c2jxzA_</a>	Alignment	not modelled	12.0	8	<b>PDB header:</b> hormone <b>Chain:</b> A: <b>PDB Molecule:</b> calcitonin; <b>PDBTitle:</b> solution conformation of a non-amyloidogenic analogue of human2 calcitonin in sodium dodecyl sulfate micelles
33	<a href="#">d1vjja1</a>	Alignment	not modelled	12.0	4	<b>Fold:</b> Immunoglobulin-like beta-sandwich <b>Superfamily:</b> E set domains <b>Family:</b> Transglutaminase N-terminal domain
34	<a href="#">d2ywqa1</a>	Alignment	not modelled	11.8	14	<b>Fold:</b> Ribosome binding protein Y (YfiA homologue) <b>Superfamily:</b> Ribosome binding protein Y (YfiA homologue) <b>Family:</b> Ribosome binding protein Y (YfiA homologue)
35	<a href="#">d1chka_</a>	Alignment	not modelled	11.3	17	<b>Fold:</b> Lysozyme-like <b>Superfamily:</b> Lysozyme-like <b>Family:</b> Chitosanase
36	<a href="#">c3oo2A_</a>	Alignment	not modelled	10.8	37	<b>PDB header:</b> isomerase <b>Chain:</b> A: <b>PDB Molecule:</b> alanine racemase 1; <b>PDBTitle:</b> 2.37 angstrom resolution crystal structure of an alanine racemase2 (alr) from staphylococcus aureus subsp. aureus col
37	<a href="#">d1wd3a1</a>	Alignment	not modelled	10.3	16	<b>Fold:</b> Concanavalin A-like lectins/glucanases <b>Superfamily:</b> Concanavalin A-like lectins/glucanases <b>Family:</b> Alpha-L-arabinofuranosidase B, N-terminal domain
38	<a href="#">d1ex0a1</a>	Alignment	not modelled	10.3	4	<b>Fold:</b> Immunoglobulin-like beta-sandwich <b>Superfamily:</b> E set domains <b>Family:</b> Transglutaminase N-terminal domain
39	<a href="#">c2rqIA_</a>	Alignment	not modelled	10.3	21	<b>PDB header:</b> translation <b>Chain:</b> A: <b>PDB Molecule:</b> probable sigma-54 modulation protein; <b>PDBTitle:</b> solution structure of the e. coli ribosome hibernation2 promoting factor hpf
40	<a href="#">c3iefA_</a>	Alignment	not modelled	10.1	33	<b>PDB header:</b> transferase, rna binding protein <b>Chain:</b> A: <b>PDB Molecule:</b> trna (guanine-n(1)-)-methyltransferase; <b>PDBTitle:</b> crystal structure of trna guanine-n1-methyltransferase from2 bartonella henselae using mpcs.
41	<a href="#">c1p4qA_</a>	Alignment	not modelled	10.0	25	<b>PDB header:</b> transcription/transferase <b>Chain:</b> A: <b>PDB Molecule:</b> cbp/p300-interacting transactivator 2; <b>PDBTitle:</b> solution structure of the cited2 transactivation domain in2 complex with the p300 ch1 domain
42	<a href="#">c3lu2B_</a>	Alignment	not modelled	9.9	11	<b>PDB header:</b> hydrolase <b>Chain:</b> B: <b>PDB Molecule:</b> lmo2462 protein; <b>PDBTitle:</b> structure of lmo2462, a listeria monocytogenes amidohydrolase family2 putative dipeptidase
43	<a href="#">d1oqja_</a>	Alignment	not modelled	9.3	23	<b>Fold:</b> SAND domain-like <b>Superfamily:</b> SAND domain-like <b>Family:</b> SAND domain
44	<a href="#">d1t56a1</a>	Alignment	not modelled	9.2	18	<b>Fold:</b> DNA/RNA-binding 3-helical bundle <b>Superfamily:</b> Homeodomain-like <b>Family:</b> Tetracyclin repressor-like, N-terminal domain
45	<a href="#">d2g9hd1</a>	Alignment	not modelled	8.8	22	<b>Fold:</b> OB-fold <b>Superfamily:</b> Bacterial enterotoxins <b>Family:</b> Superantigen toxins, N-terminal domain
46	<a href="#">c2d44A_</a>	Alignment	not modelled	8.7	16	<b>PDB header:</b> hydrolase <b>Chain:</b> A: <b>PDB Molecule:</b> alpha-l-arabinofuranosidase b; <b>PDBTitle:</b> crystal structure of arabinofuranosidase complexed with2 arabinofuranosyl-alpha-1,2-xylobiose
47	<a href="#">d1imua_</a>	Alignment	not modelled	8.5	11	<b>Fold:</b> Ribosome binding protein Y (YfiA homologue) <b>Superfamily:</b> Ribosome binding protein Y (YfiA homologue) <b>Family:</b> Ribosome binding protein Y (YfiA homologue)
48	<a href="#">d2q3za1</a>	Alignment	not modelled	8.4	13	<b>Fold:</b> Immunoglobulin-like beta-sandwich <b>Superfamily:</b> E set domains <b>Family:</b> Transglutaminase N-terminal domain
49	<a href="#">d1h5pa_</a>	Alignment	not modelled	8.1	30	<b>Fold:</b> SAND domain-like <b>Superfamily:</b> SAND domain-like <b>Family:</b> SAND domain
50	<a href="#">c3tqmD_</a>	Alignment	not modelled	8.0	25	<b>PDB header:</b> protein binding <b>Chain:</b> D: <b>PDB Molecule:</b> ribosome-associated factor y; <b>PDBTitle:</b> structure of an ribosomal subunit interface protein from coxiella2 burnetii
51	<a href="#">d1yfna1</a>	Alignment	not modelled	7.6	23	<b>Fold:</b> SspB-like <b>Superfamily:</b> SspB-like <b>Family:</b> Stringent starvation protein B, SspB
52	<a href="#">c1y8qD_</a>	Alignment	not modelled	7.4	31	<b>PDB header:</b> ligase <b>Chain:</b> D: <b>PDB Molecule:</b> ubiquitin-like 2 activating enzyme e1b; <b>PDBTitle:</b> sumo e1 activating enzyme sae1-sae2-mg-atp complex
53	<a href="#">d1ad2a_</a>	Alignment	not modelled	7.3	13	<b>Fold:</b> Ribosomal protein L1 <b>Superfamily:</b> Ribosomal protein L1 <b>Family:</b> Ribosomal protein L1
54	<a href="#">d1m06f_</a>	Alignment	not modelled	7.2	75	<b>Fold:</b> Nucleoplasmin-like/VP (viral coat and capsid proteins) <b>Superfamily:</b> ssDNA viruses <b>Family:</b> Microviridae-like VP
55	<a href="#">c2dzIA_</a>	Alignment	not modelled	7.1	24	<b>PDB header:</b> structural genomics unknown function <b>Chain:</b> A: <b>PDB Molecule:</b> protein fam100b; <b>PDBTitle:</b> solution structure of the uba domain in human protein2 fam100b

56	<a href="#">d2id6a1</a>	Alignment	not modelled	7.1	13	<b>Fold:</b> DNA/RNA-binding 3-helical bundle <b>Superfamily:</b> Homeodomain-like <b>Family:</b> Tetracyclin repressor-like, N-terminal domain
57	<a href="#">c3vh1A</a>	Alignment	not modelled	7.0	31	<b>PDB header:</b> metal binding protein <b>Chain:</b> A: <b>PDB Molecule:</b> ubiquitin-like modifier-activating enzyme atg7; <b>PDBTitle:</b> crystal structure of saccharomyces cerevisiae atg7 (1-595)
58	<a href="#">c1r8uA</a>	Alignment	not modelled	6.9	25	<b>PDB header:</b> transcription/transcription activator <b>Chain:</b> A: <b>PDB Molecule:</b> cbp/p300-interacting transactivator 2; <b>PDBTitle:</b> nmr structure of cbp taz1/cited2 complex
59	<a href="#">d1ufna</a>	Alignment	not modelled	6.8	23	<b>Fold:</b> SAND domain-like <b>Superfamily:</b> SAND domain-like <b>Family:</b> SAND domain
60	<a href="#">d1t07a</a>	Alignment	not modelled	6.7	14	<b>Fold:</b> YggX-like <b>Superfamily:</b> YggX-like <b>Family:</b> YggX-like
61	<a href="#">d2fd5a1</a>	Alignment	not modelled	6.7	20	<b>Fold:</b> DNA/RNA-binding 3-helical bundle <b>Superfamily:</b> Homeodomain-like <b>Family:</b> Tetracyclin repressor-like, N-terminal domain
62	<a href="#">c2w9jB</a>	Alignment	not modelled	6.6	43	<b>PDB header:</b> signaling protein <b>Chain:</b> B: <b>PDB Molecule:</b> signal recognition particle subunit srp14; <b>PDBTitle:</b> the crystal structure of srp14 from the schizosaccharomyces2 pombe signal recognition particle
63	<a href="#">d1xs8a</a>	Alignment	not modelled	6.6	29	<b>Fold:</b> YggX-like <b>Superfamily:</b> YggX-like <b>Family:</b> YggX-like
64	<a href="#">d1scoa</a>	Alignment	not modelled	6.4	50	<b>Fold:</b> Knottins (small inhibitors, toxins, lectins) <b>Superfamily:</b> Scorpion toxin-like <b>Family:</b> Short-chain scorpion toxins
65	<a href="#">d1kq1a</a>	Alignment	not modelled	6.4	80	<b>Fold:</b> Sm-like fold <b>Superfamily:</b> Sm-like ribonucleoproteins <b>Family:</b> Pleiotropic translational regulator Hfq
66	<a href="#">d1r5sa</a>	Alignment	not modelled	6.3	42	<b>Fold:</b> Connexin43 <b>Superfamily:</b> Connexin43 <b>Family:</b> Connexin43
67	<a href="#">d2g7la1</a>	Alignment	not modelled	6.2	23	<b>Fold:</b> DNA/RNA-binding 3-helical bundle <b>Superfamily:</b> Homeodomain-like <b>Family:</b> Tetracyclin repressor-like, N-terminal domain
68	<a href="#">d2hya1</a>	Alignment	not modelled	6.1	18	<b>Fold:</b> DNA/RNA-binding 3-helical bundle <b>Superfamily:</b> Homeodomain-like <b>Family:</b> Tetracyclin repressor-like, N-terminal domain
69	<a href="#">d1nova</a>	Alignment	not modelled	6.0	23	<b>Fold:</b> Nucleoplasmin-like/VP (viral coat and capsid proteins) <b>Superfamily:</b> Positive stranded ssRNA viruses <b>Family:</b> Nodaviridae-like VP
70	<a href="#">c3ixrA</a>	Alignment	not modelled	5.9	7	<b>PDB header:</b> oxidoreductase <b>Chain:</b> A: <b>PDB Molecule:</b> bacterioferritin comigratory protein; <b>PDBTitle:</b> crystal structure of xylella fastidiosa prxq c47s mutant
71	<a href="#">d1qusa</a>	Alignment	not modelled	5.8	19	<b>Fold:</b> Lysozyme-like <b>Superfamily:</b> Lysozyme-like <b>Family:</b> Bacterial muramidase, catalytic domain
72	<a href="#">c3hsbB</a>	Alignment	not modelled	5.7	80	<b>PDB header:</b> rna binding protein/rna <b>Chain:</b> B: <b>PDB Molecule:</b> protein hfq; <b>PDBTitle:</b> crystal structure of ymah (hfq) from bacillus subtilis in complex with2 an rna aptamer
73	<a href="#">c2b7fD</a>	Alignment	not modelled	5.7	18	<b>PDB header:</b> hydrolase/hydrolase inhibitor <b>Chain:</b> D: <b>PDB Molecule:</b> htlv protease; <b>PDBTitle:</b> crystal structure of human t-cell leukemia virus protease, a novel2 target for anti-cancer design
74	<a href="#">d1u1sa1</a>	Alignment	not modelled	5.7	80	<b>Fold:</b> Sm-like fold <b>Superfamily:</b> Sm-like ribonucleoproteins <b>Family:</b> Pleiotropic translational regulator Hfq
75	<a href="#">d1novc</a>	Alignment	not modelled	5.6	23	<b>Fold:</b> Nucleoplasmin-like/VP (viral coat and capsid proteins) <b>Superfamily:</b> Positive stranded ssRNA viruses <b>Family:</b> Nodaviridae-like VP
76	<a href="#">d1hk9a</a>	Alignment	not modelled	5.5	80	<b>Fold:</b> Sm-like fold <b>Superfamily:</b> Sm-like ribonucleoproteins <b>Family:</b> Pleiotropic translational regulator Hfq
77	<a href="#">d1ou9a</a>	Alignment	not modelled	5.5	26	<b>Fold:</b> SspB-like <b>Superfamily:</b> SspB-like <b>Family:</b> Stringent starvation protein B, SspB
78	<a href="#">c1kq1W</a>	Alignment	not modelled	5.2	80	<b>PDB header:</b> translation <b>Chain:</b> W: <b>PDB Molecule:</b> host factor for q beta; <b>PDBTitle:</b> 1.55 a crystal structure of the pleiotropic translational2 regulator, hfq
79	<a href="#">d2oi8a1</a>	Alignment	not modelled	5.2	15	<b>Fold:</b> DNA/RNA-binding 3-helical bundle <b>Superfamily:</b> Homeodomain-like <b>Family:</b> Tetracyclin repressor-like, N-terminal domain