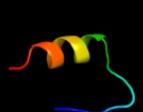
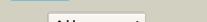


# Phyre<sup>2</sup>

Email	i.a.kelley@imperial.ac.uk
Description	P21418
Date	Wed Jan 25 15:20:41 GMT 2012
Unique Job ID	a126f2c6933b85af

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	<a href="#">d1pkxa2</a>	 Alignment		40.6	37	<b>Fold:</b> Cytidine deaminase-like <b>Superfamily:</b> Cytidine deaminase-like <b>Family:</b> AICAR transformylase domain of bifunctional purine biosynthesis enzyme ATIC
2	<a href="#">c1zcza_</a>	 Alignment		39.0	39	<b>PDB header:</b> transferase/hydrolase <b>Chain:</b> A: <b>PDB Molecule:</b> bifunctional purine biosynthesis protein purh; <b>PDBTitle:</b> crystal structure of phosphoribosylaminoimidazolecarboxamide2 formyltransferase / imp cyclohydrolase (tm1249) from thermotoga3 maritima at 1.88 a resolution
3	<a href="#">d1g8ma2</a>	 Alignment		33.2	26	<b>Fold:</b> Cytidine deaminase-like <b>Superfamily:</b> Cytidine deaminase-like <b>Family:</b> AICAR transformylase domain of bifunctional purine biosynthesis enzyme ATIC
4	<a href="#">d1zcza2</a>	 Alignment		29.4	42	<b>Fold:</b> Cytidine deaminase-like <b>Superfamily:</b> Cytidine deaminase-like <b>Family:</b> AICAR transformylase domain of bifunctional purine biosynthesis enzyme ATIC
5	<a href="#">c1thzA_</a>	 Alignment		29.0	26	<b>PDB header:</b> transferase, hydrolase <b>Chain:</b> A: <b>PDB Molecule:</b> bifunctional purine biosynthesis protein purh; <b>PDBTitle:</b> crystal structure of avian aicar transformylase in complex2 with a novel inhibitor identified by virtual ligand3 screening
6	<a href="#">c2kw0A_</a>	 Alignment		28.6	12	<b>PDB header:</b> oxidoreductase <b>Chain:</b> A: <b>PDB Molecule:</b> ccmh protein; <b>PDBTitle:</b> solution structure of n-terminal domain of ccmh from escherichia.coli
7	<a href="#">d1cy9a_</a>	 Alignment		27.4	36	<b>Fold:</b> Prokaryotic type I DNA topoisomerase <b>Superfamily:</b> Prokaryotic type I DNA topoisomerase <b>Family:</b> Prokaryotic type I DNA topoisomerase
8	<a href="#">c2hl7A_</a>	 Alignment		26.5	21	<b>PDB header:</b> oxidoreductase <b>Chain:</b> A: <b>PDB Molecule:</b> cytochrome c-type biogenesis protein ccmh; <b>PDBTitle:</b> crystal structure of the periplasmic domain of ccmh from pseudomonas2 aeruginosa
9	<a href="#">c4a1oB_</a>	 Alignment		24.1	50	<b>PDB header:</b> transferase-hydrolase <b>Chain:</b> B: <b>PDB Molecule:</b> bifunctional purine biosynthesis protein purh; <b>PDBTitle:</b> crystal structure of mycobacterium tuberculosis purh complexedwith2 aicar and a novel nucleotide cfair, at 2.48 a resolution.
10	<a href="#">c3c4mD_</a>	 Alignment		23.9	29	<b>PDB header:</b> membrane protein <b>Chain:</b> D: <b>PDB Molecule:</b> parathyroid hormone; <b>PDBTitle:</b> structure of human parathyroid hormone in complex withthe2 extracellular domain of its g-protein-coupled receptor (pth1r)
11	<a href="#">c3c4mC_</a>	 Alignment		23.9	29	<b>PDB header:</b> membrane protein <b>Chain:</b> C: <b>PDB Molecule:</b> parathyroid hormone; <b>PDBTitle:</b> structure of human parathyroid hormone in complex withthe2 extracellular domain of its g-protein-coupled receptor (pth1r)

12	<a href="#">c1z4hA</a>			23.3	11	<b>PDB header:</b> protein binding, dna binding protein <b>Chain:</b> A: <b>PDB Molecule:</b> tor inhibition protein; <b>PDBTitle:</b> the response regulator tori belongs to a new family of2 atypical excisionase
13	<a href="#">c3jzaB</a>			23.3	32	<b>PDB header:</b> transport protein <b>Chain:</b> B: <b>PDB Molecule:</b> uncharacterized protein drra; <b>PDBTitle:</b> crystal structure of human rab1b in complex with the gef domain of2 drra/sidm from legionella pneumophila
14	<a href="#">c3gyqB</a>			23.3	27	<b>PDB header:</b> transferase <b>Chain:</b> B: <b>PDB Molecule:</b> rrna (adenosine-2'-o)-methyltransferase; <b>PDBTitle:</b> structure of the thiostrepton-resistance methyltransferase2 s-adenosyl-l-methionine complex
15	<a href="#">c2rmia</a>			22.3	50	<b>PDB header:</b> neuropeptide <b>Chain:</b> A: <b>PDB Molecule:</b> astressin; <b>PDBTitle:</b> 3d nmr structure of astressin
16	<a href="#">d1mw9x</a>			19.0	32	<b>Fold:</b> Prokaryotic type I DNA topoisomerase <b>Superfamily:</b> Prokaryotic type I DNA topoisomerase <b>Family:</b> Prokaryotic type I DNA topoisomerase
17	<a href="#">c3tj6B</a>			18.9	36	<b>PDB header:</b> protein binding/toxin <b>Chain:</b> B: <b>PDB Molecule:</b> protein ps 120; <b>PDBTitle:</b> human vinculin head domain (vh1, residues 1-258) in complex with the2 vinculin binding site of the surface cell antigen 4 (sca4-vbs-c;3 residues 812-835) from rickettsia rickettsii
18	<a href="#">d2a07f1</a>			17.2	27	<b>Fold:</b> DNA/RNA-binding 3-helical bundle <b>Superfamily:</b> "Winged helix" DNA-binding domain <b>Family:</b> Forkhead DNA-binding domain
19	<a href="#">c3g73A</a>			16.9	23	<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
20	<a href="#">c1zwgA</a>			16.5	50	<b>PDB header:</b> hormone <b>Chain:</b> A: <b>PDB Molecule:</b> parathyroid hormone; <b>PDBTitle:</b> succinyl human parathyroid hormone 4-37, nmr, 10 structures
21	<a href="#">c2fjIA</a>		not modelled	16.2	29	<b>PDB header:</b> hydrolase <b>Chain:</b> A: <b>PDB Molecule:</b> 1-phosphatidylinositol-4,5-bisphosphate <b>PDBTitle:</b> solution structure of the split ph domain in phospholipase2 c-gamma1
22	<a href="#">c2o59B</a>		not modelled	16.2	43	<b>PDB header:</b> isomerase/dna <b>Chain:</b> B: <b>PDB Molecule:</b> dna topoisomerase 3; <b>PDBTitle:</b> structure of e. coli topoisomerase iii in complex with an 8-2 base single stranded oligonucleotide. frozen in glycerol3 ph 8.0
23	<a href="#">c2ha8A</a>		not modelled	15.5	27	<b>PDB header:</b> rna binding protein <b>Chain:</b> A: <b>PDB Molecule:</b> tar (hiv-1) rna loop binding protein; <b>PDBTitle:</b> methyltransferase domain of human tar (hiv-1) rna binding2 protein 1
24	<a href="#">c1gl9B</a>		not modelled	15.5	25	<b>PDB header:</b> topoisomerase <b>Chain:</b> B: <b>PDB Molecule:</b> reverse gyrase; <b>PDBTitle:</b> archaeoglobus fulgidus reverse gyrase complexed with adnpn
25	<a href="#">c3n6oB</a>		not modelled	15.4	32	<b>PDB header:</b> signaling protein <b>Chain:</b> B: <b>PDB Molecule:</b> guanine nucleotide exchange factor; <b>PDBTitle:</b> crystal structure of the gef and p4m domain of drra/sidm from2 legionella pneumophila
26	<a href="#">c3swfA</a>		not modelled	15.3	32	<b>PDB header:</b> transport protein <b>Chain:</b> A: <b>PDB Molecule:</b> cgmp-gated cation channel alpha-1; <b>PDBTitle:</b> cnga1 621-690 containing clz domain
27	<a href="#">c1x7pB</a>		not modelled	15.2	60	<b>PDB header:</b> transferase <b>Chain:</b> B: <b>PDB Molecule:</b> rrna methyltransferase; <b>PDBTitle:</b> crystal structure of the spou methyltransferase avirb from2 streptomyces viridochromogenes in complex with the cofactor adomat
28	<a href="#">d1gkub3</a>		not modelled	14.7	29	<b>Fold:</b> Prokaryotic type I DNA topoisomerase <b>Superfamily:</b> Prokaryotic type I DNA topoisomerase

						<b>Family:</b> Prokaryotic type I DNA topoisomerase
29	<a href="#">c2pihA</a>	Alignment	not modelled	14.4	7	<b>PDB header:</b> structural genomics, unknown function <b>Chain:</b> A: <b>PDB Molecule:</b> protein ymca; <b>PDBTitle:</b> crystal structure of protein ymca from bacillus subtilis,2 northeast structural genomics target sr375
30	<a href="#">d2pihA1</a>	Alignment	not modelled	14.4	7	<b>Fold:</b> YheA-like <b>Superfamily:</b> YheA/Ymca-like <b>Family:</b> YmcA-like
31	<a href="#">c2l1nA</a>	Alignment	not modelled	14.3	20	<b>PDB header:</b> structural genomics, unknown function <b>Chain:</b> A: <b>PDB Molecule:</b> uncharacterized protein; <b>PDBTitle:</b> solution nmr structure of the protein yp_399305.1
32	<a href="#">d2vgna2</a>	Alignment	not modelled	14.3	15	<b>Fold:</b> Ribonuclease H-like motif <b>Superfamily:</b> Translational machinery components <b>Family:</b> ERF1/Dom34 middle domain-like
33	<a href="#">c3omdB</a>	Alignment	not modelled	14.3	9	<b>PDB header:</b> structural genomics, unknown function <b>Chain:</b> B: <b>PDB Molecule:</b> uncharacterized protein; <b>PDBTitle:</b> crystal structure of unknown function protein from leptospirillum2 rubarum
34	<a href="#">d3bpva1</a>	Alignment	not modelled	13.6	36	<b>Fold:</b> DNA/RNA-binding 3-helical bundle <b>Superfamily:</b> "Winged helix" DNA-binding domain <b>Family:</b> Forkhead DNA-binding domain
35	<a href="#">d1ipa1</a>	Alignment	not modelled	13.3	56	<b>Fold:</b> alpha/beta knot <b>Superfamily:</b> alpha/beta knot <b>Family:</b> SpoU-like RNA 2'-O ribose methyltransferase
36	<a href="#">c1zhcA</a>	Alignment	not modelled	13.2	28	<b>PDB header:</b> unknown function <b>Chain:</b> A: <b>PDB Molecule:</b> hypothetical protein hp1242; <b>PDBTitle:</b> solution structure of hp1242 from helicobacter pylori
37	<a href="#">d2c6ya1</a>	Alignment	not modelled	12.0	17	<b>Fold:</b> DNA/RNA-binding 3-helical bundle <b>Superfamily:</b> "Winged helix" DNA-binding domain <b>Family:</b> Forkhead DNA-binding domain
38	<a href="#">c1e17A</a>	Alignment	not modelled	11.4	38	<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)
39	<a href="#">c3co7C</a>	Alignment	not modelled	10.8	42	<b>PDB header:</b> transcription/dna <b>Chain:</b> C: <b>PDB Molecule:</b> forkhead box protein 01; <b>PDBTitle:</b> crystal structure of foxo1 dbd bound to dbe2 dna
40	<a href="#">d2hfha</a>	Alignment	not modelled	10.4	14	<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="#">c1kq8A</a>	Alignment	not modelled	10.4	29	<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 fhf-1
42	<a href="#">d1kq8a</a>	Alignment	not modelled	10.4	29	<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="#">d1d5va</a>	Alignment	not modelled	10.1	14	<b>Fold:</b> DNA/RNA-binding 3-helical bundle <b>Superfamily:</b> "Winged helix" DNA-binding domain <b>Family:</b> Forkhead DNA-binding domain
44	<a href="#">c1mofA</a>	Alignment	not modelled	10.1	24	<b>PDB header:</b> viral protein <b>Chain:</b> A: <b>PDB Molecule:</b> moloney murine leukemia virus p15; <b>PDBTitle:</b> coat protein
45	<a href="#">c2eb0B</a>	Alignment	not modelled	10.0	15	<b>PDB header:</b> envelope glycoprotein <b>Chain:</b> B: <b>PDB Molecule:</b> ebola virus envelope glycoprotein; <b>PDBTitle:</b> core structure of gp2 from ebola virus
46	<a href="#">d2c4ka2</a>	Alignment	not modelled	9.1	17	<b>Fold:</b> PRTase-like <b>Superfamily:</b> PRTase-like <b>Family:</b> Phosphoribosylpyrophosphate synthetase-like
47	<a href="#">d2j5ya1</a>	Alignment	not modelled	9.1	33	<b>Fold:</b> immunoglobulin/albumin-binding domain-like <b>Superfamily:</b> Bacterial immunoglobulin/albumin-binding domains <b>Family:</b> GA module, an albumin-binding domain
48	<a href="#">c2gajA</a>	Alignment	not modelled	9.0	18	<b>PDB header:</b> isomerase <b>Chain:</b> A: <b>PDB Molecule:</b> dna topoisomerase i; <b>PDBTitle:</b> structure of full length topoisomerase i from thermotoga maritima in2 monoclinic crystal form
49	<a href="#">d1i7da</a>	Alignment	not modelled	8.6	29	<b>Fold:</b> Prokaryotic type I DNA topoisomerase <b>Superfamily:</b> Prokaryotic type I DNA topoisomerase <b>Family:</b> Prokaryotic type I DNA topoisomerase
50	<a href="#">d1whqa</a>	Alignment	not modelled	8.5	38	<b>Fold:</b> dsRBD-like <b>Superfamily:</b> dsRNA-binding domain-like <b>Family:</b> Double-stranded RNA-binding domain (dsRBD)
51	<a href="#">d1jb0b</a>	Alignment	not modelled	8.4	24	<b>Fold:</b> Photosystem I subunits PsaA/PsaB <b>Superfamily:</b> Photosystem I subunits PsaA/PsaB <b>Family:</b> Photosystem I subunits PsaA/PsaB
52	<a href="#">c1fvyA</a>	Alignment	not modelled	8.0	50	<b>PDB header:</b> hormone/growth factor <b>Chain:</b> A: <b>PDB Molecule:</b> parathyroid hormone; <b>PDBTitle:</b> solution structure of the osteogenic 1-31 fragment of the2 human parathyroid hormone
53	<a href="#">d2qi2a2</a>	Alignment	not modelled	7.5	21	<b>Fold:</b> Ribonuclease H-like motif <b>Superfamily:</b> Translational machinery components <b>Family:</b> ERF1/Dom34 middle domain-like
54	<a href="#">c2kjmA</a>	Alignment	not modelled	7.3	30	<b>PDB header:</b> rna binding protein <b>Chain:</b> A: <b>PDB Molecule:</b> histone rna hairpin-binding protein; <b>PDBTitle:</b> solution structure of slbp rna binding domain fragment
55	<a href="#">d1v4sa1</a>	Alignment	not modelled	7.3	19	<b>Fold:</b> Ribonuclease H-like motif <b>Superfamily:</b> Actin-like ATPase domain <b>Family:</b> Hexokinase

56	<a href="#">c3he4A</a>	Alignment	not modelled	7.1	39	<b>PDB header:</b> de novo protein <b>Chain:</b> A; <b>PDB Molecule:</b> synzip6; <b>PDBTitle:</b> heterospecific coiled-coil pair synzip5:synzip6
57	<a href="#">c2wttl</a>	Alignment	not modelled	7.0	28	<b>PDB header:</b> transcription <b>Chain:</b> L; <b>PDB Molecule:</b> tumor protein p73; <b>PDBTitle:</b> structure of the human p73 tetramerization domain (crystal2 form ii)
58	<a href="#">d1gz0a1</a>	Alignment	not modelled	6.9	50	<b>Fold:</b> alpha/beta knot <b>Superfamily:</b> alpha/beta knot <b>Family:</b> SpoU-like RNA 2'-O ribose methyltransferase
59	<a href="#">c1gz0G</a>	Alignment	not modelled	6.9	50	<b>PDB header:</b> transferase <b>Chain:</b> G; <b>PDB Molecule:</b> hypothetical trna/rrna methyltransferase yjfh; <b>PDBTitle:</b> 23s ribosomal rna g2251 2' o-methyltransferase r1mb
60	<a href="#">d1ig8a1</a>	Alignment	not modelled	6.6	23	<b>Fold:</b> Ribonuclease H-like motif <b>Superfamily:</b> Actin-like ATPase domain <b>Family:</b> Hexokinase
61	<a href="#">c3bkhA</a>	Alignment	not modelled	6.5	33	<b>PDB header:</b> hydrolase <b>Chain:</b> A; <b>PDB Molecule:</b> lytic transglycosylase; <b>PDBTitle:</b> crystal structure of the bacteriophage phiKZ lytic2 transglycosylase, gp144
62	<a href="#">d1dkua2</a>	Alignment	not modelled	6.5	17	<b>Fold:</b> PRTase-like <b>Superfamily:</b> PRTase-like <b>Family:</b> Phosphoribosylpyrophosphate synthetase-like
63	<a href="#">d2eyqa6</a>	Alignment	not modelled	6.5	17	<b>Fold:</b> TRCF domain-like <b>Superfamily:</b> TRCF domain-like <b>Family:</b> TRCF domain
64	<a href="#">d1meka</a>	Alignment	not modelled	6.3	12	<b>Fold:</b> Thioredoxin fold <b>Superfamily:</b> Thioredoxin-like <b>Family:</b> PDI-like
65	<a href="#">c1uoia</a>	Alignment	not modelled	6.3	50	<b>PDB header:</b> de novo protein <b>Chain:</b> A; <b>PDB Molecule:</b> iaal-e3; <b>PDBTitle:</b> iaal-e3/k3 heterodimer
66	<a href="#">c4a9zD</a>	Alignment	not modelled	6.1	36	<b>PDB header:</b> transcription <b>Chain:</b> D; <b>PDB Molecule:</b> tumor protein 63; <b>PDBTitle:</b> crystal structure of human p63 tetramerization domain
67	<a href="#">clipaA</a>	Alignment	not modelled	5.9	56	<b>PDB header:</b> transferase <b>Chain:</b> A; <b>PDB Molecule:</b> rna 2'-o-ribose methyltransferase; <b>PDBTitle:</b> crystal structure of rna 2'-o ribose methyltransferase
68	<a href="#">c3dlaD</a>	Alignment	not modelled	5.6	21	<b>PDB header:</b> ligase <b>Chain:</b> D; <b>PDB Molecule:</b> glutamine-dependent nad(+) synthetase; <b>PDBTitle:</b> x-ray crystal structure of glutamine-dependent nad+ synthetase from mycobacterium tuberculosis bound to naad+ and don
69	<a href="#">c1leboE</a>	Alignment	not modelled	5.5	15	<b>PDB header:</b> viral protein <b>Chain:</b> E; <b>PDB Molecule:</b> ebola virus envelope protein chimera consisting <b>PDBTitle:</b> crystal structure of the ebola virus membrane-fusion2 subunit, gp2, from the envelope glycoprotein ectodomain
70	<a href="#">c2qjvB</a>	Alignment	not modelled	5.2	33	<b>PDB header:</b> isomerase <b>Chain:</b> B; <b>PDB Molecule:</b> uncharacterized iolb-like protein; <b>PDBTitle:</b> crystal structure of an iolb-like protein (stm4420) from salmonella2 typhimurium lt2 at 1.90 a resolution
71	<a href="#">d1z1za1</a>	Alignment	not modelled	5.1	38	<b>Fold:</b> Phage tail protein-like <b>Superfamily:</b> Phage tail protein-like <b>Family:</b> Lambda phage gpU-like