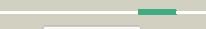
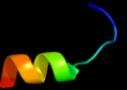
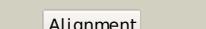
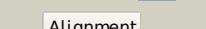
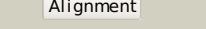
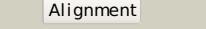
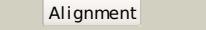
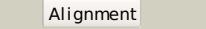
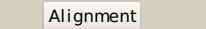
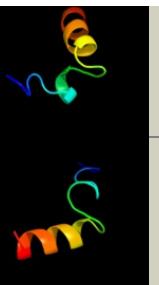
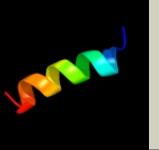


# Phyre<sup>2</sup>

Email	I.a.kelley@imperial.ac.uk
Description	P0AFT8
Date	Thu Jan 5 11:27:14 GMT 2012
Unique Job ID	8a1aa53317d8e3dd

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	<a href="#">c2hcuA</a>	 Alignment		40.0	40	<b>PDB header:</b> lyase <b>Chain:</b> A: <b>PDB Molecule:</b> 3-isopropylmalate dehydratase small subunit; <b>PDBTitle:</b> crystal structure of smu.1381 (or leud) from streptococcus2 mutans
2	<a href="#">c3h5jA</a>	 Alignment		38.3	40	<b>PDB header:</b> lyase <b>Chain:</b> A: <b>PDB Molecule:</b> 3-isopropylmalate dehydratase small subunit; <b>PDBTitle:</b> leud_1-168 small subunit of isopropylmalate isomerase (rv2987c) from mycobacterium tuberculosis
3	<a href="#">c3q3wB</a>	 Alignment		31.9	40	<b>PDB header:</b> transferase <b>Chain:</b> B: <b>PDB Molecule:</b> 3-isopropylmalate dehydratase small subunit; <b>PDBTitle:</b> isopropylmalate isomerase small subunit from campylobacter jejuni.
4	<a href="#">d1v7la</a>	 Alignment		25.9	40	<b>Fold:</b> The "swivelling" beta/beta/alpha domain <b>Superfamily:</b> LeuD/IvD-like <b>Family:</b> LeuD-like
5	<a href="#">c2pkpA</a>	 Alignment		24.9	40	<b>PDB header:</b> lyase <b>Chain:</b> A: <b>PDB Molecule:</b> homoaconitase small subunit; <b>PDBTitle:</b> crystal structure of 3-isopropylmalate dehydratase (leud)2 from methanocaldococcus jannaschii dsm2661 (mj1271)
6	<a href="#">c3gseA</a>	 Alignment		23.0	28	<b>PDB header:</b> isomerase <b>Chain:</b> A: <b>PDB Molecule:</b> menaquinone-specific isochorismate synthase; <b>PDBTitle:</b> crystal structure of menaquinone-specific isochorismate synthase from yersinia pestis co92
7	<a href="#">c3h9mA</a>	 Alignment		22.9	8	<b>PDB header:</b> lyase <b>Chain:</b> A: <b>PDB Molecule:</b> p-aminobenzoate synthetase, component i; <b>PDBTitle:</b> crystal structure of para-aminobenzoate synthetase,2 component i from cytophaga hutchinsonii
8	<a href="#">c3os6A</a>	 Alignment		22.9	20	<b>PDB header:</b> isomerase <b>Chain:</b> A: <b>PDB Molecule:</b> isochorismate synthase dhbc; <b>PDBTitle:</b> crystal structure of putative 2,3-dihydroxybenzoate-specific2 isochorismate synthase, dhbc from bacillus anthracis.
9	<a href="#">d2fn0a1</a>	 Alignment		22.3	20	<b>Fold:</b> ADC synthase <b>Superfamily:</b> ADC synthase <b>Family:</b> ADC synthase
10	<a href="#">d2g5fa1</a>	 Alignment		22.1	12	<b>Fold:</b> ADC synthase <b>Superfamily:</b> ADC synthase <b>Family:</b> ADC synthase
11	<a href="#">d3bzna1</a>	 Alignment		20.0	28	<b>Fold:</b> ADC synthase <b>Superfamily:</b> ADC synthase <b>Family:</b> ADC synthase

12	<a href="#">c2i6yA_</a>	Alignment		19.9	12	<b>PDB header:</b> lyase <b>Chain:</b> A; <b>PDB Molecule:</b> anthranilate synthase component i, putative; <b>PDBTitle:</b> structure and mechanism of mycobacterium tuberculosis salicylate2 synthase, mbti
13	<a href="#">c3hwoB_</a>	Alignment		19.1	24	<b>PDB header:</b> isomerase <b>Chain:</b> B; <b>PDB Molecule:</b> isochorismate synthase entc; <b>PDBTitle:</b> crystal structure of escherichia coli enterobactin-specific2 isochorismate synthase entc in complex with isochorismate
14	<a href="#">c2crcA_</a>	Alignment		17.8	42	<b>PDB header:</b> ligase <b>Chain:</b> A; <b>PDB Molecule:</b> ubiquitin conjugating enzyme 7 interacting <b>PDBTitle:</b> solution structure of the zf-ranbp domain of the protein2 hbv associated factor
15	<a href="#">d1lva4a</a>	Alignment		17.7	25	<b>Fold:</b> DNA/RNA-binding 3-helical bundle <b>Superfamily:</b> "Winged helix" DNA-binding domain <b>Family:</b> C-terminal fragment of elongation factor SelB
16	<a href="#">d1wgqa</a>	Alignment		15.8	9	<b>Fold:</b> PH domain-like barrel <b>Superfamily:</b> PH domain-like <b>Family:</b> Pleckstrin-homology domain (PH domain)
17	<a href="#">c3b08H_</a>	Alignment		15.6	47	<b>PDB header:</b> signaling protein/metal binding protein <b>Chain:</b> H; <b>PDB Molecule:</b> ranbp-type and c3hc4-type zinc finger-containing protein 1; <b>PDBTitle:</b> crystal structure of the mouse hoil1-l-nzf in complex with linear di-2 ubiquitin
18	<a href="#">d2dlq2a</a>	Alignment		14.9	67	<b>Fold:</b> beta-beta-alpha zinc fingers <b>Superfamily:</b> beta-beta-alpha zinc fingers <b>Family:</b> Classic zinc finger, C2H2
19	<a href="#">c2rrfA_</a>	Alignment		14.7	29	<b>PDB header:</b> unknown function <b>Chain:</b> A; <b>PDB Molecule:</b> zinc finger fyve domain-containing protein 21; <b>PDBTitle:</b> the solution structure of the c-terminal region of zinc finger fyve2 domain-containing protein 21
20	<a href="#">d2oz6a1</a>	Alignment		14.5	30	<b>Fold:</b> DNA/RNA-binding 3-helical bundle <b>Superfamily:</b> "Winged helix" DNA-binding domain <b>Family:</b> CAP C-terminal domain-like
21	<a href="#">c2kefA_</a>	Alignment	not modelled	14.2	63	<b>PDB header:</b> antibiotic, hormone <b>Chain:</b> A; <b>PDB Molecule:</b> hepcidin; <b>PDBTitle:</b> solution nmr structures of human hepcidin at 325k
22	<a href="#">c3h0tC_</a>	Alignment	not modelled	14.0	63	<b>PDB header:</b> immune system/antimicrobial protein <b>Chain:</b> C; <b>PDB Molecule:</b> hepcidin; <b>PDBTitle:</b> hepcidin-fab complex
23	<a href="#">c1m4eA_</a>	Alignment	not modelled	13.1	63	<b>PDB header:</b> antimicrobial protein <b>Chain:</b> A; <b>PDB Molecule:</b> hepcidin; <b>PDBTitle:</b> solution structure of hepcidin-20
24	<a href="#">c2bruC_</a>	Alignment	not modelled	12.9	75	<b>PDB header:</b> oxidoreductase <b>Chain:</b> C; <b>PDB Molecule:</b> nad(p) transhydrogenase subunit beta; <b>PDBTitle:</b> complex of the domain i and domain iii of escherichia coli2 transhydrogenase
25	<a href="#">d1d4oa_</a>	Alignment	not modelled	12.5	63	<b>Fold:</b> DHS-like NAD/FAD-binding domain <b>Superfamily:</b> DHS-like NAD/FAD-binding domain <b>Family:</b> Transhydrogenase domain III (dIII)
26	<a href="#">c1m4fA_</a>	Alignment	not modelled	12.4	63	<b>PDB header:</b> antimicrobial protein <b>Chain:</b> A; <b>PDB Molecule:</b> hepcidin; <b>PDBTitle:</b> solution structure of hepcidin-25
27	<a href="#">d1pnoa_</a>	Alignment	not modelled	12.0	88	<b>Fold:</b> DHS-like NAD/FAD-binding domain <b>Superfamily:</b> DHS-like NAD/FAD-binding domain <b>Family:</b> Transhydrogenase domain III (dIII)
28	<a href="#">c3nsuA_</a>	Alignment	not modelled	11.7	29	<b>PDB header:</b> signaling protein <b>Chain:</b> A; <b>PDB Molecule:</b> phosphatidylinositol 4,5-bisphosphate-binding protein slm1; <b>PDBTitle:</b> a systematic screen for protein-lipid interactions in saccharomyces2 cerevisiae
29	<a href="#">c1pt9B_</a>	Alignment	not modelled	11.6	63	<b>PDB header:</b> oxidoreductase <b>Chain:</b> B; <b>PDB Molecule:</b> nad(p) transhydrogenase, mitochondrial; <b>PDBTitle:</b> crystal structure analysis of the dIII component of

						transhydrogenase2 with a thio-nicotinamide nucleotide analogue
30	<a href="#">d1qdlA</a>	Alignment	not modelled	11.1	24	<b>Fold:</b> ADC synthase <b>Superfamily:</b> ADC synthase <b>Family:</b> ADC synthase
31	<a href="#">d1acoal</a>	Alignment	not modelled	10.5	27	<b>Fold:</b> The "swivelling" beta/beta/alpha domain <b>Superfamily:</b> LeuD/IlvD-like <b>Family:</b> LeuD-like
32	<a href="#">c1clIA</a>	Alignment	not modelled	9.9	46	<b>PDB header:</b> de novo protein <b>Chain:</b> A: <b>PDB Molecule:</b> thlox; <b>PDBTitle:</b> solution structure of designed beta-sheet mini-protein thlox
33	<a href="#">d1i5za1</a>	Alignment	not modelled	9.7	30	<b>Fold:</b> DNA/RNA-binding 3-helical bundle <b>Superfamily:</b> "Winged helix" DNA-binding domain <b>Family:</b> CAP C-terminal domain-like
34	<a href="#">d2gaua1</a>	Alignment	not modelled	9.4	15	<b>Fold:</b> DNA/RNA-binding 3-helical bundle <b>Superfamily:</b> "Winged helix" DNA-binding domain <b>Family:</b> CAP C-terminal domain-like
35	<a href="#">c3r74B</a>	Alignment	not modelled	9.0	12	<b>PDB header:</b> lyase, biosynthetic protein <b>Chain:</b> B: <b>PDB Molecule:</b> anthranilate/para-aminobenzoate synthases component I; <b>PDBTitle:</b> crystal structure of 2-amino-2-desoxyisochorismate synthase (adic2) synthase phze from burkholderia lata 383
36	<a href="#">c2qdrA</a>	Alignment	not modelled	8.9	14	<b>PDB header:</b> unknown function <b>Chain:</b> A: <b>PDB Molecule:</b> uncharacterized protein; <b>PDBTitle:</b> crystal structure of a putative dioxygenase (npun_f5605) from nosoc2 punctiforme pcc 73102 at 2.60 a resolution
37	<a href="#">c1s6wA</a>	Alignment	not modelled	8.9	71	<b>PDB header:</b> antibiotic <b>Chain:</b> A: <b>PDB Molecule:</b> hepcidin; <b>PDBTitle:</b> solution structure of hybrid white striped bass hepcidin
38	<a href="#">c1wsuA</a>	Alignment	not modelled	8.5	25	<b>PDB header:</b> translation/rna <b>Chain:</b> A: <b>PDB Molecule:</b> selenocysteine-specific elongation factor; <b>PDBTitle:</b> c-terminal domain of elongation factor selb complexed with2 seics rna
39	<a href="#">d1x1gal</a>	Alignment	not modelled	8.3	20	<b>Fold:</b> PH domain-like barrel <b>Superfamily:</b> PH domain-like <b>Family:</b> Pleckstrin-homology domain (PH domain)
40	<a href="#">c2knnA</a>	Alignment	not modelled	8.3	57	<b>PDB header:</b> plant protein <b>Chain:</b> A: <b>PDB Molecule:</b> cycloviolacin-o2; <b>PDBTitle:</b> solution structure of the cyclotide cycloviolacin o2 with2 glu6 methylated (cyo2me)
41	<a href="#">c3bl4B</a>	Alignment	not modelled	8.2	45	<b>PDB header:</b> unknown function <b>Chain:</b> B: <b>PDB Molecule:</b> uncharacterized protein; <b>PDBTitle:</b> crystal structure of a protein with unknown function (arth_0117) from2 arthrobacter sp. fb24 at 2.20 a resolution
42	<a href="#">c2pjpa</a>	Alignment	not modelled	7.8	20	<b>PDB header:</b> translation/rna <b>Chain:</b> A: <b>PDB Molecule:</b> selenocysteine-specific elongation factor; <b>PDBTitle:</b> structure of the mrna-binding domain of elongation factor2 selb from e.coli in complex with seics rna
43	<a href="#">d2b3ya1</a>	Alignment	not modelled	7.6	33	<b>Fold:</b> The "swivelling" beta/beta/alpha domain <b>Superfamily:</b> LeuD/IlvD-like <b>Family:</b> LeuD-like
44	<a href="#">d1v5ua</a>	Alignment	not modelled	7.2	14	<b>Fold:</b> PH domain-like barrel <b>Superfamily:</b> PH domain-like <b>Family:</b> Pleckstrin-homology domain (PH domain)
45	<a href="#">c2rf4B</a>	Alignment	not modelled	7.0	17	<b>PDB header:</b> transferase <b>Chain:</b> B: <b>PDB Molecule:</b> dna-directed rna polymerase i subunit rpa4; <b>PDBTitle:</b> crystal structure of the rna polymerase i subcomplex a14/43
46	<a href="#">d1k25a2</a>	Alignment	not modelled	6.8	28	<b>Fold:</b> Penicillin-binding protein 2x (pbp-2x), c-terminal domain <b>Superfamily:</b> Penicillin-binding protein 2x (pbp-2x), c-terminal domain <b>Family:</b> Penicillin-binding protein 2x (pbp-2x), c-terminal domain
47	<a href="#">d1nekb2</a>	Alignment	not modelled	6.5	50	<b>Fold:</b> beta-Grasp (ubiquitin-like) <b>Superfamily:</b> 2Fe-2S ferredoxin-like <b>Family:</b> 2Fe-2S ferredoxin domains from multidomain proteins
48	<a href="#">d2cocA1</a>	Alignment	not modelled	6.4	19	<b>Fold:</b> PH domain-like barrel <b>Superfamily:</b> PH domain-like <b>Family:</b> Pleckstrin-homology domain (PH domain)
49	<a href="#">c3gitA</a>	Alignment	not modelled	6.2	25	<b>PDB header:</b> transferase <b>Chain:</b> A: <b>PDB Molecule:</b> carbon monoxide dehydrogenase/acetyl-coa synthase subunit <b>PDBTitle:</b> crystal structure of a truncated acetyl-coa synthase
50	<a href="#">d1k0ga</a>	Alignment	not modelled	6.1	20	<b>Fold:</b> ADC synthase <b>Superfamily:</b> ADC synthase <b>Family:</b> ADC synthase
51	<a href="#">d1ft9a1</a>	Alignment	not modelled	5.6	40	<b>Fold:</b> DNA/RNA-binding 3-helical bundle <b>Superfamily:</b> "Winged helix" DNA-binding domain <b>Family:</b> CAP C-terminal domain-like
52	<a href="#">c2k2jA</a>	Alignment	not modelled	5.4	9	<b>PDB header:</b> hydrolase, signaling protein <b>Chain:</b> A: <b>PDB Molecule:</b> 1-phosphatidylinositol-4,5-bisphosphate <b>PDBTitle:</b> nmr solution structure of the split ph domain from2 phospholipase c gamma 2
53	<a href="#">d1l5ja2</a>	Alignment	not modelled	5.4	50	<b>Fold:</b> The "swivelling" beta/beta/alpha domain <b>Superfamily:</b> LeuD/IlvD-like <b>Family:</b> LeuD-like
54	<a href="#">d1upqa</a>	Alignment	not modelled	5.4	14	<b>Fold:</b> PH domain-like barrel <b>Superfamily:</b> PH domain-like <b>Family:</b> Pleckstrin-homology domain (PH domain)
55	<a href="#">d1k36a</a>	Alignment	not modelled	5.4	17	<b>Fold:</b> Knottins (small inhibitors, toxins, lectins) <b>Superfamily:</b> EGF/Laminin

						<b>Family:</b> EGF-type module
56	<a href="#">c3nggA_</a>		Alignment	not modelled	5.1	42 <b>PDB header:</b> antibiotic <b>Chain:</b> A: <b>PDB Molecule:</b> omwaprin-a; <b>PDBTitle:</b> x-ray structure of omwaprin
57	<a href="#">d2h6ca1</a>		Alignment	not modelled	5.0	20 <b>Fold:</b> DNA/RNA-binding 3-helical bundle <b>Superfamily:</b> "Winged helix" DNA-binding domain <b>Family:</b> CAP C-terminal domain-like