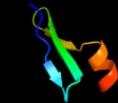
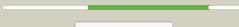
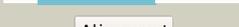
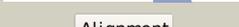
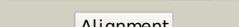
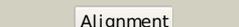
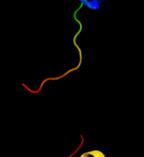
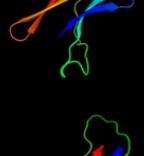
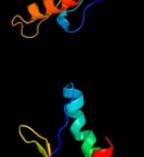
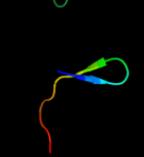
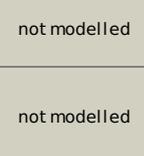


# Phyre2

Email	I.a.kelley@imperial.ac.uk
Description	P0AD21
Date	Thu Jan 5 11:19:45 GMT 2012
Unique Job ID	6346292c0675758d

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	<a href="#">d2cx1a2</a>	 Alignment		85.5	31	<b>Fold:</b> Cystatin-like <b>Superfamily:</b> Pre-PUA domain <b>Family:</b> Hypothetical protein APE0525, N-terminal domain
2	<a href="#">c1zhvA</a>	 Alignment		69.9	22	<b>PDB header:</b> structural genomics, unknown function <b>Chain:</b> A: <b>PDB Molecule:</b> hypothetical protein atu0741; <b>PDBTitle:</b> x-ray crystal structure protein atu0741 from agobacterium tumefaciens.2 northeast structural genomics consortium target atr8.
3	<a href="#">d1zhva2</a>	 Alignment		57.5	18	<b>Fold:</b> Ferredoxin-like <b>Superfamily:</b> ACT-like <b>Family:</b> Atu0741-like
4	<a href="#">d1ev7a</a>	 Alignment		33.9	33	<b>Fold:</b> Restriction endonuclease-like <b>Superfamily:</b> Restriction endonuclease-like <b>Family:</b> Restriction endonuclease NaeI
5	<a href="#">d1w96a1</a>	 Alignment		33.2	7	<b>Fold:</b> Barrel-sandwich hybrid <b>Superfamily:</b> Rudiment single hybrid motif <b>Family:</b> BC C-terminal domain-like
6	<a href="#">d1e32a3</a>	 Alignment		29.7	59	<b>Fold:</b> Cdc48 domain 2-like <b>Superfamily:</b> Cdc48 domain 2-like <b>Family:</b> Cdc48 domain 2-like
7	<a href="#">c3zquA</a>	 Alignment		25.8	21	<b>PDB header:</b> lyase <b>Chain:</b> A: <b>PDB Molecule:</b> probable aromatic acid decarboxylase; <b>PDBTitle:</b> structure of a probable aromatic acid decarboxylase
8	<a href="#">c3qocD</a>	 Alignment		24.2	22	<b>PDB header:</b> hydrolase <b>Chain:</b> D: <b>PDB Molecule:</b> putative metallopeptidase; <b>PDBTitle:</b> crystal structure of n-terminal domain (creatinase/prolidase like2 domain) of putative metallopeptidase from corynebacterium diphtheriae
9	<a href="#">d1n1ta2</a>	 Alignment		24.0	19	<b>Fold:</b> 6-bladed beta-propeller <b>Superfamily:</b> Sialidases <b>Family:</b> Sialidases (neuraminidases)
10	<a href="#">d2j9ga1</a>	 Alignment		23.9	18	<b>Fold:</b> Barrel-sandwich hybrid <b>Superfamily:</b> Rudiment single hybrid motif <b>Family:</b> BC C-terminal domain-like
11	<a href="#">c2qhsA</a>	 Alignment		23.3	11	<b>PDB header:</b> transferase <b>Chain:</b> A: <b>PDB Molecule:</b> lipoyltransferase; <b>PDBTitle:</b> structural basis of octanoic acid recognition by lipoyl-protein2 ligase b

12	<a href="#">c2qhvA_</a>	Alignment		23.3	11	<b>PDB header:</b> transferase <b>Chain:</b> A: <b>PDB Molecule:</b> lipoyltransferase; <b>PDBTitle:</b> structural basis of octanoic acid recognition by lipoyltransferase
13	<a href="#">d1p9oa_</a>	Alignment		22.4	15	<b>Fold:</b> Ribokinase-like <b>Superfamily:</b> CoaB-like <b>Family:</b> CoaB-like
14	<a href="#">c2ejbA_</a>	Alignment		21.2	6	<b>PDB header:</b> lyase <b>Chain:</b> A: <b>PDB Molecule:</b> probable aromatic acid decarboxylase; <b>PDBTitle:</b> crystal structure of phenylacrylic acid decarboxylase from2 aquifex aeolicus
15	<a href="#">c1n1vA_</a>	Alignment		19.6	19	<b>PDB header:</b> hydrolase <b>Chain:</b> A: <b>PDB Molecule:</b> sialidase; <b>PDBTitle:</b> trypanosoma rangeli sialidase in complex with dana
16	<a href="#">d1ulza1</a>	Alignment		19.6	20	<b>Fold:</b> Barrel-sandwich hybrid <b>Superfamily:</b> Rudiment single hybrid motif <b>Family:</b> BC C-terminal domain-like
17	<a href="#">d1zvpa2</a>	Alignment		19.5	20	<b>Fold:</b> Ferredoxin-like <b>Superfamily:</b> ACT-like <b>Family:</b> VC0802-like
18	<a href="#">d1sbza_</a>	Alignment		18.4	29	<b>Fold:</b> Homo-oligomeric flavin-containing Cys decarboxylases, HFCD <b>Superfamily:</b> Homo-oligomeric flavin-containing Cys decarboxylases, HFCD <b>Family:</b> Homo-oligomeric flavin-containing Cys decarboxylases, HFCD
19	<a href="#">d1w96c1</a>	Alignment		18.3	11	<b>Fold:</b> Barrel-sandwich hybrid <b>Superfamily:</b> Rudiment single hybrid motif <b>Family:</b> BC C-terminal domain-like
20	<a href="#">c3a5zF_</a>	Alignment		18.0	20	<b>PDB header:</b> ligase <b>Chain:</b> F: <b>PDB Molecule:</b> elongation factor p; <b>PDBTitle:</b> crystal structure of escherichia coli genx in complex with elongation2 factor p
21	<a href="#">c2k7mA_</a>	Alignment	not modelled	16.9	71	<b>PDB header:</b> membrane protein <b>Chain:</b> A: <b>PDB Molecule:</b> gap junction alpha-5 protein; <b>PDBTitle:</b> structure of the connexin40 carboxyl terminal domain
22	<a href="#">c2g7rA_</a>	Alignment	not modelled	16.5	25	<b>PDB header:</b> hydrolase <b>Chain:</b> A: <b>PDB Molecule:</b> mucosa-associated lymphoid tissue lymphoma translocation <b>PDBTitle:</b> x-ray structure of the death domain of the human mucosa associated2 lymphoid tissue lymphoma translocation protein 1
23	<a href="#">c2eifA_</a>	Alignment	not modelled	16.3	25	<b>PDB header:</b> gene regulation <b>Chain:</b> A: <b>PDB Molecule:</b> protein (eukaryotic translation initiation factor 5a); <b>PDBTitle:</b> eukaryotic translation initiation factor 5a from methanococcus2 jannaschii
24	<a href="#">c3hksB_</a>	Alignment	not modelled	14.3	19	<b>PDB header:</b> translation, rna binding protein <b>Chain:</b> B: <b>PDB Molecule:</b> eukaryotic translation initiation factor 5a-2; <b>PDBTitle:</b> crystal structure of eukaryotic translation initiation2 factor eif-5a2 from arabidopsis thaliana
25	<a href="#">d2ah2a2</a>	Alignment	not modelled	14.2	13	<b>Fold:</b> 6-bladed beta-propeller <b>Superfamily:</b> Sialidases <b>Family:</b> Sialidases (neuraminidases)
26	<a href="#">c30ooA_</a>	Alignment	not modelled	13.4	18	<b>PDB header:</b> hydrolase <b>Chain:</b> A: <b>PDB Molecule:</b> proline dipeptidase; <b>PDBTitle:</b> the structure of a proline dipeptidase from streptococcus agalactiae2 2603v
27	<a href="#">d1ueba1</a>	Alignment	not modelled	12.3	20	<b>Fold:</b> SH3-like barrel <b>Superfamily:</b> Translation proteins SH3-like domain <b>Family:</b> eIF5a N-terminal domain-like
						<b>PDB header:</b> cytokine <b>Chain:</b> A: <b>PDB Molecule:</b> macrophage migration inhibitory factor-

28	<a href="#">c3b64A</a>	Alignment	not modelled	11.5	10	like <b>PDBTitle:</b> macrophage migration inhibitory factor (mif) from2 /leishmania major
29	<a href="#">d1fima</a>	Alignment	not modelled	11.5	16	<b>Fold:</b> Tautomerase/MIF <b>Superfamily:</b> Tautomerase/MIF <b>Family:</b> MIF-related
30	<a href="#">d2g2xa1</a>	Alignment	not modelled	11.2	18	<b>Fold:</b> PUA domain-like <b>Superfamily:</b> PUA domain-like <b>Family:</b> Atu2648/PH1033-like
31	<a href="#">d1vk6a3</a>	Alignment	not modelled	11.1	35	<b>Fold:</b> Nudix <b>Superfamily:</b> Nudix <b>Family:</b> NADH pyrophosphatase
32	<a href="#">c3kdpD</a>	Alignment	not modelled	11.0	47	<b>PDB header:</b> hydrolase <b>Chain:</b> D: <b>PDB Molecule:</b> sodium/potassium-transporting atpase subunit beta-1; <b>PDBTitle:</b> crystal structure of the sodium-potassium pump
33	<a href="#">c2h31A</a>	Alignment	not modelled	10.3	21	<b>PDB header:</b> ligase, lyase <b>Chain:</b> A: <b>PDB Molecule:</b> multifunctional protein ade2; <b>PDBTitle:</b> crystal structure of human paics, a bifunctional carboxylase and2 synthetase in purine biosynthesis
34	<a href="#">d1pv8a</a>	Alignment	not modelled	9.5	19	<b>Fold:</b> TIM beta/alpha-barrel <b>Superfamily:</b> Aldolase <b>Family:</b> 5-aminolaevulinate dehydratase, ALAD (porphobilinogen synthase)
35	<a href="#">c3fwtA</a>	Alignment	not modelled	8.4	11	<b>PDB header:</b> cytokine <b>Chain:</b> A: <b>PDB Molecule:</b> macrophage migration inhibitory factor-like <b>PDBTitle:</b> crystal structure of leishmania major mif2
36	<a href="#">c2zxeB</a>	Alignment	not modelled	8.0	44	<b>PDB header:</b> hydrolase/transport protein <b>Chain:</b> B: <b>PDB Molecule:</b> na+,k+-atpase beta subunit; <b>PDBTitle:</b> crystal structure of the sodium - potassium pump in the e2.2k+.pi2 state
37	<a href="#">c2wk1A</a>	Alignment	not modelled	7.8	23	<b>PDB header:</b> transferase <b>Chain:</b> A: <b>PDB Molecule:</b> novp; <b>PDBTitle:</b> structure of the o-methyltransferase novp
38	<a href="#">c3krnB</a>	Alignment	not modelled	7.8	15	<b>PDB header:</b> hydrolase <b>Chain:</b> B: <b>PDB Molecule:</b> protein c14a4.5, confirmed by transcript evidence; <b>PDBTitle:</b> crystal structure of c. elegans cell-death-related nuclease 5(crn-5)
39	<a href="#">d2gbsa1</a>	Alignment	not modelled	7.2	22	<b>Fold:</b> PUA domain-like <b>Superfamily:</b> PUA domain-like <b>Family:</b> Atu2648/PH1033-like
40	<a href="#">d2gda1</a>	Alignment	not modelled	7.1	33	<b>Fold:</b> SARS Nsp1-like <b>Superfamily:</b> SARS Nsp1-like <b>Family:</b> SARS Nsp1-like
41	<a href="#">c3i7mA</a>	Alignment	not modelled	7.1	18	<b>PDB header:</b> hydrolase <b>Chain:</b> A: <b>PDB Molecule:</b> xaa-pro dipeptidase; <b>PDBTitle:</b> n-terminal domain of xaa-pro dipeptidase from lactobacillus brevis.
42	<a href="#">d1gd0a</a>	Alignment	not modelled	7.1	18	<b>Fold:</b> Tautomerase/MIF <b>Superfamily:</b> Tautomerase/MIF <b>Family:</b> MIF-related
43	<a href="#">c3er0A</a>	Alignment	not modelled	6.9	19	<b>PDB header:</b> translation <b>Chain:</b> A: <b>PDB Molecule:</b> eukaryotic translation initiation factor 5a-2; <b>PDBTitle:</b> crystal structure of the full length eif5a from2 saccharomyces cerevisiae
44	<a href="#">c2gk4A</a>	Alignment	not modelled	6.7	15	<b>PDB header:</b> structural genomics, unknown function <b>Chain:</b> A: <b>PDB Molecule:</b> conserved hypothetical protein; <b>PDBTitle:</b> the crystal structure of the dna/pantothenate metabolism flavoprotein2 from streptococcus pneumoniae
45	<a href="#">d1riea</a>	Alignment	not modelled	6.7	15	<b>Fold:</b> ISP domain <b>Superfamily:</b> ISP domain <b>Family:</b> Rieske iron-sulfur protein (ISP)
46	<a href="#">d2prva1</a>	Alignment	not modelled	6.5	40	<b>Fold:</b> SMI1/KNR4-like <b>Superfamily:</b> SMI1/KNR4-like <b>Family:</b> SMI1/KNR4-like
47	<a href="#">d1u7za</a>	Alignment	not modelled	6.4	11	<b>Fold:</b> Ribokinase-like <b>Superfamily:</b> CoaB-like <b>Family:</b> CoaB-like
48	<a href="#">d1laue</a>	Alignment	not modelled	6.4	11	<b>Fold:</b> Uracil-DNA glycosylase-like <b>Superfamily:</b> Uracil-DNA glycosylase-like <b>Family:</b> Uracil-DNA glycosylase
49	<a href="#">c3o5vA</a>	Alignment	not modelled	6.3	23	<b>PDB header:</b> hydrolase <b>Chain:</b> A: <b>PDB Molecule:</b> x-pro dipeptidase; <b>PDBTitle:</b> the crystal structure of the creatinase/prolidase n-terminal domain of2 an x-pro dipeptidase from streptococcus pyogenes to 1.85a
50	<a href="#">c3c9pA</a>	Alignment	not modelled	6.3	20	<b>PDB header:</b> structural genomics, unknown function <b>Chain:</b> A: <b>PDB Molecule:</b> uncharacterized protein sp1917; <b>PDBTitle:</b> crystal structure of uncharacterized protein sp1917
51	<a href="#">c2f06B</a>	Alignment	not modelled	6.1	15	<b>PDB header:</b> structural genomics, unknown function <b>Chain:</b> B: <b>PDB Molecule:</b> conserved hypothetical protein; <b>PDBTitle:</b> crystal structure of protein bt0572 from bacteroides thetaiotaomicron
52	<a href="#">d2evea1</a>	Alignment	not modelled	6.0	19	<b>Fold:</b> PUA domain-like <b>Superfamily:</b> PUA domain-like <b>Family:</b> Atu2648/PH1033-like
53	<a href="#">c3gacD</a>	Alignment	not modelled	5.7	20	<b>PDB header:</b> cytokine <b>Chain:</b> D: <b>PDB Molecule:</b> macrophage migration inhibitory factor-like <b>PDBTitle:</b> structure of mif with hpp <b>Fold:</b> Tautomerase/MIF

54	<a href="#">dlhfoa_</a>	Alignment	not modelled	5.7	15	<b>Superfamily:</b> Tautomerase/MIF <b>Family:</b> MIF-related
55	<a href="#">d2gdga1</a>	Alignment	not modelled	5.7	16	<b>Fold:</b> Tautomerase/MIF <b>Superfamily:</b> Tautomerase/MIF <b>Family:</b> MIF-related
56	<a href="#">c3ic8D_</a>	Alignment	not modelled	5.6	24	<b>PDB header:</b> structural genomics, unknown function <b>Chain:</b> D: <b>PDB Molecule:</b> uncharacterized gst-like proteinprotein; <b>PDBTitle:</b> the crystal structure of a gst-like protein from pseudomonas syringae2 to 2.4a
57	<a href="#">c3treA_</a>	Alignment	not modelled	5.6	14	<b>PDB header:</b> translation <b>Chain:</b> A: <b>PDB Molecule:</b> elongation factor p; <b>PDBTitle:</b> structure of a translation elongation factor p (efp) from coxiella2 burnetii
58	<a href="#">dlu11a_</a>	Alignment	not modelled	5.4	20	<b>Fold:</b> Flavodoxin-like <b>Superfamily:</b> N5-CAIR mutase (phosphoribosylaminoimidazole carboxylase, PurE) <b>Family:</b> N5-CAIR mutase (phosphoribosylaminoimidazole carboxylase, PurE)
59	<a href="#">c2fw9A_</a>	Alignment	not modelled	5.4	20	<b>PDB header:</b> lyase <b>Chain:</b> A: <b>PDB Molecule:</b> n5-carboxyami noimidazole ribonucleotide mutase; <b>PDBTitle:</b> structure of pure (n5-carboxyami noimidazole ribonucleotide mutase)2 h59f from the acidophilic bacterium acetobacter aceti, at ph 8
60	<a href="#">c4a1eF_</a>	Alignment	not modelled	5.4	24	<b>PDB header:</b> ribosome <b>Chain:</b> F: <b>PDB Molecule:</b> rpl7a; <b>PDBTitle:</b> t.thermophila 60s ribosomal subunit in complex with2 initiation factor 6. this file contains 5s rrna, 5.8s rrna3 and proteins of molecule 1
61	<a href="#">c2k1IA_</a>	Alignment	not modelled	5.3	27	<b>PDB header:</b> cytokine <b>Chain:</b> A: <b>PDB Molecule:</b> interleukin-33; <b>PDBTitle:</b> solution structure of human interleukin-33
62	<a href="#">dlxgsa1</a>	Alignment	not modelled	5.3	33	<b>Fold:</b> DNA/RNA-binding 3-helical bundle <b>Superfamily:</b> "Winged helix" DNA-binding domain <b>Family:</b> Methionine aminopeptidase, insert domain
63	<a href="#">dlzcea1</a>	Alignment	not modelled	5.2	18	<b>Fold:</b> PUA domain-like <b>Superfamily:</b> PUA domain-like <b>Family:</b> Atu2648/PH1033-like
64	<a href="#">dllokba_</a>	Alignment	not modelled	5.2	17	<b>Fold:</b> Uracil-DNA glycosylase-like <b>Superfamily:</b> Uracil-DNA glycosylase-like <b>Family:</b> Uracil-DNA glycosylase
65	<a href="#">c3lodA_</a>	Alignment	not modelled	5.1	9	<b>PDB header:</b> transferase <b>Chain:</b> A: <b>PDB Molecule:</b> putative acyl-coa n-acyltransferase; <b>PDBTitle:</b> the crystal structure of the putative acyl-coa n-acyltransferase from2 klebsiella pneumoniae subsp.pneumoniae mgh 78578
66	<a href="#">d2icga1</a>	Alignment	not modelled	5.1	20	<b>Fold:</b> SM11/KNR4-like <b>Superfamily:</b> SM11/KNR4-like <b>Family:</b> SM11/KNR4-like