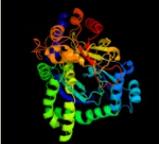
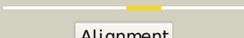
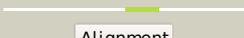
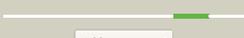
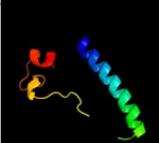
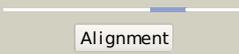
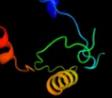
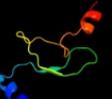
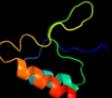
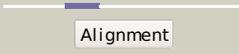


# Phyre2

Email	I.a.kelley@imperial.ac.uk
Description	P77221
Date	Thu Jan 5 12:26:33 GMT 2012
Unique Job ID	c338bc5a3c191341

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	<a href="#">c3clqC_</a>	 Alignment		100.0	65	<b>PDB header:</b> structural genomics, unknown function <b>Chain:</b> C; <b>PDB Molecule:</b> uncharacterized protein; <b>PDBTitle:</b> crystal structure of a conserved protein of unknown function from <i>enterococcus faecalis</i> v583
2	<a href="#">d1pdza2</a>	 Alignment		74.3	35	<b>Fold:</b> Enolase N-terminal domain-like <b>Superfamily:</b> Enolase N-terminal domain-like <b>Family:</b> Enolase N-terminal domain-like
3	<a href="#">d2akza2</a>	 Alignment		68.4	24	<b>Fold:</b> Enolase N-terminal domain-like <b>Superfamily:</b> Enolase N-terminal domain-like <b>Family:</b> Enolase N-terminal domain-like
4	<a href="#">d2al1a2</a>	 Alignment		65.9	22	<b>Fold:</b> Enolase N-terminal domain-like <b>Superfamily:</b> Enolase N-terminal domain-like <b>Family:</b> Enolase N-terminal domain-like
5	<a href="#">d1wo8a1</a>	 Alignment		60.8	19	<b>Fold:</b> Methylglyoxal synthase-like <b>Superfamily:</b> Methylglyoxal synthase-like <b>Family:</b> Methylglyoxal synthase, MgsA
6	<a href="#">c1vjta_</a>	 Alignment		51.7	9	<b>PDB header:</b> hydrolase <b>Chain:</b> A; <b>PDB Molecule:</b> alpha-glucosidase; <b>PDBTitle:</b> crystal structure of alpha-glucosidase (tm0752) from <i>thermotoga2 maritima</i> at 2.50 a resolution
7	<a href="#">c2cqiA_</a>	 Alignment		50.2	17	<b>PDB header:</b> rna binding protein <b>Chain:</b> A; <b>PDB Molecule:</b> u3 small nucleolar ribonucleoprotein protein <b>PDBTitle:</b> solution structure of the s4 domain of u3 small nucleolar2 ribonucleoprotein protein imp3 homolog
8	<a href="#">d1alua_</a>	 Alignment		41.0	15	<b>Fold:</b> 4-helical cytokines <b>Superfamily:</b> 4-helical cytokines <b>Family:</b> Long-chain cytokines
9	<a href="#">d2fyma2</a>	 Alignment		40.7	15	<b>Fold:</b> Enolase N-terminal domain-like <b>Superfamily:</b> Enolase N-terminal domain-like <b>Family:</b> Enolase N-terminal domain-like
10	<a href="#">c2re2A_</a>	 Alignment		31.9	32	<b>PDB header:</b> oxidoreductase <b>Chain:</b> A; <b>PDB Molecule:</b> uncharacterized protein ta1041; <b>PDBTitle:</b> crystal structure of a putative iron-molybdenum cofactor (femo-co)2 dinitrogenase (ta1041m) from <i>thermoplasma acidophilum</i> dsm 1728 at 3.130 a resolution
11	<a href="#">d1h3fa2</a>	 Alignment		21.9	21	<b>Fold:</b> Alpha-L RNA-binding motif <b>Superfamily:</b> Alpha-L RNA-binding motif <b>Family:</b> Tyrosyl-tRNA synthetase (TyrRS), C-terminal domain

12	<a href="#">d1c06a_</a>	 Alignment		21.5	36	<b>Fold:</b> Alpha-L RNA-binding motif <b>Superfamily:</b> Alpha-L RNA-binding motif <b>Family:</b> Ribosomal protein S4
13	<a href="#">c2y9xG_</a>	 Alignment		20.4	30	<b>PDB header:</b> oxidoreductase <b>Chain:</b> G: <b>PDB Molecule:</b> lectin-like fold protein; <b>PDBTitle:</b> crystal structure of ppo3, a tyrosinase from agaricus bisporus, in2 deoxy-form that contains additional unknown lectin-like subunit,3 with inhibitor tropolone
14	<a href="#">c2yvqA_</a>	 Alignment		20.2	18	<b>PDB header:</b> ligase <b>Chain:</b> A: <b>PDB Molecule:</b> carbamoyl-phosphate synthase; <b>PDBTitle:</b> crystal structure of mgs domain of carbamoyl-phosphate2 synthetase from homo sapiens
15	<a href="#">d2pw4a1</a>	 Alignment		19.7	18	<b>Fold:</b> Jann2411-like <b>Superfamily:</b> Jann2411-like <b>Family:</b> Jann2411-like
16	<a href="#">d1b93a_</a>	 Alignment		19.4	23	<b>Fold:</b> Methylglyoxal synthase-like <b>Superfamily:</b> Methylglyoxal synthase-like <b>Family:</b> Methylglyoxal synthase, MgsA
17	<a href="#">c3hp7A_</a>	 Alignment		19.2	17	<b>PDB header:</b> structural genomics, unknown function <b>Chain:</b> A: <b>PDB Molecule:</b> hemolysin, putative; <b>PDBTitle:</b> putative hemolysin from streptococcus thermophilus.
18	<a href="#">c2htmB_</a>	 Alignment		17.0	19	<b>PDB header:</b> biosynthetic protein <b>Chain:</b> B: <b>PDB Molecule:</b> thiazole biosynthesis protein thig; <b>PDBTitle:</b> crystal structure of ttha0676 from thermus thermophilus hb8
19	<a href="#">c2158A_</a>	 Alignment		16.6	40	<b>PDB header:</b> apoptosis <b>Chain:</b> A: <b>PDB Molecule:</b> activator of apoptosis harakiri; <b>PDBTitle:</b> solution structure of the cytosolic fragment 22-53 of bcl-2 member2 harakiri
20	<a href="#">d2gy9d1</a>	 Alignment		16.4	24	<b>Fold:</b> Alpha-L RNA-binding motif <b>Superfamily:</b> Alpha-L RNA-binding motif <b>Family:</b> Ribosomal protein S4
21	<a href="#">d1twda_</a>	 Alignment	not modelled	12.7	17	<b>Fold:</b> TIM beta/alpha-barrel <b>Superfamily:</b> CutC-like <b>Family:</b> CutC-like
22	<a href="#">d1nuba2</a>	 Alignment	not modelled	11.7	50	<b>Fold:</b> Knottins (small inhibitors, toxins, lectins) <b>Superfamily:</b> EGF/Laminin <b>Family:</b> Follistatin (FS) module N-terminal domain, FS-N
23	<a href="#">c2xzmD_</a>	 Alignment	not modelled	11.6	18	<b>PDB header:</b> ribosome <b>Chain:</b> D: <b>PDB Molecule:</b> ribosomal protein s4 containing protein; <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 1
24	<a href="#">c21dkA_</a>	 Alignment	not modelled	11.5	14	<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 protein aaur_3427 from arthrobacter2 aureus, northeast structural genomics consortium target aar96
25	<a href="#">d1jh3a_</a>	 Alignment	not modelled	10.5	25	<b>Fold:</b> Alpha-L RNA-binding motif <b>Superfamily:</b> Alpha-L RNA-binding motif <b>Family:</b> Tyrosyl-tRNA synthetase (TyrRS), C-terminal domain
26	<a href="#">d3cuma1</a>	 Alignment	not modelled	10.2	19	<b>Fold:</b> 6-phosphogluconate dehydrogenase C-terminal domain-like <b>Superfamily:</b> 6-phosphogluconate dehydrogenase C-terminal domain-like <b>Family:</b> Hydroxyisobutyrate and 6-phosphogluconate dehydrogenase domain
27	<a href="#">c3msuA_</a>	 Alignment	not modelled	10.0	20	<b>PDB header:</b> transferase <b>Chain:</b> A: <b>PDB Molecule:</b> citrate synthase; <b>PDBTitle:</b> crystal structure of citrate synthase from francisella tularensis
28	<a href="#">c3d0iA_</a>	 Alignment	not modelled	9.9	12	<b>PDB header:</b> structural genomics, unknown function <b>Chain:</b> A: <b>PDB Molecule:</b> uncharacterized protein ca_c3497;

28	<a href="#">c0u7jA_</a>	Alignment	not modelled	9.9	14	<b>PDBTitle:</b> crystal structure of conserved protein of unknown function ca_c34972 from clostridium acetobutylicum atcc 824 <b>PDB header:</b> hydrolase, oxidoreductase
29	<a href="#">c2d5nB_</a>	Alignment	not modelled	9.8	17	<b>Chain:</b> B: <b>PDB Molecule:</b> riboflavin biosynthesis protein ribd; <b>PDBTitle:</b> crystal structure of a bifunctional deaminase and reductase2 involved in riboflavin biosynthesis
30	<a href="#">d2hsja1</a>	Alignment	not modelled	9.8	18	<b>Fold:</b> Flavodoxin-like <b>Superfamily:</b> SGNH hydrolase <b>Family:</b> Acetylhydrolase
31	<a href="#">c2bibA_</a>	Alignment	not modelled	9.8	17	<b>PDB header:</b> hydrolase <b>Chain:</b> A: <b>PDB Molecule:</b> teichoic acid phosphorylcholine esterase/ choline binding <b>PDBTitle:</b> crystal structure of the complete modular teichoic acid2 phosphorylcholine esterase pce (cbpe) from streptococcus3 pneumoniae
32	<a href="#">c3iefA_</a>	Alignment	not modelled	9.8	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.
33	<a href="#">d2o34a1</a>	Alignment	not modelled	9.7	57	<b>Fold:</b> T-fold <b>Superfamily:</b> AppE-like <b>Family:</b> DVU1097-like
34	<a href="#">c2bs5A_</a>	Alignment	not modelled	9.4	25	<b>PDB header:</b> sugar binding protein <b>Chain:</b> A: <b>PDB Molecule:</b> fucoase-binding lectin protein; <b>PDBTitle:</b> lectin from ralstonia solanacearum complexed with 2-2 fucosyllactose
35	<a href="#">d1p9ka_</a>	Alignment	not modelled	8.6	24	<b>Fold:</b> Alpha-L RNA-binding motif <b>Superfamily:</b> Alpha-L RNA-binding motif <b>Family:</b> Ybcj-like
36	<a href="#">c1u8xX_</a>	Alignment	not modelled	8.4	21	<b>PDB header:</b> hydrolase <b>Chain:</b> X: <b>PDB Molecule:</b> maltose-6'-phosphate glucosidase; <b>PDBTitle:</b> crystal structure of glva from bacillus subtilis, a metal-requiring,2 nad-dependent 6-phospho-alpha-glucosidase
37	<a href="#">c3fefB_</a>	Alignment	not modelled	8.3	24	<b>PDB header:</b> hydrolase <b>Chain:</b> B: <b>PDB Molecule:</b> putative glucosidase lpld; <b>PDBTitle:</b> crystal structure of putative glucosidase lpld from2 bacillus subtilis
38	<a href="#">d1vmda_</a>	Alignment	not modelled	8.3	19	<b>Fold:</b> Methylglyoxal synthase-like <b>Superfamily:</b> Methylglyoxal synthase-like <b>Family:</b> Methylglyoxal synthase, MgsA
39	<a href="#">d2isba1</a>	Alignment	not modelled	7.8	17	<b>Fold:</b> The "swivelling" beta/beta/alpha domain <b>Superfamily:</b> FumA C-terminal domain-like <b>Family:</b> FumA C-terminal domain-like
40	<a href="#">d1vjta1</a>	Alignment	not modelled	7.7	7	<b>Fold:</b> NAD(P)-binding Rossmann-fold domains <b>Superfamily:</b> NAD(P)-binding Rossmann-fold domains <b>Family:</b> LDH N-terminal domain-like
41	<a href="#">c3n5mD_</a>	Alignment	not modelled	7.4	20	<b>PDB header:</b> transferase <b>Chain:</b> D: <b>PDB Molecule:</b> adenosyl methionine-8-amino-7-oxononanoate aminotransferase; <b>PDBTitle:</b> crystals structure of a bacillus anthracis aminotransferase
42	<a href="#">d2uubd1</a>	Alignment	not modelled	7.3	35	<b>Fold:</b> Alpha-L RNA-binding motif <b>Superfamily:</b> Alpha-L RNA-binding motif <b>Family:</b> Ribosomal protein S4
43	<a href="#">c2i7uA_</a>	Alignment	not modelled	7.2	43	<b>PDB header:</b> de novo protein/ligand binding protein <b>Chain:</b> A: <b>PDB Molecule:</b> four-alpha-helix bundle; <b>PDBTitle:</b> structural and dynamical analysis of a four-alpha-helix2 bundle with designed anesthetic binding pockets
44	<a href="#">d1vk4a_</a>	Alignment	not modelled	7.0	15	<b>Fold:</b> Ribokinase-like <b>Superfamily:</b> Ribokinase-like <b>Family:</b> Ribokinase-like
45	<a href="#">c1s1hD_</a>	Alignment	not modelled	6.8	32	<b>PDB header:</b> ribosome <b>Chain:</b> D: <b>PDB Molecule:</b> 40s ribosomal protein s9-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, 1s1h,4 contains 40s subunit. the 60s ribosomal subunit is in file5 1s1i.
46	<a href="#">d2jeka1</a>	Alignment	not modelled	6.5	32	<b>Fold:</b> Rv1873-like <b>Superfamily:</b> Rv1873-like <b>Family:</b> Rv1873-like
47	<a href="#">c2iunD_</a>	Alignment	not modelled	6.4	25	<b>PDB header:</b> viral protein <b>Chain:</b> D: <b>PDB Molecule:</b> avian adenovirus celo long fibre; <b>PDBTitle:</b> structure of the c-terminal head domain of the avian2 adenovirus celo long fibre (p21 crystal form)
48	<a href="#">c3bbnD_</a>	Alignment	not modelled	6.3	25	<b>PDB header:</b> ribosome <b>Chain:</b> D: <b>PDB Molecule:</b> ribosomal protein s4; <b>PDBTitle:</b> homology model for the spinach chloroplast 30s subunit2 fitted to 9.4a cryo-em map of the 70s chlororibosome.
49	<a href="#">c1oy5B_</a>	Alignment	not modelled	6.3	32	<b>PDB header:</b> transferase <b>Chain:</b> B: <b>PDB Molecule:</b> trna (guanine-n(1)-)-methyltransferase; <b>PDBTitle:</b> crystal structure of trna (m1g37) methyltransferase from aquifex2 aeolicus
50	<a href="#">d1oy5a_</a>	Alignment	not modelled	6.3	32	<b>Fold:</b> alpha/beta knot <b>Superfamily:</b> alpha/beta knot <b>Family:</b> tRNA(m1G37)-methyltransferase TrmD
51	<a href="#">c1s6yA_</a>	Alignment	not modelled	6.3	31	<b>PDB header:</b> hydrolase <b>Chain:</b> A: <b>PDB Molecule:</b> 6-phospho-beta-glucosidase; <b>PDBTitle:</b> 2.3a crystal structure of phospho-beta-glucosidase
52	<a href="#">d1s4da_</a>	Alignment	not modelled	6.1	19	<b>Fold:</b> Tetrapyrrole methylase <b>Superfamily:</b> Tetrapyrrole methylase <b>Family:</b> Tetrapyrrole methylase
53	<a href="#">c2k4mA_</a>	Alignment	not modelled	6.1	29	<b>PDB header:</b> structural genomics, unknown function <b>Chain:</b> A: <b>PDB Molecule:</b> upf0146 protein mth_1000; <b>PDBTitle:</b> solution nmr structure of m. thermoautotrophicum protein2 mth_1000, northeast structural genomics consortium

						target3 tr8
54	<a href="#">c3btpA_</a>	Alignment	not modelled	6.0	43	<b>PDB header:</b> dna binding protein, chaperone <b>Chain:</b> A: <b>PDB Molecule:</b> single-strand dna-binding protein; <b>PDBTitle:</b> crystal structure of agrobacterium tumefaciens vire2 in complex with2 its chaperone vire1: a novel fold and implications for dna binding
55	<a href="#">c3brtC_</a>	Alignment	not modelled	5.9	33	<b>PDB header:</b> transferase/transcription <b>Chain:</b> C: <b>PDB Molecule:</b> inhibitor of nuclear factor kappa-b kinase <b>PDBTitle:</b> nemo/ikk association domain structure
56	<a href="#">c2akmA_</a>	Alignment	not modelled	5.9	23	<b>PDB header:</b> lyase <b>Chain:</b> A: <b>PDB Molecule:</b> gamma enolase; <b>PDBTitle:</b> fluoride inhibition of enolase: crystal structure of the2 inhibitory complex
57	<a href="#">d1t6la2</a>	Alignment	not modelled	5.8	56	<b>Fold:</b> DNA clamp <b>Superfamily:</b> DNA clamp <b>Family:</b> DNA polymerase processivity factor
58	<a href="#">c3p04A_</a>	Alignment	not modelled	5.8	19	<b>PDB header:</b> structural genomics, unknown function <b>Chain:</b> A: <b>PDB Molecule:</b> uncharacterized bcr; <b>PDBTitle:</b> crystal structure of the bcr protein from corynebacterium glutamicum.2 northeast structural genomics consortium target cgr8
59	<a href="#">c3bboG_</a>	Alignment	not modelled	5.7	46	<b>PDB header:</b> ribosome <b>Chain:</b> G: <b>PDB Molecule:</b> ribosomal protein l4; <b>PDBTitle:</b> homology model for the spinach chloroplast 50s subunit2 fitted to 9.4a cryo-em map of the 70s chlororibosome
60	<a href="#">c2q7aA_</a>	Alignment	not modelled	5.5	43	<b>PDB header:</b> heme binding protein <b>Chain:</b> A: <b>PDB Molecule:</b> cell surface heme-binding protein; <b>PDBTitle:</b> crystal structure of the cell surface heme transfer protein shp
61	<a href="#">c2w40C_</a>	Alignment	not modelled	5.4	18	<b>PDB header:</b> transferase <b>Chain:</b> C: <b>PDB Molecule:</b> glycerol kinase, putative; <b>PDBTitle:</b> crystal structure of plasmodium falciparum glycerol kinase2 with bound glycerol
62	<a href="#">d1a7ha_</a>	Alignment	not modelled	5.3	23	<b>Fold:</b> gamma-Crystallin-like <b>Superfamily:</b> gamma-Crystallin-like <b>Family:</b> Crystallins/Ca-binding development proteins
63	<a href="#">d1s0aa_</a>	Alignment	not modelled	5.3	32	<b>Fold:</b> PLP-dependent transferase-like <b>Superfamily:</b> PLP-dependent transferases <b>Family:</b> GABA-aminotransferase-like
64	<a href="#">c3fd0B_</a>	Alignment	not modelled	5.1	20	<b>PDB header:</b> lyase <b>Chain:</b> B: <b>PDB Molecule:</b> putative cystathionine beta-lyase involved in aluminum <b>PDBTitle:</b> crystal structure of putative cystathionine beta-lyase involved in2 aluminum resistance (np_470671.1) from listeria innocua at 2.12 a3 resolution
65	<a href="#">d2cr9a1</a>	Alignment	not modelled	5.1	21	<b>Fold:</b> WGR domain-like <b>Superfamily:</b> WGR domain-like <b>Family:</b> WGR domain
66	<a href="#">c2lf2A_</a>	Alignment	not modelled	5.1	26	<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 ahsa1-like protein chu_1110 from2 cytophaga hutchinsonii, northeast structural genomics consortium3 target chr152