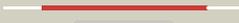
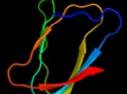
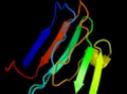
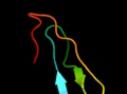


# Phyre2

Email	l.a.kelley@imperial.ac.uk
Description	P0AC73
Date	Thu Jan 5 11:17:27 GMT 2012
Unique Job ID	e686e4a3cbeb252b

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	<a href="#">d1s4ca1</a>	 Alignment		100.0	18	<b>Fold:</b> Double-stranded beta-helix <b>Superfamily:</b> Clavamate synthase-like <b>Family:</b> YhcH-like
2	<a href="#">d1yfua1</a>	 Alignment		90.4	17	<b>Fold:</b> Double-stranded beta-helix <b>Superfamily:</b> RmlC-like cupins <b>Family:</b> 3-hydroxyanthranilic acid dioxygenase-like
3	<a href="#">c2i45C_</a>	 Alignment		83.1	16	<b>PDB header:</b> structural genomics, unknown function <b>Chain:</b> C: <b>PDB Molecule:</b> hypothetical protein; <b>PDBTitle:</b> crystal structure of protein nmb1881 from neisseria meningitidis
4	<a href="#">c3cewA_</a>	 Alignment		75.8	14	<b>PDB header:</b> structural genomics, unknown function <b>Chain:</b> A: <b>PDB Molecule:</b> uncharacterized cupin protein; <b>PDBTitle:</b> crystal structure of a cupin protein (bf4112) from bacteroides2 fragilis. northeast structural genomics consortium target bfr205
5	<a href="#">d2arca_</a>	 Alignment		70.5	23	<b>Fold:</b> Double-stranded beta-helix <b>Superfamily:</b> Regulatory protein AraC <b>Family:</b> Regulatory protein AraC
6	<a href="#">d2pa7a1</a>	 Alignment		58.2	13	<b>Fold:</b> Double-stranded beta-helix <b>Superfamily:</b> RmlC-like cupins <b>Family:</b> dTDP-sugar isomerase
7	<a href="#">c3d82A_</a>	 Alignment		52.5	16	<b>PDB header:</b> metal binding protein <b>Chain:</b> A: <b>PDB Molecule:</b> cupin 2, conserved barrel domain protein; <b>PDBTitle:</b> crystal structure of a cupin-2 domain containing protein (sfri_3543)2 from shewanella frigidimarina nci mb 400 at 2.05 a resolution
8	<a href="#">d1v70a_</a>	 Alignment		46.2	14	<b>Fold:</b> Double-stranded beta-helix <b>Superfamily:</b> RmlC-like cupins <b>Family:</b> TM1287-like
9	<a href="#">d1o4ta_</a>	 Alignment		46.0	22	<b>Fold:</b> Double-stranded beta-helix <b>Superfamily:</b> RmlC-like cupins <b>Family:</b> TM1287-like
10	<a href="#">c2opkC_</a>	 Alignment		32.8	20	<b>PDB header:</b> isomerase <b>Chain:</b> C: <b>PDB Molecule:</b> hypothetical protein; <b>PDBTitle:</b> crystal structure of a putative mannose-6-phosphate isomerase2 (reut_a1446) from ralstonia eutropha jmp134 at 2.10 a resolution
11	<a href="#">c2ozjB_</a>	 Alignment		30.0	12	<b>PDB header:</b> unknown function <b>Chain:</b> B: <b>PDB Molecule:</b> cupin 2, conserved barrel; <b>PDBTitle:</b> crystal structure of a cupin superfamily protein (dsy2733) from2 desulfibacterium hafnense dcb-2 at 1.60 a resolution

12	<a href="#">c2oa2A_</a>	Alignment		29.2	13	<b>PDB header:</b> structural genomics, unknown function <b>Chain:</b> A: <b>PDB Molecule:</b> bh2720 protein; <b>PDBTitle:</b> crystal structure of bh2720 (10175341) from bacillus halodurans at2 1.41 a resolution
13	<a href="#">d1j0sa_</a>	Alignment		25.5	23	<b>Fold:</b> beta-Trefoil <b>Superfamily:</b> Cytokine <b>Family:</b> Interleukin-1 (IL-1)
14	<a href="#">c3ht2A_</a>	Alignment		24.9	16	<b>PDB header:</b> lyase <b>Chain:</b> A: <b>PDB Molecule:</b> remf protein; <b>PDBTitle:</b> zink containing polyketide cyclase remf from streptomyces2 resistomyficicus
15	<a href="#">c2o8qA_</a>	Alignment		24.0	22	<b>PDB header:</b> metal binding protein <b>Chain:</b> A: <b>PDB Molecule:</b> hypothetical protein; <b>PDBTitle:</b> crystal structure of a protein with a cupin-like fold and unknown2 function (bx_e_c0505) from burkholderia xenovorans lb400 at 1.55 a3 resolution
16	<a href="#">c2xp1A_</a>	Alignment		21.9	13	<b>PDB header:</b> transcription <b>Chain:</b> A: <b>PDB Molecule:</b> spt6; <b>PDBTitle:</b> structure of the tandem sh2 domains from antonospora locustae2 transcription elongation factor spt6
17	<a href="#">d1lr5a_</a>	Alignment		21.9	9	<b>Fold:</b> Double-stranded beta-helix <b>Superfamily:</b> RmlC-like cupins <b>Family:</b> Germin/Seed storage 7S protein
18	<a href="#">c3bcwB_</a>	Alignment		21.4	21	<b>PDB header:</b> unknown function <b>Chain:</b> B: <b>PDB Molecule:</b> uncharacterized protein; <b>PDBTitle:</b> crystal structure of a duf861 family protein with a rmlc-like cupin2 fold (bb1179) from bordetella bronchiseptica rb50 at 1.60 a3 resolution
19	<a href="#">c2xxzA_</a>	Alignment		21.1	9	<b>PDB header:</b> oxidoreductase <b>Chain:</b> A: <b>PDB Molecule:</b> lysine-specific demethylase 6b; <b>PDBTitle:</b> crystal structure of the human jmj3 jumonji domain
20	<a href="#">d1zvfa1</a>	Alignment		20.7	7	<b>Fold:</b> Double-stranded beta-helix <b>Superfamily:</b> RmlC-like cupins <b>Family:</b> 3-hydroxyanthranilic acid dioxygenase-like
21	<a href="#">c2q30C_</a>	Alignment	not modelled	20.5	13	<b>PDB header:</b> unknown function <b>Chain:</b> C: <b>PDB Molecule:</b> uncharacterized protein; <b>PDBTitle:</b> crystal structure of a rmlc-like cupin protein (dde_2303) from2 desulfovibrio desulfuricans subsp. at 1.94 a resolution
22	<a href="#">d1vj2a_</a>	Alignment	not modelled	20.1	18	<b>Fold:</b> Double-stranded beta-helix <b>Superfamily:</b> RmlC-like cupins <b>Family:</b> TM1459-like
23	<a href="#">d1x82a_</a>	Alignment	not modelled	17.1	28	<b>Fold:</b> Double-stranded beta-helix <b>Superfamily:</b> RmlC-like cupins <b>Family:</b> Glucose-6-phosphate isomerase, GPI
24	<a href="#">c3kgzA_</a>	Alignment	not modelled	16.8	16	<b>PDB header:</b> structural genomics, unknown function <b>Chain:</b> A: <b>PDB Molecule:</b> cupin 2 conserved barrel domain protein; <b>PDBTitle:</b> crystal structure of a cupin 2 conserved barrel domain protein from2 rhodopseudomonas palustris
25	<a href="#">c2xueB_</a>	Alignment	not modelled	15.1	11	<b>PDB header:</b> oxidoreductase <b>Chain:</b> B: <b>PDB Molecule:</b> lysine-specific demethylase 6b; <b>PDBTitle:</b> crystal structure of jmj3
26	<a href="#">c2pfbB_</a>	Alignment	not modelled	14.9	13	<b>PDB header:</b> unknown function <b>Chain:</b> B: <b>PDB Molecule:</b> cupin 2, conserved barrel domain protein; <b>PDBTitle:</b> crystal structure of a rmlc-like cupin (sfri_3105) from shewanella2 frigidimarina ncimb 400 at 1.90 a resolution
27	<a href="#">d1j3pa_</a>	Alignment	not modelled	13.7	22	<b>Fold:</b> Double-stranded beta-helix <b>Superfamily:</b> RmlC-like cupins <b>Family:</b> Glucose-6-phosphate isomerase, GPI
28	<a href="#">d3dl3a1</a>	Alignment	not modelled	12.7	13	<b>Fold:</b> Double-stranded beta-helix <b>Superfamily:</b> Clavaminate synthase-like <b>Family:</b> TehB-like

29	<a href="#">d1o5ua_</a>	Alignment	not modelled	11.7	25	<b>Fold:</b> Double-stranded beta-helix <b>Superfamily:</b> RmlC-like cupins <b>Family:</b> Hypothetical protein TM1112
30	<a href="#">d3bb6a1</a>	Alignment	not modelled	11.3	8	<b>Fold:</b> Double-stranded beta-helix <b>Superfamily:</b> Clavamate synthase-like <b>Family:</b> TehB-like
31	<a href="#">d1yhfa1</a>	Alignment	not modelled	10.8	21	<b>Fold:</b> Double-stranded beta-helix <b>Superfamily:</b> RmlC-like cupins <b>Family:</b> TM1287-like
32	<a href="#">c3fjsC_</a>	Alignment	not modelled	10.8	18	<b>PDB header:</b> biosynthetic protein <b>Chain:</b> C: <b>PDB Molecule:</b> uncharacterized protein with rmlc-like cupin fold; <b>PDBTitle:</b> crystal structure of a putative biosynthetic protein with rmlc-like2 cupin fold (reut_b4087) from ralstonia eutropha jmp134 at 1.90 a3 resolution
33	<a href="#">c3l2hD_</a>	Alignment	not modelled	10.5	26	<b>PDB header:</b> isomerase <b>Chain:</b> D: <b>PDB Molecule:</b> putative sugar phosphate isomerase; <b>PDBTitle:</b> crystal structure of putative sugar phosphate isomerase (afe_0303)2 from acidithiobacillus ferrooxidans atcc 23270 at 1.85 a resolution
34	<a href="#">c2vqaC_</a>	Alignment	not modelled	10.0	15	<b>PDB header:</b> metal-binding protein <b>Chain:</b> C: <b>PDB Molecule:</b> sll1358 protein; <b>PDBTitle:</b> protein-folding location can regulate mn versus cu- or zn-2 binding. crystal structure of mnca.
35	<a href="#">c3ibmB_</a>	Alignment	not modelled	9.8	16	<b>PDB header:</b> structural genomics, unknown function <b>Chain:</b> B: <b>PDB Molecule:</b> cupin 2, conserved barrel domain protein; <b>PDBTitle:</b> crystal structure of cupin 2 domain-containing protein hha1_0468 from2 halorhodospira halophila
36	<a href="#">c3ebrA_</a>	Alignment	not modelled	9.2	18	<b>PDB header:</b> unknown function <b>Chain:</b> A: <b>PDB Molecule:</b> uncharacterized rmlc-like cupin; <b>PDBTitle:</b> crystal structure of an rmlc-like cupin protein (reut_a0381) from2 ralstonia eutropha jmp134 at 2.60 a resolution
37	<a href="#">c3jzvA_</a>	Alignment	not modelled	7.5	16	<b>PDB header:</b> structural genomics, unknown function <b>Chain:</b> A: <b>PDB Molecule:</b> uncharacterized protein rru_a2000; <b>PDBTitle:</b> crystal structure of rru_a2000 from rhodospirillum rubrum: a cupin-22 domain.
38	<a href="#">c2w2iC_</a>	Alignment	not modelled	7.2	5	<b>PDB header:</b> oxidoreductase <b>Chain:</b> C: <b>PDB Molecule:</b> 2-oxoglutarate oxygenase; <b>PDBTitle:</b> crystal structure of the human 2-oxoglutarate oxygenase2 loc390245
39	<a href="#">d1dgwa_</a>	Alignment	not modelled	7.1	14	<b>Fold:</b> Double-stranded beta-helix <b>Superfamily:</b> RmlC-like cupins <b>Family:</b> Germin/Seed storage 7S protein
40	<a href="#">c2odbB_</a>	Alignment	not modelled	6.7	13	<b>PDB header:</b> protein binding <b>Chain:</b> B: <b>PDB Molecule:</b> serine/threonine-protein kinase pak 6; <b>PDBTitle:</b> the crystal structure of human cdc42 in complex with the crib domain2 of human p21-activated kinase 6 (pak6)
41	<a href="#">c2ca9B_</a>	Alignment	not modelled	6.3	9	<b>PDB header:</b> transcriptional regulation <b>Chain:</b> B: <b>PDB Molecule:</b> putative nickel-responsive regulator; <b>PDBTitle:</b> apo-nikr from helicobacter pylori in closed trans-2 conformation
42	<a href="#">c2os2A_</a>	Alignment	not modelled	6.1	14	<b>PDB header:</b> oxidoreductase <b>Chain:</b> A: <b>PDB Molecule:</b> jmjc domain-containing histone demethylation protein 3a; <b>PDBTitle:</b> crystal structure of jmjd2a complexed with histone h3 peptide2 trimethylated at lys36
43	<a href="#">c2q8eB_</a>	Alignment	not modelled	6.1	14	<b>PDB header:</b> oxidoreductase <b>Chain:</b> B: <b>PDB Molecule:</b> jmjc domain-containing histone demethylation <b>PDBTitle:</b> specificity and mechanism of jmjd2a, a trimethyllysine-2 specific histone demethylase
44	<a href="#">d1y9qa2</a>	Alignment	not modelled	5.8	12	<b>Fold:</b> Double-stranded beta-helix <b>Superfamily:</b> RmlC-like cupins <b>Family:</b> Probable transcriptional regulator VC1968, C-terminal domain
45	<a href="#">c3opwA_</a>	Alignment	not modelled	5.8	19	<b>PDB header:</b> oxidoreductase <b>Chain:</b> A: <b>PDB Molecule:</b> dna damage-responsive transcriptional repressor rph1; <b>PDBTitle:</b> crystal structure of the rph1 catalytic core
46	<a href="#">d1sfna_</a>	Alignment	not modelled	5.7	19	<b>Fold:</b> Double-stranded beta-helix <b>Superfamily:</b> RmlC-like cupins <b>Family:</b> YlbA-like
47	<a href="#">d1rc6a_</a>	Alignment	not modelled	5.6	20	<b>Fold:</b> Double-stranded beta-helix <b>Superfamily:</b> RmlC-like cupins <b>Family:</b> YlbA-like
48	<a href="#">d2es7a1</a>	Alignment	not modelled	5.4	29	<b>Fold:</b> Thioredoxin fold <b>Superfamily:</b> Thioredoxin-like <b>Family:</b> HyaE-like