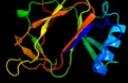
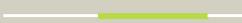
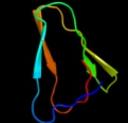
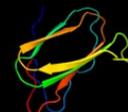
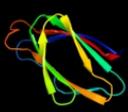
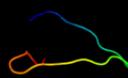
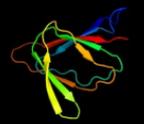
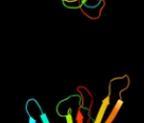
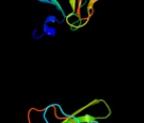


Phyre2

Email	I.a.kelley@imperial.ac.uk
Description	P45424
Date	Wed Jan 25 15:20:54 GMT 2012
Unique Job ID	2191665119ecec11

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	d1s4ca1	 Alignment		100.0	38	Fold: Double-stranded beta-helix Superfamily: Clavamate synthase-like Family: YhcH-like
2	d1yfua1	 Alignment		83.4	18	Fold: Double-stranded beta-helix Superfamily: RmlC-like cupins Family: 3-hydroxyanthranilic acid dioxygenase-like
3	c3cewA	 Alignment		80.2	23	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: uncharacterized cupin protein; PDBTitle: crystal structure of a cupin protein (bf4112) from bacteroides2 fragilis. northeast structural genomics consortium target bfr205
4	d1v70a	 Alignment		74.2	23	Fold: Double-stranded beta-helix Superfamily: RmlC-like cupins Family: TM1287-like
5	c2i45C	 Alignment		60.1	19	PDB header: structural genomics, unknown function Chain: C: PDB Molecule: hypothetical protein; PDBTitle: crystal structure of protein nmb1881 from neisseria meningitidis
6	c2oa2A	 Alignment		51.0	14	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: bh2720 protein; PDBTitle: crystal structure of bh2720 (10175341) from bacillus halodurans at2 1.41 a resolution
7	d1o4ta	 Alignment		47.6	21	Fold: Double-stranded beta-helix Superfamily: RmlC-like cupins Family: TM1287-like
8	d2arca	 Alignment		37.8	32	Fold: Double-stranded beta-helix Superfamily: Regulatory protein AraC Family: Regulatory protein AraC
9	d1j3pa	 Alignment		33.6	15	Fold: Double-stranded beta-helix Superfamily: RmlC-like cupins Family: Glucose-6-phosphate isomerase, GPI
10	c2xxzA	 Alignment		33.5	20	PDB header: oxidoreductase Chain: A: PDB Molecule: lysine-specific demethylase 6b; PDBTitle: crystal structure of the human jmj3 jumonji domain
11	c2xueB	 Alignment		32.3	21	PDB header: oxidoreductase Chain: B: PDB Molecule: lysine-specific demethylase 6b; PDBTitle: crystal structure of jmj3

12	c2fqzD	Alignment		31.3	16	PDB header: metal binding protein Chain: D: PDB Molecule: hypothetical protein bp2299; PDBTitle: crystal structure of a cupin domain (bp2299) from bordetella pertussis2 tohama i at 1.80 a resolution
13	c3d82A	Alignment		31.2	27	PDB header: metal binding protein Chain: A: PDB Molecule: cupin 2, conserved barrel domain protein; PDBTitle: crystal structure of a cupin-2 domain containing protein (sfri_3543)2 from shewanella frigidimarina ncimb 400 at 2.05 a resolution
14	c3kgzA	Alignment		30.1	20	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: cupin 2 conserved barrel domain protein; PDBTitle: crystal structure of a cupin 2 conserved barrel domain protein from2 rhodopseudomonas palustris
15	d1zvf1	Alignment		26.5	13	Fold: Double-stranded beta-helix Superfamily: RmlC-like cupins Family: 3-hydroxyanthranilic acid dioxygenase-like
16	c2oziA	Alignment		24.7	19	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: hypothetical protein rpa4178; PDBTitle: structural genomics, the crystal structure of a putative2 protein rpa4178 from rhodopseudomonas palustris cga009
17	c2ozjB	Alignment		23.6	29	PDB header: unknown function Chain: B: PDB Molecule: cupin 2, conserved barrel; PDBTitle: crystal structure of a cupin superfamily protein (dsy2733) from2 desulfitobacterium hafniense dcb-2 at 1.60 a resolution
18	c2qu9B	Alignment		22.6	12	PDB header: immune system Chain: B: PDB Molecule: tetracenomycin polyketide synthesis protein; PDBTitle: crystal structure of xc5357 from xanthomonas campestris: a2 putative tetracenomycin polyketide synthesis protein3 adopting a novel cupin subfamily structure
19	c2hdlA	Alignment		20.8	31	PDB header: cytokine Chain: A: PDB Molecule: small inducible cytokine b14; PDBTitle: solution structure of brak/cxcl14
20	d2pa7a1	Alignment		19.7	8	Fold: Double-stranded beta-helix Superfamily: RmlC-like cupins Family: dTDP-sugar isomerase
21	d3dl3a1	Alignment	not modelled	19.5	23	Fold: Double-stranded beta-helix Superfamily: Clavamate synthase-like Family: TehB-like
22	c2w2iC	Alignment	not modelled	16.6	25	PDB header: oxidoreductase Chain: C: PDB Molecule: 2-oxoglutarate oxygenase; PDBTitle: crystal structure of the human 2-oxoglutarate oxygenase2 loc390245
23	d1vj2a	Alignment	not modelled	16.2	15	Fold: Double-stranded beta-helix Superfamily: RmlC-like cupins Family: TM1459-like
24	c3ht2A	Alignment	not modelled	16.0	25	PDB header: lyase Chain: A: PDB Molecule: remf protein; PDBTitle: zink containing polyketide cyclase remf from streptomyces2 resistomycescificus
25	c2pyhB	Alignment	not modelled	15.9	26	PDB header: isomerase Chain: B: PDB Molecule: poly(beta-d-mannuronate) c5 epimerase 4; PDBTitle: azotobacter vinelandii mannuronan c-5 epimerase alge4 a-module2 complexed with mannuronan trisaccharide
26	c2r32A	Alignment	not modelled	15.9	26	PDB header: immune system Chain: A: PDB Molecule: gcn4-pii/tumor necrosis factor ligand PDBTitle: crystal structure of human gitrl variant
27	d3bb6a1	Alignment	not modelled	15.7	35	Fold: Double-stranded beta-helix Superfamily: Clavamate synthase-like Family: TehB-like
28	d2bdra1	Alignment	not modelled	15.1	15	Fold: Double-stranded beta-helix Superfamily: RmlC-like cupins Family: Ureidoglycolate hydrolase AIIA
						Fold: Double-stranded beta-helix

29	d1y9qa2	Alignment	not modelled	14.6	22	Superfamily: RmlC-like cupins Family: Probable transcriptional regulator VC1968, C-terminal domain
30	d1a6qa1	Alignment	not modelled	14.4	19	Fold: Another 3-helical bundle Superfamily: Protein serine/threonine phosphatase 2C, C-terminal domain Family: Protein serine/threonine phosphatase 2C, C-terminal domain
31	c2q8eB	Alignment	not modelled	14.3	20	PDB header: oxidoreductase Chain: B: PDB Molecule: jmjc domain-containing histone demethylation PDBTitle: specificity and mechanism of jmjd2a, a trimethyllysine-2 specific histone demethylase
32	c2os2A	Alignment	not modelled	13.7	20	PDB header: oxidoreductase Chain: A: PDB Molecule: jmjc domain-containing histone demethylation protein 3a; PDBTitle: crystal structure of jmjd2a complexed with histone h3 peptide2 trimethylated at lys36
33	c3ebrA	Alignment	not modelled	13.6	16	PDB header: unknown function Chain: A: PDB Molecule: uncharacterized rmlc-like cupin; PDBTitle: crystal structure of an rmlc-like cupin protein (reut_a0381) from2 ralstonia eutropha jmp134 at 2.60 a resolution
34	c3opwA	Alignment	not modelled	13.5	25	PDB header: oxidoreductase Chain: A: PDB Molecule: dna damage-responsive transcriptional repressor rph1; PDBTitle: crystal structure of the rph1 catalytic core
35	d1j0sa	Alignment	not modelled	12.2	16	Fold: beta-Trefoil Superfamily: Cytokine Family: Interleukin-1 (IL-1)
36	c3ibmB	Alignment	not modelled	12.2	14	PDB header: structural genomics, unknown function Chain: B: PDB Molecule: cupin 2, conserved barrel domain protein; PDBTitle: crystal structure of cupin 2 domain-containing protein hhal_0468 from2 halorhodospira halophila
37	d2es7a1	Alignment	not modelled	12.2	14	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: HyaE-like
38	d2fcta1	Alignment	not modelled	11.3	22	Fold: Double-stranded beta-helix Superfamily: Clavaminate synthase-like Family: PhyH-like
39	c3h8uA	Alignment	not modelled	11.1	23	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: uncharacterized conserved protein with double-stranded PDBTitle: crystal structure of uncharacterized conserved protein with double-2 stranded beta-helix domain (yp_001338853.1) from klebsiella3 pneumoniae subsp. pneumoniae mgh 78578 at 1.80 a resolution
40	c2bx6A	Alignment	not modelled	9.7	12	PDB header: transduction protein Chain: A: PDB Molecule: xrp2 protein; PDBTitle: crystal structure of the human retinitis pigmentosa2 protein 2 (rp2)
41	c2pfwB	Alignment	not modelled	9.6	15	PDB header: unknown function Chain: B: PDB Molecule: cupin 2, conserved barrel domain protein; PDBTitle: crystal structure of a rmlc-like cupin (sfri_3105) from shewanella2 frigidimarina ncimb 400 at 1.90 a resolution
42	d1x82a	Alignment	not modelled	9.4	15	Fold: Double-stranded beta-helix Superfamily: RmlC-like cupins Family: Glucose-6-phosphate isomerase, GPI
43	c3jzvA	Alignment	not modelled	9.3	13	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: uncharacterized protein rru_a2000; PDBTitle: crystal structure of rru_a2000 from rhodospirillum rubrum: a cupin-22 domain.
44	d2f4pa1	Alignment	not modelled	8.6	19	Fold: Double-stranded beta-helix Superfamily: RmlC-like cupins Family: TM1287-like
45	d1rc6a	Alignment	not modelled	8.3	16	Fold: Double-stranded beta-helix Superfamily: RmlC-like cupins Family: YlbA-like
46	c3emrA	Alignment	not modelled	8.1	13	PDB header: oxidoreductase Chain: A: PDB Molecule: ectd; PDBTitle: crystal structure analysis of the ectoine hydroxylase ectd from2 salibacillus salexigens
47	c2q30C	Alignment	not modelled	8.0	25	PDB header: unknown function Chain: C: PDB Molecule: uncharacterized protein; PDBTitle: crystal structure of a rmlc-like cupin protein (dde_2303) from2 desulfovibrio desulfuricans subsp. at 1.94 a resolution
48	c3l2hD	Alignment	not modelled	7.7	17	PDB header: isomerase Chain: D: PDB Molecule: putative sugar phosphate isomerase; PDBTitle: crystal structure of putative sugar phosphate isomerase (afe_0303)2 from acidithiobacillus ferrooxidans atcc 23270 at 1.85 a resolution
49	d1xsqa	Alignment	not modelled	7.4	13	Fold: Double-stranded beta-helix Superfamily: RmlC-like cupins Family: Ureidoglycolate hydrolase AIIA
50	c3fjsC	Alignment	not modelled	7.2	17	PDB header: biosynthetic protein Chain: C: PDB Molecule: uncharacterized protein with rmlc-like cupin fold; PDBTitle: crystal structure of a putative biosynthetic protein with rmlc-like2 cupin fold (reut_b4087) from ralstonia eutropha jmp134 at 1.90 a3 resolution
51	c2o8qA	Alignment	not modelled	6.9	30	PDB header: metal binding protein Chain: A: PDB Molecule: hypothetical protein; PDBTitle: crystal structure of a protein with a cupin-like fold and unknown2 function (bx_c0505) from burkholderia xenovorans lb400 at 1.55 a3 resolution
52	c2opwA	Alignment	not modelled	6.4	9	PDB header: oxidoreductase Chain: A: PDB Molecule: phyhd1 protein;

52	c20pwa1	Alignment	not modelled	6.4	9	PDBTitle: crystal structure of human phytanoyl-coa dioxygenase phyhd1 (apo)
53	d1wzaa1	Alignment	not modelled	6.3	13	Fold: Glycosyl hydrolase domain Superfamily: Glycosyl hydrolase domain Family: alpha-Amylases, C-terminal beta-sheet domain
54	c3jurA	Alignment	not modelled	6.1	7	PDB header: hydrolase Chain: A: PDB Molecule: exo-poly-alpha-d-galacturonosidase; PDBTitle: the crystal structure of a hyperthermoactive exopolygalacturonase from <i>Thermotoga maritima</i>
55	c3gjbA	Alignment	not modelled	6.1	21	PDB header: biosynthetic protein Chain: A: PDB Molecule: cytc3; PDBTitle: cytc3 with fe(ii) and alpha-ketoglutarate
56	d2f2ha1	Alignment	not modelled	6.0	18	Fold: Putative glucosidase YicI, C-terminal domain Superfamily: Putative glucosidase YicI, C-terminal domain Family: Putative glucosidase YicI, C-terminal domain
57	d1y3ta1	Alignment	not modelled	5.7	16	Fold: Double-stranded beta-helix Superfamily: RmlC-like cupins Family: Quercetin 2,3-dioxygenase-like
58	c2yrvA	Alignment	not modelled	5.7	27	PDB header: transcription Chain: A: PDB Molecule: at-rich interactive domain-containing protein 4a; PDBTitle: solution structure of the rbb1nt domain of human2 rb(retinoblastoma)-binding protein 1
59	d2a1xa1	Alignment	not modelled	5.5	15	Fold: Double-stranded beta-helix Superfamily: Clavamate synthase-like Family: PhyH-like
60	c2vpvA	Alignment	not modelled	5.2	10	PDB header: cell cycle Chain: A: PDB Molecule: protein mif2; PDBTitle: dimerization domain of mif2p