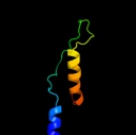
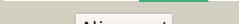
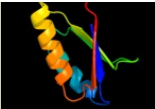
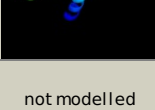


Phyre2

Email	I.a.kelley@imperial.ac.uk
Description	P0A8A0
Date	Thu Jan 5 11:07:16 GMT 2012
Unique Job ID	b63b28ce7a127386

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	d1lfpa_	 Alignment		100.0	44	Fold: YebC-like Superfamily: YebC-like Family: YebC-like
2	d1kona_	 Alignment		100.0	99	Fold: YebC-like Superfamily: YebC-like Family: YebC-like
3	d1mw7a_	 Alignment		100.0	31	Fold: YebC-like Superfamily: YebC-like Family: YebC-like
4	c3k85B_	 Alignment		65.2	18	PDB header: transferase Chain: B: PDB Molecule: d-glycero-d-manno-heptose 1-phosphate kinase; PDBTitle: crystal structure of a d-glycero-d-manno-heptose 1-phosphate2 kinase from bacteriodes thetaiotaomicron
5	c2jsxA_	 Alignment		62.7	23	PDB header: chaperone Chain: A: PDB Molecule: protein napd; PDBTitle: solution structure of the e. coli tat proofreading2 chaperone protein napd
6	c3ibwA_	 Alignment		62.5	12	PDB header: transferase Chain: A: PDB Molecule: gtp pyrophosphokinase; PDBTitle: crystal structure of the act domain from gtp2 pyrophosphokinase of chlorobium tepidum. northeast3 structural genomics consortium target ctr148a
7	c3ke8A_	 Alignment		56.3	26	PDB header: oxidoreductase Chain: A: PDB Molecule: 4-hydroxy-3-methylbut-2-enyl diphosphate PDBTitle: crystal structure of isph:hmbpp-complex
8	d2auna2	 Alignment		50.9	16	Fold: Flavodoxin-like Superfamily: Class I glutamine amidotransferase-like Family: LD-carboxypeptidase A N-terminal domain-like
9	c2zf8A_	 Alignment		45.7	9	PDB header: structural protein Chain: A: PDB Molecule: component of sodium-driven polar flagellar motor; PDBTitle: crystal structure of moty
10	c2cveA_	 Alignment		42.3	20	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: hypothetical protein tth1053; PDBTitle: crystal structure of a conserved hypothetical protein tt1547 from2 thermus thermophilus hb8
11	c1vi7A_	 Alignment		42.2	7	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: hypothetical protein yigz; PDBTitle: crystal structure of an hypothetical protein

12	c2e1cA	Alignment		38.6	11	PDB header: transcription/dna Chain: A: PDB Molecule: putative hth-type transcriptional regulator ph1519; PDBTitle: structure of putative hth-type transcriptional regulator ph1519/dna2 complex
13	d2cyya2	Alignment		37.4	11	Fold: Ferredoxin-like Superfamily: Dimeric alpha+beta barrel Family: Lrp/AsnC-like transcriptional regulator C-terminal domain
14	c2zbcH	Alignment		36.8	11	PDB header: transcription Chain: H: PDB Molecule: 83aa long hypothetical transcriptional regulator asnc; PDBTitle: crystal structure of sts042, a stand-alone ram module protein, from2 hyperthermophilic archaeon sulfolobus tokodaii strain7.
15	c2f06B	Alignment		36.4	16	PDB header: structural genomics, unknown function Chain: B: PDB Molecule: conserved hypothetical protein; PDBTitle: crystal structure of protein bt0572 from bacteroides thetaiotaomicron
16	d1i1ga2	Alignment		34.5	18	Fold: Ferredoxin-like Superfamily: Dimeric alpha+beta barrel Family: Lrp/AsnC-like transcriptional regulator C-terminal domain
17	d1k47a2	Alignment		34.4	13	Fold: Ferredoxin-like Superfamily: GHMP Kinase, C-terminal domain Family: Phosphomevalonate kinase (PMK)
18	c2plyB	Alignment		33.5	13	PDB header: translation/rna Chain: B: PDB Molecule: selenocysteine-specific elongation factor; PDBTitle: structure of the mrna binding fragment of elongation factor2 selb in complex with secis rna.
19	c3bzqA	Alignment		31.1	22	PDB header: signaling protein/transcription Chain: A: PDB Molecule: nitrogen regulatory protein p-ii; PDBTitle: high resolution crystal structure of nitrogen regulatory protein2 (rv2919c) of mycobacterium tuberculosis
20	d1ub9a	Alignment		31.1	16	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: MarR-like transcriptional regulators
21	d1sc6a3	Alignment	not modelled	29.1	9	Fold: Ferredoxin-like Superfamily: ACT-like Family: Phosphoglycerate dehydrogenase, regulatory (C-terminal) domain
22	d1ewqa2	Alignment	not modelled	27.7	22	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: ABC transporter ATPase domain-like
23	d1jr3d2	Alignment	not modelled	27.2	12	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Extended AAA-ATPase domain
24	d1lxja	Alignment	not modelled	27.0	7	Fold: Ferredoxin-like Superfamily: MTH1187/YkoF-like Family: MTH1187-like
25	d1weya	Alignment	not modelled	26.4	15	Fold: Ferredoxin-like Superfamily: RNA-binding domain, RBD Family: Canonical RBD
26	c2p6tH	Alignment	not modelled	25.8	7	PDB header: transcription Chain: H: PDB Molecule: transcriptional regulator, lrp/asnc family; PDBTitle: crystal structure of transcriptional regulator nmb0573 and l-leucine2 complex from neisseria meningitidis
27	c3k2qA	Alignment	not modelled	25.5	17	PDB header: transferase Chain: A: PDB Molecule: pyrophosphate-dependent phosphofructokinase; PDBTitle: crystal structure of pyrophosphate-dependent2 phosphofructokinase from marinobacter aquaeolei, northeast3 structural genomics consortium target mqr88
28	c3l7pA	Alignment	not modelled	25.3	16	PDB header: transcription Chain: A: PDB Molecule: putative nitrogen regulatory protein pii; PDBTitle: crystal structure of smu.1657c, putative nitrogen

						regulatory protein2 pii from streptococcus mutans
29	d1lxna	Alignment	not modelled	25.3	18	Fold: Ferredoxin-like Superfamily: MTH1187/YkoF-like Family: MTH1187-like
30	c1fpqA	Alignment	not modelled	25.3	27	PDB header: transferase Chain: A: PDB Molecule: isoliquiritigenin 2'-o-methyltransferase; PDBTitle: crystal structure analysis of selenomethionine substituted chalcone o-2 methyltransferase
31	c1i1gA	Alignment	not modelled	25.2	17	PDB header: transcription Chain: A: PDB Molecule: transcriptional regulator LrpA; PDBTitle: crystal structure of the Lrp-like transcriptional regulator from the2 archaeon pyrococcus furiosus
32	c2vsaA	Alignment	not modelled	24.5	45	PDB header: toxin Chain: A: PDB Molecule: mosquitocidal toxin; PDBTitle: structure and mode of action of a mosquitocidal holotoxin
33	d2cg4a2	Alignment	not modelled	24.2	11	Fold: Ferredoxin-like Superfamily: Dimeric alpha+beta barrel Family: Lrp/AsnC-like transcriptional regulator C-terminal domain
34	c2kgrA	Alignment	not modelled	23.4	9	PDB header: protein binding Chain: A: PDB Molecule: intersectin-1; PDBTitle: solution structure of protein itsn1 from homo sapiens.2 northeast structural genomics consortium target hr5524a
35	d1kkca2	Alignment	not modelled	23.3	47	Fold: Fe,Mn superoxide dismutase (SOD), C-terminal domain Superfamily: Fe,Mn superoxide dismutase (SOD), C-terminal domain Family: Fe,Mn superoxide dismutase (SOD), C-terminal domain
36	c2epiA	Alignment	not modelled	22.6	20	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: upf0045 protein mj1052; PDBTitle: crystal structure pf hypothetical protein mj1052 from2 methanocaldococcus jannaschii (form 2)
37	c2e1aD	Alignment	not modelled	22.3	17	PDB header: transcription Chain: D: PDB Molecule: 75aa long hypothetical regulatory protein asnc; PDBTitle: crystal structure of ffrp-dm1
38	d1kkha2	Alignment	not modelled	22.3	11	Fold: Ferredoxin-like Superfamily: GHMP Kinase, C-terminal domain Family: Mevalonate kinase
39	d1ul3a	Alignment	not modelled	21.9	14	Fold: Ferredoxin-like Superfamily: GlnB-like Family: Prokaryotic signal transducing protein
40	d2nzca1	Alignment	not modelled	21.9	7	Fold: Ferredoxin-like Superfamily: ACT-like Family: TM1266-like
41	c2csuB	Alignment	not modelled	21.4	16	PDB header: structural genomics, unknown function Chain: B: PDB Molecule: 457aa long hypothetical protein; PDBTitle: crystal structure of ph0766 from pyrococcus horikoshii ot3
42	d1qmha1	Alignment	not modelled	21.1	24	Fold: Thioredoxin fold Superfamily: RNA 3'-terminal phosphate cyclase, RPTC, insert domain Family: RNA 3'-terminal phosphate cyclase, RPTC, insert domain
43	d1cc8a	Alignment	not modelled	19.9	9	Fold: Ferredoxin-like Superfamily: HMA, heavy metal-associated domain Family: HMA, heavy metal-associated domain
44	d1q5za	Alignment	not modelled	19.8	22	Fold: Invasion protein A (SipA) , C-terminal actin binding domain Superfamily: Invasion protein A (SipA) , C-terminal actin binding domain Family: Invasion protein A (SipA) , C-terminal actin binding domain
45	c1q5zA	Alignment	not modelled	19.8	22	PDB header: cell invasion Chain: A: PDB Molecule: sipa; PDBTitle: crystal structure of the c-terminal actin binding domain of2 salmonella invasion protein a (sipa)
46	c3s01A	Alignment	not modelled	19.5	20	PDB header: rna binding protein Chain: A: PDB Molecule: heterogeneous nuclear ribonucleoprotein l; PDBTitle: crystal structure of a heterogeneous nuclear ribonucleoprotein l2 (hnrlp) from mus musculus at 2.15 a resolution
47	c3canA	Alignment	not modelled	19.4	22	PDB header: lyase activator Chain: A: PDB Molecule: pyruvate-formate lyase-activating enzyme; PDBTitle: crystal structure of a domain of pyruvate-formate lyase-activating2 enzyme from bacteroides vulgatus atcc 8482
48	d2iboa1	Alignment	not modelled	19.2	19	Fold: Ferredoxin-like Superfamily: MTH1187/YkoF-like Family: MTH1187-like
49	c1zrsB	Alignment	not modelled	19.0	15	PDB header: hydrolase Chain: B: PDB Molecule: hypothetical protein; PDBTitle: wild-type ld-carboxypeptidase
50	d1zl0a2	Alignment	not modelled	18.7	13	Fold: Flavodoxin-like Superfamily: Class I glutamine amidotransferase-like Family: LD-carboxypeptidase A N-terminal domain-like
51	c3fiaA	Alignment	not modelled	18.5	13	PDB header: protein binding Chain: A: PDB Molecule: intersectin-1; PDBTitle: crystal structure of the eh 1 domain from human intersectin-2 1 protein. northeast structural genomics consortium target3 hr3646e.
52	d2ev0a2	Alignment	not modelled	18.4	10	Fold: Iron-dependent repressor protein, dimerization domain Superfamily: Iron-dependent repressor protein, dimerization domain Family: Iron-dependent repressor protein, dimerization domain
53	d1ygva3	Alignment	not modelled	18.4	18	Fold: Ferredoxin-like Superfamily: ACT-like Family: Phosphoglycerate dehydrogenase, regulatory (C-terminal) domain
						Fold: S-adenosyl-L-methionine-dependent methyltransferases Superfamily: S-adenosyl-L-methionine-dependent

54	d2ex4a1	Alignment	not modelled	18.3	21	Supersfamily: S-adenosyl-L-methionine-dependent methyltransferases Family: AD-003 protein-like
55	d1gtra1	Alignment	not modelled	18.1	13	Fold: Ribosomal protein L25-like Supersfamily: Ribosomal protein L25-like Family: Gln-tRNA synthetase (GlnRS), C-terminal (anticodon-binding) domain
56	d2q02a1	Alignment	not modelled	17.8	13	Fold: TIM beta/alpha-barrel Supersfamily: Xylose isomerase-like Family: loll-like
57	d1wb9a2	Alignment	not modelled	17.8	17	Fold: P-loop containing nucleoside triphosphate hydrolases Supersfamily: P-loop containing nucleoside triphosphate hydrolases Family: ABC transporter ATPase domain-like
58	d2f06a2	Alignment	not modelled	17.1	17	Fold: Ferredoxin-like Supersfamily: ACT-like Family: BT0572-like
59	c2e7xA	Alignment	not modelled	16.9	7	PDB header: transcription regulator Chain: A: PDB Molecule: 150aa long hypothetical transcriptional regulator; PDBTitle: structure of the lrp/asnc like transcriptional regulator from2 sulfobolus tokodaii 7 complexed with its cognate ligand
60	c3o3nB	Alignment	not modelled	16.9	14	PDB header: lyase Chain: B: PDB Molecule: beta-subunit 2-hydroxyacyl-coa dehydratase; PDBTitle: (r)-2-hydroxyisocaproyl-coa dehydratase in complex with its substrate2 (r)-2-hydroxyisocaproyl-coa
61	c2nyiB	Alignment	not modelled	16.5	17	PDB header: structural genomics, unknown function Chain: B: PDB Molecule: unknown protein; PDBTitle: crystal structure of an unknown protein from galdieria2 sulphuraria
62	d2f06a1	Alignment	not modelled	16.4	13	Fold: Ferredoxin-like Supersfamily: ACT-like Family: BT0572-like
63	d1j5ya2	Alignment	not modelled	16.4	15	Fold: HPr-like Supersfamily: Putative transcriptional regulator TM1602, C-terminal domain Family: Putative transcriptional regulator TM1602, C-terminal domain
64	d1mwza	Alignment	not modelled	16.4	23	Fold: Ferredoxin-like Supersfamily: HMA, heavy metal-associated domain Family: HMA, heavy metal-associated domain
65	d4pfka	Alignment	not modelled	16.1	35	Fold: Phosphofructokinase Supersfamily: Phosphofructokinase Family: Phosphofructokinase
66	c2hw5F	Alignment	not modelled	15.6	29	PDB header: lyase Chain: F: PDB Molecule: enoyl-coa hydratase; PDBTitle: the crystal structure of human enoyl-coenzyme a (coa) hydratase short2 chain 1, echs1
67	d1fima	Alignment	not modelled	15.4	18	Fold: Tautomerase/MIF Supersfamily: Tautomerase/MIF Family: MIF-related
68	c2dhaA	Alignment	not modelled	15.4	15	PDB header: rna binding protein Chain: A: PDB Molecule: flj20171 protein; PDBTitle: solution structure of the second rna recognition motif in2 hypothetical protein flj201171
69	d1hwua	Alignment	not modelled	15.3	18	Fold: Ferredoxin-like Supersfamily: GlnB-like Family: Prokaryotic signal transducing protein
70	c1ewrA	Alignment	not modelled	15.1	22	PDB header: hydrolase Chain: A: PDB Molecule: dna mismatch repair protein muts; PDBTitle: crystal structure of taq muts
71	d3cx5d2	Alignment	not modelled	14.9	56	Fold: Single transmembrane helix Supersfamily: Cytochrome c1 subunit of cytochrome bc1 complex (Ubiquinol-cytochrome c reductase), transmembrane anchor Family: Cytochrome c1 subunit of cytochrome bc1 complex (Ubiquinol-cytochrome c reductase), transmembrane anchor
72	c3fybA	Alignment	not modelled	14.8	29	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: protein of unknown function (duf1244); PDBTitle: crystal structure of a protein of unknown function (duf1244) from2 alcanivorax borkumensis
73	c2djwF	Alignment	not modelled	14.8	9	PDB header: unknown function Chain: F: PDB Molecule: probable transcriptional regulator, asnc family; PDBTitle: crystal structure of ttha0845 from thermus thermophilus hb8
74	c2cg4B	Alignment	not modelled	14.7	10	PDB header: transcription Chain: B: PDB Molecule: regulatory protein asnc; PDBTitle: structure of e.coli asnc
75	c3g23A	Alignment	not modelled	14.3	16	PDB header: hydrolase Chain: A: PDB Molecule: ld-carboxypeptidase a; PDBTitle: crystal structure of a ld-carboxypeptidase a (saro_1426) from2 novosphingobium aromaticivorans dsm at 1.89 a resolution
76	d1ppjd2	Alignment	not modelled	13.9	44	Fold: Single transmembrane helix Supersfamily: Cytochrome c1 subunit of cytochrome bc1 complex (Ubiquinol-cytochrome c reductase), transmembrane anchor Family: Cytochrome c1 subunit of cytochrome bc1 complex (Ubiquinol-cytochrome c reductase), transmembrane anchor
77	c3ia1A	Alignment	not modelled	13.9	19	PDB header: oxidoreductase Chain: A: PDB Molecule: thio-disulfide isomerase/thioredoxin; PDBTitle: crystal structure of thio-disulfide isomerase from thermus2 thermophilus
78	c3lk7A	Alignment	not modelled	13.8	12	PDB header: ligase Chain: A: PDB Molecule: udp-n-acetylmuramoylalanine--d-glutamate ligase; PDBTitle: the crystal structure of udp-n-acetylmuramoylalanine-d-2 glutamate (murd) ligase from streptococcus agalactiae to3 1.5a

79	d2cfxa2	Alignment	not modelled	13.5	6	Fold: Ferredoxin-like Superfamily: Dimeric alpha+beta barrel Family: Lrp/AsnC-like transcriptional regulator C-terminal domain
80	d2o35a1	Alignment	not modelled	13.3	33	Fold: SMc04008-like Superfamily: SMc04008-like Family: SMc04008-like
81	c2o35A	Alignment	not modelled	13.3	33	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: hypothetical protein duf1244; PDBTitle: protein of unknown function (duf1244) from sinorhizobium meliloti
82	c2i38A	Alignment	not modelled	13.3	22	PDB header: rna binding protein/chimera Chain: A: PDB Molecule: fusion protein consists of immunoglobulin g- PDBTitle: solution structure of the rrm of srp20
83	c3jz3B	Alignment	not modelled	13.2	34	PDB header: transferase Chain: B: PDB Molecule: sensor protein qsec; PDBTitle: structure of the cytoplasmic segment of histidine kinase qsec
84	d1u8sa1	Alignment	not modelled	13.2	11	Fold: Ferredoxin-like Superfamily: ACT-like Family: Glycine cleavage system transcriptional repressor
85	c1b4aA	Alignment	not modelled	13.0	12	PDB header: repressor Chain: A: PDB Molecule: arginine repressor; PDBTitle: structure of the arginine repressor from bacillus stearothermophilus
86	d2adca1	Alignment	not modelled	12.9	21	Fold: Ferredoxin-like Superfamily: RNA-binding domain, RBD Family: Canonical RBD
87	d1lq1a	Alignment	not modelled	12.7	33	Fold: DNA/RNA-binding 3-helical bundle Superfamily: C-terminal effector domain of the bipartite response regulators Family: Spo0A
88	d2u1aa	Alignment	not modelled	12.6	14	Fold: Ferredoxin-like Superfamily: RNA-binding domain, RBD Family: Canonical RBD
89	c1zxxA	Alignment	not modelled	12.5	35	PDB header: transferase Chain: A: PDB Molecule: 6-phosphofructokinase; PDBTitle: the crystal structure of phosphofructokinase from lactobacillus2 delbrueckii
90	d1gd0a	Alignment	not modelled	12.3	14	Fold: Tautomerase/MIF Superfamily: Tautomerase/MIF Family: MIF-related
91	c3i4pA	Alignment	not modelled	12.3	5	PDB header: transcription regulator Chain: A: PDB Molecule: transcriptional regulator, asnc family; PDBTitle: crystal structure of asnc family transcriptional regulator from2 agrobacterium tumefaciens
92	c2d9oA	Alignment	not modelled	12.2	17	PDB header: rna binding protein Chain: A: PDB Molecule: dnaj (hsp40) homolog, subfamily c, member 17; PDBTitle: solution structure of rna binding domain in hypothetical2 protein flj10634
93	c1ewqA	Alignment	not modelled	12.1	22	PDB header: replication/dna Chain: A: PDB Molecule: dna mismatch repair protein muts; PDBTitle: crystal structure of taq muts complexed with a heteroduplex2 dna at 2.2 a resolution
94	d2g0wa1	Alignment	not modelled	12.0	19	Fold: TIM beta/alpha-barrel Superfamily: Xylose isomerase-like Family: IolI-like
95	c3thxB	Alignment	not modelled	11.9	17	PDB header: dna binding protein/dna Chain: B: PDB Molecule: dna mismatch repair protein msh3; PDBTitle: human mutsbeta complexed with an idl of 3 bases (loop3) and adp
96	d1pfka	Alignment	not modelled	11.8	35	Fold: Phosphofructokinase Superfamily: Phosphofructokinase Family: Phosphofructokinase
97	c3dx5A	Alignment	not modelled	11.6	14	PDB header: lyase Chain: A: PDB Molecule: uncharacterized protein asbf; PDBTitle: crystal structure of the probable 3-dhs dehydratase asbf involved in2 the petrobactin synthesis from bacillus anthracis
98	c2pc6C	Alignment	not modelled	11.6	11	PDB header: lyase Chain: C: PDB Molecule: probable acetolactate synthase isozyme iii (small subunit); PDBTitle: crystal structure of putative acetolactate synthase- small subunit2 from nitrosomonas europaea
99	c2cfxD	Alignment	not modelled	11.4	6	PDB header: transcription Chain: D: PDB Molecule: hth-type transcriptional regulator lrpc; PDBTitle: structure of b.subtilis lrpc