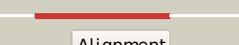
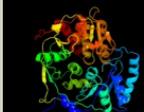
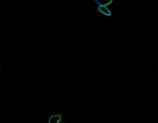
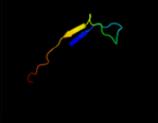


Phyre2

Email	I.a.kelley@imperial.ac.uk
Description	P75764
Date	Thu Jan 5 12:13:53 GMT 2012
Unique Job ID	ffd62f2f397f0755

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c2b3yB_	 Alignment		100.0	22	PDB header: lyase Chain: B; PDB Molecule: iron-responsive element binding protein 1; PDBTitle: structure of a monoclinic crystal form of human cytosolic aconitase2 (irp1)
2	c5acnA_	 Alignment		100.0	24	PDB header: lyase(carbon-oxygen) Chain: A; PDB Molecule: aconitase; PDBTitle: structure of activated aconitase. formation of the (4fe-4s)2 cluster in the crystal
3	d2b3ya2	 Alignment		100.0	23	Fold: Aconitase iron-sulfur domain Superfamily: Aconitase iron-sulfur domain Family: Aconitase iron-sulfur domain
4	d1acoa2	 Alignment		100.0	26	Fold: Aconitase iron-sulfur domain Superfamily: Aconitase iron-sulfur domain Family: Aconitase iron-sulfur domain
5	d1l5ja3	 Alignment		100.0	22	Fold: Aconitase iron-sulfur domain Superfamily: Aconitase iron-sulfur domain Family: Aconitase iron-sulfur domain
6	c1l5jB_	 Alignment		100.0	21	PDB header: lyase Chain: B; PDB Molecule: aconitate hydratase 2; PDBTitle: crystal structure of e. coli aconitase b.
7	d2b3ya1	 Alignment		100.0	19	Fold: The "swivelling" beta/beta/alpha domain Superfamily: LeuD/IlvD-like Family: LeuD-like
8	d1acoa1	 Alignment		100.0	21	Fold: The "swivelling" beta/beta/alpha domain Superfamily: LeuD/IlvD-like Family: LeuD-like
9	d1v7la_	 Alignment		100.0	24	Fold: The "swivelling" beta/beta/alpha domain Superfamily: LeuD/IlvD-like Family: LeuD-like
10	c2pkpA_	 Alignment		100.0	28	PDB header: lyase Chain: A; PDB Molecule: homoaconitase small subunit; PDBTitle: crystal structure of 3-isopropylmalate dehydratase (leud)2 from methanocaldococcus jannaschii dsm2661 (mj1271)
11	d1l5ja2	 Alignment		100.0	20	Fold: The "swivelling" beta/beta/alpha domain Superfamily: LeuD/IlvD-like Family: LeuD-like

12	c2hcuA	Alignment		100.0	20	PDB header: lyase Chain: A: PDB Molecule: 3-isopropylmalate dehydratase small subunit; PDBTitle: crystal structure of smu.1381 (or leud) from streptococcus2 mutans
13	c3q3wB	Alignment		100.0	18	PDB header: transferase Chain: B: PDB Molecule: 3-isopropylmalate dehydratase small subunit; PDBTitle: isopropylmalate isomerase small subunit from campylobacter jejuni.
14	c3h5jA	Alignment		100.0	18	PDB header: lyase Chain: A: PDB Molecule: 3-isopropylmalate dehydratase small subunit; PDBTitle: leud_1-168 small subunit of isopropylmalate isomerase (rv2987c) from2 mycobacterium tuberculosis
15	d1g4ma1	Alignment		86.9	23	Fold: Immunoglobulin-like beta-sandwich Superfamily: E set domains Family: Arrestin/Vps26-like
16	c1cjbB	Alignment		85.0	11	PDB header: hydrolase Chain: B: PDB Molecule: protein (cytosolic phospholipase a2); PDBTitle: human cytosolic phospholipase a2
17	d1cfla1	Alignment		80.3	14	Fold: Immunoglobulin-like beta-sandwich Superfamily: E set domains Family: Arrestin/Vps26-like
18	c2k6zA	Alignment		64.6	21	PDB header: metal transport Chain: A: PDB Molecule: putative uncharacterized protein ttha1943; PDBTitle: solution structures of copper loaded form pcua (trans2 conformation of the peptide bond involving the nitrogen of3 p14)
19	d1x9la	Alignment		54.5	16	Fold: Common fold of diphtheria toxin/transcription factors/cytochrome f Superfamily: DR1885-like metal-binding protein Family: DR1885-like metal-binding protein
20	c3dc1A	Alignment		50.5	12	PDB header: transferase Chain: A: PDB Molecule: kynurenine/alpha-aminoadipate aminotransferase PDBTitle: crystal structure of kynurenine aminotransferase ii complex with2 alpha-ketoglutarate
21	c2yx6C	Alignment	not modelled	42.3	10	PDB header: structural genomics, unknown function Chain: C: PDB Molecule: hypothetical protein ph0822; PDBTitle: crystal structure of ph0822
22	c3l4gl	Alignment	not modelled	38.0	19	PDB header: ligase Chain: I: PDB Molecule: phenylalanyl-trna synthetase alpha chain; PDBTitle: crystal structure of homo sapiens cytoplasmic phenylalanyl-trna2 synthetase
23	d1rdua	Alignment	not modelled	37.0	10	Fold: Ribonuclease H-like motif Superfamily: Nitrogenase accessory factor-like Family: MTH1175-like
24	d1t3va	Alignment	not modelled	34.5	15	Fold: Ribonuclease H-like motif Superfamily: Nitrogenase accessory factor-like Family: MTH1175-like
25	c3bolB	Alignment	not modelled	30.7	16	PDB header: transferase Chain: B: PDB Molecule: 5-methyltetrahydrofolate s-homocysteine PDBTitle: cobalamin-dependent methionine synthase (1-566) from2 thermotoga maritima complexed with zn2+
26	d1o13a	Alignment	not modelled	30.5	11	Fold: Ribonuclease H-like motif Superfamily: Nitrogenase accessory factor-like Family: MTH1175-like
27	d2r4qa1	Alignment	not modelled	30.5	21	Fold: Phosphotyrosine protein phosphatases I-like Superfamily: PTS system IIB component-like Family: PTS system, Fructose specific IIB subunit-like
28	d2q7wa1	Alignment	not modelled	30.4	8	Fold: PLP-dependent transferase-like Superfamily: PLP-dependent transferases Family: AAT-like
29	d1yaaa	Alignment	not modelled	29.8	17	Fold: PLP-dependent transferase-like Superfamily: PLP-dependent transferases Family: AAT-like

30	c3mo4B_	Alignment	not modelled	29.0	20	PDB header: hydrolase Chain: B: PDB Molecule: alpha-1,3/4-fucosidase; PDBTitle: the crystal structure of an alpha-(1-3,4)-fucosidase from <i>Bifidobacterium longum</i> subsp. <i>infantis</i> atcc 15697
31	c3gzaB_	Alignment	not modelled	25.8	24	PDB header: hydrolase Chain: B: PDB Molecule: putative alpha-l-fucosidase; PDBTitle: crystal structure of putative alpha-l-fucosidase (np_812709.1) from <i>Bacteroides thetaiotaomicron</i> vpi-5482 at 1.60 Å resolution
32	c2yb1A_	Alignment	not modelled	24.9	30	PDB header: hydrolase Chain: A: PDB Molecule: amidohydrolase; PDBTitle: structure of an amidohydrolase from <i>Chromobacterium violaceum</i> (efi2 target efi-500202) with bound mn, amp and phosphate.
33	d1t0tv_	Alignment	not modelled	24.3	14	Fold: Ferredoxin-like Superfamily: Dimeric alpha+beta barrel Family: Chlorite dismutase-like
34	c2wbrA_	Alignment	not modelled	23.6	31	PDB header: dna-binding protein Chain: A: PDB Molecule: gw182; PDBTitle: the rrm domain in gw182 proteins contributes to mirna-2 mediated gene silencing
35	c2wvsD_	Alignment	not modelled	23.1	20	PDB header: hydrolase Chain: D: PDB Molecule: alpha-l-fucosidase; PDBTitle: crystal structure of an alpha-l-fucosidase gh29 trapped 2 covalent intermediate from <i>Bacteroides thetaiotaomicron</i> in 3 complex with 2-fluoro-fucosyl fluoride using an e288q4 mutant
36	d2csta_	Alignment	not modelled	22.1	13	Fold: PLP-dependent transferase-like Superfamily: PLP-dependent transferases Family: AAT-like
37	d1p90a_	Alignment	not modelled	21.6	10	Fold: Ribonuclease H-like motif Superfamily: Nitrogenase accessory factor-like Family: Nitrogenase accessory factor
38	d3bofa2	Alignment	not modelled	21.6	29	Fold: TIM beta/alpha-barrel Superfamily: Homocysteine S-methyltransferase Family: Homocysteine S-methyltransferase
39	c3qguB_	Alignment	not modelled	20.8	22	PDB header: transferase Chain: B: PDB Molecule: l,l-diaminopimelate aminotransferase; PDBTitle: l,l-diaminopimelate aminotransferase from <i>Chlamydomonas reinhardtii</i>
40	d1vdha_	Alignment	not modelled	20.6	9	Fold: Ferredoxin-like Superfamily: Dimeric alpha+beta barrel Family: Chlorite dismutase-like
41	d1go3e1	Alignment	not modelled	20.5	12	Fold: OB-fold Superfamily: Nucleic acid-binding proteins Family: Cold shock DNA-binding domain-like
42	c3ihjA_	Alignment	not modelled	20.5	5	PDB header: transferase Chain: A: PDB Molecule: alanine aminotransferase 2; PDBTitle: human alanine aminotransferase 2 in complex with plp
43	d1e01a_	Alignment	not modelled	20.2	15	Fold: Ribonuclease H-like motif Superfamily: Nitrogenase accessory factor-like Family: MTH1175-like
44	c3cmwA_	Alignment	not modelled	19.9	19	PDB header: recombination/dna Chain: A: PDB Molecule: protein reca; PDBTitle: mechanism of homologous recombination from the reca-2 ssdna/dsdna structures
45	c3a2kB_	Alignment	not modelled	19.9	8	PDB header: ligase/rna Chain: B: PDB Molecule: trna(ile)-lysine synthase; PDBTitle: crystal structure of tils complexed with trna
46	c1pt1B_	Alignment	not modelled	19.8	16	PDB header: lyase Chain: B: PDB Molecule: aspartate 1-decarboxylase; PDBTitle: unprocessed pyruvoyl dependent aspartate decarboxylase with histidine2 11 mutated to alanine
47	d1ppyA_	Alignment	not modelled	19.8	16	Fold: Double psi beta-barrel Superfamily: ADC-like Family: Pyruvoyl dependent aspartate decarboxylase, ADC
48	c2wfbA_	Alignment	not modelled	18.8	16	PDB header: biosynthetic protein Chain: A: PDB Molecule: putative uncharacterized protein orp; PDBTitle: high resolution structure of the apo form of the orange2 protein (orp) from <i>Desulfovibrio gigas</i>
49	d2ay1a_	Alignment	not modelled	18.1	16	Fold: PLP-dependent transferase-like Superfamily: PLP-dependent transferases Family: AAT-like
50	c3pg8B_	Alignment	not modelled	17.2	11	PDB header: transferase Chain: B: PDB Molecule: phospho-2-dehydro-3-deoxyheptonate aldolase; PDBTitle: truncated form of 3-deoxy-d-arabino-heptulosonate 7-phosphate synthase2 from <i>Thermotoga maritima</i>
51	d7aata_	Alignment	not modelled	16.8	11	Fold: PLP-dependent transferase-like Superfamily: PLP-dependent transferases Family: AAT-like
52	c3eypB_	Alignment	not modelled	16.5	24	PDB header: structural genomics, unknown function Chain: B: PDB Molecule: putative alpha-l-fucosidase; PDBTitle: crystal structure of putative alpha-l-fucosidase from <i>Bacteroides thetaiotaomicron</i>
53	c3gitA_	Alignment	not modelled	16.4	32	PDB header: transferase Chain: A: PDB Molecule: carbon monoxide dehydrogenase/acetyl-coa synthase subunit PDBTitle: crystal structure of a truncated acetyl-coa synthase
54	d1lt7a_	Alignment	not modelled	16.1	25	Fold: TIM beta/alpha-barrel Superfamily: Homocysteine S-methyltransferase Family: Homocysteine S-methyltransferase
55	c2nvgA_	Alignment	not modelled	15.9	14	PDB header: oxidoreductase Chain: A: PDB Molecule: ubiquinol-cytochrome c reductase iron-sulfur subunit;

						PDBTitle: soluble domain of rieske iron sulfur protein.
56	d3ccda2	Alignment	not modelled	15.5	15	Fold: Phage tail proteins Superfamily: Phage tail proteins Family: Baseplate protein-like
57	c2vxhF	Alignment	not modelled	15.3	0	PDB header: oxidoreductase Chain: F: PDB Molecule: chlorite dismutase; PDBTitle: the crystal structure of chlorite dismutase: a detox enzyme2 producing molecular oxygen
58	c3k7yA	Alignment	not modelled	14.8	10	PDB header: transferase Chain: A: PDB Molecule: aspartate aminotransferase; PDBTitle: aspartate aminotransferase of plasmodium falciparum
59	d1x0ma1	Alignment	not modelled	14.5	17	Fold: PLP-dependent transferase-like Superfamily: PLP-dependent transferases Family: AAT-like
60	d1w7la	Alignment	not modelled	14.0	12	Fold: PLP-dependent transferase-like Superfamily: PLP-dependent transferases Family: AAT-like
61	c2c45F	Alignment	not modelled	13.9	11	PDB header: lyase Chain: F: PDB Molecule: aspartate 1-decarboxylase precursor; PDBTitle: native precursor of pyruvoyl dependent aspartate2 decarboxylase
62	c3c9uB	Alignment	not modelled	13.4	13	PDB header: transferase Chain: B: PDB Molecule: thiamine monophosphate kinase; PDBTitle: aath1l complexed with adp and tpp
63	c2ebbA	Alignment	not modelled	13.0	15	PDB header: lyase Chain: A: PDB Molecule: pterin-4-alpha-carbinolamine dehydratase; PDBTitle: crystal structure of pterin-4-alpha-carbinolamine2 dehydratase (pterin carbinolamine dehydratase) from3 geobacillus kaustophilus hta426
64	c3pplB	Alignment	not modelled	12.7	14	PDB header: transferase Chain: B: PDB Molecule: aspartate aminotransferase; PDBTitle: crystal structure of an aspartate transaminase (ncgl0237, cgl0240)2 from corynebacterium glutamicum atcc 13032 kitasato at 1.25 a3 resolution
65	d2r5ea1	Alignment	not modelled	12.6	12	Fold: PLP-dependent transferase-like Superfamily: PLP-dependent transferases Family: AAT-like
66	c3nn4C	Alignment	not modelled	12.5	5	PDB header: oxidoreductase Chain: C: PDB Molecule: chlorite dismutase; PDBTitle: structure of chlorite dismutase from candidatus nitrospira defluviu2 r173k mutant
67	c2oxlA	Alignment	not modelled	12.3	21	PDB header: gene regulation Chain: A: PDB Molecule: hypothetical protein ymgb; PDBTitle: structure and function of the e. coli protein ymgb: a protein critical2 for biofilm formation and acid resistance
68	d1l0sa	Alignment	not modelled	12.2	21	Fold: Single-stranded left-handed beta-helix Superfamily: An insect antifreeze protein Family: An insect antifreeze protein
69	c3m84A	Alignment	not modelled	12.1	13	PDB header: ligase Chain: A: PDB Molecule: phosphoribosylformylglycinamide cyclo-ligase; PDBTitle: crystal structure of phosphoribosylaminoimidazole synthetase from2 francisella tularensis
70	c2jz2A	Alignment	not modelled	12.1	17	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: ssl0352 protein; PDBTitle: solution nmr structure of ssl0352 protein from synechocystis sp. pcc2 6803. northeast structural genomics consortium target sgr42
71	c3muxB	Alignment	not modelled	12.0	13	PDB header: lyase Chain: B: PDB Molecule: putative 4-hydroxy-2-oxoglutarate aldolase; PDBTitle: the crystal structure of a putative 4-hydroxy-2-oxoglutarate aldolase2 from bacillus anthracis to 1.45a
72	d2nu7b2	Alignment	not modelled	11.9	25	Fold: ATP-grasp Superfamily: Glutathione synthetase ATP-binding domain-like Family: Succinyl-CoA synthetase, beta-chain, N-terminal domain
73	c3m6yA	Alignment	not modelled	11.7	13	PDB header: lyase Chain: A: PDB Molecule: 4-hydroxy-2-oxoglutarate aldolase; PDBTitle: structure of 4-hydroxy-2-oxoglutarate aldolase from bacillus cereus at2 1.45 a resolution.
74	d1w44a	Alignment	not modelled	11.7	24	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: RecA protein-like (ATPase-domain)
75	c1ni5A	Alignment	not modelled	11.4	7	PDB header: cell cycle Chain: A: PDB Molecule: putative cell cycle protein mesj; PDBTitle: structure of the mesj pp-atpase from escherichia coli
76	c2w9mB	Alignment	not modelled	11.3	25	PDB header: dna replication Chain: B: PDB Molecule: polymerase x; PDBTitle: structure of family x dna polymerase from deinococcus2 radiodurans
77	c3kxyW	Alignment	not modelled	10.7	25	PDB header: chaperone/transcription inhibitor Chain: W: PDB Molecule: exsc; PDBTitle: crystal structure of the exsc-exsc complex
78	c3cmuA	Alignment	not modelled	10.7	16	PDB header: recombination/dna Chain: A: PDB Molecule: protein reca; PDBTitle: mechanism of homologous recombination from the reca-2 ssdna/dsdna structures
79	d1m8na	Alignment	not modelled	10.3	14	Fold: Single-stranded left-handed beta-helix Superfamily: An insect antifreeze protein Family: An insect antifreeze protein
80	d2p5zx2	Alignment	not modelled	10.2	25	Fold: Phage tail proteins Superfamily: Phage tail proteins Family: Baseplate protein-like

81	d1ru3a_	Alignment	not modelled	10.1	23	Fold: Prismane protein-like Superfamily: Prismane protein-like Family: Acetyl-CoA synthase
82	c3eibB_	Alignment	not modelled	9.8	19	PDB header: transferase Chain: B: PDB Molecule: Il-di aminopimelate aminotransferase; PDBTitle: crystal structure of k270n variant of Il-di aminopimelate2 aminotransferase from arabidopsis thaliana
83	c2gp4A_	Alignment	not modelled	9.8	24	PDB header: lyase Chain: A: PDB Molecule: 6-phosphogluconate dehydratase; PDBTitle: structure of [fes]cluster-free apo form of 6-phosphogluconate2 dehydratase from shewanella oneidensis
84	d1oaoc_	Alignment	not modelled	9.7	32	Fold: Prismane protein-like Superfamily: Prismane protein-like Family: Acetyl-CoA synthase
85	c3bzwA_	Alignment	not modelled	9.6	12	PDB header: hydrolase Chain: A: PDB Molecule: putative lipase; PDBTitle: crystal structure of a putative lipase from bacteroides2 thetaiotaomicron
86	d3bzwal	Alignment	not modelled	9.6	12	Fold: Flavodoxin-like Superfamily: SGNH hydrolase Family: BT2961-like
87	c3bkdB_	Alignment	not modelled	9.6	38	PDB header: viral protein, membrane protein Chain: B: PDB Molecule: transmembrane domain of matrix protein m2; PDBTitle: high resolution crystal structure of transmembrane domain of m22 protein
88	c3bkdG_	Alignment	not modelled	9.6	38	PDB header: viral protein, membrane protein Chain: G: PDB Molecule: transmembrane domain of matrix protein m2; PDBTitle: high resolution crystal structure of transmembrane domain of m22 protein
89	c3bkdD_	Alignment	not modelled	9.6	38	PDB header: viral protein, membrane protein Chain: D: PDB Molecule: transmembrane domain of matrix protein m2; PDBTitle: high resolution crystal structure of transmembrane domain of m22 protein
90	c3bkdC_	Alignment	not modelled	9.6	38	PDB header: viral protein, membrane protein Chain: C: PDB Molecule: transmembrane domain of matrix protein m2; PDBTitle: high resolution crystal structure of transmembrane domain of m22 protein
91	c3bkdE_	Alignment	not modelled	9.6	38	PDB header: viral protein, membrane protein Chain: E: PDB Molecule: transmembrane domain of matrix protein m2; PDBTitle: high resolution crystal structure of transmembrane domain of m22 protein
92	c3bkdF_	Alignment	not modelled	9.6	38	PDB header: viral protein, membrane protein Chain: F: PDB Molecule: transmembrane domain of matrix protein m2; PDBTitle: high resolution crystal structure of transmembrane domain of m22 protein
93	c3bkdA_	Alignment	not modelled	9.6	38	PDB header: viral protein, membrane protein Chain: A: PDB Molecule: transmembrane domain of matrix protein m2; PDBTitle: high resolution crystal structure of transmembrane domain of m22 protein
94	c3bkdH_	Alignment	not modelled	9.6	38	PDB header: viral protein, membrane protein Chain: H: PDB Molecule: transmembrane domain of matrix protein m2; PDBTitle: high resolution crystal structure of transmembrane domain of m22 protein
95	d1qlma_	Alignment	not modelled	9.4	15	Fold: Methenyltetrahydromethanopterin cyclohydrolase Superfamily: Methenyltetrahydromethanopterin cyclohydrolase Family: Methenyltetrahydromethanopterin cyclohydrolase
96	c2kadC_	Alignment	not modelled	9.4	38	PDB header: membrane protein Chain: C: PDB Molecule: transmembrane peptide of matrix protein 2; PDBTitle: magic-angle-spinning solid-state nmr structure of influenza2 a m2 transmembrane domain
97	c2kadA_	Alignment	not modelled	9.4	38	PDB header: membrane protein Chain: A: PDB Molecule: transmembrane peptide of matrix protein 2; PDBTitle: magic-angle-spinning solid-state nmr structure of influenza2 a m2 transmembrane domain
98	c2kadB_	Alignment	not modelled	9.4	38	PDB header: membrane protein Chain: B: PDB Molecule: transmembrane peptide of matrix protein 2; PDBTitle: magic-angle-spinning solid-state nmr structure of influenza2 a m2 transmembrane domain
99	c2kadD_	Alignment	not modelled	9.4	38	PDB header: membrane protein Chain: D: PDB Molecule: transmembrane peptide of matrix protein 2; PDBTitle: magic-angle-spinning solid-state nmr structure of influenza2 a m2 transmembrane domain