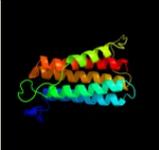
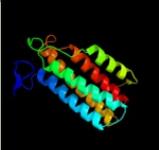
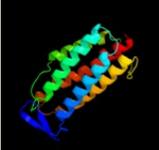
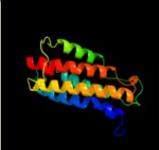
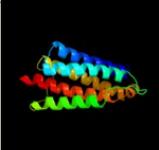
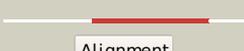
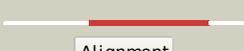
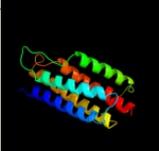


Phyre2

Email	l.a.kelley@imperial.ac.uk
Description	P65643
Date	Thu Jan 5 12:10:17 GMT 2012
Unique Job ID	b73cc2aa2a814c69

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c3ke4B_	 Alignment		100.0	17	PDB header: transferase Chain: B: PDB Molecule: hypothetical cytosolic protein; PDBTitle: crystal structure of a pduo-type atp:cob(i)alamin adenosyltransferase2 from bacillus cereus
2	c2nt8A_	 Alignment		100.0	16	PDB header: transferase Chain: A: PDB Molecule: cobalamin adenosyltransferase; PDBTitle: atp bound at the active site of a pduo type atp:co(i)rrinoid2 adenosyltransferase from lactobacillus reuteri
3	c3ci1A_	 Alignment		100.0	16	PDB header: transferase Chain: A: PDB Molecule: cobalamin adenosyltransferase pduo-like protein; PDBTitle: structure of the pduo-type atp:co(i)rrinoid2 adenosyltransferase from lactobacillus reuteri complexed3 with four-coordinate cob(ii)alamin and atp
4	c2zhzC_	 Alignment		100.0	19	PDB header: transferase Chain: C: PDB Molecule: atp:cob(i)alamin adenosyltransferase, putative; PDBTitle: crystal structure of a pduo-type atp:cobalamin adenosyltransferase2 from burkholderia thailandensis
5	d1rtyb_	 Alignment		100.0	18	Fold: Ferritin-like Superfamily: Cobalamin adenosyltransferase-like Family: Cobalamin adenosyltransferase
6	c2ah6B_	 Alignment		100.0	18	PDB header: transferase Chain: B: PDB Molecule: bh1595, unknown conserved protein; PDBTitle: crystal structure of a putative cobalamin adenosyltransferase (bh1595)2 from bacillus halodurans c-125 at 1.60 a resolution
7	c2g2dA_	 Alignment		100.0	18	PDB header: transferase Chain: A: PDB Molecule: atp:cobalamin adenosyltransferase; PDBTitle: crystal structure of a putative pduo-type atp:cobalamin2 adenosyltransferase from mycobacterium tuberculosis
8	c1wozA_	 Alignment		100.0	16	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: 177aa long conserved hypothetical protein (st1454); PDBTitle: crystal structure of uncharacterized protein st1454 from sulfolobus2 tokodaii
9	c1wvtA_	 Alignment		100.0	14	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: hypothetical protein st2180; PDBTitle: crystal structure of uncharacterized protein st2180 from sulfolobus2 tokodaii
10	d1rtya_	 Alignment		100.0	19	Fold: Ferritin-like Superfamily: Cobalamin adenosyltransferase-like Family: Cobalamin adenosyltransferase
11	c1nogA_	 Alignment		100.0	13	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: conserved hypothetical protein ta0546; PDBTitle: crystal structure of conserved protein 0546 from thermoplasma2 acidophilum

12	d1noga_	Alignment		100.0	13	Fold: Ferritin-like Superfamily: Cobalamin adenosyltransferase-like Family: Cobalamin adenosyltransferase
13	c2idxA_	Alignment		100.0	13	PDB header: transferase Chain: A: PDB Molecule: cob(i)yrinic acid a,c-diamide PDBTitle: structure of human atp:cobalamin adenosyltransferase bound2 to atp.
14	c1wy1B_	Alignment		100.0	20	PDB header: transferase Chain: B: PDB Molecule: hypothetical protein ph0671; PDBTitle: crystal structure of the ph0671 protein from pyrococcus horikoshii ot3
15	c3t6gB_	Alignment		71.9	18	PDB header: signaling protein, cell adhesion Chain: B: PDB Molecule: breast cancer anti-estrogen resistance protein 1; PDBTitle: structure of the complex between nsp3 (shep1) and p130cas
16	d1niga_	Alignment		62.4	13	Fold: Ferritin-like Superfamily: Cobalamin adenosyltransferase-like Family: Hypothetical protein Ta1238
17	d1w4ha1	Alignment		53.1	28	Fold: Peripheral subunit-binding domain of 2-oxo acid dehydrogenase complex Superfamily: Peripheral subunit-binding domain of 2-oxo acid dehydrogenase complex Family: Peripheral subunit-binding domain of 2-oxo acid dehydrogenase complex
18	d1bala_	Alignment		48.2	29	Fold: Peripheral subunit-binding domain of 2-oxo acid dehydrogenase complex Superfamily: Peripheral subunit-binding domain of 2-oxo acid dehydrogenase complex Family: Peripheral subunit-binding domain of 2-oxo acid dehydrogenase complex
19	d2cyua1	Alignment		46.8	33	Fold: Peripheral subunit-binding domain of 2-oxo acid dehydrogenase complex Superfamily: Peripheral subunit-binding domain of 2-oxo acid dehydrogenase complex Family: Peripheral subunit-binding domain of 2-oxo acid dehydrogenase complex
20	d1r61a_	Alignment		41.0	25	Fold: The "swivelling" beta/beta/alpha domain Superfamily: Putative cyclase Family: Putative cyclase
21	c2eq9C_	Alignment	not modelled	38.6	27	PDB header: oxidoreductase Chain: C: PDB Molecule: pyruvate dehydrogenase complex, dihydrolipoamide PDBTitle: crystal structure of lipoamide dehydrogenase from thermus thermophilus2 hb8 with psbdb
22	c2eq7C_	Alignment	not modelled	37.2	18	PDB header: oxidoreductase Chain: C: PDB Molecule: 2-oxoglutarate dehydrogenase e2 component; PDBTitle: crystal structure of lipoamide dehydrogenase from thermus thermophilus2 hb8 with psbdo
23	c1w3dA_	Alignment	not modelled	35.9	22	PDB header: transferase Chain: A: PDB Molecule: dihydrolipoyllysine-residue acetyltransferase PDBTitle: nmr structure of the peripheral-subunit binding domain of2 bacillus stearothermophilus e2p
24	c2p8tA_	Alignment	not modelled	33.1	23	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: hypothetical protein ph0730; PDBTitle: hypothetical protein ph0730 from pyrococcus horikoshii ot3
25	c1zwvA_	Alignment	not modelled	32.0	22	PDB header: transferase Chain: A: PDB Molecule: lipoamide acyltransferase component of branched- PDBTitle: solution structure of the subunit binding domain (hbsbd) of2 the human mitochondrial branched-chain alpha-ketoacid3 dehydrogenase
26	c1w4kA_	Alignment	not modelled	30.2	17	PDB header: transferase Chain: A: PDB Molecule: pyruvate dehydrogenase e2; PDBTitle: peripheral-subunit binding domains from mesophilic, 2 thermophilic, and hyperthermophilic bacteria fold by3 ultrafast, apparently two-state transitions
27	c1v9lA_	Alignment	not modelled	27.4	20	PDB header: oxidoreductase Chain: A: PDB Molecule: glutamate dehydrogenase;

27	c1v91A	Alignment	not modelled	27.4	29	PDBTitle: l-glutamate dehydrogenase from pyrobaculum islandicum2 complexed with nad PDB header: oxidoreductase/transferase Chain: I: PDB Molecule: dihydrolipoyllysine-residue acetyltransferase PDBTitle: snapshots of catalysis in the e1 subunit of the pyruvate2 dehydrogenase multi-enzyme complex
28	c3dv0L	Alignment	not modelled	26.7	20	PDB header: oxidoreductase Chain: C: PDB Molecule: pyruvate dehydrogenase complex, dihydrolipoamide PDBTitle: crystal structure of lipoamide dehydrogenase from thermus thermophilus2 hb8 with psbdp
29	c2eq8C	Alignment	not modelled	26.6	22	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: Aminoacid dehydrogenase-like, C-terminal domain
30	d1b26a1	Alignment	not modelled	26.2	35	PDB header: immune system Chain: A: PDB Molecule: cas1; PDBTitle: structural basis for dnase activity of a conserved protein2 implicated in crispr-mediated antiviral defense
31	c3godA	Alignment	not modelled	26.1	17	Fold: RuvA C-terminal domain-like Superfamily: Double-stranded DNA-binding domain Family: Double-stranded DNA-binding domain
32	d1ei1a	Alignment	not modelled	26.1	50	PDB header: unknown function Chain: A: PDB Molecule: hypothetical 16.0 kda protein in abf2-chl2 PDBTitle: nmr ensemble of the yeast saccharomyces cerevisiae protein2 ymr074cp core region
33	c2fh0A	Alignment	not modelled	25.9	42	PDB header: transferase Chain: A: PDB Molecule: lipoamide acyltransferase component of branched- PDBTitle: solution structure of the e3_binding domain of2 dihydrolipoamide branched chaintransacylase Fold: Peripheral subunit-binding domain of 2-oxo acid dehydrogenase complex Superfamily: Peripheral subunit-binding domain of 2-oxo acid dehydrogenase complex Family: Peripheral subunit-binding domain of 2-oxo acid dehydrogenase complex
34	c2cooA	Alignment	not modelled	25.9	23	PDB header: metal binding protein Chain: B: PDB Molecule: stage v sporulation protein s (spovs) related protein; PDBTitle: stage v sporulation protein s (spovs) from thermus thermophilus zinc2 form
35	d1w85i	Alignment	not modelled	25.0	20	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: Aminoacid dehydrogenase-like, C-terminal domain
36	c2ek0B	Alignment	not modelled	23.8	18	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: Aminoacid dehydrogenase-like, C-terminal domain
37	d1gtma1	Alignment	not modelled	23.4	29	PDB header: unknown function Chain: A: PDB Molecule: uncharacterized protein ymr074c; PDBTitle: solution structure of s. cerevisiae pdcd5-like protein ymr074cp
38	d1v91a1	Alignment	not modelled	23.1	29	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: Aminoacid dehydrogenase-like, C-terminal domain
39	c2jxnA	Alignment	not modelled	22.7	42	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: Aminoacid dehydrogenase-like, C-terminal domain
40	d1bvua1	Alignment	not modelled	22.2	35	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: hypothetical protein; PDBTitle: nmr structure of protein ne1680 from nitrosomonas europaea:2 northeast structural genomics consortium target net5
41	c2hfgA	Alignment	not modelled	21.9	27	Fold: NE1680-like Superfamily: NE1680-like Family: NE1680-like
42	d2hfga1	Alignment	not modelled	21.9	27	PDB header: oxidoreductase Chain: D: PDB Molecule: protein (glutamate dehydrogenase); PDBTitle: thermotoga maritima glutamate dehydrogenase mutant s128r,2 t158e, n117r, s160e
43	c2tmgD	Alignment	not modelled	21.6	35	Fold: MTH938-like Superfamily: MTH938-like Family: MTH938-like
44	d2q4qa1	Alignment	not modelled	21.3	9	PDB header: oxidoreductase Chain: D: PDB Molecule: nad-specific glutamate dehydrogenase; PDBTitle: crystal structure of gudb1 a decrypted secondary glutamate2 dehydrogenase from b. subtilis
45	c3k8zD	Alignment	not modelled	21.0	18	PDB header: immune system Chain: B: PDB Molecule: crispr-associated protein cas1; PDBTitle: structure of crispr-associated protein cas1 from escherichia coli str.2 k-12
46	c3nkdB	Alignment	not modelled	20.2	22	Fold: RuvA C-terminal domain-like Superfamily: Double-stranded DNA-binding domain Family: Double-stranded DNA-binding domain
47	d2crua1	Alignment	not modelled	20.2	45	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Thioltransferase
48	d1h75a	Alignment	not modelled	20.2	17	PDB header: oxidoreductase Chain: A: PDB Molecule: glutamate dehydrogenase; PDBTitle: crystal structure of glutamate dehydrogenase (gdhb) from thermus2 thermophilus (glu bound form)
49	c3aogA	Alignment	not modelled	19.9	24	PDB header: oxidoreductase Chain: A: PDB Molecule: glutamate dehydrogenase 1; PDBTitle: crystal structure of the r463a mutant of human glutamate2 dehydrogenase
50	c1nr1A	Alignment	not modelled	19.6	24	PDB header: oxidoreductase Chain: A: PDB Molecule: glutamate dehydrogenase (nadp+); PDBTitle: the crystal structure of plasmodium falciparum glutamate2 dehydrogenase, a putative target for novel antimalarial3 drugs
51	c2bmaA	Alignment	not modelled	19.4	14	

52	d1euza1	Alignment	not modelled	19.4	24	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: Aminoacid dehydrogenase-like, C-terminal domain
53	d2bl7a1	Alignment	not modelled	18.8	21	Fold: Bromodomain-like Superfamily: Bacteriocin immunity protein-like Family: EntA-Im
54	d1g7oa1	Alignment	not modelled	18.5	33	Fold: GST C-terminal domain-like Superfamily: GST C-terminal domain-like Family: Glutathione S-transferase (GST), C-terminal domain
55	d1st6a5	Alignment	not modelled	18.4	8	Fold: Four-helical up-and-down bundle Superfamily: alpha-catenin/vinculin-like Family: alpha-catenin/vinculin
56	d2ge7a1	Alignment	not modelled	18.4	24	Fold: Nucleocapsid protein dimerization domain Superfamily: Nucleocapsid protein dimerization domain Family: Coronavirus nucleocapsid protein
57	d1hwxal	Alignment	not modelled	18.1	24	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: Aminoacid dehydrogenase-like, C-terminal domain
58	c3aoeC	Alignment	not modelled	17.9	24	PDB header: oxidoreductase Chain: C: PDB Molecule: glutamate dehydrogenase; PDBTitle: crystal structure of hetero-hexameric glutamate dehydrogenase from2 thermus thermophilus (leu bound form)
59	d1ryaa	Alignment	not modelled	17.3	10	Fold: Nudix Superfamily: Nudix Family: GDP-mannose mannosyl hydrolase NudD
60	c2lafA	Alignment	not modelled	17.2	22	PDB header: membrane protein Chain: A: PDB Molecule: lipoprotein 34; PDBTitle: nmr solution structure of the n-terminal domain of the e. coli2 lipoprotein bamc
61	c1bvuf	Alignment	not modelled	16.1	21	PDB header: oxidoreductase Chain: F: PDB Molecule: protein (glutamate dehydrogenase); PDBTitle: glutamate dehydrogenase from thermococcus litoralis
62	d1v43a1	Alignment	not modelled	15.8	33	Fold: OB-fold Superfamily: MOP-like Family: ABC-transporter additional domain
63	d2giba1	Alignment	not modelled	15.5	17	Fold: Nucleocapsid protein dimerization domain Superfamily: Nucleocapsid protein dimerization domain Family: Coronavirus nucleocapsid protein
64	d1rwla	Alignment	not modelled	15.2	31	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: ArsC-like
65	c2q4dB	Alignment	not modelled	14.9	5	PDB header: structural genomics, unknown function Chain: B: PDB Molecule: lysine decarboxylase-like protein at5g11950; PDBTitle: ensemble refinement of the crystal structure of a lysine2 decarboxylase-like protein from arabidopsis thaliana gene at5g11950
66	c2yfqA	Alignment	not modelled	14.8	17	PDB header: oxidoreductase Chain: A: PDB Molecule: nad-specific glutamate dehydrogenase; PDBTitle: crystal structure of glutamate dehydrogenase from2 peptoniphilus asaccharolyticus
67	c2qgoA	Alignment	not modelled	14.8	33	PDB header: biosynthetic protein Chain: A: PDB Molecule: putative fe-s biosynthesis protein; PDBTitle: crystal structure of a putative fe-s biosynthesis protein from2 lactobacillus acidophilus
68	c1zunA	Alignment	not modelled	14.6	7	PDB header: transferase Chain: A: PDB Molecule: sulfate adenyltransferase subunit 2; PDBTitle: crystal structure of a gtp-regulated atp sulfurylase2 heterodimer from pseudomonas syringae
69	d2fvta1	Alignment	not modelled	13.6	11	Fold: MTH938-like Superfamily: MTH938-like Family: MTH938-like
70	d1ydha	Alignment	not modelled	12.3	5	Fold: MCP/YpsA-like Superfamily: MCP/YpsA-like Family: MoCo carrier protein-like
71	c3ebqA	Alignment	not modelled	11.7	9	PDB header: hydrolase Chain: A: PDB Molecule: molecule: pppde1 (permuted papain fold PDBTitle: crystal structure of human pppde1
72	d2p2ea1	Alignment	not modelled	11.6	25	Fold: HesB-like domain Superfamily: HesB-like domain Family: HesB-like domain
73	d1abaa	Alignment	not modelled	11.3	31	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Thioltransferase
74	c2wmyH	Alignment	not modelled	11.2	21	PDB header: hydrolase Chain: H: PDB Molecule: putative acid phosphatase wzb; PDBTitle: crystal structure of the tyrosine phosphatase wzb from2 escherichia coli k30 in complex with sulphate.
75	c3lfxE	Alignment	not modelled	10.6	18	PDB header: structural genomics, unknown function Chain: E: PDB Molecule: uncharacterized protein; PDBTitle: structure of tm1797, a cas1 protein from thermotoga maritima
76	d1aw9a1	Alignment	not modelled	10.5	13	Fold: GST C-terminal domain-like Superfamily: GST C-terminal domain-like Family: Glutathione S-transferase (GST), C-terminal domain
77	d2cjr1	Alignment	not modelled	10.3	14	Fold: Nucleocapsid protein dimerization domain Superfamily: Nucleocapsid protein dimerization domain Family: Coronavirus nucleocapsid protein
78	d2dlka1	Alianment	not modelled	10.1	43	Fold: beta-beta-alpha zinc fingers Superfamily: beta-beta-alpha zinc fingers

						Family: Classic zinc finger, C2H2
79	d1c4ka3	Alignment	not modelled	10.0	4	Fold: Ornithine decarboxylase C-terminal domain Superfamily: Ornithine decarboxylase C-terminal domain Family: Ornithine decarboxylase C-terminal domain
80	d1oywa1	Alignment	not modelled	10.0	27	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: RecQ helicase DNA-binding domain-like
81	d1r7ha	Alignment	not modelled	9.9	10	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Thioltransferase
82	c1iq8B	Alignment	not modelled	9.7	22	PDB header: transferase Chain: B: PDB Molecule: archaeosine trna-guanine transglycosylase; PDBTitle: crystal structure of archaeosine trna-guanine2 transglycosylase from pyrococcus horikoshii
83	c1y88A	Alignment	not modelled	9.4	4	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: hypothetical protein af1548; PDBTitle: crystal structure of protein of unknown function af1548
84	d1igna2	Alignment	not modelled	9.4	9	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: DNA-binding domain of rap1
85	d16vpa	Alignment	not modelled	9.3	22	Fold: Conserved core of transcriptional regulatory protein vp16 Superfamily: Conserved core of transcriptional regulatory protein vp16 Family: Conserved core of transcriptional regulatory protein vp16
86	c3gkxB	Alignment	not modelled	9.3	13	PDB header: structural genomics, unknown function Chain: B: PDB Molecule: putative arcs family related protein; PDBTitle: crystal structure of putative arcs family related protein from2 bacteroides fragilis
87	d1in4a1	Alignment	not modelled	9.0	24	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: Helicase DNA-binding domain
88	d1ixsb1	Alignment	not modelled	8.8	29	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: Helicase DNA-binding domain
89	d1zuna1	Alignment	not modelled	8.7	9	Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Adenine nucleotide alpha hydrolases-like Family: PAPS reductase-like
90	c3e0sA	Alignment	not modelled	8.6	14	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: uncharacterized protein; PDBTitle: crystal structure of an uncharacterized protein from2 chlorobium tepidum
91	c3f0iA	Alignment	not modelled	8.4	25	PDB header: oxidoreductase Chain: A: PDB Molecule: arsenate reductase; PDBTitle: arsenate reductase from vibrio cholerae.
92	c2yzsB	Alignment	not modelled	8.3	20	PDB header: structural genomics, unknown function Chain: B: PDB Molecule: putative uncharacterized protein; PDBTitle: crystal structure of uncharacterized conserved protein from2 aquifex aeolicus
93	d1ixrc1	Alignment	not modelled	8.0	31	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: Helicase DNA-binding domain
94	d1kyha	Alignment	not modelled	7.9	30	Fold: Ribokinase-like Superfamily: Ribokinase-like Family: YjeF C-terminal domain-like
95	d1a4ia2	Alignment	not modelled	7.8	10	Fold: Aminoacid dehydrogenase-like, N-terminal domain Superfamily: Aminoacid dehydrogenase-like, N-terminal domain Family: Tetrahydrofolate dehydrogenase/cyclohydrolase
96	c3edpB	Alignment	not modelled	7.6	7	PDB header: structural genomics, unknown function Chain: B: PDB Molecule: lin2111 protein; PDBTitle: the crystal structure of the protein lin2111 (functionally unknown)2 from listeria innocua clip11262
97	d1j9ba	Alignment	not modelled	7.5	13	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: ArsC-like
98	d1t1va	Alignment	not modelled	7.4	13	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: SH3BGR (SH3-binding, glutamic acid-rich protein-like)
99	c3pv9D	Alignment	not modelled	7.4	17	PDB header: immune system Chain: D: PDB Molecule: putative uncharacterized protein ph1245; PDBTitle: structure of ph1245, a cas1 from pyrococcus horikoshii