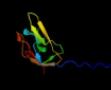
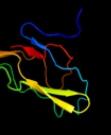
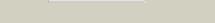
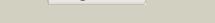
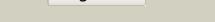
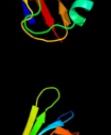
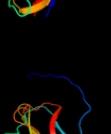
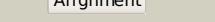
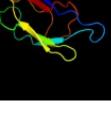
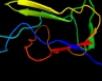
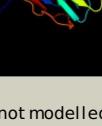


Phyre²

Email	i.a.kelley@imperial.ac.uk
Description	P0ABD8
Date	Thu Jan 5 11:15:15 GMT 2012
Unique Job ID	7158a17527696cc1

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	d1bdoa_	 Alignment		99.9	100	Fold: Barrel-sandwich hybrid Superfamily: Single hybrid motif Family: Biotinyl/lipoyl-carrier proteins and domains
2	c3n6rK_	 Alignment		99.9	32	PDB header: ligase Chain: K: PDB Molecule: propionyl-coa carboxylase, alpha subunit; PDBTitle: crystal structure of the holoenzyme of propionyl-coa carboxylase (pcc)
3	d1dcza_	 Alignment		99.8	32	Fold: Barrel-sandwich hybrid Superfamily: Single hybrid motif Family: Biotinyl/lipoyl-carrier proteins and domains
4	c2ejmA_	 Alignment		99.8	35	PDB header: ligase Chain: A: PDB Molecule: methylcrotonyl-coa carboxylase subunit alpha; PDBTitle: solution structure of ruh-072, an apo-biotin domain form2 human acetyl coenzyme a carboxylase
5	d1o78a_	 Alignment		99.8	29	Fold: Barrel-sandwich hybrid Superfamily: Single hybrid motif Family: Biotinyl/lipoyl-carrier proteins and domains
6	c2qf7A_	 Alignment		99.8	19	PDB header: ligase Chain: A: PDB Molecule: pyruvate carboxylase protein; PDBTitle: crystal structure of a complete multifunctional pyruvate carboxylase2 from rhizobium etii
7	c2ejgD_	 Alignment		99.8	41	PDB header: ligase Chain: D: PDB Molecule: 149aa long hypothetical methylmalonyl-coa decarboxylase PDBTitle: crystal structure of the biotin protein ligase (mutation r48a) and2 biotin carboxyl carrier protein complex from pyrococcus horikoshii3 ot3
8	c2b8ga_	 Alignment		99.8	31	PDB header: biosynthetic protein Chain: A: PDB Molecule: biotin/lipoyl attachment protein; PDBTitle: solution structure of bacillus subtilis blap biotinylated-2 form (energy minimized mean structure)
9	d1iyua_	 Alignment		99.8	22	Fold: Barrel-sandwich hybrid Superfamily: Single hybrid motif Family: Biotinyl/lipoyl-carrier proteins and domains
10	c2dn8A_	 Alignment		99.8	25	PDB header: ligase Chain: A: PDB Molecule: acetyl-coa carboxylase 2; PDBTitle: solution structure of rsg1 ruh-053, an apo-biotin carboxy2 carrier protein from human transcarboxylase
11	d1ghja_	 Alignment		99.8	17	Fold: Barrel-sandwich hybrid Superfamily: Single hybrid motif Family: Biotinyl/lipoyl-carrier proteins and domains

12	c215tA_	Alignment		99.8	23	PDB header: transferase Chain: A: PDB Molecule: lipoamide acyltransferase; PDBTitle: solution nmr structure of e2 lipoyl domain from thermoplasma2 acidophilum
13	d1qjoa_	Alignment		99.8	26	Fold: Barrel-sandwich hybrid Superfamily: Single hybrid motif Family: Biotinyl/lipoyl-carrier proteins and domains
14	c2kccA_	Alignment		99.8	29	PDB header: ligase Chain: A: PDB Molecule: acetyl-coa carboxylase 2; PDBTitle: solution structure of biotinyl domain from human acetyl-2 coa carboxylase 2
15	d1k8ma_	Alignment		99.7	19	Fold: Barrel-sandwich hybrid Superfamily: Single hybrid motif Family: Biotinyl/lipoyl-carrier proteins and domains
16	d1y8ob1	Alignment		99.7	27	Fold: Barrel-sandwich hybrid Superfamily: Single hybrid motif Family: Biotinyl/lipoyl-carrier proteins and domains
17	d1gjxa_	Alignment		99.7	25	Fold: Barrel-sandwich hybrid Superfamily: Single hybrid motif Family: Biotinyl/lipoyl-carrier proteins and domains
18	c2q8iB_	Alignment		99.7	29	PDB header: transferase Chain: B: PDB Molecule: dihydrolipoylysine-residue acetyltransferase component of PDBTitle: pyruvate dehydrogenase kinase isoform 3 in complex with antitumor drug2 radicicol
19	c2dneA_	Alignment		99.7	24	PDB header: transferase Chain: A: PDB Molecule: dihydrolipoylysine-residue acetyltransferase PDBTitle: solution structure of rsg1 ruh-058, a lipoyl domain of2 human 2-oxoacid dehydrogenase
20	c2dnCA_	Alignment		99.7	24	PDB header: transferase Chain: A: PDB Molecule: pyruvate dehydrogenase protein x component; PDBTitle: solution structure of rsg1 ruh-054, a lipoyl domain from2 human 2-oxoacid dehydrogenase
21	d1laba_	Alignment	not modelled	99.7	26	Fold: Barrel-sandwich hybrid Superfamily: Single hybrid motif Family: Biotinyl/lipoyl-carrier proteins and domains
22	d1pmra_	Alignment	not modelled	99.7	19	Fold: Barrel-sandwich hybrid Superfamily: Single hybrid motif Family: Biotinyl/lipoyl-carrier proteins and domains
23	d2pnrc1	Alignment	not modelled	99.4	28	Fold: Barrel-sandwich hybrid Superfamily: Single hybrid motif Family: Biotinyl/lipoyl-carrier proteins and domains
24	c2k33A_	Alignment	not modelled	98.6	30	PDB header: membrane protein, transport protein Chain: A: PDB Molecule: acra; PDBTitle: solution structure of an n-glycosylated protein using in2 vitro glycosylation
25	c3h9iB_	Alignment	not modelled	98.1	33	PDB header: transport protein Chain: B: PDB Molecule: cation efflux system protein cusb; PDBTitle: crystal structure of the membrane fusion protein cusb from escherichia2 coli PDB header: hydrolase Chain: C: PDB Molecule: putative succinylglutamate desuccinylase / aspartoacylase;
26	c3fmcc_	Alignment	not modelled	98.0	16	PDBTitle: crystal structure of a putative succinylglutamate desuccinylase / aspartoacylase family protein (sama_0604) from shewanella amazonensis3 sb2b at 1.80 a resolution PDB header: hydrolase Chain: B: PDB Molecule: mlr6093 protein;
27	c2qj8B_	Alignment	not modelled	97.9	23	PDBTitle: crystal structure of an aspartoacylase family protein (mlr6093) from mesorhizobium loti maff303099 at 2.00 a resolution Fold: Barrel-sandwich hybrid
28	d1hpca_	Alignment	not modelled	97.9	26	Superfamily: Single hybrid motif

						Family: Biotinyl/lipoil-carrier proteins and domains
29	d1onla_	Alignment	not modelled	97.9	29	Fold: Barrel-sandwich hybrid Superfamily: Single hybrid motif Family: Biotinyl/lipoil-carrier proteins and domains
30	c2edgA_	Alignment	not modelled	97.9	20	PDB header: biosynthetic protein Chain: A: PDB Molecule: glycine cleavage system h protein; PDBTitle: solution structure of the gcv_h domain from mouse glycine
31	c3mxuA_	Alignment	not modelled	97.9	29	PDB header: oxidoreductase Chain: A: PDB Molecule: glycine cleavage system h protein; PDBTitle: crystal structure of glycine cleavage system protein h from bartonella2 henselae
32	c3iftA_	Alignment	not modelled	97.9	29	PDB header: oxidoreductase Chain: A: PDB Molecule: glycine cleavage system h protein; PDBTitle: crystal structure of glycine cleavage system protein h from2 mycobacterium tuberculosis, using x-rays from the compact light3 source.
33	c3na6A_	Alignment	not modelled	97.8	18	PDB header: hydrolase Chain: A: PDB Molecule: succinylglutamate desuccinylase/aspartoacylase; PDBTitle: crystal structure of a succinylglutamate desuccinylase (tm1040_2694)2 from silicibacter sp. tm1040 at 2.00 a resolution
34	c3fppB_	Alignment	not modelled	97.8	25	PDB header: membrane protein Chain: B: PDB Molecule: macrolide-specific efflux protein maca; PDBTitle: crystal structure of e.coli maca
35	c2jkuA_	Alignment	not modelled	97.8	34	PDB header: ligase Chain: A: PDB Molecule: propionyl-coa carboxylase alpha chain, PDBTitle: crystal structure of the n-terminal region of the biotin2 acceptor domain of human propionyl-coa carboxylase
36	c2ka7A_	Alignment	not modelled	97.6	26	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: glycine cleavage system h protein; PDBTitle: nmr solution structure of tm0212 at 40 c
37	c3cdxB_	Alignment	not modelled	97.5	17	PDB header: hydrolase Chain: B: PDB Molecule: succinylglutamatedesuccinylase/aspartoacylase; PDBTitle: crystal structure of2 succinylglutamatedesuccinylase/aspartoacylase from3 rhodobacter sphaeroides
38	c3a8jF_	Alignment	not modelled	97.4	28	PDB header: transferase/transport protein Chain: F: PDB Molecule: glycine cleavage system h protein; PDBTitle: crystal structure of et-ehred complex
39	d1glaf_	Alignment	not modelled	97.4	29	Fold: Barrel-sandwich hybrid Superfamily: Duplicated hybrid motif Family: Glucose permease-like
40	c2aukA_	Alignment	not modelled	97.4	31	PDB header: transferase Chain: A: PDB Molecule: dna-directed rna polymerase beta' chain; PDBTitle: structure of e. coli rna polymerase beta' g/g' insert
41	d2f3ga_	Alignment	not modelled	97.3	30	Fold: Barrel-sandwich hybrid Superfamily: Duplicated hybrid motif Family: Glucose permease-like
42	d2gpra_	Alignment	not modelled	97.3	36	Fold: Barrel-sandwich hybrid Superfamily: Duplicated hybrid motif Family: Glucose permease-like
43	d1gpra_	Alignment	not modelled	97.2	26	Fold: Barrel-sandwich hybrid Superfamily: Duplicated hybrid motif Family: Glucose permease-like
44	c2aujD_	Alignment	not modelled	96.5	21	PDB header: transferase Chain: D: PDB Molecule: dna-directed rna polymerase beta' chain; PDBTitle: structure of thermus aquaticus rna polymerase beta'-subunit2 insert
45	d1vf7a_	Alignment	not modelled	95.8	25	Fold: HlyD-like secretion proteins Superfamily: HlyD-like secretion proteins Family: HlyD-like secretion proteins
46	c1t5eB_	Alignment	not modelled	95.8	25	PDB header: transport protein Chain: B: PDB Molecule: multidrug resistance protein mexa; PDBTitle: the structure of mexa
47	c3d4rE_	Alignment	not modelled	95.6	26	PDB header: unknown function Chain: E: PDB Molecule: domain of unknown function from the pfam-b_34464 family; PDBTitle: crystal structure of a duf2118 family protein (mmp0046) from2 methanococcus maripaludis at 2.20 a resolution
48	d1ouua3	Alignment	not modelled	95.5	26	Fold: alpha/beta-Hammerhead Superfamily: Pyrimidine nucleoside phosphorylase C-terminal domain Family: Pyrimidine nucleoside phosphorylase C-terminal domain
49	c2f1mA_	Alignment	not modelled	95.5	22	PDB header: transport protein Chain: A: PDB Molecule: acriflavine resistance protein a; PDBTitle: conformational flexibility in the multidrug efflux system protein acra
50	d1brwa3	Alignment	not modelled	95.5	32	Fold: alpha/beta-Hammerhead Superfamily: Pyrimidine nucleoside phosphorylase C-terminal domain Family: Pyrimidine nucleoside phosphorylase C-terminal domain
51	c3lnnB_	Alignment	not modelled	95.3	25	PDB header: metal transport Chain: B: PDB Molecule: membrane fusion protein (mfp) heavy metal cation efflux PDBTitle: crystal structure of zneb from cupriavidus metallidurans
52	d2tpa3	Alignment	not modelled	94.8	33	Fold: alpha/beta-Hammerhead Superfamily: Pyrimidine nucleoside phosphorylase C-terminal domain Family: Pyrimidine nucleoside phosphorylase C-terminal domain
53	c1otpA_	Alignment	not modelled	92.9	32	PDB header: phosphorylase Chain: A: PDB Molecule: thymidine phosphorylase; PDBTitle: structural and theoretical studies suggest domain movement produces an2 active conformation of thymidine

						phosphorylase
54	c2j0fC	Alignment	not modelled	92.7	26	PDB header: transferase Chain: C: PDB Molecule: thymidine phosphorylase; PDBTitle: structural basis for non-competitive product inhibition in2 human thymidine phosphorylase: implication for drug design
55	c2dsjA	Alignment	not modelled	92.6	31	PDB header: transferase Chain: A: PDB Molecule: pyrimidine-nucleoside (thymidine) phosphorylase; PDBTitle: crystal structure of project id tt0128 from thermus thermophilus hb8
56	c3h5qA	Alignment	not modelled	92.4	41	PDB header: transferase Chain: A: PDB Molecule: pyrimidine-nucleoside phosphorylase; PDBTitle: crystal structure of a putative pyrimidine-nucleoside phosphorylase2 from staphylococcus aureus
57	c2xhaB	Alignment	not modelled	91.9	38	PDB header: transcription Chain: B: PDB Molecule: transcription antitermination protein nusg; PDBTitle: crystal structure of domain 2 of thermotoga maritima n-utilization2 substance g (nusg)
58	c1brwB	Alignment	not modelled	91.5	32	PDB header: transferase Chain: B: PDB Molecule: protein (pyrimidine nucleoside phosphorylase); PDBTitle: the crystal structure of pyrimidine nucleoside2 phosphorylase in a closed conformation
59	c2hsIB	Alignment	not modelled	90.9	28	PDB header: structural genomics, unknown function Chain: B: PDB Molecule: putative peptidase m23; PDBTitle: crystal structure of putative peptidase m23 from2 pseudomonas aeruginosa, new york structural genomics3 consortium
60	c2gu1A	Alignment	not modelled	89.8	23	PDB header: hydrolase Chain: A: PDB Molecule: zinc peptidase; PDBTitle: crystal structure of a zinc containing peptidase from2 vibrio cholerae
61	c2xhcA	Alignment	not modelled	89.7	38	PDB header: transcription Chain: A: PDB Molecule: transcription antitermination protein nusg; PDBTitle: crystal structure of thermotoga maritima n-utilization substance g2 (nusg)
62	d1qwya	Alignment	not modelled	80.7	25	Fold: Barrel-sandwich hybrid Superfamily: Duplicated hybrid motif Family: Peptidoglycan hydrolase Lytm
63	c2b44A	Alignment	not modelled	80.5	22	PDB header: hydrolase Chain: A: PDB Molecule: glycyl-glycine endopeptidase lytm; PDBTitle: truncated s. aureus lytm, p 32 2 1 crystal form
64	d1ci3m2	Alignment	not modelled	80.2	20	Fold: Barrel-sandwich hybrid Superfamily: Rudiment single hybrid motif Family: Cytochrome f, small domain
65	d1e2wa2	Alignment	not modelled	79.6	20	Fold: Barrel-sandwich hybrid Superfamily: Rudiment single hybrid motif Family: Cytochrome f, small domain
66	c3a5dB	Alignment	not modelled	78.9	23	PDB header: hydrolase Chain: B: PDB Molecule: v-type atp synthase alpha chain; PDBTitle: inter-subunit interaction and quaternary rearrangement2 defined by the central stalk of prokaryotic v1-atpase
67	d1o4ua2	Alignment	not modelled	76.2	20	Fold: alpha/beta-Hammerhead Superfamily: Nicotinate/Quinolinate PRTase N-terminal domain-like Family: NadC N-terminal domain-like
68	c3csqC	Alignment	not modelled	72.2	25	PDB header: hydrolase Chain: C: PDB Molecule: morphogenesis protein 1; PDBTitle: crystal and cryoem structural studies of a cell wall2 degrading enzyme in the bacteriophage phi29 tail
69	d1qpoa2	Alignment	not modelled	72.2	30	Fold: alpha/beta-Hammerhead Superfamily: Nicotinate/Quinolinate PRTase N-terminal domain-like Family: NadC N-terminal domain-like
70	c2jxmB	Alignment	not modelled	72.1	16	PDB header: electron transport Chain: B: PDB Molecule: cytochrome f; PDBTitle: ensemble of twenty structures of the prochlorothrix2 hollandica plastocyanin- cytochrome f complex
71	c3it5B	Alignment	not modelled	71.5	20	PDB header: hydrolase Chain: B: PDB Molecule: protease lasa; PDBTitle: crystal structure of the lasa virulence factor from pseudomonas2 aeruginosa
72	d1qapa2	Alignment	not modelled	69.6	10	Fold: alpha/beta-Hammerhead Superfamily: Nicotinate/Quinolinate PRTase N-terminal domain-like Family: NadC N-terminal domain-like
73	c3nyyA	Alignment	not modelled	68.6	38	PDB header: hydrolase Chain: A: PDB Molecule: putative glycyl-glycine endopeptidase lytm; PDBTitle: crystal structure of a putative glycyl-glycine endopeptidase lytm2 (rumgna_02482) from ruminococcus gnarus atcc 29149 at 1.60 a3 resolution
74	c1ctmA	Alignment	not modelled	66.5	6	PDB header: electron transport(cytochrome) Chain: A: PDB Molecule: cytochrome f; PDBTitle: crystal structure of chloroplast cytochrome f reveals a2 novel cytochrome fold and unexpected heme ligation
75	c3gnnA	Alignment	not modelled	61.7	20	PDB header: transferase Chain: A: PDB Molecule: nicotinate-nucleotide pyrophosphorylase; PDBTitle: crystal structure of nicotinate-nucleotide2 pyrophosphorylase from burkholderi pseudomallei
76	c1qpoA	Alignment	not modelled	60.3	30	PDB header: transferase Chain: A: PDB Molecule: quinolinate acid phosphoribosyl transferase; PDBTitle: quinolinate phosphoribosyl transferase (qaptase) apoenzyme from2 mycobacterium tuberculosis
77	c1q00A	Alignment	not modelled	59.4	8	PDB header: photosynthesis Chain: A: PDB Molecule: apocytochrome f;

	c1qz0m	Alignment	not modelled	59.4	8	PDBTitle: structure of the cytochrome b6f (plastoquinone : plastocyanin2 oxidoreductase) from chlamydomonas reinhardtii PDB header: electron transport proteins Chain: B: PDB Molecule: cytochrome f; PDBTitle: n153q mutant of cytochrome f from chlamydomonas reinhardtii
78	c1e2vB	Alignment	not modelled	59.4	8	PDB header: electron transport Chain: B: PDB Molecule: apocytochrome f; PDBTitle: the complex of nostoc cytochrome f and plastocyanin determin with2 paramagnetic nmr. based on the structures of cytochrome f and plastocyanin, 10 structures
79	c1tu2B	Alignment	not modelled	57.3	30	PDB header: photosynthesis Chain: C: PDB Molecule: apocytochrome f; PDBTitle: crystal structure of the cytochrome b6f complex with 2-nonyl-4-2 hydroxyquinoline n-oxide (nqno) from m.laminosus
80	c2e75C	Alignment	not modelled	56.7	12	Fold: Barrel-sandwich hybrid Superfamily: Rudiment single hybrid motif Family: Cytochrome f, small domain
81	d1tu2b2	Alignment	not modelled	55.6	30	PDB header: transferase Chain: A: PDB Molecule: nicotinate-nucleotide pyrophosphorylase, carboxylating; PDBTitle: 2.00 angstrom resolution crystal structure of a quinolinate2 phosphoribosyltransferase from vibrio cholerae o1 biovar eltor str.3 n16961
82	c3pajA	Alignment	not modelled	54.0	20	PDB header: transferase Chain: D: PDB Molecule: nicotinate-nucleotide pyrophosphorylase; PDBTitle: crystal structure of nicotinate-nucleotide pyrophosphorylase from2 ehrlichia chaffeensis at 2.05a resolution
84	c1vdzA	Alignment	not modelled	50.7	26	PDB header: hydrolase Chain: A: PDB Molecule: a-type atpase subunit a; PDBTitle: crystal structure of a-type atpase catalytic subunit a from2 pyrococcus horikoshii ot3
85	c1o4uA	Alignment	not modelled	48.1	20	PDB header: transferase Chain: A: PDB Molecule: type ii quinolic acid phosphoribosyltransferase; PDBTitle: crystal structure of a nicotinate nucleotide pyrophosphorylase2 (tm1645) from thermotoga maritima at 2.50 a resolution
86	c3tqvA	Alignment	not modelled	47.5	12	PDB header: transferase Chain: A: PDB Molecule: nicotinate-nucleotide pyrophosphorylase; PDBTitle: structure of the nicotinate-nucleotide pyrophosphorylase from2 francisella tularensis.
87	c2b7pA	Alignment	not modelled	45.6	10	PDB header: transferase Chain: A: PDB Molecule: probable nicotinate-nucleotide pyrophosphorylase; PDBTitle: crystal structure of quinolinic acid phosphoribosyltransferase from2 helicobacter pylori
88	c1qapA	Alignment	not modelled	43.2	10	PDB header: glycosyltransferase Chain: A: PDB Molecule: quinolinic acid phosphoribosyltransferase; PDBTitle: quinolinic acid phosphoribosyltransferase with bound2 quinolinic acid
89	c2jbmA	Alignment	not modelled	42.7	20	PDB header: transferase Chain: A: PDB Molecule: nicotinate-nucleotide pyrophosphorylase; PDBTitle: qprtase structure from human
90	c1x1oC	Alignment	not modelled	37.9	21	PDB header: transferase Chain: C: PDB Molecule: nicotinate-nucleotide pyrophosphorylase; PDBTitle: crystal structure of project id tt0268 from thermus thermophilus hb8
91	d1hcza2	Alignment	not modelled	30.7	9	Fold: Barrel-sandwich hybrid Superfamily: Rudiment single hybrid motif Family: Cytochrome f, small domain
92	c3tbiB	Alignment	not modelled	15.3	36	PDB header: transcription Chain: B: PDB Molecule: dna-directed rna polymerase subunit beta; PDBTitle: crystal structure of t4 gp33 bound to e. coli rnap beta-flap domain
93	c3e3xA	Alignment	not modelled	14.8	38	PDB header: hydrolase Chain: A: PDB Molecule: bipa; PDBTitle: the c-terminal part of bipa protein from vibrio parahaemolyticus rimd2 2210633
94	c3oo2B	Alignment	not modelled	14.6	16	PDB header: isomerase Chain: B: PDB Molecule: alanine racemase 1; PDBTitle: 2.37 angstrom resolution crystal structure of an alanine racemase2 (alr) from staphylococcus aureus subsp. aureus col
95	d2i14a2	Alignment	not modelled	14.3	29	Fold: alpha/beta-Hammerhead Superfamily: Nicotinate/Quinolinate PRTase N-terminal domain-like Family: NadC N-terminal domain-like
96	d2vv5a1	Alignment	not modelled	14.2	17	Fold: Sm-like fold Superfamily: Sm-like ribonucleoproteins Family: Mechanosensitive channel protein MscS (YggB), middle domain
97	d2f7fa2	Alignment	not modelled	12.1	41	Fold: alpha/beta-Hammerhead Superfamily: Nicotinate/Quinolinate PRTase N-terminal domain-like Family: NadC N-terminal domain-like
98	d1vf5c2	Alignment	not modelled	10.0	38	Fold: Barrel-sandwich hybrid Superfamily: Rudiment single hybrid motif Family: Cytochrome f, small domain
99	d1bd0a1	Alignment	not modelled	9.9	20	Fold: Domain of alpha and beta subunits of F1 ATP synthase-like Superfamily: Alanine racemase C-terminal domain-like Family: Alanine racemase