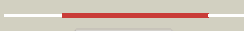
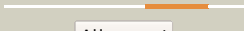
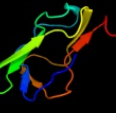
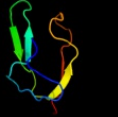


Phyre2

Email	I.a.kelley@imperial.ac.uk
Description	P0A8K1
Date	Thu Jan 5 11:08:01 GMT 2012
Unique Job ID	6b9d16282375025e

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	d2gpra_	 Alignment		97.4	17	Fold: Barrel-sandwich hybrid Superfamily: Duplicated hybrid motif Family: Glucose permease-like
2	d1gpra_	 Alignment		96.7	17	Fold: Barrel-sandwich hybrid Superfamily: Duplicated hybrid motif Family: Glucose permease-like
3	d2f3ga_	 Alignment		96.6	16	Fold: Barrel-sandwich hybrid Superfamily: Duplicated hybrid motif Family: Glucose permease-like
4	d1glaf_	 Alignment		96.4	13	Fold: Barrel-sandwich hybrid Superfamily: Duplicated hybrid motif Family: Glucose permease-like
5	c2dncA_	 Alignment		89.6	16	PDB header: transferase Chain: A: PDB Molecule: pyruvate dehydrogenase protein x component; PDBTitle: solution structure of rsgi ruh-054, a lipoyl domain from2 human 2-oxoacid dehydrogenase
6	c2ejmA_	 Alignment		88.8	9	PDB header: ligase Chain: A: PDB Molecule: methylcrotonoyl-coa carboxylase subunit alpha; PDBTitle: solution structure of ruh-072, an apo-biotnyl domain form2 human acetyl coenzyme a carboxylase
7	c2dn8A_	 Alignment		88.7	9	PDB header: ligase Chain: A: PDB Molecule: acetyl-coa carboxylase 2; PDBTitle: solution structure of rsgi ruh-053, an apo-biotin carboxy2 carrier protein from human transcarboxylase
8	d1bdoa_	 Alignment		88.4	12	Fold: Barrel-sandwich hybrid Superfamily: Single hybrid motif Family: Biotinyl/lipoyl-carrier proteins and domains
9	c2b8gA_	 Alignment		88.2	13	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)
10	d1laba_	 Alignment		87.1	11	Fold: Barrel-sandwich hybrid Superfamily: Single hybrid motif Family: Biotinyl/lipoyl-carrier proteins and domains
11	c2ejgD_	 Alignment		87.0	10	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

12	dly8ob1	Alignment		85.9	13	Fold: Barrel-sandwich hybrid Superfamily: Single hybrid motif Family: Biotinyl/lipoyl-carrier proteins and domains
13	dlcza_	Alignment		85.9	11	Fold: Barrel-sandwich hybrid Superfamily: Single hybrid motif Family: Biotinyl/lipoyl-carrier proteins and domains
14	dlghja_	Alignment		85.1	12	Fold: Barrel-sandwich hybrid Superfamily: Single hybrid motif Family: Biotinyl/lipoyl-carrier proteins and domains
15	c2dneA_	Alignment		84.6	12	PDB header: transferase Chain: A: PDB Molecule: dihydrolipoyllysine-residue acetyltransferase PDBTitle: solution structure of rsgi ruh-058, a lipoyl domain of2 human 2-oxoacid dehydrogenase
16	c2qika_	Alignment		83.5	19	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: upf0131 protein ykqa; PDBTitle: crystal structure of ykqa from bacillus subtilis. northeast2 structural genomics target sr631
17	c2l5ta_	Alignment		81.8	13	PDB header: transferase Chain: A: PDB Molecule: lipamide acyltransferase; PDBTitle: solution nmr structure of e2 lipoyl domain from thermoplasma2 acidophilum
18	dlqioa_	Alignment		81.7	7	Fold: Barrel-sandwich hybrid Superfamily: Single hybrid motif Family: Biotinyl/lipoyl-carrier proteins and domains
19	dliyua_	Alignment		81.5	7	Fold: Barrel-sandwich hybrid Superfamily: Single hybrid motif Family: Biotinyl/lipoyl-carrier proteins and domains
20	dlgixa_	Alignment		81.3	9	Fold: Barrel-sandwich hybrid Superfamily: Single hybrid motif Family: Biotinyl/lipoyl-carrier proteins and domains
21	c2kccA_	Alignment	not modelled	78.9	8	PDB header: ligase Chain: A: PDB Molecule: acetyl-coa carboxylase 2; PDBTitle: solution structure of biotinoyl domain from human acetyl-2 coa carboxylase 2
22	dlk8ma_	Alignment	not modelled	77.8	10	Fold: Barrel-sandwich hybrid Superfamily: Single hybrid motif Family: Biotinyl/lipoyl-carrier proteins and domains
23	c2q8iB_	Alignment	not modelled	75.7	14	PDB header: transferase Chain: B: PDB Molecule: dihydrolipoyllysine-residue acetyltransferase component of PDBTitle: pyruvate dehydrogenase kinase isoform 3 in complex with antitumor drug2 radicicol
24	dlpmra_	Alignment	not modelled	75.4	7	Fold: Barrel-sandwich hybrid Superfamily: Single hybrid motif Family: Biotinyl/lipoyl-carrier proteins and domains
25	dl078a_	Alignment	not modelled	73.1	9	Fold: Barrel-sandwich hybrid Superfamily: Single hybrid motif Family: Biotinyl/lipoyl-carrier proteins and domains
26	clurzc_	Alignment	not modelled	59.5	34	PDB header: virus/viral protein Chain: C: PDB Molecule: envelope protein; PDBTitle: low ph induced, membrane fusion conformation of the2 envelope protein of tick-borne encephalitis virus
27	c3cdxB_	Alignment	not modelled	50.4	13	PDB header: hydrolase Chain: B: PDB Molecule: succinylglutamatedesuccinylase/aspartoacylase; PDBTitle: crystal structure of2 succinylglutamatedesuccinylase/aspartoacylase from3 rhodobacter sphaeroides
28	dlz66a1	Alignment	not modelled	45.9	22	Fold: Immunoglobulin-like beta-sandwich Superfamily: E set domains

					Family: Class II viral fusion proteins C-terminal domain
29	c2jqmA	Alignment	not modelled	40.9	31 PDB header: transferase Chain: A: PDB Molecule: envelope protein e; PDBTitle: yellow fever envelope protein domain iii nmr structure2 (s288-k398)
30	c3na6A	Alignment	not modelled	39.7	19 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
31	c1vdzA	Alignment	not modelled	39.5	17 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 o3
32	c2hsiB	Alignment	not modelled	38.5	18 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
33	c2h0pA	Alignment	not modelled	38.4	28 PDB header: viral protein Chain: A: PDB Molecule: envelope glycoprotein; PDBTitle: nmr structure of the dengue-4 virus envelope protein domain2 iii
34	c2qj8B	Alignment	not modelled	37.5	11 PDB header: hydrolase Chain: B: PDB Molecule: mlr6093 protein; PDBTitle: crystal structure of an aspartoacylase family protein (mlr6093) from2 mesorhizobium loti maff303099 at 2.00 a resolution
35	d1svba1	Alignment	not modelled	36.9	22 Fold: Immunoglobulin-like beta-sandwich Superfamily: E set domains Family: Class II viral fusion proteins C-terminal domain
36	d1pjwa	Alignment	not modelled	30.2	31 Fold: Immunoglobulin-like beta-sandwich Superfamily: E set domains Family: Class II viral fusion proteins C-terminal domain
37	d1xpm2	Alignment	not modelled	30.2	40 Fold: Thiolase-like Superfamily: Thiolase-like Family: Chalcone synthase-like
38	c2ka7A	Alignment	not modelled	29.7	30 PDB header: structural genomics, unknown function Chain: A: PDB Molecule: glycine cleavage system h protein; PDBTitle: nmr solution structure of tm0212 at 40 c
39	d1qwya	Alignment	not modelled	29.6	20 Fold: Barrel-sandwich hybrid Superfamily: Duplicated hybrid motif Family: Peptidoglycan hydrolase LytM
40	c3mxuA	Alignment	not modelled	29.5	20 PDB header: oxidoreductase Chain: A: PDB Molecule: glycine cleavage system h protein; PDBTitle: crystal structure of glycine cleavage system protein h from bartonella2 henselae
41	c3lazB	Alignment	not modelled	28.5	5 PDB header: lyase Chain: B: PDB Molecule: d-galactarate dehydratase; PDBTitle: the crystal structure of the n-terminal domain of d-2 galactarate dehydratase from escherichia coli cft073
42	c2aujD	Alignment	not modelled	28.4	15 PDB header: transferase Chain: D: PDB Molecule: dna-directed rna polymerase beta' chain; PDBTitle: structure of thermus aquaticus rna polymerase beta'-subunit2 insert
43	c1otcB	Alignment	not modelled	26.9	35 PDB header: protein/dna Chain: B: PDB Molecule: protein (telomere-binding protein beta subunit); PDBTitle: the o. nova telomere end binding protein complexed with2 single strand dna
44	c2i0qB	Alignment	not modelled	26.5	35 PDB header: structural protein/dna Chain: B: PDB Molecule: telomere-binding protein beta subunit; PDBTitle: crystal structure of a telomere single-strand dna-protein2 complex from o. nova with full-length alpha and beta3 telomere proteins
45	d1jb7b	Alignment	not modelled	26.5	35 Fold: OB-fold Superfamily: Nucleic acid-binding proteins Family: Single strand DNA-binding domain, SSB
46	d1ok8a1	Alignment	not modelled	26.0	25 Fold: Immunoglobulin-like beta-sandwich Superfamily: E set domains Family: Class II viral fusion proteins C-terminal domain
47	c3egpA	Alignment	not modelled	25.3	25 PDB header: viral protein Chain: A: PDB Molecule: envelope protein; PDBTitle: crystal structure analysis of dengue-1 envelope protein2 domain iii
48	c2jkuA	Alignment	not modelled	24.7	13 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
49	c2aukA	Alignment	not modelled	24.0	23 PDB header: transferase Chain: A: PDB Molecule: dna-directed rna polymerase beta' chain; PDBTitle: structure of e. coli rna polymerase beta' g/g' insert
50	c2b44A	Alignment	not modelled	23.8	20 PDB header: hydrolase Chain: A: PDB Molecule: glycyl-glycine endopeptidase lytm; PDBTitle: truncated s. aureus lytm, p 32 2 1 crystal form
51	c3it5B	Alignment	not modelled	22.4	18 PDB header: hydrolase Chain: B: PDB Molecule: protease lasa; PDBTitle: crystal structure of the lasa virulence factor from pseudomonas2 aeruginosa
52	c3iftA	Alignment	not modelled	21.2	18 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.
53	c2edaA	Alignment	not modelled	20.7	18 PDB header: biosynthetic protein Chain: A: PDB Molecule: glycine cleavage system h protein;

53	c2e0gA	Alignment	not modelled	20.7	10	PDBTitle: solution structure of the gcv_h domain from mouse glycine PDB header: hydrolase
54	c2r9qD	Alignment	not modelled	19.9	22	Chain: D: PDB Molecule: 2'-deoxycytidine 5'-triphosphate deaminase; PDBTitle: crystal structure of 2'-deoxycytidine 5'-triphosphate deaminase from2 agrobacterium tumefaciens
55	d1wqla2	Alignment	not modelled	19.5	24	Fold: TBP-like Superfamily: Bet v1-like Family: Ring hydroxylating alpha subunit catalytic domain
56	d1r0va2	Alignment	not modelled	19.3	11	Fold: Restriction endonuclease-like Superfamily: tRNA-intron endonuclease catalytic domain-like Family: tRNA-intron endonuclease catalytic domain-like
57	c2k33A	Alignment	not modelled	19.0	24	PDB header: membrane protein, transport protein Chain: A: PDB Molecule: acra; PDBTitle: solution structure of an n-glycosylated protein using in2 vitro glycosylation
58	d2b1xa2	Alignment	not modelled	18.2	21	Fold: TBP-like Superfamily: Bet v1-like Family: Ring hydroxylating alpha subunit catalytic domain
59	d1onla	Alignment	not modelled	18.0	34	Fold: Barrel-sandwich hybrid Superfamily: Single hybrid motif Family: Biotinyl/lipoyl-carrier proteins and domains
60	c2gu1A	Alignment	not modelled	16.4	16	PDB header: hydrolase Chain: A: PDB Molecule: zinc peptidase; PDBTitle: crystal structure of a zinc containing peptidase from2 vibrio cholerae
61	c3fmcC	Alignment	not modelled	15.9	18	PDB header: hydrolase Chain: C: PDB Molecule: putative succinylglutamate desuccinylase / aspartoacylase; PDBTitle: crystal structure of a putative succinylglutamate desuccinylase /2 aspartoacylase family protein (sama_0604) from shewanella amazonensis3 sb2b at 1.80 a resolution
62	d2q07a1	Alignment	not modelled	15.6	21	Fold: PUA domain-like Superfamily: PUA domain-like Family: PUA domain
63	d1ulia2	Alignment	not modelled	14.8	24	Fold: TBP-like Superfamily: Bet v1-like Family: Ring hydroxylating alpha subunit catalytic domain
64	d2bmoa2	Alignment	not modelled	14.7	16	Fold: TBP-like Superfamily: Bet v1-like Family: Ring hydroxylating alpha subunit catalytic domain
65	d1o7na2	Alignment	not modelled	14.5	16	Fold: TBP-like Superfamily: Bet v1-like Family: Ring hydroxylating alpha subunit catalytic domain
66	c3c6dB	Alignment	not modelled	13.7	31	PDB header: virus Chain: B: PDB Molecule: polyprotein; PDBTitle: the pseudo-atomic structure of dengue immature virus
67	d2f5bx2	Alignment	not modelled	13.6	21	Fold: Phospholipase D/nuclease Superfamily: Phospholipase D/nuclease Family: TrmB middle domain-like
68	c3lehA	Alignment	not modelled	13.5	35	PDB header: transferase Chain: A: PDB Molecule: putative hydroxymethylglutaryl-coa synthase; PDBTitle: the crystal structure of smu.943c from streptococcus mutans ua159
69	c2f9aA	Alignment	not modelled	12.9	33	PDB header: transferase Chain: A: PDB Molecule: 3-hydroxy-3-methylglutaryl coenzyme a synthase 1; PDBTitle: hmg-coa synthase from brassica juncea in complex with f-244
70	d1miua3	Alignment	not modelled	12.5	24	Fold: OB-fold Superfamily: Nucleic acid-binding proteins Family: Single strand DNA-binding domain, SSB
71	c2lcoA	Alignment	not modelled	12.4	15	PDB header: protein binding Chain: A: PDB Molecule: putative uncharacterized protein tb39.8; PDBTitle: rv0020c_nter structure
72	d1s6na	Alignment	not modelled	12.3	32	Fold: Immunoglobulin-like beta-sandwich Superfamily: E set domains Family: Class II viral fusion proteins C-terminal domain
73	c3k3sG	Alignment	not modelled	12.3	15	PDB header: hydrolase Chain: G: PDB Molecule: altronate hydrolase; PDBTitle: crystal structure of altronate hydrolase (fragment 1-84) from shigella2 flexneri.
74	c3csqC	Alignment	not modelled	12.3	40	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
75	c3uajA	Alignment	not modelled	12.2	21	PDB header: viral protein/immune system Chain: A: PDB Molecule: envelope protein; PDBTitle: crystal structure of the envelope glycoprotein ectodomain from dengue2 virus serotype 4 in complex with the fab fragment of the chimpanzee3 monoclonal antibody 5h2
76	c3c64A	Alignment	not modelled	12.0	25	PDB header: cd36-binding protein,cell adhesion Chain: A: PDB Molecule: pfemp1 variant 2 of strain mc; PDBTitle: the mc179 portion of the cysteine-rich interdomain region2 (cidr) of a plasmodium falciparum erythrocyte membrane3 protein-1 (pfemp1)
77	c2f1mA	Alignment	not modelled	11.9	15	PDB header: transport protein Chain: A: PDB Molecule: acriflavine resistance protein a; PDBTitle: conformational flexibility in the multidrug efflux system protein acra
78	c1x9aB	Alignment	not modelled	11.5	35	PDB header: lyase Chain: B: PDB Molecule: hmg-coa synthase;

78	c1A9eB_	Alignment	not modelled	11.3	33	PDBTitle: crystal structure of hmg-coa synthase from enterococcus2 faecalis
79	d2nqwa1	Alignment	not modelled	11.5	11	Fold: FAD-binding/transporter-associated domain-like Superfamily: FAD-binding/transporter-associated domain-like Family: CorC/HlyC domain-like
80	c1xtB_	Alignment	not modelled	11.5	40	PDB header: lyase Chain: B: PDB Molecule: 3-hydroxy-3-methylglutaryl-coa synthase; PDBTitle: staphylococcus aureus 3-hydroxy-3-methylglutaryl-coa2 synthase
81	c2wusR_	Alignment	not modelled	11.3	18	PDB header: structural protein Chain: R: PDB Molecule: putative uncharacterized protein; PDBTitle: bacterial actin mreB assembles in complex with cell shape2 protein rodz
82	c3nyyA_	Alignment	not modelled	10.9	18	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 gnavus atcc 29149 at 1.60 a3 resolution
83	c2f5tX_	Alignment	not modelled	10.5	21	PDB header: transcription Chain: X: PDB Molecule: archaeal transcriptional regulator trmb; PDBTitle: crystal structure of the sugar binding domain of the archaeal2 transcriptional regulator trmb
84	d1ztxe1	Alignment	not modelled	10.5	27	Fold: Immunoglobulin-like beta-sandwich Superfamily: E set domains Family: Class II viral fusion proteins C-terminal domain
85	c2p8uB_	Alignment	not modelled	10.0	43	PDB header: transferase Chain: B: PDB Molecule: hydroxymethylglutaryl-coa synthase, cytoplasmic; PDBTitle: crystal structure of human 3-hydroxy-3-methylglutaryl coa synthase i
86	c3d4rE_	Alignment	not modelled	9.9	18	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
87	c1orhA_	Alignment	not modelled	9.5	14	PDB header: transferase Chain: A: PDB Molecule: protein arginine n-methyltransferase 1; PDBTitle: structure of the predominant protein arginine methyltransferase prmt1
88	c3e9uA_	Alignment	not modelled	9.1	24	PDB header: membrane protein Chain: A: PDB Molecule: na/ca exchange protein; PDBTitle: crystal structure of calx cbd2 domain
89	d2gtaa1	Alignment	not modelled	9.0	13	Fold: all-alpha NTP pyrophosphatases Superfamily: all-alpha NTP pyrophosphatases Family: MazG-like
90	c3ddcB_	Alignment	not modelled	8.9	11	PDB header: hydrolase/apoptosis Chain: B: PDB Molecule: ras association domain-containing family protein 5; PDBTitle: crystal structure of nore1a in complex with ras
91	c3n6rK_	Alignment	not modelled	8.8	16	PDB header: ligase Chain: K: PDB Molecule: propionyl-coa carboxylase, alpha subunit; PDBTitle: crystal structure of the holoenzyme of propionyl-coa carboxylase (pcc)
92	d1iyjb3	Alignment	not modelled	8.6	24	Fold: OB-fold Superfamily: Nucleic acid-binding proteins Family: Single strand DNA-binding domain, SSB
93	c3fymA_	Alignment	not modelled	8.3	5	PDB header: dna binding protein Chain: A: PDB Molecule: putative uncharacterized protein; PDBTitle: the 1a structure of ymfm, a putative dna-binding membrane2 protein from staphylococcus aureus
94	c3llbA_	Alignment	not modelled	8.2	8	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: uncharacterized protein; PDBTitle: the crystal structure of the protein pa3983 with unknown2 function from pseudomonas aeruginosa pao1
95	c1t5eB_	Alignment	not modelled	8.1	21	PDB header: transport protein Chain: B: PDB Molecule: multi drug resistance protein mexa; PDBTitle: the structure of mexa
96	d1y7ma2	Alignment	not modelled	7.7	13	Fold: LysM domain Superfamily: LysM domain Family: LysM domain
97	d3brda3	Alignment	not modelled	7.6	13	Fold: beta-Trefoil Superfamily: DNA-binding protein LAG-1 (CSL) Family: DNA-binding protein LAG-1 (CSL)
98	d2a9da1	Alignment	not modelled	7.4	28	Fold: Immunoglobulin-like beta-sandwich Superfamily: E set domains Family: Molybdenum-containing oxidoreductases-like dimerisation domain
99	d2fx0a2	Alignment	not modelled	7.4	33	Fold: Tetracyclin repressor-like, C-terminal domain Superfamily: Tetracyclin repressor-like, C-terminal domain Family: Tetracyclin repressor-like, C-terminal domain