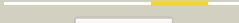
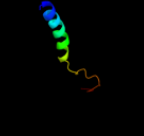
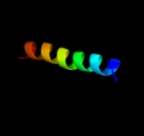
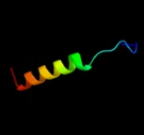
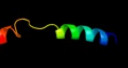
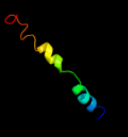
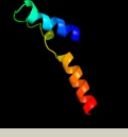


Phyre2

Email	I.a.kelley@imperial.ac.uk
Description	P77173
Date	Thu Jan 5 12:25:58 GMT 2012
Unique Job ID	e842081890ccb440

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	d1f46a_	 Alignment		100.0	99	Fold: TBP-like Superfamily: Cell-division protein ZipA, C-terminal domain Family: Cell-division protein ZipA, C-terminal domain
2	c1qmiC_	 Alignment		79.0	13	PDB header: rna 3'-terminal phosphate cyclase Chain: C: PDB Molecule: rna 3'-terminal phosphate cyclase; PDBTitle: crystal structure of rna 3'-terminal phosphate cyclase, an2 ubiquitous enzyme with unusual topology
3	c2kncA_	 Alignment		75.4	18	PDB header: cell adhesion Chain: A: PDB Molecule: integrin alpha-iiB; PDBTitle: platelet integrin alfaIIb-beta3 transmembrane-cytoplasmic2 heterocomplex
4	c3sokB_	 Alignment		55.5	19	PDB header: cell adhesion Chain: B: PDB Molecule: fimbrial protein; PDBTitle: dichelobacter nodosus pilin fima
5	d2pila_	 Alignment		48.9	32	Fold: Pili subunits Superfamily: Pili subunits Family: Pilin
6	c2kncB_	 Alignment		45.6	35	PDB header: cell adhesion Chain: B: PDB Molecule: integrin beta-3; PDBTitle: platelet integrin alfaIIb-beta3 transmembrane-cytoplasmic2 heterocomplex
7	d2axtj1	 Alignment		45.0	33	Fold: Single transmembrane helix Superfamily: Photosystem II reaction center protein J, PsbJ Family: PsbJ-like
8	c1afoB_	 Alignment		43.6	36	PDB header: integral membrane protein Chain: B: PDB Molecule: glycophorin a; PDBTitle: dimeric transmembrane domain of human glycophorin a, nmr,2 20 structures
9	c2k21A_	 Alignment		41.0	15	PDB header: membrane protein Chain: A: PDB Molecule: potassium voltage-gated channel subfamily e PDBTitle: nmr structure of human kcne1 in Impg micelles at ph 6.0 and2 40 degree c
10	c2jwaA_	 Alignment		40.6	26	PDB header: transferase Chain: A: PDB Molecule: receptor tyrosine-protein kinase erbb-2; PDBTitle: erbb2 transmembrane segment dimer spatial structure
11	d1oqwa_	 Alignment		39.3	29	Fold: Pili subunits Superfamily: Pili subunits Family: Pilin

12	c3pqvD_	Alignment		38.3	17	PDB header: unknown function Chain: D: PDB Molecule: rcl1 protein; PDBTitle: cyclase homolog
13	c2l9uA_	Alignment		38.1	24	PDB header: membrane protein Chain: A: PDB Molecule: receptor tyrosine-protein kinase erbb-3; PDBTitle: spatial structure of dimeric erbb3 transmembrane domain
14	c2it3B_	Alignment		33.2	25	PDB header: structural genomics, unknown function Chain: B: PDB Molecule: upf0130 protein ph1069; PDBTitle: structure of ph1069 protein from pyrococcus horikoshii
15	c2dvkA_	Alignment		32.2	19	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: upf0130 protein ape0816; PDBTitle: crystal structure of hypothetical protein from aeropyrum pernix
16	d2o02a1	Alignment		31.3	14	Fold: alpha-alpha superhelix Superfamily: 14-3-3 protein Family: 14-3-3 protein
17	c2qg3B_	Alignment		31.0	32	PDB header: unknown function Chain: B: PDB Molecule: upf0130 protein af_2059; PDBTitle: crystal structure of a tyw3 methyltransferase-like protein (af_2059)2 from archaeoglobus fulgidus dsm 4304 at 1.95 a resolution
18	d1fftb2	Alignment		30.7	20	Fold: Transmembrane helix hairpin Superfamily: Cytochrome c oxidase subunit II-like, transmembrane region Family: Cytochrome c oxidase subunit II-like, transmembrane region
19	c2jp3A_	Alignment		30.3	20	PDB header: transcription Chain: A: PDB Molecule: fxyd domain-containing ion transport regulator 4; PDBTitle: solution structure of the human fxyd4 (chif) protein in sds2 micelles
20	c2c1nA_	Alignment		28.5	14	PDB header: signaling protein Chain: A: PDB Molecule: 14-3-3 protein zeta/delta; PDBTitle: molecular basis for the recognition of phosphorylated and2 phosphoacetylated histone h3 by 14-3-3
21	d1tjja_	Alignment	not modelled	26.6	25	Fold: SSo0622-like Superfamily: SSo0622-like Family: SSo0622-like
22	c1tjja_	Alignment	not modelled	26.6	25	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: hypothetical upf0130 protein sso0622; PDBTitle: crystal structure of conserved protein of unknown function2 sso0622 from sulfolobus solfataricus
23	d1q1la_	Alignment	not modelled	25.0	15	Fold: Chorismate synthase, AroC Superfamily: Chorismate synthase, AroC Family: Chorismate synthase, AroC
24	d1hywa_	Alignment	not modelled	24.0	21	Fold: gpW/XkdW-like Superfamily: Head-to-tail joining protein W, gpW Family: Head-to-tail joining protein W, gpW
25	c1ztbA_	Alignment	not modelled	22.9	16	PDB header: ligase Chain: A: PDB Molecule: chorismate synthase; PDBTitle: crystal structure of chorismate synthase from mycobacterium2 tuberculosis
26	d1xrda1	Alignment	not modelled	22.8	30	Fold: Light-harvesting complex subunits Superfamily: Light-harvesting complex subunits Family: Light-harvesting complex subunits
27	d1wfya_	Alignment	not modelled	22.5	12	Fold: beta-Grasp (ubiquitin-like) Superfamily: Ubiquitin-like Family: Ras-binding domain, RBD
28	c2jo1A_	Alignment	not modelled	22.1	33	PDB header: hydrolase regulator Chain: A: PDB Molecule: phospholemman; PDBTitle: structure of the na,k-atpase regulatory protein fxyd1 in2 micelles
29	c2k1aA_	Alignment	not modelled	21.9	14	PDB header: cell adhesion Chain: A: PDB Molecule: integrin alpha-iiB;

29	c2k1aA_	Alignment	not modelled	21.5	14	PDBTitle: bicelle-embedded integrin alpha(iiib) transmembrane segment
30	d1ljda_	Alignment	not modelled	21.6	60	Fold: Light-harvesting complex subunits Superfamily: Light-harvesting complex subunits Family: Light-harvesting complex subunits
31	c2x2oA_	Alignment	not modelled	21.1	15	PDB header: flavoprotein Chain: A: PDB Molecule: nrdr protein; PDBTitle: the flavoprotein nrdr from bacillus cereus with the2 initially oxidized fmn cofactor in an intermediate3 radiation reduced state
32	d1o9da_	Alignment	not modelled	18.4	7	Fold: alpha-alpha superhelix Superfamily: 14-3-3 protein Family: 14-3-3 protein
33	d1mx3a2	Alignment	not modelled	17.9	19	Fold: Flavodoxin-like Superfamily: Formate/glycerate dehydrogenase catalytic domain-like Family: Formate/glycerate dehydrogenases, substrate-binding domain
34	d1nkza_	Alignment	not modelled	17.5	43	Fold: Light-harvesting complex subunits Superfamily: Light-harvesting complex subunits Family: Light-harvesting complex subunits
35	c2mltB_	Alignment	not modelled	17.2	33	PDB header: toxin (hemolytic polypeptide) Chain: B: PDB Molecule: melittin; PDBTitle: melittin
36	c2npmB_	Alignment	not modelled	16.9	7	PDB header: protein binding Chain: B: PDB Molecule: 14-3-3 domain containing protein; PDBTitle: crystal structure of cryptosporidium parvum 14-3-3 protein2 in complex with peptide
37	c2mltA_	Alignment	not modelled	16.9	33	PDB header: toxin (hemolytic polypeptide) Chain: A: PDB Molecule: melittin; PDBTitle: melittin
38	d1c99a_	Alignment	not modelled	16.0	26	Fold: Transmembrane helix hairpin Superfamily: F1F0 ATP synthase subunit C Family: F1F0 ATP synthase subunit C
39	d1qwlal	Alignment	not modelled	16.0	16	Fold: SH3-like barrel Superfamily: C-terminal domain of transcriptional repressors Family: FeoA-like
40	d1qxoA_	Alignment	not modelled	15.9	14	Fold: Chorismate synthase, AroC Superfamily: Chorismate synthase, AroC Family: Chorismate synthase, AroC
41	c1qcrD_	Alignment	not modelled	15.1	25	PDB header: PDB COMPND:
42	c1fftG_	Alignment	not modelled	14.2	18	PDB header: oxidoreductase Chain: G: PDB Molecule: ubiquinol oxidase; PDBTitle: the structure of ubiquinol oxidase from escherichia coli
43	c2kluA_	Alignment	not modelled	14.1	32	PDB header: immune system, membrane protein Chain: A: PDB Molecule: t-cell surface glycoprotein cd4; PDBTitle: nmr structure of the transmembrane and cytoplasmic domains2 of human cd4
44	c3u5eL_	Alignment	not modelled	14.0	14	PDB header: ribosome Chain: L: PDB Molecule: 60s ribosomal protein l13-a; PDBTitle: the structure of the eukaryotic ribosome at 3.0 resolution
45	c3e6yB_	Alignment	not modelled	13.5	9	PDB header: signaling protein Chain: B: PDB Molecule: 14-3-3-like protein c; PDBTitle: structure of 14-3-3 in complex with the differentiation-inducing agent2 cotylenin a
46	c2kxhB_	Alignment	not modelled	13.5	50	PDB header: protein binding Chain: B: PDB Molecule: peptide of far upstream element-binding protein 1; PDBTitle: solution structure of the first two rrm domains of fir in the complex2 with fbp nbx peptide
47	d2o8pa1	Alignment	not modelled	13.1	17	Fold: alpha-alpha superhelix Superfamily: 14-3-3 protein Family: 14-3-3 protein
48	c4a1bO_	Alignment	not modelled	12.9	22	PDB header: ribosome Chain: O: PDB Molecule: rpl28; PDBTitle: t.thermophila 60s ribosomal subunit in complex with2 initiation factor 6. this file contains 26s rrna and3 proteins of molecule 3.
49	c2k9yA_	Alignment	not modelled	12.8	23	PDB header: transferase Chain: A: PDB Molecule: ephrin type-a receptor 2; PDBTitle: epha2 dimeric structure in the lipidic bicelle at ph 5.0
50	c2k9yB_	Alignment	not modelled	12.8	23	PDB header: transferase Chain: B: PDB Molecule: ephrin type-a receptor 2; PDBTitle: epha2 dimeric structure in the lipidic bicelle at ph 5.0
51	c2hg5D_	Alignment	not modelled	12.2	4	PDB header: membrane protein Chain: D: PDB Molecule: kcsa channel; PDBTitle: cs+ complex of a k channel with an amide to ester substitution in the2 selectivity filter
52	c2zzeG_	Alignment	not modelled	12.2	20	PDB header: hydrolase/transport protein Chain: G: PDB Molecule: phospholemman-like protein; PDBTitle: crystal structure of the sodium - potassium pump in the e2.2k+.pi2 state
53	d1ydlal	Alignment	not modelled	11.9	20	Fold: TFB5-like Superfamily: TFB5-like Family: TFB5-like
54	c3bwwA_	Alignment	not modelled	11.8	23	PDB header: metal binding protein Chain: A: PDB Molecule: protein of unknown function duf692/cog3220; PDBTitle: crystal structure of a duf692 family protein (hs_1138) from2 haemophilus somnus 129pt at 2.20 a resolution

55	c3cs5B_	Alignment	not modelled	11.6	27	PDB header: photosynthesis Chain: B: PDB Molecule: phycobilisome degradation protein nbla; PDBTitle: nbla protein from synechococcus elongatus pcc 7942
56	c2j7aC_	Alignment	not modelled	11.2	20	PDB header: oxidoreductase Chain: C: PDB Molecule: cytochrome c quinol dehydrogenase nrhf; PDBTitle: crystal structure of cytochrome c nitrite reductase nrha2 complex from desulfovibrio vulgaris
57	d2nlva1	Alignment	not modelled	10.7	12	Fold: 7-stranded beta/alpha barrel Superfamily: Glycoside hydrolase/deacetylase Family: Divergent polysaccharide deacetylase
58	c3dgpB_	Alignment	not modelled	10.5	21	PDB header: transcription Chain: B: PDB Molecule: rna polymerase ii transcription factor b subunit 5; PDBTitle: crystal structure of the complex between tfb5 and the c-terminal2 domain of tfb2
59	d1ul7a_	Alignment	not modelled	10.5	3	Fold: TBP-like Superfamily: KA1-like Family: Kinase associated domain 1, KA1
60	c2pcrA_	Alignment	not modelled	10.5	14	PDB header: hydrolase Chain: A: PDB Molecule: inositol-1-monophosphatase; PDBTitle: crystal structure of myo-inositol-1(or 4)-monophosphatase (aq_1983)2 from aquifex aeolicus vf5
61	d1v54i_	Alignment	not modelled	9.0	13	Fold: Single transmembrane helix Superfamily: Mitochondrial cytochrome c oxidase subunit VIc Family: Mitochondrial cytochrome c oxidase subunit VIc
62	c3mk7F_	Alignment	not modelled	9.0	19	PDB header: oxidoreductase Chain: F: PDB Molecule: cytochrome c oxidase, cbb3-type, subunit p; PDBTitle: the structure of cbb3 cytochrome oxidase
63	d2bkra1	Alignment	not modelled	8.8	6	Fold: Cysteine proteinases Superfamily: Cysteine proteinases Family: Adenain-like
64	d1rlja_	Alignment	not modelled	8.8	15	Fold: Flavodoxin-like Superfamily: Flavoproteins Family: Flavoprotein Nrdl
65	c3n23E_	Alignment	not modelled	8.5	27	PDB header: hydrolase Chain: E: PDB Molecule: na+/k+ atpase gamma subunit transcript variant a; PDBTitle: crystal structure of the high affinity complex between ouabain and the2 e2p form of the sodium-potassium pump
66	c2latA_	Alignment	not modelled	8.2	12	PDB header: membrane protein Chain: A: PDB Molecule: dolichyl-diphosphooligosaccharide--protein PDBTitle: solution structure of a human minimembrane protein ost4
67	d1xzpa3	Alignment	not modelled	8.1	20	Fold: Folate-binding domain Superfamily: Folate-binding domain Family: TrmE formyl-THF-binding domain
68	c1xqB_	Alignment	not modelled	8.1	20	PDB header: hydrolase Chain: B: PDB Molecule: probable trna modification gtpase trme; PDBTitle: structure of the gtp-binding protein trme from thermotoga2 maritima complexed with 5-formyl-thf
69	c2q74B_	Alignment	not modelled	7.8	21	PDB header: hydrolase Chain: B: PDB Molecule: inositol-1-monophosphatase; PDBTitle: mycobacterium tuberculosis subh
70	c2g2bA_	Alignment	not modelled	7.7	7	PDB header: immune system Chain: A: PDB Molecule: allograft inflammatory factor 1; PDBTitle: nmr structure of the human allograft inflammatory factor 1
71	c2i7gA_	Alignment	not modelled	7.6	31	PDB header: oxidoreductase Chain: A: PDB Molecule: monooxygenase; PDBTitle: crystal structure of monooxygenase from agrobacterium tumefaciens
72	c3otbB_	Alignment	not modelled	7.4	23	PDB header: transferase Chain: B: PDB Molecule: trna(his) guanylyltransferase; PDBTitle: crystal structure of human trnahis guanylyltransferase (thg1) - dgt2 complex
73	c2qflA_	Alignment	not modelled	7.3	21	PDB header: hydrolase Chain: A: PDB Molecule: inositol-1-monophosphatase; PDBTitle: structure of subh: inositol monophosphatase and extragenic2 suppressor from e. coli
74	cls7fa_	Alignment	not modelled	7.3	6	PDB header: transferase Chain: A: PDB Molecule: acetyl transferase; PDBTitle: riml- ribosomal l7/l12 alpha-n-protein acetyltransferase crystal form2 i (apo)
75	c2l2ta_	Alignment	not modelled	7.2	14	PDB header: membrane protein Chain: A: PDB Molecule: receptor tyrosine-protein kinase erbb-4; PDBTitle: solution nmr structure of the erbb4 dimeric membrane domain
76	c1qlcB_	Alignment	not modelled	7.2	16	PDB header: oxidoreductase/immune system Chain: B: PDB Molecule: cytochrome c oxidase polypeptide ii; PDBTitle: cryo-structure of the paracoccus denitrificans four-subunit2 cytochrome c oxidase in the completely oxidized state3 complexed with an antibody fv fragment
77	clar1B_	Alignment	not modelled	7.2	16	PDB header: complex (oxidoreductase/antibody) Chain: B: PDB Molecule: cytochrome c oxidase; PDBTitle: structure at 2.7 angstrom resolution of the paracoccus2 denitrificans two-subunit cytochrome c oxidase complexed3 with an antibody fv fragment
78	c3ih5A_	Alignment	not modelled	7.2	18	PDB header: electron transport Chain: A: PDB Molecule: electron transfer flavoprotein alpha-subunit; PDBTitle: crystal structure of electron transfer flavoprotein alpha-2 subunit from bacteroides thetaiotaomicron
79	d3clsdl	Alignment	not modelled	6.8	12	Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Adenine nucleotide alpha hydrolases-like Family: ETFP subunits

80	c3dwcA_	Alignment	not modelled	6.7	21	PDB header: hydrolase Chain: A: PDB Molecule: metallocarboxypeptidase; PDBTitle: trypanosoma cruzi metallocarboxypeptidase 1
81	d1ap4a_	Alignment	not modelled	6.7	17	Fold: EF Hand-like Superfamily: EF-hand Family: Calmodulin-like
82	c2rmzA_	Alignment	not modelled	6.5	35	PDB header: cell adhesion Chain: A: PDB Molecule: integrin beta-3; PDBTitle: bicelle-embedded integrin beta3 transmembrane segment
83	c1bh1A_	Alignment	not modelled	6.2	33	PDB header: toxin Chain: A: PDB Molecule: melittin; PDBTitle: structural studies of d-pro melittin, nmr, 20 structures
84	c2l16A_	Alignment	not modelled	6.0	38	PDB header: protein transport Chain: A: PDB Molecule: sec-independent protein translocase protein tatad; PDBTitle: solution structure of bacillus subtilis tatad protein in dpc micelles
85	d1ueka2	Alignment	not modelled	6.0	31	Fold: Ferredoxin-like Superfamily: GHMP Kinase, C-terminal domain Family: 4-(cytidine 5'-diphospho)-2C-methyl-D-erythritol kinase IspE
86	c3tcvB_	Alignment	not modelled	5.9	29	PDB header: transferase Chain: B: PDB Molecule: gcn5-related n-acetyltransferase; PDBTitle: crystal structure of a gcn5-related n-acetyltransferase from brucella2 melitensis
87	d1fi5a_	Alignment	not modelled	5.8	15	Fold: EF Hand-like Superfamily: EF-hand Family: Calmodulin-like
88	c1fi5A_	Alignment	not modelled	5.8	15	PDB header: contractile protein Chain: A: PDB Molecule: protein (troponin c); PDBTitle: nmr structure of the c terminal domain of cardiac troponin2 c bound to the n terminal domain of cardiac troponin i.
89	d1a0pa1	Alignment	not modelled	5.7	11	Fold: SAM domain-like Superfamily: lambda integrase-like, N-terminal domain Family: lambda integrase-like, N-terminal domain
90	d1lf6a2	Alignment	not modelled	5.6	14	Fold: Supersandwich Superfamily: Galactose mutarotase-like Family: Bacterial glucoamylase N-terminal domain-like
91	d3ehbb2	Alignment	not modelled	5.5	16	Fold: Transmembrane helix hairpin Superfamily: Cytochrome c oxidase subunit II-like, transmembrane region Family: Cytochrome c oxidase subunit II-like, transmembrane region
92	d1yoba1	Alignment	not modelled	5.4	18	Fold: Flavodoxin-like Superfamily: Flavoproteins Family: Flavodoxin-related
93	d2fcka1	Alignment	not modelled	5.4	16	Fold: Acyl-CoA N-acyltransferases (Nat) Superfamily: Acyl-CoA N-acyltransferases (Nat) Family: N-acetyl transferase, NAT
94	c2b19A_	Alignment	not modelled	5.4	22	PDB header: neuropeptide Chain: A: PDB Molecule: neuropeptide k; PDBTitle: solution structure of mammalian tachykinin peptide,2 neuropeptide k
95	d3dtub2	Alignment	not modelled	5.3	19	Fold: Transmembrane helix hairpin Superfamily: Cytochrome c oxidase subunit II-like, transmembrane region Family: Cytochrome c oxidase subunit II-like, transmembrane region
96	c3kdpH_	Alignment	not modelled	5.3	27	PDB header: hydrolase Chain: H: PDB Molecule: na+/k+ atpase gamma subunit transcript variant a; PDBTitle: crystal structure of the sodium-potassium pump
97	c3kdpG_	Alignment	not modelled	5.3	27	PDB header: hydrolase Chain: G: PDB Molecule: na+/k+ atpase gamma subunit transcript variant a; PDBTitle: crystal structure of the sodium-potassium pump
98	c3owcA_	Alignment	not modelled	5.3	16	PDB header: transferase Chain: A: PDB Molecule: probable acetyltransferase; PDBTitle: crystal structure of gnat superfamily protein pa2578 from pseudomonas2 aeruginosa
99	c3fj2A_	Alignment	not modelled	5.2	14	PDB header: unknown function Chain: A: PDB Molecule: monooxygenase-like protein; PDBTitle: crystal structure of a monooxygenase-like protein (lin2316) from2 listeria innocua at 1.85 a resolution