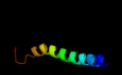
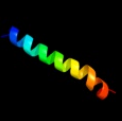
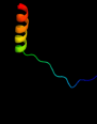
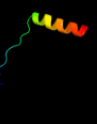
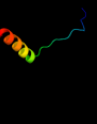
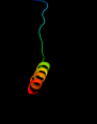
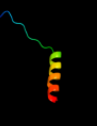
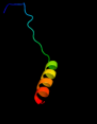
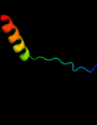


Phyre2

Email	I.a.kelley@imperial.ac.uk
Description	P77437
Date	Thu Jan 5 12:29:18 GMT 2012
Unique Job ID	df3a97ad84902093

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c3rkoL_	 Alignment		100.0	26	PDB header: oxidoreductase Chain: L; PDB Molecule: nadh-quinone oxidoreductase subunit l; PDBTitle: crystal structure of the membrane domain of respiratory complex i from2 e. coli at 3.0 angstrom resolution
2	c3rkoM_	 Alignment		100.0	21	PDB header: oxidoreductase Chain: M; PDB Molecule: nadh-quinone oxidoreductase subunit m; PDBTitle: crystal structure of the membrane domain of respiratory complex i from2 e. coli at 3.0 angstrom resolution
3	c3rkoN_	 Alignment		100.0	23	PDB header: oxidoreductase Chain: N; PDB Molecule: nadh-quinone oxidoreductase subunit n; PDBTitle: crystal structure of the membrane domain of respiratory complex i from2 e. coli at 3.0 angstrom resolution
4	c3rkoK_	 Alignment		40.9	17	PDB header: oxidoreductase Chain: K; PDB Molecule: nadh-quinone oxidoreductase subunit k; PDBTitle: crystal structure of the membrane domain of respiratory complex i from2 e. coli at 3.0 angstrom resolution
5	c2l3iA_	 Alignment		34.4	58	PDB header: antimicrobial protein Chain: A; PDB Molecule: aoxki4a, antimicrobial peptide in spider venom; PDBTitle: oxki4a, spider derived antimicrobial peptide
6	d1o8bb1	 Alignment		22.7	21	Fold: NagB/RpiA/CoA transferase-like Superfamily: NagB/RpiA/CoA transferase-like Family: D-ribose-5-phosphate isomerase (RpiA), catalytic domain
7	c2kncA_	 Alignment		20.6	16	PDB header: cell adhesion Chain: A; PDB Molecule: integrin alpha-iiB; PDBTitle: platelet integrin alphaIIb-beta3 transmembrane-cytoplasmic2 heterocomplex
8	d1a6qa1	 Alignment		20.2	20	Fold: Another 3-helical bundle Superfamily: Protein serine/threonine phosphatase 2C, C-terminal domain Family: Protein serine/threonine phosphatase 2C, C-terminal domain
9	d1s1qa_	 Alignment		15.5	31	Fold: UBC-like Superfamily: UBC-like Family: UEV domain
10	d2gf4a1	 Alignment		12.6	10	Fold: immunoglobulin/albumin-binding domain-like Superfamily: Vng1086c-like Family: Vng1086c-like
11	c3u7jA_	 Alignment		12.4	20	PDB header: isomerase Chain: A; PDB Molecule: ribose-5-phosphate isomerase a; PDBTitle: crystal structure of ribose-5-phosphate isomerase a from burkholderia2 thailandensis

12	c3arcl_	Alignment		12.3	13	PDB header: electron transport, photosynthesis Chain: L: PDB Molecule: photosystem ii reaction center protein I; PDBTitle: crystal structure of oxygen-evolving photosystem ii at 1.9 angstrom2 resolution
13	c3bz1L_	Alignment		11.8	13	PDB header: electron transport Chain: L: PDB Molecule: photosystem ii reaction center protein I; PDBTitle: crystal structure of cyanobacterial photosystem ii (part 12 of 2). this file contains first monomer of psii dimer
14	d2axtl1	Alignment		11.8	13	Fold: Single transmembrane helix Superfamily: Photosystem II reaction center protein L, PsbL Family: PsbL-like
15	c3a0hL_	Alignment		11.8	13	PDB header: electron transport Chain: L: PDB Molecule: photosystem ii reaction center protein I; PDBTitle: crystal structure of i-substituted photosystem ii complex
16	c3arcl_	Alignment		11.8	13	PDB header: electron transport, photosynthesis Chain: L: PDB Molecule: photosystem ii reaction center protein I; PDBTitle: crystal structure of oxygen-evolving photosystem ii at 1.9 angstrom2 resolution
17	c2axtl_	Alignment		11.8	13	PDB header: electron transport Chain: L: PDB Molecule: photosystem ii reaction center I protein; PDBTitle: crystal structure of photosystem ii from thermosynechococcus elongatus
18	c2axtl_	Alignment		11.8	13	PDB header: electron transport Chain: L: PDB Molecule: photosystem ii reaction center I protein; PDBTitle: crystal structure of photosystem ii from thermosynechococcus elongatus
19	c1s5II_	Alignment		11.8	13	PDB header: photosynthesis Chain: L: PDB Molecule: photosystem ii reaction center I protein; PDBTitle: architecture of the photosynthetic oxygen evolving center
20	c1s5IL_	Alignment		11.8	13	PDB header: photosynthesis Chain: L: PDB Molecule: photosystem ii reaction center I protein; PDBTitle: architecture of the photosynthetic oxygen evolving center
21	c3prqL_	Alignment	not modelled	11.8	13	PDB header: photosynthesis Chain: L: PDB Molecule: photosystem ii reaction center protein I; PDBTitle: crystal structure of cyanobacterial photosystem ii in complex with2 terbutryn (part 1 of 2). this file contains first monomer of psii3 dimer
22	c3kziL_	Alignment	not modelled	11.8	13	PDB header: electron transport Chain: L: PDB Molecule: photosystem ii reaction center protein I; PDBTitle: crystal structure of monomeric form of cyanobacterial photosystem ii
23	c3prriL_	Alignment	not modelled	11.8	13	PDB header: photosynthesis Chain: L: PDB Molecule: photosystem ii reaction center protein I; PDBTitle: crystal structure of cyanobacterial photosystem ii in complex with2 terbutryn (part 2 of 2). this file contains second monomer of psii3 dimer
24	c3a0bl_	Alignment	not modelled	11.8	13	PDB header: electron transport Chain: L: PDB Molecule: photosystem ii reaction center protein I; PDBTitle: crystal structure of br-substituted photosystem ii complex
25	c3bz2L_	Alignment	not modelled	11.8	13	PDB header: electron transport Chain: L: PDB Molecule: photosystem ii reaction center protein I; PDBTitle: crystal structure of cyanobacterial photosystem ii (part 22 of 2). this file contains second monomer of psii dimer
26	c3a0bL_	Alignment	not modelled	11.8	13	PDB header: electron transport Chain: L: PDB Molecule: photosystem ii reaction center protein I; PDBTitle: crystal structure of br-substituted photosystem ii complex
27	c3a0hl_	Alignment	not modelled	11.8	13	PDB header: electron transport Chain: L: PDB Molecule: photosystem ii reaction center protein I; PDBTitle: crystal structure of i-substituted photosystem ii complex
28	d1xmec1	Alignment	not modelled	11.4	15	Fold: Single transmembrane helix Superfamily: Bacterial ba3 type cytochrome c oxidase subunit IIa Family: Bacterial ba3 type cytochrome c oxidase subunit IIa

29	c3na2C_	Alignment	not modelled	10.7	58	PDB header: structural genomics, unknown function Chain: C: PDB Molecule: uncharacterized protein; PDBTitle: crystal structure of protein of unknown function from mine drainage2 metagenome leptospirillum rubarum
30	c3c25A_	Alignment	not modelled	10.6	67	PDB header: hydrolase/dna Chain: A: PDB Molecule: noti restriction endonuclease; PDBTitle: crystal structure of noti restriction endonuclease bound to cognate2 dna
31	d1n9wa2	Alignment	not modelled	10.0	63	Fold: Class II aaRS and biotin synthetases Superfamily: Class II aaRS and biotin synthetases Family: Class II aminoacyl-trna synthetase (aaRS)-like, catalytic domain
32	c1n9wa_	Alignment	not modelled	9.9	63	PDB header: biosynthetic protein Chain: A: PDB Molecule: aspartyl-trna synthetase 2; PDBTitle: crystal structure of the non-discriminating and archaeal-2 type aspartyl-trna synthetase from thermus thermophilus
33	c3rkoF_	Alignment	not modelled	9.8	13	PDB header: oxidoreductase Chain: F: PDB Molecule: nadh-quinone oxidoreductase subunit j; PDBTitle: crystal structure of the membrane domain of respiratory complex i from2 e. coli at 3.0 angstrom resolution
34	c3bjuB_	Alignment	not modelled	9.3	38	PDB header: ligase Chain: B: PDB Molecule: lysyl-trna synthetase; PDBTitle: crystal structure of tetrameric form of human lysyl-trna2 synthetase
35	d1j4na_	Alignment	not modelled	8.9	9	Fold: Aquaporin-like Superfamily: Aquaporin-like Family: Aquaporin-like
36	c1b8aB_	Alignment	not modelled	8.6	63	PDB header: ligase Chain: B: PDB Molecule: protein (aspartyl-trna synthetase); PDBTitle: aspartyl-trna synthetase
37	d3d37a2	Alignment	not modelled	8.3	57	Fold: Phage tail proteins Superfamily: Phage tail proteins Family: Baseplate protein-like
38	d1bcce2	Alignment	not modelled	8.3	5	Fold: Single transmembrane helix Superfamily: ISP transmembrane anchor Family: ISP transmembrane anchor
39	c1wydB_	Alignment	not modelled	8.3	63	PDB header: ligase Chain: B: PDB Molecule: hypothetical aspartyl-trna synthetase; PDBTitle: crystal structure of aspartyl-trna synthetase from sulfolobus tokodaii
40	c1x55A_	Alignment	not modelled	8.1	38	PDB header: ligase Chain: A: PDB Molecule: asparaginyl-trna synthetase; PDBTitle: crystal structure of asparaginyl-trna synthetase from pyrococcus2 horikoshii complexed with asparaginyl-adenylate analogue
41	c2k1aA_	Alignment	not modelled	8.1	16	PDB header: cell adhesion Chain: A: PDB Molecule: integrin alpha-iiib; PDBTitle: bicelle-embedded integrin alpha(iiib) transmembrane segment
42	c1e22A_	Alignment	not modelled	8.1	38	PDB header: ligase Chain: A: PDB Molecule: lysyl-trna synthetase; PDBTitle: lysyl-trna synthetase (lysu) hexagonal form complexed with2 lysine and the non-hydrolysable atp analogue amp-pcp
43	c2xgtB_	Alignment	not modelled	8.0	25	PDB header: ligase Chain: B: PDB Molecule: asparaginyl-trna synthetase, cytoplasmic; PDBTitle: asparaginyl-trna synthetase from brugia malayi complexed2 with the sulphamoyl analogue of asparaginyl-adenylate
44	c3r24A_	Alignment	not modelled	7.9	33	PDB header: transferase, viral protein Chain: A: PDB Molecule: 2'-o-methyl transferase; PDBTitle: crystal structure of nsp10/nsp16 complex of sars coronavirus" if2 possible
45	c2ks1B_	Alignment	not modelled	7.8	18	PDB header: transferase Chain: B: PDB Molecule: epidermal growth factor receptor; PDBTitle: heterodimeric association of transmembrane domains of erbb1 and erbb22 receptors enabling kinase activation
46	c3mesB_	Alignment	not modelled	7.7	31	PDB header: transferase Chain: B: PDB Molecule: choline kinase; PDBTitle: crystal structure of choline kinase from cryptosporidium2 parvum iowa ii, cgd3 2030
47	c1asyA_	Alignment	not modelled	7.6	38	PDB header: complex (aminoacyl-trna synthase/trna) Chain: A: PDB Molecule: aspartyl-trna synthetase; PDBTitle: class ii aminoacyl transfer rna synthetases: crystal2 structure of yeast aspartyl-trna synthetase complexed with3 trna asp
48	c2kwtA_	Alignment	not modelled	7.5	29	PDB header: viral protein Chain: A: PDB Molecule: protease ns2-3; PDBTitle: solution structure of ns2 [27-59]
49	c1ceuA_	Alignment	not modelled	7.4	25	PDB header: viral protein Chain: A: PDB Molecule: protein (hiv-1 regulatory protein n-terminal PDBTitle: nmr structure of the (1-51) n-terminal domain of the hiv-12 regulatory protein
50	c2p04B_	Alignment	not modelled	7.3	23	PDB header: transferase Chain: B: PDB Molecule: signal transduction histidine kinase; PDBTitle: 2.1 ang structure of the dimerized pas domain of signal transduction2 histidine kinase from nostoc punctiforme pcc 73102 with homology to3 the h-noxa/h-noba domain of the soluble guanylyl cyclase
51	d1unca_	Alignment	not modelled	7.2	21	Fold: VHP, Villin headpiece domain Superfamily: VHP, Villin headpiece domain Family: VHP, Villin headpiece domain
52	c2re3A_	Alignment	not modelled	7.2	45	PDB header: unknown function Chain: A: PDB Molecule: uncharacterized protein; PDBTitle: crystal structure of a duf1285 family protein (spo_0140) from2 silicibacter pomeroyi dss-3 at 2.50 a resolution
						Fold: VHP, Villin headpiece domain

53	d1yu8x1	Alignment	not modelled	7.1	22	Superfamily: VHP, Villin headpiece domain Family: VHP, Villin headpiece domain
54	d1ppje2	Alignment	not modelled	7.0	5	Fold: Single transmembrane helix Superfamily: ISP transmembrane anchor Family: ISP transmembrane anchor
55	c3e9hB	Alignment	not modelled	7.0	50	PDB header: ligase Chain: B: PDB Molecule: lysyl-trna synthetase; PDBTitle: lysyl-trna synthetase from bacillus stearothermophilus2 complexed with l-lysylsulfamoyl adenosine
56	c1efwA	Alignment	not modelled	7.0	38	PDB header: ligase/rna Chain: A: PDB Molecule: aspartyl-trna synthetase; PDBTitle: crystal structure of aspartyl-trna synthetase from thermus2 thermophilus complexed to trnaasp from escherichia coli
57	d1r6ra	Alignment	not modelled	7.0	19	Fold: Flavivirus capsid protein C Superfamily: Flavivirus capsid protein C Family: Flavivirus capsid protein C
58	c1r6rA	Alignment	not modelled	7.0	19	PDB header: viral protein Chain: A: PDB Molecule: genome polyprotein; PDBTitle: solution structure of dengue virus capsid protein reveals a2 new fold
59	c3m4qA	Alignment	not modelled	6.9	25	PDB header: ligase Chain: A: PDB Molecule: asparaginyl-trna synthetase, putative; PDBTitle: entamoeba histolytica asparaginyl-trna synthetase (asnrs)
60	d1unda	Alignment	not modelled	6.9	22	Fold: VHP, Villin headpiece domain Superfamily: VHP, Villin headpiece domain Family: VHP, Villin headpiece domain
61	c2ejbA	Alignment	not modelled	6.5	20	PDB header: lyase Chain: A: PDB Molecule: probable aromatic acid decarboxylase; PDBTitle: crystal structure of phenylacrylic acid decarboxylase from2 aquifex aeolicus
62	c2voyK	Alignment	not modelled	6.5	23	PDB header: hydrolase Chain: K: PDB Molecule: sarcoplasmic/endoplasmic reticulum calcium PDBTitle: cryoem model of copa, the copper transporting atpase from2 archaeoglobus fulgidus
63	d2axti1	Alignment	not modelled	6.4	13	Fold: Single transmembrane helix Superfamily: Photosystem II reaction center protein I, Psbl Family: Psbl-like
64	d1jhda1	Alignment	not modelled	6.2	11	Fold: PUA domain-like Superfamily: PUA domain-like Family: ATP sulfurylase N-terminal domain
65	d1oqwa	Alignment	not modelled	6.2	20	Fold: Pili subunits Superfamily: Pili subunits Family: Pilin
66	d2f05a1	Alignment	not modelled	6.2	30	Fold: PAH2 domain Superfamily: PAH2 domain Family: PAH2 domain
67	d1ca1a2	Alignment	not modelled	6.2	11	Fold: Lipase/lipoxygenase domain (PLAT/LH2 domain) Superfamily: Lipase/lipoxygenase domain (PLAT/LH2 domain) Family: Alpha-toxin, C-terminal domain
68	c3kv0A	Alignment	not modelled	6.2	57	PDB header: transport protein Chain: A: PDB Molecule: het-c2; PDBTitle: crystal structure of het-c2: a fungal glycolipid transfer protein2 (gltp)
69	d1swxa	Alignment	not modelled	6.1	30	Fold: Glycolipid transfer protein, GLTP Superfamily: Glycolipid transfer protein, GLTP Family: Glycolipid transfer protein, GLTP
70	d1l0wa3	Alignment	not modelled	6.1	38	Fold: Class II aaRS and biotin synthetases Superfamily: Class II aaRS and biotin synthetases Family: Class II aminoacyl-tRNA synthetase (aaRS)-like, catalytic domain
71	c3rpfC	Alignment	not modelled	5.9	33	PDB header: transferase Chain: C: PDB Molecule: molybdopterin converting factor, subunit 1 (moad); PDBTitle: protein-protein complex of subunit 1 and 2 of molybdopterin-converting2 factor from helicobacter pylori 26695
72	c2pjma	Alignment	not modelled	5.9	25	PDB header: isomerase Chain: A: PDB Molecule: ribose-5-phosphate isomerase a; PDBTitle: structure of ribose 5-phosphate isomerase a from2 methanocaldococcus jannaschii
73	d1c0aa3	Alignment	not modelled	5.9	38	Fold: Class II aaRS and biotin synthetases Superfamily: Class II aaRS and biotin synthetases Family: Class II aminoacyl-tRNA synthetase (aaRS)-like, catalytic domain
74	c1eqrC	Alignment	not modelled	5.8	38	PDB header: ligase Chain: C: PDB Molecule: aspartyl-trna synthetase; PDBTitle: crystal structure of free aspartyl-trna synthetase from2 escherichia coli
75	c3jzdA	Alignment	not modelled	5.7	11	PDB header: oxidoreductase Chain: A: PDB Molecule: iron-containing alcohol dehydrogenase; PDBTitle: crystal structure of putative alcohol dehydrogenase (yp_298327.1) from2 ralstonia eutropha jmp134 at 2.10 a resolution
76	d1qzpa	Alignment	not modelled	5.7	7	Fold: VHP, Villin headpiece domain Superfamily: VHP, Villin headpiece domain Family: VHP, Villin headpiece domain
77	d1eova2	Alignment	not modelled	5.7	38	Fold: Class II aaRS and biotin synthetases Superfamily: Class II aaRS and biotin synthetases Family: Class II aminoacyl-tRNA synthetase (aaRS)-like, catalytic domain
78	c2jwaA	Alignment	not modelled	5.7	21	PDB header: transferase Chain: A: PDB Molecule: receptor tyrosine-protein kinase erbb-2; PDBTitle: erbb2 transmembrane segment dimer spatial structure
						Fold: Class II aaRS and biotin synthetases

79	d1b8aa2	Alignment	not modelled	5.7	63	Superfamily: Class II aaRS and biotin synthetases Family: Class II aminoacyl-tRNA synthetase (aaRS)-like, catalytic domain
80	d1x6va1	Alignment	not modelled	5.7	33	Fold: PUA domain-like Superfamily: PUA domain-like Family: ATP sulfurylase N-terminal domain
81	d1zvpa1	Alignment	not modelled	5.6	22	Fold: Ferredoxin-like Superfamily: ACT-like Family: VC0802-like
82	c3i7fA	Alignment	not modelled	5.6	25	PDB header: ligase Chain: A: PDB Molecule: aspartyl-trna synthetase; PDBTitle: aspartyl trna synthetase from entamoeba histolytica
83	c3bwrC	Alignment	not modelled	5.6	38	PDB header: viral protein Chain: C: PDB Molecule: capsid protein vp1; PDBTitle: sv40 vp1 pentamer in complex with gm1 oligosaccharide
84	c2k6nA	Alignment	not modelled	5.6	22	PDB header: structural protein Chain: A: PDB Molecule: supervillin; PDBTitle: solution structure of human supervillin headpiece, minimized2 average
85	d1uzxa	Alignment	not modelled	5.6	27	Fold: UBC-like Superfamily: UBC-like Family: UEV domain
86	c2i3xA	Alignment	not modelled	5.6	14	PDB header: protein binding Chain: A: PDB Molecule: ablim2 protein; PDBTitle: villin head piece domain of human ablim2
87	c2i3fA	Alignment	not modelled	5.6	30	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: glycolipid transfer-like protein; PDBTitle: crystal structure of a glycolipid transfer-like protein2 from galdieria sulphuraria
88	d1yu5x1	Alignment	not modelled	5.5	22	Fold: VHP, Villin headpiece domain Superfamily: VHP, Villin headpiece domain Family: VHP, Villin headpiece domain
89	c2uwjG	Alignment	not modelled	5.5	42	PDB header: chaperone Chain: G: PDB Molecule: type iii export protein pscg; PDBTitle: structure of the heterotrimeric complex which regulates2 type iii secretion needle formation
90	c3pisA	Alignment	not modelled	5.4	38	PDB header: hydrolase inhibitor Chain: A: PDB Molecule: kazal-type serine protease inhibitor spi-1; PDBTitle: crystal structure of carcinoscorpis rotundicauda serine protease2 inhibitor domain 1
91	d1sva1	Alignment	not modelled	5.4	38	Fold: Nucleoplasmin-like/VP (viral coat and capsid proteins) Superfamily: Group I dsDNA viruses Family: Papovaviridae-like VP
92	d1ujsa	Alignment	not modelled	5.4	11	Fold: VHP, Villin headpiece domain Superfamily: VHP, Villin headpiece domain Family: VHP, Villin headpiece domain
93	c1v55B	Alignment	not modelled	5.3	11	PDB header: oxidoreductase Chain: B: PDB Molecule: cytochrome c oxidase polypeptide ii; PDBTitle: bovine heart cytochrome c oxidase at the fully reduced state
94	d1sbza	Alignment	not modelled	5.3	30	Fold: Homo-oligomeric flavin-containing Cys decarboxylases, HFCD Superfamily: Homo-oligomeric flavin-containing Cys decarboxylases, HFCD Family: Homo-oligomeric flavin-containing Cys decarboxylases, HFCD
95	c3mk7F	Alignment	not modelled	5.1	13	PDB header: oxidoreductase Chain: F: PDB Molecule: cytochrome c oxidase, cbb3-type, subunit p; PDBTitle: the structure of cbb3 cytochrome oxidase
96	c3sokB	Alignment	not modelled	5.1	24	PDB header: cell adhesion Chain: B: PDB Molecule: fimbrial protein; PDBTitle: dichelobacter nodosus pilin fima
97	d2axte1	Alignment	not modelled	5.1	26	Fold: Single transmembrane helix Superfamily: Cytochrome b559 subunits Family: Cytochrome b559 subunits
98	c1h2sB	Alignment	not modelled	5.0	27	PDB header: membrane protein Chain: B: PDB Molecule: sensory rhodopsin ii transducer; PDBTitle: molecular basis of transmembrane signalling by sensory2 rhodopsin ii-transducer complex