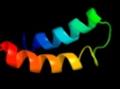
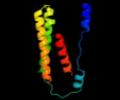
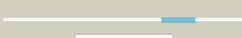
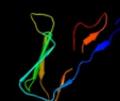
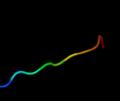
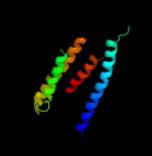
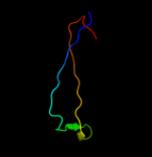
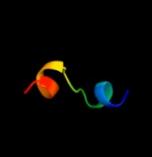
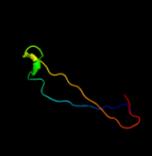
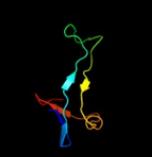


Phyre2

Email	I.a.kelley@imperial.ac.uk
Description	P08369
Date	Wed Jan 25 15:20:13 GMT 2012
Unique Job ID	6947354f1d6119b9

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	d1hnga1	 Alignment		46.1	12	Fold: Immunoglobulin-like beta-sandwich Superfamily: Immunoglobulin Family: V set domains (antibody variable domain-like)
2	c2kr6A_	 Alignment		45.3	31	PDB header: hydrolase Chain: A: PDB Molecule: presenilin-1; PDBTitle: solution structure of presenilin-1 ctf subunit
3	d1v54c_	 Alignment		36.6	27	Fold: Cytochrome c oxidase subunit III-like Superfamily: Cytochrome c oxidase subunit III-like Family: Cytochrome c oxidase subunit III-like
4	c1q8hA_	 Alignment		32.5	45	PDB header: metal binding protein Chain: A: PDB Molecule: osteocalcin; PDBTitle: crystal structure of porcine osteocalcin
5	d1q8ha_	 Alignment		32.5	45	Fold: GLA-domain Superfamily: GLA-domain Family: GLA-domain
6	d1ikpa1	 Alignment		30.5	18	Fold: Concanavalin A-like lectins/glucanases Superfamily: Concanavalin A-like lectins/glucanases Family: Exotoxin A, N-terminal domain
7	c3k3gA_	 Alignment		29.9	21	PDB header: transport protein Chain: A: PDB Molecule: urea transporter; PDBTitle: crystal structure of the urea transporter from desulfovibrio vulgaris2 bound to 1,3-dimethylurea
8	c3kp9A_	 Alignment		26.5	10	PDB header: blood coagulation, oxidoreductase Chain: A: PDB Molecule: vkorc1/thioredoxin domain protein; PDBTitle: structure of a bacterial homolog of vitamin k epoxide reductase
9	d1hnfa1	 Alignment		26.3	18	Fold: Immunoglobulin-like beta-sandwich Superfamily: Immunoglobulin Family: V set domains (antibody variable domain-like)
10	d1q3ma_	 Alignment		25.3	45	Fold: GLA-domain Superfamily: GLA-domain Family: GLA-domain
11	c2vesA_	 Alignment		21.5	17	PDB header: hydrolase Chain: A: PDB Molecule: udp-3-o-[3-hydroxymyristoyl] n-acetylglucosamine PDBTitle: crystal structure of Ipxc from pseudomonas aeruginosa2 complexed with the potent bb-78485 inhibitor

12	d1oria_	Alignment		21.2	12	Fold: S-adenosyl-L-methionine-dependent methyltransferases Superfamily: S-adenosyl-L-methionine-dependent methyltransferases Family: Arginine methyltransferase
13	c3nzkB_	Alignment		20.3	17	PDB header: hydrolase Chain: B: PDB Molecule: udp-3-o-[3-hydroxymyristoyl] n-acetylglucosamine PDBTitle: structure of lpxc from yersinia enterocolitica complexed with chir0902 inhibitor
14	d1qlec_	Alignment		20.0	23	Fold: Cytochrome c oxidase subunit III-like Superfamily: Cytochrome c oxidase subunit III-like Family: Cytochrome c oxidase subunit III-like
15	c2yboA_	Alignment		19.9	21	PDB header: transferase Chain: A: PDB Molecule: methyltransferase; PDBTitle: the x-ray structure of the sam-dependent uroporphyrinogen2 iii methyltransferase nire from pseudomonas aeruginosa in3 complex with sah
16	d1e2wa1	Alignment		19.4	12	Fold: Common fold of diphtheria toxin/transcription factors/cytochrome f Superfamily: Cytochrome f, large domain Family: Cytochrome f, large domain
17	d1g47a1	Alignment		18.3	40	Fold: Glucocorticoid receptor-like (DNA-binding domain) Superfamily: Glucocorticoid receptor-like (DNA-binding domain) Family: LIM domain
18	d1yvra1	Alignment		17.0	33	Fold: alpha-alpha superhelix Superfamily: TROVE domain-like Family: TROVE domain-like
19	d1vf5c1	Alignment		16.9	15	Fold: Common fold of diphtheria toxin/transcription factors/cytochrome f Superfamily: Cytochrome f, large domain Family: Cytochrome f, large domain
20	d1k0ha_	Alignment		16.7	9	Fold: Phage tail proteins Superfamily: Phage tail proteins Family: gpFII-like
21	c3o44G_	Alignment	not modelled	15.9	18	PDB header: toxin Chain: G: PDB Molecule: hemolysin; PDBTitle: crystal structure of the vibrio cholerae cytolysin (hlya) heptameric2 pore
22	c1xezA_	Alignment	not modelled	15.6	18	PDB header: toxin Chain: A: PDB Molecule: hemolysin; PDBTitle: crystal structure of the vibrio cholerae cytolysin (hlya)2 pro-toxin with octylglucoside bound
23	c1e2vB_	Alignment	not modelled	15.3	12	PDB header: electron transport proteins Chain: B: PDB Molecule: cytochrome f; PDBTitle: n153q mutant of cytochrome f from chlamydomonas reinhardtii
24	c3c5oD_	Alignment	not modelled	15.2	9	PDB header: structural genomics, unknown function Chain: D: PDB Molecule: upf0311 protein rpa1785; PDBTitle: crystal structure of the conserved protein of unknown function rpa17852 from rhodospseudomonas palustris
25	c2v11A_	Alignment	not modelled	14.8	23	PDB header: unknown function Chain: A: PDB Molecule: hypothetical protein; PDBTitle: structure of the conserved hypothetical protein vc1805 from2 pathogenicity island vpi-2 of vibrio cholerae o1 biovar3 eltor str. n16961 shares structural homology with the4 human p32 protein
26	c2p8zS_	Alignment	not modelled	14.7	63	PDB header: translation Chain: S: PDB Molecule: elongation factor tu-b; PDBTitle: fitted structure of adpr-eef2 in the 80s:adpr-2 eef2:gdppp:sordarin cryo-em reconstruction
27	c1q90A_	Alignment	not modelled	14.4	12	PDB header: photosynthesis Chain: A: PDB Molecule: apocytochrome f; PDBTitle: structure of the cytochrome b6f (plastohydroquinone : plastocyanin2 oxidoreductase) from chlamydomonas reinhardtii
28	c2rd4B_	Alignment	not modelled	13.7	6	PDB header: membrane protein/transport protein Chain: B: PDB Molecule: upf0092 membrane protein yajc;

28	c2r00b_	Alignment	not modelled	13.7	0	PDBTitle: x-ray crystal structure of acrb in complex with a novel2 transmembrane helix.
29	c1ikqA_	Alignment	not modelled	13.6	18	PDB header: transferase Chain: A: PDB Molecule: exotoxin a; PDBTitle: pseudomonas aeruginosa exotoxin a, wild type
30	d1ci3m1_	Alignment	not modelled	13.6	15	Fold: Common fold of diphtheria toxin/transcription factors/cytochrome f Superfamily: Cytochrome f, large domain Family: Cytochrome f, large domain
31	c3g7gG_	Alignment	not modelled	13.4	17	PDB header: structural genomics, unknown function Chain: G: PDB Molecule: upf0311 protein ca_c3321; PDBTitle: crystal structure of the protein with unknown function from2 clostridium acetobutylicum atcc 824
32	d1tu2b1_	Alignment	not modelled	12.6	15	Fold: Common fold of diphtheria toxin/transcription factors/cytochrome f Superfamily: Cytochrome f, large domain Family: Cytochrome f, large domain
33	c2w56B_	Alignment	not modelled	12.6	20	PDB header: unknown function Chain: B: PDB Molecule: vc0508; PDBTitle: structure of the hypothetical protein vc0508 from vibrio cholerae2 vsp-ii pathogenicity island
34	d1hcza1_	Alignment	not modelled	11.9	12	Fold: Common fold of diphtheria toxin/transcription factors/cytochrome f Superfamily: Cytochrome f, large domain Family: Cytochrome f, large domain
35	c3dwaA_	Alignment	not modelled	11.8	63	PDB header: biosynthetic protein Chain: A: PDB Molecule: elongation factor tu-b; PDBTitle: transition-state model conformation of the switch i region2 fitted into the cryo-em map of the eef2.80s.alf4.gdp3 complex
36	c3demB_	Alignment	not modelled	11.6	6	PDB header: hydrolase Chain: B: PDB Molecule: complement factor masp-3; PDBTitle: cub1-egf-cub2 domain of human masp-1/3
37	c2e75C_	Alignment	not modelled	11.6	15	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
38	d1iwga8_	Alignment	not modelled	11.5	13	Fold: Multidrug efflux transporter AcrB transmembrane domain Superfamily: Multidrug efflux transporter AcrB transmembrane domain Family: Multidrug efflux transporter AcrB transmembrane domain
39	c2k9pA_	Alignment	not modelled	11.5	25	PDB header: membrane protein Chain: A: PDB Molecule: pheromone alpha factor receptor; PDBTitle: structure of tm1_tm2 in lppg micelles
40	d3c8ya2_	Alignment	not modelled	11.1	18	Fold: beta-Grasp (ubiquitin-like) Superfamily: 2Fe-2S ferredoxin-like Family: 2Fe-2S ferredoxin domains from multidomain proteins
41	d1v97a1_	Alignment	not modelled	10.5	46	Fold: CO dehydrogenase ISP C-domain like Superfamily: CO dehydrogenase ISP C-domain like Family: CO dehydrogenase ISP C-domain like
42	d1jb0L_	Alignment	not modelled	10.5	27	Fold: Photosystem I reaction center subunit XI, PsaL Superfamily: Photosystem I reaction center subunit XI, PsaL Family: Photosystem I reaction center subunit XI, PsaL
43	c1ctmA_	Alignment	not modelled	10.5	14	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
44	d1mtyg_	Alignment	not modelled	10.3	27	Fold: Open three-helical up-and-down bundle Superfamily: Methane monooxygenase hydrolase, gamma subunit Family: Methane monooxygenase hydrolase, gamma subunit
45	d3cx5e2_	Alignment	not modelled	9.8	24	Fold: Single transmembrane helix Superfamily: ISP transmembrane anchor Family: ISP transmembrane anchor
46	c2k6zA_	Alignment	not modelled	9.8	25	PDB header: metal transport Chain: A: PDB Molecule: putative uncharacterized protein ttha1943; PDBTitle: solution structures of copper loaded form pcua (trans2 conformation of the peptide bond involving the nitrogen of3 p14)
47	d1m56c_	Alignment	not modelled	9.6	15	Fold: Cytochrome c oxidase subunit III-like Superfamily: Cytochrome c oxidase subunit III-like Family: Cytochrome c oxidase subunit III-like
48	d1mhyg_	Alignment	not modelled	9.5	33	Fold: Open three-helical up-and-down bundle Superfamily: Methane monooxygenase hydrolase, gamma subunit Family: Methane monooxygenase hydrolase, gamma subunit
49	c2nvoA_	Alignment	not modelled	9.4	33	PDB header: rna binding protein Chain: A: PDB Molecule: ro sixty-related protein, rsr; PDBTitle: crystal structure of deinococcus radiodurans ro (rsr) protein
50	c2gutA_	Alignment	not modelled	9.1	25	PDB header: transcription Chain: A: PDB Molecule: arc/mediator, positive cofactor 2 glutamine/q- PDBTitle: solution structure of the trans-activation domain of the2 human co-activator arc105
51	c3lrcC_	Alignment	not modelled	8.9	11	PDB header: transport protein Chain: C: PDB Molecule: arginine/agmatine antiporter; PDBTitle: structure of e. coli adic (p1)
52	c1dnuB_	Alignment	not modelled	8.8	23	PDB header: oxidoreductase Chain: B: PDB Molecule: myeloperoxidase; PDBTitle: structural analyses of human myeloperoxidase-thiocyanate complex
53	c2oarA_	Alignment	not modelled	8.7	17	PDB header: membrane protein Chain: A: PDB Molecule: large-conductance mechanosensitive channel; PDBTitle: mechanosensitive channel of large conductance (mscl) Fold: Argininosuccinate synthetase, C-terminal domain

54	d1k92a2	Alignment	not modelled	8.6	30	Superfamily: Argininosuccinate synthetase, C-terminal domain Family: Argininosuccinate synthetase, C-terminal domain
55	c2iv1j	Alignment	not modelled	8.4	36	PDB header: lyase Chain: J; PDB Molecule: cyanate hydratase; PDBTitle: site directed mutagenesis of key residues involved in the2 catalytic mechanism of cyanase
56	c1orhA	Alignment	not modelled	8.4	13	PDB header: transferase Chain: A; PDB Molecule: protein arginine n-methyltransferase 1; PDBTitle: structure of the predominant protein arginine methyltransferase prmt1
57	c2jxmB	Alignment	not modelled	8.2	12	PDB header: electron transport Chain: B; PDB Molecule: cytochrome f; PDBTitle: ensemble of twenty structures of the prochlorothrix2 hollandica plastocyanin- cytochrome f complex
58	d1x9la	Alignment	not modelled	8.1	25	Fold: Common fold of diphtheria toxin/transcription factors/cytochrome f Superfamily: DR1885-like metal-binding protein Family: DR1885-like metal-binding protein
59	c1tu2B	Alignment	not modelled	7.8	15	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 and3 plastocyanin, 10 structures
60	d1vava	Alignment	not modelled	7.7	25	Fold: Concanavalin A-like lectins/glucanases Superfamily: Concanavalin A-like lectins/glucanases Family: Alginate lyase
61	d2i5nl1	Alignment	not modelled	7.7	14	Fold: Bacterial photosystem II reaction centre, L and M subunits Superfamily: Bacterial photosystem II reaction centre, L and M subunits Family: Bacterial photosystem II reaction centre, L and M subunits
62	c3c25A	Alignment	not modelled	7.6	21	PDB header: hydrolase/dna Chain: A; PDB Molecule: noti restriction endonuclease; PDBTitle: crystal structure of noti restriction endonuclease bound to cognate2 dna
63	c2l4wA	Alignment	not modelled	7.4	29	PDB header: protein transport Chain: A; PDB Molecule: uncharacterized protein; PDBTitle: nmr structure of the xanthomonas virb7
64	d1k8ba	Alignment	not modelled	7.4	18	Fold: Ribosome binding domain-like Superfamily: Translation initiation factor 2 beta, aIF2beta, N-terminal domain Family: Translation initiation factor 2 beta, aIF2beta, N-terminal domain
65	d2f41a1	Alignment	not modelled	7.3	15	Fold: Thioesterase/thiol ester dehydrase-isomerase Superfamily: Thioesterase/thiol ester dehydrase-isomerase Family: Paal/Ydil-like
66	d1t3qa1	Alignment	not modelled	7.1	20	Fold: CO dehydrogenase ISP C-domain like Superfamily: CO dehydrogenase ISP C-domain like Family: CO dehydrogenase ISP C-domain like
67	c2kqtD	Alignment	not modelled	7.1	26	PDB header: transport protein Chain: D; PDB Molecule: m2 protein; PDBTitle: solid-state nmr structure of the m2 transmembrane peptide of the2 influenza a virus in dmpl lipid bilayers bound to deuterated3 amantadine
68	c2kqtA	Alignment	not modelled	7.1	26	PDB header: transport protein Chain: A; PDB Molecule: m2 protein; PDBTitle: solid-state nmr structure of the m2 transmembrane peptide of the2 influenza a virus in dmpl lipid bilayers bound to deuterated3 amantadine
69	c2kqtB	Alignment	not modelled	7.1	26	PDB header: transport protein Chain: B; PDB Molecule: m2 protein; PDBTitle: solid-state nmr structure of the m2 transmembrane peptide of the2 influenza a virus in dmpl lipid bilayers bound to deuterated3 amantadine
70	c2kqtC	Alignment	not modelled	7.1	26	PDB header: transport protein Chain: C; PDB Molecule: m2 protein; PDBTitle: solid-state nmr structure of the m2 transmembrane peptide of the2 influenza a virus in dmpl lipid bilayers bound to deuterated3 amantadine
71	d1mv8a1	Alignment	not modelled	7.1	36	Fold: 6-phosphogluconate dehydrogenase C-terminal domain-like Superfamily: 6-phosphogluconate dehydrogenase C-terminal domain-like Family: UDP-glucose/GDP-mannose dehydrogenase dimerisation domain
72	d1nt0a2	Alignment	not modelled	7.1	13	Fold: CUB-like Superfamily: Spermadhesin, CUB domain Family: Spermadhesin, CUB domain
73	c2lhuA	Alignment	not modelled	7.0	50	PDB header: structural protein Chain: A; PDB Molecule: mybpc3 protein; PDBTitle: structural insight into the unique cardiac myosin binding protein-c2 motif: a partially folded domain
74	c2yvxD	Alignment	not modelled	7.0	17	PDB header: transport protein Chain: D; PDB Molecule: mg2+ transporter mgte; PDBTitle: crystal structure of magnesium transporter mgte
75	d2axth1	Alignment	not modelled	6.9	28	Fold: Single transmembrane helix Superfamily: Photosystem II 10 kDa phosphoprotein PsbH Family: PsbH-like
76	d2oiea1	Alignment	not modelled	6.9	58	Fold: all-alpha NTP pyrophosphatases Superfamily: all-alpha NTP pyrophosphatases Family: MazG-like
77	c3o0rB	Alignment	not modelled	6.8	6	PDB header: immune system/oxidoreductase Chain: B; PDB Molecule: nitric oxide reductase subunit b; PDBTitle: crystal structure of nitric oxide reductase from pseudomonas2 aeruginosa in complex with antibody fragment
78	d1zxia1	Alignment	not modelled	6.8	25	Fold: CO dehydrogenase ISP C-domain like Superfamily: CO dehydrogenase ISP C-domain like Family: CO dehydrogenase ISP C-domain like

79	c1nyiC_	Alignment	not modelled	6.8	28	PDB header: viral protein Chain: C: PDB Molecule: matrix protein m2; PDBTitle: the closed state structure of m2 protein h+ channel by2 solid state nmr spectroscopy
80	c1mp6A_	Alignment	not modelled	6.8	28	PDB header: membrane protein Chain: A: PDB Molecule: matrix protein m2; PDBTitle: structure of the transmembrane region of the m2 protein h+2 channel by solid state nmr spectroscopy
81	c1nyiB_	Alignment	not modelled	6.8	28	PDB header: viral protein Chain: B: PDB Molecule: matrix protein m2; PDBTitle: the closed state structure of m2 protein h+ channel by2 solid state nmr spectroscopy
82	c1nyiA_	Alignment	not modelled	6.8	28	PDB header: viral protein Chain: A: PDB Molecule: matrix protein m2; PDBTitle: the closed state structure of m2 protein h+ channel by2 solid state nmr spectroscopy
83	c1nyiD_	Alignment	not modelled	6.8	28	PDB header: viral protein Chain: D: PDB Molecule: matrix protein m2; PDBTitle: the closed state structure of m2 protein h+ channel by2 solid state nmr spectroscopy
84	c3pojA_	Alignment	not modelled	6.7	7	PDB header: hydrolase Chain: A: PDB Molecule: mannan-binding lectin serine protease 1; PDBTitle: crystal structure of masp-1 cub2 domain bound to ethylamine
85	d2c5ra1	Alignment	not modelled	6.7	25	Fold: Phage replication organizer domain Superfamily: Phage replication organizer domain Family: Phage replication organizer domain
86	d1jroa1	Alignment	not modelled	6.6	50	Fold: CO dehydrogenase ISP C-domain like Superfamily: CO dehydrogenase ISP C-domain like Family: CO dehydrogenase ISP C-domain like
87	c1ds5F_	Alignment	not modelled	6.6	45	PDB header: transferase Chain: F: PDB Molecule: casein kinase, beta chain; PDBTitle: dimeric crystal structure of the alpha subunit in complex2 with two beta peptides mimicking the architecture of the3 tetrameric protein kinase ck2 holoenzyme.
88	c2q4pA_	Alignment	not modelled	6.6	32	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: protein rs21-c6; PDBTitle: ensemble refinement of the crystal structure of protein from mus2 musculus mn.29898
89	d2a3qa1	Alignment	not modelled	6.6	32	Fold: all-alpha NTP pyrophosphatases Superfamily: all-alpha NTP pyrophosphatases Family: MazG-like
90	c2q9lA_	Alignment	not modelled	6.4	42	PDB header: hydrolase Chain: A: PDB Molecule: hypothetical protein; PDBTitle: crystal structure of imazg from vibrio dat 722: ctag-imazg (p43212)
91	c2jttD_	Alignment	not modelled	6.3	13	PDB header: calcium binding protein/antitumor protei Chain: D: PDB Molecule: calcyclin-binding protein; PDBTitle: solution structure of calcium loaded s100a6 bound to c-2 terminal siah-1 interacting protein
92	d2axti1	Alignment	not modelled	6.3	23	Fold: Single transmembrane helix Superfamily: Photosystem II reaction center protein I, Psbl Family: Psbl-like
93	c3nfgG_	Alignment	not modelled	6.3	34	PDB header: transcription Chain: G: PDB Molecule: dna-directed rna polymerase i subunit rpa49; PDBTitle: crystal structure of dimerization module of rna polymerase i2 subcomplex a49/a34.5
94	c3s88J_	Alignment	not modelled	6.3	20	PDB header: immune system/viral protein Chain: J: PDB Molecule: envelope glycoprotein; PDBTitle: crystal structure of sudan ebolavirus glycoprotein (strain gulu) bound2 to 16f6
95	c3dh4A_	Alignment	not modelled	6.3	8	PDB header: transport protein Chain: A: PDB Molecule: sodium/glucose cotransporter; PDBTitle: crystal structure of sodium/sugar symporter with bound galactose from2 vibrio parahaemolyticus
96	c2f3xA_	Alignment	not modelled	6.2	15	PDB header: gene regulation Chain: A: PDB Molecule: transcription factor fapr; PDBTitle: crystal structure of fapr (in complex with effector)- a2 global regulator of fatty acid biosynthesis in b. subtilis
97	c2qmaB_	Alignment	not modelled	6.1	25	PDB header: transferase Chain: B: PDB Molecule: diaminobutyrate-pyruvate transaminase and l-2,4- PDBTitle: crystal structure of glutamate decarboxylase domain of2 diaminobutyrate-pyruvate transaminase and l-2,4-diaminobutyrate3 decarboxylase from vibrio parahaemolyticus
98	c3rceA_	Alignment	not modelled	6.1	14	PDB header: transferase/peptide Chain: A: PDB Molecule: oligosaccharide transferase to n-glycosylate proteins; PDBTitle: bacterial oligosaccharyltransferase pglb
99	c1yvrA_	Alignment	not modelled	6.1	33	PDB header: rna binding protein Chain: A: PDB Molecule: 60-kda ss-a/ro ribonucleoprotein; PDBTitle: ro autoantigen