



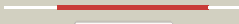
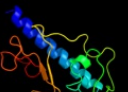
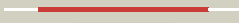
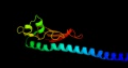



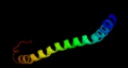

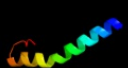

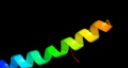






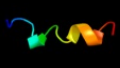
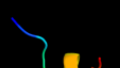
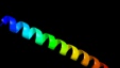








Phyre2

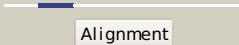
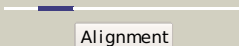

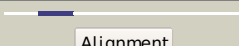
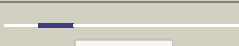

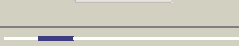
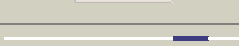
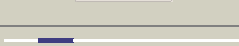
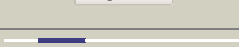
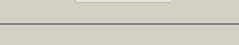
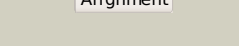
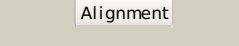
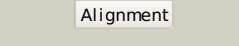
Email	l.a.kelley@imperial.ac.uk
Description	P41442
Date	Thu Jan 5 12:01:33 GMT 2012
Unique Job ID	c8917067a1085351

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	d1t92a_	 Alignment		99.9	64	Fold: Pili subunits Superfamily: Pili subunits Family: Pseudopilin
2	c2kepA_	 Alignment		99.9	53	PDB header: transport protein Chain: A: PDB Molecule: general secretion pathway protein g; PDBTitle: solution structure of xcpt, the main component of the type 22 secretion system of pseudomonas aeruginosa
3	c3fu1B_	 Alignment		99.9	64	PDB header: protein transport Chain: B: PDB Molecule: general secretion pathway protein g; PDBTitle: crystal structure of the major pseudopilin from the type 2 secretion2 system of vibrio cholerae
4	d1oqwa_	 Alignment		99.7	16	Fold: Pili subunits Superfamily: Pili subunits Family: Pilin
5	d2pila_	 Alignment		99.7	17	Fold: Pili subunits Superfamily: Pili subunits Family: Pilin
6	c3sokB_	 Alignment		99.7	21	PDB header: cell adhesion Chain: B: PDB Molecule: fimbrial protein; PDBTitle: dichelobacter nodosus pilin fima
7	d1qvea_	 Alignment		77.7	12	Fold: Pili subunits Superfamily: Pili subunits Family: Pilin
8	d1x6za1	 Alignment		68.4	6	Fold: Pili subunits Superfamily: Pili subunits Family: Pilin
9	d1pbya4	 Alignment		60.2	60	Fold: Immunoglobulin-like beta-sandwich Superfamily: E set domains Family: Quinohemoprotein amine dehydrogenase A chain, domains 4 and 5
10	c1pbyA_	 Alignment		53.7	60	PDB header: oxidoreductase Chain: A: PDB Molecule: quinohemoprotein amine dehydrogenase 60 kda PDBTitle: structure of the phenylhydrazine adduct of the2 quinohemoprotein amine dehydrogenase from paracoccus3 denitrificans at 1.7 a resolution
11	c4a18U_	 Alignment		36.8	20	PDB header: ribosome Chain: U: PDB Molecule: rpl13; PDBTitle: t.thermophila 60s ribosomal subunit in complex with initiation2 factor 6. this file contains 26s rrna and proteins of molecule 1

12	c2wsfG_	Alignment		31.6	13	PDB header: photosynthesis Chain: G: PDB Molecule: photosystem i reaction center subunit v, PDBTitle: improved model of plant photosystem i
13	c3u5eL_	Alignment		31.5	55	PDB header: ribosome Chain: L: PDB Molecule: 60s ribosomal protein l13-a; PDBTitle: the structure of the eukaryotic ribosome at 3.0 resolution
14	d1r3jc_	Alignment		30.1	11	Fold: Voltage-gated potassium channels Superfamily: Voltage-gated potassium channels Family: Voltage-gated potassium channels
15	d1m56d_	Alignment		27.6	29	Fold: Single transmembrane helix Superfamily: Bacterial aa3 type cytochrome c oxidase subunit IV Family: Bacterial aa3 type cytochrome c oxidase subunit IV
16	d1f6ga_	Alignment		27.2	12	Fold: Voltage-gated potassium channels Superfamily: Voltage-gated potassium channels Family: Voltage-gated potassium channels
17	c2kb1A_	Alignment		23.3	6	PDB header: membrane protein Chain: A: PDB Molecule: wsk3; PDBTitle: nmr studies of a channel protein without membrane:2 structure and dynamics of water-solubilized kcsa
18	c3lw5K_	Alignment		23.1	22	PDB header: photosynthesis Chain: K: PDB Molecule: photosystem i reaction center subunit x psak; PDBTitle: improved model of plant photosystem i
19	c1btsA_	Alignment		20.7	25	PDB header: transmembrane protein Chain: A: PDB Molecule: band 3 anion transport protein; PDBTitle: the solution structures of the first and second2 transmembrane-spanning segments of band 3
20	c1bttA_	Alignment		20.7	25	PDB header: transmembrane protein Chain: A: PDB Molecule: band 3 anion transport protein; PDBTitle: the solution structures of the first and second2 transmembrane-spanning segments of band 3
21	d3dtub2	Alignment	not modelled	16.8	30	Fold: Transmembrane helix hairpin Superfamily: Cytochrome c oxidase subunit II-like, transmembrane region Family: Cytochrome c oxidase subunit II-like, transmembrane region
22	d1otsa_	Alignment	not modelled	16.1	20	Fold: Clc chloride channel Superfamily: Clc chloride channel Family: Clc chloride channel
23	c3jyzA_	Alignment	not modelled	15.7	0	PDB header: structural protein Chain: A: PDB Molecule: type iv pilin structural subunit; PDBTitle: crystal structure of pseudomonas aeruginosa (strain:2 pa110594) typeiv pilin in space group p41212
24	c2kxeA_	Alignment	not modelled	15.1	27	PDB header: transferase Chain: A: PDB Molecule: dna polymerase ii small subunit; PDBTitle: n-terminal domain of the dp1 subunit of an archaeal d-family dna2 polymerase
25	c2o01G_	Alignment	not modelled	14.4	13	PDB header: photosynthesis Chain: G: PDB Molecule: photosystem i reaction center subunit v, PDBTitle: the structure of a plant photosystem i supercomplex at 3.42 angstrom resolution
26	d1oqva_	Alignment	not modelled	13.7	20	Fold: Pili subunits Superfamily: Pili subunits Family: TcpA-like pilin
27	c2qksA_	Alignment	not modelled	13.0	21	PDB header: metal transport Chain: A: PDB Molecule: kir3.1-prokaryotic kir channel chimera; PDBTitle: crystal structure of a kir3.1-prokaryotic kir channel chimera
28	d2a9ha1	Alignment	not modelled	12.7	14	Fold: Voltage-gated potassium channels Superfamily: Voltage-gated potassium channels Family: Voltage-gated potassium channels

29	c2ljcA	Alignment	not modelled	12.5	31	PDB header: transport protein/inhibitor Chain: A: PDB Molecule: m2 protein, bm2 protein chimera; PDBTitle: structure of the influenza am2-bm2 chimeric channel bound to2 rimantadine
30	c2wscK	Alignment	not modelled	10.8	31	PDB header: photosynthesis Chain: K: PDB Molecule: photosystem i reaction center subunit psak, PDBTitle: improved model of plant photosystem i
31	c1qlcB	Alignment	not modelled	10.0	13	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
32	c1ar1B	Alignment	not modelled	10.0	13	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
33	c2k21A	Alignment	not modelled	9.7	10	PDB header: membrane protein Chain: A: PDB Molecule: potassium voltage-gated channel subfamily e PDBTitle: nmr structure of human kcne1 in 1mpg micelles at ph 6.0 and2 40 degree c
34	c2hg5D	Alignment	not modelled	9.5	9	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
35	c1afoB	Alignment	not modelled	8.8	21	PDB header: integral membrane protein Chain: B: PDB Molecule: glycophorin a; PDBTitle: dimeric transmembrane domain of human glycophorin a, nmr,2 20 structures
36	c2j7aC	Alignment	not modelled	7.7	19	PDB header: oxidoreductase Chain: C: PDB Molecule: cytochrome c quinol dehydrogenase nrfh; PDBTitle: crystal structure of cytochrome c nitrite reductase nrfa2 complex from desulfovibrio vulgaris
37	c2jo1A	Alignment	not modelled	7.7	36	PDB header: hydrolase regulator Chain: A: PDB Molecule: phospholemman; PDBTitle: structure of the na,k-atpase regulatory protein fxyd1 in2 micelles
38	c2kadB	Alignment	not modelled	7.6	31	PDB header: membrane protein Chain: B: PDB Molecule: transmembrane peptide of matrix protein 2; PDBTitle: magic-angle-spinning solid-state nmr structure of influenza2 a m2 transmembrane domain
39	c2kadC	Alignment	not modelled	7.6	31	PDB header: membrane protein Chain: C: PDB Molecule: transmembrane peptide of matrix protein 2; PDBTitle: magic-angle-spinning solid-state nmr structure of influenza2 a m2 transmembrane domain
40	c2kadD	Alignment	not modelled	7.6	31	PDB header: membrane protein Chain: D: PDB Molecule: transmembrane peptide of matrix protein 2; PDBTitle: magic-angle-spinning solid-state nmr structure of influenza2 a m2 transmembrane domain
41	c2kadA	Alignment	not modelled	7.6	31	PDB header: membrane protein Chain: A: PDB Molecule: transmembrane peptide of matrix protein 2; PDBTitle: magic-angle-spinning solid-state nmr structure of influenza2 a m2 transmembrane domain
42	c3ifxB	Alignment	not modelled	7.5	10	PDB header: membrane protein Chain: B: PDB Molecule: voltage-gated potassium channel; PDBTitle: crystal structure of the spin-labeled kcsa mutant v48r1
43	d3ehbb2	Alignment	not modelled	7.4	18	Fold: Transmembrane helix hairpin Superfamily: Cytochrome c oxidase subunit II-like, transmembrane region Family: Cytochrome c oxidase subunit II-like, transmembrane region
44	c1m57H	Alignment	not modelled	7.0	27	PDB header: oxidoreductase Chain: H: PDB Molecule: cytochrome c oxidase; PDBTitle: structure of cytochrome c oxidase from rhodobacter2 sphaeroides (eq(i-286) mutant))
45	c2jp3A	Alignment	not modelled	7.0	21	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
46	c2jwaA	Alignment	not modelled	6.9	22	PDB header: transferase Chain: A: PDB Molecule: receptor tyrosine-protein kinase erbb-2; PDBTitle: erbb2 transmembrane segment dimer spatial structure
47	c2qzbB	Alignment	not modelled	6.7	47	PDB header: structural genomics, unknown function Chain: B: PDB Molecule: uncharacterized protein yfey; PDBTitle: crystal structure of the uncharacterized protein yfey from escherichia2 coli
48	c2kqtA	Alignment	not modelled	6.5	31	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 dmcp lipid bilayers bound to deuterated3 amantadine
49	c1nyjB	Alignment	not modelled	6.5	31	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
50	c2kqtC	Alignment	not modelled	6.5	31	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 dmcp lipid bilayers bound to deuterated3 amantadine
51	c2kqtD	Alignment	not modelled	6.5	31	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 dmcp lipid bilayers bound to deuterated3 amantadine

52	c1nyjA_	 Alignment	not modelled	6.5	31	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
53	c1mp6A_	 Alignment	not modelled	6.5	31	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
54	c1nyjC_	 Alignment	not modelled	6.5	31	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
55	c1nyjD_	 Alignment	not modelled	6.5	31	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
56	c2kqtB_	 Alignment	not modelled	6.5	31	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 dmpe lipid bilayers bound to deuterated3 amantadine
57	c2kncB_	 Alignment	not modelled	6.5	21	PDB header: cell adhesion Chain: B: PDB Molecule: integrin beta-3; PDBTitle: platelet integrin alphaIIb-beta3 transmembrane-cytoplasmic2 heterocomplex
58	d1az3a_	 Alignment	not modelled	6.5	44	Fold: Restriction endonuclease-like Superfamily: Restriction endonuclease-like Family: Restriction endonuclease EcoRV
59	c2gs0B_	 Alignment	not modelled	6.4	29	PDB header: transcription Chain: B: PDB Molecule: cellular tumor antigen p53; PDBTitle: nmr structure of the complex between the ph domain of the2 tfb1 subunit from tfiih and the activation domain of p53
60	c2bnoA_	 Alignment	not modelled	5.7	7	PDB header: oxidoreductase Chain: A: PDB Molecule: epoxidase; PDBTitle: the structure of hydroxypropylphosphonic acid epoxidase2 from s. wedmorenisi.
61	c3orgB_	 Alignment	not modelled	5.7	19	PDB header: transport protein Chain: B: PDB Molecule: cmclc; PDBTitle: crystal structure of a eukaryotic clc transporter
62	d1ehkb2	 Alignment	not modelled	5.7	28	Fold: Transmembrane helix hairpin Superfamily: Cytochrome c oxidase subunit II-like, transmembrane region Family: Cytochrome c oxidase subunit II-like, transmembrane region
63	c3jycA_	 Alignment	not modelled	5.7	14	PDB header: metal transport Chain: A: PDB Molecule: inward-rectifier k+ channel kir2.2; PDBTitle: crystal structure of the eukaryotic strong inward-rectifier2 k+ channel kir2.2 at 3.1 angstrom resolution
64	c2l2ta_	 Alignment	not modelled	5.2	21	PDB header: membrane protein Chain: A: PDB Molecule: receptor tyrosine-protein kinase erbb-4; PDBTitle: solution nmr structure of the erbb4 dimeric membrane domain
65	d1fftb2	 Alignment	not modelled	5.0	16	Fold: Transmembrane helix hairpin Superfamily: Cytochrome c oxidase subunit II-like, transmembrane region Family: Cytochrome c oxidase subunit II-like, transmembrane region