

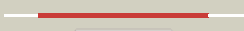


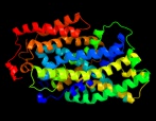











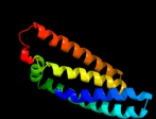

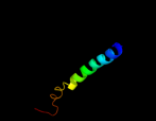

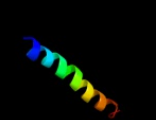


Phyre2

Email	l.a.kelley@imperial.ac.uk
Description	Q47689
Date	Thu Jan 5 12:37:03 GMT 2012
Unique Job ID	97e11cfa27354db3

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c3giaA_	 Alignment		100.0	16	PDB header: transport protein Chain: A: PDB Molecule: uncharacterized protein mj0609; PDBTitle: crystal structure of apct transporter
2	c3lrcC_	 Alignment		100.0	21	PDB header: transport protein Chain: C: PDB Molecule: arginine/agmatine antiporter; PDBTitle: structure of e. coli adic (p1)
3	c2jlnA_	 Alignment		99.9	11	PDB header: membrane protein Chain: A: PDB Molecule: mhp1; PDBTitle: structure of mhp1, a nucleobase-cation-symport-1 family2 transporter
4	c2xq2A_	 Alignment		99.3	9	PDB header: transport protein Chain: A: PDB Molecule: sodium/glucose cotransporter; PDBTitle: structure of the k294a mutant of vsgl
5	c3dh4A_	 Alignment		99.2	10	PDB header: transport protein Chain: A: PDB Molecule: sodium/glucose cotransporter; PDBTitle: crystal structure of sodium/sugar symporter with bound galactose from2 vibrio parahaemolyticus
6	d2a65a1	 Alignment		97.3	14	Fold: SNF-like Superfamily: SNF-like Family: SNF-like
7	c2w8aC_	 Alignment		96.1	10	PDB header: membrane protein Chain: C: PDB Molecule: glycine betaine transporter betp; PDBTitle: crystal structure of the sodium-coupled glycine betaine2 symporter betp from corynebacterium glutamicum with bound3 substrate
8	c3hfxA_	 Alignment		79.0	10	PDB header: transport protein Chain: A: PDB Molecule: l-carnitine/gamma-butyrobetaine antiporter; PDBTitle: crystal structure of carnitine transporter
9	c3m7bA_	 Alignment		57.0	12	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: tellurite resistance protein teha homolog; PDBTitle: crystal structure of plant slac1 homolog teha
10	c2kncA_	 Alignment		46.2	8	PDB header: cell adhesion Chain: A: PDB Molecule: integrin alpha-iiB; PDBTitle: platelet integrin alfaIIB-beta3 transmembrane-cytoplasmic2 heterocomplex
11	c2rddB_	 Alignment		40.6	26	PDB header: membrane protein/transport protein Chain: B: PDB Molecule: upf0092 membrane protein yajc; PDBTitle: x-ray crystal structure of acrb in complex with a novel2 transmembrane helix.

28	d3dwa1	Alignment	not modelled	13.3	12	Superfamily: Metl-like Family: Metl-like
29	d1jt8a	Alignment	not modelled	13.2	21	Fold: OB-fold Superfamily: Nucleic acid-binding proteins Family: Cold shock DNA-binding domain-like
30	c3cwbQ	Alignment	not modelled	13.1	17	PDB header: oxidoreductase Chain: Q: PDB Molecule: mitochondrial cytochrome c1, heme protein; PDBTitle: chicken cytochrome bc1 complex inhibited by an iodinated analogue of2 the polyketide crocacin-d
31	c3aqpB	Alignment	not modelled	13.0	11	PDB header: membrane protein Chain: B: PDB Molecule: probable secdf protein-export membrane protein; PDBTitle: crystal structure of secdf, a translocon-associated membrane protein,2 from thermus thrmophilus
32	d1iwga8	Alignment	not modelled	12.5	9	Fold: Multidrug efflux transporter AcrB transmembrane domain Superfamily: Multidrug efflux transporter AcrB transmembrane domain Family: Multidrug efflux transporter AcrB transmembrane domain
33	c3ixzA	Alignment	not modelled	11.8	12	PDB header: hydrolase Chain: A: PDB Molecule: potassium-transporting atpase alpha; PDBTitle: pig gastric h+/k+-atpase complexed with aluminium fluoride
34	d2yvxa3	Alignment	not modelled	11.8	19	Fold: MgtE membrane domain-like Superfamily: MgtE membrane domain-like Family: MgtE membrane domain-like
35	d1niga	Alignment	not modelled	11.8	21	Fold: Ferritin-like Superfamily: Cobalamin adenosyltransferase-like Family: Hypothetical protein Ta1238
36	d1pv7a	Alignment	not modelled	11.4	10	Fold: MFS general substrate transporter Superfamily: MFS general substrate transporter Family: LacY-like proton/sugar symporter
37	c3rkoK	Alignment	not modelled	11.3	12	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
38	c1qcrD	Alignment	not modelled	11.2	17	PDB header: PDB COMPND:
39	c2e2sA	Alignment	not modelled	11.1	11	PDB header: toxin Chain: A: PDB Molecule: agelenin; PDBTitle: solution structure of agelenin, an insecticidal peptide2 from the venom of agelena opulenta
40	c2k21A	Alignment	not modelled	11.1	20	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
41	c2cpbA	Alignment	not modelled	10.8	29	PDB header: viral protein Chain: A: PDB Molecule: m13 major coat protein; PDBTitle: solution nmr structures of the major coat protein of2 filamentous bacteriophage m13 solubilized in3 dodecylphosphocholine micelles, 25 lowest energy structures
42	c2k1kB	Alignment	not modelled	10.8	17	PDB header: signaling protein Chain: B: PDB Molecule: ephrin type-a receptor 1; PDBTitle: nmr structures of dimeric transmembrane domain of the2 receptor tyrosine kinase epha1 in lipid bicelles at ph 4.3
43	c2k1lB	Alignment	not modelled	10.8	17	PDB header: signaling protein Chain: B: PDB Molecule: ephrin type-a receptor 1; PDBTitle: nmr structures of dimeric transmembrane domain of the2 receptor tyrosine kinase epha1 in lipid bicelles at ph 6.3
44	c2k1lA	Alignment	not modelled	10.8	17	PDB header: signaling protein Chain: A: PDB Molecule: ephrin type-a receptor 1; PDBTitle: nmr structures of dimeric transmembrane domain of the2 receptor tyrosine kinase epha1 in lipid bicelles at ph 6.3
45	c2k1kA	Alignment	not modelled	10.8	17	PDB header: signaling protein Chain: A: PDB Molecule: ephrin type-a receptor 1; PDBTitle: nmr structures of dimeric transmembrane domain of the2 receptor tyrosine kinase epha1 in lipid bicelles at ph 4.3
46	c3aa0C	Alignment	not modelled	10.0	38	PDB header: protein binding Chain: C: PDB Molecule: 21mer peptide from leucine-rich repeat-containing protein PDBTitle: crystal structure of actin capping protein in complex with the cp-2 binding motif derived from carmil
47	c2xutC	Alignment	not modelled	9.9	7	PDB header: transport protein Chain: C: PDB Molecule: proton/peptide symporter family protein; PDBTitle: crystal structure of a proton dependent oligopeptide (pot)2 family transporter.
48	c2jo1A	Alignment	not modelled	9.9	11	PDB header: hydrolase regulator Chain: A: PDB Molecule: phospholemman; PDBTitle: structure of the na,k-atpase regulatory protein fxyd1 in2 micelles
49	c3b8eC	Alignment	not modelled	9.7	8	PDB header: hydrolase/transport protein Chain: C: PDB Molecule: sodium/potassium-transporting atpase subunit PDBTitle: crystal structure of the sodium-potassium pump
50	c1p84D	Alignment	not modelled	9.6	14	PDB header: oxidoreductase Chain: D: PDB Molecule: cytochrome c1, heme protein; PDBTitle: hdbt inhibited yeast cytochrome bc1 complex
51	d1otsa	Alignment	not modelled	9.5	22	Fold: Clc chloride channel Superfamily: Clc chloride channel Family: Clc chloride channel
52	d1zela1	Alignment	not modelled	9.3	21	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: Rv2827c N-terminal domain-like
						PDB header: lipoprotein Chain: A: PDB Molecule: uncharacterized lipoprotein yaji;

53	c2jwyA_	Alignment	not modelled	9.1	13	PDBTitle: solution nmr structure of uncharacterized lipoprotein yaji from2 escherichia coli. northeast structural genomics target er540
54	d2iuba2	Alignment	not modelled	9.1	3	Fold: Transmembrane helix hairpin Superfamily: Magnesium transport protein CorA, transmembrane region Family: Magnesium transport protein CorA, transmembrane region
55	d1g2913	Alignment	not modelled	9.0	29	Fold: OB-fold Superfamily: MOP-like Family: ABC-transporter additional domain
56	d2nr9a1	Alignment	not modelled	9.0	22	Fold: Rhomboid-like Superfamily: Rhomboid-like Family: Rhomboid-like
57	c3fh6F_	Alignment	not modelled	8.9	13	PDB header: transport protein Chain: F: PDB Molecule: maltose transport system permease protein malf; PDBTitle: crystal structure of the resting state maltose transporter from e.2 coli
58	c1oy8A_	Alignment	not modelled	8.9	7	PDB header: membrane protein Chain: A: PDB Molecule: acriflavine resistance protein b; PDBTitle: structural basis of multiple drug binding capacity of the acrb2 multidrug efflux pump
59	c2dmpA_	Alignment	not modelled	8.9	10	PDB header: dna binding protein Chain: A: PDB Molecule: zinc fingers and homeoboxes protein 2; PDBTitle: solution structure of the third homeobox domain of zinc2 fingers and homeoboxes protein 2
60	c3njcA_	Alignment	not modelled	8.7	18	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: yslb protein; PDBTitle: crystal structure of the yslb protein from bacillus subtilis.2 northeast structural genomics consortium target sr460.
61	d1v54d_	Alignment	not modelled	8.7	8	Fold: Single transmembrane helix Superfamily: Mitochondrial cytochrome c oxidase subunit IV Family: Mitochondrial cytochrome c oxidase subunit IV
62	c2y69Q_	Alignment	not modelled	8.6	8	PDB header: electron transport Chain: Q: PDB Molecule: cytochrome c oxidase subunit 4 isoform 1; PDBTitle: bovine heart cytochrome c oxidase re-refined with molecular2 oxygen
63	c2h3oA_	Alignment	not modelled	8.5	18	PDB header: membrane protein Chain: A: PDB Molecule: merf; PDBTitle: structure of merft, a membrane protein with two trans-2 membrane helices
64	d2oara1	Alignment	not modelled	8.4	17	Fold: Gated mechanosensitive channel Superfamily: Gated mechanosensitive channel Family: Gated mechanosensitive channel
65	c2oarA_	Alignment	not modelled	8.3	14	PDB header: membrane protein Chain: A: PDB Molecule: large-conductance mechanosensitive channel; PDBTitle: mechanosensitive channel of large conductance (mscl)
66	c2k1aA_	Alignment	not modelled	8.2	9	PDB header: cell adhesion Chain: A: PDB Molecule: integrin alpha-iiib; PDBTitle: bicelle-embedded integrin alpha(iiib) transmembrane segment
67	c2l3hA_	Alignment	not modelled	8.2	7	PDB header: hydrolase Chain: A: PDB Molecule: prostatic acid phosphatase; PDBTitle: nmr structure in a membrane environment reveals putative amyloidogenic2 regions of the sevi precursor peptide pap248-286
68	d1j9ia_	Alignment	not modelled	8.2	15	Fold: Putative DNA-binding domain Superfamily: Putative DNA-binding domain Family: Terminase gpNU1 subunit domain
69	c3ixxE_	Alignment	not modelled	8.2	25	PDB header: virus Chain: E: PDB Molecule: peptide pr; PDBTitle: the pseudo-atomic structure of west nile immature virus in2 complex with fab fragments of the anti-fusion loop antibody3 e53
70	c3r7gB_	Alignment	not modelled	8.1	8	PDB header: protein binding Chain: B: PDB Molecule: formin-2; PDBTitle: crystal structure of spire kind domain in complex with the tail of2 fmn2
71	c2jo8B_	Alignment	not modelled	8.1	27	PDB header: transferase Chain: B: PDB Molecule: serine/threonine-protein kinase 4; PDBTitle: solution structure of c-terminal domain of human mammalian2 sterile 20-like kinase 1 (mst1)
72	d1rhzb_	Alignment	not modelled	8.0	18	Fold: Single transmembrane helix Superfamily: Preprotein translocase SecE subunit Family: Preprotein translocase SecE subunit
73	c2cblA_	Alignment	not modelled	8.0	24	PDB header: complex (proto-oncogene/peptide) Chain: A: PDB Molecule: proto-oncogene cbl; PDBTitle: n-terminal domain of cbl in complex with its binding site2 on zap-70
74	d1zh5a1	Alignment	not modelled	8.0	29	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: La domain
75	c3bunB_	Alignment	not modelled	8.0	24	PDB header: ligase/signaling protein Chain: B: PDB Molecule: e3 ubiquitin-protein ligase cbl; PDBTitle: crystal structure of c-cbl-tkb domain complexed with its2 binding motif in sprouty4
76	d1t98a2	Alignment	not modelled	7.9	21	Fold: STAT-like Superfamily: MukF C-terminal domain-like Family: MukF C-terminal domain-like
77	c1wazA_	Alignment	not modelled	7.8	15	PDB header: transport protein Chain: A: PDB Molecule: merf; PDBTitle: nmr structure determination of the bacterial mercury2 transporter, merf, in micelles Fold: Single transmembrane helix Superfamily: Photosystem II reaction centre subunit H,

78	d1eysh2	Alignment	not modelled	7.7	19	transmembrane region Family: Photosystem II reaction centre subunit H, transmembrane region
79	c3lk2T_	Alignment	not modelled	7.7	50	PDB header: protein binding Chain: T: PDB Molecule: leucine-rich repeat-containing protein 16a; PDBTitle: crystal structure of capz bound to the uncapping motif from carmil
80	c3c6eC_	Alignment	not modelled	7.7	43	PDB header: viral protein Chain: C: PDB Molecule: prm; PDBTitle: crystal structure of the precursor membrane protein-envelope protein2 heterodimer from the dengue 2 virus at neutral ph
81	c3mk7F_	Alignment	not modelled	7.7	8	PDB header: oxidoreductase Chain: F: PDB Molecule: cytochrome c oxidase, cbb3-type, subunit p; PDBTitle: the structure of cbb3 cytochrome oxidase
82	c3opyl_	Alignment	not modelled	7.6	18	PDB header: transferase Chain: J: PDB Molecule: 6-phosphofructo-1-kinase gamma-subunit; PDBTitle: crystal structure of pichia pastoris phosphofructokinase in the t-2 state
83	c3opyL_	Alignment	not modelled	7.6	18	PDB header: transferase Chain: L: PDB Molecule: 6-phosphofructo-1-kinase gamma-subunit; PDBTitle: crystal structure of pichia pastoris phosphofructokinase in the t-2 state
84	c3p5nA_	Alignment	not modelled	7.6	7	PDB header: transport protein Chain: A: PDB Molecule: riboflavin uptake protein; PDBTitle: structure and mechanism of the s component of a bacterial ecf2 transporter
85	c3hzqA_	Alignment	not modelled	7.6	12	PDB header: membrane protein Chain: A: PDB Molecule: large-conductance mechanosensitive channel; PDBTitle: structure of a tetrameric mscl in an expanded intermediate2 state
86	c3c6rE_	Alignment	not modelled	7.5	43	PDB header: virus Chain: E: PDB Molecule: peptide pr; PDBTitle: low ph immature dengue virus
87	c2k9yB_	Alignment	not modelled	7.4	13	PDB header: transferase Chain: B: PDB Molecule: ephrin type-a receptor 2; PDBTitle: epha2 dimeric structure in the lipidic bicelle at ph 5.0
88	c2k9yA_	Alignment	not modelled	7.4	13	PDB header: transferase Chain: A: PDB Molecule: ephrin type-a receptor 2; PDBTitle: epha2 dimeric structure in the lipidic bicelle at ph 5.0
89	d2h8pc1	Alignment	not modelled	7.3	9	Fold: Voltage-gated potassium channels Superfamily: Voltage-gated potassium channels Family: Voltage-gated potassium channels
90	c3nauA_	Alignment	not modelled	7.3	11	PDB header: transcription Chain: B: PDB Molecule: zinc fingers and homeoboxes protein 2; PDBTitle: crystal structure of zhx2 hd2 (zinc-fingers and homeoboxes protein 2,2 homeodomain 2)
91	d1zyba1	Alignment	not modelled	7.2	14	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: CAP C-terminal domain-like
92	d1rh5b_	Alignment	not modelled	7.2	18	Fold: Single transmembrane helix Superfamily: Preprotein translocase SecE subunit Family: Preprotein translocase SecE subunit
93	d2ecba1	Alignment	not modelled	7.2	15	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: Homeodomain
94	c2zzeA_	Alignment	not modelled	7.2	11	PDB header: hydrolase/transport protein Chain: A: PDB Molecule: na, k-atpase alpha subunit; PDBTitle: crystal structure of the sodium - potassium pump in the e2.2k+ .pi2 state
95	d2e2ca_	Alignment	not modelled	7.2	14	Fold: UBC-like Superfamily: UBC-like Family: UBC-related
96	c2l2ta_	Alignment	not modelled	7.1	11	PDB header: membrane protein Chain: A: PDB Molecule: receptor tyrosine-protein kinase erbb-4; PDBTitle: solution nmr structure of the erbb4 dimeric membrane domain
97	c3iz5d_	Alignment	not modelled	7.0	19	PDB header: ribosome Chain: D: PDB Molecule: 60s ribosomal protein l4 (l4p); PDBTitle: localization of the large subunit ribosomal proteins into a 5.5 a2 cryo-em map of triticum aestivum translating 80s ribosome
98	d1ubdc2	Alignment	not modelled	7.0	43	Fold: beta-beta-alpha zinc fingers Superfamily: beta-beta-alpha zinc fingers Family: Classic zinc finger, C2H2
99	c3op0B_	Alignment	not modelled	7.0	18	PDB header: signaling protein/signaling protein regu Chain: B: PDB Molecule: signal transduction protein cbl-c; PDBTitle: crystal structure of cbl-c (cbl-3) tkb domain in complex with egfr2 py1069 peptide