




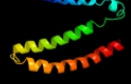


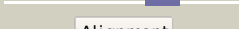
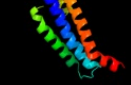
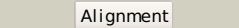

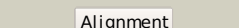

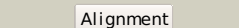

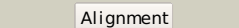

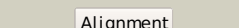

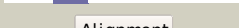


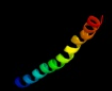
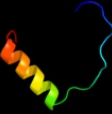

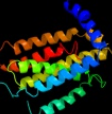
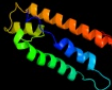





Phyre2

Email	I.a.kelley@imperial.ac.uk
Description	P45537
Date	Thu Jan 5 12:02:58 GMT 2012
Unique Job ID	ace9cf229ab65d62

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c2ht2B_	 Alignment		44.4	17	PDB header: membrane protein Chain: B: PDB Molecule: h(+)/cl(-) exchange transporter clca; PDBTitle: structure of the escherichia coli clc chloride channel2 y445h mutant and fab complex
2	d1otsa_	 Alignment		41.4	16	Fold: Clc chloride channel Superfamily: Clc chloride channel Family: Clc chloride channel
3	c2yvxD_	 Alignment		28.6	17	PDB header: transport protein Chain: D: PDB Molecule: mg2+ transporter mgte; PDBTitle: crystal structure of magnesium transporter mgte
4	d1kpla_	 Alignment		14.7	16	Fold: Clc chloride channel Superfamily: Clc chloride channel Family: Clc chloride channel
5	d1fx8a_	 Alignment		12.2	13	Fold: Aquaporin-like Superfamily: Aquaporin-like Family: Aquaporin-like
6	c1ldaA_	 Alignment		12.2	13	PDB header: transport protein Chain: A: PDB Molecule: glycerol uptake facilitator protein; PDBTitle: crystal structure of the e. coli glycerol facilitator (glpf) without2 substrate glycerol
7	c2yggA_	 Alignment		11.7	9	PDB header: metal binding protein/transport protein Chain: A: PDB Molecule: sodium/hydrogen exchanger 1; PDBTitle: complex of camr and cam
8	c1ymgA_	 Alignment		11.7	8	PDB header: membrane protein Chain: A: PDB Molecule: lens fiber major intrinsic protein; PDBTitle: the channel architecture of aquaporin o at 2.2 angstrom resolution
9	d1ymga1	 Alignment		11.7	8	Fold: Aquaporin-like Superfamily: Aquaporin-like Family: Aquaporin-like
10	d1ciya3	 Alignment		11.4	10	Fold: Toxins' membrane translocation domains Superfamily: delta-Endotoxin (insectocide), N-terminal domain Family: delta-Endotoxin (insectocide), N-terminal domain
11	d2nefa_	 Alignment		11.4	23	Fold: Regulatory factor Nef Superfamily: Regulatory factor Nef Family: Regulatory factor Nef

12	c3nd0A_	Alignment		11.2	13	PDB header: transport protein Chain: A: PDB Molecule: sli0855 protein; PDBTitle: x-ray crystal structure of a slow cyanobacterial ci-/h+ antiporter
13	c2kncB_	Alignment		11.2	17	PDB header: cell adhesion Chain: B: PDB Molecule: integrin beta-3; PDBTitle: platelet integrin alfaIIb-beta3 transmembrane-cytoplasmic2 heterocomplex
14	c3rbbA_	Alignment		10.7	20	PDB header: viral protein, protein binding Chain: A: PDB Molecule: protein nef; PDBTitle: hiv-1 nef protein in complex with engineered hck sh3 domain
15	d1e12a_	Alignment		10.5	11	Fold: Family A G protein-coupled receptor-like Superfamily: Family A G protein-coupled receptor-like Family: Bacteriorhodopsin-like
16	d1iwg8	Alignment		10.2	13	Fold: Multidrug efflux transporter AcrB transmembrane domain Superfamily: Multidrug efflux transporter AcrB transmembrane domain Family: Multidrug efflux transporter AcrB transmembrane domain
17	d1rc2a_	Alignment		10.1	12	Fold: Aquaporin-like Superfamily: Aquaporin-like Family: Aquaporin-like
18	d1j4na_	Alignment		9.9	10	Fold: Aquaporin-like Superfamily: Aquaporin-like Family: Aquaporin-like
19	d2r6gf1	Alignment		9.6	10	Fold: MalF N-terminal region-like Superfamily: MalF N-terminal region-like Family: MalF N-terminal region-like
20	c2rmzA_	Alignment		9.4	17	PDB header: cell adhesion Chain: A: PDB Molecule: integrin beta-3; PDBTitle: bicelle-embedded integrin beta3 transmembrane segment
21	c3pltB_	Alignment	not modelled	9.2	14	PDB header: structural protein Chain: B: PDB Molecule: sphingolipid long chain base-responsive protein lsp1; PDBTitle: crystal structure of lsp1 from saccharomyces cerevisiae
22	c3k3gA_	Alignment	not modelled	8.8	14	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
23	c2jagA_	Alignment	not modelled	8.6	11	PDB header: membrane protein Chain: A: PDB Molecule: halorhodopsin; PDBTitle: I1-intermediate of halorhodopsin t203v
24	d1pw4a_	Alignment	not modelled	8.4	7	Fold: MFS general substrate transporter Superfamily: MFS general substrate transporter Family: Glycerol-3-phosphate transporter
25	c3hfwA_	Alignment	not modelled	8.3	13	PDB header: hydrolase Chain: A: PDB Molecule: protein adp-ribosylarginine hydrolase; PDBTitle: crystal structure of human adp-ribosylhydrolase 1 (harh1)
26	c2wocA_	Alignment	not modelled	8.3	25	PDB header: hydrolase Chain: A: PDB Molecule: adp-ribosyl-[dinitrogen reductase] glycohydrolase; PDBTitle: crystal structure of the dinitrogenase reductase-activating2 glycohydrolase (drag) from rhodospirillum rubrum
27	c3msqC_	Alignment	not modelled	8.2	10	PDB header: biosynthetic protein Chain: C: PDB Molecule: putative ubiquinone biosynthesis protein; PDBTitle: crystal structure of a putative ubiquinone biosynthesis protein2 (npun02000094) from nostoc punctiforme pcc 73102 at 2.85 a resolution
28	c2kbvA_	Alignment	not modelled	8.1	21	PDB header: membrane protein Chain: A: PDB Molecule: sodium/hydrogen exchanger 1; PDBTitle: structural and functional analysis of tm xi of the nhe12

						isoform of the na+/h+ exchanger
29	c1i5pA_	Alignment	not modelled	7.8	14	PDB header: toxin Chain: A: PDB Molecule: pesticidal crystal protein cry2aa; PDBTitle: insecticidal crystal protein cry2aa
30	c1iijA_	Alignment	not modelled	7.7	21	PDB header: signaling protein Chain: A: PDB Molecule: erbB-2 receptor protein-tyrosine kinase; PDBTitle: solution structure of the neu/erbB-2 membrane spanning2 segment
31	c3k07A_	Alignment	not modelled	7.6	10	PDB header: transport protein Chain: A: PDB Molecule: cation efflux system protein cusa; PDBTitle: crystal structure of cusa
32	c3g9dB_	Alignment	not modelled	7.6	25	PDB header: hydrolase Chain: B: PDB Molecule: dinitrogenase reductase activating PDBTitle: crystal structure glycohydrolase
33	c2kdcC_	Alignment	not modelled	7.5	5	PDB header: transferase Chain: C: PDB Molecule: diacylglycerol kinase; PDBTitle: nmr solution structure of e. coli diacylglycerol kinase2 (dagk) in dpc micelles
34	c1iojA_	Alignment	not modelled	7.4	21	PDB header: apolipoprotein Chain: A: PDB Molecule: apoc-i; PDBTitle: human apolipoprotein c-i, nmr, 18 structures
35	d1i5pa3	Alignment	not modelled	7.3	13	Fold: Toxins' membrane translocation domains Superfamily: delta-Endotoxin (insectocide), N-terminal domain Family: delta-Endotoxin (insectocide), N-terminal domain
36	c1ciyA_	Alignment	not modelled	7.0	9	PDB header: toxin Chain: A: PDB Molecule: cryia(a); PDBTitle: insecticidal toxin: structure and channel formation
37	c2b5fD_	Alignment	not modelled	7.0	12	PDB header: transport protein,membrane protein Chain: D: PDB Molecule: aquaporin; PDBTitle: crystal structure of the spinach aquaporin sopip2;1 in an2 open conformation to 3.9 resolution
38	c2kncA_	Alignment	not modelled	6.7	17	PDB header: cell adhesion Chain: A: PDB Molecule: integrin alpha-iiB; PDBTitle: platelet integrin alfaIIb-beta3 transmembrane-cytoplasmic2 heterocomplex
39	d2pw6a1	Alignment	not modelled	6.6	7	Fold: Phosphorylase/hydrolase-like Superfamily: LigB-like Family: LigB-like
40	c2qtyB_	Alignment	not modelled	6.6	17	PDB header: hydrolase Chain: B: PDB Molecule: poly(adp-ribose) glycohydrolase arh3; PDBTitle: crystal structure of mouse adp-riboylhydrolase 3 (marh3)
41	c2yzwA_	Alignment	not modelled	6.5	20	PDB header: hydrolase Chain: A: PDB Molecule: adp-riboylglycohydrolase; PDBTitle: adp-riboylglycohydrolase-related protein complex
42	c3ik5A_	Alignment	not modelled	6.4	21	PDB header: viral protein/signaling protein Chain: A: PDB Molecule: protein nef; PDBTitle: sivmac239 nef in complex with tcr zeta itam 1 polypeptide2 (a63-r80)
43	c2k1lB_	Alignment	not modelled	6.3	28	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	c2k1kA_	Alignment	not modelled	6.3	28	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
45	c2k1kB_	Alignment	not modelled	6.3	28	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
46	c2k1lA_	Alignment	not modelled	6.3	28	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
47	d1t5ja_	Alignment	not modelled	6.3	21	Fold: ADP-riboylglycohydrolase Superfamily: ADP-riboylglycohydrolase Family: ADP-riboylglycohydrolase
48	c3t6gB_	Alignment	not modelled	6.2	7	PDB header: signaling protein, cell adhesion Chain: B: PDB Molecule: breast cancer anti-estrogen resistance protein 1; PDBTitle: structure of the complex between nsp3 (shep1) and p130cas
49	c2c9kA_	Alignment	not modelled	6.0	13	PDB header: toxin Chain: A: PDB Molecule: pesticidal crystal protein cry4aa; PDBTitle: structure of the functional form of the mosquito-larvicidal2 cry4aa toxin from bacillus thuringiensis at 2.8 a3 resolution
50	d1tuka1	Alignment	not modelled	5.3	25	Fold: Bifunctional inhibitor/lipid-transfer protein/seed storage 2S albumin Superfamily: Bifunctional inhibitor/lipid-transfer protein/seed storage 2S albumin Family: Plant lipid-transfer and hydrophobic proteins
51	d2bida_	Alignment	not modelled	5.3	10	Fold: Toxins' membrane translocation domains Superfamily: Bcl-2 inhibitors of programmed cell death Family: Bcl-2 inhibitors of programmed cell death
52	d1t01a1	Alignment	not modelled	5.2	12	Fold: Four-helical up-and-down bundle Superfamily: alpha-catenin/vinculin-like Family: alpha-catenin/vinculin
53	c2y69Q_	Alignment	not modelled	5.2	6	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
						Fold: 7-stranded beta/alpha barrel

