










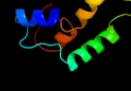
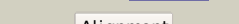

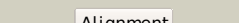

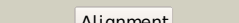



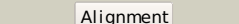

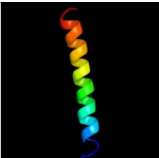


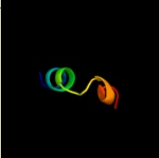




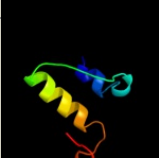


Phyre2

Email	l.a.kelley@imperial.ac.uk
Description	P77328
Date	Thu Jan 5 12:27:47 GMT 2012
Unique Job ID	c45367e6c11cc5f7

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c3qe7A_	 Alignment		100.0	17	PDB header: transport protein Chain: A: PDB Molecule: uracil permease; PDBTitle: crystal structure of uracil transporter--uraa
2	d2a65a1	 Alignment		29.6	7	Fold: SNF-like Superfamily: SNF-like Family: SNF-like
3	c3orgB_	 Alignment		23.7	14	PDB header: transport protein Chain: B: PDB Molecule: cmclc; PDBTitle: crystal structure of a eukaryotic clc transporter
4	c3lpzA_	 Alignment		22.4	0	PDB header: protein transport Chain: A: PDB Molecule: get4 (yor164c homolog); PDBTitle: crystal structure of c. therm. get4
5	c1unhD_	 Alignment		17.1	23	PDB header: cell cycle Chain: D: PDB Molecule: cyclin-dependent kinase 5 activator 1; PDBTitle: structural mechanism for the inhibition of cdk5-p25 by2 roscovetine, aloisine and indirubin.
6	d1unld_	 Alignment		16.4	23	Fold: Cyclin-like Superfamily: Cyclin-like Family: Cyclin
7	c3nd0A_	 Alignment		15.9	16	PDB header: transport protein Chain: A: PDB Molecule: sll0855 protein; PDBTitle: x-ray crystal structure of a slow cyanobacterial cl-/h+ antiporter
8	c1bzkA_	 Alignment		11.6	13	PDB header: transport protein Chain: A: PDB Molecule: protein (band 3 anion transport protein); PDBTitle: structural studies on the effects of the deletion in the2 red cell anion exchanger (band3, ae1) associated with3 south east asian ovalocytosis.
9	c2d4vD_	 Alignment		11.1	12	PDB header: oxidoreductase Chain: D: PDB Molecule: isocitrate dehydrogenase; PDBTitle: crystal structure of nad dependent isocitrate dehydrogenase2 from acidithiobacillus thiooxidans
10	c2bbjB_	 Alignment		10.4	4	PDB header: metal transport/membrane protein Chain: B: PDB Molecule: divalent cation transport-related protein; PDBTitle: crystal structure of the cora mg2+ transporter
11	c2kpeA_	 Alignment		9.8	21	PDB header: membrane protein Chain: A: PDB Molecule: glycophorin-a; PDBTitle: refined structure of glycophorin a transmembrane segment dimer in dpc2 micelles

12	c2kpeB_	Alignment		9.8	21	PDB header: membrane protein Chain: B: PDB Molecule: glycophorin-a; PDBTitle: refined structure of glycophorin a transmembrane segment dimer in dpc2 micelles
13	c2ht2B_	Alignment		9.7	9	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
14	c2xteH_	Alignment		9.1	24	PDB header: transcription Chain: H: PDB Molecule: f-box-like/wd repeat-containing protein tbl1x; PDBTitle: structure of the tbl1 tetramerisation domain
15	c3fgxA_	Alignment		8.6	12	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: rbstp2171; PDBTitle: structure of uncharacterised protein rbstp2171 from bacillus2 steartophilus
16	c2xtdB_	Alignment		8.5	24	PDB header: transcription Chain: B: PDB Molecule: tbl1 f-box-like/wd repeat-containing protein tbl1x; PDBTitle: structure of the tbl1 tetramerisation domain
17	c1bttA_	Alignment		8.1	18	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
18	c1btsA_	Alignment		8.1	18	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
19	d1v53a1	Alignment		7.9	7	Fold: Isocitrate/Isopropylmalate dehydrogenase-like Superfamily: Isocitrate/Isopropylmalate dehydrogenase-like Family: Dimeric isocitrate & isopropylmalate dehydrogenases
20	d1g2ua_	Alignment		7.8	7	Fold: Isocitrate/Isopropylmalate dehydrogenase-like Superfamily: Isocitrate/Isopropylmalate dehydrogenase-like Family: Dimeric isocitrate & isopropylmalate dehydrogenases
21	c2e0cA_	Alignment	not modelled	7.4	4	PDB header: oxidoreductase Chain: A: PDB Molecule: 409aa long hypothetical nadp-dependent isocitrate PDBTitle: crystal structure of isocitrate dehydrogenase from sulfolobus tokodaii2 strain7 at 2.0 a resolution
22	d1rubx4	Alignment	not modelled	7.3	38	Fold: Glucocorticoid receptor-like (DNA-binding domain) Superfamily: Glucocorticoid receptor-like (DNA-binding domain) Family: LIM domain
23	c1x0lB_	Alignment	not modelled	7.2	5	PDB header: oxidoreductase Chain: B: PDB Molecule: homoisocitrate dehydrogenase; PDBTitle: crystal structure of tetrameric homoisocitrate dehydrogenase from an2 extreme thermophile, thermus thermophilus
24	c3u1hA_	Alignment	not modelled	7.2	2	PDB header: oxidoreductase Chain: A: PDB Molecule: 3-isopropylmalate dehydrogenase; PDBTitle: crystal structure of ipmdh from the last common ancestor of bacillus
25	d1xaca_	Alignment	not modelled	7.1	7	Fold: Isocitrate/Isopropylmalate dehydrogenase-like Superfamily: Isocitrate/Isopropylmalate dehydrogenase-like Family: Dimeric isocitrate & isopropylmalate dehydrogenases
26	d1cnza_	Alignment	not modelled	7.1	5	Fold: Isocitrate/Isopropylmalate dehydrogenase-like Superfamily: Isocitrate/Isopropylmalate dehydrogenase-like Family: Dimeric isocitrate & isopropylmalate dehydrogenases
27	c3a0bt_	Alignment	not modelled	6.3	21	PDB header: electron transport Chain: T: PDB Molecule: photosystem ii reaction center protein t; PDBTitle: crystal structure of br-substituted photosystem ii complex
28	d2axttl	Alignment	not modelled	6.3	21	Fold: Single transmembrane helix Superfamily: Photosystem II reaction center protein T, PsbT Family: PsbT-like

29	c2axtt	Alignment	not modelled	6.3	21	PDB header: electron transport Chain: T; PDB Molecule: photosystem ii reaction center t protein; PDBTitle: crystal structure of photosystem ii from thermosynechococcus elongatus
30	c3a0ht	Alignment	not modelled	6.3	21	PDB header: electron transport Chain: T; PDB Molecule: photosystem ii reaction center protein t; PDBTitle: crystal structure of i-substituted photosystem ii complex
31	c3a0hT	Alignment	not modelled	6.3	21	PDB header: electron transport Chain: T; PDB Molecule: photosystem ii reaction center protein t; PDBTitle: crystal structure of i-substituted photosystem ii complex
32	c3kziT	Alignment	not modelled	6.3	21	PDB header: electron transport Chain: T; PDB Molecule: photosystem ii reaction center protein t; PDBTitle: crystal structure of monomeric form of cyanobacterial photosystem ii
33	c2axtT	Alignment	not modelled	6.3	21	PDB header: electron transport Chain: T; PDB Molecule: photosystem ii reaction center t protein; PDBTitle: crystal structure of photosystem ii from thermosynechococcus elongatus
34	c3arcT	Alignment	not modelled	6.3	21	PDB header: electron transport, photosynthesis Chain: T; PDB Molecule: photosystem ii reaction center protein t; PDBTitle: crystal structure of oxygen-evolving photosystem ii at 1.9 angstrom2 resolution
35	c1svfB	Alignment	not modelled	6.3	31	PDB header: viral protein Chain: B; PDB Molecule: protein (fusion glycoprotein); PDBTitle: paramyxovirus sv5 fusion protein core
36	c1s5IT	Alignment	not modelled	6.3	21	PDB header: photosynthesis Chain: T; PDB Molecule: photosystem ii psbt protein; PDBTitle: architecture of the photosynthetic oxygen evolving center
37	c1s5It	Alignment	not modelled	6.3	21	PDB header: photosynthesis Chain: T; PDB Molecule: photosystem ii psbt protein; PDBTitle: architecture of the photosynthetic oxygen evolving center
38	d1mswd	Alignment	not modelled	6.3	44	Fold: DNA/RNA polymerases Superfamily: DNA/RNA polymerases Family: T7 RNA polymerase
39	c3prT	Alignment	not modelled	6.3	21	PDB header: photosynthesis Chain: T; PDB Molecule: photosystem ii reaction center protein t; PDBTitle: crystal structure of cyanobacterial photosystem ii in complex with2 terbutryn (part 2 of 2). this file contains second monomer of psii3 dimer
40	c3bz1T	Alignment	not modelled	6.3	21	PDB header: electron transport Chain: T; PDB Molecule: photosystem ii reaction center protein t; PDBTitle: crystal structure of cyanobacterial photosystem ii (part 12 of 2). this file contains first monomer of psii dimer
41	c3prqT	Alignment	not modelled	6.3	21	PDB header: photosynthesis Chain: T; PDB Molecule: photosystem ii reaction center protein t; PDBTitle: crystal structure of cyanobacterial photosystem ii in complex with2 terbutryn (part 1 of 2). this file contains first monomer of psii3 dimer
42	c3bz2T	Alignment	not modelled	6.3	21	PDB header: electron transport Chain: T; PDB Molecule: photosystem ii reaction center protein t; PDBTitle: crystal structure of cyanobacterial photosystem ii (part 22 of 2). this file contains second monomer of psii dimer
43	c2qeuA	Alignment	not modelled	6.2	7	PDB header: lyase Chain: A; PDB Molecule: putative carboxymuconolactone decarboxylase; PDBTitle: crystal structure of putative carboxymuconolactone decarboxylase2 (yp_555818.1) from burkholderia xenovorans lb400 at 1.65 a resolution
44	c1wazA	Alignment	not modelled	6.2	5	PDB header: transport protein Chain: A; PDB Molecule: merf; PDBTitle: nmr structure determination of the bacterial mercury2 transporter, merf, in micelles
45	d1cm7a	Alignment	not modelled	6.2	5	Fold: Isocitrate/Isopropylmalate dehydrogenase-like Superfamily: Isocitrate/Isopropylmalate dehydrogenase-like Family: Dimeric isocitrate & isopropylmalate dehydrogenases
46	c2pjvA	Alignment	not modelled	6.0	22	PDB header: viral protein Chain: A; PDB Molecule: envelope glycoprotein; PDBTitle: solution structure of hiv-1 gp41 fusion domain bound to dpc2 micelle
47	d1vlca	Alignment	not modelled	6.0	2	Fold: Isocitrate/Isopropylmalate dehydrogenase-like Superfamily: Isocitrate/Isopropylmalate dehydrogenase-like Family: Dimeric isocitrate & isopropylmalate dehydrogenases
48	d1wpwa	Alignment	not modelled	5.9	2	Fold: Isocitrate/Isopropylmalate dehydrogenase-like Superfamily: Isocitrate/Isopropylmalate dehydrogenase-like Family: Dimeric isocitrate & isopropylmalate dehydrogenases
49	d2pnga1	Alignment	not modelled	5.9	10	Fold: Acyl carrier protein-like Superfamily: ACP-like Family: Acyl-carrier protein (ACP)
50	c3s0xB	Alignment	not modelled	5.8	13	PDB header: hydrolase Chain: B; PDB Molecule: peptidase a24b, flak domain protein; PDBTitle: the crystal structure of gxgd membrane protease flak
51	c1erfA	Alignment	not modelled	5.8	22	PDB header: viral protein Chain: A; PDB Molecule: transmembrane glycoprotein; PDBTitle: conformational mapping of the n-terminal fusion peptide of2 hiv-1 gp41 using 13c-enhanced fourier transform infrared3 spectroscopy (ftir)
52	d1hqsa	Alignment	not modelled	5.7	5	Fold: Isocitrate/Isopropylmalate dehydrogenase-like Superfamily: Isocitrate/Isopropylmalate dehydrogenase-like Family: Dimeric isocitrate & isopropylmalate dehydrogenases
53	c2gfpA	Alignment	not modelled	5.7	14	PDB header: membrane protein Chain: A; PDB Molecule: multidrug resistance protein d; PDBTitle: structure of the multidrug transporter emrd from2 escherichia coli
						PDB header: oxidoreductase Chain: C; PDB Molecule: 3-isopropylmalate dehydrogenase 2,

54	c3r8wC_	Alignment	not modelled	5.6	7	chloroplastic; PDBTitle: structure of 3-isopropylmalate dehydrogenase isoform 2 from2 arabidopsis thaliana at 2.2 angstrom resolution
55	d1w0da_	Alignment	not modelled	5.6	10	Fold: Isocitrate/Isopropylmalate dehydrogenase-like Superfamily: Isocitrate/Isopropylmalate dehydrogenase-like Family: Dimeric isocitrate & isopropylmalate dehydrogenases
56	c1mxeE_	Alignment	not modelled	5.5	57	PDB header: metal binding protein Chain: E: PDB Molecule: target sequence of rat calmodulin-dependent PDBTitle: structure of the complex of calmodulin with the target2 sequence of camki
57	c1mxeF_	Alignment	not modelled	5.5	57	PDB header: metal binding protein Chain: F: PDB Molecule: target sequence of rat calmodulin-dependent PDBTitle: structure of the complex of calmodulin with the target2 sequence of camki
58	c3spaA_	Alignment	not modelled	5.5	22	PDB header: transferase Chain: A: PDB Molecule: dna-directed rna polymerase, mitochondrial; PDBTitle: crystal structure of human mitochondrial rna polymerase
59	c2jd3B_	Alignment	not modelled	5.4	7	PDB header: dna binding protein Chain: B: PDB Molecule: sbb protein; PDBTitle: parr from plasmid pb171
60	d1gr0a1	Alignment	not modelled	5.4	8	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: Glyceraldehyde-3-phosphate dehydrogenase-like, N-terminal domain
61	c1afoB_	Alignment	not modelled	5.4	23	PDB header: integral membrane protein Chain: B: PDB Molecule: glycophorin a; PDBTitle: dimeric transmembrane domain of human glycophorin a, nmr,2 20 structures
62	d1a05a_	Alignment	not modelled	5.4	5	Fold: Isocitrate/Isopropylmalate dehydrogenase-like Superfamily: Isocitrate/Isopropylmalate dehydrogenase-like Family: Dimeric isocitrate & isopropylmalate dehydrogenases
63	d2vzsa2	Alignment	not modelled	5.4	38	Fold: Immunoglobulin-like beta-sandwich Superfamily: beta-Galactosidase/glucuronidase domain Family: beta-Galactosidase/glucuronidase domain
64	d1pb1a_	Alignment	not modelled	5.4	5	Fold: Isocitrate/Isopropylmalate dehydrogenase-like Superfamily: Isocitrate/Isopropylmalate dehydrogenase-like Family: Dimeric isocitrate & isopropylmalate dehydrogenases
65	c3neyC_	Alignment	not modelled	5.3	23	PDB header: membrane protein Chain: C: PDB Molecule: 55 kda erythrocyte membrane protein; PDBTitle: crystal structure of the kinase domain of mpp1/p55
66	c2qfyE_	Alignment	not modelled	5.3	2	PDB header: oxidoreductase Chain: E: PDB Molecule: isocitrate dehydrogenase [nadp]; PDBTitle: crystal structure of saccharomyces cerevesiae mitochondrial nadp(+)-2 dependent isocitrate dehydrogenase in complex with a-ketoglutarate
67	d3e46a1	Alignment	not modelled	5.3	40	Fold: RuvA C-terminal domain-like Superfamily: UBA-like Family: UBA domain
68	d1q90r_	Alignment	not modelled	5.3	26	Fold: Single transmembrane helix Superfamily: ISP transmembrane anchor Family: ISP transmembrane anchor
69	c1q90R_	Alignment	not modelled	5.3	26	PDB header: photosynthesis Chain: R: PDB Molecule: cytochrome b6f complex iron-sulfur subunit; PDBTitle: structure of the cytochrome b6f (plastoquinone : plastocyanin2 oxidoreductase) from chlamydomonas reinhardtii
70	c2kncA_	Alignment	not modelled	5.2	17	PDB header: cell adhesion Chain: A: PDB Molecule: integrin alpha-iiB; PDBTitle: platelet integrin alfaIIB-beta3 transmembrane-cytoplasmic2 heterocomplex
71	c2d1cB_	Alignment	not modelled	5.2	7	PDB header: oxidoreductase Chain: B: PDB Molecule: isocitrate dehydrogenase; PDBTitle: crystal structure of tt0538 protein from thermus thermophilus hb8
72	c2kjfA_	Alignment	not modelled	5.2	23	PDB header: antimicrobial protein Chain: A: PDB Molecule: carnocyclin-a; PDBTitle: the solution structure of the circular bacteriocin2 carnocyclin a (ccla)
73	c2l9xA_	Alignment	not modelled	5.2	14	PDB header: antimicrobial protein Chain: A: PDB Molecule: uncharacterized protein; PDBTitle: trn- peptide of the two-component bacteriocin thuricin cd
74	c1b9uA_	Alignment	not modelled	5.2	14	PDB header: hydrolase Chain: A: PDB Molecule: protein (atp synthase); PDBTitle: membrane domain of the subunit b of the e.coli atp synthase
75	c1btrA_	Alignment	not modelled	5.2	16	PDB header: anion transport Chain: A: PDB Molecule: band 3 anion transport protein; PDBTitle: the solution structures of the first and second2 transmembrane-spanning segments of band 3
76	c1btqA_	Alignment	not modelled	5.2	16	PDB header: anion transport Chain: A: PDB Molecule: band 3 anion transport protein; PDBTitle: the solution structures of the first and second2 transmembrane-spanning segments of band 3
77	c3p5nA_	Alignment	not modelled	5.2	11	PDB header: transport protein Chain: A: PDB Molecule: riboflavin uptake protein; PDBTitle: structure and mechanism of the s component of a bacterial ecf2 transporter