




















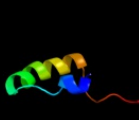


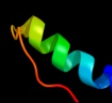


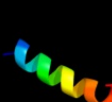





Phyre2

Email	I.a.kelley@imperial.ac.uk
Description	P69805
Date	Thu Jan 5 12:12:01 GMT 2012
Unique Job ID	faecc54ca0d9980c

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c2dmwA_	 Alignment		37.4	20	PDB header: membrane protein Chain: A: PDB Molecule: synaptobrevin-like 1 variant; PDBTitle: solution structure of the longin domain of synaptobrevin-2 like protein 1
2	c3aqpB_	 Alignment		23.9	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
3	d1ljra1	 Alignment		21.6	13	Fold: GST C-terminal domain-like Superfamily: GST C-terminal domain-like Family: Glutathione S-transferase (GST), C-terminal domain
4	d1iyxa2	 Alignment		19.2	24	Fold: Enolase N-terminal domain-like Superfamily: Enolase N-terminal domain-like Family: Enolase N-terminal domain-like
5	c2jttD_	 Alignment		17.2	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
6	c1zroB_	 Alignment		16.6	12	PDB header: cell invasion Chain: B: PDB Molecule: erythrocyte binding antigen region ii; PDBTitle: crystal structure of eba-175 region ii (rii) crystallized2 in the presence of (alpha)2,3-sialyllactose
7	c3htkB_	 Alignment		15.8	13	PDB header: recombination/replication/ligase Chain: B: PDB Molecule: structural maintenance of chromosomes protein 5; PDBTitle: crystal structure of mms21 and smc5 complex
8	d1v97a1	 Alignment		14.8	20	Fold: CO dehydrogenase ISP C-domain like Superfamily: CO dehydrogenase ISP C-domain like Family: CO dehydrogenase ISP C-domain like
9	d1oaia_	 Alignment		13.9	16	Fold: RuvA C-terminal domain-like Superfamily: UBA-like Family: TAP-C domain-like
10	d1axda1	 Alignment		13.2	16	Fold: GST C-terminal domain-like Superfamily: GST C-terminal domain-like Family: Glutathione S-transferase (GST), C-terminal domain
11	d1hh4e_	 Alignment		13.1	26	Fold: Immunoglobulin-like beta-sandwich Superfamily: E set domains Family: RhoGDI-like

12	c1yx5A_	Alignment		12.6	29	PDB header: hydrolase Chain: A: PDB Molecule: 26s proteasome non-atpase regulatory subunit 4; PDBTitle: solution structure of s5a uim-1/ubiquitin complex
13	c1yhuW_	Alignment		11.2	8	PDB header: oxygen storage/transport Chain: W: PDB Molecule: hemoglobin b1a chain; PDBTitle: crystal structure of rifia pachyptila c1 hemoglobin reveals novel2 assembly of 24 subunits.
14	d2i4ra1	Alignment		10.9	35	Fold: AtpF-like Superfamily: AtpF-like Family: AtpF-like
15	d1ds6b_	Alignment		10.9	29	Fold: Immunoglobulin-like beta-sandwich Superfamily: E set domains Family: RhoGDI-like
16	c3bd0D_	Alignment		10.8	11	PDB header: peptide binding protein Chain: D: PDB Molecule: protein memo1; PDBTitle: crystal structure of memo, form ii
17	d3cx5d2	Alignment		10.3	17	Fold: Single transmembrane helix Superfamily: Cytochrome c1 subunit of cytochrome bc1 complex (Ubiquinol-cytochrome c reductase), transmembrane anchor Family: Cytochrome c1 subunit of cytochrome bc1 complex (Ubiquinol-cytochrome c reductase), transmembrane anchor
18	d1ppid2	Alignment		10.2	28	Fold: Single transmembrane helix Superfamily: Cytochrome c1 subunit of cytochrome bc1 complex (Ubiquinol-cytochrome c reductase), transmembrane anchor Family: Cytochrome c1 subunit of cytochrome bc1 complex (Ubiquinol-cytochrome c reductase), transmembrane anchor
19	c2j96B_	Alignment		10.0	22	PDB header: photosynthesis Chain: B: PDB Molecule: phycoerythrocyanin alpha chain; PDBTitle: the e-configuration of alfa-phycoerythrocyanin
20	c3c9pA_	Alignment		9.9	24	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: uncharacterized protein sp1917; PDBTitle: crystal structure of uncharacterized protein sp1917
21	c1l2aD_	Alignment	not modelled	9.7	16	PDB header: hydrolase Chain: D: PDB Molecule: cellobiohydrolase; PDBTitle: the crystal structure and catalytic mechanism of2 cellobiohydrolase cells, the major enzymatic component of3 the clostridium thermocellum cellulosome
22	d1l1ya_	Alignment	not modelled	9.7	16	Fold: alpha/alpha toroid Superfamily: Six-hairpin glycosidases Family: Cellulases catalytic domain
23	d1go5a_	Alignment	not modelled	9.7	20	Fold: RuvA C-terminal domain-like Superfamily: UBA-like Family: TAP-C domain-like
24	d1vmja_	Alignment	not modelled	9.4	23	Fold: YjbQ-like Superfamily: YjbQ-like Family: YjbQ-like
25	d1k3ra2	Alignment	not modelled	9.3	19	Fold: alpha/beta knot Superfamily: alpha/beta knot Family: Hypothetical protein MTH1 (MT0001), dimerisation domain
26	c2kdtA_	Alignment	not modelled	9.3	50	PDB header: protein transport Chain: A: PDB Molecule: neuroendocrine convertase 1; PDBTitle: pc1/3 dcsg sorting domain structure in dpc
27	d1t3qa1	Alignment	not modelled	9.1	11	Fold: CO dehydrogenase ISP C-domain like Superfamily: CO dehydrogenase ISP C-domain like Family: CO dehydrogenase ISP C-domain like
28	d2ebfx1	Alignment	not modelled	8.9	18	Fold: PMT central region-like Superfamily: PMT central region-like Family: PMT central region-like
						Fold: S15/NS1 RNA-binding domain

29	dlxeqa1	Alignment	not modelled	8.7	50	Superfamily: S15/NS1 RNA-binding domain Family: N-terminal, RNA-binding domain of nonstructural protein NS1
30	c2vh3B	Alignment	not modelled	8.6	29	PDB header: unknown function Chain: B: PDB Molecule: ranasmurfin; PDBTitle: ranasmurfin
31	c3r66A	Alignment	not modelled	8.5	50	PDB header: viral protein/antiviral protein Chain: A: PDB Molecule: non-structural protein 1; PDBTitle: crystal structure of human isg15 in complex with ns1 n-terminal region2 from influenza virus b, northeast structural genomics consortium3 target ids hx6481, hr2873, and or2
32	d1t33a1	Alignment	not modelled	8.3	14	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: Tetracyclin repressor-like, N-terminal domain
33	c3cloC	Alignment	not modelled	8.3	14	PDB header: transcription regulator Chain: C: PDB Molecule: transcriptional regulator; PDBTitle: crystal structure of putative transcriptional regulator containing a2 luxr dna binding domain (np_811094.1) from bacteroides3 thetaiotaomicron vpi-5482 at 2.04 a resolution
34	c2qr4B	Alignment	not modelled	8.2	8	PDB header: hydrolase Chain: B: PDB Molecule: peptidase m3b, oligoendopeptidase f; PDBTitle: crystal structure of oligoendopeptidase-f from enterococcus faecium
35	c2jp7A	Alignment	not modelled	8.2	21	PDB header: translation Chain: A: PDB Molecule: mrna export factor mex67; PDBTitle: nmr structure of the mex67 uba domain
36	d1flsa1	Alignment	not modelled	8.1	21	Fold: alpha/alpha toroid Superfamily: Chondroitin AC/alginate lyase Family: Hyaluronate lyase-like catalytic, N-terminal domain
37	d1s29a	Alignment	not modelled	8.1	27	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: La domain
38	d1doab	Alignment	not modelled	8.0	26	Fold: Immunoglobulin-like beta-sandwich Superfamily: E set domains Family: RhoGDI-like
39	d1r2za1	Alignment	not modelled	7.9	36	Fold: S13-like H2TH domain Superfamily: S13-like H2TH domain Family: Middle domain of MutM-like DNA repair proteins
40	d1q33a	Alignment	not modelled	7.9	12	Fold: Nudix Superfamily: Nudix Family: MutT-like
41	c1bm4A	Alignment	not modelled	7.8	38	PDB header: viral protein Chain: A: PDB Molecule: protein (moloney murine leukemia virus capsid); PDBTitle: momlv capsid protein major homology region peptide analog
42	d1vi0a2	Alignment	not modelled	7.6	15	Fold: Tetracyclin repressor-like, C-terminal domain Superfamily: Tetracyclin repressor-like, C-terminal domain Family: Tetracyclin repressor-like, C-terminal domain
43	d1u7ka	Alignment	not modelled	7.4	20	Fold: Retrovirus capsid protein, N-terminal core domain Superfamily: Retrovirus capsid protein, N-terminal core domain Family: Retrovirus capsid protein, N-terminal core domain
44	d1ee8a1	Alignment	not modelled	7.4	43	Fold: S13-like H2TH domain Superfamily: S13-like H2TH domain Family: Middle domain of MutM-like DNA repair proteins
45	d1j2za	Alignment	not modelled	7.3	19	Fold: Single-stranded left-handed beta-helix Superfamily: Trimeric LpxA-like enzymes Family: UDP N-acetylglucosamine acyltransferase
46	d1g9ga	Alignment	not modelled	7.2	16	Fold: alpha/alpha toroid Superfamily: Six-hairpin glycosidases Family: Cellulases catalytic domain
47	c2rrfA	Alignment	not modelled	7.2	35	PDB header: unknown function Chain: A: PDB Molecule: zinc finger fyve domain-containing protein 21; PDBTitle: the solution structure of the c-terminal region of zinc finger fyve2 domain-containing protein 21
48	c1wyoA	Alignment	not modelled	7.1	17	PDB header: structural protein Chain: A: PDB Molecule: microtubule-associated protein rp/eb family PDBTitle: solution structure of the ch domain of human microtubule-2 associated protein rp/eb family member 3
49	d1utga	Alignment	not modelled	7.1	18	Fold: Uteroglobin-like Superfamily: Uteroglobin-like Family: Uteroglobin-like
50	d1rm6c1	Alignment	not modelled	7.0	15	Fold: CO dehydrogenase ISP C-domain like Superfamily: CO dehydrogenase ISP C-domain like Family: CO dehydrogenase ISP C-domain like
51	d2cqka1	Alignment	not modelled	7.0	33	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: La domain
52	c2r8uA	Alignment	not modelled	6.9	20	PDB header: cell cycle Chain: A: PDB Molecule: microtubule-associated protein rp/eb family PDBTitle: structure of fragment of human end-binding protein 1 (eb1)2 containing the n-terminal domain at 1.35 a resolution
53	c2p6cB	Alignment	not modelled	6.8	19	PDB header: structural genomics, unknown function Chain: B: PDB Molecule: aq_2013 protein; PDBTitle: crystal structure of hypothetical protein aq_2013 from aquifex2 aeolicus vf5.
54	d1i3da	Alignment	not modelled	6.6	14	Fold: Globin-like Superfamily: Globin-like Family: Globins

55	dlcb8a1	Alignment	not modelled	6.5	12	Fold: alpha/alpha toroid Superfamily: Chondroitin AC/alginate lyase Family: Hyaluronate lyase-like catalytic, N-terminal domain
56	c2veqA	Alignment	not modelled	6.4	40	PDB header: cell cycle Chain: A: PDB Molecule: centromere dna-binding protein complex cbf3 PDBTitle: insights into kinetochore-dna interactions from the2 structure of cep3p
57	c1x1jA	Alignment	not modelled	6.3	23	PDB header: lyase Chain: A: PDB Molecule: xanthan lyase; PDBTitle: crystal structure of xanthan lyase (n194a) with a substrate.
58	dlw6ta2	Alignment	not modelled	6.1	24	Fold: Enolase N-terminal domain-like Superfamily: Enolase N-terminal domain-like Family: Enolase N-terminal domain-like
59	c3n8bB	Alignment	not modelled	6.0	13	PDB header: nucleic acid binding protein Chain: B: PDB Molecule: uncharacterized protein; PDBTitle: crystal structure of borrelia burgdorferi pur-alpha
60	clrm6F	Alignment	not modelled	6.0	16	PDB header: oxidoreductase Chain: F: PDB Molecule: 4-hydroxybenzoyl-coa reductase gamma subunit; PDBTitle: structure of 4-hydroxybenzoyl-coa reductase from thauera2 aromatica
61	dl12la	Alignment	not modelled	5.9	36	Fold: Ribokinase-like Superfamily: Ribokinase-like Family: ADP-specific Phosphofructokinase/Glucokinase
62	dljroa1	Alignment	not modelled	5.9	16	Fold: CO dehydrogenase ISP C-domain like Superfamily: CO dehydrogenase ISP C-domain like Family: CO dehydrogenase ISP C-domain like
63	d2h8aa1	Alignment	not modelled	5.8	15	Fold: MAPEG domain-like Superfamily: MAPEG domain-like Family: MAPEG domain
64	c3zvrA	Alignment	not modelled	5.8	17	PDB header: hydrolase Chain: A: PDB Molecule: dynamin-1; PDBTitle: crystal structure of dynamin
65	dlm22a	Alignment	not modelled	5.8	25	Fold: Amidase signature (AS) enzymes Superfamily: Amidase signature (AS) enzymes Family: Amidase signature (AS) enzymes
66	dl1alla	Alignment	not modelled	5.7	18	Fold: Globin-like Superfamily: Globin-like Family: Phycocyanin-like phycobilisome proteins
67	dltw9a1	Alignment	not modelled	5.7	12	Fold: GST C-terminal domain-like Superfamily: GST C-terminal domain-like Family: Glutathione S-transferase (GST), C-terminal domain
68	clcb8A	Alignment	not modelled	5.6	5	PDB header: lyase Chain: A: PDB Molecule: protein (chondroitinase ac); PDBTitle: chondroitinase ac lyase from flavobacterium heparinum
69	c3nm7D	Alignment	not modelled	5.6	13	PDB header: nucleic acid binding protein Chain: D: PDB Molecule: uncharacterized protein; PDBTitle: crystal structure of borrelia burgdorferi pur-alpha
70	c2rddB	Alignment	not modelled	5.5	11	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.
71	clq0wA	Alignment	not modelled	5.5	40	PDB header: transport protein Chain: A: PDB Molecule: vacuolar protein sorting-associated protein PDBTitle: solution structure of vps27 amino-terminal uim-ubiquitin2 complex
72	dln9wa2	Alignment	not modelled	5.4	21	Fold: Class II aaRS and biotin synthetases Superfamily: Class II aaRS and biotin synthetases Family: Class II aminoacyl-tRNA synthetase (aaRS)-like, catalytic domain
73	dlccda	Alignment	not modelled	5.4	15	Fold: Uteroglobin-like Superfamily: Uteroglobin-like Family: Uteroglobin-like
74	c3snhA	Alignment	not modelled	5.3	17	PDB header: endocytosis Chain: A: PDB Molecule: dynamin-1; PDBTitle: crystal structure of nucleotide-free human dynamin1
75	clk3rA	Alignment	not modelled	5.3	19	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: conserved protein mt0001; PDBTitle: crystal structure of the methyltransferase with a knot from2 methanobacterium thermoautotrophicum
76	dlffva1	Alignment	not modelled	5.2	9	Fold: CO dehydrogenase ISP C-domain like Superfamily: CO dehydrogenase ISP C-domain like Family: CO dehydrogenase ISP C-domain like
77	dlk1xa1	Alignment	not modelled	5.1	26	Fold: immunoglobulin/albumin-binding domain-like Superfamily: Families 57/38 glycoside transferase middle domain Family: 4-alpha-glucanotransferase, domain 2
78	c3b9yA	Alignment	not modelled	5.1	10	PDB header: transport protein Chain: A: PDB Molecule: ammonium transporter family rh-like protein; PDBTitle: crystal structure of the nitrosomonas europaea rh protein