





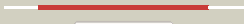









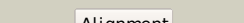

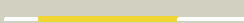



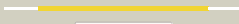


























Phyre2

Email	l.a.kelley@imperial.ac.uk
Description	P0AC23
Date	Thu Jan 5 11:16:57 GMT 2012
Unique Job ID	f5431b30df416b7a

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c3klzE_	 Alignment		100.0	55	PDB header: membrane protein Chain: E: PDB Molecule: putative formate transporter 1; PDBTitle: pentameric formate channel with formate bound
2	c3kcvG_	 Alignment		100.0	100	PDB header: transport protein Chain: G: PDB Molecule: probable formate transporter 1; PDBTitle: structure of formate channel
3	c1ldaA_	 Alignment		95.6	14	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
4	d1fx8a_	 Alignment		95.6	14	Fold: Aquaporin-like Superfamily: Aquaporin-like Family: Aquaporin-like
5	c3llqB_	 Alignment		93.6	11	PDB header: membrane protein Chain: B: PDB Molecule: aquaporin z 2; PDBTitle: aquaporin structure from plant pathogen agrobacterium tumefaciens
6	c2b5fD_	 Alignment		91.0	11	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
7	d1rc2a_	 Alignment		88.9	11	Fold: Aquaporin-like Superfamily: Aquaporin-like Family: Aquaporin-like
8	c3iyzA_	 Alignment		88.4	16	PDB header: transport protein Chain: A: PDB Molecule: aquaporin-4; PDBTitle: structure of aquaporin-4 s180d mutant at 10.0 a resolution from2 electron micrograph
9	c3gd8A_	 Alignment		84.6	17	PDB header: membrane protein Chain: A: PDB Molecule: aquaporin-4; PDBTitle: crystal structure of human aquaporin 4 at 1.8 and its mechanism of2 conductance
10	c2w2eA_	 Alignment		79.5	12	PDB header: membrane protein Chain: A: PDB Molecule: aquaporin; PDBTitle: 1.15 angstrom crystal structure of p.pastoris aquaporin,2 aqy1, in a closed conformation at ph 3.5
11	d1j4na_	 Alignment		77.9	12	Fold: Aquaporin-like Superfamily: Aquaporin-like Family: Aquaporin-like

12	c2d57A_	 Alignment		77.6	15	PDB header: transport protein Chain: A: PDB Molecule: aquaporin-4; PDBTitle: double layered 2d crystal structure of aquaporin-4 (aqp4m23) at 3.2 a2 resolution by electron crystallography
13	c3c02A_	 Alignment		73.3	9	PDB header: membrane protein Chain: A: PDB Molecule: aquaglyceroporin; PDBTitle: x-ray structure of the aquaglyceroporin from plasmodium falciparum
14	c3d9sB_	 Alignment		50.3	12	PDB header: membrane protein Chain: B: PDB Molecule: aquaporin-5; PDBTitle: human aquaporin 5 (aqp5) - high resolution x-ray structure
15	c2f2bA_	 Alignment		48.5	9	PDB header: membrane protein Chain: A: PDB Molecule: aquaporin aqpm; PDBTitle: crystal structure of integral membrane protein aquaporin aqpm at 1.68a2 resolution
16	d1w2za2	 Alignment		46.4	25	Fold: Cystatin-like Superfamily: Amine oxidase N-terminal region Family: Amine oxidase N-terminal region
17	c1ymgA_	 Alignment		46.0	14	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
18	d1ymga1	 Alignment		46.0	14	Fold: Aquaporin-like Superfamily: Aquaporin-like Family: Aquaporin-like
19	d1d6za2	 Alignment		41.9	21	Fold: Cystatin-like Superfamily: Amine oxidase N-terminal region Family: Amine oxidase N-terminal region
20	d2oqea2	 Alignment		41.3	25	Fold: Cystatin-like Superfamily: Amine oxidase N-terminal region Family: Amine oxidase N-terminal region
21	d1w6ga2	 Alignment	not modelled	40.6	25	Fold: Cystatin-like Superfamily: Amine oxidase N-terminal region Family: Amine oxidase N-terminal region
22	d1h6ia_	 Alignment	not modelled	21.0	9	Fold: Aquaporin-like Superfamily: Aquaporin-like Family: Aquaporin-like
23	c3e49A_	 Alignment	not modelled	16.1	16	PDB header: metal binding protein Chain: A: PDB Molecule: uncharacterized protein duf849 with a tim barrel fold; PDBTitle: crystal structure of a prokaryotic domain of unknown function (duf849)2 with a tim barrel fold (bx_e_c0966) from burkholderia xenovorans lb4003 at 1.75 a resolution
24	c3lotC_	 Alignment	not modelled	15.5	18	PDB header: structure genomics, unknown function Chain: C: PDB Molecule: uncharacterized protein; PDBTitle: crystal structure of protein of unknown function (np_070038.1) from2 archaeoglobus fulgidus at 1.89 a resolution
25	c3c6cA_	 Alignment	not modelled	15.1	24	PDB header: hydrolase Chain: A: PDB Molecule: 3-keto-5-aminoheptanoate cleavage enzyme; PDBTitle: crystal structure of a putative 3-keto-5-aminoheptanoate cleavage2 enzyme (reut_c6226) from ralstonia eutropha jmp134 at 1.72 a3 resolution
26	c2y7eA_	 Alignment	not modelled	13.6	28	PDB header: lyase Chain: A: PDB Molecule: 3-keto-5-aminoheptanoate cleavage enzyme; PDBTitle: crystal structure of the 3-keto-5-aminoheptanoate cleavage enzyme2 (kce) from candidatus cloacamonas acidaminovorans (tetragonal form)
27	d1c17m_	 Alignment	not modelled	13.6	31	Fold: F1F0 ATP synthase subunit A Superfamily: F1F0 ATP synthase subunit A Family: F1F0 ATP synthase subunit A

28	c1ksiA_	Alignment	not modelled	12.9	25	PDB header: oxidoreductase Chain: A: PDB Molecule: copper amine oxidase; PDBTitle: crystal structure of a eukaryotic (pea seedling) copper-containing2 amine oxidase at 2.2a resolution
29	c3loyB_	Alignment	not modelled	12.5	20	PDB header: oxidoreductase Chain: B: PDB Molecule: copper amine oxidase; PDBTitle: crystal structure of a copper-containing benzylamine oxidase from2 hansenula polymorpha
30	c3no5C_	Alignment	not modelled	12.1	20	PDB header: structural genomics, unknown function Chain: C: PDB Molecule: uncharacterized protein; PDBTitle: crystal structure of a pfam duf849 domain containing protein2 (reut_a1631) from ralstonia eutropha jmp134 at 1.90 a resolution
31	c3chvA_	Alignment	not modelled	11.9	28	PDB header: metal binding protein Chain: A: PDB Molecule: prokaryotic domain of unknown function (duf849) with a tim PDBTitle: crystal structure of a prokaryotic domain of unknown function (duf849)2 member (spoa0042) from silicibacter pomeroyi dss-3 at 1.45 a3 resolution
32	c1d6vB_	Alignment	not modelled	11.7	21	PDB header: oxidoreductase Chain: B: PDB Molecule: copper amine oxidase; PDBTitle: crystal structure of e. coli amine oxidase anaerobically reduced with2 beta-phenylethylamine
33	c1ui7A_	Alignment	not modelled	11.5	25	PDB header: oxidoreductase Chain: A: PDB Molecule: phenylethylamine oxidase; PDBTitle: site-directed mutagenesis of his433 involved in binding of2 copper ion in arthrobacter globiformis amine oxidase
34	c1ekmC_	Alignment	not modelled	10.5	25	PDB header: oxidoreductase Chain: C: PDB Molecule: copper amine oxidase; PDBTitle: crystal structure at 2.5 a resolution of zinc-substituted2 copper amine oxidase of hansenula polymorpha expressed in3 escherichia coli
35	c3nbbC_	Alignment	not modelled	10.1	25	PDB header: oxidoreductase Chain: C: PDB Molecule: peroxisomal primary amine oxidase; PDBTitle: crystal structure of mutant y305f expressed in e. coli in the copper2 amine oxidase from hansenula polymorpha
36	c3e02A_	Alignment	not modelled	9.3	16	PDB header: metal binding protein Chain: A: PDB Molecule: uncharacterized protein duf849; PDBTitle: crystal structure of a duf849 family protein (bx_e_c0271) from2 burkholderia xenovorans lb400 at 1.90 a resolution
37	c2jy0A_	Alignment	not modelled	8.5	50	PDB header: membrane protein, viral protein Chain: A: PDB Molecule: protease ns2-3; PDBTitle: solution nmr structure of hcv ns2 protein, membrane segment2 (1-27)
38	d2c1wa1	Alignment	not modelled	8.2	67	Fold: EndoU-like Superfamily: EndoU-like Family: Eukaryotic EndoU ribonuclease
39	d1rm6b2	Alignment	not modelled	7.7	25	Fold: FAD-binding/transporter-associated domain-like Superfamily: FAD-binding/transporter-associated domain-like Family: CO dehydrogenase flavoprotein N-terminal domain-like
40	d2foka2	Alignment	not modelled	7.0	10	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: Restriction endonuclease FokI, N-terminal (recognition) domain
41	c1rm6E_	Alignment	not modelled	6.9	25	PDB header: oxidoreductase Chain: E: PDB Molecule: 4-hydroxybenzoyl-coa reductase beta subunit; PDBTitle: structure of 4-hydroxybenzoyl-coa reductase from thauera2 aromatica
42	c2voyG_	Alignment	not modelled	5.5	39	PDB header: hydrolase Chain: G: PDB Molecule: sarcoplasmic/endoplasmic reticulum calcium PDBTitle: cryoem model of copa, the copper transporting atpase from2 archaeoglobus fulgidus