











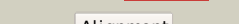

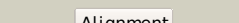
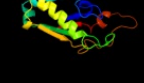
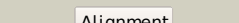



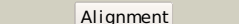








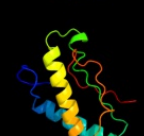



Phyre2

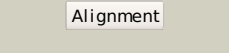
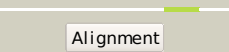

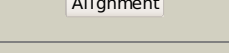

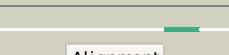
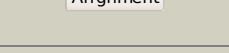

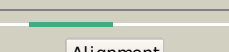
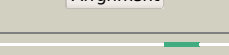
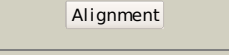


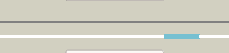
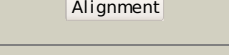
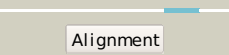

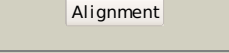

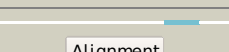
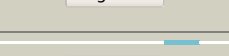
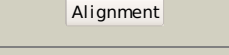

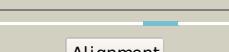
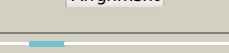
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Description	P0A910
Date	Thu Jan 5 11:09:07 GMT 2012
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Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c2l26A_	 Alignment		100.0	33	PDB header: membrane protein Chain: A: PDB Molecule: uncharacterized protein rv0899/mt0922; PDBTitle: rv0899 from mycobacterium tuberculosis contains two separated domains
2	d2aizp1	 Alignment		100.0	27	Fold: Bacillus chorismate mutase-like Superfamily: OmpA-like Family: OmpA-like
3	c2kgwA_	 Alignment		100.0	32	PDB header: membrane protein Chain: A: PDB Molecule: outer membrane protein a; PDBTitle: solution structure of the carboxy-terminal domain of ompatb, a pore2 forming protein from mycobacterium tuberculosis
4	c3td4D_	 Alignment		100.0	26	PDB header: membrane protein,peptide binding protein Chain: D: PDB Molecule: outer membrane protein omp38; PDBTitle: crystal structure of ompa-like domain from acinetobacter baumannii in2 complex with diaminopimelate
5	c1r1mA_	 Alignment		100.0	40	PDB header: membrane protein Chain: A: PDB Molecule: outer membrane protein class 4; PDBTitle: structure of the ompa-like domain of rmpm from neisseria2 meningitidis
6	d1r1mA_	 Alignment		100.0	40	Fold: Bacillus chorismate mutase-like Superfamily: OmpA-like Family: OmpA-like
7	c2k1sA_	 Alignment		100.0	33	PDB header: lipoprotein Chain: A: PDB Molecule: inner membrane lipoprotein yiad; PDBTitle: solution nmr structure of the folded c-terminal fragment of yiad from2 escherichia coli. northeast structural genomics consortium target3 er553.
8	c3khnB_	 Alignment		100.0	30	PDB header: structural genomics, unknown function Chain: B: PDB Molecule: motb protein, putative; PDBTitle: crystal structure of putative motb like protein dvu_22282 from desulfovibrio vulgaris.
9	d2hqsc1	 Alignment		100.0	30	Fold: Bacillus chorismate mutase-like Superfamily: OmpA-like Family: OmpA-like
10	c3cyqM_	 Alignment		99.9	22	PDB header: membrane protein Chain: M: PDB Molecule: chemotaxis protein motb; PDBTitle: the crystal structure of the complex of the c-terminal domain of2 helicobacter pylori motb (residues 125-256) with n-acetylmuramic acid
11	c2zvyB_	 Alignment		99.9	22	PDB header: membrane protein Chain: B: PDB Molecule: chemotaxis protein motb; PDBTitle: structure of the periplasmic domain of motb from salmonella2 (crystal form ii)

12	c3oonA_	Alignment		99.9	30	PDB header: membrane protein Chain: A: PDB Molecule: outer membrane protein (tpn50); PDBTitle: the structure of an outer membrane protein from borrelia burgdorferi2 b31
13	c3lcltA_	Alignment		99.9	23	PDB header: membrane protein Chain: A: PDB Molecule: outer membrane protein, ompa family protein; PDBTitle: crystal structure of an outer membrane protein(ompa)from2 legionella pneumophila
14	d1g90a_	Alignment		99.9	98	Fold: Transmembrane beta-barrels Superfamily: OMPA-like Family: Outer membrane protein
15	c2k0lA_	Alignment		99.9	82	PDB header: membrane protein Chain: A: PDB Molecule: outer membrane protein a; PDBTitle: nmr structure of the transmembrane domain of the outer2 membrane protein a from klebsiella pneumoniae in dhpc3 micelles.
16	c2zovA_	Alignment		99.9	23	PDB header: membrane protein Chain: A: PDB Molecule: chemotaxis protein motb; PDBTitle: structure of the periplasmic domain of motb from salmonella2 (crystal form i)
17	d1qjpa_	Alignment		99.8	99	Fold: Transmembrane beta-barrels Superfamily: OMPA-like Family: Outer membrane protein
18	c3nb3C_	Alignment		99.8	99	PDB header: virus Chain: C: PDB Molecule: outer membrane protein a; PDBTitle: the host outer membrane proteins ompa and ompc are packed at specific2 sites in the shigella phage sf6 virion as structural components
19	c2zf8A_	Alignment		99.8	30	PDB header: structural protein Chain: A: PDB Molecule: component of sodium-driven polar flagellar motor; PDBTitle: crystal structure of moty
20	c2x27X_	Alignment		99.7	12	PDB header: membrane protein Chain: X: PDB Molecule: outer membrane protein oprg; PDBTitle: crystal structure of the outer membrane protein oprg from2 pseudomonas aeruginosa
21	d1p4ta_	Alignment	not modelled	99.7	17	Fold: Transmembrane beta-barrels Superfamily: OMPA-like Family: Outer membrane protein
22	c2f1tB_	Alignment	not modelled	99.7	13	PDB header: membrane protein Chain: B: PDB Molecule: outer membrane protein w; PDBTitle: outer membrane protein ompw
23	c2jmmA_	Alignment	not modelled	99.7	76	PDB header: membrane protein Chain: A: PDB Molecule: outer membrane protein a; PDBTitle: nmr solution structure of a minimal transmembrane beta-2 barrel platform protein
24	c3qraA_	Alignment	not modelled	99.6	18	PDB header: cell invasion Chain: A: PDB Molecule: attachment invasion locus protein; PDBTitle: the crystal structure of ail, the attachment invasion locus protein of2 yersinia pestis
25	d1qj8a_	Alignment	not modelled	99.5	23	Fold: Transmembrane beta-barrels Superfamily: OMPA-like Family: Outer membrane protein
26	c2lhfA_	Alignment	not modelled	99.4	14	PDB header: membrane protein Chain: A: PDB Molecule: outer membrane protein h1; PDBTitle: solution structure of outer membrane protein h (oprh) from p.2 aeruginosa in dhpc micelles
27	d1uynx_	Alignment	not modelled	97.7	20	Fold: Transmembrane beta-barrels Superfamily: Autotransporter Family: Autotransporter
28	c3kvnA_	Alignment	not modelled	97.6	20	PDB header: hydrolase Chain: A: PDB Molecule: esterase esta; PDBTitle: crystal structure of the full-length autotransporter esta from2 pseudomonas aeruginosa
						PDB header: hydrolase

29	c3aehB	Alignment	not modelled	97.5	12	Chain: B: PDB Molecule: hemoglobin-binding protease hbp autotransporter; PDBTitle: integral membrane domain of autotransporter hbp
30	c2qomB	Alignment	not modelled	97.2	16	PDB header: hydrolase Chain: B: PDB Molecule: serine protease espp; PDBTitle: the crystal structure of the e.coli espp autotransporter beta-domain.
31	c3sljA	Alignment	not modelled	97.2	16	PDB header: protein transport Chain: A: PDB Molecule: serine protease espp; PDBTitle: pre-cleavage structure of the autotransporter espp - n1023a mutant
32	c2x4mD	Alignment	not modelled	97.0	12	PDB header: hydrolase Chain: D: PDB Molecule: coagulase/fibrinolysin; PDBTitle: yersinia pestis plasminogen activator pla
33	c3qq2C	Alignment	not modelled	96.8	12	PDB header: membrane protein/protein transport Chain: C: PDB Molecule: brka autotransporter; PDBTitle: crystal structure of the beta domain of the bordetella autotransporter2 brka
34	c3dwoX	Alignment	not modelled	96.1	11	PDB header: membrane protein Chain: X: PDB Molecule: probable outer membrane protein; PDBTitle: crystal structure of a pseudomonas aeruginosa fadl homologue
35	c2iwwD	Alignment	not modelled	96.0	18	PDB header: ion channel Chain: D: PDB Molecule: outer membrane protein g; PDBTitle: structure of the monomeric outer membrane porin ompg in the2 open and closed conformation
36	c3brzA	Alignment	not modelled	94.5	15	PDB header: transport protein Chain: A: PDB Molecule: todx; PDBTitle: crystal structure of the pseudomonas putida toluene2 transporter todx
37	c3nsgA	Alignment	not modelled	94.5	10	PDB header: membrane protein Chain: A: PDB Molecule: outer membrane protein f; PDBTitle: crystal structure of ompf, an outer membrane protein from salmonella2 typhi
38	d1i78a	Alignment	not modelled	91.3	19	Fold: Transmembrane beta-barrels Superfamily: OMPT-like Family: Outer membrane protease OMPT
39	d1osma	Alignment	not modelled	90.3	15	Fold: Transmembrane beta-barrels Superfamily: Porins Family: Porin
40	d1t16a	Alignment	not modelled	89.1	10	Fold: Transmembrane beta-barrels Superfamily: Porins Family: Outer membrane protein transport protein
41	c2ervA	Alignment	not modelled	88.7	10	PDB header: membrane protein Chain: A: PDB Molecule: hypothetical protein paer03002360; PDBTitle: crystal structure of the outer membrane enzyme pagl
42	c2wjgA	Alignment	not modelled	88.7	16	PDB header: transport protein Chain: A: PDB Molecule: probable n-acetylneuraminic acid outer membrane channel PDBTitle: nanc porin structure in hexagonal crystal form.
43	d1phoa	Alignment	not modelled	85.5	11	Fold: Transmembrane beta-barrels Superfamily: Porins Family: Porin
44	c3a2rX	Alignment	not modelled	81.0	13	PDB header: membrane protein Chain: X: PDB Molecule: outer membrane protein ii; PDBTitle: crystal structure of outer membrane protein porb from neisseria2 meningitidis
45	d1gvha3	Alignment	not modelled	78.5	17	Fold: Ferredoxin reductase-like, C-terminal NADP-linked domain Superfamily: Ferredoxin reductase-like, C-terminal NADP-linked domain Family: Flavohemoglobin, C-terminal domain
46	d2zfga1	Alignment	not modelled	78.5	14	Fold: Transmembrane beta-barrels Superfamily: Porins Family: Porin
47	c1gvhA	Alignment	not modelled	76.2	18	PDB header: oxidoreductase Chain: A: PDB Molecule: flavohemoprotein; PDBTitle: the x-ray structure of ferric escherichia coli2 flavohemoglobin reveals an unsuspected geometry of the3 distal heme pocket
48	c2r6hC	Alignment	not modelled	75.8	25	PDB header: oxidoreductase Chain: C: PDB Molecule: nadh:ubiquinone oxidoreductase, na translocating, f PDBTitle: crystal structure of the domain comprising the nad binding and the fad2 binding regions of the nadh:ubiquinone oxidoreductase, na3 translocating, f subunit from porphyromonas gingivalis
49	c2iahA	Alignment	not modelled	74.6	13	PDB header: membrane protein Chain: A: PDB Molecule: ferripyoverdine receptor; PDBTitle: crystal structure of the ferripyoverdine receptor of the outer2 membrane of pseudomonas aeruginosa bound to ferripyoverdine.
50	d2fgqx1	Alignment	not modelled	70.6	10	Fold: Transmembrane beta-barrels Superfamily: Porins Family: Porin
51	c1xkhC	Alignment	not modelled	64.7	13	PDB header: membrane protein Chain: C: PDB Molecule: ferripyoverdine receptor; PDBTitle: pyoverdine outer membrane receptor fpva from pseudomonas aeruginosa2 pao1 bound to pyoverdine
52	c2hdiA	Alignment	not modelled	64.4	14	PDB header: protein transport,antimicrobial protein Chain: A: PDB Molecule: colicin i receptor; PDBTitle: crystal structure of the colicin i receptor cir from e.coli in complex2 with receptor binding domain of colicin ia.
53	c1cqxB	Alignment	not modelled	63.9	23	PDB header: lipid binding protein Chain: B: PDB Molecule: flavohemoprotein; PDBTitle: crystal structure of the flavohemoglobin from alcaligenes eutrophus at2 1.75 a resolution
						Fold: Ferredoxin reductase-like, C-terminal NADP-linked domain

54	d1cqxa3	 <div>Alignment</div>	not modelled	62.8	20	Superfamily: Ferredoxin reductase-like, C-terminal NADP-linked domain Family: Flavo-hemoglobin, C-terminal domain
55	d1tvca2	 <div>Alignment</div>	not modelled	60.4	18	Fold: Ferredoxin reductase-like, C-terminal NADP-linked domain Superfamily: Ferredoxin reductase-like, C-terminal NADP-linked domain Family: Aromatic dioxygenase reductase-like
56	c1tvca_	 <div>Alignment</div>	not modelled	55.9	19	PDB header: oxidoreductase Chain: A: PDB Molecule: methane monooxygenase component c; PDBTitle: fad and nadh binding domain of methane monooxygenase2 reductase from methylococcus capsulatus (bath)
57	d1krha2	 <div>Alignment</div>	not modelled	54.4	15	Fold: Ferredoxin reductase-like, C-terminal NADP-linked domain Superfamily: Ferredoxin reductase-like, C-terminal NADP-linked domain Family: Aromatic dioxygenase reductase-like
58	c2gpiA_	 <div>Alignment</div>	not modelled	47.5	4	PDB header: fad-binding protein Chain: A: PDB Molecule: siderophore-interacting protein; PDBTitle: crystal structure of a siderophore-interacting protein (sputcn32_0076)2 from shewanella putrefaciens cn-32 at 2.20 a resolution
59	c2oghA_	 <div>Alignment</div>	not modelled	43.7	27	PDB header: translation Chain: A: PDB Molecule: eukaryotic translation initiation factor eif-1; PDBTitle: solution structure of yeast eif1
60	c3dzmb_	 <div>Alignment</div>	not modelled	41.7	10	PDB header: unknown function Chain: B: PDB Molecule: hypothetical conserved protein; PDBTitle: crystal structure of a major outer membrane protein from thermus2 thermophilus hb27
61	d2gdga1	 <div>Alignment</div>	not modelled	40.6	13	Fold: Tautomerase/MIF Superfamily: Tautomerase/MIF Family: MIF-related
62	d2vdfa1	 <div>Alignment</div>	not modelled	40.3	10	Fold: Transmembrane beta-barrels Superfamily: OMPT-like Family: Outer membrane adhesin/invasin OpcA
63	d1gd0a_	 <div>Alignment</div>	not modelled	39.8	13	Fold: Tautomerase/MIF Superfamily: Tautomerase/MIF Family: MIF-related
64	c3t5sA_	 <div>Alignment</div>	not modelled	38.9	21	PDB header: immune system Chain: A: PDB Molecule: macrophage migration inhibitory factor; PDBTitle: structure of macrophage migration inhibitory factor from giardia2 lamblia
65	c3b64A_	 <div>Alignment</div>	not modelled	38.0	29	PDB header: cytokine Chain: A: PDB Molecule: macrophage migration inhibitory factor-like PDBTitle: macrophage migration inhibitory factor (mif) from2 /leishmania major
66	c1xkwA_	 <div>Alignment</div>	not modelled	34.7	13	PDB header: membrane protein Chain: A: PDB Molecule: fe(iii)-pyochelin receptor; PDBTitle: pyochelin outer membrane receptor fpta from pseudomonas2 aeruginosa
67	d1hfoa_	 <div>Alignment</div>	not modelled	33.6	25	Fold: Tautomerase/MIF Superfamily: Tautomerase/MIF Family: MIF-related
68	c3ct5A_	 <div>Alignment</div>	not modelled	33.6	33	PDB header: hydrolase Chain: A: PDB Molecule: morphogenesis protein 1; PDBTitle: crystal and cryoem structural studies of a cell wall degrading enzyme2 in the bacteriophage phi29 tail
69	d1fima_	 <div>Alignment</div>	not modelled	33.1	12	Fold: Tautomerase/MIF Superfamily: Tautomerase/MIF Family: MIF-related
70	c3fwtA_	 <div>Alignment</div>	not modelled	32.2	21	PDB header: cytokine Chain: A: PDB Molecule: macrophage migration inhibitory factor-like PDBTitle: crystal structure of leishmania major mif2
71	c3o0dF_	 <div>Alignment</div>	not modelled	31.0	20	PDB header: hydrolase Chain: F: PDB Molecule: triacylglycerol lipase; PDBTitle: crystal structure of lip2 lipase from yarrowia lipolytica at 1.7 a2 resolution
72	d2jnaa1	 <div>Alignment</div>	not modelled	30.8	33	Fold: Dodecin subunit-like Superfamily: YdgH-like Family: YdgH-like
73	c3k13A_	 <div>Alignment</div>	not modelled	30.1	14	PDB header: transferase Chain: A: PDB Molecule: 5-methyltetrahydrofolate-homocysteine methyltransferase; PDBTitle: structure of the pterin-binding domain metr of 5-2 methyltetrahydrofolate-homocysteine methyltransferase from3 bacteroides thetaiotaomicron
74	d2pora_	 <div>Alignment</div>	not modelled	29.4	20	Fold: Transmembrane beta-barrels Superfamily: Porins Family: Porin
75	c3l7pA_	 <div>Alignment</div>	not modelled	29.4	28	PDB header: transcription Chain: A: PDB Molecule: putative nitrogen regulatory protein pii; PDBTitle: crystal structure of smu.1657c, putative nitrogen regulatory protein2 pii from streptococcus mutans
76	d1jmxal	 <div>Alignment</div>	not modelled	29.1	21	Fold: Cytochrome c Superfamily: Cytochrome c Family: Quinohemoprotein amine dehydrogenase A chain, domains 1 and 2
77	c2bgjB_	 <div>Alignment</div>	not modelled	28.7	22	PDB header: oxidoreductase Chain: B: PDB Molecule: ferredoxin-nadp(h) reductase; PDBTitle: x-ray structure of the ferredoxin-nadp(h) reductase from2 rhodobacter capsulatus at 2.1 angstroms
78	c3poha_	 <div>Alignment</div>	not modelled	28.6	22	PDB header: hydrolase Chain: A: PDB Molecule: endo-beta-n-acetylglucosaminidase f1; PDBTitle: crystal structure of an endo-beta-n-acetylglucosaminidase (bt_3987)2 from bacteroides thetaiotaomicron

79	d2if1a_	Alignment	not modelled	28.3	14	Superfamily: eIF1-like Family: eIF1-like
80	c2os5C_	Alignment	not modelled	28.3	20	PDB header: cytokine Chain: C: PDB Molecule: acemif; PDBTitle: macrophage migration inhibitory factor from ancylostoma ceylanicum
81	c1krhA_	Alignment	not modelled	27.9	15	PDB header: oxidoreductase Chain: A: PDB Molecule: benzoate 1,2-dioxygenase reductase; PDBTitle: x-ray stucture of benzoate dioxygenase reductase
82	c2rd5D_	Alignment	not modelled	26.7	27	PDB header: protein binding Chain: D: PDB Molecule: pii protein; PDBTitle: structural basis for the regulation of n-acetylglutamate kinase by pii2 in arabidopsis thaliana
83	c3g40A_	Alignment	not modelled	26.6	18	PDB header: transport protein Chain: A: PDB Molecule: na-k-cl cotransporter; PDBTitle: crystal structure of the cytoplasmic domain of a2 prokaryotic cation chloride cotransporter
84	c2yciX_	Alignment	not modelled	26.5	17	PDB header: transferase Chain: X: PDB Molecule: 5-methyltetrahydrofolate corrinoid/iron sulfur protein PDBTitle: methyltransferase native
85	c3bryB_	Alignment	not modelled	26.1	14	PDB header: transport protein Chain: B: PDB Molecule: tbux; PDBTitle: crystal structure of the ralstonia pickettii toluene2 transporter tbux
86	c3ca8B_	Alignment	not modelled	25.6	29	PDB header: structural genomics, unknown function Chain: B: PDB Molecule: protein ydcf; PDBTitle: crystal structure of escherichia coli ydcf, an s-adenosyl-l-methionine2 utilizing enzyme
87	d2nvma1	Alignment	not modelled	24.9	35	Fold: Xisl-like Superfamily: Xisl-like Family: Xisl-like
88	d1f6ya_	Alignment	not modelled	24.4	12	Fold: TIM beta/alpha-barrel Superfamily: Dihydropteroate synthetase-like Family: Methyltetrahydrofolate-utilizing methyltransferases
89	c2xczA_	Alignment	not modelled	24.0	29	PDB header: immune system Chain: A: PDB Molecule: possible atls1-like light-inducible protein; PDBTitle: crystal structure of macrophage migration inhibitory factor2 homologue from prochlorococcus marinus
90	d2nlva1	Alignment	not modelled	23.9	24	Fold: Xisl-like Superfamily: Xisl-like Family: Xisl-like
91	c3gacD_	Alignment	not modelled	23.0	13	PDB header: cytokine Chain: D: PDB Molecule: macrophage migration inhibitory factor-like PDBTitle: structure of mif with hpp
92	c3efmA_	Alignment	not modelled	22.0	14	PDB header: membrane protein Chain: A: PDB Molecule: ferric alcaligin siderophore receptor; PDBTitle: structure of the alcaligin outer membrane recepteur faua from2 bordetella pertussis
93	c2xznF_	Alignment	not modelled	21.7	29	PDB header: ribosome Chain: F: PDB Molecule: eif1; PDBTitle: crystal structure of the eukaryotic 40s ribosomal2 subunit in complex with initiation factor 1. this file3 contains the 40s subunit and initiation factor for4 molecule 2
94	c3d7qB_	Alignment	not modelled	21.5	24	PDB header: unknown function Chain: B: PDB Molecule: xisi protein-like; PDBTitle: crystal structure of a xisi-like protein (npun_ar114) from nostoc2 punctiforme pcc 73102 at 2.30 a resolution
95	d1uwca_	Alignment	not modelled	20.9	21	Fold: alpha/beta-Hydrolases Superfamily: alpha/beta-Hydrolases Family: Fungal lipases
96	d2piia_	Alignment	not modelled	20.7	20	Fold: Ferredoxin-like Superfamily: GlnB-like Family: Prokaryotic signal transducing protein
97	c3ce8A_	Alignment	not modelled	20.4	20	PDB header: unknown function Chain: A: PDB Molecule: putative pii-like nitrogen regulatory protein; PDBTitle: crystal structure of a duf3240 family protein (sbal_0098) from2 shewanella baltica os155 at 2.40 a resolution
98	d1pbya1	Alignment	not modelled	20.1	14	Fold: Cytochrome c Superfamily: Cytochrome c Family: Quinohemoprotein amine dehydrogenase A chain, domains 1 and 2
99	d3tgla_	Alignment	not modelled	19.9	16	Fold: alpha/beta-Hydrolases Superfamily: alpha/beta-Hydrolases Family: Fungal lipases