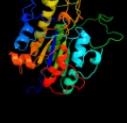


Phyre²

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Description	P42640
Date	Thu Jan 5 12:02:01 GMT 2012
Unique Job ID	a2a42925ec7eef37

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c2w8dB_	 Alignment		100.0	13	PDB header: transferase Chain: B; PDB Molecule: processed glycerol phosphate lipoteichoic acid synthase 2; PDBTitle: distinct and essential morphogenic functions for wall- and2 lipo-teichoic acids in bacillus subtilis
2	c3ed4A_	 Alignment		100.0	16	PDB header: transferase Chain: A; PDB Molecule: arylsulfatase; PDBTitle: crystal structure of putative arylsulfatase from escherichia coli
3	d1fsua_	 Alignment		100.0	12	Fold: Alkaline phosphatase-like Superfamily: Alkaline phosphatase-like Family: Arylsulfatase
4	c2qzuA_	 Alignment		100.0	17	PDB header: hydrolase Chain: A; PDB Molecule: putative sulfatase yidj; PDBTitle: crystal structure of the putative sulfatase yidj from bacteroides2 fragilis. northeast structural genomics consortium target bfr123
5	c2w5tA_	 Alignment		100.0	11	PDB header: transferase Chain: A; PDB Molecule: processed glycerol phosphate lipoteichoic acid PDBTitle: structure-based mechanism of lipoteichoic acid synthesis by2 staphylococcus aureus Itas.
6	c3b5qB_	 Alignment		100.0	14	PDB header: hydrolase Chain: B; PDB Molecule: putative sulfatase yidj; PDBTitle: crystal structure of a putative sulfatase (np_810509.1)2 from bacteroides thetaiotaomicron vpi-5482 at 2.40 a ³ resolution
7	c3lxqB_	 Alignment		100.0	14	PDB header: structural genomics, unknown function Chain: B; PDB Molecule: uncharacterized protein vp1736; PDBTitle: the crystal structure of a protein in the alkaline2 phosphatase superfamily from vibrio parahaemolyticus to3 1.95a
8	d1auka_	 Alignment		100.0	14	Fold: Alkaline phosphatase-like Superfamily: Alkaline phosphatase-like Family: Arylsulfatase
9	d1hdha_	 Alignment		100.0	17	Fold: Alkaline phosphatase-like Superfamily: Alkaline phosphatase-like Family: Arylsulfatase
10	d1p49a_	 Alignment		100.0	16	Fold: Alkaline phosphatase-like Superfamily: Alkaline phosphatase-like Family: Arylsulfatase
11	c2vqrA_	 Alignment		100.0	18	PDB header: hydrolase Chain: A; PDB Molecule: putative sulfatase; PDBTitle: crystal structure of a phosphonate monoester hydrolase2 from rhizobium leguminosarum: a new member of the3 alkaline phosphatase superfamily

12	d1o98a2			100.0	13	Fold: Alkaline phosphatase-like Superfamily: Alkaline phosphatase-like Family: 2,3-Bisphosphoglycerate-independent phosphoglycerate mutase, catalytic domain
13	c2zktB			100.0	13	PDB header: isomerase Chain: B: PDB Molecule: 2,3-bisphosphoglycerate-independent phosphoglycerate PDBTitle: structure of ph0037 protein from pyrococcus horikoshii
14	c3m8yC			100.0	16	PDB header: isomerase Chain: C: PDB Molecule: phosphopentomutase; PDBTitle: phosphopentomutase from bacillus cereus after glucose-1,6-bisphosphate2 activation
15	d2i09a1			100.0	12	Fold: Alkaline phosphatase-like Superfamily: Alkaline phosphatase-like Family: DeoB catalytic domain-like
16	c2gsob			99.9	17	PDB header: hydrolase Chain: B: PDB Molecule: phosphodiesterase-nucleotide pyrophosphatase; PDBTitle: structure of xac nucleotide2 pyrophosphatase/phosphodiesterase in complex with vanadate
17	c3q3qA			99.9	22	PDB header: hydrolase Chain: A: PDB Molecule: alkaline phosphatase; PDBTitle: crystal structure of spap: an novel alkaline phosphatase from2 bacterium sphingomonas sp. strain bsar-1
18	c2i09A			99.9	14	PDB header: isomerase Chain: A: PDB Molecule: phosphopentomutase; PDBTitle: crystal structure of putative phosphopentomutase from streptococcus2 mutans
19	c3szza			99.9	14	PDB header: hydrolase Chain: A: PDB Molecule: phosphonoacetate hydrolase; PDBTitle: crystal structure of phosphonoacetate hydrolase from sinorhizobium2 meliloti 1021 in complex with acetate
20	d1ei6a			99.9	12	Fold: Alkaline phosphatase-like Superfamily: Alkaline phosphatase-like Family: Phosphonoacetate hydrolase
21	c2xrgA		not modelled	99.9	16	PDB header: hydrolase Chain: A: PDB Molecule: ectonucleotide pyrophosphatase/phosphodiesterase family PDBTitle: crystal structure of autotaxin (enpp2) in complex with the2 ha155 boronic acid inhibitor
22	c2xr9A		not modelled	99.9	15	PDB header: hydrolase Chain: A: PDB Molecule: ectonucleotide pyrophosphatase/phosphodiesterase family PDBTitle: crystal structure of autotaxin (enpp2)
23	c1o98A		not modelled	99.6	13	PDB header: isomerase Chain: A: PDB Molecule: 2,3-bisphosphoglycerate-independent PDBTitle: 1.4a crystal structure of phosphoglycerate mutase from2 bacillus stearothermophilus complexed with3 2-phosphoglycerate
24	c3igzB		not modelled	99.6	15	PDB header: isomerase Chain: B: PDB Molecule: cofactor-independent phosphoglycerate mutase; PDBTitle: crystal structures of leishmania mexicana phosphoglycerate2 mutase at low cobalt concentration
25	c2d1gb		not modelled	99.4	18	PDB header: hydrolase Chain: B: PDB Molecule: acid phosphatase; PDBTitle: structure of francisella tularensis acid phosphatase a (acpa) bound to2 orthovanadate
26	c2iucB		not modelled	98.9	16	PDB header: hydrolase Chain: B: PDB Molecule: alkaline phosphatase; PDBTitle: structure of alkaline phosphatase from the antarctic2 bacterium tab5
27	d1y6va1		not modelled	98.5	18	Fold: Alkaline phosphatase-like Superfamily: Alkaline phosphatase-like Family: Alkaline phosphatase
28	c1ew2A		not modelled	98.4	14	PDB header: hydrolase Chain: A: PDB Molecule: phosphatase;

					PDBTitle: crystal structure of a human phosphatase	
29	c2w0yB	Alignment	not modelled	98.4	10	PDB header: hydrolase Chain: B: PDB Molecule: alkaline phosphatase; PDBTitle: h.salinarum alkaline phosphatase
30	d1zedal	Alignment	not modelled	98.4	14	Fold: Alkaline phosphatase-like Superfamily: Alkaline phosphatase-like Family: Alkaline phosphatase
31	d1k7ha	Alignment	not modelled	98.4	13	Fold: Alkaline phosphatase-like Superfamily: Alkaline phosphatase-like Family: Alkaline phosphatase
32	c2x98A	Alignment	not modelled	98.3	13	PDB header: hydrolase Chain: A: PDB Molecule: alkaline phosphatase; PDBTitle: h.salinarum alkaline phosphatase
33	c3a52A	Alignment	not modelled	98.1	14	PDB header: hydrolase Chain: A: PDB Molecule: cold-active alkaline phosphatase; PDBTitle: crystal structure of cold-active alkaline phosphatase from2 psychrophile shewanella sp.
34	c3e2dB	Alignment	not modelled	98.0	19	PDB header: hydrolase Chain: B: PDB Molecule: alkaline phosphatase; PDBTitle: the 1.4 a crystal structure of the large and cold-active2 vibrio sp. alkaline phosphatase
35	c3iddA	Alignment	not modelled	87.8	20	PDB header: isomerase Chain: A: PDB Molecule: 2,3-bisphosphoglycerate-independent PDBTitle: cofactor-independent phosphoglycerate mutase from2 thermoplasma acidophilum dsm 1728
36	c3bijC	Alignment	not modelled	63.4	15	PDB header: structural genomics, unknown function Chain: C: PDB Molecule: uncharacterized protein gsu0716; PDBTitle: crystal structure of protein gsu0716 from geobacter2 sulfurreducens. northeast structural genomics target gsr13
37	c3uoab	Alignment	not modelled	58.2	21	PDB header: hydrolase/hydrolase inhibitor Chain: B: PDB Molecule: mucosa-associated lymphoid tissue lymphoma translocation PDBTitle: crystal structure of the malt1 paracaspase (p21 form)
38	d1b4ub	Alignment	not modelled	56.5	9	Fold: Phosphorylase/hydrolase-like Superfamily: LigB-like Family: LigB-like
39	d2nxfa1	Alignment	not modelled	43.8	12	Fold: Metallo-dependent phosphatases Superfamily: Metallo-dependent phosphatases Family: ADPRibase-Mn-like
40	d1s1qa	Alignment	not modelled	32.7	14	Fold: UBC-like Superfamily: UBC-like Family: UEV domain
41	d1qnra	Alignment	not modelled	31.1	8	Fold: TIM beta/alpha-barrel Superfamily: (Trans)glycosidases Family: beta-glycanases
42	d1j33a	Alignment	not modelled	29.1	54	Fold: Nicotinate mononucleotide:5,6-dimethylbenzimidazole phosphoribosyltransferase (CobT) Superfamily: Nicotinate mononucleotide:5,6-dimethylbenzimidazole phosphoribosyltransferase (CobT) Family: Nicotinate mononucleotide:5,6-dimethylbenzimidazole phosphoribosyltransferase (CobT)
43	d1l5oa	Alignment	not modelled	28.3	38	Fold: Nicotinate mononucleotide:5,6-dimethylbenzimidazole phosphoribosyltransferase (CobT) Superfamily: Nicotinate mononucleotide:5,6-dimethylbenzimidazole phosphoribosyltransferase (CobT) Family: Nicotinate mononucleotide:5,6-dimethylbenzimidazole phosphoribosyltransferase (CobT)
44	d1cmwa2	Alignment	not modelled	20.0	8	Fold: PIN domain-like Superfamily: PIN domain-like Family: 5' to 3' exonuclease catalytic domain
45	c2jcmA	Alignment	not modelled	15.5	24	PDB header: hydrolase Chain: A: PDB Molecule: cytosolic purine 5'-nucleotidase; PDBTitle: crystal structure of human cytosolic 5'-nucleotidase ii in2 complex with beryllium trifluoride
46	d1ma3a	Alignment	not modelled	12.6	13	Fold: DHS-like NAD/FAD-binding domain Superfamily: DHS-like NAD/FAD-binding domain Family: Sir2 family of transcriptional regulators
47	d2bdea1	Alignment	not modelled	11.3	24	Fold: HAD-like Superfamily: HAD-like Family: 5' nucleotidase-like
48	d1txla	Alignment	not modelled	10.2	15	Fold: Lipocalins Superfamily: Lipocalins Family: Hypothetical protein YodA
49	c1txIA	Alignment	not modelled	10.2	15	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: metal-binding protein yoda; PDBTitle: crystal structure of metal-binding protein yoda from e.2 coli, pfam duf149
50	d2hy1a1	Alignment	not modelled	10.1	27	Fold: Metallo-dependent phosphatases Superfamily: Metallo-dependent phosphatases Family: GpdQ-like
51	c2hy1A	Alignment	not modelled	10.1	27	PDB header: hydrolase Chain: A: PDB Molecule: rv0805; PDBTitle: crystal structure of rv0805
52	d1yj5a1	Alignment	not modelled	10.0	11	Fold: HAD-like Superfamily: HAD-like Family: phosphatase domain of polynucleotide kinase
53	c3t1iC	Alignment	not modelled	10.0	10	PDB header: hydrolase Chain: C: PDB Molecule: double-strand break repair protein mre11a; PDBTitle: crystal structure of human mre11: understanding tumorigenic mutations
						Fold: PreATP-grasp domain

54	d2r7ka1	Alignment	not modelled	10.0	18	Superfamily: PreATP-grasp domain Family: PurP N-terminal domain-like
55	c3ib7A	Alignment	not modelled	9.9	26	PDB header: hydrolase Chain: A: PDB Molecule: icc protein; PDBTitle: crystal structure of full length rv0805
56	c2xokG	Alignment	not modelled	9.4	19	PDB header: hydrolase Chain: G: PDB Molecule: atp synthase subunit gamma, mitochondrial; PDBTitle: refined structure of yeast f1c10 atpase complex to 3 a2 resolution
57	c2funB	Alignment	not modelled	9.4	12	PDB header: apoptosis/hydrolase Chain: B: PDB Molecule: caspase-8; PDBTitle: alternative p35-caspase-8 complex
58	c3oaaO	Alignment	not modelled	9.3	20	PDB header: hydrolase/transport protein Chain: O: PDB Molecule: atp synthase gamma chain; PDBTitle: structure of the e.coli f1-atp synthase inhibited by subunit epsilon
59	d1fs0g	Alignment	not modelled	9.2	21	Fold: Pyruvate kinase C-terminal domain-like Superfamily: ATP synthase (F1-ATPase), gamma subunit Family: ATP synthase (F1-ATPase), gamma subunit
60	c3e4cb	Alignment	not modelled	9.1	18	PDB header: hydrolase Chain: B: PDB Molecule: caspase-1; PDBTitle: procaspase-1 zymogen domain crystal strucuture
61	d1j08a1	Alignment	not modelled	8.9	8	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: PDI-like
62	c3g7kD	Alignment	not modelled	8.9	13	PDB header: isomerase Chain: D: PDB Molecule: 3-methylitaconate isomerase; PDBTitle: crystal structure of methylitaconate-delta-isomerase
63	d1umdb1	Alignment	not modelled	8.8	15	Fold: Thiamin diphosphate-binding fold (THDP-binding) Superfamily: Thiamin diphosphate-binding fold (THDP-binding) Family: Branched-chain alpha-keto acid dehydrogenase Pyr module
64	d1v8za1	Alignment	not modelled	8.5	4	Fold: Tryptophan synthase beta subunit-like PLP-dependent enzymes Superfamily: Tryptophan synthase beta subunit-like PLP-dependent enzymes Family: Tryptophan synthase beta subunit-like PLP-dependent enzymes
65	d2jdig1	Alignment	not modelled	8.5	30	Fold: Pyruvate kinase C-terminal domain-like Superfamily: ATP synthase (F1-ATPase), gamma subunit Family: ATP synthase (F1-ATPase), gamma subunit
66	c2w6jG	Alignment	not modelled	8.4	20	PDB header: hydrolase Chain: G: PDB Molecule: atp synthase subunit gamma, mitochondrial; PDBTitle: low resolution structures of bovine mitochondrial f1-atpase2 during controlled dehydration: hydration state 5.
67	c2qe7G	Alignment	not modelled	8.3	30	PDB header: hydrolase Chain: G: PDB Molecule: atp synthase subunit gamma; PDBTitle: crystal structure of the f1-atpase from the thermoalkaliphilic2 bacterium bacillus sp. ta2.a1
68	c3k35D	Alignment	not modelled	8.1	8	PDB header: hydrolase Chain: D: PDB Molecule: nad-dependent deacetylase sirtuin-6; PDBTitle: crystal structure of human sirt6
69	d1szpb1	Alignment	not modelled	8.1	14	Fold: SAM domain-like Superfamily: Rad51 N-terminal domain-like Family: DNA repair protein Rad51, N-terminal domain
70	d1nw9b	Alignment	not modelled	7.9	12	Fold: Caspase-like Superfamily: Caspase-like Family: Caspase catalytic domain
71	d1xo1a2	Alignment	not modelled	7.7	13	Fold: PIN domain-like Superfamily: PIN domain-like Family: 5' to 3' exonuclease catalytic domain
72	c3eypB	Alignment	not modelled	7.3	16	PDB header: structural genomics, unknown function Chain: B: PDB Molecule: putative alpha-l-fucosidase; PDBTitle: crystal structure of putative alpha-l-fucosidase from bacteroides2 thetaiotaomicron
73	d1uzxa	Alignment	not modelled	7.2	9	Fold: UBC-like Superfamily: UBC-like Family: UEV domain
74	c3qfnA	Alignment	not modelled	7.2	14	PDB header: hydrolase Chain: A: PDB Molecule: putative uncharacterized protein; PDBTitle: crystal structure of streptococcal asymmetric ap4a hydrolase and2 phosphodiesterase spr1479/saph in complex with inorganic phosphate
75	d1yc5a1	Alignment	not modelled	7.2	21	Fold: DHS-like NAD/FAD-binding domain Superfamily: DHS-like NAD/FAD-binding domain Family: Sir2 family of transcriptional regulators
76	d2z1aa2	Alignment	not modelled	7.1	17	Fold: Metallo-dependent phosphatases Superfamily: Metallo-dependent phosphatases Family: 5'-nucleotidase (syn. UDP-sugar hydrolase), N-terminal domain
77	c1cp3B	Alignment	not modelled	7.0	21	PDB header: hydrolase/hydrolase inhibitor Chain: B: PDB Molecule: apopain; PDBTitle: crystal structure of the complex of apopain with the tetrapeptide2 inhibitor ace-dvad-fmc
78	d1n57a	Alignment	not modelled	6.9	8	Fold: Flavodoxin-like Superfamily: Class I glutamine amidotransferase-like Family: DJ-1/PfpI
79	d1tfra2	Alignment	not modelled	6.8	8	Fold: PIN domain-like Superfamily: PIN domain-like Family: 5' to 3' exonuclease catalytic domain

80	d1uf3a_	Alignment	not modelled	6.7	14	Fold: Metallo-dependent phosphatases Superfamily: Metallo-dependent phosphatases Family: TT1561-like
81	d2pw6a1	Alignment	not modelled	6.7	14	Fold: Phosphorylase/hydrolase-like Superfamily: LigB-like Family: LigB-like
82	d1a8la1	Alignment	not modelled	6.6	6	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: PDI-like
83	c2o2ja_	Alignment	not modelled	6.6	12	PDB header: lyase Chain: A: PDB Molecule: tryptophan synthase beta chain; PDBTitle: mycobacterium tuberculosis tryptophan synthase beta chain2 dimer (apoform)
84	c3auzA_	Alignment	not modelled	6.5	9	PDB header: recombination Chain: A: PDB Molecule: dna double-strand break repair protein mre11; PDBTitle: crystal structure of mre11 with manganese
85	c2xmoB_	Alignment	not modelled	6.4	10	PDB header: hydrolase Chain: B: PDB Molecule: lmo2642 protein; PDBTitle: the crystal structure of lmo2642
86	c3pkfF_	Alignment	not modelled	6.4	8	PDB header: hydrolase Chain: F: PDB Molecule: nad-dependent deacetylase sirtuin-6; PDBTitle: human sirt6 crystal structure in complex with adp ribose
87	d1usha2	Alignment	not modelled	6.3	14	Fold: Metallo-dependent phosphatases Superfamily: Metallo-dependent phosphatases Family: 5'-nucleotidase (syn. UDP-sugar hydrolase), N-terminal domain
88	c2x7IP_	Alignment	not modelled	6.3	45	PDB header: immune system Chain: P: PDB Molecule: hiv rev; PDBTitle: implications of the hiv-1 rev dimer structure at 3.2a2 resolution for multimeric binding to the rev response3 element
89	d1ex9a_	Alignment	not modelled	6.2	20	Fold: alpha/beta-Hydrolases Superfamily: alpha/beta-Hydrolases Family: Bacterial lipase
90	c1kmcb_	Alignment	not modelled	6.2	19	PDB header: apoptosis/hydrolase Chain: B: PDB Molecule: caspase-7; PDBTitle: crystal structure of the caspase-7 / xiap-bir2 complex
91	d1m7ta_	Alignment	not modelled	6.2	13	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Thioltransferase
92	d2ozlb1	Alignment	not modelled	6.1	12	Fold: Thiamin diphosphate-binding fold (THDP-binding) Superfamily: Thiamin diphosphate-binding fold (THDP-binding) Family: Branched-chain alpha-keto acid dehydrogenase Pyr module
93	c3siqf_	Alignment	not modelled	6.1	14	PDB header: ligase Chain: F: PDB Molecule: apoptosis 1 inhibitor; PDBTitle: crystal structure of autoinhibited diap1-bir1 domain
94	d1hlga_	Alignment	not modelled	6.0	9	Fold: alpha/beta-Hydrolases Superfamily: alpha/beta-Hydrolases Family: Gastric lipase
95	c2kncA_	Alignment	not modelled	6.0	15	PDB header: cell adhesion Chain: A: PDB Molecule: integrin alpha-iiib; PDBTitle: platelet integrin alfa1ib-beta3 transmembrane-cytoplasmic2 heterocomplex
96	d1w85b1	Alignment	not modelled	6.0	12	Fold: Thiamin diphosphate-binding fold (THDP-binding) Superfamily: Thiamin diphosphate-binding fold (THDP-binding) Family: Branched-chain alpha-keto acid dehydrogenase Pyr module
97	d1uzdc1	Alignment	not modelled	6.0	17	Fold: RuBisCO, small subunit Superfamily: RuBisCO, small subunit Family: RuBisCO, small subunit
98	c1w8xp_	Alignment	not modelled	5.9	10	PDB header: virus Chain: P: PDB Molecule: protein p16; PDBTitle: structural analysis of prd1
99	d1ej7s_	Alignment	not modelled	5.9	15	Fold: RuBisCO, small subunit Superfamily: RuBisCO, small subunit Family: RuBisCO, small subunit