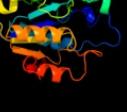


Phyre²

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Description	P21369
Date	Thu Jan 5 11:38:14 GMT 2012
Unique Job ID	6a63412b328dd173

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c2h0rD_	Alignment		100.0	34	PDB header: hydrolase Chain: D: PDB Molecule: nicotinamidase; PDBTitle: structure of the yeast nicotinamidase pnc1p
2	c2wtaA_	Alignment		100.0	37	PDB header: hydrolase Chain: A: PDB Molecule: nicotinamidase; PDBTitle: acinetobacter baumanii nicotinamidase pyrazinamidease
3	d1nbaa_	Alignment		100.0	20	Fold: Isochorismatase-like hydrolases Superfamily: Isochorismatase-like hydrolases Family: Isochorismatase-like hydrolases
4	c3hu5B_	Alignment		100.0	28	PDB header: hydrolase Chain: B: PDB Molecule: isochorismatase family protein; PDBTitle: crystal structure of isochorismatase family protein from desulfovibrio2 vulgaris subsp. vulgaris str. hildenborough
5	c2fq1A_	Alignment		100.0	19	PDB header: hydrolase Chain: A: PDB Molecule: isochorismatase; PDBTitle: crystal structure of the two-domain non-ribosomal peptide synthetase2 entb containing isochorismate lyase and aryl-carrier protein domains
6	c3r2jC_	Alignment		100.0	37	PDB header: hydrolase Chain: C: PDB Molecule: alpha/beta-hydrolase-like protein; PDBTitle: crystal structure of pnc1 from L. infantum in complex with nicotinate
7	c3irvA_	Alignment		100.0	22	PDB header: hydrolase Chain: A: PDB Molecule: cysteine hydrolase; PDBTitle: crystal structure of cysteine hydrolase pspph_2384 from pseudomonas2 syringae pv. phaseolicola 1448a
8	d1nf9a_	Alignment		100.0	21	Fold: Isochorismatase-like hydrolases Superfamily: Isochorismatase-like hydrolases Family: Isochorismatase-like hydrolases
9	c3oqpA_	Alignment		100.0	30	PDB header: hydrolase Chain: A: PDB Molecule: putative isochorismatase; PDBTitle: crystal structure of a putative isochorismatase (bxe_a0706) from2 burkholderia xenovorans lb400 at 1.22 a resolution
10	d1j2ra_	Alignment		100.0	22	Fold: Isochorismatase-like hydrolases Superfamily: Isochorismatase-like hydrolases Family: Isochorismatase-like hydrolases
11	c3ot4F_	Alignment		100.0	23	PDB header: hydrolase Chain: F: PDB Molecule: putative isochorismatase; PDBTitle: structure and catalytic mechanism of bordetella bronchiseptica ncf

12	d1im5a	Alignment		100.0	42	Fold: Isochorismatase-like hydrolases Superfamily: Isochorismatase-like hydrolases Family: Isochorismatase-like hydrolases
13	c3oqpB	Alignment		100.0	30	PDB header: hydrolase Chain: B; PDB Molecule: putative isochorismatase; PDBTitle: crystal structure of a putative isochorismatase (bxe_a0706) from2 burkholderia xenovorans lb400 at 1.22 a resolution
14	c3kl2K	Alignment		100.0	21	PDB header: structural genomics, unknown function Chain: K; PDB Molecule: putative isochorismatase; PDBTitle: crystal structure of a putative isochorismatase from streptomyces2 avermitilis
15	c3gbcA	Alignment		100.0	35	PDB header: hydrolase Chain: A; PDB Molecule: pyrazinamidase/nicotinamidas pnca; PDBTitle: determination of the crystal structure of the pyrazinamidase from2 m.tuberculosis : a structure-function analysis for prediction3 resistance to pyrazinamide
16	c3hb7G	Alignment		100.0	23	PDB header: hydrolase Chain: G; PDB Molecule: isochorismatase hydrolase; PDBTitle: the crystal structure of an isochorismatase-like hydrolase from2 alkaliphilus metallireducens to 2.3a
17	c3eefA	Alignment		100.0	31	PDB header: hydrolase Chain: A; PDB Molecule: n-carbamoylsarcosine amidase related protein; PDBTitle: crystal structure of n-carbamoylsarcosine amidase from thermoplasma2 acidophilum
18	c3mcwA	Alignment		100.0	25	PDB header: hydrolase Chain: A; PDB Molecule: putative hydrolase; PDBTitle: crystal structure of an a putative hydrolase of the isochorismatase2 family (cv_1320) from chromobacterium violaceum atcc 12472 at 1.06 a3 resolution
19	c3o93A	Alignment		100.0	27	PDB header: hydrolase Chain: A; PDB Molecule: nicotinamidase; PDBTitle: high resolution crystal structures of streptococcus pneumoniae2 nicotinamidase with trapped intermediates provide insights into3 catalytic mechanism and inhibition by aldehydes
20	c3lqyA	Alignment		100.0	26	PDB header: hydrolase Chain: A; PDB Molecule: putative isochorismatase hydrolase; PDBTitle: crystal structure of putative isochorismatase hydrolase from2 oleispira antarctica
21	c2a67C	Alignment	not modelled	100.0	24	PDB header: structural genomics, unknown function Chain: C; PDB Molecule: isochorismatase family protein; PDBTitle: crystal structure of isochorismatase family protein
22	c1yzvA	Alignment	not modelled	100.0	21	PDB header: structural genomics, unknown function Chain: A; PDB Molecule: hypothetical protein; PDBTitle: hypothetical protein from trypanosoma cruzi
23	d1yaca	Alignment	not modelled	100.0	26	Fold: Isochorismatase-like hydrolases Superfamily: Isochorismatase-like hydrolases Family: Isochorismatase-like hydrolases
24	c2b34C	Alignment	not modelled	100.0	25	PDB header: hydrolase Chain: C; PDB Molecule: mar1 ribonuclease; PDBTitle: structure of mar1 ribonuclease from caenorhabditis elegans
25	d1x9ga	Alignment	not modelled	100.0	24	Fold: Isochorismatase-like hydrolases Superfamily: Isochorismatase-like hydrolases Family: Isochorismatase-like hydrolases
26	d1cmwa2	Alignment	not modelled	83.4	19	Fold: PIN domain-like Superfamily: PIN domain-like Family: 5' to 3' exonuclease catalytic domain
27	d1tfra2	Alignment	not modelled	67.4	14	Fold: PIN domain-like Superfamily: PIN domain-like Family: 5' to 3' exonuclease catalytic domain
28	c2ihhA	Alignment	not modelled	66.9	12	PDB header: hydrolase/dna Chain: A; PDB Molecule: ribonuclease h; PDBTitle: co-crystal of bacteriophage t4 rnase h with a fork dna2 substrate Fold: Tryptophan synthase beta subunit-like PLP-dependent enzymes

29	d1tyzA	Alignment	not modelled	63.6	16	Superfamily: Tryptophan synthase beta subunit-like PLP-dependent enzymes Family: Tryptophan synthase beta subunit-like PLP-dependent enzymes
30	d1xdpa3	Alignment	not modelled	55.7	18	Fold: Phospholipase D/nuclease Superfamily: Phospholipase D/nuclease Family: Polyphosphate kinase C-terminal domain
31	d1xp8a1	Alignment	not modelled	54.0	13	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: RecA protein-like (ATPase-domain) PDB header: transferase
32	c1xdoB	Alignment	not modelled	53.7	18	Chain: B; PDB Molecule: polyphosphate kinase; PDBTitle: crystal structure of escherichia coli polyphosphate kinase
33	d1a9xa3	Alignment	not modelled	53.5	17	Fold: PreATP-grasp domain Superfamily: PreATP-grasp domain Family: BC N-terminal domain-like
34	d1f2da	Alignment	not modelled	50.6	14	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
35	c1cmwA	Alignment	not modelled	47.0	21	PDB header: transferase Chain: A; PDB Molecule: protein (dna polymerase i); PDBTitle: crystal structure of taq dna-polymerase shows a new2 orientation for the structure-specific nuclease domain
36	c3fkjA	Alignment	not modelled	45.1	17	PDB header: isomerase Chain: A; PDB Molecule: putative phosphosugar isomerases; PDBTitle: crystal structure of a putative phosphosugar isomerase (stm_0572) from2 salmonella typhimurium lt2 at 2.12 a resolution
37	d1vp8a	Alignment	not modelled	39.4	21	Fold: Pyruvate kinase C-terminal domain-like Superfamily: PK C-terminal domain-like Family: MTH1675-like
38	c2b4qB	Alignment	not modelled	38.9	17	PDB header: oxidoreductase Chain: B; PDB Molecule: rhamnolipids biosynthesis 3-oxoacyl-[acyl-] PDBTitle: pseudomonas aeruginosa rhlg/nadp active-site complex
39	d1oi7a1	Alignment	not modelled	38.7	23	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: CoA-binding domain
40	c3euuD	Alignment	not modelled	38.4	10	PDB header: isomerase Chain: D; PDB Molecule: putative fructose-aminoacid-6-phosphate deglycase; PDBTitle: crystal structure of a putative phosphosugar isomerase (bsu32610) from2 bacillus subtilis at 1.90 a resolution
41	d1xu9a	Alignment	not modelled	38.2	20	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: Tyrosine-dependent oxidoreductases
42	d1qsga	Alignment	not modelled	38.0	13	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: Tyrosine-dependent oxidoreductases
43	d2dt5a1	Alignment	not modelled	36.9	13	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: Transcriptional repressor Rex, N-terminal domain
44	c1xp8A	Alignment	not modelled	36.1	13	PDB header: dna binding protein Chain: A; PDB Molecule: reca protein; PDBTitle: "deinococcus radiodurans reca in complex with atp-gamma-s"
45	c2nm0B	Alignment	not modelled	35.5	17	PDB header: oxidoreductase Chain: B; PDB Molecule: probable 3-oxacyl-(acyl-carrier-protein) reductase; PDBTitle: crystal structure of sco1815: a beta-ketoacyl-acyl carrier protein2 reductase from streptomyces coelicolor a3(2)
46	c2f06B	Alignment	not modelled	35.3	14	PDB header: structural genomics, unknown function Chain: B; PDB Molecule: conserved hypothetical protein; PDBTitle: crystal structure of protein bt0572 from bacteroides thetaiotaomicron
47	c1x1qA	Alignment	not modelled	34.3	14	PDB header: lyase Chain: A; PDB Molecule: tryptophan synthase beta chain; PDBTitle: crystal structure of tryptophan synthase beta chain from thermus2 thermophilus hb8
48	d1nhpa2	Alignment	not modelled	33.5	25	Fold: FAD/NAD(P)-binding domain Superfamily: FAD/NAD(P)-binding domain Family: FAD/NAD-linked reductases, N-terminal and central domains
49	d1gz6a	Alignment	not modelled	32.9	20	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: Tyrosine-dependent oxidoreductases
50	d2bd0a1	Alignment	not modelled	32.2	15	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: Tyrosine-dependent oxidoreductases
51	c3toxG	Alignment	not modelled	31.9	21	PDB header: oxidoreductase Chain: G; PDB Molecule: short chain dehydrogenase; PDBTitle: crystal structure of a short chain dehydrogenase in complex with2 nad(p) from sinorhizobium meliloti 1021
52	c3nugA	Alignment	not modelled	31.6	23	PDB header: oxidoreductase Chain: A; PDB Molecule: 3-oxoacyl-(acyl-carrier protein) reductase; PDBTitle: crystal structure of wild type tetrameric pyridoxal 4-dehydrogenase2 from mesorhizobium loti
53	c2recB	Alignment	not modelled	30.1	8	PDB header: helicase PDB COMPND:
						Fold: NAD(P)-binding Rossmann-fold domains

54	d2ae2a_	Alignment	not modelled	28.6	15	Superfamily: NAD(P)-binding Rossmann-fold domains Family: Tyrosine-dependent oxidoreductases
55	c3g8rA_	Alignment	not modelled	27.9	12	PDB header: biosynthetic protein Chain: A: PDB Molecule: probable spore coat polysaccharide biosynthesis protein e; PDBTitle: crystal structure of putative spore coat polysaccharide biosynthesis2 protein e from chromobacterium violaceum atcc 12472
56	c2ptgA_	Alignment	not modelled	27.8	19	PDB header: oxidoreductase Chain: A: PDB Molecule: enoyl-acyl carrier reductase; PDBTitle: crystal structure of eimeria tenella enoyl reductase
57	d1ooea_	Alignment	not modelled	27.8	24	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: Tyrosine-dependent oxidoreductases
58	d2bs2a2	Alignment	not modelled	27.7	21	Fold: FAD/NAD(P)-binding domain Superfamily: FAD/NAD(P)-binding domain Family: Succinate dehydrogenase/fumarate reductase flavoprotein N-terminal domain
59	d1qopb_	Alignment	not modelled	26.7	16	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
60	d1duvg2	Alignment	not modelled	26.5	11	Fold: ATC-like Superfamily: Aspartate/ornithine carbamoyltransferase Family: Aspartate/ornithine carbamoyltransferase
61	d1pv8a_	Alignment	not modelled	26.3	11	Fold: TIM beta/alpha-barrel Superfamily: Al долазе Family: 5-aminoalaevulinate dehydratase, ALAD (porphobilinogen synthase)
62	d1ela1_	Alignment	not modelled	25.9	17	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: Tyrosine-dependent oxidoreductases
63	c3v2hB_	Alignment	not modelled	25.9	7	PDB header: oxidoreductase Chain: B: PDB Molecule: d-beta-hydroxybutyrate dehydrogenase; PDBTitle: the crystal structure of d-beta-hydroxybutyrate dehydrogenase from2 sinorhizobium meliloti
64	c3rd5A_	Alignment	not modelled	24.9	13	PDB header: oxidoreductase Chain: A: PDB Molecule: mypaa.01249.c; PDBTitle: crystal structure of a putative uncharacterized protein from2 mycobacterium paratuberculosis
65	c3i1jB_	Alignment	not modelled	24.7	17	PDB header: oxidoreductase Chain: B: PDB Molecule: oxidoreductase, short chain PDBTitle: structure of a putative short chain dehydrogenase from2 pseudomonas syringae
66	d1o5wa1	Alignment	not modelled	24.7	19	Fold: FAD/NAD(P)-binding domain Superfamily: FAD/NAD(P)-binding domain Family: FAD-linked reductases, N-terminal domain
67	c2dy0A_	Alignment	not modelled	24.5	27	PDB header: transferase Chain: A: PDB Molecule: adenine phosphoribosyltransferase; PDBTitle: crystal structure of project jw0458 from escherichia coli
68	c3d3kd_	Alignment	not modelled	24.2	5	PDB header: protein binding Chain: D: PDB Molecule: enhancer of mrna-decapping protein 3; PDBTitle: crystal structure of human edc3p
69	d1mg5a_	Alignment	not modelled	23.5	22	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: Tyrosine-dependent oxidoreductases
70	d1v8za1	Alignment	not modelled	23.4	17	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
71	d1dxha2	Alignment	not modelled	23.2	18	Fold: ATC-like Superfamily: Aspartate/ornithine carbamoyltransferase Family: Aspartate/ornithine carbamoyltransferase
72	c2p68A_	Alignment	not modelled	23.2	13	PDB header: oxidoreductase Chain: A: PDB Molecule: 3-oxoacyl-[acyl-carrier-protein] reductase; PDBTitle: crystal structure of aq_1716 from aquifex aeolicus vf5
73	c3grkE_	Alignment	not modelled	23.0	13	PDB header: oxidoreductase Chain: E: PDB Molecule: enoyl-(acyl-carrier-protein) reductase (nadh); PDBTitle: crystal structure of short chain dehydrogenase reductase2 sdr glucose-ribitol dehydrogenase from brucella melitensis
74	d1ulsa_	Alignment	not modelled	22.7	13	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: Tyrosine-dependent oxidoreductases
75	c2fcfB_	Alignment	not modelled	22.6	20	PDB header: oxidoreductase Chain: B: PDB Molecule: 2-(r)-hydroxypropyl-com dehydrogenase; PDBTitle: structural basis for stereo selectivity in the (r)- and2 (s)-hydroxypropylethane thiosulfonate dehydrogenases
76	c3rkrC_	Alignment	not modelled	22.3	17	PDB header: oxidoreductase Chain: C: PDB Molecule: short chain oxidoreductase; PDBTitle: crystal structure of a metagenomic short-chain oxidoreductase (sdr) in2 complex with nadp
77	c1vlvA_	Alignment	not modelled	22.0	6	PDB header: transferase Chain: A: PDB Molecule: ornithine carbamoyltransferase; PDBTitle: crystal structure of ornithine carbamoyltransferase (tm1097) from2 thermotoga maritima at 2.25 a resolution
78	c2vyea_	Alignment	not modelled	22.0	13	PDB header: hydrolase Chain: A: PDB Molecule: replicative dna helicase; PDBTitle: crystal structure of the dnac-ssdna complex

79	d1c0pa1		not modelled	21.8	21	Fold: Nucleotide-binding domain Superfamily: Nucleotide-binding domain Family: D-aminoacid oxidase, N-terminal domain
80	d1uluA_		not modelled	21.4	13	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: Tyrosine-dependent oxidoreductases
81	d2pd4a1		not modelled	21.3	10	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: Tyrosine-dependent oxidoreductases
82	c3edmD_		not modelled	21.2	17	PDB header: oxidoreductase Chain: D: PDB Molecule: short chain dehydrogenase; PDBTitle: crystal structure of a short chain dehydrogenase from agrobacterium2 tumefaciens
83	d1pr9a_		not modelled	21.1	20	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: Tyrosine-dependent oxidoreductases
84	c2ntnB_		not modelled	21.1	20	PDB header: oxidoreductase Chain: B: PDB Molecule: 3-oxoacyl-[acyl-carrier-protein] reductase; PDBTitle: crystal structure of maba-c60v/g139a/s144l
85	c3m1aF_		not modelled	21.1	17	PDB header: oxidoreductase Chain: F: PDB Molecule: putative dehydrogenase; PDBTitle: the crystal structure of a short-chain dehydrogenase from streptomyces avermitilis to 2a
86	c2nwqA_		not modelled	20.7	17	PDB header: oxidoreductase Chain: A: PDB Molecule: probable short-chain dehydrogenase; PDBTitle: short chain dehydrogenase from pseudomonas aeruginosa
87	d1xsea_		not modelled	20.6	17	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: Tyrosine-dependent oxidoreductases
88	d2a4ka1		not modelled	20.6	13	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: Tyrosine-dependent oxidoreductases
89	c3ek2D_		not modelled	20.1	10	PDB header: oxidoreductase Chain: D: PDB Molecule: enoyl-(acyl-carrier-protein) reductase (nadh); PDBTitle: crystal structure of enoyl-(acyl carrier protein) reductase2 from burkholderia pseudomallei 1719b
90	c2ha8A_		not modelled	20.1	6	PDB header: rna binding protein Chain: A: PDB Molecule: tar (hiv-1) rna loop binding protein; PDBTitle: methyltransferase domain of human tar (hiv-1) rna binding2 protein 1
91	c3l77A_		not modelled	19.8	10	PDB header: oxidoreductase Chain: A: PDB Molecule: short-chain alcohol dehydrogenase; PDBTitle: x-ray structure alcohol dehydrogenase from archaeon thermococcus2 sibiricus complexed with 5-hydroxy-nadp
92	d1k2wa_		not modelled	19.8	12	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: Tyrosine-dependent oxidoreductases
93	c2ehdB_		not modelled	19.6	17	PDB header: oxidoreductase Chain: B: PDB Molecule: oxidoreductase, short-chain dehydrogenase/reductase family; PDBTitle: crystal structure analysis of oxidoreductase
94	d1ubea1		not modelled	19.4	6	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: RecA protein-like (ATPase-domain) PDB header: transferase Chain: A: PDB Molecule: ornithine carbamoyltransferase, catabolic; PDBTitle: crystal structure of the hexameric catabolic ornithine2 transcarbamylase from lactobacillus hilgardi
95	c2w37A_		not modelled	19.3	14	PDB header: oxidoreductase Chain: D: PDB Molecule: estradiol 17-beta-dehydrogenase 8; PDBTitle: structure of human hydroxysteroid dehydrogenase type 8, hsd17b8
96	c2pd6D_		not modelled	19.2	12	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: Tyrosine-dependent oxidoreductases
97	d1xq1a_		not modelled	19.2	11	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: Tyrosine-dependent oxidoreductases
98	d2o8ra3		not modelled	19.1	17	Fold: Phospholipase D/nuclease Superfamily: Phospholipase D/nuclease Family: Polyphosphate kinase C-terminal domain
99	c3g68A_		not modelled	19.1	18	PDB header: isomerase Chain: A: PDB Molecule: putative phosphosugar isomerase; PDBTitle: crystal structure of a putative phosphosugar isomerase (cd3275) from clostridium difficile 630 at 1.80 a resolution