






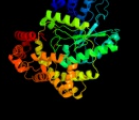
















Phyre2

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Description	P00864
Date	Thu Jan 5 10:56:57 GMT 2012
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Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	dljqna_	 Alignment		100.0	100	Fold: TIM beta/alpha-barrel Superfamily: Phosphoenolpyruvate/pyruvate domain Family: Phosphoenolpyruvate carboxylase
2	cljqoA_	 Alignment		100.0	42	PDB header: lyase Chain: A: PDB Molecule: phosphoenolpyruvate carboxylase; PDBTitle: crystal structure of c4-form phosphoenolpyruvate carboxylase from2 maize
3	dljqoa_	 Alignment		100.0	42	Fold: TIM beta/alpha-barrel Superfamily: Phosphoenolpyruvate/pyruvate domain Family: Phosphoenolpyruvate carboxylase
4	c3odmE_	 Alignment		100.0	17	PDB header: lyase Chain: E: PDB Molecule: phosphoenolpyruvate carboxylase; PDBTitle: archaeal-type phosphoenolpyruvate carboxylase
5	dle0ta2	 Alignment		97.3	18	Fold: TIM beta/alpha-barrel Superfamily: Phosphoenolpyruvate/pyruvate domain Family: Pyruvate kinase
6	dlpkla2	 Alignment		97.2	19	Fold: TIM beta/alpha-barrel Superfamily: Phosphoenolpyruvate/pyruvate domain Family: Pyruvate kinase
7	dla3xa2	 Alignment		97.0	19	Fold: TIM beta/alpha-barrel Superfamily: Phosphoenolpyruvate/pyruvate domain Family: Pyruvate kinase
8	d2g50a2	 Alignment		96.5	18	Fold: TIM beta/alpha-barrel Superfamily: Phosphoenolpyruvate/pyruvate domain Family: Pyruvate kinase
9	c2vwtA_	 Alignment		96.5	21	PDB header: lyase Chain: A: PDB Molecule: yfau, 2-keto-3-deoxy sugar aldolase; PDBTitle: crystal structure of yfau, a metal ion dependent class ii2 aldolase from escherichia coli k12 - mg-pyruvate product3 complex
10	dldxea_	 Alignment		95.9	14	Fold: TIM beta/alpha-barrel Superfamily: Phosphoenolpyruvate/pyruvate domain Family: Hpch/Hpal aldolase
11	dliua2	 Alignment		95.3	23	Fold: TIM beta/alpha-barrel Superfamily: Phosphoenolpyruvate/pyruvate domain Family: Pyruvate kinase

12	c2v5jB_	Alignment		95.3	18	PDB header: lyase Chain: B: PDB Molecule: 2,4-dihydroxyhept-2-ene-1,7-dioic acid aldolase; PDBTitle: apo class ii aldolase hpch
13	c3qqwC_	Alignment		95.1	16	PDB header: lyase Chain: C: PDB Molecule: putative citrate lyase; PDBTitle: crystal structure of a hypothetical lyase (reut_b4148) from ralstonia2 eutropha jmp134 at 2.44 a resolution
14	dlizca_	Alignment		94.7	17	Fold: TIM beta/alpha-barrel Superfamily: Phosphoenolpyruvate/pyruvate domain Family: Hpch/Hpai aldolase
15	clizcA_	Alignment		94.7	17	PDB header: lyase Chain: A: PDB Molecule: macrophomate synthase intermolecular diels-alderase; PDBTitle: crystal structure analysis of macrophomate synthase
16	c3qz6A_	Alignment		94.2	18	PDB header: lyase Chain: A: PDB Molecule: hpch/hpai aldolase; PDBTitle: the crystal structure of hpch/hpai aldolase from desulfitobacterium2 hafniense dcb-2
17	c3r4iB_	Alignment		93.8	18	PDB header: lyase Chain: B: PDB Molecule: citrate lyase; PDBTitle: crystal structure of a citrate lyase (bx_e_b2899) from burkholderia2 xenovorans lb400 at 2.24 a resolution
18	clsgjB_	Alignment		92.3	17	PDB header: lyase Chain: B: PDB Molecule: citrate lyase, beta subunit; PDBTitle: crystal structure of citrate lyase beta subunit
19	dlsgja_	Alignment		92.2	17	Fold: TIM beta/alpha-barrel Superfamily: Phosphoenolpyruvate/pyruvate domain Family: Hpch/Hpai aldolase
20	dlu5ha_	Alignment		91.5	17	Fold: TIM beta/alpha-barrel Superfamily: Phosphoenolpyruvate/pyruvate domain Family: Hpch/Hpai aldolase
21	clu5vA_	Alignment	not modelled	90.5	17	PDB header: lyase Chain: A: PDB Molecule: cite; PDBTitle: structure of cite complexed with triphosphate group of atp2 form mycobacterium tuberculosis
22	cla3wB_	Alignment	not modelled	88.9	28	PDB header: transferase Chain: B: PDB Molecule: pyruvate kinase; PDBTitle: pyruvate kinase from saccharomyces cerevisiae complexed with fbp, pg, 2 mn2+ and k+
23	clpkIB_	Alignment	not modelled	88.6	26	PDB header: transferase Chain: B: PDB Molecule: protein (pyruvate kinase); PDBTitle: the structure of leishmania pyruvate kinase
24	c3pugA_	Alignment	not modelled	88.4	14	PDB header: transferase Chain: A: PDB Molecule: malate synthase; PDBTitle: haloferax volcanii malate synthase native at 3mm glyoxylate
25	c3qllB_	Alignment	not modelled	87.5	17	PDB header: lyase Chain: B: PDB Molecule: citrate lyase; PDBTitle: crystal structure of ripc from yersinia pestis
26	cle0tD_	Alignment	not modelled	87.2	30	PDB header: phosphotransferase Chain: D: PDB Molecule: pyruvate kinase; PDBTitle: r292d mutant of e. coli pyruvate kinase
27	c3eoeC_	Alignment	not modelled	86.3	26	PDB header: transferase Chain: C: PDB Molecule: pyruvate kinase; PDBTitle: crystal structure of pyruvate kinase from toxoplasma gondii, 55.m00007
28	c2vgbB_	Alignment	not modelled	83.9	27	PDB header: transferase Chain: B: PDB Molecule: pyruvate kinase isozymes r/i; PDBTitle: human erythrocyte pyruvate kinase
						PDB header: transferase/transferase inhibitor

29	c3t07D_	Alignment	not modelled	83.8	29	Chain: D: PDB Molecule: pyruvate kinase; PDBTitle: crystal structure of s. aureus pyruvate kinase in complex with a2 naturally occurring bis-indole alkaloid
30	c1aqfB_	Alignment	not modelled	83.8	26	PDB header: transferase Chain: B: PDB Molecule: pyruvate kinase; PDBTitle: pyruvate kinase from rabbit muscle with mg, k, and l-2 phospholactate
31	c3e0vB_	Alignment	not modelled	81.6	22	PDB header: transferase Chain: B: PDB Molecule: pyruvate kinase; PDBTitle: crystal structure of pyruvate kinase from leishmania mexicana in2 complex with sulphate ions
32	c3cuzA_	Alignment	not modelled	78.1	18	PDB header: transferase Chain: A: PDB Molecule: malate synthase a; PDBTitle: atomic resolution structures of escherichia coli and2 bacillis anthracis malate synthase a: comparison with3 isoform g and implications for structure based drug design
33	c1t5aB_	Alignment	not modelled	77.5	27	PDB header: transferase Chain: B: PDB Molecule: pyruvate kinase, m2 isozyme; PDBTitle: human pyruvate kinase m2
34	c3khdC_	Alignment	not modelled	76.9	24	PDB header: transferase Chain: C: PDB Molecule: pyruvate kinase; PDBTitle: crystal structure of pff1300w.
35	c3ma8A_	Alignment	not modelled	75.7	24	PDB header: transferase Chain: A: PDB Molecule: pyruvate kinase; PDBTitle: crystal structure of cgd1_2040, a pyruvate kinase from cryptosporidium2 parvum
36	c2e28A_	Alignment	not modelled	74.6	24	PDB header: transferase Chain: A: PDB Molecule: pyruvate kinase; PDBTitle: crystal structure analysis of pyruvate kinase from bacillus2 stearothermophilus
37	d1wdpa1	Alignment	not modelled	62.5	33	Fold: TIM beta/alpha-barrel Superfamily: (Trans)glycosidases Family: Amylase, catalytic domain
38	c1j0yD_	Alignment	not modelled	61.7	24	PDB header: hydrolase Chain: D: PDB Molecule: beta-amylase; PDBTitle: beta-amylase from bacillus cereus var. mycoides in complex2 with glucose
39	c2xfyA_	Alignment	not modelled	61.5	40	PDB header: hydrolase Chain: A: PDB Molecule: beta-amylase; PDBTitle: crystal structure of barley beta-amylase complexed with2 alpha-cyclodextrin
40	c1q7tA_	Alignment	not modelled	59.8	17	PDB header: hydrolase Chain: A: PDB Molecule: hypothetical protein rv1170; PDBTitle: rv1170 (mshb) from mycobacterium tuberculosis
41	d1q74a_	Alignment	not modelled	59.4	19	Fold: LmbE-like Superfamily: LmbE-like Family: LmbE-like
42	c2yxgD_	Alignment	not modelled	58.0	9	PDB header: lyase Chain: D: PDB Molecule: dihydrodipicolinate synthase; PDBTitle: crystal structure of dihydrodipicolinate synthase (dapa)
43	c3godA_	Alignment	not modelled	52.9	17	PDB header: immune system Chain: A: PDB Molecule: cas1; PDBTitle: structural basis for dnase activity of a conserved protein2 implicated in crispr-mediated antiviral defense
44	c1ahuB_	Alignment	not modelled	52.6	25	PDB header: flavoenzyme Chain: B: PDB Molecule: vanillyl-alcohol oxidase; PDBTitle: structure of the octameric flavoenzyme vanillyl-alcohol2 oxidase in complex with p-cresol
45	c3tekA_	Alignment	not modelled	52.2	28	PDB header: dna binding protein Chain: A: PDB Molecule: thermodbp-single stranded dna binding protein; PDBTitle: thermodbp: a non-canonical single-stranded dna binding protein with a2 novel structure and mechanism
46	c3fluD_	Alignment	not modelled	50.3	12	PDB header: lyase Chain: D: PDB Molecule: dihydrodipicolinate synthase; PDBTitle: crystal structure of dihydrodipicolinate synthase from the pathogen2 neisseria meningitidis
47	c3nkdB_	Alignment	not modelled	50.1	23	PDB header: immune system Chain: B: PDB Molecule: crispr-associated protein cas1; PDBTitle: structure of crispr-associated protein cas1 from escherichia coli str.2 k-12
48	d1vema2	Alignment	not modelled	48.9	27	Fold: TIM beta/alpha-barrel Superfamily: (Trans)glycosidases Family: Amylase, catalytic domain
49	d2hf5a1	Alignment	not modelled	47.2	47	Fold: EF Hand-like Superfamily: EF-hand Family: Calmodulin-like
50	c3io3A_	Alignment	not modelled	46.8	23	PDB header: chaperone Chain: A: PDB Molecule: deha2d07832p; PDBTitle: get3 with adp from d. hansenii in closed form
51	c2yr1B_	Alignment	not modelled	44.5	21	PDB header: lyase Chain: B: PDB Molecule: 3-dehydroquinate dehydratase; PDBTitle: crystal structure of 3-dehydroquinate dehydratase from geobacillus2 kaustophilus hta426
52	d1wota_	Alignment	not modelled	44.1	28	Fold: Nucleotidyltransferase Superfamily: Nucleotidyltransferase Family: Catalytic subunit of bi-partite nucleotidyltransferase
53	c2k7rA_	Alignment	not modelled	43.3	11	PDB header: replication Chain: A: PDB Molecule: primosomal protein dnaI; PDBTitle: n-terminal domain of the bacillus subtilis helicase-loading2 protein dnaI
54	d2csua1	Alignment	not modelled	42.8	17	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: CoA-binding domain
						PDB header: transferase

55	c3cuxA	Alignment	not modelled	42.0	16	Chain: A: PDB Molecule: malate synthase; PDBTitle: atomic resolution structures of escherichia coli and2 bacillis anthracis malate synthase a: comparison with3 isoform g and implications for structure based drug design
56	c3noeA	Alignment	not modelled	39.8	12	PDB header: lyase Chain: A: PDB Molecule: dihydrodipicolinate synthase; PDBTitle: crystal structure of dihydrodipicolinate synthase from pseudomonas2 aeruginosa
57	d1b1ya	Alignment	not modelled	39.4	24	Fold: TIM beta/alpha-barrel Superfamily: (Trans)glycosidases Family: Amylase, catalytic domain
58	c3d0cB	Alignment	not modelled	38.8	4	PDB header: lyase Chain: B: PDB Molecule: dihydrodipicolinate synthase; PDBTitle: crystal structure of dihydrodipicolinate synthase from2 oceanobacillus iheyensis at 1.9 a resolution
59	d1fa2a	Alignment	not modelled	36.1	30	Fold: TIM beta/alpha-barrel Superfamily: (Trans)glycosidases Family: Amylase, catalytic domain
60	c3cyqM	Alignment	not modelled	33.3	12	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
61	c3e96B	Alignment	not modelled	33.3	7	PDB header: lyase Chain: B: PDB Molecule: dihydrodipicolinate synthase; PDBTitle: crystal structure of dihydrodipicolinate synthase from2 bacillus clausii
62	d1fp3a	Alignment	not modelled	32.5	12	Fold: alpha/alpha toroid Superfamily: Six-hairpin glycosidases Family: N-acetylglucosamine (NAG) epimerase
63	d1bg5a1	Alignment	not modelled	32.2	14	Fold: GST C-terminal domain-like Superfamily: GST C-terminal domain-like Family: Glutathione S-transferase (GST), C-terminal domain
64	d1scta	Alignment	not modelled	31.1	12	Fold: Globin-like Superfamily: Globin-like Family: Globins
65	d1rd5a	Alignment	not modelled	28.9	18	Fold: TIM beta/alpha-barrel Superfamily: Ribulose-phosphate binding barrel Family: Tryptophan biosynthesis enzymes
66	c2o98P	Alignment	not modelled	27.6	29	PDB header: protein binding Chain: P: PDB Molecule: plasma membrane h+ atpase; PDBTitle: structure of the 14-3-3 / h+-atpase plant complex
67	c3h8hA	Alignment	not modelled	27.6	43	PDB header: transcription Chain: A: PDB Molecule: e3 ubiquitin-protein ligase ring2; PDBTitle: structure of the c-terminal domain of human rnf2/ring1b;
68	c3lfxE	Alignment	not modelled	27.3	16	PDB header: structural genomics, unknown function Chain: E: PDB Molecule: uncharacterized protein; PDBTitle: structure of tm1797, a cas1 protein from thermotoga maritima
69	d1a9xa1	Alignment	not modelled	27.1	19	Fold: Carbamoyl phosphate synthetase, large subunit connection domain Superfamily: Carbamoyl phosphate synthetase, large subunit connection domain Family: Carbamoyl phosphate synthetase, large subunit connection domain
70	d1z7aa1	Alignment	not modelled	26.9	13	Fold: 7-stranded beta/alpha barrel Superfamily: Glycoside hydrolase/deacetylase Family: PA1517-like
71	c2gljR	Alignment	not modelled	26.8	21	PDB header: hydrolase Chain: R: PDB Molecule: PDBTitle: crystal structure of aminopeptidase i from clostridium2 acetobutylicum
72	c3si9B	Alignment	not modelled	25.2	12	PDB header: lyase Chain: B: PDB Molecule: dihydrodipicolinate synthase; PDBTitle: crystal structure of dihydrodipicolinate synthase from bartonella2 henselae
73	c3ibgF	Alignment	not modelled	24.9	17	PDB header: hydrolase Chain: F: PDB Molecule: atpase, subunit of the get complex; PDBTitle: crystal structure of aspergillus fumigatus get3 with bound2 adp
74	c2ehbD	Alignment	not modelled	24.8	19	PDB header: signalling protein/transferase Chain: D: PDB Molecule: cbl-interacting serine/threonine-protein kinase 24; PDBTitle: the structure of the c-terminal domain of the protein kinase atos22 bound to the calcium sensor atos3
75	d2r8ba1	Alignment	not modelled	24.4	50	Fold: alpha/beta-Hydrolases Superfamily: alpha/beta-Hydrolases Family: Carboxylesterase/thioesterase 1
76	c3u0vA	Alignment	not modelled	24.4	50	PDB header: hydrolase Chain: A: PDB Molecule: lysophospholipase-like protein 1; PDBTitle: crystal structure analysis of human lyp1a1
77	d1p4ca	Alignment	not modelled	24.2	20	Fold: TIM beta/alpha-barrel Superfamily: FMN-linked oxidoreductases Family: FMN-linked oxidoreductases
78	c2hmcA	Alignment	not modelled	24.1	7	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: dihydrodipicolinate synthase; PDBTitle: the crystal structure of dihydrodipicolinate synthase dapa from2 agrobacterium tumefaciens
79	d2vl8a1	Alignment	not modelled	23.7	16	Fold: Nucleotide-diphospho-sugar transferases Superfamily: Nucleotide-diphospho-sugar transferases Family: Glycosylating toxin catalytic domain-like
80	d1hzfa	Alignment	not modelled	23.5	26	Fold: alpha/alpha toroid Superfamily: Terpenoid cyclases/Protein prenyltransferases Family: Complement components

81	c1hzaA_	Alignment	not modelled	23.5	26	PDB header: immune system Chain: A: PDB Molecule: complement factor c4a; PDBTitle: c4adg fragment of human complement factor c4a
82	c3og9A_	Alignment	not modelled	23.4	50	PDB header: hydrolase Chain: A: PDB Molecule: protein yahd a copper inducible hydrolase; PDBTitle: structure of yahd with malic acid
83	d1gtma1	Alignment	not modelled	23.4	41	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: Aminoacid dehydrogenase-like, C-terminal domain
84	d1xnya1	Alignment	not modelled	22.7	19	Fold: ClpP/crotonase Superfamily: ClpP/crotonase Family: Biotin dependent carboxylase carboxyltransferase domain
85	c2gedB_	Alignment	not modelled	22.6	30	PDB header: protein transport, signaling protein Chain: B: PDB Molecule: signal recognition particle receptor beta PDBTitle: signal recognition particle receptor beta-subunit in2 nucleotide-free dimerized form
86	c3epmB_	Alignment	not modelled	22.4	21	PDB header: biosynthetic protein Chain: B: PDB Molecule: thiamine biosynthesis protein thic; PDBTitle: crystal structure of caulobacter crescentus thic
87	c2cdh1_	Alignment	not modelled	22.4	11	PDB header: transferase Chain: 1: PDB Molecule: enoyl reductase; PDBTitle: architecture of the thermomyces lanuginosus fungal fatty2 acid synthase at 5 angstrom resolution.
88	d1k0ma1	Alignment	not modelled	21.9	11	Fold: GST C-terminal domain-like Superfamily: GST C-terminal domain-like Family: Glutathione S-transferase (GST), C-terminal domain
89	d1vrga1	Alignment	not modelled	21.7	19	Fold: ClpP/crotonase Superfamily: ClpP/crotonase Family: Biotin dependent carboxylase carboxyltransferase domain
90	d1z1za1	Alignment	not modelled	21.6	30	Fold: Phage tail protein-like Superfamily: Phage tail protein-like Family: Lambda phage gpU-like
91	d1gzda_	Alignment	not modelled	21.3	18	Fold: SIS domain Superfamily: SIS domain Family: Phosphoglucose isomerase, PGI
92	d1fj2a_	Alignment	not modelled	21.1	30	Fold: alpha/beta-Hydrolases Superfamily: alpha/beta-Hydrolases Family: Carboxylesterase/thioesterase 1
93	d1jmsa3	Alignment	not modelled	21.1	18	Fold: SAM domain-like Superfamily: PsbU/PolX domain-like Family: DNA polymerase beta-like, second domain
94	c3pv9D_	Alignment	not modelled	20.9	20	PDB header: immune system Chain: D: PDB Molecule: putative uncharacterized protein ph1245; PDBTitle: structure of ph1245, a cas1 from pyrococcus horikoshii
95	d1zl0a2	Alignment	not modelled	20.3	36	Fold: Flavodoxin-like Superfamily: Class I glutamine amidotransferase-like Family: LD-carboxypeptidase A N-terminal domain-like
96	c3dz1A_	Alignment	not modelled	20.1	9	PDB header: lyase Chain: A: PDB Molecule: dihydrodipicolinate synthase; PDBTitle: crystal structure of dihydrodipicolinate synthase from2 rhodospseudomonas palustris at 1.87a resolution
97	d1auoa_	Alignment	not modelled	19.9	30	Fold: alpha/beta-Hydrolases Superfamily: alpha/beta-Hydrolases Family: Carboxylesterase/thioesterase 1
98	d1xhoa_	Alignment	not modelled	19.7	15	Fold: Bacillus chorismate mutase-like Superfamily: YjgF-like Family: Chorismate mutase
99	c1xhoB_	Alignment	not modelled	19.7	15	PDB header: structural genomics, unknown function Chain: B: PDB Molecule: chorismate mutase; PDBTitle: chorismate mutase from clostridium thermocellum cth-682