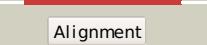


Phyre²

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Description	P08997
Date	Thu Jan 5 11:01:45 GMT 2012
Unique Job ID	1fbe5d9204cf41b3

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c3cuA_			100.0	100	PDB header: transferase Chain: A: PDB Molecule: malate synthase a; PDBTitle: atomic resolution structures of escherichia coli and2 bacillus anthracis malate synthase a: comparison with3 isoform g and implications for structure based drug design
2	c3cuxA_			100.0	55	PDB header: transferase Chain: A: PDB Molecule: malate synthase; PDBTitle: atomic resolution structures of escherichia coli and2 bacillus anthracis malate synthase a: comparison with3 isoform g and implications for structure based drug design
3	d1n8ia_			100.0	21	Fold: TIM beta/alpha-barrel Superfamily: Malate synthase G Family: Malate synthase G
4	d1d8ca_			100.0	19	Fold: TIM beta/alpha-barrel Superfamily: Malate synthase G Family: Malate synthase G
5	c3pugA_			100.0	17	PDB header: transferase Chain: A: PDB Molecule: malate synthase; PDBTitle: haloferax volcanii malate synthase native at 3mm glyoxylate
6	c3r4iB_			100.0	17	PDB header: lyase Chain: B: PDB Molecule: citrate lyase; PDBTitle: crystal structure of a citrate lyase (bxz_b2899) from burkholderia2 xenovorans lb400 at 2.24 a resolution
7	c3qqwC_			100.0	15	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
8	c1sgjB_			100.0	16	PDB header: lyase Chain: B: PDB Molecule: citrate lyase, beta subunit; PDBTitle: crystal structure of citrate lyase beta subunit
9	d1sgja_			100.0	16	Fold: TIM beta/alpha-barrel Superfamily: Phosphoenolpyruvate/pyruvate domain Family: HpcH/Hpal aldolase
10	c1u5vA_			100.0	20	PDB header: lyase Chain: A: PDB Molecule: cite; PDBTitle: structure of cite complexed with triphosphate group of atp2 form mycobacterium tuberculosis
11	d1u5ha_			100.0	20	Fold: TIM beta/alpha-barrel Superfamily: Phosphoenolpyruvate/pyruvate domain Family: HpcH/Hpal aldolase

12	d1dxea			99.9	19	Fold: TIM beta/alpha-barrel Superfamily: Phosphoenolpyruvate/pyruvate domain Family: HpcH/Hpal aldolase
13	c2v5jB			99.8	20	PDB header: lyase Chain: B; PDB Molecule: 2,4-dihydroxyhept-2-ene-1,7-dioic acid aldolase; PDBTitle: apo class ii aldolase hpch
14	c1izcA			99.8	16	PDB header: lyase Chain: A; PDB Molecule: macrophomate synthase intermolecular diels-alderase; PDBTitle: crystal structure analysis of macrophomate synthase
15	d1izca			99.8	16	Fold: TIM beta/alpha-barrel Superfamily: Phosphoenolpyruvate/pyruvate domain Family: HpcH/Hpal aldolase
16	c2vwta			99.8	18	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
17	c3qz6A			99.7	19	PDB header: lyase Chain: A; PDB Molecule: hpch/hpai aldolase; PDBTitle: the crystal structure of hpch/hpai aldolase from desulfitobacterium2 hafniense dcb-2
18	d1e0ta2			99.7	22	Fold: TIM beta/alpha-barrel Superfamily: Phosphoenolpyruvate/pyruvate domain Family: Pyruvate kinase
19	d1a3xa2			99.6	19	Fold: TIM beta/alpha-barrel Superfamily: Phosphoenolpyruvate/pyruvate domain Family: Pyruvate kinase
20	d1pkla2			99.4	19	Fold: TIM beta/alpha-barrel Superfamily: Phosphoenolpyruvate/pyruvate domain Family: Pyruvate kinase
21	d2g50a2		not modelled	99.3	15	Fold: TIM beta/alpha-barrel Superfamily: Phosphoenolpyruvate/pyruvate domain Family: Pyruvate kinase
22	d1liua2		not modelled	99.3	19	Fold: TIM beta/alpha-barrel Superfamily: Phosphoenolpyruvate/pyruvate domain Family: Pyruvate kinase
23	c2hwgA		not modelled	98.9	10	PDB header: transferase Chain: A; PDB Molecule: phosphoenolpyruvate-protein phosphotransferase; PDBTitle: structure of phosphorylated enzyme i of the2 phosphoenolpyruvate:sugar phosphotransferase system
24	c2hroA		not modelled	98.8	10	PDB header: transferase Chain: A; PDB Molecule: phosphoenolpyruvate-protein phosphotransferase; PDBTitle: structure of the full-length enzyme i of the pts system from staphylococcus carnosus
25	c2bg5C		not modelled	98.8	14	PDB header: transferase Chain: C; PDB Molecule: phosphoenolpyruvate-protein kinase; PDBTitle: crystal structure of the phosphoenolpyruvate-binding enzyme2 i-domain from the thermoanaerobacter tengcongensis pep:3 sugar phosphotransferase system (pts)
26	d1h6za1		not modelled	98.7	12	Fold: TIM beta/alpha-barrel Superfamily: Phosphoenolpyruvate/pyruvate domain Family: Pyruvate phosphate dikinase, C-terminal domain
27	d1vbga1		not modelled	98.6	18	Fold: TIM beta/alpha-barrel Superfamily: Phosphoenolpyruvate/pyruvate domain Family: Pyruvate phosphate dikinase, C-terminal domain
28	c1vhbhA		not modelled	98.6	17	PDB header: transferase Chain: A; PDB Molecule: pyruvate,orthophosphate dikinase; PDBTitle: pyruvate phosphate dikinase with bound mg-pep from

					maize
29	c1t5aB	Alignment	not modelled	98.4	18 PDB header: transferase Chain: B: PDB Molecule: pyruvate kinase, m2 isozyme; PDBTitle: human pyruvate kinase m2
30	c2vgbB	Alignment	not modelled	98.3	14 PDB header: transferase Chain: B: PDB Molecule: pyruvate kinase isozymes r/l; PDBTitle: human erythrocyte pyruvate kinase
31	c1aqfB	Alignment	not modelled	98.3	18 PDB header: transferase Chain: B: PDB Molecule: pyruvate kinase; PDBTitle: pyruvate kinase from rabbit muscle with mg, k, and l-2 phospholactate
32	c3khdc	Alignment	not modelled	98.3	20 PDB header: transferase Chain: C: PDB Molecule: pyruvate kinase; PDBTitle: crystal structure of pff1300w.
33	c1h6zA	Alignment	not modelled	98.3	13 PDB header: transferase Chain: A: PDB Molecule: pyruvate phosphate dikinase; PDBTitle: 3.0 Å resolution crystal structure of glycosomal pyruvate2 phosphate dikinase from trypanosoma brucei
34	d1kbla1	Alignment	not modelled	98.1	12 Fold: TIM beta/alpha-barrel Superfamily: Phosphoenolpyruvate/pyruvate domain Family: Pyruvate phosphate dikinase, C-terminal domain
35	c1e0tD	Alignment	not modelled	98.1	19 PDB header: phosphotransferase Chain: D: PDB Molecule: pyruvate kinase; PDBTitle: r292d mutant of e. coli pyruvate kinase
36	c1kbla	Alignment	not modelled	98.1	15 PDB header: transferase Chain: A: PDB Molecule: pyruvate phosphate dikinase; PDBTitle: pyruvate phosphate dikinase
37	c1a3wB	Alignment	not modelled	98.0	20 PDB header: transferase Chain: B: PDB Molecule: pyruvate kinase; PDBTitle: pyruvate kinase from saccharomyces cerevisiae complexed with fbp, pg,2 mn2+ and k+
38	c3ma8A	Alignment	not modelled	98.0	18 PDB header: transferase Chain: A: PDB Molecule: pyruvate kinase; PDBTitle: crystal structure of cgd1_2040, a pyruvate kinase from cryptosporidium2 parvum
39	c1pk1B	Alignment	not modelled	97.9	17 PDB header: transferase Chain: B: PDB Molecule: protein (pyruvate kinase); PDBTitle: the structure of leishmania pyruvate kinase
40	c2olsA	Alignment	not modelled	97.9	14 PDB header: transferase Chain: A: PDB Molecule: phosphoenolpyruvate synthase; PDBTitle: the crystal structure of the phosphoenolpyruvate synthase from neisseria meningitidis
41	c3e0vB	Alignment	not modelled	97.8	19 PDB header: transferase Chain: B: PDB Molecule: pyruvate kinase; PDBTitle: crystal structure of pyruvate kinase from leishmania mexicana in2 complex with sulphate ions
42	c2e28A	Alignment	not modelled	97.7	21 PDB header: transferase Chain: A: PDB Molecule: pyruvate kinase; PDBTitle: crystal structure analysis of pyruvate kinase from bacillus2 stearothermophilus
43	c3eoec	Alignment	not modelled	97.7	18 PDB header: transferase Chain: C: PDB Molecule: pyruvate kinase; PDBTitle: crystal structure of pyruvate kinase from toxoplasma gondii, 55.m00007
44	c3t07D	Alignment	not modelled	97.6	20 PDB header: transferase/transferase inhibitor Chain: D: PDB Molecule: pyruvate kinase; PDBTitle: crystal structure of s. aureus pyruvate kinase in complex with a2 naturally occurring bis-indole alkaloid
45	c3odmE	Alignment	not modelled	97.6	19 PDB header: lyase Chain: E: PDB Molecule: phosphoenolpyruvate carboxylase; PDBTitle: archaeal-type phosphoenolpyruvate carboxylase
46	d1jqoa	Alignment	not modelled	76.0	10 Fold: TIM beta/alpha-barrel Superfamily: Phosphoenolpyruvate/pyruvate domain Family: Phosphoenolpyruvate carboxylase
47	c1jqoA	Alignment	not modelled	76.0	10 PDB header: lyase Chain: A: PDB Molecule: phosphoenolpyruvate carboxylase; PDBTitle: crystal structure of c4-form phosphoenolpyruvate carboxylase from2 maize
48	d1jqna	Alignment	not modelled	71.4	19 Fold: TIM beta/alpha-barrel Superfamily: Phosphoenolpyruvate/pyruvate domain Family: Phosphoenolpyruvate carboxylase
49	c3r3sD	Alignment	not modelled	62.3	17 PDB header: oxidoreductase Chain: D: PDB Molecule: oxidoreductase; PDBTitle: structure of the ygha oxidoreductase from salmonella enterica
50	c3i1jB	Alignment	not modelled	61.0	18 PDB header: oxidoreductase Chain: B: PDB Molecule: oxidoreductase, short chain PDBTitle: structure of a putative short chain dehydrogenase from2 pseudomonas syringae
51	c2x3mA	Alignment	not modelled	52.0	36 PDB header: unknown function Chain: A: PDB Molecule: hypothetical protein orf239; PDBTitle: crystal structure of hypothetical protein orf239 from pyrobaculum2 spherical virus
52	c3g5oC	Alignment	not modelled	40.9	13 PDB header: toxin/antitoxin Chain: C: PDB Molecule: uncharacterized protein rv2866; PDBTitle: the crystal structure of the toxin-antitoxin complex relbe2 (rv2865-2 2866) from mycobacterium tuberculosis
53	d1yxma1	Alignment	not modelled	40.9	23 Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: Tyrosine-dependent oxidoreductases
54	d1qasa3	Alignment	not modelled	35.5	28 Fold: TIM beta/alpha-barrel Superfamily: PLC-like phosphodiesterases Family: Mammalian PLC
					Fold: NAD(P)-binding Rossmann-fold domains

55	d1g0oa_	Alignment	not modelled	30.2	22	Superfamily: NAD(P)-binding Rossmann-fold domains Family: Tyrosine-dependent oxidoreductases
56	d2zkmx4	Alignment	not modelled	28.4	18	Fold: TIM beta/alpha-barrel Superfamily: PLC-like phosphodiesterases Family: Mammalian PLC
57	c3iv6C_	Alignment	not modelled	26.6	29	PDB header: oxidoreductase Chain: C: PDB Molecule: putative zn-dependent alcohol dehydrogenase; PDBTitle: crystal structure of putative zn-dependent alcohol dehydrogenases from2 rhodobacter sphaeroides.
58	c2gjmA_	Alignment	not modelled	26.1	16	PDB header: oxidoreductase Chain: A: PDB Molecule: lactoperoxidase; PDBTitle: crystal structure of buffalo lactoperoxidase at 2.75a resolution
59	c3qkbB_	Alignment	not modelled	25.4	10	PDB header: structural genomics, unknown function Chain: B: PDB Molecule: uncharacterized protein; PDBTitle: crystal structure of a protein with unknown function which belongs to pfam duf74 family (pepe_0654) from pediococcus pentosaceus atcc 257453 at 2.73 a resolution
60	d1q45a_	Alignment	not modelled	24.2	14	Fold: TIM beta/alpha-barrel Superfamily: FMN-linked oxidoreductases Family: FMN-linked oxidoreductases
61	c3ohmB_	Alignment	not modelled	22.4	18	PDB header: signaling protein / hydrolase Chain: B: PDB Molecule: 1-phosphatidylinositol-4,5-bisphosphate phosphodiesterase PDBTitle: crystal structure of activated g alpha q bound to its effector2 phospholipase c beta 3
62	c1djyB_	Alignment	not modelled	22.0	28	PDB header: lipid degradation Chain: B: PDB Molecule: phosphoinositide-specific phospholipase C, PDBTitle: phosphoinositide-specific phospholipase c-delta1 from rat2 complexed with inositol-2,4,5-trisphosphate
63	c3bbnD_	Alignment	not modelled	22.0	27	PDB header: ribosome Chain: D: PDB Molecule: ribosomal protein s4; PDBTitle: homology model for the spinach chloroplast 30s subunit2 fitted to 9.4a cryo-em map of the 70s chlororibosome.
64	d1mn3a_	Alignment	not modelled	20.6	23	Fold: RuvA C-terminal domain-like Superfamily: UBA-like Family: CUE domain
65	c1bkna_	Alignment	not modelled	20.4	25	PDB header: dna repair Chain: A: PDB Molecule: mutl; PDBTitle: crystal structure of an n-terminal 40kd fragment of e. coli2 dna mismatch repair protein mutl
66	d1geea_	Alignment	not modelled	19.9	30	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: Tyrosine-dependent oxidoreductases
67	d1gtea2	Alignment	not modelled	19.8	11	Fold: TIM beta/alpha-barrel Superfamily: FMN-linked oxidoreductases Family: FMN-linked oxidoreductases
68	c1ddxA_	Alignment	not modelled	19.7	16	PDB header: oxidoreductase Chain: A: PDB Molecule: protein (prostaglandin h2 synthase-2); PDBTitle: crystal structure of a mixture of arachidonic acid and prostaglandin2 bound to the cyclooxygenase active site of cox-2: prostaglandin3 structure
69	c3pghD_	Alignment	not modelled	19.4	19	PDB header: oxidoreductase Chain: D: PDB Molecule: cyclooxygenase-2; PDBTitle: cyclooxygenase-2 (prostaglandin synthase-2) complexed with a non-2 selective inhibitor, flurbiprofen
70	c2fjuB_	Alignment	not modelled	18.9	18	PDB header: signaling protein,apoptosis/hydrolase Chain: B: PDB Molecule: 1-phosphatidylinositol-4,5-bisphosphate PDBTitle: activated rac1 bound to its effector phospholipase c beta 2
71	c3gdbA_	Alignment	not modelled	18.9	27	PDB header: hydrolase Chain: A: PDB Molecule: putative uncharacterized protein spr0440; PDBTitle: crystal structure of spr0440 glycoside hydrolase domain,2 endo-d from streptococcus pneumoniae r6
72	d1cvua1	Alignment	not modelled	18.3	19	Fold: Heme-dependent peroxidases Superfamily: Heme-dependent peroxidases Family: Myeloperoxidase-like
73	c3ivuB_	Alignment	not modelled	18.3	12	PDB header: transferase Chain: B: PDB Molecule: homocitrate synthase, mitochondrial; PDBTitle: homocitrate synthase lys4 bound to 2-og
74	d1vyua2	Alignment	not modelled	18.2	13	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Nucleotide and nucleoside kinases
75	clpggB_	Alignment	not modelled	18.2	14	PDB header: oxidoreductase Chain: B: PDB Molecule: prostaglandin h2 synthase-1; PDBTitle: prostaglandin h2 synthase-1 complexed with 1-(4-iodobenzoyl)-5-2 methoxy-2-methylindole-3-acetic acid (iodindomethacin), trans model
76	c1ht8B_	Alignment	not modelled	18.2	14	PDB header: oxidoreductase Chain: B: PDB Molecule: prostaglandin h2 synthase-1; PDBTitle: the 2.7 angstrom resolution model of ovine cox-1 complexed with2 aclofenac
77	c3kvoB_	Alignment	not modelled	18.1	20	PDB header: oxidoreductase Chain: B: PDB Molecule: hydroxysteroid dehydrogenase-like protein 2; PDBTitle: crystal structure of the catalytic domain of human hydroxysteroid2 dehydrogenase like 2 (hsdl2)
78	c1y2ic_	Alignment	not modelled	17.2	11	PDB header: structural genomics, unknown function Chain: C: PDB Molecule: hypothetical protein s0862; PDBTitle: crystal structure of mcsq target apc27401 from shigella2 flexneri
79	d1y2ia_	Alignment	not modelled	17.2	11	Fold: Dodecin subunit-like Superfamily: YbjQ-like

						Family: YbjQ-like
80	c2w91A_	Alignment	not modelled	16.8	26	PDB header: hydrolase Chain: A: PDB Molecule: endo-beta-n-acetylglucosaminidase d; PDBTitle: structure of a streptococcus pneumoniae family 85 glycoside2 hydrolase, endo-d.
81	c2oyuP_	Alignment	not modelled	16.7	14	PDB header: oxidoreductase Chain: P: PDB Molecule: prostaglandin g/h synthase 1; PDBTitle: indomethacin-(s)-alpha-ethyl-ethanolamide bound to cyclooxygenase-1
82	c2qr6A_	Alignment	not modelled	16.6	14	PDB header: oxidoreductase Chain: A: PDB Molecule: imp dehydrogenase/gmp reductase; PDBTitle: crystal structure of imp dehydrogenase/gmp reductase-like protein2 (np_599840.1) from corynebacterium glutamicum atcc 13032 kitasato at3 1.50 a resolution
83	c3qr0A_	Alignment	not modelled	16.5	17	PDB header: hydrolase Chain: A: PDB Molecule: phospholipase c-beta (plc-beta); PDBTitle: crystal structure of s. officinalis plc21
84	c1zfjA_	Alignment	not modelled	16.1	16	PDB header: oxidoreductase Chain: A: PDB Molecule: inosine monophosphate dehydrogenase; PDBTitle: inosine monophosphate dehydrogenase (impdh; ec 1.1.1.205) from2 streptococcus pyogenes
85	d1o70a2	Alignment	not modelled	16.1	9	Fold: FAS1 domain Superfamily: FAS1 domain Family: FAS1 domain
86	c3mdoB_	Alignment	not modelled	15.7	15	PDB header: ligase Chain: B: PDB Molecule: putative phosphoribosylformylglycinamide cyclo-ligase; PDBTitle: crystal structure of a putative phosphoribosylformylglycinamide2 cyclo-ligase (bdi_2101) from parabacteroides distasonis atcc 8503 at3 1.91 a resolution
87	c2a7rD_	Alignment	not modelled	15.7	22	PDB header: oxidoreductase Chain: D: PDB Molecule: gmp reductase 2; PDBTitle: crystal structure of human guanosine monophosphate2 reductase 2 (gmrp2)
88	c3gafF_	Alignment	not modelled	15.2	23	PDB header: oxidoreductase Chain: F: PDB Molecule: 7-alpha-hydroxysteroid dehydrogenase; PDBTitle: 2.2a crystal structure of 7-alpha-hydroxysteroid2 dehydrogenase from brucella melitensis
89	d2cu0a1	Alignment	not modelled	14.9	17	Fold: TIM beta/alpha-barrel Superfamily: Inosine monophosphate dehydrogenase (IMPDH) Family: Inosine monophosphate dehydrogenase (IMPDH)
90	c2kheA_	Alignment	not modelled	14.9	12	PDB header: hydrolase Chain: A: PDB Molecule: toxin-like protein; PDBTitle: solution structure of the bacterial toxin rele from thermus2 thermophilus hb8
91	d1w6ua_	Alignment	not modelled	14.8	20	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: Tyrosine-dependent oxidoreductases
92	d1uzma1	Alignment	not modelled	14.6	21	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: Tyrosine-dependent oxidoreductases
93	d1q4ga1	Alignment	not modelled	14.4	14	Fold: Heme-dependent peroxidases Superfamily: Heme-dependent peroxidases Family: Myeloperoxidase-like
94	d1pvna1	Alignment	not modelled	14.2	17	Fold: TIM beta/alpha-barrel Superfamily: Inosine monophosphate dehydrogenase (IMPDH) Family: Inosine monophosphate dehydrogenase (IMPDH)
95	d2jn4a1	Alignment	not modelled	14.1	21	Fold: NifT/FixU barrel-like Superfamily: NifT/FixU-like Family: NifT/FixU
96	c2jn4A_	Alignment	not modelled	14.1	21	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: hypothetical protein fixu, nift; PDBTitle: solution nmr structure of protein rp4601 from2 rhodopseudomonas palustris. northeast structural genomics3 consortium target rpt2; ontario center for structural4 proteomics target rp4601.
97	d1zfja1	Alignment	not modelled	14.0	16	Fold: TIM beta/alpha-barrel Superfamily: Inosine monophosphate dehydrogenase (IMPDH) Family: Inosine monophosphate dehydrogenase (IMPDH)
98	c3rihB_	Alignment	not modelled	14.0	28	PDB header: oxidoreductase Chain: B: PDB Molecule: short chain dehydrogenase or reductase; PDBTitle: crystal structure of a putative short chain dehydrogenase or reductase2 from mycobacterium abscessus
99	c1d2vD_	Alignment	not modelled	14.0	19	PDB header: oxidoreductase Chain: D: PDB Molecule: myeloperoxidase; PDBTitle: crystal structure of bromide-bound human myeloperoxidase isoform c at2 ph 5.5