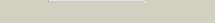
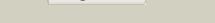
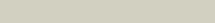
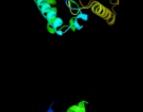
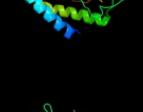
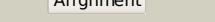


Phyre²

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Description	P60472
Date	Thu Jan 5 12:06:50 GMT 2012
Unique Job ID	9d691c5baa51da38

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c2vg2C_			100.0	41	PDB header: transferase Chain: C; PDB Molecule: undecaprenyl pyrophosphate synthetase; PDBTitle: rv2361 with ipp
2	d1ueha_			100.0	97	Fold: Undecaprenyl diphosphate synthase Superfamily: Undecaprenyl diphosphate synthase Family: Undecaprenyl diphosphate synthase
3	c2vfwB_			100.0	33	PDB header: transferase Chain: B; PDB Molecule: short-chain z-isoprenyl diphosphate synthetase; PDBTitle: rv1086 native
4	c1jp3A_			100.0	95	PDB header: transferase Chain: A; PDB Molecule: undecaprenyl pyrophosphate synthase; PDBTitle: structure of e.coli undecaprenyl pyrophosphate synthase
5	d1f75a_			100.0	38	Fold: Undecaprenyl diphosphate synthase Superfamily: Undecaprenyl diphosphate synthase Family: Undecaprenyl diphosphate synthase
6	c2d2rA_			100.0	41	PDB header: transferase Chain: A; PDB Molecule: undecaprenyl pyrophosphate synthase; PDBTitle: crystal structure of helicobacter pylori undecaprenyl pyrophosphate2 synthase
7	c3ugsB_			100.0	38	PDB header: transferase Chain: B; PDB Molecule: undecaprenyl pyrophosphate synthase; PDBTitle: crystal structure of a probable undecaprenyl diphosphate synthase2 (upps) from campylobacter jejuni
8	c3bdkB_			92.3	15	PDB header: lyase Chain: B; PDB Molecule: d-mannonate dehydratase; PDBTitle: crystal structure of streptococcus suis mannonate2 dehydratase complexed with substrate analogue
9	c3cnyA_			91.4	8	PDB header: biosynthetic protein Chain: A; PDB Molecule: inositol catabolism protein iole; PDBTitle: crystal structure of a putative inositol catabolism protein iole2 (iole, Ip_3607) from lactobacillus plantarum wcf1 at 1.85 a3 resolution
10	d1tz9a_			85.7	18	Fold: TIM beta/alpha-barrel Superfamily: Xylose isomerase-like Family: UxuA-like
11	c2ou4C_			84.2	9	PDB header: isomerase Chain: C; PDB Molecule: d-tagatose 3-epimerase; PDBTitle: crystal structure of d-tagatose 3-epimerase from2 pseudomonas cichorii

12	c2hk1D			84.1	12	PDB header: isomerase Chain: D: PDB Molecule: d-psicose 3-epimerase; PDBTitle: crystal structure of d-psicose 3-epimerase (dpease) in the presence of 2 d-fructose
13	c2nuxB			81.3	9	PDB header: lyase Chain: B: PDB Molecule: 2-keto-3-deoxygluconate/2-keto-3-deoxy-6-phospho gluconate PDBTitle: 2-keto-3-deoxygluconate aldolase from <i>sulfolobus acidocaldarius</i> , 2 native structure in p6522 at 2.5 a resolution
14	c3dx5A			79.6	13	PDB header: lyase Chain: A: PDB Molecule: uncharacterized protein asbf; PDBTitle: crystal structure of the probable 3-dhs dehydratase asbf involved in2 the petrobactin synthesis from <i>bacillus anthracis</i>
15	c3eb2A			77.4	20	PDB header: lyase Chain: A: PDB Molecule: putative dihydrodipicolinate synthetase; PDBTitle: crystal structure of dihydrodipicolinate synthase from <i>rhodopseudomonas palustris</i> at 2.0a resolution
16	c3b4ub			75.9	15	PDB header: lyase Chain: B: PDB Molecule: dihydrodipicolinate synthase; PDBTitle: crystal structure of dihydrodipicolinate synthase from <i>agrobacterium tumefaciens</i> str. c58
17	c3fluD			75.3	20	PDB header: lyase Chain: D: PDB Molecule: dihydrodipicolinate synthase; PDBTitle: crystal structure of dihydrodipicolinate synthase from the pathogen2 <i>neisseria meningitidis</i>
18	c2rgfB			73.9	16	PDB header: lyase Chain: B: PDB Molecule: dihydrodipicolinate synthase; PDBTitle: crystal structure of dihydrodipicolinate synthase from <i>hahella chejuensis</i> at 1.5a resolution
19	c3cqkB			73.5	16	PDB header: isomerase Chain: B: PDB Molecule: l-ribulose-5-phosphate 3-epimerase ulae; PDBTitle: crystal structure of l-xylulose-5-phosphate 3-epimerase ulae (form b)2 complex with zn2+ and sulfate
20	c3d0cb			73.4	17	PDB header: lyase Chain: B: PDB Molecule: dihydrodipicolinate synthase; PDBTitle: crystal structure of dihydrodipicolinate synthase from <i>oceanobacillus iheyensis</i> at 1.9 a resolution
21	c3qxbB		not modelled	72.1	9	PDB header: isomerase Chain: B: PDB Molecule: putative xylose isomerase; PDBTitle: crystal structure of a putative xylose isomerase (yp_426450.1) from <i>rhodospirillum rubrum</i> atcc 11170 at 1.90 a resolution
22	c3si9B		not modelled	70.7	19	PDB header: lyase Chain: B: PDB Molecule: dihydrodipicolinate synthase; PDBTitle: crystal structure of dihydrodipicolinate synthase from <i>bartonella2 henselae</i>
23	c2zdsB		not modelled	66.6	15	PDB header: dna binding protein Chain: B: PDB Molecule: putative dna-binding protein; PDBTitle: crystal structure of sco6571 from <i>streptomyces coelicolor2</i> a3(2)
24	c3pueA		not modelled	63.5	16	PDB header: lyase Chain: A: PDB Molecule: dihydrodipicolinate synthase; PDBTitle: crystal structure of the complex of dihydronicotinate synthase from <i>acinetobacter baumannii</i> with lysine at 2.6a resolution
25	c3s5oA		not modelled	59.4	10	PDB header: lyase Chain: A: PDB Molecule: 4-hydroxy-2-oxoglutarate aldolase, mitochondrial; PDBTitle: crystal structure of human 4-hydroxy-2-oxoglutarate aldolase bound to2 pyruvate
26	c2r8wB		not modelled	57.4	13	PDB header: lyase Chain: B: PDB Molecule: agr_c_1641p; PDBTitle: the crystal structure of dihydrodipicolinate synthase (atuo899) from <i>agrobacterium tumefaciens</i> str. c58
27	c3cpkB		not modelled	56.4	16	PDB header: lyase Chain: B: PDB Molecule: dihydrodipicolinate synthetase; PDBTitle: the crystal structure of <i>corynebacterium glutamicum</i> 2 dihydrodipicolinate synthase to 2.2 a resolution
						Fold: TIM beta/alpha-barrel

28	d1bxba	Alignment	not modelled	55.5	9	Superfamily: Xylose isomerase-like Family: Xylose isomerase
29	c2v9dB	Alignment	not modelled	54.9	17	PDB header: lyase Chain: B: PDB Molecule: yage; PDBTitle: crystal structure of yage, a prophage protein belonging to2 dihydropicolinic acid synthase family from e. coli3 k12
30	c3fkA	Alignment	not modelled	52.6	21	PDB header: lyase Chain: A: PDB Molecule: l-2-keto-3-deoxyarabonate dehydratase; PDBTitle: structure of l-2-keto-3-deoxyarabonate dehydratase
31	c3kwsB	Alignment	not modelled	52.3	3	PDB header: isomerase Chain: B: PDB Molecule: putative sugar isomerase; PDBTitle: crystal structure of putative sugar isomerase (yp_001305149.1) from2 parabacteroides distasonis atcc 8503 at 1.68 a resolution
32	d1m5wa	Alignment	not modelled	51.6	15	Fold: TIM beta/alpha-barrel Superfamily: Pyridoxine 5'-phosphate synthase Family: Pyridoxine 5'-phosphate synthase
33	c3qfeB	Alignment	not modelled	51.3	13	PDB header: lyase Chain: B: PDB Molecule: putative dihydropicoline synthase family protein; PDBTitle: crystal structures of a putative dihydropicoline synthase family2 protein from coccidioides immitis
34	c3noeA	Alignment	not modelled	49.5	17	PDB header: lyase Chain: A: PDB Molecule: dihydrodipicolinate synthase; PDBTitle: crystal structure of dihydrodipicolinate synthase from pseudomonas2 aeruginosa
35	d1xxxal	Alignment	not modelled	49.2	16	Fold: TIM beta/alpha-barrel Superfamily: Aldolase Family: Class I aldolase
36	c3n2xB	Alignment	not modelled	48.4	18	PDB header: lyase Chain: B: PDB Molecule: uncharacterized protein yage; PDBTitle: crystal structure of yage, a prophage protein belonging to2 dihydropicolinic acid synthase family from e. coli k12 in complex3 with pyruvate
37	c3ktcB	Alignment	not modelled	46.8	8	PDB header: isomerase Chain: B: PDB Molecule: xylose isomerase; PDBTitle: crystal structure of putative sugar isomerase (yp_050048.1) from2 erwinia carotovora atroseptica scri1043 at 1.54 a resolution
38	c2ehhE	Alignment	not modelled	46.6	16	PDB header: lyase Chain: E: PDB Molecule: dihydrodipicolinate synthase; PDBTitle: crystal structure of dihydrodipicolinate synthase from2 aquifex aeolicus
39	c3h5dD	Alignment	not modelled	46.6	13	PDB header: lyase Chain: D: PDB Molecule: dihydrodipicolinate synthase; PDBTitle: dihydrodipicolinate synthase from drug-resistant streptococcus2 pneumoniae
40	c2vc6A	Alignment	not modelled	45.3	18	PDB header: lyase Chain: A: PDB Molecule: dihydrodipicolinate synthase; PDBTitle: structure of mosa from s. meliloti with pyruvate bound
41	c3bi8A	Alignment	not modelled	44.1	12	PDB header: lyase Chain: A: PDB Molecule: dihydrodipicolinate synthase; PDBTitle: structure of dihydrodipicolinate synthase from clostridium2 botulinum
42	c2r94B	Alignment	not modelled	43.7	15	PDB header: lyase Chain: B: PDB Molecule: 2-keto-3-deoxy-(6-phospho-)gluconate aldolase; PDBTitle: crystal structure of kd(p)ga from t.tenax
43	c2zvrA	Alignment	not modelled	42.9	9	PDB header: isomerase Chain: A: PDB Molecule: uncharacterized protein tm_0416; PDBTitle: crystal structure of a d-tagatose 3-epimerase-related2 protein from thermotoga maritima
44	c2ksnA	Alignment	not modelled	41.9	20	PDB header: signaling protein Chain: A: PDB Molecule: ubiquitin domain-containing protein 2; PDBTitle: solution structure of the n-terminal domain of dc-upb/ubtd2
45	d1hl2a	Alignment	not modelled	41.9	16	Fold: TIM beta/alpha-barrel Superfamily: Aldolase Family: Class I aldolase
46	d1vhua	Alignment	not modelled	41.7	15	Fold: Macro domain-like Superfamily: Macro domain-like Family: Macro domain
47	d1i60a	Alignment	not modelled	41.6	13	Fold: TIM beta/alpha-barrel Superfamily: Xylose isomerase-like Family: loll-like
48	d1bxca	Alignment	not modelled	39.3	7	Fold: TIM beta/alpha-barrel Superfamily: Xylose isomerase-like Family: Xylose isomerase
49	c3daqB	Alignment	not modelled	38.9	15	PDB header: lyase Chain: B: PDB Molecule: dihydrodipicolinate synthase; PDBTitle: crystal structure of dihydrodipicolinate synthase from methicillin-2 resistant staphylococcus aureus
50	d1otha2	Alignment	not modelled	37.7	21	Fold: ATC-like Superfamily: Aspartate/ornithine carbamoyltransferase Family: Aspartate/ornithine carbamoyltransferase
51	c2ejab	Alignment	not modelled	37.6	12	PDB header: lyase Chain: B: PDB Molecule: uroporphyrinogen decarboxylase; PDBTitle: crystal structure of uroporphyrinogen decarboxylase from2 aquifex aeolicus
52	d1o5ka	Alignment	not modelled	37.5	21	Fold: TIM beta/alpha-barrel Superfamily: Aldolase Family: Class I aldolase
53	c3g0sA	Alignment	not modelled	36.0	14	PDB header: lyase Chain: A: PDB Molecule: dihydrodipicolinate synthase; PDBTitle: dihydrodipicolinate synthase from salmonella typhimurium lt2

54	c3na8A	Alignment	not modelled	35.9	15	PDB header: lyase Chain: A: PDB Molecule: putative dihydrodipicolinate synthetase; PDBTitle: crystal structure of a putative dihydrodipicolinate synthetase from2 pseudomonas aeruginosa
55	c3dz1A	Alignment	not modelled	35.7	22	PDB header: lyase Chain: A: PDB Molecule: dihydrodipicolinate synthase; PDBTitle: crystal structure of dihydrodipicolinate synthase from2 rhodopseudomonas palustris at 1.87a resolution
56	c3lciA	Alignment	not modelled	34.7	16	PDB header: lyase Chain: A: PDB Molecule: n-acetylneuraminate lyase; PDBTitle: the d-sialic acid aldolase mutant v251w
57	c3bzjA	Alignment	not modelled	33.3	17	PDB header: hydrolase Chain: A: PDB Molecule: uv endonuclease; PDBTitle: uvde k229l
58	c1xhoB	Alignment	not modelled	33.2	19	PDB header: structural genomics, unknown function Chain: B: PDB Molecule: chorismate mutase; PDBTitle: chorismate mutase from clostridium thermocellum cth-682
59	d1xhoa	Alignment	not modelled	33.2	19	Fold: Bacillus chorismate mutase-like Superfamily: YjgF-like Family: Chorismate mutase
60	c3vh1A	Alignment	not modelled	31.8	20	PDB header: metal binding protein Chain: A: PDB Molecule: ubiquitin-like modifier-activating enzyme atg7; PDBTitle: crystal structure of saccharomyces cerevisiae atg7 (1-595)
61	c3gk0H	Alignment	not modelled	31.4	15	PDB header: transferase Chain: H: PDB Molecule: pyridoxine 5'-phosphate synthase; PDBTitle: crystal structure of pyridoxal phosphate biosynthetic2 protein from burkholderia pseudomallei
62	d1fnja	Alignment	not modelled	31.2	22	Fold: Bacillus chorismate mutase-like Superfamily: YjgF-like Family: Chorismate mutase
63	c3q71A	Alignment	not modelled	30.9	13	PDB header: transferase Chain: A: PDB Molecule: poly [adp-ribose] polymerase 14; PDBTitle: human parp14 (artd8) - macro domain 2 in complex with adenosine-5'-diphosphoribose
64	c3grfA	Alignment	not modelled	30.8	15	PDB header: transferase Chain: A: PDB Molecule: ornithine carbamoyltransferase; PDBTitle: x-ray structure of ornithine transcarbamoylase from giardia2 lamblia
65	d1vk1a	Alignment	not modelled	29.8	60	Fold: ParB/Sulfiredoxin Superfamily: ParB/Sulfiredoxin Family: Hypothetical protein PF0380
66	c1ut8B	Alignment	not modelled	28.1	8	PDB header: hydrolase Chain: B: PDB Molecule: exodeoxyribonuclease; PDBTitle: divalent metal ions (zinc) bound to t5 5'-exonuclease
67	c2yxgD	Alignment	not modelled	27.7	18	PDB header: lyase Chain: D: PDB Molecule: dihydrodipicolinate synthase; PDBTitle: crystal structure of dihydrodipicolinate synthase (dapa)
68	d1dbfa	Alignment	not modelled	25.6	22	Fold: Bacillus chorismate mutase-like Superfamily: YjgF-like Family: Chorismate mutase
69	c2pfuA	Alignment	not modelled	25.6	10	PDB header: transport protein Chain: A: PDB Molecule: biopolymer transport exbd protein; PDBTitle: nmr strcuture determination of the periplasmic domain of exbd from2 e.coli
70	c2f9iC	Alignment	not modelled	25.5	16	PDB header: transferase Chain: C: PDB Molecule: acetyl-coenzyme a carboxylase carboxyl PDBTitle: crystal structure of the carboxyltransferase subunit of acc2 from staphylococcus aureus
71	c3gzaB	Alignment	not modelled	24.6	16	PDB header: hydrolase Chain: B: PDB Molecule: putative alpha-l-fucosidase; PDBTitle: crystal structure of putative alpha-l-fucosidase (np_812709.1) from2 bacteroides thetaiotomicron vpi-5482 at 1.60 a resolution
72	d1cmwa2	Alignment	not modelled	24.5	10	Fold: PIN domain-like Superfamily: PIN domain-like Family: 5' to 3' exonuclease catalytic domain
73	d1xkyal	Alignment	not modelled	23.2	18	Fold: TIM beta/alpha-barrel Superfamily: Aldolase Family: Class I aldolase
74	d2f9ya1	Alignment	not modelled	22.9	16	Fold: ClpP/crotonase Superfamily: ClpP/crotonase Family: Biotin dependent carboxylase carboxyltransferase domain
75	d2a6na1	Alignment	not modelled	22.7	14	Fold: TIM beta/alpha-barrel Superfamily: Aldolase Family: Class I aldolase
76	c3lmzA	Alignment	not modelled	22.5	14	PDB header: isomerase Chain: A: PDB Molecule: putative sugar isomerase; PDBTitle: crystal structure of putative sugar isomerase. (yp_001305105.1) from2 parabacteroides distasonis atcc 8503 at 1.44 a resolution
77	c3e96B	Alignment	not modelled	22.4	16	PDB header: lyase Chain: B: PDB Molecule: dihydrodipicolinate synthase; PDBTitle: crystal structure of dihydrodipicolinate synthase from2 bacillus clausii
78	c3ngfA	Alignment	not modelled	22.3	18	PDB header: isomerase Chain: A: PDB Molecule: ap endonuclease, family 2; PDBTitle: crystal structure of ap endonuclease, family 2 from brucella2 melitensis
79	d1nw9b	Alignment	not modelled	21.7	16	Fold: Caspase-like Superfamily: Caspase-like Family: Caspase catalytic domain

80	c3ju2A	Alignment	not modelled	21.6	24	PDB header: structural genomics, unknown function Chain: A; PDB Molecule: uncharacterized protein smc04130; PDBTitle: crystal structure of protein smc04130 from sinorhizobium meliloti 1021
81	d1xima	Alignment	not modelled	21.5	21	Fold: TIM beta/alpha-barrel Superfamily: Xylose isomerase-like Family: Xylose isomerase
82	c2qtzA	Alignment	not modelled	20.6	13	PDB header: oxidoreductase Chain: A; PDB Molecule: methionine synthase reductase; PDBTitle: crystal structure of the nadp+-bound fad-containing fnr-like module of2 human methionine synthase reductase
83	c3gqeA	Alignment	not modelled	19.4	13	PDB header: viral protein Chain: A; PDB Molecule: non-structural protein 3; PDBTitle: crystal structure of macro domain of venezuelan equine encephalitis2 virus
84	c3q6zA	Alignment	not modelled	16.3	12	PDB header: transferase Chain: A; PDB Molecule: poly [adp-ribose] polymerase 14; PDBTitle: human parp14 (artd8)-macro domain 1 in complex with adenosine-5'-diphosphoribose
85	d1f1ja	Alignment	not modelled	16.1	16	Fold: Caspase-like Superfamily: Caspase-like Family: Caspase catalytic domain
86	d1fmata2	Alignment	not modelled	16.1	17	Fold: Formyltransferase Superfamily: Formyltransferase Family: Formyltransferase
87	d2eyqa6	Alignment	not modelled	15.9	9	Fold: TRCF domain-like Superfamily: TRCF domain-like Family: TRCF domain
88	d1wsca1	Alignment	not modelled	15.7	16	Fold: AMMECR1-like Superfamily: AMMECR1-like Family: AMMECR1-like
89	c2bpoA	Alignment	not modelled	15.6	9	PDB header: reductase Chain: A; PDB Molecule: nadph-cytochrom p450 reductase; PDBTitle: crystal structure of the yeast cpr triple mutant: d74g,2 y75f, k78a.
90	c1nmqB	Alignment	not modelled	15.6	20	PDB header: apoptosis, hydrolase Chain: B; PDB Molecule: caspase-3; PDBTitle: extendend tethering: in situ assembly of inhibitors
91	c3lerA	Alignment	not modelled	15.5	14	PDB header: lyase Chain: A; PDB Molecule: dihydrodipicolinate synthase; PDBTitle: crystal structure of dihydrodipicolinate synthase from campylobacter jejuni subsp. jejuni nctc 11168
92	d1w3ia	Alignment	not modelled	15.2	15	Fold: TIM beta/alpha-barrel Superfamily: Aldolase Family: Class I aldolase
93	c2bttdA	Alignment	not modelled	15.0	23	PDB header: transferase Chain: A; PDB Molecule: pts-dependent dihydroxyacetone kinase; PDBTitle: crystal structure of dhal from e. coli
94	d1bg4a	Alignment	not modelled	14.9	11	Fold: TIM beta/alpha-barrel Superfamily: (Trans)glycosidases Family: beta-glycanases
95	c3eyxB	Alignment	not modelled	14.5	36	PDB header: lyase Chain: B; PDB Molecule: carbonic anhydrase; PDBTitle: crystal structure of carbonic anhydrase nce103 from2 saccharomyces cerevisiae
96	d2pp4a1	Alignment	not modelled	14.4	13	Fold: TAFH domain-like Superfamily: TAFH domain-like Family: TAFH domain-like
97	d1yvka1	Alignment	not modelled	14.4	17	Fold: Acyl-CoA N-acyltransferases (Nat) Superfamily: Acyl-CoA N-acyltransferases (Nat) Family: N-acetyl transferase, NAT
98	c2x7vA	Alignment	not modelled	14.3	16	PDB header: hydrolase Chain: A; PDB Molecule: probable endonuclease 4; PDBTitle: crystal structure of thermotoga maritima endonuclease iv in2 the presence of zinc
99	d2q02a1	Alignment	not modelled	13.7	19	Fold: TIM beta/alpha-barrel Superfamily: Xylose isomerase-like Family: loll-like