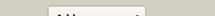
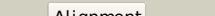
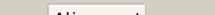
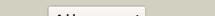
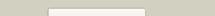


Phyre²

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Description	P37306
Date	Thu Jan 5 11:55:07 GMT 2012
Unique Job ID	9d20ec67684c7cd2

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	d1e19a_	 Alignment		100.0	37	Fold: Carbamate kinase-like Superfamily: Carbamate kinase-like Family: Carbamate kinase
2	c2e9yA_	 Alignment		100.0	41	PDB header: transferase Chain: A; PDB Molecule: carbamate kinase; PDBTitle: crystal structure of project ape1968 from aeropyrum pernix k1
3	d1b7ba_	 Alignment		100.0	40	Fold: Carbamate kinase-like Superfamily: Carbamate kinase-like Family: Carbamate kinase
4	c3kzfC_	 Alignment		100.0	39	PDB header: transferase Chain: C; PDB Molecule: carbamate kinase; PDBTitle: structure of giardia carbamate kinase
5	c2rd5A_	 Alignment		100.0	26	PDB header: protein binding Chain: A; PDB Molecule: acetylglutamate kinase-like protein; PDBTitle: structural basis for the regulation of n-acetylglutamate kinase by pii2 in arabidopsis thaliana
6	d2ap9a1	 Alignment		100.0	20	Fold: Carbamate kinase-like Superfamily: Carbamate kinase-like Family: N-acetyl-l-glutamate kinase
7	c2r98A_	 Alignment		100.0	18	PDB header: transferase Chain: A; PDB Molecule: putative acetylglutamate synthase; PDBTitle: crystal structure of n-acetylglutamate synthase (selenomet2 substituted) from neisseria gonorrhoeae
8	d2bufa1	 Alignment		100.0	21	Fold: Carbamate kinase-like Superfamily: Carbamate kinase-like Family: N-acetyl-l-glutamate kinase
9	c2v5hb_	 Alignment		100.0	23	PDB header: transcription Chain: B; PDB Molecule: acetylglutamate kinase; PDBTitle: controlling the storage of nitrogen as arginine: the2 complex of pii and acetylglutamate kinase from3 synechococcus elongatus pcc 7942
10	d2btyna1	 Alignment		100.0	24	Fold: Carbamate kinase-like Superfamily: Carbamate kinase-like Family: N-acetyl-l-glutamate kinase
11	d1gs5a_	 Alignment		100.0	24	Fold: Carbamate kinase-like Superfamily: Carbamate kinase-like Family: N-acetyl-l-glutamate kinase

12	c3l86A	Alignment		100.0	20	PDB header: transferase Chain: A: PDB Molecule: acetylglutamate kinase; PDBTitle: the crystal structure of smu.665 from streptococcus mutans ua159
13	c2j5tF	Alignment		100.0	24	PDB header: transferase Chain: F: PDB Molecule: glutamate 5-kinase; PDBTitle: glutamate 5-kinase from escherichia coli complexed with2 glutamate
14	c2egxA	Alignment		100.0	21	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: putative acetylglutamate kinase; PDBTitle: crystal structure of the putative acetylglutamate kinase from thermus2 thermophilus
15	c2w21A	Alignment		100.0	25	PDB header: transferase Chain: A: PDB Molecule: glutamate 5-kinase; PDBTitle: crystal structure of the aminoacid kinase domain of the2 glutamate 5 kinase of escherichia coli.
16	d2hmfa1	Alignment		100.0	17	Fold: Carbamate kinase-like Superfamily: Carbamate kinase-like Family: PyrH-like
17	d1ybda1	Alignment		100.0	20	Fold: Carbamate kinase-like Superfamily: Carbamate kinase-like Family: PyrH-like
18	d2bneal	Alignment		100.0	21	Fold: Carbamate kinase-like Superfamily: Carbamate kinase-like Family: PyrH-like
19	d1z9da1	Alignment		100.0	19	Fold: Carbamate kinase-like Superfamily: Carbamate kinase-like Family: PyrH-like
20	c3l15C	Alignment		100.0	20	PDB header: transferase Chain: C: PDB Molecule: gamma-glutamyl kinase related protein; PDBTitle: crystal structure of t. acidophilum isopentenyl phosphate kinase2 product complex
21	c2jjxC	Alignment	not modelled	100.0	19	PDB header: transferase Chain: C: PDB Molecule: uridylate kinase; PDBTitle: the crystal structure of ump kinase from bacillus anthracis2 (ba1797)
22	d2akoal	Alignment	not modelled	100.0	19	Fold: Carbamate kinase-like Superfamily: Carbamate kinase-like Family: PyrH-like
23	c3c1nA	Alignment	not modelled	100.0	18	PDB header: transferase Chain: A: PDB Molecule: probable aspartokinase; PDBTitle: crystal structure of allosteric inhibition threonine-sensitive2 aspartokinase from methanococcus jannaschii with l-threonine
24	c3ek5A	Alignment	not modelled	100.0	21	PDB header: transferase Chain: A: PDB Molecule: uridylate kinase; PDBTitle: unique gtp-binding pocket and allostery of ump kinase from a gram-2 negative phytopathogen bacterium
25	c3nwYB	Alignment	not modelled	100.0	23	PDB header: transferase Chain: B: PDB Molecule: uridylate kinase; PDBTitle: structure and allosteric regulation of the uridine monophosphate2 kinase from mycobacterium tuberculosis
26	c3l19A	Alignment	not modelled	100.0	22	PDB header: transferase Chain: A: PDB Molecule: isopentenyl phosphate kinase; PDBTitle: x-ray structures of isopentenyl phosphate kinase
27	c3l76B	Alignment	not modelled	100.0	19	PDB header: transferase Chain: B: PDB Molecule: aspartokinase; PDBTitle: crystal structure of aspartate kinase from synechocystis
28	c3k4yB	Alignment	not modelled	100.0	20	PDB header: transferase Chain: B: PDB Molecule: isopentenyl phosphate kinase; PDBTitle: crystal structure of isopentenyl phosphate kinase from m. jannaschii2 in complex with ipp

29	d2j0wa1		not modelled	100.0	16	Fold: Carbamate kinase-like Superfamily: Carbamate kinase-like Family: PyrH-like
30	d2cdqa1		not modelled	100.0	14	Fold: Carbamate kinase-like Superfamily: Carbamate kinase-like Family: PyrH-like
31	d2ij9a1		not modelled	100.0	26	Fold: Carbamate kinase-like Superfamily: Carbamate kinase-like Family: PyrH-like
32	c3d40A_		not modelled	100.0	20	PDB header: transferase Chain: A: PDB Molecule: foma protein; PDBTitle: crystal structure of fosfomycin resistance kinase foma from2 streptomyces wedmorensis complexed with diphosphate
33	c2cdqB_		not modelled	100.0	14	PDB header: transferase Chain: B: PDB Molecule: aspartokinase; PDBTitle: crystal structure of arabidopsis thaliana aspartate kinase2 complexed with lysine and s-adenosylmethionine
34	d2a1fa1		not modelled	100.0	20	Fold: Carbamate kinase-like Superfamily: Carbamate kinase-like Family: PyrH-like
35	d2brxa1		not modelled	100.0	24	Fold: Carbamate kinase-like Superfamily: Carbamate kinase-like Family: PyrH-like
36	c2ogxB_		not modelled	100.0	22	PDB header: metal binding protein Chain: B: PDB Molecule: molybdenum storage protein subunit beta; PDBTitle: the crystal structure of the molybdenum storage protein from2 azotobacter vinelandii loaded with polyoxotungstates (wsto)
37	c2ogxA_		not modelled	100.0	24	PDB header: metal binding protein Chain: A: PDB Molecule: molybdenum storage protein subunit alpha; PDBTitle: the crystal structure of the molybdenum storage protein from2 azotobacter vinelandii loaded with polyoxotungstates (wsto)
38	c2j0wA_		not modelled	100.0	15	PDB header: transferase Chain: A: PDB Molecule: lysine-sensitive aspartokinase 3; PDBTitle: crystal structure of e. coli aspartokinase iii in complex2 with aspartate and adp (r-state)
39	c3ab4K_		not modelled	100.0	22	PDB header: transferase Chain: K: PDB Molecule: aspartokinase; PDBTitle: crystal structure of feedback inhibition resistant mutant of aspartate2 kinase from corynebacterium glutamicum in complex with lysine and3 threonine
40	c2va1A_		not modelled	100.0	18	PDB header: transferase Chain: A: PDB Molecule: uridylylate kinase; PDBTitle: crystal structure of ump kinase from ureaplasma parvum
41	c2j4kC_		not modelled	100.0	27	PDB header: transferase Chain: C: PDB Molecule: uridylylate kinase; PDBTitle: crystal structure of uridylylate kinase from sulfolobus2 solfataricus in complex with ump to 2.2 angstrom3 resolution
42	c2vcbA_		not modelled	72.0	16	PDB header: hydrolase Chain: A: PDB Molecule: alpha-n-acetylglucosaminidase; PDBTitle: family 89 glycoside hydrolase from clostridium perfringens2 in complex with pugnac
43	d2nx2a1		not modelled	67.0	20	Fold: MCP/YpsA-like Superfamily: MCP/YpsA-like Family: YpsA-like
44	c3bq9A_		not modelled	63.4	28	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: predicted rossmann fold nucleotide-binding domain- PDBTitle: crystal structure of predicted nucleotide-binding protein from2 idiomarina baltica os145
45	d1ydhA_		not modelled	52.5	21	Fold: MCP/YpsA-like Superfamily: MCP/YpsA-like Family: MoCo carrier protein-like
46	c2q4dB_		not modelled	49.6	21	PDB header: structural genomics, unknown function Chain: B: PDB Molecule: lysine decarboxylase-like protein at5g11950; PDBTitle: ensemble refinement of the crystal structure of a lysine2 decarboxylase-like protein from arabidopsis thaliana gene at5g11950
47	d2q4oa1		not modelled	42.4	17	Fold: MCP/YpsA-like Superfamily: MCP/YpsA-like Family: MoCo carrier protein-like
48	c2q4oA_		not modelled	42.4	17	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: uncharacterized protein at2g37210/2n18.3; PDBTitle: ensemble refinement of the crystal structure of a lysine2 decarboxylase-like protein from arabidopsis thaliana gene at2g37210
49	d1xpja_		not modelled	42.1	17	Fold: HAD-like Superfamily: HAD-like Family: Hypothetical protein VC0232
50	d2b0ja2		not modelled	31.4	20	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: 6-phosphogluconate dehydrogenase-like, N-terminal domain
51	c2ejbA_		not modelled	25.4	16	PDB header: lyase Chain: A: PDB Molecule: probable aromatic acid decarboxylase; PDBTitle: crystal structure of phenylacrylic acid decarboxylase from2 aquifer aeolicus
52	c3f46A_		not modelled	22.3	20	PDB header: oxidoreductase Chain: A: PDB Molecule: 5,10-methenyltetrahydromethanopterin hydrogenase; PDBTitle: the crystal structure of c176a mutated [fe]-hydrogenase (hmd)2 holoenzyme from methanocaldococcus jannaschii PDB header: hydrolase

53	c3mmzA	Alignment	not modelled	22.2	17	<p>Chain: A: PDB Molecule:putative had family hydrolase; PDBTitle: crystal structure of putative had family hydrolase from streptomyces2 avermitilis ma-4680</p> <p>PDB header:transferase</p>
54	c3gk0H	Alignment	not modelled	19.9	26	<p>Chain: H: PDB Molecule:pyridoxine 5'-phosphate synthase; PDBTitle: crystal structure of pyridoxal phosphate biosynthetic2 protein from burkholderia pseudomallei</p>
55	d1u02a	Alignment	not modelled	18.8	16	<p>Fold:HAD-like Superfamily:HAD-like Family:Trehalose-phosphatase</p>
56	d1kleA	Alignment	not modelled	18.0	15	<p>Fold:HAD-like Superfamily:HAD-like Family:Probable phosphatase Yrb1</p>
57	c3o6cA	Alignment	not modelled	16.9	15	<p>PDB header:transferase Chain: A: PDB Molecule:pyridoxine 5'-phosphate synthase; PDBTitle: pyridoxal phosphate biosynthetic protein pdxj from campylobacter2 jejuni</p>
58	c2w6rA	Alignment	not modelled	16.7	16	<p>PDB header:lyase Chain: A: PDB Molecule:imidazole glycerol phosphate synthase subunit PDBTitle: crystal structure of an artificial (ba)8-barrel protein2 designed from identical half barrels</p>
59	d1m5wa	Alignment	not modelled	16.2	26	<p>Fold:TIM beta/alpha-barrel Superfamily:Pyridoxine 5'-phosphate synthase Family:Pyridoxine 5'-phosphate synthase</p>
60	c3e8mD	Alignment	not modelled	14.9	29	<p>PDB header:transferase Chain: D: PDB Molecule:acylneuraminate cytidyltransferase; PDBTitle: structure-function analysis of 2-keto-3-deoxy-d-glycero-d-galacto-2 nononate-9-phosphate (kdn) phosphatase defines a new clan within the3 type c0 had subfamily</p>
61	c2iz6A	Alignment	not modelled	14.0	16	<p>PDB header:metal transport Chain: A: PDB Molecule:molybdenum cofactor carrier protein; PDBTitle: structure of the chlamydomonas rheinhardtii moco carrier2 protein</p>
62	d1q0qa2	Alignment	not modelled	13.0	60	<p>Fold:NAD(P)-binding Rossmann-fold domains Superfamily:NAD(P)-binding Rossmann-fold domains Family:Glyceraldehyde-3-phosphate dehydrogenase-like, N-terminal domain</p>
63	c3ewiB	Alignment	not modelled	12.5	11	<p>PDB header:transferase Chain: B: PDB Molecule:n-acetylneuraminate cytidyltransferase; PDBTitle: structural analysis of the c-terminal domain of murine cmp-2 sialic acid synthetase</p>
64	c3mn1B	Alignment	not modelled	12.1	15	<p>PDB header:hydrolase Chain: B: PDB Molecule:probable yrbi family phosphatase; PDBTitle: crystal structure of probable yrbi family phosphatase from pseudomonas2 syringae pv. phaseolica 1448a</p>
65	d1weha	Alignment	not modelled	11.7	7	<p>Fold:MCP/YpsA-like Superfamily:MCP/YpsA-like Family:MoCo carrier protein-like</p>
66	d1ecfa1	Alignment	not modelled	11.6	22	<p>Fold:PRTase-like Superfamily:PRTase-like Family:Phosphoribosyltransferases (PRTases)</p>
67	c3etjB	Alignment	not modelled	10.9	35	<p>PDB header:lyase Chain: B: PDB Molecule:phosphoribosylaminoimidazole carboxylase atpase PDBTitle: crystal structure e. coli purk in complex with mg, adp, and2 pi</p>
68	c3gygA	Alignment	not modelled	10.7	14	<p>PDB header:hydrolase Chain: A: PDB Molecule:ntd biosynthesis operon putative hydrolase ntbd; PDBTitle: crystal structure of yhjk (haloacid dehalogenase-like hydrolase2 protein) from bacillus subtilis</p>
69	d1yzfa1	Alignment	not modelled	10.5	30	<p>Fold:Flavodoxin-like Superfamily:SGNH hydrolase Family:TAP-like</p>
70	d1weka	Alignment	not modelled	10.4	22	<p>Fold:MCP/YpsA-like Superfamily:MCP/YpsA-like Family:MoCo carrier protein-like</p>
71	c1ecjB	Alignment	not modelled	10.2	22	<p>PDB header:transferase Chain: B: PDB Molecule:glutamine phosphoribosylpyrophosphate PDBTitle: escherichia coli glutamine phosphoribosylpyrophosphate2 (prpp) amidotransferase complexed with 2 amp per tetramer</p>
72	d1rcua	Alignment	not modelled	9.3	20	<p>Fold:MCP/YpsA-like Superfamily:MCP/YpsA-like Family:MoCo carrier protein-like</p>
73	c1rcuB	Alignment	not modelled	9.3	20	<p>PDB header:structural genomics, unknown function Chain: B: PDB Molecule:conserved hypothetical protein vt76; PDBTitle: x-ray structure of tm1055 northeast structural genomics2 consortium target vt76</p>
74	d2zdra2	Alignment	not modelled	8.5	24	<p>Fold:TIM beta/alpha-barrel Superfamily:Aldolase Family:NeuB-like</p>
75	c2kswA	Alignment	not modelled	8.4	31	<p>PDB header:hydrolase inhibitor Chain: A: PDB Molecule:oryctin; PDBTitle: backbone 1h, 13c, and 15n chemical shift assignments for oryctin</p>
76	d1gph11	Alignment	not modelled	8.0	22	<p>Fold:PRTase-like Superfamily:PRTase-like Family:Phosphoribosyltransferases (PRTases)</p>
77	c2zakB	Alignment	not modelled	8.0	18	<p>PDB header:hydrolase Chain: B: PDB Molecule:l-asparaginase precursor; PDBTitle: orthorhombic crystal structure of precursor e. coli isoaspartyl2 peptidase/l-asparaginase (ecaiii) with active-site t179a mutation</p>
						<p>Fold:MCP/YpsA-like</p>

78	d1t35a_	Alignment	not modelled	7.9	14	Superfamily: MCP/YpsA-like Family: MoCo carrier protein-like
79	c3dhnA_	Alignment	not modelled	7.4	16	PDB header: isomerase, lyase Chain: A: PDB Molecule: nad-dependent epimerase/dehydratase; PDBTitle: crystal structure of the putative epimerase q89z24_bactn2 from bacteroides thetaiotomicron. northeast structural3 genomics consortium target btr310.
80	c2p9jH_	Alignment	not modelled	7.2	13	PDB header: structural genomics, unknown function Chain: H: PDB Molecule: hypothetical protein aq2171; PDBTitle: crystal structure of aq2171 from aquifex aeolicus
81	c2gx0A_	Alignment	not modelled	7.1	29	PDB header: transferase Chain: A: PDB Molecule: 7,8-dihydro-6-hydroxymethylpterin PDBTitle: crystal structure of yersinia pestis hppk (ternary complex)
82	c1t3mA_	Alignment	not modelled	7.0	13	PDB header: hydrolase Chain: A: PDB Molecule: putative l-asparaginase; PDBTitle: structure of the isoaspartyl peptidase with l-asparaginase2 activity from e. coli
83	c3quaA_	Alignment	not modelled	6.9	11	PDB header: unknown function Chain: A: PDB Molecule: putative uncharacterized protein; PDBTitle: crystal structure of a putative uncharacterized protein and possible2 molybdenum cofactor protein from mycobacterium smegmatis
84	c2h29A_	Alignment	not modelled	6.7	50	PDB header: transferase Chain: A: PDB Molecule: probable nicotinate-nucleotide PDBTitle: crystal structure of nicotinic acid mononucleotide2 adenyllyltransferase from staphylococcus aureus: product3 bound form 1
85	c3nd5D_	Alignment	not modelled	6.0	20	PDB header: transferase Chain: D: PDB Molecule: phosphopantetheine adenyllyltransferase; PDBTitle: crystal structure of phosphopantetheine adenyllyltransferase (ppat)2 from enterococcus faecalis
86	c3gh1A_	Alignment	not modelled	6.0	32	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: predicted nucleotide-binding protein; PDBTitle: crystal structure of predicted nucleotide-binding protein from vibrio2 cholerae
87	d1wmaa1	Alignment	not modelled	5.9	24	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: Tyrosine-dependent oxidoreductases
88	c1gph1_	Alignment	not modelled	5.9	22	PDB header: transferase(glutamine amidotransferase) Chain: 1: PDB Molecule: glutamine phosphoribosyl-pyrophosphate amidotransferase; PDBTitle: structure of the allosteric regulatory enzyme of purine biosynthesis
89	d3eeqa2	Alignment	not modelled	5.9	33	Fold: CbiG N-terminal domain-like Superfamily: CbiG N-terminal domain-like Family: CbiG N-terminal domain-like