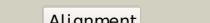
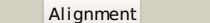
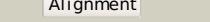
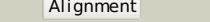
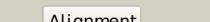
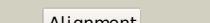


Phyre²

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Description	P22564
Date	Thu Jan 5 11:38:58 GMT 2012
Unique Job ID	e11e3175645721cd

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c3b9xA_			100.0	38	PDB header: hydrolase Chain: A: PDB Molecule: pyrimidine-specific ribonucleoside hydrolase rihb; PDBTitle: crystal structure of the e. coli pyrimidine nucleoside hydrolase yeik2 in complex with inosine
2	d1q8fa_			100.0	38	Fold: Nucleoside hydrolase Superfamily: Nucleoside hydrolase Family: Nucleoside hydrolase
3	d2masa_			100.0	37	Fold: Nucleoside hydrolase Superfamily: Nucleoside hydrolase Family: Nucleoside hydrolase
4	c1yoeA_			100.0	45	PDB header: hydrolase Chain: A: PDB Molecule: hypothetical protein ybek; PDBTitle: crystal structure of the e. coli pyrimidine nucleoside hydrolase2 ybek with bound ribose
5	d1ezra_			100.0	37	Fold: Nucleoside hydrolase Superfamily: Nucleoside hydrolase Family: Nucleoside hydrolase
6	c3fz0C_			100.0	29	PDB header: hydrolase Chain: C: PDB Molecule: nucleoside hydrolase, putative; PDBTitle: inosine-guanosine nucleoside hydrolase (ig-nh)
7	c2c40B_			100.0	24	PDB header: hydrolase Chain: B: PDB Molecule: inosine-uridine preferring nucleoside hydrolase family PDBTitle: crystal structure of inosine-uridine preferring nucleoside2 hydrolase from bacillus anthracis at 2.2a resolution
8	d1kica_			100.0	21	Fold: Nucleoside hydrolase Superfamily: Nucleoside hydrolase Family: Nucleoside hydrolase
9	c2yhgA_			99.5	21	PDB header: hydrolase Chain: A: PDB Molecule: cellulose-binding protein; PDBTitle: ab initio phasing of a nucleoside hydrolase-related hypothetical2 protein from saccharophagus degradans that is associated with3 carbohydrate metabolism
10	d1gpmal			77.3	13	Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Adenine nucleotide alpha hydrolases-like Family: N-type ATP pyrophosphatases
11	d2ocda1			49.0	22	Fold: Glutaminase/Asparaginase Superfamily: Glutaminase/Asparaginase Family: Glutaminase/Asparaginase

12	d1o7ja_			48.3	14	Fold: Glutaminase/Asparaginase Superfamily: Glutaminase/Asparaginase Family: Glutaminase/Asparaginase
13	d1nnsa_			48.1	16	Fold: Glutaminase/Asparaginase Superfamily: Glutaminase/Asparaginase Family: Glutaminase/Asparaginase
14	d1o5za2			47.8	15	Fold: Ribokinase-like Superfamily: MurD-like peptide ligases, catalytic domain Family: Folylpolyglutamate synthetase
15	d4pgaa_			47.0	15	Fold: Glutaminase/Asparaginase Superfamily: Glutaminase/Asparaginase Family: Glutaminase/Asparaginase
16	c2dplA_			42.3	13	PDB header: ligase Chain: A; PDB Molecule: gmp synthase [glutamine-hydrolyzing] subunit b; PDBTitle: crystal structure of the gmp synthase from pyrococcus horikoshii ot3
17	c3r79B_			35.7	15	PDB header: structure genomics, unknown function Chain: B; PDB Molecule: uncharacterized protein; PDBTitle: crystal structure of an uncharacterized protein from agrobacterium2 tumefaciens
18	d1pkla3			35.4	14	Fold: Pyruvate kinase C-terminal domain-like Superfamily: PK C-terminal domain-like Family: Pyruvate kinase, C-terminal domain
19	d1e0ta3			35.0	14	Fold: Pyruvate kinase C-terminal domain-like Superfamily: PK C-terminal domain-like Family: Pyruvate kinase, C-terminal domain
20	d1agxa_			34.9	12	Fold: Glutaminase/Asparaginase Superfamily: Glutaminase/Asparaginase Family: Glutaminase/Asparaginase
21	c2z1dA_		not modelled	34.1	23	PDB header: metal binding protein Chain: A; PDB Molecule: hydrogenase expression/formation protein hypd; PDBTitle: crystal structure of [nife] hydrogenase maturation protein, hypd from2 thermococcus kodakaraensis
22	d3bula2		not modelled	32.4	18	Fold: Flavodoxin-like Superfamily: Cobalamin (vitamin B12)-binding domain Family: Cobalamin (vitamin B12)-binding domain
23	c3uowB_		not modelled	30.8	15	PDB header: ligase Chain: B; PDB Molecule: gmp synthetase; PDBTitle: crystal structure of pf10_0123, a gmp synthetase from plasmodium2 falciparum
24	d2b3ya2		not modelled	30.5	31	Fold: Aconitase iron-sulfur domain Superfamily: Aconitase iron-sulfur domain Family: Aconitase iron-sulfur domain
25	c2zyiB_		not modelled	29.5	16	PDB header: hydrolase Chain: B; PDB Molecule: lipase, putative; PDBTitle: a. fulgidus lipase with fatty acid fragment and calcium
26	d1ccwa_		not modelled	29.4	15	Fold: Flavodoxin-like Superfamily: Cobalamin (vitamin B12)-binding domain Family: Cobalamin (vitamin B12)-binding domain
27	c3tqiB_		not modelled	29.0	13	PDB header: ligase Chain: B; PDB Molecule: gmp synthase [glutamine-hydrolyzing]; PDBTitle: structure of the gmp synthase (guaa) from coxiella burnetii
28	c1wnfA_		not modelled	28.5	18	PDB header: hydrolase Chain: A; PDB Molecule: l-asparaginase; PDBTitle: crystal structure of ph0066 from pyrococcus horikoshii
						PDB header: ligase

29	c3p52B	Alignment	not modelled	25.1	18	Chain: B: PDB Molecule: nh(3)-dependent nad(+) synthetase; PDBTitle: nh3-dependent nad synthetase from campylobacter jejuni subsp. jejuni2 nctc 11168 in complex with the nitrate ion
30	c1y80A	Alignment	not modelled	23.8	11	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: predicted cobalamin binding protein; PDBTitle: structure of a corrinoid (factor iiim)-binding protein from2 moorella thermoacetica
31	d2c5sa1	Alignment	not modelled	23.6	13	Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Adenine nucleotide alpha hydrolases-like Family: ThiI-like
32	c2vosA	Alignment	not modelled	23.5	19	PDB header: ligase Chain: A: PDB Molecule: folylpolyglutamate synthase protein folc; PDBTitle: mycobacterium tuberculosis folylpolyglutamate synthase2 complexed with adp
33	d2gc6a2	Alignment	not modelled	22.9	13	Fold: Ribokinase-like Superfamily: MurD-like peptide ligases, catalytic domain Family: Folylpolyglutamate synthetase
34	c3dlaD	Alignment	not modelled	21.5	23	PDB header: ligase Chain: D: PDB Molecule: glutamine-dependent nad(+) synthetase; PDBTitle: x-ray crystal structure of glutamine-dependent nad+ synthetase from2 mycobacterium tuberculosis bound to naad+ and don
35	c2d6fA	Alignment	not modelled	20.4	20	PDB header: ligase/rna Chain: A: PDB Molecule: glutamyl-trna(gln) amidotransferase subunit d; PDBTitle: crystal structure of glu-trna(gln) amidotransferase in the2 complex with trna(gln)
36	c1zq1B	Alignment	not modelled	19.3	23	PDB header: lyase Chain: B: PDB Molecule: glutamyl-trna(gln) amidotransferase subunit d; PDBTitle: structure of gatde trna-dependent amidotransferase from2 pyrococcus abyssi
37	d1wsaa	Alignment	not modelled	19.1	13	Fold: Glutaminase/Asparaginase Superfamily: Glutaminase/Asparaginase Family: Glutaminase/Asparaginase
38	c3fiuD	Alignment	not modelled	18.6	24	PDB header: ligase Chain: D: PDB Molecule: nh(3)-dependent nad(+) synthetase; PDBTitle: structure of nmn synthetase from francisella tularensis
39	d2nu7b1	Alignment	not modelled	18.0	11	Fold: Flavodoxin-like Superfamily: Succinyl-CoA synthetase domains Family: Succinyl-CoA synthetase domains
40	c1bmtB	Alignment	not modelled	16.3	18	PDB header: methyltransferase Chain: B: PDB Molecule: methionine synthase; PDBTitle: how a protein binds b12: a 3.0 angstrom x-ray structure of2 the b12-binding domains of methionine synthase
41	c2nu9E	Alignment	not modelled	16.1	11	PDB header: ligase Chain: E: PDB Molecule: succinyl-coa synthetase beta chain; PDBTitle: c123at mutant of e. coli succinyl-coa synthetase2 orthorhombic crystal form
42	c1w8gA	Alignment	not modelled	16.0	17	PDB header: plp-binding protein Chain: A: PDB Molecule: hypothetical upf0001 protein yggs; PDBTitle: crystal structure of e. coli k-12 yggs
43	c2w1tA	Alignment	not modelled	15.7	16	PDB header: hydrolase Chain: A: PDB Molecule: -asparaginase; PDBTitle: the crystal structure of helicobacter pylori l-asparaginase2 at 1.4 a resolution
44	d1tcaa	Alignment	not modelled	15.1	14	Fold: alpha/beta-Hydrolases Superfamily: alpha/beta-Hydrolases Family: Fungal lipases
45	c1w78A	Alignment	not modelled	14.9	15	PDB header: synthase Chain: A: PDB Molecule: folc bifunctional protein; PDBTitle: e.coli folc in complex with dhpp and adp
46	d1tru8a	Alignment	not modelled	14.6	18	Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Adenine nucleotide alpha hydrolases-like Family: N-type ATP pyrophosphatases
47	c3si9B	Alignment	not modelled	14.2	10	PDB header: lyase Chain: B: PDB Molecule: dihydrodipicolinate synthase; PDBTitle: crystal structure of dihydrodipicolinate synthase from bartonellae2 henselae
48	d2vk9a1	Alignment	not modelled	13.9	9	Fold: Nucleotide-diphospho-sugar transferases Superfamily: Nucleotide-diphospho-sugar transferases Family: Glycosylating toxin catalytic domain-like
49	c3l1xA	Alignment	not modelled	13.5	19	PDB header: isomerase Chain: A: PDB Molecule: predicted amino acid aldolase or racemase; PDBTitle: crystal structure of an ala racemase-like protein (i11761) from2 idiomarina loihensis at 1.50 a resolution
50	c2hmaA	Alignment	not modelled	13.4	7	PDB header: transferase Chain: A: PDB Molecule: probable trna (5-methylaminomethyl-2-thiouridylate)-2 methyltransferase trmu from streptococcus pneumoniae
51	d1d9ea	Alignment	not modelled	13.4	9	Fold: TIM beta/alpha-barrel Superfamily: Alcohol dehydrogenase Family: Class I DAHP synthetase
52	c3nxkE	Alignment	not modelled	13.0	20	PDB header: hydrolase Chain: E: PDB Molecule: cytoplasmic l-asparaginase; PDBTitle: crystal structure of probable cytoplasmic l-asparaginase from2 campylobacter jejuni
53	d3cx5a2	Alignment	not modelled	12.7	4	Fold: LuxS/MPP-like metallohydrolase Superfamily: LuxS/MPP-like metallohydrolase Family: MPP-like
						PDB header: transferase (glutamine amidotransferase) Chain: B: PDB Molecule: glutamine amidotransferase

54	c1gpmD	Alignment	not modelled	12.4	13	Chain: D: PDB Molecule: gmp synthetase; PDBTitle: escherichia coli gmp synthetase complexed with amp and pyrophosphate
55	d3clsc1	Alignment	not modelled	12.2	14	Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Adenine nucleotide alpha hydrolases-like Family: ETFP subunits
56	d1efvb	Alignment	not modelled	11.5	21	Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Adenine nucleotide alpha hydrolases-like Family: ETFP subunits
57	c2derA	Alignment	not modelled	11.3	8	PDB header: transferase/rna Chain: A: PDB Molecule: trna-specific 2-thiouridylase mnma; PDBTitle: cocrystal structure of an rna sulfuration enzyme mnma and2 trna-glu in the initial trna binding state
58	c1xtxD	Alignment	not modelled	11.3	45	PDB header: hydrolase Chain: D: PDB Molecule: peptidyl-trna hydrolase; PDBTitle: crystal structure of sulfolobus solfataricus peptidyl-trna2 hydrolase
59	c3cseA	Alignment	not modelled	11.2	24	PDB header: oxidoreductase Chain: A: PDB Molecule: dihydrofolate reductase; PDBTitle: candida glabrata dihydrofolate reductase complexed with2 nadph and 2,4-diamino-5-(3-(2,5-dimethoxyphenyl)prop-1-3 ynyl)-6-ethylpyrimidine (ucp120b)
60	c3bl5E	Alignment	not modelled	11.0	9	PDB header: hydrolase Chain: E: PDB Molecule: queuosine biosynthesis protein quec; PDBTitle: crystal structure of quec from bacillus subtilis: an enzyme2 involved in preq1 biosynthesis
61	c3sz8D	Alignment	not modelled	11.0	10	PDB header: transferase Chain: D: PDB Molecule: 2-dehydro-3-deoxyphosphooctonate aldolase 2; PDBTitle: crystal structure of 2-dehydro-3-deoxyphosphooctonate aldolase from2 burkholderia pseudomallei
62	d1lw7a1	Alignment	not modelled	10.7	8	Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Nucleotidyl transferase Family: Adenylyltransferase
63	d1vbka1	Alignment	not modelled	10.5	12	Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Adenine nucleotide alpha hydrolases-like Family: ThiI-like
64	c2d3kA	Alignment	not modelled	10.3	55	PDB header: hydrolase Chain: A: PDB Molecule: peptidyl-trna hydrolase; PDBTitle: structural study on project id ph1539 from pyrococcus2 horikoshii ot3
65	c2yxgD	Alignment	not modelled	10.2	11	PDB header: lyase Chain: D: PDB Molecule: dihydrodipicolinate synthase; PDBTitle: crystal structure of dihydroadipicoline synthase (dapa)
66	d1liua3	Alignment	not modelled	10.2	17	Fold: Pyruvate kinase C-terminal domain-like Superfamily: PK C-terminal domain-like Family: Pyruvate kinase, C-terminal domain
67	d1j20a1	Alignment	not modelled	10.1	14	Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Adenine nucleotide alpha hydrolases-like Family: N-type ATP pyrophosphatases
68	d1kqpa	Alignment	not modelled	10.1	20	Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Adenine nucleotide alpha hydrolases-like Family: N-type ATP pyrophosphatases
69	d2bcea	Alignment	not modelled	10.0	20	Fold: alpha/beta-Hydrolases Superfamily: alpha/beta-Hydrolases Family: Acetylcholinesterase-like
70	c2zv3E	Alignment	not modelled	9.7	64	PDB header: hydrolase Chain: E: PDB Molecule: peptidyl-trna hydrolase; PDBTitle: crystal structure of project mj0051 from methanocaldococcus2 jannaschii dsm 2661
71	d1q7sa	Alignment	not modelled	9.5	45	Fold: Peptidyl-tRNA hydrolase II Superfamily: Peptidyl-tRNA hydrolase II Family: Peptidyl-tRNA hydrolase II
72	d1bd0a2	Alignment	not modelled	9.5	26	Fold: TIM beta/alpha-barrel Superfamily: PLP-binding barrel Family: Alanine racemase-like, N-terminal domain
73	d1lk6a2	Alignment	not modelled	9.3	33	Fold: TK C-terminal domain-like Superfamily: TK C-terminal domain-like Family: Branched-chain alpha-keto acid dehydrogenase beta-subunit, C-terminal-domain
74	d3erja1	Alignment	not modelled	9.0	55	Fold: Peptidyl-tRNA hydrolase II Superfamily: Peptidyl-tRNA hydrolase II Family: Peptidyl-tRNA hydrolase II
75	d2g50a3	Alignment	not modelled	8.9	14	Fold: Pyruvate kinase C-terminal domain-like Superfamily: PK C-terminal domain-like Family: Pyruvate kinase, C-terminal domain
76	d1xngal	Alignment	not modelled	8.8	14	Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Adenine nucleotide alpha hydrolases-like Family: N-type ATP pyrophosphatases
77	c1o5zA	Alignment	not modelled	8.7	15	PDB header: ligase Chain: A: PDB Molecule: folyl polyglutamate synthase/dihydrofolate synthase; PDBTitle: crystal structure of folyl polyglutamate synthase (tm0166) from2 thermotoga maritima at 2.10 a resolution
78	d1hioa	Alignment	not modelled	8.7	14	Fold: Histone-fold Superfamily: Histone-fold Family: Nucleosome core histones
79	d5mdha1	Alignment	not modelled	8.6	20	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: LDH N-terminal domain-like
80	d2bvla1	Alignment	not modelled	8.4	17	Fold: Nucleotide-diphospho-sugar transferases Superfamily: Nucleotide-diphospho-sugar transferases

						Family: Glycosylating toxin catalytic domain-like
81	c1eucB_	Alignment	not modelled	8.4	15	PDB header: ligase Chain: B: PDB Molecule: succinyl-coa synthetase, beta chain; PDBTitle: crystal structure of dephosphorylated pig heart, gtp-2 specific succinyl-coa synthetase
82	c3ezxA_	Alignment	not modelled	8.4	12	PDB header: transferase Chain: A: PDB Molecule: monomethylamine corrinoid protein 1; PDBTitle: structure of methanosaclera barkeri monomethylamine2 corrinoid protein
83	d1rlka_	Alignment	not modelled	8.0	36	Fold: Peptidyl-tRNA hydrolase II Superfamily: Peptidyl-tRNA hydrolase II Family: Peptidyl-tRNA hydrolase II
84	d2d6fa2	Alignment	not modelled	8.0	20	Fold: Glutaminase/Asparaginase Superfamily: Glutaminase/Asparaginase Family: Glutaminase/Asparaginase
85	d1t1ra2	Alignment	not modelled	8.0	28	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: Glyceraldehyde-3-phosphate dehydrogenase-like, N-terminal domain
86	c2dy3B_	Alignment	not modelled	7.8	20	PDB header: isomerase Chain: B: PDB Molecule: alanine racemase; PDBTitle: crystal structure of alanine racemase from corynebacterium glutamicum
87	c3rg9A_	Alignment	not modelled	7.8	26	PDB header: oxidoreductase/oxidoreductase inhibitor Chain: A: PDB Molecule: bifunctional dihydrofolate reductase-thymidylate synthase; PDBTitle: trypanosoma brucei dihydrofolate reductase (tbdhfr) in complex with2 wr99210
88	c2gc6A_	Alignment	not modelled	7.6	13	PDB header: ligase Chain: A: PDB Molecule: folylpolyglutamate synthase; PDBTitle: s73a mutant of l. casei fpgs
89	d1o94c_	Alignment	not modelled	7.6	13	Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Adenine nucleotide alpha hydrolases-like Family: ETFP subunits
90	d1k4ya_	Alignment	not modelled	7.4	20	Fold: alpha/beta-Hydrolases Superfamily: alpha/beta-Hydrolases Family: Acetylcholinesterase-like
91	c3jz0B_	Alignment	not modelled	7.3	18	PDB header: transferase/antibiotic Chain: B: PDB Molecule: lincosamide nucleotidyltransferase; PDBTitle: linb complexed with clindamycin and ampcpp
92	c3kw3B_	Alignment	not modelled	7.3	10	PDB header: isomerase Chain: B: PDB Molecule: alanine racemase; PDBTitle: crystal structure of alanine racemase from bartonella henselae with2 covalently bound pyridoxal phosphate
93	d1qs0b2	Alignment	not modelled	7.3	21	Fold: TK C-terminal domain-like Superfamily: TK C-terminal domain-like Family: Branched-chain alpha-keto acid dehydrogenase beta-subunit, C-terminal-domain
94	d1u35c1	Alignment	not modelled	7.0	18	Fold: Histone-fold Superfamily: Histone-fold Family: Nucleosome core histones
95	d7reqa2	Alignment	not modelled	7.0	14	Fold: Flavodoxin-like Superfamily: Cobalamin (vitamin B12)-binding domain Family: Cobalamin (vitamin B12)-binding domain
96	d2ozlb2	Alignment	not modelled	6.8	21	Fold: TK C-terminal domain-like Superfamily: TK C-terminal domain-like Family: Branched-chain alpha-keto acid dehydrogenase beta-subunit, C-terminal-domain
97	d2pg3a1	Alignment	not modelled	6.7	15	Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Adenine nucleotide alpha hydrolases-like Family: N-type ATP pyrophosphatases
98	d1qe3a_	Alignment	not modelled	6.6	18	Fold: alpha/beta-Hydrolases Superfamily: alpha/beta-Hydrolases Family: Acetylcholinesterase-like
99	c1vl2C_	Alignment	not modelled	6.6	19	PDB header: ligase Chain: C: PDB Molecule: argininosuccinate synthase; PDBTitle: crystal structure of argininosuccinate synthase (tm1780) from2 thermotoga maritima at 1.65 a resolution