

Phyre²

Email	i.a.kelley@imperial.ac.uk
Description	P18843
Date	Thu Jan 5 11:37:11 GMT 2012
Unique Job ID	a5bb643fc98a4c2c

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	d1wxia1			100.0	100	Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Adenine nucleotide alpha hydrolases-like Family: N-type ATP pyrophosphatases
2	d1kqpa_			100.0	54	Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Adenine nucleotide alpha hydrolases-like Family: N-type ATP pyrophosphatases
3	c3dp1A_			100.0	44	PDB header: ligase Chain: A: PDB Molecule: nad+ synthetase; PDBTitle: crystal structure of nad+ synthetase from burkholderia pseudomallei
4	c3q4gA_			100.0	49	PDB header: ligase Chain: A: PDB Molecule: nh(3)-dependent nad(+) synthetase; PDBTitle: structure of nad synthetase from vibrio cholerae
5	c2e18B_			100.0	30	PDB header: ligase Chain: B: PDB Molecule: nh(3)-dependent nad(+) synthetase; PDBTitle: crystal structure of project ph0182 from pyrococcus horikoshii ot3
6	c3f1uD_			100.0	32	PDB header: ligase Chain: D: PDB Molecule: nh(3)-dependent nad(+) synthetase; PDBTitle: structure of nmn synthetase from francisella tularensis
7	c3dlaD_			100.0	22	PDB header: ligase Chain: D: PDB Molecule: glutamine-dependent nad(+) synthetase; PDBTitle: x-ray crystal structure of glutamine-dependent nad+ synthetase from mycobacterium tuberculosis bound to naad+ and don
8	c3n05B_			100.0	20	PDB header: ligase Chain: B: PDB Molecule: nh(3)-dependent nad(+) synthetase; PDBTitle: crystal structure of nh3-dependent nad+ synthetase from streptomyces avermitilis
9	c3ilvA_			100.0	17	PDB header: ligase Chain: A: PDB Molecule: glutamine-dependent nad(+) synthetase; PDBTitle: crystal structure of a glutamine-dependent nad(+) synthetase2 from cytophaga hutchinsonii
10	d1xngal			100.0	27	Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Adenine nucleotide alpha hydrolases-like Family: N-type ATP pyrophosphatases
11	c3p52B_			100.0	22	PDB header: ligase 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

12	c1gpmD		100.0	17	PDB header: transferase (glutamine amidotransferase) Chain: D: PDB Molecule: gmp synthetase; PDBTitle: escherichia coli gmp synthetase complexed with amp and pyrophosphate	
13	c2vxoB		100.0	15	PDB header: ligase Chain: B: PDB Molecule: gmp synthase [glutamine-hydrolyzing]; PDBTitle: human gmp synthetase in complex with xmp	
14	c3uowB		100.0	16	PDB header: ligase Chain: B: PDB Molecule: gmp synthetase; PDBTitle: crystal structure of pf10_0123, a gmp synthetase from plasmodium2 falciparum	
15	c3tqiB		100.0	19	PDB header: ligase Chain: B: PDB Molecule: gmp synthase [glutamine-hydrolyzing]; PDBTitle: structure of the gmp synthase (guaa) from coxiella burnetii	
16	c2ywcc		100.0	18	PDB header: ligase Chain: C: PDB Molecule: gmp synthase [glutamine-hydrolyzing]; PDBTitle: crystal structure of gmp synthetase from thermus thermophilus in2 complex with xmp	
17	c2dplA		100.0	17	PDB header: ligase Chain: A: PDB Molecule: gmp synthase [glutamine-hydrolyzing] subunit b; PDBTitle: crystal structure of the gmp synthase from pyrococcus horikoshii ot3	
18	d1gpmal		99.9	16	Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Adenine nucleotide alpha hydrolases-like Family: N-type ATP pyrophosphatases	
19	c2hmaA		99.9	22	PDB header: transferase Chain: A: PDB Molecule: probable trna (5-methylaminomethyl-2-thiouridylate)- PDBTitle: the crystal structure of trna (5-methylaminomethyl-2-thiouridylate)-2 methyltransferase trmu from streptococcus pneumoniae	
20	c2derA		99.8	18	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	
21	c2c5sA	Alignment	not modelled	99.7	16	PDB header: rna-binding protein Chain: A: PDB Molecule: probable thiamine biosynthesis protein thiI; PDBTitle: crystal structure of bacillus anthracis thiI, a trna-2 modifying enzyme containing the predicted rna-binding3 thump domain
22	d2c5sa1	Alignment	not modelled	99.7	16	Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Adenine nucleotide alpha hydrolases-like Family: ThiI-like
23	d1wy5a1	Alignment	not modelled	99.6	16	Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Adenine nucleotide alpha hydrolases-like Family: PP-loop ATPase
24	d1j20a1	Alignment	not modelled	99.6	13	Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Adenine nucleotide alpha hydrolases-like Family: N-type ATP pyrophosphatases
25	d1vl2a1	Alignment	not modelled	99.6	18	Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Adenine nucleotide alpha hydrolases-like Family: N-type ATP pyrophosphatases
26	c3bl5E	Alignment	not modelled	99.5	15	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 PDB header: transferase
27	c3k32D	Alignment	not modelled	99.5	12	Chain: D: PDB Molecule: uncharacterized protein mj0690; PDBTitle: the crystal structure of predicted subunit of trna2 methyltransferase from methanocaldococcus jannaschii dsm
28	d1k92a1	Alignment	not modelled	99.4	12	Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Adenine nucleotide alpha hydrolases-like Family: N-type ATP pyrophosphatases

29	c2e21A	Alignment	not modelled	99.4	16	PDB header: ligase Chain: A: PDB Molecule: trna(ile)-lysidine synthase; PDBTitle: crystal structure of tils in a complex with amppnp from aquifex2 aeolicus.
30	d2pg3a1	Alignment	not modelled	99.3	16	Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Adenine nucleotide alpha hydrolases-like Family: N-type ATP pyrophosphatases
31	c1kh2D	Alignment	not modelled	99.3	13	PDB header: ligase Chain: D: PDB Molecule: argininosuccinate synthetase; PDBTitle: crystal structure of thermus thermophilus hb82 argininosuccinate synthetase in complex with atp
32	c2nz2A	Alignment	not modelled	99.3	16	PDB header: ligase Chain: A: PDB Molecule: argininosuccinate synthase; PDBTitle: crystal structure of human argininosuccinate synthase in complex with2 aspartate and citrulline
33	d1ni5a1	Alignment	not modelled	99.3	17	Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Adenine nucleotide alpha hydrolases-like Family: PP-loop ATPase
34	c1vl2C	Alignment	not modelled	99.3	18	PDB header: ligase Chain: C: PDB Molecule: argininosuccinate synthase; PDBTitle: crystal structure of argininosuccinate synthase (tm1780) from thermotoga maritima at 1.65 a resolution
35	c3a2kB	Alignment	not modelled	99.2	16	PDB header: ligase/rna Chain: B: PDB Molecule: trna(ile)-lysidine synthase; PDBTitle: crystal structure of tils complexed with trna
36	c1k97A	Alignment	not modelled	99.1	10	PDB header: ligase Chain: A: PDB Molecule: argininosuccinate synthetase; PDBTitle: crystal structure of e. coli argininosuccinate synthetase in complex2 with aspartate and citrulline
37	d1sura	Alignment	not modelled	99.0	9	Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Adenine nucleotide alpha hydrolases-like Family: PAPS reductase-like
38	d1q15a1	Alignment	not modelled	98.9	13	Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Adenine nucleotide alpha hydrolases-like Family: N-type ATP pyrophosphatases
39	d1vbka1	Alignment	not modelled	98.8	10	Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Adenine nucleotide alpha hydrolases-like Family: ThiI-like
40	c1ni5A	Alignment	not modelled	98.8	15	PDB header: cell cycle Chain: A: PDB Molecule: putative cell cycle protein mesj; PDBTitle: structure of the mesj pp-atpase from escherichia coli
41	c1q15A	Alignment	not modelled	98.8	13	PDB header: biosynthetic protein Chain: A: PDB Molecule: cara; PDBTitle: carbapenam synthetase
42	d1jgtal	Alignment	not modelled	98.7	15	Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Adenine nucleotide alpha hydrolases-like Family: N-type ATP pyrophosphatases
43	c2o8vA	Alignment	not modelled	98.7	9	PDB header: oxidoreductase Chain: A: PDB Molecule: phosphoadenosine phosphosulfate reductase; PDBTitle: paps reductase in a covalent complex with thioredoxin c35a
44	c1zunA	Alignment	not modelled	98.7	10	PDB header: transferase Chain: A: PDB Molecule: sulfate adenylyltransferase subunit 2; PDBTitle: crystal structure of a gtp-regulated atp sulfurylase2 heterodimer from pseudomonas syringae
45	c2goyC	Alignment	not modelled	98.6	12	PDB header: oxidoreductase Chain: C: PDB Molecule: adenosine phosphosulfate reductase; PDBTitle: crystal structure of assimilatory adenosine 5'-2' phosphosulfate reductase with bound aps
46	d1ct9a1	Alignment	not modelled	98.6	15	Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Adenine nucleotide alpha hydrolases-like Family: N-type ATP pyrophosphatases
47	d1zunal	Alignment	not modelled	98.6	13	Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Adenine nucleotide alpha hydrolases-like Family: PAPS reductase-like
48	c1ct9D	Alignment	not modelled	98.4	11	PDB header: ligase Chain: D: PDB Molecule: asparagine synthetase b; PDBTitle: crystal structure of asparagine synthetase b from2 escherichia coli
49	c1mlzB	Alignment	not modelled	98.4	13	PDB header: hydrolase Chain: B: PDB Molecule: beta-lactam synthetase; PDBTitle: beta-lactam synthetase apo enzyme
50	c2oq2B	Alignment	not modelled	98.0	11	PDB header: oxidoreductase Chain: B: PDB Molecule: phosphoadenosine phosphosulfate reductase; PDBTitle: crystal structure of yeast paps reductase with pap, a product complex
51	d1ru8a	Alignment	not modelled	97.7	13	Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Adenine nucleotide alpha hydrolases-like Family: N-type ATP pyrophosphatases
52	c1vbkA	Alignment	not modelled	97.3	15	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: hypothetical protein ph1313; PDBTitle: crystal structure of ph1313 from pyrococcus horikoshii ot3
53	c2ws1A	Alignment	not modelled	97.1	11	PDB header: transferase Chain: A: PDB Molecule: fad synthetase; PDBTitle: crystal structure of yeast fad synthetase (fad1) in complex2 with fad
54	c3g59A	Alignment	not modelled	97.0	17	PDB header: transferase Chain: A: PDB Molecule: fmn adenyllyltransferase; PDBTitle: crystal structure of candida glabrata fmn2 adenyllyltransferase in complex with atp
						Fold: Adenine nucleotide alpha hydrolase-like

55	d2d13a1	Alignment	not modelled	94.6	17	Superfamily: Adenine nucleotide alpha hydrolases-like Family: N-type ATP pyrophosphatases
56	d1rz3a_	Alignment	not modelled	78.2	30	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Phosphoribulokinase/pantothenate kinase
57	c1y89B_	Alignment	not modelled	59.2	23	PDB header: structural genomics, unknown function Chain: B: PDB Molecule: devb protein; PDBTitle: crystal structure of devb protein
58	c3c8uA_	Alignment	not modelled	56.5	13	PDB header: transferase Chain: A: PDB Molecule: fructokinase; PDBTitle: crystal structure of putative fructose transport system kinase2 (yp_612366.1) from silicibacter sp. tm1040 at 1.95 a resolution
59	c3oc6A_	Alignment	not modelled	51.2	12	PDB header: hydrolase Chain: A: PDB Molecule: 6-phosphogluconolactonase; PDBTitle: crystal structure of 6-phosphogluconolactonase from mycobacterium smegmatis, apo form
60	c3lwdA_	Alignment	not modelled	50.2	21	PDB header: hydrolase Chain: A: PDB Molecule: 6-phosphogluconolactonase; PDBTitle: crystal structure of putative 6-phosphogluconolactonase (yp_574786.1)2 from chromohalobacter salexigens dsm 3043 at 1.88 a resolution
61	c3e15D_	Alignment	not modelled	50.2	16	PDB header: hydrolase Chain: D: PDB Molecule: glucose-6-phosphate 1-dehydrogenase; PDBTitle: 6-phosphogluconolactonase from plasmodium vivax
62	c3lhiA_	Alignment	not modelled	46.8	36	PDB header: hydrolase Chain: A: PDB Molecule: putative 6-phosphogluconolactonase; PDBTitle: crystal structure of putative 6-2 phosphogluconolactonase(yp_207848.1) from neisseria3 gonorrhoeae fa 1090 at 1.33 a resolution
63	d2apla2	Alignment	not modelled	38.3	15	Fold: Ribonuclease H-like motif Superfamily: Actin-like ATPase domain Family: ROK
64	d1fsfa_	Alignment	not modelled	37.4	18	Fold: NagB/RpiA/CoA transferase-like Superfamily: NagB/RpiA/CoA transferase-like Family: NagB-like
65	c3ch4B_	Alignment	not modelled	36.8	22	PDB header: transferase Chain: B: PDB Molecule: phosphomevalonate kinase; PDBTitle: the crystal structure of human phosphomavelonate kinase at 2.1.8 a resolution
66	c2bkxB_	Alignment	not modelled	33.7	20	PDB header: hydrolase Chain: B: PDB Molecule: glucosamine-6-phosphate deaminase; PDBTitle: structure and kinetics of a monomeric glucosamine-6-2 phosphate deaminase: missing link of the nagb superfamily
67	d1qgpa_	Alignment	not modelled	32.4	19	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: Z-DNA binding domain
68	d1qbjc_	Alignment	not modelled	32.2	19	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: Z-DNA binding domain
69	c1usdA_	Alignment	not modelled	30.7	9	PDB header: signaling protein Chain: A: PDB Molecule: vasodilator-stimulated phosphoprotein; PDBTitle: human vasp tetramerisation domain I352m
70	c2zbtB_	Alignment	not modelled	30.3	20	PDB header: lyase Chain: B: PDB Molecule: pyridoxal biosynthesis lyase pdxs; PDBTitle: crystal structure of pyridoxine biosynthesis protein from thermus2 thermophilus hb8
71	d2gxba1	Alignment	not modelled	29.8	19	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: Z-DNA binding domain
72	c1pbta_	Alignment	not modelled	29.1	11	PDB header: hydrolase, oxidoreductase Chain: A: PDB Molecule: 6-phosphogluconolactonase; PDBTitle: the crystal structure of tm154, oxidoreductase, sol/devb2 family from thermotoga maritima
73	c3nwpA_	Alignment	not modelled	28.9	18	PDB header: hydrolase Chain: A: PDB Molecule: 6-phosphogluconolactonase; PDBTitle: crystal structure of a 6-phosphogluconolactonase (sbal_2240)from shewanella baltica os155 at 1.40 a resolution
74	c1wyoa_	Alignment	not modelled	28.3	16	PDB header: structural protein Chain: A: PDB Molecule: microtubule-associated protein rp/eb family PDBTitle: solution structure of the ch domain of human microtubule-2 associated protein rp/eb family member 3
75	d2gnpa1	Alignment	not modelled	28.0	12	Fold: NagB/RpiA/CoA transferase-like Superfamily: NagB/RpiA/CoA transferase-like Family: SorC sugar-binding domain-like
76	d1pjqa3	Alignment	not modelled	27.4	29	Fold: Siroheme synthase middle domains-like Superfamily: Siroheme synthase middle domains-like Family: Siroheme synthase middle domains-like
77	c3grfA_	Alignment	not modelled	26.7	15	PDB header: transferase Chain: A: PDB Molecule: ornithine carbamoyltransferase; PDBTitle: x-ray structure of ornithine transcarbamoylase from giardia2 lamblia
78	d1vl1a_	Alignment	not modelled	26.6	10	Fold: NagB/RpiA/CoA transferase-like Superfamily: NagB/RpiA/CoA transferase-like Family: NagB-like
79	d1ne7a_	Alignment	not modelled	25.3	12	Fold: NagB/RpiA/CoA transferase-like Superfamily: NagB/RpiA/CoA transferase-like Family: NagB-like
80	c2p2gD_	Alignment	not modelled	24.9	13	PDB header: transferase Chain: D: PDB Molecule: ornithine carbamoyltransferase; PDBTitle: crystal structure of ornithine carbamoyltransferase from mycobacterium2 tuberculosis (rv1656): orthorhombic form

81	c3zquA	Alignment	not modelled	24.1	12	PDB header: lyase Chain: A: PDB Molecule: probable aromatic acid decarboxylase; PDBTitle: structure of a probable aromatic acid decarboxylase
82	c1fvoB	Alignment	not modelled	23.1	14	PDB header: transferase Chain: B: PDB Molecule: ornithine transcarbamylase; PDBTitle: crystal structure of human ornithine transcarbamylase complexed with2 carbamoyl phosphate
83	d2eyqa4	Alignment	not modelled	22.0	18	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Tandem AAA-ATPase domain
84	c3cssA	Alignment	not modelled	21.6	18	PDB header: hydrolase Chain: A: PDB Molecule: 6-phosphogluconolactonase; PDBTitle: crystal structure of 6-phosphogluconolactonase from leishmania2 guyanensis
85	d1g66a	Alignment	not modelled	21.2	23	Fold: alpha/beta-Hydrolases Superfamily: alpha/beta-Hydrolases Family: Cutinase-like
86	c3kv1A	Alignment	not modelled	20.7	20	PDB header: transcription Chain: A: PDB Molecule: transcriptional repressor; PDBTitle: crystal structure of putative sugar-binding domain of transcriptional2 repressor from vibrio fischeri
87	d1saza1	Alignment	not modelled	20.0	13	Fold: Ribonuclease H-like motif Superfamily: Actin-like ATPase domain Family: Acetokinase-like
88	c2qjxA	Alignment	not modelled	19.7	16	PDB header: protein binding Chain: A: PDB Molecule: protein bim1; PDBTitle: structural basis of microtubule plus end tracking by2 xmap215, clip-170 and eb1
89	c2nv2U	Alignment	not modelled	19.6	16	PDB header: lyase/transferase Chain: U: PDB Molecule: pyridoxal biosynthesis lyase pdxs; PDBTitle: structure of the plp synthase complex pdx1/2 (yaad/e) from bacillus2 subtilis
90	d3cx5a1	Alignment	not modelled	19.3	13	Fold: LuxS/MPP-like metallohydrolase Superfamily: LuxS/MPP-like metallohydrolase Family: MPP-like
91	c2ejbA	Alignment	not modelled	19.2	27	PDB header: lyase Chain: A: PDB Molecule: probable aromatic acid decarboxylase; PDBTitle: crystal structure of phenylacrylic acid decarboxylase from2 aquifex aeolicus
92	d2qjza1	Alignment	not modelled	19.2	17	Fold: CH domain-like Superfamily: Calponin-homology domain, CH-domain Family: Calponin-homology domain, CH-domain
93	c3icoA	Alignment	not modelled	19.0	14	PDB header: hydrolase Chain: A: PDB Molecule: 6-phosphogluconolactonase; PDBTitle: crystal structure of 6-phosphogluconolactonase from2 mycobacterium tuberculosis
94	d1v5ka	Alignment	not modelled	18.5	17	Fold: CH domain-like Superfamily: Calponin-homology domain, CH-domain Family: Calponin-homology domain, CH-domain
95	c3sdsA	Alignment	not modelled	18.2	9	PDB header: transferase Chain: A: PDB Molecule: ornithine carbamoyltransferase, mitochondrial; PDBTitle: crystal structure of a mitochondrial ornithine carbamoyltransferase2 from coccidioides immitis
96	c2ri0B	Alignment	not modelled	18.1	24	PDB header: hydrolase Chain: B: PDB Molecule: glucosamine-6-phosphate deaminase; PDBTitle: crystal structure of glucosamine 6-phosphate deaminase (nagb) from s.2 mutans
97	d1cexa	Alignment	not modelled	17.8	21	Fold: alpha/beta-Hydrolases Superfamily: alpha/beta-Hydrolases Family: Cutinase-like
98	c3hn6D	Alignment	not modelled	17.3	12	PDB header: isomerase Chain: D: PDB Molecule: glucosamine-6-phosphate deaminase; PDBTitle: crystal structure of glucosamine-6-phosphate deaminase from borrelia2 burgdorferi
99	d1otha1	Alignment	not modelled	16.6	14	Fold: ATC-like Superfamily: Aspartate/ornithine carbamoyltransferase Family: Aspartate/ornithine carbamoyltransferase