


















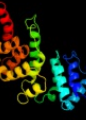





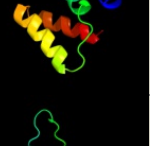
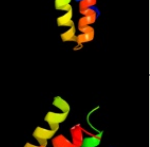
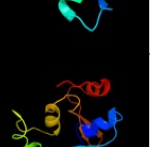
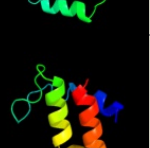

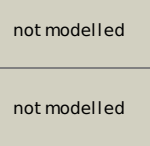


Phyre2

Email	I.a.kelley@imperial.ac.uk
Description	P06961
Date	Thu Jan 5 10:59:31 GMT 2012
Unique Job ID	932a8cb9bad437bd

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c1miyB_	 Alignment		100.0	26	PDB header: translation, transferase Chain: B: PDB Molecule: trna cca-adding enzyme; PDBTitle: crystal structure of bacillus stearothermophilus cca-adding enzyme in2 complex with ctp
2	c1vfgB_	 Alignment		100.0	24	PDB header: transferase/rna Chain: B: PDB Molecule: poly a polymerase; PDBTitle: crystal structure of bacillus stearothermophilus cca-adding enzyme in2 complex with a primer trna and an incoming atp analog
3	c3h37B_	 Alignment		100.0	23	PDB header: transferase Chain: B: PDB Molecule: trna nucleotidyl transferase-related protein; PDBTitle: the structure of cca-adding enzyme apo form i
4	c3aqnA_	 Alignment		100.0	25	PDB header: transferase Chain: A: PDB Molecule: poly(a) polymerase; PDBTitle: complex structure of bacterial protein (apo form ii)
5	c1ou5A_	 Alignment		100.0	25	PDB header: translation, transferase Chain: A: PDB Molecule: trna cca-adding enzyme; PDBTitle: crystal structure of human cca-adding enzyme
6	d1miwa1	 Alignment		100.0	22	Fold: Poly A polymerase C-terminal region-like Superfamily: Poly A polymerase C-terminal region-like Family: Poly A polymerase C-terminal region-like
7	d1miwa2	 Alignment		100.0	36	Fold: Nucleotidyltransferase Superfamily: Nucleotidyltransferase Family: Poly A polymerase head domain-like
8	d1vfga2	 Alignment		100.0	38	Fold: Nucleotidyltransferase Superfamily: Nucleotidyltransferase Family: Poly A polymerase head domain-like
9	d1ou5a2	 Alignment		100.0	29	Fold: Nucleotidyltransferase Superfamily: Nucleotidyltransferase Family: Poly A polymerase head domain-like
10	d1vfga1	 Alignment		100.0	18	Fold: Poly A polymerase C-terminal region-like Superfamily: Poly A polymerase C-terminal region-like Family: Poly A polymerase C-terminal region-like
11	d1ou5a1	 Alignment		99.9	23	Fold: Poly A polymerase C-terminal region-like Superfamily: Poly A polymerase C-terminal region-like Family: Poly A polymerase C-terminal region-like

12	d2qgsa1	Alignment		97.3	13	Fold: HD-domain/PDEase-like Superfamily: HD-domain/PDEase-like Family: HD domain
13	d2pq7a1	Alignment		97.2	17	Fold: HD-domain/PDEase-like Superfamily: HD-domain/PDEase-like Family: HD domain
14	d3djba1	Alignment		96.6	22	Fold: HD-domain/PDEase-like Superfamily: HD-domain/PDEase-like Family: HD domain
15	d3b57a1	Alignment		95.5	13	Fold: HD-domain/PDEase-like Superfamily: HD-domain/PDEase-like Family: HD domain
16	c3m5fA	Alignment		94.4	12	PDB header: hydrolase Chain: A: PDB Molecule: metal dependent phosphohydrolase; PDBTitle: structure of mj0384, a cas3 protein from methanocaldococcus jannaschii
17	d3dtoa1	Alignment		94.3	18	Fold: HD-domain/PDEase-like Superfamily: HD-domain/PDEase-like Family: HD domain
18	c2la3A	Alignment		93.7	24	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: uncharacterized protein; PDBTitle: the nmr structure of the protein np_344798.1 reveals a cca-adding2 enzyme head domain
19	d1u6za1	Alignment		91.8	16	Fold: HD-domain/PDEase-like Superfamily: HD-domain/PDEase-like Family: Ppx associated domain
20	d2piqa1	Alignment		91.7	14	Fold: HD-domain/PDEase-like Superfamily: HD-domain/PDEase-like Family: HD domain
21	d2fcla1	Alignment	not modelled	91.4	19	Fold: Nucleotidyltransferase Superfamily: Nucleotidyltransferase Family: TM1012-like
22	c2q14A	Alignment	not modelled	90.9	19	PDB header: hydrolase Chain: A: PDB Molecule: phosphohydrolase; PDBTitle: crystal structure of phosphohydrolase (bt4208) from bacteroides2 thetaiotaomicron vpi-5482 at 2.20 a resolution
23	c2o08B	Alignment	not modelled	90.7	28	PDB header: hydrolase Chain: B: PDB Molecule: bh1327 protein; PDBTitle: crystal structure of a putative hd superfamily hydrolase (bh1327) from2 bacillus halodurans at 1.90 a resolution
24	c3ccgA	Alignment	not modelled	88.9	32	PDB header: hydrolase Chain: A: PDB Molecule: hd superfamily hydrolase; PDBTitle: crystal structure of predicted hd superfamily hydrolase involved in2 nad metabolism (np_347894.1) from clostridium acetobutylicum at 1.503 a resolution
25	c3skdA	Alignment	not modelled	87.7	18	PDB header: hydrolase Chain: A: PDB Molecule: putative uncharacterized protein thb187; PDBTitle: crystal structure of the thermus thermophilus cas3 hd domain in the2 presence of ni2+
26	c3u1nC	Alignment	not modelled	86.6	25	PDB header: hydrolase Chain: C: PDB Molecule: sam domain and hd domain-containing protein 1; PDBTitle: structure of the catalytic core of human samhd1
27	c2ogiA	Alignment	not modelled	85.9	28	PDB header: hydrolase Chain: A: PDB Molecule: hypothetical protein sag1661; PDBTitle: crystal structure of a putative metal dependent phosphohydrolase2 (sag1661) from streptococcus agalactiae serogroup v at 1.85 a3 resolution
						PDB header: hydrolase Chain: A: PDB Molecule: uncharacterized protein yedj; PDBTitle: crystal structure of a putative metal dependent

28	c3gw7A_	Alignment	not modelled	85.5	14	PDB title: crystal structure of a metal-dependent phosphohydrolase2 with conserved hd domain (yedj) from escherichia coli in3 complex with nickel ions. northeast structural genomics4 consortium target er63
29	c2floA_	Alignment	not modelled	84.9	15	PDB header: hydrolase Chain: A: PDB Molecule: exopolyphosphatase; PDBTitle: crystal structure of exopolyphosphatase (ppx) from e. coli o157:h7
30	d2o6ia1	Alignment	not modelled	82.9	23	Fold: HD-domain/PDEase-like Superfamily: HD-domain/PDEase-like Family: HD domain
31	c2o6iA_	Alignment	not modelled	82.9	23	PDB header: hydrolase Chain: A: PDB Molecule: hd domain protein; PDBTitle: structure of an enterococcus faecalis hd domain phosphohydrolase
32	d2gz4a1	Alignment	not modelled	70.6	12	Fold: HD-domain/PDEase-like Superfamily: HD-domain/PDEase-like Family: HD domain
33	c3kq5A_	Alignment	not modelled	66.0	7	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: hypothetical cytosolic protein; PDBTitle: crystal structure of an uncharacterized protein from coxiella burnetii
34	c3hi0B_	Alignment	not modelled	61.4	10	PDB header: hydrolase Chain: B: PDB Molecule: putative exopolyphosphatase; PDBTitle: crystal structure of putative exopolyphosphatase (17739545) from2 agrobacterium tumefaciens str. c58 (dupont) at 2.30 a resolution
35	c2dqB_	Alignment	not modelled	61.3	22	PDB header: hydrolase, dna binding protein Chain: B: PDB Molecule: deoxyguanosinetriphosphate triphosphohydrolase, putative; PDBTitle: crystal structure of dntp triphosphohydrolase from thermus2 thermophilus hb8, which is homologous to dgtp triphosphohydrolase
36	c2pgsA_	Alignment	not modelled	54.9	29	PDB header: hydrolase Chain: A: PDB Molecule: putative deoxyguanosinetriphosphate triphosphohydrolase; PDBTitle: crystal structure of a putative deoxyguanosinetriphosphate2 triphosphohydrolase from pseudomonas syringae pv. phaseolicola 1448a
37	c3lmaC_	Alignment	not modelled	44.5	19	PDB header: membrane protein Chain: C: PDB Molecule: stage v sporulation protein ad (spovad); PDBTitle: crystal structure of the stage v sporulation protein ad2 (spovad) from bacillus licheniformis. northeast structural3 genomics consortium target bir6.
38	c3hc1A_	Alignment	not modelled	43.5	16	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: uncharacterized hdod domain protein; PDBTitle: crystal structure of hdod domain protein with unknown function2 (np_953345.1) from geobacter sulfurreducens at 1.90 a resolution
39	c3m1tA_	Alignment	not modelled	41.1	14	PDB header: hydrolase Chain: A: PDB Molecule: putative phosphohydrolase; PDBTitle: crystal structure of putative phosphohydrolase (yp_929327.1) from2 shewanella amazonensis sb2b at 1.62 a resolution
40	d1vqra_	Alignment	not modelled	40.9	12	Fold: HD-domain/PDEase-like Superfamily: HD-domain/PDEase-like Family: modified HD domain
41	d1ylqa1	Alignment	not modelled	38.8	30	Fold: Nucleotidyltransferase Superfamily: Nucleotidyltransferase Family: Catalytic subunit of bi-partite nucleotidyltransferase
42	c2w9mB_	Alignment	not modelled	34.1	21	PDB header: dna replication Chain: B: PDB Molecule: polymerase x; PDBTitle: structure of family x dna polymerase from deinococcus2 radiodurans
43	d2ibna1	Alignment	not modelled	31.2	16	Fold: HD-domain/PDEase-like Superfamily: HD-domain/PDEase-like Family: MioX-like
44	d2heka1	Alignment	not modelled	30.7	20	Fold: HD-domain/PDEase-like Superfamily: HD-domain/PDEase-like Family: HD domain
45	c2huoA_	Alignment	not modelled	26.1	26	PDB header: oxidoreductase Chain: A: PDB Molecule: inositol oxygenase; PDBTitle: crystal structure of mouse myo-inositol oxygenase in complex with2 substrate
46	d3bxda1	Alignment	not modelled	26.1	26	Fold: HD-domain/PDEase-like Superfamily: HD-domain/PDEase-like Family: MioX-like
47	d1jmsa4	Alignment	not modelled	21.1	17	Fold: Nucleotidyltransferase Superfamily: Nucleotidyltransferase Family: DNA polymerase beta-like
48	d1wota_	Alignment	not modelled	20.1	18	Fold: Nucleotidyltransferase Superfamily: Nucleotidyltransferase Family: Catalytic subunit of bi-partite nucleotidyltransferase
49	c3bg2A_	Alignment	not modelled	19.6	23	PDB header: hydrolase Chain: A: PDB Molecule: dgtp triphosphohydrolase; PDBTitle: crystal structure of deoxyguanosinetriphosphate triphosphohydrolase2 from flavobacterium sp. med217
50	c3k1rB_	Alignment	not modelled	19.4	24	PDB header: structural protein Chain: B: PDB Molecule: usher syndrome type-1g protein; PDBTitle: structure of harmonin npd21 in complex with the sam-pbm of2 sans
51	d1r89a2	Alignment	not modelled	18.6	13	Fold: Nucleotidyltransferase Superfamily: Nucleotidyltransferase Family: Archaeal tRNA CCA-adding enzyme catalytic domain
52	d2bcqa3	Alignment	not modelled	17.2	10	Fold: Nucleotidyltransferase Superfamily: Nucleotidyltransferase

					Family: DNA polymerase beta-like
53	d2b7oa1	Alignment	not modelled	17.0	38 Fold: TIM beta/alpha-barrel Superfamily: Aldolase Family: Class-II DAHP synthetase
54	d1no5a_	Alignment	not modelled	15.8	18 Fold: Nucleotidyltransferase Superfamily: Nucleotidyltransferase Family: Catalytic subunit of bi-partite nucleotidyltransferase
55	d2dula1	Alignment	not modelled	15.1	23 Fold: S-adenosyl-L-methionine-dependent methyltransferases Superfamily: S-adenosyl-L-methionine-dependent methyltransferases Family: TRM1-like
56	d1bgfa_	Alignment	not modelled	12.8	22 Fold: Transcription factor STAT-4 N-domain Superfamily: Transcription factor STAT-4 N-domain Family: Transcription factor STAT-4 N-domain
57	c3riuC_	Alignment	not modelled	12.7	22 PDB header: hydrolase Chain: C: PDB Molecule: translin associated factor x, isoform b; PDBTitle: crystal structure of drosophila hexameric c3po formed by truncated2 translin and trax
58	c2bcuA_	Alignment	not modelled	12.2	14 PDB header: transferase, lyase/dna Chain: A: PDB Molecule: dna polymerase lambda; PDBTitle: dna polymerase lambda in complex with a dna duplex2 containing an unpaired damp and a tt mismatch
59	c2ihmA_	Alignment	not modelled	11.8	18 PDB header: transferase/dna Chain: A: PDB Molecule: dna polymerase mu; PDBTitle: polymerase mu in ternary complex with gapped 11mer dna2 duplex and bound incoming nucleotide
60	d1vola2	Alignment	not modelled	11.4	17 Fold: Cyclin-like Superfamily: Cyclin-like Family: Transcription factor IIB (TFIIB), core domain
61	dles6a1	Alignment	not modelled	11.3	45 Fold: EV matrix protein Superfamily: EV matrix protein Family: EV matrix protein
62	d2gmwa1	Alignment	not modelled	11.0	22 Fold: HAD-like Superfamily: HAD-like Family: Histidinol phosphatase-like
63	c3esqA_	Alignment	not modelled	11.0	22 PDB header: hydrolase Chain: A: PDB Molecule: d,d-heptose 1,7-bisphosphate phosphatase; PDBTitle: crystal structure of calcium-bound d,d-heptose 1.7-2 bisphosphate phosphatase from e. coli
64	c2r8qA_	Alignment	not modelled	10.0	21 PDB header: hydrolase Chain: A: PDB Molecule: class i phosphodiesterase pdeb1; PDBTitle: structure of lmpdeb1 in complex with ibmx
65	d1t3ta4	Alignment	not modelled	9.3	44 Fold: Bacillus chorismate mutase-like Superfamily: PurM N-terminal domain-like Family: PurM N-terminal domain-like
66	d2fmpa3	Alignment	not modelled	9.2	14 Fold: Nucleotidyltransferase Superfamily: Nucleotidyltransferase Family: DNA polymerase beta-like
67	c3ndcB_	Alignment	not modelled	9.2	29 PDB header: transferase Chain: B: PDB Molecule: precorrin-4 c(11)-methyltransferase; PDBTitle: crystal structure of precorrin-4 c11-methyltransferase from2 rhodobacter capsulatus
68	d1vk3a1	Alignment	not modelled	9.1	67 Fold: Bacillus chorismate mutase-like Superfamily: PurM N-terminal domain-like Family: PurM N-terminal domain-like
69	c1h2dA_	Alignment	not modelled	9.1	45 PDB header: virus/viral protein Chain: A: PDB Molecule: matrix protein vp40; PDBTitle: ebola virus matrix protein vp40 n-terminal domain in2 complex with rna (low-resolution vp40[31-212] variant).
70	c2cqzA_	Alignment	not modelled	9.1	14 PDB header: structural genomics, unknown function Chain: A: PDB Molecule: 177aa long hypothetical protein; PDBTitle: crystal structure of ph0347 protein from pyrococcus horikoshii ot3
71	d1h2ca_	Alignment	not modelled	9.1	45 Fold: EV matrix protein Superfamily: EV matrix protein Family: EV matrix protein
72	d1jqra_	Alignment	not modelled	8.8	18 Fold: Nucleotidyltransferase Superfamily: Nucleotidyltransferase Family: DNA polymerase beta-like
73	c2rffA_	Alignment	not modelled	8.6	26 PDB header: transferase Chain: A: PDB Molecule: putative nucleotidyltransferase; PDBTitle: crystal structure of a putative nucleotidyltransferase2 (np_343093.1) from sulfobolus solfataricus at 1.40 a3 resolution
74	d1uqva_	Alignment	not modelled	8.6	4 Fold: SAM domain-like Superfamily: SAM/Pointed domain Family: SAM (sterile alpha motif) domain
75	c1b0nB_	Alignment	not modelled	7.8	32 PDB header: transcription regulator Chain: B: PDB Molecule: protein (sini protein); PDBTitle: sinr protein/sini protein complex
76	d1b0nb_	Alignment	not modelled	7.8	32 Fold: Dimerisation interlock Superfamily: SinR repressor dimerisation domain-like Family: SinR repressor dimerisation domain-like
77	d1g60a_	Alignment	not modelled	7.6	25 Fold: S-adenosyl-L-methionine-dependent methyltransferases Superfamily: S-adenosyl-L-methionine-dependent methyltransferases Family: Type II DNA methylase
78	d1eg2a_	Alignment	not modelled	7.4	17 Fold: S-adenosyl-L-methionine-dependent methyltransferases Superfamily: S-adenosyl-L-methionine-dependent methyltransferases Family: Type II DNA methylase
					Fold: Cyclin-like

79	d1vola1	Alignment	not modelled	7.4	12	Superfamily: Cyclin-like Family: Transcription factor IIB (TFIIB), core domain
80	c3ljvA	Alignment	not modelled	7.4	9	PDB header: transcription Chain: A: PDB Molecule: mmoq response regulator; PDBTitle: crystal structure of mmoq response regulator (fragment 29-302) from2 methylococcus capsulatus str. bath, northeast structural genomics3 consortium target mcr175m
81	c2zifB	Alignment	not modelled	7.3	25	PDB header: transferase Chain: B: PDB Molecule: putative modification methylase; PDBTitle: crystal structure of ttha0409, putative dna modification2 methylase from thermus thermophilus hb8- complexed with s-3 adenosyl-l-methionine
82	d2vana2	Alignment	not modelled	7.1	21	Fold: Nucleotidyltransferase Superfamily: Nucleotidyltransferase Family: DNA polymerase beta-like
83	c1xotB	Alignment	not modelled	6.3	14	PDB header: hydrolase Chain: B: PDB Molecule: camp-specific 3',5'-cyclic phosphodiesterase 4b; PDBTitle: catalytic domain of human phosphodiesterase 4b in complex with2 vardenafil
84	c2w11B	Alignment	not modelled	5.9	25	PDB header: hydrolase Chain: B: PDB Molecule: 2-haloalkanoic acid dehalogenase; PDBTitle: structure of the l-2-haloacid dehalogenase from sulfolobus2 tokodaii
85	c2ounA	Alignment	not modelled	5.9	16	PDB header: hydrolase Chain: A: PDB Molecule: camp and camp-inhibited cgmp 3',5'-cyclic PDBTitle: crystal structure of pde10a2 in complex with amp
86	c3i7aA	Alignment	not modelled	5.8	9	PDB header: hydrolase Chain: A: PDB Molecule: putative metal-dependent phosphohydrolase; PDBTitle: crystal structure of putative metal-dependent phosphohydrolase2 (yp_926882.1) from shewanella amazonensis sb2b at 2.06 a resolution
87	c1nw6A	Alignment	not modelled	5.7	17	PDB header: transferase Chain: A: PDB Molecule: modification methylase rsri; PDBTitle: structure of the beta class n6-adenine dna methyltransferase rsri2 bound to sinefungin
88	d1tbfa	Alignment	not modelled	5.7	13	Fold: HD-domain/PDEase-like Superfamily: HD-domain/PDEase-like Family: PDEase
89	c1xozA	Alignment	not modelled	5.7	13	PDB header: hydrolase Chain: A: PDB Molecule: cgmp-specific 3',5'-cyclic phosphodiesterase; PDBTitle: catalytic domain of human phosphodiesterase 5a in complex2 with tadalafil
90	cles6A	Alignment	not modelled	5.6	45	PDB header: viral protein Chain: A: PDB Molecule: matrix protein vp40; PDBTitle: crystal structure of the matrix protein of ebola virus
91	d1loxja1	Alignment	not modelled	5.6	12	Fold: SAM domain-like Superfamily: SAM/Pointed domain Family: SAM (sterile alpha motif) domain
92	d1sv0c	Alignment	not modelled	5.5	16	Fold: SAM domain-like Superfamily: SAM/Pointed domain Family: Pointed domain
93	d1taza	Alignment	not modelled	5.5	31	Fold: HD-domain/PDEase-like Superfamily: HD-domain/PDEase-like Family: PDEase
94	d1pv5a	Alignment	not modelled	5.4	30	Fold: Hypothetical protein YwqG Superfamily: Hypothetical protein YwqG Family: Hypothetical protein YwqG
95	c2zq5A	Alignment	not modelled	5.1	22	PDB header: transferase Chain: A: PDB Molecule: putative uncharacterized protein; PDBTitle: crystal structure of sulfotransferase stf1 from2 mycobacterium tuberculosis h37rv (type1 form)