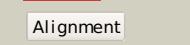
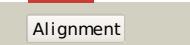
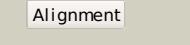
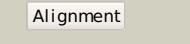
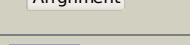
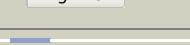
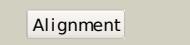


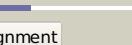
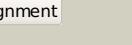
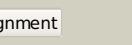
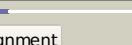
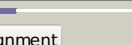
Phyre²

Email	i.a.kelley@imperial.ac.uk
Description	P0A873
Date	Thu Jan 5 11:07:04 GMT 2012
Unique Job ID	2ab663c291353529

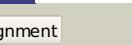
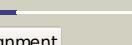
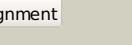
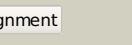
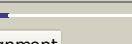
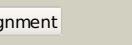
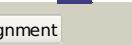
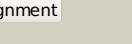
Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	d1uua_			100.0	83	Fold: alpha/beta knot Superfamily: alpha/beta knot Family: tRNA(m1G37)-methyltransferase TrmD
2	d1p9pa_			100.0	100	Fold: alpha/beta knot Superfamily: alpha/beta knot Family: tRNA(m1G37)-methyltransferase TrmD
3	c3ky7A_			100.0	43	PDB header: transferase Chain: A: PDB Molecule: tRNA (guanine-n(1)-)methyltransferase; PDBTitle: 2.35 angstrom resolution crystal structure of a putative tRNA2 (guanine-7)-methyltransferase (trmd) from staphylococcus aureus3 subsp. aureus mrsa252
4	c3iefA_			100.0	44	PDB header: transferase, rna binding protein Chain: A: PDB Molecule: tRNA (guanine-n(1)-)methyltransferase; PDBTitle: crystal structure of tRNA guanine-n1-methyltransferase from bartonella henselae using mpc.
5	c3quvB_			100.0	45	PDB header: transferase Chain: B: PDB Molecule: tRNA (guanine-n(1)-)methyltransferase; PDBTitle: crystal structure of a tRNA-guanine-n1-methyltransferase from mycobacterium abscessus
6	c1oy5B_			100.0	41	PDB header: transferase Chain: B: PDB Molecule: tRNA (guanine-n(1)-)methyltransferase; PDBTitle: crystal structure of tRNA (m1G37) methyltransferase from aquifex2 aeolicus
7	d1oy5a_			100.0	41	Fold: alpha/beta knot Superfamily: alpha/beta knot Family: tRNA(m1G37)-methyltransferase TrmD
8	c3knuD_			100.0	45	PDB header: transferase Chain: D: PDB Molecule: tRNA (guanine-n(1)-)methyltransferase; PDBTitle: crystal structure of tRNA (guanine-n1)-methyltransferase from anaplasma phagocytophilum
9	d1o6da_			97.2	8	Fold: alpha/beta knot Superfamily: alpha/beta knot Family: YbeA-like
10	d1to0a_			96.4	21	Fold: alpha/beta knot Superfamily: alpha/beta knot Family: YbeA-like
11	c2v3jA_			96.3	14	PDB header: ribosomal protein Chain: A: PDB Molecule: essential for mitotic growth 1; PDBTitle: the yeast ribosome synthesis factor emg1 alpha beta knot2 fold methyltransferase

12	d1vh0a			96.2	22	Fold: alpha/beta knot Superfamily: alpha/beta knot Family: YbeA-like
13	d2v3ka1			96.1	14	Fold: alpha/beta knot Superfamily: alpha/beta knot Family: EMG1/NEP1-like
14	d1ns5a			95.0	19	Fold: alpha/beta knot Superfamily: alpha/beta knot Family: YbeA-like
15	c3o7ba			78.5	18	PDB header: transferase Chain: A: PDB Molecule: ribosome biogenesis nep1 rna methyltransferase; PDBTitle: crystal structure of archaeoglobus fulgidus nep1 bound to s-2 adenosylhomocysteine
16	c3ai9X			46.1	24	PDB header: transferase Chain: X: PDB Molecule: upf0217 protein mj1640; PDBTitle: crystal structure of duf358 protein reveals a putative spout-class2 rRNA methyltransferase
17	d3d3ra1			44.2	38	Fold: OB-fold Superfamily: HupF/HypC-like Family: HupF/HypC-like
18	c3d3rA			43.1	38	PDB header: chaperone Chain: A: PDB Molecule: hydrogenase assembly chaperone hyc/hupf; PDBTitle: crystal structure of the hydrogenase assembly chaperone hyc/hupf2 family protein from shewanella oneidensis mr-1
19	d2ot2a1			29.4	27	Fold: OB-fold Superfamily: HupF/HypC-like Family: HupF/HypC-like
20	d1dj3a			28.8	19	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Nitrogenase iron protein-like
21	d1dj2a		not modelled	27.4	22	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Nitrogenase iron protein-like
22	d2qmma1		not modelled	25.8	24	Fold: alpha/beta knot Superfamily: alpha/beta knot Family: AF1056-like
23	c1zmrA		not modelled	24.8	24	PDB header: transferase Chain: A: PDB Molecule: phosphoglycerate kinase; PDBTitle: crystal structure of the e. coli phosphoglycerate kinase
24	c1zosE		not modelled	23.9	21	PDB header: hydrolase Chain: E: PDB Molecule: 5'-methylthioadenosine / s-adenosylhomocysteine PDBTitle: structure of 5'-methylthionadenosine/s-adenosylhomocysteine2 nucleosidase from s. pneumoniae with a transition-state inhibitor mt-imma
25	d2z1ca1		not modelled	21.6	22	Fold: OB-fold Superfamily: HupF/HypC-like Family: HupF/HypC-like
26	d1sqsa		not modelled	21.1	9	Fold: Flavodoxin-like Superfamily: Flavoproteins Family: Hypothetical protein SP1951
27	d2z1aa2		not modelled	20.3	23	Fold: Metallo-dependent phosphatases Superfamily: Metallo-dependent phosphatases Family: 5'-nucleotidase (syn. UDP-sugar hydrolase), N-terminal domain
28	c1xi4O		not modelled	19.2	22	PDB header: endocytosis/exocytosis Chain: O: PDB Molecule: clathrin light chain a; PDBTitle: clathrin d6 coat

29	c1rcub_		Alignment	not modelled	18.9	22	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
30	d1rcua_		Alignment	not modelled	18.9	22	Fold: MCP/YpsA-like Superfamily: MCP/YpsA-like Family: MoCo carrier protein-like
31	d1vjda_		Alignment	not modelled	18.0	27	Fold: Phosphoglycerate kinase Superfamily: Phosphoglycerate kinase Family: Phosphoglycerate kinase
32	d3bbda1		Alignment	not modelled	17.2	15	Fold: alpha/beta knot Superfamily: alpha/beta knot Family: EMG1/NEP1-like
33	c1zggA_		Alignment	not modelled	16.5	17	PDB header: hydrolase Chain: A: PDB Molecule: putative low molecular weight protein-tyrosine- PDBTitle: solution structure of a low molecular weight protein2 tyrosine phosphatase from bacillus subtilis
34	c3dcmx_		Alignment	not modelled	16.3	22	PDB header: transferase Chain: X: PDB Molecule: uncharacterized protein tm_1570; PDBTitle: crystal structure of the thermotoga maritima spout family2 rna-methyltransferase protein tm1570 in complex with s-3 adenosyl-l-methionine
35	d1qf5a_		Alignment	not modelled	15.7	21	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Nitrogenase iron protein-like
36	d1jysa_		Alignment	not modelled	15.1	24	Fold: Phosphorylase/hydrolase-like Superfamily: Purine and uridine phosphorylases Family: Purine and uridine phosphorylases
37	c2ky8A_		Alignment	not modelled	14.9	55	PDB header: transcription/dna Chain: A: PDB Molecule: methyl-cpg-binding domain protein 2; PDBTitle: solution structure and dynamic analysis of chicken mbd2 methyl binding2 domain bound to a target methylated dna sequence
38	c2cunA_		Alignment	not modelled	14.4	16	PDB header: transferase Chain: A: PDB Molecule: phosphoglycerate kinase; PDBTitle: crystal structure of phosphoglycerate kinase from pyrococcus2 horikoshii ot3
39	d1fdja_		Alignment	not modelled	14.1	15	Fold: TIM beta/alpha-barrel Superfamily: Aldolase Family: Class I aldolase
40	c1w4za_		Alignment	not modelled	13.6	13	PDB header: antibiotic biosynthesis Chain: A: PDB Molecule: ketoacyl reductase; PDBTitle: structure of actinorhodin polyketide (actii) reductase
41	d16pka_		Alignment	not modelled	13.4	26	Fold: Phosphoglycerate kinase Superfamily: Phosphoglycerate kinase Family: Phosphoglycerate kinase
42	d1prtf_		Alignment	not modelled	13.0	33	Fold: OB-fold Superfamily: Bacterial enterotoxins Family: Bacterial AB5 toxins, B-subunits
43	d1vpea_		Alignment	not modelled	12.6	23	Fold: Phosphoglycerate kinase Superfamily: Phosphoglycerate kinase Family: Phosphoglycerate kinase
44	c3r7tA_		Alignment	not modelled	12.6	17	PDB header: ligase Chain: A: PDB Molecule: adenylosuccinate synthetase; PDBTitle: crystal structure of adenylosuccinate synthetase from campylobacter2 jejuni
45	d3dl3a1		Alignment	not modelled	12.6	17	Fold: Double-stranded beta-helix Superfamily: Clavaminate synthase-like Family: TehB-like
46	d1m2ka_		Alignment	not modelled	12.2	20	Fold: DHS-like NAD/FAD-binding domain Superfamily: DHS-like NAD/FAD-binding domain Family: Sir2 family of transcriptional regulators
47	d1gsaa1		Alignment	not modelled	12.2	15	Fold: PreATP-grasp domain Superfamily: PreATP-grasp domain Family: Prokaryotic glutathione synthetase, N-terminal domain
48	d1v6sa_		Alignment	not modelled	11.8	20	Fold: Phosphoglycerate kinase Superfamily: Phosphoglycerate kinase Family: Phosphoglycerate kinase
49	d3bb6a1		Alignment	not modelled	11.6	8	Fold: Double-stranded beta-helix Superfamily: Clavaminate synthase-like Family: TehB-like
50	d1hdia_		Alignment	not modelled	11.5	26	Fold: Phosphoglycerate kinase Superfamily: Phosphoglycerate kinase Family: Phosphoglycerate kinase
51	d1pj3a1		Alignment	not modelled	11.4	20	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: Aminoacid dehydrogenase-like, C-terminal domain
52	d1ig4a_		Alignment	not modelled	11.1	29	Fold: DNA-binding domain Superfamily: DNA-binding domain Family: Methyl-CpG-binding domain, MBD
53	d1ltka_		Alignment	not modelled	10.8	26	Fold: Phosphoglycerate kinase Superfamily: Phosphoglycerate kinase Family: Phosphoglycerate kinase
54	d1phpa_		Alignment	not modelled	10.7	31	Fold: Phosphoglycerate kinase Superfamily: Phosphoglycerate kinase Family: Phosphoglycerate kinase
55	d2qwva1		Alignment	not modelled	10.6	18	Fold: alpha/beta knot Superfamily: alpha/beta knot

						Family: AF1056-like
56	d2fvka1	Alignment	not modelled	10.3	25	Fold: Composite domain of metallo-dependent hydrolases Superfamily: Composite domain of metallo-dependent hydrolases Family: Hydantoinase (dihydropyrimidinase)
57	c2yvaB_	Alignment	not modelled	10.1	17	PDB header: dna binding protein Chain: B: PDB Molecule: dnaa initiator-associating protein diaa; PDBTitle: crystal structure of escherichia coli diaa
58	d2o3aa1	Alignment	not modelled	9.8	25	Fold: alpha/beta knot Superfamily: alpha/beta knot Family: AF0751-like
59	d1ddza2	Alignment	not modelled	9.3	56	Fold: Resolvase-like Superfamily: beta-carbonic anhydrase, cab Family: beta-carbonic anhydrase, cab
60	d1qk9a_	Alignment	not modelled	9.2	36	Fold: DNA-binding domain Superfamily: DNA-binding domain Family: Methyl-CpG-binding domain, MBD
61	c2k1IB_	Alignment	not modelled	9.2	45	PDB header: signaling protein Chain: B: PDB Molecule: ephrin type-a receptor 1; PDBTitle: nmr structures of dimeric transmembrane domain of the2 receptor tyrosine kinase epha1 in lipid bicelles at ph 6.3
62	c2k1kA_	Alignment	not modelled	9.2	45	PDB header: signaling protein Chain: A: PDB Molecule: ephrin type-a receptor 1; PDBTitle: nmr structures of dimeric transmembrane domain of the2 receptor tyrosine kinase epha1 in lipid bicelles at ph 4.3
63	c2k1kB_	Alignment	not modelled	9.2	45	PDB header: signaling protein Chain: B: PDB Molecule: ephrin type-a receptor 1; PDBTitle: nmr structures of dimeric transmembrane domain of the2 receptor tyrosine kinase epha1 in lipid bicelles at ph 4.3
64	c2k1IA_	Alignment	not modelled	9.2	45	PDB header: signaling protein Chain: A: PDB Molecule: ephrin type-a receptor 1; PDBTitle: nmr structures of dimeric transmembrane domain of the2 receptor tyrosine kinase epha1 in lipid bicelles at ph 6.3
65	c3lf2B_	Alignment	not modelled	9.1	18	PDB header: oxidoreductase Chain: B: PDB Molecule: short chain oxidoreductase q9hya2; PDBTitle: nadph bound structure of the short chain oxidoreductase q9hya2 from2 pseudomonas aeruginosa pao1 containing an atypical catalytic center
66	c3ff4A_	Alignment	not modelled	9.0	12	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: uncharacterized protein; PDBTitle: crystal structure of uncharacterized protein chu_1412
67	c1gshA_	Alignment	not modelled	8.9	15	PDB header: glutathione biosynthesis ligase Chain: A: PDB Molecule: glutathione biosynthetic ligase; PDBTitle: structure of escherichia coli glutathione synthetase at ph 7.5
68	d1ddza1	Alignment	not modelled	8.9	78	Fold: Resolvase-like Superfamily: beta-carbonic anhydrase, cab Family: beta-carbonic anhydrase, cab
69	d1ub1a_	Alignment	not modelled	8.8	36	Fold: DNA-binding domain Superfamily: DNA-binding domain Family: Methyl-CpG-binding domain, MBD
70	c3ue9A_	Alignment	not modelled	8.8	18	PDB header: ligase Chain: A: PDB Molecule: adenylosuccinate synthetase; PDBTitle: crystal structure of adenylosuccinate synthetase (ampsase) (pura) from2 burkholderia thailandensis
71	c2yh5A_	Alignment	not modelled	8.7	21	PDB header: lipid binding protein Chain: A: PDB Molecule: dapx protein; PDBTitle: structure of the c-terminal domain of bamc
72	c3majA_	Alignment	not modelled	8.7	24	PDB header: dna binding protein Chain: A: PDB Molecule: dna processing chain a; PDBTitle: crystal structure of putative dna processing protein dpra from2 rhodopseudomonas palustris cga009
73	c3q3vA_	Alignment	not modelled	8.6	33	PDB header: transferase Chain: A: PDB Molecule: phosphoglycerate kinase; PDBTitle: crystal structure of phosphoglycerate kinase from campylobacter jejuni.
74	c1ddzA_	Alignment	not modelled	8.3	78	PDB header: lyase Chain: A: PDB Molecule: carbonic anhydrase; PDBTitle: x-ray structure of a beta-carbonic anhydrase from the red2 alga, porphyridium purpureum r-1
75	c3eh0C_	Alignment	not modelled	8.1	22	PDB header: transferase Chain: C: PDB Molecule: udp-3-o-[3-hydroxymyristoyl] glucosamine n- PDBTitle: crystal structure of lpxd from escherichia coli
76	c3lasA_	Alignment	not modelled	8.1	22	PDB header: lyase Chain: A: PDB Molecule: putative carbonic anhydrase; PDBTitle: crystal structure of carbonic anhydrase from streptococcus mutans to2 1.4 angstrom resolution
77	d2cqaa1	Alignment	not modelled	8.0	15	Fold: OB-fold Superfamily: Nucleic acid-binding proteins Family: TIP49 domain
78	d2qmwa1	Alignment	not modelled	8.0	10	Fold: Periplasmic binding protein-like II Superfamily: Periplasmic binding protein-like II Family: Phosphopeptide binding protein-like
79	d2rhca1	Alignment	not modelled	8.0	13	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: Tyrosine-dependent oxidoreductases
80	d1a5ca_	Alignment	not modelled	8.0	19	Fold: TIM beta/alpha-barrel Superfamily: Aldolase Family: Class I aldolase
81	d3c2wa2	Alignment	not modelled	7.8	13	Fold: Profilin-like Superfamily: GAF domain-like Family: Phytochrome-specific domain

82	d2dsma1		Alignment	not modelled	7.7	43	Fold: Yqal-like Superfamily: Yqal-like Family: Yqal-like
83	c3eyxB_		Alignment	not modelled	7.6	22	PDB header: lyase Chain: B: PDB Molecule: carbonic anhydrase; PDBTitle: crystal structure of carbonic anhydrase nce103 from <i>saccharomyces cerevisiae</i>
84	d2a9va1		Alignment	not modelled	7.6	8	Fold: Flavodoxin-like Superfamily: Class I glutamine amidotransferase-like Family: Class I glutamine amidotransferases (GAT)
85	d2do3a1		Alignment	not modelled	7.5	26	Fold: SH3-like barrel Superfamily: Translation proteins SH3-like domain Family: SPT5 KOW domain-like
86	c2q2qG_		Alignment	not modelled	7.5	14	PDB header: oxidoreductase Chain: G: PDB Molecule: beta-d-hydroxybutyrate dehydrogenase; PDBTitle: structure of d-3-hydroxybutyrate dehydrogenase from <i>pseudomonas putida</i>
87	d1xfba1		Alignment	not modelled	7.5	19	Fold: TIM beta/alpha-barrel Superfamily: Aldolase Family: Class I aldolase
88	d2fr1a1		Alignment	not modelled	7.5	7	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: Tyrosine-dependent oxidoreductases
89	c3nkdB_		Alignment	not modelled	7.4	29	PDB header: immune system Chain: B: PDB Molecule: crispr-associated protein cas1; PDBTitle: structure of crisp-associated protein cas1 from <i>escherichia coli</i> str.2 k-12
90	c2iz6A_		Alignment	not modelled	7.3	18	PDB header: metal transport Chain: A: PDB Molecule: molybdenum cofactor carrier protein; PDBTitle: structure of the chlamydomonas rheinhardtii moco carrier2 protein
91	c2pc4B_		Alignment	not modelled	7.3	19	PDB header: lyase Chain: B: PDB Molecule: fructose-bisphosphate aldolase; PDBTitle: crystal structure of fructose-bisphosphate aldolase from <i>plasmodium2 falciparum</i> in complex with trap-tail determined at 2.4 angstrom3 resolution
92	d2pw6a1		Alignment	not modelled	7.1	9	Fold: Phosphorylase/hydrolase-like Superfamily: LigB-like Family: LigB-like
93	d1gxha_		Alignment	not modelled	7.1	40	Fold: Acyl carrier protein-like Superfamily: Colicin E immunity proteins Family: Colicin E immunity proteins
94	c2d7uA_		Alignment	not modelled	7.1	11	PDB header: ligase Chain: A: PDB Molecule: adenylosuccinate synthetase; PDBTitle: crystal structure of hypothetical adenylosuccinate synthetase, ph04382 from <i>pyrococcus horikoshii</i> ot3
95	c3ggsA_		Alignment	not modelled	7.0	26	PDB header: transferase Chain: A: PDB Molecule: purine nucleoside phosphorylase; PDBTitle: human purine nucleoside phosphorylase double mutant e201q,n243d2 complexed with 2-fluoro-2'-deoxyadenosine
96	c2ph3B_		Alignment	not modelled	6.9	18	PDB header: oxidoreductase Chain: B: PDB Molecule: 3-oxoacyl-[acyl carrier protein] reductase; PDBTitle: crystal structure of 3-oxoacyl-[acyl carrier protein] reductase2 <i>ttha0415</i> from <i>thermus thermophilus</i>
97	d2vlqa1		Alignment	not modelled	6.8	20	Fold: Acyl carrier protein-like Superfamily: Colicin E immunity proteins Family: Colicin E immunity proteins
98	d1zaia1		Alignment	not modelled	6.8	19	Fold: TIM beta/alpha-barrel Superfamily: Aldolase Family: Class I aldolase
99	d1v2xa_		Alignment	not modelled	6.8	15	Fold: alpha/beta knot Superfamily: alpha/beta knot Family: SpoU-like RNA 2'-O ribose methyltransferase