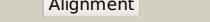
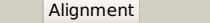


Phyre²

Email	mdejesus@rockefeller.edu
Description	RVBD3366_(spoU)_3777908_3778372
Date	Fri Aug 9 18:20:03 BST 2019
Unique Job ID	407eff1a76ed143f

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	d1mxia			100.0	47	Fold: alpha/beta knot Superfamily: alpha/beta knot Family: SpoU-like RNA 2'-O ribose methyltransferase
2	c4pkzA			100.0	40	PDB header: transferase Chain: A: PDB Molecule: tRNA (cytidine(34)-2'-o)-methyltransferase; PDBTitle: crystal strucrure of putative rna methyltransferase from bacillus2 anthracis.
3	c1gz0H			100.0	19	PDB header: transferase Chain: H: PDB Molecule: hypothetical tRNA/rrNA methyltransferase yjfh; PDBTitle: 23s ribosomal rna g2251 2'o-methyltransferase rlmb
4	c5co4A			100.0	49	PDB header: transferase Chain: A: PDB Molecule: putative tRNA (cytidine(34)-2'-o)-methyltransferase; PDBTitle: structural insights into the 2'-oh methylation of c/u34 on tRNA
5	c1x7pB			100.0	26	PDB header: transferase Chain: B: PDB Molecule: rrNA methyltransferase; PDBTitle: crystal structure of the spoU methyltransferase avirB from2 streptomyces viridochromogenes in complex with the cofactor adomet
6	c4x3mB			100.0	31	PDB header: transferase Chain: B: PDB Molecule: rrNA 2'-o ribose methyltransferase; PDBTitle: crystal structure of ttha0275 from thermus thermophilus (hb8) in2 complex with adenosine in space group p212121
7	c1gz0G			100.0	19	PDB header: transferase Chain: G: PDB Molecule: hypothetical tRNA/rrNA methyltransferase yjfh; PDBTitle: 23s ribosomal rna g2251 2'o-methyltransferase rlmb
8	d1gz0a1			100.0	19	Fold: alpha/beta knot Superfamily: alpha/beta knot Family: SpoU-like RNA 2'-O ribose methyltransferase
9	c1ipaA			100.0	32	PDB header: transferase Chain: A: PDB Molecule: rrNA 2'-o-ribose methyltransferase; PDBTitle: crystal structure of rrNA 2'-o ribose methyltransferase
10	c2i6dA			100.0	21	PDB header: transferase Chain: A: PDB Molecule: rrNA methyltransferase, trmh family; PDBTitle: the structure of a putative rrNA methyltransferase of the trmh family2 from porphyromonas gingivalis.
11	c3e5yB			100.0	49	PDB header: transferase Chain: B: PDB Molecule: trmh family rrNA methyltransferase; PDBTitle: crystal structure of trmh family rrNA methyltransferase from2 burkholderia pseudomallei

12	c5kzka	Alignment		100.0	22	PDB header: rna binding protein Chain: A: PDB Molecule: probable rna methyltransferase, trmh family; PDBTitle: crystal structure of rRNA methyltransferase from sinorhizobium2 meliloti
13	c3gyqB	Alignment		100.0	21	PDB header: transferase Chain: B: PDB Molecule: rRNA (adenosine-2'-o-) methyltransferase; PDBTitle: structure of the thiostrepton-resistance methyltransferase2 s-adenosyl-l-methionine complex
14	d1ipa1	Alignment		100.0	33	Fold: alpha/beta knot Superfamily: alpha/beta knot Family: SpoU-like RNA 2'-O ribose methyltransferase
15	d1v2xa	Alignment		100.0	29	Fold: alpha/beta knot Superfamily: alpha/beta knot Family: SpoU-like RNA 2'-O ribose methyltransferase
16	c1zjra	Alignment		100.0	20	PDB header: transferase Chain: A: PDB Molecule: tRNA (guanosine-2'-o-) methyltransferase; PDBTitle: crystal structure of a. aeolicus trmh/spou tRNA modifying enzyme
17	c3l8uA	Alignment		100.0	34	PDB header: transferase Chain: A: PDB Molecule: putative rRNA methyltransferase; PDBTitle: crystal structure of smu.1707c, a putative rRNA methyltransferase from streptococcus mutans ua159
18	c2ha8A	Alignment		100.0	18	PDB header: rna binding protein Chain: A: PDB Molecule: tar (HIV-1) RNA loop binding protein; PDBTitle: methyltransferase domain of human tar (HIV-1) RNA binding protein 1
19	c3onpA	Alignment		100.0	22	PDB header: transferase Chain: A: PDB Molecule: tRNA/rRNA methyltransferase (spou); PDBTitle: crystal structure of tRNA/rRNA methyltransferase spou from rhodobacter2 sphaeroides
20	c3ic6A	Alignment		100.0	20	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: putative methylase family protein; PDBTitle: crystal structure of putative methylase family protein from neisseria2 gonorrhoeae
21	c5gm8A	Alignment	not modelled	100.0	25	PDB header: transferase Chain: A: PDB Molecule: tRNA (cytidine/uridine-2'-o-) methyltransferase trmj; PDBTitle: methylation at position 32 of tRNA catalyzed by trmj alters oxidative stress response in pseudomonas aeruginosa
22	c4xboA	Alignment	not modelled	100.0	20	PDB header: transferase Chain: A: PDB Molecule: tRNA (cytidine/uridine-2'-o-) methyltransferase trmj; PDBTitle: crystal structure of full length e.coli trmj in complex with sah
23	c5graA	Alignment	not modelled	100.0	25	PDB header: transferase Chain: A: PDB Molecule: tRNA (cytidine/uridine-2'-o-) methyltransferase trmj; PDBTitle: crystal structure of trmj from z. mobilis zm4
24	c3ilkB	Alignment	not modelled	100.0	21	PDB header: structural genomics, unknown function Chain: B: PDB Molecule: uncharacterized tRNA/rRNA methyltransferase hi0380; PDBTitle: the structure of a probable methylase family protein from haemophilus2 influenzae rd_kw20
25	c4cngB	Alignment	not modelled	100.0	21	PDB header: transferase Chain: B: PDB Molecule: spou rRNA methylase; PDBTitle: crystal structure of sulfolobus acidocaldarius trmj in2 complex with S-adenosyl-L-homocysteine
26	c3ktyA	Alignment	not modelled	100.0	20	PDB header: transferase Chain: A: PDB Molecule: probable methyltransferase; PDBTitle: crystal structure of probable methyltransferase from bordetella2 pertussis tohama i
27	c4cndB	Alignment	not modelled	100.0	20	PDB header: transferase Chain: B: PDB Molecule: tRNA (cytidine/uridine-2'-o-) methyltransferase trmj; PDBTitle: crystal structure of e.coli trmj
28	c3dcmX	Alignment	not modelled	99.9	17	PDB header: transferase Chain: X: PDB Molecule: uncharacterized protein tm_1570; PDBTitle: crystal structure of the thermotoga maritima spout family

29	c6ahwB	Alignment	not modelled	99.9	47	rna-2 methyltransferase protein tm1570 in complex with s-adenosyl-l-3 methionine PDB header: transferase Chain: B: PDB Molecule: circular-permuted trna (cytidine(34)-2'-o)- PDBTitle: crystal structure of circular-permuted yibk methyltransferase from2 haemophilus influenzae
30	d1vhka2	Alignment	not modelled	97.4	12	Fold: alpha/beta knot Superfamily: alpha/beta knot Family: YggJ C-terminal domain-like
31	c2yy8B	Alignment	not modelled	97.2	11	PDB header: transferase Chain: B: PDB Molecule: upf0106 protein ph0461; PDBTitle: crystal structure of archaeal trna-methylase for position2 56 (atrm56) from pyrococcus horikoshii, complexed with s-3 adenosyl-l-methionine
32	c1vhkA	Alignment	not modelled	97.1	13	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: hypothetical protein yqe; PDBTitle: crystal structure of an hypothetical protein
33	c1vhvB	Alignment	not modelled	96.7	16	PDB header: structural genomics, unknown function Chain: B: PDB Molecule: hypothetical protein hi0303; PDBTitle: crystal structure of haemophilus influenzae protein hi0303, pfam2 duf558
34	d1nxza2	Alignment	not modelled	96.2	17	Fold: alpha/beta knot Superfamily: alpha/beta knot Family: YggJ C-terminal domain-like
35	d2o3aa1	Alignment	not modelled	95.9	12	Fold: alpha/beta knot Superfamily: alpha/beta knot Family: AF0751-like
36	c2egwB	Alignment	not modelled	95.4	11	PDB header: rna methyltransferase Chain: B: PDB Molecule: upf0088 protein aq_165; PDBTitle: crystal structure of rrna methyltransferase with sah ligand
37	c5o96F	Alignment	not modelled	95.3	15	PDB header: transferase Chain: F: PDB Molecule: ribosomal rna small subunit methyltransferase e; PDBTitle: structure of the putative methyltransferase lpg2936 from legionella2 pneumophila in complex with the bound cofactor sam
38	c4j3cB	Alignment	not modelled	94.8	17	PDB header: transferase Chain: B: PDB Molecule: ribosomal rna small subunit methyltransferase e; PDBTitle: crystal structure of 16s ribosomal rna methyltransferase rsme
39	c4e8bA	Alignment	not modelled	94.7	18	PDB header: transferase Chain: A: PDB Molecule: ribosomal rna small subunit methyltransferase e; PDBTitle: crystal structure of 16s rrna methyltransferase rsme from e.coli
40	c5vm8A	Alignment	not modelled	94.7	13	PDB header: transferase Chain: A: PDB Molecule: ribosomal rna small subunit methyltransferase e; PDBTitle: crystal structure of a ribosomal rna small subunit methyltransferase e2 from neisseria gonorrhoeae bound to s-adenosyl methionine
41	c3kw2A	Alignment	not modelled	92.5	8	PDB header: transferase Chain: A: PDB Molecule: probable r-rrna methyltransferase; PDBTitle: crystal structure of probable rrna-methyltransferase from2 porphyromonas gingivalis
42	d1v6za2	Alignment	not modelled	91.9	16	Fold: alpha/beta knot Superfamily: alpha/beta knot Family: YggJ C-terminal domain-like
43	c1z85B	Alignment	not modelled	91.2	17	PDB header: transferase Chain: B: PDB Molecule: hypothetical protein tm1380; PDBTitle: crystal structure of a predicted rrna methyltransferase (tm1380) from2 thermotoga maritima msb8 at 2.12 a resolution
44	c4l69A	Alignment	not modelled	90.2	20	PDB header: transferase Chain: A: PDB Molecule: ribosomal rna small subunit methyltransferase e; PDBTitle: rv2372c of mycobacterium tuberculosis is rsme like methyltransferase
45	c2cx8A	Alignment	not modelled	89.3	17	PDB header: transferase Chain: A: PDB Molecule: methyl transferase; PDBTitle: crystal structure of methyltransferase with ligand(sah)
46	c3ai9X	Alignment	not modelled	82.4	9	PDB header: transferase Chain: X: PDB Molecule: upf0217 protein mj1640; PDBTitle: crystal structure of duf358 protein reveals a putative spout-class2 rrna methyltransferase
47	d1k3ra2	Alignment	not modelled	81.6	19	Fold: alpha/beta knot Superfamily: alpha/beta knot Family: Hypothetical protein MTH1 (MT0001), dimerisation domain
48	c2cx8B	Alignment	not modelled	77.9	14	PDB header: transferase Chain: B: PDB Molecule: methyl transferase; PDBTitle: crystal structure of methyltransferase with ligand(sah)
49	d1saza1	Alignment	not modelled	75.4	23	Fold: Ribonuclease H-like motif Superfamily: Actin-like ATPase domain Family: Acetokinase-like
50	d2qmma1	Alignment	not modelled	74.3	15	Fold: alpha/beta knot Superfamily: alpha/beta knot Family: AF1056-like
51	d2qwva1	Alignment	not modelled	66.5	10	Fold: alpha/beta knot Superfamily: alpha/beta knot Family: AF1056-like
52	c1k3rA	Alignment	not modelled	61.7	13	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: conserved protein mt0001; PDBTitle: crystal structure of the methyltransferase with a knot from2 methanobacterium thermoautotrophicum

53	dloth2		Alignment	not modelled	52.5	13	Fold: ATC-like Superfamily: Aspartate/ornithine carbamoyltransferase Family: Aspartate/ornithine carbamoyltransferase
54	c4rg1A		Alignment	not modelled	47.4	24	PDB header: transferase Chain: A: PDB Molecule: c9orf114; PDBTitle: methyltransferase domain of c9orf114
55	c4fmwA		Alignment	not modelled	45.4	15	PDB header: transferase Chain: A: PDB Molecule: rna (guanine-9-)methyltransferase domain-containing PDBTitle: crystal structure of methyltransferase domain of human rna (guanine-9-2) methyltransferase domain containing protein 2
56	d1pvva2		Alignment	not modelled	36.0	13	Fold: ATC-like Superfamily: Aspartate/ornithine carbamoyltransferase Family: Aspartate/ornithine carbamoyltransferase
57	c4jwhB		Alignment	not modelled	34.3	8	PDB header: transferase Chain: B: PDB Molecule: rna (guanine(9)-n1)-methyltransferase; PDBTitle: crystal structure of sprtm10(full length)-sah complex
58	d1duvg2		Alignment	not modelled	33.5	18	Fold: ATC-like Superfamily: Aspartate/ornithine carbamoyltransferase Family: Aspartate/ornithine carbamoyltransferase
59	c4jwjA		Alignment	not modelled	32.7	18	PDB header: transferase Chain: A: PDB Molecule: rna (guanine(9)-n1)-methyltransferase; PDBTitle: crystal structure of sctrm10(84)-sah complex
60	d1vlva2		Alignment	not modelled	32.2	16	Fold: ATC-like Superfamily: Aspartate/ornithine carbamoyltransferase Family: Aspartate/ornithine carbamoyltransferase
61	d1ml4a2		Alignment	not modelled	22.5	11	Fold: ATC-like Superfamily: Aspartate/ornithine carbamoyltransferase Family: Aspartate/ornithine carbamoyltransferase
62	c2e2kC		Alignment	not modelled	22.0	15	PDB header: hydrolase Chain: C: PDB Molecule: formamidase; PDBTitle: helicobacter pylori formamidase amif contains a fine-tuned cysteine-2 glutamate-lysine catalytic triad
63	c2w37A		Alignment	not modelled	20.2	17	PDB header: transferase Chain: A: PDB Molecule: ornithine carbamoyltransferase, catabolic; PDBTitle: crystal structure of the hexameric catabolic ornithine2 transcarbamylase from lactobacillus hilgardii
64	c3j1rD		Alignment	not modelled	18.8	38	PDB header: cell adhesion, structural protein Chain: D: PDB Molecule: archaeal adhesion filament core; PDBTitle: filaments from ignicoccus hospitalis show diversity of packing in2 proteins containing n-terminal type iv pilin helices
65	c3j1rO		Alignment	not modelled	18.8	38	PDB header: cell adhesion, structural protein Chain: O: PDB Molecule: archaeal adhesion filament core; PDBTitle: filaments from ignicoccus hospitalis show diversity of packing in2 proteins containing n-terminal type iv pilin helices
66	c3j1rC		Alignment	not modelled	18.8	38	PDB header: cell adhesion, structural protein Chain: C: PDB Molecule: archaeal adhesion filament core; PDBTitle: filaments from ignicoccus hospitalis show diversity of packing in2 proteins containing n-terminal type iv pilin helices
67	c3j1rR		Alignment	not modelled	18.8	38	PDB header: cell adhesion, structural protein Chain: R: PDB Molecule: archaeal adhesion filament core; PDBTitle: filaments from ignicoccus hospitalis show diversity of packing in2 proteins containing n-terminal type iv pilin helices
68	c3j1rH		Alignment	not modelled	18.8	38	PDB header: cell adhesion, structural protein Chain: H: PDB Molecule: archaeal adhesion filament core; PDBTitle: filaments from ignicoccus hospitalis show diversity of packing in2 proteins containing n-terminal type iv pilin helices
69	c3j1rL		Alignment	not modelled	18.8	38	PDB header: cell adhesion, structural protein Chain: L: PDB Molecule: archaeal adhesion filament core; PDBTitle: filaments from ignicoccus hospitalis show diversity of packing in2 proteins containing n-terminal type iv pilin helices
70	c3j1rT		Alignment	not modelled	18.8	38	PDB header: cell adhesion, structural protein Chain: T: PDB Molecule: archaeal adhesion filament core; PDBTitle: filaments from ignicoccus hospitalis show diversity of packing in2 proteins containing n-terminal type iv pilin helices
71	c3j1rM		Alignment	not modelled	18.8	38	PDB header: cell adhesion, structural protein Chain: M: PDB Molecule: archaeal adhesion filament core; PDBTitle: filaments from ignicoccus hospitalis show diversity of packing in2 proteins containing n-terminal type iv pilin helices
72	c3j1rF		Alignment	not modelled	18.8	38	PDB header: cell adhesion, structural protein Chain: F: PDB Molecule: archaeal adhesion filament core; PDBTitle: filaments from ignicoccus hospitalis show diversity of packing in2 proteins containing n-terminal type iv pilin helices
73	c3j1rN		Alignment	not modelled	18.8	38	PDB header: cell adhesion, structural protein Chain: N: PDB Molecule: archaeal adhesion filament core; PDBTitle: filaments from ignicoccus hospitalis show diversity of packing in2 proteins containing n-terminal type iv pilin helices
74	c3j1rB		Alignment	not modelled	18.8	38	PDB header: cell adhesion, structural protein Chain: B: PDB Molecule: archaeal adhesion filament core; PDBTitle: filaments from ignicoccus hospitalis show diversity of packing in2 proteins containing n-terminal type iv pilin helices
75	c3j1rP		Alignment	not modelled	18.8	38	PDB header: cell adhesion, structural protein Chain: P: PDB Molecule: archaeal adhesion filament core; PDBTitle: filaments from ignicoccus hospitalis show diversity of packing in2 proteins containing n-terminal type iv pilin helices
76	c3j1rl		Alignment	not modelled	18.8	38	PDB header: cell adhesion, structural protein Chain: I: PDB Molecule: archaeal adhesion filament core; PDBTitle: filaments from ignicoccus hospitalis show diversity of packing in2 proteins containing n-terminal type iv pilin helices
77	c3j1rs		Alignment	not modelled	18.8	38	PDB header: cell adhesion, structural protein Chain: S: PDB Molecule: archaeal adhesion filament core; PDBTitle: filaments from ignicoccus hospitalis show diversity of packing in2 proteins containing n-terminal type iv pilin helices
78	c3j1ra		Alignment	not modelled	18.8	38	PDB header: cell adhesion, structural protein Chain: A: PDB Molecule: archaeal adhesion filament core; PDBTitle: filaments from ignicoccus hospitalis show diversity of packing in2 proteins containing n-terminal type iv pilin helices

79	c3j1rK_	Alignment	not modelled	18.8	38	Chain: K: PDB Molecule: archaeal adhesion filament core; PDBTitle: filaments from ignicoccus hospitalis show diversity of packing in2 proteins containing n-terminal type iv pilin helices PDB header: cell adhesion, structural protein
80	c3j1rG_	Alignment	not modelled	18.8	38	Chain: G: PDB Molecule: archaeal adhesion filament core; PDBTitle: filaments from ignicoccus hospitalis show diversity of packing in2 proteins containing n-terminal type iv pilin helices PDB header: cell adhesion, structural protein
81	c3j1rJ_	Alignment	not modelled	18.8	38	Chain: J: PDB Molecule: archaeal adhesion filament core; PDBTitle: filaments from ignicoccus hospitalis show diversity of packing in2 proteins containing n-terminal type iv pilin helices PDB header: cell adhesion, structural protein
82	c3j1rQ_	Alignment	not modelled	18.8	38	Chain: Q: PDB Molecule: archaeal adhesion filament core; PDBTitle: filaments from ignicoccus hospitalis show diversity of packing in2 proteins containing n-terminal type iv pilin helices PDB header: cell adhesion, structural protein
83	c3j1rE_	Alignment	not modelled	18.8	38	Chain: E: PDB Molecule: archaeal adhesion filament core; PDBTitle: filaments from ignicoccus hospitalis show diversity of packing in2 proteins containing n-terminal type iv pilin helices PDB header: cell adhesion, structural protein
84	c3j1rU_	Alignment	not modelled	18.8	38	Chain: U: PDB Molecule: archaeal adhesion filament core; PDBTitle: filaments from ignicoccus hospitalis show diversity of packing in2 proteins containing n-terminal type iv pilin helices PDB header: transcarbamylase
85	c1a1sA_	Alignment	not modelled	17.9	13	Chain: A: PDB Molecule: ornithine carbamoyltransferase; PDBTitle: ornithine carbamoyltransferase from pyrococcus furiosus
86	d1dxha2	Alignment	not modelled	14.5	10	Fold: ATC-like Superfamily: Aspartate/ornithine carbamoyltransferase Family: Aspartate/ornithine carbamoyltransferase
87	c2n9rA_	Alignment	not modelled	12.3	36	PDB header: antimicrobial protein Chain: A: PDB Molecule: antimicrobial peptide padbs1r1; PDBTitle: novel antimicrobial peptide padbs1r1 designed from the ribosomal2 protein l39e from pyrobaculum aerophilum using bioinformatics
88	c5nfjA_	Alignment	not modelled	11.0	16	PDB header: transferase Chain: A: PDB Molecule: mitochondrial ribonuclease p protein 1; PDBTitle: crystal structure of the methyltransferase subunit of human2 mitochondrial ribonuclease p (mrpp1) bound to s-adenosyl-methionine3 (sam)
89	c3d6nB_	Alignment	not modelled	10.5	12	PDB header: hydrolase/transferase Chain: B: PDB Molecule: aspartate carbamoyltransferase; PDBTitle: crystal structure of aquifex dihydroorotate activated by aspartate2 transcarbamoylase
90	c1fvoB_	Alignment	not modelled	10.2	11	PDB header: transferase Chain: B: PDB Molecule: ornithine transcarbamylase; PDBTitle: crystal structure of human ornithine transcarbamylase complexed with2 carbamoyl phosphate
91	c4ep1B_	Alignment	not modelled	10.2	13	PDB header: transferase Chain: B: PDB Molecule: ornithine carbamoyltransferase; PDBTitle: crystal structure of anabolic ornithine carbamoyltransferase from2 bacillus anthracis
92	c1vlvA_	Alignment	not modelled	10.1	14	PDB header: transferase Chain: A: PDB Molecule: ornithine carbamoyltransferase; PDBTitle: crystal structure of ornithine carbamoyltransferase (tm1097) from2 thermotoga maritima at 2.25 a resolution
93	d2ivya1	Alignment	not modelled	9.0	13	Fold: Ferredoxin-like Superfamily: TTP0101/SSO1404-like Family: TTP0101/SSO1404-like
94	c2vh1G_	Alignment	not modelled	8.8	11	PDB header: hydrolase Chain: G: PDB Molecule: cg3027-pa; PDBTitle: crystal structure of a pyrimidine degrading enzyme from2 drosophila melanogaster
95	d1pg5a2	Alignment	not modelled	8.7	6	Fold: ATC-like Superfamily: Aspartate/ornithine carbamoyltransferase Family: Aspartate/ornithine carbamoyltransferase
96	d1ekxa2	Alignment	not modelled	8.6	11	Fold: ATC-like Superfamily: Aspartate/ornithine carbamoyltransferase Family: Aspartate/ornithine carbamoyltransferase
97	c3updA_	Alignment	not modelled	8.0	12	PDB header: transferase Chain: A: PDB Molecule: ornithine carbamoyltransferase; PDBTitle: 2.9 angstrom crystal structure of ornithine carbamoyltransferase2 (argf) from vibrio vulnificus
98	c6emvA_	Alignment	not modelled	7.6	9	PDB header: rna binding protein Chain: A: PDB Molecule: tRNA (guanine(9)-adenine(9)-n1)-methyltransferase; PDBTitle: crystal structure of dual specific trm10 construct from thermococcus2 kodakaraensis.
99	c2ef0A_	Alignment	not modelled	7.2	15	PDB header: transferase Chain: A: PDB Molecule: ornithine carbamoyltransferase; PDBTitle: crystal structure of ornithine carbamoyltransferase from thermus2 thermophilus