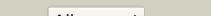
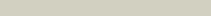
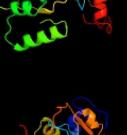
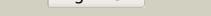
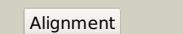
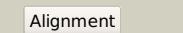
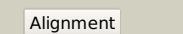
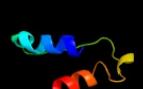
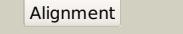
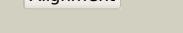
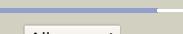
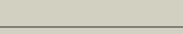


Phyre²

Email	mdejesus@rockefeller.edu
Description	RVBD1301 (-) _1457564_1458217
Date	Wed Jul 31 22:05:39 BST 2019
Unique Job ID	5954628397ffb6dc

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c6f87C_	 Alignment		100.0	36	PDB header: transferase Chain: C; PDB Molecule: threonylcarbamoyl-amp synthase; PDBTitle: crystal structure of p. abyssi sua5 complexed with l-threonine and ppi
2	c2eqaA_	 Alignment		100.0	33	PDB header: rna binding protein Chain: A; PDB Molecule: hypothetical protein st1526; PDBTitle: crystal structure of the hypothetical sua5 protein from2 sulfolobus tokodaii
3	d1k7ja_	 Alignment		100.0	22	Fold: YrdC/RibB Superfamily: YrdC/RibB Family: YrdC-like
4	d1jcua_	 Alignment		100.0	30	Fold: YrdC/RibB Superfamily: YrdC/RibB Family: YrdC-like
5	d1hrauA_	 Alignment		100.0	24	Fold: YrdC/RibB Superfamily: YrdC/RibB Family: YrdC-like
6	c3vthA_	 Alignment		100.0	21	PDB header: transferase Chain: A; PDB Molecule: hydrogenase maturation factor; PDBTitle: crystal structure of full-length hypf in the phosphate- and2 nucleotide-bound form
7	c3vthB_	 Alignment		100.0	22	PDB header: transferase Chain: B; PDB Molecule: hydrogenase maturation factor; PDBTitle: crystal structure of full-length hypf in the phosphate- and2 nucleotide-bound form
8	c3l7va_	 Alignment		100.0	21	PDB header: transcription Chain: A; PDB Molecule: putative uncharacterized protein smu.1377c; PDBTitle: crystal structure of a hypothetical protein smu.1377c from2 streptococcus mutans ua159
9	c4g9iA_	 Alignment		100.0	21	PDB header: transferase Chain: A; PDB Molecule: hydrogenase maturation protein hypf; PDBTitle: crystal structure of t.kodakarensis hypf
10	c3tsuA_	 Alignment		100.0	27	PDB header: transferase Chain: A; PDB Molecule: transcriptional regulatory protein; PDBTitle: crystal structure of e. coli hypf with amp-pnp and carbamoyl phosphate
11	c3viewA_	 Alignment		99.3	14	PDB header: transferase Chain: A; PDB Molecule: o-carbamoyltransferase tobz; PDBTitle: crystal structure of the o-carbamoyltransferase tobz in complex with2 adp

12	c2m4mA			66.6	15	PDB header: unknown function Chain: A: PDB Molecule: hypothetical protein; PDBTitle: solution structure of the rrm domain of the hypothetical protein2 cagl0m09691g from candida glabrata
13	c3p3dA			51.9	29	PDB header: nuclear protein Chain: A: PDB Molecule: nucleoporin 53; PDBTitle: crystal structure of the nup53 rrm domain from pichia guilliermondii
14	c5uazB			51.1	23	PDB header: protein transport Chain: B: PDB Molecule: nucleoporin nup53; PDBTitle: crystal structure of the yeast nucleoporin
15	c4fp9F			39.3	18	PDB header: transferase Chain: F: PDB Molecule: methyltransferase nsun4; PDBTitle: human mterf4-nsun4 protein complex
16	c2qs0A			38.2	16	PDB header: biosynthetic protein Chain: A: PDB Molecule: quinolinate synthetase a; PDBTitle: quinolinate synthase from pyrococcus furiosus
17	d1t5la1			37.3	15	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Tandem AAA-ATPase domain
18	c5fmfY			34.8	9	PDB header: transcription Chain: Y: PDB Molecule: dna repair helicase rad3; PDBTitle: the p-lobe of rna polymerase ii pre-initiation complex
19	c2frxD			34.2	23	PDB header: transferase Chain: D: PDB Molecule: hypothetical protein yebu; PDBTitle: crystal structure of yebu, a m5c rna methyltransferase from e.coli
20	c3m4xA			29.0	18	PDB header: transferase Chain: A: PDB Molecule: nol1/nop2/sun family protein; PDBTitle: structure of a ribosomal methyltransferase
21	c4xqkB		not modelled	28.7	17	PDB header: hydrolase/dna Chain: B: PDB Molecule: llabili; PDBTitle: atp-dependent type isp restriction-modification enzyme llabili bound2 to dna
22	c1solA		not modelled	27.9	36	PDB header: actin-binding protein Chain: A: PDB Molecule: gelsolin (150-169); PDBTitle: a pip2 and f-actin-binding site of gelsolin, residue 150-2 169 (nmr, averaged structure)
23	c4c2IA		not modelled	25.8	21	PDB header: hydrolase Chain: A: PDB Molecule: endo-xylogalacturonan hydrolase a; PDBTitle: crystal structure of endo-xylogalacturonan hydrolase from aspergillus2 tubingensis
24	d1hq0a		not modelled	25.7	33	Fold: CNF1/YfiH-like putative cysteine hydrolases Superfamily: CNF1/YfiH-like putative cysteine hydrolases Family: Type 1 cytotoxic necrotizing factor, catalytic domain
25	c3irsB		not modelled	25.1	16	PDB header: structural genomics, unknown function Chain: B: PDB Molecule: uncharacterized protein bb4693; PDBTitle: crystal structure of uncharacterized tim-barrel protein bb4693 from2 bordetella bronchiseptica
26	d1r0ua		not modelled	24.7	35	Fold: Lipocalins Superfamily: Lipocalins Family: Hypothetical protein YwiB
27	c2oemA		not modelled	24.7	12	PDB header: isomerase Chain: A: PDB Molecule: 2,3-diketo-5-methylthiopentyl-1-phosphate enolase; PDBTitle: crystal structure of a rubisco-like protein from geobacillus2 kaustophilus liganded with mg2+ and 2,3-diketohexane 1-phosphate
28	c3m6wA		not modelled	24.4	23	PDB header: transferase Chain: A: PDB Molecule: rrna methylase; PDBTitle: multi-site-specific 16s rrna methyltransferase rsmf from

						thermus2 thermophilus in space group p21212 in complex with s-adenosyl-l-3 methionine
29	d1d4oa	Alignment	not modelled	24.4	26	Fold: DHS-like NAD/FAD-binding domain Superfamily: DHS-like NAD/FAD-binding domain Family: Transhydrogenase domain III (dIII)
30	c1pt9B	Alignment	not modelled	24.4	26	PDB header: oxidoreductase Chain: B: PDB Molecule: nad(p) transhydrogenase, mitochondrial; PDBTitle: crystal structure analysis of the dIII component of transhydrogenase2 with a thio-nicotinamide nucleotide analogue
31	d1ixka	Alignment	not modelled	24.1	15	Fold: S-adenosyl-L-methionine-dependent methyltransferases Superfamily: S-adenosyl-L-methionine-dependent methyltransferases Family: NOL1/NOP2/sun
32	c2dcqA	Alignment	not modelled	20.1	7	PDB header: unknown function Chain: A: PDB Molecule: putative protein at4g01050; PDBTitle: fully automated nmr structure determination of the2 rhodanese homology domain at4g01050(175-295) from3 arabidopsis thaliana
33	c3fk4A	Alignment	not modelled	19.7	23	PDB header: isomerase Chain: A: PDB Molecule: rubisco-like protein; PDBTitle: crystal structure of rubisco-like protein from bacillus2 cereus atcc 14579
34	c3mioA	Alignment	not modelled	19.5	23	PDB header: lyase Chain: A: PDB Molecule: 3,4-dihydroxy-2-butanone 4-phosphate synthase; PDBTitle: crystal structure of 3,4-dihydroxy-2-butanone 4-phosphate synthase2 domain from mycobacterium tuberculosis at ph 6.00
35	d1rbla1	Alignment	not modelled	19.4	18	Fold: TIM beta/alpha-barrel Superfamily: RuBisCo, C-terminal domain Family: RuBisCo, large subunit, C-terminal domain
36	d1sqga2	Alignment	not modelled	19.3	23	Fold: S-adenosyl-L-methionine-dependent methyltransferases Superfamily: S-adenosyl-L-methionine-dependent methyltransferases Family: NOL1/NOP2/sun
37	d1pnna	Alignment	not modelled	18.7	21	Fold: DHS-like NAD/FAD-binding domain Superfamily: DHS-like NAD/FAD-binding domain Family: Transhydrogenase domain III (dIII)
38	c4p6dA	Alignment	not modelled	18.6	12	PDB header: lyase Chain: A: PDB Molecule: 3,4-dihydroxy-2-butanone 4-phosphate synthase; PDBTitle: structure of ribB complexed with po4 ion
39	d1snna	Alignment	not modelled	18.3	15	PDB header: YrdC/RibB Superfamily: YrdC/RibB Family: 3,4-dihydroxy-2-butanone 4-phosphate synthase, DHBP synthase, RibB
40	c4nasD	Alignment	not modelled	17.9	17	PDB header: lyase Chain: D: PDB Molecule: ribulose-bisphosphate carboxylase; PDBTitle: the crystal structure of a rubisco-like protein (mtnw) from2 alicyclobacillus acidocaldarius subsp. acidocaldarius dsm 446
41	c3nwrA	Alignment	not modelled	17.7	16	PDB header: lyase Chain: A: PDB Molecule: a rubisco-like protein; PDBTitle: crystal structure of a rubisco-like protein from burkholderia fungorum
42	c6k1dB	Alignment	not modelled	17.4	3	PDB header: hydrolase Chain: B: PDB Molecule: exonuclease 3'-5' domain-containing protein 2; PDBTitle: crystal structure of exd2 exonuclease domain soaked in mn and gmp
43	c3h1tA	Alignment	not modelled	17.4	26	PDB header: hydrolase Chain: A: PDB Molecule: type i site-specific restriction-modification PDBTitle: the fragment structure of a putative hsdr subunit of a type2 i restriction enzyme from vibrio vulnificus yj016
44	d1ej7l1	Alignment	not modelled	16.5	14	Fold: TIM beta/alpha-barrel Superfamily: RuBisCo, C-terminal domain Family: RuBisCo, large subunit, C-terminal domain
45	d1c4oa1	Alignment	not modelled	16.2	17	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Tandem AAA-ATPase domain
46	d1gk8a1	Alignment	not modelled	15.7	12	Fold: TIM beta/alpha-barrel Superfamily: RuBisCo, C-terminal domain Family: RuBisCo, large subunit, C-terminal domain
47	d2d69a1	Alignment	not modelled	15.5	16	Fold: TIM beta/alpha-barrel Superfamily: RuBisCo, C-terminal domain Family: RuBisCo, large subunit, C-terminal domain
48	d1ykwa1	Alignment	not modelled	14.9	20	Fold: TIM beta/alpha-barrel Superfamily: RuBisCo, C-terminal domain Family: RuBisCo, large subunit, C-terminal domain
49	c2yxIA	Alignment	not modelled	14.8	15	PDB header: transferase Chain: A: PDB Molecule: 450aa long hypothetical fmw protein; PDBTitle: crystal structure of ph0851
50	c3ckkA	Alignment	not modelled	14.8	22	PDB header: transferase Chain: A: PDB Molecule: tRNA (guanine-n(7)-)methyltransferase; PDBTitle: crystal structure of human methyltransferase-like protein 1
51	c2e6mA	Alignment	not modelled	14.8	9	PDB header: hydrolase Chain: A: PDB Molecule: werner syndrome atp-dependent helicase homolog; PDBTitle: structure of mouse werner exonuclease domain
52	c3mtiA	Alignment	not modelled	14.5	14	PDB header: transferase Chain: A: PDB Molecule: rRNA methylase; PDBTitle: the crystal structure of a rRNA methylase from streptococcus2 thermophilus to 1.95a
53	c3pfhD	Alignment	not modelled	14.5	9	PDB header: transferase Chain: D: PDB Molecule: n-methyltransferase; PDBTitle: x-ray crystal structure the n,n-dimethyltransferase tylm1 from2 streptomyces fradiae in complex with sah and dtdp-quip3n

54	c3id5F	Alignment	not modelled	14.3	21	PDB header: transferase/ribosomal protein/rna Chain: F: PDB Molecule: fibrillarin-like rrna/trna 2'-o-methyltransferase; PDBTitle: crystal structure of sulfolobus solfataricus c/d rnp assembled with2 ntp5, fibrillarin, l7ae and a split half c/d rna
55	c4mxnB	Alignment	not modelled	14.2	27	PDB header: hydrolase Chain: B: PDB Molecule: uncharacterized protein; PDBTitle: crystal structure of a putative glycosyl hydrolase (parmer_00599) from2 parabacteroides merdae atcc 43184 at 1.95 a resolution
56	c1kevB	Alignment	not modelled	13.9	8	PDB header: oxidoreductase Chain: B: PDB Molecule: nadp-dependent alcohol dehydrogenase; PDBTitle: structure of nadp-dependent alcohol dehydrogenase
57	c2bruC	Alignment	not modelled	13.8	21	PDB header: oxidoreductase Chain: C: PDB Molecule: nad(p) transhydrogenase subunit beta; PDBTitle: complex of the domain i and domain iii of escherichia coli2 transhydrogenase
58	c4o9uB	Alignment	not modelled	13.7	21	PDB header: membrane protein Chain: B: PDB Molecule: nad(p) transhydrogenase subunit beta; PDBTitle: mechanism of transhydrogenase coupling proton translocation and2 hydride transfer
59	d1zq1c2	Alignment	not modelled	13.6	16	Fold: DCoH-like Superfamily: GAD domain-like Family: GAD domain
60	c1sqgA	Alignment	not modelled	13.6	23	PDB header: transferase Chain: A: PDB Molecule: sun protein; PDBTitle: the crystal structure of the e. coli fmu apoenzyme at 1.652 a resolution
61	c2qj8B	Alignment	not modelled	13.6	21	PDB header: hydrolase Chain: B: PDB Molecule: mlr6093 protein; PDBTitle: crystal structure of an aspartoacylase family protein (mlr6093) from2 mesorhizobium loti maff303099 at 2.00 a resolution
62	c4xpmA	Alignment	not modelled	13.5	16	PDB header: protein binding Chain: A: PDB Molecule: protein meh1; PDBTitle: crystal structure of ego-tc
63	c4ffjA	Alignment	not modelled	13.4	23	PDB header: lyase Chain: A: PDB Molecule: riboflavin biosynthesis protein ribba; PDBTitle: the crystal structure of spdhbps from s.pneumoniae
64	c5knkB	Alignment	not modelled	13.3	21	PDB header: transferase Chain: B: PDB Molecule: lipid a biosynthesis lauroyl acyltransferase; PDBTitle: lipid a secondary acyltransferase lpxm from acinetobacter baumannii2 with catalytic residue substitution (e127a)
65	d1svda1	Alignment	not modelled	12.6	11	Fold: TIM beta/alpha-barrel Superfamily: RuBisCo, C-terminal domain Family: RuBisCo, large subunit, C-terminal domain
66	c3qfwB	Alignment	not modelled	12.2	18	PDB header: lyase Chain: B: PDB Molecule: ribulose-1,5-bisphosphate carboxylase/oxygenase large PDBTitle: crystal structure of rubisco-like protein from rhodopseudomonas2 palustris
67	c5c2xB	Alignment	not modelled	12.1	17	PDB header: lyase Chain: B: PDB Molecule: deoxyribose-phosphate aldolase; PDBTitle: crystal structure of deoxyribose-phosphate aldolase from colwellia2 psychrerythraea (tetragonal form)
68	c2ipxA	Alignment	not modelled	12.1	24	PDB header: transferase Chain: A: PDB Molecule: rrna 2'-o-methyltransferase fibrillarin; PDBTitle: human fibrillarin
69	c5zvdB	Alignment	not modelled	11.9	18	PDB header: rna binding protein Chain: B: PDB Molecule: 389aa long hypothetical nucleolar protein; PDBTitle: the crystal structure of nsun6 from pyrococcus horikoshii
70	c3cgkB	Alignment	not modelled	11.5	13	PDB header: transferase Chain: B: PDB Molecule: sam-dependent methyltransferase; PDBTitle: crystal structure of tehb-like sam-dependent methyltransferase2 (np_600671.1) from corynebacterium glutamicum atcc 13032 kitasato at3 2.00 a resolution
71	c3tfwB	Alignment	not modelled	11.4	15	PDB header: transferase Chain: B: PDB Molecule: putative o-methyltransferase; PDBTitle: crystal structure of a putative o-methyltransferase from klebsiella2 pneumoniae
72	c2g8nB	Alignment	not modelled	11.4	15	PDB header: transferase Chain: B: PDB Molecule: phenylethanolamine n-methyltransferase; PDBTitle: structure of hpnmt with inhibitor 3-hydroxymethyl-7-(n-4-2 chlorophenylaminosulfonyl)-thiq and adohcy
73	c3zihB	Alignment	not modelled	11.3	13	PDB header: cell cycle Chain: B: PDB Molecule: cell division protein sepf; PDBTitle: bacillus subtilis sepf, c-terminal domain
74	d1xcfA	Alignment	not modelled	11.3	11	Fold: TIM beta/alpha-barrel Superfamily: Ribulose-phosphate binding barrel Family: Tryptophan biosynthesis enzymes
75	d8ruca1	Alignment	not modelled	11.2	14	Fold: TIM beta/alpha-barrel Superfamily: RuBisCo, C-terminal domain Family: RuBisCo, large subunit, C-terminal domain
76	c5bszA	Alignment	not modelled	11.2	16	PDB header: transferase Chain: A: PDB Molecule: n-methyltransferase; PDBTitle: x-ray structure of the sugar n-methyltransferase keds8 from2 streptoalloteichus sp atcc 53650
77	c4p3xA	Alignment	not modelled	11.0	13	PDB header: transferase Chain: A: PDB Molecule: quinolinate synthase a; PDBTitle: structure of the fe4s4 quinolinate synthase nada from thermotoga2 maritima
78	c5jw9A	Alignment	not modelled	11.0	25	PDB header: protein binding Chain: A: PDB Molecule: af4/fmr2 family member 4; PDBTitle: the crystal structure of ell2 oclcludin domain and aff4 peptide
79	c4i14B	Alianment	not modelled	10.8	28	PDB header: hydrolase, lyase Chain: B: PDB Molecule: riboflavin biosynthesis protein ribba;

						PDBTitle: crystal structure of mtb-riba2 (rv1415)
80	c6hunA	Alignment	not modelled	10.7	18	PDB header: photosynthesis Chain: A: PDB Molecule: ribulose bisphosphate carboxylase; PDBTitle: dimeric archaeal rubisco from hyperthermus butylicus
81	c1zwvA	Alignment	not modelled	10.6	19	PDB header: transferase Chain: A: PDB Molecule: lipoamide acyltransferase component of branched-chain alpha-ketoacid dehydrogenase PDBTitle: solution structure of the subunit binding domain (hbsbd) of2 the human mitochondrial branched-chain alpha-ketoacid3 dehydrogenase
82	c2vdvE	Alignment	not modelled	10.6	15	PDB header: transferase Chain: E: PDB Molecule: tRNA (guanine-n(7)-methyltransferase; PDBTitle: structure of trm8-trm82, the yeast tRNA m7g methylation2 complex
83	d1bhea	Alignment	not modelled	10.3	18	Fold: Single-stranded right-handed beta-helix Superfamily: Pectin lyase-like Family: Galacturonase
84	c2ouiB	Alignment	not modelled	10.3	12	PDB header: oxidoreductase Chain: B: PDB Molecule: nadp-dependent alcohol dehydrogenase; PDBTitle: d275p mutant of alcohol dehydrogenase from protozoa entamoeba2 histolytica
85	c5ykaA	Alignment	not modelled	10.2	21	PDB header: biosynthetic protein Chain: A: PDB Molecule: uncharacterized protein kdoo; PDBTitle: crystal structure of the kdo hydroxylase kdoo, a non-heme fe(ii)2 alphaketoglutarate dependent dioxygenase in complex with cobalt(ii)
86	d1yb2a1	Alignment	not modelled	10.1	19	Fold: S-adenosyl-L-methionine-dependent methyltransferases Superfamily: S-adenosyl-L-methionine-dependent methyltransferases Family: tRNA(1-methyladenosine) methyltransferase-like
87	c1yb2A	Alignment	not modelled	10.1	19	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: hypothetical protein ta0852; PDBTitle: structure of a putative methyltransferase from thermoplasma2 acidophilum.
88	c3p04A	Alignment	not modelled	10.1	28	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: uncharacterized bcr; PDBTitle: crystal structure of the bcr protein from corynebacterium glutamicum.2 northeast structural genomics consortium target cgr8
89	c1rldB	Alignment	not modelled	10.0	14	PDB header: lyase(carbon-carbon) Chain: B: PDB Molecule: ribulose 1,5 bisphosphate carboxylase/oxygenase (large PDBTitle: solid-state phase transition in the crystal structure of ribulose 1,5-2 bisphosphate carboxylase(slash)oxygenase
90	c3cgxA	Alignment	not modelled	10.0	15	PDB header: transferase Chain: A: PDB Molecule: putative nucleotide-diphospho-sugar transferase; PDBTitle: crystal structure of putative nucleotide-diphospho-sugar transferase2 (yp_389115.1) from desulfovibrio desulfuricans g20 at 1.90 a3 resolution
91	c2hb0B	Alignment	not modelled	10.0	45	PDB header: cell adhesion Chain: B: PDB Molecule: cfa/i fimbrial subunit e; PDBTitle: crystal structure of cfae, the adhesive subunit of cfa/i2 fimbria of enterotoxigenic escherichia coli
92	c3w6kC	Alignment	not modelled	9.9	7	PDB header: cell cycle Chain: C: PDB Molecule: scpb; PDBTitle: crystal structure of dimer of scpb n-terminal domain complexed with2 scpa peptide
93	c2zviB	Alignment	not modelled	9.7	24	PDB header: isomerase Chain: B: PDB Molecule: 2,3-diketo-5-methylthiopentyl-1-phosphate PDBTitle: crystal structure of 2,3-diketo-5-methylthiopentyl-1-2 phosphate enolase from bacillus subtilis
94	c3ofkA	Alignment	not modelled	9.7	19	PDB header: transferase Chain: A: PDB Molecule: nodulation protein s; PDBTitle: crystal structure of n-methyltransferase nods from bradyrhizobium2 japonicum w9 in complex with s-adenosyl-l-homocysteine (sah)
95	c3p04B	Alignment	not modelled	9.6	28	PDB header: structural genomics, unknown function Chain: B: PDB Molecule: uncharacterized bcr; PDBTitle: crystal structure of the bcr protein from corynebacterium glutamicum.2 northeast structural genomics consortium target cgr8
96	c5wwrA	Alignment	not modelled	9.5	26	PDB header: transferase/rna Chain: A: PDB Molecule: putative methyltransferase nsun6; PDBTitle: crystal structure of human nsun6/trna/sfg
97	c2d69B	Alignment	not modelled	9.5	16	PDB header: lyase Chain: B: PDB Molecule: ribulose bisphosphate carboxylase; PDBTitle: crystal structure of the complex of sulfate ion and octameric2 ribulose-1,5-bisphosphate carboxylase/oxygenase (rubisco) from3 pyrococcus horikoshii ot3 (form-2 crystal)
98	c4df3B	Alignment	not modelled	9.5	26	PDB header: transferase Chain: B: PDB Molecule: fibrillarin-like rrna/trna 2'-o-methyltransferase; PDBTitle: crystal structure of aeropyrum pernix fibrillarin in complex with2 natively bound s-adenosyl-l-methionine at 1.7a
99	c4obuG	Alignment	not modelled	9.5	12	PDB header: lyase Chain: G: PDB Molecule: pyridoxal-dependent decarboxylase domain protein; PDBTitle: ruminococcus gnarus tryptophan decarboxylase rumgna_01526 (apo)