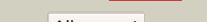
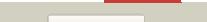
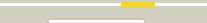
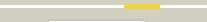
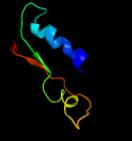
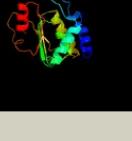


Phyre²

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Description	RVBD3081 (-) _3446037_3447275
Date	Thu Aug 8 16:20:25 BST 2019
Unique Job ID	11fff342f79d8916

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c5uvdA			99.0	20	PDB header: transferase Chain: A: PDB Molecule: nucleotidyltransferase-like protein; PDBTitle: crystal structure of an antigenic nucleotidyltransferase-like protein2 from paracoccidioides brasiliensis
2	c4e8iA			98.1	13	PDB header: transferase Chain: A: PDB Molecule: lincosamide resistance protein; PDBTitle: crystal structure of lincosamide antibiotic adenyltransferase lina,2 apo
3	c4ok0B			97.6	15	PDB header: transferase Chain: B: PDB Molecule: putative; PDBTitle: crystal structure of putative nucleotidyltransferase from h. pylori
4	c4wqkA			95.2	17	PDB header: transferase Chain: A: PDB Molecule: 2"-aminoglycoside nucleotidyltransferase; PDBTitle: crystal structure of aminoglycoside nucleotidyltransferase ant(2")-2 ia, apo form
5	c3h37B			78.5	22	PDB header: transferase Chain: B: PDB Molecule: tRNA nucleotidyl transferase-related protein; PDBTitle: the structure of cca-adding enzyme apo form i
6	d1ccwa			73.0	17	Fold: Flavodoxin-like Superfamily: Cobalamin (vitamin B12)-binding domain Family: Cobalamin (vitamin B12)-binding domain
7	d1miwa2			68.3	26	Fold: Nucleotidyltransferase Superfamily: Nucleotidyltransferase Family: Poly A polymerase head domain-like
8	d1ou5a2			65.8	19	Fold: Nucleotidyltransferase Superfamily: Nucleotidyltransferase Family: Poly A polymerase head domain-like
9	d1ig3a2			62.6	20	Fold: Thiamin pyrophosphokinase, catalytic domain Superfamily: Thiamin pyrophosphokinase, catalytic domain Family: Thiamin pyrophosphokinase, catalytic domain
10	c2yn2A			62.3	29	PDB header: hydrolase Chain: A: PDB Molecule: uncharacterized protein ynl108c; PDBTitle: huf protein - parologue of the tau55 histidine phosphatase domain
11	c2yn0A			61.8	30	PDB header: transcription Chain: A: PDB Molecule: transcription factor tau 55 kda subunit; PDBTitle: tau55 histidine phosphatase domain

12	c4oi6A	Alignment		59.4	26	PDB header: metal binding protein Chain: A: PDB Molecule: nickel responsive protein; PDBTitle: crystal structure analysis of nickel-bound form sco4226 from2 streptomyces coelicolor a3(2)
13	c1miyB	Alignment		55.5	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
14	c2f17A	Alignment		54.4	19	PDB header: transferase Chain: A: PDB Molecule: thiamin pyrophosphokinase 1; PDBTitle: mouse thiamin pyrophosphokinase in a ternary complex with2 pyridithiamin pyrophosphate and amp at 2.5 angstrom
15	c1xrsB	Alignment		49.6	20	PDB header: isomerase Chain: B: PDB Molecule: d-lysine 5,6-aminomutase beta subunit; PDBTitle: crystal structure of lysine 5,6-aminomutase in complex with plp,2 cobalamin, and 5'-deoxyadenosine
16	d2bcqa3	Alignment		49.4	13	Fold: Nucleotidyltransferase Superfamily: Nucleotidyltransferase Family: DNA polymerase beta-like
17	c4q6tA	Alignment		49.1	12	PDB header: hydrolase Chain: A: PDB Molecule: glycosyl hydrolase, family 18; PDBTitle: the crystal structure of a class v chitininase from pseudomonas2 fluorescens pf-5
18	c2hroA	Alignment		47.5	15	PDB header: transferase Chain: A: PDB Molecule: phosphoenolpyruvate-protein phosphotransferase; PDBTitle: structure of the full-length enzyme i of the pts system from2 staphylococcus carnosus
19	c3k35D	Alignment		45.9	29	PDB header: hydrolase Chain: D: PDB Molecule: nad-dependent deacetylase sirtuin-6; PDBTitle: crystal structure of human sirt6
20	c2qm3A	Alignment		44.8	23	PDB header: transferase Chain: A: PDB Molecule: predicted methyltransferase; PDBTitle: crystal structure of a predicted methyltransferase from pyrococcus2 furiosus
21	c6g52A	Alignment	not modelled	44.8	26	PDB header: rna binding protein Chain: A: PDB Molecule: cca-adding enzyme; PDBTitle: structure of a psychrophilic cca-adding enzyme in complex with cmpcpp2 at room temperature in chipx microfluidic device
22	c1hlvA	Alignment	not modelled	41.5	23	PDB header: dna binding protein/dna Chain: A: PDB Molecule: major centromere autoantigen b; PDBTitle: crystal structure of cnp-b(1-129) complexed with the cnp-2 b box dna
23	c4x4wB	Alignment	not modelled	41.3	21	PDB header: rna binding protein Chain: B: PDB Molecule: cca trna nucleotidyltransferase 1, mitochondrial; PDBTitle: crystal structure of the full-length human mitochondrial cca-adding2 enzyme
24	d2b4va2	Alignment	not modelled	41.2	15	Fold: Nucleotidyltransferase Superfamily: Nucleotidyltransferase Family: RNA editing terminal uridyl transferase 2, RET2, catalytic domain
25	c5d50I	Alignment	not modelled	39.9	21	PDB header: dna binding protein Chain: I: PDB Molecule: repressor; PDBTitle: crystal structure of rep-ant complex from salmonella-temperate phage
26	d7rega2	Alignment	not modelled	39.2	10	Fold: Flavodoxin-like Superfamily: Cobalamin (vitamin B12)-binding domain Family: Cobalamin (vitamin B12)-binding domain
27	c6j27D	Alignment	not modelled	37.2	15	PDB header: transferase Chain: D: PDB Molecule: n(4)-bis(aminopropyl)spermidine synthase; PDBTitle: crystal structure of the branched-chain polyamine synthase from2 thermus thermophilus (tth-bpsa) in complex with n4-3 aminopropylspermidine and 5'-methylthioadenosine
						PDB header: translation, transferase

28	c1ou5A	Alignment	not modelled	36.6	21	Chain: A: PDB Molecule: tRNA CCA-adding enzyme; PDBTitle: crystal structure of human CCA-adding enzyme
29	d1vfga2	Alignment	not modelled	36.3	13	Fold: Nucleotidyltransferase Superfamily: Nucleotidyltransferase Family: Poly A polymerase head domain-like
30	c3e0bA	Alignment	not modelled	36.2	24	PDB header: oxidoreductase Chain: A: PDB Molecule: dihydrofolate reductase; PDBTitle: bacillus anthracis dihydrofolate reductase complexed with nadph and 2,2' 4-diamino-5-(3-(2,5-dimethoxyphenyl)prop-1-enyl)-6-ethylpyrimidine3 (ucp120b)
31	d1wvfa2	Alignment	not modelled	36.0	20	Fold: FAD-binding/transporter-associated domain-like Superfamily: FAD-binding/transporter-associated domain-like Family: FAD-linked oxidases, N-terminal domain
32	c6gioB	Alignment	not modelled	35.5	14	PDB header: isomerase Chain: B: PDB Molecule: amino acid amide racemase; PDBTitle: structure of amino acid amide racemase from ochrobactrum anthropi
33	c2hh9A	Alignment	not modelled	34.1	12	PDB header: transferase Chain: A: PDB Molecule: thiamin pyrophosphokinase; PDBTitle: thiamin pyrophosphokinase from candida albicans
34	c3pkf	Alignment	not modelled	34.0	29	PDB header: hydrolase Chain: F: PDB Molecule: nad-dependent deacetylase sirtuin-6; PDBTitle: human sirt6 crystal structure in complex with adp ribose
35	c1z7dE	Alignment	not modelled	33.5	10	PDB header: transferase Chain: E: PDB Molecule: ornithine aminotransferase; PDBTitle: ornithine aminotransferase py00104 from plasmodium yoelii
36	d1rxwa1	Alignment	not modelled	32.8	44	Fold: SAM domain-like Superfamily: 5' to 3' exonuclease, C-terminal subdomain Family: 5' to 3' exonuclease, C-terminal subdomain
37	c3vcoA	Alignment	not modelled	32.5	23	PDB header: oxidoreductase Chain: A: PDB Molecule: dihydrofolate reductase; PDBTitle: schistosoma mansoni dihydrofolate reductase
38	c3aqnA	Alignment	not modelled	31.6	15	PDB header: transferase Chain: A: PDB Molecule: poly(A) polymerase; PDBTitle: complex structure of bacterial protein (apo form ii)
39	d1p9qc1	Alignment	not modelled	30.9	21	Fold: RuvA C-terminal domain-like Superfamily: Hypothetical protein AF0491, middle domain Family: Hypothetical protein AF0491, middle domain
40	c3c7tB	Alignment	not modelled	29.9	29	PDB header: hydrolase Chain: B: PDB Molecule: ecdysteroid-phosphate phosphatase; PDBTitle: crystal structure of the ecdysone phosphate phosphatase, epase, from2 bombyx mori in complex with tungstate
41	d1jmsa4	Alignment	not modelled	29.8	22	Fold: Nucleotidyltransferase Superfamily: Nucleotidyltransferase Family: DNA polymerase beta-like
42	c5lhaC	Alignment	not modelled	29.2	23	PDB header: transferase Chain: C: PDB Molecule: omega transaminase; PDBTitle: amine transaminase crystal structure from an uncultivated pseudomonas2 species in the pmp-bound form
43	c1sz1A	Alignment	not modelled	29.2	19	PDB header: transferase/rna Chain: A: PDB Molecule: tRNA nucleotidyltransferase; PDBTitle: mechanism of CCA-adding enzymes specificity revealed by crystal2 structures of ternary complexes
44	d1knya2	Alignment	not modelled	28.7	17	Fold: Nucleotidyltransferase Superfamily: Nucleotidyltransferase Family: Kanamycin nucleotidyltransferase (KNTase), N-terminal domain
45	c2e1mA	Alignment	not modelled	27.2	67	PDB header: oxidoreductase Chain: A: PDB Molecule: L-glutamate oxidase; PDBTitle: crystal structure of L-glutamate oxidase from streptomyces sp. x-119-6
46	d1xrsb1	Alignment	not modelled	26.9	21	Fold: Flavodoxin-like Superfamily: Cobalamin (vitamin B12)-binding domain Family: Cobalamin (vitamin B12)-binding domain
47	c4a0rB	Alignment	not modelled	26.8	22	PDB header: transferase Chain: B: PDB Molecule: adenosylmethionine-8-amino-7-oxononanoate PDBTitle: structure of bifunctional dapa aminotransferase-dtb synthetase from2 arabidopsis thaliana bound to dethiobiotin (dtb).
48	c3wfsC	Alignment	not modelled	26.5	19	PDB header: transferase/rna Chain: C: PDB Molecule: poly A polymerase; PDBTitle: tRNA processing enzyme complex 3
49	c3jtwB	Alignment	not modelled	26.1	15	PDB header: oxidoreductase Chain: B: PDB Molecule: dihydrofolate reductase; PDBTitle: crystal structure of putative dihydrofolate reductase (yp_805003.1)2 from pediococcus pentosaceus atcc 25745 at 1.90 a resolution
50	c3wfqE	Alignment	not modelled	26.0	21	PDB header: transferase/rna Chain: E: PDB Molecule: poly A polymerase; PDBTitle: tRNA processing enzyme complex 1
51	c3imIB	Alignment	not modelled	25.9	20	PDB header: transferase Chain: B: PDB Molecule: s-adenosylmethionine synthetase; PDBTitle: crystal structure of s-adenosylmethionine synthetase from burkholderia2 pseudomallei
52	d1mxaa2	Alignment	not modelled	25.6	18	Fold: S-adenosylmethionine synthetase Superfamily: S-adenosylmethionine synthetase Family: S-adenosylmethionine synthetase
53	c2ze5A	Alignment	not modelled	25.6	13	PDB header: transferase Chain: A: PDB Molecule: isopentenyl transferase; PDBTitle: crystal structure of adenosine phosphate-isopentenyltransferase
						PDB header: transferase Chain: B: PDB Molecule: acetylornithine/succinyl diaminopimelate

54	c2pb2B	Alignment	not modelled	25.3	12	aminotransferase; PDBTitle: structure of biosynthetic n-acetylornithine aminotransferase from <i>salmonella typhimurium</i> : studies on substrate specificity and inhibitor binding
55	c3wfrF	Alignment	not modelled	25.3	29	PDB header: transferase/rna Chain: F: PDB Molecule: poly A polymerase; PDBTitle: trna processing enzyme complex 2
56	d3dfa	Alignment	not modelled	25.1	25	Fold: Dihydrofolate reductase-like Superfamily: Dihydrofolate reductase-like Family: Dihydrofolate reductases
57	c3d4iD	Alignment	not modelled	24.9	35	PDB header: hydrolase Chain: D: PDB Molecule: sts-2 protein; PDBTitle: crystal structure of the 2h-phosphatase domain of sts-2
58	c1qysA	Alignment	not modelled	24.4	25	PDB header: de novo protein Chain: A: PDB Molecule: top7; PDBTitle: crystal structure of top7: a computationally designed2 protein with a novel fold
59	c3wfrE	Alignment	not modelled	24.4	25	PDB header: transferase/rna Chain: E: PDB Molecule: poly A polymerase; PDBTitle: trna processing enzyme complex 2
60	d1a77a1	Alignment	not modelled	24.1	19	Fold: SAM domain-like Superfamily: 5' to 3' exonuclease, C-terminal subdomain Family: 5' to 3' exonuclease, C-terminal subdomain
61	c2w8wA	Alignment	not modelled	24.0	10	PDB header: transferase Chain: A: PDB Molecule: serine palmitoyltransferase; PDBTitle: n100y spt wth plp-ser
62	c2hwgA	Alignment	not modelled	23.9	13	PDB header: transferase Chain: A: PDB Molecule: phosphoenolpyruvate-protein phosphotransferase; PDBTitle: structure of phosphorylated enzyme i of the phosphoenolpyruvate:sugar2 phosphotransferase system
63	c2rdsA	Alignment	not modelled	23.6	14	PDB header: oxidoreductase Chain: A: PDB Molecule: 1-deoxypentalenic acid 11-beta hydroxylase; fe(ii)/alpha- PDBTitle: crystal structure of ptlh with fe/oxalylglycine and ent-1-2 deoxypentalenic acid bound
64	c3ia5A	Alignment	not modelled	23.4	30	PDB header: oxidoreductase Chain: A: PDB Molecule: dihydrofolate reductase; PDBTitle: moritella profunda dihydrofolate reductase (dhfr)
65	c3wfqH	Alignment	not modelled	23.4	19	PDB header: transferase/rna Chain: H: PDB Molecule: poly A polymerase; PDBTitle: trna processing enzyme complex 1
66	c3w6kC	Alignment	not modelled	23.4	19	PDB header: cell cycle Chain: C: PDB Molecule: scpb; PDBTitle: crystal structure of dimer of scpb n-terminal domain complexed with2 scpa peptide
67	c3wfoB	Alignment	not modelled	23.3	28	PDB header: transferase Chain: B: PDB Molecule: poly A polymerase; PDBTitle: trna processing enzyme (apo form 1)
68	c3wfpa	Alignment	not modelled	23.1	21	PDB header: transferase Chain: A: PDB Molecule: poly A polymerase; PDBTitle: trna processing enzyme (apo form 2)
69	d1ig0a2	Alignment	not modelled	22.8	21	Fold: Thiamin pyrophosphokinase, catalytic domain Superfamily: Thiamin pyrophosphokinase, catalytic domain Family: Thiamin pyrophosphokinase, catalytic domain
70	c3i5tB	Alignment	not modelled	22.5	17	PDB header: transferase Chain: B: PDB Molecule: aminotransferase; PDBTitle: crystal structure of aminotransferase prk07036 from rhodobacter sphaeroides kd131
71	c4iw7A	Alignment	not modelled	22.2	10	PDB header: transferase Chain: A: PDB Molecule: 8-amino-7-oxononanoate synthase; PDBTitle: crystal structure of 8-amino-7-oxononanoate synthase (biof) from <i>francisella tularensis</i> .
72	c3dxvA	Alignment	not modelled	22.1	11	PDB header: isomerase Chain: A: PDB Molecule: alpha-amino-epsilon-caprolactam racemase; PDBTitle: the crystal structure of alpha-amino-epsilon-caprolactam racemase from <i>achromobacter obae</i>
73	d1wota	Alignment	not modelled	21.9	21	Fold: Nucleotidyltransferase Superfamily: Nucleotidyltransferase Family: Catalytic subunit of bi-partite nucleotidyltransferase
74	c3cseA	Alignment	not modelled	21.6	26	PDB header: oxidoreductase Chain: A: PDB Molecule: dihydrofolate reductase; PDBTitle: candida glabrata dihydrofolate reductase complexed with nadph and 2,4-2 diamino-5-(3-(2,5-dimethoxyphenyl)prop-1-ynyl)-6-ethylpyrimidine3 (ucp120b)
75	c3hjeA	Alignment	not modelled	21.3	17	PDB header: transferase Chain: A: PDB Molecule: 704aa long hypothetical glycosyltransferase; PDBTitle: crystal structure of sulfolobus tokodaii hypothetical maltooligosyl2 trehalose synthase
76	c2jvfA	Alignment	not modelled	21.3	40	PDB header: de novo protein Chain: A: PDB Molecule: de novo protein m7; PDBTitle: solution structure of m7, a computationally-designed2 artificial protein
77	d1ohea2	Alignment	not modelled	21.0	22	Fold: (Phosphotyrosine protein) phosphatases II Superfamily: (Phosphotyrosine protein) phosphatases II Family: Dual specificity phosphatase-like
78	c3tq8A	Alignment	not modelled	20.9	26	PDB header: oxidoreductase/oxidoreductase inhibitor Chain: A: PDB Molecule: dihydrofolate reductase; PDBTitle: structure of the dihydrofolate reductase (fola) from coxiella burnetii2 in complex with trimethoprim
79	c1ufpD	Alignment	not modelled	20.5	13	PDB header: transferase/rna Chain: B: PDB Molecule: poly A polymerase;

79	c1v1yD	Alignment	not modelled	20.5	13	PDBTitle: crystal structure of trna nucleotidyltransferase complexed2 with a primer trna and an incoming atp analog PDB header: ligase Chain: A: PDB Molecule: alanine-anticapsin ligase bacd; PDBTitle: crystal structure of bacd, an l-amino acid dipeptide ligase from2 bacillus subtilis
80	c3vmmA	Alignment	not modelled	20.5	12	PDB header: transferase Chain: A: PDB Molecule: thiamin pyrophosphokinase; PDBTitle: crystal structure of yeast thiamin pyrophosphokinase
81	c1ig0A	Alignment	not modelled	20.5	21	PDB header: toxin/toxin repressor Chain: M: PDB Molecule: antitoxin dinj; PDBTitle: crystal structure of the e. coli dinj-yafq toxin-antitoxin complex
82	c4q2uM	Alignment	not modelled	19.9	21	PDB header: transferase/dna Chain: A: PDB Molecule: dna polymerase mu; PDBTitle: polymerase mu in ternary complex with gapped 11mer dna duplex and 2 bound incoming nucleotide
83	c2ihmA	Alignment	not modelled	19.1	11	Fold: Dihydrofolate reductase-like Superfamily: Dihydrofolate reductase-like Family: Dihydrofolate reductases
84	d8dfra	Alignment	not modelled	19.0	21	PDB header: transferase Chain: C: PDB Molecule: phosphoenolpyruvate-protein kinase; PDBTitle: crystal structure of the phosphoenolpyruvate-binding enzyme i-domain2 from the thermoanaerobacter tengcongensis pep: sugar3 phototransferase system (pts)
85	c2bg5C	Alignment	not modelled	18.8	14	Fold: Nucleotidyltransferase Superfamily: Nucleotidyltransferase Family: DNA polymerase beta-like
86	d2fmpa3	Alignment	not modelled	18.8	11	Fold: Flavodoxin-like Superfamily: Cobalamin (vitamin B12)-binding domain Family: Cobalamin (vitamin B12)-binding domain
87	d1fmfa	Alignment	not modelled	18.5	20	PDB header: transferase/rna Chain: A: PDB Molecule: 2'-5'-oligoadenylate synthase 3; PDBTitle: crystal structure of human oas3 domain i in complex with dsrna
88	c4s3nA	Alignment	not modelled	18.5	26	PDB header: transferase Chain: A: PDB Molecule: putative aminotransferase; PDBTitle: crystal structure of putative aminotransferase (yp_614685.1) from2 silicibacter sp. tm1040 at 1.80 a resolution
89	c3fcrA	Alignment	not modelled	18.3	12	PDB header: transferase/rna Chain: D: PDB Molecule: poly a polymerase; PDBTitle: trna processing enzyme complex 3
90	c3wfsD	Alignment	not modelled	18.1	15	Fold: FAD-binding/transporter-associated domain-like Superfamily: FAD-binding/transporter-associated domain-like Family: FAD-linked oxidases, N-terminal domain
91	d1e8ga2	Alignment	not modelled	17.6	10	PDB header: transferase/rna binding protein Chain: A: PDB Molecule: poly(a) rna polymerase protein 2; PDBTitle: structure and function of the polymerase core of tramp, a rna2 surveillance complex
92	c3wfqG	Alignment	not modelled	17.6	21	PDB header: de novo protein Chain: A: PDB Molecule: designed protein or327; PDBTitle: three-dimensional structure of the orthorhombic crystal of2 computationally designed insertion domain , northeast structural3 genomics consortium (nsgc) target or327
93	c3nybA	Alignment	not modelled	17.4	14	PDB header: oxidoreductase Chain: B: PDB Molecule: dihydrofolate reductase; PDBTitle: dhfr from bacillus stearothermophilus
94	c4ky3A	Alignment	not modelled	17.2	25	PDB header: hydrolyase Chain: G: PDB Molecule: agmatine deiminase; PDBTitle: agmatine deiminase of enterococcus faecalis catalyzing its2 reaction.
95	c1zdrB	Alignment	not modelled	17.2	23	PDB header: transferase Chain: D: PDB Molecule: s-adenosylmethionine synthetase; PDBTitle: s-adenosylmethionine synthetase complexed with sam and ppnp
96	c2jerG	Alignment	not modelled	17.1	22	PDB header: hydrolyase Chain: B: PDB Molecule: peptidase, m48 family; PDBTitle: x-ray structure of the putative zn-dependent peptidase q74d82 at the2 resolution 1.7 a. northeast structural genomics consortium target3 gsr143a
97	c1rg9D	Alignment	not modelled	17.0	14	PDB header: hydrolyase Chain: B: PDB Molecule: peptidase, m48 family; PDBTitle: x-ray structure of the putative zn-dependent peptidase q74d82 at the2 resolution 1.7 a. northeast structural genomics consortium target3 gsr143a
98	c3c37B	Alignment	not modelled	17.0	16	PDB header: transferase Chain: D: PDB Molecule: 4-aminobutyrate transaminase; PDBTitle: structure of gaba-transaminase a1r958 from arthrobacter aurescens in2 complex with plp
99	c4atpD	Alignment	not modelled	17.0	16	PDB header: transferase Chain: D: PDB Molecule: 4-aminobutyrate transaminase; PDBTitle: structure of gaba-transaminase a1r958 from arthrobacter aurescens in2 complex with plp