









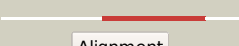






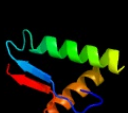

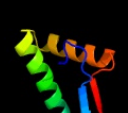






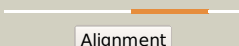

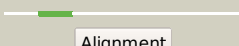

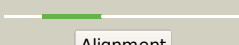

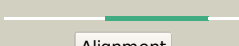







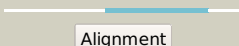
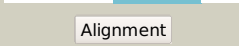
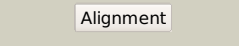
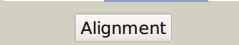
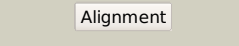
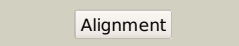
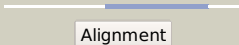
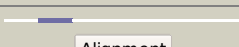


Phyre2

Email	mdejesus@rockefeller.edu
Description	RVBD2331A (-) _2604750_2605088
Date	Mon Aug 5 13:25:48 BST 2019
Unique Job ID	64cfb4a6b55ad9f2

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c3qftA_	 Alignment		94.9	26	PDB header: oxidoreductase Chain: A: PDB Molecule: nadph--cytochrome p450 reductase; PDBTitle: crystal structure of nadph-cytochrome p450 reductase (fad/nadph domain2 and r457h mutant)
2	c2qtzA_	 Alignment		94.2	25	PDB header: oxidoreductase Chain: A: PDB Molecule: methionine synthase reductase; PDBTitle: crystal structure of the nadp+-bound fad-containing fnr-like module of 2 human methionine synthase reductase
3	c6j7aB_	 Alignment		93.9	28	PDB header: oxidoreductase Chain: B: PDB Molecule: heme oxygenase 1,nadph--cytochrome p450 reductase; PDBTitle: fusion protein of heme oxygenase-1 and nadph cytochrome p450 reductase2 (17aa)
4	c2bpoA_	 Alignment		93.8	28	PDB header: reductase Chain: A: PDB Molecule: nadph-cytochrom p450 reductase; PDBTitle: crystal structure of the yeast cpr triple mutant: d74g, y75f, k78a.
5	c1ddiA_	 Alignment		93.7	32	PDB header: oxidoreductase Chain: A: PDB Molecule: sulfite reductase [nadph] flavoprotein alpha-component; PDBTitle: crystal structure of sir-fp60
6	c6efvA_	 Alignment		93.1	32	PDB header: flavoprotein Chain: A: PDB Molecule: sulfite reductase [nadph] flavoprotein alpha-component; PDBTitle: the nadph-dependent sulfite reductase flavoprotein adopts an extended2 conformation that is unique to this diflavin reductase
7	c5gxuA_	 Alignment		92.4	30	PDB header: oxidoreductase Chain: A: PDB Molecule: nadph--cytochrome p450 reductase 2; PDBTitle: cystal structure of arabidopsis atr2
8	c1j9zB_	 Alignment		92.0	28	PDB header: oxidoreductase Chain: B: PDB Molecule: nadph-cytochrome p450 reductase; PDBTitle: cypor-w677g
9	c1f20A_	 Alignment		91.6	23	PDB header: oxidoreductase Chain: A: PDB Molecule: nitric-oxide synthase; PDBTitle: crystal structure of rat neuronal nitric-oxide synthase fad/nadp+2 domain at 1.9a resolution.
10	c4dqkA_	 Alignment		91.4	25	PDB header: oxidoreductase Chain: A: PDB Molecule: bifunctional p-450/nadph-p450 reductase; PDBTitle: crystal structure of the fad binding domain of cytochrome p450 bm3
11	d1ddga2	 Alignment		88.6	32	Fold: Ferredoxin reductase-like, C-terminal NADP-linked domain Superfamily: Ferredoxin reductase-like, C-terminal NADP-linked domain Family: NADPH-cytochrome p450 reductase-like

12	dlja1a3	 Alignment		88.1	28	Fold: Ferredoxin reductase-like, C-terminal NADP-linked domain Superfamily: Ferredoxin reductase-like, C-terminal NADP-linked domain Family: NADPH-cytochrome p450 reductase-like
13	c1t1lA	 Alignment		87.6	21	PDB header: oxidoreductase Chain: A: PDB Molecule: nitric-oxide synthase, brain; PDBTitle: crystal structure of rat neuronal nitric-oxide synthase2 reductase module at 2.3 a resolution.
14	d1f20a2	 Alignment		80.8	26	Fold: Ferredoxin reductase-like, C-terminal NADP-linked domain Superfamily: Ferredoxin reductase-like, C-terminal NADP-linked domain Family: NADPH-cytochrome p450 reductase-like
15	c4u3qA	 Alignment		56.7	67	PDB header: lipid binding protein Chain: A: PDB Molecule: 17 kda lipoprotein; PDBTitle: crystal structure of recombinant tp0435 from treponema pallidum
16	c6drfA	 Alignment		55.8	34	PDB header: signaling protein Chain: A: PDB Molecule: protein rd3; PDBTitle: structure of human retinal degeneration 3(rd3) protein
17	c1fncA	 Alignment		45.2	19	PDB header: oxidoreductase (nadp+(a),ferredoxin(a)) Chain: A: PDB Molecule: ferredoxin-nadp+ reductase; PDBTitle: refined crystal structure of spinach ferredoxin reductase2 at 1.7 angstroms resolution: oxidized, reduced, and 2'-3 phospho-5'-amp bound states
18	c1jb9A	 Alignment		45.0	16	PDB header: oxidoreductase Chain: A: PDB Molecule: ferredoxin-nadp reductase; PDBTitle: crystal structure of the ferredoxin:nadp+ reductase from maize root at2 1.7 angstroms
19	d1jb9a2	 Alignment		36.2	16	Fold: Ferredoxin reductase-like, C-terminal NADP-linked domain Superfamily: Ferredoxin reductase-like, C-terminal NADP-linked domain Family: Reductases
20	c2rc5D	 Alignment		35.2	15	PDB header: oxidoreductase Chain: D: PDB Molecule: ferredoxin-nadp reductase; PDBTitle: refined structure of fnr from leptospira interrogans
21	c1qgyA	 Alignment	not modelled	34.8	19	PDB header: oxidoreductase Chain: A: PDB Molecule: ferredoxin--nadp+ reductase; PDBTitle: ferredoxin:nadp+ reductase mutant with lys 75 replaced by glu (k75e)
22	c4nexA	 Alignment	not modelled	32.5	20	PDB header: transferase Chain: A: PDB Molecule: acetylglutamate kinase; PDBTitle: structure of the n-acetyltransferase domain of x. fastidiosa nags/k
23	d2proc1	 Alignment	not modelled	31.5	33	Fold: Alpha-lytic protease prodomain-like Superfamily: Alpha-lytic protease prodomain Family: Alpha-lytic protease prodomain
24	d1sm4a2	 Alignment	not modelled	27.5	19	Fold: Ferredoxin reductase-like, C-terminal NADP-linked domain Superfamily: Ferredoxin reductase-like, C-terminal NADP-linked domain Family: Reductases
25	d1wi3a	 Alignment	not modelled	25.9	41	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: Homeodomain
26	d1dvoa	 Alignment	not modelled	24.1	32	Fold: FinO-like Superfamily: FinO-like Family: FinO-like
27	d1qfza2	 Alignment	not modelled	24.0	23	Fold: Ferredoxin reductase-like, C-terminal NADP-linked domain Superfamily: Ferredoxin reductase-like, C-terminal NADP-linked domain Family: Reductases
28	c3ltiA	 Alignment	not modelled	18.3	100	PDB header: transferase Chain: A: PDB Molecule: dna-directed rna polymerase subunit beta; PDBTitle: crystal structure of the escherichia coli rna polymerase beta subunit2 beta2-beta14 domains Fold: Ferredoxin reductase-like, C-terminal NADP-linked domain

29	d1fnda2	Alignment	not modelled	18.0	19	Superfamily: Ferredoxin reductase-like, C-terminal NADP-linked domain Family: Reductases
30	c2b5oA	Alignment	not modelled	12.9	13	PDB header: oxidoreductase Chain: A: PDB Molecule: ferredoxin--nadp reductase; PDBTitle: ferredoxin-nadp reductase
31	d1s3ia2	Alignment	not modelled	12.2	60	Fold: Formyltransferase Superfamily: Formyltransferase Family: Formyltransferase
32	d1ei5a1	Alignment	not modelled	11.6	46	Fold: Streptavidin-like Superfamily: D-aminopeptidase, middle and C-terminal domains Family: D-aminopeptidase, middle and C-terminal domains
33	c3kcaA	Alignment	not modelled	11.3	50	PDB header: transferase Chain: A: PDB Molecule: phosphoribosylglycinamide formyltransferase; PDBTitle: crystal structure of phosphoribosylglycinamide formyltransferase from2 anaplasma phagocytophilum
34	c3shgB	Alignment	not modelled	11.2	50	PDB header: transferase/protein binding Chain: B: PDB Molecule: vbha; PDBTitle: vbht fic protein from bartonella schoenbuchensis in complex with vbha2 antitoxin
35	d2bw0a2	Alignment	not modelled	10.9	60	Fold: Formyltransferase Superfamily: Formyltransferase Family: Formyltransferase
36	c1yrwA	Alignment	not modelled	9.7	60	PDB header: transferase Chain: A: PDB Molecule: protein arna; PDBTitle: crystal structure of e.coli arna transformylase domain
37	d1fmta2	Alignment	not modelled	9.6	50	Fold: Formyltransferase Superfamily: Formyltransferase Family: Formyltransferase
38	c1zghA	Alignment	not modelled	9.5	50	PDB header: transferase Chain: A: PDB Molecule: methionyl-trna formyltransferase; PDBTitle: methionyl-trna formyltransferase from clostridium thermocellum
39	d1zgha2	Alignment	not modelled	9.5	50	Fold: Formyltransferase Superfamily: Formyltransferase Family: Formyltransferase
40	c4s1nA	Alignment	not modelled	9.4	67	PDB header: transferase Chain: A: PDB Molecule: phosphoribosylglycinamide formyltransferase; PDBTitle: the crystal structure of phosphoribosylglycinamide formyltransferase2 from streptococcus pneumoniae tigr4
41	c3aufA	Alignment	not modelled	8.5	56	PDB header: transferase Chain: A: PDB Molecule: glycinamide ribonucleotide transformylase 1; PDBTitle: crystal structure of glycinamide ribonucleotide transformylase 1 from2 symbiobacterium toebii
42	c5uaiA	Alignment	not modelled	8.4	50	PDB header: transferase Chain: A: PDB Molecule: methionyl-trna formyltransferase; PDBTitle: crystal structure of methionyl-trna formyltransferase from pseudomonas2 aeruginosa
43	c3tqrA	Alignment	not modelled	8.4	60	PDB header: transferase Chain: A: PDB Molecule: phosphoribosylglycinamide formyltransferase; PDBTitle: structure of the phosphoribosylglycinamide formyltransferase (purn) in2 complex with ches from coxiella burnetii
44	c3iz5d	Alignment	not modelled	8.3	75	PDB header: ribosome Chain: D: PDB Molecule: 60s ribosomal protein l4 (l4p); PDBTitle: localization of the large subunit ribosomal proteins into a 5.5 a2 cryo-em map of triticum aestivum translating 80s ribosome
45	c3izrD	Alignment	not modelled	8.3	75	PDB header: ribosome Chain: D: PDB Molecule: 60s ribosomal protein l4 (l4p); PDBTitle: localization of the large subunit ribosomal proteins into a 5.5 a2 cryo-em map of triticum aestivum translating 80s ribosome
46	c6ci2A	Alignment	not modelled	8.2	40	PDB header: transferase Chain: A: PDB Molecule: formyltransferase psej; PDBTitle: crystal structure of the formyltransferase psej from anoxybacillus2 kamchatkensis
47	c3tqqA	Alignment	not modelled	8.1	56	PDB header: transferase Chain: A: PDB Molecule: methionyl-trna formyltransferase; PDBTitle: structure of the methionyl-trna formyltransferase (fmt) from coxiella2 burnetii
48	c4ds3A	Alignment	not modelled	7.9	50	PDB header: transferase Chain: A: PDB Molecule: phosphoribosylglycinamide formyltransferase; PDBTitle: crystal structure of phosphoribosylglycinamide formyltransferase from2 brucella melitensis
49	c3rfoA	Alignment	not modelled	7.8	50	PDB header: transferase Chain: A: PDB Molecule: methionyl-trna formyltransferase; PDBTitle: crystal structure of methionyl-trna formyltransferase from bacillus2 anthracis
50	c4npgA	Alignment	not modelled	7.6	43	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: putative lipoprotein; PDBTitle: crystal structure of a hypothetical protein (bt1938) from bacteroides2 thetaiotaomicron vpi-5482 at 2.50 a resolution
51	c2ibjA	Alignment	not modelled	7.2	24	PDB header: electron transport Chain: A: PDB Molecule: cytochrome b5; PDBTitle: structure of house fly cytochrome b5
52	c1fmtA	Alignment	not modelled	7.1	56	PDB header: formyltransferase Chain: A: PDB Molecule: methionyl-trna fmet formyltransferase; PDBTitle: methionyl-trnafmet formyltransferase from escherichia coli
53	c5vytD	Alignment	not modelled	7.1	78	PDB header: transferase Chain: D: PDB Molecule: gdp-mannose 4,6-dehydratase / gdp-4-amino-4,6-dideoxy-d- PDBTitle: crystal structure of the wbkc n-formyltransferase (f142a

						variant) from2 brucella melitensis
54	c4faol_	Alignment	not modelled	7.1	39	PDB header: signaling protein/signaling protein Chain: I: PDB Molecule: serine/threonine-protein kinase receptor r3; PDBTitle: specificity and structure of a high affinity activin-like 1 (alk1)2 signaling complex
55	d1jkxa_	Alignment	not modelled	7.1	60	Fold: Formyltransferase Superfamily: Formyltransferase Family: Formyltransferase
56	c5ujhA_	Alignment	not modelled	7.0	83	PDB header: cytokine Chain: A: PDB Molecule: granulin; PDBTitle: ov-grn12-34
57	c5jsdB_	Alignment	not modelled	7.0	50	PDB header: viral protein Chain: B: PDB Molecule: phiab6 tailspike; PDBTitle: crystal structure of phiab6 tailspike in complex with five-repeated2 oligosaccharides of acinetobacter baumannii surface polysaccharide
58	d3proc1	Alignment	not modelled	6.9	54	Fold: Alpha-lytic protease prodomain-like Superfamily: Alpha-lytic protease prodomain Family: Alpha-lytic protease prodomain
59	c5ujgA_	Alignment	not modelled	6.7	83	PDB header: cytokine Chain: A: PDB Molecule: granulin; PDBTitle: ovgrn12-35_3s
60	c3q0iA_	Alignment	not modelled	6.6	56	PDB header: transferase Chain: A: PDB Molecule: methionyl-trna formyltransferase; PDBTitle: methionyl-trna formyltransferase from vibrio cholerae
61	d2c4fl3	Alignment	not modelled	6.5	73	Fold: GLA-domain Superfamily: GLA-domain Family: GLA-domain
62	c4nv1D_	Alignment	not modelled	6.5	50	PDB header: transferase Chain: D: PDB Molecule: formyltransferase; PDBTitle: crystal structure of a 4-n formyltransferase from francisella2 tularensis
63	c5a16A_	Alignment	not modelled	6.4	50	PDB header: structural protein Chain: A: PDB Molecule: anastral spindle 2; PDBTitle: central coiled-coil domain (cccd) of drosophila melanogaster ana2. a2 natural, parallel, tetrameric coiled-coil bundle.
64	c3et4A_	Alignment	not modelled	6.4	16	PDB header: hydrolase Chain: A: PDB Molecule: outer membrane protein p4, nadp phosphatase; PDBTitle: structure of recombinant haemophilus influenzae e(p4) acid phosphatase
65	d1cyoa_	Alignment	not modelled	6.3	24	Fold: Cytochrome b5-like heme/steroid binding domain Superfamily: Cytochrome b5-like heme/steroid binding domain Family: Cytochrome b5
66	c4b8nC_	Alignment	not modelled	6.3	25	PDB header: electron transport Chain: C: PDB Molecule: cytochrome b5-host origin; PDBTitle: cytochrome b5 of ostreococcus tauri virus 2
67	c4pzuF_	Alignment	not modelled	6.1	50	PDB header: transferase Chain: F: PDB Molecule: uncharacterized protein rv3404c/mt3512; PDBTitle: crystal structure of a putative uncharacterize protein rv3404c and2 likely sugar n-formyltransferase from mycobacterium tuberculosis
68	c3tdqB_	Alignment	not modelled	6.0	24	PDB header: cell adhesion Chain: B: PDB Molecule: pily2 protein; PDBTitle: crystal structure of a fimbrial biogenesis protein pily22 (pily2_pa4555) from pseudomonas aeruginosa pao1 at 2.10 a resolution
69	c6gmaA_	Alignment	not modelled	5.9	15	PDB header: protein binding Chain: A: PDB Molecule: rb1-inducible coiled-coil protein 1; PDBTitle: crystal structure of the fip200 c-terminal region
70	c3p9xB_	Alignment	not modelled	5.8	56	PDB header: transferase Chain: B: PDB Molecule: phosphoribosylglycinamide formyltransferase; PDBTitle: crystal structure of phosphoribosylglycinamide formyltransferase from2 bacillus halodurans
71	d1rgoa2	Alignment	not modelled	5.8	64	Fold: CCCH zinc finger Superfamily: CCCH zinc finger Family: CCCH zinc finger
72	c3hrdF_	Alignment	not modelled	5.8	22	PDB header: oxidoreductase Chain: F: PDB Molecule: nicotinate dehydrogenase medium molybdopterin PDBTitle: crystal structure of nicotinate dehydrogenase
73	c2kc8B_	Alignment	not modelled	5.7	64	PDB header: toxin/toxin repressor Chain: B: PDB Molecule: antitoxin relb; PDBTitle: structure of e. coli toxin rele (r81a/r83a) mutant in2 complex with antitoxin relbc (k47-l79) peptide
74	c2ywrA_	Alignment	not modelled	5.7	44	PDB header: transferase Chain: A: PDB Molecule: phosphoribosylglycinamide formyltransferase; PDBTitle: crystal structure of gar transformylase from aquifex aeolicus
75	c3o1lB_	Alignment	not modelled	5.7	44	PDB header: hydrolase Chain: B: PDB Molecule: formyltetrahydrofolate deformylase; PDBTitle: crystal structure of a formyltetrahydrofolate deformylase (pspto_4314)2 from pseudomonas syringae pv. tomato str. dc3000 at 2.20 a resolution
76	c4lzxB_	Alignment	not modelled	5.5	38	PDB header: metal binding protein Chain: B: PDB Molecule: iq domain-containing protein g; PDBTitle: complex of iqcg and ca2+-free cam
77	d1meoa_	Alignment	not modelled	5.5	70	Fold: Formyltransferase Superfamily: Formyltransferase Family: Formyltransferase

78	d1axib1	Alignment	not modelled	5.3	19	Fold: Immunoglobulin-like beta-sandwich Superfamily: Fibronectin type III Family: Fibronectin type III
79	c2i34B_	Alignment	not modelled	5.2	21	PDB header: hydrolase Chain: B: PDB Molecule: acid phosphatase; PDBTitle: the crystal structure of class c acid phosphatase from bacillus2 anthracis with tungstate bound