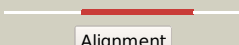



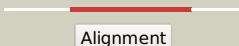

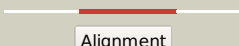
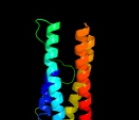
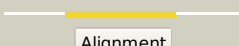

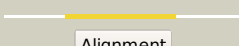

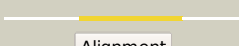
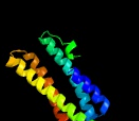
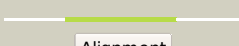

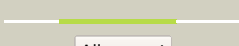

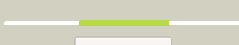
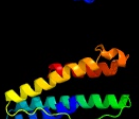




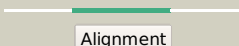

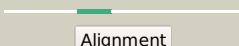

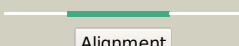

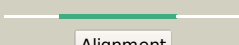

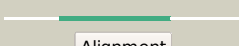
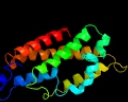
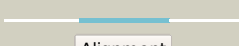
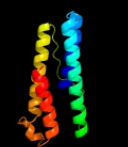


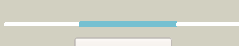

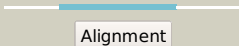
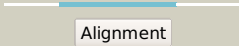

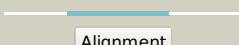
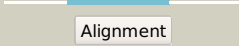
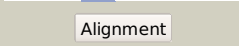
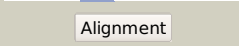
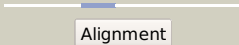


Phyre2

Email	mdejesus@rockefeller.edu
Description	RVBD2777c_(-)_3084495_3085565
Date	Wed Aug 7 12:50:43 BST 2019
Unique Job ID	c8ea8674841af553

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	d1rcwa_	 Alignment		95.8	11	Fold: Heme oxygenase-like Superfamily: Heme oxygenase-like Family: PqqC-like
2	c3chtA_	 Alignment		95.5	17	PDB header: oxidoreductase Chain: A: PDB Molecule: p-aminobenzoate n-oxygenase; PDBTitle: crystal structure of di-iron aurf with partially bound ligand
3	c5hyhA_	 Alignment		93.4	16	PDB header: metal binding protein Chain: A: PDB Molecule: uncharacterized protein; PDBTitle: cmlI (chemically reduced state), arylamine oxygenase of2 chloramphenicol biosynthetic pathway
4	d2fzfa1	 Alignment		90.6	12	Fold: Ferritin-like Superfamily: Ferritin-like Family: Ferritin
5	c5olkD_	 Alignment		79.0	12	PDB header: oxidoreductase Chain: D: PDB Molecule: ribonucleoside-diphosphate reductase, beta subunit 1; PDBTitle: crystal structure of the atp-cone-containing nrdb from2 leeuwenhoekiiella blandensis
6	c2o1zA_	 Alignment		78.7	16	PDB header: oxidoreductase Chain: A: PDB Molecule: ribonucleotide reductase subunit r2; PDBTitle: plasmodium vivax ribonucleotide reductase subunit r2 (pv086155)
7	c3oghB_	 Alignment		72.5	8	PDB header: structural genomics, unknown function Chain: B: PDB Molecule: protein yciE; PDBTitle: crystal structure of yciE protein from e. coli cft073, a member of2 ferritin-like superfamily of diiron-containing four-helix-bundle3 proteins
8	c4a58B_	 Alignment		61.6	14	PDB header: oxidoreductase Chain: B: PDB Molecule: ribonucleoside-diphosphate reductase small chain; PDBTitle: crystal structure of a monometal state of the2 ribonucleotide-reductase small subunit from epstein-barr virus in3 orthorhombic space group
9	c2rccC_	 Alignment		61.3	12	PDB header: oxidoreductase Chain: C: PDB Molecule: ribonucleoside-diphosphate reductase subunit beta; PDBTitle: crystal structure of putative class i ribonucleotide reductase2 (np_241368.1) from bacillus halodurans at 1.90 a resolution
10	d2fkza1	 Alignment		61.1	8	Fold: Ferritin-like Superfamily: Ferritin-like Family: Ferritin
11	c2vuxB_	 Alignment		58.5	17	PDB header: oxidoreductase Chain: B: PDB Molecule: ribonucleoside-diphosphate reductase subunit m2 b; PDBTitle: human ribonucleotide reductase, subunit m2 b

12	c2edfA	 Alignment		46.9	31	PDB header: contractile protein Chain: A; PDB Molecule: obscurin; PDBTitle: solution structure of the second ig-like domain(2826-2915)2 from human obscurin
13	d1nf4a	 Alignment		44.6	14	Fold: Ferritin-like Superfamily: Ferritin-like Family: Ferritin
14	d2bmob1	 Alignment		42.5	30	Fold: Cystatin-like Superfamily: NTF2-like Family: Ring hydroxylating beta subunit
15	c3bknB	 Alignment		41.0	20	PDB header: metal binding protein Chain: B; PDB Molecule: bacterioferritin; PDBTitle: the structure of mycobacterial bacterioferritin
16	c6cwqA	 Alignment		40.3	15	PDB header: oxidoreductase Chain: A; PDB Molecule: ribonucleotide reductase; PDBTitle: x-ray crystal structure of flavobacterium johnsoniae dimanganese(ii)2 ribonucleotide reductase beta subunit (as-isolated)
17	c5uxqB	 Alignment		40.2	14	PDB header: lyase Chain: B; PDB Molecule: aldehyde deformylating oxygenase; PDBTitle: protein 84 with aldehyde deformylating oxygenase activity from2 sulfobolus tokodaii (monoclinic)
18	c4am4B	 Alignment		38.5	11	PDB header: metal binding protein Chain: B; PDB Molecule: bacterioferritin; PDBTitle: bacterioferritin from blastochloris viridis
19	d2htna1	 Alignment		37.2	15	Fold: Ferritin-like Superfamily: Ferritin-like Family: Ferritin
20	c2vzbA	 Alignment		35.6	16	PDB header: metal transport Chain: A; PDB Molecule: putative bacterioferritin-related protein; PDBTitle: a dodecameric thioferritin in the bacterial domain, characterization2 of the bacterioferritin-related protein from bacteroides fragilis
21	d1jk0b	 Alignment	not modelled	31.8	15	Fold: Ferritin-like Superfamily: Ferritin-like Family: Ribonucleotide reductase-like
22	c4bmtB	 Alignment	not modelled	31.5	10	PDB header: oxidoreductase Chain: B; PDB Molecule: ribonucleoside-diphosphate reductase subunit beta; PDBTitle: crystal structure of ribonucleotide reductase di-iron nrdf2 from bacillus cereus
23	d2p62a1	 Alignment	not modelled	31.5	67	Fold: PH0156-like Superfamily: PH0156-like Family: PH0156-like
24	c3fvbB	 Alignment	not modelled	30.9	16	PDB header: metal binding protein Chain: B; PDB Molecule: bacterioferritin; PDBTitle: crystal structure of ferritin (bacterioferritin) from brucella2 melitensis
25	d1jgca	 Alignment	not modelled	30.5	16	Fold: Ferritin-like Superfamily: Ferritin-like Family: Ferritin
26	c5nv3P	 Alignment	not modelled	29.6	30	PDB header: lyase Chain: P; PDB Molecule: ribulose biphosphate carboxylase small chain 1; PDBTitle: structure of rubisco from rhodobacter sphaeroides in complex with cabp
27	c4etrA	 Alignment	not modelled	29.2	15	PDB header: unknown function Chain: A; PDB Molecule: putative uncharacterized protein; PDBTitle: x-ray structure of pa2169 from pseudomonas aeruginosa
28	d1uzhc1	 Alignment	not modelled	29.1	25	Fold: RuBisCO, small subunit Superfamily: RuBisCO, small subunit Family: RuBisCO, small subunit

29	d3buxb2	Alignment	not modelled	28.9	31	Fold: N-cbl like Superfamily: N-terminal domain of cbl (N-cbl) Family: N-terminal domain of cbl (N-cbl)
30	d2oh3a1	Alignment	not modelled	28.4	11	Fold: Ferritin-like Superfamily: Ferritin-like Family: AMB4284-like
31	d1rbli_	Alignment	not modelled	28.3	30	Fold: RuBisCO, small subunit Superfamily: RuBisCO, small subunit Family: RuBisCO, small subunit
32	c1avoA_	Alignment	not modelled	27.6	11	PDB header: proteasome activator Chain: A: PDB Molecule: 11s regulator; PDBTitle: proteasome activator reg(alpha)
33	d2bo4a1	Alignment	not modelled	27.4	38	Fold: Nucleotide-diphospho-sugar transferases Superfamily: Nucleotide-diphospho-sugar transferases Family: MGS-like
34	c1yfdA_	Alignment	not modelled	27.1	15	PDB header: oxidoreductase Chain: A: PDB Molecule: ribonucleoside-diphosphate reductase 1 beta chain; PDBTitle: crystal structure of the y122h mutant of ribonucleotide reductase r22 protein from e. coli
35	c2p1iA_	Alignment	not modelled	27.0	13	PDB header: oxidoreductase Chain: A: PDB Molecule: ribonucleotide reductase, small chain; PDBTitle: plasmodium yoelii ribonucleotide reductase subunit r2 (py03671)
36	d1bwvs_	Alignment	not modelled	26.7	25	Fold: RuBisCO, small subunit Superfamily: RuBisCO, small subunit Family: RuBisCO, small subunit
37	c1smqD_	Alignment	not modelled	26.1	16	PDB header: oxidoreductase Chain: D: PDB Molecule: ribonucleoside-diphosphate reductase small chain PDBTitle: structure of the ribonucleotide reductase rnr2 homodimer2 from saccharomyces cerevisiae
38	c1r2fB_	Alignment	not modelled	26.0	11	PDB header: oxidoreductase Chain: B: PDB Molecule: protein (ribonucleotide reductase r2); PDBTitle: ribonucleotide reductase r2f protein from salmonella2 typhimurium
39	d1svdm1	Alignment	not modelled	25.7	25	Fold: RuBisCO, small subunit Superfamily: RuBisCO, small subunit Family: RuBisCO, small subunit
40	d1bxni_	Alignment	not modelled	25.6	25	Fold: RuBisCO, small subunit Superfamily: RuBisCO, small subunit Family: RuBisCO, small subunit
41	d1za0a1	Alignment	not modelled	25.6	16	Fold: Ferritin-like Superfamily: Ferritin-like Family: Ribonucleotide reductase-like
42	c5mz2l_	Alignment	not modelled	25.4	25	PDB header: photosynthesis Chain: I: PDB Molecule: rubisco small subunit; PDBTitle: rubisco from thalassiosira antarctica
43	d5easa1	Alignment	not modelled	25.4	10	Fold: alpha/alpha toroid Superfamily: Terpenoid cyclases/Protein prenyltransferases Family: Terpenoid cyclase N-terminal domain
44	c5xx9A_	Alignment	not modelled	24.3	16	PDB header: metal transport Chain: A: PDB Molecule: bacterioferritin; PDBTitle: crystal structure of bacterioferritin
45	c5c05A_	Alignment	not modelled	23.8	10	PDB header: biosynthetic protein Chain: A: PDB Molecule: putative gamma-terpinene synthase; PDBTitle: crystal structure of gamma-terpinene synthase from thymus vulgaris
46	c2ybvN_	Alignment	not modelled	23.5	35	PDB header: lyase Chain: N: PDB Molecule: ribulose biphosphate carboxylase small subunit; PDBTitle: structure of rubisco from thermosynechococcus elongatus
47	c5w7dA_	Alignment	not modelled	22.9	46	PDB header: hydrolase Chain: A: PDB Molecule: acyloxyacyl hydrolase; PDBTitle: murine acyloxyacyl hydrolase (aoah), s262a mutant
48	d1w68a_	Alignment	not modelled	22.7	18	Fold: Ferritin-like Superfamily: Ferritin-like Family: Ribonucleotide reductase-like
49	c2lnhA_	Alignment	not modelled	22.7	33	PDB header: signaling protein/protein binding Chain: A: PDB Molecule: neural wiskott-aldrich syndrome protein; PDBTitle: enterohaemorrhagic e. coli (ehec) exploits a tryptophan switch to2 hijack host f-actin assembly
50	d1o7nb_	Alignment	not modelled	22.6	24	Fold: Cystatin-like Superfamily: NTF2-like Family: Ring hydroxylating beta subunit
51	d1r2fa_	Alignment	not modelled	22.4	11	Fold: Ferritin-like Superfamily: Ferritin-like Family: Ribonucleotide reductase-like
52	c2v43A_	Alignment	not modelled	22.2	31	PDB header: regulator Chain: A: PDB Molecule: sigma-e factor regulatory protein rseb; PDBTitle: crystal structure of rseb: a sensor for periplasmic stress2 response in e. coli
53	c2kz9A_	Alignment	not modelled	21.5	33	PDB header: proton transport Chain: A: PDB Molecule: v-type proton atpase subunit e; PDBTitle: structure of e1-69 of yeast v-atpase
54	c4n83F_	Alignment	not modelled	21.0	8	PDB header: oxidoreductase Chain: F: PDB Molecule: ribonucleoside-diphosphate reductase subunit beta; PDBTitle: x-ray crystal structure of streptococcus sanguinis dimanganese(ii)-2 nrdf

55	c5w78B_	Alignment	not modelled	20.2	46	PDB header: hydrolase Chain: B: PDB Molecule: acyloxyacyl hydrolase; PDBTitle: human acyloxyacyl hydrolase (aoah), proteolytically processed
56	d1vjxa_	Alignment	not modelled	19.9	15	Fold: Ferritin-like Superfamily: Ferritin-like Family: Ferritin
57	d1y71a1	Alignment	not modelled	19.9	21	Fold: SH3-like barrel Superfamily: Kinase-associated protein B-like Family: Kinase-associated protein B-like
58	c2qzA_	Alignment	not modelled	19.4	25	PDB header: ligase Chain: A: PDB Molecule: ubiquitin conjugation factor e4; PDBTitle: structure of the yeast u-box-containing ubiquitin ligase2 ufd2p
59	d1ir1s_	Alignment	not modelled	19.3	30	Fold: RuBisCO, small subunit Superfamily: RuBisCO, small subunit Family: RuBisCO, small subunit
60	d1vs5o1	Alignment	not modelled	18.7	20	Fold: S15/NS1 RNA-binding domain Superfamily: S15/NS1 RNA-binding domain Family: Ribosomal protein S15
61	c5n5eM_	Alignment	not modelled	18.6	11	PDB header: oxidoreductase Chain: M: PDB Molecule: pfc_05175; PDBTitle: crystal structure of encapsulated ferritin domain from pyrococcus2 furiosus pfc_05175
62	d1a32a_	Alignment	not modelled	18.4	18	Fold: S15/NS1 RNA-binding domain Superfamily: S15/NS1 RNA-binding domain Family: Ribosomal protein S15
63	c5o5jO_	Alignment	not modelled	18.4	33	PDB header: ribosome Chain: O: PDB Molecule: 30s ribosomal protein s15; PDBTitle: structure of the 30s small ribosomal subunit from mycobacterium2 smegmatis
64	c3q4nA_	Alignment	not modelled	18.1	12	PDB header: unknown function Chain: A: PDB Molecule: uncharacterized protein mj0754; PDBTitle: crystal structure of hypothetical protein mj0754 from methanococcus2 jannaschii dsm 2661
65	c3ulwA_	Alignment	not modelled	17.9	27	PDB header: ribosomal protein Chain: A: PDB Molecule: 30s ribosomal protein s15; PDBTitle: 30s ribosomal protein s15 from campylobacter jejuni
66	d1kuqa_	Alignment	not modelled	17.6	24	Fold: S15/NS1 RNA-binding domain Superfamily: S15/NS1 RNA-binding domain Family: Ribosomal protein S15
67	c3aagA_	Alignment	not modelled	17.4	47	PDB header: transferase Chain: A: PDB Molecule: general glycosylation pathway protein; PDBTitle: crystal structure of c. jejuni pglb c-terminal domain
68	c1h0oA_	Alignment	not modelled	17.3	16	PDB header: oxidoreductase Chain: A: PDB Molecule: ribonucleoside-diphosphate reductase; PDBTitle: cobalt substitution of mouse r2 ribonucleotide reductase to2 model the reactive diferrous state
69	d1g1xb_	Alignment	not modelled	16.6	27	Fold: S15/NS1 RNA-binding domain Superfamily: S15/NS1 RNA-binding domain Family: Ribosomal protein S15
70	d1uzra_	Alignment	not modelled	15.8	11	Fold: Ferritin-like Superfamily: Ferritin-like Family: Ribonucleotide reductase-like
71	d1gk8i_	Alignment	not modelled	15.7	25	Fold: RuBisCO, small subunit Superfamily: RuBisCO, small subunit Family: RuBisCO, small subunit
72	c2p0vA_	Alignment	not modelled	15.5	19	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: hypothetical protein bt3781; PDBTitle: crystal structure of bt3781 protein from bacteroides thetaiotaomicron,2 northeast structural genomics target btr58
73	d2p0va1	Alignment	not modelled	15.5	19	Fold: alpha/alpha toroid Superfamily: Six-hairpin glycosidases Family: CPF0428-like
74	d2v6ai1	Alignment	not modelled	15.4	25	Fold: RuBisCO, small subunit Superfamily: RuBisCO, small subunit Family: RuBisCO, small subunit
75	c3bbnO_	Alignment	not modelled	15.2	12	PDB header: ribosome Chain: O: PDB Molecule: ribosomal protein s15; PDBTitle: homology model for the spinach chloroplast 30s subunit fitted to 9.4a2 cryo-em map of the 70s chlororibosome.
76	d1smsa_	Alignment	not modelled	15.0	13	Fold: Ferritin-like Superfamily: Ferritin-like Family: Ribonucleotide reductase-like
77	c2n5IA_	Alignment	not modelled	14.8	22	PDB header: hydrolase Chain: A: PDB Molecule: ribonuclease zc3h12a; PDBTitle: regnase-1 c-terminal domain
78	c6d9fA_	Alignment	not modelled	14.5	18	PDB header: lyase Chain: A: PDB Molecule: putative vimb homolog; PDBTitle: protein 60 with aldehyde deformylating oxidase activity from2 kitasatospora setae
79	d1jk0a_	Alignment	not modelled	14.5	14	Fold: Ferritin-like Superfamily: Ferritin-like Family: Ribonucleotide reductase-like
80	d1wdds_	Alignment	not modelled	14.3	15	Fold: RuBisCO, small subunit Superfamily: RuBisCO, small subunit Family: RuBisCO, small subunit
81	c1yuzB_	Alignment	not modelled	14.3	13	PDB header: oxidoreductase Chain: B: PDB Molecule: nigerythrin; PDBTitle: partially reduced state of nigerythrin

82	c3ddeB_	Alignment	not modelled	14.2	10	PDB header: unknown function Chain: B: PDB Molecule: tena/thi-4 protein, domain of unknown function with a heme PDBTitle: crystal structure of a domain of unknown function with a heme2 oxygenase-like fold (sden_3740) from shewanella denitrificans os2173 at 2.30 a resolution
83	d1n1ba1	Alignment	not modelled	14.1	12	Fold: alpha/alpha toroid Superfamily: Terpenoid cyclases/Protein prenyltransferases Family: Terpenoid cyclase N-terminal domain
84	c4jkmB_	Alignment	not modelled	13.8	21	PDB header: hydrolase Chain: B: PDB Molecule: beta-glucuronidase; PDBTitle: crystal structure of clostridium perfringens beta-glucuronidase
85	c3g4dB_	Alignment	not modelled	13.8	25	PDB header: lyase Chain: B: PDB Molecule: (+)-delta-cadinene synthase isozyme xc1; PDBTitle: crystal structure of (+)-delta-cadinene synthase from gossypium2 arboreum and evolutionary divergence of metal binding motifs for3 catalysis
86	c1q3jA_	Alignment	not modelled	13.8	67	PDB header: antifungal protein Chain: A: PDB Molecule: alo3; PDBTitle: solution structure of alo3: a new knottin-type antifungal peptide from2 the insect acrocinus longimanus
87	d1q3ja_	Alignment	not modelled	13.8	67	Fold: Knottins (small inhibitors, toxins, lectins) Superfamily: Gurmarin-like Family: Antifungal peptide
88	c3n0fA_	Alignment	not modelled	13.7	19	PDB header: lyase Chain: A: PDB Molecule: isoprene synthase; PDBTitle: crystal structure of isoprene synthase from grey poplar leaves2 (populus x canescens)
89	c1hx9A_	Alignment	not modelled	13.4	13	PDB header: lyase Chain: A: PDB Molecule: 5-epi-aristolochene synthase; PDBTitle: crystal structure of teas w273s form 1
90	d8rucj_	Alignment	not modelled	13.4	30	Fold: RuBisCO, small subunit Superfamily: RuBisCO, small subunit Family: RuBisCO, small subunit
91	d1uzdc1	Alignment	not modelled	13.3	25	Fold: RuBisCO, small subunit Superfamily: RuBisCO, small subunit Family: RuBisCO, small subunit
92	c5sv6A_	Alignment	not modelled	13.3	16	PDB header: unknown function Chain: A: PDB Molecule: extracellular solute-binding protein, family 3; PDBTitle: crystal structure of mxaj from methlophaga aminisulfidorans mpt
93	d2ib0a1	Alignment	not modelled	13.2	9	Fold: Ferritin-like Superfamily: Ferritin-like Family: Rv2844-like
94	c2ib0A_	Alignment	not modelled	13.2	9	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: conserved hypothetical alanine rich protein; PDBTitle: crystal structure of a conserved hypothetical protein, rv2844, from2 mycobacterium tuberculosis
95	d1ej7s_	Alignment	not modelled	13.1	25	Fold: RuBisCO, small subunit Superfamily: RuBisCO, small subunit Family: RuBisCO, small subunit
96	d1z72a1	Alignment	not modelled	12.5	9	Fold: Heme oxygenase-like Superfamily: Heme oxygenase-like Family: TENA/THI-4
97	c1v5vA_	Alignment	not modelled	12.4	33	PDB header: transferase Chain: A: PDB Molecule: aminomethyltransferase; PDBTitle: crystal structure of a component of glycine cleavage system: t-protein2 from pyrococcus horikoshii ot3 at 1.5 a resolution
98	c2gu1A_	Alignment	not modelled	12.4	27	PDB header: hydrolase Chain: A: PDB Molecule: zinc peptidase; PDBTitle: crystal structure of a zinc containing peptidase from2 vibrio cholerae
99	d3dhza1	Alignment	not modelled	12.2	13	Fold: Ferritin-like Superfamily: Ferritin-like Family: Ribonucleotide reductase-like