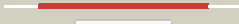



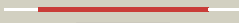


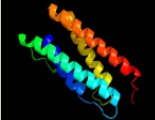



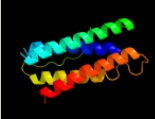





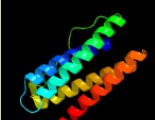



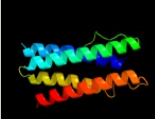


Phyre2

Email	mdejesus@rockefeller.edu
Description	RVBD2844 (-)_3150723_3151211
Date	Wed Aug 7 12:50:51 BST 2019
Unique Job ID	08b41d8b7115c7c0

Detailed template
information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	d2ib0a1	 Alignment		100.0	100	Fold: Ferritin-like Superfamily: Ferritin-like Family: Rv2844-like
2	c2ib0A_	 Alignment		100.0	100	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
3	c2clbP_	 Alignment		99.5	18	PDB header: metal binding protein Chain: P: PDB Molecule: dps-like protein; PDBTitle: the structure of the dps-like protein from sulfobolus2 solfataricus reveals a bacterioferritin-like di-metal3 binding site within a dps-like dodecameric assembly
4	d2oh3a1	 Alignment		99.4	13	Fold: Ferritin-like Superfamily: Ferritin-like Family: AMB4284-like
5	c2vzbA_	 Alignment		99.3	12	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
6	c3gvyC_	 Alignment		99.2	12	PDB header: metal binding protein Chain: C: PDB Molecule: bacterioferritin; PDBTitle: crystal structure of bacterioferritin from r.sphaeroides
7	d2fkza1	 Alignment		99.2	13	Fold: Ferritin-like Superfamily: Ferritin-like Family: Ferritin
8	d1nf4a_	 Alignment		99.1	10	Fold: Ferritin-like Superfamily: Ferritin-like Family: Ferritin
9	c2qqyA_	 Alignment		99.1	11	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: sigma b operon; PDBTitle: crystal structure of ferritin like, diiron-carboxylate proteins from2 bacillus anthracis str. ames
10	c3bknB_	 Alignment		99.0	8	PDB header: metal binding protein Chain: B: PDB Molecule: bacterioferritin; PDBTitle: the structure of mycobacterial bacterioferritin
11	c5xx9A_	 Alignment		99.0	10	PDB header: metal transport Chain: A: PDB Molecule: bacterioferritin; PDBTitle: crystal structure of bacterioferritin

12	c3fvbB_	Alignment		99.0	11	PDB header: metal binding protein Chain: B: PDB Molecule: bacterioferritin; PDBTitle: crystal structure of ferritin (bacterioferritin) from brucella2 melitensis
13	d2htna1	Alignment		99.0	14	Fold: Ferritin-like Superfamily: Ferritin-like Family: Ferritin
14	d1jgca_	Alignment		99.0	11	Fold: Ferritin-like Superfamily: Ferritin-like Family: Ferritin
15	d2fzfa1	Alignment		99.0	8	Fold: Ferritin-like Superfamily: Ferritin-like Family: Ferritin
16	c4am4B_	Alignment		99.0	6	PDB header: metal binding protein Chain: B: PDB Molecule: bacterioferritin; PDBTitle: bacterioferritin from blastochloris viridis
17	d1vjxa_	Alignment		98.9	10	Fold: Ferritin-like Superfamily: Ferritin-like Family: Ferritin
18	c3r2rA_	Alignment		98.9	14	PDB header: metal binding protein Chain: A: PDB Molecule: bacterioferritin; PDBTitle: 1.65a resolution structure of iron soaked ftna from pseudomonas2 aeruginosa (ph 6.0)
19	c4r42B_	Alignment		98.8	16	PDB header: oxidoreductase Chain: B: PDB Molecule: alr3090 protein; PDBTitle: crystal structure of katb, a manganese catalase from anabaena pcc7120
20	c3e6sD_	Alignment		98.7	12	PDB header: oxidoreductase Chain: D: PDB Molecule: ferritin; PDBTitle: crystal structure of ferritin soaked with iron from pseudo-nitzschia2 multiseris
21	d1j30a_	Alignment	not modelled	98.6	15	Fold: Ferritin-like Superfamily: Ferritin-like Family: Ferritin
22	d1lkoa1	Alignment	not modelled	98.6	11	Fold: Ferritin-like Superfamily: Ferritin-like Family: Ferritin
23	d1vlga_	Alignment	not modelled	98.6	15	Fold: Ferritin-like Superfamily: Ferritin-like Family: Ferritin
24	d1krqa_	Alignment	not modelled	98.6	13	Fold: Ferritin-like Superfamily: Ferritin-like Family: Ferritin
25	c4etrA_	Alignment	not modelled	98.5	14	PDB header: unknown function Chain: A: PDB Molecule: putative uncharacterized protein; PDBTitle: x-ray structure of pa2169 from pseudomonas aeruginosa
26	c4di0B_	Alignment	not modelled	98.5	15	PDB header: oxidoreductase Chain: B: PDB Molecule: rubrerythrin; PDBTitle: the structure of rubrerythrin from burkholderia pseudomallei
27	d1s3qa1	Alignment	not modelled	98.5	14	Fold: Ferritin-like Superfamily: Ferritin-like Family: Ferritin
28	c5ouwa_	Alignment	not modelled	98.5	15	PDB header: metal binding protein Chain: A: PDB Molecule: ferritin; PDBTitle: metal free structure of synftn
						PDB header: structural genomics, unknown function Chain: B: PDB Molecule: protein ycie;

29	c3oghB	Alignment	not modelled	98.5	10	PDBTitle: crystal structure of ycie protein from e. coli cft073, a member of2 ferritin-like superfamily of diiron-containing four-helix-bundle3 proteins
30	c2jd8C	Alignment	not modelled	98.5	18	PDB header: metal transport Chain: C: PDB Molecule: ferritin homolog; PDBTitle: crystal structure of the zn-soaked ferritin from the2 hyperthermophilic archaeal anaerobe pyrococcus furiosus
31	c3qz3A	Alignment	not modelled	98.5	13	PDB header: oxidoreductase Chain: A: PDB Molecule: ferritin; PDBTitle: the crystal structure of ferritin from vibrio cholerae o1 biovar el2 tor str. n16961
32	c2c41K	Alignment	not modelled	98.4	11	PDB header: iron-binding/oxidation protein Chain: K: PDB Molecule: dps family dna-binding stress response protein; PDBTitle: x-ray structure of dps from thermosynechococcus elongatus
33	c2c6rA	Alignment	not modelled	98.4	13	PDB header: dna-binding protein Chain: A: PDB Molecule: dna-binding stress response protein, dps family; PDBTitle: fe-soaked crystal structure of the dps92 from deinococcus2 radiodurans
34	d1o9ra	Alignment	not modelled	98.4	13	Fold: Ferritin-like Superfamily: Ferritin-like Family: Ferritin
35	d1vela	Alignment	not modelled	98.4	12	Fold: Ferritin-like Superfamily: Ferritin-like Family: Ferritin
36	c4cmyN	Alignment	not modelled	98.4	14	PDB header: metal transport Chain: N: PDB Molecule: ferritin; PDBTitle: chlorobium tepidum ferritin
37	d1yv1a1	Alignment	not modelled	98.4	10	Fold: Ferritin-like Superfamily: Ferritin-like Family: Ferritin
38	c2chpC	Alignment	not modelled	98.4	13	PDB header: dna binding protein Chain: C: PDB Molecule: metalloregulation dna-binding stress protein; PDBTitle: crystal structure of the dodecameric ferritin mrga from b. subtilis2 168
39	c3qd8M	Alignment	not modelled	98.4	14	PDB header: metal binding protein Chain: M: PDB Molecule: probable bacterioferritin bfrb; PDBTitle: crystal structure of mycobacterium tuberculosis bfrb
40	d1jiga	Alignment	not modelled	98.4	11	Fold: Ferritin-like Superfamily: Ferritin-like Family: Ferritin
41	d1yuza1	Alignment	not modelled	98.4	11	Fold: Ferritin-like Superfamily: Ferritin-like Family: Ferritin
42	c5hjhB	Alignment	not modelled	98.3	14	PDB header: metal binding protein Chain: B: PDB Molecule: ferritin, dps family protein; PDBTitle: dps4 from nostoc punctiforme in complex with fe ions
43	c3bvkC	Alignment	not modelled	98.3	14	PDB header: oxidoreductase Chain: C: PDB Molecule: ferritin; PDBTitle: structural basis for the iron uptake mechanism of helicobacter pylori2 ferritin
44	d1jj5a	Alignment	not modelled	98.3	10	Fold: Ferritin-like Superfamily: Ferritin-like Family: Ferritin
45	d1euma	Alignment	not modelled	98.3	11	Fold: Ferritin-like Superfamily: Ferritin-like Family: Ferritin
46	d1tjoa	Alignment	not modelled	98.3	14	Fold: Ferritin-like Superfamily: Ferritin-like Family: Ferritin
47	c2vxxB	Alignment	not modelled	98.1	12	PDB header: dna-binding protein Chain: B: PDB Molecule: starvation induced dna binding protein; PDBTitle: x-ray structure of dpsa from thermosynechococcus elongatus
48	c4cy9A	Alignment	not modelled	98.1	16	PDB header: iron-binding protein Chain: A: PDB Molecule: dpsa; PDBTitle: dpsa14 from streptomyces coelicolor
49	c2d5kC	Alignment	not modelled	98.1	9	PDB header: metal binding protein Chain: C: PDB Molecule: dps family protein; PDBTitle: crystal structure of dps from staphylococcus aureus
50	d1dpsa	Alignment	not modelled	98.1	10	Fold: Ferritin-like Superfamily: Ferritin-like Family: Ferritin
51	c1dvbA	Alignment	not modelled	98.1	13	PDB header: electron transport Chain: A: PDB Molecule: rubrerythrin; PDBTitle: rubrerythrin
52	c3iq1A	Alignment	not modelled	98.0	10	PDB header: metal transport Chain: A: PDB Molecule: dps family protein; PDBTitle: crystal structure of dps protein from vibrio cholerae o1, a member of2 a broad superfamily of ferritin-like diiron-carboxylate proteins
53	c2wlaA	Alignment	not modelled	98.0	17	PDB header: oxidoreductase Chain: A: PDB Molecule: dps-like peroxide resistance protein; PDBTitle: streptococcus pyogenes dpr
54	c4cybl	Alignment	not modelled	97.9	13	PDB header: iron binding protein Chain: I: PDB Molecule: putative dna protection protein; PDBTitle: dpsc from streptomyces coelicolor
						PDB header: metal binding protein

55	c2xgwA	Alignment	not modelled	97.9	17	Chain: A: PDB Molecule: peroxide resistance protein; PDBTitle: zinc-bound crystal structure of streptococcus pyogenes dpr
56	c1yuzB	Alignment	not modelled	97.9	12	PDB header: oxidoreductase Chain: B: PDB Molecule: nigerythrin; PDBTitle: partially reduced state of nigerythrin
57	d1lb3a	Alignment	not modelled	97.9	15	Fold: Ferritin-like Superfamily: Ferritin-like Family: Ferritin
58	c6a4uD	Alignment	not modelled	97.8	12	PDB header: metal binding protein Chain: D: PDB Molecule: ferritin; PDBTitle: the first crystal structure of crustacean ferritin that is a hybrid2 type of h and l ferritin
59	c5wpmA	Alignment	not modelled	97.8	13	PDB header: oxidoreductase Chain: A: PDB Molecule: ferritin; PDBTitle: zn-bound structure of chaetopterus variopedatus ferritin
60	c3q4nA	Alignment	not modelled	97.8	13	PDB header: unknown function Chain: A: PDB Molecule: uncharacterized protein mj0754; PDBTitle: crystal structure of hypothetical protein mj0754 from methanococcus2 jannaschii dsm 2661
61	d2bk6a1	Alignment	not modelled	97.7	11	Fold: Ferritin-like Superfamily: Ferritin-like Family: Ferritin
62	d2za7a1	Alignment	not modelled	97.7	17	Fold: Ferritin-like Superfamily: Ferritin-like Family: Ferritin
63	d1jkva	Alignment	not modelled	97.6	13	Fold: Ferritin-like Superfamily: Ferritin-like Family: Manganese catalase (T-catalase)
64	d1nnqa1	Alignment	not modelled	97.6	15	Fold: Ferritin-like Superfamily: Ferritin-like Family: Ferritin
65	c2z90D	Alignment	not modelled	97.5	11	PDB header: dna binding protein Chain: D: PDB Molecule: starvation-inducible dna-binding protein or fine PDBTitle: crystal structure of the second dps from mycobacterium2 smegmatis
66	d1n1qa	Alignment	not modelled	97.5	11	Fold: Ferritin-like Superfamily: Ferritin-like Family: Ferritin
67	d1umna	Alignment	not modelled	97.5	13	Fold: Ferritin-like Superfamily: Ferritin-like Family: Ferritin
68	d1r03a	Alignment	not modelled	97.4	11	Fold: Ferritin-like Superfamily: Ferritin-like Family: Ferritin
69	c3qhbA	Alignment	not modelled	97.4	13	PDB header: metal transport Chain: A: PDB Molecule: symerythrin; PDBTitle: crystal structure of oxidized symerythrin from cyanophora paradoxa
70	d2ceia1	Alignment	not modelled	97.4	13	Fold: Ferritin-like Superfamily: Ferritin-like Family: Ferritin
71	d2fjca1	Alignment	not modelled	97.3	15	Fold: Ferritin-like Superfamily: Ferritin-like Family: Ferritin
72	c3kwoA	Alignment	not modelled	97.3	10	PDB header: oxidoreductase Chain: A: PDB Molecule: putative bacterioferritin; PDBTitle: crystal structure of putative bacterioferritin from2 campylobacter jejuni
73	c2hr5B	Alignment	not modelled	97.3	13	PDB header: metal binding protein Chain: B: PDB Molecule: rubrerythrin; PDBTitle: pf1283- rubrerythrin from pyrococcus furiosus iron bound form
74	c2f7nA	Alignment	not modelled	97.2	12	PDB header: dna binding protein Chain: A: PDB Molecule: dna-binding stress response protein, dps family; PDBTitle: structure of d. radiodurans dps-1
75	c5lhbG	Alignment	not modelled	97.2	10	PDB header: transport protein Chain: G: PDB Molecule: caip; PDBTitle: crystal structure of helicobacter cinaedi caip
76	d1mfra	Alignment	not modelled	97.0	15	Fold: Ferritin-like Superfamily: Ferritin-like Family: Ferritin
77	c3vnxA	Alignment	not modelled	97.0	17	PDB header: oxidoreductase Chain: A: PDB Molecule: ferritin; PDBTitle: crystal structure of ferritin from multicellular green algae, ulva2 pertusa.
78	d1rcda	Alignment	not modelled	97.0	13	Fold: Ferritin-like Superfamily: Ferritin-like Family: Ferritin
79	d2yw6a1	Alignment	not modelled	96.9	12	Fold: Ferritin-like Superfamily: Ferritin-like Family: Ferritin
80	c2yjkF	Alignment	not modelled	96.8	11	PDB header: metal-binding protein Chain: F: PDB Molecule: afp; PDBTitle: structure of dps from microbacterium arborescens in the2 high iron form
81	d1ji4a	Alignment	not modelled	96.7	9	Fold: Ferritin-like Superfamily: Ferritin-like Family: Ferritin

82	c2pybC_	Alignment	not modelled	96.2	9	PDB header: metal transport Chain: C: PDB Molecule: neutrophil activating protein; PDBTitle: napa protein from borrelia burgdorferi
83	c5n5eM_	Alignment	not modelled	96.1	13	PDB header: oxidoreductase Chain: M: PDB Molecule: pfc_05175; PDBTitle: crystal structure of encapsulated ferritin domain from pyrococcus2 furiosus pfc_05175
84	d1bg7a_	Alignment	not modelled	95.9	14	Fold: Ferritin-like Superfamily: Ferritin-like Family: Ferritin
85	d2gs4a1	Alignment	not modelled	95.0	11	Fold: Ferritin-like Superfamily: Ferritin-like Family: Ycif-like
86	d2gyqa1	Alignment	not modelled	94.3	12	Fold: Ferritin-like Superfamily: Ferritin-like Family: Ycif-like
87	d1za0a1	Alignment	not modelled	94.1	9	Fold: Ferritin-like Superfamily: Ferritin-like Family: Ribonucleotide reductase-like
88	c5ffbA_	Alignment	not modelled	93.8	6	PDB header: metal binding protein Chain: A: PDB Molecule: copm; PDBTitle: copm in the apo form
89	c3a9qR_	Alignment	not modelled	93.7	15	PDB header: oxidoreductase Chain: R: PDB Molecule: PDBTitle: crystal structure analysis of e173a variant of the soybean2 ferritin sfer4
90	d1z6om1	Alignment	not modelled	93.6	18	Fold: Ferritin-like Superfamily: Ferritin-like Family: Ferritin
91	c5da5R_	Alignment	not modelled	92.3	14	PDB header: oxidoreductase Chain: R: PDB Molecule: rru_a0973; PDBTitle: crystal structure of rhodospirillum rubrum rru_a0973
92	c5n5fC_	Alignment	not modelled	92.1	17	PDB header: oxidoreductase Chain: C: PDB Molecule: encapsulated ferritin; PDBTitle: crystal structure of haliangium ochraceum encapsulated ferritin
93	c3hiuB_	Alignment	not modelled	91.8	17	PDB header: structural genomics, unknown function Chain: B: PDB Molecule: uncharacterized protein; PDBTitle: the crystal structure of protein (xcc3681) from xanthomonas2 campestris pv. campestris str. atcc 33913
94	c2qf9B_	Alignment	not modelled	90.1	16	PDB header: structural genomics, unknown function Chain: B: PDB Molecule: putative secreted protein; PDBTitle: crystal structure of putative secreted protein duf305 from2 streptomyces coelicolor
95	d1zpya1	Alignment	not modelled	88.6	14	Fold: Ferritin-like Superfamily: Ferritin-like Family: half-ferritin
96	c4a25A_	Alignment	not modelled	88.2	13	PDB header: metal binding protein Chain: A: PDB Molecule: ferritin dps family protein; PDBTitle: x-ray structure dps from kineococcus radiotolerans in2 complex with mn (ii) ions.
97	d2cwlal	Alignment	not modelled	88.0	16	Fold: Ferritin-like Superfamily: Ferritin-like Family: Manganese catalase (T-catalase)
98	c3bt5A_	Alignment	not modelled	87.4	15	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: uncharacterized protein duf305; PDBTitle: crystal structure of duf305 fragment from deinococcus radiodurans
99	d1z6oa1	Alignment	not modelled	73.5	13	Fold: Ferritin-like Superfamily: Ferritin-like Family: Ferritin
100	c1u7mB_	Alignment	not modelled	65.7	14	PDB header: de novo protein Chain: B: PDB Molecule: four-helix bundle model; PDBTitle: solution structure of a diiron protein model: due ferri(ii)2 turn mutant
101	d1afra_	Alignment	not modelled	61.0	12	Fold: Ferritin-like Superfamily: Ferritin-like Family: Ribonucleotide reductase-like
102	c3hl1B_	Alignment	not modelled	46.5	19	PDB header: metal binding protein Chain: B: PDB Molecule: ferritin like protein; PDBTitle: crystal structure of a ferritin like protein (cc_0557) from2 caulobacter vibrioides at 1.95 a resolution
103	c1lt1G_	Alignment	not modelled	41.7	19	PDB header: de novo protein Chain: G: PDB Molecule: l13g-df1; PDBTitle: sliding helix induced change of coordination geometry in a2 model di-mn(ii) protein
104	c5ux1D_	Alignment	not modelled	28.8	18	PDB header: lyase Chain: D: PDB Molecule: trna-(ms(2)io(6)a)-hydroxylase-like; PDBTitle: protein 43 with aldehyde deformylating oxygenase activity from2 synechococcus
105	c3qguB_	Alignment	not modelled	23.1	8	PDB header: transferase Chain: B: PDB Molecule: ll-diaminopimelate aminotransferase; PDBTitle: l,l-diaminopimelate aminotransferase from chalydomonas reinhardtii
106	c6iz2A_	Alignment	not modelled	22.3	28	PDB header: unknown function Chain: A: PDB Molecule: dinb/yfit family protein; PDBTitle: crystal structure of dinb/yfit protein dr0053 from d. radiodurans r1