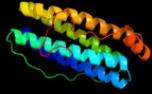
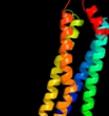
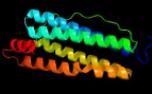
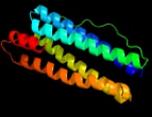
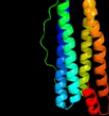
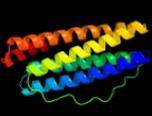
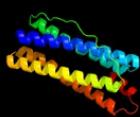
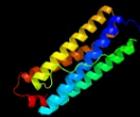


Phyre2

Email mdejesus@rockefeller.edu
 Description RVBD3841_(bfrB)_4314356_4314901
 Date Sat Aug 10 22:05:02 BST 2019
 Unique Job ID 801fcc0355aabfeb

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c3qd8M_	 Alignment		100.0	100	PDB header: metal binding protein Chain: M: PDB Molecule: probable bacterioferritin bfrb; PDBTitle: crystal structure of mycobacterium tuberculosis bfrb
2	c3vnxA_	 Alignment		100.0	29	PDB header: oxidoreductase Chain: A: PDB Molecule: ferritin; PDBTitle: crystal structure of ferritin from multicellular green algae, ulva2 pertusa.
3	c3a9qR_	 Alignment		100.0	25	PDB header: oxidoreductase Chain: R: PDB Molecule: PDBTitle: crystal structure analysis of e173a variant of the soybean2 ferritin sfer4
4	c4cmyN_	 Alignment		100.0	25	PDB header: metal transport Chain: N: PDB Molecule: ferritin; PDBTitle: chlorobium tepidum ferritin
5	c2jd8C_	 Alignment		100.0	26	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
6	c3qz3A_	 Alignment		100.0	22	PDB header: oxidoreductase Chain: A: PDB Molecule: ferritin; PDBTitle: the crystal structure of ferritin from vibrio cholerae o1 biovar el2 tor str. n16961
7	d1s3qa1	 Alignment		100.0	28	Fold: Ferritin-like Superfamily: Ferritin-like Family: Ferritin
8	c5ouuA_	 Alignment		100.0	21	PDB header: metal binding protein Chain: A: PDB Molecule: ferritin; PDBTitle: metal free structure of synftn
9	c3bvkC_	 Alignment		100.0	19	PDB header: oxidoreductase Chain: C: PDB Molecule: ferritin; PDBTitle: structural basis for the iron uptake mechanism of helicobacter pylori2 ferritin
10	d1euma_	 Alignment		100.0	21	Fold: Ferritin-like Superfamily: Ferritin-like Family: Ferritin
11	d2ceia1	 Alignment		100.0	24	Fold: Ferritin-like Superfamily: Ferritin-like Family: Ferritin

12	d1lb3a_	Alignment		100.0	19	Fold: Ferritin-like Superfamily: Ferritin-like Family: Ferritin
13	d1rcda_	Alignment		100.0	23	Fold: Ferritin-like Superfamily: Ferritin-like Family: Ferritin
14	d1r03a_	Alignment		100.0	25	Fold: Ferritin-like Superfamily: Ferritin-like Family: Ferritin
15	d1vlga_	Alignment		100.0	25	Fold: Ferritin-like Superfamily: Ferritin-like Family: Ferritin
16	d1krqa_	Alignment		100.0	23	Fold: Ferritin-like Superfamily: Ferritin-like Family: Ferritin
17	d1z6om1	Alignment		100.0	26	Fold: Ferritin-like Superfamily: Ferritin-like Family: Ferritin
18	d1mfra_	Alignment		100.0	22	Fold: Ferritin-like Superfamily: Ferritin-like Family: Ferritin
19	d2za7a1	Alignment		100.0	19	Fold: Ferritin-like Superfamily: Ferritin-like Family: Ferritin
20	d1z6oa1	Alignment		100.0	18	Fold: Ferritin-like Superfamily: Ferritin-like Family: Ferritin
21	c5wpaA_	Alignment	not modelled	100.0	25	PDB header: oxidoreductase Chain: A: PDB Molecule: ferritin; PDBTitle: zn-bound structure of chaetopterus variopedatus ferritin
22	c6a4uD_	Alignment	not modelled	100.0	25	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
23	c3e6sD_	Alignment	not modelled	100.0	22	PDB header: oxidoreductase Chain: D: PDB Molecule: ferritin; PDBTitle: crystal structure of ferritin soaked with iron from pseudonitzschia2 multiseris
24	d1bg7a_	Alignment	not modelled	100.0	25	Fold: Ferritin-like Superfamily: Ferritin-like Family: Ferritin
25	d1nf4a_	Alignment	not modelled	100.0	15	Fold: Ferritin-like Superfamily: Ferritin-like Family: Ferritin
26	c3r2rA_	Alignment	not modelled	100.0	16	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)
27	d1jgca_	Alignment	not modelled	100.0	21	Fold: Ferritin-like Superfamily: Ferritin-like Family: Ferritin
28	d2htna1	Alignment	not modelled	100.0	19	Fold: Ferritin-like Superfamily: Ferritin-like Family: Ferritin
						PDB header: metal binding protein

29	c4am4B_	Alignment	not modelled	100.0	20	Chain: B: PDB Molecule: bacterioferritin; PDBTitle: bacterioferritin from blastochloris viridis
30	c5xx9A_	Alignment	not modelled	100.0	19	PDB header: metal transport Chain: A: PDB Molecule: bacterioferritin; PDBTitle: crystal structure of bacterioferritin
31	c3gvyC_	Alignment	not modelled	100.0	16	PDB header: metal binding protein Chain: C: PDB Molecule: bacterioferritin; PDBTitle: crystal structure of bacterioferritin from r.sphaeroides
32	c3bknB_	Alignment	not modelled	100.0	21	PDB header: metal binding protein Chain: B: PDB Molecule: bacterioferritin; PDBTitle: the structure of mycobacterial bacterioferritin
33	c3fvbB_	Alignment	not modelled	100.0	18	PDB header: metal binding protein Chain: B: PDB Molecule: bacterioferritin; PDBTitle: crystal structure of ferritin (bacterioferritin) from brucella2 melitensis
34	d2fkza1	Alignment	not modelled	100.0	20	Fold: Ferritin-like Superfamily: Ferritin-like Family: Ferritin
35	c4di0B_	Alignment	not modelled	99.9	22	PDB header: oxidoreductase Chain: B: PDB Molecule: rubrerythrin; PDBTitle: the structure of rubrerythrin from burkholderia pseudomallei
36	d1j30a_	Alignment	not modelled	99.9	18	Fold: Ferritin-like Superfamily: Ferritin-like Family: Ferritin
37	c2qqyA_	Alignment	not modelled	99.9	14	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
38	d1yv1a1	Alignment	not modelled	99.9	14	Fold: Ferritin-like Superfamily: Ferritin-like Family: Ferritin
39	d1lkoa1	Alignment	not modelled	99.9	17	Fold: Ferritin-like Superfamily: Ferritin-like Family: Ferritin
40	c2clbP_	Alignment	not modelled	99.9	17	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
41	c2vzbA_	Alignment	not modelled	99.9	14	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
42	d1yuza1	Alignment	not modelled	99.9	17	Fold: Ferritin-like Superfamily: Ferritin-like Family: Ferritin
43	d1nnqa1	Alignment	not modelled	99.9	19	Fold: Ferritin-like Superfamily: Ferritin-like Family: Ferritin
44	d1o9ra_	Alignment	not modelled	99.9	8	Fold: Ferritin-like Superfamily: Ferritin-like Family: Ferritin
45	c1dvbA_	Alignment	not modelled	99.9	18	PDB header: electron transport Chain: A: PDB Molecule: rubrerythrin; PDBTitle: rubrerythrin
46	c5hjhB_	Alignment	not modelled	99.8	12	PDB header: metal binding protein Chain: B: PDB Molecule: ferritin, dps family protein; PDBTitle: dps4 from nostoc punctiforme in complex with fe ions
47	d1jiga_	Alignment	not modelled	99.8	13	Fold: Ferritin-like Superfamily: Ferritin-like Family: Ferritin
48	c4cybl_	Alignment	not modelled	99.8	11	PDB header: iron binding protein Chain: I: PDB Molecule: putative dna protection protein; PDBTitle: dpsc from streptomyces coelicolor
49	c2c41K_	Alignment	not modelled	99.8	12	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
50	c2vxxB_	Alignment	not modelled	99.8	13	PDB header: dna-binding protein Chain: B: PDB Molecule: starvation induced dna binding protein; PDBTitle: x-ray structure of dpsa from thermosynechococcus elongatus
51	c3iq1A_	Alignment	not modelled	99.8	12	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
52	c2hr5B_	Alignment	not modelled	99.8	19	PDB header: metal binding protein Chain: B: PDB Molecule: rubrerythrin; PDBTitle: pf1283- rubrerythrin from pyrococcus furiosus iron bound form
53	d1ji5a_	Alignment	not modelled	99.8	10	Fold: Ferritin-like Superfamily: Ferritin-like Family: Ferritin
54	c2d5kC_	Alignment	not modelled	99.8	12	PDB header: metal binding protein Chain: C: PDB Molecule: dps family protein; PDBTitle: crystal structure of dps from staphylococcus aureus
						PDB header: oxidoreductase

55	c1yuzB	Alignment	not modelled	99.8	16	Chain: B: PDB Molecule: nigerythrin; PDBTitle: partially reduced state of nigerythrin
56	d1tjoa	Alignment	not modelled	99.8	13	Fold: Ferritin-like Superfamily: Ferritin-like Family: Ferritin
57	c2chpC	Alignment	not modelled	99.8	11	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
58	c4cy9A	Alignment	not modelled	99.7	9	PDB header: iron-binding protein Chain: A: PDB Molecule: dpsa; PDBTitle: dpsa14 from streptomyces coelicolor
59	d2oh3a1	Alignment	not modelled	99.7	20	Fold: Ferritin-like Superfamily: Ferritin-like Family: AMB4284-like
60	d1n1qa	Alignment	not modelled	99.7	11	Fold: Ferritin-like Superfamily: Ferritin-like Family: Ferritin
61	c5lbhG	Alignment	not modelled	99.7	10	PDB header: transport protein Chain: G: PDB Molecule: caip; PDBTitle: crystal structure of helicobacter cinaedi caip
62	c2c6rA	Alignment	not modelled	99.7	10	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
63	d1vela	Alignment	not modelled	99.7	10	Fold: Ferritin-like Superfamily: Ferritin-like Family: Ferritin
64	d1ji4a	Alignment	not modelled	99.7	10	Fold: Ferritin-like Superfamily: Ferritin-like Family: Ferritin
65	c3kwoA	Alignment	not modelled	99.7	10	PDB header: oxidoreductase Chain: A: PDB Molecule: putative bacterioferritin; PDBTitle: crystal structure of putative bacterioferritin from2 campylobacter jejuni
66	d2fjca1	Alignment	not modelled	99.7	9	Fold: Ferritin-like Superfamily: Ferritin-like Family: Ferritin
67	d1lumna	Alignment	not modelled	99.6	11	Fold: Ferritin-like Superfamily: Ferritin-like Family: Ferritin
68	d1dpsa	Alignment	not modelled	99.6	7	Fold: Ferritin-like Superfamily: Ferritin-like Family: Ferritin
69	c2wiaA	Alignment	not modelled	99.6	10	PDB header: oxidoreductase Chain: A: PDB Molecule: dps-like peroxide resistance protein; PDBTitle: streptococcus pyogenes dpr
70	d2bk6a1	Alignment	not modelled	99.6	12	Fold: Ferritin-like Superfamily: Ferritin-like Family: Ferritin
71	c3oghB	Alignment	not modelled	99.6	15	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 ferritine-like superfamily of diiron-containing four-helix-bundle3 proteins
72	c3qhbA	Alignment	not modelled	99.6	16	PDB header: metal transport Chain: A: PDB Molecule: symerythrin; PDBTitle: crystal structure of oxidized symerythrin from cyanophora paradoxa
73	c2f7nA	Alignment	not modelled	99.6	7	PDB header: dna binding protein Chain: A: PDB Molecule: dna-binding stress response protein, dps family; PDBTitle: structure of d. radiodurans dps-1
74	c2z90D	Alignment	not modelled	99.6	9	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
75	c2xgwA	Alignment	not modelled	99.6	10	PDB header: metal binding protein Chain: A: PDB Molecule: peroxide resistance protein; PDBTitle: zinc-bound crystal structure of streptococcus pyogenes dpr
76	c2yjkF	Alignment	not modelled	99.5	6	PDB header: metal-binding protein Chain: F: PDB Molecule: afp; PDBTitle: structure of dps from microbacterium arborescens in the2 high iron form
77	d2yw6a1	Alignment	not modelled	99.5	11	Fold: Ferritin-like Superfamily: Ferritin-like Family: Ferritin
78	c4a25A	Alignment	not modelled	99.5	12	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.
79	c4r42B	Alignment	not modelled	99.5	18	PDB header: oxidoreductase Chain: B: PDB Molecule: alr3090 protein; PDBTitle: crystal structure of katb, a manganese catalase from anabaena pcc7120
80	c2pybC	Alignment	not modelled	99.4	6	PDB header: metal transport Chain: C: PDB Molecule: neutrophil activating protein; PDBTitle: napa protein from borrelia burgdorferi
						Fold: Ferritin-like

81	d2fzfa1	Alignment	not modelled	99.2	15	Superfamily: Ferritin-like Family: Ferritin
82	dlzs3a1	Alignment	not modelled	99.0	14	Fold: Ferritin-like Superfamily: Ferritin-like Family: Ferritin
83	d1vjxa_	Alignment	not modelled	99.0	16	Fold: Ferritin-like Superfamily: Ferritin-like Family: Ferritin
84	d1zuja1	Alignment	not modelled	98.9	16	Fold: Ferritin-like Superfamily: Ferritin-like Family: Ferritin
85	d1jkva_	Alignment	not modelled	98.7	12	Fold: Ferritin-like Superfamily: Ferritin-like Family: Manganese catalase (T-catalase)
86	c2ib0A_	Alignment	not modelled	98.6	13	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
87	d2ib0a1	Alignment	not modelled	98.6	13	Fold: Ferritin-like Superfamily: Ferritin-like Family: Rv2844-like
88	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
89	d2cwa1	Alignment	not modelled	97.7	11	Fold: Ferritin-like Superfamily: Ferritin-like Family: Manganese catalase (T-catalase)
90	c3hiuB_	Alignment	not modelled	97.6	16	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
91	c3q4nA_	Alignment	not modelled	97.5	10	PDB header: unknown function Chain: A: PDB Molecule: uncharacterized protein mj0754; PDBTitle: crystal structure of hypothetical protein mj0754 from methanococcus2 jannaschii dsm 2661
92	c5n5eM_	Alignment	not modelled	97.1	25	PDB header: oxidoreductase Chain: M: PDB Molecule: pfc_05175; PDBTitle: crystal structure of encapsulated ferritin domain from pyrococcus2 furiosus pfc_05175
93	d1afra_	Alignment	not modelled	96.5	15	Fold: Ferritin-like Superfamily: Ferritin-like Family: Ribonucleotide reductase-like
94	d1za0a1	Alignment	not modelled	96.4	19	Fold: Ferritin-like Superfamily: Ferritin-like Family: Ribonucleotide reductase-like
95	c3hl1B_	Alignment	not modelled	96.4	10	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
96	d2gs4a1	Alignment	not modelled	95.7	16	Fold: Ferritin-like Superfamily: Ferritin-like Family: Ycif-like
97	d2gyqa1	Alignment	not modelled	95.0	14	Fold: Ferritin-like Superfamily: Ferritin-like Family: Ycif-like
98	c5n5fC_	Alignment	not modelled	94.4	27	PDB header: oxidoreductase Chain: C: PDB Molecule: encapsulated ferritin; PDBTitle: crystal structure of haliangium ochraceum encapsulated ferritin
99	d1zpya1	Alignment	not modelled	93.7	17	Fold: Ferritin-like Superfamily: Ferritin-like Family: half-ferritin
100	c5da5R_	Alignment	not modelled	91.8	23	PDB header: oxidoreductase Chain: R: PDB Molecule: rru_a0973; PDBTitle: crystal structure of rhodospirillum rubrum rru_a0973
101	c5ux1D_	Alignment	not modelled	91.3	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
102	c3dhiA_	Alignment	not modelled	88.7	10	PDB header: oxidoreductase Chain: A: PDB Molecule: toluene 4-monooxygenase hydroxylase alpha subunit; PDBTitle: crystal structure of reduced toluene 4-monooxygenase hydroxylase2 complexed with effector protein
103	c3fseB_	Alignment	not modelled	88.2	11	PDB header: hydrolase Chain: B: PDB Molecule: two-domain protein containing dj-1/thij/pfpi-like and PDBTitle: crystal structure of a two-domain protein containing dj-1/thij/pfpi-2 like and ferritin-like domains (ava_4496) from anabaena variabilis3 atcc 29413 at 1.90 a resolution
104	d2itba1	Alignment	not modelled	81.0	14	Fold: Ferritin-like Superfamily: Ferritin-like Family: MiaE-like
105	c1u7mB_	Alignment	not modelled	71.7	13	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
106	c3dhhB_	Alignment	not modelled	69.6	11	PDB header: oxidoreductase Chain: B: PDB Molecule: toluene 4-monooxygenase hydroxylase beta subunit; PDBTitle: crystal structure of toluene 4-monooxygenase hydroxylase

107	d2incb1	Alignment	not modelled	68.0	13	Fold: Ferritin-like Superfamily: Ferritin-like Family: Ribonucleotide reductase-like
108	c1lt1G_	Alignment	not modelled	66.6	13	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
109	c4dr0A_	Alignment	not modelled	53.4	12	PDB header: oxidoreductase Chain: A; PDB Molecule: ribonucleoside-diphosphate reductase subunit beta; PDBTitle: crystal structure of bacillus subtilis dimanganese(ii) nrdf
110	c6gp2A_	Alignment	not modelled	52.2	11	PDB header: oxidoreductase Chain: A; PDB Molecule: ribonucleoside-diphosphate reductase beta chain; PDBTitle: ribonucleotide reductase class ie r2 from mesoplasma florum, dopa-2 active form
111	d3dhza1	Alignment	not modelled	51.8	13	Fold: Ferritin-like Superfamily: Ferritin-like Family: Ribonucleotide reductase-like
112	d1oquc_	Alignment	not modelled	48.4	13	Fold: Ferritin-like Superfamily: Ferritin-like Family: Ribonucleotide reductase-like
113	d1smsa_	Alignment	not modelled	47.3	9	Fold: Ferritin-like Superfamily: Ferritin-like Family: Ribonucleotide reductase-like
114	c4bmtB_	Alignment	not modelled	45.2	13	PDB header: oxidoreductase Chain: B; PDB Molecule: ribonucleoside-diphosphate reductase subunit beta; PDBTitle: crystal structure of ribonucleotide reductase di-iron nrdf2 from bacillus cereus
115	d1w68a_	Alignment	not modelled	44.7	12	Fold: Ferritin-like Superfamily: Ferritin-like Family: Ribonucleotide reductase-like
116	c1smqD_	Alignment	not modelled	43.6	11	PDB header: oxidoreductase Chain: D; PDB Molecule: ribonucleoside-diphosphate reductase small chain PDBTitle: structure of the ribonucleotide reductase rnr2 homodimer2 from saccharomyces cerevisiae
117	c2rccC_	Alignment	not modelled	43.1	13	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
118	c1yfdA_	Alignment	not modelled	42.6	18	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
119	c3b5oA_	Alignment	not modelled	41.6	15	PDB header: oxidoreductase Chain: A; PDB Molecule: cadd-like protein of unknown function; PDBTitle: crystal structure of a cadd-like protein of unknown function2 (npun_f6505) from nostoc punctiforme pcc 73102 at 1.35 a resolution
120	d1jk0b_	Alignment	not modelled	40.5	9	Fold: Ferritin-like Superfamily: Ferritin-like Family: Ribonucleotide reductase-like