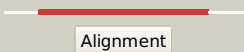

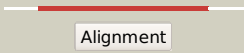



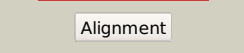


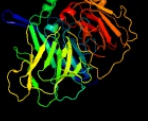
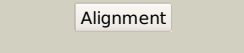

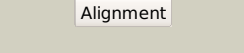



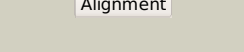

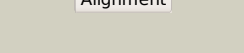

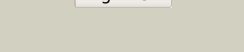









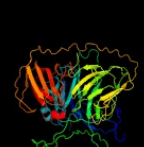


Phyre2

Email	mdejesus@rockefeller.edu
Description	RVBD0846c_(-)_942683_944197
Date	Fri Jul 26 01:50:43 BST 2019
Unique Job ID	169f9e2b9a12e6cc

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c3sqrA_	 Alignment		100.0	27	PDB header: oxidoreductase Chain: A: PDB Molecule: laccase; PDBTitle: crystal structure of laccase from botrytis aclada at 1.67 a resolution
2	c1zpuE_	 Alignment		100.0	27	PDB header: oxidoreductase Chain: E: PDB Molecule: iron transport multicopper oxidase fet3; PDBTitle: crystal structure of fet3p, a multicopper oxidase that functions in2 iron import
3	c5lwxA_	 Alignment		100.0	27	PDB header: oxidoreductase Chain: A: PDB Molecule: multicopper oxidase; PDBTitle: crystal structure of the h253d mutant of mcog from aspergillus niger
4	c3ppsD_	 Alignment		100.0	29	PDB header: oxidoreductase Chain: D: PDB Molecule: laccase; PDBTitle: crystal structure of an ascomycete fungal laccase from thielavia2 arenaria
5	c2q9oA_	 Alignment		100.0	28	PDB header: oxidoreductase Chain: A: PDB Molecule: laccase-1; PDBTitle: near-atomic resolution structure of a melanocarpus albomyces laccase
6	c3zx1A_	 Alignment		100.0	25	PDB header: oxidoreductase Chain: A: PDB Molecule: oxidoreductase, putative; PDBTitle: multicopper oxidase from campylobacter jejuni: a metallo-oxidase
7	c1asqB_	 Alignment		100.0	27	PDB header: oxidoreductase Chain: B: PDB Molecule: ascorbate oxidase; PDBTitle: x-ray structures and mechanistic implications of three functional2 derivatives of ascorbate oxidase from zucchini: reduced-, peroxide-,3 and azide-forms
8	c1gycA_	 Alignment		100.0	26	PDB header: oxidoreductase Chain: A: PDB Molecule: laccase 2; PDBTitle: crystal structure determination at room temperature of a laccase from2 trametes versicolor in its oxidised form containing a full complement3 of copper ions
9	c2xu9A_	 Alignment		100.0	30	PDB header: oxidoreductase Chain: A: PDB Molecule: laccase; PDBTitle: crystal structure of laccase from thermus thermophilus hb27
10	c2xllC_	 Alignment		100.0	24	PDB header: oxidoreductase Chain: C: PDB Molecule: bilirubin oxidase; PDBTitle: the crystal structure of bilirubin oxidase from myrothecium2 verrucaria
11	c5daoA_	 Alignment		100.0	29	PDB header: oxidoreductase Chain: A: PDB Molecule: laccase; PDBTitle: laccase from antrodiella faginea

12	c3t6vA_	Alignment		100.0	29	PDB header: oxidoreductase Chain: A: PDB Molecule: laccase; PDBTitle: crystal structure of laccase from steccerinum ochraceum
13	c1v10A_	Alignment		100.0	28	PDB header: oxidase Chain: A: PDB Molecule: laccase; PDBTitle: structure of rigidoporus lignosus laccase from hemihedrally2 twinned crystals
14	c3abgA_	Alignment		100.0	23	PDB header: oxidoreductase Chain: A: PDB Molecule: bilirubin oxidase; PDBTitle: x-ray crystal analysis of bilirubin oxidase from myrothecium2 verrucaria at 2.3 angstrom resolution using a twin crystal
15	c1of0A_	Alignment		100.0	21	PDB header: oxidoreductase Chain: A: PDB Molecule: spore coat protein a; PDBTitle: crystal structure of bacillus subtilis cota after 1h soaking with abts
16	c2fqeA_	Alignment		100.0	25	PDB header: oxidoreductase Chain: A: PDB Molecule: blue copper oxidase cueo; PDBTitle: crystal structures of e. coli laccase cueo under different copper2 binding situations
17	c1a65A_	Alignment		100.0	29	PDB header: oxidoreductase Chain: A: PDB Molecule: laccase; PDBTitle: type-2 cu-depleted laccase from coprinus cinereus
18	c2yxwB_	Alignment		100.0	24	PDB header: oxidoreductase Chain: B: PDB Molecule: blue copper oxidase cueo; PDBTitle: the deletion mutant of multicopper oxidase cueo
19	c6evgA_	Alignment		100.0	23	PDB header: oxidoreductase Chain: A: PDB Molecule: multi-copper oxidase cueo; PDBTitle: structural and functional characterisation of a bacterial laccase-like2 multi-copper oxidase cueo from lignin-degrading bacterium3 ochrobactrum sp. with oxidase activity towards lignin model compounds4 and liginosulfonate
20	c2g23G_	Alignment		100.0	24	PDB header: oxidoreductase Chain: G: PDB Molecule: phenoxazinone synthase; PDBTitle: the crystal structure of hexameric phenoxazinone synthase
21	c2uxtA_	Alignment	not modelled	100.0	19	PDB header: oxidoreductase Chain: A: PDB Molecule: protein sufi; PDBTitle: sufi protein from escherichia coli
22	c4f7kA_	Alignment	not modelled	100.0	30	PDB header: oxidoreductase Chain: A: PDB Molecule: laccase; PDBTitle: crystal structure of lac15 from a marine microbial metagenome
23	c3aw5A_	Alignment	not modelled	100.0	26	PDB header: oxidoreductase Chain: A: PDB Molecule: multicopper oxidase; PDBTitle: structure of a multicopper oxidase from the hyperthermophilic archaeon2 pyrobaculum aerophilum
24	c6hbeA_	Alignment	not modelled	100.0	17	PDB header: oxidoreductase Chain: A: PDB Molecule: copper-containing nitrite reductase; PDBTitle: cu-containing nitrite reductase (nirk) from thermus scotoductus sa-01
25	c4bxsV_	Alignment	not modelled	100.0	18	PDB header: blood clotting Chain: V: PDB Molecule: venom prothrombin activator pseutarin-c non-catalytic PDBTitle: crystal structure of the prothrombinase complex from the2 venom of pseudonaja textilis
26	c3cdzA_	Alignment	not modelled	100.0	20	PDB header: blood clotting Chain: A: PDB Molecule: coagulation factor viii heavy chain; PDBTitle: crystal structure of human factor viii
27	c1kcwA_	Alignment	not modelled	100.0	23	PDB header: oxidoreductase Chain: A: PDB Molecule: ceruloplasmin; PDBTitle: x-ray crystal structure of human ceruloplasmin at 3.0 angstroms
28	c3g5wC_	Alignment	not modelled	100.0	26	PDB header: metal binding protein Chain: C: PDB Molecule: multicopper oxidase type 1; PDBTitle: crystal structure of blue copper oxidase from nitrosomonas europaea

29	c3gdcC	Alignment	not modelled	100.0	28	PDB header: oxidoreductase Chain: C: PDB Molecule: multicopper oxidase; PDBTitle: crystal structure of multicopper oxidase
30	c3wkoA	Alignment	not modelled	100.0	24	PDB header: oxidoreductase Chain: A: PDB Molecule: nitrite reductase; PDBTitle: copper-containing nitrite reductase from thermophilic bacterium2 geobacillus thermodenitrificans
31	c2zwnA	Alignment	not modelled	100.0	23	PDB header: oxidoreductase Chain: A: PDB Molecule: two-domain type laccase; PDBTitle: crystal structure of the novel two-domain type laccase from a2 metagenome
32	c3cdzB	Alignment	not modelled	100.0	23	PDB header: blood clotting Chain: B: PDB Molecule: coagulation factor viii light chain; PDBTitle: crystal structure of human factor viii
33	c2zooA	Alignment	not modelled	100.0	21	PDB header: oxidoreductase Chain: A: PDB Molecule: probable nitrite reductase; PDBTitle: crystal structure of nitrite reductase from pseudoalteromonas2 haloplanktis tac125
34	c2r7eB	Alignment	not modelled	100.0	23	PDB header: blood clotting Chain: B: PDB Molecule: coagulation factor viii; PDBTitle: crystal structure analysis of coagulation factor viii
35	c1kbwA	Alignment	not modelled	100.0	22	PDB header: oxidoreductase Chain: A: PDB Molecule: major outer membrane protein pan 1; PDBTitle: crystal structure of the soluble domain of ania from2 neisseria gonorrhoeae
36	c4knuB	Alignment	not modelled	100.0	24	PDB header: oxidoreductase Chain: B: PDB Molecule: multicopper oxidase type 1; PDBTitle: copper nitrite reductase from nitrosomonas europaea at ph 6.5
37	c3tasC	Alignment	not modelled	100.0	35	PDB header: oxidoreductase Chain: C: PDB Molecule: small laccase, multi-copper oxidase; PDBTitle: small laccase from streptomyces viridosporus t7a
38	c2dv6F	Alignment	not modelled	100.0	24	PDB header: oxidoreductase Chain: F: PDB Molecule: nitrite reductase; PDBTitle: crystal structure of nitrite reductase from hypomicrobium2 denitrificans
39	c5z1A	Alignment	not modelled	100.0	21	PDB header: oxidoreductase Chain: A: PDB Molecule: putative copper-type nitrite reductase; PDBTitle: hexameric structure of copper-containing nitrite reductase of an2 anammox organism ksu-1
40	c4ax3A	Alignment	not modelled	100.0	23	PDB header: oxidoreductase Chain: A: PDB Molecule: copper-containing nitrite reductase; PDBTitle: structure of three-domain heme-cu nitrite reductase from ralstonia2 pickettii at 1.6 a resolution
41	c1aq8B	Alignment	not modelled	100.0	20	PDB header: oxidoreductase Chain: B: PDB Molecule: nitrite reductase; PDBTitle: structure of alcaligenes faecalis nitrite reductase reduced2 with ascorbate
42	c1wa1X	Alignment	not modelled	100.0	17	PDB header: reductase Chain: X: PDB Molecule: dissimilatory copper-containing nitrite reductase; PDBTitle: crystal structure of h313q mutant of alcaligenes xylooxidans nitrite2 reductase
43	c1sddB	Alignment	not modelled	100.0	28	PDB header: blood clotting Chain: B: PDB Molecule: coagulation factor v; PDBTitle: crystal structure of bovine factor vai
44	c3t9wA	Alignment	not modelled	100.0	30	PDB header: oxidoreductase Chain: A: PDB Molecule: small laccase, multi-copper oxidase; PDBTitle: small laccase from amycolatopsis sp. atcc 39116
45	c1mzzC	Alignment	not modelled	100.0	16	PDB header: oxidoreductase Chain: C: PDB Molecule: copper-containing nitrite reductase; PDBTitle: crystal structure of mutant (m182t)of nitrite reductase
46	c3kw8A	Alignment	not modelled	100.0	26	PDB header: oxidoreductase Chain: A: PDB Molecule: putative copper oxidase; PDBTitle: two-domain laccase from streptomyces coelicolor at 2.3 a resolution
47	c3cg8B	Alignment	not modelled	100.0	33	PDB header: oxidoreductase Chain: B: PDB Molecule: laccase; PDBTitle: laccase from streptomyces coelicolor
48	c1sddA	Alignment	not modelled	100.0	23	PDB header: blood clotting Chain: A: PDB Molecule: coagulation factor v; PDBTitle: crystal structure of bovine factor vai
49	d1kv7a1	Alignment	not modelled	100.0	29	Fold: Cupredoxin-like Superfamily: Cupredoxins Family: Multidomain cupredoxins
50	d1gsk3	Alignment	not modelled	100.0	24	Fold: Cupredoxin-like Superfamily: Cupredoxins Family: Multidomain cupredoxins
51	d1gsk1	Alignment	not modelled	100.0	24	Fold: Cupredoxin-like Superfamily: Cupredoxins Family: Multidomain cupredoxins
52	d1aoza1	Alignment	not modelled	100.0	33	Fold: Cupredoxin-like Superfamily: Cupredoxins Family: Multidomain cupredoxins
53	d2q9oa1	Alignment	not modelled	100.0	27	Fold: Cupredoxin-like Superfamily: Cupredoxins Family: Multidomain cupredoxins
54	d1v10a1	Alignment	not modelled	100.0	36	Fold: Cupredoxin-like Superfamily: Cupredoxins Family: Multidomain cupredoxins
55	d1gyca1	Alianment	not modelled	100.0	35	Fold: Cupredoxin-like Superfamily: Cupredoxins

						Family: Multidomain cupredoxins
56	d1hfua3	Alignment	not modelled	100.0	26	Fold: Cupredoxin-like Superfamily: Cupredoxins Family: Multidomain cupredoxins
57	d1kyaa3	Alignment	not modelled	100.0	24	Fold: Cupredoxin-like Superfamily: Cupredoxins Family: Multidomain cupredoxins
58	d1hfua1	Alignment	not modelled	100.0	36	Fold: Cupredoxin-like Superfamily: Cupredoxins Family: Multidomain cupredoxins
59	d1kyaa1	Alignment	not modelled	100.0	34	Fold: Cupredoxin-like Superfamily: Cupredoxins Family: Multidomain cupredoxins
60	d1mzya1	Alignment	not modelled	100.0	17	Fold: Cupredoxin-like Superfamily: Cupredoxins Family: Multidomain cupredoxins
61	d1v10a3	Alignment	not modelled	100.0	27	Fold: Cupredoxin-like Superfamily: Cupredoxins Family: Multidomain cupredoxins
62	d1gyca3	Alignment	not modelled	100.0	23	Fold: Cupredoxin-like Superfamily: Cupredoxins Family: Multidomain cupredoxins
63	d2bw4a1	Alignment	not modelled	100.0	20	Fold: Cupredoxin-like Superfamily: Cupredoxins Family: Multidomain cupredoxins
64	d1kv7a3	Alignment	not modelled	100.0	28	Fold: Cupredoxin-like Superfamily: Cupredoxins Family: Multidomain cupredoxins
65	d1aoza3	Alignment	not modelled	100.0	30	Fold: Cupredoxin-like Superfamily: Cupredoxins Family: Multidomain cupredoxins
66	d2q9oa3	Alignment	not modelled	100.0	32	Fold: Cupredoxin-like Superfamily: Cupredoxins Family: Multidomain cupredoxins
67	d1oe1a1	Alignment	not modelled	100.0	18	Fold: Cupredoxin-like Superfamily: Cupredoxins Family: Multidomain cupredoxins
68	d1kbva1	Alignment	not modelled	100.0	23	Fold: Cupredoxin-like Superfamily: Cupredoxins Family: Multidomain cupredoxins
69	d1snra1	Alignment	not modelled	100.0	21	Fold: Cupredoxin-like Superfamily: Cupredoxins Family: Multidomain cupredoxins
70	d1sdda1	Alignment	not modelled	100.0	22	Fold: Cupredoxin-like Superfamily: Cupredoxins Family: Multidomain cupredoxins
71	d1ndsaa1	Alignment	not modelled	100.0	16	Fold: Cupredoxin-like Superfamily: Cupredoxins Family: Multidomain cupredoxins
72	d1aoza2	Alignment	not modelled	100.0	20	Fold: Cupredoxin-like Superfamily: Cupredoxins Family: Multidomain cupredoxins
73	d2q9oa2	Alignment	not modelled	99.9	24	Fold: Cupredoxin-like Superfamily: Cupredoxins Family: Multidomain cupredoxins
74	d1kyaa2	Alignment	not modelled	99.9	25	Fold: Cupredoxin-like Superfamily: Cupredoxins Family: Multidomain cupredoxins
75	d2j5wa3	Alignment	not modelled	99.9	27	Fold: Cupredoxin-like Superfamily: Cupredoxins Family: Multidomain cupredoxins
76	d1gyca2	Alignment	not modelled	99.9	24	Fold: Cupredoxin-like Superfamily: Cupredoxins Family: Multidomain cupredoxins
77	d1hfua2	Alignment	not modelled	99.9	28	Fold: Cupredoxin-like Superfamily: Cupredoxins Family: Multidomain cupredoxins
78	d1sddb2	Alignment	not modelled	99.9	22	Fold: Cupredoxin-like Superfamily: Cupredoxins Family: Multidomain cupredoxins
79	d2j5wa1	Alignment	not modelled	99.9	30	Fold: Cupredoxin-like Superfamily: Cupredoxins Family: Multidomain cupredoxins
80	d1v10a2	Alignment	not modelled	99.9	28	Fold: Cupredoxin-like Superfamily: Cupredoxins Family: Multidomain cupredoxins
81	d2j5wa5	Alignment	not modelled	99.9	26	Fold: Cupredoxin-like Superfamily: Cupredoxins Family: Multidomain cupredoxins
82	d2j5wa2	Alignment	not modelled	99.9	21	Fold: Cupredoxin-like Superfamily: Cupredoxins Family: Multidomain cupredoxins
						Fold: Cupredoxin-like

83	d2j5wa4	Alignment	not modelled	99.9	31	Superfamily: Cupredoxins Family: Multidomain cupredoxins
84	d1kbva2	Alignment	not modelled	99.9	18	Fold: Cupredoxin-like Superfamily: Cupredoxins Family: Multidomain cupredoxins
85	d1kcwa2	Alignment	not modelled	99.9	24	Fold: Cupredoxin-like Superfamily: Cupredoxins Family: Multidomain cupredoxins
86	d1ndsaa2	Alignment	not modelled	99.9	19	Fold: Cupredoxin-like Superfamily: Cupredoxins Family: Multidomain cupredoxins
87	d1snra2	Alignment	not modelled	99.9	17	Fold: Cupredoxin-like Superfamily: Cupredoxins Family: Multidomain cupredoxins
88	d1gska2	Alignment	not modelled	99.9	19	Fold: Cupredoxin-like Superfamily: Cupredoxins Family: Multidomain cupredoxins
89	d1kv7a2	Alignment	not modelled	99.9	22	Fold: Cupredoxin-like Superfamily: Cupredoxins Family: Multidomain cupredoxins
90	d2bw4a2	Alignment	not modelled	99.9	19	Fold: Cupredoxin-like Superfamily: Cupredoxins Family: Multidomain cupredoxins
91	d1mzya2	Alignment	not modelled	99.9	16	Fold: Cupredoxin-like Superfamily: Cupredoxins Family: Multidomain cupredoxins
92	d1e30a_	Alignment	not modelled	99.8	19	Fold: Cupredoxin-like Superfamily: Cupredoxins Family: Plastocyanin/azurin-like
93	c2aanA_	Alignment	not modelled	99.7	22	PDB header: electron transport Chain: A; PDB Molecule: auracyanin a; PDBTitle: auracyanin a: a "blue" copper protein from the green thermophilic2 photosynthetic bacterium, chloroflexus aurantiacus
94	d1qhqa_	Alignment	not modelled	99.7	18	Fold: Cupredoxin-like Superfamily: Cupredoxins Family: Plastocyanin/azurin-like
95	d1libya_	Alignment	not modelled	99.6	14	Fold: Cupredoxin-like Superfamily: Cupredoxins Family: Nitrosocyanin
96	d1fwxa1	Alignment	not modelled	99.6	21	Fold: Cupredoxin-like Superfamily: Cupredoxins Family: Nitrosocyanin
97	d1sdda2	Alignment	not modelled	99.5	19	Fold: Cupredoxin-like Superfamily: Cupredoxins Family: Multidomain cupredoxins
98	d1qnia1	Alignment	not modelled	99.4	18	Fold: Cupredoxin-like Superfamily: Cupredoxins Family: Nitrosocyanin
99	d1sddb1	Alignment	not modelled	99.3	20	Fold: Cupredoxin-like Superfamily: Cupredoxins Family: Multidomain cupredoxins
100	d1jzga_	Alignment	not modelled	99.2	17	Fold: Cupredoxin-like Superfamily: Cupredoxins Family: Plastocyanin/azurin-like
101	c3ay2A_	Alignment	not modelled	99.2	15	PDB header: antitumor protein, antiviral protein Chain: A; PDB Molecule: lipid modified azurin protein; PDBTitle: crystal structure of neisserial azurin
102	d2ccwa1	Alignment	not modelled	99.2	19	Fold: Cupredoxin-like Superfamily: Cupredoxins Family: Plastocyanin/azurin-like
103	d1joia_	Alignment	not modelled	99.1	17	Fold: Cupredoxin-like Superfamily: Cupredoxins Family: Plastocyanin/azurin-like
104	d1plaa_	Alignment	not modelled	99.1	12	Fold: Cupredoxin-like Superfamily: Cupredoxins Family: Plastocyanin/azurin-like
105	d1oe1a2	Alignment	not modelled	99.1	21	Fold: Cupredoxin-like Superfamily: Cupredoxins Family: Multidomain cupredoxins
106	d1ag6a_	Alignment	not modelled	99.1	16	Fold: Cupredoxin-like Superfamily: Cupredoxins Family: Plastocyanin/azurin-like
107	d2plta_	Alignment	not modelled	99.1	11	Fold: Cupredoxin-like Superfamily: Cupredoxins Family: Plastocyanin/azurin-like
108	c4hcgA_	Alignment	not modelled	99.0	17	PDB header: oxidoreductase Chain: A; PDB Molecule: cupredoxin 1; PDBTitle: uncharacterized cupredoxin-like domain protein cupredoxin_1 with zinc2 bound from bacillus anthracis
109	d2q5ba1	Alignment	not modelled	99.0	14	Fold: Cupredoxin-like Superfamily: Cupredoxins Family: Plastocyanin/azurin-like
110	c2h47C_	Alignment	not modelled	98.9	14	PDB header: oxidoreductase/electron transport Chain: C; PDB Molecule: azurin; PDBTitle: crystal structure of an electron transfer complex between2 aromatic amine dehydrogenase and azurin from

					alcaligenes3 faecalis (form 1) PDB header: metal transport
111	c4f2eA_	Alignment	not modelled	98.9	11 Chain: A: PDB Molecule: cupa; PDBTitle: crystal structure of the streptococcus pneumoniae d39 copper chaperone2 cupa with cu(i)
112	d2jxma1	Alignment	not modelled	98.8	18 Fold: Cupredoxin-like Superfamily: Cupredoxins Family: Plastocyanin/azurin-like
113	d1pcca_	Alignment	not modelled	98.8	23 Fold: Cupredoxin-like Superfamily: Cupredoxins Family: Plastocyanin/azurin-like
114	d1cuoa_	Alignment	not modelled	98.8	21 Fold: Cupredoxin-like Superfamily: Cupredoxins Family: Plastocyanin/azurin-like
115	d1iuza_	Alignment	not modelled	98.7	18 Fold: Cupredoxin-like Superfamily: Cupredoxins Family: Plastocyanin/azurin-like
116	d7pcya_	Alignment	not modelled	98.7	19 Fold: Cupredoxin-like Superfamily: Cupredoxins Family: Plastocyanin/azurin-like
117	d1azca_	Alignment	not modelled	98.7	15 Fold: Cupredoxin-like Superfamily: Cupredoxins Family: Plastocyanin/azurin-like
118	d1bypa_	Alignment	not modelled	98.6	15 Fold: Cupredoxin-like Superfamily: Cupredoxins Family: Plastocyanin/azurin-like
119	d9pcya_	Alignment	not modelled	98.6	18 Fold: Cupredoxin-like Superfamily: Cupredoxins Family: Plastocyanin/azurin-like
120	c3sbrF_	Alignment	not modelled	98.6	22 PDB header: oxidoreductase Chain: F: PDB Molecule: nitrous-oxide reductase; PDBTitle: pseudomonas stutzeri nitrous oxide reductase, p1 crystal form with2 substrate