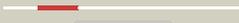
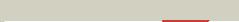
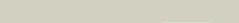


Phyre2

Email mdejesus@rockefeller.edu
 Description RVBD2340c_(PE_PGRS39)_2617677_2618918
 Date Mon Aug 5 13:25:49 BST 2019
 Unique Job ID 8f0bc58b3e7f614d

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c1ygvA_	 Alignment		99.9	17	PDB header: structural protein/contractile protein Chain: A: PDB Molecule: collagen i alpha 1; PDBTitle: the structure of collagen type i. single type i collagen2 molecule: rigid refinement
2	c2g38A_	 Alignment		99.9	29	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: pe family protein; PDBTitle: a pe/ppe protein complex from mycobacterium tuberculosis
3	d2g38a1	 Alignment		99.9	29	Fold: Ferritin-like Superfamily: PE/PPE dimer-like Family: PE
4	c5xfA_	 Alignment		99.9	49	PDB header: protein transport Chain: A: PDB Molecule: pe family protein pe8; PDBTitle: crystal structure of pe8-ppe15 in complex with espg5 from m.2 tuberculosis
5	c1y0fB_	 Alignment		99.9	17	PDB header: structural protein/contractile protein Chain: B: PDB Molecule: collagen i alpha 2; PDBTitle: the structure of collagen type i. single type i collagen2 molecule
6	c3hqvB_	 Alignment		99.9	14	PDB header: structural protein, contractile protein Chain: B: PDB Molecule: collagen alpha-2(i) chain; PDBTitle: low resolution, molecular envelope structure of type i2 collagen in situ determined by fiber diffraction. single3 type i collagen molecule, rigid body refinement
7	c3bogB_	 Alignment		98.7	19	PDB header: antifreeze protein Chain: B: PDB Molecule: 6.5 kda glycine-rich antifreeze protein; PDBTitle: snow flea antifreeze protein quasi-racemate
8	c3bogA_	 Alignment		98.7	19	PDB header: antifreeze protein Chain: A: PDB Molecule: 6.5 kda glycine-rich antifreeze protein; PDBTitle: snow flea antifreeze protein quasi-racemate
9	c2pneA_	 Alignment		98.4	19	PDB header: antifreeze protein Chain: A: PDB Molecule: 6.5 kda glycine-rich antifreeze protein; PDBTitle: crystal structure of the snow flea antifreeze protein
10	c3boiB_	 Alignment		98.4	19	PDB header: antifreeze protein Chain: B: PDB Molecule: 6.5 kda glycine-rich antifreeze protein; PDBTitle: snow flea antifreeze protein racemate
11	c3boiA_	 Alignment		98.4	19	PDB header: antifreeze protein Chain: A: PDB Molecule: 6.5 kda glycine-rich antifreeze protein; PDBTitle: snow flea antifreeze protein racemate

12	c1nayC_	Alignment		97.6	13	PDB header: structural protein Chain: C: PDB Molecule: collagen-like peptide; PDBTitle: gpp-foldon:x-ray structure
13	c5ctdB_	Alignment		97.2	24	PDB header: structural protein Chain: B: PDB Molecule: collagen alpha-2(i) chain,collagen alpha-2(ix) chain; PDBTitle: crystal structure of the type ix collagen nc2 heterotrimerization2 domain with a guest fragment a2a1a1 of type i collagen
14	c5ctiC_	Alignment		97.1	13	PDB header: structural protein Chain: C: PDB Molecule: collagen alpha-1(i) chain,collagen alpha-3(ix) chain; PDBTitle: crystal structure of the type ix collagen nc2 heterotrimerization2 domain with a guest fragment a2a1a1 of type i collagen (native form)
15	c5ctdA_	Alignment		97.1	16	PDB header: structural protein Chain: A: PDB Molecule: collagen alpha-1(i) chain,collagen alpha-1(ix) chain; PDBTitle: crystal structure of the type ix collagen nc2 heterotrimerization2 domain with a guest fragment a2a1a1 of type i collagen
16	c2klwA_	Alignment		91.9	13	PDB header: de novo protein Chain: A: PDB Molecule: (pkg)10; PDBTitle: solution structure of an abc collagen heterotrimer reveals a2 single-register helix stabilized by electrostatic3 interactions
17	c2cuoF_	Alignment		85.0	19	PDB header: structural protein Chain: F: PDB Molecule: collagen model peptide (pro-pro-gly)9; PDBTitle: collagen model peptide (pro-pro-gly)9
18	c2cuoC_	Alignment		85.0	19	PDB header: structural protein Chain: C: PDB Molecule: collagen model peptide (pro-pro-gly)9; PDBTitle: collagen model peptide (pro-pro-gly)9
19	c3ah9A_	Alignment		77.4	20	PDB header: structural protein Chain: A: PDB Molecule: collagen-like peptide; PDBTitle: crystal structure of (pro-pro-gly)9 at 1.1 a resolution
20	c3ah9F_	Alignment		76.7	19	PDB header: structural protein Chain: F: PDB Molecule: collagen-like peptide; PDBTitle: crystal structure of (pro-pro-gly)9 at 1.1 a resolution
21	c2cuoD_	Alignment	not modelled	76.5	19	PDB header: structural protein Chain: D: PDB Molecule: collagen model peptide (pro-pro-gly)9; PDBTitle: collagen model peptide (pro-pro-gly)9
22	c2cuoE_	Alignment	not modelled	76.5	19	PDB header: structural protein Chain: E: PDB Molecule: collagen model peptide (pro-pro-gly)9; PDBTitle: collagen model peptide (pro-pro-gly)9
23	c2cuoA_	Alignment	not modelled	76.5	19	PDB header: structural protein Chain: A: PDB Molecule: collagen model peptide (pro-pro-gly)9; PDBTitle: collagen model peptide (pro-pro-gly)9
24	c2cuoB_	Alignment	not modelled	76.5	19	PDB header: structural protein Chain: B: PDB Molecule: collagen model peptide (pro-pro-gly)9; PDBTitle: collagen model peptide (pro-pro-gly)9
25	c3ah9D_	Alignment	not modelled	75.6	21	PDB header: structural protein Chain: D: PDB Molecule: collagen-like peptide; PDBTitle: crystal structure of (pro-pro-gly)9 at 1.1 a resolution
26	c1k6fD_	Alignment	not modelled	75.2	24	PDB header: structural protein Chain: D: PDB Molecule: collagen triple helix; PDBTitle: crystal structure of the collagen triple helix model [(pro-pro-gly)2 10]3
27	c1k6fA_	Alignment	not modelled	75.2	24	PDB header: structural protein Chain: A: PDB Molecule: collagen triple helix; PDBTitle: crystal structure of the collagen triple helix model [(pro-pro-gly)2 10]3
28	c1k6fC_	Alignment	not modelled	75.2	24	PDB header: structural protein Chain: C: PDB Molecule: collagen triple helix; PDBTitle: crystal structure of the collagen triple helix model [(pro-pro-gly)2 10]3
29	c1k6fE_	Alignment	not modelled	75.2	24	PDB header: structural protein Chain: E: PDB Molecule: collagen triple helix;

29	c1k6LE	Alignment	not modelled	75.2	24	PDBTitle: crystal structure of the collagen triple helix model [(pro-pro-gly)2 10]3 PDB header: structural protein
30	c1k6fF	Alignment	not modelled	75.2	24	Chain: F; PDB Molecule: collagen triple helix; PDBTitle: crystal structure of the collagen triple helix model [(pro-pro-gly)2 10]3
31	c1k6fB	Alignment	not modelled	75.2	24	PDB header: structural protein Chain: B; PDB Molecule: collagen triple helix; PDBTitle: crystal structure of the collagen triple helix model [(pro-pro-gly)2 10]3
32	c3ah9B	Alignment	not modelled	74.7	19	PDB header: structural protein Chain: B; PDB Molecule: collagen-like peptide; PDBTitle: crystal structure of (pro-pro-gly)9 at 1.1 a resolution
33	c3ah9C	Alignment	not modelled	74.7	19	PDB header: structural protein Chain: C; PDB Molecule: collagen-like peptide; PDBTitle: crystal structure of (pro-pro-gly)9 at 1.1 a resolution
34	c3ah9E	Alignment	not modelled	74.7	19	PDB header: structural protein Chain: E; PDB Molecule: collagen-like peptide; PDBTitle: crystal structure of (pro-pro-gly)9 at 1.1 a resolution
35	c3a0mF	Alignment	not modelled	65.1	12	PDB header: structural protein Chain: F; PDB Molecule: collagen-like peptide; PDBTitle: structure of (ppg)4-ovg-(ppg)4, monoclinic, twinned crystal
36	c3admC	Alignment	not modelled	56.0	19	PDB header: structural protein Chain: C; PDB Molecule: collagen-like peptide; PDBTitle: crystal structure of (pro-pro-gly)4-hyp-ser-gly-(pro-pro-gly)4
37	c3abnA	Alignment	not modelled	47.6	23	PDB header: structural protein Chain: A; PDB Molecule: collagen-like peptide; PDBTitle: crystal structure of (pro-pro-gly)4-hyp-asp-gly-(pro-pro-gly)4 at 1.022 a
38	c3admE	Alignment	not modelled	46.9	19	PDB header: structural protein Chain: E; PDB Molecule: collagen-like peptide; PDBTitle: crystal structure of (pro-pro-gly)4-hyp-ser-gly-(pro-pro-gly)4
39	c3admB	Alignment	not modelled	46.9	19	PDB header: structural protein Chain: B; PDB Molecule: collagen-like peptide; PDBTitle: crystal structure of (pro-pro-gly)4-hyp-ser-gly-(pro-pro-gly)4
40	c3admF	Alignment	not modelled	46.9	19	PDB header: structural protein Chain: F; PDB Molecule: collagen-like peptide; PDBTitle: crystal structure of (pro-pro-gly)4-hyp-ser-gly-(pro-pro-gly)4
41	c3admA	Alignment	not modelled	46.9	19	PDB header: structural protein Chain: A; PDB Molecule: collagen-like peptide; PDBTitle: crystal structure of (pro-pro-gly)4-hyp-ser-gly-(pro-pro-gly)4
42	c3a0mC	Alignment	not modelled	42.1	19	PDB header: structural protein Chain: C; PDB Molecule: collagen-like peptide; PDBTitle: structure of (ppg)4-ovg-(ppg)4, monoclinic, twinned crystal
43	c3a19D	Alignment	not modelled	38.5	19	PDB header: structural protein Chain: D; PDB Molecule: collagen-like peptide; PDBTitle: structure of (ppg)4-oog-(ppg)4_h monoclinic, twinned crystal
44	c3a0aE	Alignment	not modelled	31.4	22	PDB header: structural protein Chain: E; PDB Molecule: collagen-like peptide; PDBTitle: structure of (ppg)4-opg-(ppg)4, monoclinic, twinned crystal
45	c3abnB	Alignment	not modelled	29.8	25	PDB header: structural protein Chain: B; PDB Molecule: collagen-like peptide; PDBTitle: crystal structure of (pro-pro-gly)4-hyp-asp-gly-(pro-pro-gly)4 at 1.022 a
46	c2d3fE	Alignment	not modelled	28.4	19	PDB header: structural protein Chain: E; PDB Molecule: collagen model peptides (pro-pro-gly)4-pro-hyp- PDBTitle: crystal structures of collagen model peptides (pro-pro-gly)2 4-pro-hyp-gly-(pro-pro-gly)4
47	c1x1kB	Alignment	not modelled	28.4	19	PDB header: structural protein Chain: B; PDB Molecule: host-guest peptide (pro-pro-gly)4-(pro-allohyp- PDBTitle: host-guest peptide (pro-pro-gly)4-(pro-allohyp-gly)-(pro-2 pro-gly)4
48	c1x1kC	Alignment	not modelled	28.4	19	PDB header: structural protein Chain: C; PDB Molecule: host-guest peptide (pro-pro-gly)4-(pro-allohyp- PDBTitle: host-guest peptide (pro-pro-gly)4-(pro-allohyp-gly)-(pro-2 pro-gly)4
49	c2d3fF	Alignment	not modelled	28.4	19	PDB header: structural protein Chain: F; PDB Molecule: collagen model peptides (pro-pro-gly)4-pro-hyp- PDBTitle: crystal structures of collagen model peptides (pro-pro-gly)2 4-pro-hyp-gly-(pro-pro-gly)4
50	c1x1kD	Alignment	not modelled	28.4	19	PDB header: structural protein Chain: D; PDB Molecule: host-guest peptide (pro-pro-gly)4-(pro-allohyp- PDBTitle: host-guest peptide (pro-pro-gly)4-(pro-allohyp-gly)-(pro-2 pro-gly)4
51	c2d3fD	Alignment	not modelled	28.4	19	PDB header: structural protein Chain: D; PDB Molecule: collagen model peptides (pro-pro-gly)4-pro-hyp- PDBTitle: crystal structures of collagen model peptides (pro-pro-gly)2 4-pro-hyp-gly-(pro-pro-gly)4
52	c1x1kA	Alignment	not modelled	28.4	19	PDB header: structural protein Chain: A; PDB Molecule: host-guest peptide (pro-pro-gly)4-(pro-allohyp- PDBTitle: host-guest peptide (pro-pro-gly)4-(pro-allohyp-gly)-(pro-2 pro-gly)4
53	c3abnC	Alignment	not modelled	28.4	20	PDB header: structural protein Chain: C; PDB Molecule: collagen-like peptide; PDBTitle: crystal structure of (pro-pro-gly)4-hyp-asp-gly-(pro-pro-

						gly)4 at 1.022 a
54	c3admD_	Alignment	not modelled	26.1	20	PDB header: structural protein Chain: D: PDB Molecule: collagen-like peptide; PDBTitle: crystal structure of (pro-pro-gly)4-hyp-ser-gly-(pro-pro-gly)4
55	c3a19F_	Alignment	not modelled	25.3	16	PDB header: structural protein Chain: F: PDB Molecule: collagen-like peptide; PDBTitle: structure of (ppg)4-oog-(ppg)4_h monoclinic, twinned crystal
56	c3a08D_	Alignment	not modelled	25.3	16	PDB header: structural protein Chain: D: PDB Molecule: collagen-like peptide; PDBTitle: structure of (ppg)4-oog-(ppg)4, monoclinic, twinned crystal
57	c2d3hD_	Alignment	not modelled	25.3	16	PDB header: structural protein Chain: D: PDB Molecule: collagen model peptides (pro-pro-gly)4-hyp-hyp- PDBTitle: crystal structures of collagen model peptides (pro-pro-gly)2 4-hyp-hyp-gly-(pro-pro-gly)4
58	c3a1hF_	Alignment	not modelled	21.8	17	PDB header: structural protein Chain: F: PDB Molecule: collagen-like peptide; PDBTitle: crystal structure analysis of the collagen-like peptide, (ppg)4-otg-2 (ppg)4
59	c3a19B_	Alignment	not modelled	21.0	22	PDB header: structural protein Chain: B: PDB Molecule: collagen-like peptide; PDBTitle: structure of (ppg)4-oog-(ppg)4_h monoclinic, twinned crystal
60	c2d3hA_	Alignment	not modelled	21.0	22	PDB header: structural protein Chain: A: PDB Molecule: collagen model peptides (pro-pro-gly)4-hyp-hyp- PDBTitle: crystal structures of collagen model peptides (pro-pro-gly)2 4-hyp-hyp-gly-(pro-pro-gly)4
61	c2d3hB_	Alignment	not modelled	21.0	22	PDB header: structural protein Chain: B: PDB Molecule: collagen model peptides (pro-pro-gly)4-hyp-hyp- PDBTitle: crystal structures of collagen model peptides (pro-pro-gly)2 4-hyp-hyp-gly-(pro-pro-gly)4
62	c3a1hB_	Alignment	not modelled	20.7	22	PDB header: structural protein Chain: B: PDB Molecule: collagen-like peptide; PDBTitle: crystal structure analysis of the collagen-like peptide, (ppg)4-otg-2 (ppg)4
63	c3a1hD_	Alignment	not modelled	20.5	22	PDB header: structural protein Chain: D: PDB Molecule: collagen-like peptide; PDBTitle: crystal structure analysis of the collagen-like peptide, (ppg)4-otg-2 (ppg)4
64	c3a1hE_	Alignment	not modelled	20.5	22	PDB header: structural protein Chain: E: PDB Molecule: collagen-like peptide; PDBTitle: crystal structure analysis of the collagen-like peptide, (ppg)4-otg-2 (ppg)4
65	c3a1hC_	Alignment	not modelled	20.5	22	PDB header: structural protein Chain: C: PDB Molecule: collagen-like peptide; PDBTitle: crystal structure analysis of the collagen-like peptide, (ppg)4-otg-2 (ppg)4
66	c3a0aA_	Alignment	not modelled	19.9	22	PDB header: structural protein Chain: A: PDB Molecule: collagen-like peptide; PDBTitle: structure of (ppg)4-opg-(ppg)4, monoclinic, twinned crystal
67	c3a0mB_	Alignment	not modelled	19.4	16	PDB header: structural protein Chain: B: PDB Molecule: collagen-like peptide; PDBTitle: structure of (ppg)4-ovg-(ppg)4, monoclinic, twinned crystal
68	c3a1hA_	Alignment	not modelled	19.4	24	PDB header: structural protein Chain: A: PDB Molecule: collagen-like peptide; PDBTitle: crystal structure analysis of the collagen-like peptide, (ppg)4-otg-2 (ppg)4
69	c3a0mA_	Alignment	not modelled	18.2	20	PDB header: structural protein Chain: A: PDB Molecule: collagen-like peptide; PDBTitle: structure of (ppg)4-ovg-(ppg)4, monoclinic, twinned crystal
70	c3a0mE_	Alignment	not modelled	18.1	22	PDB header: structural protein Chain: E: PDB Molecule: collagen-like peptide; PDBTitle: structure of (ppg)4-ovg-(ppg)4, monoclinic, twinned crystal
71	c3a0mD_	Alignment	not modelled	17.8	22	PDB header: structural protein Chain: D: PDB Molecule: collagen-like peptide; PDBTitle: structure of (ppg)4-ovg-(ppg)4, monoclinic, twinned crystal
72	c4auoE_	Alignment	not modelled	16.4	14	PDB header: hydrolase/peptide Chain: E: PDB Molecule: triple-helical collagen peptide; PDBTitle: crystal structure of mmp-1(e200a) in complex with a triple-2 helical collagen peptide
73	c4auoH_	Alignment	not modelled	16.4	14	PDB header: hydrolase/peptide Chain: H: PDB Molecule: triple-helical collagen peptide; PDBTitle: crystal structure of mmp-1(e200a) in complex with a triple-2 helical collagen peptide
74	c2d3hE_	Alignment	not modelled	15.7	22	PDB header: structural protein Chain: E: PDB Molecule: collagen model peptides (pro-pro-gly)4-hyp-hyp- PDBTitle: crystal structures of collagen model peptides (pro-pro-gly)2 4-hyp-hyp-gly-(pro-pro-gly)4
75	c3a19C_	Alignment	not modelled	15.4	21	PDB header: structural protein Chain: C: PDB Molecule: collagen-like peptide; PDBTitle: structure of (ppg)4-oog-(ppg)4_h monoclinic, twinned crystal
76	c3a19E_	Alignment	not modelled	15.4	21	PDB header: structural protein Chain: E: PDB Molecule: collagen-like peptide; PDBTitle: structure of (ppg)4-oog-(ppg)4_h monoclinic, twinned crystal
77	c3a19A_	Alignment	not modelled	15.3	23	PDB header: structural protein Chain: A: PDB Molecule: collagen-like peptide; PDBTitle: structure of (ppg)4-oog-(ppg)4_h monoclinic, twinned crystal
						PDB header: structural protein Chain: C: PDB Molecule: collagen model peptides (pro-pro-gly)4-

78	c2d3hC	Alignment	not modelled	15.3	23	hyp-hyp- PDBTitle: crystal structures of collagen model peptides (pro-pro-gly)2 4-hyp-hyp-gly-(pro-pro-gly)4
79	c3a0aC	Alignment	not modelled	14.5	16	PDB header: structural protein Chain: C: PDB Molecule: collagen-like peptide; PDBTitle: structure of (ppg)4-opg-(ppg)4, monoclinic, twinned crystal
80	c4auoG	Alignment	not modelled	14.3	14	PDB header: hydrolase/peptide Chain: G: PDB Molecule: triple-helical collagen peptide; PDBTitle: crystal structure of mmp-1(e200a) in complex with a triple-2 helical collagen peptide
81	c4auoF	Alignment	not modelled	14.3	14	PDB header: hydrolase/peptide Chain: F: PDB Molecule: triple-helical collagen peptide; PDBTitle: crystal structure of mmp-1(e200a) in complex with a triple-2 helical collagen peptide
82	c4auoD	Alignment	not modelled	14.3	14	PDB header: hydrolase/peptide Chain: D: PDB Molecule: triple-helical collagen peptide; PDBTitle: crystal structure of mmp-1(e200a) in complex with a triple-2 helical collagen peptide
83	c2d3fC	Alignment	not modelled	13.0	20	PDB header: structural protein Chain: C: PDB Molecule: collagen model peptides (pro-pro-gly)4-pro-hyp- PDBTitle: crystal structures of collagen model peptides (pro-pro-gly)2 4-pro-hyp-gly-(pro-pro-gly)4
84	c2d3fA	Alignment	not modelled	13.0	20	PDB header: structural protein Chain: A: PDB Molecule: collagen model peptides (pro-pro-gly)4-pro-hyp- PDBTitle: crystal structures of collagen model peptides (pro-pro-gly)2 4-pro-hyp-gly-(pro-pro-gly)4
85	c2d3fB	Alignment	not modelled	13.0	20	PDB header: structural protein Chain: B: PDB Molecule: collagen model peptides (pro-pro-gly)4-pro-hyp- PDBTitle: crystal structures of collagen model peptides (pro-pro-gly)2 4-pro-hyp-gly-(pro-pro-gly)4
86	c1x1kE	Alignment	not modelled	13.0	20	PDB header: structural protein Chain: E: PDB Molecule: host-guest peptide (pro-pro-gly)4-(pro-allohyp- PDBTitle: host-guest peptide (pro-pro-gly)4-(pro-allohyp-gly)-(pro-2 pro-gly)4
87	c4auoC	Alignment	not modelled	12.5	14	PDB header: hydrolase/peptide Chain: C: PDB Molecule: triple-helical collagen peptide; PDBTitle: crystal structure of mmp-1(e200a) in complex with a triple-2 helical collagen peptide
88	c3a08F	Alignment	not modelled	10.3	17	PDB header: structural protein Chain: F: PDB Molecule: collagen-like peptide; PDBTitle: structure of (ppg)4-oog-(ppg)4, monoclinic, twinned crystal
89	c2d3hF	Alignment	not modelled	10.1	17	PDB header: structural protein Chain: F: PDB Molecule: collagen model peptides (pro-pro-gly)4-hyp-hyp- PDBTitle: crystal structures of collagen model peptides (pro-pro-gly)2 4-hyp-hyp-gly-(pro-pro-gly)4
90	c3a08E	Alignment	not modelled	8.7	18	PDB header: structural protein Chain: E: PDB Molecule: collagen-like peptide; PDBTitle: structure of (ppg)4-oog-(ppg)4, monoclinic, twinned crystal
91	c3a08C	Alignment	not modelled	8.1	20	PDB header: structural protein Chain: C: PDB Molecule: collagen-like peptide; PDBTitle: structure of (ppg)4-oog-(ppg)4, monoclinic, twinned crystal
92	c3a08B	Alignment	not modelled	7.8	24	PDB header: structural protein Chain: B: PDB Molecule: collagen-like peptide; PDBTitle: structure of (ppg)4-oog-(ppg)4, monoclinic, twinned crystal
93	c3a08A	Alignment	not modelled	7.8	24	PDB header: structural protein Chain: A: PDB Molecule: collagen-like peptide; PDBTitle: structure of (ppg)4-oog-(ppg)4, monoclinic, twinned crystal
94	c3a0aB	Alignment	not modelled	7.7	13	PDB header: structural protein Chain: B: PDB Molecule: collagen-like peptide; PDBTitle: structure of (ppg)4-opg-(ppg)4, monoclinic, twinned crystal
95	c1x1kF	Alignment	not modelled	6.3	19	PDB header: structural protein Chain: F: PDB Molecule: host-guest peptide (pro-pro-gly)4-(pro-allohyp- PDBTitle: host-guest peptide (pro-pro-gly)4-(pro-allohyp-gly)-(pro-2 pro-gly)4