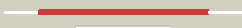
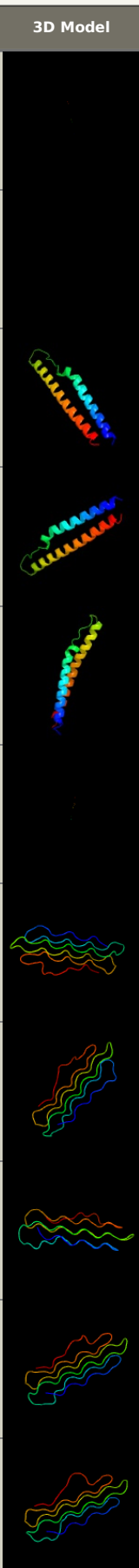













Phyre2

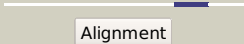

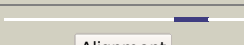
Email	mdejesus@rockefeller.edu
Description	RVBD1468c_(PE_PGRS29)_1655615_1656727
Date	Fri Aug 2 13:30:04 BST 2019
Unique Job ID	0a71b1523089ffa4

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c1ygvA_	 Alignment		99.7	26	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	c3hqvB_	 Alignment		99.5	22	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
3	c2g38A_	 Alignment		99.4	30	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: pe family protein; PDBTitle: a pe/ppe protein complex from mycobacterium tuberculosis
4	d2g38a1	 Alignment		99.4	30	Fold: Ferritin-like Superfamily: PE/PPE dimer-like Family: PE
5	c5xfsA_	 Alignment		99.4	49	PDB header: protein transport Chain: A: PDB Molecule: pe family protein pe8; PDBTitle: crystal structure of pe8-ppe15 in complex with esp5 from m.2 tuberculosis
6	c1y0fB_	 Alignment		99.2	22	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
7	c3bogB_	 Alignment		97.5	38	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		97.5	38	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		97.3	36	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		97.3	36	PDB header: antifreeze protein Chain: B: PDB Molecule: 6.5 kda glycine-rich antifreeze protein; PDBTitle: snow flea antifreeze protein racemate
11	c3boiA_	 Alignment		97.3	36	PDB header: antifreeze protein Chain: A: PDB Molecule: 6.5 kda glycine-rich antifreeze protein; PDBTitle: snow flea antifreeze protein racemate

12	c5ctdB_	Alignment		95.9	34	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
13	c5ctiC_	Alignment		95.7	34	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)
14	c5ctdA_	Alignment		95.6	37	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
15	c2ml2A_	Alignment		95.3	9	PDB header: isomerase Chain: A: PDB Molecule: poly(beta-d-mannuronate) c5 epimerase 6; PDBTitle: solution structure of alge6r2 subunit from the azotobacter vinelandii2 mannuronan c5-epimerase
16	c2zj6A_	Alignment		94.7	14	PDB header: hydrolase Chain: A: PDB Molecule: lipase; PDBTitle: crystal structure of d337a mutant of pseudomonas sp. mis38 lipase
17	c2ml3A_	Alignment		94.5	13	PDB header: isomerase Chain: A: PDB Molecule: poly(beta-d-mannuronate) c5 epimerase 6; PDBTitle: solution structure of alge6r3 subunit from the azotobacter vinelandii2 mannuronan c5-epimerase
18	c2qubG_	Alignment		94.1	12	PDB header: hydrolase Chain: G: PDB Molecule: extracellular lipase; PDBTitle: crystal structure of extracellular lipase lipa from serratia2 marcescens
19	c1k7qA_	Alignment		93.8	6	PDB header: hydrolase Chain: A: PDB Molecule: secreted protease c; PDBTitle: prtC from erwinia chrysanthemi: e189a mutant
20	c1satA_	Alignment		92.9	11	PDB header: hydrolase (serine protease) Chain: A: PDB Molecule: serratia protease; PDBTitle: crystal structure of the 50 kda metallo protease from s.2 marcescens
21	c1nayC_	Alignment	not modelled	92.6	27	PDB header: structural protein Chain: C: PDB Molecule: collagen-like peptide; PDBTitle: gpp-foldon:x-ray structure
22	c1jiwP_	Alignment	not modelled	92.4	17	PDB header: hydrolase/hyrolase inhibitor Chain: P: PDB Molecule: alkaline metalloproteinase; PDBTitle: crystal structure of the apr-aprin complex
23	d1k7ia1	Alignment	not modelled	91.1	10	Fold: Single-stranded right-handed beta-helix Superfamily: beta-Roll Family: Serralysin-like metalloprotease, C-terminal domain
24	d1kapp1	Alignment	not modelled	90.6	17	Fold: Single-stranded right-handed beta-helix Superfamily: beta-Roll Family: Serralysin-like metalloprotease, C-terminal domain
25	c2agmA_	Alignment	not modelled	90.5	16	PDB header: isomerase Chain: A: PDB Molecule: poly(beta-d-mannuronate) c5 epimerase 4; PDBTitle: solution structure of the r-module from alge4
26	c1om8A_	Alignment	not modelled	90.1	17	PDB header: hydrolase Chain: A: PDB Molecule: serralysin; PDBTitle: crystal structure of a cold adapted alkaline protease from pseudomonas2 tac ii 18, co-crystallized with 10 mm edta
27	c2klwA_	Alignment	not modelled	78.4	30	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
28	c3p4gD_	Alignment	not modelled	69.3	16	PDB header: antifreeze protein Chain: D: PDB Molecule: antifreeze protein; PDBTitle: x-ray crystal structure of a hyperactive, ca2+-dependent, beta-helical2 antifreeze protein from an antarctic bacterium
						PDB header: toxin

29	c5cxIA	Alignment	not modelled	68.9	13	Chain: A; PDB Molecule: bifunctional hemolysin/adenylate cyclase; PDBTitle: crystal structure of rtx domain block v of adenylate cyclase toxin2 from bordetella pertussis
30	d1g9ka1	Alignment	not modelled	36.4	12	Fold: Single-stranded right-handed beta-helix Superfamily: beta-Roll Family: Serralysin-like metalloprotease, C-terminal domain
31	c3a0mF	Alignment	not modelled	32.0	40	PDB header: structural protein Chain: F; PDB Molecule: collagen-like peptide; PDBTitle: structure of (ppg)4-ovg-(ppg)4, monoclinic, twinned crystal
32	c1k6fB	Alignment	not modelled	25.4	32	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
33	c1k6fC	Alignment	not modelled	25.4	32	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
34	c1k6fF	Alignment	not modelled	25.4	32	PDB header: structural protein Chain: F; PDB Molecule: collagen triple helix; PDBTitle: crystal structure of the collagen triple helix model [(pro-pro-gly)2 10]3
35	c1k6fD	Alignment	not modelled	25.4	32	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
36	c1k6fE	Alignment	not modelled	25.4	32	PDB header: structural protein Chain: E; PDB Molecule: collagen triple helix; PDBTitle: crystal structure of the collagen triple helix model [(pro-pro-gly)2 10]3
37	c1k6fA	Alignment	not modelled	25.4	32	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
38	c2cuoC	Alignment	not modelled	19.0	33	PDB header: structural protein Chain: C; PDB Molecule: collagen model peptide (pro-pro-gly)9; PDBTitle: collagen model peptide (pro-pro-gly)9
39	c2cuoF	Alignment	not modelled	19.0	33	PDB header: structural protein Chain: F; PDB Molecule: collagen model peptide (pro-pro-gly)9; PDBTitle: collagen model peptide (pro-pro-gly)9
40	c4q1qA	Alignment	not modelled	18.8	9	PDB header: cell adhesion Chain: A; PDB Molecule: adhesin/invasin tibia autotransporter; PDBTitle: crystal structure of tibia-catalyzed hyper-glycosylated tibia55-3502 fragment
41	c3ah9D	Alignment	not modelled	17.1	33	PDB header: structural protein Chain: D; PDB Molecule: collagen-like peptide; PDBTitle: crystal structure of (pro-pro-gly)9 at 1.1 a resolution
42	d1sata1	Alignment	not modelled	14.9	9	Fold: Single-stranded right-handed beta-helix Superfamily: beta-Roll Family: Serralysin-like metalloprotease, C-terminal domain
43	c3ah9F	Alignment	not modelled	13.4	35	PDB header: structural protein Chain: F; PDB Molecule: collagen-like peptide; PDBTitle: crystal structure of (pro-pro-gly)9 at 1.1 a resolution
44	c3ah9A	Alignment	not modelled	12.9	33	PDB header: structural protein Chain: A; PDB Molecule: collagen-like peptide; PDBTitle: crystal structure of (pro-pro-gly)9 at 1.1 a resolution
45	c3ah9E	Alignment	not modelled	11.8	35	PDB header: structural protein Chain: E; PDB Molecule: collagen-like peptide; PDBTitle: crystal structure of (pro-pro-gly)9 at 1.1 a resolution
46	c3ah9C	Alignment	not modelled	11.8	35	PDB header: structural protein Chain: C; PDB Molecule: collagen-like peptide; PDBTitle: crystal structure of (pro-pro-gly)9 at 1.1 a resolution
47	c3ah9B	Alignment	not modelled	11.8	35	PDB header: structural protein Chain: B; PDB Molecule: collagen-like peptide; PDBTitle: crystal structure of (pro-pro-gly)9 at 1.1 a resolution
48	c5juhA	Alignment	not modelled	9.9	14	PDB header: cell adhesion Chain: A; PDB Molecule: antifreeze protein; PDBTitle: crystal structure of c-terminal domain (rv) of mpafp
49	c2cuoA	Alignment	not modelled	8.8	36	PDB header: structural protein Chain: A; PDB Molecule: collagen model peptide (pro-pro-gly)9; PDBTitle: collagen model peptide (pro-pro-gly)9
50	c2cuoE	Alignment	not modelled	8.8	36	PDB header: structural protein Chain: E; PDB Molecule: collagen model peptide (pro-pro-gly)9; PDBTitle: collagen model peptide (pro-pro-gly)9
51	c2cuoB	Alignment	not modelled	8.8	36	PDB header: structural protein Chain: B; PDB Molecule: collagen model peptide (pro-pro-gly)9; PDBTitle: collagen model peptide (pro-pro-gly)9
52	c2cuoD	Alignment	not modelled	8.8	36	PDB header: structural protein Chain: D; PDB Molecule: collagen model peptide (pro-pro-gly)9; PDBTitle: collagen model peptide (pro-pro-gly)9
53	c3admC	Alignment	not modelled	8.3	42	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
54	c3a0mC	Alignment	not modelled	6.9	44	PDB header: structural protein Chain: C; PDB Molecule: collagen-like peptide; PDBTitle: structure of (ppg)4-ovg-(ppg)4, monoclinic, twinned crystal
55	c3abnA	Alignment	not modelled	6.3	42	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

56	c3admB_	 Alignment	not modelled	6.2	42	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
57	c3admA_	 Alignment	not modelled	6.2	42	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
58	c3admF_	 Alignment	not modelled	6.2	42	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