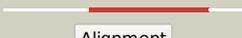
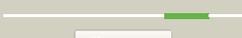
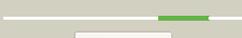
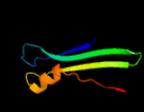
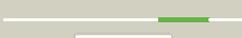
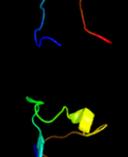
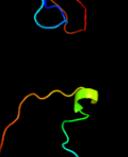
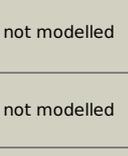


Phyre2

Email	mdejesus@rockefeller.edu
Description	RVBD0179c_(lprO)_209701_210810
Date	Tue Jul 23 14:50:23 BST 2019
Unique Job ID	70daf8aeee71e3ca

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c3ohgA	 Alignment		98.9	21	PDB header: structural genomics, unknown function Chain: A; PDB Molecule: uncharacterized protein from duf2233 family; PDBTitle: crystal structure of a protein with unknown function from duf22332 family (bacova_00430) from bacteroides ovatus at 1.80 a resolution
2	c5h3kA	 Alignment		98.3	27	PDB header: unknown function Chain: A; PDB Molecule: slr0280 protein; PDBTitle: crystal structure of a hypothetical protein from synechocystis
3	c6ozdB	 Alignment		98.1	29	PDB header: structural genomics Chain: B; PDB Molecule: putative exported protein; PDBTitle: crystal structure of putative exported protein (bpss2145) from2 burkholderia pseudomallei k96243
4	c4ftdA	 Alignment		64.9	26	PDB header: structural genomics, unknown function Chain: A; PDB Molecule: uncharacterized protein; PDBTitle: crystal structure of a duf4623 family protein (bacegg_03550) from2 bacteroides eggerthii dsm 20697 at 1.91 a resolution
5	d1itva	 Alignment		55.6	18	Fold: 4-bladed beta-propeller Superfamily: Hemopexin-like domain Family: Hemopexin-like domain
6	d1txka2	 Alignment		51.8	39	Fold: Supersandwich Superfamily: Galactose mutarotase-like Family: MdoG-like
7	c1txkA	 Alignment		51.5	39	PDB header: biosynthetic protein Chain: A; PDB Molecule: glucans biosynthesis protein g; PDBTitle: crystal structure of escherichia coli oppg
8	c3gf8A	 Alignment		49.5	22	PDB header: carbohydrate binding protein Chain: A; PDB Molecule: putative polysaccharide binding proteins (duf1812); PDBTitle: crystal structure of putative polysaccharide binding proteins2 (duf1812) (np_809975.1) from bacteroides thetaiotaomicron vpi-5482 at3 2.20 a resolution
9	c3oyoB	 Alignment		41.3	25	PDB header: plant protein Chain: B; PDB Molecule: hemopexin fold protein cp4; PDBTitle: crystal structure of hemopexin fold protein cp4 from cow pea
10	d1gtka2	 Alignment		37.1	56	Fold: dsRBD-like Superfamily: Porphobilinogen deaminase (hydroxymethylbilane synthase), C-terminal domain Family: Porphobilinogen deaminase (hydroxymethylbilane synthase), C-terminal domain
11	d1pdaa2	 Alignment		36.3	44	Fold: dsRBD-like Superfamily: Porphobilinogen deaminase (hydroxymethylbilane synthase), C-terminal domain Family: Porphobilinogen deaminase (hydroxymethylbilane synthase), C-terminal domain

12	d1pexa_	Alignment		35.5	22	Fold: 4-bladed beta-propeller Superfamily: Hemopexin-like domain Family: Hemopexin-like domain
13	c2cltB_	Alignment		33.7	34	PDB header: hydrolase Chain: B: PDB Molecule: interstitial collagenase; PDBTitle: crystal structure of the active form (full-length) of human2 fibroblast collagenase.
14	c3c7xA_	Alignment		33.4	28	PDB header: hydrolase Chain: A: PDB Molecule: matrix metalloproteinase-14; PDBTitle: hemopexin-like domain of matrix metalloproteinase 14
15	c4mlqA_	Alignment		32.4	21	PDB header: transferase Chain: A: PDB Molecule: porphobilinogen deaminase; PDBTitle: crystal structure of bacillus megaterium porphobilinogen deaminase
16	d1fbla1	Alignment		32.2	31	Fold: 4-bladed beta-propeller Superfamily: Hemopexin-like domain Family: Hemopexin-like domain
17	c3lp9C_	Alignment		28.8	24	PDB header: plant protein Chain: C: PDB Molecule: ls-24; PDBTitle: crystal structure of ls24, a seed albumin from lathyrus2 sativus
18	d1jq5a_	Alignment		28.2	28	Fold: GTP cyclohydrolase I feedback regulatory protein, GFRP Superfamily: GTP cyclohydrolase I feedback regulatory protein, GFRP Family: GTP cyclohydrolase I feedback regulatory protein, GFRP
19	d1xdna_	Alignment		25.0	32	Fold: ATP-grasp Superfamily: DNA ligase/mRNA capping enzyme, catalytic domain Family: RNA ligase
20	c1su3A_	Alignment		23.1	34	PDB header: hydrolase Chain: A: PDB Molecule: interstitial collagenase; PDBTitle: x-ray structure of human prommp-1: new insights into2 collagenase action
21	c5aeoA_	Alignment	not modelled	21.6	33	PDB header: immune system Chain: A: PDB Molecule: r. equi vapg protein; PDBTitle: virulence-associated protein vapg from the intracellular2 pathogen rhodococcus equi
22	c4cv7A_	Alignment	not modelled	21.6	33	PDB header: toxin Chain: A: PDB Molecule: virulence associated protein vapb; PDBTitle: crystal structure of rhodococcus equi vapb
23	c4csbA_	Alignment	not modelled	21.4	30	PDB header: unknown function Chain: A: PDB Molecule: virulence associated protein vapd; PDBTitle: structure of the virulence-associated protein vapd from the2 intracellular pathogen rhodococcus equi.
24	d1hxna_	Alignment	not modelled	21.0	19	Fold: 4-bladed beta-propeller Superfamily: Hemopexin-like domain Family: Hemopexin-like domain
25	d1g47a2	Alignment	not modelled	20.1	32	Fold: Glucocorticoid receptor-like (DNA-binding domain) Superfamily: Glucocorticoid receptor-like (DNA-binding domain) Family: LIM domain
26	c3eq1A_	Alignment	not modelled	19.6	44	PDB header: transferase Chain: A: PDB Molecule: porphobilinogen deaminase; PDBTitle: the crystal structure of human porphobilinogen deaminase at2.8a resolution
27	c2pnyA_	Alignment	not modelled	19.1	14	PDB header: isomerase Chain: A: PDB Molecule: isopentenyl-diphosphate delta-isomerase 2; PDBTitle: structure of human isopentenyl-diphosphate delta-isomerase 2
28	d1lbu2	Alignment	not modelled	18.6	23	Fold: Hedgehog/DD-peptidase Superfamily: Hedgehog/DD-peptidase Family: Muramoyl-pentapeptide carboxypeptidase

29	c2ypnA	Alignment	not modelled	18.6	56	PDB header: transferase Chain: A: PDB Molecule: protein (hydroxymethylbilane synthase); PDBTitle: hydroxymethylbilane synthase
30	c4xfkA	Alignment	not modelled	18.5	13	PDB header: transport protein Chain: A: PDB Molecule: putative branched chain amino acid abc transporter, PDBTitle: crystal structure of leucine-, isoleucine-, valine-, threonine-, and 2 alanine-binding protein from brucella ovis
31	c4jxpA	Alignment	not modelled	18.0	55	PDB header: hydrolase Chain: A: PDB Molecule: alpha-l-iduronidase; PDBTitle: crystal structure of human alpha-l-iduronidase, monoclinic form
32	c4q0pA	Alignment	not modelled	17.9	31	PDB header: isomerase Chain: A: PDB Molecule: l-ribose isomerase; PDBTitle: crystal structure of acinetobacter sp. d128 l-ribose isomerase in2 complex with l-ribose
33	c1gxdA	Alignment	not modelled	17.7	23	PDB header: hydrolase Chain: A: PDB Molecule: 72 kda type iv collagenase; PDBTitle: prommp-2/timp-2 complex
34	d1u2ca1	Alignment	not modelled	17.6	67	Fold: Immunoglobulin-like beta-sandwich Superfamily: Cadherin-like Family: Dystroglycan, N-terminal domain
35	c4aupA	Alignment	not modelled	17.1	44	PDB header: hydrolase Chain: A: PDB Molecule: phospholipase a2 group xiii; PDBTitle: tuber borchii phospholipase a2
36	c4htgA	Alignment	not modelled	16.7	33	PDB header: transferase/transferase inhibitor Chain: A: PDB Molecule: porphobilinogen deaminase, chloroplastic; PDBTitle: porphobilinogen deaminase from arabidopsis thaliana
37	d1su3a2	Alignment	not modelled	16.3	34	Fold: 4-bladed beta-propeller Superfamily: Hemopexin-like domain Family: Hemopexin-like domain
38	c5l6mA	Alignment	not modelled	14.7	30	PDB header: hydrolase Chain: A: PDB Molecule: vapb family protein; PDBTitle: structure of caulobacter crescentus vapbc1 (vapb1deltac:vapc1 form)
39	c2zpaB	Alignment	not modelled	14.6	23	PDB header: transferase Chain: B: PDB Molecule: uncharacterized protein ypfi; PDBTitle: crystal structure of trna(met) cytidine acetyltransferase
40	c4g0dD	Alignment	not modelled	13.6	22	PDB header: hydrolase Chain: D: PDB Molecule: collagenase 3; PDBTitle: human collagenase 3 (mmp-13) full form with peptides from pro-domain
41	c3anoA	Alignment	not modelled	13.6	38	PDB header: transferase Chain: A: PDB Molecule: ap-4-a phosphorylase; PDBTitle: crystal structure of a novel diadenosine 5',5'''-p1,p4-tetraphosphate2 phosphorylase from mycobacterium tuberculosis h37rv
42	c2y9zB	Alignment	not modelled	13.1	27	PDB header: transcription Chain: B: PDB Molecule: iswi one complex protein 3; PDBTitle: chromatin remodeling factor isw1a(del_atpase) in dna complex
43	c3ba0A	Alignment	not modelled	12.9	24	PDB header: hydrolase Chain: A: PDB Molecule: macrophage metalloelastase; PDBTitle: crystal structure of full-length human mmp-12
44	c5nwmB	Alignment	not modelled	12.5	50	PDB header: signaling protein Chain: B: PDB Molecule: signal transducer and activator of transcription 6; PDBTitle: insight into the molecular recognition mechanism of the coactivator2 ncoa1 by stat6
45	c6imfB	Alignment	not modelled	12.4	18	PDB header: toxin/antitoxin Chain: B: PDB Molecule: small serum protein 2; PDBTitle: crystal structure of toxin/antitoxin complex
46	c4yycA	Alignment	not modelled	12.1	19	PDB header: transferase Chain: A: PDB Molecule: putative trimethylamine methyltransferase; PDBTitle: crystal structure of trimethylamine methyltransferase from2 sinorhizobium meliloti in complex with unknown ligand
47	c4mi7A	Alignment	not modelled	11.9	40	PDB header: hydrolase, toxin Chain: A: PDB Molecule: bacteriophage encoded virulence factor; PDBTitle: crystal structure of salmonella effector protein gtge
48	d1cmra	Alignment	not modelled	11.8	54	Fold: Knottins (small inhibitors, toxins, lectins) Superfamily: Scorpion toxin-like Family: Short-chain scorpion toxins
49	c3mlhA	Alignment	not modelled	11.7	24	PDB header: viral protein Chain: A: PDB Molecule: hemagglutinin; PDBTitle: crystal structure of the 2009 h1n1 influenza virus hemagglutinin2 receptor-binding domain
50	c2cisA	Alignment	not modelled	11.6	23	PDB header: isomerase Chain: A: PDB Molecule: glucose-6-phosphate 1-epimerase; PDBTitle: structure-based functional annotation: yeast ymr099c codes for a d-2 hexose-6-phosphate mutarotase. complex with tagatose-6-phosphate
51	c5ax7A	Alignment	not modelled	11.1	22	PDB header: transferase Chain: A: PDB Molecule: pyruvyl transferase 1; PDBTitle: yeast pyruvyltransferase pvg1p
52	c2ec5B	Alignment	not modelled	10.7	32	PDB header: toxin Chain: B: PDB Molecule: dermonecrotic toxin; PDBTitle: crystal structures reveal a thiol-protease like catalytic triad in the2 c-terminal region of pasteurilla multocida toxin
53	c3wdkA	Alignment	not modelled	10.6	26	PDB header: ligase Chain: A: PDB Molecule: 4-phosphopantoate--beta-alanine ligase; PDBTitle: crystal structure of 4-phosphopantoate-beta-alanine ligase complexed2 with reaction intermediate
54	c3navB	Alignment	not modelled	10.3	20	PDB header: cell adhesion Chain: B: PDB Molecule: putative adhesin;

54	c3payB	Alignment	not modelled	10.3	20	PDBTitle: crystal structure of a putative adhesin (bacova_04077) from <i>Bacteroides ovatus</i> at 2.50 Å resolution PDB header: virus
55	c1fpvA	Alignment	not modelled	10.3	14	Chain: A; PDB Molecule: feline panleukopenia virus (strain b) viral PDBTitle: structure determination of feline panleukopenia virus empty2 particles
56	c2iz4A	Alignment	not modelled	9.7	11	PDB header: inhibitor Chain: A; PDB Molecule: beta-microseminoprotein; PDBTitle: solution structure of human and porcine beta-2 microseminoprotein
57	d1wk1a	Alignment	not modelled	9.4	13	Fold: C-type lectin-like Superfamily: C-type lectin-like Family: C-type lectin domain
58	d1w91a1	Alignment	not modelled	9.4	45	Fold: Glycosyl hydrolase domain Superfamily: Glycosyl hydrolase domain Family: Composite domain of glycosyl hydrolase families 5, 30, 39 and 51
59	c2qnkA	Alignment	not modelled	9.4	14	PDB header: oxidoreductase Chain: A; PDB Molecule: 3-hydroxyanthranilate 3,4-dioxygenase; PDBTitle: crystal structure of human 3-hydroxyanthranilate 3,4-dioxygenase
60	c4bluB	Alignment	not modelled	9.3	33	PDB header: transferase Chain: B; PDB Molecule: ribosomal rna large subunit methyltransferase j; PDBTitle: crystal structure of escherichia coli 23s rrna (a2030-n6)-2 methyltransferase rlmj
61	c2jxyA	Alignment	not modelled	9.2	19	PDB header: hydrolase Chain: A; PDB Molecule: macrophage metalloelastase; PDBTitle: solution structure of the hemopexin-like domain of mmp12
62	d1gvia2	Alignment	not modelled	9.2	60	Fold: Glycosyl hydrolase domain Superfamily: Glycosyl hydrolase domain Family: alpha-Amylases, C-terminal beta-sheet domain
63	d2viua	Alignment	not modelled	9.2	29	Fold: Viral protein domain Superfamily: Viral protein domain Family: Influenza hemagglutinin headpiece
64	c2i6kA	Alignment	not modelled	9.0	14	PDB header: isomerase Chain: A; PDB Molecule: isopentenyl-diphosphate delta-isomerase 1; PDBTitle: crystal structure of human type i isomerase complexed with a2 substrate analog
65	c4eogA	Alignment	not modelled	8.9	38	PDB header: dna binding protein Chain: A; PDB Molecule: putative uncharacterized protein; PDBTitle: crystal structure of csx1 of <i>pyrococcus furiosus</i>
66	c3isiA	Alignment	not modelled	8.9	20	PDB header: transferase Chain: A; PDB Molecule: purine catabolism protein pucg; PDBTitle: crystal structure of ureidoglycine-glyoxylate aminotransferase (pucg)2 from <i>Bacillus subtilis</i>
67	d1mqma	Alignment	not modelled	8.7	24	Fold: Viral protein domain Superfamily: Viral protein domain Family: Influenza hemagglutinin headpiece
68	c2gaaA	Alignment	not modelled	8.7	38	PDB header: unknown function Chain: A; PDB Molecule: hypothetical 39.9 kda protein; PDBTitle: crystal structure of yfh7 from <i>Saccharomyces cerevisiae</i> : a2 putative p-loop containing kinase with a circular3 permutation.
69	c2hb5A	Alignment	not modelled	8.6	20	PDB header: hydrolase Chain: A; PDB Molecule: reverse transcriptase/ribonuclease h; PDBTitle: crystal structure of the moloney murine leukemia virus rnase h domain
70	c1hupA	Alignment	not modelled	8.5	10	PDB header: c-type lectin Chain: A; PDB Molecule: mannose-binding protein; PDBTitle: human mannose binding protein carbohydrate recognition domain2 trimerizes through a triple alpha-helical coiled-coil
71	d2visc	Alignment	not modelled	8.4	30	Fold: Viral protein domain Superfamily: Viral protein domain Family: Influenza hemagglutinin headpiece
72	c2o0tB	Alignment	not modelled	8.3	22	PDB header: lyase Chain: B; PDB Molecule: diaminopimelate decarboxylase; PDBTitle: the three dimensional structure of diaminopimelate decarboxylase from <i>Mycobacterium tuberculosis</i> reveals a tetrameric enzyme organisation
73	c3zvkg	Alignment	not modelled	8.3	20	PDB header: antitoxin/toxin/dna Chain: G; PDB Molecule: antitoxin of toxin-antitoxin system vapb; PDBTitle: crystal structure of vapbc2 from <i>Rickettsia felis</i> bound to a dna fragment from their promoter
74	c4y90B	Alignment	not modelled	8.2	26	PDB header: isomerase Chain: B; PDB Molecule: triosephosphate isomerase; PDBTitle: crystal structure of triosephosphate isomerase from <i>Deinococcus radiodurans</i>
75	c3fcsA	Alignment	not modelled	8.2	20	PDB header: cell adhesion/blood clotting Chain: A; PDB Molecule: integrin, alpha 2b; PDBTitle: structure of complete ectodomain of integrin aiibb3
76	c2ww9O	Alignment	not modelled	8.1	57	PDB header: ribosome Chain: O; PDB Molecule: 60s ribosomal protein l39; PDBTitle: cryo-em structure of the active yeast ssh1 complex bound to the yeast2 80s ribosome
77	c4f15D	Alignment	not modelled	8.1	24	PDB header: immune system Chain: D; PDB Molecule: hemagglutinin; PDBTitle: molecular basis of infectivity of 2009 pandemic h1n1 influenza a2 viruses
78	d1otga	Alignment	not modelled	8.1	20	Fold: Tautomerase/MIF Superfamily: Tautomerase/MIF Family: 5-carboxymethyl-2-hydroxyruconate isomerase (CHMI)
79	c1q14A	Alignment	not modelled	8.0	14	PDB header: hydrolase Chain: A; PDB Molecule: hst2 protein; PDBTitle: structure and autoregulation of the yeast hst2 homolog of

