

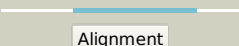

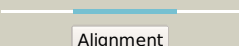
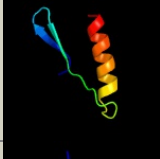
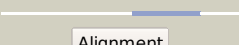
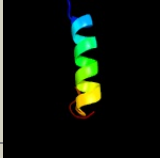
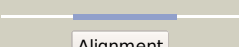

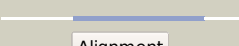
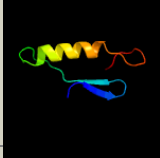
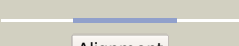
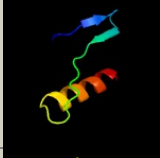

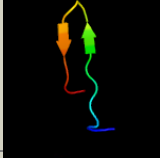





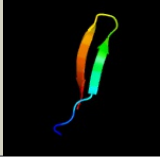
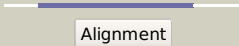




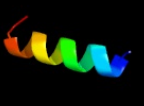
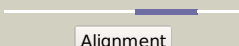

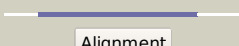
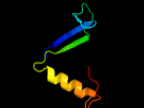
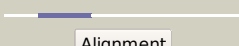
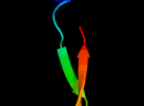
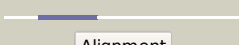
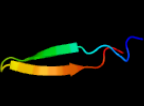

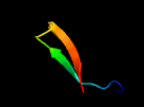

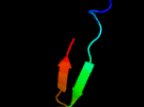



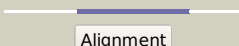
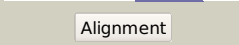
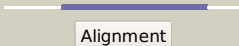
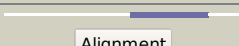




Phyre2

Email	mdejesus@rockefeller.edu
Description	RVBD2517c_(-)_2833520_2833771
Date	Wed Aug 7 12:50:15 BST 2019
Unique Job ID	1d190edfd8c15b49

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	d2ewoa1	 Alignment		38.7	14	Fold: Pentein, beta/alpha-propeller Superfamily: Pentein Family: Porphyromonas-type peptidylarginine deiminase
2	d1vkpa_	 Alignment		37.4	16	Fold: Pentein, beta/alpha-propeller Superfamily: Pentein Family: Porphyromonas-type peptidylarginine deiminase
3	d2cmua1	 Alignment		33.8	14	Fold: Pentein, beta/alpha-propeller Superfamily: Pentein Family: Porphyromonas-type peptidylarginine deiminase
4	c2l6pa_	 Alignment		29.3	24	PDB header: structure genomics, unknown function Chain: A: PDB Molecule: phac1, phac2 and phad genes; PDBTitle: nmr solution structure of the protein np_253742.1
5	c2jerG_	 Alignment		23.9	22	PDB header: hydrolase Chain: G: PDB Molecule: agmatine deiminase; PDBTitle: agmatine deiminase of enterococcus faecalis catalyzing its2 reaction.
6	d1zbra1	 Alignment		22.7	15	Fold: Pentein, beta/alpha-propeller Superfamily: Pentein Family: Porphyromonas-type peptidylarginine deiminase
7	d1xkna_	 Alignment		22.3	27	Fold: Pentein, beta/alpha-propeller Superfamily: Pentein Family: Porphyromonas-type peptidylarginine deiminase
8	d1ylxa1	 Alignment		21.9	33	Fold: N domain of copper amine oxidase-like Superfamily: GK1464-like Family: GK1464-like
9	d2jera1	 Alignment		21.2	22	Fold: Pentein, beta/alpha-propeller Superfamily: Pentein Family: Porphyromonas-type peptidylarginine deiminase
10	c4ytgA_	 Alignment		21.1	11	PDB header: hydrolase Chain: A: PDB Molecule: peptidylarginine deiminase; PDBTitle: crystal structure of porphyromonas gingivalis peptidylarginine2 deiminase (ppad) mutant c351a in complex with dipeptide met-arg.
11	d1upsa2	 Alignment		20.1	53	Fold: beta-Trefoil Superfamily: Ricin B-like lectins Family: GlcNAc-alpha-1,4-Gal-releasing endo-beta-galactosidase, GngC, C-terminal domain

12	c3tquD	 Alignment		17.9	22	PDB header: hydrolase Chain: D: PDB Molecule: non-canonical purine ntp pyrophosphatase; PDBTitle: structure of a ham1 protein from coxiella burnetii
13	c2qvtA	 Alignment		17.8	100	PDB header: unknown function Chain: A: PDB Molecule: avr1567-d; PDBTitle: structure of melampsora lini avirulence protein, avr1567-d
14	c2pr7A	 Alignment		17.3	53	PDB header: hydrolase Chain: A: PDB Molecule: haloacid dehalogenase/epoxide hydrolase family; PDBTitle: crystal structure of uncharacterized protein (np_599989.1) from2 corynebacterium glutamicum atcc 13032 kitasato at 1.44 a resolution
15	c2l6nA	 Alignment		17.1	26	PDB header: structure genomics, unknown function Chain: A: PDB Molecule: uncharacterized protein yp_001092504.1; PDBTitle: nmr solution structure of the protein yp_001092504.1
16	c3dntB	 Alignment		16.0	25	PDB header: transferase Chain: B: PDB Molecule: protein hipa; PDBTitle: structures of mdt proteins
17	c2vsaA	 Alignment		15.5	35	PDB header: toxin Chain: A: PDB Molecule: mosquitocidal toxin; PDBTitle: structure and mode of action of a mosquitocidal holotoxin
18	c6eujC	 Alignment		14.6	23	PDB header: hydrolase Chain: C: PDB Molecule: beta-glucanase; PDBTitle: the gh43, beta 1,3 galactosidase, bt0265
19	d2hg6a1	 Alignment		14.2	40	Fold: PA1123-like Superfamily: PA1123-like Family: PA1123-like
20	c3phzA	 Alignment		13.9	15	PDB header: sugar binding protein Chain: A: PDB Molecule: ricin b-related lectin; PDBTitle: crystal structure analysis of polyporus squamosus lectin bound to2 human-type influenza-binding epitope neu5aca2-6galb1-4glcnac
21	c1yr2A	 Alignment	not modelled	13.3	25	PDB header: hydrolase Chain: A: PDB Molecule: prolyl oligopeptidase; PDBTitle: structural and mechanistic analysis of two prolyl endopeptidases: role2 of inter-domain dynamics in catalysis and specificity
22	c2k8vA	 Alignment	not modelled	12.6	21	PDB header: oxidoreductase Chain: A: PDB Molecule: thioredoxin domain-containing protein 12; PDBTitle: solution structure of oxidised erp18
23	d2f2fa1	 Alignment	not modelled	11.7	15	Fold: beta-Trefoil Superfamily: Ricin B-like lectins Family: Ricin B-like
24	c6b2wB	 Alignment	not modelled	11.4	18	PDB header: hydrolase Chain: B: PDB Molecule: putative peptidyl-arginine deiminase family protein; PDBTitle: c. jejuni c315s agmatine deiminase with substrate bound
25	d2qrda1	 Alignment	not modelled	11.2	20	Fold: TBP-like Superfamily: KA1-like Family: Ssp2 C-terminal domain-like
26	c3bc9A	 Alignment	not modelled	10.5	29	PDB header: hydrolase Chain: A: PDB Molecule: alpha amylase, catalytic region; PDBTitle: alpha-amylase b in complex with acarbose
27	d1zcaa1	 Alignment	not modelled	10.5	24	Fold: Transducin (alpha subunit), insertion domain Superfamily: Transducin (alpha subunit), insertion domain Family: Transducin (alpha subunit), insertion domain
28	d1z0xa2	 Alignment	not modelled	10.3	29	Fold: Tetracyclin repressor-like, C-terminal domain Superfamily: Tetracyclin repressor-like, C-terminal domain Family: Tetracyclin repressor-like, C-terminal domain
						PDB header: hormone receptor

29	c3qrzC_	Alignment	not modelled	9.8	44	Chain: C: PDB Molecule: abscisic acid receptor pyl5; PDBTitle: crystal structure of native abscisic acid receptor pyl5 at 2.62 angstrom
30	d1k7ka_	Alignment	not modelled	9.6	17	Fold: Anticodon-binding domain-like Superfamily: ITPase-like Family: ITPase (Ham1)
31	d1dvpa1	Alignment	not modelled	9.5	28	Fold: alpha-alpha superhelix Superfamily: ENTH/VHS domain Family: VHS domain
32	c5uqyB_	Alignment	not modelled	9.2	30	PDB header: viral protein/immune system Chain: B: PDB Molecule: envelope glycoprotein gp2; PDBTitle: crystal structure of marburg virus gp in complex with the human2 survivor antibody mr78
33	d2v8qa1	Alignment	not modelled	9.1	20	Fold: TBP-like Superfamily: KA1-like Family: Ssp2 C-terminal domain-like
34	d2bcjq1	Alignment	not modelled	9.1	14	Fold: Transducin (alpha subunit), insertion domain Superfamily: Transducin (alpha subunit), insertion domain Family: Transducin (alpha subunit), insertion domain
35	c2jwB_	Alignment	not modelled	8.5	23	PDB header: membrane protein Chain: B: PDB Molecule: protein tolR; PDBTitle: solution structure of periplasmic domain of tolR from h.2 influenzae with saxs data
36	c5d1D_	Alignment	not modelled	8.4	22	PDB header: transferase Chain: D: PDB Molecule: polyphosphate:amp phosphotransferase; PDBTitle: crystal structure of polyphosphate kinase from meiothermus ruber bound2 to atp
37	d2f99a1	Alignment	not modelled	8.2	19	Fold: Cystatin-like Superfamily: NTF2-like Family: SnoaL-like polyketide cyclase
38	c1x5bA_	Alignment	not modelled	8.1	27	PDB header: protein binding Chain: A: PDB Molecule: signal transducing adaptor molecule 2; PDBTitle: the solution structure of the vhs domain of human signal2 transducing adaptor molecule 2
39	c1ybiA_	Alignment	not modelled	8.1	12	PDB header: toxin Chain: A: PDB Molecule: non-toxin haemagglutinin ha34; PDBTitle: crystal structure of ha33a, a neurotoxin-associated protein2 from clostridium botulinum type a
40	c4bz0A_	Alignment	not modelled	8.0	29	PDB header: motor protein Chain: A: PDB Molecule: putative type iv pilus biosynthesis protein; PDBTitle: structural characterization using sulfur-sad of the cytoplasmic2 domain of burkholderia pseudomallei pilo2bp, an actin-like3 protein component of a type ivb r64-derivative pilus machinery.
41	c3plwA_	Alignment	not modelled	7.8	56	PDB header: hydrolase Chain: A: PDB Molecule: recombination enhancement function protein; PDBTitle: ref protein from p1 bacteriophage
42	c2dxcG_	Alignment	not modelled	7.3	14	PDB header: hydrolase Chain: G: PDB Molecule: thiocyanate hydrolase subunit alpha; PDBTitle: recombinant thiocyanate hydrolase, fully-matured form
43	c3gjxE_	Alignment	not modelled	7.3	35	PDB header: protein transport Chain: E: PDB Molecule: snurportin-1; PDBTitle: crystal structure of the nuclear export complex crm1-2 snurportin1-rangtp
44	d1o9ja_	Alignment	not modelled	7.1	16	Fold: ALDH-like Superfamily: ALDH-like Family: ALDH-like
45	c4owlA_	Alignment	not modelled	7.0	17	PDB header: toxin Chain: A: PDB Molecule: cytolysin; PDBTitle: crystal structure of the vibrio vulnificus hemolysin/cytolysin beta-2 trefoil lectin with n-acetyl-d-lactosamine bound
46	c6jx3B_	Alignment	not modelled	6.9	21	PDB header: peptide binding protein Chain: B: PDB Molecule: tfub1; PDBTitle: lasso peptide synthetase b1 complexed with the leader peptide
47	c5xg5A_	Alignment	not modelled	6.9	15	PDB header: de novo protein Chain: A: PDB Molecule: mitsuba-1; PDBTitle: crystal structure of mitsuba-1 with bound nacgal
48	d1juqa_	Alignment	not modelled	6.9	29	Fold: alpha-alpha superhelix Superfamily: ENTH/VHS domain Family: VHS domain
49	c2cpmA_	Alignment	not modelled	6.9	21	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: sperm-associated antigen 7; PDBTitle: solution structure of the r3h domain of human sperm-2 associated antigen 7
50	c1sr4A_	Alignment	not modelled	6.8	14	PDB header: toxin Chain: A: PDB Molecule: cytolethal distending toxin subunit a; PDBTitle: crystal structure of the haemophilus ducreyi cytolethal2 distending toxin
51	d1sr4a_	Alignment	not modelled	6.8	14	Fold: beta-Trefoil Superfamily: Ricin B-like lectins Family: Ricin B-like
52	c1ij2C_	Alignment	not modelled	6.8	45	PDB header: transcription Chain: C: PDB Molecule: general control protein gcn4; PDBTitle: gcn4-pvtl coiled-coil trimer with threonine at the a(16)2 position
53	c1ij3C_	Alignment	not modelled	6.8	45	PDB header: transcription Chain: C: PDB Molecule: general control protein gcn4; PDBTitle: gcn4-pvsl coiled-coil trimer with serine at the a(16)2 position
54	c1rb1B_	Alignment	not modelled	6.8	45	PDB header: dna binding protein Chain: B: PDB Molecule: general control protein gcn4; PDBTitle: gcn4-leucine zipper core mutant as n16a trigonal automatic2 solution PDB header: dna binding protein

55	c1rb1A_	Alignment	not modelled	6.8	45	Chain: A: PDB Molecule: general control protein gcn4; PDBTitle: gcn4-leucine zipper core mutant as n16a trigonal automatic2 solution
56	c3k7zB_	Alignment	not modelled	6.8	45	PDB header: dna binding protein Chain: B: PDB Molecule: general control protein gcn4; PDBTitle: gcn4-leucine zipper core mutant as n16a trigonal automatic2 solution
57	c3k7zA_	Alignment	not modelled	6.8	45	PDB header: dna binding protein Chain: A: PDB Molecule: general control protein gcn4; PDBTitle: gcn4-leucine zipper core mutant as n16a trigonal automatic2 solution
58	c6au0A_	Alignment	not modelled	6.7	24	PDB header: transferase/transferase inhibitor Chain: A: PDB Molecule: polyphosphate:amp phosphotransferase; PDBTitle: crystal structure of ppk2 (class iii) in complex with bisphosphonate2 inhibitor (2-((3,5-dichlorophenyl)amino)ethane-1,1-diyl)diphosphonic3 acid
59	c1dvpA_	Alignment	not modelled	6.7	29	PDB header: transferase Chain: A: PDB Molecule: hepatocyte growth factor-regulated tyrosine PDBTitle: crystal structure of the vhs and fyve tandem domains of hrs,2 a protein involved in membrane trafficking and signal3 transduction
60	c1ij2B_	Alignment	not modelled	6.6	45	PDB header: transcription Chain: B: PDB Molecule: general control protein gcn4; PDBTitle: gcn4-pvtl coiled-coil trimer with threonine at the a(16)2 position
61	c3gb8B_	Alignment	not modelled	6.5	33	PDB header: transport protein Chain: B: PDB Molecule: snurportin-1; PDBTitle: crystal structure of crm1/snurportin-1 complex
62	c4eagA_	Alignment	not modelled	6.5	20	PDB header: transferase Chain: A: PDB Molecule: eg:132e8.2 protein; PDBTitle: co-crystal structure of an chimeric ampk core with atp
63	c6dbbA_	Alignment	not modelled	6.5	21	PDB header: oxidoreductase Chain: A: PDB Molecule: putative aldehyde dehydrogenase family protein; PDBTitle: crystal structure of a putative aldehyde dehydrogenase family protein2 burkholderia cenocepacia j2315 in complex with partially reduced nadh
64	d1zcba1	Alignment	not modelled	6.5	25	Fold: Transducin (alpha subunit), insertion domain Superfamily: Transducin (alpha subunit), insertion domain Family: Transducin (alpha subunit), insertion domain
65	d1q3ma_	Alignment	not modelled	6.4	71	Fold: GLA-domain Superfamily: GLA-domain Family: GLA-domain
66	c1rb6C_	Alignment	not modelled	6.4	45	PDB header: dna binding protein Chain: C: PDB Molecule: general control protein gcn4; PDBTitle: antiparallel trimer of gcn4-leucine zipper core mutant as n16a2 tetragonal form
67	c4as2D_	Alignment	not modelled	6.1	24	PDB header: hydrolase Chain: D: PDB Molecule: phosphorylcholine phosphatase; PDBTitle: pseudomonas aeruginosa phosphorylcholine phosphatase. monoclinic form
68	c4eajA_	Alignment	not modelled	5.9	20	PDB header: transferase Chain: A: PDB Molecule: 5'-amp-activated protein kinase catalytic subunit alpha-1; PDBTitle: co-crystal of ampk core with amp soaked with atp
69	c5lnk2_	Alignment	not modelled	5.8	29	PDB header: oxidoreductase Chain: 2: PDB Molecule: mitochondrial complex i, 24 kda subunit; PDBTitle: entire ovine respiratory complex i
70	c1ij3B_	Alignment	not modelled	5.6	45	PDB header: transcription Chain: B: PDB Molecule: general control protein gcn4; PDBTitle: gcn4-pvsl coiled-coil trimer with serine at the a(16)2 position
71	c1mszA_	Alignment	not modelled	5.6	30	PDB header: dna binding protein Chain: A: PDB Molecule: dna-binding protein smubp-2; PDBTitle: solution structure of the r3h domain from human smubp-2
72	d1msza_	Alignment	not modelled	5.6	30	Fold: IF3-like Superfamily: R3H domain Family: R3H domain
73	c2q83A_	Alignment	not modelled	5.6	12	PDB header: transferase Chain: A: PDB Molecule: ytaa protein; PDBTitle: crystal structure of ytaa (2635576) from bacillus subtilis at 2.50 a2 resolution
74	d1mxga1	Alignment	not modelled	5.6	21	Fold: Glycosyl hydrolase domain Superfamily: Glycosyl hydrolase domain Family: alpha-Amylases, C-terminal beta-sheet domain
75	c2cceB_	Alignment	not modelled	5.5	58	PDB header: four helix bundle Chain: B: PDB Molecule: general control protein gcn4; PDBTitle: parallel configuration of pli e20s
76	c3auoB_	Alignment	not modelled	5.5	30	PDB header: transferase/dna Chain: B: PDB Molecule: dna polymerase beta family (x family); PDBTitle: dna polymerase x from thermus thermophilus hb8 ternary complex with 1-2 nt gapped dna and ddgtp
77	d1rj9a1	Alignment	not modelled	5.5	70	Fold: Four-helical up-and-down bundle Superfamily: Domain of the SRP/SRP receptor G-proteins Family: Domain of the SRP/SRP receptor G-proteins
78	c5by4A_	Alignment	not modelled	5.5	29	PDB header: protein transport Chain: A: PDB Molecule: protein tolr; PDBTitle: structure and function of the escherichia coli tol-pal stator protein2 tolr
79	c6g1cV_	Alignment	not modelled	5.4	21	PDB header: antitoxin Chain: V: PDB Molecule: antitoxin hicb; PDBTitle: crystal structure of the n-terminal domain of burkholderia2 pseudomallei antitoxin hicb
						Fold: 4-helical cytokines

80	d1v7mv_	Alignment	not modelled	5.4	35	Superfamily: 4-helical cytokines Family: Short-chain cytokines
81	c4bnqA_	Alignment	not modelled	5.4	20	PDB header: hydrolase Chain: A: PDB Molecule: non-canonical purine ntp pyrophosphatase; PDBTitle: the structure of the staphylococcus aureus ham1 protein
82	d1lvaa3	Alignment	not modelled	5.4	27	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: C-terminal fragment of elongation factor SelB
83	c1ce0B_	Alignment	not modelled	5.3	55	PDB header: hiv-1 envelope protein Chain: B: PDB Molecule: protein (leucine zipper model h38-p1); PDBTitle: trimerization specificity in hiv-1 gp41: analysis with a2 gcn4 leucine zipper model
84	d1v29b_	Alignment	not modelled	5.2	36	Fold: SH3-like barrel Superfamily: Electron transport accessory proteins Family: Nitrile hydratase beta chain
85	c3j21M_	Alignment	not modelled	5.1	31	PDB header: ribosome Chain: M: PDB Molecule: 50s ribosomal protein l15e; PDBTitle: promiscuous behavior of proteins in archaeal ribosomes revealed by2 cryo-em: implications for evolution of eukaryotic ribosomes (50s3 ribosomal proteins)