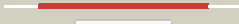



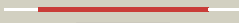










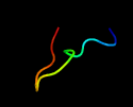




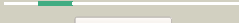
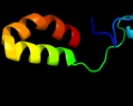
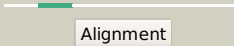

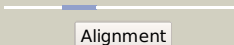

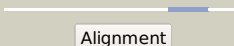
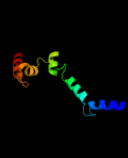
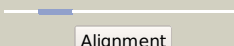

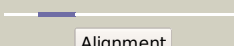
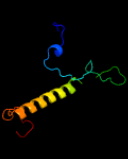
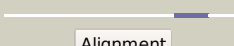
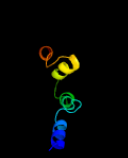
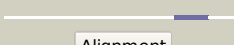


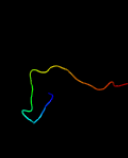


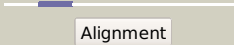
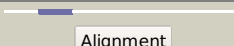
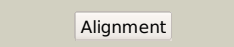
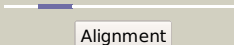
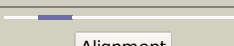
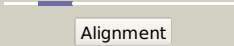
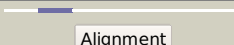
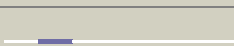


Phyre2

Email	mdejesus@rockefeller.edu
Description	RVBD2097c_(-)_2355327_2356685
Date	Mon Aug 5 13:25:21 BST 2019
Unique Job ID	56eaa2e08237047e

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c4b0tB_	 Alignment		100.0	55	PDB header: ligase Chain: B: PDB Molecule: pup--protein ligase; PDBTitle: structure of the pup ligase pafa of the prokaryotic2 ubiquitin-like modification pathway in complex with adp
2	c4bjrA_	 Alignment		100.0	54	PDB header: ligase Chain: A: PDB Molecule: pup--protein ligase, prokaryotic ubiquitin-like protein PDBTitle: crystal structure of the complex between prokaryotic2 ubiquitin-like protein pup and its ligase pafa
3	c4b0sA_	 Alignment		100.0	41	PDB header: hydrolase Chain: A: PDB Molecule: deamidase-depupylase dop; PDBTitle: structure of the deamidase-depupylase dop of the prokaryotic2 ubiquitin-like modification pathway in complex with atp
4	d1r8ga_	 Alignment		96.8	12	Fold: Glutamine synthetase/guanido kinase Superfamily: Glutamine synthetase/guanido kinase Family: Glutamate-cysteine ligase family 2 (GCS2)
5	d1tt4a_	 Alignment		95.7	11	Fold: Glutamine synthetase/guanido kinase Superfamily: Glutamine synthetase/guanido kinase Family: Glutamate-cysteine ligase family 2 (GCS2)
6	c1tt4B_	 Alignment		95.7	11	PDB header: structural genomics, unknown function Chain: B: PDB Molecule: putative cytoplasmic protein; PDBTitle: structure of np459575, a predicted glutathione synthase from2 salmonella typhimurium
7	c2gwcE_	 Alignment		89.7	13	PDB header: ligase Chain: E: PDB Molecule: glutamate cysteine ligase; PDBTitle: crystal structure of plant glutamate cysteine ligase in complex with a2 transition state analogue
8	c5cywB_	 Alignment		50.9	36	PDB header: viral protein Chain: B: PDB Molecule: interferon antagonist c7; PDBTitle: crystal structure of vaccinia virus c7
9	d1ghha_	 Alignment		49.2	17	Fold: DNA damage-inducible protein DinI Superfamily: DNA damage-inducible protein DinI Family: DNA damage-inducible protein DinI
10	c5cz3B_	 Alignment		49.2	43	PDB header: viral protein Chain: B: PDB Molecule: m64r; PDBTitle: crystal structure of myxoma virus m64
11	d2jg0a1	 Alignment		40.2	19	Fold: alpha/alpha toroid Superfamily: Six-hairpin glycosidases Family: Trehalase-like

12	c2jg0A_	 Alignment		40.2	19	PDB header: hydrolase Chain: A; PDB Molecule: periplasmic trehalase; PDBTitle: family 37 trehalase from escherichia coli in complex with 1-2 thiatrehazolin
13	c2kseA_	 Alignment		25.1	17	PDB header: transferase Chain: A; PDB Molecule: sensor protein qsec; PDBTitle: backbone structure of the membrane domain of e. coli histidine kinase2 receptor qsec, center for structures of membrane proteins (csm)3 target 4311c
14	c3ff6D_	 Alignment		21.1	24	PDB header: ligase Chain: D; PDB Molecule: acetyl-coa carboxylase 2; PDBTitle: human acc2 ct domain with cp-640186
15	c5m4aA_	 Alignment		20.0	15	PDB header: hydrolase Chain: A; PDB Molecule: neutral trehalase; PDBTitle: neutral trehalase nth1 from saccharomyces cerevisiae in complex with2 trehalose
16	c3cvjB_	 Alignment		17.3	25	PDB header: isomerase Chain: B; PDB Molecule: putative phosphoheptose isomerase; PDBTitle: crystal structure of a putative phosphoheptose isomerase (bh3325) from2 bacillus halodurans c-125 at 2.00 a resolution
17	c2x24B_	 Alignment		16.2	27	PDB header: ligase Chain: B; PDB Molecule: acetyl-coa carboxylase; PDBTitle: bovine acc2 ct domain in complex with inhibitor
18	c3tadB_	 Alignment		15.5	23	PDB header: protein binding Chain: B; PDB Molecule: liprin-alpha-2; PDBTitle: crystal structure of the liprin-alpha/liprin-beta complex
19	c4emtB_	 Alignment		14.5	42	PDB header: membrane protein Chain: B; PDB Molecule: transmembrane protein 173; PDBTitle: crystal structure of human sting bound to c-di-gmp
20	c3o2iB_	 Alignment		14.3	13	PDB header: structural genomics, unknown function Chain: B; PDB Molecule: uncharacterized protein; PDBTitle: the crystal structure of a functionally unknown protein from2 leptospirillum sp. group ii uba
21	d1m65a_	 Alignment	not modelled	13.6	16	Fold: 7-stranded beta/alpha barrel Superfamily: PHP domain-like Family: PHP domain
22	c5gs5D_	 Alignment	not modelled	13.4	37	PDB header: immune system Chain: D; PDB Molecule: stimulator of interferon genes protein; PDBTitle: crystal structure of apo rat sting
23	d1uyra2	 Alignment	not modelled	13.4	22	Fold: ClpP/crotonase Superfamily: ClpP/crotonase Family: Biotin dependent carboxylase carboxyltransferase domain
24	c4wa0A_	 Alignment	not modelled	13.3	42	PDB header: cell adhesion Chain: A; PDB Molecule: possible adhesin; PDBTitle: the structure of a possible adhesin c-terminal domain from2 caldicellulosiruptor kronotskyensis
25	d2gc6a1	 Alignment	not modelled	12.7	21	Fold: MurD-like peptide ligases, peptide-binding domain Superfamily: MurD-like peptide ligases, peptide-binding domain Family: Folylpolyglutamate synthetase, C-terminal domain
26	c4ef4B_	 Alignment	not modelled	12.5	42	PDB header: immune system Chain: B; PDB Molecule: transmembrane protein 173; PDBTitle: crystal structure of sting ctd complex with c-di-gmp
27	d2jn4a1	 Alignment	not modelled	12.5	50	Fold: NifT/FixU barrel-like Superfamily: NifT/FixU-like Family: NifT/FixU
28	c2jn4A_	 Alignment	not modelled	12.5	50	PDB header: structural genomics, unknown function Chain: A; PDB Molecule: hypothetical protein fixu, nifT; PDBTitle: solution nmr structure of protein rp4601 from rhodospseudomonas2 palustris. northeast structural genomics consortium target rpt2;3 ontario center for structural proteomics target rp4601.

29	c2lt5A_	Alignment	not modelled	12.5	29	PDB header: hydrolase Chain: A: PDB Molecule: protein p-30; PDBTitle: zymogen-flg of the onconase
30	c5cqqB_	Alignment	not modelled	12.1	20	PDB header: transcription/dna Chain: B: PDB Molecule: regulatory protein zeste; PDBTitle: crystal structure of the drosophila zeste dna binding domain in2 complex with dna
31	c6mtgB_	Alignment	not modelled	11.6	31	PDB header: transferase Chain: B: PDB Molecule: homoserine o-succinyltransferase; PDBTitle: a single reactive noncanonical amino acid is able to dramatically2 stabilize protein structure
32	c2h2wA_	Alignment	not modelled	11.3	31	PDB header: transferase Chain: A: PDB Molecule: homoserine o-succinyltransferase; PDBTitle: crystal structure of homoserine o-succinyltransferase (ec 2.3.1.46)2 (homoserine o-transsuccinylase) (hts) (tm0881) from thermotoga3 maritima at 2.52 a resolution
33	d2ghra1	Alignment	not modelled	11.1	31	Fold: Flavodoxin-like Superfamily: Class I glutamine amidotransferase-like Family: HTS-like
34	d1dy2a_	Alignment	not modelled	11.0	25	Fold: C-type lectin-like Superfamily: C-type lectin-like Family: Endostatin
35	d1u7za_	Alignment	not modelled	10.8	21	Fold: Ribokinase-like Superfamily: CoaB-like Family: CoaB-like
36	c5e2hB_	Alignment	not modelled	10.7	35	PDB header: hydrolase Chain: B: PDB Molecule: beta-lactamase; PDBTitle: crystal structure of d-alanine carboxypeptidase ampC from2 mycobacterium smegmatis
37	c5yisC_	Alignment	not modelled	10.3	47	PDB header: protein binding Chain: C: PDB Molecule: ankyrin-2; PDBTitle: crystal structure of ankB lir/lc3b complex
38	c4k7cA_	Alignment	not modelled	10.2	18	PDB header: hydrolase Chain: A: PDB Molecule: aminopeptidase c; PDBTitle: crystal structure of pepw from lactobacillus rhamnosis hn001 (dr20)2 determined as the selenomet derivative
39	c3btpB_	Alignment	not modelled	10.1	64	PDB header: dna binding protein, chaperone Chain: B: PDB Molecule: protein vire1; PDBTitle: crystal structure of agrobacterium tumefaciens vire2 in complex with2 its chaperone vire1: a novel fold and implications for dna binding
40	c3h0jA_	Alignment	not modelled	9.5	22	PDB header: transferase Chain: A: PDB Molecule: acetyl-coa carboxylase; PDBTitle: crystal structure of the carboxyltransferase domain of2 acetyl-coenzyme a carboxylase in complex with compound 2
41	d1pixa3	Alignment	not modelled	9.4	20	Fold: ClpP/crotonase Superfamily: ClpP/crotonase Family: Biotin dependent carboxylase carboxyltransferase domain
42	c5oomv_	Alignment	not modelled	9.2	17	PDB header: ribosome Chain: V: PDB Molecule: 39s ribosomal protein l24, mitochondrial; PDBTitle: structure of a native assembly intermediate of the human mitochondrial2 ribosome with unfolded interfacial rrna
43	c5gmxA_	Alignment	not modelled	9.1	15	PDB header: hydrolase Chain: A: PDB Molecule: carboxylesterase; PDBTitle: crystal structure of a family viii carboxylesterase
44	d1wo8a1	Alignment	not modelled	9.0	25	Fold: Methylglyoxal synthase-like Superfamily: Methylglyoxal synthase-like Family: Methylglyoxal synthase, MgsA
45	c2pc9B_	Alignment	not modelled	9.0	20	PDB header: lyase Chain: B: PDB Molecule: phosphoenolpyruvate carboxykinase [atp]; PDBTitle: crystal structure of atp-dependent phosphoenolpyruvate carboxykinase2 from thermus thermophilus hb8
46	d2h9fa1	Alignment	not modelled	8.9	14	Fold: Diaminopimelate epimerase-like Superfamily: Diaminopimelate epimerase-like Family: PA0793-like
47	c4zqaA_	Alignment	not modelled	8.8	33	PDB header: transcription repressor Chain: A: PDB Molecule: sin3 histone deacetylase corepressor complex component PDBTitle: crystal structure of the sds3 dimerization domain
48	d1g5ma_	Alignment	not modelled	8.8	20	Fold: Toxins' membrane translocation domains Superfamily: Bcl-2 inhibitors of programmed cell death Family: Bcl-2 inhibitors of programmed cell death
49	d2hmva1	Alignment	not modelled	8.6	18	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: Potassium channel NAD-binding domain
50	d1o5za1	Alignment	not modelled	8.5	40	Fold: MurD-like peptide ligases, peptide-binding domain Superfamily: MurD-like peptide ligases, peptide-binding domain Family: Folypolyglutamate synthetase, C-terminal domain
51	c3ja7L_	Alignment	not modelled	8.5	20	PDB header: viral protein Chain: L: PDB Molecule: portal protein gp20; PDBTitle: cryo-em structure of the bacteriophage t4 portal protein assembly at2 near-atomic resolution
52	d1cpqa_	Alignment	not modelled	8.0	50	Fold: Four-helical up-and-down bundle Superfamily: Cytochromes Family: Cytochrome c'-like
53	d1e85a_	Alignment	not modelled	7.9	50	Fold: Four-helical up-and-down bundle Superfamily: Cytochromes Family: Cytochrome c'-like
54	c5tgfB_	Alignment	not modelled	7.9	27	PDB header: hydrolase Chain: B: PDB Molecule: uncharacterized protein; PDBTitle: crystal structure of putative beta-lactamase from bacteroides dorei2 dsm 17855 PDB header: ligase Chain: B: PDB Molecule: aspartyl/alutamyl-trna(asn/aln)

55	c2g5iB_	Alignment	not modelled	7.8	38	amidotransferase PDBTitle: structure of trna-dependent amidotransferase gatcab2 complexed with adp-alf4
56	d1x4ka2	Alignment	not modelled	7.8	40	Fold: Glucocorticoid receptor-like (DNA-binding domain) Superfamily: Glucocorticoid receptor-like (DNA-binding domain) Family: LIM domain
57	c3fy6A_	Alignment	not modelled	7.7	40	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: integron cassette protein; PDBTitle: structure of the mobile metagenome of v. cholerae. integron cassette2 protein vch_cass3
58	c3kfuF_	Alignment	not modelled	7.6	38	PDB header: ligase/rna Chain: F: PDB Molecule: aspartyl/glutamyl-trna(asn/gln) amidotransferase subunit b; PDBTitle: crystal structure of the transamidosome
59	c5yirG_	Alignment	not modelled	7.5	39	PDB header: protein binding Chain: G: PDB Molecule: ankyrin-2; PDBTitle: crystal structure of ankb lir/gabarap complex
60	d1s05a_	Alignment	not modelled	7.5	67	Fold: Four-helical up-and-down bundle Superfamily: Cytochromes Family: Cytochrome c'-like
61	c5yirH_	Alignment	not modelled	7.4	47	PDB header: protein binding Chain: H: PDB Molecule: ankyrin-2; PDBTitle: crystal structure of ankb lir/gabarap complex
62	d2f2ab2	Alignment	not modelled	7.3	38	Fold: Glutamine synthetase/guanido kinase Superfamily: Glutamine synthetase/guanido kinase Family: GatB/GatE catalytic domain-like
63	c5b3iB_	Alignment	not modelled	7.3	50	PDB header: electron transport Chain: B: PDB Molecule: cytochrome c prime; PDBTitle: homo-dimeric structure of cytochrome c' from thermophilic2 hydrogenophilus thermoluteolus
64	c3ip4B_	Alignment	not modelled	7.3	38	PDB header: ligase Chain: B: PDB Molecule: aspartyl/glutamyl-trna(asn/gln) amidotransferase subunit b; PDBTitle: the high resolution structure of gatcab
65	c3o3vB_	Alignment	not modelled	7.0	27	PDB header: hydrolase Chain: B: PDB Molecule: beta-lactamase; PDBTitle: crystal structure of clbp peptidase domain
66	c4woyB_	Alignment	not modelled	7.0	19	PDB header: ligase/ligase inhibitor Chain: B: PDB Molecule: acetyl-coa carboxylase; PDBTitle: crystal structure of human-yeast chimera acetyl coa carboxylase ct2 domain bound to compound 1
67	d1j3ba2	Alignment	not modelled	7.0	20	Fold: PEP carboxykinase N-terminal domain Superfamily: PEP carboxykinase N-terminal domain Family: PEP carboxykinase N-terminal domain
68	d2j8wa1	Alignment	not modelled	7.0	50	Fold: Four-helical up-and-down bundle Superfamily: Cytochromes Family: Cytochrome c'-like
69	c5evlA_	Alignment	not modelled	7.0	26	PDB header: hydrolase Chain: A: PDB Molecule: beta-lactamase; PDBTitle: crystal structure of beta-lactamase/d-alanine carboxypeptidase from2 chromobacterium violaceum
70	c1w8xM_	Alignment	not modelled	7.0	45	PDB header: virus Chain: M: PDB Molecule: protein p30; PDBTitle: structural analysis of prd1
71	d2ccya_	Alignment	not modelled	6.9	50	Fold: Four-helical up-and-down bundle Superfamily: Cytochromes Family: Cytochrome c'-like
72	d1g7oa1	Alignment	not modelled	6.9	13	Fold: GST C-terminal domain-like Superfamily: GST C-terminal domain-like Family: Glutathione S-transferase (GST), C-terminal domain
73	c2ebyA_	Alignment	not modelled	6.9	2	PDB header: transcription Chain: A: PDB Molecule: putative hth-type transcriptional regulator ybaq; PDBTitle: crystal structure of a hypothetical protein from e. coli
74	c5m86C_	Alignment	not modelled	6.8	28	PDB header: unknown function Chain: C: PDB Molecule: ta1207; PDBTitle: crystal structure of the thermoplasma acidophilum protein ta1207
75	c6njka_	Alignment	not modelled	6.8	31	PDB header: hydrolase Chain: A: PDB Molecule: beta-lactamase; PDBTitle: crystal structure of beta-lactamase from sulfitobacter sp. ee-36
76	c5n6nC_	Alignment	not modelled	6.7	31	PDB header: signaling protein Chain: C: PDB Molecule: neutral trehalase; PDBTitle: crystal structure of the 14-3-3:neutral trehalase nth1 complex
77	c3h0mE_	Alignment	not modelled	6.7	38	PDB header: ligase Chain: E: PDB Molecule: aspartyl/glutamyl-trna(asn/gln) amidotransferase PDBTitle: structure of trna-dependent amidotransferase gatcab from2 aquifex aeolicus
78	c2qz6A_	Alignment	not modelled	6.7	29	PDB header: hydrolase Chain: A: PDB Molecule: beta-lactamase; PDBTitle: first crystal structure of a psychrophile class c beta-2 lactamase
79	c4n0iB_	Alignment	not modelled	6.6	38	PDB header: ligase Chain: B: PDB Molecule: glutamyl-trna(gln) amidotransferase subunit b, PDBTitle: crystal structure of s. cerevisiae mitochondrial gatfab in complex2 with glutamine
80	c5x90A_	Alignment	not modelled	6.6	35	PDB header: protein transport Chain: A: PDB Molecule: icms; PDBTitle: structure of dotl(656-783)-icms-icmw-lvga derived from legionella2 pneumophila
						PDB header: ligase/rna

81	c4wj3K_	Alignment	not modelled	6.6	38	Chain: K; PDB Molecule: aspartyl/glutamyl-trna(asn/gln) amidotransferase subunit b; PDBTitle: crystal structure of the asparagine transamidosome from pseudomonas2 aeruginosa
82	c4wj3E_	Alignment	not modelled	6.6	38	PDB header: ligase/rna Chain: E; PDB Molecule: aspartyl/glutamyl-trna(asn/gln) amidotransferase subunit b; PDBTitle: crystal structure of the asparagine transamidosome from pseudomonas2 aeruginosa
83	c4wj3H_	Alignment	not modelled	6.6	38	PDB header: ligase/rna Chain: H; PDB Molecule: aspartyl/glutamyl-trna(asn/gln) amidotransferase subunit b; PDBTitle: crystal structure of the asparagine transamidosome from pseudomonas2 aeruginosa
84	c4wj3B_	Alignment	not modelled	6.6	38	PDB header: ligase/rna Chain: B; PDB Molecule: aspartyl/glutamyl-trna(asn/gln) amidotransferase subunit b; PDBTitle: crystal structure of the asparagine transamidosome from pseudomonas2 aeruginosa
85	c3kful_	Alignment	not modelled	6.6	38	PDB header: ligase/rna Chain: I; PDB Molecule: aspartyl/glutamyl-trna(asn/gln) amidotransferase subunit b; PDBTitle: crystal structure of the transamidosome
86	c4gudA_	Alignment	not modelled	6.6	36	PDB header: transferase Chain: A; PDB Molecule: imidazole glycerol phosphate synthase subunit hish; PDBTitle: crystal structure of amidotransferase hish from vibrio cholerae
87	c5lcwS_	Alignment	not modelled	6.5	14	PDB header: cell cycle Chain: S; PDB Molecule: mitotic checkpoint serine/threonine-protein kinase bub1 PDBTitle: cryo-em structure of the anaphase-promoting complex/cyclosome, in2 complex with the mitotic checkpoint complex (apc/c-mcc) at 4.23 angstrom resolution
88	c3zeyT_	Alignment	not modelled	6.5	17	PDB header: ribosome Chain: T; PDB Molecule: 40s ribosomal protein s24; PDBTitle: high-resolution cryo-electron microscopy structure of the trypanosoma2 brucei ribosome
89	d1mqva_	Alignment	not modelled	6.5	33	Fold: Four-helical up-and-down bundle Superfamily: Cytochromes Family: Cytochrome c'-like
90	c3al0B_	Alignment	not modelled	6.5	38	PDB header: ligase/rna Chain: B; PDB Molecule: aspartyl/glutamyl-trna(asn/gln) amidotransferase subunit b; PDBTitle: crystal structure of the glutamine transamidosome from thermotoga2 maritima in the glutamylation state.
91	c4ulvB_	Alignment	not modelled	6.5	67	PDB header: electron transport Chain: B; PDB Molecule: cytochrome c, class ii; PDBTitle: cytochrome c prime from shewanella frigidimarina
92	c3c85A_	Alignment	not modelled	6.5	36	PDB header: transport protein Chain: A; PDB Molecule: putative glutathione-regulated potassium-efflux system PDBTitle: crystal structure of trka domain of putative glutathione-regulated2 potassium-efflux kefb from vibrio parahaemolyticus
93	c3u5cY_	Alignment	not modelled	6.3	17	PDB header: ribosome Chain: Y; PDB Molecule: 40s ribosomal protein s24-a; PDBTitle: the structure of the eukaryotic ribosome at 3.0 a resolution. this2 entry contains proteins of the 40s subunit, ribosome a
94	c4mupC_	Alignment	not modelled	6.3	21	PDB header: hydrolase Chain: C; PDB Molecule: amidohydrolase; PDBTitle: crystal structure of agrobacterium tumefaciens atu3138 (efi target2 505157), apo structure
95	d1gh6b2	Alignment	not modelled	6.3	15	Fold: Cyclin-like Superfamily: Cyclin-like Family: Retinoblastoma tumor suppressor domains
96	c3ij3A_	Alignment	not modelled	6.3	11	PDB header: hydrolase Chain: A; PDB Molecule: cytosol aminopeptidase; PDBTitle: 1.8 angstrom resolution crystal structure of cytosol aminopeptidase2 from coxiella burnetii
97	c5y88R_	Alignment	not modelled	6.3	60	PDB header: splicing Chain: R; PDB Molecule: protein cwc16; PDBTitle: cryo-em structure of the intron-lariat spliceosome ready for2 disassembly from s.cerevisiae at 3.5 angstrom
98	c1sgbB_	Alignment	not modelled	6.3	38	PDB header: structural protein Chain: B; PDB Molecule: ezrin-radixin-moesin binding phosphoprotein 50; PDBTitle: moesin ferm domain bound to ebp50 c-terminal peptide
99	d2hdsa1	Alignment	not modelled	6.2	27	Fold: beta-lactamase/transpeptidase-like Superfamily: beta-lactamase/transpeptidase-like Family: beta-Lactamase/D-ala carboxypeptidase