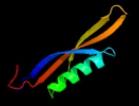
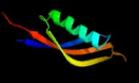
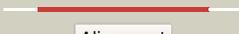
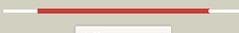
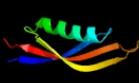
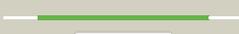
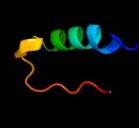
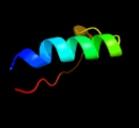


Phyre2

Email mdejesus@rockefeller.edu
 Description RVBD0379_(secE2)_455978_456193
 Date Tue Jul 23 14:50:45 BST 2019
 Unique Job ID 19a2e4947be96934

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c3onrl_	 Alignment		100.0	97	PDB header: metal binding protein Chain: I: PDB Molecule: protein transport protein sece2; PDBTitle: crystal structure of the calcium chelating immunodominant antigen,2 calcium dodecin (rv0379),from mycobacterium tuberculosis with a novel3 calcium-binding site
2	c3oqtP_	 Alignment		99.9	21	PDB header: flavoprotein Chain: P: PDB Molecule: rv1498a protein; PDBTitle: crystal structure of rv1498a protein from mycobacterium tuberculosis
3	c6r1eC_	 Alignment		99.9	23	PDB header: flavoprotein Chain: C: PDB Molecule: dodecin; PDBTitle: structure of dodecin from streptomyces coelicolor
4	c2vxaL_	 Alignment		99.9	23	PDB header: flavoprotein Chain: L: PDB Molecule: dodecin; PDBTitle: h.halophila dodecin in complex with riboflavin
5	d2ux9a1	 Alignment		99.9	33	Fold: Dodecin subunit-like Superfamily: Dodecin-like Family: Dodecin-like
6	d2cc6a1	 Alignment		99.5	31	Fold: Dodecin subunit-like Superfamily: Dodecin-like Family: Dodecin-like
7	c5lw8A_	 Alignment		53.1	19	PDB header: metal transport Chain: A: PDB Molecule: protein tonb; PDBTitle: nmr solution structure of helicobacter pylori tonb-ctd (residues 194-2 285)
8	d1ulqa2	 Alignment		45.9	23	Fold: Thiolase-like Superfamily: Thiolase-like Family: Thiolase-related
9	c6fipA_	 Alignment		38.9	12	PDB header: transport protein Chain: A: PDB Molecule: protein tonb; PDBTitle: solution nmr structure of pseudomonas aeruginosa tonb ctd
10	d1m3ka2	 Alignment		30.5	23	Fold: Thiolase-like Superfamily: Thiolase-like Family: Thiolase-related
11	c4ubwB_	 Alignment		30.4	18	PDB header: transferase Chain: B: PDB Molecule: acetyl-coa acetyltransferase fada5; PDBTitle: apo structure of the 3-ketoacyl-coa thiolase fada5 from m.2 tuberculosis

12	d1fc3a_	Alignment		26.5	28	Fold: DNA/RNA-binding 3-helical bundle Superfamily: C-terminal effector domain of the bipartite response regulators Family: Spo0A
13	d1qd1a1	Alignment		26.4	26	Fold: Ferredoxin-like Superfamily: Formiminotransferase domain of formiminotransferase-cyclodeaminase. Family: Formiminotransferase domain of formiminotransferase-cyclodeaminase.
14	d1lq1a_	Alignment		25.4	28	Fold: DNA/RNA-binding 3-helical bundle Superfamily: C-terminal effector domain of the bipartite response regulators Family: Spo0A
15	d1wdkc2	Alignment		24.9	23	Fold: Thiolase-like Superfamily: Thiolase-like Family: Thiolase-related
16	c1ulqD_	Alignment		24.0	21	PDB header: transferase Chain: D: PDB Molecule: putative acetyl-coa acetyltransferase; PDBTitle: crystal structure of tt0182 from thermus thermophilus hb8
17	c2jxpA_	Alignment		22.9	11	PDB header: lipoprotein Chain: A: PDB Molecule: putative lipoprotein b; PDBTitle: solution nmr structure of uncharacterized lipoprotein b2 from nitrosomonas europaea. northeast structural genomics3 target ner45a
18	c3svkB_	Alignment		22.8	20	PDB header: transferase Chain: B: PDB Molecule: acetyl-coa acetyltransferase; PDBTitle: crystal structure of acetyl-coa acetyltransferase from mycobacterium2 avium
19	c3brtC_	Alignment		22.8	17	PDB header: transferase/transcription Chain: C: PDB Molecule: inhibitor of nuclear factor kappa-b kinase subunit beta, PDBTitle: nemo/ikk association domain structure
20	c1wl5A_	Alignment		22.4	21	PDB header: transferase Chain: A: PDB Molecule: acetyl-coenzyme a acetyltransferase 2; PDBTitle: human cytosolic acetoacetyl-coa thiolase
21	c2ibyD_	Alignment	not modelled	21.2	21	PDB header: transferase Chain: D: PDB Molecule: acetyl-coa acetyltransferase; PDBTitle: crystallographic and kinetic studies of human mitochondrial2 acetoacetyl-coa thiolase (t2): the importance of potassium and3 chloride for its structure and function
22	d1kwia_	Alignment	not modelled	21.0	32	Fold: Cystatin-like Superfamily: Cystatin/monellin Family: Cathelicidin motif
23	c3o6uB_	Alignment	not modelled	20.9	17	PDB header: structural genomics, unknown function Chain: B: PDB Molecule: uncharacterized protein cpe2226; PDBTitle: crystal structure of cpe2226 protein from clostridium perfringens.2 northeast structural genomics consortium target cpr195
24	d1afwa2	Alignment	not modelled	20.6	16	Fold: Thiolase-like Superfamily: Thiolase-like Family: Thiolase-related
25	c2k9kA_	Alignment	not modelled	20.5	21	PDB header: metal transport Chain: A: PDB Molecule: tonb2; PDBTitle: molecular characterization of the tonb2 protein from vibrio2 anguillarum
26	c4c2jA_	Alignment	not modelled	20.0	21	PDB header: transferase Chain: A: PDB Molecule: 3-ketoacyl-coa thiolase, mitochondrial; PDBTitle: crystal structure of human mitochondrial 3-ketoacyl-coa2 thiolase in complex with coa
27	c4e1lC_	Alignment	not modelled	19.3	25	PDB header: transferase Chain: C: PDB Molecule: acetoacetyl-coa thiolase 2; PDBTitle: crystal structure of acetoacetyl-coa thiolase (thla2) from clostridium2 difficile
28	c2m2kA_	Alignment	not modelled	18.4	15	PDB header: transport protein Chain: A: PDB Molecule: hasb protein; PDBTitle: the structure of hasb ctd

29	c2d9zA_	Alignment	not modelled	18.1	36	PDB header: signaling protein Chain: A: PDB Molecule: protein kinase c, nu type; PDBTitle: solution structure of the ph domain of protein kinase c, nu2 type from human
30	c4h62O_	Alignment	not modelled	18.1	21	PDB header: transcription Chain: Q: PDB Molecule: mediator of rna polymerase ii transcription subunit 17; PDBTitle: structure of the saccharomyces cerevisiae mediator subcomplex2 med17c/med11c/med22c
31	c6bn2A_	Alignment	not modelled	18.1	21	PDB header: transferase Chain: A: PDB Molecule: acetyl-coa acetyltransferase; PDBTitle: crystal structure of acetyl-coa acetyltransferase from elizabethkingia2 anophelis nuhp1
32	c5oarC_	Alignment	not modelled	16.8	28	PDB header: hydrolase Chain: C: PDB Molecule: beta-hexosaminidase; PDBTitle: crystal structure of native beta-n-acetylhexosaminidase isolated from2 aspergillus oryzae
33	c4egvC_	Alignment	not modelled	16.7	21	PDB header: transferase Chain: C: PDB Molecule: acetyl-coa acetyltransferase; PDBTitle: crystal structure of a monomeric scp2-thiolase like protein type 12 (stlp1) from mycobacterium smegmatis
34	d2dy1a3	Alignment	not modelled	16.6	17	Fold: Ribosomal protein S5 domain 2-like Superfamily: Ribosomal protein S5 domain 2-like Family: Translational machinery components
35	c4q35B_	Alignment	not modelled	16.4	12	PDB header: membrane protein Chain: B: PDB Molecule: lps-assembly lipoprotein lpte; PDBTitle: structure of a membrane protein
36	c1tt9B_	Alignment	not modelled	15.4	26	PDB header: transferase, lyase Chain: B: PDB Molecule: formimidoyltransferase-cyclodeaminase PDBTitle: structure of the bifunctional and golgi associated2 formiminotransferase cyclodeaminase octamer
37	c3ss6B_	Alignment	not modelled	15.2	11	PDB header: transferase Chain: B: PDB Molecule: acetyl-coa acetyltransferase; PDBTitle: crystal structure of the bacillus anthracis acetyl-coa2 acetyltransferase
38	c5vidI_	Alignment	not modelled	15.1	40	PDB header: toxin Chain: I: PDB Molecule: bot.0671.2; PDBTitle: receptor binding domain of bont/b in complex with mini-protein binder2 bot.0671.2
39	c5vidG_	Alignment	not modelled	15.1	40	PDB header: toxin Chain: G: PDB Molecule: bot.0671.2; PDBTitle: receptor binding domain of bont/b in complex with mini-protein binder2 bot.0671.2
40	d1tola2	Alignment	not modelled	14.8	20	Fold: TolA/TonB C-terminal domain Superfamily: TolA/TonB C-terminal domain Family: TolA
41	c2iikA_	Alignment	not modelled	14.3	21	PDB header: transferase Chain: A: PDB Molecule: 3-ketoacyl-coa thiolase, peroxisomal; PDBTitle: crystal structure of human peroxisomal acetyl-coa acyl transferase 12 (acaa1)
42	c4nzsA_	Alignment	not modelled	13.8	25	PDB header: transferase Chain: A: PDB Molecule: beta-ketothiolase bktb; PDBTitle: crystal structure of beta-ketothiolase bktb b from ralstonia eutropha2 h16
43	c5ab6E_	Alignment	not modelled	13.6	29	PDB header: transport protein Chain: E: PDB Molecule: scp2-thiolase like protein; PDBTitle: crystal structure of trypanosoma brucei scp2-thiolase like2 protein (tbslp) in complex with acetoacetyl-coa.
44	c4g7xB_	Alignment	not modelled	12.7	11	PDB header: protein binding/protein binding Chain: B: PDB Molecule: tola protein; PDBTitle: crystal structure of a complex between the ctxphi piiii n-terminal2 domain and the vibrio cholerae tola c-terminal domain
45	c3gkuB_	Alignment	not modelled	12.7	14	PDB header: rna binding protein Chain: B: PDB Molecule: probable rna-binding protein; PDBTitle: crystal structure of a probable rna-binding protein from clostridium2 symbiosum atcc 14940
46	d2bv3a3	Alignment	not modelled	12.5	11	Fold: Ribosomal protein S5 domain 2-like Superfamily: Ribosomal protein S5 domain 2-like Family: Translational machinery components
47	c4yccC_	Alignment	not modelled	12.4	28	PDB header: hydrolase Chain: C: PDB Molecule: uncharacterized protein; PDBTitle: crystal structure of putative lipoprotein from peptoclostridium2 difficile 630 (fragment)
48	c3goaA_	Alignment	not modelled	12.2	25	PDB header: transferase Chain: A: PDB Molecule: 3-ketoacyl-coa thiolase; PDBTitle: crystal structure of the salmonella typhimurium fada 3-ketoacyl-coa2 thiolase
49	c4n45B_	Alignment	not modelled	12.1	18	PDB header: transferase Chain: B: PDB Molecule: acetyl-coa acetyltransferase; PDBTitle: crystal structure of reduced form of thiolase from clostridium2 acetobutylicum
50	d1vkza1	Alignment	not modelled	12.1	28	Fold: Barrel-sandwich hybrid Superfamily: Rudiment single hybrid motif Family: BC C-terminal domain-like
51	c1qd1A_	Alignment	not modelled	12.1	26	PDB header: transferase Chain: A: PDB Molecule: formiminotransferase-cyclodeaminase; PDBTitle: the crystal structure of the formiminotransferase domain of2 formiminotransferase-cyclodeaminase.
52	d2pjua1	Alignment	not modelled	12.0	28	Fold: Chelatase-like Superfamily: PrpR receptor domain-like Family: PrpR receptor domain-like
53	c2zkqe_	Alignment	not modelled	12.0	22	PDB header: ribosomal protein/rna Chain: E: PDB Molecule: rna expansion segment es6 part ii; PDBTitle: structure of a mammalian ribosomal 40s subunit within an 80s complex2 obtained by docking homology models of the rna and proteins into an3 8.7 a cryo-em map
54	d1dwna_	Alignment	not modelled	11.8	29	Fold: RNA bacteriophage capsid protein Superfamily: RNA bacteriophage capsid protein

						Family: RNA bacteriophage capsid protein
55	d1nfpA_	Alignment	not modelled	11.5	31	Fold: TIM beta/alpha-barrel Superfamily: Bacterial luciferase-like Family: Non-fluorescent flavoprotein (luxF, FP390)
56	c3hz4A_	Alignment	not modelled	11.1	18	PDB header: oxidoreductase Chain: A: PDB Molecule: thioredoxin; PDBTitle: crystal structure of thioredoxin from methanosarcina mazei
57	d2uube2	Alignment	not modelled	10.8	16	Fold: dsRBD-like Superfamily: dsRNA-binding domain-like Family: Ribosomal S5 protein, N-terminal domain
58	c2ow8f_	Alignment	not modelled	10.6	23	PDB header: ribosome Chain: F: PDB Molecule: PDBTitle: crystal structure of a 70s ribosome-trna complex reveals functional2 interactions and rearrangements. this file, 2ow8, contains the 30s3 ribosome subunit, two trna, and mrna molecules. 50s ribosome subunit4 is in the file 1vsa.
59	c6bjaA_	Alignment	not modelled	10.6	7	PDB header: transferase Chain: A: PDB Molecule: acetyl-coa acetyltransferase a; PDBTitle: crystal structure of acat5 thiolase from ascaris suum in complex with2 coenzyme a
60	d1pkpa2	Alignment	not modelled	10.6	16	Fold: dsRBD-like Superfamily: dsRNA-binding domain-like Family: Ribosomal S5 protein, N-terminal domain
61	c1afwB_	Alignment	not modelled	10.5	14	PDB header: thiolase Chain: B: PDB Molecule: 3-ketoacetyl-coa thiolase; PDBTitle: the 1.8 angstrom crystal structure of the dimeric2 peroxisomal thiolase of saccharomyces cerevisiae
62	c6q2zB_	Alignment	not modelled	10.5	17	PDB header: unknown function Chain: B: PDB Molecule: upf0339 family protein; PDBTitle: nmr solution structure of the hvo_2922 protein from haloferax volcanii
63	d2qale2	Alignment	not modelled	10.4	15	Fold: dsRBD-like Superfamily: dsRNA-binding domain-like Family: Ribosomal S5 protein, N-terminal domain
64	c1gshA_	Alignment	not modelled	10.2	29	PDB header: glutathione biosynthesis ligase Chain: A: PDB Molecule: glutathione biosynthetic ligase; PDBTitle: structure of escherichia coli glutathione synthetase at ph 7.5
65	c2c7yB_	Alignment	not modelled	10.0	25	PDB header: transferase Chain: B: PDB Molecule: 3-ketoacyl-coa thiolase 2; PDBTitle: plant enzyme
66	c2x9aB_	Alignment	not modelled	10.0	26	PDB header: viral protein Chain: B: PDB Molecule: membrane spanning protein, required for outer membrane PDBTitle: crystal structure of g3p from phage if1 in complex with its2 coreceptor, the c-terminal domain of tola
67	c6bjbB_	Alignment	not modelled	9.7	10	PDB header: transferase Chain: B: PDB Molecule: acetyl-coa acetyltransferase a; PDBTitle: crystal structure of acat2-c91s thiolase from ascaris suum in complex2 with propionyl-coa and nitrate
68	c3brvC_	Alignment	not modelled	9.6	17	PDB header: transferase/transcription Chain: C: PDB Molecule: inhibitor of nuclear factor kappa-b kinase subunit beta; PDBTitle: nemo/ikkb association domain structure
69	d1r4ca_	Alignment	not modelled	9.5	19	Fold: Cystatin-like Superfamily: Cystatin/monellin Family: Cystatins
70	c6aqpA_	Alignment	not modelled	9.4	21	PDB header: transferase Chain: A: PDB Molecule: acetyl-coa acetyltransferase; PDBTitle: aspergillus fumigatus cytosolic thiolase: acetylated enzyme in complex2 with coa and potassium ions
71	d3eeqa1	Alignment	not modelled	9.3	7	Fold: CobE/GbiG C-terminal domain-like Superfamily: CobE/GbiG C-terminal domain-like Family: CobE/GbiG C-terminal domain-like
72	c4wysB_	Alignment	not modelled	9.3	21	PDB header: transferase Chain: B: PDB Molecule: acetyl-coa acetyltransferase; PDBTitle: crystal structure of thiolase from escherichia coli
73	d1gsoa1	Alignment	not modelled	9.3	16	Fold: Barrel-sandwich hybrid Superfamily: Rudiment single hybrid motif Family: BC C-terminal domain-like
74	c2wuaA_	Alignment	not modelled	9.1	25	PDB header: transferase Chain: A: PDB Molecule: acetoacetyl coa thiolase; PDBTitle: structure of the peroxisomal 3-ketoacyl-coa thiolase from sunflower
75	d1ihra_	Alignment	not modelled	9.1	21	Fold: ToIA/TonB C-terminal domain Superfamily: ToIA/TonB C-terminal domain Family: TonB
76	d1w26a2	Alignment	not modelled	9.0	24	Fold: Ribosome binding domain-like Superfamily: Trigger factor ribosome-binding domain Family: Trigger factor ribosome-binding domain
77	c4x8wE_	Alignment	not modelled	8.9	27	PDB header: gene regulation Chain: E: PDB Molecule: loquacious, isoform b; PDBTitle: dsrbd3 of loquacious
78	c2kzxA_	Alignment	not modelled	8.8	17	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: uncharacterized protein; PDBTitle: solution nmr structure of a3dht5 from clostridium thermocellum,2 northeast structural genomics consortium target cmr116
79	d1e5ma2	Alignment	not modelled	8.8	11	Fold: Thiolase-like Superfamily: Thiolase-like Family: Thiolase-related
						PDB header: unknown function

80	c4eycA_	Alignment	not modelled	8.7	17	Chain: A: PDB Molecule: cathelicidin antimicrobial peptide; PDBTitle: crystal structure of the cathelin-like domain of human cathelicidin2 ll-37 (hclcd)
81	d1p9ya_	Alignment	not modelled	8.6	21	Fold: Ribosome binding domain-like Superfamily: Trigger factor ribosome-binding domain Family: Trigger factor ribosome-binding domain
82	c3hk4B_	Alignment	not modelled	8.3	18	PDB header: lyase Chain: B: PDB Molecule: mlr7391 protein; PDBTitle: crystal structure of a putative snoal-like polyketide cyclase2 [carbohydrate phosphatase] (mlr7391) from mesorhizobium loti at 1.963 a resolution
83	d3by5a1	Alignment	not modelled	8.2	19	Fold: CobE/GbiG C-terminal domain-like Superfamily: CobE/GbiG C-terminal domain-like Family: CobE/GbiG C-terminal domain-like
84	c3by5A_	Alignment	not modelled	8.2	19	PDB header: biosynthetic protein Chain: A: PDB Molecule: cobalamin biosynthesis protein; PDBTitle: crystal structure of cobalamin biosynthesis protein chig from2 agrobacterium tumefaciens str. c58
85	c1eg0B_	Alignment	not modelled	8.2	13	PDB header: ribosome PDB COMPND:
86	c3bbnE_	Alignment	not modelled	8.2	19	PDB header: ribosome Chain: E: PDB Molecule: ribosomal protein s5; PDBTitle: homology model for the spinach chloroplast 30s subunit fitted to 9.4a2 cryo-em map of the 70s chlororibosome.
87	c5xyiC_	Alignment	not modelled	8.1	24	PDB header: ribosome Chain: C: PDB Molecule: uncharacterized protein; PDBTitle: small subunit of trichomonas vaginalis ribosome
88	d2w6ka1	Alignment	not modelled	8.1	11	Fold: CobE/GbiG C-terminal domain-like Superfamily: CobE/GbiG C-terminal domain-like Family: CobE/GbiG C-terminal domain-like
89	d2coaa1	Alignment	not modelled	8.1	36	Fold: PH domain-like barrel Superfamily: PH domain-like Family: Pleckstrin-homology domain (PH domain)
90	c2d3tC_	Alignment	not modelled	8.1	23	PDB header: lyase, oxidoreductase/transferase Chain: C: PDB Molecule: 3-ketoacyl-coa thiolase; PDBTitle: fatty acid beta-oxidation multienzyme complex from2 pseudomonas fragi, form v
91	d1eiwa_	Alignment	not modelled	8.0	21	Fold: Flavodoxin-like Superfamily: Hypothetical protein MTH538 Family: Hypothetical protein MTH538
92	c2pjuD_	Alignment	not modelled	8.0	29	PDB header: transcription Chain: D: PDB Molecule: propionate catabolism operon regulatory protein; PDBTitle: crystal structure of propionate catabolism operon regulatory protein2 prpr
93	c5z79F_	Alignment	not modelled	7.9	21	PDB header: transferase Chain: F: PDB Molecule: hydroxymethylidihydropterin pyrophosphokinase- PDBTitle: crystal structure analysis of the hppk-dhps in complex with substrates
94	c5ixmH_	Alignment	not modelled	7.9	8	PDB header: transport protein Chain: H: PDB Molecule: lps-assembly lipoprotein lpte; PDBTitle: the lps transporter lptde from yersinia pestis, core complex
95	c2vu2D_	Alignment	not modelled	7.9	21	PDB header: transferase Chain: D: PDB Molecule: acetyl-coa acetyltransferase; PDBTitle: biosynthetic thiolase from z. ramigera. complex with s-pantetheine-11-2 pivalate.
96	d1tqyb2	Alignment	not modelled	7.8	26	Fold: Thiolase-like Superfamily: Thiolase-like Family: Thiolase-related
97	c6et9D_	Alignment	not modelled	7.7	25	PDB header: transferase Chain: D: PDB Molecule: acetyl-coa acetyltransferase thiolase; PDBTitle: structure of the acetoacetyl-coa-thiolase/hmg-coa-synthase complex2 from methanothermococcus thermolithotrophicus at 2.75 a
98	c1p6gE_	Alignment	not modelled	7.5	18	PDB header: ribosome Chain: E: PDB Molecule: 30s ribosomal protein s5; PDBTitle: real space refined coordinates of the 30s subunit fitted into the low2 resolution cryo-em map of the ef-g.gtp state of e. coli 70s ribosome
99	c5svhB_	Alignment	not modelled	7.5	43	PDB header: transcription Chain: B: PDB Molecule: mll/c-myb chimera; PDBTitle: crystal structure of the kix domain of cbp in complex with a mll/c-myb2 chimera