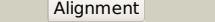
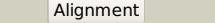
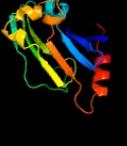
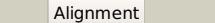
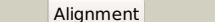
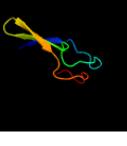
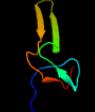
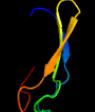
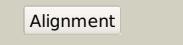
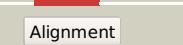


Phyre²

Email	mdejesus@rockefeller.edu
Description	RVBD1826_(gcvH)_2071959_2072363
Date	Fri Aug 2 13:30:43 BST 2019
Unique Job ID	1a54f9e99388682e

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c3iftA			100.0	100	PDB header: oxidoreductase Chain: A: PDB Molecule: glycine cleavage system h protein; PDBTitle: crystal structure of glycine cleavage system protein h from2 mycobacterium tuberculosis, using x-rays from the compact light3 source.
2	c2edgA			100.0	42	PDB header: biosynthetic protein Chain: A: PDB Molecule: glycine cleavage system h protein; PDBTitle: solution structure of the gcv_h domain from mouse glycine
3	c3a8jF			100.0	48	PDB header: transferase/transport protein Chain: F: PDB Molecule: glycine cleavage system h protein; PDBTitle: crystal structure of et-ehred complex
4	d1onla			100.0	54	Fold: Barrel-sandwich hybrid Superfamily: Single hybrid motif Family: Biotinyl/lipoyl-carrier proteins and domains
5	d1hpca			100.0	48	Fold: Barrel-sandwich hybrid Superfamily: Single hybrid motif Family: Biotinyl/lipoyl-carrier proteins and domains
6	c2ka7A			100.0	45	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: glycine cleavage system h protein; PDBTitle: nmr solution structure of tm0212 at 40 c
7	c3mxuA			100.0	44	PDB header: oxidoreductase Chain: A: PDB Molecule: glycine cleavage system h protein; PDBTitle: crystal structure of glycine cleavage system protein h from bartonella2 henselae
8	c5a35A			100.0	24	PDB header: transport protein Chain: A: PDB Molecule: glycine cleavage system h protein; PDBTitle: crystal structure of glycine cleavage protein h-like (gcvh-l)2 from streptococcus pyogenes
9	c5ks8D			97.9	30	PDB header: ligase Chain: D: PDB Molecule: pyruvate carboxylase subunit beta; PDBTitle: crystal structure of two-subunit pyruvate carboxylase from2 methylbacillus flagellatus
10	c2b8gA			97.9	30	PDB header: biosynthetic protein Chain: A: PDB Molecule: biotin/lipoyl attachment protein; PDBTitle: solution structure of bacillus subtilis blap biotinylated-2 form (energy minimized mean structure)
11	d1dcza			97.8	34	Fold: Barrel-sandwich hybrid Superfamily: Single hybrid motif Family: Biotinyl/lipoyl-carrier proteins and domains

12	c3n6rK_			97.8	30	PDB header: ligase Chain: K: PDB Molecule: propionyl-coa carboxylase, alpha subunit; PDBTitle: crystal structure of the holoenzyme of propionyl-coa carboxylase (pcc)
13	c5ks8F_			97.8	30	PDB header: ligase Chain: F: PDB Molecule: pyruvate carboxylase subunit beta; PDBTitle: crystal structure of two-subunit pyruvate carboxylase from2 methyllobacillus flagellatus
14	d1k8ma_			97.8	24	Fold: Barrel-sandwich hybrid Superfamily: Single hybrid motif Family: Biotinyl/lipoyl-carrier proteins and domains
15	d1bdoa_			97.7	29	Fold: Barrel-sandwich hybrid Superfamily: Single hybrid motif Family: Biotinyl/lipoyl-carrier proteins and domains
16	c2ejmA_			97.7	25	PDB header: ligase Chain: A: PDB Molecule: methylcrotonyl-coa carboxylase subunit alpha; PDBTitle: solution structure of ruh-072, an apo-biotinyl domain form2 human acetyl coenzyme a carboxylase
17	c3bg5B_			97.7	28	PDB header: ligase Chain: B: PDB Molecule: pyruvate carboxylase; PDBTitle: crystal structure of staphylococcus aureus pyruvate carboxylase
18	c3hb1A_			97.7	28	PDB header: ligase Chain: A: PDB Molecule: pyruvate carboxylase; PDBTitle: crystal structure of s. aureus pyruvate carboxylase t908a mutant
19	c5vz0D_			97.7	22	PDB header: ligase Chain: D: PDB Molecule: pyruvate carboxylase; PDBTitle: crystal structure of lactococcus lactis pyruvate carboxylase g746a2 mutant in complex with cyclic-di-amp
20	c4hnvB_			97.6	27	PDB header: ligase Chain: B: PDB Molecule: pyruvate carboxylase; PDBTitle: crystal structure of r54e mutant of s. aureus pyruvate carboxylase
21	d1ghja_		not modelled	97.6	26	Fold: Barrel-sandwich hybrid Superfamily: Single hybrid motif Family: Biotinyl/lipoyl-carrier proteins and domains
22	c4qskB_		not modelled	97.6	30	PDB header: ligase Chain: B: PDB Molecule: pyruvate carboxylase; PDBTitle: crystal structure of l. monocytogenes pyruvate carboxylase in complex2 with cyclic-di-amp
23	c2l5tA_		not modelled	97.6	21	PDB header: transferase Chain: A: PDB Molecule: lipoamide acyltransferase; PDBTitle: solution nmr structure of e2 lipoyl domain from thermoplasma2 acidophilum
24	c2dneA_		not modelled	97.6	16	PDB header: transferase Chain: A: PDB Molecule: dihydrolipoyllysine-residue acetyltransferase PDBTitle: solution structure of rsg1 ruh-058, a lipoyl domain of2 human 2-oxoacid dehydrogenase
25	d1qjoa_		not modelled	97.6	29	Fold: Barrel-sandwich hybrid Superfamily: Single hybrid motif Family: Biotinyl/lipoyl-carrier proteins and domains
26	c2q8iB_		not modelled	97.5	16	PDB header: transferase Chain: B: PDB Molecule: dihydrolipoyllysine-residue acetyltransferase component of PDBTitle: pyruvate dehydrogenase kinase isoform 3 in complex with antitumor drug2 radicicol
27	d1iyua_		not modelled	97.5	23	Fold: Barrel-sandwich hybrid Superfamily: Single hybrid motif Family: Biotinyl/lipoyl-carrier proteins and domains
28	c2einD		not modelled	97.5	24	PDB header: ligase Chain: D: PDB Molecule: 149aa long hypothetical methylmalonyl-coa decarboxylase

28	c2ejyD	Alignment	not modelled	97.5	24	PDBTitle: crystal structure of the biotin protein ligase (mutation r48a) and2 biotin carboxyl carrier protein complex from pyrococcus horikoshii3 ot3 PDB header: transferase Chain: A: PDB Molecule: pyruvate dehydrogenase protein x component; PDBTitle: solution structure of rsgj ruh-054, a lipoyl domain from2 human 2-oxacid dehydrogenase
29	c2dncA	Alignment	not modelled	97.5	35	PDB header: ligase Chain: A: PDB Molecule: pyruvate carboxylase, mitochondrial; PDBTitle: crystal structure of human pyruvate carboxylase (missing the biotin2 carboxylase domain at the n-terminus)
30	c3bg3A	Alignment	not modelled	97.5	24	Fold: Barrel-sandwich hybrid Superfamily: Single hybrid motif Family: Biotinyl/lipoyl-carrier proteins and domains
31	d2pnrc1	Alignment	not modelled	97.5	16	Fold: Barrel-sandwich hybrid Superfamily: Single hybrid motif Family: Biotinyl/lipoyl-carrier proteins and domains
32	d1y8ob1	Alignment	not modelled	97.5	16	Fold: Barrel-sandwich hybrid Superfamily: Single hybrid motif Family: Biotinyl/lipoyl-carrier proteins and domains
33	d1o78a	Alignment	not modelled	97.4	34	Fold: Barrel-sandwich hybrid Superfamily: Single hybrid motif Family: Biotinyl/lipoyl-carrier proteins and domains
34	d1lab1	Alignment	not modelled	97.4	29	Fold: Barrel-sandwich hybrid Superfamily: Single hybrid motif Family: Biotinyl/lipoyl-carrier proteins and domains
35	d1gjxa	Alignment	not modelled	97.4	26	Fold: Barrel-sandwich hybrid Superfamily: Single hybrid motif Family: Biotinyl/lipoyl-carrier proteins and domains
36	c3va7A	Alignment	not modelled	97.3	28	PDB header: ligase Chain: A: PDB Molecule: klla0e08119p; PDBTitle: crystal structure of the kluyveromyces lactis urea carboxylase PDB header: ligase
37	c2kccA	Alignment	not modelled	97.2	26	Chain: A: PDB Molecule: acetyl-coa carboxylase 2; PDBTitle: solution structure of biotinyl domain from human acetyl-2 coa carboxylase 2
38	c2dn8A	Alignment	not modelled	97.2	27	PDB header: ligase Chain: A: PDB Molecule: acetyl-coa carboxylase 2; PDBTitle: solution structure of rsgj ruh-053, an apo-biotin carboxy2 carrier protein from human transcarboxylase
39	c3u9sA	Alignment	not modelled	97.1	32	PDB header: ligase Chain: A: PDB Molecule: methylcrotonyl-coa carboxylase, alpha-subunit; PDBTitle: crystal structure of p. aeruginosa 3-methylcrotonyl-coa carboxylase2 (mcc) 750 kd holoenzyme, coa complex
40	d1pmra	Alignment	not modelled	97.0	29	Fold: Barrel-sandwich hybrid Superfamily: Single hybrid motif Family: Biotinyl/lipoyl-carrier proteins and domains
41	c4rcnA	Alignment	not modelled	96.7	33	PDB header: ligase Chain: A: PDB Molecule: long-chain acyl-coa carboxylase; PDBTitle: structure and function of a single-chain, multi-domain long-chain2 acyl-coa carboxylase
42	c3d4rE	Alignment	not modelled	96.6	28	PDB header: unknown function Chain: E: PDB Molecule: domain of unknown function from the pfam-b_34464 family; PDBTitle: crystal structure of a duf2118 family protein (mmp0046) from2 methanococcus maripaludis at 2.20 a resolution
43	c6g2dC	Alignment	not modelled	96.6	33	PDB header: ligase Chain: C: PDB Molecule: acetyl-coa carboxylase 1; PDBTitle: citrate-induced acetyl-coa carboxylase (acc-cit) filament at 5.4 a2 resolution
44	c5csIA	Alignment	not modelled	96.4	23	PDB header: ligase Chain: A: PDB Molecule: acetyl-coa carboxylase; PDBTitle: crystal structure of the 500 kd yeast acetyl-coa carboxylase2 holoenzyme dimer
45	c5csaA	Alignment	not modelled	95.6	23	PDB header: ligase Chain: A: PDB Molecule: acetyl-coa carboxylase; PDBTitle: crystal structure of domains bt-bccp-ac1-ac5 of yeast acetyl-coa2 carboxylase
46	c4p6vA	Alignment	not modelled	94.9	30	PDB header: oxidoreductase Chain: A: PDB Molecule: (+)-translocating nadh-quinone reductase subunit a; PDBTitle: crystal structure of the na+-translocating nadh: ubiquinone2 oxidoreductase from vibrio cholerae
47	c2k33A	Alignment	not modelled	94.6	30	PDB header: membrane protein, transport protein Chain: A: PDB Molecule: acra; PDBTitle: solution structure of an n-glycosylated protein using in vitro glycosylation
48	c2qf7A	Alignment	not modelled	93.6	24	PDB header: ligase Chain: A: PDB Molecule: pyruvate carboxylase protein; PDBTitle: crystal structure of a complete multifunctional pyruvate carboxylase2 from rhizobium etli
49	c2qj8B	Alignment	not modelled	91.9	19	PDB header: hydrolase Chain: B: PDB Molecule: mlr6093 protein; PDBTitle: crystal structure of an aspartoacylase family protein (mlr6093) from2 mesorhizobium loti maff303099 at 2.00 a resolution
50	c3tw6B	Alignment	not modelled	91.7	29	PDB header: ligase/activator Chain: B: PDB Molecule: pyruvate carboxylase protein; PDBTitle: structure of rhizobium etli pyruvate carboxylase t882a with the2 allosteric activator, acetyl coenzyme-a
51	c3na6A	Alignment	not modelled	89.3	18	PDB header: hydrolase Chain: A: PDB Molecule: succinylglutamate desuccinylase/aspartoacylase; PDBTitle: crystal structure of a succinylglutamate desuccinylase (tm1040_2694)2 from sulicibacter sp. tm1040 at 2.00 a resolution
52	c3fmcc	Alignment	not modelled	86.1	17	PDB header: hydrolase Chain: C: PDB Molecule: putative succinylglutamate desuccinylase / aspartoacylase; PDBTitle: crystal structure of a putative succinylglutamate desuccinylase /2 aspartoacylase family protein (sama_0604) from

						shewanella amazonensis3 sb2b at 1.80 a resolution
53	c4kkuD_	Alignment	not modelled	81.8	24	PDB header: membrane protein Chain: D: PDB Molecule: membrane fusion protein; PDBTitle: structure of besa (selenomethionine derivative - p212121)
54	c3cdxB_	Alignment	not modelled	79.9	24	PDB header: hydrolase Chain: B: PDB Molecule: Molecule: succinylglutamatedesuccinylase/aspartoacylase; PDBTitle: crystal structure of succinylglutamatedesuccinylase/aspartoacylase2 from rhodobacter sphaerooides
55	c3t51C_	Alignment	not modelled	74.1	24	PDB header: transport protein Chain: C: PDB Molecule: cation efflux system protein cusb; PDBTitle: crystal structures of the pre-extrusion and extrusion states of the cusb2 adaptor-transporter complex
56	c2jkuA_	Alignment	not modelled	68.1	36	PDB header: ligase Chain: A: PDB Molecule: propionyl-coa carboxylase alpha chain, mitochondrial; PDBTitle: crystal structure of the n-terminal region of the biotin acceptor2 domain of human propionyl-coa carboxylase
57	c3h9iB_	Alignment	not modelled	67.0	24	PDB header: transport protein Chain: B: PDB Molecule: cation efflux system protein cusb; PDBTitle: crystal structure of the membrane fusion protein cusb from escherichia2 coli
58	d1brwa3	Alignment	not modelled	63.0	29	Fold: alpha/beta-Hammerhead Superfamily: Pyrimidine nucleoside phosphorylase C-terminal domain Family: Pyrimidine nucleoside phosphorylase C-terminal domain
59	d1uoua3	Alignment	not modelled	59.5	19	Fold: alpha/beta-Hammerhead Superfamily: Pyrimidine nucleoside phosphorylase C-terminal domain Family: Pyrimidine nucleoside phosphorylase C-terminal domain
60	d2tpfa3	Alignment	not modelled	54.3	10	Fold: alpha/beta-Hammerhead Superfamily: Pyrimidine nucleoside phosphorylase C-terminal domain Family: Pyrimidine nucleoside phosphorylase C-terminal domain
61	c5xu0B_	Alignment	not modelled	41.3	24	PDB header: transport protein Chain: B: PDB Molecule: membrane-fusion protein; PDBTitle: structure of the membrane fusion protein spr0693 from streptococcus2 pneumoniae r6
62	c5c22A_	Alignment	not modelled	39.3	15	PDB header: protein transport Chain: A: PDB Molecule: chromosomal hemolysin d; PDBTitle: crystal structure of zn-bound hlyd from e. coli
63	c2f1mA_	Alignment	not modelled	35.1	16	PDB header: transport protein Chain: A: PDB Molecule: acriflavine resistance protein a; PDBTitle: conformational flexibility in the multidrug efflux system protein acra
64	c3lnnB_	Alignment	not modelled	33.7	28	PDB header: metal transport Chain: B: PDB Molecule: membrane fusion protein (mfp) heavy metal cation efflux PDBTitle: crystal structure of zneb from cupriavidus metallidurans
65	c3h5qA_	Alignment	not modelled	33.6	29	PDB header: transferase Chain: A: PDB Molecule: pyrimidine-nucleoside phosphorylase; PDBTitle: crystal structure of a putative pyrimidine-nucleoside phosphorylase2 from staphylococcus aureus
66	c5nenA_	Alignment	not modelled	33.0	33	PDB header: hydrolase Chain: A: PDB Molecule: lipase c; PDBTitle: crystal structure of the soluble domain of lipc, a membrane fusion2 protein of a type i secretion system
67	c2dsjA_	Alignment	not modelled	32.6	29	PDB header: transferase Chain: A: PDB Molecule: pyrimidine-nucleoside (thymidine) phosphorylase; PDBTitle: crystal structure of project id tt0128 from thermus thermophilus hb8
68	c1brwB_	Alignment	not modelled	32.6	29	PDB header: transferase Chain: B: PDB Molecule: protein (pyrimidine nucleoside phosphorylase); PDBTitle: the crystal structure of pyrimidine nucleoside2 phosphorylase in a closed conformation
69	c1t5eB_	Alignment	not modelled	31.8	24	PDB header: transport protein Chain: B: PDB Molecule: multidrug resistance protein mexa; PDBTitle: the structure of mexa
70	c2j0fC_	Alignment	not modelled	31.2	19	PDB header: transferase Chain: C: PDB Molecule: thymidine phosphorylase; PDBTitle: structural basis for non-competitive product inhibition in2 human thymidine phosphorylase: implication for drug design
71	c1otpA_	Alignment	not modelled	30.9	10	PDB header: phosphorylase Chain: A: PDB Molecule: thymidine phosphorylase; PDBTitle: structural and theoretical studies suggest domain movement produces an2 active conformation of thymidine phosphorylase
72	c5nbbA_	Alignment	not modelled	29.1	21	PDB header: chaperone Chain: A: PDB Molecule: rna chaperone proq; PDBTitle: structure of the c-terminal domain of the escherichia coli proq rna2 binding protein
73	c4ga5H_	Alignment	not modelled	28.8	14	PDB header: transferase Chain: H: PDB Molecule: putative thymidine phosphorylase; PDBTitle: crystal structure of amp phosphorylase c-terminal deletion mutant in2 the apo-form
74	d1vf7a_	Alignment	not modelled	28.0	20	Fold: HlyD-like secretion proteins Superfamily: HlyD-like secretion proteins Family: HlyD-like secretion proteins
75	c2aukA_	Alignment	not modelled	27.8	25	PDB header: transferase Chain: A: PDB Molecule: dna-directed rna polymerase beta' chain; PDBTitle: structure of e. coli rna polymerase beta' g/g' insert
76	c4l8jA_	Alignment	not modelled	27.0	20	PDB header: transport protein Chain: A: PDB Molecule: putative efflux transporter; PDBTitle: crystal structure of a putative efflux transporter (bacegg_01895) from2 bacteroides eggerthii dsm 20697 at 2.06 a resolution

77	c5nilG	Alignment	not modelled	27.0	20	PDB header: transport protein Chain: G; PDB Molecule: macrolide export protein maca; PDBTitle: structure of the macab-tolc abc-type tripartite multidrug efflux pump2 macb section
78	c4tkoB	Alignment	not modelled	25.0	28	PDB header: membrane protein Chain: B; PDB Molecule: emra; PDBTitle: structure of the periplasmic adaptor protein emra
79	d1v95a	Alignment	not modelled	21.0	17	Fold: Anticodon-binding domain-like Superfamily: Class II aaRS ABD-related Family: Anticodon-binding domain of Class II aaRS
80	d2f3ga	Alignment	not modelled	18.7	24	Fold: Barrel-sandwich hybrid Superfamily: Duplicated hybrid motif Family: Glucose permease-like
81	d2gpra	Alignment	not modelled	18.6	16	Fold: Barrel-sandwich hybrid Superfamily: Duplicated hybrid motif Family: Glucose permease-like
82	d1gpra	Alignment	not modelled	17.2	22	Fold: Barrel-sandwich hybrid Superfamily: Duplicated hybrid motif Family: Glucose permease-like
83	c5v5sH	Alignment	not modelled	16.7	16	PDB header: membrane protein Chain: H; PDB Molecule: multidrug efflux pump subunit acra; PDBTitle: multi-drug efflux; membrane transport; rnd superfamily; drug2 resistance
84	d1ci3m2	Alignment	not modelled	16.4	29	Fold: Barrel-sandwich hybrid Superfamily: Rudiment single hybrid motif Family: Cytochrome f, small domain
85	d1qapa2	Alignment	not modelled	16.2	27	Fold: alpha/beta-Hammerhead Superfamily: Nicotinate/Quinolinate PRTase N-terminal domain-like Family: NadC N-terminal domain-like
86	d2p84a1	Alignment	not modelled	15.1	20	Fold: YopX-like Superfamily: YopX-like Family: YopX-like
87	c5b0hB	Alignment	not modelled	14.4	14	PDB header: metal binding protein Chain: B; PDB Molecule: leukocyte cell-derived chemotaxin-2; PDBTitle: crystal structure of human leukocyte cell-derived chemotaxin 2
88	c4cg4D	Alignment	not modelled	13.9	10	PDB header: actin-binding protein Chain: D; PDB Molecule: pyrin; PDBTitle: crystal structure of the chs-b30.2 domains of trim20
89	c3sdzA	Alignment	not modelled	13.5	30	PDB header: hydrolase Chain: A; PDB Molecule: v-type atp synthase alpha chain; PDBTitle: structural characterization of the subunit a mutant f427w of the a-atp2 synthase from pyrococcus horikoshii
90	c4dk0A	Alignment	not modelled	13.0	24	PDB header: membrane protein Chain: A; PDB Molecule: putative maca; PDBTitle: crystal structure of maca from actinobacillus actinomycetemcomitans
91	c3fppB	Alignment	not modelled	13.0	26	PDB header: membrane protein Chain: B; PDB Molecule: macrolide-specific efflux protein maca; PDBTitle: crystal structure of e.coli maca
92	c3InnA	Alignment	not modelled	12.2	28	PDB header: metal transport Chain: A; PDB Molecule: membrane fusion protein (mfp) heavy metal cation efflux PDBTitle: crystal structure of zneb from cupriavidus metallidurans
93	c4dk1B	Alignment	not modelled	12.2	20	PDB header: membrane protein Chain: B; PDB Molecule: putative maca, multidrug resistance protein mexa; PDBTitle: crystal structure of maca-mexa chimeric protein, containing the2 pseudomonas aeruginosa mexa alpha-hairpin domain.
94	d1m1fa	Alignment	not modelled	11.9	25	Fold: SH3-like barrel Superfamily: Cell growth inhibitor/plasmid maintenance toxic component Family: Kid/PemK
95	c6flnE	Alignment	not modelled	11.8	29	PDB header: protein binding Chain: E; PDB Molecule: e3 ubiquitin/isg15 ligase trim25; PDBTitle: crystal structure of the human trim25 coiled-coil and pryspry domains
96	d1glaf	Alignment	not modelled	11.6	24	Fold: Barrel-sandwich hybrid Superfamily: Duplicated hybrid motif Family: Glucose permease-like
97	c3pajA	Alignment	not modelled	9.9	24	PDB header: transferase Chain: A; PDB Molecule: nicotinate-nucleotide pyrophosphorylase, carboxylating; PDBTitle: 2.00 angstrom resolution crystal structure of a quinolinate2 phosphoribosyltransferase from vibrio cholerae o1 biovar eltor str.3 n16961
98	c4zhbA	Alignment	not modelled	9.7	57	PDB header: structural genomics, unknown function Chain: A; PDB Molecule: ankyrin repeat-containing protein; PDBTitle: n-terminal structure of ankyrin repeat-containing protein lega11 from2 legionella pneumophila
99	d1o4ua2	Alignment	not modelled	9.5	16	Fold: alpha/beta-Hammerhead Superfamily: Nicotinate/Quinolinate PRTase N-terminal domain-like Family: NadC N-terminal domain-like