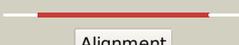
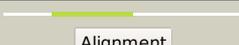
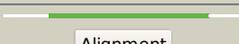


Phyre2

Email	mdejesus@rockefeller.edu
Description	RVBD2417c (-)_2715482_2716324
Date	Wed Aug 7 12:50:03 BST 2019
Unique Job ID	d3d7b3a2b0d99d02

Detailed template
information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c6dkeA_	 Alignment		100.0	21	PDB header: transferase Chain: A: PDB Molecule: fatty acid kinase (fak) b1 protein; PDBTitle: the x-ray crystal structure of streptococcus pneumoniae fatty acid2 kinase (fak) b1 protein loaded with palmitic acid (c16:0) to 1.763 angstrom resolution
2	c2dt8A_	 Alignment		100.0	31	PDB header: lipid binding protein Chain: A: PDB Molecule: degv family protein; PDBTitle: fatty acid binding of a degv family protein from thermus thermophilus
3	c3fysA_	 Alignment		100.0	28	PDB header: fatty acid-binding protein Chain: A: PDB Molecule: protein degv; PDBTitle: crystal structure of degv, a fatty acid binding protein2 from bacillus subtilis
4	c6cngA_	 Alignment		100.0	19	PDB header: transferase Chain: A: PDB Molecule: fatty acid kinase (fak) b3 protein; PDBTitle: the x-ray crystal structure of the streptococcus pneumoniae fatty acid2 kinase (fak) b3 protein loaded with linoleic acid to 1.47 angstrom3 resolution
5	c3lupA_	 Alignment		100.0	23	PDB header: structure genomics, unknown function Chain: A: PDB Molecule: degv family protein; PDBTitle: crystal structure of fatty acid binding degv family protein sag13422 from streptococcus agalactiae
6	d1pzxa_	 Alignment		100.0	24	Fold: DAK1/DegV-like Superfamily: DAK1/DegV-like Family: DegV-like
7	c5utoB_	 Alignment		100.0	26	PDB header: transport protein Chain: B: PDB Molecule: edd domain protein, degv family; PDBTitle: the crystal structure of the staphylococcus aureus fatty acid kinase2 (fak) b1 protein loaded with palmitic acid to 1.83 angstrom3 resolution
8	c3nyiA_	 Alignment		100.0	22	PDB header: lipid binding protein Chain: A: PDB Molecule: fat acid-binding protein; PDBTitle: the crystal structure of a fat acid (stearic acid)-binding protein2 from eubacterium ventriosum atcc 27560.
9	c6dj6B_	 Alignment		100.0	21	PDB header: transferase Chain: B: PDB Molecule: fatty acid kinase (fak) b2 protein (spr1019); PDBTitle: the x-ray crystal structure of the streptococcus pneumoniae fatty acid2 kinase (fak) b2 protein loaded with cis-oleic acid to 1.9 angstrom3 resolution
10	c2g7zB_	 Alignment		100.0	24	PDB header: structural genomics, unknown function Chain: B: PDB Molecule: conserved hypothetical protein spy1493; PDBTitle: conserved degv-like protein of unknown function from streptococcus2 pyogenes m1 gas binds long-chain fatty acids
11	c3fdjA_	 Alignment		100.0	20	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: degv family protein; PDBTitle: the structure of a degv family protein from eubacterium eligens.

12	c4x9xA_	 Alignment		100.0	26	PDB header: transferase Chain: A: PDB Molecule: degv domain-containing protein mw1315; PDBTitle: biochemical roles for conserved residues in the bacterial fatty acid2 binding protein family
13	c3jr7A_	 Alignment		100.0	22	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: uncharacterized egv family protein cog1307; PDBTitle: the crystal structure of the protein of degv family cog1307 with2 unknown function from ruminococcus gnavus atcc 29149
14	c3pl5A_	 Alignment		100.0	24	PDB header: lipid binding protein Chain: A: PDB Molecule: putative uncharacterized protein; PDBTitle: fatty acid binding protein
15	d1mgpa_	 Alignment		100.0	22	Fold: DAK1/DegV-like Superfamily: DAK1/DegV-like Family: DegV-like
16	c1mgpA_	 Alignment		100.0	22	PDB header: lipid binding protein Chain: A: PDB Molecule: hypothetical protein tm841; PDBTitle: hypothetical protein tm841 from thermotoga maritima reveals2 fatty acid binding function
17	c3eglC_	 Alignment		100.0	33	PDB header: structural genomics, unknown function Chain: C: PDB Molecule: degv family protein; PDBTitle: crystal structure of degv family protein cg2579 from corynebacterium2 glutamicum
18	c3gx1A_	 Alignment		95.9	15	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: lin1832 protein; PDBTitle: crystal structure of a domain of lin1832 from listeria innocua
19	d3ct6a1	 Alignment		93.9	10	Fold: PTS system fructose IIA component-like Superfamily: PTS system fructose IIA component-like Family: DhaM-like
20	c3gdwA_	 Alignment		79.4	16	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: sigma-54 interaction domain protein; PDBTitle: crystal structure of sigma-54 interaction domain protein from2 enterococcus faecalis
21	d3beda1	 Alignment	not modelled	67.7	15	Fold: PTS system fructose IIA component-like Superfamily: PTS system fructose IIA component-like Family: EIIA-man component-like
22	c1un9B_	 Alignment	not modelled	64.7	29	PDB header: kinase Chain: B: PDB Molecule: dihydroxyacetone kinase; PDBTitle: crystal structure of the dihydroxyacetone kinase from c.2 freundii in complex with amp-pnp and mg2+
23	c3iprC_	 Alignment	not modelled	56.6	20	PDB header: transferase Chain: C: PDB Molecule: pts system, iia component; PDBTitle: crystal structure of the enterococcus faecalis gluconate2 specific eiiA phosphotransferase system component
24	d1oi2a_	 Alignment	not modelled	56.5	17	Fold: DAK1/DegV-like Superfamily: DAK1/DegV-like Family: DAK1
25	d1un8a4	 Alignment	not modelled	55.0	19	Fold: DAK1/DegV-like Superfamily: DAK1/DegV-like Family: DAK1
26	c3ostA_	 Alignment	not modelled	54.6	9	PDB header: lipid binding protein Chain: A: PDB Molecule: serine/threonine-protein kinase kcc4; PDBTitle: structure of the kinase associated-1 (ka1) from kcc4p
27	c2qv5A_	 Alignment	not modelled	54.4	15	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: uncharacterized protein atu2773; PDBTitle: crystal structure of uncharacterized protein atu2773 from2 agrobacterium tumefaciens c58
28	c4ikgA_	 Alignment	not modelled	52.3	12	PDB header: apoptosis Chain: A: PDB Molecule: cell death activator cide-3; PDBTitle: crystal structure of cell death-inducing dffa-like effector c
29	c4tkzA_	 Alignment	not modelled	50.0	11	PDB header: transferase Chain: A: PDB Molecule: putative uncharacterized protein gbs1890;

29	c4kzA	Alignment	not modelled	30.0	11	PDBTitle: crystal structure of phosphotransferase system component eiaa from <i>Streptococcus agalactiae</i> PDB header: ligase
30	c2do6A	Alignment	not modelled	49.8	19	Chain: A; PDB Molecule: e3 ubiquitin-protein ligase cbl-b; PDBTitle: solution structure of rsgi ruh-065, a uba domain from human2 cdna
31	c2d9sA	Alignment	not modelled	49.7	19	PDB header: ligase Chain: A; PDB Molecule: cbl e3 ubiquitin protein ligase; PDBTitle: solution structure of rsgi ruh-049, a uba domain from mouse2 cdna
32	c2jnhA	Alignment	not modelled	48.5	19	PDB header: ligase Chain: A; PDB Molecule: e3 ubiquitin-protein ligase cbl-b; PDBTitle: solution structure of the uba domain from cbl-b
33	d2fi9a1	Alignment	not modelled	47.2	12	Fold: MTH938-like Superfamily: MTH938-like Family: MTH938-like
34	c4u10B	Alignment	not modelled	44.6	16	PDB header: hydrolase Chain: B; PDB Molecule: poly-beta-1,6-n-acetyl-d-glucosamine n-deacetylase; PDBTitle: probing the structure and mechanism of de-n-acetylase from <i>Aggregatibacter actinomycetemcomitans</i>
35	c3orsD	Alignment	not modelled	44.4	16	PDB header: isomerase, biosynthetic protein Chain: D; PDB Molecule: n5-carboxyaminoimidazole ribonucleotide mutase; PDBTitle: crystal structure of n5-carboxyaminoimidazole ribonucleotide mutase2 from <i>Staphylococcus aureus</i>
36	c2eelA	Alignment	not modelled	44.1	13	PDB header: apoptosis Chain: A; PDB Molecule: cell death activator cide-a; PDBTitle: solution structure of the cide-n domain of human cell death2 activator cide-a
37	c4d2kB	Alignment	not modelled	43.5	18	PDB header: apoptosis Chain: B; PDB Molecule: drep2; PDBTitle: crystal structure of drep2 cide domain
38	c1zowB	Alignment	not modelled	42.6	21	PDB header: transferase Chain: B; PDB Molecule: 3-oxoacyl-[acyl-carrier-protein] synthase iii; PDBTitle: crystal structure of <i>S. aureus</i> fabh, beta-ketoacyl carrier protein2 synthase iii
39	d1d4ba	Alignment	not modelled	42.2	18	Fold: beta-Grasp (ubiquitin-like) Superfamily: CAD & PB1 domains Family: CAD domain
40	c1sjjA	Alignment	not modelled	39.9	8	PDB header: metal binding protein Chain: A; PDB Molecule: calsequestrin, cardiac muscle isoform; PDBTitle: comparing skeletal and cardiac calsequestrin structures and their2 calcium binding: a proposed mechanism for coupled calcium binding and3 protein polymerization
41	c3iz5s	Alignment	not modelled	37.5	14	PDB header: ribosome Chain: S; PDB Molecule: 60s ribosomal protein l18a (l18ae); PDBTitle: localization of the large subunit ribosomal proteins into a 5.5 a2 cryo-em map of <i>Triticum aestivum</i> translating 80s ribosome
42	d1hnja1	Alignment	not modelled	35.2	26	Fold: Thiolase-like Superfamily: Thiolase-like Family: Chalcone synthase-like
43	c2iu6B	Alignment	not modelled	34.8	11	PDB header: transferase Chain: B; PDB Molecule: dihydroxyacetone kinase; PDBTitle: regulation of the dha operon of <i>Lactococcus lactis</i>
44	c5t3uA	Alignment	not modelled	32.6	11	PDB header: transport protein Chain: A; PDB Molecule: pts system, iia component; PDBTitle: crystal structure of the pts iia protein associated with the fucose2 utilization operon from <i>Streptococcus pneumoniae</i>
45	c3izcs	Alignment	not modelled	32.0	13	PDB header: ribosome Chain: S; PDB Molecule: 60s ribosomal protein rpl20 (l18ae); PDBTitle: localization of the large subunit ribosomal proteins into a 6.1 a2 cryo-em map of <i>Saccharomyces cerevisiae</i> translating 80s ribosome
46	c3jsyA	Alignment	not modelled	31.2	17	PDB header: ribosomal protein Chain: A; PDB Molecule: acidic ribosomal protein p0 homolog; PDBTitle: n-terminal fragment of ribosomal protein l10 from <i>Methanococcus2 jannaschii</i>
47	c5xpcD	Alignment	not modelled	30.7	16	PDB header: apoptosis Chain: D; PDB Molecule: dnaation factor-related protein 4; PDBTitle: crystal structure of drep4 cide domain
48	c1ibxB	Alignment	not modelled	30.6	18	PDB header: hydrolase/hydrolase inhibitor Chain: B; PDB Molecule: chimera of igg binding protein g and dna PDBTitle: nmr structure of dff40 and dff45 n-terminal domain complex
49	d1ibxb	Alignment	not modelled	30.6	18	Fold: beta-Grasp (ubiquitin-like) Superfamily: CAD & PB1 domains Family: CAD domain
50	d1xnga1	Alignment	not modelled	27.9	10	Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Adenine nucleotide alpha hydrolases-like Family: N-type ATP pyrophosphatases
51	c1a8yA	Alignment	not modelled	27.2	6	PDB header: calcium-binding protein Chain: A; PDB Molecule: calsequestrin; PDBTitle: crystal structure of calsequestrin from rabbit skeletal muscle2 sarcoplasmic reticulum at 2.4 a resolution
52	c6dq3B	Alignment	not modelled	26.6	15	PDB header: hydrolase Chain: B; PDB Molecule: polysaccharide deacetylase; PDBTitle: streptococcus pyogenes deacetylase pdi in complex with acetate
53	c5i1tA	Alignment	not modelled	26.4	18	PDB header: hydrolase Chain: A; PDB Molecule: stage ii sporulation protein d; PDBTitle: 2.6 angstrom resolution crystal structure of stage ii sporulation2 protein d (spoid) from <i>Clostridium difficile</i> in complex with3 triacetylchitotriose
54	c6cuxA	Alignment	not modelled	26.4	8	PDB header: hydrolase Chain: A; PDB Molecule: ribonuclease p protein subunit p20;

54	c6cwaA	Alignment	not modelled	26.4	0	PDBTitle: crystal structure of human ribonuclease p/mrp proteins rpp20/rpp25 PDB header: transferase
55	c6fmgC	Alignment	not modelled	26.3	16	Chain: C; PDB Molecule: pts system mannose-specific transporter subunit iiab; PDBTitle: structure of the mannose transporter iia domain from streptococcus2 pneumoniae
56	c4rwrB	Alignment	not modelled	25.6	23	PDB header: viral protein Chain: B; PDB Molecule: stage ii sporulation protein d; PDBTitle: 2.1 angstrom crystal structure of stage ii sporulation protein d from2 bacillus anthracis
57	d1vz0a1	Alignment	not modelled	25.2	17	Fold: DNA/RNA-binding 3-helical bundle Superfamily: KorB DNA-binding domain-like Family: KorB DNA-binding domain-like
58	c5lwcA	Alignment	not modelled	24.7	4	PDB header: antimicrobial protein Chain: A; PDB Molecule: bacteriocin bacsp222; PDBTitle: nmr solution structure of bacteriocin bacsp222 from staphylococcus2 pseudintermedius 222
59	c2ov6A	Alignment	not modelled	21.9	18	PDB header: hydrolase Chain: A; PDB Molecule: v-type atp synthase subunit f; PDBTitle: the nmr structure of subunit f of the methanogenic a1ao atp synthase2 and its interaction with the nucleotide-binding subunit b
60	d2fvta1	Alignment	not modelled	21.8	8	Fold: MTH938-like Superfamily: MTH938-like Family: MTH938-like
61	c3j3bq	Alignment	not modelled	20.6	11	PDB header: ribosome Chain: Q; PDB Molecule: 60s ribosomal protein l18; PDBTitle: structure of the human 60s ribosomal proteins
62	c1r71B	Alignment	not modelled	18.8	19	PDB header: transcription/dna Chain: B; PDB Molecule: transcriptional repressor protein korb; PDBTitle: crystal structure of the dna binding domain of korb in complex with2 the operator dna
63	d1c9fa	Alignment	not modelled	18.7	15	Fold: beta-Grasp (ubiquitin-like) Superfamily: CAD & PB1 domains Family: CAD domain
64	d1r71a	Alignment	not modelled	18.2	19	Fold: DNA/RNA-binding 3-helical bundle Superfamily: KorB DNA-binding domain-like Family: KorB DNA-binding domain-like
65	c1fvoB	Alignment	not modelled	18.1	20	PDB header: transferase Chain: B; PDB Molecule: ornithine transcarbamylase; PDBTitle: crystal structure of human ornithine transcarbamylase complexed with2 carbamoyl phosphate
66	c5xceB	Alignment	not modelled	17.8	23	PDB header: transport protein Chain: B; PDB Molecule: vacuolar protein sorting-associated protein 29; PDBTitle: crystal structure of wild type vps29 from entamoeba histolytica
67	c5l7aA	Alignment	not modelled	17.5	19	PDB header: dna binding protein Chain: A; PDB Molecule: swi/snf-related matrix-associated actin-dependent regulator PDBTitle: the crystal structure of the human snf5/ini1 domain
68	c1hyuA	Alignment	not modelled	17.1	15	PDB header: oxidoreductase Chain: A; PDB Molecule: alkyl hydroperoxide reductase subunit f; PDBTitle: crystal structure of intact ahpf
69	c2e18B	Alignment	not modelled	16.9	25	PDB header: ligase Chain: B; PDB Molecule: nh(3)-dependent nad(+) synthetase; PDBTitle: crystal structure of project ph0182 from pyrococcus horikoshii ot3
70	c2qnxA	Alignment	not modelled	16.7	25	PDB header: transferase Chain: A; PDB Molecule: 3-oxoacyl-[acyl-carrier-protein] synthase 3; PDBTitle: crystal structure of the complex between the mycobacterium beta-2 ketoacyl-acyl carrier protein synthase iii (fabh) and 11-3 [(decyloxy-carbonyl)dithio]-undecanoic acid
71	c2wshC	Alignment	not modelled	16.6	10	PDB header: hydrolase Chain: C; PDB Molecule: endonuclease ii; PDBTitle: structure of bacteriophage t4 endoi e118a mutant
72	c2i6oA	Alignment	not modelled	16.2	12	PDB header: hydrolase Chain: A; PDB Molecule: sulfolobus solfataricus protein tyrosine PDBTitle: crystal structure of the complex of the archaeal sulfolobus2 ptp-fold phosphatase with phosphopeptides n-g-(p)j-y-k-n
73	d1f2ri	Alignment	not modelled	16.1	20	Fold: beta-Grasp (ubiquitin-like) Superfamily: CAD & PB1 domains Family: CAD domain
74	c3lfhF	Alignment	not modelled	16.0	9	PDB header: transferase Chain: F; PDB Molecule: phosphotransferase system, mannose/fructose-specific PDBTitle: crystal structure of manxa from thermoanaerobacter tengcongensis
75	c4xgjA	Alignment	not modelled	15.4	13	PDB header: structural genomics, unknown function Chain: A; PDB Molecule: uncharacterized protein; PDBTitle: crystal structure of a domain of unknown function (duf1537) from2 pectobacterium atrosepticum (eca3761), target efi-511609, apo3 structure, domain swapped dimer
76	d1ewqa4	Alignment	not modelled	14.8	16	Fold: MutS N-terminal domain-like Superfamily: DNA repair protein MutS, domain I Family: DNA repair protein MutS, domain I
77	d1pj3a1	Alignment	not modelled	14.7	13	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: Aminoacid dehydrogenase-like, C-terminal domain
78	c2gm2A	Alignment	not modelled	14.7	12	PDB header: structural genomics, unknown function Chain: A; PDB Molecule: conserved hypothetical protein; PDBTitle: nmr structure of xanthomonas campestris xcc1710: northeast2 structural genomics consortium target xcr35
						Fold: PTS system fructose IIA component-like

79	d1pdoa_	Alignment	not modelled	14.5	16	Superfamily: PTS system fructose IIA component-like Family: EIIA-man component-like
80	d1mkza_	Alignment	not modelled	13.8	19	Fold: Molybdenum cofactor biosynthesis proteins Superfamily: Molybdenum cofactor biosynthesis proteins Family: MogA-like
81	c5dxlA_	Alignment	not modelled	13.3	18	PDB header: hydrolase Chain: A: PDB Molecule: trehalose-6-phosphate phosphatase; PDBTitle: structure of aspergillus fumigatus trehalose-6-phosphate phosphatase2 crystal form 1
82	c3fiuD_	Alignment	not modelled	13.1	14	PDB header: ligase Chain: D: PDB Molecule: nh(3)-dependent nad(+) synthetase; PDBTitle: structure of nmn synthetase from francisella tularensis
83	c4f78A_	Alignment	not modelled	13.0	12	PDB header: hydrolase Chain: A: PDB Molecule: d,d-dipeptidase/d,d-carboxypeptidase; PDBTitle: crystal structure of vancomycin resistance d,d-dipeptidase vanxyg
84	d3efxd1	Alignment	not modelled	13.0	21	Fold: OB-fold Superfamily: Bacterial enterotoxins Family: Bacterial AB5 toxins, B-subunits
85	c1fokA_	Alignment	not modelled	12.9	15	PDB header: hydrolase/dna Chain: A: PDB Molecule: protein (foki restriction endonucleas); PDBTitle: structure of restriction endonuclease foki bound to dna
86	c3bxwB_	Alignment	not modelled	12.9	15	PDB header: hydrolase Chain: B: PDB Molecule: chitinase domain-containing protein 1; PDBTitle: crystal structure of stabilin-1 interacting chitinase-like protein,2 si-clp
87	c4q6qA_	Alignment	not modelled	12.9	17	PDB header: hydrolase Chain: A: PDB Molecule: conserved hypothetical secreted protein; PDBTitle: structural analysis of the zn-form ii of helicobacter pylori csd4, a2 d,l-carboxypeptidase
88	d3b48a1	Alignment	not modelled	12.7	9	Fold: PTS system fructose IIA component-like Superfamily: PTS system fructose IIA component-like Family: DhaM-like
89	d1l5ja2	Alignment	not modelled	11.6	40	Fold: The "swivelling" beta/beta/alpha domain Superfamily: LeuD/IIVD-like Family: LeuD-like
90	d1vlva1	Alignment	not modelled	11.5	16	Fold: ATC-like Superfamily: Aspartate/ornithine carbamoyltransferase Family: Aspartate/ornithine carbamoyltransferase
91	c3zhiA_	Alignment	not modelled	11.5	9	PDB header: transcription Chain: A: PDB Molecule: ci; PDBTitle: n-terminal domain of the ci repressor from bacteriophage tp901-1
92	c3ct4B_	Alignment	not modelled	11.2	15	PDB header: transferase Chain: B: PDB Molecule: pts-dependent dihydroxyacetone kinase, dihydroxyacetone- PDBTitle: structure of dha-kinase subunit dhak from I. lactis
93	c1ortD_	Alignment	not modelled	11.2	18	PDB header: transferase Chain: D: PDB Molecule: ornithine transcarbamoylase; PDBTitle: ornithine transcarbamoylase from pseudomonas aeruginosa
94	d1w7ab4	Alignment	not modelled	11.2	11	Fold: MutS N-terminal domain-like Superfamily: DNA repair protein MutS, domain I Family: DNA repair protein MutS, domain I
95	d1zpdA1	Alignment	not modelled	11.1	14	Fold: DHS-like NAD/FAD-binding domain Superfamily: DHS-like NAD/FAD-binding domain Family: Pyruvate oxidase and decarboxylase, middle domain
96	d1xi8a3	Alignment	not modelled	11.1	18	Fold: Molybdenum cofactor biosynthesis proteins Superfamily: Molybdenum cofactor biosynthesis proteins Family: MoeA central domain-like
97	d1qcza_	Alignment	not modelled	10.8	17	Fold: Flavodoxin-like Superfamily: N5-CAIR mutase (phosphoribosylaminoimidazole carboxylase, PurE) Family: N5-CAIR mutase (phosphoribosylaminoimidazole carboxylase, PurE)
98	d1s3la_	Alignment	not modelled	10.2	23	Fold: Metallo-dependent phosphatases Superfamily: Metallo-dependent phosphatases Family: YfcE-like
99	c1s3mA_	Alignment	not modelled	10.2	23	PDB header: phosphodiesterase Chain: A: PDB Molecule: hypothetical protein mj0936; PDBTitle: structural and functional characterization of a novel2 archaeal phosphodiesterase