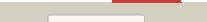
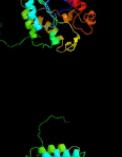
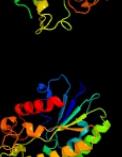
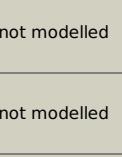


Phyre²

Email	mdejesus@rockefeller.edu
Description	RVBD0111 (-) _133948_136005
Date	Tue Jul 23 14:50:15 BST 2019
Unique Job ID	65a1c169eb53a840

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c4ijyA			99.3	15	PDB header: hydrolase Chain: A; PDB Molecule: gdsl-like protein; PDBTitle: crystal structure of a putative acylhydrolase (bacuni_03406) from 2 bacteroides uniformis atcc 8492 at 1.37 a resolution
2	c3p94A			99.3	15	PDB header: hydrolase Chain: A; PDB Molecule: gdsl-like lipase; PDBTitle: crystal structure of a gdsl-like lipase (bdi_0976) from 2 parabacteroides distasonis atcc 8503 at 1.93 a resolution
3	c2o14A			99.3	18	PDB header: structural genomics, unknown function Chain: A; PDB Molecule: hypothetical protein xjim; PDBTitle: x-ray crystal structure of protein xjim_bacsu from bacillus subtilis.2 northeast structural genomics consortium target sr595
4	c4rshB			99.2	14	PDB header: structural genomics, unknown function Chain: B; PDB Molecule: lipolytic protein g-d-s-l family; PDBTitle: structure of a putative lipolytic protein of g-d-s-l family from 2 desulfobacterium hafniense dcb-2
5	c5ufyA			99.2	17	PDB header: transferase Chain: A; PDB Molecule: acyltransferase; PDBTitle: structure of streptococcus pneumoniae peptidoglycan o-2 acetyltransferase a (oata) c-terminal catalytic domain
6	c4h08A			99.2	13	PDB header: hydrolase Chain: A; PDB Molecule: putative hydrolase; PDBTitle: crystal structure of a putative hydrolase (bt3161) from bacteroides2 thetaiotaomicron vpi-5482 at 1.80 a resolution
7	c3milA			99.1	17	PDB header: hydrolase Chain: A; PDB Molecule: isoamyl acetate-hydrolyzing esterase; PDBTitle: crystal structure of isoamyl acetate-hydrolyzing esterase from 2 saccharomyces cerevisiae
8	c4jggB			99.1	19	PDB header: hydrolase Chain: B; PDB Molecule: esterase tesa; PDBTitle: crystal structure of tesa
9	c4k40B			99.1	14	PDB header: hydrolase Chain: B; PDB Molecule: gdsl-like lipase/acylhydrolase family protein; PDBTitle: peptidoglycan o-acetylestearate in action, 0 min
10	d1k7ca			99.1	16	Fold: Flavodoxin-like Superfamily: SGNH hydrolase Family: Rhamnogalacturonan acetylesterase
11	d1jrla			99.1	15	Fold: Flavodoxin-like Superfamily: SGNH hydrolase Family: TAP-like

12	c4s1pA	Alignment		99.1	10	PDB header: hydrolase Chain: A: PDB Molecule: uncharacterized protein; PDBTitle: shel_16390 protein, a putative sgnh hydrolase from slackia2 heliotrinireducens
13	c6njcB	Alignment		99.0	12	PDB header: hydrolase Chain: B: PDB Molecule: sialate o-acetylesterase; PDBTitle: crystal structure of the sialate o-acetylesterase from bacteroides2 vulgaris
14	c4jhIA	Alignment		99.0	16	PDB header: hydrolase Chain: A: PDB Molecule: acetyl xylan esterase; PDBTitle: crystal structure of of axe2, an acetylxyan esterase from geobacillus2 stearothermophilus
15	c3bzwA	Alignment		99.0	15	PDB header: hydrolase Chain: A: PDB Molecule: putative lipase; PDBTitle: crystal structure of a putative lipase from bacteroides2 thetaiotaomicron
16	d3bzwa1	Alignment		99.0	15	Fold: Flavodoxin-like Superfamily: SGNH hydrolase Family: BT2961-like
17	d1yzfa1	Alignment		99.0	19	Fold: Flavodoxin-like Superfamily: SGNH hydrolase Family: TAP-like
18	d2hsja1	Alignment		99.0	16	Fold: Flavodoxin-like Superfamily: SGNH hydrolase Family: Acetylhydrolase
19	c5jd3A	Alignment		99.0	15	PDB header: hydrolase Chain: A: PDB Molecule: iae5; PDBTitle: crystal structure of iae5, an alpha/beta hydrolase enzyme from the2 metagenome of lake arreo, spain
20	c6iqbA	Alignment		99.0	14	PDB header: hydrolase Chain: A: PDB Molecule: sgnh-hydrolase family esterase; PDBTitle: esterase aline4 mutant-s13a
21	c3hp4A	Alignment	not modelled	99.0	15	PDB header: hydrolase Chain: A: PDB Molecule: gdsl-esterase; PDBTitle: crystal structure of psychrotrophic esterase esta from2 pseudoalteromonas sp. 643a inhibited by monoethylphosphonate
22	c3dc7B	Alignment	not modelled	99.0	13	PDB header: structural genomics, unknown function Chain: B: PDB Molecule: putative uncharacterized protein lp_3323; PDBTitle: crystal structure of the protein q88sr8 from lactobacillus plantarum.2 northeast structural genomics consortium target lpr109.
23	c4hf7A	Alignment	not modelled	99.0	13	PDB header: hydrolase Chain: A: PDB Molecule: putative acylhydrolase; PDBTitle: crystal structure of a gdsl-like lipase (bt0569) from bacteroides2 thetaiotaomicron vpi-5482 at 1.77 a resolution
24	c4lhsA	Alignment	not modelled	99.0	14	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: uncharacterized protein; PDBTitle: crystal structure of a putative gdsl-like lipase (bacova_00914) from2 bacteroides ovatus atcc 8483 at 1.40 a resolution
25	d2o14a2	Alignment	not modelled	99.0	14	Fold: Flavodoxin-like Superfamily: SGNH hydrolase Family: YxIM C-terminal domain-like
26	c4rw0B	Alignment	not modelled	99.0	17	PDB header: hydrolase Chain: B: PDB Molecule: lipolytic protein g-d-s-l family; PDBTitle: crystal structure of a member of the lipolytic protein g-d-s-l family2 from veillonella parvula dsm 2008
27	d1fxwf	Alignment	not modelled	99.0	17	Fold: Flavodoxin-like Superfamily: SGNH hydrolase Family: Acetylhydrolase
28	d1es9a	Alignment	not modelled	98.9	15	Fold: Flavodoxin-like Superfamily: SGNH hydrolase Family: Acetylhydrolase

29	d3dc7a1		Alignment	not modelled	98.9	12	Fold: Flavodoxin-like Superfamily: SGNH hydrolase Family: BT2961-like
30	c6iq8B_		Alignment	not modelled	98.9	16	PDB header: hydrolase Chain: B: PDB Molecule: carboxylesterase; PDBTitle: esterase crme10 mutant-d178a
31	c3rjtA_		Alignment	not modelled	98.9	14	PDB header: hydrolase Chain: A: PDB Molecule: lipolytic protein g-d-s-l family; PDBTitle: crystal structure of lipolytic protein g-d-s-l family from2 alicyclobacillus acidocaldarius subsp. acidocaldarius dsm 446
32	c2vptA_		Alignment	not modelled	98.9	15	PDB header: hydrolase Chain: A: PDB Molecule: lipolytic enzyme; PDBTitle: clostridium thermocellum family 3 carbohydrate esterase
33	c4q7qA_		Alignment	not modelled	98.8	16	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: lipolytic protein g-d-s-l family; PDBTitle: the crystal structure of a possible lipase from chitinophaga pinensis2 dsm 2588
34	c5hoeB_		Alignment	not modelled	98.8	17	PDB header: hydrolase Chain: B: PDB Molecule: hydrolase; PDBTitle: crystal structure of est24, a carbohydrate acetylesterase from2 sinorhizobium meliloti
35	c4c1bcC_		Alignment	not modelled	98.7	17	PDB header: hydrolase Chain: C: PDB Molecule: orf1-encoded protein; PDBTitle: esterase domain of the zfl2-1 orf1 protein from the zebrafish zfl2-12 retrotransposon
36	c4nrdA_		Alignment	not modelled	98.7	14	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: uncharacterized protein; PDBTitle: crystal structure of a putative gdsl-like lipase (bacova_04955) from2 bacteroides ovatus atcc 8483 at 2.10 a resolution
37	c2waoA_		Alignment	not modelled	98.7	11	PDB header: hydrolase Chain: A: PDB Molecule: endoglucanase e; PDBTitle: structure of a family two carbohydrate esterase from clostridium2 thermocellum in complex with cellobiohexaose
38	d1esca_		Alignment	not modelled	98.7	13	Fold: Flavodoxin-like Superfamily: SGNH hydrolase Family: Esterase
39	c4q9aA_		Alignment	not modelled	98.7	14	PDB header: hydrolase Chain: A: PDB Molecule: tat pathway signal sequence domain protein; PDBTitle: crystal structure of a putative gdsl-like lipase (parmer_00689) from2 parabacteroides merdae atcc 43184 at 2.86 a resolution
40	c3x0hA_		Alignment	not modelled	98.7	17	PDB header: hydrolase Chain: A: PDB Molecule: carbohydrate esterase 1; PDBTitle: crystal structure of a carbohydrate esterase family 1 from talaromyces2 cellulolyticus
41	c3dc1B_		Alignment	not modelled	98.6	16	PDB header: hydrolase Chain: B: PDB Molecule: arylesterase; PDBTitle: the structure of a putative arylesterase from agrobacterium2 tumefaciens str. c58
42	c4devE_		Alignment	not modelled	98.6	12	PDB header: hydrolase Chain: E: PDB Molecule: acetyl-xylan esterase est2a; PDBTitle: an acetyl xylan esterase (est2a) from the rumen bacterium butyrivibrio2 proteoclasticus.
43	c4tx1C_		Alignment	not modelled	98.6	15	PDB header: hydrolase Chain: C: PDB Molecule: esterase; PDBTitle: the crystal structure of carbohydrate acylesterase family member2 from sinorhizobium meliloti
44	d1vjga_		Alignment	not modelled	98.6	17	Fold: Flavodoxin-like Superfamily: SGNH hydrolase Family: Hypothetical protein alr1529
45	c2q0qC_		Alignment	not modelled	98.6	16	PDB header: hydrolase Chain: C: PDB Molecule: aryl esterase; PDBTitle: structure of the native m. smegmatis aryl esterase
46	c4m8kA_		Alignment	not modelled	98.6	19	PDB header: hydrolase Chain: A: PDB Molecule: hypothetical protein, gdsl-like lipase/acetylhydrolase family PDBTitle: crystal structure of a putative gdsl-like lipase (bacuni_00748) from2 bacteroides uniformis atcc 8492 at 1.90 a resolution
47	c4xvhA_		Alignment	not modelled	98.5	13	PDB header: hydrolase Chain: A: PDB Molecule: carbohydrate esterase family 2 (ce2); PDBTitle: crystal structure of a corynascus thermopiles (myceliophthora2 fergusii) carbohydrate esterase family 2 (ce2) enzyme plus3 carbohydrate binding domain (cbd)
48	c2waaA_		Alignment	not modelled	98.5	14	PDB header: hydrolase Chain: A: PDB Molecule: xylan esterase, putative, axe2c; PDBTitle: structure of a family two carbohydrate esterase from2 cellulibrio japonicus
49	c2w9xA_		Alignment	not modelled	98.5	15	PDB header: hydrolase Chain: A: PDB Molecule: putative acetyl xylan esterase; PDBTitle: the active site of a carbohydrate esterase displays2 divergent3 catalytic and non-catalytic binding functions
50	c5malA_		Alignment	not modelled	98.1	14	PDB header: hydrolase Chain: A: PDB Molecule: lipase; PDBTitle: crystal structure of extracellular lipase from streptomyces rimosus at2 1.7a resolution
51	c4hyqA_		Alignment	not modelled	98.0	15	PDB header: hydrolase Chain: A: PDB Molecule: phospholipase a1; PDBTitle: crystal structure of phospholipase a1 from streptomyces albidoflavus2 na297
52	c6jl1A_		Alignment	not modelled	97.8	13	PDB header: hydrolase Chain: A: PDB Molecule: thermolabile hemolysin; PDBTitle: crystal structure of vvplpa g389d from vibrio vulnificus
53	c4knca_		Alignment	not modelled	97.5	12	PDB header: sugar binding protein Chain: A: PDB Molecule: alginate biosynthesis protein algx; PDBTitle: structural and functional characterization of

					pseudomonas aeruginosa2 algx
54	c4o8vA	Alignment	not modelled	97.3	18 PDB header: transferase Chain: A: PDB Molecule: alginate biosynthesis protein algj; PDBTitle: o-acetyltransferase domain of pseudomonas putida algj
55	c5xtuA	Alignment	not modelled	97.2	15 PDB header: hydrolase Chain: A: PDB Molecule: gdsl-family esterase; PDBTitle: crystal structure of gdsl esterase of photobacterium sp. j15
56	c4i8iA	Alignment	not modelled	96.7	13 PDB header: structural genomics, unknown function Chain: A: PDB Molecule: hypothetical protein; PDBTitle: crystal structure of a duf4886 family protein (bacuni_01406) from2 bacteroides uniformis atcc 8492 at 1.50 a resolution
57	c4nzkA	Alignment	not modelled	95.8	16 PDB header: structural genomics, unknown function Chain: A: PDB Molecule: uncharacterized protein; PDBTitle: crystal structure of a dhhw family protein (eubsir_00411) from2 eubacterium siraeum dsm 15702 at 1.49 a resolution
58	c3kvnA	Alignment	not modelled	95.8	17 PDB header: hydrolase Chain: A: PDB Molecule: esterase esta; PDBTitle: crystal structure of the full-length autotransporter esta from2 pseudomonas aeruginosa
59	d1zmba1	Alignment	not modelled	94.5	10 Fold: Flavodoxin-like Superfamily: SGNH hydrolase Family: Putative acetylxyran esterase-like
60	c5v8eB	Alignment	not modelled	94.2	10 PDB header: unknown function Chain: B: PDB Molecule: bacillus cereus patb1; PDBTitle: structure of bacillus cereus patb1
61	c6o93A	Alignment	not modelled	91.9	15 PDB header: transferase Chain: A: PDB Molecule: d-alanyl transferase dltd; PDBTitle: d-alanyl transferase dltd from enterococcus faecalis
62	c6pfxB	Alignment	not modelled	91.6	12 PDB header: transferase Chain: B: PDB Molecule: d-alanyl transferase dltd; PDBTitle: d-alanyl transferase dltd from enterococcus faecium
63	c3bmaC	Alignment	not modelled	89.4	13 PDB header: ligase Chain: C: PDB Molecule: d-alanyl-lipoteichoic acid synthetase; PDBTitle: crystal structure of d-alanyl-lipoteichoic acid synthetase from2 streptococcus pneumoniae r6
64	d2apja1	Alignment	not modelled	89.2	16 Fold: Flavodoxin-like Superfamily: SGNH hydrolase Family: Putative acetylxyran esterase-like
65	c3nvbA	Alignment	not modelled	88.1	11 PDB header: structural genomics, unknown function Chain: A: PDB Molecule: uncharacterized protein; PDBTitle: crystal structure of n-terminal part of the protein bf1531 from2 bacteroides fragilis containing phosphatase domain complexed with mg3 and tungstate
66	c5w78B	Alignment	not modelled	57.0	15 PDB header: hydrolase Chain: B: PDB Molecule: acyloxyacyl hydrolase; PDBTitle: human acyloxyacyl hydrolase (aoah), proteolytically processed
67	d2gc6a1	Alignment	not modelled	53.5	24 Fold: MurD-like peptide ligases, peptide-binding domain Superfamily: MurD-like peptide ligases, peptide-binding domain Family: Folylpolyglutamate synthetase, C-terminal domain
68	c2wwbB	Alignment	not modelled	46.7	39 PDB header: ribosome Chain: B: PDB Molecule: protein transport protein sec61 subunit gamma; PDBTitle: cryo-em structure of the mammalian sec61 complex bound to the actively2 translating wheat germ 80s ribosome
69	c3eywA	Alignment	not modelled	31.4	11 PDB header: transport protein Chain: A: PDB Molecule: c-terminal domain of glutathione-regulated potassium-efflux PDBTitle: crystal structure of the c-terminal domain of e. coli kefc in complex2 with keff
70	d3bypa1	Alignment	not modelled	27.9	10 Fold: Alpha-lytic protease prodomain-like Superfamily: Cation efflux protein cytoplasmic domain-like Family: Cation efflux protein cytoplasmic domain-like
71	d1rhzb	Alignment	not modelled	26.9	28 Fold: Single transmembrane helix Superfamily: Preprotein translocase SecE subunit Family: Preprotein translocase SecE subunit
72	c4s3hD	Alignment	not modelled	23.7	24 PDB header: unknown function Chain: D: PDB Molecule: mdb1; PDBTitle: crystal structure of s. pombe mdb1 fha domain
73	c4aghA	Alignment	not modelled	20.5	18 PDB header: transcription Chain: A: PDB Molecule: mosub1, transcription cofactor; PDBTitle: structural features of ssdna binding protein mosub1 from magnaporthe2 oryzae
74	d1ulia1	Alignment	not modelled	19.4	7 Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: Glyceraldehyde-3-phosphate dehydrogenase-like, N-terminal domain
75	c5fgnA	Alignment	not modelled	19.3	10 PDB header: transferase,hydrolase Chain: A: PDB Molecule: lipooligosaccharide phosphoethanolamine transferase a; PDBTitle: integral membrane protein lipooligosaccharide phosphoethanolamine2 transferase a (epta) from neisseria meningitidis
76	c5a4aA	Alignment	not modelled	18.9	10 PDB header: rna binding protein Chain: A: PDB Molecule: maternal effect protein oskar; PDBTitle: crystal structure of the osk domain of drosophila oskar
77	c3pt5A	Alignment	not modelled	18.8	8 PDB header: hydrolase Chain: A: PDB Molecule: nans (yjhs), a 9-o-acetyl n-acetyleneuraminc acid esterase; PDBTitle: crystal structure of nans
78	c3vsjA	Alignment	not modelled	17.2	25 PDB header: oxidoreductase Chain: A: PDB Molecule: 2-amino-5-chlorophenol 1,6-dioxygenase alpha subunit;

					PDBTitle: crystal structure of 1,6-apd (2-animophenol-1,6-dioxygenase) complexed2 with intermediate products
79	d1y6ia2	Alignment	not modelled	15.9	33 Fold: GUN4-like Superfamily: GUN4-like Family: GUN4-like
80	c3wrB2	Alignment	not modelled	15.2	9 PDB header: oxidoreductase Chain: B: PDB Molecule: gallate dioxygenase; PDBTitle: crystal structure of the anaerobic h124f desb-gallate complex
81	d1jmkc	Alignment	not modelled	15.1	15 Fold: alpha/beta-Hydrolases Superfamily: alpha/beta-Hydrolases Family: Thioesterase domain of polypeptide, polyketide and fatty acid synthases
82	d1k4ta3	Alignment	not modelled	13.8	12 Fold: Eukaryotic DNA topoisomerase I, N-terminal DNA-binding fragment Superfamily: Eukaryotic DNA topoisomerase I, N-terminal DNA-binding fragment Family: Eukaryotic DNA topoisomerase I, N-terminal DNA-binding fragment
83	c4oc8D	Alignment	not modelled	11.5	22 PDB header: hydrolase Chain: D: PDB Molecule: restriction endonuclease aspbhi; PDBTitle: dna modification-dependent restriction endonuclease aspbhi
84	c6odmK	Alignment	not modelled	11.3	24 PDB header: viral protein Chain: K: PDB Molecule: capsid vertex component 2; PDBTitle: herpes simplex virus type 1 (hsv-1) portal vertex-adjacent2 capsid/catc, asymmetric unit
85	c4rzIA	Alignment	not modelled	11.1	17 PDB header: dna binding protein Chain: A: PDB Molecule: restriction endonuclease lpnpi; PDBTitle: dna recognition domain of the cytosine modification-dependent2 restriction endonuclease lpnpi
86	d1pcfa	Alignment	not modelled	10.9	22 Fold: ssDNA-binding transcriptional regulator domain Superfamily: ssDNA-binding transcriptional regulator domain Family: Transcriptional coactivator PC4 C-terminal domain
87	d1j6ua2	Alignment	not modelled	10.8	24 Fold: MurD-like peptide ligases, peptide-binding domain Superfamily: MurD-like peptide ligases, peptide-binding domain Family: MurCDEF C-terminal domain
88	c5xj6A	Alignment	not modelled	10.1	9 PDB header: transferase Chain: A: PDB Molecule: glycerol-3-phosphate acyltransferase; PDBTitle: crystal structure of pslx (ygih), an integral membrane glycerol 3-2 phosphate acyltransferase - the glycerol 3-phosphate form
89	c3mduA	Alignment	not modelled	9.7	21 PDB header: hydrolase Chain: A: PDB Molecule: n-formimino-l-glutamate iminohydrolase; PDBTitle: the structure of n-formimino-l-glutamate iminohydrolase from 2 pseudomonas aeruginosa complexed with n-guanidino-l-glutamate
90	c4jxpA	Alignment	not modelled	9.7	12 PDB header: hydrolase Chain: A: PDB Molecule: alpha-l-iduronidase; PDBTitle: crystal structure of human alpha-l-iduronidase, monoclinic form
91	c6gvbC	Alignment	not modelled	9.4	8 PDB header: hydrolase Chain: C: PDB Molecule: exo-beta-1,4-mannosidase; PDBTitle: crystal structure of cutibacterium acnes exo-beta-1,4-mannosidase
92	c3odmE	Alignment	not modelled	9.1	9 PDB header: lyase Chain: E: PDB Molecule: phosphoenolpyruvate carboxylase; PDBTitle: archaeal-type phosphoenolpyruvate carboxylase
93	c2vr2A	Alignment	not modelled	9.0	21 PDB header: hydrolase Chain: A: PDB Molecule: dihydropyrimidinase; PDBTitle: human dihydropyrimidinase
94	c5ho5D	Alignment	not modelled	8.9	12 PDB header: metal transport Chain: D: PDB Molecule: magnetosome protein mamb; PDBTitle: mamb
95	c1b9xC	Alignment	not modelled	8.8	15 PDB header: signaling protein Chain: C: PDB Molecule: protein (phosducin); PDBTitle: structural analysis of phosducin and its phosphorylation-2 regulated interaction with transducin
96	c4gn0D	Alignment	not modelled	8.7	18 PDB header: signaling protein Chain: D: PDB Molecule: hamp domain of af1503; PDBTitle: de novo phasing of a hamp-complex using an improved arcimboldo method
97	c5w7dA	Alignment	not modelled	8.6	15 PDB header: hydrolase Chain: A: PDB Molecule: acyloxyacyl hydrolase; PDBTitle: murine acyloxyacyl hydrolase (aoah), s262a mutant
98	c2jq5A	Alignment	not modelled	8.4	29 PDB header: structural genomics Chain: A: PDB Molecule: sec-c motif; PDBTitle: solution structure of rpa3114, a sec-c motif containing protein from2 rhodopseudomonas palustris; northeast structural genomics consortium3 target rpt5 / ontario center for structural proteomics target rp3097
99	c6cc1A	Alignment	not modelled	8.3	20 PDB header: transferase Chain: A: PDB Molecule: protein eskimo 1; PDBTitle: the crystal structure of xoat1