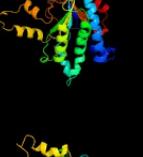
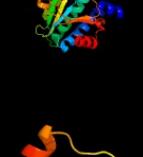
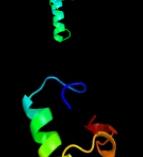


Phyre²

Email	mdejesus@rockefeller.edu
Description	RVBD3378c_(-)_3792538_3793428
Date	Fri Aug 9 18:20:04 BST 2019
Unique Job ID	c1b424aefddd301e

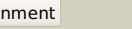
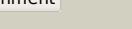
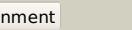
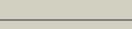
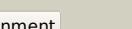
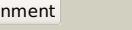
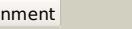
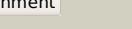
Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c4cmxB			100.0	100	PDB header: nuclear protein Chain: B; PDB Molecule: rv3378c; PDBTitle: crystal structure of rv3378c
2	c6acsA			98.9	18	PDB header: transferase Chain: A; PDB Molecule: ditrans,poly(cis-undecaprenyl-diphosphate synthase ((2e,6e)- PDBTitle: poly-cis-prenyltransferase
3	c4h8eA			98.6	13	PDB header: transferase/transferase inhibitor Chain: A; PDB Molecule: undecaprenyl pyrophosphate synthase; PDBTitle: structure of s. aureus undecaprenyl diphosphate synthase in complex2 with fpp and sulfate
4	c2vg2C			98.5	15	PDB header: transferase Chain: C; PDB Molecule: undecaprenyl pyrophosphate synthetase; PDBTitle: rv2361 with ipp
5	c5hc7A			98.5	14	PDB header: transferase/transferase inhibitor Chain: A; PDB Molecule: prenyltransferase for protein; PDBTitle: crystal structure of lavandula x2 intermedia in complex with s-thiolo-isopentenylidiphosphate
6	c5hxpA			98.4	20	PDB header: transferase Chain: A; PDB Molecule: (2z,6z)-farnesyl diphosphate synthase, chloroplastic; PDBTitle: crystal structure of z,z-farnesyl diphosphate synthase (d71m, e75a and2 h103y mutants) complexed with ipp
7	c4g9mA			98.4	16	PDB header: transferase/transferase inhibitor Chain: A; PDB Molecule: isoprenyl transferase; PDBTitle: crystal structure of upps in complex with fpp and an allosteric2 inhibitor
8	d1f75a			98.3	16	Fold: Undecaprenyl diphosphate synthase Superfamily: Undecaprenyl diphosphate synthase Family: Undecaprenyl diphosphate synthase
9	d1ueha			98.3	17	Fold: Undecaprenyl diphosphate synthase Superfamily: Undecaprenyl diphosphate synthase Family: Undecaprenyl diphosphate synthase
10	c3ugsB			98.3	15	PDB header: transferase Chain: B; PDB Molecule: undecaprenyl pyrophosphate synthase; PDBTitle: crystal structure of a probable undecaprenyl diphosphate synthase2 (upps) from campylobacter jejuni
11	c1jp3A			98.2	17	PDB header: transferase Chain: A; PDB Molecule: undecaprenyl pyrophosphate synthase; PDBTitle: structure of e.coli undecaprenyl pyrophosphate synthase

12	c2d2rA	Alignment		98.2	18	PDB header: transferase Chain: A: PDB Molecule: undecaprenyl pyrophosphate synthase; PDBTitle: crystal structure of helicobacter pylori undecaprenyl pyrophosphate2 synthase
13	c2vfwB	Alignment		98.1	19	PDB header: transferase Chain: B: PDB Molecule: short-chain z-isoprenyl diphosphate synthetase; PDBTitle: rv1086 native
14	c5xk9F	Alignment		97.7	18	PDB header: transferase Chain: F: PDB Molecule: undecaprenyl diphosphate synthase; PDBTitle: crystal structure of isosesquivalanyl diphosphate synthase from streptomyces sp. strain cnh-189 in complex with gsp and dmapp
15	c5gukA	Alignment		97.1	19	PDB header: biosynthetic protein Chain: A: PDB Molecule: cyclolavandulyl diphosphate synthase; PDBTitle: crystal structure of apo form of cyclolavandulyl diphosphate synthase2 (clds) from streptomyces sp. cl190
16	d1jhfa1	Alignment		68.7	31	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: LexA repressor, N-terminal DNA-binding domain
17	c6jcnB	Alignment		58.3	11	PDB header: transferase Chain: B: PDB Molecule: dehydrodolichyl diphosphate synthase complex subunit nus1; PDBTitle: yeast dehydrodolichyl diphosphate synthase complex subunit nus1
18	c4kvjA	Alignment		45.1	30	PDB header: oxidoreductase Chain: A: PDB Molecule: fatty acid alpha-oxidase; PDBTitle: crystal structure of oryza sativa fatty acid alpha-dioxygenase with2 hydrogen peroxide
19	c5iq5A	Alignment		44.4	20	PDB header: viral protein Chain: A: PDB Molecule: macro domain; PDBTitle: nmr solution structure of mayaro virus macro domain
20	c2kmua	Alignment		38.9	13	PDB header: hydrolase Chain: A: PDB Molecule: atp-dependent dna helicase q4; PDBTitle: recql4 amino-terminal domain
21	d1k8ba	Alignment	not modelled	37.9	19	Fold: Ribosome binding domain-like Superfamily: Translation initiation factor 2 beta, alF2beta, N-terminal domain Family: Translation initiation factor 2 beta, alF2beta, N-terminal domain
22	d1xola2	Alignment	not modelled	31.9	17	Fold: PIN domain-like Superfamily: PIN domain-like Family: 5' to 3' exonuclease catalytic domain
23	d1lwga	Alignment	not modelled	30.7	24	Fold: TIM beta/alpha-barrel Superfamily: (2r)-phospho-3-sulfolactate synthase ComA Family: (2r)-phospho-3-sulfolactate synthase ComA
24	c6b1zA	Alignment	not modelled	30.7	21	PDB header: ligase Chain: A: PDB Molecule: glutamate--trna ligase; PDBTitle: crystal structure of glutamate-trna synthetase from elizabethkingia2 anophelis
25	c2e9hA	Alignment	not modelled	30.2	30	PDB header: translation Chain: A: PDB Molecule: eukaryotic translation initiation factor 5; PDBTitle: solution structure of the eif-5_eif-2b domain from human2 eukaryotic translation initiation factor 5
26	c5hr4J	Alignment	not modelled	26.9	24	PDB header: hydrolase/dna Chain: J: PDB Molecule: mmei; PDBTitle: structure of type iii restriction-modification enzyme mmei in complex2 with dna has implications for engineering of new specificities
27	c3ff4A	Alignment	not modelled	26.5	14	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: uncharacterized protein; PDBTitle: crystal structure of uncharacterized protein chu_1412
28	d1cvual	Alignment	not modelled	25.7	10	Fold: Heme-dependent peroxidases Superfamily: Heme-dependent peroxidases Family: Myeloperoxidase-like

29	c1ddxA	Alignment	not modelled	25.6	10	PDB header: oxidoreductase Chain: A: PDB Molecule: protein (prostaglandin h2 synthase-2); PDBTitle: crystal structure of a mixture of arachidonic acid and prostaglandin2 bound to the cyclooxygenase active site of cox-2: prostaglandin3 structure
30	c5bthA	Alignment	not modelled	24.4	16	PDB header: hydrolase Chain: A: PDB Molecule: decapping nuclease rai1; PDBTitle: crystal structure of candida albicans rai1
31	cloheA	Alignment	not modelled	24.0	20	PDB header: hydrolase Chain: A: PDB Molecule: cdc14b phosphatase; PDBTitle: structure of cdc14b phosphatase with a peptide ligand
32	c1pggB	Alignment	not modelled	23.6	17	PDB header: oxidoreductase Chain: B: PDB Molecule: prostaglandin h2 synthase-1; PDBTitle: prostaglandin h2 synthase-1 complexed with 1-(4-iodobenzoyl)-5-2 methoxy-2-methylindole-3-acetic acid (idoindomethacin), trans model
33	c1ht8B	Alignment	not modelled	23.5	17	PDB header: oxidoreductase Chain: B: PDB Molecule: prostaglandin h2 synthase-1; PDBTitle: the 2.7 angstrom resolution model of ovine cox-1 complexed with 2 alclofenac
34	d1bdga2	Alignment	not modelled	22.9	14	Fold: Ribonuclease H-like motif Superfamily: Actin-like ATPase domain Family: Hexokinase
35	c3pghd	Alignment	not modelled	22.6	10	PDB header: oxidoreductase Chain: D: PDB Molecule: cyclooxygenase-2; PDBTitle: cyclooxygenase-2 (prostaglandin synthase-2) complexed with a non-2 selective inhibitor, flurbiprofen
36	c6md3F	Alignment	not modelled	22.4	17	PDB header: hydrolase/rna Chain: F: PDB Molecule: rrp44p homologue; PDBTitle: structure of t. brucei rrp44 pin domain
37	d1q4ga1	Alignment	not modelled	22.1	17	Fold: Heme-dependent peroxidases Superfamily: Heme-dependent peroxidases Family: Myeloperoxidase-like
38	c1ig8A	Alignment	not modelled	21.7	24	PDB header: transferase Chain: A: PDB Molecule: hexokinase pii; PDBTitle: crystal structure of yeast hexokinase pii with the correct2 amino acid sequence
39	c4zwjA	Alignment	not modelled	21.0	26	PDB header: signaling protein Chain: A: PDB Molecule: chimera protein of human rhodopsin, mouse s-arrestin, and PDBTitle: crystal structure of rhodopsin bound to arrestin by femtosecond x-ray2 laser
40	c3gebC	Alignment	not modelled	20.8	25	PDB header: hydrolase Chain: C: PDB Molecule: eyes absent homolog 2; PDBTitle: crystal structure of edeya2
41	c2oyuP	Alignment	not modelled	20.5	17	PDB header: oxidoreductase Chain: P: PDB Molecule: prostaglandin g/h synthase 1; PDBTitle: indomethacin-(s)-alpha-ethyl-ethanolamide bound to cyclooxygenase-1
42	d2bgxa1	Alignment	not modelled	20.4	37	Fold: PGBD-like Superfamily: PGBD-like Family: Peptidoglycan binding domain, PGBD
43	c5uqyB	Alignment	not modelled	20.1	20	PDB header: viral protein/immune system Chain: B: PDB Molecule: envelope glycoprotein gp2; PDBTitle: crystal structure of marburg virus gp in complex with the human2 survivor antibody mr78
44	c6d6rK	Alignment	not modelled	19.9	20	PDB header: hydrolase Chain: K: PDB Molecule: exosome complex exonuclease rrp44; PDBTitle: human nuclear exosome-mtr4 rna complex - composite map after focused2 reconstruction
45	d2npta1	Alignment	not modelled	19.3	15	Fold: beta-Grasp (ubiquitin-like) Superfamily: CAD & PB1 domains Family: PB1 domain
46	c6ajjA	Alignment	not modelled	19.1	26	PDB header: membrane protein, hydrolase Chain: A: PDB Molecule: drug exporters of the rnd superfamily-like protein, PDBTitle: crystal structure of mycolic acid transporter mmp13 from mycobacterium2 smegmatis complexed with ica38
47	c1jpeA	Alignment	not modelled	18.6	20	PDB header: electron transport Chain: A: PDB Molecule: dsbd-alpha; PDBTitle: crystal structure of dsbd-alpha; the n-terminal domain of2 dsbd
48	d1ig8a2	Alignment	not modelled	18.5	24	Fold: Ribonuclease H-like motif Superfamily: Actin-like ATPase domain Family: Hexokinase
49	d1iuka	Alignment	not modelled	18.4	17	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: CoA-binding domain
50	c2of5A	Alignment	not modelled	18.3	21	PDB header: apoptosis Chain: A: PDB Molecule: death domain-containing protein cradd; PDBTitle: oligomeric death domain complex
51	c4pv6E	Alignment	not modelled	18.1	19	PDB header: transferase Chain: E: PDB Molecule: n-terminal acetyltransferase complex subunit [ard1]; PDBTitle: crystal structure analysis of ard1 from thermoplasma volcanium
52	c4zwjC	Alignment	not modelled	17.5	26	PDB header: signaling protein Chain: C: PDB Molecule: chimera protein of human rhodopsin, mouse s-arrestin, and PDBTitle: crystal structure of rhodopsin bound to arrestin by femtosecond x-ray2 laser
53	d2qtva4	Alignment	not modelled	17.3	27	Fold: Gelsolin-like Superfamily: C-terminal, gelsolin-like domain of Sec23/24 Family: C-terminal, gelsolin-like domain of Sec23/24

54	d1iuqa_		Alignment	not modelled	17.2	12	Fold: Glycerol-3-phosphate (1)-acyltransferase Superfamily: Glycerol-3-phosphate (1)-acyltransferase Family: Glycerol-3-phosphate (1)-acyltransferase
55	d1u83a_		Alignment	not modelled	17.2	24	Fold: TIM beta/alpha-barrel Superfamily: (2r)-phospho-3-sulfolactate synthase ComA Family: (2r)-phospho-3-sulfolactate synthase ComA
56	c1u83A_		Alignment	not modelled	17.2	24	PDB header: lyase Chain: A: PDB Molecule: phosphosulfolactate synthase; PDBTitle: psl synthase from bacillus subtilis
57	c4p9eA_		Alignment	not modelled	16.8	27	PDB header: hydrolase Chain: A: PDB Molecule: deoxycytidylate deaminase; PDBTitle: crystal structure of dcmp deaminase from the cyanophage s-tim5 in apo2 form
58	c3al0C_		Alignment	not modelled	16.7	16	PDB header: ligase/rna Chain: C: PDB Molecule: glutamyl-trna(gln) amidotransferase subunit c,linker, PDBTitle: crystal structure of the glutamine transamidosome from thermotoga2 maritima in the glutamylation state.
59	d1l6pa_		Alignment	not modelled	16.6	20	Fold: immunoglobulin-like beta-sandwich Superfamily: Thiol:disulfide interchange protein DsbD, N-terminal domain (DsbD-alpha) Family: Thiol:disulfide interchange protein DsbD, N-terminal domain (DsbD-alpha)
60	c3zddA_		Alignment	not modelled	16.2	17	PDB header: hydrolase/dna Chain: A: PDB Molecule: protein xni; PDBTitle: structure of e. coli exoix in complex with the palindromic Sov62 oligonucleotide and potassium
61	c3j6vJ_		Alignment	not modelled	15.3	30	PDB header: ribosome Chain: J: PDB Molecule: 28s ribosomal protein s10, mitochondrial; PDBTitle: cryo-em structure of the small subunit of the mammalian mitochondrial2 ribosome
62	c2x7bA_		Alignment	not modelled	15.2	17	PDB header: transferase Chain: A: PDB Molecule: n-acetyltransferase sso0209; PDBTitle: crystal structure of the n-terminal acetylase ard1 from2 sulfolobus solfataricus p2
63	d1l0oc_		Alignment	not modelled	14.9	20	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Sigma3 and sigma4 domains of RNA polymerase sigma factors Family: Sigma4 domain
64	c1l0oC_		Alignment	not modelled	14.9	20	PDB header: protein binding Chain: C: PDB Molecule: sigma factor; PDBTitle: crystal structure of the bacillus stearothermophilus anti-2 sigma factor spoIab with the sporulation sigma factor3 sigmaf
65	c2fb6A_		Alignment	not modelled	14.7	13	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: conserved hypothetical protein; PDBTitle: structure of conserved protein of unknown function bt1422 from2 bacteroides thetaiotaomicron
66	c4bqeA_		Alignment	not modelled	14.5	23	PDB header: transferase Chain: A: PDB Molecule: alpha-glucan phosphorylase 2,4-glucan phosphorylase; PDBTitle: arabidopsis thaliana cytosolic alpha-1,4-glucan phosphorylase (phs2)
67	c2mxtA_		Alignment	not modelled	14.5	13	PDB header: splicing Chain: A: PDB Molecule: heterogeneous nuclear ribonucleoprotein q; PDBTitle: nmr structure of the acidic domain of syncrip (hnrrnpq)
68	d2bcqa2		Alignment	not modelled	13.9	21	Fold: SAM domain-like Superfamily: PsbU/PoX domain-like Family: DNA polymerase beta-like, second domain
69	d1o98a1		Alignment	not modelled	13.8	18	Fold: 2,3-Bisphosphoglycerate-independent phosphoglycerate mutase, substrate-binding domain Superfamily: 2,3-Bisphosphoglycerate-independent phosphoglycerate mutase, substrate-binding domain Family: 2,3-Bisphosphoglycerate-independent phosphoglycerate mutase, substrate-binding domain
70	c5y26A_		Alignment	not modelled	13.6	27	PDB header: dna binding protein Chain: A: PDB Molecule: dna polymerase epsilon subunit d; PDBTitle: crystal structure of native dpb4-dpb3
71	c4f0qC_		Alignment	not modelled	13.5	18	PDB header: hydrolase Chain: C: PDB Molecule: restriction endonuclease; PDBTitle: mspji restriction endonuclease - p21 form
72	c4f0qA_		Alignment	not modelled	13.5	18	PDB header: hydrolase Chain: A: PDB Molecule: restriction endonuclease; PDBTitle: mspji restriction endonuclease - p21 form
73	c3d7iB_		Alignment	not modelled	13.4	17	PDB header: lyase Chain: B: PDB Molecule: carboxymuconolactone decarboxylase family protein; PDBTitle: crystal structure of carboxymuconolactone decarboxylase family protein2 possibly involved in oxygen detoxification (1591455) from3 methanococcus jannaschii at 1.75 a resolution
74	c2a5wC_		Alignment	not modelled	13.2	9	PDB header: oxidoreductase Chain: C: PDB Molecule: sulfite reductase, desulfovibrin-type subunit gamma PDBTitle: crystal structure of the oxidized gamma-subunit of the dissimilatory2 sulfite reductase (dsrc) from archaeoglobus fulgidus
75	c2k0rA_		Alignment	not modelled	13.1	33	PDB header: oxidoreductase Chain: A: PDB Molecule: thiol:disulfide interchange protein dsbd; PDBTitle: solution structure of the c103s mutant of the n-terminal2 domain of dsbd from neisseria meningitidis
76	c5kzoA_		Alignment	not modelled	13.0	44	PDB header: transcription Chain: A: PDB Molecule: neurogenic locus notch homolog protein 1; PDBTitle: notch1 transmembrane and associated juxtamembrane segment
77	c6c95B_		Alignment	not modelled	12.7	12	PDB header: transferase Chain: B: PDB Molecule: n-alpha-acetyltransferase 10; PDBTitle: the human nata (naa10/naa15) amino-terminal acetyltransferase complex2 bound to hypk Fold: DNA/RNA-binding 3-helical bundle

78	d1stz1		Alignment	not modelled	12.7	15	Superfamily: "Winged helix" DNA-binding domain Family: Heat-inducible transcription repressor HrcA, N-terminal domain
79	c3js0A		Alignment	not modelled	12.4	31	PDB header: hydrolase/dna Chain: A: PDB Molecule: lexa repressor; PDBTitle: classic protein with a new twist: crystal structure of a lexa2 repressor dna complex
80	d1ygha		Alignment	not modelled	12.2	9	Fold: Acyl-CoA N-acyltransferases (Nat) Superfamily: Acyl-CoA N-acyltransferases (Nat) Family: N-acetyl transferase, NAT
81	d2icwg1		Alignment	not modelled	11.9	23	Fold: Superantigen MAM Superfamily: Superantigen MAM Family: Superantigen MAM
82	c2jpmA		Alignment	not modelled	11.5	15	PDB header: antimicrobial protein Chain: A: PDB Molecule: bacteriocin lactococcin-g subunit beta; PDBTitle: lactococcin g-b in tfe
83	c3qbuD		Alignment	not modelled	11.4	13	PDB header: hydrolase Chain: D: PDB Molecule: putative uncharacterized protein; PDBTitle: crystal structure of putative peptidoglycan deactelyase (hp0310) from2 helicobacter pylori
84	c2n6vA		Alignment	not modelled	11.4	25	PDB header: unknown function Chain: A: PDB Molecule: astexin3; PDBTitle: solution study of astexin3
85	c1yx3A		Alignment	not modelled	11.3	12	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: hypothetical protein dsrc; PDBTitle: nmr structure of allochromatium vinosum dsrc: northeast2 structural genomics consortium target op4
86	c4giwB		Alignment	not modelled	11.3	24	PDB header: signaling protein Chain: B: PDB Molecule: run and sh3 domain-containing protein 1; PDBTitle: crystal structure of the run domain of human nesca
87	c4im4F		Alignment	not modelled	11.1	13	PDB header: hydrolase Chain: F: PDB Molecule: endoglucanase e; PDBTitle: multifunctional cellulase, xylanase, mannanase
88	c3wo6A		Alignment	not modelled	10.9	13	PDB header: membrane protein Chain: A: PDB Molecule: membrane protein insertase yidc 2; PDBTitle: crystal structure of yidc from bacillus halodurans (form i)
89	d2iw0a1		Alignment	not modelled	10.8	15	Fold: 7-stranded beta/alpha barrel Superfamily: Glycoside hydrolase/deacetylase Family: NodB-like polysaccharide deacetylase
90	c4e5gB		Alignment	not modelled	10.8	20	PDB header: viral protein, transcription Chain: B: PDB Molecule: polymerase protein pa; PDBTitle: crystal structure of avian influenza virus pan bound to compound 2
91	c4oc8A		Alignment	not modelled	10.7	23	PDB header: hydrolase Chain: A: PDB Molecule: restriction endonuclease asphii; PDBTitle: dna modification-dependent restriction endonuclease asphii
92	c2jpkA		Alignment	not modelled	10.7	15	PDB header: antimicrobial protein Chain: A: PDB Molecule: bacteriocin lactococcin-g subunit beta; PDBTitle: lactococcin g-b in dpc
93	c4gr1B		Alignment	not modelled	10.6	18	PDB header: ligase Chain: B: PDB Molecule: glutamate-trna ligase; PDBTitle: crystal structure of a glutamyl-trna synthetase glurs from borrelia2 burgdorferi bound to glutamic acid and zinc
94	c4hhsA		Alignment	not modelled	10.6	17	PDB header: oxidoreductase Chain: A: PDB Molecule: alpha-dioxygenase; PDBTitle: crystal structure of fatty acid alpha-dioxygenase (arabidopsis2 thaliana)
95	c5ccuA		Alignment	not modelled	10.6	24	PDB header: hydrolase Chain: A: PDB Molecule: putative secreted endoglycosylceramidase; PDBTitle: crystal structure of endoglycoceramidase i from rhodococcus equi
96	c3gqeA		Alignment	not modelled	10.5	13	PDB header: viral protein Chain: A: PDB Molecule: non-structural protein 3; PDBTitle: crystal structure of macro domain of venezuelan equine encephalitis2 virus
97	c6mzdC		Alignment	not modelled	10.4	18	PDB header: transcription Chain: C: PDB Molecule: transcription initiation factor tfiid subunit 3; PDBTitle: human tfiid lobe a canonical
98	c2m8fA		Alignment	not modelled	10.3	25	PDB header: unknown function Chain: A: PDB Molecule: astexin3; PDBTitle: structure of lasso peptide astexin3
99	c1kbiB		Alignment	not modelled	10.3	28	PDB header: oxidoreductase Chain: B: PDB Molecule: cytochrome b2; PDBTitle: crystallographic study of the recombinant flavin-binding domain of2 baker's yeast flavocytochrome b2: comparison with the intact wild-3 type enzyme