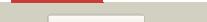
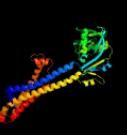
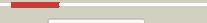
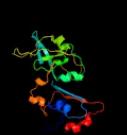
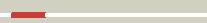
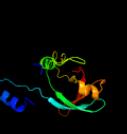
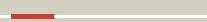


Phyre²

Email	mdejesus@rockefeller.edu
Description	RVBD0987 (-) _1102546_1105113
Date	Wed Jul 31 22:05:05 BST 2019
Unique Job ID	6e853b966a62dd9a

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c5ws4A_			100.0	16	PDB header: membrane protein Chain: A: PDB Molecule: macrolide export atp-binding/permease protein macb; PDBTitle: crystal structure of tripartite-type abc transporter macb from2 acinetobacter baumannii
2	c5nikK_			100.0	19	PDB header: transport protein Chain: K: PDB Molecule: macrolide export atp-binding/permease protein macb; PDBTitle: structure of the macab-tolc abc-type tripartite multidrug efflux pump
3	c5xu1M_			100.0	16	PDB header: transport protein Chain: M: PDB Molecule: abc transporter permeae; PDBTitle: structure of a non-canonical abc transporter from streptococcus2 pneumoniae r6
4	c5lj7B_			100.0	17	PDB header: transport protein Chain: B: PDB Molecule: macrolide export atp-binding/permease protein macb; PDBTitle: structure of aggregatibacter actinomycetemcomitans macb bound to atp2 (p21)
5	c5udfB_			99.4	14	PDB header: protein transport Chain: B: PDB Molecule: lipoprotein-releasing system transmembrane protein lole; PDBTitle: structure of the n-terminal domain of lipoprotein-releasing system2 transmembrane protein lole from acinetobacter baumannii
6	c5naaB_			99.4	18	PDB header: protein transport Chain: B: PDB Molecule: lipoprotein-releasing system transmembrane protein lolc; PDBTitle: lipoprotein-releasing system transmembrane protein lolc
7	c3is6A_			98.9	12	PDB header: transport protein Chain: A: PDB Molecule: putative permease protein, abc transporter; PDBTitle: the crystal structure of a domain of a putative permease protein from2 porphyromonas gingivalis to 2a
8	c5f9qA_			98.9	10	PDB header: membrane protein Chain: A: PDB Molecule: macrolide export atp-binding/permease protein yknz; PDBTitle: crystal structure of the extracellular domain of noncanonic abc-type2 transporter yknz from gram-positive bacteria
9	c3ftjA_			98.8	13	PDB header: hydrolase Chain: A: PDB Molecule: macrolide export atp-binding/permease protein PDBTitle: crystal structure of the periplasmic region of macb from2 actinobacillus actinomycetemcomitans
10	c5c59F_			98.1	15	PDB header: hydrolase Chain: F: PDB Molecule: macrolide export atp-binding/permease protein macb; PDBTitle: crystal structure of the periplasmic region of macb from e. coli
11	c5c59G_			96.3	15	PDB header: hydrolase Chain: G: PDB Molecule: macrolide export atp-binding/permease protein macb; PDBTitle: crystal structure of the periplasmic region of macb from e. coli

12	d2jioa1			83.3	13	Fold: Double psi beta-barrel Superfamily: ADC-like Family: Formate dehydrogenase/DMSO reductase, C-terminal domain
13	c2a8vA			81.8	23	PDB header: protein/rna Chain: A: PDB Molecule: rna binding domain of rho transcription PDBTitle: rho transcription termination factor/rna complex
14	d1a62a2			81.1	23	Fold: OB-fold Superfamily: Nucleic acid-binding proteins Family: Cold shock DNA-binding domain-like
15	d1vifm1			80.8	13	Fold: Double psi beta-barrel Superfamily: ADC-like Family: Formate dehydrogenase/DMSO reductase, C-terminal domain
16	c2iv2X			80.6	7	PDB header: oxidoreductase Chain: X: PDB Molecule: formate dehydrogenase h; PDBTitle: reinterpretation of reduced form of formate dehydrogenase h from e. coli
17	c4mt1A			80.2	11	PDB header: membrane protein, tranport protein Chain: A: PDB Molecule: drug efflux protein; PDBTitle: crystal structure of the neisseria gonorrhoeae mtrd inner membrane2 multidrug efflux pump
18	c5l75F			78.3	18	PDB header: transport protein Chain: F: PDB Molecule: fig000988: predicted permease; PDBTitle: a protein structure
19	c5gasN			78.0	11	PDB header: hydrolase Chain: N: PDB Molecule: archaeal/vacuolar-type h+-atpase subunit i; PDBTitle: thermus thermophilus v/a-atpase, conformation 2
20	c2v50A			77.4	12	PDB header: membrane protein Chain: A: PDB Molecule: multidrug resistance protein mexb; PDBTitle: the missing part of the bacterial mexab-oprm system: structural2 determination of the multidrug exporter mexb
21	d1h0hal		not modelled	74.9	16	Fold: Double psi beta-barrel Superfamily: ADC-like Family: Formate dehydrogenase/DMSO reductase, C-terminal domain
22	d2iv2x1		not modelled	74.8	8	Fold: Double psi beta-barrel Superfamily: ADC-like Family: Formate dehydrogenase/DMSO reductase, C-terminal domain
23	d1tmoa1		not modelled	74.1	18	Fold: Double psi beta-barrel Superfamily: ADC-like Family: Formate dehydrogenase/DMSO reductase, C-terminal domain
24	d1g8ka1		not modelled	73.4	8	Fold: Double psi beta-barrel Superfamily: ADC-like Family: Formate dehydrogenase/DMSO reductase, C-terminal domain
25	c5mkkB		not modelled	72.8	21	PDB header: transport protein Chain: B: PDB Molecule: multidrug resistance abc transporter atp-binding and PDBTitle: crystal structure of the heterodimeric abc transporter tmrab, a2 homolog of the antigen translocation complex tap
26	d1ogyal		not modelled	72.1	14	Fold: Double psi beta-barrel Superfamily: ADC-like Family: Formate dehydrogenase/DMSO reductase, C-terminal domain
27	c5x5yF		not modelled	71.9	14	PDB header: membrane protein Chain: F: PDB Molecule: uncharacterized protein; PDBTitle: a membrane protein complex
28	d1kqfa1		not modelled	71.4	24	Fold: Double psi beta-barrel Superfamily: ADC-like Family: Formate dehydrogenase/DMSO reductase, C-terminal domain

29	c2fhda	Alignment	not modelled	70.4	11	PDB header: cell cycle Chain: A: PDB Molecule: dna repair protein rhp9/crb2; PDBTitle: crystal structure of crb2 tandem tudor domains
30	c1ciiA	Alignment	not modelled	69.9	16	PDB header: transmembrane protein Chain: A: PDB Molecule: colicin ia; PDBTitle: colicin ia
31	c1eu1A	Alignment	not modelled	69.1	16	PDB header: oxidoreductase Chain: A: PDB Molecule: dimethyl sulfoxide reductase; PDBTitle: the crystal structure of rhodobacter sphaeroides dimethylsulfoxide2 reductase reveals two distinct molybdenum coordination environments.
32	d1eula1	Alignment	not modelled	68.8	16	Fold: Double psi beta-barrel Superfamily: ADC-like Family: Formate dehydrogenase/DMSO reductase, C-terminal domain
33	c2mrnB	Alignment	not modelled	68.8	11	PDB header: dna binding protein Chain: B: PDB Molecule: antitoxin maze; PDBTitle: structure of truncated ecmaze
34	d1y5ia1	Alignment	not modelled	68.4	24	Fold: Double psi beta-barrel Superfamily: ADC-like Family: Formate dehydrogenase/DMSO reductase, C-terminal domain
35	c6mjF	Alignment	not modelled	66.8	13	PDB header: lipid transport Chain: F: PDB Molecule: fig000988: predicted permease; PDBTitle: lptb(e163q)fgc from vibrio cholerae
36	c2v45A	Alignment	not modelled	66.0	13	PDB header: oxidoreductase Chain: A: PDB Molecule: periplasmic nitrate reductase; PDBTitle: a new catalytic mechanism of periplasmic nitrate reductase2 from desulfovibrio desulfuricans atcc 27774 from3 crystallographic and epr data and based on detailed4 analysis of the sixth ligand
37	c1oy8A	Alignment	not modelled	65.9	14	PDB header: membrane protein Chain: A: PDB Molecule: sacriflavine resistance protein b; PDBTitle: structural basis of multiple drug binding capacity of the acrb2 multidrug efflux pump
38	d1dmra1	Alignment	not modelled	65.6	13	Fold: Double psi beta-barrel Superfamily: ADC-like Family: Formate dehydrogenase/DMSO reductase, C-terminal domain
39	d1zqla1	Alignment	not modelled	65.2	21	Fold: Sm-like fold Superfamily: GatD N-terminal domain-like Family: GatD N-terminal domain-like
40	c2nyaF	Alignment	not modelled	65.0	11	PDB header: oxidoreductase Chain: F: PDB Molecule: periplasmic nitrate reductase; PDBTitle: crystal structure of the periplasmic nitrate reductase2 (nap) from escherichia coli
41	c1h5nC	Alignment	not modelled	64.3	13	PDB header: oxidoreductase Chain: C: PDB Molecule: dmsr reductase; PDBTitle: dmsr reductase modified by the presence of dms and air
42	c1h0hA	Alignment	not modelled	63.7	16	PDB header: electron transport Chain: A: PDB Molecule: formate dehydrogenase subunit alpha; PDBTitle: tungsten containing formate dehydrogenase from desulfovibrio gigas
43	c5l75G	Alignment	not modelled	63.1	18	PDB header: transport protein Chain: G: PDB Molecule: fig000906: predicted permease; PDBTitle: a protein structure
44	c6btmD	Alignment	not modelled	62.0	12	PDB header: membrane protein Chain: D: PDB Molecule: alternative complex iii subunit d; PDBTitle: structure of alternative complex iii from flavobacterium johnsoniae2 (wild type)
45	c1tmoA	Alignment	not modelled	60.7	18	PDB header: oxidoreductase Chain: A: PDB Molecule: trimethylamine n-oxide reductase; PDBTitle: trimethylamine n-oxide reductase from shewanella massilia
46	c2pjhB	Alignment	not modelled	60.5	17	PDB header: transport protein Chain: B: PDB Molecule: transitional endoplasmic reticulum atpase; PDBTitle: strctural model of the p97 n domain- npl4 ubd complex
47	c6cz7C	Alignment	not modelled	59.5	19	PDB header: oxidoreductase Chain: C: PDB Molecule: arra; PDBTitle: the arsenate respiratory reductase (arr) complex from shewanella sp.2 ana-3
48	c1vlfQ	Alignment	not modelled	59.3	15	PDB header: oxidoreductase Chain: Q: PDB Molecule: pyrogallol hydroxytransferase large subunit; PDBTitle: crystal structure of pyrogallol-phloroglucinol transhydroxylase2 from pelobacter acidigallici complexed with inhibitor 1,2,4,5-tetrahydroxy-benzene
49	c4aayE	Alignment	not modelled	58.7	13	PDB header: oxidoreductase Chain: E: PDB Molecule: aroa; PDBTitle: crystal structure of the arsenite oxidase protein complex2 from rhizobium species strain nt-26
50	c1g8jC	Alignment	not modelled	58.3	8	PDB header: oxidoreductase Chain: C: PDB Molecule: arsenite oxidase; PDBTitle: crystal structure analysis of arsenite oxidase from2 alcaligenes faecalis
51	c5t5iL	Alignment	not modelled	58.1	18	PDB header: oxidoreductase Chain: L: PDB Molecule: tungsten formylmethanofuran dehydrogenase subunit fwdd; PDBTitle: tungsten-containing formylmethanofuran dehydrogenase from2 methanothermobacter wolfeii, orthorhombic form at 1.9 a
52	d1mvfd	Alignment	not modelled	57.3	10	Fold: Double-split beta-barrel Superfamily: AbrB/MazE/MraZ-like Family: Kis/PemI addiction antidote
53	c1kqgA	Alignment	not modelled	57.1	25	PDB header: oxidoreductase Chain: A: PDB Molecule: formate dehydrogenase, nitrate-inducible, major subunit; PDBTitle: formate dehydrogenase n from e. coli

54	c2etnA		Alignment	not modelled	56.1	24	PDB header: transcription Chain: A: PDB Molecule: anti-cleavage anti-greA transcription factor PDBTitle: crystal structure of thermus aquaticus gfh1
55	c5x5yG		Alignment	not modelled	55.6	20	PDB header: membrane protein Chain: G: PDB Molecule: uncharacterized protein; PDBTitle: a membrane protein complex
56	c1ogyA		Alignment	not modelled	55.2	13	PDB header: oxidoreductase Chain: A: PDB Molecule: periplasmic nitrate reductase; PDBTitle: crystal structure of the heterodimeric nitrate reductase2 from rhodobacter sphaeroides
57	c2ivfA		Alignment	not modelled	53.7	17	PDB header: oxidoreductase Chain: A: PDB Molecule: ethylbenzene dehydrogenase alpha-subunit; PDBTitle: ethylbenzene dehydrogenase from aromatoleum aromaticum
58	c5ch7E		Alignment	not modelled	53.2	10	PDB header: oxidoreductase Chain: E: PDB Molecule: dmso reductase family type ii enzyme, molybdopterin PDBTitle: crystal structure of the perchlorate reductase pcrab - phe164 gate2 switch intermediate - from azospira suillum ps
59	c2ki8A		Alignment	not modelled	52.9	19	PDB header: oxidoreductase Chain: A: PDB Molecule: tungsten formylmethanofuran dehydrogenase, PDBTitle: solution nmr structure of tungsten formylmethanofuran2 dehydrogenase subunit d from archaeoglobus fulgidus,3 northeast structural genomics consortium target att7
60	c2p4vA		Alignment	not modelled	52.3	12	PDB header: transcription Chain: A: PDB Molecule: transcription elongation factor greb; PDBTitle: crystal structure of the transcript cleavage factor, greb2 at 2.6a resolution
61	d1ylea1		Alignment	not modelled	52.0	27	Fold: Acyl-CoA N-acyltransferases (Nat) Superfamily: Acyl-CoA N-acyltransferases (Nat) Family: Asta-like
62	d1e32a1		Alignment	not modelled	51.6	20	Fold: Double psi beta-barrel Superfamily: ADC-like Family: Cdc48 N-terminal domain-like
63	c2e7zA		Alignment	not modelled	50.5	22	PDB header: lyase Chain: A: PDB Molecule: acetylene hydratase ahY; PDBTitle: acetylene hydratase from pelobacter acetylénicus
64	c2vpyE		Alignment	not modelled	49.0	21	PDB header: oxidoreductase Chain: E: PDB Molecule: thiosulfate reductase; PDBTitle: polysulfide reductase with bound quinone inhibitor,2 pentachlorophenol (pcp)
65	d1ub4c		Alignment	not modelled	47.8	13	Fold: Double-split beta-barrel Superfamily: AbrB/MazE/MraZ-like Family: Kis/PemI addiction antidote
66	c1y5iA		Alignment	not modelled	47.4	26	PDB header: oxidoreductase Chain: A: PDB Molecule: respiratory nitrate reductase 1 alpha chain; PDBTitle: the crystal structure of the narghi mutant nari-k86a
67	c6ajjA		Alignment	not modelled	46.6	15	PDB header: membrane protein, hydrolase Chain: A: PDB Molecule: drug exporters of the rnd superfamily-like protein, PDBTitle: crystal structure of mycolic acid transporter mmpl3 from mycobacterium smegmatis complexed with ica38
68	c6btmB		Alignment	not modelled	43.2	26	PDB header: membrane protein Chain: B: PDB Molecule: alternative complex iii subunit b; PDBTitle: structure of alternative complex iii from flavobacterium johnsoniae2 (wild type)
69	d2vbua1		Alignment	not modelled	42.6	16	Fold: Reductase/isomerase/elongation factor common domain Superfamily: Riboflavin kinase-like Family: CTP-dependent riboflavin kinase-like
70	c6mjG		Alignment	not modelled	41.1	9	PDB header: lipid transport Chain: G: PDB Molecule: ps export abc transporter permease lptG; PDBTitle: lptG(e163q)fgc from vibrio cholerae
71	c1wlfa		Alignment	not modelled	41.1	28	PDB header: protein transport Chain: A: PDB Molecule: peroxisome biogenesis factor 1; PDBTitle: structure of the n-terminal domain of pex1 aaa-atape:2 characterization of a putative adaptor-binding domain
72	c2fugC		Alignment	not modelled	39.7	13	PDB header: oxidoreductase Chain: C: PDB Molecule: nadh-quinone oxidoreductase chain 3; PDBTitle: crystal structure of the hydrophilic domain of respiratory complex i2 from thermus thermophilus
73	c6owsB		Alignment	not modelled	36.5	10	PDB header: membrane protein Chain: B: PDB Molecule: efflux pump membrane transporter; PDBTitle: cryo-em structure of an acinetobacter baumannii multidrug efflux pump
74	c2yujA		Alignment	not modelled	36.1	15	PDB header: protein binding Chain: A: PDB Molecule: ubiquitin fusion degradation 1-like; PDBTitle: solution structure of human ubiquitin fusion degradation2 protein 1 homolog ufd1
75	c3bmbB		Alignment	not modelled	36.0	25	PDB header: rna binding protein Chain: B: PDB Molecule: regulator of nucleoside diphosphate kinase; PDBTitle: crystal structure of a new rna polymerase interacting2 protein
76	c1zc1A		Alignment	not modelled	35.8	15	PDB header: protein turnover Chain: A: PDB Molecule: ubiquitin fusion degradation protein 1; PDBTitle: ufd1 exhibits the aaa-atape fold with two distinct2 ubiquitin interaction sites
77	d2f23a2		Alignment	not modelled	35.5	22	Fold: FKBP-like Superfamily: FKBP-like Family: GreA transcript cleavage factor, C-terminal domain
78	c6f0kB		Alignment	not modelled	35.4	29	PDB header: membrane protein Chain: B: PDB Molecule: fe-s-cluster-containing hydrogenase; PDBTitle: alternative complex iii

79	c3l0oA_	Alignment	not modelled	34.7	23	PDB header: hydrolase Chain: A: PDB Molecule: transcription termination factor rho; PDBTitle: structure of rna-free rho transcription termination factor from2 thermotoga maritima
80	d2etna2	Alignment	not modelled	32.6	22	Fold: FKBP-like Superfamily: FKBP-like Family: GreA transcript cleavage factor, C-terminal domain
81	c2pn0D_	Alignment	not modelled	31.2	36	PDB header: transcription Chain: D: PDB Molecule: prokaryotic transcription elongation factor PDBTitle: prokaryotic transcription elongation factor grea/greb from2 nitrosomonas europaea
82	c2I66B_	Alignment	not modelled	30.3	23	PDB header: transcription regulator Chain: B: PDB Molecule: transcriptional regulator, abrb family; PDBTitle: the dna-recognition fold of sso7c4 suggests a new member of spvrt-abrb2 superfamily from archaea.
83	c4tqxA_	Alignment	not modelled	28.9	16	PDB header: hydrolase Chain: A: PDB Molecule: sortase; PDBTitle: molecular basis of streptococcus mutans sortase a inhibition by2 chalcone.
84	c3l0oB_	Alignment	not modelled	25.8	23	PDB header: hydrolase Chain: B: PDB Molecule: transcription termination factor rho; PDBTitle: structure of rna-free rho transcription termination factor from2 thermotoga maritima
85	c5hu4A_	Alignment	not modelled	24.5	11	PDB header: hydrolase Chain: A: PDB Molecule: cysteine protease; PDBTitle: crystal structure of listeria monocytogenes sortase a
86	c2kw8A_	Alignment	not modelled	24.3	17	PDB header: protein binding Chain: A: PDB Molecule: ipxtg-site transpeptidase family protein; PDBTitle: solution structure of bacillus anthracis sortase a (srtA) transpeptidase
87	d1cz5a1	Alignment	not modelled	24.0	15	Fold: Double psi beta-barrel Superfamily: ADC-like Family: Cdc48 N-terminal domain-like
88	d2d6fa1	Alignment	not modelled	23.0	21	Fold: Sm-like fold Superfamily: GatD N-terminal domain-like Family: GatD N-terminal domain-like
89	c1xpUB_	Alignment	not modelled	22.9	23	PDB header: transcription/rna Chain: B: PDB Molecule: rho transcription termination factor; PDBTitle: structural mechanism of inhibition of the rho transcription termination factor by the antibiotic 5a-(3-formylphenylsulfanyl)-3 dihydrobicyclomycin (fpdb)
90	c4ymuC_	Alignment	not modelled	22.5	10	PDB header: protein binding/transport protein Chain: C: PDB Molecule: abc-type amino acid transport system, permease component; PDBTitle: crystal structure of an amino acid abc transporter complex with2 arginines and atps
91	d2hyda2	Alignment	not modelled	21.8	5	Fold: ABC transporter transmembrane region Superfamily: ABC transporter transmembrane region Family: ABC transporter transmembrane region
92	c3ltiA_	Alignment	not modelled	19.1	38	PDB header: transferase Chain: A: PDB Molecule: dna-directed rna polymerase subunit beta; PDBTitle: crystal structure of the escherichia coli rna polymerase beta subunit2 beta2-beta14 domains
93	d1t2wa_	Alignment	not modelled	18.4	14	Fold: Sortase Superfamily: Sortase Family: Sortase
94	d1rqpa1	Alignment	not modelled	18.3	17	Fold: Bacterial fluorinating enzyme, C-terminal domain Superfamily: Bacterial fluorinating enzyme, C-terminal domain Family: Bacterial fluorinating enzyme, C-terminal domain
95	c2w1tB_	Alignment	not modelled	17.9	14	PDB header: transcription Chain: B: PDB Molecule: stage v sporulation protein t; PDBTitle: crystal structure of b. subtilis spvpt
96	d1dzfa2	Alignment	not modelled	17.0	21	Fold: RPB5-like RNA polymerase subunit Superfamily: RPB5-like RNA polymerase subunit Family: RPB5
97	c4aa3A_	Alignment	not modelled	16.9	7	PDB header: transport protein Chain: A: PDB Molecule: atp-binding cassette sub-family b member 10, PDBTitle: structure of the human mitochondrial abc transporter,2 abc10 (plate form)
98	d1udxa3	Alignment	not modelled	16.4	13	Fold: Obg GTP-binding protein C-terminal domain Superfamily: Obg GTP-binding protein C-terminal domain Family: Obg GTP-binding protein C-terminal domain
99	c3l53F_	Alignment	not modelled	16.0	25	PDB header: structural genomics, unknown function Chain: F: PDB Molecule: putative fumarylacetoacetate isomerase/hydrolase; PDBTitle: crystal structure of a putative fumarylacetoacetate2 isomerase/hydrolase from oleispira antarctica