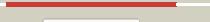
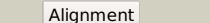
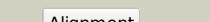
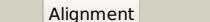


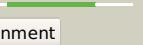
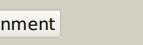
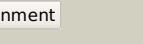
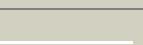
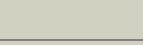
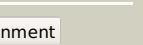
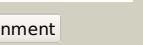
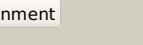
Phyre²

Email	mdejesus@rockefeller.edu
Description	RVBD1437_(pgk)_1614335_1615573
Date	Wed Jul 31 22:05:54 BST 2019
Unique Job ID	67815a19eebd72f5

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	d1phpa_			100.0	44	Fold: Phosphoglycerate kinase Superfamily: Phosphoglycerate kinase Family: Phosphoglycerate kinase
2	d1vpea_			100.0	47	Fold: Phosphoglycerate kinase Superfamily: Phosphoglycerate kinase Family: Phosphoglycerate kinase
3	c4dg5A_			100.0	42	PDB header: transferase Chain: A: PDB Molecule: phosphoglycerate kinase; PDBTitle: crystal structure of staphylococcal phosphoglycerate kinase
4	c3zlbA_			100.0	44	PDB header: transferase Chain: A: PDB Molecule: phosphoglycerate kinase; PDBTitle: crystal structure of phosphoglycerate kinase from streptococcus2 pneumoniae
5	c3q3vA_			100.0	42	PDB header: transferase Chain: A: PDB Molecule: phosphoglycerate kinase; PDBTitle: crystal structure of phosphoglycerate kinase from campylobacter2 jejuni.
6	d16pka_			100.0	41	Fold: Phosphoglycerate kinase Superfamily: Phosphoglycerate kinase Family: Phosphoglycerate kinase
7	d1v6sa_			100.0	49	Fold: Phosphoglycerate kinase Superfamily: Phosphoglycerate kinase Family: Phosphoglycerate kinase
8	d1vjda_			100.0	39	Fold: Phosphoglycerate kinase Superfamily: Phosphoglycerate kinase Family: Phosphoglycerate kinase
9	d1qpga_			100.0	38	Fold: Phosphoglycerate kinase Superfamily: Phosphoglycerate kinase Family: Phosphoglycerate kinase
10	c5bt8D_			100.0	42	PDB header: transferase Chain: D: PDB Molecule: phosphoglycerate kinase; PDBTitle: x-ray crystal structure of phosphoglycerate kinase from acinetobacter2 baumannii
11	d1ltka_			100.0	37	Fold: Phosphoglycerate kinase Superfamily: Phosphoglycerate kinase Family: Phosphoglycerate kinase

12	c2cunA_			100.0	32	PDB header: transferase Chain: A: PDB Molecule: phosphoglycerate kinase; PDBTitle: crystal structure of phosphoglycerate kinase from pyrococcus2 horikoshii ot3
13	c4ng4B_			100.0	39	PDB header: transferase Chain: B: PDB Molecule: phosphoglycerate kinase; PDBTitle: structure of phosphoglycerate kinase (cbu_1782) from coxiella burnetii
14	c1zmrA_			100.0	41	PDB header: transferase Chain: A: PDB Molecule: phosphoglycerate kinase; PDBTitle: crystal structure of the e. coli phosphoglycerate kinase
15	d1hdia_			100.0	38	Fold: Phosphoglycerate kinase Superfamily: Phosphoglycerate kinase Family: Phosphoglycerate kinase
16	c4ehjA_			100.0	41	PDB header: transferase Chain: A: PDB Molecule: phosphoglycerate kinase; PDBTitle: an x-ray structure of a putative phosphoglycerate kinase from Francisella tularensis subsp. tularensis schu s4
17	d1fw8a_			100.0	38	Fold: Phosphoglycerate kinase Superfamily: Phosphoglycerate kinase Family: Phosphoglycerate kinase
18	c3zvmA_			89.1	22	PDB header: hydrolase/transferase/dna Chain: A: PDB Molecule: bifunctional polynucleotide phosphatase/kinase; PDBTitle: the structural basis for substrate recognition by mammalian2 polynucleotide kinase 3' phosphatase
19	d1yj5a1			88.5	21	Fold: HAD-like Superfamily: HAD-like Family: phosphatase domain of polynucleotide kinase
20	c1yj5B_			87.3	19	PDB header: transferase Chain: B: PDB Molecule: 5' polynucleotide kinase-3' phosphatase catalytic domain; PDBTitle: molecular architecture of mammalian polynucleotide kinase, a dna2 repair enzyme
21	c3rf0A_		not modelled	72.0	22	PDB header: transferase Chain: A: PDB Molecule: methionyl-tRNA formyltransferase; PDBTitle: crystal structure of methionyl-tRNA formyltransferase from bacillus2 anthracis
22	c3ek5A_		not modelled	67.7	19	PDB header: transferase Chain: A: PDB Molecule: uridylate kinase; PDBTitle: unique gtp-binding pocket and allostery of ump kinase from a gram-2 negative phytopathogen bacterium
23	d2pjua1		not modelled	66.5	14	Fold: Chelatase-like Superfamily: PrpR receptor domain-like Family: PrpR receptor domain-like
24	c3uagA_		not modelled	62.8	12	PDB header: ligase Chain: A: PDB Molecule: protein (udp-n-acetyl muramoyl-l-alanine:d- PDBTitle: udp-n-acetyl muramoyl-l-alanine:d-glutamate ligase
25	c3kc2A_		not modelled	61.9	16	PDB header: hydrolase Chain: A: PDB Molecule: uncharacterized protein ykr070w; PDBTitle: crystal structure of mitochondrial had-like phosphatase from Saccharomyces cerevisiae
26	d1ybda1		not modelled	61.8	10	Fold: Carbamate kinase-like Superfamily: Carbamate kinase-like Family: PyrH-like
27	c2pjuD_		not modelled	61.6	14	PDB header: transcription Chain: D: PDB Molecule: propionate catabolism operon regulatory protein; PDBTitle: crystal structure of propionate catabolism operon regulatory protein2 prp
28	c5uaiA_		not modelled	54.8	22	PDB header: transferase Chain: A: PDB Molecule: methionyl-tRNA formyltransferase; PDBTitle: crystal structure of methionyl-tRNA formyltransferase from pseudomonas2 aeruginosa

29	c5ajtA		Alignment	not modelled	51.9	19	PDB header: hydrolase Chain: A: PDB Molecule: phosphoribohydrolase lonely guy; PDBTitle: crystal structure of ligand-free phosphoribohydrolase lonely guy from2 claviceps purpurea
30	c3obaA		Alignment	not modelled	50.8	16	PDB header: hydrolase Chain: A: PDB Molecule: beta-galactosidase; PDBTitle: structure of the beta-galactosidase from kluyveromyces lactis
31	c2j5tF		Alignment	not modelled	50.3	13	PDB header: transferase Chain: F: PDB Molecule: glutamate 5-kinase; PDBTitle: glutamate 5-kinase from escherichia coli complexed with2 glutamate
32	c2wdfA		Alignment	not modelled	48.4	20	PDB header: hydrolase Chain: A: PDB Molecule: sulfur oxidation protein soxb; PDBTitle: termus thermophilus sulfate thiohydrolase soxb
33	c4zexA		Alignment	not modelled	43.8	28	PDB header: unknown function Chain: A: PDB Molecule: pfhad1; PDBTitle: crystal structure of pfhad1 in complex with glyceraldehyde-3-phosphate
34	c4jyrG		Alignment	not modelled	41.8	20	PDB header: hydrolase Chain: G: PDB Molecule: d,d-heptose 1,7-bisphosphate phosphatase; PDBTitle: crystal structure of d,d-heptose 1,7-bisphosphate phosphatase from2 burkholderia thailandensis
35	d2b30a1		Alignment	not modelled	41.4	22	Fold: HAD-like Superfamily: HAD-like Family: Predicted hydrolases Cof
36	d2a1fa1		Alignment	not modelled	39.2	22	Fold: Carbamate kinase-like Superfamily: Carbamate kinase-like Family: PyrH-like
37	d1kfia1		Alignment	not modelled	38.1	15	Fold: Phosphoglucomutase, first 3 domains Superfamily: Phosphoglucomutase, first 3 domains Family: Phosphoglucomutase, first 3 domains
38	c5ykaA		Alignment	not modelled	37.0	26	PDB header: biosynthetic protein Chain: A: PDB Molecule: uncharacterized protein kdoo; PDBTitle: crystal structure of the kdo hydroxylase kdoo, a non-heme fe(ii)2 alphaketoglutarate dependent dioxygenase in complex with cobalt(ii)
39	c3n5IA		Alignment	not modelled	34.3	17	PDB header: transport protein Chain: A: PDB Molecule: binding protein component of abc phosphonate transporter; PDBTitle: crystal structure of a binding protein component of abc phosphonate2 transporter (pa3383) from pseudomonas aeruginosa at 1.97 a resolution
40	c4zkjA		Alignment	not modelled	33.5	15	PDB header: unknown function Chain: A: PDB Molecule: crispr-associated protein cas1; PDBTitle: crystal structure of crispr-associated protein
41	c2yybA		Alignment	not modelled	33.3	17	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: hypothetical protein ttha1606; PDBTitle: crystal structure of ttha1606 from thermus thermophilus hb8
42	c2i55C		Alignment	not modelled	33.3	26	PDB header: isomerase Chain: C: PDB Molecule: phosphomannomutase; PDBTitle: complex of glucose-1,6-bisphosphate with phosphomannomutase from2 leishmania mexicana
43	c2va1A		Alignment	not modelled	33.2	13	PDB header: transferase Chain: A: PDB Molecule: uridylylate kinase; PDBTitle: crystal structure of ump kinase from ureaplasma parvum
44	d1rkqa		Alignment	not modelled	31.6	33	Fold: HAD-like Superfamily: HAD-like Family: Predicted hydrolases Cof
45	c4rapD		Alignment	not modelled	30.1	22	PDB header: transferase Chain: D: PDB Molecule: glycosyltransferase tibc; PDBTitle: crystal structure of bacterial iron-containing dodecameric2 glycosyltransferase tibc from enterotoxigenic e.coli h10407
46	d1dkua2		Alignment	not modelled	29.9	21	Fold: PRTase-like Superfamily: PRTase-like Family: Phosphoribosylpyrophosphate synthetase-like
47	d2btya1		Alignment	not modelled	29.2	10	Fold: Carbamate kinase-like Superfamily: Carbamate kinase-like Family: N-acetyl-l-glutamate kinase
48	d1z9da1		Alignment	not modelled	28.1	14	Fold: Carbamate kinase-like Superfamily: Carbamate kinase-like Family: PyrH-like
49	c5xvnL		Alignment	not modelled	28.0	18	PDB header: immune system Chain: L: PDB Molecule: crispr-associated endonuclease cas1; PDBTitle: e. far cas1-cas2/prespacer binary complex
50	d2ji7a1		Alignment	not modelled	27.8	18	Fold: DHS-like NAD/FAD-binding domain Superfamily: DHS-like NAD/FAD-binding domain Family: Pyruvate oxidase and decarboxylase, middle domain
51	d2z1aa2		Alignment	not modelled	27.4	32	Fold: Metallo-dependent phosphatases Superfamily: Metallo-dependent phosphatases Family: 5'-nucleotidase (syn. UDP-sugar hydrolase), N-terminal domain
52	d1mv8a3		Alignment	not modelled	27.3	16	Fold: Adenine nucleotide alpha hydrolase-like Superfamily: UDP-glucose/GDP-mannose dehydrogenase C-terminal domain Family: UDP-glucose/GDP-mannose dehydrogenase C-terminal domain
53	c3r4cA		Alignment	not modelled	27.2	36	PDB header: hydrolase Chain: A: PDB Molecule: hydrolase, haloacid dehalogenase-like hydrolase; PDBTitle: divergence of structure and function among phosphatases of the2 haloalkanoate (had) enzyme superfamily:

						analysis of bt1666 from3 bacteroides thetaiotaomicron
54	c3p7iA	Alignment	not modelled	26.7	17	PDB header: transport protein Chain: A: PDB Molecule: phnd, subunit of alkylphosphonate abc transporter; PDBTitle: crystal structure of escherichia coli phnd in complex with 2-2 aminoethyl phosphonate
55	c4qjbB	Alignment	not modelled	26.4	31	PDB header: hydrolase Chain: B: PDB Molecule: haloacid dehalogenase-like hydrolase; PDBTitle: crystal structure of the sugar phosphatase pfhd1 from plasmodium2 falciparum
56	d1wzca1	Alignment	not modelled	26.1	17	Fold: HAD-like Superfamily: HAD-like Family: Predicted hydrolases Cof
57	c2e9yA	Alignment	not modelled	25.9	11	PDB header: transferase Chain: A: PDB Molecule: carbamate kinase; PDBTitle: crystal structure of project ape1968 from aeropyrum pernix k1
58	c2ohoA	Alignment	not modelled	25.6	22	PDB header: isomerase Chain: A: PDB Molecule: glutamate racemase; PDBTitle: structural basis for glutamate racemase inhibitor
59	c6hz4B	Alignment	not modelled	25.3	26	PDB header: dna binding protein Chain: B: PDB Molecule: 5-methylcytosine-specific restriction enzyme b; PDBTitle: structure of mcrbc without dna binding domains (one half of the full2 complex)
60	d1sm4a2	Alignment	not modelled	25.2	4	Fold: Ferredoxin reductase-like, C-terminal NADP-linked domain Superfamily: Ferredoxin reductase-like, C-terminal NADP-linked domain Family: Reductases
61	d1vhna	Alignment	not modelled	25.1	17	Fold: TIM beta/alpha-barrel Superfamily: FMN-linked oxidoreductases Family: FMN-linked oxidoreductases
62	c1pkIB	Alignment	not modelled	25.0	13	PDB header: transferase Chain: B: PDB Molecule: protein (pyruvate kinase); PDBTitle: the structure of leishmania pyruvate kinase
63	d1xpja	Alignment	not modelled	24.9	8	Fold: HAD-like Superfamily: HAD-like Family: Hypothetical protein VC0232
64	c4a7xF	Alignment	not modelled	24.7	20	PDB header: transferase Chain: F: PDB Molecule: uridylate kinase; PDBTitle: crystal structure of uridylate kinase from helicobacter pylori
65	c2kxhB	Alignment	not modelled	24.6	33	PDB header: protein binding Chain: B: PDB Molecule: peptide of far upstream element-binding protein 1; PDBTitle: solution structure of the first two rrm domains of fir in the complex2 with fbp nbox peptide
66	d1c8ba	Alignment	not modelled	24.6	19	Fold: Phosphorylase/hydrolase-like Superfamily: HybD-like Family: Germination protease
67	c2iz6A	Alignment	not modelled	24.2	23	PDB header: metal transport Chain: A: PDB Molecule: molybdenum cofactor carrier protein; PDBTitle: structure of the chlamydomonas rheinhardtii moco carrier2 protein
68	c3prjB	Alignment	not modelled	24.1	28	PDB header: oxidoreductase Chain: B: PDB Molecule: udp-glucose 6-dehydrogenase; PDBTitle: role of packing defects in the evolution of allostery and induced fit2 in human udp-glucose dehydrogenase.
69	c5fcID	Alignment	not modelled	23.8	15	PDB header: dna binding protein Chain: D: PDB Molecule: crispr-associated endonuclease cas1; PDBTitle: crystal structure of cas1 from pectobacterium atrosepticum
70	d1krha2	Alignment	not modelled	23.7	23	Fold: Ferredoxin reductase-like, C-terminal NADP-linked domain Superfamily: Ferredoxin reductase-like, C-terminal NADP-linked domain Family: Aromatic dioxygenase reductase-like
71	d1vh0a	Alignment	not modelled	23.4	17	Fold: alpha/beta knot Superfamily: alpha/beta knot Family: YbeA-like
72	c3nkdB	Alignment	not modelled	23.4	15	PDB header: immune system Chain: B: PDB Molecule: crispr-associated protein cas1; PDBTitle: structure of crisp-associated protein cas1 from escherichia coli str.2 k-12
73	d2bmwa2	Alignment	not modelled	23.1	7	Fold: Ferredoxin reductase-like, C-terminal NADP-linked domain Superfamily: Ferredoxin reductase-like, C-terminal NADP-linked domain Family: Reductases
74	d2obba1	Alignment	not modelled	22.9	23	Fold: HAD-like Superfamily: HAD-like Family: BT0820-like
75	c5htxA	Alignment	not modelled	22.8	24	PDB header: transferase Chain: A: PDB Molecule: putative xylose kinase; PDBTitle: putative sugar kinases from arabidopsis thaliana in complex with adp
76	d1h5ya	Alignment	not modelled	22.8	15	Fold: TIM beta/alpha-barrel Superfamily: Ribulose-phosphate binding barrel Family: Histidine biosynthesis enzymes
77	c3zupB	Alignment	not modelled	22.8	24	PDB header: hydrolase Chain: B: PDB Molecule: mannosyl-3-phosphoglycerate phosphatase; PDBTitle: the 3-dimensional structure of mpgp from thermus2 thermophilus hb27, in complex with the alpha-3 mannosylglycerate and orthophosphate reaction products.
78	c5dmnA	Alignment	not modelled	22.7	22	PDB header: transferase Chain: A: PDB Molecule: homocysteine s-methyltransferase; PDBTitle: crystal structure of the homocysteine methyltransferase mmum from2 escherichia coli, apo form

79	c5bjA_		Alignment	not modelled	22.5	13	PDB header: hydrolase Chain: A: PDB Molecule: putative cytokinin riboside 5'-monophosphate PDBTitle: crystal structure of type-i log from pseudomonas aeruginosa pao1
80	c5ynlA_		Alignment	not modelled	22.4	22	PDB header: hydrolase Chain: A: PDB Molecule: arginase; PDBTitle: crystal structure of a cold-adapted arginase from psychrophilic yeast,2 glacioczyma antarctica
81	c3jyfB_		Alignment	not modelled	22.3	24	PDB header: hydrolase Chain: B: PDB Molecule: 2',3'-cyclic nucleotide 2'-phosphodiesterase/3'- PDBTitle: the crystal structure of a 2,3-cyclic nucleotide 2-2 phosphodiesterase/3-nucleotidase bifunctional periplasmic precursor3 protein from klebsiella pneumoniae subsp. pneumoniae mgh 78578
82	c4edfC_		Alignment	not modelled	22.3	26	PDB header: oxidoreductase Chain: C: PDB Molecule: udp-glucose 6-dehydrogenase; PDBTitle: dimeric hugdh, k94e
83	d2b8ea1		Alignment	not modelled	22.3	19	Fold: HAD-like Superfamily: HAD-like Family: Meta-cation ATPase, catalytic domain P
84	c1zdrB_		Alignment	not modelled	22.3	17	PDB header: oxidoreductase Chain: B: PDB Molecule: dihydrofolate reductase; PDBTitle: dhfr from bacillus stearothermophilus
85	c2ek8A_		Alignment	not modelled	22.2	14	PDB header: hydrolase Chain: A: PDB Molecule: aminopeptidase; PDBTitle: aminopeptidase from aneurinibacillus sp. strain am-1
86	c3t07D_		Alignment	not modelled	21.9	13	PDB header: transferase/transferase inhibitor Chain: D: PDB Molecule: pyruvate kinase; PDBTitle: crystal structure of s. aureus pyruvate kinase in complex with a2 naturally occurring bis-indole alkaloid
87	c4pu6A_		Alignment	not modelled	21.7	18	PDB header: hydrolase Chain: A: PDB Molecule: l-asparaginase alpha subunit; PDBTitle: crystal structure of potassium-dependent plant-type l-asparaginase2 from phaseolus vulgaris in complex with k+ cations
88	c2vx6A_		Alignment	not modelled	21.6	15	PDB header: hydrolase Chain: A: PDB Molecule: cellvibrio japonicus mannanase cjman26c; PDBTitle: cellvibrio japonicus mannanase cjman26c gal1man4-bound form
89	c3dg8B_		Alignment	not modelled	21.3	29	PDB header: oxidoreductase, transferase Chain: B: PDB Molecule: bifunctional dihydrofolate reductase-thymidylate synthase; PDBTitle: quadruple mutant (n51i+c59r+s108n+i164l) plasmodium falciparum2 dihydrofolate reductase-thymidylate synthase (pfdhfr-ts) complexed3 with rjf670, nadph, and dump
90	c6igmH_		Alignment	not modelled	21.0	19	PDB header: transcription Chain: H: PDB Molecule: helicase srca; PDBTitle: cryo-em structure of human srca complex
91	c4f4fB_		Alignment	not modelled	20.9	17	PDB header: lyase Chain: B: PDB Molecule: threonine synthase; PDBTitle: x-ray crystal structure of plp bound threonine synthase from brucella2 melitensis
92	c3dnnpA_		Alignment	not modelled	20.7	16	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: stress response protein yhax; PDBTitle: crystal structure of stress response protein yhax from bacillus2 subtilis
93	c3gveB_		Alignment	not modelled	20.2	19	PDB header: structural genomics, unknown function Chain: B: PDB Molecule: yfkn protein; PDBTitle: crystal structure of calcineurin-like phosphoesterase yfkn from2 bacillus subtilis
94	d1gawa2		Alignment	not modelled	20.2	3	Fold: Ferrodoxin reductase-like, C-terminal NADP-linked domain Superfamily: Ferrodoxin reductase-like, C-terminal NADP-linked domain Family: Reductases
95	c3g7uA_		Alignment	not modelled	19.9	12	PDB header: transferase Chain: A: PDB Molecule: cytosine-specific methyltransferase; PDBTitle: crystal structure of putative dna modification methyltransferase2 encoded within prophage cp-933r (e.coli)
96	d1vb3a1		Alignment	not modelled	19.7	29	Fold: Tryptophan synthase beta subunit-like PLP-dependent enzymes Superfamily: Tryptophan synthase beta subunit-like PLP-dependent enzymes Family: Tryptophan synthase beta subunit-like PLP-dependent enzymes
97	d1lp3da2		Alignment	not modelled	19.7	10	Fold: MurD-like peptide ligases, peptide-binding domain Superfamily: MurD-like peptide ligases, peptide-binding domain Family: MurCDEF C-terminal domain
98	c5wqlC_		Alignment	not modelled	19.6	24	PDB header: protein binding/signaling protein/hydrol Chain: C: PDB Molecule: tail-specific protease; PDBTitle: structure of a pdz-protease bound to a substrate-binding adaptor
99	d1tr9a_		Alignment	not modelled	19.6	23	Fold: TIM beta/alpha-barrel Superfamily: (Trans)glycosidases Family: NagZ-like