

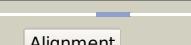
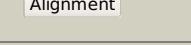
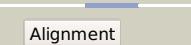
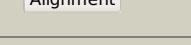
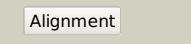
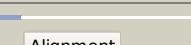
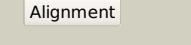
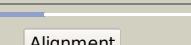
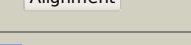
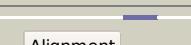
Phyre²

Email	mdejesus@rockefeller.edu
Description	RVBD2734 (-)_3046831_3047685
Date	Wed Aug 7 12:50:39 BST 2019
Unique Job ID	ea2397f7b55e5698

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c4fheA_	Alignment		98.1	15	PDB header: lyase Chain: A: PDB Molecule: spore photoproduct lyase; PDBTitle: spore photoproduct lyase c140a mutant
2	c2ad5B_	Alignment		70.8	13	PDB header: ligase Chain: B: PDB Molecule: ctp synthase; PDBTitle: mechanisms of feedback regulation and drug resistance of ctp2 synthetases: structure of the e. coli ctps/ctp complex at 2.8-3 angstrom resolution.
3	c2ywdA_	Alignment		69.9	18	PDB header: transferase Chain: A: PDB Molecule: glutamine amidotransferase subunit pdxt; PDBTitle: crystal structure of glutamine amidotransferase
4	d2a9va1	Alignment		64.7	13	Fold: Flavodoxin-like Superfamily: Class I glutamine amidotransferase-like Family: Class I glutamine amidotransferases (GAT)
5	d1izca_	Alignment		57.5	18	Fold: TIM beta/alpha-barrel Superfamily: Phosphoenolpyruvate/pyruvate domain Family: HpcH/Hpal aldolase
6	c1izcA_	Alignment		57.5	18	PDB header: lyase Chain: A: PDB Molecule: macrophomate synthase intermolecular diels-alderase; PDBTitle: crystal structure analysis of macrophomate synthase
7	c5h7dl_	Alignment		47.5	23	PDB header: transferase, immune system/metal binding Chain: I: PDB Molecule: putrescine aminotransferase,immunoglobulin g-binding PDBTitle: crystal structure of the ygjg-protein a-zpa963-calmodulin complex
8	d1qkia2	Alignment		47.2	10	Fold: FwdE/GAPDH domain-like Superfamily: Glyceraldehyde-3-phosphate dehydrogenase-like, C-terminal domain Family: Glucose 6-phosphate dehydrogenase-like
9	c1h9aA_	Alignment		41.3	28	PDB header: oxidoreductase (choh(d) - nad(p)) Chain: A: PDB Molecule: glucose 6-phosphate 1-dehydrogenase; PDBTitle: complex of active mutant (q365->c) of glucose 6-phosphate2 dehydrogenase from l. mesenteroides with coenzyme nadp
10	c2zuuA_	Alignment		40.8	32	PDB header: transferase Chain: A: PDB Molecule: lacto-n-biose phosphorylase; PDBTitle: crystal structure of galacto-n-biose/lacto-n-biose i phosphorylase in2 complex with glcnac
11	c3imkA_	Alignment		40.4	29	PDB header: metal binding protein Chain: A: PDB Molecule: putative molybdenum carrier protein; PDBTitle: crystal structure of putative molybdenum carrier protein (yp_461806.1)2 from syntrophus aciditrophicus sb at 1.45 a resolution

12	d1gk8a1			40.2	15	Fold: TIM beta/alpha-barrel Superfamily: RuBisCo, C-terminal domain Family: RuBisCo, large subunit, C-terminal domain
13	c2bh1B			39.9	10	PDB header: oxidoreductase Chain: B: PDB Molecule: glucose-6-phosphate 1-dehydrogenase; PDBTitle: x-ray structure of human glucose-6-phosphate dehydrogenase (deletion2 variant) complexed with glucose-6 phosphate
14	d1h9aa2			38.6	26	Fold: FwdE/GAPDH domain-like Superfamily: Glyceraldehyde-3-phosphate dehydrogenase-like, C-terminal domain Family: Glucose 6-phosphate dehydrogenase-like
15	c3n5mD			38.3	19	PDB header: transferase Chain: D: PDB Molecule: adenosylmethionine-8-amino-7-oxononanoate aminotransferase; PDBTitle: crystals structure of a bacillus anthracis aminotransferase
16	d1gsoa2			38.0	39	Fold: PreATP-grasp domain Superfamily: PreATP-grasp domain Family: BC N-terminal domain-like
17	c3fseB			37.6	18	PDB header: hydrolase Chain: B: PDB Molecule: two-domain protein containing dj-1/thij/pfpi-like and PDBTitle: crystal structure of a two-domain protein containing dj-1/thij/pfpi-2 like and ferritin-like domains (ava_4496) from anabaena variabilis3 atcc 29413 at 1.90 a resolution
18	c5ddwD			34.9	16	PDB header: transferase Chain: D: PDB Molecule: crmg; PDBTitle: crystal structure of aminotransferase crmg from actinomycetoides sp.2 wh1-2216-6 in complex with the pmp external aldimine adduct with3 caerulomycin m
19	c2vwtA			34.3	22	PDB header: lyase Chain: A: PDB Molecule: yfau, 2-keto-3-deoxy sugar aldolase; PDBTitle: crystal structure of yfau, a metal ion dependent class ii2 aldolase from escherichia coli k12 - mg-pyruvate product3 complex
20	c3qz6A			34.3	19	PDB header: lyase Chain: A: PDB Molecule: hpch/hpai aldolase; PDBTitle: the crystal structure of hpch/hpai aldolase from desulfobacterium2 hafniense dcb-2
21	c4e9iB		not modelled	33.5	10	PDB header: oxidoreductase Chain: B: PDB Molecule: glucose-6-phosphate 1-dehydrogenase; PDBTitle: glucose-6-p dehydrogenase (apo form) from trypanosoma cruzi
22	c3r5wO		not modelled	32.3	18	PDB header: oxidoreductase Chain: O: PDB Molecule: deazaflavin-dependent nitroreductase; PDBTitle: structure of ddn, the deazaflavin-dependent nitroreductase from2 mycobacterium tuberculosis involved in bioreductive activation of pa-3 824, with co-factor f420
23	c2yqeA		not modelled	31.9	20	PDB header: dna binding protein Chain: A: PDB Molecule: jumonji/arid domain-containing protein 1d; PDBTitle: solution structure of the arid domain of jard1d protein
24	d1to3a		not modelled	30.9	11	Fold: TIM beta/alpha-barrel Superfamily: Aldolase Family: Class I aldolase
25	d1dxea		not modelled	30.7	24	Fold: TIM beta/alpha-barrel Superfamily: Phosphoenolpyruvate/pyruvate domain Family: HpcH/HpaI aldolase
26	c1qkiE		not modelled	28.2	10	PDB header: oxidoreductase Chain: E: PDB Molecule: glucose-6-phosphate 1-dehydrogenase; PDBTitle: x-ray structure of human glucose 6-phosphate dehydrogenase (variant2 canton r459l) complexed with structural nadp+
27	c3pdIB		not modelled	27.4	14	PDB header: protein binding Chain: B: PDB Molecule: nitrogenase mofe cofactor biosynthesis protein nifn; PDBTitle: precursor bound nifen
28	c5u03C		not modelled	27.2	16	PDB header: ligase, protein fibril Chain: C: PDB Molecule: ctp synthase 1; PDBTitle: cryo-em structure of the human ctp synthase filament

29	c3r5zB		Alignment	not modelled	27.0	23	PDB header: unknown function Chain: B: PDB Molecule: putative uncharacterized protein; PDBTitle: structure of a deazafavin-dependent reductase from nocardia2 farcinica, with co-factor f420
30	c2issF		Alignment	not modelled	26.7	18	PDB header: lyase, transferase Chain: F: PDB Molecule: glutamine amidotransferase subunit pdxt; PDBTitle: structure of the plp synthase holoenzyme from thermotoga maritima
31	c5n6yE		Alignment	not modelled	26.6	13	PDB header: oxidoreductase Chain: E: PDB Molecule: nitrogenase vanadium-iron protein beta chain; PDBTitle: azotobacter vinelandii vanadium nitrogenase
32	c4tv6A		Alignment	not modelled	26.3	23	PDB header: lyase Chain: A: PDB Molecule: 2-dehydro-3-deoxyglucarate aldolase; PDBTitle: crystal structure of citrate synthase variant sbng e151q
33	c4e77A		Alignment	not modelled	24.7	23	PDB header: isomerase Chain: A: PDB Molecule: glutamate-1-semialdehyde 2,1-aminomutase; PDBTitle: 2.0a crystal structure of a glutamate-1-semialdehyde aminotransferase2 from yersinia pestis co92
34	c3h96B		Alignment	not modelled	24.0	14	PDB header: flavoprotein Chain: B: PDB Molecule: f420-h2 dependent reductase a; PDBTitle: msmeg_3358 f420 reductase
35	c3cneD		Alignment	not modelled	23.4	17	PDB header: hydrolase Chain: D: PDB Molecule: putative protease i; PDBTitle: crystal structure of the putative protease i from bacteroides2 thetaiotaomicron
36	c4a0rB		Alignment	not modelled	23.2	23	PDB header: transferase Chain: B: PDB Molecule: adenosylmethionine-8-amino-7-oxononanoate PDBTitle: structure of bifunctional dapa aminotransferase-dtb synthetase from2 arabidopsis thaliana bound to dethiobiotin (dtb).
37	c2zw3B		Alignment	not modelled	22.5	50	PDB header: cell adhesion Chain: B: PDB Molecule: gap junction beta-2 protein; PDBTitle: structure of the connexin-26 gap junction channel at 3.52 angstrom resolution
38	c3bs8A		Alignment	not modelled	21.8	26	PDB header: isomerase Chain: A: PDB Molecule: glutamate-1-semialdehyde 2,1-aminomutase; PDBTitle: crystal structure of glutamate 1-semialdehyde aminotransferase2 complexed with pyridoxamine-5'-phosphate from bacillus subtilis
39	d1qh8a		Alignment	not modelled	21.3	13	Fold: Chelatase-like Superfamily: "Helical backbone" metal receptor Family: Nitrogenase iron-molybdenum protein
40	c2ywja		Alignment	not modelled	20.4	16	PDB header: transferase Chain: A: PDB Molecule: glutamine amidotransferase subunit pdxt; PDBTitle: crystal structure of uncharacterized conserved protein from2 methanocaldococcus jannaschii
41	d1iloa		Alignment	not modelled	20.4	27	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Thioltransferase
42	c6mhqE		Alignment	not modelled	20.2	50	PDB header: membrane protein Chain: E: PDB Molecule: gap junction alpha-3 protein, connexin-46; PDBTitle: structure of connexin-46 intercellular gap junction channel at 3.42 angstrom resolution by cryoem
43	c3on1A		Alignment	not modelled	19.9	14	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: bh2414 protein; PDBTitle: the structure of a protein with unknown function from bacillus2 halodurans c
44	c5v1tA		Alignment	not modelled	19.5	29	PDB header: metal binding protein Chain: A: PDB Molecule: radical sam; PDBTitle: crystal structure of streptococcus suis sub1 bound to precursor2 peptide sua
45	d1jqna		Alignment	not modelled	19.4	25	Fold: TIM beta/alpha-barrel Superfamily: Phosphoenolpyruvate/pyruvate domain Family: Phosphoenolpyruvate carboxylase
46	c4zdiE		Alignment	not modelled	19.3	16	PDB header: ligase Chain: E: PDB Molecule: ctp synthase; PDBTitle: crystal structure of the m. tuberculosis ctp synthase pyrg (apo form)
47	d1b8ta4		Alignment	not modelled	19.3	32	Fold: Glucocorticoid receptor-like (DNA-binding domain) Superfamily: Glucocorticoid receptor-like (DNA-binding domain) Family: LIM domain
48	d1wv2a		Alignment	not modelled	19.2	21	Fold: TIM beta/alpha-barrel Superfamily: ThiG-like Family: ThiG-like
49	c4y9iA		Alignment	not modelled	19.1	18	PDB header: oxidoreductase Chain: A: PDB Molecule: mycobacterium tuberculosis paralogous family 11; PDBTitle: structure of f420-h2 dependent reductase (fdr-a) msmeag_2027
50	c3jrkG		Alignment	not modelled	18.2	32	PDB header: lyase Chain: G: PDB Molecule: tagatose 1,6-diphosphate aldolase 2; PDBTitle: a putative tagatose 1,6-diphosphate aldolase from streptococcus2 pyogenes
51	d2nv0a1		Alignment	not modelled	18.2	19	Fold: Flavodoxin-like Superfamily: Class I glutamine amidotransferase-like Family: Class I glutamine amidotransferases (GAT)
52	d1m1na		Alignment	not modelled	18.1	15	Fold: Chelatase-like Superfamily: "Helical backbone" metal receptor Family: Nitrogenase iron-molybdenum protein
53	c2lbwA		Alignment	not modelled	17.8	32	PDB header: rna binding protein Chain: A: PDB Molecule: h/aca ribonucleoprotein complex subunit 2; PDBTitle: solution structure of the s. cerevisiae h/aca rnp protein nhp2p-s82w2 mutant

54	c1hyuA	Alignment	not modelled	17.6	18	PDB header: oxidoreductase Chain: A: PDB Molecule: alkyl hydroperoxide reductase subunit f; PDBTitle: crystal structure of intact ahpf
55	c3p2aB	Alignment	not modelled	17.5	23	PDB header: oxidoreductase Chain: B: PDB Molecule: putative thioredoxin-like protein; PDBTitle: crystal structure of thioredoxin 2 from yersinia pestis
56	d1jqoa	Alignment	not modelled	17.3	35	Fold: TIM beta/alpha-barrel Superfamily: Phosphoenolpyruvate/pyruvate domain Family: Phosphoenolpyruvate carboxylase
57	c1jqoA	Alignment	not modelled	17.3	35	PDB header: lyase Chain: A: PDB Molecule: phosphoenolpyruvate carboxylase; PDBTitle: crystal structure of c4-form phosphoenolpyruvate carboxylase from2 maize
58	c4b5sB	Alignment	not modelled	17.3	19	PDB header: lyase Chain: B: PDB Molecule: 4-hydroxy-2-oxo-heptane-1,7-dioate aldolase; PDBTitle: crystal structures of divalent metal dependent pyruvate aldolase,2 hpai, in complex with pyruvate
59	c2v5jB	Alignment	not modelled	16.9	15	PDB header: lyase Chain: B: PDB Molecule: 2,4-dihydroxyhept-2-ene-1,7-dioic acid aldolase; PDBTitle: apo class ii aldolase hpcch
60	d2pv7a2	Alignment	not modelled	16.8	19	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: 6-phosphogluconate dehydrogenase-like, N-terminal domain
61	c3hmuA	Alignment	not modelled	16.7	17	PDB header: transferase Chain: A: PDB Molecule: aminotransferase, class iii; PDBTitle: crystal structure of a class iii aminotransferase from silicibacter2 pomeroyi
62	d1un2a	Alignment	not modelled	16.5	56	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Dsba-like
63	c3l44A	Alignment	not modelled	15.9	25	PDB header: isomerase Chain: A: PDB Molecule: glutamate-1-semialdehyde 2,1-aminomutase 1; PDBTitle: crystal structure of bacillus anthracis heml-1, glutamate semialdehyde2 aminotransferase
64	d1qh8b	Alignment	not modelled	15.8	11	Fold: Chelatase-like Superfamily: "Helical backbone" metal receptor Family: Nitrogenase iron-molybdenum protein
65	d1miob	Alignment	not modelled	15.4	19	Fold: Chelatase-like Superfamily: "Helical backbone" metal receptor Family: Nitrogenase iron-molybdenum protein
66	c2eqyA	Alignment	not modelled	15.2	18	PDB header: dna binding protein Chain: A: PDB Molecule: jumonji, at rich interactive domain 1b; PDBTitle: solution structure of the arid domain of jarid1b protein
67	c4nn7A	Alignment	not modelled	15.1	40	PDB header: cytokine/cytokine receptor Chain: A: PDB Molecule: thymic stromal lymphopoietin; PDBTitle: cytokine receptor complex - crystal form 2
68	d1xb4a1	Alignment	not modelled	15.1	23	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: Vacuolar sorting protein domain
69	c1vcnA	Alignment	not modelled	14.9	16	PDB header: ligase Chain: A: PDB Molecule: ctp synthetase; PDBTitle: crystal structure of t.th. hb8 ctp synthetase complex with sulfate2 anion
70	d1xi3a	Alignment	not modelled	14.8	13	Fold: TIM beta/alpha-barrel Superfamily: Thiamin phosphate synthase Family: Thiamin phosphate synthase
71	d1q7ra	Alignment	not modelled	14.7	18	Fold: Flavodoxin-like Superfamily: Class I glutamine amidotransferase-like Family: Class I glutamine amidotransferases (GAT)
72	c1vw4W	Alignment	not modelled	14.6	29	PDB header: ribosome Chain: W: PDB Molecule: 54s ribosomal protein l32, mitochondrial; PDBTitle: structure of the yeast mitochondrial large ribosomal subunit
73	c3r5yC	Alignment	not modelled	14.5	18	PDB header: unknown function Chain: C: PDB Molecule: putative uncharacterized protein; PDBTitle: structure of a deazafavin-dependent nitroreductase from nocardia2 farginica, with co-factor f420
74	d1vlia2	Alignment	not modelled	14.2	24	Fold: TIM beta/alpha-barrel Superfamily: Aldolase Family: NeuB-like
75	c2ordA	Alignment	not modelled	14.2	14	PDB header: transferase Chain: A: PDB Molecule: acetylornithine aminotransferase; PDBTitle: crystal structure of acetylornithine aminotransferase (ec 2.6.1.11)2 (acoat) (tm1785) from thermotoga maritima at 1.40 a resolution
76	c3aerB	Alignment	not modelled	14.1	7	PDB header: oxidoreductase Chain: B: PDB Molecule: light-independent protochlorophyllide reductase subunit b; PDBTitle: structure of the light-independent protochlorophyllide reductase2 catalyzing a key reduction for greening in the dark
77	c3graA	Alignment	not modelled	13.8	20	PDB header: transcription regulator Chain: A: PDB Molecule: transcriptional regulator, arac family; PDBTitle: crystal structure of arac family transcriptional regulator from2 pseudomonas putida
78	d1mnda2	Alignment	not modelled	13.5	40	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Motor proteins
79	c3dtpA	Alignment	not modelled	13.4	40	PDB header: contractile protein Chain: A: PDB Molecule: myosin 2 heavy chain chimera of smooth and cardiac muscle;

80	c3jbhA_	Alignment	not modelled	13.3	40	PDBTitle: tarantula heavy meromyosin obtained by flexible docking to tarantula2 muscle thick filament cryo-em 3d-map PDB header: contractile protein Chain: A: PDB Molecule: myosin 2 heavy chain striated muscle; PDBTitle: two heavy meromyosin interacting-heads motifs flexible docked into2 tarantula thick filament 3d-map allows in depth study of intra- and3 intermolecular interactions
81	c1ni5A_	Alignment	not modelled	13.2	20	PDB header: cell cycle Chain: A: PDB Molecule: putative cell cycle protein mesj; PDBTitle: structure of the mesj pp-atpase from escherichia coli
82	c4rjfB_	Alignment	not modelled	12.7	56	PDB header: replication Chain: B: PDB Molecule: cyclin-dependent kinase inhibitor 1; PDBTitle: crystal structure of the human sliding clamp at 2.0 angstrom2 resolution
83	c1nj3A_	Alignment	not modelled	12.7	33	PDB header: protein binding Chain: A: PDB Molecule: npl4; PDBTitle: structure and ubiquitin interactions of the conserved nzf domain of2 npl4
84	c4rjfD_	Alignment	not modelled	12.6	56	PDB header: replication Chain: D: PDB Molecule: cyclin-dependent kinase inhibitor 1; PDBTitle: crystal structure of the human sliding clamp at 2.0 angstrom2 resolution
85	c4atpD_	Alignment	not modelled	12.6	26	PDB header: transferase Chain: D: PDB Molecule: 4-aminobutyrate transaminase; PDBTitle: structure of gaba-transaminase a1r958 from arthrobacter aurescens in2 complex with plp
86	c3ewnA_	Alignment	not modelled	12.6	15	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: thij/pfpi family protein; PDBTitle: crystal structure of thij/pfpi family protein from pseudomonas2 syringae
87	d1br2a2	Alignment	not modelled	12.5	40	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Motor proteins
88	d1fa2a_	Alignment	not modelled	12.4	27	Fold: TIM beta/alpha-barrel Superfamily: (Trans)glycosidases Family: Amylase, catalytic domain
89	c1oe9A_	Alignment	not modelled	12.3	50	PDB header: atpase/myosin Chain: A: PDB Molecule: myosin va; PDBTitle: crystal structure of myosin v motor with essential light2 chain - nucleotide-free
90	c4qbdC_	Alignment	not modelled	12.3	40	PDB header: motor protein Chain: C: PDB Molecule: myosin heavy chain, muscle; PDBTitle: the first x-ray crystal structure of an insect muscle myosin.2 drosophila melanogaster, skeletal muscle myosin ii, an embryonic3 isoform, subfragment-1
91	c2cy8A_	Alignment	not modelled	12.0	17	PDB header: transferase Chain: A: PDB Molecule: d-phenylglycine aminotransferase; PDBTitle: crystal structure of d-phenylglycine aminotransferase (d-phgat) from2 pseudomonas strutzeri st-201
92	c4byfA_	Alignment	not modelled	12.0	50	PDB header: hydrolase Chain: A: PDB Molecule: unconventional myosin-ic; PDBTitle: crystal structure of human myosin 1c in complex with2 calmodulin in the pre-power stroke state
93	c6nvoA_	Alignment	not modelled	12.0	15	PDB header: dna binding protein Chain: A: PDB Molecule: nuclease mpe; PDBTitle: crystal structure of pseudomonas putida nuclease mpe
94	c1ldbA_	Alignment	not modelled	12.0	16	PDB header: oxidoreductase(choh(d)-nad(a)) Chain: A: PDB Molecule: apo-l-lactate dehydrogenase; PDBTitle: structure determination and refinement of bacillus2 stearothermophilus lactate dehydrogenase
95	c6dueA_	Alignment	not modelled	12.0	50	PDB header: motor protein Chain: A: PDB Molecule: myosin a; PDBTitle: toxoplasma gondii myoa, a class-xiv myosin, in the pre-powerstroke2 state
96	d1qdlb_	Alignment	not modelled	11.9	11	Fold: Flavodoxin-like Superfamily: Class I glutamine amidotransferase-like Family: Class I glutamine amidotransferases (GAT)
97	c1w9iA_	Alignment	not modelled	11.8	40	PDB header: myosin Chain: A: PDB Molecule: myosin ii heavy chain; PDBTitle: myosin ii dictyostelium discoideum motor domain s456y bound2 with mgadp-befx
98	c2r5rA_	Alignment	not modelled	11.8	15	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: upf0343 protein ne1163; PDBTitle: the crystal structure of duf198 from nitrosomonas europaea2 atcc 19718
99	d1w7ja2	Alignment	not modelled	11.7	50	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Motor proteins