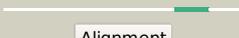
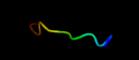
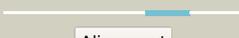
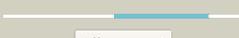
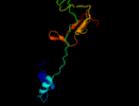
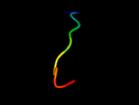
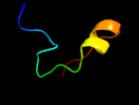
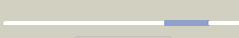


Phyre2

Email	mdejesus@rockefeller.edu
Description	RVBD0877 (-) _976078_976866
Date	Fri Jul 26 01:50:46 BST 2019
Unique Job ID	451e6f3d5362cc95

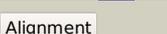
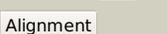
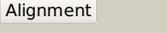
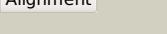
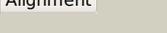
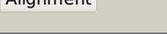
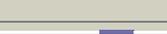
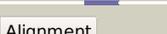
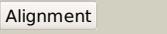
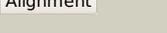
Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c3d0fA_	 Alignment		56.4	27	PDB header: transferase Chain: A; PDB Molecule: penicillin-binding 1 transmembrane protein mrca; PDBTitle: structure of the big_1156.2 domain of putative penicillin-binding2 protein mrca from nitrosomonas europaea atcc 19718
2	d1js2a_	 Alignment		50.0	17	Fold: HIPIP (high potential iron protein) Superfamily: HIPIP (high potential iron protein) Family: HIPIP (high potential iron protein)
3	c4d0mW_	 Alignment		41.7	27	PDB header: signaling protein Chain: W; PDB Molecule: phosphatidylinositol 4-kinase beta; PDBTitle: phosphatidylinositol 4-kinase iii beta in a complex with rab11a-gtp-2 gamma-s and the rab-binding domain of fip3
4	d1b0ya_	 Alignment		40.2	22	Fold: HIPIP (high potential iron protein) Superfamily: HIPIP (high potential iron protein) Family: HIPIP (high potential iron protein)
5	c6e7aY_	 Alignment		38.2	17	PDB header: dna binding protein/dna/rna Chain: Y; PDB Molecule: casx; PDBTitle: casx-grna-dna(30bp) state ii
6	c3csqC_	 Alignment		32.9	14	PDB header: hydrolase Chain: C; PDB Molecule: morphogenesis protein 1; PDBTitle: crystal and cryoem structural studies of a cell wall2 degrading enzyme in the bacteriophage phi29 tail
7	c3ls8A_	 Alignment		30.1	18	PDB header: transferase Chain: A; PDB Molecule: phosphatidylinositol 3-kinase catalytic subunit PDBTitle: crystal structure of human pik3c3 in complex with 3-[4-(4-2 morpholinyl)thieno[3,2-d]pyrimidin-2-yl]-phenol
8	c3h31A_	 Alignment		30.0	20	PDB header: electron transport Chain: A; PDB Molecule: high potential iron-sulfur protein; PDBTitle: structure of rhodothermus marinus hipip at 1.0 a resolution
9	d1e7ua4	 Alignment		29.7	18	Fold: Protein kinase-like (PK-like) Superfamily: Protein kinase-like (PK-like) Family: Phosphoinositide 3-kinase (PI3K), catalytic domain
10	d1hlqa_	 Alignment		28.9	24	Fold: HIPIP (high potential iron protein) Superfamily: HIPIP (high potential iron protein) Family: HIPIP (high potential iron protein)
11	d1ckqa_	 Alignment		28.2	32	Fold: Restriction endonuclease-like Superfamily: Restriction endonuclease-like Family: Restriction endonuclease EcoRI

12	c2wanA_	Alignment		28.2	25	PDB header: hydrolase Chain: A: PDB Molecule: pullulanase; PDBTitle: pullulanase from bacillus acidopullulyticus
13	c2x6kB_	Alignment		27.7	18	PDB header: transferase Chain: B: PDB Molecule: phosphatidylinositol 3 kinase 59f; PDBTitle: the crystal structure of the drosophila class iii pi3-kinase vps34 in2 complex with pi-103
14	c2akfA_	Alignment		26.6	17	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: phna-like protein pa0128; PDBTitle: solution structure for phn-a like protein pa0128 from2 pseudomonas aeruginosa
15	d4znfa_	Alignment		25.8	29	Fold: beta-beta-alpha zinc fingers Superfamily: beta-beta-alpha zinc fingers Family: Classic zinc finger, C2H2
16	c3znfA_	Alignment		25.8	29	PDB header: zinc finger dna binding domain Chain: A: PDB Molecule: zinc finger; PDBTitle: high-resolution three-dimensional structure of a single2 zinc finger from a human enhancer binding protein in3 solution
17	c4znfA_	Alignment		25.8	29	PDB header: zinc finger dna binding domain Chain: A: PDB Molecule: zinc finger; PDBTitle: high-resolution three-dimensional structure of a single2 zinc finger from a human enhancer binding protein in3 solution
18	d3hipa_	Alignment		25.0	19	Fold: HIPIP (high potential iron protein) Superfamily: HIPIP (high potential iron protein) Family: HIPIP (high potential iron protein)
19	c2lxwA_	Alignment		23.8	60	PDB header: apoptosis Chain: A: PDB Molecule: xiap-associated factor 1; PDBTitle: the solution structure of xiap(ring)-binding domain of human xaf1
20	d1dkca_	Alignment		23.6	36	Fold: Knottins (small inhibitors, toxins, lectins) Superfamily: Gurmarin-like Family: Antifungal peptide
21	c5dfzC_	Alignment	not modelled	22.9	27	PDB header: transferase Chain: C: PDB Molecule: phosphatidylinositol 3-kinase vps34; PDBTitle: structure of vps34 complex ii from s. cerevisiae.
22	d2akla2	Alignment	not modelled	22.2	17	Fold: Rubredoxin-like Superfamily: Zinc beta-ribbon Family: PhnA zinc-binding domain
23	d2gmga1	Alignment	not modelled	22.0	50	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: PF0610-like
24	c4av1C_	Alignment	not modelled	19.9	27	PDB header: transferase Chain: C: PDB Molecule: poly [adp-ribose] polymerase 1; PDBTitle: crystal structure of the human parp-1 dna binding domain in2 complex with dna
25	c1vzhB_	Alignment	not modelled	19.2	15	PDB header: oxidoreductase Chain: B: PDB Molecule: desulfoferrodoxin; PDBTitle: structure of superoxide reductase bound to ferrocyanide and active2 site expansion upon x-ray induced photoreduction
26	c3j3v0_	Alignment	not modelled	19.0	32	PDB header: ribosome Chain: 0: PDB Molecule: 50s ribosomal protein l32; PDBTitle: atomic model of the immature 50s subunit from bacillus subtilis (state2 i-a)
27	d1hpia_	Alignment	not modelled	19.0	20	Fold: HIPIP (high potential iron protein) Superfamily: HIPIP (high potential iron protein) Family: HIPIP (high potential iron protein)
28	d2j0151	Alignment	not modelled	18.5	26	Fold: Rubredoxin-like Superfamily: Zn-binding ribosomal proteins Family: Ribosomal protein L32p
						Fold: Rubredoxin-like

29	d2zjz1	Alignment	not modelled	17.9	21	Superfamily: Zn-binding ribosomal proteins Family: Ribosomal protein L32p
30	d1isua	Alignment	not modelled	17.9	40	Fold: HIPIP (high potential iron protein) Superfamily: HIPIP (high potential iron protein) Family: HIPIP (high potential iron protein)
31	c2y3aA	Alignment	not modelled	17.9	14	PDB header: transferase Chain: A: PDB Molecule: phosphatidylinositol-4,5-bisphosphate 3-kinase catalytic PDBTitle: crystal structure of p110beta in complex with icsh2 of p85beta and the2 drug gdc-0941
32	c3rx9A	Alignment	not modelled	17.3	22	PDB header: lipid binding protein Chain: A: PDB Molecule: putative uncharacterized protein; PDBTitle: 3d structure of scin from an escherichia coli patotype
33	c5yz0A	Alignment	not modelled	17.3	30	PDB header: cell cycle Chain: A: PDB Molecule: serine/threonine-protein kinase atr; PDBTitle: cryo-em structure of human atr-atrip complex
34	d2k4xa1	Alignment	not modelled	17.3	42	Fold: Rubredoxin-like Superfamily: Zn-binding ribosomal proteins Family: Ribosomal protein S27a
35	c1sxbB	Alignment	not modelled	17.1	42	PDB header: replication Chain: B: PDB Molecule: activator 1 37 kda subunit; PDBTitle: crystal structure of the eukaryotic clamp loader (replication factor2 c, rfc) bound to the dna sliding clamp (proliferating cell nuclear3 antigen, pcna)
36	c4jspA	Alignment	not modelled	17.0	20	PDB header: transferase Chain: A: PDB Molecule: serine/threonine-protein kinase mtor; PDBTitle: structure of mtordeltan-mlst8-atpgammas-mg complex
37	c3tkaA	Alignment	not modelled	16.9	44	PDB header: transferase Chain: A: PDB Molecule: ribosomal rna small subunit methyltransferase h; PDBTitle: crystal structure and solution saxs of methyltransferase rsmh from2 e.coli
38	c2wxoA	Alignment	not modelled	16.9	13	PDB header: transferase Chain: A: PDB Molecule: phosphatidylinositol-4,5-bisphosphate 3-kinase catalytic PDBTitle: the crystal structure of the murine class ia pi 3-kinase p110delta in2 complex with as5.
39	c3tu8A	Alignment	not modelled	16.7	53	PDB header: unknown function Chain: A: PDB Molecule: burkholderia lethal factor 1 (blf1); PDBTitle: crystal structure of the burkholderia lethal factor 1 (blf1)
40	c3fhdA	Alignment	not modelled	16.6	25	PDB header: hydrolase Chain: A: PDB Molecule: orf 37; PDBTitle: crystal structure of the shutoff and exonuclease protein from kaposi2 sarcoma associated herpesvirus
41	c5h64a	Alignment	not modelled	16.2	20	PDB header: transferase Chain: A: PDB Molecule: serine/threonine-protein kinase mtor; PDBTitle: cryo-em structure of mtorc1
42	c1wg8B	Alignment	not modelled	16.1	31	PDB header: transferase Chain: B: PDB Molecule: predicted s-adenosylmethionine-dependent PDBTitle: crystal structure of a predicted s-adenosylmethionine-2 dependent methyltransferase tt1512 from thermus3 thermophilus hb8.
43	d1qf8a	Alignment	not modelled	16.1	32	Fold: Rubredoxin-like Superfamily: Casein kinase II beta subunit Family: Casein kinase II beta subunit
44	d1iuaa	Alignment	not modelled	15.9	19	Fold: HIPIP (high potential iron protein) Superfamily: HIPIP (high potential iron protein) Family: HIPIP (high potential iron protein)
45	d2hipa	Alignment	not modelled	15.7	18	Fold: HIPIP (high potential iron protein) Superfamily: HIPIP (high potential iron protein) Family: HIPIP (high potential iron protein)
46	c5x51X	Alignment	not modelled	15.1	21	PDB header: transferase Chain: X: PDB Molecule: rna polymerase subunit, found in rna polymerase complexes PDBTitle: rna polymerase ii from komagataella pastoris (type-3 crystal)
47	c2ja6L	Alignment	not modelled	15.1	21	PDB header: transferase Chain: L: PDB Molecule: dna-directed rna polymerases i, ii, and iii 7.7 kda PDBTitle: cpd lesion containing rna polymerase ii elongation complex b
48	c5cm2Z	Alignment	not modelled	15.0	20	PDB header: transferase Chain: Z: PDB Molecule: trna methyltransferase; PDBTitle: insights into molecular plasticity in protein complexes from trm9-2 trm112 trna modifying enzyme crystal structure
49	d2d8xa2	Alignment	not modelled	14.9	27	Fold: Glucocorticoid receptor-like (DNA-binding domain) Superfamily: Glucocorticoid receptor-like (DNA-binding domain) Family: LIM domain
50	c5is5A	Alignment	not modelled	14.8	18	PDB header: transferase Chain: A: PDB Molecule: phosphatidylinositol 4,5-bisphosphate 3-kinase catalytic PDBTitle: discovery and pharmacological characterization of novel quinazoline-2 based pi3k delta-selective inhibitors
51	c2uzhB	Alignment	not modelled	14.7	20	PDB header: lyase Chain: B: PDB Molecule: 2c-methyl-d-erythritol 2,4-cyclodiphosphate PDBTitle: mycobacterium smegmatis 2c-methyl-d-erythritol-2,4-2 cyclodiphosphate synthase (ispf)
52	c5dxuA	Alignment	not modelled	14.7	14	PDB header: transferase/inhibitor Chain: A: PDB Molecule: phosphatidylinositol 4,5-bisphosphate 3-kinase catalytic PDBTitle: p110delta/p85alpha with gdc-0326
53	c3h0nl	Alignment	not modelled	14.4	27	PDB header: transcription Chain: L: PDB Molecule: dna-directed rna polymerases i, ii, and iii

53	c1rv9L	Alignment	not modelled	14.4	27	subunit rpabc4; PDBTitle: rna polymerase ii from schizosaccharomyces pombe
54	c5zcsB	Alignment	not modelled	14.3	20	PDB header: gene regulation Chain: B: PDB Molecule: serine/threonine-protein kinase mtor; PDBTitle: 4.9 angstrom cryo-em structure of human mtor complex 2
55	d1twfj	Alignment	not modelled	14.3	15	Fold: DNA/RNA-binding 3-helical bundle Superfamily: RNA polymerase subunit RPB10 Family: RNA polymerase subunit RPB10
56	c3odeA	Alignment	not modelled	14.1	19	PDB header: dna binding protein/dna Chain: A: PDB Molecule: poly [adp-ribose] polymerase 1; PDBTitle: human parp-1 zinc finger 2 (zn2) bound to dna
57	d2j4wd1	Alignment	not modelled	14.0	29	Fold: Apical membrane antigen 1 Superfamily: Apical membrane antigen 1 Family: Apical membrane antigen 1
58	c2j4wD	Alignment	not modelled	14.0	29	PDB header: immune system Chain: D: PDB Molecule: apical membrane antigen 1; PDBTitle: structure of a plasmodium vivax apical membrane antigen 1-2 fab f8.12.19 complex
59	c3vpbF	Alignment	not modelled	13.9	35	PDB header: ligase Chain: F: PDB Molecule: alpha-aminoadipate carrier protein lysw; PDBTitle: argx from sulfolobus tokodaii complexed with2 lysw/glu/adp/mg/zn/sulfate
60	c2rd0A	Alignment	not modelled	13.9	21	PDB header: transferase/oncoprotein Chain: A: PDB Molecule: phosphatidylinositol-4,5-bisphosphate 3-kinase catalytic PDBTitle: structure of a human p110alpha/p85alpha complex
61	c2w45A	Alignment	not modelled	13.8	27	PDB header: hydrolase Chain: A: PDB Molecule: alkaline exonuclease; PDBTitle: epstein-barr virus alkaline nuclease
62	c4yknA	Alignment	not modelled	13.6	21	PDB header: transferase/transferase inhibitor Chain: A: PDB Molecule: phosphatidylinositol 3-kinase regulatory subunit alpha, PDBTitle: pi3k alpha lipid kinase with active site inhibitor
63	d1yzha1	Alignment	not modelled	13.5	19	Fold: S-adenosyl-L-methionine-dependent methyltransferases Superfamily: S-adenosyl-L-methionine-dependent methyltransferases Family: TrmB-like
64	d1iqca2	Alignment	not modelled	13.5	20	Fold: Cytochrome c Superfamily: Cytochrome c Family: Di-heme cytochrome c peroxidase
65	c2zkr2	Alignment	not modelled	13.4	36	PDB header: ribosomal protein/rna Chain: 2: PDB Molecule: 60s ribosomal protein l37e; PDBTitle: structure of a mammalian ribosomal 60s subunit within an 80s complex2 obtained by docking homology models of the rna and proteins into an3 8.7 a cryo-em map
66	c3jvwY	Alignment	not modelled	13.4	36	PDB header: ribosome Chain: Y: PDB Molecule: 60s ribosomal protein l37(a); PDBTitle: structure of the 60s proteins for eukaryotic ribosome based on cryo-em2 map of thermomyces lanuginosus ribosome at 8.9a resolution
67	c1s1iY	Alignment	not modelled	13.0	36	PDB header: ribosome Chain: Y: PDB Molecule: 60s ribosomal protein l37-a; PDBTitle: structure of the ribosomal 80s-eef2-sordarin complex from yeast2 obtained by docking atomic models for rna and protein components into3 a 11.7 a cryo-em map. this file, 1s1i, contains 60s subunit. the 40s4 ribosomal subunit is in file 1s1h.
68	c5flmL	Alignment	not modelled	12.6	21	PDB header: transcription Chain: L: PDB Molecule: dna-directed rna polymerases i, ii, and iii subunit rpabc4; PDBTitle: structure of transcribing mammalian rna polymerase ii
69	d1jwhc	Alignment	not modelled	12.5	32	Fold: Rubredoxin-like Superfamily: Casein kinase II beta subunit Family: Casein kinase II beta subunit
70	c1m6yA	Alignment	not modelled	12.5	31	PDB header: transferase Chain: A: PDB Molecule: s-adenosyl-methyltransferase mraw; PDBTitle: crystal structure analysis of tm0872, a putative sam-dependent2 methyltransferase, complexed with sah
71	c6ba3A	Alignment	not modelled	12.4	32	PDB header: toxin Chain: A: PDB Molecule: u21-hexatoxin-hi1a; PDBTitle: nmr structure of u21-hexatoxin-hi1a toxin from australian funnel-web2 spider hadronyche infensa
72	c5ivaB	Alignment	not modelled	12.4	31	PDB header: transport protein Chain: B: PDB Molecule: lps-assembly lipoprotein lpte; PDBTitle: the lps transporter lptde from pseudomonas aeruginosa, core complex
73	c2kaeA	Alignment	not modelled	12.3	15	PDB header: transcription/dna Chain: A: PDB Molecule: gata-type transcription factor; PDBTitle: data-driven model of med1:dna complex
74	c2dmjA	Alignment	not modelled	12.3	27	PDB header: transferase Chain: A: PDB Molecule: poly (adp-ribose) polymerase family, member 1; PDBTitle: solution structure of the first zf-parp domain of human2 poly(adp-ribose)polymerase-1
75	c1e8zA	Alignment	not modelled	12.3	14	PDB header: transferase Chain: A: PDB Molecule: phosphatidylinositol 3-kinase catalytic subunit; PDBTitle: structure determinants of phosphoinositide 3-kinase2 inhibition by wortmannin, ly294002, quercetin, myricetin3 and staurosporine
76	c5np1A	Alignment	not modelled	12.2	20	PDB header: transferase Chain: A: PDB Molecule: serine-protein kinase atm; PDBTitle: open protomer of human atm (ataxia telangiectasia mutated)
77	c2hntC	Alignment	not modelled	12.2	26	PDB header: serine protease Chain: C: PDB Molecule: gamma-thrombin; PDBTitle: crystallographic structure of human gamma-thrombin

78	c2f9iD	 Alignment	not modelled	12.1	31	PDB header: transferase Chain: D: PDB Molecule: acetyl-coenzyme a carboxylase carboxyl transferase subunit PDBTitle: crystal structure of the carboxyltransferase subunit of acc from 2 staphylococcus aureus
79	c2lzoA	 Alignment	not modelled	11.7	58	PDB header: toxin Chain: A: PDB Molecule: ugtX; PDBTitle: spatial structure of pi-anmtX ugr 9a-1
80	c5fvmB	 Alignment	not modelled	11.7	40	PDB header: transferase Chain: B: PDB Molecule: serine/threonine-protein kinase tor2; PDBTitle: cryo electron microscopy of a complex of tor and Ist8
81	c1e2xA	 Alignment	not modelled	11.5	18	PDB header: transcriptional regulation Chain: A: PDB Molecule: fatty acid metabolism regulator protein; PDBTitle: fadr, fatty acid responsive transcription factor from e.2 coli
82	c3j21e	 Alignment	not modelled	11.5	45	PDB header: ribosome Chain: E: PDB Molecule: 50s ribosomal protein l5p; PDBTitle: promiscuous behavior of proteins in archaeal ribosomes revealed by 2 cryo-em: implications for evolution of eukaryotic ribosomes (50s3 ribosomal proteins)
83	d1vqo11	 Alignment	not modelled	11.4	55	Fold: Rubredoxin-like Superfamily: Zn-binding ribosomal proteins Family: Ribosomal protein L37e
84	d1nmla2	 Alignment	not modelled	11.4	20	Fold: Cytochrome c Superfamily: Cytochrome c Family: Di-heme cytochrome c peroxidase
85	c1sxD	 Alignment	not modelled	11.1	45	PDB header: replication Chain: D: PDB Molecule: activator 1 41 kda subunit; PDBTitle: crystal structure of the eukaryotic clamp loader (replication factor 2 c, rfc) bound to the dna sliding clamp (proliferating cell nuclear 3 antigen, pcna)
86	c3ongA	 Alignment	not modelled	11.1	29	PDB header: ligase Chain: A: PDB Molecule: ubiquitin-activating enzyme e1-like; PDBTitle: crystal structure of uba2ufd-ubc9: insights into e1-e2 interactions in 2 sumo pathways
87	c5x6oC	 Alignment	not modelled	11.0	30	PDB header: transferase/dna binding protein Chain: C: PDB Molecule: serine/threonine-protein kinase mec1; PDBTitle: intact atr/mec1-atr/ddd2 complex
88	d1zwyA1	 Alignment	not modelled	10.9	34	Fold: Anticodon-binding domain-like Superfamily: TPase-like Family: YjyX-like
89	d1gnfa	 Alignment	not modelled	10.8	22	Fold: Glucocorticoid receptor-like (DNA-binding domain) Superfamily: Glucocorticoid receptor-like (DNA-binding domain) Family: Erythroid transcription factor GATA-1
90	d2vuti1	 Alignment	not modelled	10.6	36	Fold: Glucocorticoid receptor-like (DNA-binding domain) Superfamily: Glucocorticoid receptor-like (DNA-binding domain) Family: Erythroid transcription factor GATA-1
91	d1gk8a1	 Alignment	not modelled	10.5	12	Fold: TIM beta/alpha-barrel Superfamily: RuBisCo, C-terminal domain Family: RuBisCo, large subunit, C-terminal domain
92	d2f9yb1	 Alignment	not modelled	10.3	33	Fold: ClpP/crotonase Superfamily: ClpP/crotonase Family: Biotin dependent carboxylase carboxyltransferase domain
93	c2f9yB	 Alignment	not modelled	10.3	33	PDB header: ligase Chain: B: PDB Molecule: acetyl-coenzyme a carboxylase carboxyl transferase subunit PDBTitle: the crystal structure of the carboxyltransferase subunit of acc from 2 escherichia coli
94	d1vhib	 Alignment	not modelled	10.3	23	Fold: Ferredoxin-like Superfamily: Viral DNA-binding domain Family: Viral DNA-binding domain
95	c3zf7n	 Alignment	not modelled	10.3	18	PDB header: ribosome Chain: N: PDB Molecule: 60s ribosomal protein l13; PDBTitle: high-resolution cryo-electron microscopy structure of the trypanosoma 2 brucei ribosome
96	c2kzyA	 Alignment	not modelled	10.3	33	PDB header: metal binding protein Chain: A: PDB Molecule: zfn5 protein (zinc finger protein 216 (predicted), PDBTitle: solution nmr structure of the znf216 a20 zinc finger
97	d1yuja	 Alignment	not modelled	10.2	19	Fold: beta-beta-alpha zinc fingers Superfamily: beta-beta-alpha zinc fingers Family: Classic zinc finger, C2H2
98	c6ghcA	 Alignment	not modelled	10.1	25	PDB header: hydrolase Chain: A: PDB Molecule: 5-methylcytosine-specific restriction enzyme a; PDBTitle: modification dependent ecomcra restriction endonuclease
99	d1vlma	 Alignment	not modelled	10.0	27	Fold: S-adenosyl-L-methionine-dependent methyltransferases Superfamily: S-adenosyl-L-methionine-dependent methyltransferases Family: UbiE/COQ5-like