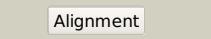
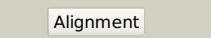
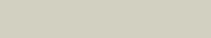
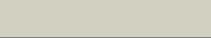
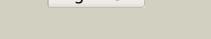


Phyre²

Email	mdejesus@rockefeller.edu
Description	RVBD0199 (-) _236550_237209
Date	Tue Jul 23 14:50:25 BST 2019
Unique Job ID	fe4c919ba2e0c402

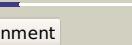
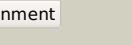
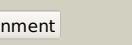
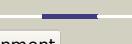
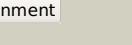
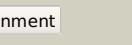
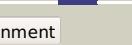
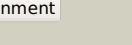
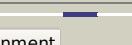
Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c5cnlA_			96.7	9	PDB header: protein transport Chain: A: PDB Molecule: icml-like; PDBTitle: crystal structure of an icml-like type iv secretion system protein2 (lpq0120) from legionella pneumophila subsp. pneumophila str.3 philadelphia 1 at 2.65 a resolution
2	c3wz3A_			96.6	10	PDB header: unknown function Chain: A: PDB Molecule: tram protein; PDBTitle: structure of a periplasmic fragment of tram
3	d2ux0a1			95.9	12	Fold: Cystatin-like Superfamily: NTF2-like Family: Association domain of calcium/calmodulin-dependent protein kinase type II alpha subunit, CAMK2A
4	c3wz4F_			95.9	14	PDB header: unknown function Chain: F: PDB Molecule: doti; PDBTitle: structure of the periplasmic domain of doti (crystal form i)
5	c5d9rA_			95.8	17	PDB header: biosynthetic protein Chain: A: PDB Molecule: protein accumulation and replication of chloroplasts 6, PDBTitle: crystal structure of a conserved domain in the intermembrane space2 region of the plastid division protein arc6
6	d1hkxa_			95.0	16	Fold: Cystatin-like Superfamily: NTF2-like Family: Association domain of calcium/calmodulin-dependent protein kinase type II alpha subunit, CAMK2A
7	c4nhfF_			94.8	12	PDB header: protein transport Chain: F: PDB Molecule: trwg protein; PDBTitle: crystal structure of the soluble domain of trwg type iv secretion2 machinery from bartonella grahamii
8	c5i97C_			93.8	9	PDB header: protein transport Chain: C: PDB Molecule: conjugal transfer protein; PDBTitle: structural analysis and inhibition of trae from the pkm101 type iv2 secretion system
9	d3cu3a1			92.4	13	Fold: Cystatin-like Superfamily: NTF2-like Family: BaiE/LinA-like
10	d3d9ra1			91.9	11	Fold: Cystatin-like Superfamily: NTF2-like Family: ECA1476-like
11	d2f86b1			91.6	11	Fold: Cystatin-like Superfamily: NTF2-like Family: Association domain of calcium/calmodulin-dependent protein kinase type II alpha subunit, CAMK2A

12	d2cc3a1			91.5	14	Fold: Cystatin-like Superfamily: NTF2-like Family: VirB8-like
13	c5ig4A			91.1	10	PDB header: transferase Chain: A: PDB Molecule: predicted protein; PDBTitle: crystal structure of n. vectensis camkii-a hub
14	c5ig5E			90.9	9	PDB header: transferase Chain: E: PDB Molecule: camkii-b hub; PDBTitle: crystal structure of n. vectensis camkii-b hub at ph 4.2
15	c3h51A			90.3	16	PDB header: protein binding Chain: A: PDB Molecule: putative calcium/calmodulin dependent protein kinase ii PDBTitle: crystal structure of putative calcium/calmodulin dependent protein2 kinase ii association domain (np_636218.1) from xanthomonas3 campestris at 1.70 a resolution
16	c4i4kB			89.9	6	PDB header: structural genomics, unknown function Chain: B: PDB Molecule: uncharacterized protein sgcj; PDBTitle: streptomyces globisporus c-1027 9-membered enediye conserved protein2 sgc6
17	c3a76B			89.7	9	PDB header: lyase Chain: B: PDB Molecule: gamma-hexachlorocyclohexane dehydrochlorinase; PDBTitle: the crystal structure of lina
18	c3gzrA			89.1	11	PDB header: unknown function Chain: A: PDB Molecule: uncharacterized protein with a ntf2-like fold; PDBTitle: crystal structure of an uncharacterized protein with a cystatin-like2 fold (cc_2572) from caulobacter vibrioides at 1.40 a resolution
19	c3f7sA			88.3	8	PDB header: unknown function Chain: A: PDB Molecule: uncharacterized ntf2-like protein; PDBTitle: crystal structure of a ntf2-like protein of unknown function (pp_4556)2 from pseudomonas putida kt2440 at 2.11 a resolution
20	c5u9oD			87.9	10	PDB header: cell cycle Chain: D: PDB Molecule: plastid division protein cdp1, chloroplastic/plastid PDBTitle: cocrystal structure of the intermembrane space region of the plastid2 division proteins parc6 and pdv1
21	c4ovmE		not modelled	87.2	9	PDB header: unknown function Chain: E: PDB Molecule: uncharacterized protein sgcj; PDBTitle: crystal structure of sgcj protein from streptomyces carzinostaticus
22	c3robC		not modelled	87.0	9	PDB header: structural genomics, unknown function Chain: C: PDB Molecule: uncharacterized conserved protein; PDBTitle: the crystal structure of a conserved protein from planctomyces2 limnophilus dsm 3776
23	d3b8la1		not modelled	86.6	16	Fold: Cystatin-like Superfamily: NTF2-like Family: BaiE/LinA-like
24	d3stda		not modelled	85.1	16	Fold: Cystatin-like Superfamily: NTF2-like Family: Scytalone dehydratase
25	c6of9G		not modelled	84.0	18	PDB header: unknown function Chain: G: PDB Molecule: camkii hub; PDBTitle: structure of the chlamydamonas reinhardtii camkii hub homology domain
26	d2rfra1		not modelled	80.7	14	Fold: Cystatin-like Superfamily: NTF2-like Family: BaiE/LinA-like
27	d2bhma1		not modelled	79.2	14	Fold: Cystatin-like Superfamily: NTF2-like Family: VirB8-like
28	c2bhmE		not modelled	78.5	14	PDB header: bacterial protein Chain: E: PDB Molecule: type iv secretion system protein virb8; PDBTitle: crystal structure of virb8 from brucella suis
29	c4bh2E		not modelled	77.2	16	PDB header: hydrolase Chain: E: PDB Molecule: putative periplasmic protein;

29	c4n2dc	Alignment	not modelled	77.2	10	PDBTitle: crystal structure of the type vii secretor-immunity complex tae3-2 tai3 from ralstonia pickettii
30	d1idpa	Alignment	not modelled	77.2	9	Fold: Cystatin-like Superfamily: NTF2-like Family: Scytalone dehydratase
31	d3ef8a1	Alignment	not modelled	76.9	18	Fold: Cystatin-like Superfamily: NTF2-like Family: BaiE/LinA-like
32	c3gwrA	Alignment	not modelled	74.6	5	PDB header: protein binding Chain: A: PDB Molecule: putative calcium/calmodulin-dependent protein kinase type PDBTitle: crystal structure of putative calcium/calmodulin-dependent protein kinase ii association domain (yp_315894.1) from thiobacillus3 denitrificans atcc 25259 at 2.00 a resolution
33	c2rsxA	Alignment	not modelled	70.0	5	PDB header: hydrolase inhibitor Chain: A: PDB Molecule: uncharacterized protein yoeb; PDBTitle: solution structure of isea, an inhibitor protein of dl-endopeptidases2 from bacillus subtilis
34	c4lehA	Alignment	not modelled	68.7	14	PDB header: lyase Chain: A: PDB Molecule: bile acid 7-alpha dehydratase, baiie; PDBTitle: crystal structure of a bile-acid 7-alpha dehydratase (closci_03134)2 from clostridium scindens atcc 35704 at 2.90 a resolution
35	d2rgqa1	Alignment	not modelled	68.2	19	Fold: Cystatin-like Superfamily: NTF2-like Family: Rv3472-like
36	c3k7cC	Alignment	not modelled	66.1	15	PDB header: protein binding Chain: C: PDB Molecule: putative ntf2-like transpeptidase; PDBTitle: crystal structure of putative ntf2-like transpeptidase (np_281412.1)2 from campylobacter jejuni at 2.00 a resolution
37	d3ebya1	Alignment	not modelled	65.7	12	Fold: Cystatin-like Superfamily: NTF2-like Family: Ring hydroxylating beta subunit
38	c4o3vA	Alignment	not modelled	65.4	13	PDB header: protein transport Chain: A: PDB Molecule: virB8-like protein of type iv secretion system; PDBTitle: crystal structure of a virB8-like protein of type iv secretion system2 from rickettsia typhi
39	d3ejva1	Alignment	not modelled	64.6	24	Fold: Cystatin-like Superfamily: NTF2-like Family: BaiE/LinA-like
40	d3b7ca1	Alignment	not modelled	64.5	11	Fold: Cystatin-like Superfamily: NTF2-like Family: SO0125-like
41	c4meiA	Alignment	not modelled	63.0	13	PDB header: protein transport Chain: A: PDB Molecule: virB8 protein; PDBTitle: crystal structure of a virB8 type iv secretion system machinery2 soluble domain from bartonella tribocorum
42	c3ub1C	Alignment	not modelled	62.3	18	PDB header: transport protein Chain: C: PDB Molecule: orf13-like protein; PDBTitle: ntf2 like protein involved in plasmid conjugation
43	d3blza1	Alignment	not modelled	58.9	23	Fold: Cystatin-like Superfamily: NTF2-like Family: Sbal0622-like
44	d2b1xb1	Alignment	not modelled	57.2	2	Fold: Cystatin-like Superfamily: NTF2-like Family: Ring hydroxylating beta subunit
45	c3dukD	Alignment	not modelled	57.0	33	PDB header: unknown function Chain: D: PDB Molecule: ntf2-like protein of unknown function; PDBTitle: crystal structure of a ntf2-like protein of unknown function2 (mfla_0564) from methylobacillus flagellatus kt at 2.200 a resolution
46	c3soyA	Alignment	not modelled	54.8	4	PDB header: membrane protein Chain: A: PDB Molecule: ntf2-like superfamily protein; PDBTitle: nuclear transport factor 2 (ntf2-like) superfamily protein from2 salmonella enterica subsp. enterica serovar typhimurium str. lt2
47	c3fkaD	Alignment	not modelled	54.4	33	PDB header: unknown function Chain: D: PDB Molecule: uncharacterized ntf-2 like protein; PDBTitle: crystal structure of a ntf-2 like protein of unknown function2 (spo1084) from silicibacter pomeroyi dss-3 at 1.69 a resolution
48	c3hx8A	Alignment	not modelled	53.5	7	PDB header: isomerase Chain: A: PDB Molecule: putative ketosteroid isomerase; PDBTitle: crystal structure of putative ketosteroid isomerase (np_103587.1) from2 mesorhizobium loti at 1.45 a resolution
49	c3bb9D	Alignment	not modelled	52.0	14	PDB header: unknown function Chain: D: PDB Molecule: putative orphan protein; PDBTitle: crystal structure of a putative ketosteroid isomerase (sfri_1973) from2 shewanella frigidimarina ncimb 400 at 1.80 a resolution
50	c4fczB	Alignment	not modelled	50.4	9	PDB header: transport protein Chain: B: PDB Molecule: toluene-tolerance protein; PDBTitle: crystal structure of toluene-tolerance protein from pseudomonas putida2 (strain kt2440), northeast structural genomics consortium (nesg)3 target ppr99
51	d2chca1	Alignment	not modelled	49.8	11	Fold: Cystatin-like Superfamily: NTF2-like Family: Rv3472-like
52	c5ig0A	Alignment	not modelled	48.2	11	PDB header: transferase Chain: A: PDB Molecule: camk/camk2 protein kinase; PDBTitle: crystal structure of s. rosetta camkii hub
53	d2r4ia1	Alignment	not modelled	46.8	10	Fold: Cystatin-like Superfamily: NTF2-like Family: CHU142-like

54	c2qguA		not modelled	46.4	15	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: probable signal peptide protein; PDBTitle: three-dimensional structure of the phospholipid-binding protein from2 ralstonia solanacearum q8xv73_ralsq in complex with a phospholipid at3 the resolution 1.53 a. northeast structural genomics consortium4 target rsr89
55	d3bb9a1		not modelled	45.2	13	Fold: Cystatin-like Superfamily: NTF2-like Family: SO0125-like
56	c4gb5A		not modelled	45.1	8	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: uncharacterized protein; PDBTitle: crystal structure of kfla4162 protein from kribbella flava
57	c5uwaB		not modelled	44.2	14	PDB header: transport protein Chain: B: PDB Molecule: probable phospholipid-binding protein mlac; PDBTitle: structure of e. coli phospholipid binding protein mlac
58	c4ouqA		not modelled	42.7	13	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: uncharacterized protein; PDBTitle: crystal structure of a duf4783 family protein (bf1468) from2 bacteroides fragilis ych46 at 1.55 a resolution
59	c3kspA		not modelled	33.8	3	PDB header: unknown function Chain: A: PDB Molecule: calcium/calmodulin-dependent kinase ii association domain; PDBTitle: crystal structure of a putative ca/calmodulin-dependent kinase ii2 association domain (exig_1688) from exiguobacterium sibiricum 255-153 at 2.59 a resolution
60	c4orlA		not modelled	33.7	8	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: uncharacterized protein; PDBTitle: crystal structure of a duf4783 family protein (bacova_04304) from2 bacteroides ovatus atcc 8483 at 1.40 a resolution
61	d2owpa1		not modelled	28.1	12	Fold: Cystatin-like Superfamily: NTF2-like Family: BxeB1374-like
62	c6bjuD		not modelled	27.4	0	PDB header: unknown function Chain: D: PDB Molecule: atzh; PDBTitle: the structure of atzh: a little known member of the atrazine breakdown2 pathway
63	c3ke7A		not modelled	22.4	11	PDB header: isomerase Chain: A: PDB Molecule: putative ketosteroid isomerase; PDBTitle: crystal structure of putative ketosteroid isomerase (yp_001303366.1)2 from parabacteroides distasonis atcc 8503 at 1.45 a resolution
64	c2n6uA		not modelled	22.0	21	PDB header: unknown function Chain: A: PDB Molecule: astexin2-dc4; PDBTitle: solution study of astexin2-dc4
65	c6f0kA		not modelled	21.9	11	PDB header: membrane protein Chain: A: PDB Molecule: cytochrome c family protein; PDBTitle: alternative complex iii
66	c5up5A		not modelled	21.3	21	PDB header: de novo protein Chain: A: PDB Molecule: ehee_rd1_0284; PDBTitle: solution structure of the de novo mini protein ehee_rd1_0284
67	c3hzpA		not modelled	18.8	10	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: ntf2-like protein of unknown function; PDBTitle: crystal structure of ntf2-like protein of unknown function mn2a_05052 from prochlorococcus marinus (yp_291699.1) from prochlorococcus sp.3 nat2a at 1.40 a resolution
68	c4r4gA		not modelled	18.4	4	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: putative lipoprotein ycda; PDBTitle: crystal structure of a putative lipoprotein (ycda) from bacillus2 subtilis subsp. subtilis str. 168 at 2.62 a resolution
69	c5ts4A		not modelled	17.1	14	PDB header: de novo protein Chain: A: PDB Molecule: denovo ntf2; PDBTitle: crystal structure of a de novo designed protein with curved beta-sheet
70	c3fsdA		not modelled	15.1	12	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: ntf2-like protein of unknown function in nutrient uptake; PDBTitle: crystal structure of ntf2-like protein of unknown function in nutrient2 uptake (yp_427473.1) from rhodospirillum rubrum atcc 11170 at 1.70 a3 resolution
71	d3e99a1		not modelled	12.8	16	Fold: Cystatin-like Superfamily: NTF2-like Family: Ring hydroxylating beta subunit
72	d3cnxa1		not modelled	12.2	12	Fold: Cystatin-like Superfamily: NTF2-like Family: SAV4671-like
73	c2k1kB		not modelled	11.6	32	PDB header: signaling protein Chain: B: PDB Molecule: ephrin type-a receptor 1; PDBTitle: nmr structures of dimeric transmembrane domain of the2 receptor tyrosine kinase ephal1 in lipid bicelles at ph 4.3
74	c2k1IB		not modelled	11.6	32	PDB header: signaling protein Chain: B: PDB Molecule: ephrin type-a receptor 1; PDBTitle: nmr structures of dimeric transmembrane domain of the2 receptor tyrosine kinase ephal1 in lipid bicelles at ph 6.3
75	c2k1kA		not modelled	11.6	32	PDB header: signaling protein Chain: A: PDB Molecule: ephrin type-a receptor 1; PDBTitle: nmr structures of dimeric transmembrane domain of the2 receptor tyrosine kinase ephal1 in lipid bicelles at ph 4.3
76	c2k1IA		not modelled	11.6	32	PDB header: signaling protein Chain: A: PDB Molecule: ephrin type-a receptor 1; PDBTitle: nmr structures of dimeric transmembrane domain of the2 receptor tyrosine kinase ephal1 in lipid bicelles at ph 6.3
77	d2rcda1		not modelled	10.0	10	Fold: Cystatin-like Superfamily: NTF2-like Family: BxeB1374-like

78	c3r2cl		Alignment	not modelled	9.3	17	PDB header: transcription/rna Chain: J: PDB Molecule: 30s ribosomal protein s10; PDBTitle: crystal structure of antitermination factors nusB and nusC in complex2 with boxA rna
79	c2kncA		Alignment	not modelled	9.1	18	PDB header: cell adhesion Chain: A: PDB Molecule: integrin alpha-iiB; PDBTitle: platelet integrin alfaIIb-beta3 transmembrane-cytoplasmic2 heterocomplex
80	c2lyyB		Alignment	not modelled	8.8	17	PDB header: structural genomics, unknown function Chain: B: PDB Molecule: uncharacterized protein; PDBTitle: nmr structure of the protein nb7890a from shewanella sp
81	c3efyB		Alignment	not modelled	8.1	23	PDB header: cell cycle Chain: C: PDB Molecule: cif (cell cycle inhibiting factor); PDBTitle: structure of the cyclomodulin cif from pathogenic2 escherichia coli
82	c5ve9C		Alignment	not modelled	7.6	25	PDB header: protein binding Chain: C: PDB Molecule: microtubule-actin cross-linking factor 1, isoforms 1/2/3/5; PDBTitle: structure of hacF7 ef1-ef2-gar domains
83	c1xofB		Alignment	not modelled	7.5	20	PDB header: de novo protein Chain: B: PDB Molecule: bbahett1; PDBTitle: heterooligomeric beta beta alpha miniprotein
84	c4w8jA		Alignment	not modelled	7.2	7	PDB header: toxin Chain: A: PDB Molecule: pesticidal crystal protein cry1ac; PDBTitle: structure of the full-length insecticidal protein cry1ac reveals2 intriguing details of toxin packaging into in vivo formed crystals
85	c5xlmB		Alignment	not modelled	7.2	9	PDB header: transferase Chain: B: PDB Molecule: serine/threonine-protein kinase pkni; PDBTitle: monomer form of m.tuberculosis pkni sensor domain
86	c1zeqX		Alignment	not modelled	7.1	0	PDB header: metal binding protein Chain: X: PDB Molecule: cation efflux system protein cufS; PDBTitle: 1.5 a structure of apo-cufS residues 6-88 from escherichia2 coli
87	c4ce4i		Alignment	not modelled	6.4	8	PDB header: ribosome Chain: I: PDB Molecule: mrpl9; PDBTitle: 39s large subunit of the porcine mitochondrial ribosome
88	c3rgaA		Alignment	not modelled	6.3	18	PDB header: isomerase Chain: A: PDB Molecule: epoxide hydrolase; PDBTitle: crystal structure of epoxide hydrolase for polyether lasalocid a2 biosynthesis
89	c6k4vA		Alignment	not modelled	6.2	25	PDB header: antibiotic Chain: A: PDB Molecule: smart chimeric peptide g6; PDBTitle: the solution structure of the smart chimeric peptide g6
90	c3j6vl		Alignment	not modelled	6.1	7	PDB header: ribosome Chain: I: PDB Molecule: 28s ribosomal protein s9, mitochondrial; PDBTitle: cryo-em structure of the small subunit of the mammalian mitochondrial2 ribosome
91	c2fyuE		Alignment	not modelled	5.9	19	PDB header: oxidoreductase Chain: E: PDB Molecule: ubiquinol-cytochrome c reductase iron-sulfur subunit, PDBTitle: crystal structure of bovine heart mitochondrial bc1 with jg1442 inhibitor
92	c5tfyl		Alignment	not modelled	5.8	23	PDB header: cell adhesion Chain: J: PDB Molecule: flagellin; PDBTitle: the archaeal flagellum of methanospirillum hungatei strain jf1.
93	d1v5ra1		Alignment	not modelled	5.5	25	Fold: N domain of copper amine oxidase-like Superfamily: GAS2 domain-like Family: GAS2 domain
94	c6k4wA		Alignment	not modelled	5.5	25	PDB header: antibiotic Chain: A: PDB Molecule: scp-a6; PDBTitle: smart chimeric peptide scp-a6
95	c2gbxF		Alignment	not modelled	5.2	10	PDB header: oxidoreductase Chain: F: PDB Molecule: biphenyl 2,3-dioxygenase beta subunit; PDBTitle: crystal structure of biphenyl 2,3-dioxygenase from sphingomonas2 yanoikuyaе b1 bound to biphenyl
96	d1t33a1		Alignment	not modelled	5.1	9	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: Tetracyclin repressor-like, N-terminal domain