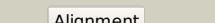
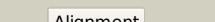
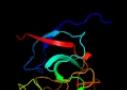
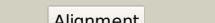
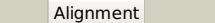
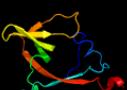
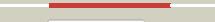
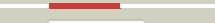


Phyre²

Email	mdejesus@rockefeller.edu
Description	RVBD2903c_(lepB)_3212980_3213864
Date	Thu Aug 8 16:20:05 BST 2019
Unique Job ID	7c8dae9c1b64f885

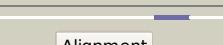
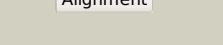
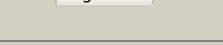
Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c4wviA_			100.0	37	PDB header: hydrolase Chain: A: PDB Molecule: maltose-binding periplasmic protein,signal peptidase ib; PDBTitle: crystal structure of the type-i signal peptidase from staphylococcus2 aureus (spsb) in complex with a substrate peptide (pep).
2	d1b12a_			100.0	36	Fold: LexA/Signal peptidase Superfamily: LexA/Signal peptidase Family: Type 1 signal peptidase
3	c4n31A_			100.0	27	PDB header: cell adhesion Chain: A: PDB Molecule: sipa; PDBTitle: structure and activity of streptococcus pyogenes sipa: a signal2 peptidase homologue essential for pilus polymerisation
4	c4me8A_			100.0	39	PDB header: hydrolase Chain: A: PDB Molecule: signal peptidase i; PDBTitle: crystal structure of a signal peptidase i (ef3073) from enterococcus2 faecalis v583 at 2.27 a resolution
5	c4nv4A_			100.0	37	PDB header: hydrolase Chain: A: PDB Molecule: signal peptidase i; PDBTitle: 1.8 angstrom crystal structure of signal peptidase i from bacillus2 anthracis.
6	c4k8wA_			100.0	28	PDB header: cell adhesion Chain: A: PDB Molecule: lepa; PDBTitle: an arm-swapped dimer of the s. pyogenes pilin specific assembly factor2 sipa
7	d1f39a_			97.7	30	Fold: LexA/Signal peptidase Superfamily: LexA/Signal peptidase Family: LexA-related
8	c6a2rD_			97.4	20	PDB header: hydrolase Chain: D: PDB Molecule: lexa repressor; PDBTitle: mycobacterium tuberculosis lexa c-domain ii
9	c3k2zA_			97.4	28	PDB header: hydrolase Chain: A: PDB Molecule: lexa repressor; PDBTitle: crystal structure of a lexa protein from thermotoga maritima
10	d1umua_			96.9	28	Fold: LexA/Signal peptidase Superfamily: LexA/Signal peptidase Family: LexA-related
11	d1jhfa2			96.9	31	Fold: LexA/Signal peptidase Superfamily: LexA/Signal peptidase Family: LexA-related

12	c3js0A			96.8	30	PDB header: hydrolase/dna Chain: A: PDB Molecule: lexa repressor; PDBTitle: classic protein with a new twist: crystal structure of a lexa2 repressor dna complex
13	c1jhhB			96.8	29	PDB header: hydrolase Chain: B: PDB Molecule: lexa repressor; PDBTitle: lexa s119a mutant
14	c3bdnB			96.2	30	PDB header: transcription/dna Chain: B: PDB Molecule: lambda repressor; PDBTitle: crystal structure of the lambda repressor
15	c2hnfA			96.0	25	PDB header: viral protein Chain: A: PDB Molecule: repressor protein ci101-229dm-k192a; PDBTitle: structure of a hyper-cleavable monomeric fragment of phage2 lambda repressor containing the cleavage site region
16	c2fjrB			92.8	7	PDB header: transcription regulator Chain: B: PDB Molecule: repressor protein ci; PDBTitle: crystal structure of bacteriophage 186
17	d1hr0w			60.5	32	Fold: OB-fold Superfamily: Nucleic acid-binding proteins Family: Cold shock DNA-binding domain-like
18	c6c00A			59.1	23	PDB header: translation Chain: A: PDB Molecule: translation initiation factor if-1; PDBTitle: solution structure of translation initiation factor 1 from clostridium2 difficile
19	c2nchA			58.7	29	PDB header: translation Chain: A: PDB Molecule: translation initiation factor if-1; PDBTitle: solution structure of translation initiation factor if1 from wolbachia2 endosymbiont strain trs of brugia malayi
20	c4ql5A			56.9	27	PDB header: translation Chain: A: PDB Molecule: translation initiation factor if-1; PDBTitle: crystal structure of translation initiation factor if-1 from streptococcus pneumoniae tigr4
21	c3pbiA		not modelled	49.8	12	PDB header: hydrolase Chain: A: PDB Molecule: invasion protein; PDBTitle: structure of the peptidoglycan hydrolase ripb (rv1478) from mycobacterium tuberculosis at 1.6 resolution
22	c3i4oA		not modelled	49.7	23	PDB header: translation Chain: A: PDB Molecule: translation initiation factor if-1; PDBTitle: crystal structure of translation initiation factor 1 from mycobacterium tuberculosis
23	d1ah9a		not modelled	48.2	23	Fold: OB-fold Superfamily: Nucleic acid-binding proteins Family: Cold shock DNA-binding domain-like
24	c4dqgA		not modelled	45.7	17	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: uncharacterized protein; PDBTitle: crystal structure of a putative carbohydrate binding protein2 (bacova_03559) from bacteroides ovatus atcc 8483 at 1.50 a resolution
25	c4bpp0		not modelled	40.0	18	PDB header: ribosome Chain: O: PDB Molecule: translation initiation factor eif-1a family protein; PDBTitle: the crystal structure of the eukaryotic 40s ribosomal subunit in2 complex with eif1 and eif1a - complex 4
26	c3j81i		not modelled	39.6	32	PDB header: ribosome Chain: I: PDB Molecule: es8; PDBTitle: cryoem structure of a partial yeast 48s preinitiation complex
27	c2kogA		not modelled	37.9	4	PDB header: membrane protein Chain: A: PDB Molecule: vesicle-associated membrane protein 2; PDBTitle: lipid-bound synaptobrevin solution nmr structure
28	d1v54d		not modelled	37.4	10	Fold: Single transmembrane helix Superfamily: Mitochondrial cytochrome c oxidase subunit IV Family: Mitochondrial cytochrome c oxidase subunit IV

29	c2y69Q	Alignment	not modelled	36.9	10	PDB header: electron transport Chain: Q: PDB Molecule: cytochrome c oxidase subunit 4 isoform 1; PDBTitle: bovine heart cytochrome c oxidase re-refined with molecular oxygen
30	c3hd7A	Alignment	not modelled	36.8	6	PDB header: exocytosis Chain: A: PDB Molecule: vesicle-associated membrane protein 2; PDBTitle: helical extension of the neuronal snare complex into the membrane,2 spacegroup c 1 2 1
31	c2xivA	Alignment	not modelled	35.3	18	PDB header: structural protein Chain: A: PDB Molecule: hypothetical invasion protein; PDBTitle: structure of rv1477, hypothetical invasion protein of mycobacterium2 tuberculosis
32	d1jz8a5	Alignment	not modelled	31.1	38	Fold: TIM beta/alpha-barrel Superfamily: (Trans)glycosidases Family: beta-glycanases
33	d2ftxa1	Alignment	not modelled	30.4	36	Fold: Kinetochore globular domain-like Superfamily: Kinetochore globular domain Family: Spc25-like
34	c2ogkA	Alignment	not modelled	30.4	32	PDB header: translation Chain: A: PDB Molecule: putative translation initiation factor eif-1a; PDBTitle: crystal structure of putative cryptosporidium parvum translation2 initiation factor eif-1a
35	d1bhga2	Alignment	not modelled	29.4	24	Fold: Galactose-binding domain-like Superfamily: Galactose-binding domain-like Family: beta-Galactosidase/glucuronidase, N-terminal domain
36	c4hzba	Alignment	not modelled	29.4	31	PDB header: hydrolase Chain: A: PDB Molecule: putative cytoplasmic protein; PDBTitle: crystal structure of the type vi semet effector-immunity complex tae3-2 tai3 from ralstonia pickettii
37	c2jv8A	Alignment	not modelled	26.6	38	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: uncharacterized protein ne1242; PDBTitle: solution structure of protein ne1242 from nitrosomonas2 europaea, northeast structural genomics consortium target3 net4
38	d1jt8a	Alignment	not modelled	26.4	26	Fold: OB-fold Superfamily: Nucleic acid-binding proteins Family: Cold shock DNA-binding domain-like
39	d1d7qa	Alignment	not modelled	25.6	32	Fold: OB-fold Superfamily: Nucleic acid-binding proteins Family: Cold shock DNA-binding domain-like
40	c5td8D	Alignment	not modelled	23.8	36	PDB header: replication Chain: D: PDB Molecule: kinetochore protein spc25; PDBTitle: crystal structure of an extended dwarf ndc80 complex
41	d1knwa1	Alignment	not modelled	23.5	14	Fold: Domain of alpha and beta subunits of F1 ATP synthase-like Superfamily: Alanine racemase C-terminal domain-like Family: Eukaryotic ODC-like
42	c3w5aC	Alignment	not modelled	23.3	13	PDB header: metal transport/membrane protein Chain: C: PDB Molecule: sarcolipin; PDBTitle: crystal structure of the calcium pump and sarcolipin from rabbit fast2 twitch skeletal muscle in the e1.mg2+ state
43	c4h1wb	Alignment	not modelled	23.3	13	PDB header: hydrolase/hydrolase regulator Chain: B: PDB Molecule: sarcolipin; PDBTitle: e1 structure of the (sr) ca2+-atpase in complex with sarcolipin
44	d1bhga3	Alignment	not modelled	21.9	27	Fold: TIM beta/alpha-barrel Superfamily: (Trans)glycosidases Family: beta-glycanases
45	d2ix0a2	Alignment	not modelled	21.3	47	Fold: OB-fold Superfamily: Nucleic acid-binding proteins Family: Cold shock DNA-binding domain-like
46	d1jnpa	Alignment	not modelled	20.2	18	Fold: Oncogene products Superfamily: Oncogene products Family: Oncogene products
47	d1zvpa1	Alignment	not modelled	20.0	40	Fold: Ferredoxin-like Superfamily: ACT-like Family: VC0802-like
48	c4egxA	Alignment	not modelled	19.6	29	PDB header: transport protein Chain: A: PDB Molecule: kinesin-like protein kif1a; PDBTitle: crystal structure of kif1a cc1-fha tandem
49	c2vjIA	Alignment	not modelled	18.0	43	PDB header: viral protein Chain: A: PDB Molecule: tailspike protein; PDBTitle: tailspike protein of e.coli bacteriophage hk620 in complex with2 hexasaccharide
50	c4ejqB	Alignment	not modelled	17.7	29	PDB header: transport protein Chain: B: PDB Molecule: kinesin-like protein kif1a; PDBTitle: crystal structure of kif1a c-cc1-fha
51	d1a1xa	Alignment	not modelled	17.7	21	Fold: Oncogene products Superfamily: Oncogene products Family: Oncogene products
52	c2rtsA	Alignment	not modelled	16.8	32	PDB header: hydrolase Chain: A: PDB Molecule: chitinase; PDBTitle: chitin binding domain1
53	d1yg2a5	Alignment	not modelled	16.8	33	Fold: TIM beta/alpha-barrel Superfamily: (Trans)glycosidases Family: beta-glycanases
54	d1jsga	Alignment	not modelled	16.7	25	Fold: Oncogene products Superfamily: Oncogene products Family: Oncogene products
55	c1jlxB	Alignment	not modelled	16.6	32	PDB header: lectin Chain: B: PDB Molecule: agglutinin; PDBTitle: agglutinin in complex with t-disaccharide

56	d2qmma1	Alignment	not modelled	16.3	21	Fold: alpha/beta knot Superfamily: alpha/beta knot Family: AF1056-like
57	d2io8a2	Alignment	not modelled	15.5	21	Fold: Cysteine proteinases Superfamily: Cysteine proteinases Family: CHAP domain
58	c3i86A_	Alignment	not modelled	15.2	14	PDB header: hydrolase Chain: A: PDB Molecule: putative uncharacterized protein; PDBTitle: crystal structure of the p60 domain from m. avium subspecies2 paratuberculosis antigen map1204
59	c4mnoA_	Alignment	not modelled	14.7	30	PDB header: translation Chain: A: PDB Molecule: translation initiation factor 1a; PDBTitle: crystal structure of aif1a from pyrococcus abyssi
60	c2lzsE_	Alignment	not modelled	14.4	33	PDB header: protein transport Chain: E: PDB Molecule: sec-independent protein translocase protein tata; PDBTitle: tata oligomer
61	c3j1rQ_	Alignment	not modelled	14.4	29	PDB header: cell adhesion, structural protein Chain: Q: PDB Molecule: archaeal adhesion filament core; PDBTitle: filaments from ignicoccus hospitalis show diversity of packing in2 proteins containing n-terminal type iv pilin helices
62	c3j1rR_	Alignment	not modelled	14.4	29	PDB header: cell adhesion, structural protein Chain: R: PDB Molecule: archaeal adhesion filament core; PDBTitle: filaments from ignicoccus hospitalis show diversity of packing in2 proteins containing n-terminal type iv pilin helices
63	c3j1rH_	Alignment	not modelled	14.4	29	PDB header: cell adhesion, structural protein Chain: H: PDB Molecule: archaeal adhesion filament core; PDBTitle: filaments from ignicoccus hospitalis show diversity of packing in2 proteins containing n-terminal type iv pilin helices
64	c3j1rD_	Alignment	not modelled	14.4	29	PDB header: cell adhesion, structural protein Chain: D: PDB Molecule: archaeal adhesion filament core; PDBTitle: filaments from ignicoccus hospitalis show diversity of packing in2 proteins containing n-terminal type iv pilin helices
65	c3j1rM_	Alignment	not modelled	14.4	29	PDB header: cell adhesion, structural protein Chain: M: PDB Molecule: archaeal adhesion filament core; PDBTitle: filaments from ignicoccus hospitalis show diversity of packing in2 proteins containing n-terminal type iv pilin helices
66	c3j1rB_	Alignment	not modelled	14.4	29	PDB header: cell adhesion, structural protein Chain: B: PDB Molecule: archaeal adhesion filament core; PDBTitle: filaments from ignicoccus hospitalis show diversity of packing in2 proteins containing n-terminal type iv pilin helices
67	c3j1rK_	Alignment	not modelled	14.4	29	PDB header: cell adhesion, structural protein Chain: K: PDB Molecule: archaeal adhesion filament core; PDBTitle: filaments from ignicoccus hospitalis show diversity of packing in2 proteins containing n-terminal type iv pilin helices
68	c3j1rG_	Alignment	not modelled	14.4	29	PDB header: cell adhesion, structural protein Chain: G: PDB Molecule: archaeal adhesion filament core; PDBTitle: filaments from ignicoccus hospitalis show diversity of packing in2 proteins containing n-terminal type iv pilin helices
69	c3j1rN_	Alignment	not modelled	14.4	29	PDB header: cell adhesion, structural protein Chain: N: PDB Molecule: archaeal adhesion filament core; PDBTitle: filaments from ignicoccus hospitalis show diversity of packing in2 proteins containing n-terminal type iv pilin helices
70	c3j1rE_	Alignment	not modelled	14.4	29	PDB header: cell adhesion, structural protein Chain: E: PDB Molecule: archaeal adhesion filament core; PDBTitle: filaments from ignicoccus hospitalis show diversity of packing in2 proteins containing n-terminal type iv pilin helices
71	c3j1rO_	Alignment	not modelled	14.4	29	PDB header: cell adhesion, structural protein Chain: O: PDB Molecule: archaeal adhesion filament core; PDBTitle: filaments from ignicoccus hospitalis show diversity of packing in2 proteins containing n-terminal type iv pilin helices
72	c3j1rl_	Alignment	not modelled	14.4	29	PDB header: cell adhesion, structural protein Chain: I: PDB Molecule: archaeal adhesion filament core; PDBTitle: filaments from ignicoccus hospitalis show diversity of packing in2 proteins containing n-terminal type iv pilin helices
73	c3j1rF_	Alignment	not modelled	14.4	29	PDB header: cell adhesion, structural protein Chain: F: PDB Molecule: archaeal adhesion filament core; PDBTitle: filaments from ignicoccus hospitalis show diversity of packing in2 proteins containing n-terminal type iv pilin helices
74	c3j1rT_	Alignment	not modelled	14.4	29	PDB header: cell adhesion, structural protein Chain: T: PDB Molecule: archaeal adhesion filament core; PDBTitle: filaments from ignicoccus hospitalis show diversity of packing in2 proteins containing n-terminal type iv pilin helices
75	c3j1rl_	Alignment	not modelled	14.4	29	PDB header: cell adhesion, structural protein Chain: L: PDB Molecule: archaeal adhesion filament core; PDBTitle: filaments from ignicoccus hospitalis show diversity of packing in2 proteins containing n-terminal type iv pilin helices
76	c3j1rA_	Alignment	not modelled	14.4	29	PDB header: cell adhesion, structural protein Chain: A: PDB Molecule: archaeal adhesion filament core; PDBTitle: filaments from ignicoccus hospitalis show diversity of packing in2 proteins containing n-terminal type iv pilin helices
77	c3j1rP_	Alignment	not modelled	14.4	29	PDB header: cell adhesion, structural protein Chain: P: PDB Molecule: archaeal adhesion filament core; PDBTitle: filaments from ignicoccus hospitalis show diversity of packing in2 proteins containing n-terminal type iv pilin helices
78	c3j1rC_	Alignment	not modelled	14.4	29	PDB header: cell adhesion, structural protein Chain: C: PDB Molecule: archaeal adhesion filament core; PDBTitle: filaments from ignicoccus hospitalis show diversity of packing in2 proteins containing n-terminal type iv pilin helices
79	c3j1rU_	Alignment	not modelled	14.4	29	PDB header: cell adhesion, structural protein Chain: U: PDB Molecule: archaeal adhesion filament core; PDBTitle: filaments from ignicoccus hospitalis show diversity of packing in2 proteins containing n-terminal type iv pilin helices
80	c3j1rl_	Alignment	not modelled	14.4	29	PDB header: cell adhesion, structural protein Chain: J: PDB Molecule: archaeal adhesion filament core; PDBTitle: filaments from ignicoccus hospitalis show diversity of packing in2 proteins containing n-terminal type iv pilin helices
81	c3j1rS_	Alignment	not modelled	14.4	29	PDB header: cell adhesion, structural protein Chain: S: PDB Molecule: archaeal adhesion filament core; PDBTitle: filaments from ignicoccus hospitalis show diversity of packing in2 proteins containing n-terminal type iv pilin helices

82	c1jdmA		Alignment	not modelled	14.1	8	PDB header: membrane protein Chain: A: PDB Molecule: sarcolipin; PDBTitle: nmr structure of sarcolipin
83	c2pkpA		Alignment	not modelled	13.7	40	PDB header: lyase Chain: A: PDB Molecule: homoaconitase small subunit; PDBTitle: crystal structure of 3-isopropylmalate dehydratase (leud)2 from methanocaldococcus jannaschii dsm2661 (mj1271)
84	c2na9A		Alignment	not modelled	13.5	22	PDB header: signaling protein Chain: A: PDB Molecule: cytokine receptor common subunit beta; PDBTitle: transmembrane structure of the p441a mutant of the cytokine receptor2 common subunit beta
85	c4wo1A		Alignment	not modelled	13.4	16	PDB header: signaling protein Chain: A: PDB Molecule: tyro protein tyrosine kinase-binding protein; PDBTitle: crystal structure of the dap12 transmembrane domain in lipidic cubic2 phase
86	c2l34B		Alignment	not modelled	13.4	16	PDB header: protein binding Chain: B: PDB Molecule: tyro protein tyrosine kinase-binding protein; PDBTitle: structure of the dap12 transmembrane homodimer
87	c2pwyB		Alignment	not modelled	13.2	19	PDB header: transferase Chain: B: PDB Molecule: tRNA (adenine-n(1)-)methyltransferase; PDBTitle: crystal structure of a m1a58 tRNA methyltransferase
88	c3mt1B		Alignment	not modelled	13.1	17	PDB header: lyase Chain: B: PDB Molecule: putative carboxynorspermidine decarboxylase protein; PDBTitle: crystal structure of putative carboxynorspermidine decarboxylase2 protein from sinorhizobium meliloti
89	c3nx6A		Alignment	not modelled	13.1	23	PDB header: chaperone Chain: A: PDB Molecule: 10kDa chaperonin; PDBTitle: crystal structure of co-chaperonin, groES (xoo4289) from xanthomonas2 oryzae pv. oryzae kacc10331
90	c4d7zA		Alignment	not modelled	13.0	38	PDB header: lyase Chain: A: PDB Molecule: aspartate 1-decarboxylase beta chain; PDBTitle: e. coli l-aspartate-alpha-decarboxylase mutant n72q to a resolution of 2.19 angstroms
91	c4wo1C		Alignment	not modelled	12.9	16	PDB header: signaling protein Chain: C: PDB Molecule: tyro protein tyrosine kinase-binding protein; PDBTitle: crystal structure of the dap12 transmembrane domain in lipidic cubic2 phase
92	c4wo1A		Alignment	not modelled	12.9	16	PDB header: signaling protein Chain: A: PDB Molecule: tyro protein tyrosine kinase-binding protein; PDBTitle: crystal structure of the dap12 transmembrane domain in lipidic cubic2 phase
93	c4wo1B		Alignment	not modelled	12.9	16	PDB header: signaling protein Chain: B: PDB Molecule: tyro protein tyrosine kinase-binding protein; PDBTitle: crystal structure of the dap12 transmembrane domain in lipidic cubic2 phase
94	c4wo1D		Alignment	not modelled	12.9	16	PDB header: signaling protein Chain: D: PDB Molecule: tyro protein tyrosine kinase-binding protein; PDBTitle: crystal structure of the dap12 transmembrane domain in lipidic cubic2 phase
95	c5djoB		Alignment	not modelled	12.9	24	PDB header: transport protein Chain: B: PDB Molecule: kinesin-like protein; PDBTitle: crystal structure of the cc1-fha tandem of kinesin-3 kif13a
96	c3n29A		Alignment	not modelled	12.8	15	PDB header: lyase Chain: A: PDB Molecule: carboxynorspermidine decarboxylase; PDBTitle: crystal structure of carboxynorspermidine decarboxylase complexed with2 norspermidine from campylobacter jejuni
97	c2mi2A		Alignment	not modelled	12.8	20	PDB header: transport protein Chain: A: PDB Molecule: sec-independent protein translocase protein tatB; PDBTitle: solution structure of the e. coli tatB protein in dpc micelles
98	c2pfuA		Alignment	not modelled	12.7	11	PDB header: transport protein Chain: A: PDB Molecule: biopolymer transport exBD protein; PDBTitle: nmr strcutre determination of the periplasmic domain of exBD from2 e.coli
99	c4wo1B		Alignment	not modelled	12.4	16	PDB header: signaling protein Chain: B: PDB Molecule: tyro protein tyrosine kinase-binding protein; PDBTitle: crystal structure of the dap12 transmembrane domain in lipidic cubic2 phase