
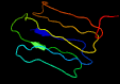


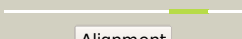
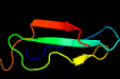

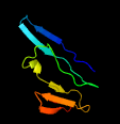



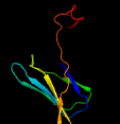



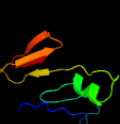

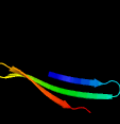

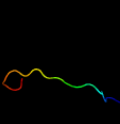

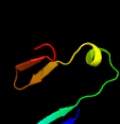


Phyre2

Email	mdejesus@rockefeller.edu
Description	RVBD2507 (-)_2822448_2823269
Date	Wed Aug 7 12:50:13 BST 2019
Unique Job ID	d260e871b0176152

Detailed template
information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c2lw3A_	 Alignment		99.9	21	PDB header: membrane protein Chain: A: PDB Molecule: putative membrane protein mmps4; PDBTitle: solution structure of the soluble domain of mmps4 from mycobacterium2 tuberculosis
2	d1ywka1	 Alignment		65.4	22	Fold: Double-stranded beta-helix Superfamily: RmIC-like cupins Family: Kdul-like
3	c2kerA_	 Alignment		61.4	20	PDB header: hydrolase inhibitor Chain: A: PDB Molecule: alpha-amylase inhibitor z-2685; PDBTitle: alpha-amylase inhibitor parvulostat (z-2685) from2 streptomyces parvulus
4	c1ywkE_	 Alignment		61.4	22	PDB header: isomerase Chain: E: PDB Molecule: 4-deoxy-1-threo-5-hexosulose-uronate ketol- PDBTitle: crystal structure of 4-deoxy-1-threo-5-hexosulose-uronate2 ketol-isomerase from enterococcus faecalis
5	c4p7hB_	 Alignment		54.5	6	PDB header: motor/fluorescent protein Chain: B: PDB Molecule: myosin-7,green fluorescent protein; PDBTitle: structure of human beta-cardiac myosin motor domain::gfp chimera
6	c3osvC_	 Alignment		54.2	10	PDB header: structural protein Chain: C: PDB Molecule: flagellar basal-body rod modification protein flgd; PDBTitle: the crytsal structure of flgd from p. aeruginosa
7	d1uvqa1	 Alignment		38.0	15	Fold: Immunoglobulin-like beta-sandwich Superfamily: Immunoglobulin Family: C1 set domains (antibody constant domain-like)
8	d1xrua1	 Alignment		36.3	20	Fold: Double-stranded beta-helix Superfamily: RmIC-like cupins Family: Kdul-like
9	c3u8pB_	 Alignment		35.8	6	PDB header: fluorescent protein, electron transport Chain: B: PDB Molecule: cytochrome b562 integral fusion with enhanced green PDBTitle: cytochrome b562 integral fusion with egfp
10	c2kvzA_	 Alignment		33.6	24	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: ispe; PDBTitle: structure of residues 161-235 of putative peptidoglycan binding2 protein lmo0835 from listeria monocytogenes: target lmr64b of the3 northeast structural genomics consortium
11	d1hxma2	 Alignment		29.7	23	Fold: Immunoglobulin-like beta-sandwich Superfamily: Immunoglobulin Family: C1 set domains (antibody constant domain-like)

12	c2I04A_	Alignment		29.1	12	PDB header: viral protein Chain: A: PDB Molecule: major tail protein v; PDBTitle: the solution structure of the c-terminal ig-like domain of the2 bacteriophage lambda tail tube protein
13	c2gw4D_	Alignment		27.1	20	PDB header: luminescent protein Chain: D: PDB Molecule: kaede; PDBTitle: crystal structure of stony coral fluorescent protein kaede, red form
14	d1ok8a2	Alignment		27.0	21	Fold: Viral glycoprotein, central and dimerisation domains Superfamily: Viral glycoprotein, central and dimerisation domains Family: Viral glycoprotein, central and dimerisation domains
15	c5e09A_	Alignment		26.0	15	PDB header: hydrolase Chain: A: PDB Molecule: cellulase; PDBTitle: structural insight of a trimodular halophilic cellulase with a family2 46 carbohydrate-binding module
16	c2I23A_	Alignment		25.7	16	PDB header: transcription Chain: A: PDB Molecule: mediator of rna polymerase ii transcription subunit 25; PDBTitle: nmr structure of the acid (activator interacting domain) of the human2 mediator med25 protein
17	d2Iada1	Alignment		25.2	16	Fold: Immunoglobulin-like beta-sandwich Superfamily: immunoglobulin Family: C1 set domains (antibody constant domain-like)
18	d1kona_	Alignment		25.1	25	Fold: YebC-like Superfamily: YebC-like Family: YebC-like
19	c3pjvB_	Alignment		24.8	19	PDB header: transcription regulator Chain: B: PDB Molecule: hypothetical signal peptide protein; PDBTitle: crystal structure of a putative transcription regulator (r01717) from2 sinorhizobium meliloti 1021 at 1.55 a resolution
20	c5y00A_	Alignment		24.4	9	PDB header: fluorescent protein Chain: A: PDB Molecule: green fluorescent protein; PDBTitle: acid-tolerant monomeric gfp, gamillus, fluorescence (on) state
21	d1jk8a1	Alignment	not modelled	24.2	17	Fold: Immunoglobulin-like beta-sandwich Superfamily: immunoglobulin Family: C1 set domains (antibody constant domain-like)
22	d1ftx_	Alignment	not modelled	24.0	15	Fold: Immunoglobulin-like beta-sandwich Superfamily: immunoglobulin Family: I set domains
23	c2c9iG_	Alignment	not modelled	24.0	20	PDB header: luminescent protein Chain: G: PDB Molecule: green fluorescent protein asfp499; PDBTitle: structure of the fluorescent protein asfp499 from anemonia2 sulcata
24	c2z6zA_	Alignment	not modelled	23.9	17	PDB header: fluorescent protein Chain: A: PDB Molecule: fluorescent protein dropa; PDBTitle: crystal structure of a photoswitchable gfp-like protein2 dropa in the bright-state
25	c1q40C_	Alignment	not modelled	23.1	22	PDB header: translation Chain: C: PDB Molecule: mrna transport regulator mtr2; PDBTitle: crystal structure of the c. albicans mtr2-mex67 m domain complex
26	c5mwcD_	Alignment	not modelled	23.0	11	PDB header: fluorescent protein Chain: D: PDB Molecule: genetically-encoded green calcium indicator ntn2; PDBTitle: crystal structure of the genetically-encoded green calcium indicator2 ntn2 in its calcium bound state
27	d1mhna_	Alignment	not modelled	22.6	8	Fold: SH3-like barrel Superfamily: Tudor/PWWP/MBT Family: Tudor domain
28	d1ok0a_	Alignment	not modelled	22.5	11	Fold: alpha-Amylase inhibitor tendamistat Superfamily: alpha-Amylase inhibitor tendamistat Family: alpha-Amylase inhibitor tendamistat

29	c3pnwX_	Alignment	not modelled	20.8	22	PDB header: protein binding/immune system Chain: X: PDB Molecule: tudor domain-containing protein 3; PDBTitle: crystal structure of the tudor domain of human tdrd3 in complex with2 an anti-tdrd3 fab
30	c3nezB_	Alignment	not modelled	20.8	9	PDB header: fluorescent protein Chain: B: PDB Molecule: mrojoa; PDBTitle: mrojoa
31	d1kska3	Alignment	not modelled	20.6	55	Fold: Alpha-L RNA-binding motif Superfamily: Alpha-L RNA-binding motif Family: Pseudouridine synthase RsuA N-terminal domain
32	d1iaka1	Alignment	not modelled	20.5	19	Fold: Immunoglobulin-like beta-sandwich Superfamily: Immunoglobulin Family: C1 set domains (antibody constant domain-like)
33	d1s9va1	Alignment	not modelled	19.7	16	Fold: Immunoglobulin-like beta-sandwich Superfamily: Immunoglobulin Family: C1 set domains (antibody constant domain-like)
34	d1lfpa_	Alignment	not modelled	19.4	17	Fold: YebC-like Superfamily: YebC-like Family: YebC-like
35	c4gupB_	Alignment	not modelled	19.0	15	PDB header: immune system Chain: B: PDB Molecule: beta-2-microglobulin; PDBTitle: structure of mhc-class i related molecule mr1
36	c3vwb_	Alignment	not modelled	19.0	15	PDB header: immune system Chain: B: PDB Molecule: beta-2-microglobulin; PDBTitle: ternary crystal structure of the human nkt tcr-cd1d-c20:2 complex
37	d1liua1	Alignment	not modelled	18.9	16	Fold: PK beta-barrel domain-like Superfamily: PK beta-barrel domain-like Family: Pyruvate kinase beta-barrel domain
38	d1pkma1	Alignment	not modelled	18.7	10	Fold: PK beta-barrel domain-like Superfamily: PK beta-barrel domain-like Family: Pyruvate kinase beta-barrel domain
39	c4oleD_	Alignment	not modelled	18.6	42	PDB header: structural genomics, unknown function Chain: D: PDB Molecule: next to brca1 gene 1 protein; PDBTitle: crystal structure of a neighbor of brca1 gene 1 (nbr1) from homo2 sapiens at 2.52 a resolution
40	c3nezA_	Alignment	not modelled	18.3	9	PDB header: fluorescent protein Chain: A: PDB Molecule: mrojoa; PDBTitle: mrojoa
41	c5aeoA_	Alignment	not modelled	17.9	24	PDB header: immune system Chain: A: PDB Molecule: r. equi vapg protein; PDBTitle: virulence-associated protein vapg from the intracellular2 pathogen rhodococcus equi
42	c2c9jG_	Alignment	not modelled	17.7	17	PDB header: luminescent protein Chain: G: PDB Molecule: green fluorescent protein fp512; PDBTitle: structure of the fluorescent protein cmfp512 at 1.35a from2 cerianthus membranaceus
43	d2oz4a2	Alignment	not modelled	17.5	19	Fold: Immunoglobulin-like beta-sandwich Superfamily: Immunoglobulin Family: I set domains
44	c3lf4B_	Alignment	not modelled	17.5	9	PDB header: fluorescent protein Chain: B: PDB Molecule: fluorescent timer precursor blue102; PDBTitle: crystal structure of fluorescent timer precursor blue102
45	d1k8ib1	Alignment	not modelled	17.5	14	Fold: Immunoglobulin-like beta-sandwich Superfamily: Immunoglobulin Family: C1 set domains (antibody constant domain-like)
46	d1oxda_	Alignment	not modelled	17.5	6	Fold: GFP-like Superfamily: GFP-like Family: Fluorescent proteins
47	c5eo9A_	Alignment	not modelled	17.4	9	PDB header: cell adhesion Chain: A: PDB Molecule: dpr6, isoform c; PDBTitle: crystal structure of the complex of dpr6 domain 1 bound to dip-alpha2 domain 1+2
48	c1dmlG_	Alignment	not modelled	17.4	23	PDB header: dna binding protein/transferase Chain: G: PDB Molecule: dna polymerase processivity factor; PDBTitle: crystal structure of herpes simplex ul42 bound to the c-terminus of2 hsv pol
49	d1gtta1	Alignment	not modelled	17.0	15	Fold: FAH Superfamily: FAH Family: FAH
50	d1kp5a_	Alignment	not modelled	17.0	9	Fold: GFP-like Superfamily: GFP-like Family: Fluorescent proteins
51	c3akoG_	Alignment	not modelled	17.0	6	PDB header: fluorescent protein Chain: G: PDB Molecule: venus; PDBTitle: crystal structure of the reassembled venus
52	c4uidB_	Alignment	not modelled	16.8	17	PDB header: sugar binding protein Chain: B: PDB Molecule: surface layer protein; PDBTitle: crystal structure of the s-layer protein sbcs domains 4 and 5
53	c4csbA_	Alignment	not modelled	16.6	20	PDB header: unknown function Chain: A: PDB Molecule: virulence associated protein vapd; PDBTitle: structure of the virulence-associated protein vapd from the2 intracellular pathogen rhodococcus equi.
54	c5ltrA_	Alignment	not modelled	16.5	9	PDB header: fluorescent protein Chain: A: PDB Molecule: mneongreen; PDBTitle: structure of the yellow-green fluorescent protein mneongreen from2 branchiostoma lanceolatum at the near physiological ph 8.0
55	c3evpA_	Alignment	not modelled	16.4	6	PDB header: signaling protein Chain: A: PDB Molecule: green fluorescent protein,green fluorescent protein;

						PDBTitle: crystal structure of circular-permutated egfp PDB header: fluorescent protein Chain: D: PDB Molecule: fluorescent protein lanfp6a; PDBTitle: x-ray structure of branchiostoma floridae fluorescent protein lanfp6a
56	c6m9yD_	Alignment	not modelled	16.3	11	PDB header: fluorescent protein Chain: H: PDB Molecule: amphioxus green fluorescent protein, gfpc1a; PDBTitle: crystal structure of amphioxus gfpc1a
57	c4dkmH_	Alignment	not modelled	16.3	9	Fold: Immunoglobulin-like beta-sandwich Superfamily: Immunoglobulin Family: C1 set domains (antibody constant domain-like)
58	d1igyb4	Alignment	not modelled	16.2	19	PDB header: signaling protein Chain: A: PDB Molecule: myosin light chain kinase, green fluorescent protein, PDBTitle: crystal structure of calcium bound monomeric gcamp2
59	c3evrA_	Alignment	not modelled	16.1	6	PDB header: transcription Chain: A: PDB Molecule: transcriptional regulatory protein cbu_1566; PDBTitle: structure of a yebc family protein (cbu_1566) from coxiella burnetii
60	c4f3qA_	Alignment	not modelled	16.1	17	PDB header: viral protein Chain: A: PDB Molecule: ns1; PDBTitle: crystal structure of the non-structural protein 1 n-terminal origin-2 recognition/nickase domain from the emerging human bocavirus
61	c4kw3A_	Alignment	not modelled	16.0	17	PDB header: fluorescent protein Chain: B: PDB Molecule: gfp-like fluorescent chromoprotein cfp484; PDBTitle: crystal structure of a monomeric cyan fluorescent protein in the2 fluorescent state
62	c2otbB_	Alignment	not modelled	15.8	9	Fold: GFP-like Superfamily: GFP-like Family: Fluorescent proteins
63	d1h6ra_	Alignment	not modelled	15.7	6	Fold: Immunoglobulin-like beta-sandwich Superfamily: Immunoglobulin Family: C1 set domains (antibody constant domain-like)
64	d1klub1	Alignment	not modelled	15.6	15	Fold: GFP-like Superfamily: GFP-like Family: Fluorescent proteins
65	d1xqma_	Alignment	not modelled	15.6	14	Fold: Immunoglobulin-like beta-sandwich Superfamily: Fibronectin type III Family: Fibronectin type III
66	d3d85d2	Alignment	not modelled	15.3	14	PDB header: luminescent protein Chain: C: PDB Molecule: fluorescent protein; PDBTitle: crystal structure of monomeric kusabira-orange (mko), orange-emitting2 gfp-like protein, at ph 6.0
67	c2zmcW_	Alignment	not modelled	15.1	17	PDB header: toxin Chain: A: PDB Molecule: virulence associated protein vapb; PDBTitle: crystal structure of rhodococcus equi vapb
68	c4cv7A_	Alignment	not modelled	15.0	24	Fold: Immunoglobulin-like beta-sandwich Superfamily: Immunoglobulin Family: C1 set domains (antibody constant domain-like)
69	d1fnqb1	Alignment	not modelled	14.8	17	Fold: GFP-like Superfamily: GFP-like Family: Fluorescent proteins
70	d1mywa_	Alignment	not modelled	14.8	6	PDB header: immune system Chain: E: PDB Molecule: beta-2-microglobulin; PDBTitle: recognition of peptide-mhc by a v-delta/v-beta tcr
71	c3nfejE_	Alignment	not modelled	14.6	15	PDB header: protein binding Chain: E: PDB Molecule: beta-2-microglobulin; PDBTitle: human class i mhc hla-a2 in complex with the hud (g2l) peptide variant
72	c3pwnE_	Alignment	not modelled	14.6	15	PDB header: protein binding Chain: B: PDB Molecule: beta-2-microglobulin; PDBTitle: human class i mhc hla-a2 in complex with the hud (g2l) peptide variant
73	c3pwnB_	Alignment	not modelled	14.6	15	PDB header: immune system Chain: E: PDB Molecule: beta-2-microglobulin; PDBTitle: crystal structure of hla a*02:03 bound to hbv core 18-27
74	c3ox8E_	Alignment	not modelled	14.6	15	PDB header: immune system Chain: B: PDB Molecule: beta-2-microglobulin; PDBTitle: crystal structure of mhc class i hla-a2 molecule complexed with hcv2 ns3-1073-1081 nonapeptide
75	c3mrgB_	Alignment	not modelled	14.6	15	PDB header: fluorescent protein Chain: E: PDB Molecule: gfp-like fluorescent chromoprotein dsfp483; PDBTitle: crystal structure and raman studies of dsfp483, a cyan fluorescent2 protein from discosoma striata
76	c3cglE_	Alignment	not modelled	14.5	14	Fold: Immunoglobulin-like beta-sandwich Superfamily: Immunoglobulin Family: C2 set domains
77	d1vcaa1	Alignment	not modelled	14.4	17	Fold: Immunoglobulin-like beta-sandwich Superfamily: Immunoglobulin Family: C1 set domains (antibody constant domain-like)
78	d1ypze2	Alignment	not modelled	14.3	23	PDB header: cell adhesion protein Chain: A: PDB Molecule: human vascular cell adhesion molecule-1; PDBTitle: crystal structure of an integrin-binding fragment of2 vascular cell adhesion molecule-1 at 1.8 angstroms3 resolution
79	c1vcaA_	Alignment	not modelled	14.3	16	PDB header: transferase Chain: A: PDB Molecule: inorganic polyphosphate/atp-nad kinase; PDBTitle: crystal structure of nad kinase from thermotoga maritima
80	c1yt5A_	Alignment	not modelled	14.2	14	PDB header: fluorescent protein Chain: B: PDB Molecule: red fluorescent protein blfp-r5; PDBTitle: crystal structure of red fluorescent protein lanrpdam
81	c4jeoB_	Alignment	not modelled	14.2	6	

					exposed to 2 prolonged x-ray irradiation
82	c4e9IA	Alignment	not modelled	14.2	11 PDB header: cell adhesion Chain: A: PDB Molecule: attaching and effacing protein, pathogenesis factor; PDBTitle: fdec, a novel broadly conserved escherichia coli adhesin eliciting 2 protection against urinary tract infections
83	c2dd9C	Alignment	not modelled	14.1	6 PDB header: luminescent protein Chain: C: PDB Molecule: green fluorescent protein; PDBTitle: a mutant of gfp-like protein from chiridius poppei
84	d1gqxa	Alignment	not modelled	14.1	11 Fold: GFP-like Superfamily: GFP-like Family: Fluorescent proteins
85	c2a48A	Alignment	not modelled	14.0	20 PDB header: luminescent protein Chain: A: PDB Molecule: gfp-like fluorescent chromoprotein amfp486; PDBTitle: crystal structure of amfp486 e150q
86	d2g50a1	Alignment	not modelled	13.9	10 Fold: PK beta-barrel domain-like Superfamily: PK beta-barrel domain-like Family: Pyruvate kinase beta-barrel domain
87	c2qhrL	Alignment	not modelled	13.9	17 PDB header: immune system/viral protein Chain: L: PDB Molecule: 13f6-1-2 fab fragment v lambda x light chain; PDBTitle: crystal structure of the 13f6-1-2 fab fragment bound to its ebola2 virus glycoprotein peptide epitope.
88	c1yzwB	Alignment	not modelled	13.9	17 PDB header: luminescent protein Chain: B: PDB Molecule: gfp-like non-fluorescent chromoprotein; PDBTitle: the 2.1a crystal structure of the far-red fluorescent 2 protein hcred: inherent conformational flexibility of the 3 chromophore
89	d1un7a1	Alignment	not modelled	13.8	24 Fold: Composite domain of metallo-dependent hydrolases Superfamily: Composite domain of metallo-dependent hydrolases Family: N-acetylglucosamine-6-phosphate deacetylase, NagA
90	c4xbiA	Alignment	not modelled	13.6	9 PDB header: chaperone Chain: A: PDB Molecule: clpb protein, putative, green fluorescent protein; PDBTitle: structure of a malarial protein involved in proteostasis
91	c4ohsB	Alignment	not modelled	13.6	17 PDB header: fluorescent protein Chain: B: PDB Molecule: far-red fluorescent protein aq143; PDBTitle: the structure of a far-red fluorescent protein, aq143
92	c4nj7P	Alignment	not modelled	13.5	25 PDB header: protein binding Chain: P: PDB Molecule: auxin response factor 7; PDBTitle: pb1 domain of atarf7 - semet derivative
93	d1e0ta1	Alignment	not modelled	13.5	19 Fold: PK beta-barrel domain-like Superfamily: PK beta-barrel domain-like Family: Pyruvate kinase beta-barrel domain
94	c6dxuA	Alignment	not modelled	13.4	19 PDB header: hydrolase Chain: A: PDB Molecule: glycosyl hydrolase family 2, tim barrel domain protein; PDBTitle: crystal structure of parabacteroides merdae beta-glucuronidase (gus)
95	c2iouC	Alignment	not modelled	13.3	25 PDB header: viral protein/membrane protein Chain: C: PDB Molecule: major tropism determinant p1; PDBTitle: major tropism determinant p1 (mtd-p1) variant complexed with 2 bordetella brochiseptica virulence factor pertactin extracellular 3 domain (prn-e).
96	c1z0zC	Alignment	not modelled	13.2	17 PDB header: transferase Chain: C: PDB Molecule: probable inorganic polyphosphate/atp-nad kinase; PDBTitle: crystal structure of a nad kinase from archaeoglobus 2 fulgidus in complex with nad
97	d1z0sa1	Alignment	not modelled	13.2	17 Fold: NAD kinase/diacylglycerol kinase-like Superfamily: NAD kinase/diacylglycerol kinase-like Family: NAD kinase-like
98	c3ai5A	Alignment	not modelled	13.1	6 PDB header: fluorescent protein, transcription protein, ubiquitin; Chain: A: PDB Molecule: yeast enhanced green fluorescent protein-2 ubiquitin fusion protein PDBTitle: crystal structure of yeast enhanced green fluorescent protein-2 ubiquitin fusion protein
99	c2iyjA	Alignment	not modelled	13.0	11 PDB header: isomerase Chain: A: PDB Molecule: thiol disulfide interchange protein dsbc; PDBTitle: crystal structure of the n-terminal dimer domain of e.coli 2 dsbc