
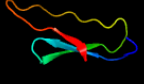



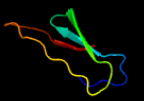
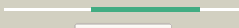


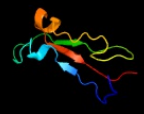
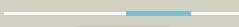




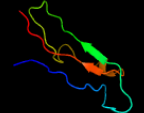

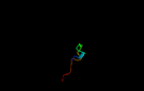

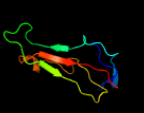

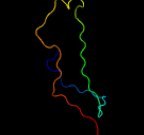
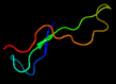




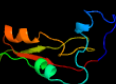

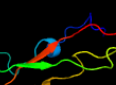



Phyre2

Email mdejesus@rockefeller.edu
 Description RVBD2330c_(lppP)_2603705_2604232
 Date Mon Aug 5 13:25:48 BST 2019
 Unique Job ID 3de962f479b9cddf

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c3pe9D_	 Alignment		76.7	18	PDB header: unknown function Chain: D: PDB Molecule: fibronectin(iii)-like module; PDBTitle: structures of clostridium thermocellum cbha fibronectin(iii)-like2 modules
2	c3pdgA_	 Alignment		68.4	19	PDB header: unknown function Chain: A: PDB Molecule: fibronectin(iii)-like module; PDBTitle: structures of clostridium thermocellum cbha fibronectin(iii)-like2 modules
3	c3pe9B_	 Alignment		67.3	21	PDB header: unknown function Chain: B: PDB Molecule: fibronectin(iii)-like module; PDBTitle: structures of clostridium thermocellum cbha fibronectin(iii)-like2 modules
4	d1ukca_	 Alignment		44.0	13	Fold: alpha/beta-Hydrolases Superfamily: alpha/beta-Hydrolases Family: Fungal lipases
5	c5a2gB_	 Alignment		43.1	16	PDB header: hydrolase Chain: B: PDB Molecule: carboxylic ester hydrolase; PDBTitle: an esterase from anaerobic clostridium hathewayi can2 hydrolyze aliphatic aromatic polyesters
6	c3pe9C_	 Alignment		38.0	18	PDB header: unknown function Chain: C: PDB Molecule: fibronectin(iii)-like module; PDBTitle: structures of clostridium thermocellum cbha fibronectin(iii)-like2 modules
7	c3pe9A_	 Alignment		38.0	18	PDB header: unknown function Chain: A: PDB Molecule: fibronectin(iii)-like module; PDBTitle: structures of clostridium thermocellum cbha fibronectin(iii)-like2 modules
8	c5w1uA_	 Alignment		36.7	16	PDB header: hydrolase Chain: A: PDB Molecule: carboxylic ester hydrolase; PDBTitle: culex quinquefasciatus carboxylesterase b2
9	c6chgB_	 Alignment		36.5	14	PDB header: transferase Chain: B: PDB Molecule: klla0c10945p; PDBTitle: crystal structure of the yeast compass catalytic module
10	c4fg5B_	 Alignment		35.1	12	PDB header: hydrolase Chain: B: PDB Molecule: e3 alpha-esterase-7 caboxylesterase; PDBTitle: crystal structure of the alpha-esterase-7 carboxylesterase, e3, from2 lucilia cuprina
11	c4hg6B_	 Alignment		32.3	14	PDB header: transferase Chain: B: PDB Molecule: cellulose synthase subunit b; PDBTitle: structure of a cellulose synthase - cellulose translocation2 intermediate

12	d1v0ea1	Alignment		32.1	18	Fold: 6-bladed beta-propeller Superfamily: Sialidases Family: Endo-alpha-sialidase
13	c4xw3B_	Alignment		30.5	11	PDB header: hydrolase Chain: B: PDB Molecule: atp-dependent rna helicase ddx1; PDBTitle: crystal structure of the spry domain of the human dead-box protein2 ddx1
14	c6i2tC_	Alignment		29.9	10	PDB header: hydrolase Chain: C: PDB Molecule: cholinesterase; PDBTitle: cryoem reconstruction of full-length, fully-glycosylated human2 butyrylcholinesterase tetramer
15	c2pm8A_	Alignment		29.7	10	PDB header: hydrolase Chain: A: PDB Molecule: cholinesterase; PDBTitle: crystal structure of recombinant full length human2 butyrylcholinesterase
16	c4p9lA_	Alignment		26.0	8	PDB header: transport protein Chain: A: PDB Molecule: ryanodine receptor 2; PDBTitle: crystal structure of mouse ryanodine receptor 2 spry2 domain (1080-2 1253) disease mutant a1107m
17	c4bdtA_	Alignment		25.1	17	PDB header: hydrolase/inhibitor Chain: A: PDB Molecule: acetylcholinesterase; PDBTitle: human acetylcholinesterase in complex with huprine w and fasciculin 2
18	d1p0ia_	Alignment		24.9	10	Fold: alpha/beta-Hydrolases Superfamily: alpha/beta-Hydrolases Family: Acetylcholinesterase-like
19	d1llfa_	Alignment		23.3	6	Fold: alpha/beta-Hydrolases Superfamily: alpha/beta-Hydrolases Family: Fungal lipases
20	d2ha2a1	Alignment		22.3	17	Fold: alpha/beta-Hydrolases Superfamily: alpha/beta-Hydrolases Family: Acetylcholinesterase-like
21	d1qe3a_	Alignment	not modelled	22.2	12	Fold: alpha/beta-Hydrolases Superfamily: alpha/beta-Hydrolases Family: Acetylcholinesterase-like
22	d1f8ua_	Alignment	not modelled	21.0	19	Fold: alpha/beta-Hydrolases Superfamily: alpha/beta-Hydrolases Family: Acetylcholinesterase-like
23	c1f8uA_	Alignment	not modelled	21.0	19	PDB header: hydrolase/toxin Chain: A: PDB Molecule: acetylcholinesterase; PDBTitle: crystal structure of mutant e202q of human acetylcholinesterase2 complexed with green mamba venom peptide fasciculin-ii
24	d2fnja1	Alignment	not modelled	19.0	19	Fold: Concanavalin A-like lectins/glucanases Superfamily: Concanavalin A-like lectins/glucanases Family: SPRY domain
25	d1dx4a_	Alignment	not modelled	18.8	8	Fold: alpha/beta-Hydrolases Superfamily: alpha/beta-Hydrolases Family: Acetylcholinesterase-like
26	c3r87A_	Alignment	not modelled	17.2	8	PDB header: unknown function Chain: A: PDB Molecule: putative uncharacterized protein; PDBTitle: crystal structure of orf6 protein from photobacterium profundum
27	d1ggbh1	Alignment	not modelled	16.6	11	Fold: Immunoglobulin-like beta-sandwich Superfamily: Immunoglobulin Family: V set domains (antibody variable domain-like)
28	d2bcea_	Alignment	not modelled	16.4	10	Fold: alpha/beta-Hydrolases Superfamily: alpha/beta-Hydrolases Family: Acetylcholinesterase-like
						Fold: Immunoglobulin-like beta-sandwich

29	d2ij0c1	Alignment	not modelled	16.4	14	Superfamily: Immunoglobulin Family: V set domains (antibody variable domain-like)
30	c5f21B	Alignment	not modelled	16.3	11	PDB header: hydrolase/immune system Chain: B; PDB Molecule: nanobody mu375; PDBTitle: human cd38 in complex with nanobody mu375
31	c2ogsA	Alignment	not modelled	16.2	15	PDB header: hydrolase Chain: A; PDB Molecule: thermostable carboxylesterase est50; PDBTitle: crystal structure of the geobacillus stearothermophilus2 carboxylesterase est55 at ph 6.2
32	d1pj5a1	Alignment	not modelled	16.0	11	Fold: Elongation factor/aminomethyltransferase common domain Superfamily: Aminomethyltransferase beta-barrel domain Family: Aminomethyltransferase beta-barrel domain
33	d2afja1	Alignment	not modelled	15.8	13	Fold: Concanavalin A-like lectins/glucanases Superfamily: Concanavalin A-like lectins/glucanases Family: SPRY domain
34	c2yyoA	Alignment	not modelled	15.8	27	PDB header: structural genomics, unknown function Chain: A; PDB Molecule: spry domain-containing protein 3; PDBTitle: crystal sturcture of human spry domain
35	c5dleD	Alignment	not modelled	15.0	33	PDB header: transferase Chain: D; PDB Molecule: pts system, fructose-specific iiabc component; PDBTitle: crystal structure from a domain (thr161-f265) from fructose-specific2 iiabc component (pts system) from borrelia burgdorferi
36	c6bx3K	Alignment	not modelled	15.0	28	PDB header: gene regulation/transferase Chain: K; PDB Molecule: compass component bre2; PDBTitle: structure of histone h3k4 methyltransferase
37	d1ymme1	Alignment	not modelled	14.9	12	Fold: Immunoglobulin-like beta-sandwich Superfamily: Immunoglobulin Family: V set domains (antibody variable domain-like)
38	c6e2hD	Alignment	not modelled	14.5	14	PDB header: protein binding Chain: D; PDB Molecule: set1/ash2 histone methyltransferase complex subunit ash2; PDBTitle: crystal structure of human ash2l (spry domain and sdi motif) in2 complex with full length dpy-30
39	c2m1zA	Alignment	not modelled	14.1	33	PDB header: transferase Chain: A; PDB Molecule: lmo0427 protein; PDBTitle: solution structure of uncharacterized protein lmo0427
40	d2hfa1	Alignment	not modelled	13.7	25	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: HyaE-like
41	d1thga	Alignment	not modelled	13.6	14	Fold: alpha/beta-Hydrolases Superfamily: alpha/beta-Hydrolases Family: Fungal lipases
42	c5e24D	Alignment	not modelled	13.2	25	PDB header: transport/dna binding/dna Chain: D; PDB Molecule: protein hairless; PDBTitle: structure of the su(h)-hairless-dna repressor complex
43	c5gsfA	Alignment	not modelled	12.9	44	PDB header: hydrolase inhibitor Chain: A; PDB Molecule: roseltide rt1; PDBTitle: structure of roseltide rt1
44	d1mieh1	Alignment	not modelled	12.5	13	Fold: Immunoglobulin-like beta-sandwich Superfamily: Immunoglobulin Family: V set domains (antibody variable domain-like)
45	c5zt3A	Alignment	not modelled	12.5	21	PDB header: plant protein Chain: A; PDB Molecule: wa352; PDBTitle: crystal structure of wa352 from oryza sativa
46	c2qsiB	Alignment	not modelled	12.1	25	PDB header: structural genomics, unknown function Chain: B; PDB Molecule: putative hydrogenase expression/formation protein hupg; PDBTitle: crystal structure of putative hydrogenase expression/formation protein2 hupg from rhodopseudomonas palustris cga009
47	c5sxyA	Alignment	not modelled	12.0	19	PDB header: chaperone Chain: A; PDB Molecule: bifunctional coenzyme pqq synthesis protein c/d; PDBTitle: the solution nmr structure for the pqqd truncation of methylobacterium2 extorquens pqqcd representing a functional and stand-alone3 ribosomally synthesized and post-translational modified (ripp)4 recognition element (rre)
48	c3g2bA	Alignment	not modelled	12.0	19	PDB header: biosynthetic protein Chain: A; PDB Molecule: coenzyme pqq synthesis protein d; PDBTitle: crystal structure of pqqd from xanthomonas campestris
49	d1crla	Alignment	not modelled	11.9	8	Fold: alpha/beta-Hydrolases Superfamily: alpha/beta-Hydrolases Family: Fungal lipases
50	d1k4ya	Alignment	not modelled	11.8	14	Fold: alpha/beta-Hydrolases Superfamily: alpha/beta-Hydrolases Family: Acetylcholinesterase-like
51	d1lr0a	Alignment	not modelled	11.7	19	Fold: ToIA/TonB C-terminal domain Superfamily: ToIA/TonB C-terminal domain Family: ToIA
52	c2kyrA	Alignment	not modelled	11.4	33	PDB header: transferase Chain: A; PDB Molecule: fructose-like phosphotransferase enzyme iib component 1; PDBTitle: solution structure of enzyme iib subunit of pts system from2 escherichia coli k12. northeast structural genomics consortium target3 er315/ontario center for structural proteomics target ec0544
53	c1v0eB	Alignment	not modelled	11.1	19	PDB header: hydrolase Chain: B; PDB Molecule: endo-alpha-sialidase; PDBTitle: endosialidase of bacteriophage k1f

54	c4mqtB	Alignment	not modelled	10.8	14	PDB header: signaling protein Chain: B: PDB Molecule: nanobody 9-8; PDBTitle: structure of active human m2 muscarinic acetylcholine receptor bound2 to the agonist iperoxo and allosteric modulator ly2119620
55	d1gpla1	Alignment	not modelled	10.4	16	Fold: Lipase/lipoxygenase domain (PLAT/LH2 domain) Superfamily: Lipase/lipoxygenase domain (PLAT/LH2 domain) Family: Colipase-binding domain
56	c2a7yA	Alignment	not modelled	10.2	15	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: hypothetical protein rv2302/mt2359; PDBTitle: solution structure of the conserved hypothetical protein2 rv2302 from the bacterium mycobacterium tuberculosis
57	d2a7ya1	Alignment	not modelled	10.2	15	Fold: SH3-like barrel Superfamily: Cell growth inhibitor/plasmid maintenance toxic component Family: Rv2302-like
58	d1f6wa	Alignment	not modelled	10.1	12	Fold: alpha/beta-Hydrolases Superfamily: alpha/beta-Hydrolases Family: Acetylcholinesterase-like
59	c4p9jC	Alignment	not modelled	9.7	12	PDB header: transport protein Chain: C: PDB Molecule: ryanodine receptor 1; PDBTitle: crystal structure of rabbit ryanodine receptor 1 spry2 domain (1070-2 1246)
60	c4crrA	Alignment	not modelled	9.6	10	PDB header: hydrolase Chain: A: PDB Molecule: endo-1,3-beta-glucanase, family gh16; PDBTitle: crystal structure of the c-terminal cbm6 of lamc a marine2 laminariase from zobellia galactanivorans
61	c2grxC	Alignment	not modelled	9.3	29	PDB header: metal transport Chain: C: PDB Molecule: protein tonb; PDBTitle: crystal structure of tonb in complex with fhua, e. coli2 outer membrane receptor for ferrichrome
62	d1ea5a	Alignment	not modelled	9.2	15	Fold: alpha/beta-Hydrolases Superfamily: alpha/beta-Hydrolases Family: Acetylcholinesterase-like
63	d1yrza2	Alignment	not modelled	9.0	11	Fold: 5-bladed beta-propeller Superfamily: Arabinanase/levansucrase/invertase Family: alpha-L-arabinanase-like
64	c2w6cX	Alignment	not modelled	8.8	15	PDB header: hydrolase Chain: X: PDB Molecule: acetylcholinesterase; PDBTitle: ache in complex with a bis(-)-nor-meptazinol derivative
65	c5zc2B	Alignment	not modelled	8.8	15	PDB header: flavoprotein Chain: B: PDB Molecule: p-hydroxyphenylacetate 3-hydroxylase, reductase component; PDBTitle: acinetobacter baumannii p-hydroxyphenylacetate 3-hydroxylase (hpah),2 reductase component (c1)
66	c4qt6A	Alignment	not modelled	8.7	7	PDB header: transport protein Chain: A: PDB Molecule: probable e3 ubiquitin-protein ligase herc1; PDBTitle: crystal structure of the spry domain of human herc1
67	c2m2kA	Alignment	not modelled	8.5	35	PDB header: transport protein Chain: A: PDB Molecule: hasb protein; PDBTitle: the structure of hasb ctd
68	d2gskb1	Alignment	not modelled	8.4	29	Fold: ToIA/TonB C-terminal domain Superfamily: ToIA/TonB C-terminal domain Family: TonB
69	d1gz7a	Alignment	not modelled	8.3	11	Fold: alpha/beta-Hydrolases Superfamily: alpha/beta-Hydrolases Family: Fungal lipases
70	c4fbrA	Alignment	not modelled	8.1	25	PDB header: carbohydrate binding protein Chain: A: PDB Molecule: myxobacterial hemagglutinin; PDBTitle: crystal structure of the myxococcus xanthus hemagglutinin (mbha)
71	d2fnjb1	Alignment	not modelled	8.1	18	Fold: beta-Grasp (ubiquitin-like) Superfamily: Ubiquitin-like Family: Ubiquitin-related
72	c5jiaH	Alignment	not modelled	7.8	13	PDB header: ran-binding protein Chain: H: PDB Molecule: ran-binding protein 10; PDBTitle: the crystal structure of ius-spry domain from ranbp10
73	d1pjwa	Alignment	not modelled	7.4	18	Fold: Immunoglobulin-like beta-sandwich Superfamily: E set domains Family: Class II viral fusion proteins C-terminal domain
74	c6a4mA	Alignment	not modelled	7.4	25	PDB header: hydrolase Chain: A: PDB Molecule: uric acid degradation bifunctional protein pucl; PDBTitle: structure of urate oxidase from bacillus subtilis 168
75	d2h7ca1	Alignment	not modelled	7.2	18	Fold: alpha/beta-Hydrolases Superfamily: alpha/beta-Hydrolases Family: Acetylcholinesterase-like
76	c5b42A	Alignment	not modelled	6.9	20	PDB header: dna binding protein Chain: A: PDB Molecule: dna mismatch repair protein mutl; PDBTitle: crystal structure of the c-terminal endonuclease domain of aquifex2 aeolicus mutl.
77	d1inva	Alignment	not modelled	6.8	17	Fold: 6-bladed beta-propeller Superfamily: Sialidases Family: Sialidases (neuraminidases)
78	d1j2ga2	Alignment	not modelled	6.7	25	Fold: T-fold Superfamily: Tetrahydrobiopterin biosynthesis enzymes-like Family: Urate oxidase (uricase)
79	d2ibaa2	Alignment	not modelled	6.6	33	Fold: T-fold Superfamily: Tetrahydrobiopterin biosynthesis enzymes-like Family: Urate oxidase (uricase)
						PDB header: hydrolase

80	c4mj3B_	Alignment	not modelled	6.5	17	Chain: B: PDB Molecule: haloalkane dehalogenase; PDBTitle: haloalkane dehalogenase dmra from mycobacterium rhodesiae js60
81	c4hizA_	Alignment	not modelled	6.2	19	PDB header: hydrolase,viral protein Chain: A: PDB Molecule: endosialidase; PDBTitle: phage phi92 endosialidase
82	d1xoya_	Alignment	not modelled	6.2	17	Fold: Galactose-binding domain-like Superfamily: Galactose-binding domain-like Family: Hypothetical protein AT3g04780/F7O18 27
83	c5c33B_	Alignment	not modelled	6.1	14	PDB header: contractile protein Chain: B: PDB Molecule: ryanodine receptor 2; PDBTitle: crystal structure of mouse ryanodine receptor 2 spry1 domain
84	c6qe7A_	Alignment	not modelled	6.1	11	PDB header: sugar binding protein Chain: A: PDB Molecule: anti-sigma factor domain-containing protein; PDBTitle: anti-sigma factor domain-containing protein
85	c4eigB_	Alignment	not modelled	5.9	8	PDB header: oxidoreductase/immune system Chain: B: PDB Molecule: ca1698 camel antibody fragment; PDBTitle: ca1698 camel antibody fragment in complex with dhfr
86	d2esve1	Alignment	not modelled	5.8	15	Fold: Immunoglobulin-like beta-sandwich Superfamily: Immunoglobulin Family: V set domains (antibody variable domain-like)
87	c3ktbD_	Alignment	not modelled	5.8	71	PDB header: transcription regulator Chain: D: PDB Molecule: arsenical resistance operon trans-acting repressor; PDBTitle: crystal structure of arsenical resistance operon trans-acting2 repressor from bacteroides vulgatus atcc 8482
88	d1iqih1	Alignment	not modelled	5.7	7	Fold: Immunoglobulin-like beta-sandwich Superfamily: Immunoglobulin Family: V set domains (antibody variable domain-like)
89	d43c9b_	Alignment	not modelled	5.6	13	Fold: Immunoglobulin-like beta-sandwich Superfamily: Immunoglobulin Family: V set domains (antibody variable domain-like)
90	c3tojA_	Alignment	not modelled	5.6	14	PDB header: transcription Chain: A: PDB Molecule: set1/ash2 histone methyltransferase complex subunit ash2; PDBTitle: structure of the spry domain of human ash2l
91	c2ys2A_	Alignment	not modelled	5.6	16	PDB header: transferase Chain: A: PDB Molecule: cytoplasmic tyrosine-protein kinase bmx; PDBTitle: solution structure of the btk motif of human cytoplasmic2 tyrosine-protein kinase bmx
92	d1bcoa1	Alignment	not modelled	5.6	4	Fold: mu transposase, C-terminal domain Superfamily: mu transposase, C-terminal domain Family: mu transposase, C-terminal domain
93	d1u07a_	Alignment	not modelled	5.4	29	Fold: ToIA/TonB C-terminal domain Superfamily: ToIA/TonB C-terminal domain Family: TonB
94	c3npfB_	Alignment	not modelled	5.4	43	PDB header: hydrolase Chain: B: PDB Molecule: putative dipeptidyl-peptidase vi; PDBTitle: crystal structure of a putative dipeptidyl-peptidase vi (bacova_00612)2 from bacteroides ovatus at 1.72 a resolution
95	c5lw8A_	Alignment	not modelled	5.3	35	PDB header: metal transport Chain: A: PDB Molecule: protein tonb; PDBTitle: nmr solution structure of helicobacter pylori tonb-ctd (residues 194-2 285)
96	c2kaoA_	Alignment	not modelled	5.3	18	PDB header: oxidoreductase Chain: A: PDB Molecule: methionine-r-sulfoxide reductase b1; PDBTitle: structure of reduced mouse methionine sulfoxide reductase b12 (sec95cys mutant)
97	c2xivA_	Alignment	not modelled	5.2	29	PDB header: structural protein Chain: A: PDB Molecule: hypothetical invasion protein; PDBTitle: structure of rv1477, hypothetical invasion protein of mycobacterium2 tuberculosis
98	d1w7ab4	Alignment	not modelled	5.1	33	Fold: MutS N-terminal domain-like Superfamily: DNA repair protein MutS, domain I Family: DNA repair protein MutS, domain I
99	c4ffyH_	Alignment	not modelled	5.1	10	PDB header: immune system/viral protein Chain: H: PDB Molecule: denv1-e111 single chain variable fragment (heavy chain); PDBTitle: crystal structure of denv1-e111 single chain variable fragment bound2 to denv-1 diii, strain 16007.