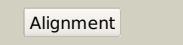
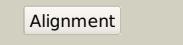
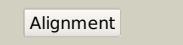
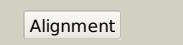
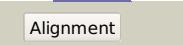
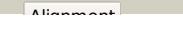


Phyre²

Email	mdejesus@rockefeller.edu
Description	RVBD0875c_(-)_973809_974297
Date	Fri Jul 26 01:50:46 BST 2019
Unique Job ID	a4b55957fe8330fd

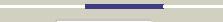
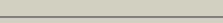
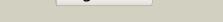
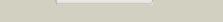
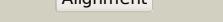
Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	d1hx0a1			42.9	24	Fold: Glycosyl hydrolase domain Superfamily: Glycosyl hydrolase domain Family: alpha-Amylases, C-terminal beta-sheet domain
2	d1g94a1			41.5	24	Fold: Glycosyl hydrolase domain Superfamily: Glycosyl hydrolase domain Family: alpha-Amylases, C-terminal beta-sheet domain
3	d3dhpa1			39.9	30	Fold: Glycosyl hydrolase domain Superfamily: Glycosyl hydrolase domain Family: alpha-Amylases, C-terminal beta-sheet domain
4	c1xmeB			39.0	10	PDB header: oxidoreductase Chain: B: PDB Molecule: cytochrome c oxidase polypeptide ii; PDBTitle: structure of recombinant cytochrome ba3 oxidase from thermus2 thermophilus
5	c4d7pA			32.6	14	PDB header: oxidoreductase Chain: A: PDB Molecule: superoxide reductase; PDBTitle: superoxide reductase (1fe-sor) from giardia intestinalis
6	c1f3kA			32.1	50	PDB header: toxin Chain: A: PDB Molecule: omega-conotoxin txvii; PDBTitle: three-dimensional solution structure of omega-conotoxin2 txvii, an l-type calcium channel blocker
7	c5o4uK			30.9	37	PDB header: cell adhesion Chain: K: PDB Molecule: flagellin; PDBTitle: the flagellin of pyrococcus furiosus
8	d2q9oa2			30.3	12	Fold: Cupredoxin-like Superfamily: Cupredoxins Family: Multidomain cupredoxins
9	c4bv1D			28.5	11	PDB header: oxidoreductase Chain: D: PDB Molecule: neq011; PDBTitle: superoxide reductase (neelaredoxin) from nanoarchaeum2 equitans
10	c1y07A			28.3	19	PDB header: oxidoreductase Chain: A: PDB Molecule: desulfoferrodoxin (rbo); PDBTitle: crystal structure of the superoxide reductase from treponema pallidum
11	c5z1ll			27.4	37	PDB header: protein fibril Chain: L: PDB Molecule: flagellin; PDBTitle: cryo-em structure of methanococcus maripaludis archaellum

12	c4u3qA			26.2	23	PDB header: lipid binding protein Chain: A: PDB Molecule: 17 kda lipoprotein; PDBTitle: crystal structure of recombinant tp0435 from treponema pallidum
13	c2g5tA			25.6	30	PDB header: toxin Chain: A: PDB Molecule: cholix toxin; PDBTitle: full-length cholix toxin from vibrio cholerae
14	d1jaeal			25.2	23	Fold: Glycosyl hydrolase domain Superfamily: Glycosyl hydrolase domain Family: alpha-Amylases, C-terminal beta-sheet domain
15	d1umga			24.3	29	Fold: Sulfolobus fructose-1,6-bisphosphatase-like Superfamily: Sulfolobus fructose-1,6-bisphosphatase-like Family: Sulfolobus fructose-1,6-bisphosphatase-like
16	c6exnc			22.1	38	PDB header: splicing Chain: C: PDB Molecule: pre-mrna-splicing factor snu114; PDBTitle: post-catalytic p complex spliceosome with 3' splice site docked
17	c5tfyl			21.3	16	PDB header: cell adhesion Chain: J: PDB Molecule: flagellin; PDBTitle: the archaeal flagellum of methanospirillum hungatei strain jf1.
18	c1fu3A			18.4	40	PDB header: metal transport inhibitor Chain: A: PDB Molecule: delta-conotoxin txvia; PDBTitle: three-dimensional structure in solution of the sodium2 channel agonist/antagonist delta-conotoxin txvia
19	d1fu3a			18.4	40	Fold: Knottins (small inhibitors, toxins, lectins) Superfamily: omega toxin-like Family: Conotoxin
20	d2cuua			17.8	9	Fold: Cupredoxin-like Superfamily: Cupredoxins Family: Periplasmic domain of cytochrome c oxidase subunit II
21	c1yz2A		not modelled	17.1	22	PDB header: toxin Chain: A: PDB Molecule: delta-conotoxin am 2766; PDBTitle: solution structure of am2766
22	d1qcsa1		not modelled	15.3	27	Fold: Double psi beta-barrel Superfamily: ADC-like Family: Cdc48 N-terminal domain-like
23	c6cfwE		not modelled	15.0	18	PDB header: membrane protein Chain: E: PDB Molecule: mbh subunit; PDBTitle: cryoem structure of a respiratory membrane-bound hydrogenase
24	c5ujpB		not modelled	14.8	20	PDB header: lyase Chain: B: PDB Molecule: glyoxalase/bleomycin resistance protein/dioxygenase; PDBTitle: the crystal structure of a glyoxalase/bleomycin resistance protein2 from streptomyces sp. cb03234
25	d1dfxa1		not modelled	14.4	21	Fold: Immunoglobulin-like beta-sandwich Superfamily: Superoxide reductase-like Family: Superoxide reductase-like
26	c4f2fA		not modelled	13.8	11	PDB header: metal binding protein Chain: A: PDB Molecule: cation-transporting atpase, e1-e2 family protein; PDBTitle: crystal structure of the metal binding domain (mbd) of the2 streptococcus pneumoniae d39 cu(i) exporting p-type atpase copa with3 cu(i)
27	c2mm5A		not modelled	12.8	24	PDB header: hydrolase inhibitor Chain: A: PDB Molecule: alpha amylose alstotide s4; PDBTitle: solution structure of alpha-amylase inhibitor peptide as4 from2 allatide scholaris
28	c6ic77		not modelled	12.5	42	PDB header: splicing Chain: Z: PDB Molecule: pre-mrna-splicing factor slu7;

28	c0ic22	Alignment	not modelled	12.5	42	PDBTitle: cryo-em structure of a human post-catalytic spliceosome (p complex) at 2.3.0 angstrom
29	d1isua	Alignment	not modelled	12.5	27	Fold: HIPPIP (high potential iron protein) Superfamily: HIPPIP (high potential iron protein) Family: HIPPIP (high potential iron protein)
30	c4bffK	Alignment	not modelled	12.3	15	PDB header: oxidoreductase Chain: K: PDB Molecule: superoxide reductase; PDBTitle: superoxide reductase (neelaredoxin) from archaeoglobus fulgidus in the reduced form
31	c4g6xA	Alignment	not modelled	12.0	4	PDB header: oxidoreductase Chain: A: PDB Molecule: glyoxalase/bleomycin resistance protein/dioxygenase; PDBTitle: crystal structure of glyoxalase/bleomycin resistance protein from2 catenulospira acidiphila.
32	c5umwA	Alignment	not modelled	11.5	13	PDB header: tiancimycin-binding protein Chain: A: PDB Molecule: glyoxalase/bleomycin resisance protein/dioxygenase; PDBTitle: crystal structure of tnms2, an antibiotic binding protein from2 streptomyces sp. cb03234
33	c4rdmB	Alignment	not modelled	11.4	23	PDB header: hydrolase/dna Chain: B: PDB Molecule: restriction endonuclease r.ngovii; PDBTitle: crystal structure of r.ngovii restriction endonuclease b3 domain with2 cognate dna
34	d1zvpa1	Alignment	not modelled	11.0	15	Fold: Ferredoxin-like Superfamily: ACT-like Family: VC0802-like
35	c3mluB	Alignment	not modelled	10.6	20	PDB header: hydrolase Chain: B: PDB Molecule: putative gamma-d-glutamyl-l-diamino acid endopeptidase; PDBTitle: crystal structure of a putative gamma-d-glutamyl-l-diamino acid2 endopeptidase (dvu_0896) from desulfovibrio vulgaris hildenborough at 3.1.75 a resolution
36	c2mm6A	Alignment	not modelled	10.4	40	PDB header: hydrolase inhibitor Chain: A: PDB Molecule: alpha amylase alstotide s1; PDBTitle: solution structure of alpha amylase inhibitor peptide as1 from2 allatide scholaris
37	d1nh2d2	Alignment	not modelled	10.3	40	Fold: Transcription factor IIA (TFIIA), beta-barrel domain Superfamily: Transcription factor IIA (TFIIA), beta-barrel domain Family: Transcription factor IIA (TFIIA), beta-barrel domain
38	c4bk8A	Alignment	not modelled	10.2	19	PDB header: oxidoreductase Chain: A: PDB Molecule: desulfoferrodoxin, ferrous iron-binding region; PDBTitle: superoxide reductase (neelaredoxin) from ignicoccus2 hospitalis
39	c4r11D	Alignment	not modelled	9.9	33	PDB header: cell adhesion/protein binding Chain: D: PDB Molecule: cadherin-related hmr-1; PDBTitle: a conserved phosphorylation switch controls the interaction between2 cadherin and beta-catenin in vitro and in vivo
40	d1lokia1	Alignment	not modelled	9.6	8	Fold: gamma-Crystallin-like Superfamily: gamma-Crystallin-like Family: Crystallins/Ca-binding development proteins
41	d1kyaa2	Alignment	not modelled	9.6	8	Fold: Cupredoxin-like Superfamily: Cupredoxins Family: Multidomain cupredoxins
42	d1djrd	Alignment	not modelled	9.5	20	Fold: OB-fold Superfamily: Bacterial enterotoxins Family: Bacterial ABS toxins, B-subunits
43	c5gyyB	Alignment	not modelled	9.4	39	PDB header: plant protein Chain: B: PDB Molecule: s-receptor kinase srk9; PDBTitle: plant receptor complex
44	c4iagA	Alignment	not modelled	9.1	30	PDB header: zorbamycin binding protein Chain: A: PDB Molecule: zbm binding protein; PDBTitle: crystal structure of zbma, the zorbamycin binding protein from2 streptomyces flavoviridis
45	c5b4sA	Alignment	not modelled	8.7	55	PDB header: hydrolase Chain: A: PDB Molecule: chitosanase; PDBTitle: crystal structure of gh80 chitosanase from mitsuaria chitosanitabida
46	c3rx9A	Alignment	not modelled	8.7	9	PDB header: lipid binding protein Chain: A: PDB Molecule: putative uncharacterized protein; PDBTitle: 3d structure of scin from an escherichia coli patotype
47	c6e5cA	Alignment	not modelled	8.6	22	PDB header: de novo protein Chain: A: PDB Molecule: de novo beta protein; PDBTitle: solution nmr structure of a de novo designed double-stranded beta-2 helix
48	d1nvpd2	Alignment	not modelled	8.5	40	Fold: Transcription factor IIA (TFIIA), beta-barrel domain Superfamily: Transcription factor IIA (TFIIA), beta-barrel domain Family: Transcription factor IIA (TFIIA), beta-barrel domain
49	c3u22B	Alignment	not modelled	8.3	12	PDB header: heme binding protein Chain: B: PDB Molecule: putative hmuy_like heme binding protein; PDBTitle: crystal structure of a putative hmuy_like heme binding protein2 (bvu_2192) from bacteroides vulgatus atcc 8482 at 2.12 a resolution
50	c2p28A	Alignment	not modelled	8.2	13	PDB header: cell adhesion Chain: A: PDB Molecule: integrin beta-2; PDBTitle: structure of the phe2 and phe3 fragments of the integrin beta2 subunit
51	c4bjia	Alignment	not modelled	8.0	40	PDB header: dna binding protein Chain: A: PDB Molecule: transcription factor tau subunit sfc1; PDBTitle: sfc1-dbd
52	c3rheA	Alignment	not modelled	7.8	16	PDB header: oxidoreductase Chain: A: PDB Molecule: nad-dependent benzaldehyde dehydrogenase; PDBTitle: the crystal structure of nad-dependent benzaldehyde dehydrogenase from2 legionella pneumophila PDB header: unknown function

53	c2kjzA	Alignment	not modelled	7.7	7	Chain: A: PDB Molecule: atc0852; PDBTitle: solution nmr structure of protein atc0852 from agrobacterium2 tumefaciens. northeast structural genomics consortium (nesg) target3 att2.
54	d1vzia1	Alignment	not modelled	7.5	24	Fold: immunoglobulin-like beta-sandwich Superfamily: Superoxide reductase-like Family: Superoxide reductase-like
55	d2h8pc1	Alignment	not modelled	7.4	24	Fold: Voltage-gated potassium channels Superfamily: Voltage-gated potassium channels Family: Voltage-gated potassium channels
56	c2yhgA	Alignment	not modelled	7.3	11	PDB header: hydrolase Chain: A: PDB Molecule: cellulose-binding protein; PDBTitle: ab initio phasing of a nucleoside hydrolase-related hypothetical2 protein from saccharophagus degradans that is associated with3 carbohydrate metabolism
57	c5uhjA	Alignment	not modelled	7.2	21	PDB header: oxidoreductase Chain: A: PDB Molecule: glyoxalase/bleomycin resistance protein/dioxygenase; PDBTitle: the crystal structure of a natural product biosynthetic enzyme from2 streptomyces sp. cb03234
58	c3mk7F	Alignment	not modelled	7.1	0	PDB header: oxidoreductase Chain: F: PDB Molecule: cytochrome c oxidase, cbb3-type, subunit p; PDBTitle: the structure of cbb3 cytochrome oxidase
59	c5k21C	Alignment	not modelled	7.0	20	PDB header: oxidoreductase Chain: C: PDB Molecule: pyocyanin demethylase; PDBTitle: pyocyanin demethylase
60	d1mpya2	Alignment	not modelled	6.9	14	Fold: Glyoxalase/Bleomycin resistance protein/Dihydroxybiphenyl dioxygenase Superfamily: Glyoxalase/Bleomycin resistance protein/Dihydroxybiphenyl dioxygenase Family: Extradiol dioxygenases
61	c5ikuA	Alignment	not modelled	6.7	8	PDB header: protein binding Chain: A: PDB Molecule: collagenase; PDBTitle: crystal structure of the clostridium histolyticum colg tandem2 collagen-binding domain s3as3b in the presence of calcium at 1.93 angstrom resolution
62	c5k26A	Alignment	not modelled	6.6	24	PDB header: transferase Chain: A: PDB Molecule: mitogen-activated protein kinase kinase 11,chimera PDBTitle: structure of the sh3 domain of mlk3 bound to peptide generated from2 phage display
63	c2zouB	Alignment	not modelled	6.6	21	PDB header: cell adhesion Chain: B: PDB Molecule: spondin-1; PDBTitle: crystal structure of human f-spondin reeler domain (fragment 2)
64	c1b5fD	Alignment	not modelled	6.4	23	PDB header: hydrolase Chain: D: PDB Molecule: protein (cardosin a); PDBTitle: native cardosin a from cynara cardunculus l.
65	c3ossC	Alignment	not modelled	6.3	7	PDB header: protein transport Chain: C: PDB Molecule: type 2 secretion system, gspc; PDBTitle: the crystal structure of enterotoxigenic escherichia coli gspc-gspd2 complex from the type ii secretion system
66	c6f0ka	Alignment	not modelled	6.3	17	PDB header: membrane protein Chain: A: PDB Molecule: cytochrome c family protein; PDBTitle: alternative complex iii
67	c5ezdB	Alignment	not modelled	6.1	44	PDB header: hydrolase Chain: B: PDB Molecule: kunitz-type protease inhibitor 1; PDBTitle: crystal structure of a hepatocyte growth factor activator inhibitor-12 (hai-1) fragment covering the pkd-like 'internal' domain and kunitz3 domain 1
68	c3n6yA	Alignment	not modelled	6.1	29	PDB header: unknown function Chain: A: PDB Molecule: immunoglobulin-like protein; PDBTitle: crystal structure of an immunoglobulin-like protein (pa1606) from2 pseudomonas aeruginosa at 1.50 a resolution
69	c1okiB	Alignment	not modelled	6.1	8	PDB header: eye lens protein Chain: B: PDB Molecule: beta crystallin b1; PDBTitle: crystal structure of truncated human beta-b1-crystallin
70	c3jqoV	Alignment	not modelled	6.0	15	PDB header: transport protein Chain: V: PDB Molecule: traf protein; PDBTitle: crystal structure of the outer membrane complex of a type iv secretion2 system
71	d2cuab	Alignment	not modelled	6.0	9	Fold: Cupredoxin-like Superfamily: Cupredoxins Family: Periplasmic domain of cytochrome c oxidase subunit II
72	c4bfhA	Alignment	not modelled	5.9	45	PDB header: hydrolase inhibitor Chain: A: PDB Molecule: wrightide r1; PDBTitle: crystal structure of alpha-amylase inhibitor wrightide r1 (wr1)2 peptide from wrightia religiosa
73	c2mauA	Alignment	not modelled	5.9	45	PDB header: hydrolase inhibitor Chain: A: PDB Molecule: wrightide r1; PDBTitle: solution structure of alpha-amylase inhibitor wrightide r1 (wr1)2 peptide from wrightia religiosa
74	c5tvzA	Alignment	not modelled	5.9	13	PDB header: transport protein Chain: A: PDB Molecule: nucleoporin pom152; PDBTitle: solution nmr structure of saccharomyces cerevisiae pom152 ig-like2 repeat, residues 718-820
75	c5yi8B	Alignment	not modelled	5.9	19	PDB header: cell cycle Chain: B: PDB Molecule: pon peptide from partner of numb; PDBTitle: crystal structure of drosophila numb ptb domain and pon peptide2 complex
76	c6cctA	Alignment	not modelled	5.9	17	PDB header: peptide binding protein Chain: A: PDB Molecule: glucose-induced degradation protein 4 homolog; PDBTitle: fragment of gid4 in complex with a short peptide
77	c3h8tA	Alignment	not modelled	5.6	13	PDB header: heme-binding protein Chain: A: PDB Molecule: hmuy; PDBTitle: structure of porphyromonas gingivalis heme-binding

						protein hmuY in2 complex with heme
78	d1qnia1		Alignment	not modelled	5.6	14 Fold: Cupredoxin-like Superfamily: Cupredoxins Family: Nitrosocyanin
79	c3g12A_		Alignment	not modelled	5.6	9 PDB header: lyase Chain: A: PDB Molecule: putative lactoylglutathione lyase; PDBTitle: crystal structure of a putative lactoylglutathione lyase from2 bdellovibrio bacteriovorus
80	c1vzhB_		Alignment	not modelled	5.6	24 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
81	d2fi9a1		Alignment	not modelled	5.5	40 Fold: MTH938-like Superfamily: MTH938-like Family: MTH938-like
82	c3zhnA_		Alignment	not modelled	5.5	11 PDB header: toxin Chain: A: PDB Molecule: pa_0080; PDBTitle: crystal structure of the t6ss lipoprotein tssJ1 from2 pseudomonas aeruginosa
83	d1xrka_		Alignment	not modelled	5.4	30 Fold: Glyoxalase/Bleomycin resistance protein/Dihydroxybiphenyl dioxygenase Superfamily: Glyoxalase/Bleomycin resistance protein/Dihydroxybiphenyl dioxygenase Family: Antibiotic resistance proteins
84	c3jvfC_		Alignment	not modelled	5.3	30 PDB header: signaling protein / cytokine Chain: C: PDB Molecule: interleukin-17 receptor a; PDBTitle: crystal structure of an interleukin-17 receptor complex
85	c6nbxG_		Alignment	not modelled	5.3	19 PDB header: oxidoreductase Chain: G: PDB Molecule: nadh-quinone oxidoreductase subunit j; PDBTitle: t.elongatus ndh (data-set 2)
86	c2hb5A_		Alignment	not modelled	5.3	13 PDB header: hydrolase Chain: A: PDB Molecule: reverse transcriptase/ribonuclease h; PDBTitle: crystal structure of the moloney murine leukemia virus rnae h domain
87	d1f1xa2		Alignment	not modelled	5.2	21 Fold: Glyoxalase/Bleomycin resistance protein/Dihydroxybiphenyl dioxygenase Superfamily: Glyoxalase/Bleomycin resistance protein/Dihydroxybiphenyl dioxygenase Family: Extradiol dioxygenases