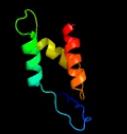
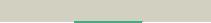
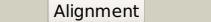
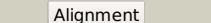
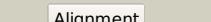
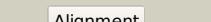
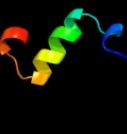
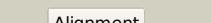
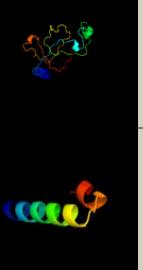
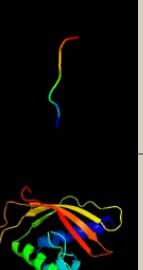
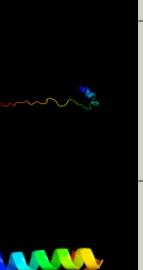
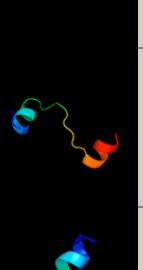
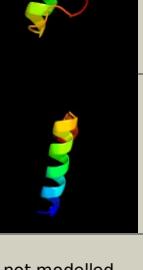
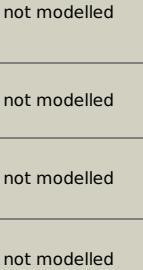


Phyre²

Email	mdejesus@rockefeller.edu
Description	RVBD2203 (-) _2468239_2468931
Date	Mon Aug 5 13:25:33 BST 2019
Unique Job ID	ddcbcebfe5bdfe45

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c5im3A			53.8	26	PDB header: oxidoreductase Chain: A: PDB Molecule: ribonucleoside-diphosphate reductase; PDBTitle: crystal structure of the class i ribonucleotide reductase from2 pseudomonas aeruginosa in complex with dapt
2	d1rlra1			48.7	10	Fold: R1 subunit of ribonucleotide reductase, N-terminal domain Superfamily: R1 subunit of ribonucleotide reductase, N-terminal domain Family: R1 subunit of ribonucleotide reductase, N-terminal domain
3	c3r1rB			47.5	11	PDB header: complex (oxidoreductase/peptide) Chain: B: PDB Molecule: ribonucleotide reductase r1 protein; PDBTitle: ribonucleotide reductase r1 protein with amppnp occupying2 the activity site from escherichia coli
4	c2wn8A			40.6	15	PDB header: transferase Chain: A: PDB Molecule: adp-ribosyltransferase enzymatic component; PDBTitle: structural basis for substrate recognition in the enzymatic2 component of adp-ribosyltransferase toxin cdta from3 clostridium difficile
5	d2k54a1			38.9	25	Fold: Cystatin-like Superfamily: NTF2-like Family: Atu0742-like
6	c2nytB			37.2	20	PDB header: hydrolase Chain: B: PDB Molecule: probable c->u-editing enzyme apobec-2; PDBTitle: the apobec2 crystal structure and functional implications2 for aid
7	d3cu3a1			34.1	9	Fold: Cystatin-like Superfamily: NTF2-like Family: BaiE/LinA-like
8	c4hpmA			33.6	34	PDB header: transcription Chain: A: PDB Molecule: bcl-6 corepressor-like protein 1; PDBTitle: pcgf1 ub fold (rawul)/bcrl1 pufd complex
9	c3bb9D			32.2	12	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
10	c4u13B			31.3	19	PDB header: transferase Chain: B: PDB Molecule: putative polyketide cyclase sma1630; PDBTitle: crystal structure of putative polyketide cyclase (protein sma1630)2 from sinorhizobium meliloti at 2.3 a resolution
11	d1nwwa			31.2	16	Fold: Cystatin-like Superfamily: NTF2-like Family: Limonene-1,2-epoxide hydrolase-like

12	c5h03A_	Alignment		30.5	9	PDB header: toxin Chain: A: PDB Molecule: binary enterotoxin of clostridium perfringens component a; PDBTitle: crystal structure of an adp-ribosylating toxin beca from c.2 perfringens
13	d1oh0a_	Alignment		30.1	15	Fold: Cystatin-like Superfamily: NTF2-like Family: Ketosteroid isomerase-like
14	d1vqo21	Alignment		28.8	71	Fold: Non-globular all-alpha subunits of globular proteins Superfamily: Ribosomal protein L39e Family: Ribosomal protein L39e
15	c5cxoA_	Alignment		28.0	14	PDB header: hydrolase Chain: A: PDB Molecule: epoxide hydrolase; PDBTitle: intriguing role of epoxide hydrolase/cyclase-like enzyme salbii in2 pyran ring formation in polyether salinomycin
16	d1m1eb_	Alignment		27.9	16	Fold: beta-catenin-interacting protein ICAT Superfamily: beta-catenin-interacting protein ICAT Family: beta-catenin-interacting protein ICAT
17	c6of9G_	Alignment		27.9	12	PDB header: unknown function Chain: G: PDB Molecule: camkii hub; PDBTitle: structure of the chlamydamonas reinhardtii camkii hub homology domain
18	c4hplA_	Alignment		26.9	37	PDB header: transcription Chain: A: PDB Molecule: bcl-6 corepressor; PDBTitle: pcgf1 ub fold (rawul)/bcor pufd complex
19	c3dukD_	Alignment		26.4	18	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
20	d3en8a1	Alignment		25.5	21	Fold: Cystatin-like Superfamily: NTF2-like Family: Rpa4348-like
21	d2a15a1	Alignment	not modelled	24.3	20	Fold: Cystatin-like Superfamily: NTF2-like Family: Ketosteroid isomerase-like
22	d2gexa1	Alignment	not modelled	22.4	15	Fold: Cystatin-like Superfamily: NTF2-like Family: SnoA-like polyketide cyclase
23	c1giqA_	Alignment	not modelled	22.3	12	PDB header: toxin Chain: A: PDB Molecule: iota toxin component ia; PDBTitle: crystal structure of the enzymatic component of iota-toxin from clostridium perfringens with nadh
24	c4e1tA_	Alignment	not modelled	22.1	23	PDB header: cell adhesion Chain: A: PDB Molecule: invasin; PDBTitle: x-ray crystal structure of the transmembrane beta-domain from invasin2 from yersinia pseudotuberculosis
25	c3j21f_	Alignment	not modelled	20.7	71	PDB header: ribosome Chain: F: PDB Molecule: 50s ribosomal protein l6p; PDBTitle: promiscuous behavior of proteins in archaeal ribosomes revealed by v2 cryo-em: implications for evolution of eukaryotic ribosomes (50s3 ribosomal proteins)
26	c5ifeC_	Alignment	not modelled	20.4	22	PDB header: splicing Chain: C: PDB Molecule: splicing factor 3b subunit 1; PDBTitle: crystal structure of the human sf3b core complex
27	c4e1sA_	Alignment	not modelled	20.1	19	PDB header: cell adhesion Chain: A: PDB Molecule: intimin; PDBTitle: x-ray crystal structure of the transmembrane beta-domain from intimin2 from ehec strain o157:h7
28	c3wmdA_	Alignment	not modelled	20.1	19	PDB header: isomerase Chain: A: PDB Molecule: probable monensin biosynthesis isomerase; PDBTitle: crystal structure of epoxide hydrolase monbi
						PDB header: unknown function Chain: B: PDB Molecule: monbi

29	c6bjuD_	Alignment	not modelled	17.2	15	Chain: D: PDB Molecule: atzn; PDBTitle: the structure of atzh: a little known member of the atrazine breakdown2 pathway PDB header: viral protein Chain: A: PDB Molecule: protein a46; PDBTitle: crystal structure of the n-terminal domain of vaccinia virus2 immunomodulator a46 in complex with myristic acid.
30	c5ezuA_	Alignment	not modelled	16.2	27	Fold: Cystatin-like Superfamily: NTF2-like Family: Ketosteroid isomerase-like
31	d1ohpa1	Alignment	not modelled	15.9	32	PDB header: unknown function Chain: A: PDB Molecule: ketosteroid isomerase fold protein hmuk_0747; PDBTitle: crystal structure of ketosteroid isomerase fold protein hmuk_0747
32	c4kvhA_	Alignment	not modelled	13.9	23	PDB header: structural genomics, unknown function Chain: B: PDB Molecule: uncharacterized protein sgjc; PDBTitle: streptomyces globisporus c-1027 9-membered enediyne conserved protein2 sgce6
33	c4i4kB_	Alignment	not modelled	13.8	11	PDB header: isomerase Chain: A: PDB Molecule: steroid delta-isomerase; PDBTitle: crystal structure of a steroid delta-isomerase (np_250810.1) from2 pseudomonas aeruginosa at 2.57 a resolution PDB header: ligase
34	c3msoA_	Alignment	not modelled	13.4	19	Chain: B: PDB Molecule: ring finger protein 31; PDBTitle: crystal structure of hoil-1l-ubl complexed with a hoip-uba derivative
35	c4dbgB_	Alignment	not modelled	13.1	35	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
36	c3robC_	Alignment	not modelled	13.1	13	Fold: Cystatin-like Superfamily: NTF2-like Family: PhzA/PhzB-like
37	d1z1sa1	Alignment	not modelled	12.8	32	PDB header: ribosome Chain: Q: PDB Molecule: ribosomal protein l15; PDBTitle: high-resolution cryo-electron microscopy structure of the trypanosoma2 brucei ribosome
38	c3zf7q_	Alignment	not modelled	12.7	71	Fold: Cystatin-like Superfamily: NTF2-like Family: PhzA/PhzB-like
39	d3dmca1	Alignment	not modelled	12.4	10	PDB header: ribosome Chain: O: PDB Molecule: 60s ribosomal protein rpl28 (l15p); PDBTitle: localization of the large subunit ribosomal proteins into a 6.1 a2 cryo-em map of saccharomyces cerevisiae translating 80s ribosome
40	d1m98a2	Alignment	not modelled	11.9	18	Fold: Cystatin-like Superfamily: NTF2-like Family: Orange carotenoid protein, C-terminal domain
41	c3izso_	Alignment	not modelled	11.7	57	PDB header: ribosome 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
42	c3fkaD_	Alignment	not modelled	11.2	18	PDB header: oxidoreductase Chain: B: PDB Molecule: formate dehydrogenase, nitrate-inducible, iron-sulfur PDBTitle: formate dehydrogenase n from e. coli
43	c1kqfB_	Alignment	not modelled	11.0	22	PDB header: ribosome Chain: B: PDB Molecule: rpl39; PDBTitle: t.thermophila 60s ribosomal subunit in complex with2 initiation factor 6. this file contains 26s rRNA and3 proteins of molecule 3.
44	c4a1bb_	Alignment	not modelled	10.4	67	PDB header: transferase Chain: A: PDB Molecule: 5-methyltetrahydrofolate-homocysteine methyltransferase; PDBTitle: structure of the pterin-binding domain metr of 5-2 methyltetrahydrofolate-homocysteine methyltransferase from3 bacteroides thetaiotomicron
45	c3k13A_	Alignment	not modelled	10.3	12	PDB header: ribosomal protein/rna Chain: 3: PDB Molecule: 60s ribosomal protein l39e; PDBTitle: structure of a mammalian ribosomal 60s subunit within an 80s complex2 obtained by docking homology models of the rRNA and proteins into an3 8.7 a cryo-em map
46	c2zkr3_	Alignment	not modelled	10.1	83	PDB header: transcription regulator Chain: C: PDB Molecule: rocr; PDBTitle: crystal structure of the response regulator rocr
47	c3sy8C_	Alignment	not modelled	9.8	9	PDB header: transferase Chain: A: PDB Molecule: camk/camk2 protein kinase; PDBTitle: crystal structure of s. rosetta camkii hub
48	c5ig0A_	Alignment	not modelled	9.7	19	PDB header: oxidoreductase/dna Chain: B: PDB Molecule: bifunctional protein puta; PDBTitle: structure of the ribbon-helix-helix domain of escherichia coli puta2 (puta52) complexed with operator DNA (O2)
49	c2rbfB_	Alignment	not modelled	9.5	56	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: hypothetical protein pa3332; PDBTitle: crystal structure of putative isomerase pa3332 from2 pseudomonas aeruginosa
50	c1z1sA_	Alignment	not modelled	9.5	32	PDB header: transferase Chain: E: PDB Molecule: camkii-b hub; PDBTitle: crystal structure of n. vectensis camkii-b hub at pH 4.2
51	c5ig5E_	Alignment	not modelled	9.4	12	PDB header: unknown function Chain: B: PDB Molecule: ftsZ-like protein of unknown function; PDBTitle: crystal structure of a ftsZ-like protein of unknown function2 (npun_r1471) from nostoc punctiforme pcc 73102 at 1.22 a resolution
52	c3c8IB_	Alignment	not modelled	9.3	21	PDB header: unknown function Chain: B: PDB Molecule: uncharacterized ntf2-like protein;
53	c3fovR	Alignment	not modelled	9.0	12	

53	c3qyD	Alignment	not modelled	8.9	12	PDBTitle: crystal structure of a ntf2-like protein (bxo_b1094) from burkholderia2 xenovorans lb400 at 1.59 a resolution
54	d1z21a1	Alignment	not modelled	8.9	25	Fold: Type III secretion system domain Superfamily: Type III secretion system domain Family: YopP Core
55	c2amnA	Alignment	not modelled	8.8	38	PDB header: antimicrobial protein Chain: A: PDB Molecule: cathelicidin; PDBTitle: solution structure of fowlcidin-1, a novel cathelicidin2 antimicrobial peptide from chicken
56	d2np5a2	Alignment	not modelled	8.6	10	Fold: Tetracyclin repressor-like, C-terminal domain Superfamily: Tetracyclin repressor-like, C-terminal domain Family: Tetracyclin repressor-like, C-terminal domain
57	d2gxfa1	Alignment	not modelled	8.4	32	Fold: Cystatin-like Superfamily: NTF2-like Family: YybH-like
58	c5jthB	Alignment	not modelled	8.4	29	PDB header: transferase Chain: B: PDB Molecule: myosin light chain kinase, smooth muscle; PDBTitle: crystal structure of e67a calmodulin - cam:rm20 complex
59	c5jqaB	Alignment	not modelled	8.4	29	PDB header: calcium binding protein/protein binding Chain: B: PDB Molecule: myosin light chain kinase, smooth muscle; PDBTitle: cam:rm20 complex
60	c5aiIP	Alignment	not modelled	8.4	17	PDB header: hydrolase Chain: P: PDB Molecule: limonene-1,2-epoxide hydrolase; PDBTitle: discovery and characterization of thermophilic limonene-1,2-epoxide2 hydrolases from hot spring metagenomic libraries.3 ch55-sample-peg complex
61	d2bnga1	Alignment	not modelled	8.3	42	Fold: Cystatin-like Superfamily: NTF2-like Family: Limonene-1,2-epoxide hydrolase-like
62	c5k8qB	Alignment	not modelled	8.2	45	PDB header: metal binding protein Chain: B: PDB Molecule: zgc:136689; PDBTitle: crystal structure of calcium-loaded calmodulin in complex with stra62 cambp2-site peptide.
63	c3h3hA	Alignment	not modelled	8.2	19	PDB header: unknown function Chain: A: PDB Molecule: uncharacterized snoal-like protein; PDBTitle: crystal structure of a snoal-like protein of unknown function2 (bth_ji0226) from burkholderia thailandensis e264 at 1.60 a3 resolution
64	d1giqa2	Alignment	not modelled	8.0	13	Fold: ADP-ribosylation Superfamily: ADP-ribosylation Family: ADP-ribosylating toxins
65	c6fejA	Alignment	not modelled	7.9	15	PDB header: photosynthesis Chain: A: PDB Molecule: all4940 protein; PDBTitle: anabaena apo-c-terminal domain homolog protein
66	c3f8hA	Alignment	not modelled	7.9	23	PDB header: unknown function Chain: A: PDB Molecule: putative polyketide cyclase; PDBTitle: crystal structure of a putative polyketide cyclase (tm1040_3560) from2 silicibacter sp. tm1040 at 2.00 a resolution
67	d3cx5e2	Alignment	not modelled	7.8	21	Fold: Single transmembrane helix Superfamily: ISP transmembrane anchor Family: ISP transmembrane anchor
68	d2ay0a1	Alignment	not modelled	7.7	54	Fold: Ribbon-helix-helix Superfamily: Ribbon-helix-helix Family: PutA pre-N-terminal region-like
69	c3vowB	Alignment	not modelled	7.7	11	PDB header: hydrolase Chain: B: PDB Molecule: probable dna dc->du-editing enzyme apobec-3c; PDBTitle: crystal structure of the human apobec3c having hiv-1 vif-binding2 interface
70	d1t6ua	Alignment	not modelled	7.6	15	Fold: Four-helical up-and-down bundle Superfamily: Nickel-containing superoxide dismutase, NiSOD Family: Nickel-containing superoxide dismutase, NiSOD
71	d1uf0a	Alignment	not modelled	7.6	24	Fold: beta-Grasp (ubiquitin-like) Superfamily: Doublecortin (DC) Family: Doublecortin (DC)
72	c4bj5A	Alignment	not modelled	7.4	43	PDB header: transcription Chain: A: PDB Molecule: protein rif2; PDBTitle: crystal structure of rif2 in complex with the c-terminal domain of2 rap1 (rap1-rc)
73	c5li2C	Alignment	not modelled	7.2	19	PDB header: viral protein Chain: C: PDB Molecule: tail sheath protein; PDBTitle: bacteriophage phi812k1-420 tail sheath and tail tube protein in native2 tail
74	d1gr0a2	Alignment	not modelled	7.1	29	Fold: FwdE/GAPDH domain-like Superfamily: Glyceraldehyde-3-phosphate dehydrogenase-like, C-terminal domain Family: Dihydrodipicolinate reductase-like
75	c5wqhE	Alignment	not modelled	6.9	5	PDB header: isomerase Chain: E: PDB Molecule: isomerase trt14; PDBTitle: structure of fungal meroterpenoid isomerase trt14 complexed with2 substrate analog and endo-terretonin d
76	c3f7sA	Alignment	not modelled	6.9	13	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
77	c6s2pN	Alignment	not modelled	6.8	26	PDB header: plant protein Chain: N: PDB Molecule: nrc1; PDBTitle: structure of the nb-arc domain from the tomato immune receptor nrc1
78	c1qsuC	Alignment	not modelled	6.7	56	PDB header: structural protein Chain: C: PDB Molecule: protein ((pro-hyp-gly)4- glu-lys-gly(pro-hyp-gly)5); PDBTitle: crystal structure of the triple-helical collagen-like peptide, (pro-2 hyp-gly)4- glu-lys-gly(pro-hyp-gly)5

79	d3blza1		Alignment	not modelled	6.7	9	Fold: Cystatin-like Superfamily: NTF2-like Family: Sbal0622-like
80	d2oz4a1		Alignment	not modelled	6.4	35	PDB header: immunoglobulin-like beta-sandwich Chain: A: PDB Molecule: cellulase; PDBTitle: crystal structure of novel cellulases from microbes associated with the gut ecosystem
81	c5ir2A_		Alignment	not modelled	6.4	15	PDB header: structural protein Chain: A: PDB Molecule: protein ((pro-hyp-gly)4- glu-lys-gly(pro-hyp-gly)5); PDBTitle: crystal structure of the triple-helical collagen-like peptide, (pro-2 hyp-gly)4-glu-lys-gly(pro-hyp-gly)5
82	c1qsuA_		Alignment	not modelled	6.2	56	PDB header: structural protein Chain: B: PDB Molecule: protein ((pro-hyp-gly)4- glu-lys-gly(pro-hyp-gly)5); PDBTitle: crystal structure of the triple-helical collagen-like peptide, (pro-2 hyp-gly)4-glu-lys-gly(pro-hyp-gly)5
83	c1qsuB_		Alignment	not modelled	6.2	56	PDB header: structural protein Chain: B: PDB Molecule: protein ((pro-hyp-gly)4- glu-lys-gly(pro-hyp-gly)5); PDBTitle: crystal structure of the triple-helical collagen-like peptide, (pro-2 hyp-gly)4-glu-lys-gly(pro-hyp-gly)5
84	c5x9jB_		Alignment	not modelled	6.2	4	PDB header: isomerase Chain: B: PDB Molecule: prhc; PDBTitle: strucutre of prhc from penicillium brasiliannum nbrc 6234
85	c6b4aB_		Alignment	not modelled	6.1	20	PDB header: structural protein Chain: B: PDB Molecule: doublecortin; PDBTitle: crystal structure of the c-terminal domain of doublecortin (tgdcx)2 from toxoplasma gondii me49
86	d2f86b1		Alignment	not modelled	6.0	12	Fold: Cystatin-like Superfamily: NTF2-like Family: Association domain of calcium/calmodulin-dependent protein kinase type II alpha subunit, CAMK2A
87	c5tkmA_		Alignment	not modelled	5.9	15	PDB header: hydrolase Chain: A: PDB Molecule: dna dc->du-editing enzyme apobec-3b; PDBTitle: crystal structure of human apobec3b n-terminal domain
88	c5evhA_		Alignment	not modelled	5.9	30	PDB header: unknown function Chain: A: PDB Molecule: uncharacterized protein; PDBTitle: crystal structure of known function protein from kribbella flava dsm2 17836
89	c4yptA_		Alignment	not modelled	5.7	22	PDB header: hydrolase Chain: A: PDB Molecule: replicase polyprotein 1ab; PDBTitle: x-ray structural of three tandemly linked domains of nsp3 from murine2 hepatitis virus at 2.60 angstroms resolution
90	c3f40A_		Alignment	not modelled	5.6	8	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: uncharacterized ntf2-like protein; PDBTitle: crystal structure of ntf2-like protein of unknown function2 (yp_677363.1) from cytophaga hutchinsonii atcc 33406 at 1.27 a3 resolution
91	c4atul_		Alignment	not modelled	5.6	30	PDB header: hydrolase Chain: I: PDB Molecule: neuronal migration protein doublecortin; PDBTitle: human doublecortin n-dc repeat plus linker, and tubulin (2xrp) docked2 into an 8a cryo-em map of doublecortin-stabilised microtubules3 reconstructed in absence of kinesin
92	c6iyaD_		Alignment	not modelled	5.6	31	PDB header: antitoxin Chain: D: PDB Molecule: transcriptional regulator copg family; PDBTitle: structure of the dna binding domain of antitoxin copaso
93	d3b7ca1		Alignment	not modelled	5.5	15	Fold: Cystatin-like Superfamily: NTF2-like Family: SO0125-like
94	c3tu6A_		Alignment	not modelled	5.4	26	PDB header: electron transport Chain: A: PDB Molecule: pseudoazurin (blue copper protein); PDBTitle: the structure of a pseudoazurin from sinorhizobium meliloti
95	c6fc1D_		Alignment	not modelled	5.4	60	PDB header: translation Chain: D: PDB Molecule: protein eap1; PDBTitle: crystal structure of the eif4e-eap1p complex from saccharomyces2 cerevisiae in the cap-bound state
96	d2rcda1		Alignment	not modelled	5.3	24	Fold: Cystatin-like Superfamily: NTF2-like Family: BxeB1374-like
97	c3fnIA_		Alignment	not modelled	5.3	43	PDB header: oxidoreductase Chain: A: PDB Molecule: putative flavin flavoprotein a 3; PDBTitle: crystal structure of a flavin flavoprotein a3 (all3895) from nostoc2 sp., northeast structural genomics consortium target nsr431a
98	c4fc9B_		Alignment	not modelled	5.3	12	PDB header: structural genomics, unknown function Chain: B: PDB Molecule: uncharacterized protein; PDBTitle: structure of the c-terminal domain of the type iii effector xcv32202 (xopl)
99	c3pawD_		Alignment	not modelled	5.3	16	PDB header: oxidoreductase Chain: D: PDB Molecule: ribonucleoside-diphosphate reductase large chain 1; PDBTitle: low resolution x-ray crystal structure of yeast rnr1p with datp bound2 in the a-site