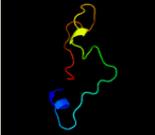
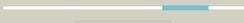
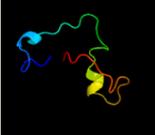
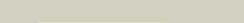
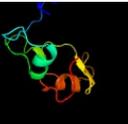
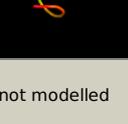


# Phyre2

Email [hurlibertj@winthrop.edu](mailto:hurlibertj@winthrop.edu)  
 Description ASR85416.1\_tail\_terminator\_[Mycobacterium\_phage\_Cain]  
 Date Mon Jun 7 16:50:02 BST 2021  
 Unique Job ID c321ccfb25c09133

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	<a href="#">d1pnoa_</a>	 Alignment		36.5	27	<b>Fold:</b> DHS-like NAD/FAD-binding domain <b>Superfamily:</b> DHS-like NAD/FAD-binding domain <b>Family:</b> Transhydrogenase domain III (dIII)
2	<a href="#">c2bruC_</a>	 Alignment		30.7	35	<b>PDB header:</b> oxidoreductase <b>Chain:</b> C: <b>PDB Molecule:</b> nad(p) transhydrogenase subunit beta; <b>PDBTitle:</b> complex of the domain i and domain iii of escherichia coli2 transhydrogenase
3	<a href="#">d1d4oa_</a>	 Alignment		27.9	24	<b>Fold:</b> DHS-like NAD/FAD-binding domain <b>Superfamily:</b> DHS-like NAD/FAD-binding domain <b>Family:</b> Transhydrogenase domain III (dIII)
4	<a href="#">c1pt9B_</a>	 Alignment		27.4	24	<b>PDB header:</b> oxidoreductase <b>Chain:</b> B: <b>PDB Molecule:</b> nad(p) transhydrogenase, mitochondrial; <b>PDBTitle:</b> crystal structure analysis of the diii component of transhydrogenase2 with a thio-nicotinamide nucleotide analogue
5	<a href="#">d1tmqb_</a>	 Alignment		25.4	24	<b>Fold:</b> Bifunctional inhibitor/lipid-transfer protein/seed storage 2S albumin <b>Superfamily:</b> Bifunctional inhibitor/lipid-transfer protein/seed storage 2S albumin <b>Family:</b> Proteinase/alpha-amylase inhibitors
6	<a href="#">d1beaa_</a>	 Alignment		23.5	29	<b>Fold:</b> Bifunctional inhibitor/lipid-transfer protein/seed storage 2S albumin <b>Superfamily:</b> Bifunctional inhibitor/lipid-transfer protein/seed storage 2S albumin <b>Family:</b> Proteinase/alpha-amylase inhibitors
7	<a href="#">c4cwwD_</a>	 Alignment		23.0	23	<b>PDB header:</b> hydrolase/hydrolase inhibitor <b>Chain:</b> D: <b>PDB Molecule:</b> limit dextrinase inhibitor; <b>PDBTitle:</b> structure of the barley limit dextrinase-limit dextrinase2 inhibitor complex
8	<a href="#">c2lzaA_</a>	 Alignment		22.5	70	<b>PDB header:</b> viral protein <b>Chain:</b> A: <b>PDB Molecule:</b> ns2 peptide; <b>PDBTitle:</b> structure of ns2(32-57) gbvb protein
9	<a href="#">c3kwrA_</a>	 Alignment		20.5	67	<b>PDB header:</b> rna binding protein <b>Chain:</b> A: <b>PDB Molecule:</b> putative rna-binding protein; <b>PDBTitle:</b> crystal structure of putative rna-binding protein (np_785364.1) from2 lactobacillus plantarum at 1.45 a resolution
10	<a href="#">d2dbsa1</a>	 Alignment		16.8	45	<b>Fold:</b> TTHC002-like <b>Superfamily:</b> TTHC002-like <b>Family:</b> TTHC002-like
11	<a href="#">c7a24z_</a>	 Alignment		16.4	15	<b>PDB header:</b> membrane protein <b>Chain:</b> Z: <b>PDB Molecule:</b> b16.6; <b>PDBTitle:</b> assembly intermediate of the plant mitochondrial complex i

12	<a href="#">c6yaqA</a>	Alignment		14.5	10	<b>PDB header:</b> flavoprotein <b>Chain:</b> A: <b>PDB Molecule:</b> cytokinin dehydrogenase 8; <b>PDBTitle:</b> crystal structure of zmck08 in complex with inhibitor 1-(3-chloro-5-2 trifluoromethoxy-phenyl)-3-[2-(2-hydroxy-ethyl)-phenyl]-urea
13	<a href="#">c4agyA</a>	Alignment		10.8	8	<b>PDB header:</b> virus <b>Chain:</b> A: <b>PDB Molecule:</b> vp1 protein; <b>PDBTitle:</b> coxsackievirus a7 (cav7) empty capsid reconstruction at 6.092 angstrom resolution.
14	<a href="#">c6yjiA</a>	Alignment		9.9	11	<b>PDB header:</b> oxidoreductase <b>Chain:</b> A: <b>PDB Molecule:</b> fad-binding pcmh-type domain-containing protein; <b>PDBTitle:</b> structure of fgceldh7c
15	<a href="#">c3h1yA</a>	Alignment		9.6	19	<b>PDB header:</b> isomerase <b>Chain:</b> A: <b>PDB Molecule:</b> mannose-6-phosphate isomerase; <b>PDBTitle:</b> crystal structure of mannose 6-phosphate isomerase from salmonella2 typhimurium bound to substrate (f6p)and metal atom (zn)
16	<a href="#">c3lkxB</a>	Alignment		9.0	32	<b>PDB header:</b> chaperone <b>Chain:</b> B: <b>PDB Molecule:</b> nascent polypeptide-associated complex subunit alpha; <b>PDBTitle:</b> human nac dimerization domain
17	<a href="#">d1lktA</a>	Alignment		8.9	10	<b>Fold:</b> Head-binding domain of phage P22 tailspike protein <b>Superfamily:</b> Head-binding domain of phage P22 tailspike protein <b>Family:</b> Head-binding domain of phage P22 tailspike protein
18	<a href="#">d1br2a1</a>	Alignment		8.8	47	<b>Fold:</b> SH3-like barrel <b>Superfamily:</b> Myosin S1 fragment, N-terminal domain <b>Family:</b> Myosin S1 fragment, N-terminal domain
19	<a href="#">c3mxtA</a>	Alignment		8.6	28	<b>PDB header:</b> ligase <b>Chain:</b> A: <b>PDB Molecule:</b> pantothenate synthetase; <b>PDBTitle:</b> crystal structure of pantoate-beta-alanine ligase from campylobacter2 jejuni
20	<a href="#">c2g7rA</a>	Alignment		8.4	63	<b>PDB header:</b> hydrolase <b>Chain:</b> A: <b>PDB Molecule:</b> mucosa-associated lymphoid tissue lymphoma translocation <b>PDBTitle:</b> x-ray structure of the death domain of the human mucosa associated2 lymphoid tissue lymphoma translocation protein 1
21	<a href="#">d2o5ha1</a>	Alignment	not modelled	8.0	44	<b>Fold:</b> NMB0513-like <b>Superfamily:</b> NMB0513-like <b>Family:</b> NMB0513-like
22	<a href="#">c1n2dC</a>	Alignment	not modelled	8.0	27	<b>PDB header:</b> cell cycle <b>Chain:</b> C: <b>PDB Molecule:</b> iq2 and iq3 motifs from myo2p, a class v myosin; <b>PDBTitle:</b> ternary complex of mlc1p bound to iq2 and iq3 of myo2p, a class v2 myosin
23	<a href="#">c5gpdB</a>	Alignment	not modelled	7.6	31	<b>PDB header:</b> dna binding protein <b>Chain:</b> B: <b>PDB Molecule:</b> sterol regulatory element-binding protein 1; <b>PDBTitle:</b> crystal structure of the binding domain of srebp from fission yeast
24	<a href="#">c2vfvA</a>	Alignment	not modelled	7.6	17	<b>PDB header:</b> oxidoreductase <b>Chain:</b> A: <b>PDB Molecule:</b> xylitol oxidase; <b>PDBTitle:</b> alditol oxidase from streptomyces coelicolor a3(2): complex2 with sulphite
25	<a href="#">c3bw7A</a>	Alignment	not modelled	7.5	10	<b>PDB header:</b> oxidoreductase <b>Chain:</b> A: <b>PDB Molecule:</b> cytokinin dehydrogenase 1; <b>PDBTitle:</b> maize cytokinin oxidase/dehydrogenase complexed with the allenic2 cytokinin analog ha-1
26	<a href="#">c3witA</a>	Alignment	not modelled	6.8	50	<b>PDB header:</b> structural protein <b>Chain:</b> A: <b>PDB Molecule:</b> putative vgr protein; <b>PDBTitle:</b> crystal structure of the c-terminal region of vgrg1 from e. coli o1572 edl933
27	<a href="#">c6u7hB</a>	Alignment	not modelled	6.7	16	<b>PDB header:</b> viral protein <b>Chain:</b> B: <b>PDB Molecule:</b> spike glycoprotein; <b>PDBTitle:</b> cryo-em structure of the hcov-229e spike glycoprotein
28	<a href="#">c6b15A</a>	Alignment	not modelled	6.3	63	<b>PDB header:</b> sugar binding protein <b>Chain:</b> A: <b>PDB Molecule:</b> amy13k; <b>PDBTitle:</b> crystal structure of cbmbc (family cbm26) from eubacterium rectale2 amy13k

29	<a href="#">c6dlmA_</a>	Alignment	not modelled	6.1	70	<b>PDB header:</b> de novo protein <b>Chain:</b> A: <b>PDB Molecule:</b> dhd127_a; <b>PDBTitle:</b> dhd127
30	<a href="#">c6i08B_</a>	Alignment	not modelled	6.0	40	<b>PDB header:</b> metal binding protein <b>Chain:</b> B: <b>PDB Molecule:</b> cytidine deaminase 1; <b>PDBTitle:</b> crystal structure of arabidopsis cytidine deaminase
31	<a href="#">c2ev2B_</a>	Alignment	not modelled	5.9	24	<b>PDB header:</b> lyase <b>Chain:</b> B: <b>PDB Molecule:</b> hypothetical protein rv1264/mt1302; <b>PDBTitle:</b> structure of rv1264n, the regulatory domain of the mycobacterial2 adenyllyl cylcase rv1264, at ph 8.5
32	<a href="#">d1ihoa_</a>	Alignment	not modelled	5.9	41	<b>Fold:</b> Adenine nucleotide alpha hydrolase-like <b>Superfamily:</b> Nucleotidylyl transferase <b>Family:</b> Pantothenate synthetase (Pantoate-beta-alanine ligase, PanC)
33	<a href="#">d1hssa_</a>	Alignment	not modelled	5.9	33	<b>Fold:</b> Bifunctional inhibitor/lipid-transfer protein/seed storage 2S albumin <b>Superfamily:</b> Bifunctional inhibitor/lipid-transfer protein/seed storage 2S albumin <b>Family:</b> Proteinase/alpha-amylase inhibitors
34	<a href="#">c5d2hA_</a>	Alignment	not modelled	5.9	17	<b>PDB header:</b> lyase <b>Chain:</b> A: <b>PDB Molecule:</b> 4-oxalocrotonate decarboxylase nahk; <b>PDBTitle:</b> 4-oxalocrotonate decarboxylase from pseudomonas putida g7 - complexed2 with magnesium and alpha-ketoglutarate
35	<a href="#">c7cc9C_</a>	Alignment	not modelled	5.8	19	<b>PDB header:</b> dna binding protein/dna <b>Chain:</b> C: <b>PDB Molecule:</b> hnhc domain-containing protein; <b>PDBTitle:</b> sulfur binding domain of sprmcra complexed with phosphorothioated dna
36	<a href="#">c3cwfA_</a>	Alignment	not modelled	5.8	64	<b>PDB header:</b> transferase <b>Chain:</b> A: <b>PDB Molecule:</b> alkaline phosphatase synthesis sensor protein phor; <b>PDBTitle:</b> crystal structure of pas domain of two-component sensor histidine2 kinase
37	<a href="#">d1i27a_</a>	Alignment	not modelled	5.8	63	<b>Fold:</b> DNA/RNA-binding 3-helical bundle <b>Superfamily:</b> "Winged helix" DNA-binding domain <b>Family:</b> C-terminal domain of the rap74 subunit of TFIIIF
38	<a href="#">c2vkyB_</a>	Alignment	not modelled	5.8	10	<b>PDB header:</b> viral protein <b>Chain:</b> B: <b>PDB Molecule:</b> tail protein, piigcn4; <b>PDBTitle:</b> headbinding domain of phage p22 tailspike c-terminally fused to2 isoleucine zipper piigcn4 (chimera i)
39	<a href="#">c3ag5A_</a>	Alignment	not modelled	5.3	21	<b>PDB header:</b> ligase <b>Chain:</b> A: <b>PDB Molecule:</b> pantothenate synthetase; <b>PDBTitle:</b> crystal structure of pantothenate synthetase from staphylococcus2 aureus
40	<a href="#">c6qtiB_</a>	Alignment	not modelled	5.2	24	<b>PDB header:</b> membrane protein <b>Chain:</b> B: <b>PDB Molecule:</b> nicotinamide nucleotide transhydrogenase; <b>PDBTitle:</b> structure of ovine transhydrogenase in the presence of nadp+ in a2 "double face-down" conformation