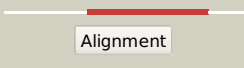

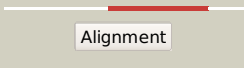

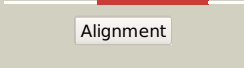

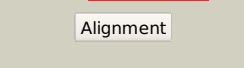
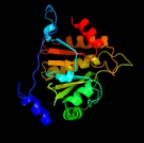
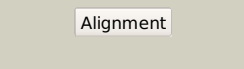

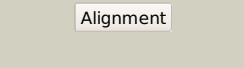

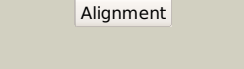

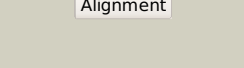

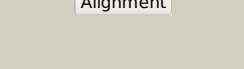

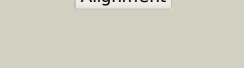

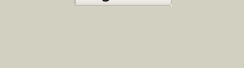









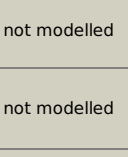


Phyre2

Email	mdejesus@rockefeller.edu
Description	RVBD1899c_(lppD)_2145221_2146252
Date	Fri Aug 2 13:30:51 BST 2019
Unique Job ID	1097483daef1183e

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c5fszA_	 Alignment		100.0	28	PDB header: hydrolase Chain: A; PDB Molecule: macrodomain; PDBTitle: crystal structure of trypanosoma cruzi macrodomain
2	c5iitC_	 Alignment		100.0	26	PDB header: inositol phosphate binding protein Chain: C; PDB Molecule: vacuolar transporter chaperone 4,core histone macro-h2a.1; PDBTitle: structure of spx domain of the yeast inorganic polyphosphate polymerase2 vtc4 crystallized by carrier-driven crystallization in fusion with3 the macro domain of human histone macroh2a1.1
3	c5fsuA_	 Alignment		100.0	33	PDB header: hydrolase Chain: A; PDB Molecule: macrodomain; PDBTitle: crystal structure of trypanosoma brucei macrodomain2 (crystal form 1)
4	c4iqyB_	 Alignment		100.0	28	PDB header: hydrolase Chain: B; PDB Molecule: o-acetyl-adp-ribose deacetylase macrod2; PDBTitle: crystal structure of the human protein-proximal adp-ribosyl-hydrolase2 macrod2
5	c5kivA_	 Alignment		100.0	28	PDB header: hydrolase Chain: A; PDB Molecule: protein-adp-ribose hydrolase; PDBTitle: crystal structure of saumacro (sav0325)
6	c2x47A_	 Alignment		100.0	32	PDB header: signaling protein Chain: A; PDB Molecule: macro domain-containing protein 1; PDBTitle: crystal structure of human macrod1
7	d1zr5a1	 Alignment		100.0	22	Fold: Macro domain-like Superfamily: Macro domain-like Family: Macro domain
8	c3vfgA_	 Alignment		100.0	31	PDB header: transferase Chain: A; PDB Molecule: poly [adp-ribose] polymerase 14; PDBTitle: human parp14 (artd8, bal2) - macro domains 1 and 2 in complex with2 adenosine-5-diphosphoribose
9	c4um1A_	 Alignment		100.0	24	PDB header: signaling protein Chain: A; PDB Molecule: ganglioside-induced differentiation-associated protein 2; PDBTitle: crystal structure of ganglioside induced differentiation2 associated protein 2 (gdap2) macro domain
10	c1zr5B_	 Alignment		100.0	22	PDB header: gene regulation Chain: B; PDB Molecule: h2afy protein; PDBTitle: crystal structure of the macro-domain of human core histone variant2 macroh2a1.2
11	c2xd7B_	 Alignment		100.0	21	PDB header: dna binding protein Chain: B; PDB Molecule: core histone macro-h2a.2; PDBTitle: crystal structure of the macro domain of human core histone h2a

12	d1yd9a1	Alignment		100.0	24	Fold: Macro domain-like Superfamily: Macro domain-like Family: Macro domain
13	c4ablA	Alignment		100.0	22	PDB header: transferase Chain: A: PDB Molecule: poly [adp-ribose] polymerase 14; PDBTitle: human parp14 (artd8, bal2) - macro domain 3
14	c3q71A	Alignment		100.0	26	PDB header: transferase Chain: A: PDB Molecule: poly [adp-ribose] polymerase 14; PDBTitle: human parp14 (artd8) - macro domain 2 in complex with adenosine-5-2 diphosphoribose
15	c3kh6A	Alignment		100.0	20	PDB header: transferase Chain: A: PDB Molecule: poly [adp-ribose] polymerase 15; PDBTitle: human poly(adp-ribose) polymerase 15, macro domain 2 in complex with2 adenosine-5-diphosphoribose
16	c3q6zA	Alignment		100.0	31	PDB header: transferase Chain: A: PDB Molecule: poly [adp-ribose] polymerase 14; PDBTitle: human parp14 (artd8)-macro domain 1 in complex with adenosine-5-2 diphosphoribose
17	d1vhua	Alignment		100.0	32	Fold: Macro domain-like Superfamily: Macro domain-like Family: Macro domain
18	c5ailA	Alignment		100.0	22	PDB header: transcription Chain: A: PDB Molecule: poly [adp-ribose] polymerase 9; PDBTitle: human parp9 2nd macrodomain
19	c5l9kB	Alignment		100.0	24	PDB header: hydrolase Chain: B: PDB Molecule: macro-d-type macrodomain; PDBTitle: oceanobacillus iheyensis macrodomain with adpr
20	d1spva	Alignment		100.0	33	Fold: Macro domain-like Superfamily: Macro domain-like Family: Macro domain
21	d2acfa1	Alignment	not modelled	100.0	26	Fold: Macro domain-like Superfamily: Macro domain-like Family: Macro domain
22	c5dusA	Alignment	not modelled	100.0	20	PDB header: viral protein Chain: A: PDB Molecule: orf1a; PDBTitle: crystal structure of mers-cov macro domain in complex with adp-ribose
23	c2vriA	Alignment	not modelled	100.0	22	PDB header: viral protein Chain: A: PDB Molecule: non-structural protein 3; PDBTitle: structure of the nsp3 x-domain of human coronavirus nl63
24	c3ejfA	Alignment	not modelled	100.0	21	PDB header: hydrolase Chain: A: PDB Molecule: non-structural protein 3; PDBTitle: crystal structure of ibv x-domain at ph 8.5
25	c2dx6B	Alignment	not modelled	100.0	39	PDB header: structural genomics, unknown function Chain: B: PDB Molecule: hypothetical protein ttha0132; PDBTitle: crystal structure of conserved hypothetical protein, ttha0132 from2 thermus thermophilus hb8
26	c3ew5B	Alignment	not modelled	100.0	25	PDB header: rna binding protein Chain: B: PDB Molecule: macro domain of non-structural protein 3; PDBTitle: structure of the tetragonal crystal form of x (adrp) domain2 from fcov
27	c3ejgA	Alignment	not modelled	100.0	20	PDB header: hydrolase Chain: A: PDB Molecule: non-structural protein 3; PDBTitle: crystal structure of hcov-229e x-domain
28	c3gqeA	Alignment	not modelled	100.0	18	PDB header: viral protein Chain: A: PDB Molecule: non-structural protein 3; PDBTitle: crystal structure of macro domain of venezuelan equine encephalitis2 virus
						PDB header: viral protein

29	c5iq5A_	Alignment	not modelled	100.0	22	Chain: A: PDB Molecule: macro domain; PDBTitle: nmr solution structure of mayaro virus macro domain
30	c3ewqA_	Alignment	not modelled	100.0	20	PDB header: hydrolase Chain: A: PDB Molecule: non-structural protein 3; PDBTitle: hcov-229e nsp3 adrp domain
31	c3gpqA_	Alignment	not modelled	100.0	19	PDB header: viral protein/rna Chain: A: PDB Molecule: non-structural protein 3; PDBTitle: crystal structure of macro domain of chikungunya virus in complex with2 rna
32	c5m3iB_	Alignment	not modelled	100.0	19	PDB header: antitoxin Chain: B: PDB Molecule: rnase iii inhibitor; PDBTitle: macrodomain of mycobacterium tuberculosis darg
33	c5m31A_	Alignment	not modelled	100.0	22	PDB header: antitoxin Chain: A: PDB Molecule: appr-1-p processing domain protein; PDBTitle: macrodomain of thermus aquaticus darg
34	c4guaB_	Alignment	not modelled	100.0	20	PDB header: hydrolase Chain: B: PDB Molecule: non-structural polyprotein; PDBTitle: alphavirus p23pro-zbd
35	c2eeeA_	Alignment	not modelled	99.9	13	PDB header: gene regulation Chain: A: PDB Molecule: uncharacterized protein c6orf130; PDBTitle: solution structure of the a1pp domain from human protein2 c6orf130
36	c5lw0A_	Alignment	not modelled	99.9	29	PDB header: adp-ribose-binding protein Chain: A: PDB Molecule: basic helix-loop-helix, putative, expressed; PDBTitle: oryza sativa apl macrodomain in complex with adp-ribose
37	d1njra_	Alignment	not modelled	99.9	19	Fold: Macro domain-like Superfamily: Macro domain-like Family: Macro domain
38	c5e3bA_	Alignment	not modelled	99.9	20	PDB header: hydrolase Chain: A: PDB Molecule: macrodomain protein; PDBTitle: structure of macrodomain protein from streptomyces coelicolor
39	d2fg1a1	Alignment	not modelled	99.9	13	Fold: Macro domain-like Superfamily: Macro domain-like Family: Macro domain
40	c5zdcL_	Alignment	not modelled	98.7	23	PDB header: hydrolase Chain: L: PDB Molecule: poly adp-ribose glycohydrolase; PDBTitle: crystal structure of poly(adp-ribose) glycohydrolase (parg) from2 deinococcus radiodurans in complex with adp-ribose (p32)
41	c3siiA_	Alignment	not modelled	98.5	32	PDB header: hydrolase/hydrolase inhibitor Chain: A: PDB Molecule: poly(adp-ribose) glycohydrolase; PDBTitle: the x-ray crystal structure of poly(adp-ribose) glycohydrolase bound2 to the inhibitor adp-hpd from thermomonospora curvata
42	c5lw6A_	Alignment	not modelled	98.4	8	PDB header: adp-ribose binding protein Chain: A: PDB Molecule: ddb_g0293866; PDBTitle: crystal structure of a se-met substituted dictyostelium discoideum2 adp-ribose binding macrodomain (residues 342-563) of ddb_g0293866
43	d1gyta1	Alignment	not modelled	97.6	13	Fold: Macro domain-like Superfamily: Macro domain-like Family: Leucine aminopeptidase (Aminopeptidase A), N-terminal domain
44	c6omeA_	Alignment	not modelled	92.5	10	PDB header: hydrolase Chain: A: PDB Molecule: probable cytosol aminopeptidase; PDBTitle: crystal structure of a probable cytosol aminopeptidase (leucine2 aminopeptidase, lap) from chlamydia trachomatis d/uw-3/cx
45	c1gytG_	Alignment	not modelled	91.4	13	PDB header: hydrolase Chain: G: PDB Molecule: cytosol aminopeptidase; PDBTitle: e. coli aminopeptidase a (pepa)
46	c3jrUB_	Alignment	not modelled	85.0	13	PDB header: hydrolase Chain: B: PDB Molecule: probable cytosol aminopeptidase; PDBTitle: crystal structure of leucyl aminopeptidase (pepa) from xoo0834,2 xanthomonas oryzae pv. oryzae kacc10331
47	c3kzwD_	Alignment	not modelled	66.4	8	PDB header: hydrolase Chain: D: PDB Molecule: cytosol aminopeptidase; PDBTitle: crystal structure of cytosol aminopeptidase from staphylococcus aureus2 col
48	c3h8gC_	Alignment	not modelled	61.4	12	PDB header: hydrolase Chain: C: PDB Molecule: cytosol aminopeptidase; PDBTitle: bestatin complex structure of leucine aminopeptidase from pseudomonas2 putida
49	c5gukA_	Alignment	not modelled	49.1	17	PDB header: biosynthetic protein Chain: A: PDB Molecule: cyclolavandulyl diphosphate synthase; PDBTitle: crystal structure of apo form of cyclolavandulyl diphosphate synthase2 (clds) from streptomyces sp. cl190
50	c2vg2C_	Alignment	not modelled	47.9	21	PDB header: transferase Chain: C: PDB Molecule: undecaprenyl pyrophosphate synthetase; PDBTitle: rv2361 with ipp
51	c5hc7A_	Alignment	not modelled	45.8	20	PDB header: transferase/transferase inhibitor Chain: A: PDB Molecule: prenyltransferase for protein; PDBTitle: crystal structure of lavandulyl diphosphate synthase from lavandula x2 intermedia in complex with s-thioo-isopentenylidiphosphate
52	c4h8eA_	Alignment	not modelled	37.7	19	PDB header: transferase/transferase inhibitor Chain: A: PDB Molecule: undecaprenyl pyrophosphate synthase; PDBTitle: structure of s. aureus undecaprenyl diphosphate synthase in complex2 with fpp and sulfate
53	c5wggA_	Alignment	not modelled	30.9	11	PDB header: peptide binding protein Chain: A: PDB Molecule: radical sam domain protein; PDBTitle: structural insights into thioether bond formation in the biosynthesis2 of sactipeptides
54	c4g56C_	Alignment	not modelled	30.0	26	PDB header: transferase Chain: C: PDB Molecule: hsl7 protein; PDBTitle: crystal structure of full length prmt5/mep50 complexes

						from xenopus2 laevis
55	c2k19A	Alignment	not modelled	28.9	45	PDB header: antimicrobial protein Chain: A: PDB Molecule: putative piscicolin 126 immunity protein; PDBTitle: nmr solution structure of pisi
56	c3ua4A	Alignment	not modelled	26.6	21	PDB header: transferase Chain: A: PDB Molecule: protein arginine n-methyltransferase 5; PDBTitle: crystal structure of protein arginine methyltransferase prmt5
57	c4dqvA	Alignment	not modelled	26.5	33	PDB header: ligase Chain: A: PDB Molecule: probable peptide synthetase nrp (peptide synthase); PDBTitle: crystal structure of reductase (r) domain of non-ribosomal peptide2 synthetase from mycobacterium tuberculosis
58	c5v1tA	Alignment	not modelled	23.5	13	PDB header: metal binding protein Chain: A: PDB Molecule: radical sam; PDBTitle: crystal structure of streptococcus suis suib bound to precursor2 peptide suia
59	c5th5C	Alignment	not modelled	21.0	14	PDB header: lyase Chain: C: PDB Molecule: 7-carboxy-7-deazaguanine synthase; PDBTitle: crystal structure of quee from bacillus subtilis with 6-carboxypterin-2 5'-deoxyadenosyl ester bound
60	c2h8bB	Alignment	not modelled	19.6	47	PDB header: hormone/growth factor Chain: B: PDB Molecule: insulin-like 3; PDBTitle: solution structure of insl3
61	d1mlda1	Alignment	not modelled	19.1	7	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: LDH N-terminal domain-like
62	c4q9mA	Alignment	not modelled	18.5	14	PDB header: transferase/transferase inhibitor Chain: A: PDB Molecule: isoprenyl transferase; PDBTitle: crystal structure of upps in complex with fpp and an allosteric2 inhibitor
63	c5n4kA	Alignment	not modelled	17.8	15	PDB header: rna binding protein Chain: A: PDB Molecule: nucleoprotein; PDBTitle: n-terminal domain of a human coronavirus nl63 nucleocapsid protein
64	d1gnfa	Alignment	not modelled	15.9	36	Fold: Glucocorticoid receptor-like (DNA-binding domain) Superfamily: Glucocorticoid receptor-like (DNA-binding domain) Family: Erythroid transcription factor GATA-1
65	c3ugsB	Alignment	not modelled	15.8	16	PDB header: transferase Chain: B: PDB Molecule: undecaprenyl pyrophosphate synthase; PDBTitle: crystal structure of a probable undecaprenyl diphosphate synthase2 (upps) from campylobacter jejuni
66	c4pg8B	Alignment	not modelled	15.1	22	PDB header: oxidoreductase Chain: B: PDB Molecule: homoserine dehydrogenase; PDBTitle: crystal structure of s. aureus homoserine dehydrogenase at ph8.5
67	c5msuC	Alignment	not modelled	14.9	30	PDB header: oxidoreductase Chain: C: PDB Molecule: carboxylic acid reductase; PDBTitle: structure of the r domain of carboxylic acid reductase (car) from2 mycobacterium marinum in complex with nadp, p21 form
68	d2vuti1	Alignment	not modelled	14.5	31	Fold: Glucocorticoid receptor-like (DNA-binding domain) Superfamily: Glucocorticoid receptor-like (DNA-binding domain) Family: Erythroid transcription factor GATA-1
69	c6bxwA	Alignment	not modelled	13.3	23	PDB header: membrane protein Chain: A: PDB Molecule: mitochondrial association factor 1; PDBTitle: crystal structure of toxoplasma gondii mitochondrial association2 factor 1 b (maf1b) in complex with adpribose
70	c2kaeA	Alignment	not modelled	12.9	31	PDB header: transcription/dna Chain: A: PDB Molecule: gata-type transcription factor; PDBTitle: data-driven model of med1:dna complex
71	c3a46B	Alignment	not modelled	12.9	27	PDB header: hydrolase Chain: B: PDB Molecule: formamidopyrimidine-dna glycosylase; PDBTitle: crystal structure of mvnei1/thf complex
72	c5b37A	Alignment	not modelled	12.2	25	PDB header: oxidoreductase Chain: A: PDB Molecule: tryptophan dehydrogenase; PDBTitle: crystal structure of l-tryptophan dehydrogenase from nostoc2 punctiforme
73	d1hyea1	Alignment	not modelled	11.9	14	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: LDH N-terminal domain-like
74	d1v5ma	Alignment	not modelled	11.7	25	Fold: PH domain-like barrel Superfamily: PH domain-like Family: Pleckstrin-homology domain (PH domain)
75	d2amxa1	Alignment	not modelled	11.5	8	Fold: TIM beta/alpha-barrel Superfamily: Metallo-dependent hydrolases Family: Adenosine/AMP deaminase
76	d1sska	Alignment	not modelled	11.4	56	Fold: Coronavirus RNA-binding domain Superfamily: Coronavirus RNA-binding domain Family: Coronavirus RNA-binding domain
77	c3g5rA	Alignment	not modelled	11.2	22	PDB header: transferase Chain: A: PDB Molecule: methylenetetrahydrofolate--trna-(uracil-5-)- PDBTitle: crystal structure of thermus thermophilus trmfo in complex with2 tetrahydrofolate
78	c4c4aA	Alignment	not modelled	10.5	13	PDB header: transferase Chain: A: PDB Molecule: protein arginine n-methyltransferase 7; PDBTitle: crystal structure of mouse protein arginine methyltransferase 7 in2 complex with sah
79	c5xk9F	Alignment	not modelled	10.1	9	PDB header: transferase Chain: F: PDB Molecule: undecaprenyl diphosphate synthase; PDBTitle: crystal structure of isosesquilandulyl diphosphate synthase from2 streptomyces sp. strain cnh-189 in complex with gppp and dmapp PDB header: lyase

80	c4zr8B_	Alignment	not modelled	10.1	21	Chain: B: PDB Molecule: uroporphyrinogen decarboxylase; PDBTitle: structure of uroporphyrinogen decarboxylase from acinetobacter2 baumannii
81	d1y0ja1	Alignment	not modelled	9.9	29	Fold: Glucocorticoid receptor-like (DNA-binding domain) Superfamily: Glucocorticoid receptor-like (DNA-binding domain) Family: Erythroid transcription factor GATA-1
82	c2lo9A_	Alignment	not modelled	9.9	75	PDB header: toxin Chain: A: PDB Molecule: mu-conotoxin buiiiib; PDBTitle: nmr solution structure of mu-contoxin buiiiib
83	c2mxfA_	Alignment	not modelled	9.9	45	PDB header: transcription regulator/dna Chain: A: PDB Molecule: mvat; PDBTitle: structure of the dna complex of the c-terminal domain of mvat
84	c5cw9A_	Alignment	not modelled	9.8	19	PDB header: de novo protein Chain: A: PDB Molecule: de novo designed ferredoxin-ferredoxin domain insertion PDBTitle: crystal structure of de novo designed ferredoxin-ferredoxin domain2 insertion protein
85	c1jpkA_	Alignment	not modelled	9.6	21	PDB header: lyase Chain: A: PDB Molecule: uroporphyrinogen decarboxylase; PDBTitle: gly156asp mutant of human urod, human uroporphyrinogen iii2 decarboxylase
86	c5vslB_	Alignment	not modelled	9.5	11	PDB header: antiviral protein Chain: B: PDB Molecule: radical s-adenosyl methionine domain-containing protein 2; PDBTitle: crystal structure of viperin with bound [4fe-4s] cluster and s-2 adenosylhomocysteine (sah)
87	c2locA_	Alignment	not modelled	9.4	75	PDB header: toxin Chain: A: PDB Molecule: mu-conotoxin buiiiib; PDBTitle: conotoxin analogue [d-ala2]buiiib
88	c6efnA_	Alignment	not modelled	9.3	14	PDB header: oxidoreductase Chain: A: PDB Molecule: sporulation killing factor maturation protein skfb; PDBTitle: structure of a ripp maturase, skfb
89	c5imuA_	Alignment	not modelled	9.2	78	PDB header: signaling protein Chain: A: PDB Molecule: tat (twin-arginine translocation) pathway signal sequence PDBTitle: a fragment of conserved hypothetical protein rv3899c (residues 184-2 410) from mycobacterium tuberculosis
90	d1r8ka_	Alignment	not modelled	9.1	12	Fold: Isocitrate/Isopropylmalate dehydrogenase-like Superfamily: Isocitrate/Isopropylmalate dehydrogenase-like Family: PdxA-like
91	c6nd1A_	Alignment	not modelled	9.1	50	PDB header: protein transport Chain: A: PDB Molecule: protein translocation protein sec63; PDBTitle: cryoem structure of the sec complex from yeast
92	d1c0pa1	Alignment	not modelled	8.9	35	Fold: Nucleotide-binding domain Superfamily: Nucleotide-binding domain Family: D-aminoacid oxidase, N-terminal domain
93	c4ndlC_	Alignment	not modelled	8.8	53	PDB header: de novo protein Chain: C: PDB Molecule: enh-c2b, computational designed homodimer; PDBTitle: computational design and experimental verification of a symmetric2 homodimer
94	c3hd4A_	Alignment	not modelled	8.8	53	PDB header: viral protein Chain: A: PDB Molecule: nucleoprotein; PDBTitle: mhv nucleocapsid protein ntd
95	c2vfwB_	Alignment	not modelled	8.6	15	PDB header: transferase Chain: B: PDB Molecule: short-chain z-isoprenyl diphosphate synthetase; PDBTitle: rv1086 native
96	c3ckvA_	Alignment	not modelled	8.5	15	PDB header: unknown function Chain: A: PDB Molecule: putative uncharacterized protein; PDBTitle: crystal structure of a mycobacterial protein
97	d2cmda1	Alignment	not modelled	8.1	8	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: LDH N-terminal domain-like
98	c3ingA_	Alignment	not modelled	8.0	9	PDB header: oxidoreductase Chain: A: PDB Molecule: homoserine dehydrogenase; PDBTitle: crystal structure of homoserine dehydrogenase (np_394635.1) from2 thermoplasma acidophilum at 1.95 a resolution
99	c6pdmA_	Alignment	not modelled	7.9	8	PDB header: transferase Chain: A: PDB Molecule: protein arginine n-methyltransferase 9; PDBTitle: crystal structure of human protein arginine methyltransferase 92 (prmt9)