






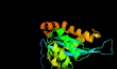














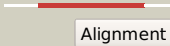

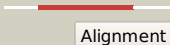

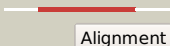







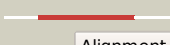






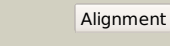

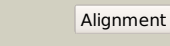
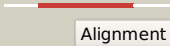


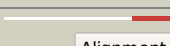


Phyre2

Email	mdejesus@rockefeller.edu
Description	RVBD3428c (-)_3844918_3846150
Date	Fri Aug 9 18:20:10 BST 2019
Unique Job ID	a2c3ea645a62f1e7

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c4fcyA_	 Alignment		100.0	15	PDB header: dna binding protein/dna Chain: A: PDB Molecule: transposase; PDBTitle: crystal structure of the bacteriophage mu transpososome
2	c1bcoA_	 Alignment		99.9	9	PDB header: transposase Chain: A: PDB Molecule: bacteriophage mu transposase; PDBTitle: bacteriophage mu transposase core domain
3	d1bcoa2	 Alignment		99.8	8	Fold: Ribonuclease H-like motif Superfamily: Ribonuclease H-like Family: mu transposase, core domain
4	c5u1cA_	 Alignment		99.8	8	PDB header: viral protein Chain: A: PDB Molecule: hiv-1 integrase, sso7d chimera; PDBTitle: structure of tetrameric hiv-1 strand transfer complex intasome
5	c5cz1B_	 Alignment		99.8	13	PDB header: hydrolase Chain: B: PDB Molecule: integrase; PDBTitle: crystal structure of the catalytic core domain of mmv integrase
6	c1c0mA_	 Alignment		99.8	15	PDB header: transferase Chain: A: PDB Molecule: protein (integrase); PDBTitle: crystal structure of rsv two-domain integrase
7	c3f9kV_	 Alignment		99.8	12	PDB header: viral protein, recombination Chain: V: PDB Molecule: integrase; PDBTitle: two domain fragment of hiv-2 integrase in complex with ledgf ibd
8	c3nf9A_	 Alignment		99.8	10	PDB header: hydrolase/hydrolase inhibitor Chain: A: PDB Molecule: integrase; PDBTitle: structural basis for a new mechanism of inhibition of hiv integrase2 identified by fragment screening and structure based design
9	c3jcaE_	 Alignment		99.8	15	PDB header: viral protein Chain: E: PDB Molecule: integrase; PDBTitle: core model of the mouse mammary tumor virus intasome
10	d1lasua_	 Alignment		99.8	15	Fold: Ribonuclease H-like motif Superfamily: Ribonuclease H-like Family: Retroviral integrase, catalytic domain
11	d1c0ma2	 Alignment		99.7	14	Fold: Ribonuclease H-like motif Superfamily: Ribonuclease H-like Family: Retroviral integrase, catalytic domain

12	c5m0rF_	 Alignment		99.7	17	PDB header: hydrolase Chain: F: PDB Molecule: integrase; PDBTitle: cryo-em reconstruction of the maedi-visna virus (mvv) strand transfer2 complex
13	c1ex4A_	 Alignment		99.7	11	PDB header: viral protein Chain: A: PDB Molecule: integrase; PDBTitle: hiv-1 integrase catalytic core and c-terminal domain
14	d1exqa_	 Alignment		99.7	10	Fold: Ribonuclease H-like motif Superfamily: Ribonuclease H-like Family: Retroviral integrase, catalytic domain
15	c3kksB_	 Alignment		99.7	14	PDB header: dna binding protein Chain: B: PDB Molecule: integrase; PDBTitle: crystal structure of catalytic core domain of biv integrase in crystal2 form ii
16	c4mq3A_	 Alignment		99.6	11	PDB header: viral protein Chain: A: PDB Molecule: integrase; PDBTitle: the 1.1 angstrom structure of catalytic core domain of fiv integrase
17	d1cxqa_	 Alignment		99.6	16	Fold: Ribonuclease H-like motif Superfamily: Ribonuclease H-like Family: Retroviral integrase, catalytic domain
18	d1hyva_	 Alignment		99.6	13	Fold: Ribonuclease H-like motif Superfamily: Ribonuclease H-like Family: Retroviral integrase, catalytic domain
19	c3hpgC_	 Alignment		99.6	17	PDB header: transferase Chain: C: PDB Molecule: integrase; PDBTitle: visna virus integrase (residues 1-219) in complex with ledgf2 ibd: examples of open integrase dimer-dimer interfaces
20	c1k6yB_	 Alignment		99.6	9	PDB header: transferase Chain: B: PDB Molecule: integrase; PDBTitle: crystal structure of a two-domain fragment of hiv-1 integrase
21	c5ejkG_	 Alignment	not modelled	99.6	15	PDB header: transferase/dna Chain: G: PDB Molecule: gag-pro-pol polyprotein; PDBTitle: crystal structure of the rous sarcoma virus intasome
22	d1c6va_	 Alignment	not modelled	99.5	11	Fold: Ribonuclease H-like motif Superfamily: Ribonuclease H-like Family: Retroviral integrase, catalytic domain
23	c5u1cD_	 Alignment	not modelled	99.3	9	PDB header: viral protein Chain: D: PDB Molecule: hiv-1 integrase, sso7d chimera; PDBTitle: structure of tetrameric hiv-1 strand transfer complex intasome
24	c3l2tB_	 Alignment	not modelled	99.3	14	PDB header: recombination/dna Chain: B: PDB Molecule: integrase; PDBTitle: crystal structure of the prototype foamy virus (pfv) intasome in2 complex with magnesium and mk0518 (raltegravir)
25	c3dlrA_	 Alignment	not modelled	99.0	14	PDB header: transferase Chain: A: PDB Molecule: integrase; PDBTitle: crystal structure of the catalytic core domain from pfv integrase
26	c3l2uA_	 Alignment	not modelled	98.1	14	PDB header: recombination/dna Chain: A: PDB Molecule: integrase; PDBTitle: crystal structure of the prototype foamy virus (pfv)2 intasome in complex with magnesium and gs91373 (elvitegravir)
27	c3hosA_	 Alignment	not modelled	97.6	12	PDB header: transferase, dna binding protein/dna Chain: A: PDB Molecule: transposable element mariner, complete cds; PDBTitle: crystal structure of the mariner mos1 paired end complex with mg
28	d1bcoa1	 Alignment	not modelled	97.0	20	Fold: mu transposase, C-terminal domain Superfamily: mu transposase, C-terminal domain Family: mu transposase, C-terminal domain

29	c5cr4B_	Alignment	not modelled	96.8	12	PDB header: hydrolase Chain: B: PDB Molecule: sleeping beauty transposase, sb100x; PDBTitle: crystal structure of the sleeping beauty transposase catalytic domain
30	c3f2kB_	Alignment	not modelled	95.1	13	PDB header: transferase Chain: B: PDB Molecule: histone-lysine n-methyltransferase setmar; PDBTitle: structure of the transposase domain of human histone-lysine2 n-methyltransferase setmar
31	d2i5ua1	Alignment	not modelled	91.7	25	Fold: DnaD domain-like Superfamily: DnaD domain-like Family: DnaD domain
32	c2zc2A_	Alignment	not modelled	91.5	17	PDB header: replication Chain: A: PDB Molecule: dnad-like replication protein; PDBTitle: crystal structure of dnad-like replication protein from streptococcus2 mutans ua159, gi 24377835, residues 127-199
33	c2f7tA_	Alignment	not modelled	82.0	14	PDB header: dna binding protein Chain: A: PDB Molecule: mos1 transposase; PDBTitle: crystal structure of the catalytic domain of mos1 mariner2 transposase
34	c5unkA_	Alignment	not modelled	63.7	21	PDB header: dna binding protein Chain: A: PDB Molecule: sleeping beauty transposase; PDBTitle: nmr structure of the red subdomain of the sleeping beauty transposase
35	c6mzIM_	Alignment	not modelled	62.8	14	PDB header: transcription Chain: M: PDB Molecule: transcription initiation factor tfiid subunit 9, taf9; PDBTitle: human tfiid canonical state
36	d2ezia_	Alignment	not modelled	48.4	25	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: Recombinase DNA-binding domain
37	c2eqxA_	Alignment	not modelled	45.2	20	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: kelch repeat and btb domain-containing protein 4; PDBTitle: solution structure of the back domain of kelch repeat and2 btb domain-containing protein 4
38	d2ezha_	Alignment	not modelled	45.0	24	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: Recombinase DNA-binding domain
39	d1mzba_	Alignment	not modelled	38.9	16	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: FUR-like
40	c2o03A_	Alignment	not modelled	36.1	20	PDB header: gene regulation Chain: A: PDB Molecule: probable zinc uptake regulation protein furb; PDBTitle: crystal structure of furb from m. tuberculosis- a zinc uptake2 regulator
41	c4i7hA_	Alignment	not modelled	34.6	16	PDB header: transcription Chain: A: PDB Molecule: peroxide stress sensing regulator; PDBTitle: structural basis for peroxide sensing and gene regulation by perr from2 streptococcus pyogenes
42	c6dk4A_	Alignment	not modelled	34.3	12	PDB header: metal transport Chain: A: PDB Molecule: ferric uptake regulation protein; PDBTitle: crystal structure of campylobacter jejuni peroxide stress regulator
43	c2wbnA_	Alignment	not modelled	32.6	14	PDB header: viral protein Chain: A: PDB Molecule: terminase large subunit; PDBTitle: crystal structure of the g2p (large terminase) nuclease2 domain from the bacteriophage spp1
44	c6hqaF_	Alignment	not modelled	32.2	14	PDB header: transcription Chain: F: PDB Molecule: subunit (17 kda) of tfiid and saga complexes, involved in PDBTitle: molecular structure of promoter-bound yeast tfiid
45	c2ahqA_	Alignment	not modelled	30.7	19	PDB header: transcription Chain: A: PDB Molecule: rna polymerase sigma factor rpon; PDBTitle: solution structure of the c-terminal rpon domain of sigma-2 54 from aquifex aeolicus
46	c3m5bA_	Alignment	not modelled	30.5	21	PDB header: transcription Chain: A: PDB Molecule: zinc finger and btb domain-containing protein 32; PDBTitle: crystal structure of the btb domain from fazf/zbtb32
47	c2xigA_	Alignment	not modelled	29.7	28	PDB header: transcription Chain: A: PDB Molecule: ferric uptake regulation protein; PDBTitle: the structure of the helicobacter pylori ferric uptake2 regulator fur reveals three functional metal binding sites
48	c2yy9A_	Alignment	not modelled	29.3	12	PDB header: transcription Chain: A: PDB Molecule: zinc finger and btb domain-containing protein 48; PDBTitle: crystal structure of btb domain from mouse hkr3
49	c6gfcG_	Alignment	not modelled	26.9	19	PDB header: antiviral protein Chain: G: PDB Molecule: galectin-3-binding protein; PDBTitle: structure of the btb/poz domain of human 90k
50	c3mwmA_	Alignment	not modelled	26.8	20	PDB header: transcription Chain: A: PDB Molecule: putative metal uptake regulation protein; PDBTitle: graded expression of zinc-responsive genes through two regulatory2 zinc-binding sites in zur
51	c5nbcD_	Alignment	not modelled	26.6	17	PDB header: dna binding protein Chain: D: PDB Molecule: ferric uptake regulation protein; PDBTitle: structure of prokaryotic transcription factors
52	c4etsB_	Alignment	not modelled	25.4	8	PDB header: metal binding protein Chain: B: PDB Molecule: ferric uptake regulation protein; PDBTitle: crystal structure of campylobacter jejuni ferric uptake regulator
53	c3eyyA_	Alignment	not modelled	25.1	20	PDB header: transport Chain: A: PDB Molecule: putative iron uptake regulatory protein; PDBTitle: structural basis for the specialization of nur, a nickel-2 specific fur homologue, in metal sensing and dna3 recognition
54	d1etza1	Alignment	not modelled	24.6	13	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain

54	c1stz6A	Alignment	not modelled	24.8	13	Family: Heat-inducible transcription repressor HrcA, N-terminal domain PDB header: protein binding
55	c4eozC	Alignment	not modelled	24.5	20	Chain: C: PDB Molecule: speckle-type poz protein; PDBTitle: crystal structure of the spop btb domain complexed with the cul3 n-2 terminal domain
56	c4uyiA	Alignment	not modelled	24.1	12	PDB header: hydrolase Chain: A: PDB Molecule: structure-specific endonuclease subunit slx4; PDBTitle: crystal structure of the btb domain of human slx4 (btbd12)
57	c4dkwA	Alignment	not modelled	23.0	11	PDB header: hydrolase Chain: A: PDB Molecule: large terminase protein; PDBTitle: structure of p22 large terminase nuclease domain
58	c5t9gD	Alignment	not modelled	22.9	12	PDB header: hydrolase Chain: D: PDB Molecule: glycoside hydrolase; PDBTitle: crystal structure of bugh2cwt in complex with galactoisofagomine
59	c4ypiB	Alignment	not modelled	22.5	18	PDB header: hydrolase Chain: B: PDB Molecule: beta galactosidase; PDBTitle: x-ray structure of the mutant of glycoside hydrolase
60	c6ed2A	Alignment	not modelled	22.0	16	PDB header: hydrolase Chain: A: PDB Molecule: glycosyl hydrolase family 2, tim barrel domain protein; PDBTitle: faecalibacterium prausnitzii beta-glucuronidase
61	c2fu4B	Alignment	not modelled	21.9	24	PDB header: dna binding protein Chain: B: PDB Molecule: ferric uptake regulation protein; PDBTitle: crystal structure of the dna binding domain of e.coli fur (ferric2 uptake regulator)
62	c5dmyA	Alignment	not modelled	21.9	15	PDB header: hydrolase Chain: A: PDB Molecule: beta-galactosidase; PDBTitle: beta-galactosidase - construct 33-930
63	c2w57A	Alignment	not modelled	21.9	20	PDB header: metal transport Chain: A: PDB Molecule: ferric uptake regulation protein; PDBTitle: crystal structure of the vibrio cholerae ferric uptake2 regulator (fur) reveals structural rearrangement of the3 dna-binding domains
64	c3hu6B	Alignment	not modelled	20.6	20	PDB header: protein binding, ligase Chain: B: PDB Molecule: speckle-type poz protein; PDBTitle: structures of spop-substrate complexes: insights into2 molecular architectures of btb-cul3 ubiquitin ligases:3 spopmathx/btb/3-box-pucsbc1
65	c5l9wA	Alignment	not modelled	20.1	16	PDB header: ligase Chain: A: PDB Molecule: acetophenone carboxylase delta subunit; PDBTitle: crystal structure of the apc core complex
66	c6dxuB	Alignment	not modelled	20.0	16	PDB header: hydrolase Chain: B: PDB Molecule: glycosyl hydrolase family 2, tim barrel domain protein; PDBTitle: crystal structure of parabacteroides merdae beta-glucuronidase (gus)
67	d2p5ka1	Alignment	not modelled	19.9	18	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: Arginine repressor (ArgR), N-terminal DNA-binding domain
68	c6d1pB	Alignment	not modelled	19.6	13	PDB header: hydrolase Chain: B: PDB Molecule: glycosyl hydrolases family 2, sugar binding domain protein; PDBTitle: apo structure of bacteroides uniformis beta-glucuronidase 3
69	c5nl9B	Alignment	not modelled	19.5	16	PDB header: dna binding protein Chain: B: PDB Molecule: transcriptional regulator (fur family); PDBTitle: crystal structure of a peroxide stress regulator from leptospira2 interrogans
70	c6d0hB	Alignment	not modelled	19.2	23	PDB header: toxin Chain: B: PDB Molecule: pars: cog5642 (duf2384) antitoxin; PDBTitle: part: prs adp-ribosylating toxin bound to cognate antitoxin pars
71	c4razB	Alignment	not modelled	18.7	16	PDB header: metal binding protein Chain: B: PDB Molecule: dna-binding transcriptional dual regulator of siderophore PDBTitle: crystal structure of magnetospirillum gryphiswaldense msr-1 holo-fur
72	c2mt3A	Alignment	not modelled	18.7	8	PDB header: transcription Chain: A: PDB Molecule: rna polymerase sigma-54 factor; PDBTitle: structure of -24 dna binding domain of sigma 54 from e.coli
73	c1v85A	Alignment	not modelled	18.3	15	PDB header: apoptosis Chain: A: PDB Molecule: similar to ring finger protein 36; PDBTitle: sterile alpha motif (sam) domain of mouse bifunctional2 apoptosis regulator
74	c2fe3B	Alignment	not modelled	17.7	16	PDB header: dna binding protein Chain: B: PDB Molecule: peroxide operon regulator; PDBTitle: the crystal structure of bacillus subtilis perr-zn reveals a novel2 zn(cys)4 structural redox switch
75	c2k4bA	Alignment	not modelled	17.3	11	PDB header: dna binding protein Chain: A: PDB Molecule: transcriptional regulator; PDBTitle: copr repressor structure
76	d1aoya	Alignment	not modelled	17.1	22	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: Arginine repressor (ArgR), N-terminal DNA-binding domain
77	c5fd6A	Alignment	not modelled	16.9	20	PDB header: transcription Chain: A: PDB Molecule: ferric uptake regulation protein; PDBTitle: zinc-bound manganese uptake regulator
78	c5xj2C	Alignment	not modelled	16.3	11	PDB header: transferase/rna Chain: C: PDB Molecule: uncharacterized rna methyltransferase sp_1029; PDBTitle: structure of sprlmcD with u747 rna PDB header: immune system

79	c7ceiB_	Alignment	not modelled	16.1	15	Chain: B; PDB Molecule: protein (colicin e7 immunity protein); PDBTitle: the endonuclease domain of colicin e7 in complex with its inhibitor2 im7 protein
80	d1f9na1	Alignment	not modelled	15.9	18	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: Arginine repressor (ArgR), N-terminal DNA-binding domain
81	d1b4aa1	Alignment	not modelled	15.7	21	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: Arginine repressor (ArgR), N-terminal DNA-binding domain
82	c6bv7A_	Alignment	not modelled	15.5	22	PDB header: membrane protein Chain: A; PDB Molecule: sodium/calcium exchanger 1; PDBTitle: nmr structure of sodium/calcium exchanger 1 (ncx1) two-helix bundle2 (thb) domain
83	c6ecaA_	Alignment	not modelled	15.4	24	PDB header: hydrolase Chain: A; PDB Molecule: beta-glucuronidase; PDBTitle: lactobacillus rhamnosus beta-glucuronidase
84	d2jb0b1	Alignment	not modelled	15.3	14	Fold: His-Me finger endonucleases Superfamily: His-Me finger endonucleases Family: HNH-motif
85	c6hqaK_	Alignment	not modelled	15.2	24	PDB header: transcription Chain: K; PDB Molecule: subunit (61/68 kda) of tfiid and saga complexes; PDBTitle: molecular structure of promoter-bound yeast tfiid
86	c4qk0H_	Alignment	not modelled	15.2	9	PDB header: antimicrobial protein Chain: H; PDB Molecule: pyocin-s2; PDBTitle: the crystal structure of the pyocin s2 nuclease domain, immunity2 protein complex at 1.8 angstroms
87	c4uhpA_	Alignment	not modelled	15.1	20	PDB header: hydrolase Chain: A; PDB Molecule: large component of pyocin ap41; PDBTitle: crystal structure of the pyocin ap41 dnase-immunity complex
88	c5ldrA_	Alignment	not modelled	15.0	14	PDB header: hydrolase Chain: A; PDB Molecule: beta-d-galactosidase; PDBTitle: crystal structure of a cold-adapted dimeric beta-d-galactosidase from2 paracoccus sp. 32d strain in complex with galactose
89	c5nlbA_	Alignment	not modelled	15.0	12	PDB header: ligase Chain: A; PDB Molecule: kelch-like ech-associated protein 1; PDBTitle: crystal structure of human cul3 n-terminal domain bound to keep1 btb2 and 3-box
90	c4mtdA_	Alignment	not modelled	14.7	20	PDB header: dna binding protein/dna Chain: A; PDB Molecule: zinc uptake regulation protein; PDBTitle: zinc uptake regulator complexed with zinc and dna
91	c3htmB_	Alignment	not modelled	14.3	29	PDB header: protein binding, ligase Chain: B; PDB Molecule: speckle-type poz protein; PDBTitle: structures of spop-substrate complexes: insights into2 molecular architectures of btb-cul3 ubiquitin ligases:3 spopbtb/3-box
92	c6mvgB_	Alignment	not modelled	13.4	6	PDB header: hydrolase Chain: B; PDB Molecule: beta-glucuronidase; PDBTitle: crystal structure of fmn-binding beta-glucuronidase from ruminococcus2 gnavus
93	d1buoa_	Alignment	not modelled	13.3	15	Fold: POZ domain Superfamily: POZ domain Family: BTB/POZ domain
94	c5t98B_	Alignment	not modelled	13.2	14	PDB header: hydrolase Chain: B; PDB Molecule: glycoside hydrolase; PDBTitle: crystal structure of bugh2awt
95	c3djmA_	Alignment	not modelled	12.7	16	PDB header: unknown function Chain: A; PDB Molecule: uncharacterized protein duf427; PDBTitle: crystal structure of a protein of unknown function from duf427 family2 (rsph17029_0682) from rhodobacter sphaeroides 2.4.1 at 2.51 a3 resolution
96	d2jn6a1	Alignment	not modelled	12.3	22	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: Cgl2762-like
97	c2o8kA_	Alignment	not modelled	12.2	19	PDB header: transcription/dna Chain: A; PDB Molecule: rna polymerase sigma factor rpon; PDBTitle: nmr structure of the sigma-54 rpon domain bound to the-242 promoter element
98	c5i4rA_	Alignment	not modelled	11.9	20	PDB header: toxin/antitoxin Chain: A; PDB Molecule: contact-dependent inhibitor a; PDBTitle: contact-dependent inhibition system from escherichia coli nc101 -2 ternary cdia/cdii/ef-tu complex (trypsin-modified)
99	c3cmgA_	Alignment	not modelled	11.8	12	PDB header: hydrolase Chain: A; PDB Molecule: putative beta-galactosidase; PDBTitle: crystal structure of putative beta-galactosidase from bacteroides2 fragilis