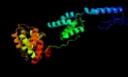
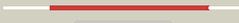
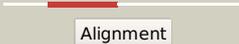


Phyre2

Email	mdejesus@rockefeller.edu
Description	RVBD2659c (-)_2979701_2980828
Date	Wed Aug 7 12:50:31 BST 2019
Unique Job ID	1b2e7bbaedc25c67

Detailed template
information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c1z1bA_	 Alignment		100.0	17	PDB header: dna binding protein/dna Chain: A: PDB Molecule: integrase; PDBTitle: crystal structure of a lambda integrase dimer bound to a2 coc' core site
2	c5jivA_	 Alignment		100.0	16	PDB header: recombination Chain: A: PDB Molecule: tyrosine recombinase xerh; PDBTitle: crystal structure of xerh site-specific recombinase bound to2 palindromic difh substrate: post-cleavage complex
3	c5vfzA_	 Alignment		100.0	15	PDB header: dna binding protein Chain: A: PDB Molecule: gp33; PDBTitle: integrase from mycobacterium phage brujita
4	c6en2A_	 Alignment		100.0	16	PDB header: recombination Chain: A: PDB Molecule: int protein; PDBTitle: structure of the tn1549 transposon integrase (aa 82-397, r225k) in2 complex with a circular intermediate dna (ci6b-dna)
5	c5hxyE_	 Alignment		100.0	18	PDB header: recombination Chain: E: PDB Molecule: tyrosine recombinase xera; PDBTitle: crystal structure of xera recombinase
6	d1p7da_	 Alignment		100.0	18	Fold: DNA breaking-rejoining enzymes Superfamily: DNA breaking-rejoining enzymes Family: Lambda integrase-like, catalytic core
7	c1ma7A_	 Alignment		100.0	15	PDB header: hydrolase, ligase/dna Chain: A: PDB Molecule: cre recombinase; PDBTitle: crystal structure of cre site-specific recombinase2 complexed with a mutant dna substrate, loxp-a8/t27
8	c2a3vA_	 Alignment		100.0	17	PDB header: recombination Chain: A: PDB Molecule: site-specific recombinase inti4; PDBTitle: structural basis for broad dna-specificity in integron recombination
9	c1crxA_	 Alignment		100.0	13	PDB header: replication/dna Chain: A: PDB Molecule: cre recombinase; PDBTitle: cre recombinase/dna complex reaction intermediate i
10	c1a0pA_	 Alignment		100.0	19	PDB header: dna recombination Chain: A: PDB Molecule: site-specific recombinase xerd; PDBTitle: site-specific recombinase, xerd
11	c3nkhB_	 Alignment		99.9	21	PDB header: recombination Chain: B: PDB Molecule: integrase; PDBTitle: crystal structure of integrase from mrsa strain staphylococcus aureus

12	c4a8eA	 Alignment		99.9	16	PDB header: cell cycle Chain: A: PDB Molecule: probable tyrosine recombinase xerc-like; PDBTitle: the structure of a dimeric xer recombinase from archaea
13	c5dcfA	 Alignment		99.9	23	PDB header: recombination Chain: A: PDB Molecule: tyrosine recombinase xerd,dna translocase ftsk; PDBTitle: c-terminal domain of xerd recombinase in complex with gamma domain of ftsk
14	c5c6kB	 Alignment		99.9	20	PDB header: hydrolase Chain: B: PDB Molecule: integrase; PDBTitle: bacteriophage p2 integrase catalytic domain
15	d1aiha	 Alignment		99.9	15	Fold: DNA breaking-rejoining enzymes Superfamily: DNA breaking-rejoining enzymes Family: Lambda integrase-like, catalytic core
16	d1f44a2	 Alignment		99.9	15	Fold: DNA breaking-rejoining enzymes Superfamily: DNA breaking-rejoining enzymes Family: Lambda integrase-like, catalytic core
17	d1a0pa2	 Alignment		99.9	22	Fold: DNA breaking-rejoining enzymes Superfamily: DNA breaking-rejoining enzymes Family: Lambda integrase-like, catalytic core
18	c3uxuA	 Alignment		99.8	13	PDB header: recombination Chain: A: PDB Molecule: probable integrase; PDBTitle: the structure of the catalytic domain of the sulfobolus spindle-shaped2 viral integrase reveals an evolutionarily conserved catalytic core3 and supports a mechanism of dna cleavage in trans
19	d1ae9a	 Alignment		99.8	18	Fold: DNA breaking-rejoining enzymes Superfamily: DNA breaking-rejoining enzymes Family: Lambda integrase-like, catalytic core
20	d5crxb2	 Alignment		99.6	17	Fold: DNA breaking-rejoining enzymes Superfamily: DNA breaking-rejoining enzymes Family: Lambda integrase-like, catalytic core
21	c2kj9A	 Alignment	not modelled	99.2	12	PDB header: dna binding protein Chain: A: PDB Molecule: integrase; PDBTitle: nmr structure of intb phage-integrase-like protein fragment2 90-199 from erwinia carotova subsp. atroseptica: northeast3 structural genomics consortium target ewr217e
22	c2kkvA	 Alignment	not modelled	99.2	19	PDB header: dna binding protein Chain: A: PDB Molecule: integrase; PDBTitle: solution nmr structure of an integrase domain from protein spa42882 from salmonella enterica, northeast structural genomics consortium3 target slr105h
23	c2kkpA	 Alignment	not modelled	99.2	21	PDB header: dna binding protein Chain: A: PDB Molecule: phage integrase; PDBTitle: solution nmr structure of the phage integrase sam-like2 domain from moth 1796 from moorella thermoacetica.3 northeast structural genomics consortium target mtr39k4 (residues 64-171).
24	c2kd1A	 Alignment	not modelled	99.2	15	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: dna integration/recombination/inversion protein; PDBTitle: solution nmr structure of the integrase-like domain from2 bacillus cereus ordered locus bc_1272. northeast3 structural genomics consortium target bcr268f
25	c2kiwA	 Alignment	not modelled	99.2	17	PDB header: dna binding protein Chain: A: PDB Molecule: int protein; PDBTitle: solution nmr structure of the domain n-terminal to the2 integrase domain of sh1003 from staphylococcus3 haemolyticus. northeast structural genomics consortium4 target shr105f (64-166).
26	c2kj8A	 Alignment	not modelled	99.1	13	PDB header: dna binding protein Chain: A: PDB Molecule: putative prophage cps-53 integrase; PDBTitle: nmr structure of fragment 87-196 from the putative phage2 integrase ints of e. coli: northeast structural genomics3 consortium target er652a, psi-2
						PDB header: structural genomics, unknown function

27	c2khvA	Alignment	not modelled	99.1	8	Chain: A: PDB Molecule: phage integrase; PDBTitle: solution nmr structure of protein nmul_a0922 from2 nitrosospira multiformis. northeast structural genomics3 consortium target nmr38b.
28	c2khqA	Alignment	not modelled	99.1	19	PDB header: dna binding protein Chain: A: PDB Molecule: integrase; PDBTitle: solution nmr structure of a phage integrase ssp19472 fragment 59-159 from staphylococcus saprophyticus,3 northeast structural genomics consortium target syr103b
29	c2kobA	Alignment	not modelled	99.1	21	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: uncharacterized protein; PDBTitle: solution nmr structure of clolep_01837 (fragment 61-160)2 from clostridium leptum. northeast structural genomics3 consortium target qlr8a
30	c2kj5A	Alignment	not modelled	99.1	12	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: phage integrase; PDBTitle: solution nmr structure of a domain from a putative phage integrase2 protein nmul_a0064 from nitrosospira multiformis, northeast3 structural genomics consortium target nmr46c
31	c2oxoA	Alignment	not modelled	99.1	22	PDB header: dna binding protein Chain: A: PDB Molecule: integrase; PDBTitle: crystallization and structure determination of the core-2 binding domain of bacteriophage lambda integrase
32	c3lysC	Alignment	not modelled	99.0	14	PDB header: recombination Chain: C: PDB Molecule: prophage pi2 protein 01, integrase; PDBTitle: crystal structure of the n-terminal domain of the prophage pi2 protein2 01 (integrase) from lactococcus lactis, northeast structural genomics3 consortium target kr124f
33	c3nrwA	Alignment	not modelled	98.7	15	PDB header: recombination Chain: A: PDB Molecule: phage integrase/site-specific recombinase; PDBTitle: crystal structure of the n-terminal domain of phage integrase/site-2 specific recombinase (tnp) from haloarcula marismortui, northeast3 structural genomics consortium target hmr208a
34	c2keyA	Alignment	not modelled	98.7	13	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: putative phage integrase; PDBTitle: solution nmr structure of a domain from a putative phage integrase2 protein bf2284 from bacteroides fragilis, northeast structural3 genomics consortium target bfr257c
35	c3ju0A	Alignment	not modelled	98.1	16	PDB header: dna binding protein Chain: A: PDB Molecule: phage integrase; PDBTitle: structure of the arm-type binding domain of hai7 integrase
36	d1a0pa1	Alignment	not modelled	97.5	12	Fold: SAM domain-like Superfamily: lambda integrase-like, N-terminal domain Family: lambda integrase-like, N-terminal domain
37	c3jtzA	Alignment	not modelled	97.3	16	PDB header: dna binding protein Chain: A: PDB Molecule: integrase; PDBTitle: structure of the arm-type binding domain of hpi integrase
38	c2v6eB	Alignment	not modelled	97.2	14	PDB header: hydrolase Chain: B: PDB Molecule: protelemorase; PDBTitle: protelomerase telk complexed with substrate dna
39	d1gccA	Alignment	not modelled	95.9	20	Fold: DNA-binding domain Superfamily: DNA-binding domain Family: GCC-box binding domain
40	d1f44a1	Alignment	not modelled	94.6	12	Fold: SAM domain-like Superfamily: lambda integrase-like, N-terminal domain Family: lambda integrase-like, N-terminal domain
41	c5wx9A	Alignment	not modelled	94.6	15	PDB header: dna binding protein/dna Chain: A: PDB Molecule: ethylene-responsive transcription factor erf096; PDBTitle: crystal structure of aterf96 with gcc-box
42	c4f43A	Alignment	not modelled	94.1	12	PDB header: recombination/dna Chain: A: PDB Molecule: protelomerase; PDBTitle: protelomerase tela mutant r255a complexed with caag hairpin dna
43	c2k49A	Alignment	not modelled	92.8	10	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: upf0339 protein so_3888; PDBTitle: solution nmr structure of upf0339 protein so3888 from shewanella2 oneidensis. northeast structural genomics consortium target sor190
44	c2k8eA	Alignment	not modelled	90.9	12	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: upf0339 protein yegp; PDBTitle: solution nmr structure of protein of unknown function yegp from e.2 coli. ontario center for structural proteomics target ec0640_1_1233 northeast structural genomics consortium target et102.
45	d3bida1	Alignment	not modelled	90.8	7	Fold: YegP-like Superfamily: YegP-like Family: YegP-like
46	d2k8ea1	Alignment	not modelled	90.7	12	Fold: YegP-like Superfamily: YegP-like Family: YegP-like
47	d2k49a2	Alignment	not modelled	90.0	10	Fold: YegP-like Superfamily: YegP-like Family: YegP-like
48	d2k7ia1	Alignment	not modelled	89.3	19	Fold: YegP-like Superfamily: YegP-like Family: YegP-like
49	c2k7iB	Alignment	not modelled	89.3	19	PDB header: structural genomics, unknown function Chain: B: PDB Molecule: upf0339 protein atu0232; PDBTitle: solution nmr structure of protein atu0232 from agrobacterium2 tumefaciens. northeast structural genomics consortium (nesg) target3 att3. ontario center for structural proteomics target atc0223.
50	c6a27B	Alignment	not modelled	89.0	7	PDB header: unknown function Chain: B: PDB Molecule: upf0339 family protein;

50	c0qzcb_	Alignment	not modelled	85.0	7	PDBTitle: nmr solution structure of the hvo_2922 protein from haloferax volcanii PDB header: isomerase
51	c2f4qA_	Alignment	not modelled	84.3	15	Chain: A: PDB Molecule: type i topoisomerase, putative; PDBTitle: crystal structure of deinococcus radiodurans topoisomerase ib
52	d1bb8a_	Alignment	not modelled	83.4	25	Fold: DNA-binding domain Superfamily: DNA-binding domain Family: DNA-binding domain from tn916 integrase
53	d2k8ea2	Alignment	not modelled	77.6	5	Fold: YegP-like Superfamily: YegP-like Family: YegP-like
54	d2k49a1	Alignment	not modelled	76.6	0	Fold: YegP-like Superfamily: YegP-like Family: YegP-like
55	c2mqkA_	Alignment	not modelled	63.3	16	PDB header: hydrolase Chain: A: PDB Molecule: atp-dependent target dna activator b; PDBTitle: solution structure of n terminal domain of the mub aaa+ atpase
56	d1z1ba1	Alignment	not modelled	48.7	14	Fold: DNA-binding domain Superfamily: DNA-binding domain Family: lambda integrase N-terminal domain
57	c1kjkA_	Alignment	not modelled	48.7	14	PDB header: viral protein Chain: A: PDB Molecule: integrase; PDBTitle: solution structure of the lambda integrase amino-terminal2 domain
58	c6b7qA_	Alignment	not modelled	36.3	14	PDB header: cell invasion Chain: A: PDB Molecule: sdea; PDBTitle: crystal structure of legionella effector protein sdea (lpg2157) aa.2 211-910
59	d1zj8a1	Alignment	not modelled	33.7	19	Fold: Ferredoxin-like Superfamily: Nitrite/Sulfite reductase N-terminal domain-like Family: Duplicated SiR/NiR-like domains 1 and 3
60	c2h7fx_	Alignment	not modelled	30.7	24	PDB header: isomerase/dna Chain: X: PDB Molecule: dna topoisomerase 1; PDBTitle: structure of variola topoisomerase covalently bound to dna
61	d1aopa2	Alignment	not modelled	29.3	19	Fold: Ferredoxin-like Superfamily: Nitrite/Sulfite reductase N-terminal domain-like Family: Duplicated SiR/NiR-like domains 1 and 3
62	c3igmA_	Alignment	not modelled	28.6	9	PDB header: transcription/dna Chain: A: PDB Molecule: pf14_0633 protein; PDBTitle: a 2.2a crystal structure of the ap2 domain of pf14_0633 from p.2 falciparum, bound as a domain-swapped dimer to its cognate dna
63	c2n3qA_	Alignment	not modelled	28.2	16	PDB header: rna binding protein Chain: A: PDB Molecule: double-stranded rna-binding protein 4; PDBTitle: solution structure of drb4 dsrbd1 (viz. drb4(1-72))
64	d2auwa1	Alignment	not modelled	27.9	13	Fold: lambda repressor-like DNA-binding domains Superfamily: lambda repressor-like DNA-binding domains Family: NE0471 C-terminal domain-like
65	d2akja1	Alignment	not modelled	27.5	26	Fold: Ferredoxin-like Superfamily: Nitrite/Sulfite reductase N-terminal domain-like Family: Duplicated SiR/NiR-like domains 1 and 3
66	d1t95a3	Alignment	not modelled	16.6	29	Fold: Ferredoxin-like Superfamily: EF-G C-terminal domain-like Family: Hypothetical protein AF0491, C-terminal domain
67	d1p9qc3	Alignment	not modelled	16.1	29	Fold: Ferredoxin-like Superfamily: EF-G C-terminal domain-like Family: Hypothetical protein AF0491, C-terminal domain
68	c3sohB_	Alignment	not modelled	15.2	13	PDB header: motor protein Chain: B: PDB Molecule: flagellar motor switch protein flig; PDBTitle: architecture of the flagellar rotor
69	c2l8nA_	Alignment	not modelled	14.4	7	PDB header: transcription regulator Chain: A: PDB Molecule: transcriptional repressor cytr; PDBTitle: nmr structure of the cytidine repressor dna binding domain in presence2 of operator half-site dna
70	d1nera_	Alignment	not modelled	14.3	16	Fold: lambda repressor-like DNA-binding domains Superfamily: lambda repressor-like DNA-binding domains Family: Phage repressors
71	c5zq2C_	Alignment	not modelled	12.5	13	PDB header: cell invasion Chain: C: PDB Molecule: side; PDBTitle: side apo form
72	c2l2nA_	Alignment	not modelled	11.2	18	PDB header: rna binding protein, plant protein Chain: A: PDB Molecule: hyponastic leave 1; PDBTitle: backbone 1h, 13c, and 15n chemical shift assignments for the first2 dsrbd of protein hyl1
73	c1rk8C_	Alignment	not modelled	11.0	24	PDB header: translation Chain: C: PDB Molecule: within the bgcn gene intron protein; PDBTitle: structure of the cytosolic protein pym bound to the mago-2 y14 core of the exon junction complex
74	d1rk8c_	Alignment	not modelled	11.0	24	Fold: WW domain-like Superfamily: Pym (Within the bgcn gene intron protein, WIBG), N-terminal domain Family: Pym (Within the bgcn gene intron protein, WIBG), N-terminal domain
75	c3adiC_	Alignment	not modelled	10.8	19	PDB header: gene regulation/rna Chain: C: PDB Molecule: f21m12.9 protein; PDBTitle: structure of arabidopsis hyl1 and its molecular implications for mirna2 processing
76	c5yimC_	Alignment	not modelled	9.8	14	PDB header: transferase Chain: C: PDB Molecule: sdea; PDBTitle: structure of a legionella effector

77	c2auwB	Alignment	not modelled	9.6	14	PDB header: unknown function Chain: B: PDB Molecule: hypothetical protein ne0471; PDBTitle: crystal structure of putative dna binding protein ne0471 from2 nitrosomonas europaea atcc 19718
78	c3vdoA	Alignment	not modelled	8.1	20	PDB header: dna binding protein/protein binding Chain: A: PDB Molecule: rna polymerase sigma factor sigk; PDBTitle: structure of extra-cytoplasmic function(ecf) sigma factor sigk in2 complex with its negative regulator rska from mycobacterium3 tuberculosis
79	c2ef8A	Alignment	not modelled	7.8	16	PDB header: transcription regulator Chain: A: PDB Molecule: putative transcription factor; PDBTitle: crystal structure of c.ecot38is
80	c2lcvA	Alignment	not modelled	7.3	7	PDB header: transcription regulator Chain: A: PDB Molecule: hth-type transcriptional repressor cytr; PDBTitle: structure of the cytidine repressor dna-binding domain; an alternate2 calculation
81	d1lcda	Alignment	not modelled	7.2	12	Fold: lambda repressor-like DNA-binding domains Superfamily: lambda repressor-like DNA-binding domains Family: GalR/LacI-like bacterial regulator
82	d2aq0a1	Alignment	not modelled	7.1	24	Fold: SAM domain-like Superfamily: RuvA domain 2-like Family: Hef domain-like
83	d1ijwc	Alignment	not modelled	6.9	18	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: Recombinase DNA-binding domain
84	d1hcra	Alignment	not modelled	6.9	18	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: Recombinase DNA-binding domain
85	c2ltsA	Alignment	not modelled	6.7	13	PDB header: rna binding protein Chain: A: PDB Molecule: protein rde-4; PDBTitle: solution structure of rde-4(150-235)
86	d1qpza1	Alignment	not modelled	6.7	12	Fold: lambda repressor-like DNA-binding domains Superfamily: lambda repressor-like DNA-binding domains Family: GalR/LacI-like bacterial regulator
87	d1rkta1	Alignment	not modelled	6.4	8	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: Tetracyclin repressor-like, N-terminal domain
88	d1q08a	Alignment	not modelled	6.2	18	Fold: Putative DNA-binding domain Superfamily: Putative DNA-binding domain Family: DNA-binding N-terminal domain of transcription activators
89	c6d0tA	Alignment	not modelled	5.9	28	PDB header: de novo protein Chain: A: PDB Molecule: bb1; PDBTitle: de novo design of a fluorescence-activating beta barrel - bb1
90	d1dwka1	Alignment	not modelled	5.8	22	Fold: lambda repressor-like DNA-binding domains Superfamily: lambda repressor-like DNA-binding domains Family: Cyanase N-terminal domain
91	c3bsuF	Alignment	not modelled	5.8	27	PDB header: hydrolase/rna/dna Chain: F: PDB Molecule: ribonuclease h1; PDBTitle: hybrid-binding domain of human rnase h1 in complex with 12-2 mer rna/dna
92	d2bjca1	Alignment	not modelled	5.7	15	Fold: lambda repressor-like DNA-binding domains Superfamily: lambda repressor-like DNA-binding domains Family: GalR/LacI-like bacterial regulator
93	c5xqlA	Alignment	not modelled	5.7	8	PDB header: transcription Chain: A: PDB Molecule: multidrug-efflux transporter 1 regulator; PDBTitle: crystal structure of a pseudomonas aeruginosa transcriptional2 regulator
94	d1s7oa	Alignment	not modelled	5.6	15	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Sigma3 and sigma4 domains of RNA polymerase sigma factors Family: YlxM/p13-like
95	d1x49a1	Alignment	not modelled	5.5	14	Fold: dsRBD-like Superfamily: dsRNA-binding domain-like Family: Double-stranded RNA-binding domain (dsRBD)
96	c1f8aB	Alignment	not modelled	5.3	19	PDB header: isomerase Chain: B: PDB Molecule: peptidyl-prolyl cis-trans isomerase nima-interacting 1; PDBTitle: structural basis for the phosphoserine-proline recognition by group iv2 ww domains
97	c4r4eA	Alignment	not modelled	5.2	22	PDB header: transcription regulator/dna Chain: A: PDB Molecule: hth-type transcriptional regulator glnr; PDBTitle: structure of glnr-dna complex
98	d1z0xa1	Alignment	not modelled	5.2	10	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: Tetracyclin repressor-like, N-terminal domain
99	c2b9sA	Alignment	not modelled	5.2	20	PDB header: isomerase/dna Chain: A: PDB Molecule: topoisomerase i-like protein; PDBTitle: crystal structure of heterodimeric l. donovani topoisomerase i-2 vanadate-dna complex