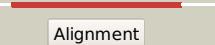
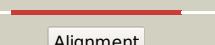
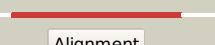
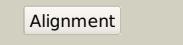
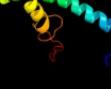
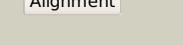
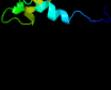
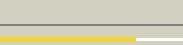
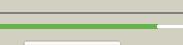
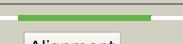


# Phyre<sup>2</sup>

Email	mdejesus@rockefeller.edu
Description	RVBD2087 (-) _2344002_2344232
Date	Mon Aug 5 13:25:20 BST 2019
Unique Job ID	5d3be358a7d5f1ce

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	<a href="#">c3f9kV_</a>			98.0	11	<b>PDB header:</b> viral protein, recombination <b>Chain:</b> V; <b>PDB Molecule:</b> integrase; <b>PDBTitle:</b> two domain fragment of hiv-2 integrase in complex with ledgf ibd
2	<a href="#">d1bcoa2</a>			98.0	17	<b>Fold:</b> Ribonuclease H-like motif <b>Superfamily:</b> Ribonuclease H-like <b>Family:</b> mu transposase, core domain
3	<a href="#">c5cz1B_</a>			97.7	11	<b>PDB header:</b> hydrolase <b>Chain:</b> B; <b>PDB Molecule:</b> integrase; <b>PDBTitle:</b> crystal structure of the catalytic core domain of mmvt integrase
4	<a href="#">c3nf9A_</a>			96.9	8	<b>PDB header:</b> hydrolase/hydrolase inhibitor <b>Chain:</b> A; <b>PDB Molecule:</b> integrase; <b>PDBTitle:</b> structural basis for a new mechanism of inhibition of hiv integrase2 identified by fragment screening and structure based design
5	<a href="#">d1asua_</a>			96.4	12	<b>Fold:</b> Ribonuclease H-like motif <b>Superfamily:</b> Ribonuclease H-like <b>Family:</b> Retroviral integrase, catalytic domain
6	<a href="#">c4mq3A_</a>			96.2	19	<b>PDB header:</b> viral protein <b>Chain:</b> A; <b>PDB Molecule:</b> integrase; <b>PDBTitle:</b> the 1.1 angstrom structure of catalytic core domain of fiv integrase
7	<a href="#">d1c0ma2</a>			96.1	14	<b>Fold:</b> Ribonuclease H-like motif <b>Superfamily:</b> Ribonuclease H-like <b>Family:</b> Retroviral integrase, catalytic domain
8	<a href="#">c3kksB_</a>			95.9	14	<b>PDB header:</b> dna binding protein <b>Chain:</b> B; <b>PDB Molecule:</b> integrase; <b>PDBTitle:</b> crystal structure of catalytic core domain of biv integrase in crystal2 form ii
9	<a href="#">c1bcoA_</a>			95.6	14	<b>PDB header:</b> transposase <b>Chain:</b> A; <b>PDB Molecule:</b> bacteriophage mu transposase; <b>PDBTitle:</b> bacteriophage mu transposase core domain
10	<a href="#">c5u1ca_</a>			95.4	8	<b>PDB header:</b> viral protein <b>Chain:</b> A; <b>PDB Molecule:</b> hiv-1 integrase, sso7d chimera; <b>PDBTitle:</b> structure of tetrameric hiv-1 strand transfer complex intasome
11	<a href="#">d1hyva_</a>			95.4	9	<b>Fold:</b> Ribonuclease H-like motif <b>Superfamily:</b> Ribonuclease H-like <b>Family:</b> Retroviral integrase, catalytic domain

12	<a href="#">d1exqa</a>			95.0	18	<b>Fold:</b> Ribonuclease H-like motif <b>Superfamily:</b> Ribonuclease H-like <b>Family:</b> Retroviral integrase, catalytic domain
13	<a href="#">c1k6yB</a>			94.5	10	<b>PDB header:</b> transferase <b>Chain:</b> B: <b>PDB Molecule:</b> integrase; <b>PDBTitle:</b> crystal structure of a two-domain fragment of hiv-1 integrase
14	<a href="#">c3jcaE</a>			94.4	19	<b>PDB header:</b> viral protein <b>Chain:</b> E: <b>PDB Molecule:</b> integrase; <b>PDBTitle:</b> core model of the mouse mammary tumor virus intasome
15	<a href="#">c1ex4A</a>			94.2	8	<b>PDB header:</b> viral protein <b>Chain:</b> A: <b>PDB Molecule:</b> integrase; <b>PDBTitle:</b> hiv-1 integrase catalytic core and c-terminal domain
16	<a href="#">c1c0mA</a>			94.1	14	<b>PDB header:</b> transferase <b>Chain:</b> A: <b>PDB Molecule:</b> protein (integrase); <b>PDBTitle:</b> crystal structure of rsv two-domain integrase
17	<a href="#">c5m0rF</a>			94.0	16	<b>PDB header:</b> hydrolase <b>Chain:</b> F: <b>PDB Molecule:</b> integrase; <b>PDBTitle:</b> cryo-em reconstruction of the maedi-visna virus (mvv) strand transfer2 complex
18	<a href="#">d1c6va</a>			93.3	17	<b>Fold:</b> Ribonuclease H-like motif <b>Superfamily:</b> Ribonuclease H-like <b>Family:</b> Retroviral integrase, catalytic domain
19	<a href="#">c3l2tB</a>			92.5	9	<b>PDB header:</b> recombination/dna <b>Chain:</b> B: <b>PDB Molecule:</b> integrase; <b>PDBTitle:</b> crystal structure of the prototype foamy virus (pfv) intasome in2 complex with magnesium and mk0518 (raltegravir)
20	<a href="#">c3hpgC</a>			90.1	18	<b>PDB header:</b> transferase <b>Chain:</b> C: <b>PDB Molecule:</b> integrase; <b>PDBTitle:</b> visna virus integrase (residues 1-219) in complex with ledgf2 ibd: examples of open integrase dimer-dimer interfaces
21	<a href="#">d1cxqa</a>		not modelled	83.8	13	<b>Fold:</b> Ribonuclease H-like motif <b>Superfamily:</b> Ribonuclease H-like <b>Family:</b> Retroviral integrase, catalytic domain
22	<a href="#">c2f7tA</a>		not modelled	79.9	10	<b>PDB header:</b> dna binding protein <b>Chain:</b> A: <b>PDB Molecule:</b> mos1 transposase; <b>PDBTitle:</b> crystal structure of the catalytic domain of mos1 mariner2 transposase
23	<a href="#">c3f2kB</a>		not modelled	76.1	17	<b>PDB header:</b> transferase <b>Chain:</b> B: <b>PDB Molecule:</b> histone-lysine n-methyltransferase setmar; <b>PDBTitle:</b> structure of the transposase domain of human histone-lysine2 n-methyltransferase setmar
24	<a href="#">c5cr4B</a>		not modelled	71.7	12	<b>PDB header:</b> hydrolase <b>Chain:</b> B: <b>PDB Molecule:</b> sleeping beauty transposase, sb100x; <b>PDBTitle:</b> crystal structure of the sleeping beauty transposase catalytic domain
25	<a href="#">c3hosA</a>		not modelled	70.4	10	<b>PDB header:</b> transferase, dna binding protein/dna <b>Chain:</b> A: <b>PDB Molecule:</b> transposable element mariner, complete cds; <b>PDBTitle:</b> crystal structure of the mariner mos1 paired end complex with mg
26	<a href="#">c4fcyA</a>		not modelled	53.4	10	<b>PDB header:</b> dna binding protein/dna <b>Chain:</b> A: <b>PDB Molecule:</b> transposase; <b>PDBTitle:</b> crystal structure of the bacteriophage mu transpososome
27	<a href="#">c3dlrA</a>		not modelled	52.0	8	<b>PDB header:</b> transferase <b>Chain:</b> A: <b>PDB Molecule:</b> integrase; <b>PDBTitle:</b> crystal structure of the catalytic core domain from pfv integrase
28	<a href="#">c6n1cB</a>		not modelled	50.8	5	<b>PDB header:</b> hydrolase <b>Chain:</b> B: <b>PDB Molecule:</b> inorganic pyrophosphatase; <b>PDBTitle:</b> crystal structure of inorganic pyrophosphatase from

					legionella2 pneumophila philadelphia 1
29	<a href="#">c4lugA_</a>	Alignment	not modelled	44.9	<b>PDB header:</b> hydrolase <b>Chain:</b> A: <b>PDB Molecule:</b> inorganic pyrophosphatase; <b>PDBTitle:</b> crystal structure of inorganic pyrophosphatase ppa1 from arabidopsis2 thaliana
30	<a href="#">c3fq3H_</a>	Alignment	not modelled	44.0	<b>PDB header:</b> hydrolase <b>Chain:</b> H: <b>PDB Molecule:</b> inorganic pyrophosphatase:bacterial/archaeal inorganic <b>PDBTitle:</b> crystal structure of inorganic phosphatase from brucella melitensis
31	<a href="#">c3g0tA_</a>	Alignment	not modelled	37.7	<b>PDB header:</b> transferase <b>Chain:</b> A: <b>PDB Molecule:</b> putative aminotransferase; <b>PDBTitle:</b> crystal structure of putative aspartate aminotransferase (np_905498.1)2 from porphyromonas gingivalis w83 at 1.75 a resolution
32	<a href="#">d2prda_</a>	Alignment	not modelled	37.1	<b>Fold:</b> OB-fold <b>Superfamily:</b> Inorganic pyrophosphatase <b>Family:</b> Inorganic pyrophosphatase
33	<a href="#">d1i40a_</a>	Alignment	not modelled	36.3	<b>Fold:</b> OB-fold <b>Superfamily:</b> Inorganic pyrophosphatase <b>Family:</b> Inorganic pyrophosphatase
34	<a href="#">d1twla_</a>	Alignment	not modelled	30.5	<b>Fold:</b> OB-fold <b>Superfamily:</b> Inorganic pyrophosphatase <b>Family:</b> Inorganic pyrophosphatase
35	<a href="#">d1udea_</a>	Alignment	not modelled	29.9	<b>Fold:</b> OB-fold <b>Superfamily:</b> Inorganic pyrophosphatase <b>Family:</b> Inorganic pyrophosphatase
36	<a href="#">c2mzyA_</a>	Alignment	not modelled	29.5	<b>PDB header:</b> iron binding protein <b>Chain:</b> A: <b>PDB Molecule:</b> probable fe(2+)-trafficking protein; <b>PDBTitle:</b> 1h, 13c, and 15n chemical shift assignments and structure of probable2 fe(2+)-trafficking protein from burkholderia pseudomallei 1710b.
37	<a href="#">c6cfzD_</a>	Alignment	not modelled	27.4	<b>PDB header:</b> nuclear protein <b>Chain:</b> D: <b>PDB Molecule:</b> duo1; <b>PDBTitle:</b> structure of the dash/dam1 complex shows its role at the yeast2 kinetochore-microtubule interface
38	<a href="#">d1w0ba_</a>	Alignment	not modelled	27.3	<b>Fold:</b> Spectrin repeat-like <b>Superfamily:</b> Alpha-hemoglobin stabilizing protein AHSP <b>Family:</b> Alpha-hemoglobin stabilizing protein AHSP
39	<a href="#">c3ld3A_</a>	Alignment	not modelled	27.3	<b>PDB header:</b> hydrolase <b>Chain:</b> A: <b>PDB Molecule:</b> inorganic pyrophosphatase; <b>PDBTitle:</b> crystal structure of inorganic phosphatase from anaplasma2 phagocytophilum at 1.75a resolution
40	<a href="#">c3d63B_</a>	Alignment	not modelled	26.4	<b>PDB header:</b> hydrolase <b>Chain:</b> B: <b>PDB Molecule:</b> inorganic pyrophosphatase; <b>PDBTitle:</b> crystal structure of inorganic pyrophosphatase from burkholderia2 pseudomallei
41	<a href="#">d1zua1</a>	Alignment	not modelled	24.7	<b>Fold:</b> Spectrin repeat-like <b>Superfamily:</b> Alpha-hemoglobin stabilizing protein AHSP <b>Family:</b> Alpha-hemoglobin stabilizing protein AHSP
42	<a href="#">c2uxsA_</a>	Alignment	not modelled	24.1	<b>PDB header:</b> hydrolase <b>Chain:</b> A: <b>PDB Molecule:</b> inorganic pyrophosphatase; <b>PDBTitle:</b> 2.7a crystal structure of inorganic pyrophosphatase (rv3628)2 from mycobacterium tuberculosis at ph 7.5
43	<a href="#">c1ygzC_</a>	Alignment	not modelled	18.0	<b>PDB header:</b> hydrolase <b>Chain:</b> C: <b>PDB Molecule:</b> inorganic pyrophosphatase; <b>PDBTitle:</b> crystal structure of inorganic pyrophosphatase from helicobacter2 pylori
44	<a href="#">c3tr4C_</a>	Alignment	not modelled	17.4	<b>PDB header:</b> hydrolase <b>Chain:</b> C: <b>PDB Molecule:</b> inorganic pyrophosphatase; <b>PDBTitle:</b> structure of an inorganic pyrophosphatase (ppa) from coxiella burnetii
45	<a href="#">d1b7ea_</a>	Alignment	not modelled	16.0	<b>Fold:</b> Ribonuclease H-like motif <b>Superfamily:</b> Ribonuclease H-like <b>Family:</b> Transposase inhibitor (Tn5 transposase)
46	<a href="#">c5tj5P_</a>	Alignment	not modelled	15.6	<b>PDB header:</b> motor protein <b>Chain:</b> P: <b>PDB Molecule:</b> v-type proton atpase subunit d; <b>PDBTitle:</b> atomic model for the membrane-embedded motor of a eukaryotic v-atpase
47	<a href="#">d2gtaa1</a>	Alignment	not modelled	14.6	<b>Fold:</b> all-alpha NTP pyrophosphatases <b>Superfamily:</b> all-alpha NTP pyrophosphatases <b>Family:</b> MazG-like
48	<a href="#">c5teaF_</a>	Alignment	not modelled	13.1	<b>PDB header:</b> hydrolase <b>Chain:</b> F: <b>PDB Molecule:</b> inorganic pyrophosphatase; <b>PDBTitle:</b> crystal structure of an inorganic pyrophosphatase from neisseria2 gonorrhoeae
49	<a href="#">c1xb4C_</a>	Alignment	not modelled	11.9	<b>PDB header:</b> unknown function <b>Chain:</b> C: <b>PDB Molecule:</b> hypothetical 23.6 kda protein in yuh1-ura8 intergenic <b>PDBTitle:</b> crystal structure of subunit vps25 of the endosomal trafficking2 complex escrt-ii
50	<a href="#">d1xs8a_</a>	Alignment	not modelled	11.5	<b>Fold:</b> YggX-like <b>Superfamily:</b> YggX-like <b>Family:</b> YggX-like
51	<a href="#">c3u21B_</a>	Alignment	not modelled	11.5	<b>PDB header:</b> transcription regulation, dna binding <b>Chain:</b> B: <b>PDB Molecule:</b> nuclear factor related to kappa-b-binding protein; <b>PDBTitle:</b> crystal structure of a fragment of nuclear factor related to kappa-b-2 binding protein (residues 370-495) (nfrkb) from homo sapiens at 2.183 a resolution
52	<a href="#">c2kdtA_</a>	Alignment	not modelled	11.3	<b>PDB header:</b> protein transport <b>Chain:</b> A: <b>PDB Molecule:</b> neuroendocrine convertase 1; <b>PDBTitle:</b> pc1/3 dcsg sorting domain structure in dpc
53	<a href="#">c2ke3A_</a>	Alignment	not modelled	11.2	<b>PDB header:</b> hydrolase <b>Chain:</b> A: <b>PDB Molecule:</b> neuroendocrine convertase 1; <b>PDBTitle:</b> pc1/3 dcsg sorting domain in chaps

54	<a href="#">c5wrtB_</a>	Alignment	not modelled	10.8	13	<b>PDB header:</b> hydrolase <b>Chain:</b> B: <b>PDB Molecule:</b> solute inorganic pyrophosphatase; <b>PDBTitle:</b> crystal structure of type i inorganic pyrophosphatase from toxoplasma2 gondii.
55	<a href="#">c2f42A_</a>	Alignment	not modelled	10.2	15	<b>PDB header:</b> chaperone <b>Chain:</b> A: <b>PDB Molecule:</b> stip1 homology and u-box containing protein 1; <b>PDBTitle:</b> dimerization and u-box domains of zebrafish c-terminal of hsp702 interacting protein
56	<a href="#">d2bcqa2</a>	Alignment	not modelled	9.8	25	<b>Fold:</b> SAM domain-like <b>Superfamily:</b> PsbU/PolX domain-like <b>Family:</b> DNA polymerase beta-like, second domain
57	<a href="#">c3h3hA_</a>	Alignment	not modelled	9.7	13	<b>PDB header:</b> unknown function <b>Chain:</b> A: <b>PDB Molecule:</b> uncharacterized snoal-like protein; <b>PDBTitle:</b> crystal structure of a snoal-like protein of unknown function2 (bth_ii0226) from burkholderia thailandensis e264 at 1.60 a3 resolution
58	<a href="#">c2cj0A_</a>	Alignment	not modelled	9.4	13	<b>PDB header:</b> oxidoreductase <b>Chain:</b> A: <b>PDB Molecule:</b> chloroperoxidase; <b>PDBTitle:</b> chloroperoxidase complexed with nitrate
59	<a href="#">d1qeza_</a>	Alignment	not modelled	9.3	5	<b>Fold:</b> OB-fold <b>Superfamily:</b> Inorganic pyrophosphatase <b>Family:</b> Inorganic pyrophosphatase
60	<a href="#">c3emjL_</a>	Alignment	not modelled	9.0	5	<b>PDB header:</b> hydrolase <b>Chain:</b> L: <b>PDB Molecule:</b> inorganic pyrophosphatase; <b>PDBTitle:</b> 2.2 a crystal structure of inorganic pyrophosphatase from2 rickettsia prowazekii (p21 form)
61	<a href="#">c6nmcc_</a>	Alignment	not modelled	8.1	23	<b>PDB header:</b> unknown function/rna <b>Chain:</b> C: <b>PDB Molecule:</b> acrv1; <b>PDBTitle:</b> cryoem structure of the lbcas12a-crrna-2xacrv1 complex
62	<a href="#">d1jmsa3</a>	Alignment	not modelled	7.7	25	<b>Fold:</b> SAM domain-like <b>Superfamily:</b> PsbU/PolX domain-like <b>Family:</b> DNA polymerase beta-like, second domain
63	<a href="#">c3lo0A_</a>	Alignment	not modelled	7.5	4	<b>PDB header:</b> hydrolase <b>Chain:</b> A: <b>PDB Molecule:</b> inorganic pyrophosphatase; <b>PDBTitle:</b> crystal structure of inorganic pyrophosphatase from2 ehrlichia chaffeensis
64	<a href="#">d2gtad1</a>	Alignment	not modelled	7.3	12	<b>Fold:</b> all-alpha NTP pyrophosphatases <b>Superfamily:</b> all-alpha NTP pyrophosphatases <b>Family:</b> MazG-like
65	<a href="#">c3k6qB_</a>	Alignment	not modelled	7.3	5	<b>PDB header:</b> ligand binding protein <b>Chain:</b> B: <b>PDB Molecule:</b> putative ligand binding protein; <b>PDBTitle:</b> crystal structure of an antitoxin part of a putative toxin/antitoxin2 system (swol_0700) from syntrophomonas wolfei subsp. wolfei at 1.80 a3 resolution
66	<a href="#">c5ejkG_</a>	Alignment	not modelled	7.2	7	<b>PDB header:</b> transferase/dna <b>Chain:</b> G: <b>PDB Molecule:</b> gag-pro-pol polyprotein; <b>PDBTitle:</b> crystal structure of the rous sarcoma virus intasome
67	<a href="#">d2vana1</a>	Alignment	not modelled	7.0	33	<b>Fold:</b> SAM domain-like <b>Superfamily:</b> PsbU/PolX domain-like <b>Family:</b> DNA polymerase beta-like, second domain
68	<a href="#">d3b77a1</a>	Alignment	not modelled	6.9	17	<b>Fold:</b> PH domain-like barrel <b>Superfamily:</b> PH domain-like <b>Family:</b> BPHL domain
69	<a href="#">c4wz1B_</a>	Alignment	not modelled	6.5	11	<b>PDB header:</b> ligase <b>Chain:</b> B: <b>PDB Molecule:</b> e3 ubiquitin-protein ligase lubx; <b>PDBTitle:</b> crystal structure of u-box 2 of lubx / legu2 / lpp2887 from legionella2 pneumophila str. paris, wild-type
70	<a href="#">c5yrqE_</a>	Alignment	not modelled	6.4	13	<b>PDB header:</b> dna binding protein <b>Chain:</b> E: <b>PDB Molecule:</b> dna repair protein rad5,dna repair protein rev1; <b>PDBTitle:</b> crystal structure of rad5 and rev1
71	<a href="#">c1bmxA_</a>	Alignment	not modelled	6.2	13	<b>PDB header:</b> viral protein <b>Chain:</b> A: <b>PDB Molecule:</b> human immunodeficiency virus type 1 capsid; <b>PDBTitle:</b> hiv-1 capsid protein major homology region peptide analog,2 nmr, 8 structures
72	<a href="#">d2fmpa2</a>	Alignment	not modelled	5.9	45	<b>Fold:</b> SAM domain-like <b>Superfamily:</b> PsbU/PolX domain-like <b>Family:</b> DNA polymerase beta-like, second domain
73	<a href="#">c3cuqC_</a>	Alignment	not modelled	5.9	19	<b>PDB header:</b> protein transport <b>Chain:</b> C: <b>PDB Molecule:</b> vacuolar protein-sorting-associated protein 25; <b>PDBTitle:</b> integrated structural and functional model of the human escrt-ii2 complex
74	<a href="#">c2kkmA_</a>	Alignment	not modelled	5.8	13	<b>PDB header:</b> translation <b>Chain:</b> A: <b>PDB Molecule:</b> translation machinery-associated protein 16; <b>PDBTitle:</b> solution nmr structure of yeast protein yor252w [residues2 38-178]: northeast structural genomics consortium target3 yt654
75	<a href="#">c4rnxA_</a>	Alignment	not modelled	5.7	14	<b>PDB header:</b> oxidoreductase <b>Chain:</b> A: <b>PDB Molecule:</b> nadph dehydrogenase 1; <b>PDBTitle:</b> k154 circular permutation of old yellow enzyme