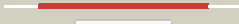



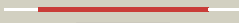


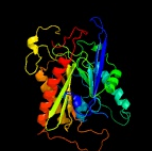





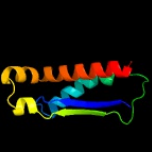



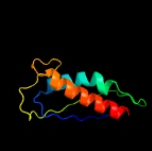



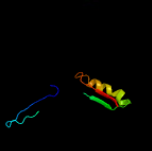
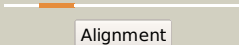


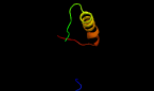
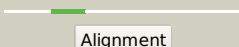
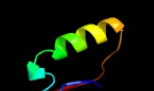

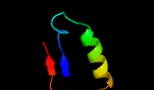
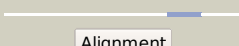
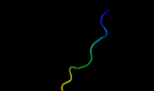
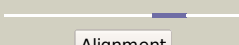

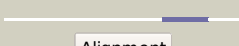




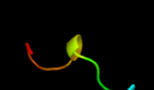

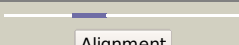
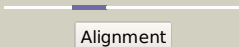
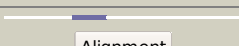



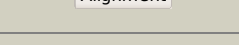



# Phyre2

Email	mdejesus@rockefeller.edu
Description	RVBD1333_(-)_1501605_1502639
Date	Wed Jul 31 22:05:43 BST 2019
Unique Job ID	a02b06a50546b5be

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	<a href="#">c3s3uB_</a>	 Alignment		100.0	52	<b>PDB header:</b> transferase <b>Chain:</b> B: <b>PDB Molecule:</b> cysteine transferase; <b>PDBTitle:</b> crystal structure of uncleaved thnt t282c
2	<a href="#">c3n5iC_</a>	 Alignment		100.0	26	<b>PDB header:</b> hydrolase <b>Chain:</b> C: <b>PDB Molecule:</b> beta-peptidyl aminopeptidase; <b>PDBTitle:</b> crystal structure of the precursor (s250a mutant) of the n-terminal2 beta-aminopeptidase bapa
3	<a href="#">d1b65a_</a>	 Alignment		100.0	24	<b>Fold:</b> DmpA/Argj-like <b>Superfamily:</b> DmpA/Argj-like <b>Family:</b> DmpA-like
4	<a href="#">c2drhD_</a>	 Alignment		100.0	25	<b>PDB header:</b> structural genomics, unknown function <b>Chain:</b> D: <b>PDB Molecule:</b> 361aa long hypothetical d-aminopeptidase; <b>PDBTitle:</b> crystal structure of the ph0078 protein from pyrococcus horikoshii ot3
5	<a href="#">c3axgN_</a>	 Alignment		100.0	31	<b>PDB header:</b> hydrolase <b>Chain:</b> N: <b>PDB Molecule:</b> endotype 6-aminohexanoat-oligomer hydrolase; <b>PDBTitle:</b> structure of 6-aminohexanoate-oligomer hydrolase
6	<a href="#">c5tzba_</a>	 Alignment		100.0	28	<b>PDB header:</b> hydrolase <b>Chain:</b> A: <b>PDB Molecule:</b> d-aminopeptidase; <b>PDBTitle:</b> burkholderia sp. beta-aminopeptidase
7	<a href="#">c3it4B_</a>	 Alignment		95.3	29	<b>PDB header:</b> transferase <b>Chain:</b> B: <b>PDB Molecule:</b> arginine biosynthesis bifunctional protein argj <b>PDBTitle:</b> the crystal structure of ornithine acetyltransferase from2 mycobacterium tuberculosis (rv1653) at 1.7 a
8	<a href="#">d1vz6a_</a>	 Alignment		95.2	19	<b>Fold:</b> DmpA/Argj-like <b>Superfamily:</b> DmpA/Argj-like <b>Family:</b> Argj-like
9	<a href="#">c1vraB_</a>	 Alignment		94.3	15	<b>PDB header:</b> transferase <b>Chain:</b> B: <b>PDB Molecule:</b> arginine biosynthesis bifunctional protein argj; <b>PDBTitle:</b> crystal structure of arginine biosynthesis bifunctional protein argj2 (10175521) from bacillus halodurans at 2.00 a resolution
10	<a href="#">c2vzkD_</a>	 Alignment		92.6	20	<b>PDB header:</b> transferase <b>Chain:</b> D: <b>PDB Molecule:</b> glutamate n-acetyltransferase 2 beta chain; <b>PDBTitle:</b> structure of the acyl-enzyme complex of an n-terminal nucleophile2 (ntn) hydrolase, oat2
11	<a href="#">c4qmkB_</a>	 Alignment		87.8	38	<b>PDB header:</b> toxin <b>Chain:</b> B: <b>PDB Molecule:</b> type iii secretion system effector protein exou; <b>PDBTitle:</b> crystal structure of type iii effector protein exou (exou)

12	<a href="#">c3tu3B_</a>		Alignment		83.2	42	<b>PDB header:</b> toxin/toxin chaperone <b>Chain:</b> B: <b>PDB Molecule:</b> exou; <b>PDBTitle:</b> 1.92 angstrom resolution crystal structure of the full-length spcu in2 complex with full-length exou from the type iii secretion system of <i>3 pseudomonas aeruginosa</i>
13	<a href="#">c4akxB_</a>		Alignment		70.7	38	<b>PDB header:</b> transport protein <b>Chain:</b> B: <b>PDB Molecule:</b> exou; <b>PDBTitle:</b> structure of the heterodimeric complex exou-spcu from the type iii2 secretion system (t3ss) of <i>pseudomonas aeruginosa</i>
14	<a href="#">c5fyaA_</a>		Alignment		54.5	35	<b>PDB header:</b> hydrolase <b>Chain:</b> A: <b>PDB Molecule:</b> patatin-like protein, plpd; <b>PDBTitle:</b> cubic crystal of the native plpd
15	<a href="#">c4akfA_</a>		Alignment		50.3	32	<b>PDB header:</b> transferase <b>Chain:</b> A: <b>PDB Molecule:</b> vipd; <b>PDBTitle:</b> crystal structure of vipd from <i>legionella pneumophila</i>
16	<a href="#">c3geiB_</a>		Alignment		29.8	40	<b>PDB header:</b> hydrolase <b>Chain:</b> B: <b>PDB Molecule:</b> trna modification gtpase mnme; <b>PDBTitle:</b> crystal structure of mnme from <i>chlorobium tepidum</i> in complex2 with gcp
17	<a href="#">c2m4mA_</a>		Alignment		19.4	10	<b>PDB header:</b> unknown function <b>Chain:</b> A: <b>PDB Molecule:</b> hypothetical protein; <b>PDBTitle:</b> solution structure of the rrm domain of the hypothetical protein2 cagl0m09691g from <i>candida glabrata</i>
18	<a href="#">c2jpiA_</a>		Alignment		17.6	19	<b>PDB header:</b> structural genomics <b>Chain:</b> A: <b>PDB Molecule:</b> hypothetical protein; <b>PDBTitle:</b> chemical shift assignments of pa4090 from <i>pseudomonas2 aeruginosa</i>
19	<a href="#">c2vg2C_</a>		Alignment		15.2	20	<b>PDB header:</b> transferase <b>Chain:</b> C: <b>PDB Molecule:</b> undecaprenyl pyrophosphate synthetase; <b>PDBTitle:</b> rv2361 with ipp
20	<a href="#">c1osxA_</a>		Alignment		14.5	54	<b>PDB header:</b> immune system <b>Chain:</b> A: <b>PDB Molecule:</b> tumor necrosis factor receptor superfamily <b>PDBTitle:</b> solution structure of the extracellular domain of blys2 receptor 3 (br3)
21	<a href="#">d1osxa_</a>		Alignment	not modelled	14.5	54	<b>Fold:</b> TNF receptor-like <b>Superfamily:</b> TNF receptor-like <b>Family:</b> BAFF receptor-like
22	<a href="#">c1p0tA_</a>		Alignment	not modelled	14.4	54	<b>PDB header:</b> protein binding <b>Chain:</b> A: <b>PDB Molecule:</b> tumor necrosis factor receptor superfamily member 13c; <b>PDBTitle:</b> crystal structure of the baff-baff-r complex (part ii)
23	<a href="#">c1p0tU_</a>		Alignment	not modelled	14.4	54	<b>PDB header:</b> protein binding <b>Chain:</b> U: <b>PDB Molecule:</b> tumor necrosis factor receptor superfamily member 13c; <b>PDBTitle:</b> crystal structure of the baff-baff-r complex (part ii)
24	<a href="#">c1p0tx_</a>		Alignment	not modelled	14.4	54	<b>PDB header:</b> protein binding <b>Chain:</b> X: <b>PDB Molecule:</b> <b>PDBTitle:</b> crystal structure of the baff-baff-r complex (part ii)
25	<a href="#">c1p0tN_</a>		Alignment	not modelled	14.4	54	<b>PDB header:</b> protein binding <b>Chain:</b> N: <b>PDB Molecule:</b> tumor necrosis factor receptor superfamily member 13c; <b>PDBTitle:</b> crystal structure of the baff-baff-r complex (part ii)
26	<a href="#">c1p0tC_</a>		Alignment	not modelled	14.4	54	<b>PDB header:</b> protein binding <b>Chain:</b> C: <b>PDB Molecule:</b> tumor necrosis factor receptor superfamily member 13c; <b>PDBTitle:</b> crystal structure of the baff-baff-r complex (part ii)
27	<a href="#">c1p0tk_</a>		Alignment	not modelled	14.4	54	<b>PDB header:</b> protein binding <b>Chain:</b> K: <b>PDB Molecule:</b> tumor necrosis factor receptor superfamily member 13c; <b>PDBTitle:</b> crystal structure of the baff-baff-r complex (part ii)
28	<a href="#">c1p0t3_</a>		Alignment	not modelled	14.4	54	<b>PDB header:</b> protein binding <b>Chain:</b> 3: <b>PDB Molecule:</b> <b>PDB Fragment:</b> residues 1-63; <b>PDBTitle:</b> crystal structure of the baff-baff-r complex (part ii)
29	<a href="#">c1p0tH_</a>		Alignment	not modelled	14.4	54	<b>PDB header:</b> protein binding <b>Chain:</b> L: <b>PDB Molecule:</b> tumor necrosis factor receptor

29	<a href="#">c1p0t_</a>	Alignment	not modelled	14.4	54	superfamily member 13c; <b>PDBTitle:</b> crystal structure of the baff-baff-r complex (part ii)
30	<a href="#">c1p0tV_</a>	Alignment	not modelled	14.4	54	<b>PDB header:</b> protein binding <b>Chain:</b> V: <b>PDB Molecule:</b> <b>PDBTitle:</b> crystal structure of the baff-baff-r complex (part ii)
31	<a href="#">c1p0tW_</a>	Alignment	not modelled	14.4	54	<b>PDB header:</b> protein binding <b>Chain:</b> W: <b>PDB Molecule:</b> <b>PDBTitle:</b> crystal structure of the baff-baff-r complex (part ii)
32	<a href="#">c1p0tp_</a>	Alignment	not modelled	14.4	54	<b>PDB header:</b> protein binding <b>Chain:</b> P: <b>PDB Molecule:</b> tumor necrosis factor receptor superfamily member 13c; <b>PDBTitle:</b> crystal structure of the baff-baff-r complex (part ii)
33	<a href="#">c1p0tX_</a>	Alignment	not modelled	14.4	54	<b>PDB header:</b> protein binding <b>Chain:</b> X: <b>PDB Molecule:</b> <b>PDBTitle:</b> crystal structure of the baff-baff-r complex (part ii)
34	<a href="#">c1p0t9_</a>	Alignment	not modelled	14.4	54	<b>PDB header:</b> protein binding <b>Chain:</b> 9: <b>PDB Molecule:</b> <b>PDBTitle:</b> crystal structure of the baff-baff-r complex (part ii)
35	<a href="#">c1p0tj_</a>	Alignment	not modelled	14.4	54	<b>PDB header:</b> protein binding <b>Chain:</b> J: <b>PDB Molecule:</b> tumor necrosis factor receptor superfamily member 13c; <b>PDBTitle:</b> crystal structure of the baff-baff-r complex (part ii)
36	<a href="#">c1p0tB_</a>	Alignment	not modelled	14.4	54	<b>PDB header:</b> protein binding <b>Chain:</b> B: <b>PDB Molecule:</b> tumor necrosis factor receptor superfamily member 13c; <b>PDBTitle:</b> crystal structure of the baff-baff-r complex (part ii)
37	<a href="#">dlqy9a1</a>	Alignment	not modelled	14.3	22	<b>Fold:</b> Diaminopimelate epimerase-like <b>Superfamily:</b> Diaminopimelate epimerase-like <b>Family:</b> PhzC/PhzF-like
38	<a href="#">c1p0tK_</a>	Alignment	not modelled	14.1	54	<b>PDB header:</b> protein binding <b>Chain:</b> K: <b>PDB Molecule:</b> tumor necrosis factor receptor superfamily member 13c; <b>PDBTitle:</b> crystal structure of the baff-baff-r complex (part ii)
39	<a href="#">c1p0te_</a>	Alignment	not modelled	14.1	54	<b>PDB header:</b> protein binding <b>Chain:</b> E: <b>PDB Molecule:</b> tumor necrosis factor receptor superfamily member 13c; <b>PDBTitle:</b> crystal structure of the baff-baff-r complex (part ii)
40	<a href="#">c1p0t7_</a>	Alignment	not modelled	14.1	54	<b>PDB header:</b> protein binding <b>Chain:</b> 7: <b>PDB Molecule:</b> <b>PDBTitle:</b> crystal structure of the baff-baff-r complex (part ii)
41	<a href="#">c1p0t0_</a>	Alignment	not modelled	14.1	54	<b>PDB header:</b> protein binding <b>Chain:</b> 0: <b>PDB Molecule:</b> <b>PDBTitle:</b> crystal structure of the baff-baff-r complex (part ii)
42	<a href="#">c1p0tZ_</a>	Alignment	not modelled	14.1	54	<b>PDB header:</b> protein binding <b>Chain:</b> Z: <b>PDB Molecule:</b> <b>PDBTitle:</b> crystal structure of the baff-baff-r complex (part ii)
43	<a href="#">c1p0tt_</a>	Alignment	not modelled	14.1	54	<b>PDB header:</b> protein binding <b>Chain:</b> T: <b>PDB Molecule:</b> tumor necrosis factor receptor superfamily member 13c; <b>PDBTitle:</b> crystal structure of the baff-baff-r complex (part ii)
44	<a href="#">c1p0tO_</a>	Alignment	not modelled	14.1	54	<b>PDB header:</b> protein binding <b>Chain:</b> O: <b>PDB Molecule:</b> tumor necrosis factor receptor superfamily member 13c; <b>PDBTitle:</b> crystal structure of the baff-baff-r complex (part ii)
45	<a href="#">c1p0tq_</a>	Alignment	not modelled	14.1	54	<b>PDB header:</b> protein binding <b>Chain:</b> Q: <b>PDB Molecule:</b> tumor necrosis factor receptor superfamily member 13c; <b>PDBTitle:</b> crystal structure of the baff-baff-r complex (part ii)
46	<a href="#">c1p0tn_</a>	Alignment	not modelled	14.1	54	<b>PDB header:</b> protein binding <b>Chain:</b> N: <b>PDB Molecule:</b> tumor necrosis factor receptor superfamily member 13c; <b>PDBTitle:</b> crystal structure of the baff-baff-r complex (part ii)
47	<a href="#">c1p0t6_</a>	Alignment	not modelled	14.1	54	<b>PDB header:</b> protein binding <b>Chain:</b> 6: <b>PDB Molecule:</b> <b>PDB Fragment:</b> residues 1-63; <b>PDBTitle:</b> crystal structure of the baff-baff-r complex (part ii)
48	<a href="#">c1p0tF_</a>	Alignment	not modelled	14.1	54	<b>PDB header:</b> protein binding <b>Chain:</b> F: <b>PDB Molecule:</b> tumor necrosis factor receptor superfamily member 13c; <b>PDBTitle:</b> crystal structure of the baff-baff-r complex (part ii)
49	<a href="#">c1p0t1_</a>	Alignment	not modelled	14.1	54	<b>PDB header:</b> protein binding <b>Chain:</b> 1: <b>PDB Molecule:</b> <b>PDB Fragment:</b> residues 1-63; <b>PDBTitle:</b> crystal structure of the baff-baff-r complex (part ii)
50	<a href="#">c1p0t8_</a>	Alignment	not modelled	14.1	54	<b>PDB header:</b> protein binding <b>Chain:</b> 8: <b>PDB Molecule:</b> <b>PDBTitle:</b> crystal structure of the baff-baff-r complex (part ii)
51	<a href="#">c1p0tf_</a>	Alignment	not modelled	14.1	54	<b>PDB header:</b> protein binding <b>Chain:</b> F: <b>PDB Molecule:</b> tumor necrosis factor receptor superfamily member 13c; <b>PDBTitle:</b> crystal structure of the baff-baff-r complex (part ii)
52	<a href="#">c1p0tR_</a>	Alignment	not modelled	14.1	54	<b>PDB header:</b> protein binding <b>Chain:</b> R: <b>PDB Molecule:</b> tumor necrosis factor receptor superfamily member 13c; <b>PDBTitle:</b> crystal structure of the baff-baff-r complex (part ii)
53	<a href="#">c1p0ta_</a>	Alignment	not modelled	14.1	54	<b>PDB header:</b> protein binding <b>Chain:</b> A: <b>PDB Molecule:</b> tumor necrosis factor receptor superfamily member 13c; <b>PDBTitle:</b> crystal structure of the baff-baff-r complex (part ii)
54	<a href="#">c1p0tw_</a>	Alignment	not modelled	14.1	54	<b>PDB header:</b> protein binding <b>Chain:</b> W: <b>PDB Molecule:</b> <b>PDBTitle:</b> crystal structure of the baff-baff-r complex (part ii)
55	<a href="#">c1p0ts_</a>	Alignment	not modelled	14.1	54	<b>PDB header:</b> protein binding <b>Chain:</b> S: <b>PDB Molecule:</b> tumor necrosis factor receptor superfamily member 13c; <b>PDBTitle:</b> crystal structure of the baff-baff-r complex (part ii)



82	<a href="#">c1p0tu</a>	Alignment	not modelled	14.1	54	<b>PDB header:</b> protein binding <b>Chain:</b> U: <b>PDB Molecule:</b> tumor necrosis factor receptor superfamily member 13c; <b>PDBTitle:</b> crystal structure of the baff-baff-r complex (part ii)
83	<a href="#">d1oqen</a>	Alignment	not modelled	13.9	54	<b>Fold:</b> TNF receptor-like <b>Superfamily:</b> TNF receptor-like <b>Family:</b> BAFF receptor-like
84	<a href="#">c1oqeN</a>	Alignment	not modelled	13.9	54	<b>PDB header:</b> immune system <b>Chain:</b> N: <b>PDB Molecule:</b> tumor necrosis factor receptor superfamily member 13c; <b>PDBTitle:</b> crystal structure of stall-1 with baff-r
85	<a href="#">c1pjtB</a>	Alignment	not modelled	13.5	12	<b>PDB header:</b> transferase/oxidoreductase/lyase <b>Chain:</b> B: <b>PDB Molecule:</b> siroheme synthase; <b>PDBTitle:</b> the structure of the ser128ala point-mutant variant of cysg, the2 multifunctional methyltransferase/dehydrogenase/ferrochelatae for3 siroheme synthesis
86	<a href="#">d1xuba1</a>	Alignment	not modelled	13.1	25	<b>Fold:</b> Diaminopimelate epimerase-like <b>Superfamily:</b> Diaminopimelate epimerase-like <b>Family:</b> PhzC/PhzF-like
87	<a href="#">c4m55E</a>	Alignment	not modelled	12.3	20	<b>PDB header:</b> lyase <b>Chain:</b> E: <b>PDB Molecule:</b> udp-glucuronic acid decarboxylase 1; <b>PDBTitle:</b> crystal structure of human udp-xylose synthase r236h substitution
88	<a href="#">c4yn3B</a>	Alignment	not modelled	10.5	21	<b>PDB header:</b> hydrolase <b>Chain:</b> B: <b>PDB Molecule:</b> cucumisn; <b>PDBTitle:</b> crystal structure of cucumisn complex with pro-peptide
89	<a href="#">c5uazB</a>	Alignment	not modelled	9.7	50	<b>PDB header:</b> protein transport <b>Chain:</b> B: <b>PDB Molecule:</b> nucleoporin nup53; <b>PDBTitle:</b> crystal structure of the yeast nucleoporin
90	<a href="#">d1ws6a1</a>	Alignment	not modelled	9.1	18	<b>Fold:</b> S-adenosyl-L-methionine-dependent methyltransferases <b>Superfamily:</b> S-adenosyl-L-methionine-dependent methyltransferases <b>Family:</b> YhhF-like
91	<a href="#">c1kyqC</a>	Alignment	not modelled	9.0	16	<b>PDB header:</b> oxidoreductase, lyase <b>Chain:</b> C: <b>PDB Molecule:</b> siroheme biosynthesis protein met8; <b>PDBTitle:</b> met8p: a bifunctional nad-dependent dehydrogenase and2 ferrochelatae involved in siroheme synthesis.
92	<a href="#">c4u3fV</a>	Alignment	not modelled	8.9	26	<b>PDB header:</b> oxidoreductase/oxidoreductase inhibitor <b>Chain:</b> V: <b>PDB Molecule:</b> cytochrome b-c1 complex subunit rieske, mitochondrial; <b>PDBTitle:</b> cytochrome bc1 complex from chicken with designed inhibitor bound
93	<a href="#">c5guKa</a>	Alignment	not modelled	8.7	27	<b>PDB header:</b> biosynthetic protein <b>Chain:</b> A: <b>PDB Molecule:</b> cyclolavandulyl diphosphate synthase; <b>PDBTitle:</b> crystal structure of apo form of cyclolavandulyl diphosphate synthase2 (clds) from streptomyces sp. cl190
94	<a href="#">c3h1kl</a>	Alignment	not modelled	8.6	20	<b>PDB header:</b> oxidoreductase <b>Chain:</b> I: <b>PDB Molecule:</b> cytochrome b-c1 complex subunit rieske, mitochondrial; <b>PDBTitle:</b> chicken cytochrome bc1 complex with zn++ and an iodinated derivative2 of kresoxim-methyl bound
95	<a href="#">c3sxpD</a>	Alignment	not modelled	8.2	15	<b>PDB header:</b> isomerase <b>Chain:</b> D: <b>PDB Molecule:</b> adp-l-glycero-d-mannoheptose-6-epimerase; <b>PDBTitle:</b> crystal structure of helicobacter pylori adp-l-glycero-d-manno-2 heptose-6-epimerase (rfad, hp0859)
96	<a href="#">c3h1lV</a>	Alignment	not modelled	7.8	26	<b>PDB header:</b> oxidoreductase <b>Chain:</b> V: <b>PDB Molecule:</b> cytochrome b-c1 complex subunit rieske, mitochondrial; <b>PDBTitle:</b> chicken cytochrome bc1 complex with ascochlorin bound at qo and qj2 sites
97	<a href="#">c3cwbV</a>	Alignment	not modelled	7.5	26	<b>PDB header:</b> oxidoreductase <b>Chain:</b> V: <b>PDB Molecule:</b> mitochondrial ubiquinol-cytochrome c reductase iron-sulfur <b>PDBTitle:</b> chicken cytochrome bc1 complex inhibited by an iodinated analogue of2 the polyketide crocacin-d
98	<a href="#">d2o0ma1</a>	Alignment	not modelled	7.5	21	<b>Fold:</b> NagB/RpiA/CoA transferase-like <b>Superfamily:</b> NagB/RpiA/CoA transferase-like <b>Family:</b> SorC sugar-binding domain-like
99	<a href="#">c2o0mA</a>	Alignment	not modelled	7.5	21	<b>PDB header:</b> transcription <b>Chain:</b> A: <b>PDB Molecule:</b> transcriptional regulator, sorc family; <b>PDBTitle:</b> the crystal structure of the putative sorc family transcriptional2 regulator from enterococcus faecalis