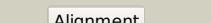
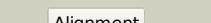
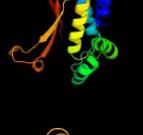


Phyre²

Email	mdejesus@rockefeller.edu
Description	RVBD3566c_(nat)_4007510_4008361
Date	Fri Aug 9 18:20:24 BST 2019
Unique Job ID	9794954004053ff7

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c2vfbA			100.0	76	PDB header: transferase Chain: A: PDB Molecule: arylamine n-acetyltransferase; PDBTitle: the structure of mycobacterium marinum arylamine n-2 acetyltransferase
2	d1w5ra1			100.0	60	Fold: Cysteine proteinases Superfamily: Cysteine proteinases Family: Arylamine N-acetyltransferase
3	d1w4ta1			100.0	34	Fold: Cysteine proteinases Superfamily: Cysteine proteinases Family: Arylamine N-acetyltransferase
4	d1e2ta			100.0	35	Fold: Cysteine proteinases Superfamily: Cysteine proteinases Family: Arylamine N-acetyltransferase
5	d2bsza1			100.0	43	Fold: Cysteine proteinases Superfamily: Cysteine proteinases Family: Arylamine N-acetyltransferase
6	c4guzA			100.0	34	PDB header: transferase Chain: A: PDB Molecule: probable arylamine n-acetyl transferase; PDBTitle: structure of the arylamine n-acetyltransferase from mycobacterium2 abscessus
7	c3d9wA			100.0	38	PDB header: transferase Chain: A: PDB Molecule: putative acetyltransferase; PDBTitle: crystal structure analysis of nocardia farcinica arylamine n-2 acetyltransferase
8	c4dmob			100.0	24	PDB header: transferase Chain: B: PDB Molecule: n-hydroxyarylamine o-acetyltransferase; PDBTitle: crystal structure of the (baccr)nat3 arylamine n-acetyltransferase2 from bacillus cereus reveals a unique cys-his-glu catalytic triad
9	c3lnbA			100.0	25	PDB header: transferase Chain: A: PDB Molecule: n-acetyltransferase family protein; PDBTitle: crystal structure analysis of arylamine n-acetyltransferase c from2 bacillus anthracis
10	c2pfrB			100.0	28	PDB header: transferase Chain: B: PDB Molecule: arylamine n-acetyltransferase 2; PDBTitle: human n-acetyltransferase 2
11	c3kd4A			97.1	10	PDB header: hydrolase Chain: A: PDB Molecule: putative protease; PDBTitle: crystal structure of a putative protease (bdi_1141) from2 parabacteroides distasonis at 2.00 a resolution

12	c3isrB			96.1	17	PDB header: hydrolase Chain: B: PDB Molecule: transglutaminase-like enzymes, putative cysteine protease; PDBTitle: the crystal structure of a putative cysteine protease from cytophaga2 hutchinsonii to 1.9a
13	c4u65F			95.9	13	PDB header: transferase/hydrolase Chain: F: PDB Molecule: putative cysteine protease; PDBTitle: structure of the periplasmic output domain of the legionella2 pneumophila larp ortholog cdgs9 in complex with pseudomonas3 fluorescens larp
14	c4xz7A			93.9	17	PDB header: transferase Chain: A: PDB Molecule: putative uncharacterized protein; PDBTitle: crystal structure of a tgase
15	c6g49A			92.7	27	PDB header: transferase Chain: A: PDB Molecule: protein-glutamine gamma-glutamyltransferase; PDBTitle: crystal structure of the periplasmic domain of tgpA from pseudomonas2 aeruginosa
16	d2f4ma1			90.2	24	Fold: Cysteine proteinases Superfamily: Cysteine proteinases Family: Transglutaminase core
17	c3eswA			88.7	25	PDB header: hydrolase Chain: A: PDB Molecule: peptide-n(4)-(n-acetyl-beta-glucosaminyl)asparagine PDBTitle: complex of yeast pngase with glnac2-iac.
18	c4g29A			83.2	21	PDB header: protein binding Chain: A: PDB Molecule: secreted effector protein ssei; PDBTitle: structure of the catalytic domain of the salmonella virulence factor2 ssei
19	d1x3za1			81.5	24	Fold: Cysteine proteinases Superfamily: Cysteine proteinases Family: Transglutaminase core
20	d2q3za4			66.8	21	Fold: Cysteine proteinases Superfamily: Cysteine proteinases Family: Transglutaminase core
21	c4fgpB		not modelled	62.5	18	PDB header: hydrolase Chain: B: PDB Molecule: periplasmic protein; PDBTitle: legionella pneumophila larp (egta-treated)
22	c2qshA		not modelled	57.4	13	PDB header: dna binding protein/dna Chain: A: PDB Molecule: dna repair protein rad4; PDBTitle: crystal structure of rad4-rad23 bound to a mismatch dna
23	c6j4nD		not modelled	52.1	19	PDB header: hydrolase Chain: D: PDB Molecule: metallo-beta-lactamases pnqm-1; PDBTitle: structure of papua new guinea mbl-1(pnqm-1) native
24	d1g0da4		not modelled	49.5	27	Fold: Cysteine proteinases Superfamily: Cysteine proteinases Family: Transglutaminase core Fold: Cytochrome c Superfamily: Cytochrome c Family: Quinohemoprotein amine dehydrogenase A chain, domains 1 and 2
25	d1jmxa1		not modelled	48.0	12	PDB header: structural genomics Chain: A: PDB Molecule: hypothetical protein atu2571; PDBTitle: complete resonance assignments and solution structure calculation of ptc2521 (nesg id: att6) from agrobacterium tumefaciens
26	c2jq4A		not modelled	46.0	24	Fold: Acyl carrier protein-like Superfamily: ACP-like Family: Acyl-carrier protein (ACP)
27	d2jq4a1		not modelled	46.0	24	PDB header: ribosome Chain: F: PDB Molecule: rpl14; PDBTitle: t.thermophila 60s ribosomal subunit in complex with2 initiation factor 6. this file contains 26s rrna and3 proteins of molecule 2.
28	c4a19F		not modelled	44.3	17	PDB header: ribosome

29	c3j3bM	Alignment	not modelled	43.4	21	Chain: M: PDB Molecule: 60s ribosomal protein l14; PDBTitle: structure of the human 60s ribosomal proteins
30	d1icaa	Alignment	not modelled	43.3	60	Fold: Knottins (small inhibitors, toxins, lectins) Superfamily: Scorpion toxin-like Family: Insect defensins
31	d1pbva1	Alignment	not modelled	43.1	14	Fold: Cytochrome c Superfamily: Cytochrome c Family: Quinohemoprotein amine dehydrogenase A chain, domains 1 and 2
32	c1wv9B	Alignment	not modelled	42.9	16	PDB header: structural genomics, unknown function Chain: B: PDB Molecule: rhodanese homolog tt1651; PDBTitle: crystal structure of rhodanese homolog tt1651 from an extremely thermophilic bacterium <i>thermus thermophilus</i> hb8
33	c3iacA	Alignment	not modelled	41.6	28	PDB header: isomerase Chain: A: PDB Molecule: glucuronate isomerase; PDBTitle: 2.2 angstrom crystal structure of glucuronate isomerase from <i>salmonella typhimurium</i> .
34	d1lex0a4	Alignment	not modelled	41.6	27	Fold: Cysteine proteinases Superfamily: Cysteine proteinases Family: Transglutaminase core
35	c3iz5N	Alignment	not modelled	40.1	14	PDB header: ribosome Chain: N: PDB Molecule: 60s ribosomal protein l14 (l14e); PDBTitle: localization of the large subunit ribosomal proteins into a 5.5 a2 cryo-em map of <i>triticum aestivum</i> translating 80s ribosome
36	c1boiA	Alignment	not modelled	39.2	12	PDB header: transferase Chain: A: PDB Molecule: rhodanese; PDBTitle: n-terminally truncated rhodanese
37	c1zkpD	Alignment	not modelled	38.7	21	PDB header: structural genomics, unknown function Chain: D: PDB Molecule: hypothetical protein ba1088; PDBTitle: 1.5a resolution crystal structure of a metallo beta lactamase family2 protein, the elac homologue of <i>bacillus anthracis</i> , a putative3 ribonuclease
38	c4as2D	Alignment	not modelled	37.0	22	PDB header: hydrolase Chain: D: PDB Molecule: phosphorylcholine phosphatase; PDBTitle: <i>pseudomonas aeruginosa</i> phosphorylcholine phosphatase. monoclinic form
39	c3zwfA	Alignment	not modelled	35.7	26	PDB header: hydrolase Chain: A: PDB Molecule: zinc phosphodiesterase elac protein 1; PDBTitle: crystal structure of human trnase z, short form (elac1).
40	c2nz3A	Alignment	not modelled	35.4	60	PDB header: antimicrobial protein Chain: A: PDB Molecule: defensin, mutant def-acaa; PDBTitle: nmr structure of def-acaa, a mutant of <i>anopheles</i> defensin2 def-aaa
41	c3izcN	Alignment	not modelled	34.6	20	PDB header: ribosome Chain: N: PDB Molecule: 60s ribosomal protein rpl14 (l14e); PDBTitle: localization of the large subunit ribosomal proteins into a 6.1 a2 cryo-em map of <i>saccharomyces cerevisiae</i> translating 80s ribosome
42	d1s1ma2	Alignment	not modelled	30.4	21	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Nitrogenase iron protein-like
43	c2e3eA	Alignment	not modelled	30.4	70	PDB header: antimicrobial protein Chain: A: PDB Molecule: defensin, mutant def-bbb; PDBTitle: nmr structure of def-bbb, a mutant of <i>anopheles</i> defensin2 def-aaa
44	c2lr5A	Alignment	not modelled	29.8	38	PDB header: antimicrobial protein Chain: A: PDB Molecule: micasin; PDBTitle: 1h chemical shift assignments for micasin
45	c3bwW	Alignment	not modelled	29.3	12	PDB header: metal binding protein Chain: A: PDB Molecule: protein of unknown function duf692/cog3220; PDBTitle: crystal structure of a duf692 family protein (hs_1138) from <i>haemophilus somnus</i> 129pt at 2.20 a resolution
46	c5xa6A	Alignment	not modelled	28.0	88	PDB header: toxin Chain: A: PDB Molecule: bmkdfsn3; PDBTitle: ion channel modulation by scorpion haemolymph and its defensin2 ingredients uncovers origin of neurotoxins in telson formed in3 paleozoic scorpion
47	d1kkxa	Alignment	not modelled	27.2	13	Fold: DNA/RNA-binding 3-helical bundle Superfamily: ARID-like Family: ARID domain
48	d1vcoa2	Alignment	not modelled	26.3	26	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Nitrogenase iron protein-like
49	c3j39M	Alignment	not modelled	26.0	24	PDB header: ribosome Chain: M: PDB Molecule: 60s ribosomal protein l14; PDBTitle: structure of the <i>d. melanogaster</i> 60s ribosomal proteins
50	c3nvaB	Alignment	not modelled	24.8	24	PDB header: ligase Chain: B: PDB Molecule: ctp synthase; PDBTitle: dimeric form of ctp synthase from <i>sulfolobus solfataricus</i>
51	c5u03C	Alignment	not modelled	24.3	19	PDB header: ligase, protein fibril Chain: C: PDB Molecule: ctp synthase 1; PDBTitle: cryo-em structure of the human ctp synthase filament
52	d1zkpa1	Alignment	not modelled	24.2	26	Fold: Metallo-hydrolase/oxidoreductase Superfamily: Metallo-hydrolase/oxidoreductase Family: Yhfl-like
53	c2ru0A	Alignment	not modelled	23.6	33	PDB header: antimicrobial protein Chain: A: PDB Molecule: arthropod defensin; PDBTitle: solution structure of actinomycetins
54	c3g5jA	Alignment	not modelled	23.4	27	PDB header: nucleotide binding protein Chain: A: PDB Molecule: putative atp/gtp binding protein; PDBTitle: crystal structure of n-terminal domain of putative atp/gtp binding2 protein from <i>clostridium difficile</i> 630
						PDB header: ligand binding protein

55	c3chgB	Alignment	not modelled	22.3	33	Chain: B: PDB Molecule: glycine betaine-binding protein; PDBTitle: the compatible solute-binding protein opuac from bacillus2 subtilis in complex with dmsa
56	d1rhsa1	Alignment	not modelled	22.1	10	Fold: Rhodanese/Cell cycle control phosphatase Superfamily: Rhodanese/Cell cycle control phosphatase Family: Multidomain sulfurtransferase (rhodanese)
57	c3zuaA	Alignment	not modelled	21.5	14	PDB header: hydrolase Chain: A: PDB Molecule: alpha-hemolysin translocation atp-binding protein hlyb; PDBTitle: a c39-like domain
58	c3h11A	Alignment	not modelled	20.5	38	PDB header: apoptosis Chain: A: PDB Molecule: casp8 and fadd-like apoptosis regulator; PDBTitle: zymogen caspase-8:c-flip protease domain complex
59	c1l9mB	Alignment	not modelled	19.3	29	PDB header: transferase Chain: B: PDB Molecule: protein-glutamine glutamyltransferase e3; PDBTitle: three-dimensional structure of the human transglutaminase 32 enzyme: binding of calcium ions change structure for3 activation
60	c2aiV	Alignment	not modelled	19.0	18	PDB header: transport protein Chain: A: PDB Molecule: fragment of nucleoporin nup116/nsp116; PDBTitle: multiple conformations in the ligand-binding site of the yeast nuclear2 pore targeting domain of nup116p
61	c3sirD	Alignment	not modelled	18.7	25	PDB header: hydrolase Chain: D: PDB Molecule: caspase; PDBTitle: crystal structure of drice
62	c3x30A	Alignment	not modelled	18.6	9	PDB header: hydrolase Chain: A: PDB Molecule: upf0173 metal-dependent hydrolase tm_1162; PDBTitle: crystal structure of metallo-beta-lactamase from thermotoga maritima
63	c2jo7A	Alignment	not modelled	18.2	29	PDB header: surface active protein Chain: A: PDB Molecule: glycosylphosphatidylinositol-anchored merozoite PDBTitle: solution structure of the adhesion protein bd37 from2 babesia divergens
64	c5uoia	Alignment	not modelled	18.2	33	PDB header: de novo protein Chain: A: PDB Molecule: hhh_rd1_0142; PDBTitle: solution structure of the de novo mini protein hhh_rd1_0142
65	c3p45I	Alignment	not modelled	17.7	26	PDB header: hydrolase Chain: I: PDB Molecule: caspase-6; PDBTitle: crystal structure of apo-caspase-6 at physiological ph
66	d2plia1	Alignment	not modelled	17.6	14	Fold: FAD-binding/transporter-associated domain-like Superfamily: FAD-binding/transporter-associated domain-like Family: CorC/HlyC domain-like
67	c3k8uA	Alignment	not modelled	17.4	15	PDB header: hydrolase Chain: A: PDB Molecule: putative abc transporter, atp-binding protein coma; PDBTitle: crystal structure of the peptidase domain of streptococcus coma, a bi-2 functional abc transporter involved in quorum sensing pathway
68	c3zf7P	Alignment	not modelled	17.4	20	PDB header: ribosome Chain: P: PDB Molecule: probable 60s ribosomal protein l14; PDBTitle: high-resolution cryo-electron microscopy structure of the trypanosoma2 brucei ribosome
69	c2ad5B	Alignment	not modelled	17.3	21	PDB header: ligase Chain: B: PDB Molecule: ctp synthase; PDBTitle: mechanisms of feedback regulation and drug resistance of ctp2 synthetases: structure of the e. coli ctps/ctp complex at 2.8-3 angstrom resolution.
70	d1yt8a4	Alignment	not modelled	16.9	20	Fold: Rhodanese/Cell cycle control phosphatase Superfamily: Rhodanese/Cell cycle control phosphatase Family: Multidomain sulfurtransferase (rhodanese)
71	c2yqeA	Alignment	not modelled	16.9	22	PDB header: dna binding protein Chain: A: PDB Molecule: jumonji/arid domain-containing protein 1d; PDBTitle: solution structure of the arid domain of jarid1d protein
72	d2cbna1	Alignment	not modelled	16.8	22	Fold: Metallo-hydrolase/oxidoreductase Superfamily: Metallo-hydrolase/oxidoreductase Family: RNase Z-like
73	c1g0dA	Alignment	not modelled	16.8	29	PDB header: transferase Chain: A: PDB Molecule: protein-glutamine gamma-glutamyltransferase; PDBTitle: crystal structure of red sea bream transglutaminase
74	c1cjyB	Alignment	not modelled	16.2	25	PDB header: hydrolase Chain: B: PDB Molecule: protein (cytosolic phospholipase a2); PDBTitle: human cytosolic phospholipase a2
75	c4wfcF	Alignment	not modelled	16.2	26	PDB header: hydrolase Chain: F: PDB Molecule: exosome complex protein lrp1; PDBTitle: structure of the rrp6-rrp47 interaction
76	c2lm1A	Alignment	not modelled	16.1	14	PDB header: dna binding protein Chain: A: PDB Molecule: lysine-specific demethylase lid; PDBTitle: solution nmr structure of lysine-specific demethylase lid from2 drosophila melanogaster, northeast structural genomics consortium3 target fr824d
77	c3llbA	Alignment	not modelled	15.7	20	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: uncharacterized protein; PDBTitle: the crystal structure of the protein pa3983 with unknown2 function from pseudomonas aeruginosa pao1
78	d1vfga2	Alignment	not modelled	15.5	24	Fold: Nucleotidyltransferase Superfamily: Nucleotidyltransferase Family: Poly A polymerase head domain-like
79	d3ci0k2	Alignment	not modelled	15.0	33	Fold: SAM domain-like Superfamily: GspK insert domain-like Family: GspK insert domain-like

80	c2ql5A	Alignment	not modelled	14.8	20	PDB header: hydrolase/hydrolase inhibitor Chain: A: PDB Molecule: caspase-7; PDBTitle: crystal structure of caspase-7 with inhibitor ac-dmqd-cho
81	c4ejyA	Alignment	not modelled	14.8	16	PDB header: hydrolase/dna Chain: A: PDB Molecule: 3-methyladenine dna glycosylase; PDBTitle: structure of mbogg1 in complex with high affinity dna ligand
82	c4wfcB	Alignment	not modelled	14.7	26	PDB header: hydrolase Chain: B: PDB Molecule: exosome complex protein lrp1; PDBTitle: structure of the rrp6-rrp47 interaction
83	d3deda1	Alignment	not modelled	14.6	22	Fold: FAD-binding/transporter-associated domain-like Superfamily: FAD-binding/transporter-associated domain-like Family: CorC/HlyC domain-like
84	d1af7a1	Alignment	not modelled	14.5	26	Fold: Chemotaxis receptor methyltransferase CheR, N-terminal domain Superfamily: Chemotaxis receptor methyltransferase CheR, N-terminal domain Family: Chemotaxis receptor methyltransferase CheR, N-terminal domain
85	d1vija4	Alignment	not modelled	14.5	15	Fold: Cysteine proteinases Superfamily: Cysteine proteinases Family: Transglutaminase core
86	d1y44a1	Alignment	not modelled	14.5	14	Fold: Metallo-hydrolase/oxidoreductase Superfamily: Metallo-hydrolase/oxidoreductase Family: RNase Z-like
87	c5laaB	Alignment	not modelled	14.4	15	PDB header: transferase Chain: B: PDB Molecule: tetrahydromethanopterin s-methyltransferase subunit a; PDBTitle: x-ray structure of the methyltransferase subunit a from methanothermus2 fervidus in complex with cobalamin
88	c4zdiE	Alignment	not modelled	14.4	24	PDB header: ligase Chain: E: PDB Molecule: ctp synthase; PDBTitle: crystal structure of the m. tuberculosis ctp synthase pyrg (apo form)
89	c2ln4A	Alignment	not modelled	14.3	50	PDB header: antimicrobial protein Chain: A: PDB Molecule: coprisin; PDBTitle: insight into the antimicrobial activities based on the structure-2 activity relationships of coprisin isolated from the dung beetle,3 copris tripartitus
90	c1f13A	Alignment	not modelled	13.7	29	PDB header: coagulation factor Chain: A: PDB Molecule: cellular coagulation factor xiii zymogen; PDBTitle: recombinant human cellular coagulation factor xiii
91	c2eg4B	Alignment	not modelled	13.4	30	PDB header: transferase Chain: B: PDB Molecule: probable thiosulfate sulfurtransferase; PDBTitle: crystal structure of probable thiosulfate sulfurtransferase
92	c5mz61	Alignment	not modelled	13.4	22	PDB header: cell cycle Chain: 1: PDB Molecule: separase; PDBTitle: cryo-em structure of a separase-securin complex from caenorhabditis2 elegans at 3.8 a resolution
93	c1kv3F	Alignment	not modelled	13.4	29	PDB header: transferase Chain: F: PDB Molecule: protein-glutamine gamma-glutamyltransferase; PDBTitle: human tissue transglutaminase in gdp bound form
94	c6bugA	Alignment	not modelled	13.4	27	PDB header: membrane protein Chain: A: PDB Molecule: d-alanyl carrier protein; PDBTitle: crystal structure of a membrane protein, crystal form i
95	c2veqA	Alignment	not modelled	13.2	30	PDB header: cell cycle Chain: A: PDB Molecule: centromere dna-binding protein complex cbf3 subunit b; PDBTitle: insights into kinetochore-dna interactions from the structure of cep3p
96	d2rk5a1	Alignment	not modelled	13.2	9	Fold: FAD-binding/transporter-associated domain-like Superfamily: FAD-binding/transporter-associated domain-like Family: CorC/HlyC domain-like
97	c1i3oC	Alignment	not modelled	13.0	27	PDB header: apoptosis Chain: C: PDB Molecule: caspase 3; PDBTitle: crystal structure of the complex of xiap-bir2 and caspase 3
98	c4gxtA	Alignment	not modelled	12.7	22	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: a conserved functionally unknown protein; PDBTitle: the crystal structure of a conserved functionally unknown protein from2 anaerococcus prevotii dsm 20548
99	c4wv4B	Alignment	not modelled	12.5	8	PDB header: transcription Chain: B: PDB Molecule: transcription initiation factor tflid subunit 8; PDBTitle: heterodimer of taf8/taf10