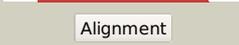
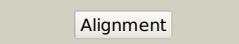
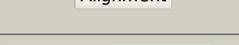


Phyre2

Email	mdejesus@rockefeller.edu
Description	RVBD1001_(arcA)_1117189_1118397
Date	Wed Jul 31 22:05:07 BST 2019
Unique Job ID	178f5ac734d3d895

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	d1rxxa_	 Alignment		100.0	39	Fold: Pentain, beta/alpha-propeller Superfamily: Pentain Family: Arginine deiminase
2	c4bofA_	 Alignment		100.0	38	PDB header: hydrolase Chain: A: PDB Molecule: arginine deiminase; PDBTitle: crystal structure of arginine deiminase from group a streptococcus
3	d1s9ra_	 Alignment		100.0	30	Fold: Pentain, beta/alpha-propeller Superfamily: Pentain Family: Arginine deiminase
4	c4e4jl_	 Alignment		100.0	30	PDB header: hydrolase Chain: J: PDB Molecule: arginine deiminase; PDBTitle: crystal structure of arginine deiminase from mycoplasma penetrans
5	c5wpiB_	 Alignment		100.0	16	PDB header: transferase Chain: B: PDB Molecule: hsva; PDBTitle: the virulence-associated protein hsva from the fire blight pathogen2 erwinia amylovora is a polyamine amidinotransferase
6	d1bwda_	 Alignment		100.0	18	Fold: Pentain, beta/alpha-propeller Superfamily: Pentain Family: Amidinotransferase
7	c8jdwA_	 Alignment		100.0	18	PDB header: transferase Chain: A: PDB Molecule: protein (l-arginine:glycine amidinotransferase); PDBTitle: crystal structure of human l-arginine:glycine amidinotransferase in2 complex with l-alanine
8	c1jdwA_	 Alignment		100.0	17	PDB header: transferase Chain: A: PDB Molecule: l-arginine\glycine amidinotransferase; PDBTitle: crystal structure and mechanism of l-arginine: glycine2 amidinotransferase: a mitochondrial enzyme involved in3 creatine biosynthesis
9	d1jdwA_	 Alignment		100.0	17	Fold: Pentain, beta/alpha-propeller Superfamily: Pentain Family: Amidinotransferase
10	c3i4aA_	 Alignment		100.0	24	PDB header: hydrolase Chain: A: PDB Molecule: n(g),n(g)-dimethylarginine dimethylaminohydrolase 1; PDBTitle: crystal structure of dimethylarginine dimethylaminohydrolase-1 (ddah-2 1) in complex with n5-(1-iminopropyl)-l-ornithine
11	c2ci6A_	 Alignment		100.0	23	PDB header: hydrolase Chain: A: PDB Molecule: ng, ng-dimethylarginine dimethylaminohydrolase 1; PDBTitle: crystal structure of dimethylarginine2 dimethylaminohydrolase i bound with zinc low ph

12	d1h70a_	 Alignment		100.0	23	Fold: Pentain, beta/alpha-propeller Superfamily: Pentain Family: Dimethylarginine dimethylaminohydrolase DDAH
13	c6b2wB_	 Alignment		99.6	13	PDB header: hydrolase Chain: B: PDB Molecule: putative peptidyl-arginine deiminase family protein; PDBTitle: c. jejuni c315s agmatine deiminase with substrate bound
14	d2ewoa1	 Alignment		99.6	18	Fold: Pentain, beta/alpha-propeller Superfamily: Pentain Family: Porphyromonas-type peptidylarginine deiminase
15	d1xkna_	 Alignment		99.6	19	Fold: Pentain, beta/alpha-propeller Superfamily: Pentain Family: Porphyromonas-type peptidylarginine deiminase
16	d1zbra1	 Alignment		99.5	19	Fold: Pentain, beta/alpha-propeller Superfamily: Pentain Family: Porphyromonas-type peptidylarginine deiminase
17	c2jerG_	 Alignment		99.5	21	PDB header: hydrolase Chain: G: PDB Molecule: agmatine deiminase; PDBTitle: agmatine deiminase of enterococcus faecalis catalyzing its2 reaction.
18	d2jera1	 Alignment		99.5	19	Fold: Pentain, beta/alpha-propeller Superfamily: Pentain Family: Porphyromonas-type peptidylarginine deiminase
19	d1vkpa_	 Alignment		99.5	18	Fold: Pentain, beta/alpha-propeller Superfamily: Pentain Family: Porphyromonas-type peptidylarginine deiminase
20	d2cmua1	 Alignment		99.5	14	Fold: Pentain, beta/alpha-propeller Superfamily: Pentain Family: Porphyromonas-type peptidylarginine deiminase
21	c4ytgA_	 Alignment	not modelled	99.4	12	PDB header: hydrolase Chain: A: PDB Molecule: peptidylarginine deiminase; PDBTitle: crystal structure of porphyromonas gingivalis peptidylarginine2 deiminase (ppad) mutant c351a in complex with dipeptide met-arg.
22	d2dexx3	 Alignment	not modelled	94.2	12	Fold: Pentain, beta/alpha-propeller Superfamily: Pentain Family: Peptidylarginine deiminase Pad4, catalytic C-terminal domain
23	c4n2gA_	 Alignment	not modelled	94.0	17	PDB header: hydrolase Chain: A: PDB Molecule: protein-arginine deiminase type-2; PDBTitle: crystal structure of protein arginine deiminase 2 (d169a, 10 mm ca2+)
24	c4n2kA_	 Alignment	not modelled	93.5	17	PDB header: hydrolase Chain: A: PDB Molecule: protein-arginine deiminase type-2; PDBTitle: crystal structure of protein arginine deiminase 2 (q350a, 0 mm ca2+)
25	c5hp5A_	 Alignment	not modelled	93.4	13	PDB header: hydrolase Chain: A: PDB Molecule: protein-arginine deiminase type-1; PDBTitle: srtructure of human peptidylarginine deiminase type i (pad1)
26	c2dexX_	 Alignment	not modelled	92.7	13	PDB header: hydrolase Chain: X: PDB Molecule: protein-arginine deiminase type iv; PDBTitle: crystal structure of human peptidylarginine deiminase 4 in complex2 with histone h3 n-terminal peptide including arg17
27	d2ebfx2	 Alignment	not modelled	46.3	17	Fold: EreA/ChaN-like Superfamily: EreA/ChaN-like Family: PMT domain-like
28	c6rdu2_	 Alignment	not modelled	43.8	13	PDB header: proton transport Chain: 2: PDB Molecule: asa-2: polytomella f-atp synthase associated subunit 2; PDBTitle: cryo-em structure of polytomella f-atp synthase, rotary

						substate 1e,2 monomer-masked refinement
29	c4o9uB_	Alignment	not modelled	42.9	46	PDB header: membrane protein Chain: B: PDB Molecule: nad(p) transhydrogenase subunit beta; PDBTitle: mechanism of transhydrogenase coupling proton translocation and2 hydride transfer
30	d1d4oa_	Alignment	not modelled	40.7	21	Fold: DHS-like NAD/FAD-binding domain Superfamily: DHS-like NAD/FAD-binding domain Family: Transhydrogenase domain III (dIII)
31	d1pnoa_	Alignment	not modelled	40.7	38	Fold: DHS-like NAD/FAD-binding domain Superfamily: DHS-like NAD/FAD-binding domain Family: Transhydrogenase domain III (dIII)
32	c4rrfD_	Alignment	not modelled	39.6	22	PDB header: ligase Chain: D: PDB Molecule: threonine--trna ligase; PDBTitle: editing domain of threonyl-trna synthetase from methanococcus2 jannaschii with l-ser3aa
33	c1pt9B_	Alignment	not modelled	38.9	21	PDB header: oxidoreductase Chain: B: PDB Molecule: nad(p) transhydrogenase, mitochondrial; PDBTitle: crystal structure analysis of the diii component of transhydrogenase2 with a thio-nicotinamide nucleotide analogue
34	c2bruC_	Alignment	not modelled	37.9	38	PDB header: oxidoreductase Chain: C: PDB Molecule: nad(p) transhydrogenase subunit beta; PDBTitle: complex of the domain i and domain iii of escherichia coli2 transhydrogenase
35	c2hl2A_	Alignment	not modelled	37.7	25	PDB header: ligase Chain: A: PDB Molecule: threonyl-trna synthetase; PDBTitle: crystal structure of the editing domain of threonyl-trna2 synthetase from pyrococcus abyssi in complex with an3 analog of seryladenylate
36	d1iuKa_	Alignment	not modelled	37.1	16	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: CoA-binding domain
37	c4k2bA_	Alignment	not modelled	32.5	15	PDB header: transferase Chain: A: PDB Molecule: ntd biosynthesis operon protein ntda; PDBTitle: crystal structure of ntda from bacillus subtilis in complex with the2 internal aldimine
38	c3zs7A_	Alignment	not modelled	30.1	24	PDB header: transferase Chain: A: PDB Molecule: pyridoxal kinase; PDBTitle: crystal structure of pyridoxal kinase from trypanosoma brucei
39	d1daaa_	Alignment	not modelled	29.5	11	Fold: D-aminoacid aminotransferase-like PLP-dependent enzymes Superfamily: D-aminoacid aminotransferase-like PLP-dependent enzymes Family: D-aminoacid aminotransferase-like PLP-dependent enzymes
40	c3ff4A_	Alignment	not modelled	26.9	16	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: uncharacterized protein; PDBTitle: crystal structure of uncharacterized protein chu_1412
41	c4ovkA_	Alignment	not modelled	26.7	24	PDB header: solute-binding protein Chain: A: PDB Molecule: periplasmic binding protein; PDBTitle: crystal structure of periplasmic solute binding protein from2 veillonella parvula dsm 2008
42	c1xtzA_	Alignment	not modelled	26.4	22	PDB header: isomerase Chain: A: PDB Molecule: ribose-5-phosphate isomerase; PDBTitle: crystal structure of the s. cerevisiae d-ribose-5-phosphate isomerase:2 comparison with the archeal and bacterial enzymes
43	c4lhdB_	Alignment	not modelled	24.6	15	PDB header: oxidoreductase Chain: B: PDB Molecule: glycine dehydrogenase [decarboxylating]; PDBTitle: crystal structure of synechocystis sp. pcc 6803 glycine decarboxylase2 (p-protein), holo form with pyridoxal-5'-phosphate and glycine,3 closed flexible loop
44	d1u6ma_	Alignment	not modelled	23.9	10	Fold: Acyl-CoA N-acyltransferases (Nat) Superfamily: Acyl-CoA N-acyltransferases (Nat) Family: N-acetyl transferase, NAT
45	d1ynha1	Alignment	not modelled	23.5	20	Fold: Pentain, beta/alpha-propeller Superfamily: Pentain Family: Succinylarginine dihydrolase-like
46	d2itba1	Alignment	not modelled	23.4	25	Fold: Ferritin-like Superfamily: Ferritin-like Family: MiaE-like
47	c3u7jA_	Alignment	not modelled	23.1	35	PDB header: isomerase Chain: A: PDB Molecule: ribose-5-phosphate isomerase a; PDBTitle: crystal structure of ribose-5-phosphate isomerase a from burkholderia2 thailandensis
48	c4inpA_	Alignment	not modelled	22.5	24	PDB header: transport protein Chain: A: PDB Molecule: iron (iii) abc transporter, periplasmic iron-binding PDBTitle: the crystal structure of helicobacter pylori ceue (hp1561) with ni(ii)2 bound
49	c4hn9B_	Alignment	not modelled	22.4	24	PDB header: transport protein Chain: B: PDB Molecule: iron complex transport system substrate-binding protein; PDBTitle: crystal structure of iron abc transporter solute-binding protein from2 eubacterium eligens
50	c4x84C_	Alignment	not modelled	21.5	30	PDB header: isomerase Chain: C: PDB Molecule: ribose-5-phosphate isomerase a; PDBTitle: crystal structure of ribose-5-phosphate isomerase a from pseudomonas2 aeruginosa
51	c4yajA_	Alignment	not modelled	21.4	23	PDB header: ligase Chain: A: PDB Molecule: alpha subunit of acetyl-coenzyme a synthetase PDBTitle: ca. korarchaeum cryptofilum dinucleotide forming acetyl-coenzyme a2 synthetase 1 (apo form)
52	c4ce5A_	Alignment	not modelled	20.9	18	PDB header: transferase Chain: A: PDB Molecule: at-omegata; PDBTitle: first crystal structure of an (r)-selective omega-transaminase2 from aspergillus terreus
53	c5ux1D_	Alignment	not modelled	20.5	28	PDB header: lyase Chain: D: PDB Molecule: trna-(ms2)io(6)a)-hydroxylase-like; PDBTitle: protein 43 with aldehyde deformylating oxygenase

						activity from2 synechococcus
54	c4nmIA	Alignment	not modelled	19.4	32	PDB header: isomerase Chain: A: PDB Molecule: ribulose 5-phosphate isomerase; PDBTitle: 2.60 angstrom resolution crystal structure of putative ribose 5-2 phosphate isomerase from toxoplasma gondii me49 in complex with dl-3 malic acid
55	c3wwjE	Alignment	not modelled	19.3	23	PDB header: transferase Chain: E: PDB Molecule: (r)-amine transaminase; PDBTitle: crystal structure of an engineered sitagliptin-producing transaminase,2 ata-117-rd11
56	c4rrcA	Alignment	not modelled	18.1	17	PDB header: ligase Chain: A: PDB Molecule: probable threonine--trna ligase 2; PDBTitle: n-terminal editing domain of threonyl-trna synthetase from aeropyrum2 pernix with l-thr3aa (snapshot 3)
57	c2e58D	Alignment	not modelled	15.4	29	PDB header: transferase Chain: D: PDB Molecule: mnmc2; PDBTitle: crystal structure of mnmc2 from aquifex aeolicus
58	c5cm0A	Alignment	not modelled	14.6	14	PDB header: transferase Chain: A: PDB Molecule: branched-chain transaminase; PDBTitle: crystal structure of branched-chain aminotransferase from thermophilic2 archaea geoglobus acetivorans
59	c5dlcC	Alignment	not modelled	14.6	26	PDB header: transferase Chain: C: PDB Molecule: pyridoxine 5'-phosphate synthase; PDBTitle: x-ray crystal structure of a pyridoxine 5-prime-phosphate synthase2 from pseudomonas aeruginosa
60	c6eddB	Alignment	not modelled	14.2	10	PDB header: transferase Chain: B: PDB Molecule: acetyltransferase pa3944; PDBTitle: crystal structure of a gnat superfamily pa3944 acetyltransferase in2 complex with coa (p1 space group)
61	d1qwga	Alignment	not modelled	13.6	25	Fold: TIM beta/alpha-barrel Superfamily: (2r)-phospho-3-sulfolactate synthase ComA Family: (2r)-phospho-3-sulfolactate synthase ComA
62	d2aeaa1	Alignment	not modelled	13.4	22	Fold: PRTase-like Superfamily: PRTase-like Family: Phosphoribosyltransferases (PRTases)
63	c4d6yA	Alignment	not modelled	13.4	24	PDB header: signaling protein Chain: A: PDB Molecule: bacterial regulatory, fis family protein; PDBTitle: crystal structure of the receiver domain of ntrx from2 brucella abortus in complex with beryll fluoride and3 magnesium
64	c1r0ID	Alignment	not modelled	13.3	15	PDB header: oxidoreductase Chain: D: PDB Molecule: 1-deoxy-d-xylulose 5-phosphate reductoisomerase; PDBTitle: 1-deoxy-d-xylulose 5-phosphate reductoisomerase from zymomonas mobilis2 in complex with nadph
65	c5ix3A	Alignment	not modelled	13.2	6	PDB header: transferase Chain: A: PDB Molecule: diamine n-acetyltransferase; PDBTitle: crystal structure of n-acetyltransferase from staphylococcus aureus.
66	d1m5wa	Alignment	not modelled	13.2	24	Fold: TIM beta/alpha-barrel Superfamily: Pyridoxine 5'-phosphate synthase Family: Pyridoxine 5'-phosphate synthase
67	c2z14A	Alignment	not modelled	13.1	16	PDB header: signaling protein Chain: A: PDB Molecule: ef-hand domain-containing family member c2; PDBTitle: crystal structure of the n-terminal duf1126 in human ef-2 hand domain containing 2 protein
68	d1f52a1	Alignment	not modelled	12.8	11	Fold: beta-Grasp (ubiquitin-like) Superfamily: Glutamine synthetase, N-terminal domain Family: Glutamine synthetase, N-terminal domain
69	c5b6aA	Alignment	not modelled	12.7	18	PDB header: transferase Chain: A: PDB Molecule: pyridoxal kinase pdxy; PDBTitle: structure of pyridoxal kinasefrom pseudomonas aeruginosa
70	c1wv9B	Alignment	not modelled	12.3	19	PDB header: structural genomics, unknown function Chain: B: PDB Molecule: rhodanese homolog tt1651; PDBTitle: crystal structure of rhodanese homolog tt1651 from an2 extremely thermophilic bacterium thermus thermophilus hb8
71	d1liua2	Alignment	not modelled	12.3	19	Fold: TIM beta/alpha-barrel Superfamily: Phosphoenolpyruvate/pyruvate domain Family: Pyruvate kinase
72	d1xhfa1	Alignment	not modelled	12.1	14	Fold: Flavodoxin-like Superfamily: CheY-like Family: CheY-related
73	d1jkea	Alignment	not modelled	11.9	21	Fold: DTD-like Superfamily: DTD-like Family: DTD-like
74	c1nl0G	Alignment	not modelled	11.6	58	PDB header: immune system Chain: G: PDB Molecule: factor ix; PDBTitle: crystal structure of human factor ix gla domain in complex2 of an inhibitory antibody, 10c12
75	d1gr0a2	Alignment	not modelled	11.5	31	Fold: FwdE/GAPDH domain-like Superfamily: Glyceraldehyde-3-phosphate dehydrogenase-like, C-terminal domain Family: Dihydrodipicolinate reductase-like
76	d1tjna	Alignment	not modelled	11.4	17	Fold: Chelatase-like Superfamily: Chelatase Family: CbiX-like
77	c1tjnA	Alignment	not modelled	11.4	17	PDB header: lyase Chain: A: PDB Molecule: sirohydrochlorin cobaltochelataase; PDBTitle: crystal structure of hypothetical protein af0721 from archaeoglobus2 fulgidus
78	c3u0gA	Alignment	not modelled	11.1	18	PDB header: transferase Chain: A: PDB Molecule: putative branched-chain amino acid aminotransferase ilve; PDBTitle: crystal structure of branched-chain amino acid aminotransferase from2 burkholderia pseudomallei

79	c4s1hA_	Alignment	not modelled	11.0	15	PDB header: transferase Chain: A: PDB Molecule: pyridoxal kinase; PDBTitle: pyridoxal kinase of entamoeba histolytica with adp
80	c3a14B_	Alignment	not modelled	10.9	27	PDB header: oxidoreductase Chain: B: PDB Molecule: 1-deoxy-d-xylulose 5-phosphate reductoisomerase; PDBTitle: crystal structure of dxr from thermotoga maritima, in complex with2 nadph
81	c5uidC_	Alignment	not modelled	10.8	18	PDB header: transferase Chain: C: PDB Molecule: aminotransferase tlmj; PDBTitle: the crystal structure of an aminotransferase tlmj from2 streptoaloteichus hindustanus
82	c2zu8A_	Alignment	not modelled	10.6	19	PDB header: transferase Chain: A: PDB Molecule: mannosyl-3-phosphoglycerate synthase; PDBTitle: crystal structure of mannosyl-3-phosphoglycerate synthase2 from pyrococcus horikoshii
83	c2x4bA_	Alignment	not modelled	10.4	17	PDB header: hydrolase Chain: A: PDB Molecule: limit dextrinase; PDBTitle: barley limit dextrinase in complex with beta-cyclodextrin
84	c4m0jA_	Alignment	not modelled	10.3	18	PDB header: transferase Chain: A: PDB Molecule: d-amino acid aminotransferase; PDBTitle: crystal structure of a d-amino acid aminotransferase from burkholderia2 thailandensis e264
85	d1dcfa_	Alignment	not modelled	10.2	31	Fold: Flavodoxin-like Superfamily: CheY-like Family: Receiver domain of the ethylene receptor
86	c4rkmK_	Alignment	not modelled	10.1	24	PDB header: unknown function Chain: K: PDB Molecule: mcca; PDBTitle: wolinnella succinogenes octaheme sulfite reductase mcca, form i
87	c2rdmB_	Alignment	not modelled	10.0	17	PDB header: structural genomics, unknown function Chain: B: PDB Molecule: response regulator receiver protein; PDBTitle: crystal structure of response regulator receiver protein from2 sinorhizobium medicae wsm419
88	c3qb8A_	Alignment	not modelled	9.9	12	PDB header: transferase Chain: A: PDB Molecule: a654l protein; PDBTitle: paramecium chlorella bursaria virus1 putative orf a654l is a polyamine2 acetyltransferase
89	c5jqoA_	Alignment	not modelled	9.6	14	PDB header: hydrolase Chain: A: PDB Molecule: lmo2184 protein; PDBTitle: crystal structure of an abc transporter substrate-binding protein from2 listeria monocytogenes egd-e
90	d1p0sl2	Alignment	not modelled	9.6	58	Fold: GLA-domain Superfamily: GLA-domain Family: GLA-domain
91	d1zh2a1	Alignment	not modelled	9.5	18	Fold: Flavodoxin-like Superfamily: CheY-like Family: CheY-related
92	c3otrC_	Alignment	not modelled	9.5	16	PDB header: lyase Chain: C: PDB Molecule: enolase; PDBTitle: 2.75 angstrom crystal structure of enolase 1 from toxoplasma gondii
93	c5khbB_	Alignment	not modelled	9.4	24	PDB header: transport protein Chain: B: PDB Molecule: hemin abc transporter, periplasmic hemin-binding protein PDBTitle: crystal structure of periplasmic heme binding protein htb of vibrio2 cholerae
94	d2fiaa1	Alignment	not modelled	9.3	7	Fold: Acyl-CoA N-acyltransferases (Nat) Superfamily: Acyl-CoA N-acyltransferases (Nat) Family: N-acetyl transferase, NAT
95	d1gmua2	Alignment	not modelled	9.3	23	Fold: Ferredoxin-like Superfamily: Urease metallochaperone UreE, C-terminal domain Family: Urease metallochaperone UreE, C-terminal domain
96	c2wnsB_	Alignment	not modelled	9.0	20	PDB header: transferase Chain: B: PDB Molecule: orotate phosphoribosyltransferase; PDBTitle: human orotate phosphoribosyltransferase (oprta) domain of2 uridine 5'-monophosphate synthase (umps) in complex with3 its substrate orotidine 5'-monophosphate (omp)
97	c3hdoB_	Alignment	not modelled	8.9	14	PDB header: transferase Chain: B: PDB Molecule: histidinol-phosphate aminotransferase; PDBTitle: crystal structure of a histidinol-phosphate aminotransferase from2 geobacter metallireducens
98	d1xlqa1	Alignment	not modelled	8.8	17	Fold: beta-Grasp (ubiquitin-like) Superfamily: 2Fe-2S ferredoxin-like Family: 2Fe-2S ferredoxin-related
99	c4p9eA_	Alignment	not modelled	8.8	30	PDB header: hydrolase Chain: A: PDB Molecule: deoxycytidylate deaminase; PDBTitle: crystal structure of dcmp deaminase from the cyanophage s-tim5 in apo2 form