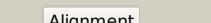
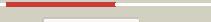
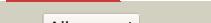
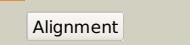
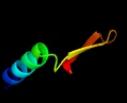
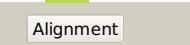
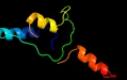
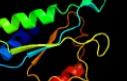
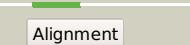
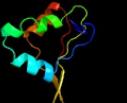
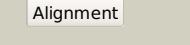
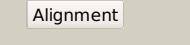
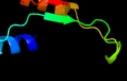
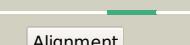
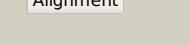
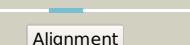


Phyre²

Email	mdejesus@rockefeller.edu
Description	RVBD1940_(ribA1)_2192613_2193674
Date	Mon Aug 5 13:25:03 BST 2019
Unique Job ID	7de09fef8a40ca6d

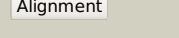
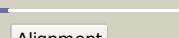
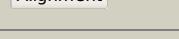
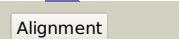
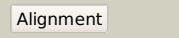
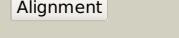
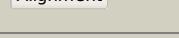
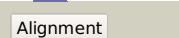
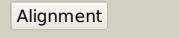
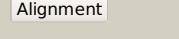
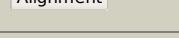
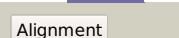
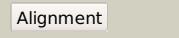
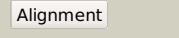
Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c4i14B			100.0	51	PDB header: hydrolase, lyase Chain: B; PDB Molecule: riboflavin biosynthesis protein ribba; PDBTitle: crystal structure of mtb-riba2 (rv1415)
2	c6mnzB			100.0	33	PDB header: lyase Chain: B; PDB Molecule: 3,4-dihydroxy-2-butanone 4-phosphate synthase; PDBTitle: crystal structure of ribbx, a two domain 3,4-dihydroxy-2-butanone 4-2 phosphate synthase from a. baumannii.
3	c4ffjA			100.0	33	PDB header: lyase Chain: A; PDB Molecule: riboflavin biosynthesis protein ribba; PDBTitle: the crystal structure of spdhbps from s.pneumoniae
4	d1k4ia			100.0	38	Fold: YrdC/RibB Superfamily: YrdC/RibB Family: 3,4-dihydroxy-2-butanone 4-phosphate synthase, DHBP synthase, RibB
5	d1g57a			100.0	38	Fold: YrdC/RibB Superfamily: YrdC/RibB Family: 3,4-dihydroxy-2-butanone 4-phosphate synthase, DHBP synthase, RibB
6	d1snna			100.0	30	Fold: YrdC/RibB Superfamily: YrdC/RibB Family: 3,4-dihydroxy-2-butanone 4-phosphate synthase, DHBP synthase, RibB
7	d1tksa			100.0	36	Fold: YrdC/RibB Superfamily: YrdC/RibB Family: 3,4-dihydroxy-2-butanone 4-phosphate synthase, DHBP synthase, RibB
8	c3mioA			100.0	56	PDB header: lyase Chain: A; PDB Molecule: 3,4-dihydroxy-2-butanone 4-phosphate synthase; PDBTitle: crystal structure of 3,4-dihydroxy-2-butanone 4-phosphate synthase2 domain from mycobacterium tuberculosis at ph 6.00
9	c4p6dA			100.0	38	PDB header: lyase Chain: A; PDB Molecule: 3,4-dihydroxy-2-butanone 4-phosphate synthase; PDBTitle: structure of ribb complexed with po4 ion
10	d2bz1a1			100.0	32	Fold: RibA-like Superfamily: RibA-like Family: RibA-like
11	c4rl4B			100.0	28	PDB header: hydrolase Chain: B; PDB Molecule: gtp cyclohydrolase-2; PDBTitle: crystal structure of gtp cyclohydrolase ii from helicobacter pylori2 26695

12	d1y0na			82.4	38	Fold: YehU-like Superfamily: YehU-like Family: YehU-like
13	d1lh0a			67.4	12	Fold: PRTase-like Superfamily: PRTase-like Family: Phosphoribosyltransferases (PRTases)
14	c5f56A			63.3	19	PDB header: dna binding protein/dna Chain: A: PDB Molecule: single-stranded-dna-specific exonuclease; PDBTitle: structure of recj complexed with dna and ssb-ct
15	d1ko7a1			52.8	13	Fold: MurF and HprK N-domain-like Superfamily: HprK N-terminal domain-like Family: HPr kinase/phoshatase HprK N-terminal domain
16	c4gijC			49.0	17	PDB header: hydrolase Chain: C: PDB Molecule: pseudouridine-5'-phosphate glycosidase; PDBTitle: crystal structure of pseudouridine monophosphate glycosidase complexed2 with sulfate
17	d1js3a			43.6	11	Fold: PLP-dependent transferase-like Superfamily: PLP-dependent transferases Family: Pyridoxal-dependent decarboxylase
18	d1vkma			43.5	18	Fold: Indigoidine synthase A-like Superfamily: Indigoidine synthase A-like Family: Indigoidine synthase A-like
19	d1oi2a			42.5	11	Fold: DAK1/DegV-like Superfamily: DAK1/DegV-like Family: DAK1
20	c6eeiA			38.1	15	PDB header: lyase Chain: A: PDB Molecule: tyrosine decarboxylase 1; PDBTitle: crystal structure of arabidopsis thaliana phenylacetaldehyde synthase2 in complex with l-phenylalanine
21	d1oeyj		not modelled	37.6	31	Fold: beta-Grasp (ubiquitin-like) Superfamily: CAD & PB1 domains Family: PB1 domain
22	c3n2IA		not modelled	35.2	18	PDB header: transferase Chain: A: PDB Molecule: orotate phosphoribosyltransferase; PDBTitle: 2.1 angstrom resolution crystal structure of an orotate2 phosphoribosyltransferase (pyre) from vibrio cholerae o1 biovar eltor3 str. n16961 PDB header: kinase
23	c1un9B		not modelled	33.5	20	Chain: B: PDB Molecule: dihydroxyacetone kinase; PDBTitle: crystal structure of the dihydroxyacetone kinase from c.2 freundii in complex with amp-pnp and mg2+ PDB header: lyase
24	c6eqqA		not modelled	32.2	17	Chain: A: PDB Molecule: 4-hydroxyphenylacetaldehyde synthase; PDBTitle: crystal structure of rhodiola rosea 4-hydroxyphenylacetaldehyde2 synthase PDB header: lyase
25	c4obuG		not modelled	31.1	13	Chain: G: PDB Molecule: pyridoxal-dependent decarboxylase domain protein; PDBTitle: ruminococcus gnarus tryptophan decarboxylase rumgna_01526 (apo)
26	d1un8a4		not modelled	27.8	20	Fold: DAK1/DegV-like Superfamily: DAK1/DegV-like Family: DAK1
27	c3ct4B		not modelled	27.4	16	PDB header: transferase Chain: B: PDB Molecule: pts-dependent dihydroxyacetone kinase, dihydroxyacetone- PDBTitle: structure of dha-kinase subunit dhak from l. lactis PDB header: structural genomics, unknown function
28	c3p04A		not modelled	26.4	23	Chain: A: PDB Molecule: uncharacterized bcr; PDBTitle: crystal structure of the bcr protein from corynebacterium

						glutamicum.2 northeast structural genomics consortium target cgr8
29	c6eewC	Alignment	not modelled	26.3	15	PDB header: lyase Chain: C: PDB Molecule: aromatic-l-amino-acid decarboxylase; PDBTitle: crystal structure of catharanthus roseus tryptophan decarboxylase in2 complex with l-tryptophan
30	c2zxrA	Alignment	not modelled	25.8	23	PDB header: hydrolase Chain: A: PDB Molecule: single-stranded dna specific exonuclease recj; PDBTitle: crystal structure of recj in complex with mg2+ from thermus2 thermophilus hb8
31	c3zihB	Alignment	not modelled	25.3	14	PDB header: cell cycle Chain: B: PDB Molecule: cell division protein sepf; PDBTitle: bacillus subtilis sepf, c-terminal domain
32	c4ritB	Alignment	not modelled	25.1	28	PDB header: lyase Chain: B: PDB Molecule: pyridoxal-dependent decarboxylase; PDBTitle: the yellow crystal structure of pyridoxal-dependent decarboxylase from2 sphaerobacter thermophilus dsm 20745
33	d1wd5a	Alignment	not modelled	23.5	27	Fold: PRTase-like Superfamily: PRTase-like Family: Phosphoribosyltransferases (PRTases)
34	d1hrua	Alignment	not modelled	22.6	7	Fold: YrdC/RibB Superfamily: YrdC/RibB Family: YrdC-like
35	c5o5cD	Alignment	not modelled	22.4	15	PDB header: lyase Chain: D: PDB Molecule: putative decarboxylase involved in desferrioxamine PDBTitle: the crystal structure of dfoj, the desferrioxamine biosynthetic2 pathway lysine decarboxylase from the fire blight disease pathogen3 erwinia amylovora
36	c3p04B	Alignment	not modelled	22.1	23	PDB header: structural genomics, unknown function Chain: B: PDB Molecule: uncharacterized bcr; PDBTitle: crystal structure of the bcr protein from corynebacterium glutamicum.2 northeast structural genomics consortium target cgr8
37	c1xr4B	Alignment	not modelled	22.0	24	PDB header: hydrolase/transferase Chain: B: PDB Molecule: putative citrate lyase alpha chain/citrate-acp transferase; PDBTitle: x-ray crystal structure of putative citrate lyase alpha chain/citrate-2 acp transferase [salmonella typhimurium]
38	c6eemB	Alignment	not modelled	21.2	9	PDB header: lyase Chain: B: PDB Molecule: tyrosine/dopa decarboxylase; PDBTitle: crystal structure of papaver somniferum tyrosine decarboxylase in2 complex with l-tyrosine
39	c2iu6B	Alignment	not modelled	21.0	16	PDB header: transferase Chain: B: PDB Molecule: dihydroxyacetone kinase; PDBTitle: regulation of the dha operon of lactococcus lactis
40	c5j84A	Alignment	not modelled	19.3	13	PDB header: lyase Chain: A: PDB Molecule: dihydroxy-acid dehydratase; PDBTitle: crystal structure of l-arabinonate dehydratase in holo-form
41	d1jcua	Alignment	not modelled	18.5	22	Fold: YrdC/RibB Superfamily: YrdC/RibB Family: YrdC-like
42	c1ko7B	Alignment	not modelled	18.3	13	PDB header: transferase,hydrolase Chain: B: PDB Molecule: hpr kinase/phosphatase; PDBTitle: x-ray structure of the hpr kinase/phosphatase from staphylococcus2 xylosid 1.95 a resolution
43	c5g4iA	Alignment	not modelled	17.9	10	PDB header: transferase Chain: A: PDB Molecule: phospholyase; PDBTitle: plp-dependent phospholyase a1rdf1 from arthrobacter aurescens tc1
44	c2mdtA	Alignment	not modelled	17.6	24	PDB header: unknown function Chain: A: PDB Molecule: putative uncharacterized protein; PDBTitle: a pilt n-terminal domain protein sso1118 from hyperthermophilic2 archaeon sulfolobus solfataricus p2
45	d1pj5a3	Alignment	not modelled	17.5	31	Fold: FAD-linked reductases, C-terminal domain Superfamily: FAD-linked reductases, C-terminal domain Family: L-aminoacid/polyamine oxidase
46	c2gp4B	Alignment	not modelled	17.3	14	PDB header: lyase Chain: B: PDB Molecule: 6-phosphogluconate dehydratase; PDBTitle: structure of [fes]cluster-free apo form of 6-phosphogluconate2 dehydratase from shewanella oneidensis
47	d2coba1	Alignment	not modelled	17.2	16	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: Psq domain
48	c5yh1A	Alignment	not modelled	16.8	16	PDB header: ribosomal protein Chain: A: PDB Molecule: member of s1p family of ribosomal proteins; PDBTitle: member of s1p family of ribosomal proteins pf0399 dhh domain
49	c4ex8A	Alignment	not modelled	16.6	15	PDB header: ligase Chain: A: PDB Molecule: alna; PDBTitle: crystal structure of the prealnumycin c-glycosynthase alna
50	c1pixB	Alignment	not modelled	16.3	19	PDB header: lyase Chain: B: PDB Molecule: glutaconyl-coa decarboxylase a subunit; PDBTitle: crystal structure of the carboxyltransferase subunit of the2 bacterial ion pump glutaconyl-coenzyme a decarboxylase
51	c3mjda	Alignment	not modelled	16.1	6	PDB header: transferase Chain: A: PDB Molecule: orotate phosphoribosyltransferase; PDBTitle: 1.9 angstrom crystal structure of orotate phosphoribosyltransferase2 (pyre) francisella tularensis.
52	c3jszA	Alignment	not modelled	15.8	17	PDB header: transferase Chain: A: PDB Molecule: putative uncharacterized protein; PDBTitle: legionella pneumophila glucosyltransferase lgt1 n293a with udp-glc
53	d1knxa1	Alignment	not modelled	15.3	14	Fold: MurF and HprK N-domain-like Superfamily: HprK N-terminal domain-like Family: HPr kinase/phoshatase HprK N-terminal domain

54	c3cf4G		Alignment	not modelled	15.0	16	PDB header: oxidoreductase Chain: G: PDB Molecule: acetyl-coa decarboxylase/synthase epsilon subunit; PDBTitle: structure of the codh component of the m. barkeri acds complex
55	c2okkA		Alignment	not modelled	15.0	9	PDB header: lyase Chain: A: PDB Molecule: glutamate decarboxylase 2; PDBTitle: the x-ray crystal structure of the 65kda isoform of glutamic acid2 decarboxylase (gad65)
56	c2kg4A		Alignment	not modelled	14.8	19	PDB header: cell cycle Chain: A: PDB Molecule: growth arrest and dna-damage-inducible protein gadd45 PDBTitle: three-dimensional structure of human gadd45alpha in solution by nmr
57	c4e1oC		Alignment	not modelled	14.7	11	PDB header: lyase Chain: C: PDB Molecule: histidine decarboxylase; PDBTitle: human histidine decarboxylase complex with histidine methyl ester2 (hme)
58	d1ohwa		Alignment	not modelled	14.4	15	Fold: PLP-dependent transferase-like Superfamily: PLP-dependent transferases Family: GABA-aminotransferase-like
59	c4efzB		Alignment	not modelled	14.3	16	PDB header: hydrolase Chain: B: PDB Molecule: metallo-beta-lactamase family protein; PDBTitle: crystal structure of a hypothetical metallo-beta-lactamase from2 burkholderia pseudomallei
60	d1pixa3		Alignment	not modelled	14.2	16	Fold: ClpP/crotonase Superfamily: ClpP/crotonase Family: Biotin dependent carboxylase carboxyltransferase domain
61	c6jrlA		Alignment	not modelled	14.1	11	PDB header: oxidoreductase Chain: A: PDB Molecule: 3,4-dihydroxyphenylacetaledehyde synthase; PDBTitle: crystal structure of drosophila alpha methyldopa-resistant protein/3,2 4-dihydroxyphenylacetaledehyde synthase
62	c5ze4A		Alignment	not modelled	13.9	22	PDB header: lyase Chain: A: PDB Molecule: dihydroxy-acid dehydratase, chloroplastic; PDBTitle: the structure of holo- structure of dhad complex with [2fe-2s] cluster
63	d1qh5a		Alignment	not modelled	13.8	16	Fold: Metallo-hydrolase/oxidoreductase Superfamily: Metallo-hydrolase/oxidoreductase Family: Glyoxalase II (hydroxacylglutathione hydrolase)
64	c2k89A		Alignment	not modelled	13.5	7	PDB header: protein binding Chain: A: PDB Molecule: phospholipase a-2-activating protein; PDBTitle: solution structure of a novel ubiquitin-binding domain from2 human plaa (pfuc, gly76-pro77 cis isomer)
65	c5ikID		Alignment	not modelled	13.4	10	PDB header: ligase Chain: D: PDB Molecule: geranyl-coa carboxylase, beta-subunit; PDBTitle: crystal structure of p. aeruginosa geranyl-coa carboxylase (gcc), beta2 subunit
66	d2ji7a1		Alignment	not modelled	13.3	26	Fold: DHS-like NAD/FAD-binding domain Superfamily: DHS-like NAD/FAD-binding domain Family: Pyruvate oxidase and decarboxylase, middle domain
67	c5h7dl		Alignment	not modelled	13.3	17	PDB header: transferase, immune system/metal binding Chain: I: PDB Molecule: putrescine aminotransferase,immunoglobulin g-binding PDBTitle: crystal structure of the ygjg-protein a-zpa963-calmodulin complex
68	d1k7ja		Alignment	not modelled	13.1	11	Fold: YrdC/RibB Superfamily: YrdC/RibB Family: YrdC-like
69	c6f87C		Alignment	not modelled	12.1	16	PDB header: transferase Chain: C: PDB Molecule: threonylcarbamoyl-amp synthase; PDBTitle: crystal structure of p. abyssi sua5 complexed with l-threonine and ppi
70	d1lj8a4		Alignment	not modelled	12.0	22	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: 6-phosphogluconate dehydrogenase-like, N-terminal domain
71	c1on3E		Alignment	not modelled	11.9	21	PDB header: transferase Chain: E: PDB Molecule: methylmalonyl-coa carboxyltransferase 12s PDBTitle: transcarboxylase 12s crystal structure: hexamer assembly2 and substrate binding to a multienzyme core (with3 methylmalonyl-coenzyme a and methylmalonic acid bound)
72	c4rcnA		Alignment	not modelled	11.9	14	PDB header: ligase Chain: A: PDB Molecule: long-chain acyl-coa carboxylase; PDBTitle: structure and function of a single-chain, multi-domain long-chain2 acyl-coa carboxylase
73	d1fvpa		Alignment	not modelled	11.8	28	Fold: TIM beta/alpha-barrel Superfamily: Bacterial luciferase-like Family: Non-fluorescent flavoprotein (luxF, FP390)
74	d2hqva1		Alignment	not modelled	11.8	19	Fold: Heme iron utilization protein-like Superfamily: Heme iron utilization protein-like Family: ChuX-like
75	c2qmaB		Alignment	not modelled	11.5	13	PDB header: transferase Chain: B: PDB Molecule: diaminobutyrate-pyruvate transaminase and l-2,4- PDBTitle: crystal structure of glutamate decarboxylase domain of2 diaminobutyrate-pyruvate transaminase and l-2,4-diaminobutyrate3 decarboxylase from vibrio parahaemolyticus
76	c2przB		Alignment	not modelled	11.5	11	PDB header: transferase Chain: B: PDB Molecule: orotate phosphoribosyltransferase 1; PDBTitle: s. cerevisiae orotate phosphoribosyltransferase complexed with omp
77	d1k3ra1		Alignment	not modelled	11.3	13	Fold: OB-fold Superfamily: Nucleic acid-binding proteins Family: Hypothetical protein MTH1 (MT0001), insert domain
							PDB header: transferase

78	c4uoxB_		Alignment	not modelled	11.0	16	Chain: B; PDB Molecule: putrescine aminotransferase; PDBTitle: crystal structure of ygjg in complex with pyridoxal-5'-phosphate2 and putrescine
79	c5vnyA_		Alignment	not modelled	11.0	27	PDB header: endocytosis, protein binding Chain: A; PDB Molecule: lethal (2) giant discs 1, isoform b; PDBTitle: crystal structure of dm14-3 domain of lgd
80	c1t3mA_		Alignment	not modelled	10.8	23	PDB header: hydrolase Chain: A; PDB Molecule: putative l-asparaginase; PDBTitle: structure of the isoaspartyl peptidase with l-asparaginase2 activity from e. coli
81	c3vthA_		Alignment	not modelled	10.8	24	PDB header: transferase Chain: A; PDB Molecule: hydrogenase maturation factor; PDBTitle: crystal structure of full-length hyf in the phosphate-and2 nucleotide-bound form
82	d1ea0a2		Alignment	not modelled	10.6	16	Fold: TIM beta/alpha-barrel Superfamily: FMN-linked oxidoreductases Family: FMN-linked oxidoreductases
83	c2l09A_		Alignment	not modelled	10.6	15	PDB header: oxidoreductase Chain: A; PDB Molecule: asr4154 protein; PDBTitle: solution nmr structure of protein asr4154 from nostoc sp. pcc71202 northeast structural genomics consortium target id nsr143
84	d1ovma1		Alignment	not modelled	10.5	19	Fold: DHS-like NAD/FAD-binding domain Superfamily: DHS-like NAD/FAD-binding domain Family: Pyruvate oxidase and decarboxylase, middle domain
85	c2gezE_		Alignment	not modelled	10.4	16	PDB header: hydrolase Chain: E; PDB Molecule: l-asparaginase alpha subunit; PDBTitle: crystal structure of potassium-independent plant asparaginase
86	c3k40B_		Alignment	not modelled	10.4	17	PDB header: lyase Chain: B; PDB Molecule: aromatic-l-amino-acid decarboxylase; PDBTitle: crystal structure of drosophila 3,4-dihydroxyphenylalanine2 decarboxylase
87	d1xm8a_		Alignment	not modelled	10.2	14	Fold: Metallo-hydrolase/oxidoreductase Superfamily: Metallo-hydrolase/oxidoreductase Family: Glyoxalase II (hydroxyacylglutathione hydrolase)
88	c2gp4A_		Alignment	not modelled	10.2	13	PDB header: lyase Chain: A; PDB Molecule: 6-phosphogluconate dehydratase; PDBTitle: structure of [fes]cluster-free apo form of 6-phosphogluconate2 dehydratase from shewanella oneidensis
89	d1w8ia_		Alignment	not modelled	10.1	18	Fold: PIN domain-like Superfamily: PIN domain-like Family: PIN domain
90	c2wnsB_		Alignment	not modelled	10.1	8	PDB header: transferase Chain: B; PDB Molecule: orotate phosphoribosyltransferase; PDBTitle: human orotate phosphoribosyltransferase (oprtase) domain of2 uridine 5'-monophosphate synthase (umps) in complex with3 its substrate orotidine 5'-monophosphate (omp)
91	d1tifA_		Alignment	not modelled	10.0	16	Fold: beta-Grasp (ubiquitin-like) Superfamily: Translation initiation factor IF3, N-terminal domain Family: Translation initiation factor IF3, N-terminal domain
92	c3u54B_		Alignment	not modelled	9.9	14	PDB header: ligase Chain: B; PDB Molecule: phosphoribosylaminoimidazole-succinocarboxamide synthase; PDBTitle: crystal structure (type-1) of saicar synthetase from pyrococcus horikoshii ot3
93	c4gdub_		Alignment	not modelled	9.8	20	PDB header: hydrolase Chain: B; PDB Molecule: l-asparaginase; PDBTitle: crystal structure of sulfate-bound human l-asparaginase protein
94	c1e0cA_		Alignment	not modelled	9.8	21	PDB header: sulfurtransferase Chain: A; PDB Molecule: sulfurtransferase; PDBTitle: sulfurtransferase from azotobacter vinelandii
95	c3ervA_		Alignment	not modelled	9.8	17	PDB header: structural genomics, unknown function Chain: A; PDB Molecule: putative c39-like peptidase; PDBTitle: crystal structure of an putative c39-like peptidase from bacillus2 anthracis
96	c3nx3A_		Alignment	not modelled	9.8	14	PDB header: transferase Chain: A; PDB Molecule: acetylornithine aminotransferase; PDBTitle: crystal structure of acetylornithine aminotransferase (argd) from2 campylobacter jejuni
97	c3g8qA_		Alignment	not modelled	9.7	18	PDB header: rna binding protein Chain: A; PDB Molecule: predicted rna-binding protein, contains thump PDBTitle: a cytidine deaminase edits c-to-u in transfer rnas in2 archaea
98	c2jisA_		Alignment	not modelled	9.6	13	PDB header: lyase Chain: A; PDB Molecule: cysteine sulfenic acid decarboxylase; PDBTitle: human cysteine sulfenic acid decarboxylase (csad) in2 complex with plp.
99	c4nogB_		Alignment	not modelled	9.5	15	PDB header: transferase Chain: B; PDB Molecule: putative ornithine aminotransferase, mitochondrial; PDBTitle: crystal structure of a putative ornithine aminotransferase from2 toxoplasma gondii me49 in complex with pyridoxal-5'-phosphate