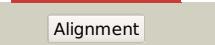
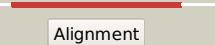
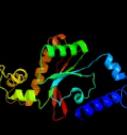


Phyre²

Email	mdejesus@rockefeller.edu
Description	RVBD3588c_(-)_4030050_4030673
Date	Fri Aug 9 18:20:27 BST 2019
Unique Job ID	17ffb9bf666da581

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c2a5vB_			100.0	100	PDB header: lyase Chain: B: PDB Molecule: carbonic anhydrase (carbonic dehydratase) (carbonic PDBTitle: crystal structure of m. tuberculosis beta carbonic anhydrase, rv3588c,2 tetrameric form
2	d1ekja_			100.0	27	Fold: Resolvase-like Superfamily: beta-carbonic anhydrase, cab Family: beta-carbonic anhydrase, cab
3	d1ddza1			100.0	29	Fold: Resolvase-like Superfamily: beta-carbonic anhydrase, cab Family: beta-carbonic anhydrase, cab
4	d1ddza2			100.0	27	Fold: Resolvase-like Superfamily: beta-carbonic anhydrase, cab Family: beta-carbonic anhydrase, cab
5	c5swcE_			100.0	26	PDB header: lyase Chain: E: PDB Molecule: carbonic anhydrase; PDBTitle: the structure of the beta-carbonic anhydrase ccaa
6	c5cxkG_			100.0	31	PDB header: lyase Chain: G: PDB Molecule: carbonic anhydrase; PDBTitle: crystal structure of beta carbonic anhydrase from vibrio cholerae
7	c2w3nA_			100.0	25	PDB header: lyase Chain: A: PDB Molecule: carbonic anhydrase 2; PDBTitle: structure and inhibition of the co2-sensing carbonic anhydrase can22 from the pathogenic fungus cryptococcus neoformans
8	c4o1kA_			100.0	28	PDB header: lyase Chain: A: PDB Molecule: carbonic anhydrase; PDBTitle: crystal structures of two tetrameric beta-carbonic anhydrases from the2 filamentous ascomycete sordaria macrospora.
9	c1ddzA_			100.0	29	PDB header: lyase Chain: A: PDB Molecule: carbonic anhydrase; PDBTitle: x-ray structure of a beta-carbonic anhydrase from the red2 alga, porphyridium purpureum r-1
10	c4o1jB_			100.0	28	PDB header: lyase Chain: B: PDB Molecule: carbonic anhydrase; PDBTitle: crystal structures of two tetrameric beta-carbonic anhydrases from the2 filamentous ascomycete sordaria macrospora.
11	c2a8cE_			100.0	29	PDB header: lyase Chain: E: PDB Molecule: carbonic anhydrase 2; PDBTitle: haemophilus influenzae beta-carbonic anhydrase

12	c6gwuB	Alignment		100.0	22	PDB header: lyase Chain: B; PDB Molecule: carbonic anhydrase; PDBTitle: carbonic anhydrase cance103p from candida albicans
13	d1i6pa	Alignment		100.0	28	Fold: Resolvase-like Superfamily: beta-carbonic anhydrase, cab Family: beta-carbonic anhydrase, cab
14	c3ucoB	Alignment		100.0	23	PDB header: lyase/lyase inhibitor Chain: B; PDB Molecule: carbonic anhydrase; PDBTitle: cocomyxa beta-carbonic anhydrase in complex with iodide
15	c4rxyA	Alignment		100.0	30	PDB header: lyase Chain: A; PDB Molecule: carbonic anhydrase; PDBTitle: crystal structure of the beta carbonic anhydrase psca3 isolated from2 pseudomonas aeruginosa
16	c3vrkA	Alignment		100.0	19	PDB header: hydrolase Chain: A; PDB Molecule: carbonyl sulfide hydrolase; PDBTitle: crystal structure of thiobacillus thioparus thi115 carbonyl sulfide2 hydrolase / thiocyanate complex
17	c3eyxB	Alignment		100.0	15	PDB header: lyase Chain: B; PDB Molecule: carbonic anhydrase; PDBTitle: crystal structure of carbonic anhydrase nce103 from2 saccharomyces cerevisiae
18	c3lasA	Alignment		100.0	26	PDB header: lyase Chain: A; PDB Molecule: putative carbonic anhydrase; PDBTitle: crystal structure of carbonic anhydrase from streptococcus mutans to 1.4 angstrom resolution
19	c1ylkA	Alignment		100.0	17	PDB header: unknown function Chain: A; PDB Molecule: hypothetical protein rv1284/mt1322; PDBTitle: crystal structure of rv1284 from mycobacterium tuberculosis in complex2 with thiocyanate
20	c3tenD	Alignment		100.0	15	PDB header: hydrolase Chain: D; PDB Molecule: cs2 hydrolase; PDBTitle: holo form of carbon disulfide hydrolase
21	c5ztpB	Alignment	not modelled	100.0	25	PDB header: lyase Chain: B; PDB Molecule: carbonic anhydrase; PDBTitle: carbonic anhydrase from glaciocyma antarctica
22	d1g5ca	Alignment	not modelled	100.0	29	Fold: Resolvase-like Superfamily: beta-carbonic anhydrase, cab Family: beta-carbonic anhydrase, cab
23	c2hwkA	Alignment	not modelled	62.4	25	PDB header: hydrolase Chain: A; PDB Molecule: helicase nsp2; PDBTitle: crystal structure of venezuelan equine encephalitis alphavirus nsp22 protease domain
24	c1bm4A	Alignment	not modelled	49.3	42	PDB header: viral protein Chain: A; PDB Molecule: protein (moloney murine leukemia virus capsid); PDBTitle: momlv capsid protein major homology region peptide analog
25	d1nlna	Alignment	not modelled	42.0	12	Fold: Cysteine proteinases Superfamily: Cysteine proteinases Family: Adenain-like
26	d1ir6a	Alignment	not modelled	38.9	22	Fold: DHH phosphoesterases Superfamily: DHH phosphoesterases Family: Exonuclease Recj
27	c1ir6A	Alignment	not modelled	38.9	22	PDB header: hydrolase Chain: A; PDB Molecule: exonuclease recj; PDBTitle: crystal structure of exonuclease recj bound to manganese
28	c5ghrA	Alignment	not modelled	37.5	15	PDB header: dna binding protein/replication Chain: A; PDB Molecule: ssDNA-specific exonuclease; PDBTitle: dna replication protein

29	c3vr1B		Alignment	not modelled	37.1	14	PDB header: translation Chain: B: PDB Molecule: peptide chain release factor 3; PDBTitle: crystal structure analysis of the translation factor rf3
30	c5ghrC		Alignment	not modelled	37.1	15	PDB header: dna binding protein/replication Chain: C: PDB Molecule: ssdna-specific exonuclease; PDBTitle: dna replication protein
31	c3d89A		Alignment	not modelled	36.7	17	PDB header: electron transport Chain: A: PDB Molecule: rieske domain-containing protein; PDBTitle: crystal structure of a soluble rieske ferredoxin from musculus
32	d1fqta		Alignment	not modelled	34.6	8	Fold: ISP domain Superfamily: ISP domain Family: Rieske iron-sulfur protein (ISP)
33	c2de7E		Alignment	not modelled	33.5	15	PDB header: oxidoreductase Chain: E: PDB Molecule: ferredoxin component of carbazole; PDBTitle: the substrate-bound complex between oxygenase and2 ferredoxin in carbazole 1,9a-dioxygenase
34	d1z01a1		Alignment	not modelled	32.8	38	Fold: ISP domain Superfamily: ISP domain Family: Ring hydroxylating alpha subunit ISP domain
35	c5f56A		Alignment	not modelled	32.2	24	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
36	d2de6a1		Alignment	not modelled	32.0	31	Fold: ISP domain Superfamily: ISP domain Family: Ring hydroxylating alpha subunit ISP domain
37	c2zxra		Alignment	not modelled	31.4	18	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
38	d2jo6a1		Alignment	not modelled	31.1	25	Fold: ISP domain Superfamily: ISP domain Family: NirD-like
39	c3gceA		Alignment	not modelled	30.2	8	PDB header: oxidoreductase Chain: A: PDB Molecule: ferredoxin component of carbazole 1,9a- PDBTitle: ferredoxin of carbazole 1,9a-dioxygenase from nocardioides 2 aromaticivorans ic177
40	c3i8sC		Alignment	not modelled	28.8	27	PDB header: transport protein Chain: C: PDB Molecule: ferrous iron transport protein b; PDBTitle: structure of the cytosolic domain of e. coli feob, nucleotide-free2 form
41	c3degC		Alignment	not modelled	28.0	21	PDB header: ribosome Chain: C: PDB Molecule: gtp-binding protein lepa; PDBTitle: complex of elongating escherichia coli 70s ribosome and ef4(lepa)-2 gmppnp
42	d1nrjb		Alignment	not modelled	28.0	33	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: G proteins
43	c3ibyA		Alignment	not modelled	27.3	25	PDB header: transport protein Chain: A: PDB Molecule: ferrous iron transport protein b; PDBTitle: structure of cytosolic domain of l. pneumophila feob
44	c4proD		Alignment	not modelled	25.8	9	PDB header: serine protease Chain: D: PDB Molecule: alpha-lytic protease; PDBTitle: alpha-lytic protease complexed with pro region
45	c3j25A		Alignment	not modelled	25.6	36	PDB header: translation Chain: A: PDB Molecule: tetracycline resistance protein tetm; PDBTitle: structural basis for tetm-mediated tetracycline resistance
46	d1zo0a1		Alignment	not modelled	25.6	14	Fold: Acyl-CoA N-acyltransferases (Nat) Superfamily: Acyl-CoA N-acyltransferases (Nat) Family: Ornithine decarboxylase antizyme-like
47	d1n0ua2		Alignment	not modelled	25.6	36	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: G proteins
48	c2h5eB		Alignment	not modelled	25.5	14	PDB header: translation Chain: B: PDB Molecule: peptide chain release factor rf-3; PDBTitle: crystal structure of e.coli polypeptide release factor rf3
49	c1d2eA		Alignment	not modelled	25.3	27	PDB header: ribosomal protein Chain: A: PDB Molecule: elongation factor tu (ef-tu); PDBTitle: crystal structure of mitochondrial ef-tu in complex with gdp
50	c5yh1A		Alignment	not modelled	25.2	10	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
51	d2fh5b1		Alignment	not modelled	24.7	17	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: G proteins
52	c3w5iB		Alignment	not modelled	24.6	33	PDB header: metal transport Chain: B: PDB Molecule: ferrous iron transport protein b; PDBTitle: crystal structure of nfeob from gallionella capsiferriformans
53	c4zciA		Alignment	not modelled	24.1	21	PDB header: gtp-binding protein Chain: A: PDB Molecule: gtp-binding protein typa/bipa; PDBTitle: crystal structure of escherichia coli gtpase bipa/typa
54	c6fgzA		Alignment	not modelled	23.8	40	PDB header: lipid binding protein Chain: A: PDB Molecule: dynamin; PDBTitle: cyanidioschyzon merolae dnml (cmdnm1)
55	c4hi2B		Alignment	not modelled	23.8	21	PDB header: hydrolase Chain: B: PDB Molecule: acylphosphatase;

					PDBTitle: crystal structure of an acylphosphatase protein cage
56	c6humO	Alignment	not modelled	23.8	30 PDB header: proton transport Chain: O: PDB Molecule: nad(p)h-quinone oxidoreductase subunit o; PDBTitle: structure of the photosynthetic complex i from thermosynechococcus2 elongatus
57	c5b5yA	Alignment	not modelled	23.3	17 PDB header: metal binding protein Chain: A: PDB Molecule: ptlcib4; PDBTitle: crystal structure of ptcib4, a homolog of the limiting co2-inducible2 protein lcb
58	c2qpzA	Alignment	not modelled	23.2	15 PDB header: metal binding protein Chain: A: PDB Molecule: naphthalene 1,2-dioxygenase system ferredoxin PDBTitle: naphthalene 1,2-dioxygenase rieske ferredoxin
59	c3p27A	Alignment	not modelled	23.1	55 PDB header: signaling protein Chain: A: PDB Molecule: elongation factor 1 alpha-like protein; PDBTitle: crystal structure of s. cerevisiae hbs1 protein (gdp-bound form), a2 translational gtpase involved in rna quality control pathways and3 interacting with dom34/pelota
60	d1s0ua3	Alignment	not modelled	23.1	36 Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: G proteins
61	d1r5ba3	Alignment	not modelled	23.1	45 Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: G proteins
62	c1mj1A	Alignment	not modelled	22.8	27 PDB header: ribosome Chain: A: PDB Molecule: elongation factor tu; PDBTitle: fitting the ternary complex of ef-tu/trna/gtp and ribosomal proteins2 into a 13 a cryo-em map of the coli 70s ribosome
63	c2i7fB	Alignment	not modelled	22.7	25 PDB header: oxidoreductase Chain: B: PDB Molecule: ferredoxin component of dioxygenase; PDBTitle: sphingomonas yanoikuyaе b1 ferredoxin
64	c2ywfa	Alignment	not modelled	22.7	29 PDB header: translation Chain: A: PDB Molecule: gtp-binding protein lepa; PDBTitle: crystal structure of gmppnp-bound lepa from aquifex aeolicus
65	c2qu8A	Alignment	not modelled	22.5	21 PDB header: structural genomics, unknown function Chain: A: PDB Molecule: putative nucleolar gtp-binding protein 1; PDBTitle: crystal structure of putative nucleolar gtp-binding protein 1 pff0625w2 from plasmodium falciparum
66	d1e8ca1	Alignment	not modelled	22.4	71 Fold: MurF and HprK N-domain-like Superfamily: MurE/MurF N-terminal domain Family: MurE/MurF N-terminal domain
67	d1apsa	Alignment	not modelled	22.1	17 Fold: Ferredoxin-like Superfamily: Acylphosphatase/BLUF domain-like Family: Acylphosphatase-like
68	d1vm9a	Alignment	not modelled	22.1	17 Fold: ISP domain Superfamily: ISP domain Family: Rieske iron-sulfur protein (ISP)
69	c2bvnB	Alignment	not modelled	22.1	27 PDB header: elongation factor Chain: B: PDB Molecule: elongation factor tu; PDBTitle: e. coli ef-tu:gdpn in complex with the antibiotic enacyloxin iia
70	d2jzaa1	Alignment	not modelled	21.9	25 Fold: ISP domain Superfamily: ISP domain Family: NirD-like
71	d3c0da1	Alignment	not modelled	21.7	18 Fold: ISP domain Superfamily: ISP domain Family: NirD-like
72	c4fn5A	Alignment	not modelled	21.4	21 PDB header: translation/antibiotic Chain: A: PDB Molecule: elongation factor g 1; PDBTitle: elongation factor g 1 (pseudomonas aeruginosa) in complex with argyrin2 b
73	c4aivA	Alignment	not modelled	21.3	36 PDB header: oxidoreductase Chain: A: PDB Molecule: probable nitrite reductase [nad(p)h] small subunit nird; PDBTitle: crystal structure of putative nadh-dependent nitrite reductase small2 subunit from mycobacterium tuberculosis
74	c5aorA	Alignment	not modelled	21.2	33 PDB header: hydrolase/rna Chain: A: PDB Molecule: dosage compensation regulator; PDBTitle: structure of mle rna adp alf4 complex
75	c1zunB	Alignment	not modelled	21.1	18 PDB header: transferase Chain: B: PDB Molecule: sulfate adenylate transferase, subunit PDBTitle: crystal structure of a gtp-regulated atp sulfurylase2 heterodimer from pseudomonas syringae
76	c3zjcC	Alignment	not modelled	21.1	40 PDB header: hydrolase Chain: C: PDB Molecule: gtpase imap family member 7; PDBTitle: crystal structure of gmppnp-bound human gimap7 l100q variant
77	c2dy1A	Alignment	not modelled	20.9	21 PDB header: signaling protein, translation Chain: A: PDB Molecule: elongation factor g; PDBTitle: crystal structure of ef-g-2 from thermus thermophilus
78	d1efca3	Alignment	not modelled	20.8	27 Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: G proteins
79	c3k53B	Alignment	not modelled	20.6	15 PDB header: metal transport Chain: B: PDB Molecule: ferrous iron transport protein b; PDBTitle: crystal structure of nfeob from p. furiosus
80	c1z01D	Alignment	not modelled	20.6	38 PDB header: oxidoreductase Chain: D: PDB Molecule: 2-oxo-1,2-dihydroquinoline 8-monoxygenase, oxygenase PDBTitle: 2-oxoquinoline 8-monoxygenase component: active site modulation by rieske-[2fe-2s] center oxidation/reduction PDB header: rna, ribosomal protein

81	c3izyP	Alignment	not modelled	20.2	33	Chain: P: PDB Molecule: translation initiation factor if-2, mitochondrial; PDBTitle: mammalian mitochondrial translation initiation factor 2
82	c3gkqB	Alignment	not modelled	20.2	46	PDB header: oxidoreductase Chain: B: PDB Molecule: terminal oxygenase component of carbazole 1,9a-dioxygenase; PDBTitle: terminal oxygenase of carbazole 1,9a-dioxygenase from novosphingobium2 sp. ka1
83	c2qagC	Alignment	not modelled	20.0	27	PDB header: cell cycle, structural protein Chain: C: PDB Molecule: septin-7; PDBTitle: crystal structure of human septin trimer 2/6/7
84	c1r5nA	Alignment	not modelled	20.0	45	PDB header: translation Chain: A: PDB Molecule: eukaryotic peptide chain release factor gtp- PDBTitle: crystal structure analysis of sup35 complexed with gdp
85	d2acya	Alignment	not modelled	19.8	26	Fold: Ferredoxin-like Superfamily: Acylphosphatase/BLUF domain-like Family: Acylphosphatase-like
86	c5jkjA	Alignment	not modelled	19.8	9	PDB header: hydrolase Chain: A: PDB Molecule: esterase e22; PDBTitle: crystal structure of esterase e22 l374d mutant
87	c3t5dC	Alignment	not modelled	19.8	27	PDB header: signaling protein Chain: C: PDB Molecule: septin-7; PDBTitle: crystal structure of septin 7 in complex with gdp
88	d1j2ra	Alignment	not modelled	19.6	16	Fold: Isochorismatase-like hydrolases Superfamily: Isochorismatase-like hydrolases Family: Isochorismatase-like hydrolases
89	c6cl4A	Alignment	not modelled	19.5	9	PDB header: hydrolase Chain: A: PDB Molecule: lipase c12; PDBTitle: lipc12 - lipase from metagenomics
90	c2lxfA	Alignment	not modelled	19.5	26	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: uncharacterized protein; PDBTitle: solution nmr structure of a potential acylphosphatase from giardia2 lamblia, seattle structural genomics center for infectious disease3 target gilaa.01396.a
91	c3tr5C	Alignment	not modelled	18.9	14	PDB header: translation Chain: C: PDB Molecule: peptide chain release factor 3; PDBTitle: structure of a peptide chain release factor 3 (prfc) from coxiella2 burnetii
92	c4zkeA	Alignment	not modelled	18.8	27	PDB header: gtp binding protein Chain: A: PDB Molecule: superkiller protein 7; PDBTitle: crystal structure of the s. cerevisiae sk17 gtpase-like domain, bound2 to gtp.
93	c4ayyH	Alignment	not modelled	18.6	15	PDB header: oxidoreductase Chain: H: PDB Molecule: arob; PDBTitle: crystal structure of the arsenite oxidase protein complex2 from rhizobium species strain nt-26
94	c3br8A	Alignment	not modelled	18.6	28	PDB header: hydrolase Chain: A: PDB Molecule: probable acylphosphatase; PDBTitle: crystal structure of acylphosphatase from bacillus subtilis
95	c5yoza	Alignment	not modelled	18.3	50	PDB header: endocytosis Chain: A: PDB Molecule: rab5a; PDBTitle: solution structure of truncated rab5a from leishmania donovani
96	c4b3xA	Alignment	not modelled	18.2	36	PDB header: translation Chain: A: PDB Molecule: translation initiation factor if-2; PDBTitle: bacterial translation initiation factor if2 (1-363), apo form
97	c2de7B	Alignment	not modelled	18.1	31	PDB header: oxidoreductase Chain: B: PDB Molecule: terminal oxygenase component of carbazole; PDBTitle: the substrate-bound complex between oxygenase and2 ferredoxin in carbazole 1,9a-dioxygenase
98	d1legaa1	Alignment	not modelled	18.1	30	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: G proteins
99	d1svia	Alignment	not modelled	17.8	29	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: G proteins