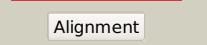
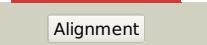
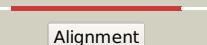


Phyre²

Email	mdejesus@rockefeller.edu
Description	RVBD2837c_(-)_3143645_3144655
Date	Wed Aug 7 12:50:50 BST 2019
Unique Job ID	9e931a1add8c8d9f

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c5oluB_			100.0	32	PDB header: hydrolase Chain: B; PDB Molecule: phosphodiesterase; PDBTitle: structure of wildtype t.maritima pde (tm1595) with amp and mn2+
2	c3dmaA_			100.0	25	PDB header: structural genomics, unknown function Chain: A; PDB Molecule: exopolyphosphatase-related protein; PDBTitle: crystal structure of an exopolyphosphatase-related protein from2 bacteroides fragilis. northeast structural genomics target bfr192
3	c3devB_			100.0	22	PDB header: structural genomics, unknown function Chain: B; PDB Molecule: sh1221; PDBTitle: crystal structure of sh1221 protein from staphylococcus haemolyticus,2 northeast structural genomics consortium target shr87
4	c5j21C_			100.0	23	PDB header: hydrolase Chain: C; PDB Molecule: bifunctional oligoribonuclease and pap phosphatase rna; PDBTitle: structure of bacillus nanornase a (wt)
5	c5xspB_			100.0	21	PDB header: hydrolase Chain: B; PDB Molecule: phosphodiesterase acting on cyclic dinucleotides; PDBTitle: the catalytic domain of gdpp with 5'-papa
6	c1ir6A_			100.0	22	PDB header: hydrolase Chain: A; PDB Molecule: exonuclease recj; PDBTitle: crystal structure of exonuclease recj bound to manganese
7	d1ir6a_			100.0	22	Fold: DHH phosphoesterases Superfamily: DHH phosphoesterases Family: Exonuclease RecJ
8	c5f56A_			100.0	23	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
9	c5ghrA_			100.0	20	PDB header: dna binding protein/replication Chain: A; PDB Molecule: ssdna-specific exonuclease; PDBTitle: dna replication protein
10	d1k20a_			100.0	16	Fold: DHH phosphoesterases Superfamily: DHH phosphoesterases Family: Manganese-dependent inorganic pyrophosphatase (family II)
11	d1i74a_			100.0	16	Fold: DHH phosphoesterases Superfamily: DHH phosphoesterases Family: Manganese-dependent inorganic pyrophosphatase (family II)

12	d2hawa1			100.0	16	Fold: DHH phosphoesterases Superfamily: DHH phosphoesterases Family: Manganese-dependent inorganic pyrophosphatase (family II)
13	c2zxrA			100.0	24	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
14	c4rpaA			100.0	14	PDB header: hydrolase Chain: A: PDB Molecule: probable manganese-dependent inorganic pyrophosphatase; PDBTitle: crystal structure of inorganic pyrophosphatase from staphylococcus2 aureus in complex with mn2+
15	c5yh1A			100.0	15	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
16	d1wpna			100.0	19	Fold: DHH phosphoesterases Superfamily: DHH phosphoesterases Family: Manganese-dependent inorganic pyrophosphatase (family II)
17	c2eb0B			100.0	17	PDB header: hydrolase Chain: B: PDB Molecule: manganese-dependent inorganic pyrophosphatase; PDBTitle: crystal structure of methanococcus jannaschii putative family ii2 inorganic pyrophosphatase
18	c6mtzB			100.0	18	PDB header: unknown function Chain: B: PDB Molecule: hepc.19480.a.b1; PDBTitle: crystal structure of an uncharacterized protein from helicobacter pylori g27
19	c2qb6A			99.9	14	PDB header: hydrolase Chain: A: PDB Molecule: exopolyphosphatase; PDBTitle: saccharomyces cerevisiae cytosolic exopolyphosphatase, sulfate complex
20	c5ghrC			99.9	18	PDB header: dna binding protein/replication Chain: C: PDB Molecule: ssdna-specific exonuclease; PDBTitle: dna replication protein
21	c6cc2A		not modelled	97.7	14	PDB header: cell cycle Chain: A: PDB Molecule: cell division control protein 45 cdc45 putative; PDBTitle: crystal structure of cdc45 from entamoeba histolytica
22	c3jc6E		not modelled	97.1	25	PDB header: replication Chain: E: PDB Molecule: cell division control protein 45; PDBTitle: structure of the eukaryotic replicative cmg helicase and pumpjack2 motion
23	c5dgoA		not modelled	96.9	15	PDB header: cell cycle Chain: A: PDB Molecule: cell division control protein 45 homolog; PDBTitle: crystal structure of cell division cycle protein 45 (cdc45)
24	c4fc5A		not modelled	95.2	20	PDB header: unknown function Chain: A: PDB Molecule: putative uncharacterized protein; PDBTitle: crystal structure of ton_0340
25	c3g98B		not modelled	91.4	23	PDB header: ligase Chain: B: PDB Molecule: alanyl-tRNA synthetase; PDBTitle: crystal structure of the c-ala domain from aquifex aeolicus2 alanyl-tRNA synthetase
26	d1ybha1		not modelled	87.7	16	Fold: DHS-like NAD/FAD-binding domain Superfamily: DHS-like NAD/FAD-binding domain Family: Pyruvate oxidase and decarboxylase, middle domain
27	c4ivnB		not modelled	87.0	18	PDB header: transcription regulator Chain: B: PDB Molecule: transcriptional regulator; PDBTitle: the vibrio vulnificus narr protein complexed with mannac-6p
28	c2zvfG		not modelled	86.4	14	PDB header: ligase Chain: G: PDB Molecule: alanyl-tRNA synthetase; PDBTitle: crystal structure of archaeoglobus fulgidus alanyl-tRNA synthetase c-terminal dimerization domain PDB header: ligase/rna

29	c3wqyB		Alignment	not modelled	84.7	12	Chain: B; PDB Molecule: alanine--trna ligase; PDBTitle: crystal structure of archaeoglobus fulgidus alanyl-trna synthetase in2 complex with wild-type trna(ala) having g3.u70 PDB header: transcription regulator
30	c3shoA		Alignment	not modelled	83.6	27	Chain: A; PDB Molecule: transcriptional regulator, rpir family; PDBTitle: crystal structure of rpir transcription factor from sphaerobacter2 thermophilus (sugar isomerase domain) PDB header: oxidoreductase
31	c3cf4G		Alignment	not modelled	78.4	12	Chain: G; PDB Molecule: acetyl-coa decarboxylase/synthase epsilon subunit; PDBTitle: structure of the codh component of the m. barkeri acds complex
32	d2ihta1		Alignment	not modelled	76.0	24	Fold: DHS-like NAD/FAD-binding domain Superfamily: DHS-like NAD/FAD-binding domain Family: Pyruvate oxidase and decarboxylase, middle domain
33	c5uqiA		Alignment	not modelled	74.2	18	PDB header: isomerase Chain: A; PDB Molecule: phosphosugar isomerase; PDBTitle: e. coli cft073 c3406 in complex with a5p
34	d1m3sa		Alignment	not modelled	70.1	12	Fold: SIS domain Superfamily: SIS domain Family: mono-SIS domain
35	c3d3jA		Alignment	not modelled	69.2	17	PDB header: protein binding Chain: A; PDB Molecule: enhancer of mrna-decapping protein 3; PDBTitle: crystal structure of human edc3p
36	c3trjC		Alignment	not modelled	66.8	10	PDB header: isomerase Chain: C; PDB Molecule: phosphoheptose isomerase; PDBTitle: structure of a phosphoheptose isomerase from francisella tularensis
37	d1vima		Alignment	not modelled	66.6	18	Fold: SIS domain Superfamily: SIS domain Family: mono-SIS domain
38	c2xhzC		Alignment	not modelled	66.0	14	PDB header: isomerase Chain: C; PDB Molecule: arabinose 5-phosphate isomerase; PDBTitle: probing the active site of the sugar isomerase domain from e. coli2 arabinose-5-phosphate isomerase via x-ray crystallography
39	c3fxaA		Alignment	not modelled	65.1	13	PDB header: sugar binding protein Chain: A; PDB Molecule: ss domain protein; PDBTitle: crystal structure of a putative sugar-phosphate isomerase2 (lmo2365_0531) from listeria monocytogenes str. 4b f2365 at 1.60 a3 resolution
40	d2djia1		Alignment	not modelled	64.3	13	Fold: DHS-like NAD/FAD-binding domain Superfamily: DHS-like NAD/FAD-binding domain Family: Pyruvate oxidase and decarboxylase, middle domain
41	d1jeoa		Alignment	not modelled	60.5	12	Fold: SIS domain Superfamily: SIS domain Family: mono-SIS domain
42	d2ez9a1		Alignment	not modelled	60.3	13	Fold: DHS-like NAD/FAD-binding domain Superfamily: DHS-like NAD/FAD-binding domain Family: Pyruvate oxidase and decarboxylase, middle domain
43	c5i01B		Alignment	not modelled	60.2	11	PDB header: isomerase Chain: B; PDB Molecule: phosphoheptose isomerase; PDBTitle: structure of phosphoheptose isomerase gmha from neisseria gonorrhoeae
44	d1d7ya2		Alignment	not modelled	59.5	21	Fold: FAD/NAD(P)-binding domain Superfamily: FAD/NAD(P)-binding domain Family: FAD/NAD-linked reductases, N-terminal and central domains
45	c3cvjB		Alignment	not modelled	59.4	8	PDB header: isomerase Chain: B; PDB Molecule: putative phosphoheptose isomerase; PDBTitle: crystal structure of a putative phosphoheptose isomerase (bh3325) from2 bacillus halodurans c-125 at 2.00 a resolution
46	d1ozha1		Alignment	not modelled	59.1	15	Fold: DHS-like NAD/FAD-binding domain Superfamily: DHS-like NAD/FAD-binding domain Family: Pyruvate oxidase and decarboxylase, middle domain
47	c1vmeB		Alignment	not modelled	57.6	23	PDB header: electron transport Chain: B; PDB Molecule: flavoprotein; PDBTitle: crystal structure of flavoprotein (tm0755) from thermotoga maritima at2 1.80 a resolution
48	d1p3da1		Alignment	not modelled	55.1	13	Fold: MurCD N-terminal domain Superfamily: MurCD N-terminal domain Family: MurCD N-terminal domain
49	c2f00A		Alignment	not modelled	54.9	20	PDB header: ligase Chain: A; PDB Molecule: udp-n-acetylmuramate--l-alanine ligase; PDBTitle: escherichia coli murc
50	d1j6ua1		Alignment	not modelled	54.3	18	Fold: MurCD N-terminal domain Superfamily: MurCD N-terminal domain Family: MurCD N-terminal domain
51	c5zvqa		Alignment	not modelled	54.3	23	PDB header: recombination Chain: A; PDB Molecule: recombination protein recr; PDBTitle: crystal structure of recombination mediator protein recr
52	c3pnxF		Alignment	not modelled	53.7	18	PDB header: transferase Chain: F; PDB Molecule: putative sulfurtransferase dsre; PDBTitle: crystal structure of a putative sulfurtransferase dsre (swol_2425)2 from syntrophomonas wolfei str. goettingen at 1.92 a resolution
53	c2qs7D		Alignment	not modelled	53.4	13	PDB header: oxidoreductase Chain: D; PDB Molecule: uncharacterized protein; PDBTitle: crystal structure of a putative oxidoreductase of the dsre/dsrf-like2 family (sso1126) from sulfolobus solfataricus p2 at 2.09 a resolution
54	d1iuka		Alignment	not modelled	52.9	19	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: CoA-binding domain

55	c5zbyA	Alignment	not modelled	52.8	21	PDB header: hydrolase Chain: A: PDB Molecule: hydrogenase maturation protease hyci; PDBTitle: crystal structure of a [nife] hydrogenase maturation protease hyci2 from thermococcus kodakarensis kod1
56	d1g1ra2	Alignment	not modelled	51.7	23	Fold: FAD/NAD(P)-binding domain Superfamily: FAD/NAD(P)-binding domain Family: FAD/NAD-linked reductases, N-terminal and central domains
57	c2puwA	Alignment	not modelled	51.7	13	PDB header: transferase Chain: A: PDB Molecule: isomerase domain of glutamine-fructose-6-phosphate PDBTitle: the crystal structure of isomerase domain of glucosamine-6-phosphate2 synthase from candida albicans
58	d1okga1	Alignment	not modelled	50.5	17	Fold: Rhodanese/Cell cycle control phosphatase Superfamily: Rhodanese/Cell cycle control phosphatase Family: Multidomain sulfurtransferase (rhodanese)
59	d1vdda	Alignment	not modelled	50.0	13	Fold: Recombination protein RecR Superfamily: Recombination protein RecR Family: Recombination protein RecR
60	d2d59a1	Alignment	not modelled	49.9	12	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: CoA-binding domain
61	c1okgA	Alignment	not modelled	47.4	17	PDB header: transferase Chain: A: PDB Molecule: possible 3-mercaptopyruvate sulfurtransferase; PDBTitle: 3-mercaptopyruvate sulfurtransferase from leishmania major
62	c3lzcA	Alignment	not modelled	41.1	14	PDB header: biosynthetic protein Chain: A: PDB Molecule: dph2; PDBTitle: crystal structure of dph2 from pyrococcus horikoshii
63	c3fofD	Alignment	not modelled	40.9	11	PDB header: isomerase/dna Chain: D: PDB Molecule: dna topoisomerase 4 subunit b; PDBTitle: structural insight into the quinolone-dna cleavage complex2 of type iiia topoisomerases
64	d2ji7a1	Alignment	not modelled	40.6	16	Fold: DHS-like NAD/FAD-binding domain Superfamily: DHS-like NAD/FAD-binding domain Family: Pyruvate oxidase and decarboxylase, middle domain
65	c4wb1B	Alignment	not modelled	40.3	15	PDB header: oxidoreductase Chain: B: PDB Molecule: cals8; PDBTitle: crystal structure of cals8 from micromonospora echinospora (p29452 mutant)
66	c3q3vA	Alignment	not modelled	40.3	17	PDB header: transferase Chain: A: PDB Molecule: phosphoglycerate kinase; PDBTitle: crystal structure of phosphoglycerate kinase from campylobacter2 jejuni.
67	d1zpda1	Alignment	not modelled	39.0	16	Fold: DHS-like NAD/FAD-binding domain Superfamily: DHS-like NAD/FAD-binding domain Family: Pyruvate oxidase and decarboxylase, middle domain
68	d1gv4a2	Alignment	not modelled	38.8	13	Fold: FAD/NAD(P)-binding domain Superfamily: FAD/NAD(P)-binding domain Family: FAD/NAD-linked reductases, N-terminal and central domains
69	d1ovma1	Alignment	not modelled	38.6	15	Fold: DHS-like NAD/FAD-binding domain Superfamily: DHS-like NAD/FAD-binding domain Family: Pyruvate oxidase and decarboxylase, middle domain
70	c1vddC	Alignment	not modelled	38.3	13	PDB header: recombination Chain: C: PDB Molecule: recombination protein recr; PDBTitle: crystal structure of recombinational repair protein recr
71	c2zjtB	Alignment	not modelled	37.7	14	PDB header: isomerase Chain: B: PDB Molecule: dna gyrase subunit b; PDBTitle: crystal structure of dna gyrase b' domain sheds lights on the2 mechanism for t-segment navigation
72	d2gk3a1	Alignment	not modelled	37.1	29	Fold: Flavodoxin-like Superfamily: Class I glutamine amidotransferase-like Family: STM3548-like
73	c2qlcC	Alignment	not modelled	36.9	19	PDB header: dna binding protein Chain: C: PDB Molecule: dna repair protein radc homolog; PDBTitle: the crystal structure of dna repair protein radc from chlorobiium2 tepidum tis
74	c2k5eA	Alignment	not modelled	35.9	31	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: uncharacterized protein; PDBTitle: solution structure of putative uncharacterized protein2 gsu1278 from methanocaldococcus jannaschii, northeast3 structural genomics consortium (nesg) target gsr195
75	c3guxA	Alignment	not modelled	34.9	14	PDB header: hydrolase Chain: A: PDB Molecule: putative zn-dependent exopeptidase; PDBTitle: crystal structure of a putative zn-dependent exopeptidase (bvu_1317)2 from bacteroides vulgatus atcc 8482 at 1.80 a resolution
76	c5xk2A	Alignment	not modelled	34.6	22	PDB header: hydrolase Chain: A: PDB Molecule: diacylglycerol lipase; PDBTitle: crystal structure of mono- and diacylglycerol lipase from aspergillus2 oryzae
77	c3euad	Alignment	not modelled	33.7	13	PDB header: isomerase Chain: D: PDB Molecule: putative fructose-aminoacid-6-phosphate deglycase; PDBTitle: crystal structure of a putative phosphosugar isomerase (bsu32610) from2 bacillus subtilis at 1.90 a resolution
78	d3pmga3	Alignment	not modelled	33.6	21	Fold: Phosphoglucomutase, first 3 domains Superfamily: Phosphoglucomutase, first 3 domains Family: Phosphoglucomutase, first 3 domains
79	d1q6za1	Alignment	not modelled	33.3	16	Fold: DHS-like NAD/FAD-binding domain Superfamily: DHS-like NAD/FAD-binding domain Family: Pyruvate oxidase and decarboxylase, middle domain
80	c2zj3A	Alignment	not modelled	32.1	14	PDB header: transferase Chain: A: PDB Molecule: glucosamine--fructose-6-phosphate

80	c2cpn	Alignment	not modelled	33.1	14	PDBTitle: isomerase domain of human glucose:fructose-6-phosphate2 amidotransferase
81	c3d3kD	Alignment	not modelled	32.9	17	PDB header: protein binding Chain: D; PDB Molecule: enhancer of mrna-decapping protein 3; PDBTitle: crystal structure of human edc3p
82	c2duwA	Alignment	not modelled	32.1	17	PDB header: ligand binding protein Chain: A; PDB Molecule: putative coa-binding protein; PDBTitle: solution structure of putative coa-binding protein of <i>klebsiella pneumoniae</i>
83	c3rhtB	Alignment	not modelled	31.9	22	PDB header: structural genomics, unknown function Chain: B; PDB Molecule: (gatase1)-like protein; PDBTitle: crystal structure of type 1 glutamine amidotransferase (gatase1)-like2 protein from <i>planctomyces limnophilus</i>
84	d1r3sa	Alignment	not modelled	31.5	14	Fold: TIM beta/alpha-barrel Superfamily: UROD/MetE-like Family: Uroporphyrinogen decarboxylase, UROD
85	c3nuhB	Alignment	not modelled	31.5	11	PDB header: isomerase Chain: B; PDB Molecule: dna gyrase subunit b; PDBTitle: a domain insertion in e. coli gyrb adopts a novel fold that plays a2 critical role in gyrase function
86	c1u57A	Alignment	not modelled	29.6	26	PDB header: viral protein Chain: A; PDB Molecule: gag polyprotein; PDBTitle: nmr structure of the (345-392)gag sequence from hiv-1
87	c4tmaH	Alignment	not modelled	28.2	11	PDB header: isomerase/isomerase inhibitor Chain: H; PDB Molecule: dna gyrase subunit b; PDBTitle: crystal structure of gyrase bound to its inhibitor yacg
88	c4s1wA	Alignment	not modelled	27.9	17	PDB header: transferase Chain: A; PDB Molecule: glutamine--fructose-6-phosphate aminotransferase PDBTitle: structure of a putative glutamine--fructose-6-phosphate2 aminotransferase from <i>staphylococcus aureus</i> subsp. <i>aureus</i> mu50
89	d1tjya	Alignment	not modelled	27.6	11	Fold: Periplasmic binding protein-like I Superfamily: Periplasmic binding protein-like I Family: L-arabinose binding protein-like
90	c5t76A	Alignment	not modelled	27.3	14	PDB header: translation Chain: A; PDB Molecule: alanine--trna ligase, cytoplasmic; PDBTitle: a fragment of a human trna synthetase
91	d1vmea2	Alignment	not modelled	27.3	23	Fold: Metallo-hydrolase/oxidoreductase Superfamily: Metallo-hydrolase/oxidoreductase Family: ROO N-terminal domain-like
92	d1j93a	Alignment	not modelled	26.6	20	Fold: TIM beta/alpha-barrel Superfamily: UROD/MetE-like Family: Uroporphyrinogen decarboxylase, UROD
93	c1jpkA	Alignment	not modelled	26.2	14	PDB header: lyase Chain: A; PDB Molecule: uroporphyrinogen decarboxylase; PDBTitle: gly156asp mutant of human urod, human uroporphyrinogen iii2 decarboxylase
94	c1yi1A	Alignment	not modelled	26.2	17	PDB header: transferase Chain: A; PDB Molecule: acetolactate synthase; PDBTitle: crystal structure of arabidopsis thaliana acetohydroxyacid synthase in2 complex with a sulfonylurea herbicide, tribenuron methyl
95	c5btaD	Alignment	not modelled	26.1	14	PDB header: isomerase/dna Chain: D; PDB Molecule: dna gyrase subunit b; PDBTitle: crystal structure of a topoisomerase ii complex
96	c4z2cD	Alignment	not modelled	24.8	11	PDB header: isomerase Chain: D; PDB Molecule: dna gyrase subunit b; PDBTitle: quinolone(moxifloxacin)-dna cleavage complex of gyrase from s.2 pneumoniae
97	c3mc3A	Alignment	not modelled	24.4	26	PDB header: structural genomics, unknown function Chain: A; PDB Molecule: dsre/dsrf-like family protein; PDBTitle: crystal structure of dsre/dsrf-like family protein (np_342589.1) from2 <i>sulfolobus solfataricus</i> at 1.49 a resolution
98	c4a7pA	Alignment	not modelled	24.4	16	PDB header: oxidoreductase Chain: A; PDB Molecule: udp-glucose dehydrogenase; PDBTitle: se-met derivatized ugdd, udp-glucose dehydrogenase from sphingomonas2 elodea
99	d1xhca2	Alignment	not modelled	23.4	16	Fold: FAD/NAD(P)-binding domain Superfamily: FAD/NAD(P)-binding domain Family: FAD/NAD-linked reductases, N-terminal and central domains
100	c1zmrA	Alignment	not modelled	23.1	20	PDB header: transferase Chain: A; PDB Molecule: phosphoglycerate kinase; PDBTitle: crystal structure of the e. coli phosphoglycerate kinase
101	d1kfia3	Alignment	not modelled	22.7	29	Fold: Phosphoglucomutase, first 3 domains Superfamily: Phosphoglucomutase, first 3 domains Family: Phosphoglucomutase, first 3 domains
102	d1j5xa	Alignment	not modelled	22.2	12	Fold: SIS domain Superfamily: SIS domain Family: double-SIS domain
103	d1pvda1	Alignment	not modelled	21.8	12	Fold: DHS-like NAD/FAD-binding domain Superfamily: DHS-like NAD/FAD-binding domain Family: Pyruvate oxidase and decarboxylase, middle domain
104	c3tbfa	Alignment	not modelled	21.7	14	PDB header: transferase Chain: A; PDB Molecule: glucosamine--fructose-6-phosphate aminotransferase PDBTitle: c-terminal domain of glucosamine-fructose-6-phosphate aminotransferase2 from <i>francisella tularensis</i> .
105	c4erhb	Alignment	not modelled	21.5	7	PDB header: membrane protein Chain: B; PDB Molecule: outer membrane protein a; PDBTitle: the crystal structure of ompa domain of ompa from salmonella enterica2 subsp. enterica serovar typhimurium str. 14028s
						PDB header: isomerase

106	c3fkjA	Alignment	not modelled	21.2	11	Chain: A: PDB Molecule: putative phosphosugar isomerases; PDBTitle: crystal structure of a putative phosphosugar isomerase (stm_0572) from <i>salmonella typhimurium</i> lt2 at 2.12 a resolution	
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