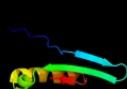
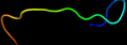
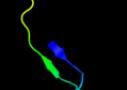


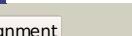
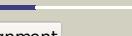
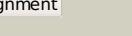
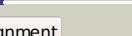
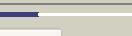
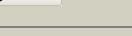
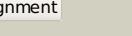
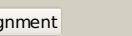
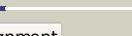
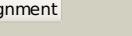
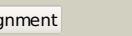
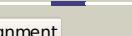
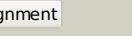
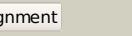
Phyre²

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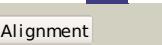
Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	d1t0fa2	Alignment		63.7	16	Fold: Restriction endonuclease-like Superfamily: Restriction endonuclease-like Family: TnsA endonuclease, N-terminal domain
2	d1pk8a1	Alignment		43.2	16	Fold: PreATP-grasp domain Superfamily: PreATP-grasp domain Family: Synapsin domain
3	d1i7na1	Alignment		41.3	20	Fold: PreATP-grasp domain Superfamily: PreATP-grasp domain Family: Synapsin domain
4	c1i7nA_	Alignment		38.8	15	PDB header: neuropeptide Chain: A: PDB Molecule: synapsin ii; PDBTitle: crystal structure analysis of the c domain of synapsin ii2 from rat brain
5	c2fqzC_	Alignment		27.8	16	PDB header: hydrolase/dna Chain: C: PDB Molecule: r.ecl18ki; PDBTitle: metal-depleted ecl18ki in complex with uncleaved dna
6	d2vola1	Alignment		21.9	15	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Nitrogenase iron protein-like
7	c3ctwB_	Alignment		20.2	41	PDB header: protein binding Chain: B: PDB Molecule: rcda; PDBTitle: crystal structure of rcda from caulobacter crescentus cb15
8	d1az3a_	Alignment		20.1	26	Fold: Restriction endonuclease-like Superfamily: Restriction endonuclease-like Family: Restriction endonuclease EcoRV
9	d1sx5a_	Alignment		18.5	26	Fold: Restriction endonuclease-like Superfamily: Restriction endonuclease-like Family: Restriction endonuclease EcoRV
10	d1cf7b_	Alignment		18.5	22	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: Cell cycle transcription factor e2f-dp
11	c2ougC_	Alignment		17.9	17	PDB header: transcription Chain: C: PDB Molecule: transcriptional activator rfah; PDBTitle: crystal structure of the rfah transcription factor at 2.1a2 resolution

12	c3bm3A			16.2	42	PDB header: hydrolase/dna Chain: A: PDB Molecule: pspgi restriction endonuclease; PDBTitle: restriction endonuclease pspgi-substrate dna complex
13	d1c8da			15.8	14	Fold: Nucleoplasmin-like/VP (viral coat and capsid proteins) Superfamily: ssDNA viruses Family: Parvoviridae-like VP
14	c2hkeB			14.8	18	PDB header: lyase Chain: B: PDB Molecule: diphosphomevalonate decarboxylase, putative; PDBTitle: mevalonate diphosphate decarboxylase from trypanosoma brucei
15	d1o7nal			14.1	20	Fold: ISP domain Superfamily: ISP domain Family: Ring hydroxylating alpha subunit ISP domain
16	d1qhda2			14.0	19	Fold: Viral protein domain Superfamily: Viral protein domain Family: Top domain of virus capsid protein
17	c1f1zB			13.9	17	PDB header: dna binding protein Chain: B: PDB Molecule: tnsa endonuclease; PDBTitle: tnsa, a catalytic component of the tn7 transposition system
18	d1x82a			13.8	20	Fold: Double-stranded beta-helix Superfamily: RmlC-like cupins Family: Glucose-6-phosphate isomerase, GPI
19	d1s58a			13.1	14	Fold: Nucleoplasmin-like/VP (viral coat and capsid proteins) Superfamily: ssDNA viruses Family: Parvoviridae-like VP
20	d1m0da			12.2	45	Fold: Restriction endonuclease-like Superfamily: Restriction endonuclease-like Family: Endonuclease I (Holliday junction resolvase)
21	d2i8da1		not modelled	12.0	9	Fold: Secretion chaperone-like Superfamily: YdhG-like Family: YdhG-like
22	d2vv5a2		not modelled	11.4	28	Fold: Ferredoxin-like Superfamily: Mechanosensitive channel protein MscS (YggB), C-terminal domain Family: Mechanosensitive channel protein MscS (YggB), C-terminal domain
23	d1a21a2		not modelled	11.2	26	Fold: Immunoglobulin-like beta-sandwich Superfamily: Fibronectin type III Family: Fibronectin type III
24	d2raqa1		not modelled	10.8	25	Fold: Ferredoxin-like Superfamily: MTH889-like Family: MTH889-like
25	c1k3vA		not modelled	10.7	11	PDB header: virus Chain: A: PDB Molecule: capsid protein vp2; PDBTitle: porcine parvovirus capsid
26	d1k3va		not modelled	10.7	11	Fold: Nucleoplasmin-like/VP (viral coat and capsid proteins) Superfamily: ssDNA viruses Family: Parvoviridae-like VP
27	c1mtkB		not modelled	10.1	22	PDB header: structural genomics Chain: B: PDB Molecule: serine proteinase inhibitor (serpin), chain b; PDBTitle: the x-ray crystal structure of a serpin from a thermophilic2 prokaryote
28	d1tf5a2		not modelled	10.0	13	Fold: Helical scaffold and wing domains of SecA Superfamily: Helical scaffold and wing domains of SecA Family: Helical scaffold and wing domains of SecA

29	d1uw4a		Alignment	not modelled	9.9	17	Fold: Ferredoxin-like Superfamily: RNA-binding domain, RBD Family: Smg-4/UPF3
30	d1g8fa3		Alignment	not modelled	9.9	21	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: ATP sulfurylase C-terminal domain
31	d1gd8a		Alignment	not modelled	9.8	29	Fold: Prokaryotic ribosomal protein L17 Superfamily: Prokaryotic ribosomal protein L17 Family: Prokaryotic ribosomal protein L17
32	c3f59A		Alignment	not modelled	9.2	20	PDB header: structural protein Chain: A: PDB Molecule: ankyrin-1; PDBTitle: crystal structure of zu5-ank, the spectrin binding region of human2 erythroid ankyrin
33	d1na6a2		Alignment	not modelled	9.2	38	Fold: Restriction endonuclease-like Superfamily: Restriction endonuclease-like Family: Type II restriction endonuclease catalytic domain
34	d1dfca2		Alignment	not modelled	8.9	10	Fold: beta-Trefoil Superfamily: Actin-crosslinking proteins Family: Fascin
35	d2c1wa1		Alignment	not modelled	8.8	19	Fold: EndoU-like Superfamily: EndoU-like Family: Eukaryotic EndoU ribonuclease
36	d3bpda1		Alignment	not modelled	8.4	25	Fold: Ferredoxin-like Superfamily: MTH889-like Family: MTH889-like
37	c3no0B		Alignment	not modelled	8.3	16	PDB header: isomerase Chain: B: PDB Molecule: dna gyrase subunit a; PDBTitle: aquifex aeolicus type iia topoisomerase c-terminal domain
38	d1gxua		Alignment	not modelled	8.2	9	Fold: Ferredoxin-like Superfamily: Acylphosphatase/BLUF domain-like Family: Acylphosphatase-like
39	c3entB		Alignment	not modelled	8.2	26	PDB header: structural protein Chain: B: PDB Molecule: putative uncharacterized protein; PDBTitle: crystal structure of nitroillin, a betagamma-crystallin from2 nitrosospira multiformis-in alternate space group (p65)
40	c3a0oB		Alignment	not modelled	8.0	24	PDB header: lyase Chain: B: PDB Molecule: oligo alginate lyase; PDBTitle: crystal structure of alginate lyase from agrobacterium tumefaciens c58
41	d1igwa		Alignment	not modelled	7.9	15	Fold: TIM beta/alpha-barrel Superfamily: Phosphoenolpyruvate/pyruvate domain Family: Phosphoenolpyruvate mutase/Isocitrate lyase-like
42	d1eloa1		Alignment	not modelled	7.7	13	Fold: OB-fold Superfamily: Nucleic acid-binding proteins Family: Anticodon-binding domain
43	d2zjrk1		Alignment	not modelled	7.6	29	Fold: Prokaryotic ribosomal protein L17 Superfamily: Prokaryotic ribosomal protein L17 Family: Prokaryotic ribosomal protein L17
44	d1k9ca		Alignment	not modelled	7.6	36	Fold: P-domain of calnexin/calreticulin Superfamily: P-domain of calnexin/calreticulin Family: P-domain of calnexin/calreticulin
45	c2bjea		Alignment	not modelled	7.6	20	PDB header: hydrolase Chain: A: PDB Molecule: acylphosphatase; PDBTitle: acylphosphatase from sulfolobus solfataricus. monoclinic p212 space group
46	c2q1fA		Alignment	not modelled	7.5	17	PDB header: lyase Chain: A: PDB Molecule: chondroitinase; PDBTitle: crystal structure of chondroitin sulfate lyase abc from bacteroides2 thetaiotaomicron wal2926
47	c2eceA		Alignment	not modelled	7.4	24	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: 462aa long hypothetical selenium-binding protein; PDBTitle: x-ray structure of hypothetical selenium-binding protein2 from sulfolobus tokodaii, st059
48	d2cqma1		Alignment	not modelled	7.4	21	Fold: Prokaryotic ribosomal protein L17 Superfamily: Prokaryotic ribosomal protein L17 Family: Prokaryotic ribosomal protein L17
49	d2qamn1		Alignment	not modelled	7.2	36	Fold: Prokaryotic ribosomal protein L17 Superfamily: Prokaryotic ribosomal protein L17 Family: Prokaryotic ribosomal protein L17
50	c1qhdA		Alignment	not modelled	7.2	19	PDB header: viral protein Chain: A: PDB Molecule: viral capsid vp6; PDBTitle: crystal structure of vp6, the major capsid protein of group a2 rotavirus
51	c3pisA		Alignment	not modelled	7.2	32	PDB header: hydrolase inhibitor Chain: A: PDB Molecule: kalaz-type serine protease inhibitor spi-1; PDBTitle: crystal structure of carcinoscorpius rotundicauda serine protease2 inhibitor domain 1
52	d1nz8a		Alignment	not modelled	7.0	29	Fold: Ferredoxin-like Superfamily: N-utilization substance G protein NusG, N-terminal domain Family: N-utilization substance G protein NusG, N-terminal domain
53	d1sa3a		Alignment	not modelled	6.7	20	Fold: Restriction endonuclease-like Superfamily: Restriction endonuclease-like Family: Restriction endonuclease Mspl
54	d1r3ha2		Alignment	not modelled	6.5	24	Fold: MHC antigen-recognition domain Superfamily: MHC antigen-recognition domain Family: MHC antigen-recognition domain
							Fold: OB-fold

55	d1krta_	Alignment	not modelled	6.5	21	Superfamily: Nucleic acid-binding proteins Family: Anticodon-binding domain
56	d1m1ha2	Alignment	not modelled	6.5	6	Fold: Ferredoxin-like Superfamily: N-utilization substance G protein NusG, N-terminal domain Family: N-utilization substance G protein NusG, N-terminal domain
57	d1v97a3	Alignment	not modelled	6.5	15	Fold: alpha/beta-Hammerhead Superfamily: CO dehydrogenase molybdoenzyme N-domain-like Family: CO dehydrogenase molybdoenzyme N-domain-like
58	d1c4ea_	Alignment	not modelled	6.4	60	Fold: Knottins (small inhibitors, toxins, lectins) Superfamily: Gurmarin-like Family: Gurmarin, a sweet taste-suppressing polypeptide
59	c2k06A_	Alignment	not modelled	6.3	6	PDB header: transcription Chain: A: PDB Molecule: transcription antitermination protein nusg; PDBTitle: solution structure of the amino-terminal domain of e. coli2 nusg
60	c3bb0P_	Alignment	not modelled	6.3	7	PDB header: ribosome Chain: P: PDB Molecule: ribosomal protein l17; PDBTitle: homology model for the spinach chloroplast 50s subunit2 fitted to 9.4 Å cryo-em map of the 70s chlororibosome
61	c3e5bB_	Alignment	not modelled	6.3	18	PDB header: lyase Chain: B: PDB Molecule: isocitrate lyase; PDBTitle: 2.4 Å crystal structure of isocitrate lyase from brucella2 melitensis
62	d1lp3a_	Alignment	not modelled	6.0	11	Fold: Nucleoplasmin-like/VP (viral coat and capsid proteins) Superfamily: ssDNA viruses Family: Parvoviridae-like VP
63	d2coa1	Alignment	not modelled	6.0	6	Fold: PH domain-like barrel Superfamily: PH domain-like Family: Pleckstrin-homology domain (PH domain)
64	c2z84A_	Alignment	not modelled	5.9	17	PDB header: hydrolase Chain: A: PDB Molecule: ufm1-specific protease 1; PDBTitle: insights from crystal and solution structures of mouse ufsp1
65	d1f61a_	Alignment	not modelled	5.9	14	Fold: TIM beta/alpha-barrel Superfamily: Phosphoenolpyruvate/pyruvate domain Family: Phosphoenolpyruvate mutase/isocitrate lyase-like
66	c2r8rB_	Alignment	not modelled	5.9	26	PDB header: transferase Chain: B: PDB Molecule: sensor protein; PDBTitle: crystal structure of the n-terminal region (19..243) of sensor protein2 kdpd from pseudomonas syringae pv. tomato str. dc3000
67	d2oc6a1	Alignment	not modelled	5.8	17	Fold: Secretion chaperone-like Superfamily: YdhG-like Family: YdhG-like
68	d3elna1	Alignment	not modelled	5.8	16	Fold: Double-stranded beta-helix Superfamily: RmlC-like cupins Family: Cysteine dioxygenase type I
69	c3hzpA_	Alignment	not modelled	5.8	31	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: ntf2-like protein of unknown function; PDBTitle: crystal structure of ntf2-like protein of unknown function mn2a_05052 from prochlorococcus marinus (yp_291699.1) from prochlorococcus sp.3 nat2a at 1.40 Å resolution
70	c2raxY_	Alignment	not modelled	5.7	19	PDB header: cell cycle Chain: Y: PDB Molecule: borealin; PDBTitle: crystal structure of borealin (20-78) bound to survivin (1-120)
71	c3eubL_	Alignment	not modelled	5.7	17	PDB header: oxidoreductase Chain: L: PDB Molecule: xanthine dehydrogenase/oxidase; PDBTitle: crystal structure of desulfo-xanthine oxidase with xanthine
72	c3c4mA_	Alignment	not modelled	5.6	8	PDB header: membrane protein Chain: A: PDB Molecule: fusion protein of maltose-binding periplasmic protein and PDBTitle: structure of human parathyroid hormone in complex with the extracellular domain of its g-protein-coupled receptor (pthr1)
73	d1bbua1	Alignment	not modelled	5.6	13	Fold: OB-fold Superfamily: Nucleic acid-binding proteins Family: Anticodon-binding domain
74	d1w2ia_	Alignment	not modelled	5.5	26	Fold: Ferredoxin-like Superfamily: Acylphosphatase/BLUF domain-like Family: Acylphosphatase-like
75	d1mn3a_	Alignment	not modelled	5.4	25	Fold: RuvA C-terminal domain-like Superfamily: UBA-like Family: CUE domain
76	d1lapsa_	Alignment	not modelled	5.3	20	Fold: Ferredoxin-like Superfamily: Acylphosphatase/BLUF domain-like Family: Acylphosphatase-like
77	d1lurra_	Alignment	not modelled	5.3	33	Fold: Ferredoxin-like Superfamily: Acylphosphatase/BLUF domain-like Family: Acylphosphatase-like
78	c2x3dC_	Alignment	not modelled	5.3	25	PDB header: unknown function Chain: C: PDB Molecule: sso6206; PDBTitle: crystal structure of sso6206 from sulfolobus solfataricus p2
79	d1ei1a1	Alignment	not modelled	5.3	14	Fold: Ribosomal protein S5 domain 2-like Superfamily: Ribosomal protein S5 domain 2-like Family: DNA gyrase/MutL, second domain
80	d1jhna3	Alignment	not modelled	5.0	36	Fold: P-domain of calnexin/calreticulin Superfamily: P-domain of calnexin/calreticulin Family: P-domain of calnexin/calreticulin

81	d3b9jc1		Alignment	not modelled	5.0	17	Fold: alpha/beta-Hammerhead Superfamily: CO dehydrogenase molybdoenzyme N-domain-like Family: CO dehydrogenase molybdoenzyme N-domain-like
82	d1z1ba1		Alignment	not modelled	5.0	30	Fold: DNA-binding domain Superfamily: DNA-binding domain Family: lambda integrase N-terminal domain