

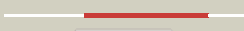














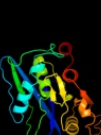






#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c3m6aC_	 Alignment		100.0	59	PDB header: hydrolase Chain: C: PDB Molecule: atp-dependent protease la 1; PDBTitle: crystal structure of bacillus subtilis lon c-terminal domain
2	c3k1jA_	 Alignment		100.0	26	PDB header: hydrolase Chain: A: PDB Molecule: atp-dependent protease lon; PDBTitle: crystal structure of lon protease from thermococcus onnurineus na1
3	c3ljcA_	 Alignment		100.0	95	PDB header: hydrolase Chain: A: PDB Molecule: atp-dependent protease la; PDBTitle: crystal structure of lon n-terminal domain.
4	c2x36F_	 Alignment		100.0	46	PDB header: hydrolase Chain: F: PDB Molecule: lon protease homolog, mitochondrial; PDBTitle: structure of the proteolytic domain of the human2 mitochondrial lon protease
5	d1rrea_	 Alignment		100.0	98	Fold: Ribosomal protein S5 domain 2-like Superfamily: Ribosomal protein S5 domain 2-like Family: ATP-dependent protease Lon (La), catalytic domain
6	c1qvrB_	 Alignment		100.0	19	PDB header: chaperone Chain: B: PDB Molecule: clpb protein; PDBTitle: crystal structure analysis of clpb
7	d1xhka_	 Alignment		100.0	32	Fold: Ribosomal protein S5 domain 2-like Superfamily: Ribosomal protein S5 domain 2-like Family: ATP-dependent protease Lon (La), catalytic domain
8	c3m65A_	 Alignment		100.0	46	PDB header: hydrolase Chain: A: PDB Molecule: atp-dependent protease la 1; PDBTitle: crystal structure of bacillus subtilis lon n-terminal domain
9	c1z0eF_	 Alignment		100.0	31	PDB header: hydrolase Chain: F: PDB Molecule: putative protease la homolog type; PDBTitle: crystal structure of a. fulgidus lon proteolytic domain
10	d1zboa1	 Alignment		100.0	19	Fold: PUA domain-like Superfamily: PUA domain-like Family: LON domain-like
11	c1r6bX_	 Alignment		100.0	18	PDB header: hydrolase Chain: X: PDB Molecule: clpa protein; PDBTitle: high resolution crystal structure of clpa

12	c3pxiB_	Alignment		100.0	19	PDB header: protein binding Chain: B: PDB Molecule: negative regulator of genetic competence clpc/meclb; PDBTitle: structure of meca108:clpc
13	d1r6bx3	Alignment		100.0	24	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Extended AAA-ATPase domain
14	d1um8a_	Alignment		100.0	23	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Extended AAA-ATPase domain
15	d1ofha_	Alignment		100.0	20	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Extended AAA-ATPase domain
16	d1g41a_	Alignment		100.0	20	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Extended AAA-ATPase domain
17	d1qvra3	Alignment		100.0	21	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Extended AAA-ATPase domain
18	c3cf1C_	Alignment		99.9	22	PDB header: transport protein Chain: C: PDB Molecule: transitional endoplasmic reticulum atpase; PDBTitle: structure of p97/vcp in complex with adp/adp.alfx
19	c3hteC_	Alignment		99.9	20	PDB header: motor protein Chain: C: PDB Molecule: atp-dependent clp protease atp-binding subunit clpx; PDBTitle: crystal structure of nucleotide-free hexameric clpx
20	d2anea1	Alignment		99.9	100	Fold: PUA domain-like Superfamily: PUA domain-like Family: LON domain-like
21	c3hu2C_	Alignment	not modelled	99.9	23	PDB header: transport protein Chain: C: PDB Molecule: transitional endoplasmic reticulum atpase; PDBTitle: structure of p97 n-d1 r86a mutant in complex with atpgs
22	c1s3sA_	Alignment	not modelled	99.9	22	PDB header: protein binding Chain: A: PDB Molecule: transitional endoplasmic reticulum atpase (ter PDBTitle: crystal structure of aaa atpase p97/vcp nd1 in complex with2 p47 c
23	c3b9pA_	Alignment	not modelled	99.9	21	PDB header: hydrolase Chain: A: PDB Molecule: cg5977-pa, isoform a; PDBTitle: spastin
24	c1xwiA_	Alignment	not modelled	99.9	18	PDB header: protein transport Chain: A: PDB Molecule: skd1 protein; PDBTitle: crystal structure of vps4b
25	c2zamA_	Alignment	not modelled	99.9	17	PDB header: protein transport Chain: A: PDB Molecule: vacuolar protein sorting-associated protein 4b; PDBTitle: crystal structure of mouse skd1/vps4b apo-form
26	c3eihB_	Alignment	not modelled	99.9	17	PDB header: protein transport Chain: B: PDB Molecule: vacuolar protein sorting-associated protein 4; PDBTitle: crystal structure of s.cerevisiae vps4 in the presence of atpgammas
27	c2dhrC_	Alignment	not modelled	99.9	21	PDB header: hydrolase Chain: C: PDB Molecule: ftsh; PDBTitle: whole cytosolic region of atp-dependent metalloprotease2 ftsh (g399l)
28	c3d8bB_	Alignment	not modelled	99.9	22	PDB header: hydrolase Chain: B: PDB Molecule: fidgetin-like protein 1; PDBTitle: crystal structure of human fidgetin-like protein 1 in

					complex with adp PDB header: hydrolase Chain: A: PDB Molecule: cell division protease ftsH homolog; PDBTitle: crystal structure of helicobacter pylori atp dependent protease, ftsH2 adp complex
29	c2r65A_	Alignment	not modelled	99.9	18
30	d2ce7a2	Alignment	not modelled	99.9	19
31	d1e94e_	Alignment	not modelled	99.9	24
32	c3pfiB_	Alignment	not modelled	99.8	21
33	cliy2A_	Alignment	not modelled	99.8	21
34	c2ce7B_	Alignment	not modelled	99.8	20
35	c2qz4A_	Alignment	not modelled	99.8	20
36	dlixza_	Alignment	not modelled	99.8	21
37	c3h4mC_	Alignment	not modelled	99.8	23
38	c3pvsA_	Alignment	not modelled	99.8	16
39	d1qzma_	Alignment	not modelled	99.8	100
40	c2x8aA_	Alignment	not modelled	99.8	20
41	dlixsb2	Alignment	not modelled	99.8	23
42	d1r6bx2	Alignment	not modelled	99.8	16
43	c1nsfA_	Alignment	not modelled	99.8	18
44	c2r44A_	Alignment	not modelled	99.8	19
45	clin8A_	Alignment	not modelled	99.7	20
46	c1x37A_	Alignment	not modelled	99.7	54
47	d1e32a2	Alignment	not modelled	99.7	19
48	c3pxgA_	Alignment	not modelled	99.7	20
49	d1lv7a_	Alignment	not modelled	99.7	17
50	c3nbxX_	Alignment	not modelled	99.7	17
51	d1r7ra3	Alignment	not modelled	99.7	21
52	d1in4a2	Alignment	not modelled	99.7	23
53	d1d2na_	Alignment	not modelled	99.7	17

						Family: Extended AAA-ATPase domain Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases
54	d1ny5a2	Alignment	not modelled	99.7	20	Family: Extended AAA-ATPase domain Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases
55	d1g8pa	Alignment	not modelled	99.7	22	Family: Extended AAA-ATPase domain Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases
56	c1sxa	Alignment	not modelled	99.7	19	PDB header: replication Chain: A: PDB Molecule: activator 1 95 kda subunit; PDBTitle: crystal structure of the eukaryotic clamp loader2 (replication factor c, rfc) bound to the dna sliding clamp3 (proliferating cell nuclear antigen, pcna)
57	c2c99A	Alignment	not modelled	99.7	17	PDB header: transcription regulation Chain: A: PDB Molecule: psp operon transcriptional activator; PDBTitle: structural basis of the nucleotide driven conformational2 changes in the aaa domain of transcription activator pspf
58	d1sxa2	Alignment	not modelled	99.7	17	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Extended AAA-ATPase domain
59	c3u5zM	Alignment	not modelled	99.7	16	PDB header: dna binding protein/dna Chain: M: PDB Molecule: dna polymerase accessory protein 44; PDBTitle: structure of t4 bacteriophage clamp loader bound to the t4 clamp,2 primer-template dna, and atp analog
60	d1w5sa2	Alignment	not modelled	99.7	15	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Extended AAA-ATPase domain
61	d1njfa	Alignment	not modelled	99.7	22	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Extended AAA-ATPase domain
62	c1sxE	Alignment	not modelled	99.6	17	PDB header: replication Chain: E: PDB Molecule: activator 1 40 kda subunit; PDBTitle: crystal structure of the eukaryotic clamp loader2 (replication factor c, rfc) bound to the dna sliding clamp3 (proliferating cell nuclear antigen, pcna)
63	c1ojf	Alignment	not modelled	99.6	14	PDB header: response regulator Chain: F: PDB Molecule: transcriptional regulatory protein zrar; PDBTitle: crystal structure of a sigma54-activator suggests the2 mechanism for the conformational switch necessary for3 sigma54 binding
64	d1sxb2	Alignment	not modelled	99.6	21	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Extended AAA-ATPase domain
65	c2chgB	Alignment	not modelled	99.6	18	PDB header: dna-binding protein Chain: B: PDB Molecule: replication factor c small subunit; PDBTitle: replication factor c domains 1 and 2
66	c1xxb	Alignment	not modelled	99.6	23	PDB header: transferase Chain: B: PDB Molecule: dna polymerase iii subunit gamma; PDBTitle: atpgs bound e. coli clamp loader complex
67	d1iqa2	Alignment	not modelled	99.6	23	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Extended AAA-ATPase domain
68	d1sxjc2	Alignment	not modelled	99.6	20	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Extended AAA-ATPase domain
69	c2c9oC	Alignment	not modelled	99.6	21	PDB header: hydrolase Chain: C: PDB Molecule: ruvb-like 1; PDBTitle: 3d structure of the human ruvb-like helicase ruvb1
70	d1jbka	Alignment	not modelled	99.6	21	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Extended AAA-ATPase domain
71	c1hqCB	Alignment	not modelled	99.6	22	PDB header: hydrolase Chain: B: PDB Molecule: ruvb; PDBTitle: structure of ruvb from thermus thermophilus hb8
72	c2hbc	Alignment	not modelled	99.6	18	PDB header: replication Chain: C: PDB Molecule: chromosomal replication initiator protein dnaa; PDBTitle: structure of amppcp-bound dnaa from aquifex aeolicus
73	d1qvra2	Alignment	not modelled	99.6	24	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Extended AAA-ATPase domain
74	d1l8qa2	Alignment	not modelled	99.6	18	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Extended AAA-ATPase domain
75	d1fnna2	Alignment	not modelled	99.6	16	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Extended AAA-ATPase domain
76	d1sxjd2	Alignment	not modelled	99.6	19	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Extended AAA-ATPase domain
77	c3te6A	Alignment	not modelled	99.6	10	PDB header: gene regulation Chain: A: PDB Molecule: regulatory protein sir3; PDBTitle: crystal structure of the s. cerevisiae sir3 aaa+ domain
78	c1iqpF	Alignment	not modelled	99.6	24	PDB header: replication Chain: F: PDB Molecule: rfcs; PDBTitle: crystal structure of the clamp loader small subunit from2 pyrococcus furiosus

79	c1sxB	Alignment	not modelled	99.6	21	PDB header: replication Chain: B: PDB Molecule: activator 1 37 kda subunit; PDBTitle: crystal structure of the eukaryotic clamp loader2 (replication factor c, rfc) bound to the dna sliding clamp3 (proliferating cell nuclear antigen, pcna)
80	c2chvE	Alignment	not modelled	99.5	21	PDB header: dna-binding protein Chain: E: PDB Molecule: replication factor c small subunit; PDBTitle: replication factor c adnp complex
81	d1sxe2	Alignment	not modelled	99.5	17	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Extended AAA-ATPase domain
82	c1ny5A	Alignment	not modelled	99.5	22	PDB header: transcription Chain: A: PDB Molecule: transcriptional regulator (ntrc family); PDBTitle: crystal structure of sigm54 activator (aaa+ atpase) in the inactive2 state
83	c3f8tA	Alignment	not modelled	99.5	15	PDB header: hydrolase Chain: A: PDB Molecule: predicted atpase involved in replication control, PDBTitle: crystal structure analysis of a full-length mcm homolog2 from methanopyrus kandleri
84	c1sxC	Alignment	not modelled	99.5	19	PDB header: replication Chain: C: PDB Molecule: activator 1 40 kda subunit; PDBTitle: crystal structure of the eukaryotic clamp loader2 (replication factor c, rfc) bound to the dna sliding clamp3 (proliferating cell nuclear antigen, pcna)
85	c3dzdA	Alignment	not modelled	99.5	20	PDB header: transcription regulator Chain: A: PDB Molecule: transcriptional regulator (ntrc family); PDBTitle: crystal structure of sigma54 activator ntrc4 in the inactive2 state
86	c1sxD	Alignment	not modelled	99.5	20	PDB header: replication Chain: D: PDB Molecule: activator 1 41 kda subunit; PDBTitle: crystal structure of the eukaryotic clamp loader2 (replication factor c, rfc) bound to the dna sliding clamp3 (proliferating cell nuclear antigen, pcna)
87	d1oz4a3	Alignment	not modelled	99.5	22	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Extended AAA-ATPase domain
88	c2z4rB	Alignment	not modelled	99.5	18	PDB header: dna binding protein Chain: B: PDB Molecule: chromosomal replication initiator protein dnaa; PDBTitle: crystal structure of domain iii from the thermotoga2 maritima replication initiation protein dnaa
89	c3bosA	Alignment	not modelled	99.4	18	PDB header: hydrolase regulator,dna binding protein Chain: A: PDB Molecule: putative dna replication factor; PDBTitle: crystal structure of a putative dna replication regulator hda2 (sama_1916) from shewanella amazonensis sb2b at 1.75 a resolution
90	c2p65A	Alignment	not modelled	99.4	19	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: hypothetical protein pf08_0063; PDBTitle: crystal structure of the first nucleotide binding domain of2 chaperone clpb1, putative, (pv089580) from plasmodium vivax
91	c1jr3E	Alignment	not modelled	99.4	20	PDB header: transferase Chain: E: PDB Molecule: dna polymerase iii, delta' subunit; PDBTitle: crystal structure of the processivity clamp loader gamma2 complex of e. coli dna polymerase iii
92	d1a5ta2	Alignment	not modelled	99.4	17	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Extended AAA-ATPase domain
93	d1gvnb	Alignment	not modelled	99.3	11	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Plasmid maintenance system epsilon/zeta, toxin zeta subunit
94	c1fnnB	Alignment	not modelled	99.3	17	PDB header: cell cycle Chain: B: PDB Molecule: cell division control protein 6; PDBTitle: crystal structure of cdc6p from pyrobaculum aerophilum
95	c2qbyA	Alignment	not modelled	99.2	17	PDB header: replication/dna Chain: A: PDB Molecule: cell division control protein 6 homolog 1; PDBTitle: crystal structure of a heterodimer of cdc6/orc1 initiators2 bound to origin dna (from s. solfataricus)
96	c3f9vA	Alignment	not modelled	99.2	22	PDB header: hydrolase Chain: A: PDB Molecule: minichromosome maintenance protein mcm; PDBTitle: crystal structure of a near full-length archaeal mcm: functional2 insights for an aaa+ hexameric helicase
97	c2v1uA	Alignment	not modelled	99.2	17	PDB header: replication Chain: A: PDB Molecule: cell division control protein 6 homolog; PDBTitle: structure of the aeropyrum pernix orc1 protein in complex2 with dna
98	d2gnoa2	Alignment	not modelled	99.2	15	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Extended AAA-ATPase domain
99	c2qbyB	Alignment	not modelled	99.2	18	PDB header: replication/dna Chain: B: PDB Molecule: cell division control protein 6 homolog 3; PDBTitle: crystal structure of a heterodimer of cdc6/orc1 initiators2 bound to origin dna (from s. solfataricus)
100	c2p5tD	Alignment	not modelled	99.1	17	PDB header: transcription regulator Chain: D: PDB Molecule: pez2; PDBTitle: molecular and structural characterization of the pezat chromosomal2 toxin-antitoxin system of the human pathogen streptococcus pneumoniae
101	c1w5sB	Alignment	not modelled	99.1	16	PDB header: replication Chain: B: PDB Molecule: origin recognition complex subunit 2 orc2; PDBTitle: structure of the aeropyrum pernix orc2 protein (adp form) PDB header: replication Chain: A: PDB Molecule: dnaa-related protein;

102	c2kjqA_	Alignment	not modelled	99.0	18	PDBTitle: solution structure of protein nmb1076 from neisseria meningitidis.2 northeast structural genomics consortium target mr101b.
103	c3ec2A_	Alignment	not modelled	98.9	23	PDB header: replication Chain: A: PDB Molecule: dna replication protein dnac; PDBTitle: crystal structure of the dnac helicase loader
104	d2fnaa2	Alignment	not modelled	98.8	18	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Extended AAA-ATPase domain
105	c2fnaA_	Alignment	not modelled	98.7	19	PDB header: atp-binding protein Chain: A: PDB Molecule: conserved hypothetical protein; PDBTitle: crystal structure of an archaeal aaa+ atpase (sso1545) from sulfolobus2 solfataricus p2 at 2.00 a resolution
106	c2qgzA_	Alignment	not modelled	98.6	21	PDB header: hydrolase Chain: A: PDB Molecule: putative primosome component; PDBTitle: crystal structure of a putative primosome component from2 streptococcus pyogenes serotype m3. northeast structural3 genomics target dr58
107	c2w58B_	Alignment	not modelled	98.6	25	PDB header: hydrolase Chain: B: PDB Molecule: primosome component (helicase loader); PDBTitle: crystal structure of the dnaI
108	c3co5B_	Alignment	not modelled	98.3	12	PDB header: transcription regulator Chain: B: PDB Molecule: putative two-component system transcriptional response PDBTitle: crystal structure of sigma-54 interaction domain of putative2 transcriptional response regulator from neisseria gonorrhoeae
109	c3qmA_	Alignment	not modelled	98.3	19	PDB header: motor protein Chain: A: PDB Molecule: cytoplasmic dynein heavy chain; PDBTitle: crystal structure of the cytoplasmic dynein heavy chain motor domain
110	d1ye8a1	Alignment	not modelled	98.2	20	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: RecA protein-like (ATPase-domain)
111	d1svmA_	Alignment	not modelled	98.2	18	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Extended AAA-ATPase domain
112	c2gnoA_	Alignment	not modelled	98.1	14	PDB header: replication Chain: A: PDB Molecule: dna polymerase iii, gamma subunit-related protein; PDBTitle: crystal structure of a dna polymerase iii, gamma subunit-related2 protein (tm0771) from thermotoga maritima msb8 at 2.00 a resolution
113	d1tuea_	Alignment	not modelled	98.0	17	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Extended AAA-ATPase domain
114	c2gxaA_	Alignment	not modelled	98.0	15	PDB header: replication/dna Chain: A: PDB Molecule: replication protein e1; PDBTitle: crystal structure of papillomavirus e1 hexameric helicase2 with ssdna and mgadp
115	c3tlxA_	Alignment	not modelled	98.0	18	PDB header: transferase Chain: A: PDB Molecule: adenylate kinase 2; PDBTitle: crystal structure of pf10_0086, adenylate kinase from plasmodium2 falciparum
116	c2og2A_	Alignment	not modelled	98.0	20	PDB header: protein transport Chain: A: PDB Molecule: putative signal recognition particle receptor; PDBTitle: crystal structure of chloroplast ftsy from arabidopsis2 thaliana
117	d1x6va3	Alignment	not modelled	97.9	11	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Adenosine-5' phosphosulfate kinase (APS kinase)
118	c3dmdA_	Alignment	not modelled	97.9	18	PDB header: transport protein Chain: A: PDB Molecule: signal recognition particle receptor; PDBTitle: structures and conformations in solution of the signal recognition2 particle receptor from the archaeon pyrococcus furiosus
119	d1lw7a2	Alignment	not modelled	97.9	15	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Nucleotide and nucleoside kinases
120	c3be4A_	Alignment	not modelled	97.9	30	PDB header: transferase Chain: A: PDB Molecule: adenylate kinase; PDBTitle: crystal structure of cryptosporidium parvum adenylate kinase cgd5_3360