


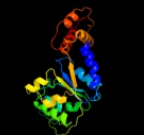

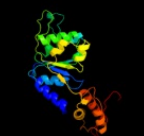
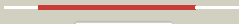














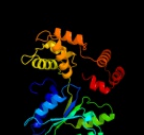




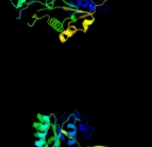
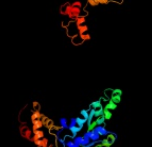
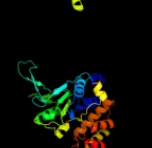

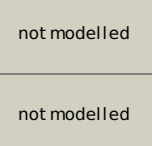


#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c1ny5A_	 Alignment		100.0	43	PDB header: transcription Chain: A: PDB Molecule: transcriptional regulator (ntrc family); PDBTitle: crystal structure of sigm54 activator (aaa+ atpase) in the inactive2 state
2	c3dzdA_	 Alignment		100.0	45	PDB header: transcription regulator Chain: A: PDB Molecule: transcriptional regulator (ntrc family); PDBTitle: crystal structure of sigma54 activator ntrc4 in the inactive2 state
3	c2c99A_	 Alignment		100.0	100	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
4	d1ny5a2	 Alignment		100.0	43	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Extended AAA-ATPase domain
5	c1ojlF_	 Alignment		100.0	45	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
6	c1qvrB_	 Alignment		99.9	23	PDB header: chaperone Chain: B: PDB Molecule: clpb protein; PDBTitle: crystal structure analysis of clpb
7	c3co5B_	 Alignment		99.9	26	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
8	d1r6bx3	 Alignment		99.9	19	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Extended AAA-ATPase domain
9	d1um8a_	 Alignment		99.9	21	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Extended AAA-ATPase domain
10	c3pxiB_	 Alignment		99.9	19	PDB header: protein binding Chain: B: PDB Molecule: negative regulator of genetic competence clpc/mech; PDBTitle: structure of meca108:clpc
11	c3pfiB_	 Alignment		99.9	14	PDB header: hydrolase Chain: B: PDB Molecule: holliday junction atp-dependent dna helicase ruvb; PDBTitle: 2.7 angstrom resolution crystal structure of a probable holliday2 junction dna helicase (ruvb) from campylobacter jejuni subsp. jejuni3 nctc 11168 in complex with adenosine-5'-diphosphate

12	c1r6bX_	Alignment		99.9	21	PDB header: hydrolase Chain: X: PDB Molecule: clpa protein; PDBTitle: high resolution crystal structure of clpa
13	d1qvra3	Alignment		99.9	21	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Extended AAA-ATPase domain
14	c1n8A_	Alignment		99.8	14	PDB header: dna binding protein Chain: A: PDB Molecule: holliday junction dna helicase ruvb; PDBTitle: thermotoga maritima ruvb t158v
15	c3nbxX_	Alignment		99.8	17	PDB header: hydrolase Chain: X: PDB Molecule: atpase rava; PDBTitle: crystal structure of e. coli rava (regulatory atpase variant a) in2 complex with adp
16	c3k1jA_	Alignment		99.8	24	PDB header: hydrolase Chain: A: PDB Molecule: atp-dependent protease lon; PDBTitle: crystal structure of lon protease from thermococcus onnurineus na1
17	c3pvsA_	Alignment		99.8	13	PDB header: recombination Chain: A: PDB Molecule: replication-associated recombination protein a; PDBTitle: structure and biochemical activities of escherichia coli mgsa
18	c3hteC_	Alignment		99.7	18	PDB header: motor protein Chain: C: PDB Molecule: atp-dependent clp protease atp-binding subunit clpx; PDBTitle: crystal structure of nucleotide-free hexameric clpx
19	c2r44A_	Alignment		99.7	18	PDB header: hydrolase Chain: A: PDB Molecule: uncharacterized protein; PDBTitle: crystal structure of a putative atpase (chu_0153) from cytophaga2 hutchinsonii atcc 33406 at 2.00 a resolution
20	d1l8qa2	Alignment		99.7	17	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Extended AAA-ATPase domain
21	d1g8pa_	Alignment	not modelled	99.7	23	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Extended AAA-ATPase domain
22	d1g41a_	Alignment	not modelled	99.7	21	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Extended AAA-ATPase domain
23	c1hqcb_	Alignment	not modelled	99.7	18	PDB header: hydrolase Chain: B: PDB Molecule: ruvb; PDBTitle: structure of ruvb from thermus thermophilus hb8
24	d1ofha_	Alignment	not modelled	99.7	20	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Extended AAA-ATPase domain
25	c1nsfA_	Alignment	not modelled	99.7	15	PDB header: protein transport Chain: A: PDB Molecule: n-ethylmaleimide sensitive factor; PDBTitle: d2 hexamerization domain of n-ethylmaleimide sensitive factor (nsf)
26	c2hcbC_	Alignment	not modelled	99.7	16	PDB header: replication Chain: C: PDB Molecule: chromosomal replication initiator protein dnaa; PDBTitle: structure of amppcp-bound dnaa from aquifex aeolicus
27	c3bosA_	Alignment	not modelled	99.7	11	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
28	c2c9oC_	Alignment	not modelled	99.6	18	PDB header: hydrolase Chain: C: PDB Molecule: ruvb-like 1; PDBTitle: 3d structure of the human ruvb-like helicase ruvb1

29	dlin4a2	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
30	c3cf1C	Alignment	not modelled	99.6	24	PDB header: transport protein Chain: C: PDB Molecule: transitional endoplasmic reticulum atpase; PDBTitle: structure of p97/vcp in complex with adp/adp.alfx
31	dlixsb2	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
32	c3f8tA	Alignment	not modelled	99.6	20	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
33	c2z4rB	Alignment	not modelled	99.6	14	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
34	d1sxd2	Alignment	not modelled	99.6	13	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Extended AAA-ATPase domain
35	d1d2na	Alignment	not modelled	99.6	15	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Extended AAA-ATPase domain
36	c3eihB	Alignment	not modelled	99.6	19	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
37	c2dhrC	Alignment	not modelled	99.6	21	PDB header: hydrolase Chain: C: PDB Molecule: ftsh; PDBTitle: whole cytosolic region of atp-dependent metalloprotease2 ftsh (g399l)
38	d1fnna2	Alignment	not modelled	99.5	12	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Extended AAA-ATPase domain
39	c1xwiA	Alignment	not modelled	99.5	18	PDB header: protein transport Chain: A: PDB Molecule: skd1 protein; PDBTitle: crystal structure of vps4b
40	c3b9pA	Alignment	not modelled	99.5	19	PDB header: hydrolase Chain: A: PDB Molecule: cg5977-pa, isoform a; PDBTitle: spastin
41	c2chgB	Alignment	not modelled	99.5	20	PDB header: dna-binding protein Chain: B: PDB Molecule: replication factor c small subunit; PDBTitle: replication factor c domains 1 and 2
42	c3hu2C	Alignment	not modelled	99.5	22	PDB header: transport protein Chain: C: PDB Molecule: transitional endoplasmic reticulum atpase; PDBTitle: structure of p97 n-d1 r86a mutant in complex with atpgs
43	dliqpa2	Alignment	not modelled	99.5	18	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Extended AAA-ATPase domain
44	c3u5zM	Alignment	not modelled	99.5	15	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
45	c1xxhB	Alignment	not modelled	99.5	18	PDB header: transferase Chain: B: PDB Molecule: dna polymerase iii subunit gamma; PDBTitle: atpgs bound e. coli clamp loader complex
46	c2zamA	Alignment	not modelled	99.5	19	PDB header: protein transport Chain: A: PDB Molecule: vacuolar protein sorting-associating protein 4b; PDBTitle: crystal structure of mouse skd1/vps4b apo-form
47	c2p65A	Alignment	not modelled	99.5	20	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
48	d1ntca	Alignment	not modelled	99.5	22	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: FIS-like
49	c3d8bB	Alignment	not modelled	99.5	18	PDB header: hydrolase Chain: B: PDB Molecule: fidgetin-like protein 1; PDBTitle: crystal structure of human fidgetin-like protein 1 in complex with adp
50	d2ce7a2	Alignment	not modelled	99.5	21	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Extended AAA-ATPase domain
51	d1njfa	Alignment	not modelled	99.4	15	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Extended AAA-ATPase domain
52	c2ce7B	Alignment	not modelled	99.4	18	PDB header: cell division protein Chain: B: PDB Molecule: cell division protein ftsh; PDBTitle: edta treated
53	c2r65A	Alignment	not modelled	99.4	22	PDB header: hydrolase Chain: A: PDB Molecule: cell division protease ftsh homolog; PDBTitle: crystal structure of helicobacter pylori atp dependent protease, ftsh2 adp complex
54	c3h4mC	Alignment	not modelled	99.4	22	PDB header: hydrolase Chain: C: PDB Molecule: proteasome-activating nucleotidase;

54	c3h4rk_	Alignment	not modelled	99.4	23	PDBTitle: aaa atpase domain of the proteasome- activating nucleotidase PDB header: replication
55	c1sxD_	Alignment	not modelled	99.4	14	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)
56	d1sxb2	Alignment	not modelled	99.4	16	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Extended AAA-ATPase domain
57	d1sxc2	Alignment	not modelled	99.4	20	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Extended AAA-ATPase domain
58	c3f9vA_	Alignment	not modelled	99.4	15	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
59	d1qvra2	Alignment	not modelled	99.4	21	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Extended AAA-ATPase domain
60	c1sxC_	Alignment	not modelled	99.4	20	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)
61	d1r6bx2	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
62	c1iy2A_	Alignment	not modelled	99.4	23	PDB header: hydrolase Chain: A: PDB Molecule: atp-dependent metalloprotease ftsH; PDBTitle: crystal structure of the ftsH atpase domain from thermus2 thermophilus
63	c1s3sA_	Alignment	not modelled	99.4	25	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
64	c1sxB_	Alignment	not modelled	99.4	17	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)
65	d1e32a2	Alignment	not modelled	99.3	23	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Extended AAA-ATPase domain
66	c1sxA_	Alignment	not modelled	99.3	12	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)
67	c2qz4A_	Alignment	not modelled	99.3	20	PDB header: hydrolase Chain: A: PDB Molecule: paraplegin; PDBTitle: human paraplegin, aaa domain in complex with adp
68	c2chvE_	Alignment	not modelled	99.3	20	PDB header: dna-binding protein Chain: E: PDB Molecule: replication factor c small subunit; PDBTitle: replication factor c adpnp complex
69	d1sxa2	Alignment	not modelled	99.3	11	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Extended AAA-ATPase domain
70	d1fipa_	Alignment	not modelled	99.3	30	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: FIS-like
71	c1iqpF_	Alignment	not modelled	99.3	19	PDB header: replication Chain: F: PDB Molecule: rfcs; PDBTitle: crystal structure of the clamp loader small subunit from2 pyrococcus furiosus
72	d1jbka_	Alignment	not modelled	99.3	21	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Extended AAA-ATPase domain
73	d1ixza_	Alignment	not modelled	99.3	24	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Extended AAA-ATPase domain
74	c3e7ID_	Alignment	not modelled	99.3	24	PDB header: transcription regulator Chain: D: PDB Molecule: transcriptional regulator (ntrc family); PDBTitle: crystal structure of sigma54 activator ntrc4's dna binding2 domain
75	c2kjqA_	Alignment	not modelled	99.3	22	PDB header: replication Chain: A: PDB Molecule: dnaa-related protein; PDBTitle: solution structure of protein nmb1076 from neisseria meningitidis.2 northeast structural genomics consortium target mr101b.
76	d1e94e_	Alignment	not modelled	99.3	19	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Extended AAA-ATPase domain
77	d1etob_	Alignment	not modelled	99.3	30	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: FIS-like
78	c3pxgA_	Alignment	not modelled	99.3	21	PDB header: protein binding Chain: A: PDB Molecule: negative regulator of genetic competence clpC/mech;

					PDBTitle: structure of meca121 and clpc1-485 complex PDB header: nuclear protein Chain: A: PDB Molecule: nuclear valosin-containing protein-like; PDBTitle: human nuclear valosin containing protein like (nvl), c-2 terminal aaa-atpase domain
79	c2x8aA_	Alignment	not modelled	99.3	21
80	d1etxa_	Alignment	not modelled	99.3	28
81	d1sxje2	Alignment	not modelled	99.2	15
82	d1w5sa2	Alignment	not modelled	99.2	10
83	d1lv7a_	Alignment	not modelled	99.2	19
84	c1umqA_	Alignment	not modelled	99.2	16
85	d1umqa_	Alignment	not modelled	99.2	16
86	c1sxE_	Alignment	not modelled	99.2	14
87	d1g2ha_	Alignment	not modelled	99.2	21
88	c1fnB_	Alignment	not modelled	99.1	11
89	c2qbyA_	Alignment	not modelled	99.1	12
90	c2v1uA_	Alignment	not modelled	99.0	18
91	c2qbyB_	Alignment	not modelled	99.0	15
92	d1r7ra3	Alignment	not modelled	99.0	26
93	c3ec2A_	Alignment	not modelled	99.0	15
94	c3te6A_	Alignment	not modelled	98.9	9
95	d1oz4a3	Alignment	not modelled	98.9	30
96	d1a5ta2	Alignment	not modelled	98.9	14
97	c2w58B_	Alignment	not modelled	98.8	13
98	c1jr3E_	Alignment	not modelled	98.7	19
99	c1w5sB_	Alignment	not modelled	98.7	12
100	c2qgZA_	Alignment	not modelled	98.7	13
101	d2gnoa2	Alignment	not modelled	98.7	12
102	d1gvnb_	Alignment	not modelled	98.7	14
103	c3qmA_	Alignment	not modelled	98.5	15

						motor domain
104	c3m6aC_	Alignment	not modelled	98.5	15	PDB header: hydrolase Chain: C: PDB Molecule: atp-dependent protease Ia 1; PDBTitle: crystal structure of bacillus subtilis lon c-terminal domain
105	c2p5tD_	Alignment	not modelled	98.2	24	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
106	d1svma_	Alignment	not modelled	97.9	16	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Extended AAA-ATPase domain
107	d2i3ba1	Alignment	not modelled	97.8	16	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: RecA protein-like (ATPase-domain)
108	c2qenA_	Alignment	not modelled	97.8	13	PDB header: unknown function Chain: A: PDB Molecule: walker-type atpase; PDBTitle: the walker-type atpase paby2304 of pyrococcus abyssi
109	d1ye8a1	Alignment	not modelled	97.8	21	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: RecA protein-like (ATPase-domain)
110	c2fnaA_	Alignment	not modelled	97.8	21	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
111	d2fnaa2	Alignment	not modelled	97.8	20	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Extended AAA-ATPase domain
112	c3e1sA_	Alignment	not modelled	97.8	17	PDB header: hydrolase Chain: A: PDB Molecule: exodeoxyribonuclease v, subunit recd; PDBTitle: structure of an n-terminal truncation of deinococcus radiodurans recd2
113	c3tlxA_	Alignment	not modelled	97.7	19	PDB header: transferase Chain: A: PDB Molecule: adenylate kinase 2; PDBTitle: crystal structure of pf10_0086, adenylate kinase from plasmodium2 falciparum
114	c3n70F_	Alignment	not modelled	97.7	24	PDB header: transport protein Chain: F: PDB Molecule: transport activator; PDBTitle: the crystal structure of the p-loop ntpase domain of the sigma-542 transport activator from e. coli to 2.8a
115	c2ja1A_	Alignment	not modelled	97.6	14	PDB header: transferase Chain: A: PDB Molecule: thymidine kinase; PDBTitle: thymidine kinase from b. cereus with ttp bound as phosphate2 donor.
116	c3trfB_	Alignment	not modelled	97.5	25	PDB header: transferase Chain: B: PDB Molecule: shikimate kinase; PDBTitle: structure of a shikimate kinase (arok) from coxiella burnetii
117	d1kaga_	Alignment	not modelled	97.5	21	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Shikimate kinase (AroK)
118	c1z6tC_	Alignment	not modelled	97.4	20	PDB header: apoptosis Chain: C: PDB Molecule: apoptotic protease activating factor 1; PDBTitle: structure of the apoptotic protease-activating factor 12 bound to adp
119	d1w36d1	Alignment	not modelled	97.4	14	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Tandem AAA-ATPase domain
120	d1khta_	Alignment	not modelled	97.4	11	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Nucleotide and nucleoside kinases