






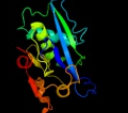





























#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c3kljA_	 Alignment		100.0	22	PDB header: hydrolase Chain: A: PDB Molecule: atp-dependent protease lon; PDBTitle: crystal structure of lon protease from thermococcus onnurineus na1
2	c3m6aC_	 Alignment		100.0	19	PDB header: hydrolase Chain: C: PDB Molecule: atp-dependent protease la 1; PDBTitle: crystal structure of bacillus subtilis lon c-terminal domain
3	c1z0eF_	 Alignment		100.0	34	PDB header: hydrolase Chain: F: PDB Molecule: putative protease la homolog type; PDBTitle: crystal structure of a. fulgidus lon proteolytic domain
4	d1xhka_	 Alignment		100.0	33	Fold: Ribosomal protein S5 domain 2-like Superfamily: Ribosomal protein S5 domain 2-like Family: ATP-dependent protease Lon (La), catalytic domain
5	c2x36F_	 Alignment		100.0	23	PDB header: hydrolase Chain: F: PDB Molecule: lon protease homolog, mitochondrial; PDBTitle: structure of the proteolytic domain of the human2 mitochondrial lon protease
6	d1rrea_	 Alignment		100.0	27	Fold: Ribosomal protein S5 domain 2-like Superfamily: Ribosomal protein S5 domain 2-like Family: ATP-dependent protease Lon (La), catalytic domain
7	c1ny5A_	 Alignment		99.3	13	PDB header: transcription Chain: A: PDB Molecule: transcriptional regulator (ntrc family); PDBTitle: crystal structure of sigma54 activator (aaa+ atpase) in the inactive2 state
8	c3dzdA_	 Alignment		99.2	14	PDB header: transcription regulator Chain: A: PDB Molecule: transcriptional regulator (ntrc family); PDBTitle: crystal structure of sigma54 activator ntrc4 in the inactive2 state
9	d1qzma_	 Alignment		99.1	13	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Extended AAA-ATPase domain
10	c1x37A_	 Alignment		99.1	18	PDB header: hydrolase Chain: A: PDB Molecule: atp-dependent protease la 1; PDBTitle: structure of bacillus subtilis lon protease ssd domain
11	d1ny5a2	 Alignment		97.7	13	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Extended AAA-ATPase domain

12	c2c99A_	Alignment		97.6	12	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
13	c3pxgA_	Alignment		97.0	16	PDB header: protein binding Chain: A: PDB Molecule: negative regulator of genetic competence clpc/meccb; PDBTitle: structure of meca121 and clpc1-485 complex
14	c1ojlF_	Alignment		96.8	15	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
15	c1qvrB_	Alignment		96.8	14	PDB header: chaperone Chain: B: PDB Molecule: clpb protein; PDBTitle: crystal structure analysis of clpb
16	c3f8tA_	Alignment		96.3	16	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
17	c3f9vA_	Alignment		95.3	16	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
18	c2gefA_	Alignment		94.5	36	PDB header: hydrolase Chain: A: PDB Molecule: protease vp4; PDBTitle: crystal structure of a novel viral protease with a2 serine/lysine catalytic dyad mechanism
19	d1r6bx2	Alignment		92.6	12	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Extended AAA-ATPase domain
20	c3nbxX_	Alignment		92.1	14	PDB header: hydrolase Chain: X: PDB Molecule: atpase rava; PDBTitle: crystal structure of e. coli rava (regulatory atpase variant a) in2 complex with adp
21	c1r6bX_	Alignment	not modelled	91.9	15	PDB header: hydrolase Chain: X: PDB Molecule: clpa protein; PDBTitle: high resolution crystal structure of clpa
22	d1um8a_	Alignment	not modelled	91.6	13	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Extended AAA-ATPase domain
23	c3pxiB_	Alignment	not modelled	90.7	14	PDB header: protein binding Chain: B: PDB Molecule: negative regulator of genetic competence clpc/meccb; PDBTitle: structure of meca108:clpc
24	d1g8pa_	Alignment	not modelled	90.6	18	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Extended AAA-ATPase domain
25	c3co5B_	Alignment	not modelled	88.0	14	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
26	c3u5zM_	Alignment	not modelled	85.8	14	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
27	c3pfiB_	Alignment	not modelled	84.9	12	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

28	c3b9pA	Alignment	not modelled	82.7	15	PDB header: hydrolase Chain: A: PDB Molecule: cg5977-pa, isoform a; PDBTitle: spastin
29	c1sxjA	Alignment	not modelled	82.5	13	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)
30	d1iqpa2	Alignment	not modelled	81.7	14	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Extended AAA-ATPase domain
31	clin8A	Alignment	not modelled	81.1	17	PDB header: dna binding protein Chain: A: PDB Molecule: holliday junction dna helicase ruvb; PDBTitle: thermotoga maritima ruvb t158v
32	d1sxjb2	Alignment	not modelled	80.7	11	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Extended AAA-ATPase domain
33	c2r44A	Alignment	not modelled	79.7	9	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
34	d1qvra3	Alignment	not modelled	79.2	13	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Extended AAA-ATPase domain
35	c1iy2A	Alignment	not modelled	78.9	14	PDB header: hydrolase Chain: A: PDB Molecule: atp-dependent metalloprotease ftsh; PDBTitle: crystal structure of the ftsh atpase domain from thermus2 thermophilus
36	c3d8bB	Alignment	not modelled	77.9	12	PDB header: hydrolase Chain: B: PDB Molecule: fidgetin-like protein 1; PDBTitle: crystal structure of human fidgetin-like protein 1 in complex with adp
37	d2ce7a2	Alignment	not modelled	76.0	13	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Extended AAA-ATPase domain
38	d1ixza	Alignment	not modelled	73.7	16	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Extended AAA-ATPase domain
39	c3pvsA	Alignment	not modelled	72.6	13	PDB header: recombination Chain: A: PDB Molecule: replication-associated recombination protein a; PDBTitle: structure and biochemical activities of escherichia coli mgsa
40	c2r65A	Alignment	not modelled	68.4	14	PDB header: hydrolase Chain: A: PDB Molecule: cell division protease ftsh homolog; PDBTitle: crystal structure of helicobacter pylori atp dependent protease, ftsh2 adp complex
41	c2z4rB	Alignment	not modelled	68.0	10	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
42	d1sxjc2	Alignment	not modelled	68.0	19	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Extended AAA-ATPase domain
43	d1dvoa	Alignment	not modelled	67.0	13	Fold: FinO-like Superfamily: FinO-like Family: FinO-like
44	d1r6bx3	Alignment	not modelled	63.9	11	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Extended AAA-ATPase domain
45	c2x8aA	Alignment	not modelled	61.5	13	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
46	c3bosA	Alignment	not modelled	61.1	13	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
47	d2hxja1	Alignment	not modelled	56.1	9	Fold: FinO-like Superfamily: FinO-like Family: FinO-like
48	d1qvra2	Alignment	not modelled	54.4	16	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Extended AAA-ATPase domain
49	c2dhrC	Alignment	not modelled	53.1	15	PDB header: hydrolase Chain: C: PDB Molecule: ftsh; PDBTitle: whole cytosolic region of atp-dependent metalloprotease2 ftsh (g3991)
50	d1yvua1	Alignment	not modelled	47.3	44	Fold: SH3-like barrel Superfamily: PAZ domain Family: PAZ domain
51	c3hteC	Alignment	not modelled	46.1	8	PDB header: motor protein Chain: C: PDB Molecule: atp-dependent clp protease atp-binding subunit clpx; PDBTitle: crystal structure of nucleotide-free hexameric clpx
52	c3hu2C	Alignment	not modelled	45.4	14	PDB header: transport protein Chain: C: PDB Molecule: transitional endoplasmic reticulum atpase; PDBTitle: structure of p97 n-d1 r86a mutant in complex with atpgs

53	d1njfa_	 Alignment	not modelled	43.8	23	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Extended AAA-ATPase domain
54	c3cf1C_	 Alignment	not modelled	41.4	14	PDB header: transport protein Chain: C: PDB Molecule: transitional endoplasmic reticulum atpase; PDBTitle: structure of p97/vcp in complex with adp/adp.alfx
55	c1sxjE_	 Alignment	not modelled	38.0	12	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)
56	d1in4a2	 Alignment	not modelled	34.9	16	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Extended AAA-ATPase domain
57	c3pi7A_	 Alignment	not modelled	33.5	12	PDB header: oxidoreductase Chain: A: PDB Molecule: nadh oxidoreductase; PDBTitle: crystal structure of a putative nadph:quinone reductase (ml13093) from2 mesorhizobium loti at 1.71 a resolution
58	d1rm6a2	 Alignment	not modelled	32.8	8	Fold: Molybdenum cofactor-binding domain Superfamily: Molybdenum cofactor-binding domain Family: Molybdenum cofactor-binding domain
59	c1wygA_	 Alignment	not modelled	32.5	17	PDB header: oxidoreductase Chain: A: PDB Molecule: xanthine dehydrogenase/oxidase; PDBTitle: crystal structure of a rat xanthine dehydrogenase triple mutant2 (c535a, c992r and c1324s)
60	c2w54F_	 Alignment	not modelled	30.9	10	PDB header: oxidoreductase Chain: F: PDB Molecule: xanthine dehydrogenase; PDBTitle: crystal structure of xanthine dehydrogenase from2 rhodobacter capsulatus in complex with bound inhibitor3 pterin-6-aldehyde
61	d1ofha_	 Alignment	not modelled	30.2	14	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Extended AAA-ATPase domain
62	c2c0cB_	 Alignment	not modelled	28.9	7	PDB header: oxidoreductase Chain: B: PDB Molecule: zinc binding alcohol dehydrogenase, domain PDBTitle: structure of the mgc45594 gene product
63	d1qf8a_	 Alignment	not modelled	26.9	24	Fold: Rubredoxin-like Superfamily: Casein kinase II beta subunit Family: Casein kinase II beta subunit
64	c2hcyD_	 Alignment	not modelled	25.9	9	PDB header: oxidoreductase Chain: D: PDB Molecule: alcohol dehydrogenase 1; PDBTitle: yeast alcohol dehydrogenase i, saccharomyces cerevisiae fermentative2 enzyme
65	c1wlvA_	 Alignment	not modelled	25.1	17	PDB header: oxidoreductase Chain: A: PDB Molecule: 2-haloacrylate reductase; PDBTitle: crystal structure of 2-haloacrylate reductase
66	c2c9kA_	 Alignment	not modelled	24.3	23	PDB header: toxin Chain: A: PDB Molecule: pesticidal crystal protein cry4aa; PDBTitle: structure of the functional form of the mosquito-larvicidal2 cry4aa toxin from bacillus thuringiensis at 2.8 a3 resolution
67	d1d2na_	 Alignment	not modelled	24.2	10	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Extended AAA-ATPase domain
68	c2z5wA_	 Alignment	not modelled	23.5	21	PDB header: structural protein Chain: A: PDB Molecule: tbcla protein; PDBTitle: tbcla, a recombinant spore surface protein from bacillus anthracis
69	d1v97a5	 Alignment	not modelled	23.3	14	Fold: Molybdenum cofactor-binding domain Superfamily: Molybdenum cofactor-binding domain Family: Molybdenum cofactor-binding domain
70	c1wckA_	 Alignment	not modelled	23.2	21	PDB header: structural protein Chain: A: PDB Molecule: tbcla protein; PDBTitle: crystal structure of the c-terminal domain of tbcla, the2 major antigen of the exosporium of the bacillus anthracis3 spore.
71	c3eihB_	 Alignment	not modelled	23.1	12	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
72	c2pnmA_	 Alignment	not modelled	22.2	19	PDB header: hydrolase Chain: A: PDB Molecule: protease vp4; PDBTitle: crystal structure of vp4 protease from infectious pancreatic necrosis2 virus (ipnv) in space group p6122
73	c2qz4A_	 Alignment	not modelled	21.9	12	PDB header: hydrolase Chain: A: PDB Molecule: paraplegin; PDBTitle: human paraplegin, aaa domain in complex with adp
74	c1nsfA_	 Alignment	not modelled	21.3	10	PDB header: protein transport Chain: A: PDB Molecule: n-ethylmaleimide sensitive factor; PDBTitle: d2 hexamerization domain of n-ethylmaleimide sensitive factor (nsf)
75	d1hiod_	 Alignment	not modelled	21.3	11	Fold: Histone-fold Superfamily: Histone-fold Family: Nucleosome core histones
76	c3gazA_	 Alignment	not modelled	20.6	22	PDB header: oxidoreductase Chain: A: PDB Molecule: alcohol dehydrogenase superfamily protein; PDBTitle: crystal structure of an alcohol dehydrogenase superfamily protein from2 novosphingobium aromaticivorans
77	c1hk8A_	 Alignment	not modelled	20.2	28	PDB header: oxidoreductase Chain: A: PDB Molecule: anaerobic ribonucleotide-triphosphate reductase; PDBTitle: structural basis for allosteric substrate specificity2

						regulation in class iii ribonucleotide reductases:3 nrdd in complex with dgtp
78	d1hk8a_	Alignment	not modelled	20.2	28	Fold: PFL-like glycol radical enzymes Superfamily: PFL-like glycol radical enzymes Family: Class III anaerobic ribonucleotide reductase NRDD subunit
79	d1sxja2	Alignment	not modelled	20.0	12	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Extended AAA-ATPase domain
80	c1uufA_	Alignment	not modelled	19.5	13	PDB header: oxidoreductase Chain: A: PDB Molecule: zinc-type alcohol dehydrogenase-like protein PDBTitle: crystal structure of a zinc-type alcohol dehydrogenase-like2 protein yahk
81	d1o75a2	Alignment	not modelled	19.3	23	Fold: Immunoglobulin-like beta-sandwich Superfamily: Tp47 lipoprotein, middle and C-terminal domains Family: Tp47 lipoprotein, middle and C-terminal domains
82	c2p65A_	Alignment	not modelled	19.1	17	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
83	d1jrob2	Alignment	not modelled	19.0	10	Fold: Molybdenum cofactor-binding domain Superfamily: Molybdenum cofactor-binding domain Family: Molybdenum cofactor-binding domain
84	c1x59A_	Alignment	not modelled	19.0	22	PDB header: protein binding Chain: A: PDB Molecule: histidyl-trna synthetase; PDBTitle: solution structures of the whep-trs domain of human2 histidyl-trna synthetase
85	d2hfga1	Alignment	not modelled	18.8	16	Fold: NE1680-like Superfamily: NE1680-like Family: NE1680-like
86	c2hfgA_	Alignment	not modelled	18.8	16	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: hypothetical protein; PDBTitle: nmr structure of protein ne1680 from nitrosomonas europaea:2 northeast structural genomics consortium target net5
87	c1zsvB_	Alignment	not modelled	18.7	31	PDB header: oxidoreductase Chain: B: PDB Molecule: nadp-dependent leukotriene b4 12- PDBTitle: crystal structure of human nadp-dependent leukotriene b4 12-2 hydroxydehydrogenase
88	c3jynA_	Alignment	not modelled	18.6	23	PDB header: oxidoreductase Chain: A: PDB Molecule: quinone oxidoreductase; PDBTitle: crystal structures of pseudomonas syringae pv. tomato dc30002 quinone oxidoreductase complexed with nadph
89	c1k47F_	Alignment	not modelled	16.3	12	PDB header: transferase Chain: F: PDB Molecule: phosphomevalonate kinase; PDBTitle: crystal structure of the streptococcus pneumoniae2 phosphomevalonate kinase (pmk)
90	c3eubL_	Alignment	not modelled	16.1	14	PDB header: oxidoreductase Chain: L: PDB Molecule: xanthine dehydrogenase/oxidase; PDBTitle: crystal structure of desulfo-xanthine oxidase with xanthine
91	c1sb3D_	Alignment	not modelled	16.1	8	PDB header: oxidoreductase Chain: D: PDB Molecule: 4-hydroxybenzoyl-coa reductase alpha subunit; PDBTitle: structure of 4-hydroxybenzoyl-coa reductase from thauera2 aromatica
92	c2vcyA_	Alignment	not modelled	16.0	17	PDB header: oxidoreductase Chain: A: PDB Molecule: trans-2-enoyl-coa reductase; PDBTitle: crystal structure of 2-enoyl thioester reductase of human2 fas ii
93	c1iqpF_	Alignment	not modelled	15.8	16	PDB header: replication Chain: F: PDB Molecule: rfcs; PDBTitle: crystal structure of the clamp loader small subunit from2 pyrococcus furiosus
94	c2om6A_	Alignment	not modelled	15.5	23	PDB header: hydrolase Chain: A: PDB Molecule: probable phosphoserine phosphatase; PDBTitle: hypothetical protein (probable phosphoserine phosph (ph0253) from2 pyrococcus horikoshii ot3
95	d1sxjd2	Alignment	not modelled	15.5	16	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Extended AAA-ATPase domain
96	d1x6va3	Alignment	not modelled	15.3	22	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Adenosine-5' phosphosulfate kinase (APS kinase)
97	c3gohA_	Alignment	not modelled	15.0	17	PDB header: oxidoreductase Chain: A: PDB Molecule: alcohol dehydrogenase, zinc-containing; PDBTitle: crystal structure of alcohol dehydrogenase superfamily protein2 (np_718042.1) from shewanella oneidensis at 1.55 a resolution
98	c3hrdE_	Alignment	not modelled	15.0	18	PDB header: oxidoreductase Chain: E: PDB Molecule: nicotinate dehydrogenase large molybdopterin PDBTitle: crystal structure of nicotinate dehydrogenase
99	c1yadD_	Alignment	not modelled	14.8	23	PDB header: transcription Chain: D: PDB Molecule: regulatory protein teni; PDBTitle: structure of teni from bacillus subtilis