























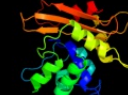




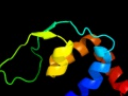
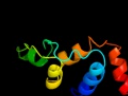
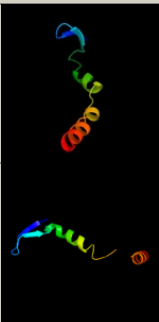
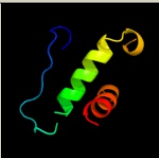
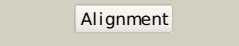
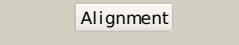
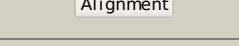
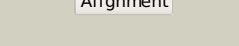
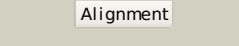


#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c2jc7A_	 Alignment		96.6	14	PDB header: hydrolase Chain: A: PDB Molecule: beta-lactamase oxa-24; PDBTitle: the crystal structure of the carbapenemase oxa-24 reveals2 new insights into the mechanism of carbapenem-hydrolysis
2	c3oc2A_	 Alignment		96.3	17	PDB header: penicillin-binding protein Chain: A: PDB Molecule: penicillin-binding protein 3; PDBTitle: crystal structure of penicillin-binding protein 3 from pseudomonas2 aeruginosa
3	c3if6C_	 Alignment		96.1	20	PDB header: hydrolase Chain: C: PDB Molecule: oxa-46 oxacillinase; PDBTitle: crystal structure of oxa-46 beta-lactamase from p.2 aeruginosa
4	c3lo7A_	 Alignment		96.0	23	PDB header: transferase Chain: A: PDB Molecule: penicillin-binding protein a; PDBTitle: crystal structure of pbpa from mycobacterium tuberculosis
5	d1k55a_	 Alignment		95.4	15	Fold: beta-lactamase/transpeptidase-like Superfamily: beta-lactamase/transpeptidase-like Family: beta-Lactamase/D-ala carboxypeptidase
6	d1nrfa_	 Alignment		95.1	14	Fold: beta-lactamase/transpeptidase-like Superfamily: beta-lactamase/transpeptidase-like Family: beta-Lactamase/D-ala carboxypeptidase
7	c3hbrD_	 Alignment		94.6	16	PDB header: hydrolase Chain: D: PDB Molecule: oxa-48; PDBTitle: crystal structure of oxa-48 beta-lactamase
8	d1xa1a_	 Alignment		94.5	16	Fold: beta-lactamase/transpeptidase-like Superfamily: beta-lactamase/transpeptidase-like Family: beta-Lactamase/D-ala carboxypeptidase
9	c3equB_	 Alignment		94.3	17	PDB header: biosynthetic protein Chain: B: PDB Molecule: penicillin-binding protein 2; PDBTitle: crystal structure of penicillin-binding protein 2 from neisseria2 gonorrhoeae
10	c3udiA_	 Alignment		94.1	19	PDB header: penicillin-binding protein/antibiotic Chain: A: PDB Molecule: penicillin-binding protein 1a; PDBTitle: crystal structure of acinetobacter baumannii pbp1a in complex with2 penicillin g
11	d1k38a_	 Alignment		93.9	18	Fold: beta-lactamase/transpeptidase-like Superfamily: beta-lactamase/transpeptidase-like Family: beta-Lactamase/D-ala carboxypeptidase

12	c2iwdA	Alignment		93.7	12	PDB header: antibiotic resistance Chain: A: PDB Molecule: methicillin resistance mecR1 protein; PDBTitle: oxacilloyl-acylated mecR1 extracellular antibiotic-sensor2 domain.
13	c3ue3A	Alignment		93.1	19	PDB header: transferase Chain: A: PDB Molecule: septum formation, penicillin binding protein 3, PDBTitle: crystal structure of acinetobacter baumannii pbp3
14	c3pbqA	Alignment		92.8	19	PDB header: hydrolase/antibiotic Chain: A: PDB Molecule: penicillin-binding protein 3; PDBTitle: crystal structure of pbp3 complexed with imipenem
15	d1vqa3	Alignment		91.9	16	Fold: beta-lactamase/transpeptidase-like Superfamily: beta-lactamase/transpeptidase-like Family: beta-Lactamase/D-ala carboxypeptidase
16	c2olvA	Alignment		89.5	16	PDB header: transferase Chain: A: PDB Molecule: penicillin-binding protein 2; PDBTitle: structural insight into the transglycosylation step of bacterial cell2 wall biosynthesis : donor ligand complex
17	d1rp5a4	Alignment		88.8	16	Fold: beta-lactamase/transpeptidase-like Superfamily: beta-lactamase/transpeptidase-like Family: beta-Lactamase/D-ala carboxypeptidase
18	d1pyya4	Alignment		88.1	14	Fold: beta-lactamase/transpeptidase-like Superfamily: beta-lactamase/transpeptidase-like Family: beta-Lactamase/D-ala carboxypeptidase
19	c1qmfA	Alignment		87.7	16	PDB header: peptidoglycan synthesis Chain: A: PDB Molecule: penicillin-binding protein 2x; PDBTitle: penicillin-binding protein 2x (pbp-2x) acyl-enzyme complex
20	c1pmdA	Alignment		86.9	16	PDB header: peptidoglycan synthesis Chain: A: PDB Molecule: peptidoglycan synthesis multifunctional enzyme; PDBTitle: penicillin-binding protein 2x (pbp-2x)
21	c2bg1A	Alignment	not modelled	86.6	17	PDB header: peptidoglycan Chain: A: PDB Molecule: penicillin-binding protein 1b; PDBTitle: active site restructuring regulates ligand recognition in2 classa penicillin-binding proteins (pbps)
22	d1mr1c	Alignment	not modelled	84.0	30	Fold: SAND domain-like Superfamily: SAND domain-like Family: SMAD4-binding domain of oncoprotein Ski
23	c3fwlA	Alignment	not modelled	82.9	16	PDB header: transferase, hydrolase Chain: A: PDB Molecule: penicillin-binding protein 1b; PDBTitle: crystal structure of the full-length transglycosylase pbp1b2 from escherichia coli
24	d2c5wb1	Alignment	not modelled	82.6	18	Fold: beta-lactamase/transpeptidase-like Superfamily: beta-lactamase/transpeptidase-like Family: beta-Lactamase/D-ala carboxypeptidase
25	c3dwcC	Alignment	not modelled	81.1	19	PDB header: transferase Chain: C: PDB Molecule: penicillin-binding protein 2; PDBTitle: identification of dynamic structural motifs involved in2 peptidoglycan glycosyltransfer
26	d2bg1a1	Alignment	not modelled	79.7	18	Fold: beta-lactamase/transpeptidase-like Superfamily: beta-lactamase/transpeptidase-like Family: beta-Lactamase/D-ala carboxypeptidase
27	c2wadB	Alignment	not modelled	78.0	21	PDB header: peptide binding protein Chain: B: PDB Molecule: penicillin-binding protein 2b; PDBTitle: penicillin-binding protein 2b (pbp-2b) from streptococcus2 pneumoniae (strain 5204)
28	c2jciA	Alignment	not modelled	77.9	19	PDB header: drug-binding protein Chain: A: PDB Molecule: penicillin-binding protein 1b; PDBTitle: structural insights into the catalytic mechanism and the2 role of streptococcus pneumoniae pbp1b
						PDB header: biosynthetic protein

29	c1mwuA	Alignment	not modelled	70.8	16	Chain: A: PDB Molecule: penicillin-binding protein 2a; PDBTitle: structure of methicillin acyl-penicillin binding protein 2a2 from methicillin resistant staphylococcus aureus strain3 27r at 2.60 a resolution.
30	c1t6sB	Alignment		63.6	9	PDB header: structural genomics, unknown function Chain: B: PDB Molecule: conserved hypothetical protein; PDBTitle: crystal structure of a conserved hypothetical protein from chlorobium2 tepidum
31	c2z99A	Alignment		63.2	16	PDB header: cell cycle Chain: A: PDB Molecule: putative uncharacterized protein; PDBTitle: crystal structure of scpb from mycobacterium tuberculosis
32	d2olu2	Alignment	not modelled	61.1	18	Fold: beta-lactamase/transpeptidase-like Superfamily: beta-lactamase/transpeptidase-like Family: beta-Lactamase/D-ala carboxypeptidase
33	c3dtkA	Alignment		52.0	31	PDB header: gene regulation Chain: A: PDB Molecule: irre protein; PDBTitle: crystal structure of the irre protein, a central regulator2 of dna damage repair in deinococcaceae
34	c2xftA	Alignment	not modelled	41.4	17	PDB header: hydrolase Chain: A: PDB Molecule: orf12; PDBTitle: structural and mechanistic studies on a cephalosporin esterase from2 the clavulanic acid biosynthesis pathway
35	c3gwrA	Alignment	not modelled	41.1	8	PDB header: protein binding Chain: A: PDB Molecule: putative calcium/calmodulin-dependent protein kinase type PDBTitle: crystal structure of putative calcium/calmodulin-dependent protein2 kinase type ii association domain (yp_315894.1) from thiobacillus3 denitrificans atcc 25259 at 2.00 a resolution
36	d3elga1	Alignment	not modelled	35.4	26	Fold: BLIP-like Superfamily: BT0923-like Family: BT0923-like
37	d1m6ka	Alignment	not modelled	32.8	14	Fold: beta-lactamase/transpeptidase-like Superfamily: beta-lactamase/transpeptidase-like Family: beta-Lactamase/D-ala carboxypeptidase
38	d1dy6a	Alignment	not modelled	31.4	19	Fold: beta-lactamase/transpeptidase-like Superfamily: beta-lactamase/transpeptidase-like Family: beta-Lactamase/D-ala carboxypeptidase
39	c2hcbC	Alignment	not modelled	30.4	35	PDB header: replication Chain: C: PDB Molecule: chromosomal replication initiator protein dnaa; PDBTitle: structure of amppcp-bound dnaa from aquifex aeolicus
40	c2dafA	Alignment	not modelled	28.1	35	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: flj35834 protein; PDBTitle: solution structure of the novel identified ubiquitin-like2 domain in the human hypothetical protein flj35834
41	c3k7cC	Alignment	not modelled	27.8	25	PDB header: protein binding Chain: C: PDB Molecule: putative nt2-like transpeptidase; PDBTitle: crystal structure of putative nt2-like transpeptidase (np_281412.1)2 from campylobacter jejuni at 2.00 a resolution
42	d2pf5a1	Alignment	not modelled	27.6	50	Fold: C-type lectin-like Superfamily: C-type lectin-like Family: Link domain
43	c1aduB	Alignment	not modelled	25.7	28	PDB header: dna-binding protein Chain: B: PDB Molecule: adenovirus single-stranded dna-binding protein; PDBTitle: early e2a dna-binding protein
44	c1wg8B	Alignment	not modelled	25.6	40	PDB header: transferase Chain: B: PDB Molecule: predicted s-adenosylmethionine-dependent PDBTitle: crystal structure of a predicted s-adenosylmethionine-2 dependent methyltransferase tt1512 from thermus3 thermophilus hb8.
45	c1m6yA	Alignment	not modelled	23.3	33	PDB header: transferase Chain: A: PDB Molecule: s-adenosyl-methyltransferase mraw; PDBTitle: crystal structure analysis of tm0872, a putative sam-2 dependent methyltransferase, complexed with sah
46	d3duea1	Alignment	not modelled	23.3	29	Fold: BLIP-like Superfamily: BT0923-like Family: BT0923-like
47	d3cnxa1	Alignment	not modelled	22.5	13	Fold: Cystatin-like Superfamily: NTF2-like Family: SAV4671-like
48	c1zb7A	Alignment	not modelled	20.2	28	PDB header: toxin Chain: A: PDB Molecule: neurotoxin; PDBTitle: crystal structure of botulinum neurotoxin type g light chain
49	d1l8qa2	Alignment	not modelled	18.4	35	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Extended AAA-ATPase domain
50	c3g5jA	Alignment	not modelled	18.3	18	PDB header: nucleotide binding protein Chain: A: PDB Molecule: putative atp/gtp binding protein; PDBTitle: crystal structure of n-terminal domain of putative atp/gtp binding2 protein from clostridium difficile 630

51	d1adta2	Alignment	not modelled	17.2	24	Fold: Zn-binding domains of ADDBP Superfamily: Zn-binding domains of ADDBP Family: Zn-binding domains of ADDBP
52	c3c0fB	Alignment	not modelled	14.3	32	PDB header: unknown function Chain: B: PDB Molecule: uncharacterized protein af_1514; PDBTitle: crystal structure of a novel non-pfam protein af1514 from archeoglobus2 fulgidus dsm 4304 solved by s-sad using a cr x-ray source
53	d1k25a4	Alignment	not modelled	13.7	23	Fold: beta-lactamase/transpeptidase-like Superfamily: beta-lactamase/transpeptidase-like Family: beta-Lactamase/D-ala carboxypeptidase
54	c3u1nC	Alignment	not modelled	13.3	23	PDB header: hydrolase Chain: C: PDB Molecule: sam domain and hd domain-containing protein 1; PDBTitle: structure of the catalytic core of human samhd1
55	d1t3ka	Alignment	not modelled	12.2	33	Fold: Rhodanese/Cell cycle control phosphatase Superfamily: Rhodanese/Cell cycle control phosphatase Family: Cell cycle control phosphatase, catalytic domain
56	c3fkaD	Alignment	not modelled	12.0	25	PDB header: unknown function Chain: D: PDB Molecule: uncharacterized ntf-2 like protein; PDBTitle: crystal structure of a ntf-2 like protein of unknown function2 (spo1084) from silicibacter pomeroyi dss-3 at 1.69 a resolution
57	c2c99A	Alignment	not modelled	11.7	21	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	d1kyfa2	Alignment	not modelled	11.7	26	Fold: Subdomain of clathrin and coatomer appendage domain Superfamily: Subdomain of clathrin and coatomer appendage domain Family: Clathrin adaptor appendage, alpha and beta chain-specific domain
59	d1jqna	Alignment	not modelled	11.7	21	Fold: TIM beta/alpha-barrel Superfamily: Phosphoenolpyruvate/pyruvate domain Family: Phosphoenolpyruvate carboxylase
60	c1xnjB	Alignment	not modelled	11.4	24	PDB header: transferase Chain: B: PDB Molecule: bifunctional 3'-phosphoadenosine 5'-phosphosulfate PDBTitle: aps complex of human paps synthetase 1
61	d2aq2b1	Alignment	not modelled	11.4	28	Fold: OB-fold Superfamily: Bacterial enterotoxins Family: Superantigen toxins, N-terminal domain
62	d1mhyd	Alignment	not modelled	11.0	18	Fold: Ferritin-like Superfamily: Ferritin-like Family: Ribonucleotide reductase-like
63	d1p5dx4	Alignment	not modelled	10.9	18	Fold: TBP-like Superfamily: Phosphoglucumutase, C-terminal domain Family: Phosphoglucumutase, C-terminal domain
64	c2jx8A	Alignment	not modelled	10.7	38	PDB header: transcription Chain: A: PDB Molecule: phosphorylated ctd-interacting factor 1; PDBTitle: solution structure of hpcif1 ww domain
65	d1whqa	Alignment	not modelled	10.4	28	Fold: dsRBD-like Superfamily: dsRNA-binding domain-like Family: Double-stranded RNA-binding domain (dsRBD)
66	c1jqoA	Alignment	not modelled	10.2	18	PDB header: lyase Chain: A: PDB Molecule: phosphoenolpyruvate carboxylase; PDBTitle: crystal structure of c4-form phosphoenolpyruvate carboxylase from2 maize
67	d1jqoa	Alignment	not modelled	10.2	18	Fold: TIM beta/alpha-barrel Superfamily: Phosphoenolpyruvate/pyruvate domain Family: Phosphoenolpyruvate carboxylase
68	c2r44A	Alignment	not modelled	10.1	21	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
69	c3nfiB	Alignment	not modelled	10.0	14	PDB header: dna binding protein, transcription Chain: B: PDB Molecule: dna-directed rna polymerase i subunit rpa49; PDBTitle: crystal structure of tandem winged helix domain of rna polymerase i2 subunit a49
70	c2givA	Alignment	not modelled	10.0	26	PDB header: transferase Chain: A: PDB Molecule: probable histone acetyltransferase myst1; PDBTitle: human myst histone acetyltransferase 1
71	d2giva1	Alignment	not modelled	10.0	26	Fold: Acyl-CoA N-acyltransferases (Nat) Superfamily: Acyl-CoA N-acyltransferases (Nat) Family: N-acetyl transferase, NAT
72	c3dukD	Alignment	not modelled	9.7	25	PDB header: unknown function Chain: D: PDB Molecule: ntf2-like protein of unknown function; PDBTitle: crystal structure of a ntf2-like protein of unknown function2 (mfla_0564) from methylobacillus flagellatus kt at 2.200 a resolution
73	d1qvra2	Alignment	not modelled	9.7	17	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Extended AAA-ATPase domain
74	c3hfkB	Alignment	not modelled	9.7	8	PDB header: isomerase Chain: B: PDB Molecule: 4-methylmuconolactone methylisomerase; PDBTitle: crystal structure of 4-methylmuconolactone methylisomerase2 (h52a) in complex with 4-methylmuconolactone
75	c3nhvE	Alignment	not modelled	9.6	21	PDB header: structural genomics, unknown function Chain: E: PDB Molecule: bh2092 protein; PDBTitle: crystal structure of bh2092 protein from bacillus halodurans,2 northeast structural genomics consortium target bhr228f

76	c3iukB		Alignment	not modelled	9.3	15	PDB header: structural genomics, unknown function Chain: B: PDB Molecule: uncharacterized protein; PDBTitle: crystal structure of putative bacterial protein of unknown function2 (duf885, pf05960.1,) from arthrobacter aureusens tc1, reveals fold3 similar to that of m32 carboxypeptidases
77	c2jofA		Alignment	not modelled	9.1	60	PDB header: de novo protein Chain: A: PDB Molecule: trp-cage; PDBTitle: the trp-cage: optimizing the stability of a globular2 mini protein
78	dlg8fa3		Alignment	not modelled	9.1	16	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: ATP sulfurylase C-terminal domain
79	c2q14A		Alignment	not modelled	9.0	23	PDB header: hydrolase Chain: A: PDB Molecule: phosphohydrolase; PDBTitle: crystal structure of a nt2-like protein of unknown function (bt4208) from bacteroides2 thetaiotaomicron vpi-5482 at 2.20 a resolution
80	c3f7sA		Alignment	not modelled	8.7	5	PDB header: unknown function Chain: A: PDB Molecule: uncharacterized nt2-like protein; PDBTitle: crystal structure of a nt2-like protein of unknown function (pp_4556)2 from pseudomonas putida kt2440 at 2.11 a resolution
81	dlfw8a		Alignment	not modelled	8.5	29	Fold: Phosphoglycerate kinase Superfamily: Phosphoglycerate kinase Family: Phosphoglycerate kinase
82	dlk82a2		Alignment	not modelled	8.4	17	Fold: N-terminal domain of MutM-like DNA repair proteins Superfamily: N-terminal domain of MutM-like DNA repair proteins Family: N-terminal domain of MutM-like DNA repair proteins
83	clwx4B		Alignment	not modelled	8.3	18	PDB header: oxidoreductase/metal transport Chain: B: PDB Molecule: melc; PDBTitle: crystal structure of the oxy-form of the copper-bound streptomyces2 castaneoglobisporus tyrosinase complexed with a caddie protein3 prepared by the addition of dithiothreitol
84	c2g7rA		Alignment	not modelled	8.3	36	PDB header: hydrolase Chain: A: PDB Molecule: mucosa-associated lymphoid tissue lymphoma translocation PDBTitle: x-ray structure of the death domain of the human mucosa associated2 lymphoid tissue lymphoma translocation protein 1
85	c2ee7A		Alignment	not modelled	8.2	20	PDB header: structural protein Chain: A: PDB Molecule: sperm flagellar protein 1; PDBTitle: solution structure of the ch domain from human sperm2 flagellar protein 1
86	dlfnua1		Alignment	not modelled	8.1	22	Fold: OB-fold Superfamily: Bacterial enterotoxins Family: Superantigen toxins, N-terminal domain
87	clc4gB		Alignment	not modelled	8.0	32	PDB header: transferase Chain: B: PDB Molecule: protein (alpha-d-glucose 1-phosphate PDBTitle: phosphoglucomutase vanadate based transition state analog2 complex
88	c2wuqA		Alignment	not modelled	7.8	16	PDB header: transcription Chain: A: PDB Molecule: beta-lactamase regulatory protein blab; PDBTitle: crystal structure of blab protein from streptomyces cacaio
89	dlyt8a4		Alignment	not modelled	7.8	16	Fold: Rhodanese/Cell cycle control phosphatase Superfamily: Rhodanese/Cell cycle control phosphatase Family: Multidomain sulfurtransferase (rhodanese)
90	d2bgca1		Alignment	not modelled	7.7	16	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: CAP C-terminal domain-like
91	c2bgcA		Alignment	not modelled	7.6	16	PDB header: transcription Chain: A: PDB Molecule: prfa; PDBTitle: prfa-g145s, a constitutive active mutant of the2 transcriptional regulator in l.monocytogenes
92	d2cb5a		Alignment	not modelled	7.5	27	Fold: Cysteine proteinases Superfamily: Cysteine proteinases Family: Papain-like
93	dlyt8a1		Alignment	not modelled	7.5	36	Fold: Rhodanese/Cell cycle control phosphatase Superfamily: Rhodanese/Cell cycle control phosphatase Family: Multidomain sulfurtransferase (rhodanese)
94	dlb24a2		Alignment	not modelled	7.5	26	Fold: Homing endonuclease-like Superfamily: Homing endonucleases Family: Group I mobile intron endonuclease
95	dle32a3		Alignment	not modelled	7.3	19	Fold: Cdc48 domain 2-like Superfamily: Cdc48 domain 2-like Family: Cdc48 domain 2-like
96	d2ux0a1		Alignment	not modelled	7.3	12	Fold: Cystatin-like Superfamily: NTF2-like Family: Association domain of calcium/calmodulin-dependent protein kinase type II alpha subunit, CAMK2A
97	d2f86b1		Alignment	not modelled	7.3	15	Fold: Cystatin-like Superfamily: NTF2-like Family: Association domain of calcium/calmodulin-dependent protein kinase type II alpha subunit, CAMK2A
98	c3nbxX		Alignment	not modelled	7.2	18	PDB header: hydrolase Chain: X: PDB Molecule: atpase rava; PDBTitle: crystal structure of e. coli rava (regulatory atpase variant a) in2 complex with adp
99	c3emeA		Alignment	not modelled	7.1	31	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: rhodanese-like domain protein; PDBTitle: crystal structure of rhodanese-like domain protein from2 staphylococcus aureus