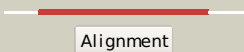

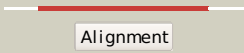







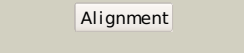

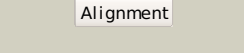

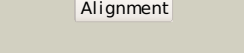



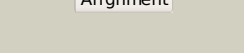

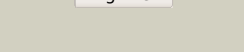












#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c2cliA_	 Alignment		100.0	22	PDB header: hydrolase Chain: A: PDB Molecule: peptidoglycan glcnac deacetylase; PDBTitle: structure of streptococcus pneumoniae peptidoglycan2 deacetylase (sppgda) d 275 n mutant.
2	c1w17A_	 Alignment		100.0	18	PDB header: hydrolase Chain: A: PDB Molecule: probable polysaccharide deacetylase pdaa; PDBTitle: structure of bacillus subtilis pdaa, a family 42 carbohydrate esterase.
3	dlnyla_	 Alignment		100.0	18	Fold: 7-stranded beta/alpha barrel Superfamily: Glycoside hydrolase/deacetylase Family: NodB-like polysaccharide deacetylase
4	dlz7aa1	 Alignment		100.0	19	Fold: 7-stranded beta/alpha barrel Superfamily: Glycoside hydrolase/deacetylase Family: PA1517-like
5	d2cc0a1	 Alignment		100.0	16	Fold: 7-stranded beta/alpha barrel Superfamily: Glycoside hydrolase/deacetylase Family: NodB-like polysaccharide deacetylase
6	c3qbuD_	 Alignment		100.0	20	PDB header: hydrolase Chain: D: PDB Molecule: putative uncharacterized protein; PDBTitle: crystal structure of putative peptidoglycan deacetylase (hp0310) from helicobacter pylori
7	d2iw0a1	 Alignment		100.0	22	Fold: 7-stranded beta/alpha barrel Superfamily: Glycoside hydrolase/deacetylase Family: NodB-like polysaccharide deacetylase
8	d2jl3a1	 Alignment		100.0	20	Fold: 7-stranded beta/alpha barrel Superfamily: Glycoside hydrolase/deacetylase Family: NodB-like polysaccharide deacetylase
9	c2vyoA_	 Alignment		100.0	17	PDB header: hydrolase Chain: A: PDB Molecule: chitooligosaccharide deacetylase; PDBTitle: chitin deacetylase family member from encephalitozoon2 cuniculi
10	c3s6oD_	 Alignment		100.0	18	PDB header: hydrolase Chain: D: PDB Molecule: polysaccharide deacetylase family protein; PDBTitle: crystal structure of a polysaccharide deacetylase family protein from burkholderia pseudomallei
11	c2w3zA_	 Alignment		100.0	21	PDB header: hydrolase Chain: A: PDB Molecule: putative deacetylase; PDBTitle: structure of a streptococcus mutans ce4 esterase

12	d2c1ia1	Alignment		100.0	22	Fold: 7-stranded beta/alpha barrel Superfamily: Glycoside hydrolase/deacetylase Family: NodB-like polysaccharide deacetylase
13	c2iw0A_	Alignment		100.0	20	PDB header: hydrolase Chain: A: PDB Molecule: chitin deacetylase; PDBTitle: structure of the chitin deacetylase from the fungal2 pathogen colletotrichum lindemuthianum
14	d2c71a1	Alignment		100.0	18	Fold: 7-stranded beta/alpha barrel Superfamily: Glycoside hydrolase/deacetylase Family: NodB-like polysaccharide deacetylase
15	c3rxzA_	Alignment		100.0	26	PDB header: hydrolase Chain: A: PDB Molecule: polysaccharide deacetylase; PDBTitle: crystal structure of putative polysaccharide deacetylase from2 mycobacterium smegmatis
16	d2nlva1	Alignment		100.0	16	Fold: 7-stranded beta/alpha barrel Superfamily: Glycoside hydrolase/deacetylase Family: Divergent polysaccharide deacetylase
17	d1k1xa3	Alignment		99.4	16	Fold: 7-stranded beta/alpha barrel Superfamily: Glycoside hydrolase/deacetylase Family: 4-alpha-glucanotransferase, N-terminal domain
18	c1k1vA_	Alignment		99.0	16	PDB header: transferase Chain: A: PDB Molecule: 4-alpha-glucanotransferase; PDBTitle: crystal structure of thermococcus litoralis 4-alpha-glucanotransferase2 complexed with acarbose
19	c2b5dX_	Alignment		99.0	15	PDB header: hydrolase Chain: X: PDB Molecule: alpha-amylase; PDBTitle: crystal structure of the novel alpha-amylase amyc from thermotoga2 maritima
20	d2b5dx2	Alignment		98.9	13	Fold: 7-stranded beta/alpha barrel Superfamily: Glycoside hydrolase/deacetylase Family: AmyC N-terminal domain-like
21	c3hftA_	Alignment	not modelled	98.8	15	PDB header: hydrolase Chain: A: PDB Molecule: wbms, polysaccharide deacetylase involved in o-antigen PDBTitle: crystal structure of a putative polysaccharide deacetylase involved in2 o-antigen biosynthesis (wbms, bb0128) from bordetella bronchiseptica3 at 1.90 a resolution
22	d1ufaa2	Alignment	not modelled	98.6	24	Fold: 7-stranded beta/alpha barrel Superfamily: Glycoside hydrolase/deacetylase Family: AmyC N-terminal domain-like
23	c2qv5A_	Alignment	not modelled	98.5	16	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: uncharacterized protein atu2773; PDBTitle: crystal structure of uncharacterized protein atu2773 from2 agrobacterium tumefaciens c58
24	c1ufaA_	Alignment	not modelled	98.3	18	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: tt1467 protein; PDBTitle: crystal structure of tt1467 from thermus thermophilus hb8
25	c3n92A_	Alignment	not modelled	98.2	23	PDB header: transferase Chain: A: PDB Molecule: alpha-amylase, gh57 family; PDBTitle: crystal structure of tk1436, a gh57 branching enzyme from2 hyperthermophilic archaeon thermococcus kodakaraensis, in complex3 with glucose
26	c2wyhA_	Alignment	not modelled	95.7	10	PDB header: hydrolase Chain: A: PDB Molecule: alpha-mannosidase; PDBTitle: structure of the streptococcus pyogenes family gh38 alpha-2 mannosidase
27	d1v6ta_	Alignment	not modelled	94.8	17	Fold: 7-stranded beta/alpha barrel Superfamily: Glycoside hydrolase/deacetylase Family: LamB/YcsF-like
						Fold: 7-stranded beta/alpha barrel

28	d2i5ia1	Alignment	not modelled	89.9	12	Superfamily: Glycoside hydrolase/deacetylase Family: YdjC-like
29	c1htyA	Alignment	not modelled	88.2	10	PDB header: hydrolase Chain: A: PDB Molecule: alpha-mannosidase ii; PDBTitle: golgi alpha-mannosidase ii
30	d3bvua3	Alignment	not modelled	79.8	11	Fold: 7-stranded beta/alpha barrel Superfamily: Glycoside hydrolase/deacetylase Family: alpha-mannosidase
31	c1o7dA	Alignment	not modelled	79.4	14	PDB header: hydrolase Chain: A: PDB Molecule: lysosomal alpha-mannosidase; PDBTitle: the structure of the bovine lysosomal a-mannosidase2 suggests a novel mechanism for low ph activation
32	c2ow7A	Alignment	not modelled	76.3	12	PDB header: hydrolase Chain: A: PDB Molecule: alpha-mannosidase 2; PDBTitle: golgi alpha-mannosidase ii complex with (1r,6s,7r,8s)-1-2 thioniabicyclo[4.3.0]nonan-7,8-diol chloride
33	c3k2gA	Alignment	not modelled	74.4	16	PDB header: resiniferatoxin binding protein Chain: A: PDB Molecule: resiniferatoxin-binding, phosphotriesterase- PDBTitle: crystal structure of a resiniferatoxin-binding protein from2 rhodobacter sphaeroides
34	d1tqha	Alignment	not modelled	56.8	13	Fold: alpha/beta-Hydrolases Superfamily: alpha/beta-Hydrolases Family: Carboxylesterase/lipase
35	d1dxqa	Alignment	not modelled	55.0	10	Fold: Flavodoxin-like Superfamily: Flavoproteins Family: Quinone reductase
36	d2qwxal	Alignment	not modelled	50.3	15	Fold: Flavodoxin-like Superfamily: Flavoproteins Family: Quinone reductase
37	d1xkla	Alignment	not modelled	50.2	17	Fold: alpha/beta-Hydrolases Superfamily: alpha/beta-Hydrolases Family: Hydroxynitrile lyase-like
38	c2qiwa	Alignment	not modelled	50.0	13	PDB header: transferase Chain: A: PDB Molecule: pep phosphonmutase; PDBTitle: crystal structure of a putative phosphoenolpyruvate phosphonmutase2 (ncgl1015, cgl1060) from corynebacterium glutamicum atcc 13032 at3 1.80 a resolution
39	c3dqzB	Alignment	not modelled	48.3	11	PDB header: lyase Chain: B: PDB Molecule: alpha-hydroxynitrile lyase-like protein; PDBTitle: structure of the hydroxynitrile lyase from arabidopsis2 thaliana
40	d1xjca	Alignment	not modelled	47.9	16	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Nitrogenase iron protein-like
41	d1qrda	Alignment	not modelled	42.5	13	Fold: Flavodoxin-like Superfamily: Flavoproteins Family: Quinone reductase
42	c3dyvA	Alignment	not modelled	41.4	11	PDB header: hydrolase Chain: A: PDB Molecule: esterase d; PDBTitle: snapshots of esterase d from lactobacillus rhamnosus:2 insights into a rotation driven catalytic mechanism
43	d2dfaa1	Alignment	not modelled	41.1	14	Fold: 7-stranded beta/alpha barrel Superfamily: Glycoside hydrolase/deacetylase Family: LamB/YcsF-like
44	d3c70a1	Alignment	not modelled	40.0	18	Fold: alpha/beta-Hydrolases Superfamily: alpha/beta-Hydrolases Family: Hydroxynitrile lyase-like
45	c2x5eA	Alignment	not modelled	35.5	18	PDB header: unknown function Chain: A: PDB Molecule: upf0271 protein pa4511; PDBTitle: crystal structure of the hypothetical protein pa4511 from2 pseudomonas aeruginosa
46	d1d4aa	Alignment	not modelled	34.4	12	Fold: Flavodoxin-like Superfamily: Flavoproteins Family: Quinone reductase
47	c3gzjB	Alignment	not modelled	32.3	12	PDB header: hydrolase Chain: B: PDB Molecule: polynuridine-aldehyde esterase; PDBTitle: crystal structure of polynuridine aldehyde esterase2 complexed with 16-epi-vellousimine
48	d1e89a	Alignment	not modelled	32.2	18	Fold: alpha/beta-Hydrolases Superfamily: alpha/beta-Hydrolases Family: Hydroxynitrile lyase-like
49	c2vdaA	Alignment	not modelled	31.9	18	PDB header: protein transport Chain: A: PDB Molecule: translocase subunit seca; PDBTitle: solution structure of the seca-signal peptide complex
50	c1nl3B	Alignment	not modelled	28.8	21	PDB header: protein transport Chain: B: PDB Molecule: preprotein translocase seca 1 subunit; PDBTitle: crystal structure of the seca protein translocation atpase2 from mycobacterium tuberculosis in apo form
51	d1x8da1	Alignment	not modelled	28.0	21	Fold: Ferredoxin-like Superfamily: Dimeric alpha+beta barrel Family: YjiL-like
52	c2ipcB	Alignment	not modelled	27.9	18	PDB header: transport protein Chain: B: PDB Molecule: preprotein translocase seca subunit; PDBTitle: crystal structure of the translocation atpase seca from thermus2 thermophilus reveals a parallel, head-to-head dimer
53	c3dinB	Alignment	not modelled	25.1	18	PDB header: membrane protein, protein transport Chain: B: PDB Molecule: protein translocase subunit seca; PDBTitle: crystal structure of the protein-translocation complex formed by the2 secy channel and the seca atpase
54	d1pnea	Alignment	not modelled	24.3	7	Fold: Profilin-like Superfamily: Profilin (actin-binding protein)

						Family: Profilin (actin-binding protein)
55	c3juxA	Alignment	not modelled	24.2	18	PDB header: protein transport Chain: A: PDB Molecule: protein translocase subunit seca; PDBTitle: structure of the translocation atpase seca from thermotoga2 maritima
56	d2pbdp1	Alignment	not modelled	23.3	7	Fold: Profilin-like Superfamily: Profilin (actin-binding protein) Family: Profilin (actin-binding protein)
57	c1u2eA	Alignment	not modelled	22.8	17	PDB header: hydrolase Chain: A: PDB Molecule: 2-hydroxy-6-ketonona-2,4-dienedioic acid PDBTitle: crystal structure of the c-c bond hydrolase mhpc
58	c2k6xA	Alignment	not modelled	20.7	12	PDB header: transcription Chain: A: PDB Molecule: rna polymerase sigma factor rpod; PDBTitle: autoregulation of a group 1 bacterial sigma factor involves2 the formation of a region 1.1- induced compacted structure
59	c3lvtA	Alignment	not modelled	20.6	4	PDB header: hydrolase Chain: A: PDB Molecule: glycosyl hydrolase, family 38; PDBTitle: the crystal structure of a protein in the glycosyl hydrolase2 family 38 from enterococcus faecalis to 2.55a
60	c3fobA	Alignment	not modelled	20.4	16	PDB header: oxidoreductase Chain: A: PDB Molecule: bromoperoxidase; PDBTitle: crystal structure of bromoperoxidase from bacillus anthracis
61	d1jmsa4	Alignment	not modelled	20.3	11	Fold: Nucleotidyltransferase Superfamily: Nucleotidyltransferase Family: DNA polymerase beta-like
62	d1xw8a	Alignment	not modelled	19.6	18	Fold: 7-stranded beta/alpha barrel Superfamily: Glycoside hydrolase/deacetylase Family: LamB/YcsF-like
63	d1a8sa	Alignment	not modelled	18.4	14	Fold: alpha/beta-Hydrolases Superfamily: alpha/beta-Hydrolases Family: Haloperoxidase
64	d1prtf	Alignment	not modelled	18.2	21	Fold: OB-fold Superfamily: Bacterial enterotoxins Family: Bacterial AB5 toxins, B-subunits
65	d1r57a	Alignment	not modelled	17.9	11	Fold: Acyl-CoA N-acyltransferases (Nat) Superfamily: Acyl-CoA N-acyltransferases (Nat) Family: N-acetyl transferase, NAT
66	c2qlxA	Alignment	not modelled	17.8	26	PDB header: isomerase Chain: A: PDB Molecule: l-rhamnose mutarotase; PDBTitle: crystal structure of rhamnose mutarotase rhau of rhizobium2 leguminosarum in complex with l-rhamnose
67	c2qlwA	Alignment	not modelled	17.8	26	PDB header: isomerase Chain: A: PDB Molecule: rhau; PDBTitle: crystal structure of rhamnose mutarotase rhau of rhizobium2 leguminosarum
68	c3mlyA	Alignment	not modelled	17.3	14	PDB header: hydrolase Chain: A: PDB Molecule: phosphoserine phosphatase (serb); PDBTitle: crystal structure of a phosphoserine phosphatase (serb) from2 helicobacter pylori
69	d1brta	Alignment	not modelled	17.1	16	Fold: alpha/beta-Hydrolases Superfamily: alpha/beta-Hydrolases Family: Haloperoxidase
70	d1vp8a	Alignment	not modelled	16.8	9	Fold: Pyruvate kinase C-terminal domain-like Superfamily: PK C-terminal domain-like Family: MTH1675-like
71	d1a8qa	Alignment	not modelled	16.7	24	Fold: alpha/beta-Hydrolases Superfamily: alpha/beta-Hydrolases Family: Haloperoxidase
72	d1uk8a	Alignment	not modelled	16.3	18	Fold: alpha/beta-Hydrolases Superfamily: alpha/beta-Hydrolases Family: Carbon-carbon bond hydrolase
73	d1va4a	Alignment	not modelled	16.0	14	Fold: alpha/beta-Hydrolases Superfamily: alpha/beta-Hydrolases Family: Haloperoxidase
74	d1c4xa	Alignment	not modelled	15.6	13	Fold: alpha/beta-Hydrolases Superfamily: alpha/beta-Hydrolases Family: Carbon-carbon bond hydrolase
75	c3u1tA	Alignment	not modelled	15.4	14	PDB header: hydrolase Chain: A: PDB Molecule: dmma haloalkane dehalogenase; PDBTitle: haloalkane dehalogenase, dmma, of marine microbial origin
76	d1r3da	Alignment	not modelled	15.3	16	Fold: alpha/beta-Hydrolases Superfamily: alpha/beta-Hydrolases Family: Hypothetical protein VC1974
77	d1l7da2	Alignment	not modelled	14.3	7	Fold: Flavodoxin-like Superfamily: Formate/glycerate dehydrogenase catalytic domain-like Family: L-alanine dehydrogenase-like
78	d1s2oa1	Alignment	not modelled	14.0	15	Fold: HAD-like Superfamily: HAD-like Family: Predicted hydrolases Cof
79	d1b6ga	Alignment	not modelled	13.8	13	Fold: alpha/beta-Hydrolases Superfamily: alpha/beta-Hydrolases Family: Haloalkane dehalogenase
80	d1t57a	Alignment	not modelled	13.8	15	Fold: Pyruvate kinase C-terminal domain-like Superfamily: PK C-terminal domain-like Family: MTH1675-like
						PDB header: oxidoreductase

81	c3dnfB	Alignment	not modelled	13.5	21	Chain: B: PDB Molecule: 4-hydroxy-3-methylbut-2-enyl diphosphate reductase; PDBTitle: structure of (e)-4-hydroxy-3-methyl-but-2-enyl diphosphate reductase,2 the terminal enzyme of the non-mevalonate pathway
82	c3rhgA	Alignment	not modelled	13.1	14	PDB header: hydrolase Chain: A: PDB Molecule: putative phosphotriesterase; PDBTitle: crystal structure of amidohydrolase pmi1525 (target efi-500319) from2 proteus mirabilis hi4320
83	c2cjpA	Alignment	not modelled	13.0	16	PDB header: hydrolase Chain: A: PDB Molecule: epoxide hydrolase; PDBTitle: structure of potato (solanum tuberosum) epoxide hydrolase i2 (steh1)
84	d2c7fa2	Alignment	not modelled	12.9	13	Fold: TIM beta/alpha-barrel Superfamily: (Trans)glycosidases Family: beta-glycanases
85	d1hkha	Alignment	not modelled	12.7	16	Fold: alpha/beta-Hydrolases Superfamily: alpha/beta-Hydrolases Family: Haloperoxidase
86	c2wtaA	Alignment	not modelled	12.2	20	PDB header: hydrolase Chain: A: PDB Molecule: nicotinamidase; PDBTitle: acinetobacter baumannii nicotinamidase pyrazinamidase
87	c2e3jA	Alignment	not modelled	11.7	15	PDB header: hydrolase Chain: A: PDB Molecule: epoxide hydrolase ephb; PDBTitle: the crystal structure of epoxide hydrolase b (rv1938) from2 mycobacterium tuberculosis at 2.1 angstrom
88	c3obeB	Alignment	not modelled	11.7	9	PDB header: isomerase Chain: B: PDB Molecule: sugar phosphate isomerase/epimerase; PDBTitle: crystal structure of a sugar phosphate isomerase/epimerase (bdi_3400)2 from parabacteroides distasonis atcc 8503 at 1.70 a resolution
89	c1vjgB	Alignment	not modelled	11.6	23	PDB header: structural genomics, de novo protein Chain: B: PDB Molecule: designed protein; PDBTitle: designed protein based on backbone conformation of2 procarboxypeptidase-a (1aye) with sidechains chosen for maximal3 predicted stability.
90	d1yqea1	Alignment	not modelled	11.6	14	Fold: Phosphorylase/hydrolase-like Superfamily: AF0625-like Family: AF0625-like
91	d2rhwA1	Alignment	not modelled	11.6	15	Fold: alpha/beta-Hydrolases Superfamily: alpha/beta-Hydrolases Family: Carbon-carbon bond hydrolase
92	d1ufoa	Alignment	not modelled	11.5	13	Fold: alpha/beta-Hydrolases Superfamily: alpha/beta-Hydrolases Family: Hypothetical protein TT1662
93	d1pava	Alignment	not modelled	10.8	14	Fold: IF3-like Superfamily: SirA-like Family: SirA-like
94	d1p6va	Alignment	not modelled	10.7	23	Fold: Small protein B (SmpB) Superfamily: Small protein B (SmpB) Family: Small protein B (SmpB)
95	c3kc2A	Alignment	not modelled	10.7	27	PDB header: hydrolase Chain: A: PDB Molecule: uncharacterized protein ykr070w; PDBTitle: crystal structure of mitochondrial had-like phosphatase from2 saccharomyces cerevisiae
96	c2xt0A	Alignment	not modelled	10.6	16	PDB header: hydrolase Chain: A: PDB Molecule: haloalkane dehalogenase; PDBTitle: dehalogenase dppa from plasiocystis pacifica sir-i
97	c2xfyA	Alignment	not modelled	10.3	20	PDB header: hydrolase Chain: A: PDB Molecule: beta-amylase; PDBTitle: crystal structure of barley beta-amylase complexed with2 alpha-cyclodextrin
98	c1cr6A	Alignment	not modelled	10.2	16	PDB header: hydrolase Chain: A: PDB Molecule: epoxide hydrolase; PDBTitle: crystal structure of murine soluble epoxide hydrolase2 complexed with cpu inhibitor
99	d1zd3a2	Alignment	not modelled	10.1	19	Fold: alpha/beta-Hydrolases Superfamily: alpha/beta-Hydrolases Family: Epoxide hydrolase