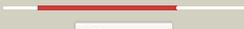
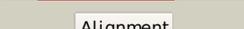
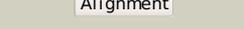


Phyre2

Email	l.a.kelley@imperial.ac.uk
Description	P75820
Date	Thu Jan 5 12:14:33 GMT 2012
Unique Job ID	4f32390b5bfb1010

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c2bh7A_	 Alignment		100.0	99	PDB header: hydrolase Chain: A; PDB Molecule: n-acetylmuramoyl-L-alanine amidase; PDBTitle: crystal structure of a semet derivative of amid at 2.22 angstroms
2	d2bqxa2	 Alignment		100.0	100	Fold: N-acetylmuramoyl-L-alanine amidase-like Superfamily: N-acetylmuramoyl-L-alanine amidase-like Family: N-acetylmuramoyl-L-alanine amidase-like
3	dlj3ga_	 Alignment		100.0	35	Fold: N-acetylmuramoyl-L-alanine amidase-like Superfamily: N-acetylmuramoyl-L-alanine amidase-like Family: N-acetylmuramoyl-L-alanine amidase-like
4	c3hmaA_	 Alignment		100.0	28	PDB header: hydrolase Chain: A; PDB Molecule: n-acetylmuramoyl-L-alanine amidase xly;a; PDBTitle: amidase from bacillus subtilis
5	d1yb0a1	 Alignment		100.0	22	Fold: N-acetylmuramoyl-L-alanine amidase-like Superfamily: N-acetylmuramoyl-L-alanine amidase-like Family: N-acetylmuramoyl-L-alanine amidase-like
6	d1ycka1	 Alignment		100.0	24	Fold: N-acetylmuramoyl-L-alanine amidase-like Superfamily: N-acetylmuramoyl-L-alanine amidase-like Family: N-acetylmuramoyl-L-alanine amidase-like
7	d2cb3a1	 Alignment		100.0	15	Fold: N-acetylmuramoyl-L-alanine amidase-like Superfamily: N-acetylmuramoyl-L-alanine amidase-like Family: N-acetylmuramoyl-L-alanine amidase-like
8	d1sk4a_	 Alignment		100.0	18	Fold: N-acetylmuramoyl-L-alanine amidase-like Superfamily: N-acetylmuramoyl-L-alanine amidase-like Family: N-acetylmuramoyl-L-alanine amidase-like
9	c2xz4A_	 Alignment		99.9	19	PDB header: immune system Chain: A; PDB Molecule: peptidoglycan-recognition protein If; PDBTitle: crystal structure of the Ifz ectodomain of the2 peptidoglycan recognition protein If
10	d1lbaa_	 Alignment		99.9	27	Fold: N-acetylmuramoyl-L-alanine amidase-like Superfamily: N-acetylmuramoyl-L-alanine amidase-like Family: N-acetylmuramoyl-L-alanine amidase-like
11	c2rkqA_	 Alignment		99.9	19	PDB header: immune system Chain: A; PDB Molecule: peptidoglycan-recognition protein-sd; PDBTitle: crystal structure of drosophila peptidoglycan recognition2 protein sd (pgpr-sd)

12	c1ohtA_	Alignment		99.9	14	PDB header: hydrolase Chain: A: PDB Molecule: cg14704 protein; PDBTitle: peptidoglycan recognition protein-lb
13	d1ohta_	Alignment		99.9	14	Fold: N-acetylmuramoyl-L-alanine amidase-like Superfamily: N-acetylmuramoyl-L-alanine amidase-like Family: N-acetylmuramoyl-L-alanine amidase-like
14	d2f2lx1	Alignment		99.9	20	Fold: N-acetylmuramoyl-L-alanine amidase-like Superfamily: N-acetylmuramoyl-L-alanine amidase-like Family: N-acetylmuramoyl-L-alanine amidase-like
15	d1sxra_	Alignment		99.9	16	Fold: N-acetylmuramoyl-L-alanine amidase-like Superfamily: N-acetylmuramoyl-L-alanine amidase-like Family: N-acetylmuramoyl-L-alanine amidase-like
16	c3latB_	Alignment		99.9	26	PDB header: hydrolase Chain: B: PDB Molecule: bifunctional autolysin; PDBTitle: crystal structure of staphylococcus peptidoglycan hydrolase2 amie
17	c1s2jA_	Alignment		99.9	15	PDB header: hydrolase Chain: A: PDB Molecule: peptidoglycan recognition protein sa cg11709-pa; PDBTitle: crystal structure of the drosophila pattern-recognition2 receptor pgrp-sa
18	d2f2la1	Alignment		99.9	12	Fold: N-acetylmuramoyl-L-alanine amidase-like Superfamily: N-acetylmuramoyl-L-alanine amidase-like Family: N-acetylmuramoyl-L-alanine amidase-like
19	d2bgxa1	Alignment		99.9	100	Fold: PGBD-like Superfamily: PGBD-like Family: Peptidoglycan binding domain, PGBD
20	c3ep1B_	Alignment		99.9	19	PDB header: immune system Chain: B: PDB Molecule: pgrp-hd - peptidoglycan recognition protein PDBTitle: structure of the pgrp-hd from alvinella pompejana
21	c2xz8A_	Alignment	not modelled	99.2	13	PDB header: immune system Chain: A: PDB Molecule: peptidoglycan-recognition protein lf; PDBTitle: crystal structure of the lfw ectodomain of the2 peptidoglycan recognition protein lf
22	c3bkhA_	Alignment	not modelled	99.0	22	PDB header: hydrolase Chain: A: PDB Molecule: lytic transglycosylase; PDBTitle: crystal structure of the bacteriophage phikz lytic2 transglycosylase, gp144
23	d1lbuA1	Alignment	not modelled	98.9	14	Fold: PGBD-like Superfamily: PGBD-like Family: Peptidoglycan binding domain, PGBD
24	c1lbuA_	Alignment	not modelled	98.8	14	PDB header: hydrolase Chain: A: PDB Molecule: muramoyl-pentapeptide carboxypeptidase; PDBTitle: hydrolase metallo (zn) dd-peptidase
25	d1eaka1	Alignment	not modelled	97.3	17	Fold: PGBD-like Superfamily: PGBD-like Family: MMP N-terminal domain
26	d1su3a1	Alignment	not modelled	96.5	21	Fold: PGBD-like Superfamily: PGBD-like Family: MMP N-terminal domain
27	d1slma1	Alignment	not modelled	96.4	22	Fold: PGBD-like Superfamily: PGBD-like Family: MMP N-terminal domain
28	d1l6ja1	Alignment	not modelled	96.3	24	Fold: PGBD-like Superfamily: PGBD-like Family: MMP N-terminal domain
						PDB header: hydrolase/hydrolase inhibitor

29	c1eakA	Alignment	not modelled	96.3	17	Chain: A: PDB Molecule: 72 kda type iv collagenase; PDBTitle: catalytic domain of prommp-2 e404q mutant
30	c1l6jA	Alignment	not modelled	95.9	25	PDB header: hydrolase Chain: A: PDB Molecule: matrix metalloproteinase-9; PDBTitle: crystal structure of human matrix metalloproteinase mmp92 (gelatinase b).
31	c1gxdA	Alignment	not modelled	92.2	16	PDB header: hydrolase Chain: A: PDB Molecule: 72 kda type iv collagenase; PDBTitle: prommp-2/timp-2 complex
32	c3ds8A	Alignment	not modelled	64.6	17	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: lin2722 protein; PDBTitle: the crystal structure of the gene lin2722 products from listeria2 innocua
33	c3d0kA	Alignment	not modelled	55.6	15	PDB header: hydrolase Chain: A: PDB Molecule: putative poly(3-hydroxybutyrate) depolymerase lpqc; PDBTitle: crystal structure of the lpqc, poly(3-hydroxybutyrate) depolymerase2 from bordetella parapertussis
34	d2ikba1	Alignment	not modelled	55.4	14	Fold: Lysozyme-like Superfamily: Lysozyme-like Family: NMB1012-like
35	c1cr6A	Alignment	not modelled	40.1	13	PDB header: hydrolase Chain: A: PDB Molecule: epoxide hydrolase; PDBTitle: crystal structure of murine soluble epoxide hydrolase2 complexed with cpu inhibitor
36	d2nr7a1	Alignment	not modelled	39.4	21	Fold: Lysozyme-like Superfamily: Lysozyme-like Family: NMB1012-like
37	c2zycA	Alignment	not modelled	37.4	23	PDB header: hydrolase Chain: A: PDB Molecule: peptidoglycan hydrolase flgj; PDBTitle: crystal structure of peptidoglycan hydrolase from2 sphingomonas sp. a1
38	c3so4C	Alignment	not modelled	37.0	18	PDB header: transferase Chain: C: PDB Molecule: methionine-adenosyltransferase; PDBTitle: methionine-adenosyltransferase from entamoeba histolytica
39	c3fi7A	Alignment	not modelled	35.5	27	PDB header: hydrolase Chain: A: PDB Molecule: lmo1076 protein; PDBTitle: crystal structure of the autolysin auto (lmo1076) from listeria2 monocytogenes, catalytic domain
40	c3imlB	Alignment	not modelled	34.9	23	PDB header: transferase Chain: B: PDB Molecule: s-adenosylmethionine synthetase; PDBTitle: crystal structure of s-adenosylmethionine synthetase from burkholderia2 pseudomallei
41	d2dsta1	Alignment	not modelled	34.9	15	Fold: alpha/beta-Hydrolases Superfamily: alpha/beta-Hydrolases Family: TTHA1544-like
42	c3fleB	Alignment	not modelled	34.6	14	PDB header: structural genomics, unknown function Chain: B: PDB Molecule: se_1780 protein; PDBTitle: se_1780 protein of unknown function from staphylococcus epidermidis.
43	c2y96A	Alignment	not modelled	34.0	12	PDB header: hydrolase Chain: A: PDB Molecule: dual specificity phosphatase dupd1; PDBTitle: structure of human dual-specificity phosphatase 27
44	d1mxaa3	Alignment	not modelled	32.4	29	Fold: S-adenosylmethionine synthetase Superfamily: S-adenosylmethionine synthetase Family: S-adenosylmethionine synthetase
45	c3mlcC	Alignment	not modelled	31.5	12	PDB header: isomerase Chain: C: PDB Molecule: fg41 malonate semialdehyde decarboxylase; PDBTitle: crystal structure of fg41msad inactivated by 3-chloropropionate
46	d1hpla2	Alignment	not modelled	30.5	16	Fold: alpha/beta-Hydrolases Superfamily: alpha/beta-Hydrolases Family: Pancreatic lipase, N-terminal domain
47	d3b5ea1	Alignment	not modelled	30.2	10	Fold: alpha/beta-Hydrolases Superfamily: alpha/beta-Hydrolases Family: Carboxylesterase/thioesterase 1
48	c3lyfB	Alignment	not modelled	30.0	24	PDB header: viral protein Chain: B: PDB Molecule: nucleocapsid protein; PDBTitle: crystal structure of the rift valley fever virus nucleocapsid protein
49	c3lp5A	Alignment	not modelled	29.4	21	PDB header: hydrolase Chain: A: PDB Molecule: putative cell surface hydrolase; PDBTitle: the crystal structure of the putative cell surface hydrolase from2 lactobacillus plantarum wcfs1
50	c2vavL	Alignment	not modelled	27.8	18	PDB header: transferase Chain: L: PDB Molecule: acetyl-coa--deacetylcephalosporin c PDBTitle: crystal structure of deacetylcephalosporin c2 acetyltransferase (dac-soak)
51	d1k8qa	Alignment	not modelled	26.8	16	Fold: alpha/beta-Hydrolases Superfamily: alpha/beta-Hydrolases Family: Gastric lipase
52	c2pplA	Alignment	not modelled	24.5	12	PDB header: hydrolase Chain: A: PDB Molecule: pancreatic lipase-related protein 1; PDBTitle: human pancreatic lipase-related protein 1
53	c1gp1A	Alignment	not modelled	23.9	20	PDB header: serine esterase Chain: A: PDB Molecule: rp2 lipase; PDBTitle: rp2 lipase
54	d1etha2	Alignment	not modelled	23.6	16	Fold: alpha/beta-Hydrolases Superfamily: alpha/beta-Hydrolases Family: Pancreatic lipase, N-terminal domain
55	d2hia1	Alignment	not modelled	23.4	10	Fold: alpha/beta-Hydrolases Superfamily: alpha/beta-Hydrolases

						Family:Carboxylesterase/thioesterase 1
56	dlrp1a2	Alignment	not modelled	23.4	16	Fold: alpha/beta-Hydrolases Superfamily: alpha/beta-Hydrolases Family: Pancreatic lipase, N-terminal domain
57	d1ppb2	Alignment	not modelled	23.4	16	Fold: alpha/beta-Hydrolases Superfamily: alpha/beta-Hydrolases Family: Pancreatic lipase, N-terminal domain
58	d1bu8a2	Alignment	not modelled	23.0	20	Fold: alpha/beta-Hydrolases Superfamily: alpha/beta-Hydrolases Family: Pancreatic lipase, N-terminal domain
59	c2pvsB	Alignment	not modelled	22.4	16	PDB header: hydrolase Chain: B: PDB Molecule: pancreatic lipase-related protein 2; PDBTitle: structure of human pancreatic lipase related protein 22 mutant n336q
60	c1hplB	Alignment	not modelled	21.1	16	PDB header: hydrolase(carboxylic esterase) Chain: B: PDB Molecule: lipase; PDBTitle: horse pancreatic lipase. the crystal structure at 2.32 angstroms resolution
61	c1rp1A	Alignment	not modelled	20.9	16	PDB header: hydrolase Chain: A: PDB Molecule: pancreatic lipase related protein 1; PDBTitle: dog pancreatic lipase related protein 1
62	c3abqA	Alignment	not modelled	20.6	20	PDB header: lyase Chain: A: PDB Molecule: ethanolamine ammonia-lyase heavy chain; PDBTitle: crystal structure of ethanolamine ammonia-lyase from escherichia coli2 complexed with cn-cbl and 2-amino-1-propanol
63	c3rv2B	Alignment	not modelled	19.8	29	PDB header: transferase Chain: B: PDB Molecule: s-adenosylmethionine synthase; PDBTitle: crystal structure of s-adenosylmethionine synthetase from2 mycobacterium marinum
64	c2zyiB	Alignment	not modelled	19.7	14	PDB header: hydrolase Chain: B: PDB Molecule: lipase, putative; PDBTitle: a. fulgidus lipase with fatty acid fragment and calcium
65	d1cvla	Alignment	not modelled	19.6	14	Fold: alpha/beta-Hydrolases Superfamily: alpha/beta-Hydrolases Family: Bacterial lipase
66	d1gpla2	Alignment	not modelled	18.9	20	Fold: alpha/beta-Hydrolases Superfamily: alpha/beta-Hydrolases Family: Pancreatic lipase, N-terminal domain
67	c3rgiA	Alignment	not modelled	18.7	13	PDB header: transferase Chain: A: PDB Molecule: disd protein; PDBTitle: trans-acting transferase from disorazole synthase
68	c2qtsA	Alignment	not modelled	18.5	24	PDB header: membrane protein Chain: A: PDB Molecule: acid-sensing ion channel; PDBTitle: structure of an acid-sensing ion channel 1 at 1.9 a resolution and low2 ph
69	d2aala1	Alignment	not modelled	18.3	13	Fold: Tautomerase/MIF Superfamily: Tautomerase/MIF Family: MSAD-like
70	c3im8A	Alignment	not modelled	17.3	13	PDB header: transferase Chain: A: PDB Molecule: malonyl acyl carrier protein transacylase; PDBTitle: crystal structure of mcat from streptococcus pneumoniae
71	d1ex9a	Alignment	not modelled	17.2	17	Fold: alpha/beta-Hydrolases Superfamily: alpha/beta-Hydrolases Family: Bacterial lipase
72	c2q0xA	Alignment	not modelled	15.7	9	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: uncharacterized protein; PDBTitle: alpha/beta hydrolase fold protein of unknown function
73	c3ezoA	Alignment	not modelled	15.6	17	PDB header: transferase Chain: A: PDB Molecule: malonyl coa-acyl carrier protein transacylase; PDBTitle: crystal structure of acyl-carrier-protein s-2 malonyltransferase from burkholderia pseudomallei 1710b
74	c3og9A	Alignment	not modelled	15.3	3	PDB header: hydrolase Chain: A: PDB Molecule: protein yahd a copper inducible hydrolase; PDBTitle: structure of yahd with malic acid
75	c1rg9D	Alignment	not modelled	15.2	24	PDB header: transferase Chain: D: PDB Molecule: s-adenosylmethionine synthetase; PDBTitle: s-adenosylmethionine synthetase complexed with sam and pppp
76	c2qezC	Alignment	not modelled	15.2	20	PDB header: lyase Chain: C: PDB Molecule: ethanolamine ammonia-lyase heavy chain; PDBTitle: crystal structure of ethanolamine ammonia-lyase heavy chain2 (yp_013784.1) from listeria monocytogenes 4b f2365 at 2.15 a3 resolution
77	c1xhoB	Alignment	not modelled	15.2	7	PDB header: structural genomics, unknown function Chain: B: PDB Molecule: chorismate mutase; PDBTitle: chorismate mutase from clostridium thermocellum cth-682
78	d1xhoa	Alignment	not modelled	15.2	7	Fold: Bacillus chorismate mutase-like Superfamily: YjgF-like Family: Chorismate mutase
79	c2h1iA	Alignment	not modelled	14.9	14	PDB header: hydrolase Chain: A: PDB Molecule: carboxylesterase; PDBTitle: crystal structure of the bacillus cereus carboxylesterase
80	d1ispa	Alignment	not modelled	14.9	13	Fold: alpha/beta-Hydrolases Superfamily: alpha/beta-Hydrolases Family: Bacterial lipase
						PDB header: transferase Chain: A: PDB Molecule: malonyl coa-acyl carrier protein

81	c3g87A_	Alignment	not modelled	14.8	10	transacylase; PDBTitle: crystal structure of malonyl coa-acyl carrier protein transacylase2 from burkholderia pseudomallei using dried seaweed as nucleant or3 protease
82	c3i1iA_	Alignment	not modelled	14.7	12	PDB header: transferase Chain: A: PDB Molecule: homoserine o-acetyltransferase; PDBTitle: x-ray crystal structure of homoserine o-acetyltransferase from2 bacillus anthracis
83	d1vhra_	Alignment	not modelled	14.7	16	Fold: (Phosphotyrosine protein) phosphatases II Superfamily: (Phosphotyrosine protein) phosphatases II Family: Dual specificity phosphatase-like
84	c2gwoC_	Alignment	not modelled	14.6	15	PDB header: hydrolase Chain: C: PDB Molecule: dual specificity protein phosphatase 13; PDBTitle: crystal structure of tmdp
85	c1qgeD_	Alignment	not modelled	14.4	16	PDB header: hydrolase Chain: D: PDB Molecule: protein (triacylglycerol hydrolase); PDBTitle: new crystal form of pseudomonas glumae (formerly chromobacterium2 viscosum atcc 6918) lipase
86	c3m6yA_	Alignment	not modelled	14.2	20	PDB header: lyase Chain: A: PDB Molecule: 4-hydroxy-2-oxoglutarate aldolase; PDBTitle: structure of 4-hydroxy-2-oxoglutarate aldolase from bacillus cereus at2 1.45 a resolution.
87	d1fnja_	Alignment	not modelled	13.9	37	Fold: Bacillus chorismate mutase-like Superfamily: YjgF-like Family: Chorismate mutase
88	c2qmqA_	Alignment	not modelled	13.9	8	PDB header: signaling protein Chain: A: PDB Molecule: protein ndrg2; PDBTitle: crystal structure of a n-myc downstream regulated 2 protein (ndrg2,2 syld, ndr2, ai182517, au040374) from mus musculus at 1.70 a3 resolution
89	c3muxB_	Alignment	not modelled	13.9	21	PDB header: lyase Chain: B: PDB Molecule: putative 4-hydroxy-2-oxoglutarate aldolase; PDBTitle: the crystal structure of a putative 4-hydroxy-2-oxoglutarate aldolase2 from bacillus anthracis to 1.45a
90	d2gsta2	Alignment	not modelled	13.4	29	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Glutathione S-transferase (GST), N-terminal domain
91	c3ptwA_	Alignment	not modelled	13.3	10	PDB header: transferase Chain: A: PDB Molecule: malonyl coa-acyl carrier protein transacylase; PDBTitle: crystal structure of malonyl coa-acyl carrier protein transacylase2 from clostridium perfringens atcc 13124
92	c3ex7I_	Alignment	not modelled	13.1	22	PDB header: hydrolase/rna binding protein/rna Chain: I: PDB Molecule: protein casc3; PDBTitle: the crystal structure of ejc in its transition state
93	c3I80A_	Alignment	not modelled	12.9	12	PDB header: hydrolase Chain: A: PDB Molecule: putative uncharacterized protein smu.1393c; PDBTitle: crystal structure of smu.1393c from streptococcus mutans ua159
94	c3doiA_	Alignment	not modelled	12.6	13	PDB header: hydrolase Chain: A: PDB Molecule: esterase; PDBTitle: crystal structure of a thermostable esterase complex with2 paraoxon
95	c2jfkD_	Alignment	not modelled	12.3	16	PDB header: transferase Chain: D: PDB Molecule: fatty acid synthase; PDBTitle: structure of the mat domain of human fas with malonyl-coa
96	d4lipd_	Alignment	not modelled	12.2	23	Fold: alpha/beta-Hydrolases Superfamily: alpha/beta-Hydrolases Family: Bacterial lipase
97	c3eenA_	Alignment	not modelled	12.2	21	PDB header: transferase Chain: A: PDB Molecule: malonyl coa-acyl carrier protein transacylase2 (fabd), xoo0880, from xanthomonas oryzae pv. oryzae kacc10331
98	d1dbfa_	Alignment	not modelled	11.9	37	Fold: Bacillus chorismate mutase-like Superfamily: YjgF-like Family: Chorismate mutase
99	d1xw6a2	Alignment	not modelled	11.8	21	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Glutathione S-transferase (GST), N-terminal domain