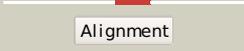
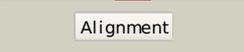
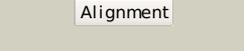
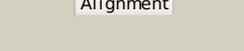
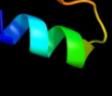
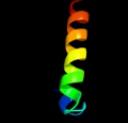
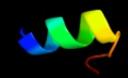
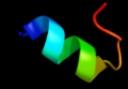
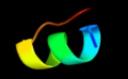


# Phyre2

Email	I.a.kelley@imperial.ac.uk
Description	P75942
Date	Thu Jan 5 12:16:14 GMT 2012
Unique Job ID	b37cde9703b78dc0

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	<a href="#">c2zycA_</a>	 Alignment		100.0	45	<b>PDB header:</b> hydrolase <b>Chain:</b> A; <b>PDB Molecule:</b> peptidoglycan hydrolase flgj; <b>PDBTitle:</b> crystal structure of peptidoglycan hydrolase from2 sphingomonas sp. a1
2	<a href="#">c3fi7A_</a>	 Alignment		100.0	32	<b>PDB header:</b> hydrolase <b>Chain:</b> A; <b>PDB Molecule:</b> lmo1076 protein; <b>PDBTitle:</b> crystal structure of the autolysin auto (lmo1076) from listeria2 monocytogenes, catalytic domain
3	<a href="#">d1qusa_</a>	 Alignment		96.9	28	<b>Fold:</b> Lysozyme-like <b>Superfamily:</b> Lysozyme-like <b>Family:</b> Bacterial muramidase, catalytic domain
4	<a href="#">c3mgwA_</a>	 Alignment		95.2	18	<b>PDB header:</b> hydrolase <b>Chain:</b> A; <b>PDB Molecule:</b> lysozyme g; <b>PDBTitle:</b> thermodynamics and structure of a salmon cold-active goose-type2 lysozyme
5	<a href="#">c3gxkB_</a>	 Alignment		95.1	18	<b>PDB header:</b> hydrolase <b>Chain:</b> B; <b>PDB Molecule:</b> goose-type lysozyme 1; <b>PDBTitle:</b> the crystal structure of g-type lysozyme from atlantic cod2 (gadus morhua l.) in complex with nag oligomers sheds new3 light on substrate binding and the catalytic mechanism.4 native structure to 1.9
6	<a href="#">d1gbsa_</a>	 Alignment		95.1	14	<b>Fold:</b> Lysozyme-like <b>Superfamily:</b> Lysozyme-like <b>Family:</b> G-type Lysozyme
7	<a href="#">c2y8pA_</a>	 Alignment		95.0	33	<b>PDB header:</b> lyase <b>Chain:</b> A; <b>PDB Molecule:</b> endo-type membrane-bound lytic murein transglycosylase a; <b>PDBTitle:</b> crystal structure of an outer membrane-anchored endolytic2 peptidoglycan lytic transglycosylase (mlte) from3 escherichia coli
8	<a href="#">d1qsaa2</a>	 Alignment		94.8	21	<b>Fold:</b> Lysozyme-like <b>Superfamily:</b> Lysozyme-like <b>Family:</b> Bacterial muramidase, catalytic domain
9	<a href="#">c3bkhA_</a>	 Alignment		89.8	20	<b>PDB header:</b> hydrolase <b>Chain:</b> A; <b>PDB Molecule:</b> lytic transglycosylase; <b>PDBTitle:</b> crystal structure of the bacteriophage phikz lytic2 transglycosylase, gp144
10	<a href="#">d1nvma1</a>	 Alignment		60.7	21	<b>Fold:</b> RuvA C-terminal domain-like <b>Superfamily:</b> post-HMGL domain-like <b>Family:</b> DmpG/LeuA communication domain-like
11	<a href="#">d1yt3a2</a>	 Alignment		36.7	6	<b>Fold:</b> SAM domain-like <b>Superfamily:</b> HRDC-like <b>Family:</b> RNase D C-terminal domains

12	<a href="#">c1slyA_</a>	Alignment		27.3	21	<b>PDB header:</b> glycosyltransferase <b>Chain:</b> A: <b>PDB Molecule:</b> 70-kda soluble lytic transglycosylase; <b>PDBTitle:</b> complex of the 70-kda soluble lytic transglycosylase with2 bulgecin a
13	<a href="#">c2k0nA_</a>	Alignment		27.1	31	<b>PDB header:</b> transcription <b>Chain:</b> A: <b>PDB Molecule:</b> mediator of rna polymerase ii transcription <b>PDBTitle:</b> solution structure of yeast gal11p kix domain
14	<a href="#">c2fbdB_</a>	Alignment		25.9	25	<b>PDB header:</b> hydrolase <b>Chain:</b> B: <b>PDB Molecule:</b> lysozyme 1; <b>PDBTitle:</b> the crystallographic structure of the digestive lysozyme 1 from musca2 domestica at 1.90 ang.
15	<a href="#">d1yroa1</a>	Alignment		20.5	18	<b>Fold:</b> Lysozyme-like <b>Superfamily:</b> Lysozyme-like <b>Family:</b> C-type lysozyme
16	<a href="#">c2eq7C_</a>	Alignment		18.9	27	<b>PDB header:</b> oxidoreductase <b>Chain:</b> C: <b>PDB Molecule:</b> 2-oxoglutarate dehydrogenase e2 component; <b>PDBTitle:</b> crystal structure of lipoamide dehydrogenase from thermus thermophilus2 hb8 with psbdo
17	<a href="#">c3l87A_</a>	Alignment		18.8	29	<b>PDB header:</b> hydrolase <b>Chain:</b> A: <b>PDB Molecule:</b> peptide deformylase; <b>PDBTitle:</b> the crystal structure of smu.143c from streptococcus mutans ua159
18	<a href="#">c2eq9C_</a>	Alignment		18.3	20	<b>PDB header:</b> oxidoreductase <b>Chain:</b> C: <b>PDB Molecule:</b> pyruvate dehydrogenase complex, dihydrolipoamide <b>PDBTitle:</b> crystal structure of lipoamide dehydrogenase from thermus thermophilus2 hb8 with psbdb
19	<a href="#">d1l3ca_</a>	Alignment		14.6	13	<b>Fold:</b> Zincin-like <b>Superfamily:</b> Metalloproteases ("zincins"), catalytic domain <b>Family:</b> Clostridium neurotoxins, catalytic domain
20	<a href="#">c2eq8C_</a>	Alignment		14.4	13	<b>PDB header:</b> oxidoreductase <b>Chain:</b> C: <b>PDB Molecule:</b> pyruvate dehydrogenase complex, dihydrolipoamide <b>PDBTitle:</b> crystal structure of lipoamide dehydrogenase from thermus thermophilus2 hb8 with psbdp
21	<a href="#">d1bw6a_</a>	Alignment	not modelled	13.7	8	<b>Fold:</b> DNA/RNA-binding 3-helical bundle <b>Superfamily:</b> Homeodomain-like <b>Family:</b> Centromere-binding
22	<a href="#">d1h3ob_</a>	Alignment	not modelled	13.2	17	<b>Fold:</b> Histone-fold <b>Superfamily:</b> Histone-fold <b>Family:</b> TBP-associated factors, TAFs
23	<a href="#">c2cooA_</a>	Alignment	not modelled	12.4	0	<b>PDB header:</b> transferase <b>Chain:</b> A: <b>PDB Molecule:</b> lipoamide acyltransferase component of branched- <b>PDBTitle:</b> solution structure of the e3_binding domain of2 dihydrolipoamide branched chaintransacylase
24	<a href="#">c3dv0l_</a>	Alignment	not modelled	12.4	13	<b>PDB header:</b> oxidoreductase/transferase <b>Chain:</b> I: <b>PDB Molecule:</b> dihydrolipoyllysine-residue acetyltransferase <b>PDBTitle:</b> snapshots of catalysis in the e1 subunit of the pyruvate2 dehydrogenase multi-enzyme complex
25	<a href="#">d1w85l_</a>	Alignment	not modelled	12.4	13	<b>Fold:</b> Peripheral subunit-binding domain of 2-oxo acid dehydrogenase complex <b>Superfamily:</b> Peripheral subunit-binding domain of 2-oxo acid dehydrogenase complex <b>Family:</b> Peripheral subunit-binding domain of 2-oxo acid dehydrogenase complex
26	<a href="#">d1w4ha1</a>	Alignment	not modelled	12.2	0	<b>Fold:</b> Peripheral subunit-binding domain of 2-oxo acid dehydrogenase complex <b>Superfamily:</b> Peripheral subunit-binding domain of 2-oxo acid dehydrogenase complex <b>Family:</b> Peripheral subunit-binding domain of 2-oxo acid dehydrogenase complex
27	<a href="#">d1gd6a_</a>	Alignment	not modelled	12.1	20	<b>Fold:</b> Lysozyme-like <b>Superfamily:</b> Lysozyme-like <b>Family:</b> C-type lysozyme

28	<a href="#">d1mp1a_</a>	Alignment	not modelled	12.0	20	<b>Fold:</b> PWI domain <b>Superfamily:</b> PWI domain <b>Family:</b> PWI domain
29	<a href="#">d2p02a2</a>	Alignment	not modelled	11.6	38	<b>Fold:</b> S-adenosylmethionine synthetase <b>Superfamily:</b> S-adenosylmethionine synthetase <b>Family:</b> S-adenosylmethionine synthetase
30	<a href="#">c3sn6R_</a>	Alignment	not modelled	11.3	11	<b>PDB header:</b> signaling protein/hydrolase <b>Chain:</b> R: <b>PDB Molecule:</b> lysozyme, beta-2 adrenergic receptor; <b>PDBTitle:</b> crystal structure of the beta2 adrenergic receptor-gs protein complex
31	<a href="#">d2cyua1</a>	Alignment	not modelled	11.2	0	<b>Fold:</b> Peripheral subunit-binding domain of 2-oxo acid dehydrogenase complex <b>Superfamily:</b> Peripheral subunit-binding domain of 2-oxo acid dehydrogenase complex <b>Family:</b> Peripheral subunit-binding domain of 2-oxo acid dehydrogenase complex
32	<a href="#">c1ewrA_</a>	Alignment	not modelled	10.7	21	<b>PDB header:</b> hydrolase <b>Chain:</b> A: <b>PDB Molecule:</b> dna mismatch repair protein muts; <b>PDBTitle:</b> crystal structure of taq muts
33	<a href="#">d1p35a_</a>	Alignment	not modelled	10.7	67	<b>Fold:</b> Baculovirus p35 protein <b>Superfamily:</b> Baculovirus p35 protein <b>Family:</b> Baculovirus p35 protein
34	<a href="#">d1qm4a2</a>	Alignment	not modelled	9.7	40	<b>Fold:</b> S-adenosylmethionine synthetase <b>Superfamily:</b> S-adenosylmethionine synthetase <b>Family:</b> S-adenosylmethionine synthetase
35	<a href="#">c1w3dA_</a>	Alignment	not modelled	9.6	13	<b>PDB header:</b> transferase <b>Chain:</b> A: <b>PDB Molecule:</b> dihydrolipoyllysine-residue acetyltransferase <b>PDBTitle:</b> nmr structure of the peripheral-subunit binding domain of2 bacillus stearothermophilus e2p
36	<a href="#">d1alca_</a>	Alignment	not modelled	9.5	21	<b>Fold:</b> Lysozyme-like <b>Superfamily:</b> Lysozyme-like <b>Family:</b> C-type lysozyme
37	<a href="#">d1iiza_</a>	Alignment	not modelled	9.0	23	<b>Fold:</b> Lysozyme-like <b>Superfamily:</b> Lysozyme-like <b>Family:</b> C-type lysozyme
38	<a href="#">d1lm4a_</a>	Alignment	not modelled	8.9	29	<b>Fold:</b> Peptide deformylase <b>Superfamily:</b> Peptide deformylase <b>Family:</b> Peptide deformylase
39	<a href="#">d1lm6a_</a>	Alignment	not modelled	8.9	29	<b>Fold:</b> Peptide deformylase <b>Superfamily:</b> Peptide deformylase <b>Family:</b> Peptide deformylase
40	<a href="#">d2bgxa2</a>	Alignment	not modelled	8.7	12	<b>Fold:</b> N-acetylmuramoyl-L-alanine amidase-like <b>Superfamily:</b> N-acetylmuramoyl-L-alanine amidase-like <b>Family:</b> N-acetylmuramoyl-L-alanine amidase-like
41	<a href="#">d1wuda1</a>	Alignment	not modelled	8.7	22	<b>Fold:</b> SAM domain-like <b>Superfamily:</b> HRDC-like <b>Family:</b> HRDC domain from helicases
42	<a href="#">c2lmdA_</a>	Alignment	not modelled	8.6	14	<b>PDB header:</b> transcription <b>Chain:</b> A: <b>PDB Molecule:</b> prospero homeobox protein 1; <b>PDBTitle:</b> minimal constraints solution nmr structure of prospero homeobox2 protein 1 from homo sapiens, northeast structural genomics consortium3 target hr4660b
43	<a href="#">d1yzma1</a>	Alignment	not modelled	8.3	16	<b>Fold:</b> Long alpha-hairpin <b>Superfamily:</b> Rabensyn-5 Rab-binding domain-like <b>Family:</b> Rabensyn-5 Rab-binding domain-like
44	<a href="#">d1f6sa_</a>	Alignment	not modelled	8.3	24	<b>Fold:</b> Lysozyme-like <b>Superfamily:</b> Lysozyme-like <b>Family:</b> C-type lysozyme
45	<a href="#">c1w4kA_</a>	Alignment	not modelled	8.3	13	<b>PDB header:</b> transferase <b>Chain:</b> A: <b>PDB Molecule:</b> pyruvate dehydrogenase e2; <b>PDBTitle:</b> peripheral-subunit binding domains from mesophilic, 2 thermophilic, and hyperthermophilic bacteria fold by3 ultrafast, apparently two-state transitions
46	<a href="#">d1w7pd2</a>	Alignment	not modelled	8.2	13	<b>Fold:</b> DNA/RNA-binding 3-helical bundle <b>Superfamily:</b> "Winged helix" DNA-binding domain <b>Family:</b> Vacuolar sorting protein domain
47	<a href="#">d1mxaa2</a>	Alignment	not modelled	8.1	38	<b>Fold:</b> S-adenosylmethionine synthetase <b>Superfamily:</b> S-adenosylmethionine synthetase <b>Family:</b> S-adenosylmethionine synthetase
48	<a href="#">d1u5tb1</a>	Alignment	not modelled	8.1	13	<b>Fold:</b> DNA/RNA-binding 3-helical bundle <b>Superfamily:</b> "Winged helix" DNA-binding domain <b>Family:</b> Vacuolar sorting protein domain
49	<a href="#">c1zwvA_</a>	Alignment	not modelled	7.9	0	<b>PDB header:</b> transferase <b>Chain:</b> A: <b>PDB Molecule:</b> lipoamide acyltransferase component of branched- <b>PDBTitle:</b> solution structure of the subunit binding domain (hbsbd) of2 the human mitochondrial branched-chain alpha-ketoacid3 dehydrogenase
50	<a href="#">d1b9oa_</a>	Alignment	not modelled	7.7	19	<b>Fold:</b> Lysozyme-like <b>Superfamily:</b> Lysozyme-like <b>Family:</b> C-type lysozyme
51	<a href="#">c1u1iC_</a>	Alignment	not modelled	7.2	33	<b>PDB header:</b> isomerase <b>Chain:</b> C: <b>PDB Molecule:</b> myo-inositol-1-phosphate synthase; <b>PDBTitle:</b> myo-inositol phosphate synthase mips from a. fulgidus
52	<a href="#">c2bh7A_</a>	Alignment	not modelled	7.2	15	<b>PDB header:</b> hydrolase <b>Chain:</b> A: <b>PDB Molecule:</b> n-acetylmuramoyl-l-alanine amidase; <b>PDBTitle:</b> crystal structure of a semet derivative of amid at 2.22 angstroms
						<b>Fold:</b> Long alpha-hairpin

53	<a href="#">d1z0kb1</a>	Alignment	not modelled	7.0	18	<b>Superfamily:</b> Rabenosyn-5 Rab-binding domain-like <b>Family:</b> Rabenosyn-5 Rab-binding domain-like
54	<a href="#">d1fkqa_</a>	Alignment	not modelled	6.8	28	<b>Fold:</b> Lysozyme-like <b>Superfamily:</b> Lysozyme-like <b>Family:</b> C-type Lysozyme
55	<a href="#">c1wx4B_</a>	Alignment	not modelled	6.1	18	<b>PDB header:</b> oxidoreductase/metal transport <b>Chain:</b> B: <b>PDB Molecule:</b> melc; <b>PDBTitle:</b> crystal structure of the oxy-form of the copper-bound streptomyces2 castaneoglobisporus tyrosinase complexed with a caddie protein3 prepared by the addition of dithiothreitol
56	<a href="#">d1pjqa3</a>	Alignment	not modelled	6.1	14	<b>Fold:</b> Siroheme synthase middle domains-like <b>Superfamily:</b> Siroheme synthase middle domains-like <b>Family:</b> Siroheme synthase middle domains-like
57	<a href="#">d2csba2</a>	Alignment	not modelled	5.7	17	<b>Fold:</b> SAM domain-like <b>Superfamily:</b> RuvA domain 2-like <b>Family:</b> Topoisomerase V repeat domain
58	<a href="#">c2l69A_</a>	Alignment	not modelled	5.7	20	<b>PDB header:</b> de novo protein <b>Chain:</b> A: <b>PDB Molecule:</b> rossmann 2x3 fold protein; <b>PDBTitle:</b> solution nmr structure of de novo designed protein, p-loop ntpase2 fold, northeast structural genomics consortium target or28
59	<a href="#">d2coba1</a>	Alignment	not modelled	5.6	29	<b>Fold:</b> DNA/RNA-binding 3-helical bundle <b>Superfamily:</b> Homeodomain-like <b>Family:</b> Psq domain
60	<a href="#">d1bala_</a>	Alignment	not modelled	5.4	0	<b>Fold:</b> Peripheral subunit-binding domain of 2-oxo acid dehydrogenase complex <b>Superfamily:</b> Peripheral subunit-binding domain of 2-oxo acid dehydrogenase complex <b>Family:</b> Peripheral subunit-binding domain of 2-oxo acid dehydrogenase complex
61	<a href="#">d1tuka1</a>	Alignment	not modelled	5.3	42	<b>Fold:</b> Bifunctional inhibitor/lipid-transfer protein/seed storage 2S albumin <b>Superfamily:</b> Bifunctional inhibitor/lipid-transfer protein/seed storage 2S albumin <b>Family:</b> Plant lipid-transfer and hydrophobic proteins
62	<a href="#">d2jn6a1</a>	Alignment	not modelled	5.3	13	<b>Fold:</b> DNA/RNA-binding 3-helical bundle <b>Superfamily:</b> Homeodomain-like <b>Family:</b> Cgl2762-like
63	<a href="#">c3cymA_</a>	Alignment	not modelled	5.1	9	<b>PDB header:</b> structural genomics, unknown function <b>Chain:</b> A: <b>PDB Molecule:</b> uncharacterized protein bad_0989; <b>PDBTitle:</b> crystal structure of protein bad_0989 from bifidobacterium2 adolescentis