



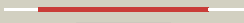





















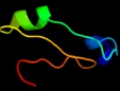
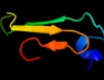

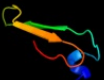



# Phyre2

Email	l.a.kelley@imperial.ac.uk
Description	Q46790
Date	Thu Jan 5 12:34:11 GMT 2012
Unique Job ID	acd6a0c8cd72f40b

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	<a href="#">c1slyA_</a>	 Alignment		100.0	22	<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
2	<a href="#">d1qsaa2</a>	 Alignment		100.0	22	<b>Fold:</b> Lysozyme-like <b>Superfamily:</b> Lysozyme-like <b>Family:</b> Bacterial muramidase, catalytic domain
3	<a href="#">c2y8pA_</a>	 Alignment		100.0	21	<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
4	<a href="#">c3mgwA_</a>	 Alignment		99.9	20	<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		99.9	19	<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		99.9	25	<b>Fold:</b> Lysozyme-like <b>Superfamily:</b> Lysozyme-like <b>Family:</b> G-type lysozyme
7	<a href="#">c3bkhA_</a>	 Alignment		98.4	17	<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
8	<a href="#">d1qusa_</a>	 Alignment		98.4	13	<b>Fold:</b> Lysozyme-like <b>Superfamily:</b> Lysozyme-like <b>Family:</b> Bacterial muramidase, catalytic domain
9	<a href="#">d1gd6a_</a>	 Alignment		98.0	34	<b>Fold:</b> Lysozyme-like <b>Superfamily:</b> Lysozyme-like <b>Family:</b> C-type lysozyme
10	<a href="#">d1iiza_</a>	 Alignment		97.9	27	<b>Fold:</b> Lysozyme-like <b>Superfamily:</b> Lysozyme-like <b>Family:</b> C-type lysozyme
11	<a href="#">c2fbdB_</a>	 Alignment		97.9	24	<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.

12	<a href="#">dlhhla_</a>	Alignment		97.7	29	<b>Fold:</b> Lysozyme-like <b>Superfamily:</b> Lysozyme-like <b>Family:</b> C-type lysozyme
13	<a href="#">d2vb1a1</a>	Alignment		97.7	29	<b>Fold:</b> Lysozyme-like <b>Superfamily:</b> Lysozyme-like <b>Family:</b> C-type lysozyme
14	<a href="#">dlghla_</a>	Alignment		97.6	29	<b>Fold:</b> Lysozyme-like <b>Superfamily:</b> Lysozyme-like <b>Family:</b> C-type lysozyme
15	<a href="#">dlsga1</a>	Alignment		97.6	36	<b>Fold:</b> Lysozyme-like <b>Superfamily:</b> Lysozyme-like <b>Family:</b> C-type lysozyme
16	<a href="#">d2eqla_</a>	Alignment		97.5	35	<b>Fold:</b> Lysozyme-like <b>Superfamily:</b> Lysozyme-like <b>Family:</b> C-type lysozyme
17	<a href="#">dljsea_</a>	Alignment		97.4	36	<b>Fold:</b> Lysozyme-like <b>Superfamily:</b> Lysozyme-like <b>Family:</b> C-type lysozyme
18	<a href="#">c2goiC</a>	Alignment		97.4	15	<b>PDB header:</b> cell adhesion, sugar binding protein <b>Chain:</b> C: <b>PDB Molecule:</b> sperm lysozyme-like protein 1; <b>PDBTitle:</b> crystal structure of mouse sperm c-type lysozyme-like2 protein 1
19	<a href="#">dlmqa_</a>	Alignment		97.4	33	<b>Fold:</b> Lysozyme-like <b>Superfamily:</b> Lysozyme-like <b>Family:</b> C-type lysozyme
20	<a href="#">dljuga_</a>	Alignment		97.3	28	<b>Fold:</b> Lysozyme-like <b>Superfamily:</b> Lysozyme-like <b>Family:</b> C-type lysozyme
21	<a href="#">dlqqya_</a>	Alignment	not modelled	97.3	32	<b>Fold:</b> Lysozyme-like <b>Superfamily:</b> Lysozyme-like <b>Family:</b> C-type lysozyme
22	<a href="#">c2z2fA</a>	Alignment	not modelled	97.2	23	<b>PDB header:</b> hydrolase <b>Chain:</b> A: <b>PDB Molecule:</b> lysozyme c-2; <b>PDBTitle:</b> x-ray crystal structure of bovine stomach lysozyme
23	<a href="#">dlivma_</a>	Alignment	not modelled	97.2	26	<b>Fold:</b> Lysozyme-like <b>Superfamily:</b> Lysozyme-like <b>Family:</b> C-type lysozyme
24	<a href="#">c3ct5A</a>	Alignment	not modelled	96.9	13	<b>PDB header:</b> hydrolase <b>Chain:</b> A: <b>PDB Molecule:</b> morphogenesis protein 1; <b>PDBTitle:</b> crystal and cryoem structural studies of a cell wall degrading enzyme2 in the bacteriophage phi29 tail
25	<a href="#">d2nwdx1</a>	Alignment	not modelled	96.9	35	<b>Fold:</b> Lysozyme-like <b>Superfamily:</b> Lysozyme-like <b>Family:</b> C-type lysozyme
26	<a href="#">dlb9oa_</a>	Alignment	not modelled	96.7	31	<b>Fold:</b> Lysozyme-like <b>Superfamily:</b> Lysozyme-like <b>Family:</b> C-type lysozyme
27	<a href="#">dlfkqa_</a>	Alignment	not modelled	96.7	45	<b>Fold:</b> Lysozyme-like <b>Superfamily:</b> Lysozyme-like <b>Family:</b> C-type lysozyme
28	<a href="#">dlf6sa_</a>	Alignment	not modelled	96.7	41	<b>Fold:</b> Lysozyme-like <b>Superfamily:</b> Lysozyme-like <b>Family:</b> C-type lysozyme
29	<a href="#">dlyroa1</a>	Alignment	not modelled	96.6	34	<b>Fold:</b> Lysozyme-like <b>Superfamily:</b> Lysozyme-like

					<b>Family:</b> C-type lysozyme
30	<a href="#">d1hfxa_</a>	Alignment	not modelled	96.6	34 <b>Fold:</b> Lysozyme-like <b>Superfamily:</b> Lysozyme-like <b>Family:</b> C-type lysozyme
31	<a href="#">d1alca_</a>	Alignment	not modelled	96.5	31 <b>Fold:</b> Lysozyme-like <b>Superfamily:</b> Lysozyme-like <b>Family:</b> C-type lysozyme
32	<a href="#">c1xsfa_</a>	Alignment	not modelled	96.4	15 <b>PDB header:</b> cell cycle, hydrolase <b>Chain:</b> A: <b>PDB Molecule:</b> probable resuscitation-promoting factor rpfb; <b>PDBTitle:</b> solution structure of a resuscitation promoting factor2 domain from mycobacterium tuberculosis
33	<a href="#">d1xsfa1</a>	Alignment	not modelled	95.9	15 <b>Fold:</b> Lysozyme-like <b>Superfamily:</b> Lysozyme-like <b>Family:</b> RPF-like
34	<a href="#">c3fi7A_</a>	Alignment	not modelled	94.8	21 <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
35	<a href="#">c2zycA_</a>	Alignment	not modelled	93.9	14 <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
36	<a href="#">c3eo5A_</a>	Alignment	not modelled	93.7	15 <b>PDB header:</b> cell adhesion <b>Chain:</b> A: <b>PDB Molecule:</b> resuscitation-promoting factor rpfb; <b>PDBTitle:</b> crystal structure of the resuscitation promoting factor rpfb
37	<a href="#">c2dqaA_</a>	Alignment	not modelled	90.1	17 <b>PDB header:</b> hydrolase <b>Chain:</b> A: <b>PDB Molecule:</b> lysozyme; <b>PDBTitle:</b> crystal structure of tapes japonica lysozyme
38	<a href="#">c3ab6A_</a>	Alignment	not modelled	87.8	14 <b>PDB header:</b> hydrolase <b>Chain:</b> A: <b>PDB Molecule:</b> lysozyme; <b>PDBTitle:</b> crystal structure of nag3 bound lysozyme from meretrix lusoria
39	<a href="#">c3csqC_</a>	Alignment	not modelled	81.8	14 <b>PDB header:</b> hydrolase <b>Chain:</b> C: <b>PDB Molecule:</b> morphogenesis protein 1; <b>PDBTitle:</b> crystal and cryoem structural studies of a cell wall2 degrading enzyme in the bacteriophage phi29 tail
40	<a href="#">c3aq8A_</a>	Alignment	not modelled	45.4	19 <b>PDB header:</b> oxygen binding <b>Chain:</b> A: <b>PDB Molecule:</b> group 1 truncated hemoglobin; <b>PDBTitle:</b> crystal structure of truncated hemoglobin from tetrahymena pyriformis,2 q46e mutant, fe(iii) form
41	<a href="#">d1idra_</a>	Alignment	not modelled	45.4	19 <b>Fold:</b> Globin-like <b>Superfamily:</b> Globin-like <b>Family:</b> Truncated hemoglobin
42	<a href="#">d1dlwa_</a>	Alignment	not modelled	43.2	14 <b>Fold:</b> Globin-like <b>Superfamily:</b> Globin-like <b>Family:</b> Truncated hemoglobin
43	<a href="#">c1dlyA_</a>	Alignment	not modelled	40.7	13 <b>PDB header:</b> oxygen storage/transport <b>Chain:</b> A: <b>PDB Molecule:</b> hemoglobin; <b>PDBTitle:</b> x-ray crystal structure of hemoglobin from the green2 unicellular alga chlamydomonas eugametos
44	<a href="#">d1dlya_</a>	Alignment	not modelled	40.7	13 <b>Fold:</b> Globin-like <b>Superfamily:</b> Globin-like <b>Family:</b> Truncated hemoglobin
45	<a href="#">c3k1tA_</a>	Alignment	not modelled	36.4	20 <b>PDB header:</b> ligase <b>Chain:</b> A: <b>PDB Molecule:</b> glutamate--cysteine ligase gsha; <b>PDBTitle:</b> crystal structure of putative gamma-glutamylcysteine synthetase2 (yp_546622.1) from methylobacillus flagellatus kt at 1.90 a3 resolution
46	<a href="#">c2bmmA_</a>	Alignment	not modelled	28.2	8 <b>PDB header:</b> oxygen storage/transport <b>Chain:</b> A: <b>PDB Molecule:</b> thermostable hemoglobin from thermobifida fusca; <b>PDBTitle:</b> x-ray structure of a novel thermostable hemoglobin from the2 actinobacterium thermobifida fusca
47	<a href="#">d1nvma1</a>	Alignment	not modelled	18.0	10 <b>Fold:</b> RuvA C-terminal domain-like <b>Superfamily:</b> post-HMGL domain-like <b>Family:</b> DmpG/LeuA communication domain-like
48	<a href="#">c2ksca_</a>	Alignment	not modelled	17.6	12 <b>PDB header:</b> unknown function <b>Chain:</b> A: <b>PDB Molecule:</b> cyanoglobin; <b>PDBTitle:</b> solution structure of synechococcus sp. pcc 7002 hemoglobin
49	<a href="#">c2xykB_</a>	Alignment	not modelled	16.1	15 <b>PDB header:</b> oxygen storage/transport <b>Chain:</b> B: <b>PDB Molecule:</b> 2-on-2 hemoglobin; <b>PDBTitle:</b> group ii 2-on-2 hemoglobin from the plant pathogen2 agrobacterium tumefaciens
50	<a href="#">c2k53A_</a>	Alignment	not modelled	14.1	12 <b>PDB header:</b> structural genomics, unknown function <b>Chain:</b> A: <b>PDB Molecule:</b> a3dk08 protein; <b>PDBTitle:</b> nmr solution structure of a3dk08 protein from clostridium2 thermocellum: northeast:structural genomics consortium3 target cmr9
51	<a href="#">c2yusA_</a>	Alignment	not modelled	13.7	11 <b>PDB header:</b> transcription <b>Chain:</b> A: <b>PDB Molecule:</b> swi/snf-related matrix-associated actin- <b>PDBTitle:</b> solution structure of the sant domain of human swi/snf-2 related matrix-associated actin-dependent regulator of3 chromatin subfamily c member 1
52	<a href="#">d2coba1</a>	Alignment	not modelled	13.5	8 <b>Fold:</b> DNA/RNA-binding 3-helical bundle <b>Superfamily:</b> Homeodomain-like <b>Family:</b> Psq domain
53	<a href="#">d1ux8a_</a>	Alignment	not modelled	13.3	19 <b>Fold:</b> Globin-like <b>Superfamily:</b> Globin-like <b>Family:</b> Truncated hemoglobin
54	<a href="#">c2k5eA_</a>	Alignment	not modelled	13.1	6 <b>PDB header:</b> structural genomics, unknown function <b>Chain:</b> A: <b>PDB Molecule:</b> uncharacterized protein; <b>PDBTitle:</b> solution structure of putative uncharacterized protein2 gsu1278 from methanocaldococcus jannaschii, northeast3

					structural genomics consortium (nesg) target gsr195
55	<a href="#">d1bw6a_</a>	Alignment	not modelled	12.8	25 <b>Fold:</b> DNA/RNA-binding 3-helical bundle <b>Superfamily:</b> Homeodomain-like <b>Family:</b> Centromere-binding
56	<a href="#">d2ahra1</a>	Alignment	not modelled	12.6	14 <b>Fold:</b> 6-phosphogluconate dehydrogenase C-terminal domain-like <b>Superfamily:</b> 6-phosphogluconate dehydrogenase C-terminal domain-like <b>Family:</b> ProC C-terminal domain-like
57	<a href="#">d1yt3a2</a>	Alignment	not modelled	12.1	17 <b>Fold:</b> SAM domain-like <b>Superfamily:</b> HRDC-like <b>Family:</b> RNase D C-terminal domains
58	<a href="#">d1t56a2</a>	Alignment	not modelled	11.4	12 <b>Fold:</b> Tetracyclin repressor-like, C-terminal domain <b>Superfamily:</b> Tetracyclin repressor-like, C-terminal domain <b>Family:</b> Tetracyclin repressor-like, C-terminal domain
59	<a href="#">d1s69a_</a>	Alignment	not modelled	10.9	19 <b>Fold:</b> Globin-like <b>Superfamily:</b> Globin-like <b>Family:</b> Truncated hemoglobin
60	<a href="#">d1yqga1</a>	Alignment	not modelled	8.5	13 <b>Fold:</b> 6-phosphogluconate dehydrogenase C-terminal domain-like <b>Superfamily:</b> 6-phosphogluconate dehydrogenase C-terminal domain-like <b>Family:</b> ProC C-terminal domain-like
61	<a href="#">d2jn6a1</a>	Alignment	not modelled	7.2	13 <b>Fold:</b> DNA/RNA-binding 3-helical bundle <b>Superfamily:</b> Homeodomain-like <b>Family:</b> Cgl2762-like
62	<a href="#">d1i36a1</a>	Alignment	not modelled	7.0	13 <b>Fold:</b> 6-phosphogluconate dehydrogenase C-terminal domain-like <b>Superfamily:</b> 6-phosphogluconate dehydrogenase C-terminal domain-like <b>Family:</b> Conserved hypothetical protein MTH1747
63	<a href="#">c2rn7A_</a>	Alignment	not modelled	6.8	6 <b>PDB header:</b> unknown function <b>Chain:</b> A: <b>PDB Molecule:</b> is629 orfa; <b>PDBTitle:</b> nmr solution structure of tnpe protein from shigella2 flexneri. northeast structural genomics target sfr125
64	<a href="#">c2elkA_</a>	Alignment	not modelled	6.8	26 <b>PDB header:</b> transcription <b>Chain:</b> A: <b>PDB Molecule:</b> spcc24b10.08c protein; <b>PDBTitle:</b> solution structure of the sant domain of fission yeast2 spcc24b10.08c protein
65	<a href="#">d1qdva_</a>	Alignment	not modelled	6.6	6 <b>Fold:</b> POZ domain <b>Superfamily:</b> POZ domain <b>Family:</b> Tetramerization domain of potassium channels
66	<a href="#">d1t1da_</a>	Alignment	not modelled	6.5	10 <b>Fold:</b> POZ domain <b>Superfamily:</b> POZ domain <b>Family:</b> Tetramerization domain of potassium channels
67	<a href="#">d1hlva1</a>	Alignment	not modelled	6.2	25 <b>Fold:</b> DNA/RNA-binding 3-helical bundle <b>Superfamily:</b> Homeodomain-like <b>Family:</b> Centromere-binding
68	<a href="#">d2cvza1</a>	Alignment	not modelled	6.2	7 <b>Fold:</b> 6-phosphogluconate dehydrogenase C-terminal domain-like <b>Superfamily:</b> 6-phosphogluconate dehydrogenase C-terminal domain-like <b>Family:</b> Hydroxyisobutyrate and 6-phosphogluconate dehydrogenase domain
69	<a href="#">d1riqa1</a>	Alignment	not modelled	6.0	24 <b>Fold:</b> Putative anticodon-binding domain of alanyl-tRNA synthetase (AlaRS) <b>Superfamily:</b> Putative anticodon-binding domain of alanyl-tRNA synthetase (AlaRS) <b>Family:</b> Putative anticodon-binding domain of alanyl-tRNA synthetase (AlaRS)
70	<a href="#">c1yx5A_</a>	Alignment	not modelled	5.8	42 <b>PDB header:</b> hydrolase <b>Chain:</b> A: <b>PDB Molecule:</b> 26s proteasome non-atpase regulatory subunit 4; <b>PDBTitle:</b> solution structure of s5a uim-1/ubiquitin complex
71	<a href="#">c3hbha_</a>	Alignment	not modelled	5.7	11 <b>PDB header:</b> hydrolase <b>Chain:</b> A: <b>PDB Molecule:</b> class iv chitinase chia4-pa2; <b>PDBTitle:</b> class iv chitinase structure from picea abies at 2.25a
72	<a href="#">d1ynja1</a>	Alignment	not modelled	5.7	18 <b>Fold:</b> DCoH-like <b>Superfamily:</b> RBP11-like subunits of RNA polymerase <b>Family:</b> RNA polymerase alpha subunit dimerisation domain
73	<a href="#">d1wj9a2</a>	Alignment	not modelled	5.3	20 <b>Fold:</b> Ferredoxin-like <b>Superfamily:</b> CRISPR-associated protein <b>Family:</b> CRISPR-associated protein
74	<a href="#">d1smya1</a>	Alignment	not modelled	5.2	23 <b>Fold:</b> DCoH-like <b>Superfamily:</b> RBP11-like subunits of RNA polymerase <b>Family:</b> RNA polymerase alpha subunit dimerisation domain