





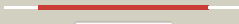





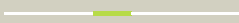
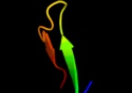

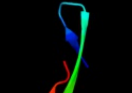



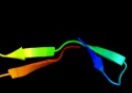

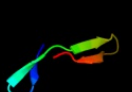
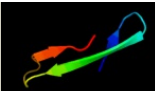






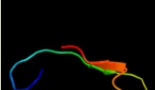
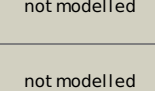


# Phyre2

Email	l.a.kelley@imperial.ac.uk
Description	P0A6M4
Date	Thu Jan 5 11:03:33 GMT 2012
Unique Job ID	4094e3cf6bd409f9

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	<a href="#">d1jkea_</a>	 Alignment		100.0	100	<b>Fold:</b> DTD-like <b>Superfamily:</b> DTD-like <b>Family:</b> DTD-like
2	<a href="#">d1j7ga_</a>	 Alignment		100.0	68	<b>Fold:</b> DTD-like <b>Superfamily:</b> DTD-like <b>Family:</b> DTD-like
3	<a href="#">c2dboA_</a>	 Alignment		100.0	44	<b>PDB header:</b> hydrolase <b>Chain:</b> A: <b>PDB Molecule:</b> d-tyrosyl-trna(tyr) deacylase; <b>PDBTitle:</b> crystal structure of d-tyr-trna(tyr) deacylase from aquifex aeolicus
4	<a href="#">c3ko7E_</a>	 Alignment		100.0	31	<b>PDB header:</b> hydrolase <b>Chain:</b> E: <b>PDB Molecule:</b> d-tyrosyl-trna(tyr) deacylase; <b>PDBTitle:</b> dtd from plasmodium falciparum in complex with d-lysine
5	<a href="#">c2okvC_</a>	 Alignment		100.0	41	<b>PDB header:</b> hydrolase <b>Chain:</b> C: <b>PDB Molecule:</b> probable d-tyrosyl-trna(tyr) deacylase 1; <b>PDBTitle:</b> c-myc dna unwinding element binding protein
6	<a href="#">d1tc5a_</a>	 Alignment		100.0	19	<b>Fold:</b> DTD-like <b>Superfamily:</b> DTD-like <b>Family:</b> DTD-like
7	<a href="#">d2k8ea1</a>	 Alignment		68.6	8	<b>Fold:</b> YegP-like <b>Superfamily:</b> YegP-like <b>Family:</b> YegP-like
8	<a href="#">d2k49a2</a>	 Alignment		67.1	12	<b>Fold:</b> YegP-like <b>Superfamily:</b> YegP-like <b>Family:</b> YegP-like
9	<a href="#">d3bida1</a>	 Alignment		66.5	20	<b>Fold:</b> YegP-like <b>Superfamily:</b> YegP-like <b>Family:</b> YegP-like
10	<a href="#">d2k7ia1</a>	 Alignment		61.3	20	<b>Fold:</b> YegP-like <b>Superfamily:</b> YegP-like <b>Family:</b> YegP-like
11	<a href="#">c2k7iB_</a>	 Alignment		61.3	20	<b>PDB header:</b> structural genomics, unknown function <b>Chain:</b> B: <b>PDB Molecule:</b> upf0339 protein atu0232; <b>PDBTitle:</b> solution nmr structure of protein atu0232 from agrobacterium2 tumefaciens. northeast structural genomics consortium (nesg) target3 att3. ontario center for structural proteomics target atc0223.

12	<a href="#">c2k49A_</a>	Alignment		55.9	12	<b>PDB header:</b> structural genomics, unknown function <b>Chain:</b> A: <b>PDB Molecule:</b> upf0339 protein so_3888; <b>PDBTitle:</b> solution nmr structure of upf0339 protein so3888 from shewanella2 oneidensis. northeast structural genomics consortium target sor190
13	<a href="#">c2k8eA_</a>	Alignment		52.1	8	<b>PDB header:</b> structural genomics, unknown function <b>Chain:</b> A: <b>PDB Molecule:</b> upf0339 protein yegp; <b>PDBTitle:</b> solution nmr structure of protein of unknown function yegp from e.2 coli. ontario center for structural proteomics target ec0640_1_1233 northeast structural genomics consortium target et102.
14	<a href="#">d1s7ia_</a>	Alignment		45.8	8	<b>Fold:</b> Ferredoxin-like <b>Superfamily:</b> Dimeric alpha+beta barrel <b>Family:</b> DGPF domain (Pfam 04946)
15	<a href="#">c2z8nB_</a>	Alignment		45.0	19	<b>PDB header:</b> lyase <b>Chain:</b> B: <b>PDB Molecule:</b> 27.5 kda virulence protein; <b>PDBTitle:</b> structural basis for the catalytic mechanism of phosphothreonine lyase
16	<a href="#">d1l1na_</a>	Alignment		35.7	23	<b>Fold:</b> Ribosome inactivating proteins (RIP) <b>Superfamily:</b> Ribosome inactivating proteins (RIP) <b>Family:</b> Plant cytotoxins
17	<a href="#">c3i0uA_</a>	Alignment		26.4	16	<b>PDB header:</b> lyase <b>Chain:</b> A: <b>PDB Molecule:</b> phosphothreonine lyase ospf; <b>PDBTitle:</b> structure of the type iii effector/phosphothreonine lyase ospf from2 shigella flexneri
18	<a href="#">c1k6mA_</a>	Alignment		23.3	6	<b>PDB header:</b> transferase, hydrolase <b>Chain:</b> A: <b>PDB Molecule:</b> 6-phosphofructo-2-kinase/fructose-2,6- <b>PDBTitle:</b> crystal structure of human liver 6-phosphofructo-2-2 kinase/fructose-2,6-bisphosphatase
19	<a href="#">c2dclB_</a>	Alignment		23.2	28	<b>PDB header:</b> structural genomics, unknown function <b>Chain:</b> B: <b>PDB Molecule:</b> hypothetical upf0166 protein ph1503; <b>PDBTitle:</b> structure of ph1503 protein from pyrococcus horikoshii ot3
20	<a href="#">d2k8ea2</a>	Alignment		21.8	26	<b>Fold:</b> YegP-like <b>Superfamily:</b> YegP-like <b>Family:</b> YegP-like
21	<a href="#">c2dgaA_</a>	Alignment	not modelled	19.9	31	<b>PDB header:</b> hydrolase <b>Chain:</b> A: <b>PDB Molecule:</b> beta-glucosidase; <b>PDBTitle:</b> crystal structure of hexameric beta-glucosidase in wheat
22	<a href="#">d1onka_</a>	Alignment	not modelled	19.6	16	<b>Fold:</b> Ribosome inactivating proteins (RIP) <b>Superfamily:</b> Ribosome inactivating proteins (RIP) <b>Family:</b> Plant cytotoxins
23	<a href="#">c3gnoA_</a>	Alignment	not modelled	19.5	25	<b>PDB header:</b> hydrolase <b>Chain:</b> A: <b>PDB Molecule:</b> os03g0212800 protein; <b>PDBTitle:</b> crystal structure of a rice os3bglu6 beta-glucosidase
24	<a href="#">d2giab1</a>	Alignment	not modelled	16.3	22	<b>Fold:</b> ssDNA-binding transcriptional regulator domain <b>Superfamily:</b> ssDNA-binding transcriptional regulator domain <b>Family:</b> Guide RNA binding protein gBP
25	<a href="#">c2giaB_</a>	Alignment	not modelled	16.3	22	<b>PDB header:</b> translation <b>Chain:</b> B: <b>PDB Molecule:</b> mitochondrial rna-binding protein 1; <b>PDBTitle:</b> crystal structures of trypanosoma brucei mrp1/mrp2
26	<a href="#">c1bifA_</a>	Alignment	not modelled	15.7	10	<b>PDB header:</b> bifunctional enzyme <b>Chain:</b> A: <b>PDB Molecule:</b> 6-phosphofructo-2-kinase/ fructose-2,6-bisphosphatase; <b>PDBTitle:</b> 6-phosphofructo-2-kinase/fructose-2,6-bisphosphatase bifunctional2 enzyme complexed with atp-g-s and phosphate
27	<a href="#">d2d6fc3</a>	Alignment	not modelled	15.6	19	<b>Fold:</b> Glutamine synthetase/guanido kinase <b>Superfamily:</b> Glutamine synthetase/guanido kinase <b>Family:</b> GatB/GatE catalytic domain-like
28	<a href="#">c3tekA_</a>	Alignment	not modelled	14.6	31	<b>PDB header:</b> dna binding protein <b>Chain:</b> A: <b>PDB Molecule:</b> thermodbp-single stranded dna binding protein; <b>PDBTitle:</b> thermodbp: a non-canonical single-stranded dna binding protein with a2 novel structure and mechanism
						<b>Fold:</b> Flavodoxin-like

29	<a href="#">d1a9xb2</a>	Alignment	not modelled	13.4	42	<b>Superfamily:</b> Class I glutamine amidotransferase-like <b>Family:</b> Class I glutamine amidotransferases (GAT)
30	<a href="#">c2d6fC</a>	Alignment	not modelled	13.3	19	<b>PDB header:</b> ligase/rna <b>Chain:</b> C: <b>PDB Molecule:</b> glutamyl-trna(gln) amidotransferase subunit e; <b>PDBTitle:</b> crystal structure of glu-trna(gln) amidotransferase in the2 complex with trna(gln)
31	<a href="#">d1ofua2</a>	Alignment	not modelled	11.6	17	<b>Fold:</b> Bacillus chorismate mutase-like <b>Superfamily:</b> Tubulin C-terminal domain-like <b>Family:</b> Tubulin, C-terminal domain
32	<a href="#">c2xtsD</a>	Alignment	not modelled	10.3	23	<b>PDB header:</b> oxidoreductase/electron transport <b>Chain:</b> D: <b>PDB Molecule:</b> cytochrome; <b>PDBTitle:</b> crystal structure of the sulfane dehydrogenase soxcd from paracoccus2 pantotrophus
33	<a href="#">d2k49a1</a>	Alignment	not modelled	10.1	25	<b>Fold:</b> YegP-like <b>Superfamily:</b> YegP-like <b>Family:</b> YegP-like
34	<a href="#">d1ii2a2</a>	Alignment	not modelled	10.0	11	<b>Fold:</b> PEP carboxykinase N-terminal domain <b>Superfamily:</b> PEP carboxykinase N-terminal domain <b>Family:</b> PEP carboxykinase N-terminal domain
35	<a href="#">d1s9ra</a>	Alignment	not modelled	9.9	21	<b>Fold:</b> Pentain, beta/alpha-propeller <b>Superfamily:</b> Pentain <b>Family:</b> Arginine deiminase
36	<a href="#">c2an7A</a>	Alignment	not modelled	9.9	21	<b>PDB header:</b> dna binding protein <b>Chain:</b> A: <b>PDB Molecule:</b> protein pard; <b>PDBTitle:</b> solution structure of the bacterial antidote pard
37	<a href="#">d1s1ma1</a>	Alignment	not modelled	9.7	21	<b>Fold:</b> Flavodoxin-like <b>Superfamily:</b> Class I glutamine amidotransferase-like <b>Family:</b> Class I glutamine amidotransferases (GAT)
38	<a href="#">d1nlqa</a>	Alignment	not modelled	9.7	23	<b>Fold:</b> Nucleoplasmin-like/VP (viral coat and capsid proteins) <b>Superfamily:</b> Nucleoplasmin-like core domain <b>Family:</b> Nucleoplasmin-like core domain
39	<a href="#">d1j3ba2</a>	Alignment	not modelled	9.5	28	<b>Fold:</b> PEP carboxykinase N-terminal domain <b>Superfamily:</b> PEP carboxykinase N-terminal domain <b>Family:</b> PEP carboxykinase N-terminal domain
40	<a href="#">d1rq2a2</a>	Alignment	not modelled	9.3	15	<b>Fold:</b> Bacillus chorismate mutase-like <b>Superfamily:</b> Tubulin C-terminal domain-like <b>Family:</b> Tubulin, C-terminal domain
41	<a href="#">d2ftsai</a>	Alignment	not modelled	9.0	21	<b>Fold:</b> beta-clip <b>Superfamily:</b> MoeA C-terminal domain-like <b>Family:</b> MoeA C-terminal domain-like
42	<a href="#">c2hl2A</a>	Alignment	not modelled	8.9	20	<b>PDB header:</b> ligase <b>Chain:</b> A: <b>PDB Molecule:</b> threonyl-trna synthetase; <b>PDBTitle:</b> crystal structure of the editing domain of threonyl-trna2 synthetase from pyrococcus abyssi in complex with an3 analog of seryladenylate
43	<a href="#">d1nm3a2</a>	Alignment	not modelled	8.4	16	<b>Fold:</b> Thioredoxin fold <b>Superfamily:</b> Thioredoxin-like <b>Family:</b> Glutathione peroxidase-like
44	<a href="#">d2j44a2</a>	Alignment	not modelled	8.4	13	<b>Fold:</b> Prealbumin-like <b>Superfamily:</b> Starch-binding domain-like <b>Family:</b> PUD-like
45	<a href="#">d1xrui</a>	Alignment	not modelled	8.2	26	<b>Fold:</b> Double-stranded beta-helix <b>Superfamily:</b> RmlC-like cupins <b>Family:</b> Kdul-like
46	<a href="#">c3h0mE</a>	Alignment	not modelled	8.1	20	<b>PDB header:</b> ligase <b>Chain:</b> E: <b>PDB Molecule:</b> aspartyl/glutamyl-trna(asn/gln) amidotransferase <b>PDBTitle:</b> structure of trna-dependent amidotransferase gatcab from2 aquifex aeolicus
47	<a href="#">c3h16A</a>	Alignment	not modelled	8.1	14	<b>PDB header:</b> signaling protein <b>Chain:</b> A: <b>PDB Molecule:</b> tir protein; <b>PDBTitle:</b> crystal structure of a bacteria tir domain, pdtir from2 paracoccus denitrificans
48	<a href="#">c3k6sB</a>	Alignment	not modelled	7.7	26	<b>PDB header:</b> cell adhesion <b>Chain:</b> B: <b>PDB Molecule:</b> integrin beta-2; <b>PDBTitle:</b> structure of integrin alphaxbeta2 ectodomain
49	<a href="#">d1k8wa5</a>	Alignment	not modelled	7.7	16	<b>Fold:</b> Pseudouridine synthase <b>Superfamily:</b> Pseudouridine synthase <b>Family:</b> Pseudouridine synthase II TruB
50	<a href="#">d2ob5a1</a>	Alignment	not modelled	7.7	21	<b>Fold:</b> RbsD-like <b>Superfamily:</b> RbsD-like <b>Family:</b> RbsD-like
51	<a href="#">d1o51a</a>	Alignment	not modelled	7.7	15	<b>Fold:</b> Ferredoxin-like <b>Superfamily:</b> GlnB-like <b>Family:</b> DUF190/COG1993
52	<a href="#">c3r84O</a>	Alignment	not modelled	7.5	19	<b>PDB header:</b> transcription <b>Chain:</b> O: <b>PDB Molecule:</b> mediator of rna polymerase ii transcription subunit 11; <b>PDBTitle:</b> structure of the mediator head subcomplex med11/22
53	<a href="#">c2g5xA</a>	Alignment	not modelled	7.5	23	<b>PDB header:</b> hydrolase <b>Chain:</b> A: <b>PDB Molecule:</b> ribosome-inactivating protein; <b>PDBTitle:</b> crystal structure of lychnin a type 1 ribosome inactivating2 protein (rip)
54	<a href="#">d1cb0a</a>	Alignment	not modelled	7.3	18	<b>Fold:</b> Phosphorylase/hydrolase-like <b>Superfamily:</b> Purine and uridine phosphorylases <b>Family:</b> Purine and uridine phosphorylases
55	<a href="#">d2f2ab2</a>	Alignment	not modelled	7.3	22	<b>Fold:</b> Glutamine synthetase/guanido kinase <b>Superfamily:</b> Glutamine synthetase/guanido kinase <b>Family:</b> GatB/GatE catalytic domain-like

56	<a href="#">d1tf5a1</a>	Alignment	not modelled	7.3	38	<b>Fold:</b> Pre-protein crosslinking domain of SecA <b>Superfamily:</b> Pre-protein crosslinking domain of SecA <b>Family:</b> Pre-protein crosslinking domain of SecA
57	<a href="#">d1a79a1</a>	Alignment	not modelled	7.3	21	<b>Fold:</b> Restriction endonuclease-like <b>Superfamily:</b> tRNA-intron endonuclease catalytic domain-like <b>Family:</b> tRNA-intron endonuclease catalytic domain-like
58	<a href="#">c1keeH</a>	Alignment	not modelled	7.2	42	<b>PDB header:</b> ligase <b>Chain:</b> H: <b>PDB Molecule:</b> carbamoyl-phosphate synthetase small chain; <b>PDBTitle:</b> inactivation of the amidotransferase activity of carbamoyl phosphate2 synthetase by the antibiotic acivicin
59	<a href="#">d1ogda</a>	Alignment	not modelled	7.2	17	<b>Fold:</b> RbsD-like <b>Superfamily:</b> RbsD-like <b>Family:</b> RbsD-like
60	<a href="#">c2v4uA</a>	Alignment	not modelled	7.1	21	<b>PDB header:</b> ligase <b>Chain:</b> A: <b>PDB Molecule:</b> ctp synthase 2; <b>PDBTitle:</b> human ctp synthetase 2 - glutaminase domain in complex with2 5-oxo-l-norleucine
61	<a href="#">c3epyA</a>	Alignment	not modelled	7.0	22	<b>PDB header:</b> lipid binding protein <b>Chain:</b> A: <b>PDB Molecule:</b> acyl-coa-binding domain-containing protein 7; <b>PDBTitle:</b> crystal structure of human acyl-coa binding domain 72 complexed with palmitoyl-coa
62	<a href="#">d1wv8a1</a>	Alignment	not modelled	7.0	11	<b>Fold:</b> TTHA1013/TTHA0281-like <b>Superfamily:</b> TTHA1013/TTHA0281-like <b>Family:</b> TTHA1013-like
63	<a href="#">c2dzlA</a>	Alignment	not modelled	6.7	38	<b>PDB header:</b> structural genomics unknown function <b>Chain:</b> A: <b>PDB Molecule:</b> protein fam100b; <b>PDBTitle:</b> solution structure of the uba domain in human protein2 fam100b
64	<a href="#">c2copA</a>	Alignment	not modelled	6.7	26	<b>PDB header:</b> lipid binding protein <b>Chain:</b> A: <b>PDB Molecule:</b> acyl-coenzyme a binding domain containing 6; <b>PDBTitle:</b> solution structure of rsgi ruh-040, an acbp domain from2 human cdna
65	<a href="#">d1ce7a</a>	Alignment	not modelled	6.5	25	<b>Fold:</b> Ribosome inactivating proteins (RIP) <b>Superfamily:</b> Ribosome inactivating proteins (RIP) <b>Family:</b> Plant cytotoxins
66	<a href="#">c2pebB</a>	Alignment	not modelled	6.4	30	<b>PDB header:</b> oxidoreductase <b>Chain:</b> B: <b>PDB Molecule:</b> putative dioxygenase; <b>PDBTitle:</b> crystal structure of a putative dioxygenase (npun_f1925) from nostoc2 punctiforme pcc 73102 at 1.46 a resolution
67	<a href="#">c3mk9A</a>	Alignment	not modelled	6.4	25	<b>PDB header:</b> hydrolase <b>Chain:</b> A: <b>PDB Molecule:</b> ricin; <b>PDBTitle:</b> stabilized ricin immunogen 1-33/44-198
68	<a href="#">c3mvkA</a>	Alignment	not modelled	6.4	18	<b>PDB header:</b> isomerase <b>Chain:</b> A: <b>PDB Molecule:</b> protein fucu; <b>PDBTitle:</b> the crystal structure of fucu from bifidobacterium longum to 1.65a
69	<a href="#">c1a79B</a>	Alignment	not modelled	6.3	21	<b>PDB header:</b> endonuclease <b>Chain:</b> B: <b>PDB Molecule:</b> trna endonuclease; <b>PDBTitle:</b> crystal structure of the trna splicing endonuclease from2 methanococcus jannaschii
70	<a href="#">d2olra2</a>	Alignment	not modelled	6.1	14	<b>Fold:</b> PEP carboxykinase N-terminal domain <b>Superfamily:</b> PEP carboxykinase N-terminal domain <b>Family:</b> PEP carboxykinase N-terminal domain
71	<a href="#">d1gtfa</a>	Alignment	not modelled	6.1	32	<b>Fold:</b> Double-stranded beta-helix <b>Superfamily:</b> TRAP-like <b>Family:</b> Trp RNA-binding attenuation protein (TRAP)
72	<a href="#">d1kska3</a>	Alignment	not modelled	6.1	56	<b>Fold:</b> Alpha-L RNA-binding motif <b>Superfamily:</b> Alpha-L RNA-binding motif <b>Family:</b> Pseudouridine synthase RsuA N-terminal domain
73	<a href="#">d1i96v</a>	Alignment	not modelled	6.1	23	<b>Fold:</b> IF3-like <b>Superfamily:</b> Translation initiation factor IF3, C-terminal domain <b>Family:</b> Translation initiation factor IF3, C-terminal domain
74	<a href="#">c3icgD</a>	Alignment	not modelled	6.0	8	<b>PDB header:</b> hydrolase <b>Chain:</b> D: <b>PDB Molecule:</b> endoglucanase d; <b>PDBTitle:</b> crystal structure of the catalytic and carbohydrate binding domain of2 endoglucanase d from clostridium cellulovorans
75	<a href="#">c2i1vB</a>	Alignment	not modelled	5.7	10	<b>PDB header:</b> transferase, hydrolase <b>Chain:</b> B: <b>PDB Molecule:</b> 6-phosphofructo-2-kinase/fructose-2,6- <b>PDBTitle:</b> crystal structure of pfkfb3 in complex with adp and2 fructose-2,6-bisphosphate
76	<a href="#">d1rxxa</a>	Alignment	not modelled	5.7	18	<b>Fold:</b> Pentain, beta/alpha-propeller <b>Superfamily:</b> Pentain <b>Family:</b> Arginine deiminase
77	<a href="#">c2z5sN</a>	Alignment	not modelled	5.6	11	<b>PDB header:</b> cell cycle <b>Chain:</b> N: <b>PDB Molecule:</b> mdm4 protein; <b>PDBTitle:</b> molecular basis for the inhibition of p53 by mdmx
78	<a href="#">c2g5iB</a>	Alignment	not modelled	5.6	22	<b>PDB header:</b> ligase <b>Chain:</b> B: <b>PDB Molecule:</b> aspartyl/glutamyl-trna(asn/gln) amidotransferase <b>PDBTitle:</b> structure of trna-dependent amidotransferase gatcab2 complexed with adp-alf4
79	<a href="#">d1t4aa</a>	Alignment	not modelled	5.4	21	<b>Fold:</b> PurS-like <b>Superfamily:</b> PurS-like <b>Family:</b> PurS subunit of FGAM synthetase
80	<a href="#">c3al0B</a>	Alignment	not modelled	5.3	22	<b>PDB header:</b> ligase/rna <b>Chain:</b> B: <b>PDB Molecule:</b> aspartyl/glutamyl-trna(asn/gln) amidotransferase subunit b; <b>PDBTitle:</b> crystal structure of the glutamine transamidosome from thermotoga2 maritima in the glutamylation state. <b>PDB header:</b> structural genomics, unknown function

81	<a href="#">c2yx5A_</a>	Alignment	not modelled	5.2	10	<b>Chain:</b> A: <b>PDB Molecule:</b> upf0062 protein mj1593; <b>PDBTitle:</b> crystal structure of methanocaldococcus jannaschii purs, one of the2 subunits of formylglycinamide ribonucleotide amidotransferase in the3 purine biosynthetic pathway
82	<a href="#">d1p8ja1</a>	Alignment	not modelled	5.2	18	<b>Fold:</b> Galactose-binding domain-like <b>Superfamily:</b> Galactose-binding domain-like <b>Family:</b> Proprotein convertase P-domain
83	<a href="#">d2q3na1</a>	Alignment	not modelled	5.2	13	<b>Fold:</b> Ribosome inactivating proteins (RIP) <b>Superfamily:</b> Ribosome inactivating proteins (RIP) <b>Family:</b> Plant cytotoxins