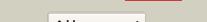
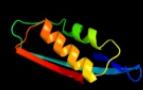
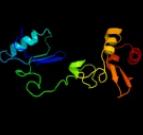
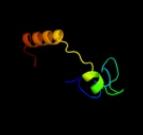
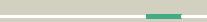


# Phyre<sup>2</sup>

Email	i.a.kelley@imperial.ac.uk
Description	Q46920
Date	Thu Jan 5 12:35:53 GMT 2012
Unique Job ID	da6b85928219f7a4

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	<a href="#">c3bp1A_</a>			100.0	64	<b>PDB header:</b> oxidoreductase <b>Chain:</b> A: <b>PDB Molecule:</b> nadph-dependent 7-cyano-7-deazaguanine reductase; <b>PDBTitle:</b> crystal structure of putative 7-cyano-7-deazaguanine2 reductase quef from vibrio cholerae o1 biovar eltor
2	<a href="#">c1wm9D_</a>			97.8	19	<b>PDB header:</b> hydrolase <b>Chain:</b> D: <b>PDB Molecule:</b> gtp cyclohydrolase i; <b>PDBTitle:</b> structure of gtp cyclohydrolase i from thermus thermophilus hb8
3	<a href="#">d1wura1</a>			97.8	19	<b>Fold:</b> T-fold <b>Superfamily:</b> Tetrahydrobiopterin biosynthesis enzymes-like <b>Family:</b> GTP cyclohydrolase I
4	<a href="#">c1is7F_</a>			95.5	20	<b>PDB header:</b> hydrolase/protein binding <b>Chain:</b> F: <b>PDB Molecule:</b> gtp cyclohydrolase i; <b>PDBTitle:</b> crystal structure of rat gtpchi/gfrp stimulatory complex
5	<a href="#">d1wpla_</a>			95.5	20	<b>Fold:</b> T-fold <b>Superfamily:</b> Tetrahydrobiopterin biosynthesis enzymes-like <b>Family:</b> GTP cyclohydrolase I
6	<a href="#">d1a8ra_</a>			95.2	19	<b>Fold:</b> T-fold <b>Superfamily:</b> Tetrahydrobiopterin biosynthesis enzymes-like <b>Family:</b> GTP cyclohydrolase I
7	<a href="#">c1rg9D_</a>			77.9	16	<b>PDB header:</b> transferase <b>Chain:</b> D: <b>PDB Molecule:</b> s-adenosylmethionine synthetase; <b>PDBTitle:</b> s-adenosylmethionine synthetase complexed with sam and ppnp
8	<a href="#">c3imlB_</a>			60.2	18	<b>PDB header:</b> transferase <b>Chain:</b> B: <b>PDB Molecule:</b> s-adenosylmethionine synthetase; <b>PDBTitle:</b> crystal structure of s-adenosylmethionine synthetase from burkholderia2 pseudomallei
9	<a href="#">c2obvA_</a>			52.0	16	<b>PDB header:</b> transferase <b>Chain:</b> A: <b>PDB Molecule:</b> s-adenosylmethionine synthetase isoform type-1; <b>PDBTitle:</b> crystal structure of the human s-adenosylmethionine synthetase 1 in2 complex with the product
10	<a href="#">c2f42A_</a>			49.5	19	<b>PDB header:</b> chaperone <b>Chain:</b> A: <b>PDB Molecule:</b> stip1 homology and u-box containing protein 1; <b>PDBTitle:</b> dimerization and u-box domains of zebrafish c-terminal of hsp702 interacting protein
11	<a href="#">c3hjhA_</a>			48.9	53	<b>PDB header:</b> hydrolase <b>Chain:</b> A: <b>PDB Molecule:</b> transcription-repair-coupling factor; <b>PDBTitle:</b> a rigid n-terminal clamp restrains the motor domains of the bacterial2 transcription-repair coupling factor

12	<a href="#">d3bz6a2</a>			32.7	30	<b>Fold:</b> DNA/RNA-binding 3-helical bundle <b>Superfamily:</b> "Winged helix" DNA-binding domain <b>Family:</b> PSPT02686-like
13	<a href="#">c3pg6D</a>			32.6	25	<b>PDB header:</b> ligase <b>Chain:</b> D; <b>PDB Molecule:</b> e3 ubiquitin-protein ligase dbx3I; <b>PDBTitle:</b> the carboxyl terminal domain of human deltex 3-like
14	<a href="#">d2b2na1</a>			31.1	54	<b>Fold:</b> P-loop containing nucleoside triphosphate hydrolases <b>Superfamily:</b> P-loop containing nucleoside triphosphate hydrolases <b>Family:</b> Tandem AAA-ATPase domain
15	<a href="#">d1j6ra</a>			31.0	27	<b>Fold:</b> Methionine synthase activation domain-like <b>Superfamily:</b> Methionine synthase activation domain-like <b>Family:</b> Hypothetical protein TM0269
16	<a href="#">d2eyqa4</a>			30.7	54	<b>Fold:</b> P-loop containing nucleoside triphosphate hydrolases <b>Superfamily:</b> P-loop containing nucleoside triphosphate hydrolases <b>Family:</b> Tandem AAA-ATPase domain
17	<a href="#">d2o4ta1</a>			29.2	13	<b>Fold:</b> Left-handed superhelix <b>Superfamily:</b> BH3980-like <b>Family:</b> BH3980-like
18	<a href="#">c3gzfD</a>			28.7	18	<b>PDB header:</b> viral protein <b>Chain:</b> D; <b>PDB Molecule:</b> replicase polyprotein 1ab; <b>PDBTitle:</b> structure of the c-terminal domain of nsp4 from feline coronavirus
19	<a href="#">c3rv2B</a>			27.0	18	<b>PDB header:</b> transferase <b>Chain:</b> B; <b>PDB Molecule:</b> s-adenosylmethionine synthase; <b>PDBTitle:</b> crystal structure of s-adenosylmethionine synthetase from2 mycobacterium marinum
20	<a href="#">c3fpnB</a>			26.2	31	<b>PDB header:</b> dna binding protein <b>Chain:</b> B; <b>PDB Molecule:</b> geobacillus stearothermophilus uvrB interaction <b>PDBTitle:</b> crystal structure of uvra-uvrb interaction domains
21	<a href="#">c3ty1B</a>		not modelled	19.7	16	<b>PDB header:</b> isomerase <b>Chain:</b> B; <b>PDB Molecule:</b> hypothetical aldose 1-epimerase; <b>PDBTitle:</b> crystal structure of a hypothetical aldose 1-epimerase (kpn_04629)2 from klebsiella pneumoniae subsp. pneumoniae mgh78578 at 1.90 a3 resolution
22	<a href="#">d1nb9a</a>		not modelled	16.4	10	<b>Fold:</b> Reductase/isomerase/elongation factor common domain <b>Superfamily:</b> Riboflavin kinase-like <b>Family:</b> ATP-dependent riboflavin kinase-like
23	<a href="#">d2pvaa</a>		not modelled	15.6	18	<b>Fold:</b> Ntn hydrolase-like <b>Superfamily:</b> N-terminal nucleophile aminohydrolases (Ntn hydrolases) <b>Family:</b> Penicillin V acylase
24	<a href="#">d1t5la1</a>		not modelled	15.5	31	<b>Fold:</b> P-loop containing nucleoside triphosphate hydrolases <b>Superfamily:</b> P-loop containing nucleoside triphosphate hydrolases <b>Family:</b> Tandem AAA-ATPase domain
25	<a href="#">c2hezB</a>		not modelled	15.3	21	<b>PDB header:</b> hydrolase <b>Chain:</b> B; <b>PDB Molecule:</b> bile salt hydrolase; <b>PDBTitle:</b> bifidobacterium longum bile salt hydrolase
26	<a href="#">c3bz6A</a>		not modelled	15.1	30	<b>PDB header:</b> structural genomics, unknown function <b>Chain:</b> A; <b>PDB Molecule:</b> upf0502 protein pspt02686; <b>PDBTitle:</b> crystal structure of a conserved protein of unknown function from2 pseudomonas syringae pv. tomato str. dc3000
27	<a href="#">c3op1A</a>		not modelled	14.5	21	<b>PDB header:</b> transferase <b>Chain:</b> A; <b>PDB Molecule:</b> macrolide-efflux protein; <b>PDBTitle:</b> crystal structure of macrolide-efflux protein sp_1110 from streptococcus pneumoniae
28	<a href="#">d1n08a</a>		not modelled	13.9	10	<b>Fold:</b> Reductase/isomerase/elongation factor common domain <b>Superfamily:</b> Riboflavin kinase-like <b>Family:</b> ATP-dependent riboflavin kinase-like

29	<a href="#">c3bnwA</a>		Alignment	not modelled	12.9	16	<b>PDB header:</b> transferase <b>Chain:</b> A: <b>PDB Molecule:</b> riboflavin kinase, putative; <b>PDBTitle:</b> crystal structure of riboflavin kinase from trypanosoma brucei
30	<a href="#">d1tyja1</a>		Alignment	not modelled	12.6	25	<b>Fold:</b> Common fold of diphtheria toxin/transcription factors/cytochrome f <b>Superfamily:</b> Carbohydrate-binding domain <b>Family:</b> Cellulose-binding domain family III
31	<a href="#">d1zv9a1</a>		Alignment	not modelled	12.4	32	<b>Fold:</b> Common fold of diphtheria toxin/transcription factors/cytochrome f <b>Superfamily:</b> Carbohydrate-binding domain <b>Family:</b> Cellulose-binding domain family III
32	<a href="#">c3izcW</a>		Alignment	not modelled	12.2	22	<b>PDB header:</b> ribosome <b>Chain:</b> W: <b>PDB Molecule:</b> 60s ribosomal protein rpl22 (l22e); <b>PDBTitle:</b> localization of the large subunit ribosomal proteins into a 6.1 a2 cryo-em map of saccharomyces cerevisiae translating 80s ribosome
33	<a href="#">c2eyqA</a>		Alignment	not modelled	11.8	54	<b>PDB header:</b> hydrolase <b>Chain:</b> A: <b>PDB Molecule:</b> transcription-repair coupling factor; <b>PDBTitle:</b> crystal structure of escherichia coli transcription-repair2 coupling factor
34	<a href="#">c2im9A</a>		Alignment	not modelled	11.2	19	<b>PDB header:</b> structural genomics, unknown function <b>Chain:</b> A: <b>PDB Molecule:</b> hypothetical protein; <b>PDBTitle:</b> crystal structure of protein lpg0564 from legionella pneumophila str.2 philadelphia 1, pfam duf1460
35	<a href="#">d2im9a1</a>		Alignment	not modelled	11.2	19	<b>Fold:</b> Cysteine proteinases <b>Superfamily:</b> Cysteine proteinases <b>Family:</b> Lpg0564-like
36	<a href="#">c3h8mB</a>		Alignment	not modelled	11.0	19	<b>PDB header:</b> transferase <b>Chain:</b> B: <b>PDB Molecule:</b> ephrin type-a receptor 7; <b>PDBTitle:</b> sam domain of human ephrin type-a receptor 7 (epha7)
37	<a href="#">c3lhiA</a>		Alignment	not modelled	10.5	21	<b>PDB header:</b> hydrolase <b>Chain:</b> A: <b>PDB Molecule:</b> putative 6-phosphogluconolactonase; <b>PDBTitle:</b> crystal structure of putative 6-2 phosphogluconolactonase(yp_207848.1) from neisseria3 gonorrhoeae fa 1090 at 1.33 a resolution
38	<a href="#">c4a1dM</a>		Alignment	not modelled	10.3	26	<b>PDB header:</b> ribosome <b>Chain:</b> M: <b>PDB Molecule:</b> ribosomal protein l22; <b>PDBTitle:</b> t thermophila 60s ribosomal subunit in complex with initiation2 factor 6. this file contains 26s rrna and proteins of3 molecule 4.
39	<a href="#">c3kkaD</a>		Alignment	not modelled	10.1	23	<b>PDB header:</b> transferase <b>Chain:</b> D: <b>PDB Molecule:</b> ephrin type-a receptor 2; <b>PDBTitle:</b> co-crystal structure of the sam domains of epha1 and epha2
40	<a href="#">c2b59A</a>		Alignment	not modelled	9.7	44	<b>PDB header:</b> hydrolase/structural protein <b>Chain:</b> A: <b>PDB Molecule:</b> cog1196: chromosome segregation atpases; <b>PDBTitle:</b> the type ii cohesin dockerin complex
41	<a href="#">d2c21a2</a>		Alignment	not modelled	9.7	17	<b>Fold:</b> RING/U-box <b>Superfamily:</b> RING/U-box <b>Family:</b> U-box
42	<a href="#">d2bm3a1</a>		Alignment	not modelled	9.6	44	<b>Fold:</b> Common fold of diphtheria toxin/transcription factors/cytochrome f <b>Superfamily:</b> Carbohydrate-binding domain <b>Family:</b> Cellulose-binding domain family III
43	<a href="#">c2kreA</a>		Alignment	not modelled	9.6	17	<b>PDB header:</b> protein binding <b>Chain:</b> A: <b>PDB Molecule:</b> ubiquitin conjugation factor e4 b; <b>PDBTitle:</b> solution structure of e4b/ufd2a u-box domain
44	<a href="#">c3o2kA</a>		Alignment	not modelled	9.5	23	<b>PDB header:</b> transferase <b>Chain:</b> A: <b>PDB Molecule:</b> brevianamide f prenyltransferase; <b>PDBTitle:</b> crystal structure of brevianamide f prenyltransferase complexed with2 brevianamide f and dimethylallyl s-thiolodiphosphate
45	<a href="#">c2x0kB</a>		Alignment	not modelled	9.4	11	<b>PDB header:</b> transferase <b>Chain:</b> B: <b>PDB Molecule:</b> riboflavin biosynthesis protein ribf; <b>PDBTitle:</b> crystal structure of modular fad synthetase from2 corynebacterium ammoniagenes
46	<a href="#">c1m0kA</a>		Alignment	not modelled	9.3	50	<b>PDB header:</b> ion transport <b>Chain:</b> A: <b>PDB Molecule:</b> bacteriorhodopsin; <b>PDBTitle:</b> bacteriorhodopsin k intermediate at 1.43 a resolution
47	<a href="#">d1m0ka</a>		Alignment	not modelled	9.3	50	<b>Fold:</b> Family A G protein-coupled receptor-like <b>Superfamily:</b> Family A G protein-coupled receptor-like <b>Family:</b> Bacteriorhodopsin-like
48	<a href="#">c3fnkA</a>		Alignment	not modelled	9.2	56	<b>PDB header:</b> structural protein <b>Chain:</b> A: <b>PDB Molecule:</b> cellulosomal scaffoldin adaptor protein b; <b>PDBTitle:</b> crystal structure of the second type ii cohesin module from2 the cellulosomal adaptor scaa scaffoldin of acetivibrio3 cellulolyticus
49	<a href="#">c2y9xC</a>		Alignment	not modelled	9.1	14	<b>PDB header:</b> oxidoreductase <b>Chain:</b> C: <b>PDB Molecule:</b> polyphenol oxidase; <b>PDBTitle:</b> crystal structure of ppo3, a tyrosinase from agaricus bisporus, in2 deoxy-form that contains additional unknown lectin-like subunit,3 with inhibitor tropolone
50	<a href="#">c2xfmA</a>		Alignment	not modelled	8.6	33	<b>PDB header:</b> rna/protein <b>Chain:</b> A: <b>PDB Molecule:</b> piwi-like protein 1; <b>PDBTitle:</b> complex structure of the miwi paz domain bound to methylated single2 stranded rna
51	<a href="#">d1gwya</a>		Alignment	not modelled	8.2	12	<b>Fold:</b> Cytolysin/lectin <b>Superfamily:</b> Cytolysin/lectin <b>Family:</b> Anemone pore-forming cytolysin
52	<a href="#">d2phcb2</a>		Alignment	not modelled	8.1	29	<b>Fold:</b> DCoH-like <b>Superfamily:</b> PH0987 N-terminal domain-like <b>Family:</b> PH0987 N-terminal domain-like
53	<a href="#">d1iyca</a>		Alignment	not modelled	8.0	50	<b>Fold:</b> Invertebrate chitin-binding proteins <b>Superfamily:</b> Invertebrate chitin-binding proteins

						<b>Family:</b> Antifungal peptide scarabaecin
54	<a href="#">c3ghpA</a>	Alignment	not modelled	7.9	56	<b>PDB header:</b> structural protein <b>Chain:</b> A: <b>PDB Molecule:</b> cellulosomal scaffoldin adaptor protein b; <b>PDBTitle:</b> structure of the second type ii cohesin module from the2 adaptor scaf scaffoldin of acetivibrio cellulolyticus3 (including long c-terminal linker)
55	<a href="#">d1v2ya</a>	Alignment	not modelled	7.8	25	<b>Fold:</b> beta-Grasp (ubiquitin-like) <b>Superfamily:</b> Ubiquitin-like <b>Family:</b> Ubiquitin-related
56	<a href="#">c3i4zA</a>	Alignment	not modelled	7.6	23	<b>PDB header:</b> transferase <b>Chain:</b> A: <b>PDB Molecule:</b> tryptophan dimethylallyltransferase; <b>PDBTitle:</b> crystal structure of the dimethylallyl tryptophan synthase fgapt2 from2 aspergillus fumigatus
57	<a href="#">d2cqa1</a>	Alignment	not modelled	7.6	9	<b>Fold:</b> Ferredoxin-like <b>Superfamily:</b> RNA-binding domain, RBD <b>Family:</b> Canonical RBD
58	<a href="#">c1t6zB</a>	Alignment	not modelled	7.6	14	<b>PDB header:</b> transferase <b>Chain:</b> B: <b>PDB Molecule:</b> riboflavin kinase/fmn adenyltransferase; <b>PDBTitle:</b> crystal structure of riboflavin bound tm379
59	<a href="#">c2quoA</a>	Alignment	not modelled	7.4	29	<b>PDB header:</b> toxin <b>Chain:</b> A: <b>PDB Molecule:</b> heat-labile enterotoxin b chain; <b>PDBTitle:</b> crystal structure of c terminal fragment of clostridium2 perfringens enterotoxin
60	<a href="#">c3htkC</a>	Alignment	not modelled	7.3	17	<b>PDB header:</b> recombination/replication/ligase <b>Chain:</b> C: <b>PDB Molecule:</b> e3 sumo-protein ligase mms21; <b>PDBTitle:</b> crystal structure of mms21 and smc5 complex
61	<a href="#">d1p42a1</a>	Alignment	not modelled	6.9	10	<b>Fold:</b> Ribosomal protein S5 domain 2-like <b>Superfamily:</b> Ribosomal protein S5 domain 2-like <b>Family:</b> UDP-3-O-[3-hydroxymyristoyl] N-acetylglucosamine deacetylase LpxC
62	<a href="#">c3dc1C</a>	Alignment	not modelled	6.8	10	<b>PDB header:</b> structural genomics, unknown function <b>Chain:</b> C: <b>PDB Molecule:</b> tm1086; <b>PDBTitle:</b> crystal structure of tm1086
63	<a href="#">d2gpi1</a>	Alignment	not modelled	6.8	27	<b>Fold:</b> Shew3726-like <b>Superfamily:</b> Shew3726-like <b>Family:</b> Shew3726-like
64	<a href="#">c2dbhA</a>	Alignment	not modelled	6.6	56	<b>PDB header:</b> signaling protein <b>Chain:</b> A: <b>PDB Molecule:</b> tumor necrosis factor receptor superfamily <b>PDBTitle:</b> solution structure of the carboxyl-terminal card-like2 domain in human tnfr-related death receptor-6
65	<a href="#">d1mxaa2</a>	Alignment	not modelled	6.5	33	<b>Fold:</b> S-adenosylmethionine synthetase <b>Superfamily:</b> S-adenosylmethionine synthetase <b>Family:</b> S-adenosylmethionine synthetase
66	<a href="#">d2hiya1</a>	Alignment	not modelled	6.4	20	<b>Fold:</b> SP0830-like <b>Superfamily:</b> SP0830-like <b>Family:</b> SP0830-like
67	<a href="#">c1zc1A</a>	Alignment	not modelled	6.1	21	<b>PDB header:</b> protein turnover <b>Chain:</b> A: <b>PDB Molecule:</b> ubiquitin fusion degradation protein 1; <b>PDBTitle:</b> ufd1 exhibits the aaa-atpase fold with two distinct2 ubiquitin interaction sites
68	<a href="#">d2d9ra1</a>	Alignment	not modelled	5.9	25	<b>Fold:</b> Double-split beta-barrel <b>Superfamily:</b> AF2212/PG0164-like <b>Family:</b> PG0164-like
69	<a href="#">d1ogy1</a>	Alignment	not modelled	5.8	25	<b>Fold:</b> Double psi beta-barrel <b>Superfamily:</b> ADC-like <b>Family:</b> Formate dehydrogenase/DMSO reductase, C-terminal domain
70	<a href="#">d1c8sa</a>	Alignment	not modelled	5.8	50	<b>Fold:</b> Family A G protein-coupled receptor-like <b>Superfamily:</b> Family A G protein-coupled receptor-like <b>Family:</b> Bacteriorhodopsin-like
71	<a href="#">c3vcbB</a>	Alignment	not modelled	5.8	16	<b>PDB header:</b> viral protein <b>Chain:</b> B: <b>PDB Molecule:</b> rna-directed rna polymerase; <b>PDBTitle:</b> c425s mutant of the c-terminal cytoplasmic domain of non-structural2 protein 4 from mouse hepatitis virus a59
72	<a href="#">d2baya1</a>	Alignment	not modelled	5.8	40	<b>Fold:</b> RING/U-box <b>Superfamily:</b> RING/U-box <b>Family:</b> U-box
73	<a href="#">d2p02a2</a>	Alignment	not modelled	5.6	40	<b>Fold:</b> S-adenosylmethionine synthetase <b>Superfamily:</b> S-adenosylmethionine synthetase <b>Family:</b> S-adenosylmethionine synthetase
74	<a href="#">c1zbe1</a>	Alignment	not modelled	5.4	23	<b>PDB header:</b> virus <b>Chain:</b> 1: <b>PDB Molecule:</b> coat protein vp1; <b>PDBTitle:</b> foot-and mouth disease virus serotype a1061
75	<a href="#">d2dira1</a>	Alignment	not modelled	5.4	15	<b>Fold:</b> THUMP domain <b>Superfamily:</b> THUMP domain-like <b>Family:</b> Minimal THUMP
76	<a href="#">d1x6ma</a>	Alignment	not modelled	5.3	25	<b>Fold:</b> Mss4-like <b>Superfamily:</b> Mss4-like <b>Family:</b> Glutathione-dependent formaldehyde-activating enzyme, Gfa
77	<a href="#">d1usua</a>	Alignment	not modelled	5.2	21	<b>Fold:</b> Ribosomal protein S5 domain 2-like <b>Superfamily:</b> Ribosomal protein S5 domain 2-like <b>Family:</b> Hsp90 middle domain
78	<a href="#">c2hz7A</a>	Alignment	not modelled	5.2	17	<b>PDB header:</b> ligase <b>Chain:</b> A: <b>PDB Molecule:</b> glutaminyl-trna synthetase; <b>PDBTitle:</b> crystal structure of the glutaminyl-trna synthetase from2 deinococcus radiodurans
79	<a href="#">d1qm4a2</a>	Alignment	not modelled	5.1	40	<b>Fold:</b> S-adenosylmethionine synthetase <b>Superfamily:</b> S-adenosylmethionine synthetase <b>Family:</b> S-adenosylmethionine synthetase

