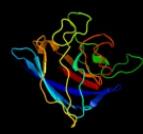
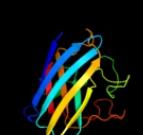
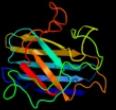


# Phyre<sup>2</sup>

Email	i.a.kelley@imperial.ac.uk
Description	P0AGD1
Date	Thu Jan 5 11:28:47 GMT 2012
Unique Job ID	6a99b1bd4c3487c2

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	<a href="#">d1esoA_</a>			100.0	100	<b>Fold:</b> Immunoglobulin-like beta-sandwich <b>Superfamily:</b> Cu,Zn superoxide dismutase-like <b>Family:</b> Cu,Zn superoxide dismutase-like
2	<a href="#">c2aqmA_</a>			100.0	55	<b>PDB header:</b> oxidoreductase <b>Chain:</b> A: <b>PDB Molecule:</b> superoxide dismutase [cu-zn]; <b>PDBTitle:</b> cu/zn superoxide dismutase from brucella abortus
3	<a href="#">d1eqwa_</a>			100.0	57	<b>Fold:</b> Immunoglobulin-like beta-sandwich <b>Superfamily:</b> Cu,Zn superoxide dismutase-like <b>Family:</b> Cu,Zn superoxide dismutase-like
4	<a href="#">c1pzsa_</a>			100.0	29	<b>PDB header:</b> oxidoreductase, metal binding protein <b>Chain:</b> A: <b>PDB Molecule:</b> superoxide dismutase [cu-zn]; <b>PDBTitle:</b> crystal structure of a cu-zn superoxide dismutase from mycobacterium2 tuberculosis at 1.63 resolution
5	<a href="#">d1pzsa_</a>			100.0	29	<b>Fold:</b> Immunoglobulin-like beta-sandwich <b>Superfamily:</b> Cu,Zn superoxide dismutase-like <b>Family:</b> Cu,Zn superoxide dismutase-like
6	<a href="#">d1oala_</a>			100.0	47	<b>Fold:</b> Immunoglobulin-like beta-sandwich <b>Superfamily:</b> Cu,Zn superoxide dismutase-like <b>Family:</b> Cu,Zn superoxide dismutase-like
7	<a href="#">d2apsa_</a>			100.0	51	<b>Fold:</b> Immunoglobulin-like beta-sandwich <b>Superfamily:</b> Cu,Zn superoxide dismutase-like <b>Family:</b> Cu,Zn superoxide dismutase-like
8	<a href="#">c1s4ic_C</a>			100.0	35	<b>PDB header:</b> oxidoreductase <b>Chain:</b> C: <b>PDB Molecule:</b> superoxide dismutase-like protein yojm; <b>PDBTitle:</b> crystal structure of a sod-like protein from bacillus subtilis
9	<a href="#">d1do5a_</a>			100.0	26	<b>Fold:</b> Immunoglobulin-like beta-sandwich <b>Superfamily:</b> Cu,Zn superoxide dismutase-like <b>Family:</b> Cu,Zn superoxide dismutase-like
10	<a href="#">d1qoea_</a>			100.0	26	<b>Fold:</b> Immunoglobulin-like beta-sandwich <b>Superfamily:</b> Cu,Zn superoxide dismutase-like <b>Family:</b> Cu,Zn superoxide dismutase-like
11	<a href="#">c3f7IA_</a>			100.0	32	<b>PDB header:</b> oxidoreductase <b>Chain:</b> A: <b>PDB Molecule:</b> copper,zinc superoxide dismutase; <b>PDBTitle:</b> x-ray crystal structure of alvinella pompejana cu,zn2 superoxide dismutase

12	<a href="#">d1srda_</a>	Alignment		100.0	30	<b>Fold:</b> Immunoglobulin-like beta-sandwich <b>Superfamily:</b> Cu,Zn superoxide dismutase-like <b>Family:</b> Cu,Zn superoxide dismutase-like
13	<a href="#">c2g2IB_</a>	Alignment		100.0	28	<b>PDB header:</b> oxidoreductase <b>Chain:</b> B: <b>PDB Molecule:</b> superoxide dismutase; <b>PDBTitle:</b> crystal structure of superoxide dismutase from p.2 atrosanguina
14	<a href="#">d2c9va1</a>	Alignment		100.0	29	<b>Fold:</b> Immunoglobulin-like beta-sandwich <b>Superfamily:</b> Cu,Zn superoxide dismutase-like <b>Family:</b> Cu,Zn superoxide dismutase-like
15	<a href="#">d1to4a_</a>	Alignment		100.0	27	<b>Fold:</b> Immunoglobulin-like beta-sandwich <b>Superfamily:</b> Cu,Zn superoxide dismutase-like <b>Family:</b> Cu,Zn superoxide dismutase-like
16	<a href="#">c3ce1A_</a>	Alignment		100.0	27	<b>PDB header:</b> oxidoreductase <b>Chain:</b> A: <b>PDB Molecule:</b> superoxide dismutase [cu-zn]; <b>PDBTitle:</b> crystal structure of the cu/zn superoxide dismutase from2 cryptococcus liquefaciens strain n6
17	<a href="#">d1xsoa_</a>	Alignment		100.0	32	<b>Fold:</b> Immunoglobulin-like beta-sandwich <b>Superfamily:</b> Cu,Zn superoxide dismutase-like <b>Family:</b> Cu,Zn superoxide dismutase-like
18	<a href="#">c2e47A_</a>	Alignment		100.0	28	<b>PDB header:</b> metal binding protein <b>Chain:</b> A: <b>PDB Molecule:</b> time interval measuring enzyme time; <b>PDBTitle:</b> crystal structure analysis of the clock protein ea4 (glycosylation2 form)
19	<a href="#">d1f1ga_</a>	Alignment		100.0	26	<b>Fold:</b> Immunoglobulin-like beta-sandwich <b>Superfamily:</b> Cu,Zn superoxide dismutase-like <b>Family:</b> Cu,Zn superoxide dismutase-like
20	<a href="#">c3l9eC_</a>	Alignment		100.0	29	<b>PDB header:</b> oxidoreductase <b>Chain:</b> C: <b>PDB Molecule:</b> superoxide dismutase [cu-zn]; <b>PDBTitle:</b> crystal structures of holo and cu-deficient cu/znsod from the silkworm2 bombyx mori and the implications in amyotrophic lateral sclerosis
21	<a href="#">c2jlpA_</a>	Alignment	not modelled	100.0	25	<b>PDB header:</b> oxidoreductase <b>Chain:</b> A: <b>PDB Molecule:</b> extracellular superoxide dismutase (cu-zn); <b>PDBTitle:</b> crystal structure of human extracellular copper-zinc2 superoxide dismutase.
22	<a href="#">d1ej8a_</a>	Alignment	not modelled	100.0	16	<b>Fold:</b> Immunoglobulin-like beta-sandwich <b>Superfamily:</b> Cu,Zn superoxide dismutase-like <b>Family:</b> Cu,Zn superoxide dismutase-like
23	<a href="#">c3kbeA_</a>	Alignment	not modelled	100.0	30	<b>PDB header:</b> oxidoreductase <b>Chain:</b> A: <b>PDB Molecule:</b> superoxide dismutase [cu-zn]; <b>PDBTitle:</b> metal-free c. elegans cu,zn superoxide dismutase
24	<a href="#">c1jk9D_</a>	Alignment	not modelled	100.0	20	<b>PDB header:</b> oxidoreductase <b>Chain:</b> D: <b>PDB Molecule:</b> copper chaperone for superoxide dismutase; <b>PDBTitle:</b> heterodimer between h48f-ysod1 and yccs
25	<a href="#">c1qupA_</a>	Alignment	not modelled	100.0	20	<b>PDB header:</b> chaperone <b>Chain:</b> A: <b>PDB Molecule:</b> superoxide dismutase 1 copper chaperone; <b>PDBTitle:</b> crystal structure of the copper chaperone for superoxide2 dismutase
26	<a href="#">c3hogA_</a>	Alignment	not modelled	100.0	34	<b>PDB header:</b> oxidoreductase <b>Chain:</b> A: <b>PDB Molecule:</b> superoxide dismutase [cu-zn], chloroplastic; <b>PDBTitle:</b> metal-free tomato chloroplast superoxide dismutase
27	<a href="#">d1jk9b1</a>	Alignment	not modelled	100.0	19	<b>Fold:</b> Immunoglobulin-like beta-sandwich <b>Superfamily:</b> Cu,Zn superoxide dismutase-like <b>Family:</b> Cu,Zn superoxide dismutase-like
28	<a href="#">c1zpuE_</a>	Alignment	not modelled	48.1	30	<b>PDB header:</b> oxidoreductase <b>Chain:</b> E: <b>PDB Molecule:</b> iron transport multicopper oxidase fet3; <b>PDBTitle:</b> crystal structure of fet3p, a multicopper oxidase that

					functions in 2 iron import
29	<a href="#">d1gsk3</a>	Alignment	not modelled	31.0	24 <b>Fold:</b> Cupredoxin-like <b>Superfamily:</b> Cupredoxins <b>Family:</b> Multidomain cupredoxins
30	<a href="#">c1of0A</a>	Alignment	not modelled	25.8	24 <b>PDB header:</b> oxidoreductase <b>Chain:</b> A: <b>PDB Molecule:</b> spore coat protein a; <b>PDBTitle:</b> crystal structure of bacillus subtilis cota after 1h2 soaking with ebs
31	<a href="#">c3zx1A</a>	Alignment	not modelled	23.3	29 <b>PDB header:</b> oxidoreductase <b>Chain:</b> A: <b>PDB Molecule:</b> oxidoreductase, putative; <b>PDBTitle:</b> multicopper oxidase from campylobacter jejuni: a metallo-oxidase
32	<a href="#">d1e30a</a>	Alignment	not modelled	21.5	27 <b>Fold:</b> Cupredoxin-like <b>Superfamily:</b> Cupredoxins <b>Family:</b> Plastocyanin/azurin-like
33	<a href="#">c2g23G</a>	Alignment	not modelled	20.5	33 <b>PDB header:</b> oxidoreductase <b>Chain:</b> G: <b>PDB Molecule:</b> phenoxazinone synthase; <b>PDBTitle:</b> the crystal structure of hexameric phenoxazinone synthase
34	<a href="#">d1kyaa3</a>	Alignment	not modelled	13.7	23 <b>Fold:</b> Cupredoxin-like <b>Superfamily:</b> Cupredoxins <b>Family:</b> Multidomain cupredoxins
35	<a href="#">d1ibya</a>	Alignment	not modelled	13.1	29 <b>Fold:</b> Cupredoxin-like <b>Superfamily:</b> Cupredoxins <b>Family:</b> Nitrosocyanin
36	<a href="#">d1bf2a1</a>	Alignment	not modelled	11.7	11 <b>Fold:</b> Immunoglobulin-like beta-sandwich <b>Superfamily:</b> E set domains <b>Family:</b> E-set domains of sugar-utilizing enzymes
37	<a href="#">c2fqea</a>	Alignment	not modelled	11.2	28 <b>PDB header:</b> oxidoreductase <b>Chain:</b> A: <b>PDB Molecule:</b> blue copper oxidase cueo; <b>PDBTitle:</b> crystal structures of e. coli laccase cueo under different2 copper binding situations
38	<a href="#">d1kv7a3</a>	Alignment	not modelled	10.7	27 <b>Fold:</b> Cupredoxin-like <b>Superfamily:</b> Cupredoxins <b>Family:</b> Multidomain cupredoxins
39	<a href="#">d1x53a1</a>	Alignment	not modelled	10.1	14 <b>Fold:</b> TBP-like <b>Superfamily:</b> Bet v1-like <b>Family:</b> AHSA1 domain
40	<a href="#">c2yxwB</a>	Alignment	not modelled	10.0	29 <b>PDB header:</b> oxidoreductase <b>Chain:</b> B: <b>PDB Molecule:</b> blue copper oxidase cueo; <b>PDBTitle:</b> the deletion mutant of multicopper oxidase cueo
41	<a href="#">c2jwyA</a>	Alignment	not modelled	9.2	24 <b>PDB header:</b> lipoprotein <b>Chain:</b> A: <b>PDB Molecule:</b> uncharacterized lipoprotein yaji; <b>PDBTitle:</b> solution nmr structure of uncharacterized lipoprotein yaji from2 escherichia coli. northeast structural genomics target er540
42	<a href="#">c2f2bA</a>	Alignment	not modelled	8.6	50 <b>PDB header:</b> membrane protein <b>Chain:</b> A: <b>PDB Molecule:</b> aquaporin aqpm; <b>PDBTitle:</b> crystal structure of integral membrane protein aquaporin aqpm at 1.68a2 resolution
43	<a href="#">c3ottB</a>	Alignment	not modelled	8.5	19 <b>PDB header:</b> transcription <b>Chain:</b> B: <b>PDB Molecule:</b> two-component system sensor histidine kinase; <b>PDBTitle:</b> crystal structure of the extracellular domain of the putative one2 component system bt4673 from b. thetaiotaomicron
44	<a href="#">d1y02a2</a>	Alignment	not modelled	8.3	18 <b>Fold:</b> FYVE/PH zinc finger <b>Superfamily:</b> FYVE/PH zinc finger <b>Family:</b> FYVE, a phosphatidylinositol-3-phosphate binding domain
45	<a href="#">c2q9oA</a>	Alignment	not modelled	7.5	20 <b>PDB header:</b> oxidoreductase <b>Chain:</b> A: <b>PDB Molecule:</b> laccase-1; <b>PDBTitle:</b> near-atomic resolution structure of a melanocarpus albomyces laccase
46	<a href="#">c2kpsA</a>	Alignment	not modelled	7.5	26 <b>PDB header:</b> structural genomics, unknown function <b>Chain:</b> A: <b>PDB Molecule:</b> uncharacterized protein; <b>PDBTitle:</b> solution structure of domain iv from the ybbr family protein of2 desulfobacterium hafniense
47	<a href="#">d1aoza3</a>	Alignment	not modelled	7.5	26 <b>Fold:</b> Cupredoxin-like <b>Superfamily:</b> Cupredoxins <b>Family:</b> Multidomain cupredoxins
48	<a href="#">d1od3a</a>	Alignment	not modelled	7.4	13 <b>Fold:</b> Galactose-binding domain-like <b>Superfamily:</b> Galactose-binding domain-like <b>Family:</b> Family 6 carbohydrate binding module, CBM6
49	<a href="#">d1gyca3</a>	Alignment	not modelled	7.2	30 <b>Fold:</b> Cupredoxin-like <b>Superfamily:</b> Cupredoxins <b>Family:</b> Multidomain cupredoxins
50	<a href="#">d2q9oa3</a>	Alignment	not modelled	7.1	17 <b>Fold:</b> Cupredoxin-like <b>Superfamily:</b> Cupredoxins <b>Family:</b> Multidomain cupredoxins
51	<a href="#">d1h6ia</a>	Alignment	not modelled	7.1	67 <b>Fold:</b> Aquaporin-like <b>Superfamily:</b> Aquaporin-like <b>Family:</b> Aquaporin-like
52	<a href="#">c2w2eA</a>	Alignment	not modelled	7.0	67 <b>PDB header:</b> membrane protein <b>Chain:</b> A: <b>PDB Molecule:</b> aquaporin; <b>PDBTitle:</b> 1.15 angstrom crystal structure of p.pastoris aquaporin,2 aqy1, in a closed conformation at ph 3.5
53	<a href="#">c2kq1A</a>	Alignment	not modelled	6.7	22 <b>PDB header:</b> structural genomics, unknown function <b>Chain:</b> A: <b>PDB Molecule:</b> bh0266 protein; <b>PDBTitle:</b> solution structure of protein bh0266 from bacillus2 halodurans. northeast structural genomics consortium target3 bhr97a
54	<a href="#">c3iyza</a>	Alignment	not modelled	6.7	67 <b>PDB header:</b> transport protein <b>Chain:</b> A: <b>PDB Molecule:</b> aquaporin-4; <b>PDBTitle:</b> structure of aquaporin-4 s180d mutant at 10.0 a

						resolution from2 electron micrograph
55	<a href="#">c3c02A</a>	Alignment	not modelled	6.7	50	<b>PDB header:</b> membrane protein <b>Chain:</b> A: <b>PDB Molecule:</b> aquaglyceroporin; <b>PDBTitle:</b> x-ray structure of the aquaglyceroporin from plasmodium falciparum
56	<a href="#">c3llqB</a>	Alignment	not modelled	6.6	67	<b>PDB header:</b> membrane protein <b>Chain:</b> B: <b>PDB Molecule:</b> aquaporin z 2; <b>PDBTitle:</b> aquaporin structure from plant pathogen agrobacterium tumefaciens
57	<a href="#">c2wnyB</a>	Alignment	not modelled	6.6	14	<b>PDB header:</b> unknown function <b>Chain:</b> B: <b>PDB Molecule:</b> conserved protein mth689; <b>PDBTitle:</b> structure of mth689, a duf54 protein from methanothermobacter2 thermautrophicus
58	<a href="#">c2d57A</a>	Alignment	not modelled	6.5	67	<b>PDB header:</b> transport protein <b>Chain:</b> A: <b>PDB Molecule:</b> aquaporin-4; <b>PDBTitle:</b> double layered 2d crystal structure of aquaporin-4 (aqp4m23) at 3.2 a2 resolution by electron crystallography
59	<a href="#">d1hfua3</a>	Alignment	not modelled	6.5	26	<b>Fold:</b> Cupredoxin-like <b>Superfamily:</b> Cupredoxins <b>Family:</b> Multidomain cupredoxins
60	<a href="#">c2xu9A</a>	Alignment	not modelled	6.3	17	<b>PDB header:</b> oxidoreductase <b>Chain:</b> A: <b>PDB Molecule:</b> laccase; <b>PDBTitle:</b> crystal structure of laccase from thermus thermophilus hb27
61	<a href="#">c3gd8A</a>	Alignment	not modelled	6.2	67	<b>PDB header:</b> membrane protein <b>Chain:</b> A: <b>PDB Molecule:</b> aquaporin-4; <b>PDBTitle:</b> crystal structure of human aquaporin 4 at 1.8 and its mechanism of2 conductance
62	<a href="#">d1fx8a</a>	Alignment	not modelled	6.1	67	<b>Fold:</b> Aquaporin-like <b>Superfamily:</b> Aquaporin-like <b>Family:</b> Aquaporin-like
63	<a href="#">c1ldaA</a>	Alignment	not modelled	6.0	67	<b>PDB header:</b> transport protein <b>Chain:</b> A: <b>PDB Molecule:</b> glycerol uptake facilitator protein; <b>PDBTitle:</b> crystal structure of the e. coli glycerol facilitator (glpf) without2 substrate glycerol
64	<a href="#">d1ymga1</a>	Alignment	not modelled	6.0	50	<b>Fold:</b> Aquaporin-like <b>Superfamily:</b> Aquaporin-like <b>Family:</b> Aquaporin-like
65	<a href="#">c1lymgA</a>	Alignment	not modelled	6.0	50	<b>PDB header:</b> membrane protein <b>Chain:</b> A: <b>PDB Molecule:</b> lens fiber major intrinsic protein; <b>PDBTitle:</b> the channel architecture of aquaporin o at 2.2 angstrom resolution
66	<a href="#">c3d9sB</a>	Alignment	not modelled	6.0	67	<b>PDB header:</b> membrane protein <b>Chain:</b> B: <b>PDB Molecule:</b> aquaporin-5; <b>PDBTitle:</b> human aquaporin 5 (aqp5) - high resolution x-ray structure
67	<a href="#">d1j4na</a>	Alignment	not modelled	5.9	67	<b>Fold:</b> Aquaporin-like <b>Superfamily:</b> Aquaporin-like <b>Family:</b> Aquaporin-like
68	<a href="#">c2b5fD</a>	Alignment	not modelled	5.8	67	<b>PDB header:</b> transport protein,membrane protein <b>Chain:</b> D: <b>PDB Molecule:</b> aquaporin; <b>PDBTitle:</b> crystal structure of the spinach aquaporin soplip2;1 in an2 open conformation to 3.9 resolution
69	<a href="#">d2ysca1</a>	Alignment	not modelled	5.6	50	<b>Fold:</b> WW domain-like <b>Superfamily:</b> WW domain <b>Family:</b> WW domain
70	<a href="#">c2zshB</a>	Alignment	not modelled	5.6	33	<b>PDB header:</b> hormone receptor <b>Chain:</b> B: <b>PDB Molecule:</b> della protein gai; <b>PDBTitle:</b> structural basis of gibberellin(ga3)-induced della2 recognition by the gibberellin receptor
71	<a href="#">d2qfra1</a>	Alignment	not modelled	5.5	6	<b>Fold:</b> Immunoglobulin-like beta-sandwich <b>Superfamily:</b> Purple acid phosphatase, N-terminal domain <b>Family:</b> Purple acid phosphatase, N-terminal domain
72	<a href="#">d2pa7a1</a>	Alignment	not modelled	5.5	26	<b>Fold:</b> Double-stranded beta-helix <b>Superfamily:</b> RmlC-like cupins <b>Family:</b> dTDP-sugar isomerase
73	<a href="#">c3l1eA</a>	Alignment	not modelled	5.5	12	<b>PDB header:</b> chaperone <b>Chain:</b> A: <b>PDB Molecule:</b> alpha-crystallin a chain; <b>PDBTitle:</b> bovine alphaa crystallin zinc bound
74	<a href="#">c3htrB</a>	Alignment	not modelled	5.4	15	<b>PDB header:</b> structural genomics, unknown function <b>Chain:</b> B: <b>PDB Molecule:</b> uncharacterized prc-barrel domain protein; <b>PDBTitle:</b> crystal structure of prc-barrel domain protein from2 rhodopseudomonas palustris
75	<a href="#">c1gycA</a>	Alignment	not modelled	5.3	32	<b>PDB header:</b> oxidoreductase <b>Chain:</b> A: <b>PDB Molecule:</b> laccase 2; <b>PDBTitle:</b> crystal structure determination at room temperature of a2 laccase from trametes versicolor in its oxidised form3 containing a full complement of copper ions
76	<a href="#">d1rc2a</a>	Alignment	not modelled	5.3	67	<b>Fold:</b> Aquaporin-like <b>Superfamily:</b> Aquaporin-like <b>Family:</b> Aquaporin-like
77	<a href="#">d2ozka1</a>	Alignment	not modelled	5.2	17	<b>Fold:</b> S-adenosyl-L-methionine-dependent methyltransferases <b>Superfamily:</b> S-adenosyl-L-methionine-dependent methyltransferases <b>Family:</b> Nsp15 N-terminal domain-like
78	<a href="#">c2r1fb</a>	Alignment	not modelled	5.2	57	<b>PDB header:</b> structural genomics, unknown function <b>Chain:</b> B: <b>PDB Molecule:</b> predicted aminodeoxychorismate lyase; <b>PDBTitle:</b> crystal structure of predicted aminodeoxychorismate lyase from2 escherichia coli
79	<a href="#">d1akpa</a>	Alignment	not modelled	5.2	10	<b>Fold:</b> Immunoglobulin-like beta-sandwich <b>Superfamily:</b> Actinoxanthin-like <b>Family:</b> Actinoxanthin-like