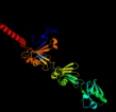
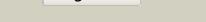
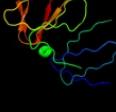
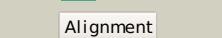
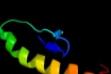
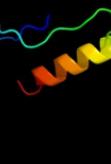
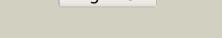
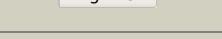
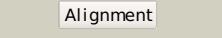


Phyre²

Email	I.a.kelley@imperial.ac.uk
Description	P0A930
Date	Thu Jan 5 11:09:15 GMT 2012
Unique Job ID	f31239463cc52480

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c2j58G_			100.0	67	PDB header: membrane protein Chain: G: PDB Molecule: outer membrane lipoprotein wza; PDBTitle: the structure of wza
2	c2w8iG_			100.0	69	PDB header: membrane protein Chain: G: PDB Molecule: putative outer membrane lipoprotein wza; PDBTitle: crystal structure of wza24-345.
3	c3p42D_			99.8	17	PDB header: unknown function Chain: D: PDB Molecule: predicted protein; PDBTitle: structure of gfcc (ymcb), protein encoded by the e. coli group 42 capsule operon
4	d2fug13			90.0	25	Fold: beta-Grasp (ubiquitin-like) Superfamily: Nqo1 middle domain-like Family: Nqo1 middle domain-like
5	c2fugA_			84.7	24	PDB header: oxidoreductase Chain: A: PDB Molecule: nadh-quinone oxidoreductase chain 1; PDBTitle: crystal structure of the hydrophilic domain of respiratory complex i2 from thermus thermophilus
6	d1ghha_			66.8	10	Fold: DNA damage-inducible protein DinI Superfamily: DNA damage-inducible protein DinI Family: DNA damage-inducible protein DinI
7	c2xdvA_			64.8	27	PDB header: nuclear protein Chain: A: PDB Molecule: myc-induced nuclear antigen; PDBTitle: crystal structure of the catalytic domain of flj14393
8	d1vrba1			57.3	37	Fold: Double-stranded beta-helix Superfamily: Clavaminate synthase-like Family: Asparaginyl hydroxylase-like
9	c3uyjA_			57.2	14	PDB header: oxidoreductase Chain: A: PDB Molecule: lysine-specific demethylase 8; PDBTitle: crystal structure of jmj5 catalytic core domain in complex with2 nickle and alpha-kg
10	c3rnsA_			56.5	15	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: cupin 2 conserved barrel domain protein; PDBTitle: cupin 2 conserved barrel domain protein from leptotrichia buccalis
11	c2h8kA_			51.8	11	PDB header: transferase Chain: A: PDB Molecule: sult1c3 splice variant d; PDBTitle: human sulfotransferase sult1c3 in complex with pap

12	c3al6A_			46.4	36	PDB header: unknown function Chain: A: PDB Molecule: jmmc domain-containing protein c2orf60; PDBTitle: crystal structure of human tyw5
13	c3eytA_			45.0	13	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: uncharacterized protein spoa0173; PDBTitle: crystal structure of thioredoxin-like superfamily protein spoa0173
14	d1q44a_			43.0	20	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: PAPS sulfotransferase
15	d1zofa1			41.9	12	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Glutathione peroxidase-like
16	d1qmva_			41.3	11	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Glutathione peroxidase-like
17	d1wp0a1			40.2	24	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Glutathione peroxidase-like
18	c3k2oB_			40.0	36	PDB header: oxidoreductase Chain: B: PDB Molecule: bifunctional arginine demethylase and lysyl-hydroxylase PDBTitle: structure of an oxygenase
19	d1x82a_			39.8	11	Fold: Double-stranded beta-helix Superfamily: RmlC-like cupins Family: Glucose-6-phosphate isomerase, GPI
20	c2zpmA_			39.2	25	PDB header: hydrolase Chain: A: PDB Molecule: regulator of sigma e protease; PDBTitle: crystal structure analysis of pdz domain b
21	c3lorB_		not modelled	38.8	19	PDB header: isomerase Chain: B: PDB Molecule: thiol-disulfide isomerase and thioredoxins; PDBTitle: the crystal structure of a thiol-disulfide isomerase from2 corynebacterium glutamicum to 2.2a
22	d1prxa_		not modelled	37.7	12	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Glutathione peroxidase-like
23	c2r37A_		not modelled	36.8	24	PDB header: oxidoreductase Chain: A: PDB Molecule: glutathione peroxidase 3; PDBTitle: crystal structure of human glutathione peroxidase 3 (selenocysteine to2 glycine mutant)
24	c2yztA_		not modelled	36.2	14	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: putative uncharacterized protein ttha1756; PDBTitle: crystal structure of uncharacterized conserved protein from thermus2 thermophilus hb8
25	c2v2gC_		not modelled	36.1	16	PDB header: oxidoreductase Chain: C: PDB Molecule: peroxiredoxin 6; PDBTitle: crystal structure of the c45s mutant of the peroxiredoxin 62 of arenicola marina. monoclinic form
26	c2opkC_		not modelled	35.9	23	PDB header: isomerase Chain: C: PDB Molecule: hypothetical protein; PDBTitle: crystal structure of a putative mannose-6-phosphate isomerase2 (reut_a1446) from ralstonia eutropha jmp134 at 2.10 a resolution
27	d1xv1a_		not modelled	35.9	21	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: PAPS sulfotransferase
						Fold: Double-stranded beta-helix

28	d1h2ka	Alignment	not modelled	35.0	46	Superfamily: Clavaminate synthase-like Family: Hypoxia-inducible factor HIF inhibitor (FIH1)
29	c3razA	Alignment	not modelled	34.2	3	PDB header: oxidoreductase Chain: A: PDB Molecule: thioredoxin-related protein; PDBTitle: the crystal structure of thioredoxin-related protein from neisseria2 meningitidis serogroup b
30	d1j99a	Alignment	not modelled	34.0	14	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: PAPS sulfotransferase
31	d1fmja	Alignment	not modelled	34.0	17	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: PAPS sulfotransferase
32	d1g3ma	Alignment	not modelled	32.8	14	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: PAPS sulfotransferase
33	d1knga	Alignment	not modelled	31.9	17	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Glutathione peroxidase-like
34	d1q20a	Alignment	not modelled	31.3	10	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: PAPS sulfotransferase
35	c2hhzA	Alignment	not modelled	31.2	11	PDB header: oxidoreductase Chain: A: PDB Molecule: pyridoxamine 5'-phosphate oxidase-related; PDBTitle: crystal structure of a pyridoxamine 5'-phosphate oxidase-related2 protein (ssuidraft_2804) from streptococcus suis 89/1591 at 2.00 a3 resolution
36	d1we0a1	Alignment	not modelled	30.9	15	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Glutathione peroxidase-like
37	c2r32A	Alignment	not modelled	30.6	18	PDB header: immune system Chain: A: PDB Molecule: gcn4-pii/tumor necrosis factor ligand PDBTitle: crystal structure of human gitrl variant
38	d1j3pa	Alignment	not modelled	30.2	14	Fold: Double-stranded beta-helix Superfamily: RmlC-like cupins Family: Glucose-6-phosphate isomerase, GPI
39	c2fhda	Alignment	not modelled	30.0	19	PDB header: cell cycle Chain: A: PDB Molecule: dna repair protein rhp9/crb2; PDBTitle: crystal structure of crb2 tandem tudor domains
40	c2v1mA	Alignment	not modelled	29.6	19	PDB header: oxidoreductase Chain: A: PDB Molecule: glutathione peroxidase; PDBTitle: crystal structure of schistosoma mansoni glutathione2 peroxidase
41	d2dsya1	Alignment	not modelled	28.6	19	Fold: TTHA1013/TTHA0281-like Superfamily: TTHA1013/TTHA0281-like Family: TTHA0281-like
42	d1xccaa	Alignment	not modelled	26.5	13	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Glutathione peroxidase-like
43	d1uula	Alignment	not modelled	26.1	11	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Glutathione peroxidase-like
44	c3cmiA	Alignment	not modelled	25.6	16	PDB header: oxidoreductase Chain: A: PDB Molecule: peroxiredoxin hyr1; PDBTitle: crystal structure of glutathione-dependent phospholipid peroxidase2 hyr1 from the yeast saccharomyces cerevisiae
45	c3or5A	Alignment	not modelled	25.3	13	PDB header: oxidoreductase Chain: A: PDB Molecule: thiol:disulfide interchange protein, thioredoxin family PDBTitle: crystal structure of thiol:disulfide interchange protein, thioredoxin2 family protein from chlorobium tepidum tis
46	c3jxoB	Alignment	not modelled	24.6	14	PDB header: transport protein Chain: B: PDB Molecule: trka-n domain protein; PDBTitle: crystal structure of an octomeric two-subunit trka k+ channel ring2 gating assembly, tm1088a:tm1088b, from thermotoga maritima
47	c3drnB	Alignment	not modelled	24.2	8	PDB header: oxidoreductase Chain: B: PDB Molecule: peroxiredoxin, bacterioferritin comigratory protein PDBTitle: the crystal structure of bcp1 from sulfolobus sulfataricus
48	d1aqua	Alignment	not modelled	23.4	14	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: PAPS sulfotransferase
49	d1gp1a	Alignment	not modelled	23.1	27	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Glutathione peroxidase-like
50	c3kh7A	Alignment	not modelled	23.0	14	PDB header: oxidoreductase Chain: A: PDB Molecule: thiol:disulfide interchange protein dsbe; PDBTitle: crystal structure of the periplasmic soluble domain of reduced ccmg2 from pseudomonas aeruginosa
51	d1juha	Alignment	not modelled	22.8	18	Fold: Double-stranded beta-helix Superfamily: RmlC-like cupins Family: Quercetin 2,3-dioxygenase-like
52	d1sfna	Alignment	not modelled	22.6	15	Fold: Double-stranded beta-helix Superfamily: RmlC-like cupins Family: Y1Ba-like
53	c1zd1B	Alignment	not modelled	22.1	17	PDB header: transferase Chain: B: PDB Molecule: sulfotransferase 4a1; PDBTitle: human sulfotransferase sult4a1

54	c2gwhA	Alignment	not modelled	22.0	14	PDB header: transferase Chain: A: PDB Molecule: sulfotransferase 1c2; PDBTitle: human sulfotranferase sult1c2 in complex with pap and2 pentachlorophenol
55	d1uija2	Alignment	not modelled	21.7	14	Fold: Double-stranded beta-helix Superfamily: RmlC-like cupins Family: Germin/Seed storage 7S protein
56	d1uika2	Alignment	not modelled	21.7	11	Fold: Double-stranded beta-helix Superfamily: RmlC-like cupins Family: Germin/Seed storage 7S protein
57	d1yexa1	Alignment	not modelled	21.7	18	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Glutathione peroxidase-like
58	c3d0fA	Alignment	not modelled	21.6	22	PDB header: transferase Chain: A: PDB Molecule: penicillin-binding 1 transmembrane protein mrcα; PDBTitle: structure of the big_1156.2 domain of putative penicillin-binding2 protein mrcα from nitrosomonas europaea atcc 19718
59	d1y7ma2	Alignment	not modelled	21.4	4	Fold: LysM domain Superfamily: LysM domain Family: LysM domain
60	c2q30C	Alignment	not modelled	21.1	7	PDB header: unknown function Chain: C: PDB Molecule: uncharacterized protein; PDBTitle: crystal structure of a rmlc-like cupin protein (dde_2303) from2 desulfovibrio desulfuricans subsp. at 1.94 a resolution
61	d2phla2	Alignment	not modelled	20.6	8	Fold: Double-stranded beta-helix Superfamily: RmlC-like cupins Family: Germin/Seed storage 7S protein
62	d1lr5a	Alignment	not modelled	20.3	12	Fold: Double-stranded beta-helix Superfamily: RmlC-like cupins Family: Germin/Seed storage 7S protein
63	c2wbqA	Alignment	not modelled	20.2	23	PDB header: oxidoreductase Chain: A: PDB Molecule: l-arginine beta-hydroxylase; PDBTitle: crystal structure of vioc in complex with (2s,3s)-2 hydroxyarginine
64	d1qq2a	Alignment	not modelled	20.2	19	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Glutathione peroxidase-like
65	c3lwaA	Alignment	not modelled	20.1	6	PDB header: isomerase Chain: A: PDB Molecule: secreted thiol-disulfide isomerase; PDBTitle: the crystal structure of a secreted thiol-disulfide2 isomerase from corynebacterium glutamicum to 1.75a
66	c1sefA	Alignment	not modelled	19.9	9	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: conserved hypothetical protein; PDBTitle: crystal structure of cupin domain protein ef2996 from enterococcus2 faecalis
67	d1sefa	Alignment	not modelled	19.9	9	Fold: Double-stranded beta-helix Superfamily: RmlC-like cupins Family: Y1ba-like
68	d1n8ja	Alignment	not modelled	19.6	16	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Glutathione peroxidase-like
69	c3kvaA	Alignment	not modelled	19.6	31	PDB header: h3k4me3 binding protein, transferase Chain: A: PDB Molecule: jmc domain-containing histone demethylation protein 1d; PDBTitle: structure of kiaa1718 jumonji domain in complex with alpha-2 ketoglutarate
70	c2rqeA	Alignment	not modelled	19.0	13	PDB header: sugar binding protein Chain: A: PDB Molecule: beta-1,3-glucan-binding protein; PDBTitle: solution structure of the silkworm bgrp/gnbp3 n-terminal2 domain reveals the mechanism for b-1,3-glucan specific3 recognition
71	d1dgwa	Alignment	not modelled	19.0	15	Fold: Double-stranded beta-helix Superfamily: RmlC-like cupins Family: Germin/Seed storage 7S protein
72	d2cv4a1	Alignment	not modelled	18.5	12	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Glutathione peroxidase-like
73	d2d40a1	Alignment	not modelled	18.4	17	Fold: Double-stranded beta-helix Superfamily: RmlC-like cupins Family: Gentisate 1,2-dioxygenase-like
74	d2phna1	Alignment	not modelled	18.4	23	Fold: CofE-like Superfamily: CofE-like Family: CofE-like
75	c2og5A	Alignment	not modelled	18.3	31	PDB header: oxidoreductase Chain: A: PDB Molecule: putative oxygenase; PDBTitle: crystal structure of asparagine oxygenase (asno)
76	d1ds1a	Alignment	not modelled	18.0	31	Fold: Double-stranded beta-helix Superfamily: Clavaminate synthase-like Family: Clavaminate synthase
77	c3gl3D	Alignment	not modelled	18.0	14	PDB header: oxidoreductase Chain: D: PDB Molecule: putative thiol:disulfide interchange protein PDBTitle: crystal structure of a putative thiol:disulfide interchange2 protein dsbe from chlorobium tepidum
78	c2rogA	Alignment	not modelled	17.5	23	PDB header: metal binding protein Chain: A: PDB Molecule: heavy metal binding protein; PDBTitle: solution structure of thermus thermophilus hb8 ttha17182 protein in living e. coli cells
79	c3u7za	Alignment	not modelled	17.4	13	PDB header: metal binding protein Chain: A: PDB Molecule: putative metal binding protein rumgna_00854; PDBTitle: crystal structure of a putative metal binding protein

					rumgna_008542 (zp_02040092.1) from ruminococcus gnatus atcc 29149 at 1.30 a3 resolution
80	d2b7ka1	Alignment	not modelled	17.4	11 Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Glutathione peroxidase-like
81	d1z5ye1	Alignment	not modelled	16.9	11 Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Glutathione peroxidase-like
82	c2b1kA_	Alignment	not modelled	16.9	7 PDB header: oxidoreductase Chain: A: PDB Molecule: thiol:disulfide interchange protein dsbe; PDBTitle: crystal structure of e. coli ccmg protein
83	d1uzxa_	Alignment	not modelled	16.9	11 Fold: UBC-like Superfamily: UBC-like Family: UEV domain
84	d1zyea1	Alignment	not modelled	16.8	16 Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Glutathione peroxidase-like
85	d1te7a_	Alignment	not modelled	16.5	23 Fold: PUA domain-like Superfamily: PUA domain-like Family: yqfb-like
86	d1rc6a_	Alignment	not modelled	16.5	9 Fold: Double-stranded beta-helix Superfamily: RmlC-like cupins Family: Ylba-like
87	c2yu1A_	Alignment	not modelled	16.5	23 PDB header: oxidoreductase Chain: A: PDB Molecule: jmc domain-containing histone demethylation protein 1a; PDBTitle: crystal structure of hhdhm1a complexed with a-ketoglutarate
88	c1zofB_	Alignment	not modelled	16.3	12 PDB header: oxidoreductase Chain: B: PDB Molecule: alkyl hydroperoxide-reductase; PDBTitle: crystal structure of alkyl hydroperoxide-reductase (ahpc)2 from helicobacter pylori
89	c2rlia_	Alignment	not modelled	16.0	15 PDB header: metal transport Chain: A: PDB Molecule: sco2 protein homolog, mitochondrial; PDBTitle: solution structure of cu(i) human sco2
90	d1sq4a_	Alignment	not modelled	15.9	12 Fold: Double-stranded beta-helix Superfamily: RmlC-like cupins Family: Ylba-like
91	d1fe0a_	Alignment	not modelled	15.9	18 Fold: Ferredoxin-like Superfamily: HMA, heavy metal-associated domain Family: HMA, heavy metal-associated domain
92	d3bfxa1	Alignment	not modelled	15.8	13 Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: PAP sulfotransferase
93	c2c0dA_	Alignment	not modelled	15.8	13 PDB header: oxidoreductase Chain: A: PDB Molecule: thioredoxin peroxidase 2; PDBTitle: structure of the mitochondrial 2-cys peroxiredoxin from plasmodium falciparum
94	c3h7hA_	Alignment	not modelled	15.6	25 PDB header: transcription Chain: A: PDB Molecule: transcription elongation factor spt4; PDBTitle: crystal structure of the human transcription elongation factor dsif, 2 hspt4/hspt5 (176-273)
95	c1zyeL_	Alignment	not modelled	15.6	16 PDB header: oxidoreductase Chain: L: PDB Molecule: thioredoxin-dependent peroxide reductase; PDBTitle: crystal strucuture analysis of bovine mitochondrial peroxiredoxin iii
96	c2wkdA_	Alignment	not modelled	15.5	31 PDB header: dna binding protein Chain: A: PDB Molecule: orf34p2; PDBTitle: crystal structure of a double ile-to-met mutant of protein2 orf34 from lactococcus phage p2
97	c2vpvA_	Alignment	not modelled	15.5	7 PDB header: cell cycle Chain: A: PDB Molecule: protein mif2; PDBTitle: dimerization domain of mif2p
98	d1e2ya_	Alignment	not modelled	15.4	16 Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Glutathione peroxidase-like
99	c2he3A_	Alignment	not modelled	15.2	23 PDB header: oxidoreductase Chain: A: PDB Molecule: glutathione peroxidase 2; PDBTitle: crystal structure of the selenocysteine to cysteine mutant of human2 glutathionine peroxidase 2 (gpx2)