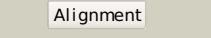
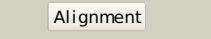
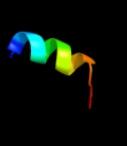


Phyre²

Email	i.a.kelley@imperial.ac.uk
Description	P0A935
Date	Thu Jan 5 11:09:17 GMT 2012
Unique Job ID	9b849492960159dd

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	d2g5da1			100.0	30	Fold: Double psi beta-barrel Superfamily: Barwin-like endoglucanases Family: MLTA-like
2	d2ae0x1			100.0	99	Fold: Double psi beta-barrel Superfamily: Barwin-like endoglucanases Family: MLTA-like
3	d2pnwa1			100.0	31	Fold: Double psi beta-barrel Superfamily: Barwin-like endoglucanases Family: MLTA-like
4	c3czbA_			100.0	27	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: putative transglycosylase; PDBTitle: crystal structure of putative transglycosylase from caulobacter2 crescentus
5	d2pi8a1			100.0	96	Fold: Double psi beta-barrel Superfamily: Barwin-like endoglucanases Family: MLTA-like
6	c1vbkA_			39.5	8	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: hypothetical protein ph1313; PDBTitle: crystal structure of ph1313 from pyrococcus horikoshii ot3
7	c2kvsA_			37.1	9	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: uncharacterized protein mw0776; PDBTitle: nmr solution structure of q7a1e8 protein from staphylococcus aureus: northeast structural genomics consortium target:3 zr215
8	c2opkC_			29.9	20	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
9	d2v0ea1			27.5	14	Fold: GYF/BRK domain-like Superfamily: BRK domain-like Family: BRK domain-like
10	d1lusua_			26.2	17	Fold: Ribosomal protein S5 domain 2-like Superfamily: Ribosomal protein S5 domain 2-like Family: Hsp90 middle domain
11	d2ckca1			25.2	14	Fold: GYF/BRK domain-like Superfamily: BRK domain-like Family: BRK domain-like

12	c2ckcA_			25.2	14	PDB header: hydrolase Chain: A; PDB Molecule: chromodomain-helicase-dna-binding protein 7; PDBTitle: solution structures of the brk domains of the human chromo2 helicase domain 7 and 8, reveals structural similarity3 with gyf domain suggesting a role in protein interaction
13	c1hk7A_			25.1	10	PDB header: chaperone Chain: A; PDB Molecule: heat shock protein hsp82; PDBTitle: middle domain of hsp90
14	c2ckaA_			24.9	21	PDB header: hydrolase Chain: A; PDB Molecule: chromodomain-helicase-dna-binding protein 8; PDBTitle: solution structures of the brk domains of the human chromo2 helicase domain 7 and 8, reveals structural similarity3 with gyf domain suggesting a role in protein interaction
15	d2ckaal			24.9	21	Fold: GYF/BRK domain-like Superfamily: BRK domain-like Family: BRK domain-like
16	d1ussa_			24.0	12	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: Linker histone H1/H5
17	d1dw0a_			23.7	21	Fold: Cytochrome c Superfamily: Cytochrome c Family: monodomain cytochrome c
18	c1y6zA_			21.8	17	PDB header: structural genomics, unknown function Chain: A; PDB Molecule: heat shock protein, putative; PDBTitle: middle domain of plasmodium falciparum putative heat shock protein2 pf14_0417
19	c2gq0B_			21.7	20	PDB header: chaperone, hydrolase Chain: B; PDB Molecule: chaperone protein htpg; PDBTitle: crystal structure of the middle domain of htpg, the e. coli hsp90
20	c2dd4H_			21.5	16	PDB header: hydrolase Chain: H; PDB Molecule: thiocyanate hydrolase beta subunit; PDBTitle: thiocyanate hydrolase (scnase) from thiobacillus thioparus2 recombinant apo-enzyme
21	d1ef5a_		not modelled	21.4	28	Fold: beta-Grasp (ubiquitin-like) Superfamily: Ubiquitin-like Family: Ras-binding domain, RBD
22	d2gal1a1		not modelled	21.3	24	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: Alr1493-like
23	c3mayE_		not modelled	21.0	12	PDB header: heme-binding protein Chain: E; PDB Molecule: possible exported protein; PDBTitle: crystal structure of a secreted mycobacterium tuberculosis heme-2 binding protein
24	c3pryA_		not modelled	19.3	13	PDB header: chaperone Chain: A; PDB Molecule: heat shock protein hsp 90-beta; PDBTitle: crystal structure of the middle domain of human hsp90-beta refined at 2.3 a resolution
25	c3g6iA_		not modelled	19.0	10	PDB header: unknown function Chain: A; PDB Molecule: putative outer membrane protein, part of carbohydrate PDBTitle: crystal structure of an outer membrane protein, part of a putative2 carbohydrate binding complex (bt_1022) from bacteroides3 thetaiotaomicron vpi-5482 at 1.93 a resolution
26	c2jroA_		not modelled	18.6	21	PDB header: structural genomics, unknown function Chain: A; PDB Molecule: uncharacterized protein; PDBTitle: solution nmr structure of so0334 from shewanella oneidensis. northeast2 structural genomics target sor75
27	c1wnfA_		not modelled	18.2	28	PDB header: hydrolase Chain: A; PDB Molecule: l-asparaginase; PDBTitle: crystal structure of ph0066 from pyrococcus horikoshii
28	d1yqaal		not modelled	18.1	12	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: Linker histone H1/H5

29	c2h9aA	Alignment	not modelled	17.2	13	PDB header: oxireductase Chain: A: PDB Molecule: carbon monoxide dehydrogenase corrinoid/iron- PDBTitle: corrinoid iron-sulfur protein
30	d2ocda1	Alignment	not modelled	17.1	26	Fold: Glutaminase/Asparaginase Superfamily: Glutaminase/Asparaginase Family: Glutaminase/Asparaginase
31	c3qmlC	Alignment	not modelled	17.0	15	PDB header: chaperone/protein transport Chain: C: PDB Molecule: nucleotide exchange factor sil1; PDBTitle: the structural analysis of sil1-bip complex reveals the mechanism for 2 sil1 to function as a novel nucleotide exchange factor
32	d1zvfa1	Alignment	not modelled	15.9	16	Fold: Double-stranded beta-helix Superfamily: Rm1C-like cupins Family: 3-hydroxyanthranilic acid dioxygenase-like
33	d2dl6a1	Alignment	not modelled	15.8	30	Fold: GYF/BRK domain-like Superfamily: BRK domain-like Family: BRK domain-like
34	d2e9xd2	Alignment	not modelled	15.7	50	Fold: GINS/PriA/YqbF domain Superfamily: PriA/YqbF domain Family: SLD5 C-terminal domain-like
35	c2yxIA	Alignment	not modelled	15.3	16	PDB header: transferase Chain: A: PDB Molecule: 450aa long hypothetical fmu protein; PDBTitle: crystal structure of ph0851
36	c1zq1B	Alignment	not modelled	15.2	33	PDB header: lyase Chain: B: PDB Molecule: glutamyl-tRNA(gln) amidotransferase subunit d; PDBTitle: structure of gatde tRNA-dependent amidotransferase from <i>Pyrococcus abyssi</i>
37	d1ei5a2	Alignment	not modelled	15.1	20	Fold: Streptavidin-like Superfamily: D-aminopeptidase, middle and C-terminal domains Family: D-aminopeptidase, middle and C-terminal domains
38	c3l6gA	Alignment	not modelled	15.1	28	PDB header: glycine betaine-binding protein Chain: A: PDB Molecule: betaine abc transporter permease and substrate binding PDBTitle: crystal structure of lactococcal opuac in its open conformation
39	d1v29b	Alignment	not modelled	15.0	16	Fold: SH3-like barrel Superfamily: Electron transport accessory proteins Family: Nitrile hydratase beta chain
40	d2cnaa	Alignment	not modelled	14.9	29	Fold: Concanavalin A-like lectins/glucanases Superfamily: Concanavalin A-like lectins/glucanases Family: Legume lectins
41	d1h8ca	Alignment	not modelled	14.9	25	Fold: beta-Grasp (ubiquitin-like) Superfamily: Ubiquitin-like Family: UBX domain
42	c2o1wB	Alignment	not modelled	14.7	27	PDB header: chaperone Chain: B: PDB Molecule: endoplasmic; PDBTitle: structure of n-terminal plus middle domains (n+m) of grp94
43	c2rqpA	Alignment	not modelled	14.6	19	PDB header: gene regulation Chain: A: PDB Molecule: heterochromatin protein 1-binding protein 3; PDBTitle: the solution structure of heterochromatin protein 1-binding2 protein 74 histone h1 like domain
44	c3pvpA	Alignment	not modelled	14.1	14	PDB header: dna binding protein/dna Chain: A: PDB Molecule: chromosomal replication initiator protein dnaa; PDBTitle: structure of mycobacterium tuberculosis dnaa-dbd in complex with box22 dna
45	d2b9ea1	Alignment	not modelled	13.9	17	Fold: S-adenosyl-L-methionine-dependent methyltransferases Superfamily: S-adenosyl-L-methionine-dependent methyltransferases Family: NOL1/NOP2/sun
46	c3h4wA	Alignment	not modelled	13.3	25	PDB header: hydrolase Chain: A: PDB Molecule: phosphatidylinositol-specific phospholipase c1; PDBTitle: structure of a ca+2 dependent phosphatidylinositol-specific2 phospholipase c (pi-PLC) enzyme from streptomyces antibioticus
47	c1vzyA	Alignment	not modelled	13.2	22	PDB header: chaperone Chain: A: PDB Molecule: 33 kDa chaperonin; PDBTitle: crystal structure of the bacillus subtilis hsp33
48	d1hsta	Alignment	not modelled	12.7	19	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: Linker histone H1/H5
49	d1vrba1	Alignment	not modelled	12.7	22	Fold: Double-stranded beta-helix Superfamily: Clavaminate synthase-like Family: Asparaginyl hydroxylase-like
50	c1f3mB	Alignment	not modelled	12.7	7	PDB header: transferase Chain: B: PDB Molecule: serine/threonine-protein kinase pak-alpha; PDBTitle: crystal structure of human serine/threonine kinase pak1
51	c1ynmA	Alignment	not modelled	12.4	18	PDB header: hydrolase Chain: A: PDB Molecule: r.hinp1i restriction endonuclease; PDBTitle: crystal structure of restriction endonuclease hinp1i
52	d2b3aa1	Alignment	not modelled	12.4	33	Fold: beta-Grasp (ubiquitin-like) Superfamily: Ubiquitin-like Family: Ras-binding domain, RBD
53	c2dzkA	Alignment	not modelled	12.3	17	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: ubx domain-containing protein 2; PDBTitle: structure of the ubx domain in mouse ubx domain-containing2 protein 2

54	d1uhma	Alignment	not modelled	12.3	19	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: Linker histone H1/H5
55	c3gasA	Alignment	not modelled	12.3	11	PDB header: oxidoreductase Chain: A: PDB Molecule: heme oxygenase; PDBTitle: crystal structure of helicobacter pylori heme oxygenase hugz2 in complex with heme
56	d1yfua1	Alignment	not modelled	12.3	13	Fold: Double-stranded beta-helix Superfamily: RmlC-like cupins Family: 3-hydroxyanthranilic acid dioxygenase-like
57	c2xdvA	Alignment	not modelled	12.1	17	PDB header: nuclear protein Chain: A: PDB Molecule: myc-induced nuclear antigen; PDBTitle: crystal structure of the catalytic domain of flj14393
58	cly4sA	Alignment	not modelled	12.1	20	PDB header: chaperone Chain: A: PDB Molecule: chaperone protein htpg; PDBTitle: conformation rearrangement of heat shock protein 90 upon 2 adp binding
59	d1i42a	Alignment	not modelled	11.9	33	Fold: beta-Grasp (ubiquitin-like) Superfamily: Ubiquitin-like Family: UBX domain
60	d2cr5a1	Alignment	not modelled	11.9	17	Fold: beta-Grasp (ubiquitin-like) Superfamily: Ubiquitin-like Family: UBX domain
61	c1x3IA	Alignment	not modelled	11.8	24	PDB header: transferase Chain: A: PDB Molecule: hypothetical protein ph0495; PDBTitle: crystal structure of the ph0495 protein from pyrococcus horikoshii2 ot3
62	d2d28c1	Alignment	not modelled	11.7	31	Fold: Alpha-lytic protease prodomain-like Superfamily: EspE N-terminal domain-like Family: GSPII protein E N-terminal domain-like
63	d1hw7a	Alignment	not modelled	11.7	20	Fold: Hsp33 domain Superfamily: Hsp33 domain Family: Hsp33 domain
64	c1hw7A	Alignment	not modelled	11.7	20	PDB header: chaperone Chain: A: PDB Molecule: heat shock protein hsp33; PDBTitle: hsp33, heat shock protein with redox-regulated chaperone activity
65	c3o7kA	Alignment	not modelled	11.6	15	PDB header: lyase Chain: A: PDB Molecule: ohcu decarboxylase; PDBTitle: crystal structure of 2-oxo-4-hydroxy-4-carboxy-5-ureidoimidazoline2 decarboxylase from klebsiella pneumoniae
66	c3a52A	Alignment	not modelled	11.6	20	PDB header: hydrolase Chain: A: PDB Molecule: cold-active alkaline phosphatase; PDBTitle: crystal structure of cold-active alkaiine phosphatase from2 psychrophile shewanella sp.
67	d1s3sg	Alignment	not modelled	11.3	33	Fold: beta-Grasp (ubiquitin-like) Superfamily: Ubiquitin-like Family: UBX domain
68	d2b8na1	Alignment	not modelled	11.2	14	Fold: GckA/TtuD-like Superfamily: GckA/TtuD-like Family: GckA/TtuD-like
69	c3al6A	Alignment	not modelled	11.2	28	PDB header: unknown function Chain: A: PDB Molecule: jmc domain-containing protein c2orf60; PDBTitle: crystal structure of human tyw5
70	d1usta	Alignment	not modelled	11.0	19	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: Linker histone H1/H5
71	c2d6fA	Alignment	not modelled	10.8	26	PDB header: ligase/rna Chain: A: PDB Molecule: glutamyl-trna(gln) amidotransferase subunit d; PDBTitle: crystal structure of glu-trna(gln) amidotransferase in the2 complex with trna(gln)
72	d1vzya1	Alignment	not modelled	10.7	17	Fold: Hsp33 domain Superfamily: Hsp33 domain Family: Hsp33 domain
73	d1ixka	Alignment	not modelled	10.7	12	Fold: S-adenosyl-L-methionine-dependent methyltransferases Superfamily: S-adenosyl-L-methionine-dependent methyltransferases Family: NOL1/NOP2/sun
74	c3bcwB	Alignment	not modelled	10.5	9	PDB header: unknown function Chain: B: PDB Molecule: uncharacterized protein; PDBTitle: crystal structure of a duf861 family protein with a rmlc-like cupin2 fold (bb1179) from bordetella bronchiseptica rb50 at 1.60 a3 resolution
75	d1prya	Alignment	not modelled	10.2	16	Fold: S-adenosyl-L-methionine-dependent methyltransferases Superfamily: S-adenosyl-L-methionine-dependent methyltransferases Family: Fibrillarin homologue
76	d1bg6a1	Alignment	not modelled	10.1	23	Fold: 6-phosphogluconate dehydrogenase C-terminal domain-like Superfamily: 6-phosphogluconate dehydrogenase C-terminal domain-like Family: N-(1-D-carboxylethyl)-L-norvaline dehydrogenase
77	d1ugpb	Alignment	not modelled	9.8	10	Fold: SH3-like barrel Superfamily: Electron transport accessory proteins Family: Nitrile hydratase beta chain
78	d1gu2a	Alignment	not modelled	9.8	13	Fold: Cytochrome c Superfamily: Cytochrome c Family: monodomain cytochrome c
79	d2bxxa1	Alignment	not modelled	9.7	41	Fold: Coronavirus RNA-binding domain Superfamily: Coronavirus RNA-binding domain Family: Coronavirus RNA-binding domain
						Fold: GYF/BRK domain-like

80	d2v0fa1	Alignment	not modelled	9.4	23	Superfamily: BRK domain-like Family: BRK domain-like
81	c3q6nF	Alignment	not modelled	9.3	10	PDB header: chaperone Chain: F; PDB Molecule: heat shock protein hsp 90-alpha; PDBTitle: crystal structure of human mc-hsp90 in p21 space group
82	d1o5ua	Alignment	not modelled	9.1	12	Fold: Double-stranded beta-helix Superfamily: RmlC-like cupins Family: Hypothetical protein TM1112
83	c2c5sA	Alignment	not modelled	9.0	13	PDB header: rna-binding protein Chain: A; PDB Molecule: probable thiamine biosynthesis protein thiI; PDBTitle: crystal structure of bacillus anthracis thiI, a trna-2 modifying enzyme containing the predicted rna-binding3 thump domain
84	d1wj4a	Alignment	not modelled	9.0	17	Fold: beta-Grasp (ubiquitin-like) Superfamily: Ubiquitin-like Family: UBX domain
85	d2f9zc1	Alignment	not modelled	8.8	23	Fold: CNF1/YfiH-like putative cysteine hydrolases Superfamily: CNF1/YfiH-like putative cysteine hydrolases Family: CheD-like
86	c1a79B	Alignment	not modelled	8.7	25	PDB header: endonuclease Chain: B; PDB Molecule: trna endonuclease; PDBTitle: crystal structure of the trna splicing endonuclease from2 methanococcus jannaschii
87	d1lfda	Alignment	not modelled	8.6	33	Fold: beta-Grasp (ubiquitin-like) Superfamily: Ubiquitin-like Family: Ras-binding domain, RBD
88	d2qdyb1	Alignment	not modelled	8.4	6	Fold: SH3-like barrel Superfamily: Electron transport accessory proteins Family: Nitrile hydratase beta chain
89	c2kxjA	Alignment	not modelled	8.3	17	PDB header: protein binding Chain: A; PDB Molecule: ubx domain-containing protein 4; PDBTitle: solution structure of ubx domain of human ubxd2 protein
90	d1vg0a1	Alignment	not modelled	8.1	21	Fold: Hsp33 domain Superfamily: Hsp33 domain Family: Hsp33 domain
91	c3d6zA	Alignment	not modelled	7.9	8	PDB header: transcription regulator/dna Chain: A; PDB Molecule: multidrug-efflux transporter 1 regulator; PDBTitle: crystal structure of r275e mutant of bmrr bound to dna and rhodamine
92	d1vl7a	Alignment	not modelled	7.6	20	Fold: Split barrel-like Superfamily: FMN-binding split barrel Family: PNP-oxidase like
93	c2kngA	Alignment	not modelled	7.5	29	PDB header: dna binding protein Chain: A; PDB Molecule: protein lsr2; PDBTitle: solution structure of c-domain of lsr2
94	c1vq0A	Alignment	not modelled	7.4	23	PDB header: chaperone Chain: A; PDB Molecule: 33 kda chaperonin; PDBTitle: crystal structure of 33 kda chaperonin (heat shock protein 33 homolog)2 (hsp33) (tmL394) from thermotoga maritima at 2.20 a resolution
95	d2d6fa2	Alignment	not modelled	7.3	24	Fold: Glutaminase/Asparaginase Superfamily: Glutaminase/Asparaginase Family: Glutaminase/Asparaginase
96	c3hefB	Alignment	not modelled	7.2	17	PDB header: viral protein Chain: B; PDB Molecule: gene 1 protein; PDBTitle: crystal structure of the bacteriophage sf6 terminase small2 subunit
97	c3kh0A	Alignment	not modelled	7.2	33	PDB header: signaling protein Chain: A; PDB Molecule: ral guanine nucleotide dissociation stimulator; PDBTitle: crystal structure of the ras-association (ra) domain of2 ralgds
98	d1xhna1	Alignment	not modelled	7.1	24	Fold: Split barrel-like Superfamily: FMN-binding split barrel Family: PNP-oxidase like
99	d1h2ka	Alignment	not modelled	7.0	17	Fold: Double-stranded beta-helix Superfamily: Clavaminate synthase-like Family: Hypoxia-inducible factor HIF Ihh inhibitor (FIH1)