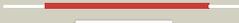
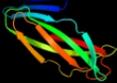
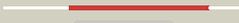
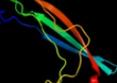
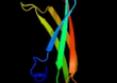
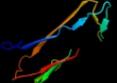
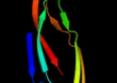
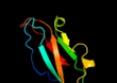
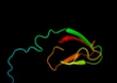


Phyre2

Email	I.a.kelley@imperial.ac.uk
Description	P75946
Date	Thu Jan 5 12:16:17 GMT 2012
Unique Job ID	127f737c8d731093

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c3o0lB_	 Alignment		100.0	13	PDB header: structural genomics, unknown function Chain: B; PDB Molecule: uncharacterized protein; PDBTitle: crystal structure of a pfam duf1425 family member (shew_1734) from <i>Shewanella sp. pv-4</i> at 1.81 Å resolution
2	d2vzsa2	 Alignment		91.2	15	Fold: Immunoglobulin-like beta-sandwich Superfamily: beta-Galactosidase/glucuronidase domain Family: beta-Galactosidase/glucuronidase domain
3	c3fn9B_	 Alignment		85.6	11	PDB header: hydrolase Chain: B; PDB Molecule: putative beta-galactosidase; PDBTitle: crystal structure of putative beta-galactosidase from <i>Bacteroides fragilis</i>
4	d2co7b1	 Alignment		85.1	11	Fold: Immunoglobulin-like beta-sandwich Superfamily: PapD-like Family: Pilus chaperone
5	d3bwuc1	 Alignment		82.8	9	Fold: Immunoglobulin-like beta-sandwich Superfamily: PapD-like Family: Pilus chaperone
6	c3isyA_	 Alignment		77.8	9	PDB header: protein binding Chain: A; PDB Molecule: intracellular proteinase inhibitor; PDBTitle: crystal structure of an intracellular proteinase inhibitor (ipi_2 bsu11130) from <i>Bacillus subtilis</i> at 2.61 Å resolution
7	d1lm8v_	 Alignment		77.5	20	Fold: Prealbumin-like Superfamily: VHL Family: VHL
8	c2x41A_	 Alignment		76.2	7	PDB header: hydrolase Chain: A; PDB Molecule: beta-glucosidase; PDBTitle: structure of beta-glucosidase 3b from <i>Thermotoga neapolitana</i> in complex with glucose
9	c3butA_	 Alignment		71.0	23	PDB header: structural genomics, unknown function Chain: A; PDB Molecule: uncharacterized protein af_0446; PDBTitle: crystal structure of protein af_0446 from <i>Archaeoglobus fulgidus</i>
10	d1p5va1	 Alignment		62.4	11	Fold: Immunoglobulin-like beta-sandwich Superfamily: PapD-like Family: Pilus chaperone
11	c1e9zA_	 Alignment		59.7	9	PDB header: hydrolase Chain: A; PDB Molecule: urease subunit alpha; PDBTitle: crystal structure of <i>Helicobacter pylori</i> urease

12	c3rgbA_	Alignment		59.7	17	PDB header: oxidoreductase Chain: A: PDB Molecule: methane monooxygenase subunit b2; PDBTitle: crystal structure of particulate methane monooxygenase from2 methylococcus capsulatus (bath)
13	c2co7B_	Alignment		59.4	11	PDB header: fibril protein Chain: B: PDB Molecule: putative fimbriae assembly chaperone; PDBTitle: salmonella enterica safra pilin in complex with the safb2 chaperone (type ii)
14	c1s3rA_	Alignment		57.7	17	PDB header: toxin Chain: A: PDB Molecule: intermedilysin; PDBTitle: crystal structure of the human-specific toxin intermedilysin
15	c3cfuA_	Alignment		56.7	13	PDB header: lipoprotein Chain: A: PDB Molecule: uncharacterized lipoprotein yjha; PDBTitle: crystal structure of the yjha protein from bacillus2 subtilis. northeast structural genomics consortium target3 sr562
16	c1yycA_	Alignment		54.2	8	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: putative late embryogenesis abundant protein; PDBTitle: solution structure of a putative late embryogenesis2 abundant (lea) protein at2g46140.1
17	d2je8a1	Alignment		53.1	10	Fold: Immunoglobulin-like beta-sandwich Superfamily: beta-Galactosidase/glucuronidase domain Family: beta-Galactosidase/glucuronidase domain
18	c3ac0B_	Alignment		52.2	10	PDB header: hydrolase Chain: B: PDB Molecule: beta-glucosidase i; PDBTitle: crystal structure of beta-glucosidase from kluveromyces marxianus in2 complex with glucose
19	c2kl6A_	Alignment		51.3	12	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: uncharacterized protein; PDBTitle: solution nmr structure of the cardb domain of pf1109 from2 pyrococcus furiosus. northeast structural genomics3 consortium target pfr193a
20	c1z9sA_	Alignment		50.7	11	PDB header: chaperone/immune system Chain: A: PDB Molecule: chaperone protein caf1m; PDBTitle: crystal structure of the native chaperone:subunit:subunit2 caf1m:caf1:caf1 complex
21	c2xfgB_	Alignment	not modelled	47.7	11	PDB header: hydrolase/sugar binding protein Chain: B: PDB Molecule: endoglucanase 1; PDBTitle: reassembly and co-crystallization of a family 9 processive2 endoglucanase from separately expressed gh9 and cbm3c3 modules
22	c2xbtA_	Alignment	not modelled	46.1	15	PDB header: sugar binding protein Chain: A: PDB Molecule: cellulosomal scaffoldin; PDBTitle: structure of a scaffoldin carbohydrate-binding module family 3b from2 the cellulosome of bacteroides cellulosolvens: structural diversity3 and implications for carbohydrate binding
23	d2j2za1	Alignment	not modelled	45.2	10	Fold: Immunoglobulin-like beta-sandwich Superfamily: PapD-like Family: Pilus chaperone
24	c3qgaD_	Alignment	not modelled	43.9	10	PDB header: hydrolase Chain: D: PDB Molecule: fusion of urease beta and gamma subunits; PDBTitle: 3.0 a model of iron containing urease urea2b2 from helicobacter2 mustelae
25	d1pfoa_	Alignment	not modelled	42.3	19	Fold: Perfringolysin Superfamily: Perfringolysin Family: Perfringolysin
26	c1pfoA_	Alignment	not modelled	42.3	19	PDB header: toxin Chain: A: PDB Molecule: perfringolysin o; PDBTitle: perfringolysin o
27	d1xo8a_	Alignment	not modelled	42.2	11	Fold: Immunoglobulin-like beta-sandwich Superfamily: LEA14-like Family: LEA14-like
28	c3q48B_	Alignment	not modelled	41.7	9	PDB header: chaperone Chain: B: PDB Molecule: chaperone cupb2; PDBTitle: crystal structure of pseudomonas aeruginosa cupb2

						chaperone
29	d1jz8a2	Alignment	not modelled	38.3	10	Fold: Immunoglobulin-like beta-sandwich Superfamily: beta-Galactosidase/glucuronidase domain Family: beta-Galactosidase/glucuronidase domain
30	c3hs0B	Alignment	not modelled	33.5	19	PDB header: immune system Chain: B: PDB Molecule: cobra venom factor; PDBTitle: cobra venom factor (cvf) in complex with human factor b
31	c3cu7A	Alignment	not modelled	33.0	14	PDB header: immune system Chain: A: PDB Molecule: complement c5; PDBTitle: human complement component 5
32	c2ys4A	Alignment	not modelled	32.8	10	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: hydrocephalus-inducing protein homolog; PDBTitle: solution structure of the n-terminal papd-like domain of 2 hydin protein from human
33	c3hvnA	Alignment	not modelled	32.7	16	PDB header: toxin Chain: A: PDB Molecule: hemolysin; PDBTitle: crystal structure of cytotoxin protein suilysin from 2 streptococcus suis
34	d1cyga2	Alignment	not modelled	32.0	17	Fold: Prealbumin-like Superfamily: Starch-binding domain-like Family: Starch-binding domain
35	d1qhoa2	Alignment	not modelled	31.9	17	Fold: Prealbumin-like Superfamily: Starch-binding domain-like Family: Starch-binding domain
36	d1yq2a1	Alignment	not modelled	31.1	16	Fold: Immunoglobulin-like beta-sandwich Superfamily: beta-Galactosidase/glucuronidase domain Family: beta-Galactosidase/glucuronidase domain
37	d1i5pa1	Alignment	not modelled	31.0	24	Fold: Galactose-binding domain-like Superfamily: Galactose-binding domain-like Family: delta-Endotoxin, C-terminal domain
38	c1skhA	Alignment	not modelled	30.6	26	PDB header: unknown function Chain: A: PDB Molecule: major prion protein 2; PDBTitle: n-terminal (1-30) of bovine prion protein
39	c2c3wB	Alignment	not modelled	30.4	22	PDB header: sugar-binding protein Chain: B: PDB Molecule: alpha-amylase g-6; PDBTitle: structure of cbm25 from bacillus halodurans amylase in 2 complex with maltotetraose
40	d1l4ia1	Alignment	not modelled	29.4	11	Fold: Immunoglobulin-like beta-sandwich Superfamily: PapD-like Family: Pilus chaperone
41	d1ejxb	Alignment	not modelled	28.4	7	Fold: beta-clip Superfamily: Urease, beta-subunit Family: Urease, beta-subunit
42	c2f3xA	Alignment	not modelled	28.4	9	PDB header: gene regulation Chain: A: PDB Molecule: transcription factor fapr; PDBTitle: crystal structure of fapr (in complex with effector)- a2 global regulator of fatty acid biosynthesis in b. subtilis
43	d4ubpb	Alignment	not modelled	28.1	4	Fold: beta-clip Superfamily: Urease, beta-subunit Family: Urease, beta-subunit
44	d1nbca	Alignment	not modelled	27.5	14	Fold: Common fold of diphtheria toxin/transcription factors/cytochrome f Superfamily: Carbohydrate-binding domain Family: Cellulose-binding domain family III
45	c2e6jA	Alignment	not modelled	27.5	17	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: hydin protein; PDBTitle: solution structure of the c-terminal papd-like domain from 2 human hydin protein
46	c2je8B	Alignment	not modelled	25.3	19	PDB header: hydrolase Chain: B: PDB Molecule: beta-mannosidase; PDBTitle: structure of a beta-mannosidase from bacteroides 2 thetaiotaomicron
47	c2l8aA	Alignment	not modelled	24.3	17	PDB header: hydrolase Chain: A: PDB Molecule: endoglucanase; PDBTitle: structure of a novel cbm3 lacking the calcium-binding site
48	c1l4iA	Alignment	not modelled	23.5	10	PDB header: chaperone Chain: A: PDB Molecule: sfae protein; PDBTitle: crystal structure of the periplasmic chaperone sfae
49	d2j5wa3	Alignment	not modelled	23.1	12	Fold: Cupredoxin-like Superfamily: Cupredoxins Family: Multidomain cupredoxins
50	c2w5fB	Alignment	not modelled	23.0	15	PDB header: hydrolase Chain: B: PDB Molecule: endo-1,4-beta-xylanase y; PDBTitle: high resolution crystallographic structure of the 2 clostridium thermocellum n-terminal endo-1,4-beta-d-3 xylanase 10b (xyn10b) cbm22-1-gH10 modules complexed with 4 xylohexaose
51	d2q0zx2	Alignment	not modelled	22.8	29	Fold: Immunoglobulin-like beta-sandwich Superfamily: E set domains Family: Sec63 C-terminal domain-like
52	c2q0zX	Alignment	not modelled	22.4	16	PDB header: protein transport Chain: X: PDB Molecule: protein pro2281; PDBTitle: crystal structure of q9p172/sec63 from homo sapiens.2 northeast structural genomics target hr1979.
53	d1e9ya1	Alignment	not modelled	22.4	10	Fold: beta-clip Superfamily: Urease, beta-subunit Family: Urease, beta-subunit
54	c3hftA	Alignment	not modelled	19.8	36	PDB header: hydrolase Chain: A: PDB Molecule: wbms, polysaccharide deacetylase involved in o-antigen PDBTitle: crystal structure of a putative polysaccharide

						deacetylase involved in 2 o-antigen biosynthesis (wbms, bb0128) from bordetella bronchiseptica3 at 1.90 a resolution
55	c1qunA	Alignment	not modelled	19.2	11	PDB header: chaperone/structural protein Chain: A: PDB Molecule: papd-like chaperone fimc; PDBTitle: x-ray structure of the fimc-fimh chaperone adhesin complex2 from uropathogenic e.coli
56	d1lga2	Alignment	not modelled	19.1	29	Fold: Glyoxalase/Bleomycin resistance protein/Dihydroxybiphenyl dioxygenase Superfamily: Glyoxalase/Bleomycin resistance protein/Dihydroxybiphenyl dioxygenase Family: Extradriol dioxygenases
57	d1aoza2	Alignment	not modelled	19.1	9	Fold: Cupredoxin-like Superfamily: Cupredoxins Family: Multidomain cupredoxins
58	c1sddA	Alignment	not modelled	17.0	11	PDB header: blood clotting Chain: A: PDB Molecule: coagulation factor v; PDBTitle: crystal structure of bovine factor vai
59	d2je8a3	Alignment	not modelled	16.4	14	Fold: Immunoglobulin-like beta-sandwich Superfamily: beta-Galactosidase/glucuronidase domain Family: beta-Galactosidase/glucuronidase domain
60	c3qbtH	Alignment	not modelled	15.6	18	PDB header: protein transport/hydrolase Chain: H: PDB Molecule: inositol polyphosphate 5-phosphatase ocr1-1; PDBTitle: crystal structure of ocr1 540-678 in complex with rab8a:gppnhp
61	d1kula	Alignment	not modelled	15.0	16	Fold: Prealbumin-like Superfamily: Starch-binding domain-like Family: Starch-binding domain
62	c2x3bB	Alignment	not modelled	14.7	22	PDB header: hydrolase Chain: B: PDB Molecule: toxic extracellular endopeptidase; PDBTitle: asap1 inactive mutant e294a, an extracellular toxic zinc2 metalloendopeptidase
63	c2wo4A	Alignment	not modelled	13.9	22	PDB header: hydrolase Chain: A: PDB Molecule: glycoside hydrolase, family 9; PDBTitle: 3b' carbohydrate-binding module from the cel9v glycoside2 hydrolase from clostridium thermocellum, in-house data
64	d1nqjb	Alignment	not modelled	13.6	11	Fold: CUB-like Superfamily: Collagen-binding domain Family: Collagen-binding domain
65	d1flua2	Alignment	not modelled	13.5	20	Fold: Glyoxalase/Bleomycin resistance protein/Dihydroxybiphenyl dioxygenase Superfamily: Glyoxalase/Bleomycin resistance protein/Dihydroxybiphenyl dioxygenase Family: Extradriol dioxygenases
66	c2l0dA	Alignment	not modelled	13.1	9	PDB header: cell adhesion Chain: A: PDB Molecule: cell surface protein; PDBTitle: solution nmr structure of putative cell surface protein ma_4588 (272-2 376 domain) from methanosarcina acetivorans, northeast structural 3 genomics consortium target mvr254a
67	c3zx1A	Alignment	not modelled	12.7	16	PDB header: oxidoreductase Chain: A: PDB Molecule: oxidoreductase, putative; PDBTitle: multi-copper oxidase from campylobacter jejuni: a metallo-oxidase
68	d1mlsa	Alignment	not modelled	12.7	8	Fold: Immunoglobulin-like beta-sandwich Superfamily: PapD-like Family: MSP-like
69	d2vzsa1	Alignment	not modelled	12.5	9	Fold: Immunoglobulin-like beta-sandwich Superfamily: beta-Galactosidase/glucuronidase domain Family: beta-Galactosidase/glucuronidase domain
70	d1uura2	Alignment	not modelled	12.0	6	Fold: Common fold of diphtheria toxin/transcription factors/cytochrome f Superfamily: p53-like transcription factors Family: STAT DNA-binding domain
71	c1yewl	Alignment	not modelled	11.6	16	PDB header: oxidoreductase, membrane protein Chain: I: PDB Molecule: particulate methane monooxygenase, b subunit; PDBTitle: crystal structure of particulate methane monooxygenase
72	d1flxa2	Alignment	not modelled	11.6	13	Fold: Glyoxalase/Bleomycin resistance protein/Dihydroxybiphenyl dioxygenase Superfamily: Glyoxalase/Bleomycin resistance protein/Dihydroxybiphenyl dioxygenase Family: Extradriol dioxygenases
73	d1ex0a2	Alignment	not modelled	11.5	17	Fold: Immunoglobulin-like beta-sandwich Superfamily: Transglutaminase, two C-terminal domains Family: Transglutaminase, two C-terminal domains
74	d2je8a2	Alignment	not modelled	11.4	0	Fold: Immunoglobulin-like beta-sandwich Superfamily: beta-Galactosidase/glucuronidase domain Family: beta-Galactosidase/glucuronidase domain
75	d1jzga	Alignment	not modelled	11.1	3	Fold: Cupredoxin-like Superfamily: Cupredoxins Family: Plastocyanin/azurin-like
76	d1e42a1	Alignment	not modelled	11.0	15	Fold: Immunoglobulin-like beta-sandwich Superfamily: Clathrin adaptor appendage domain Family: Alpha-adaptin ear subdomain-like
77	d2k5qa1	Alignment	not modelled	10.7	23	Fold: OB-fold Superfamily: BC4932-like Family: BC4932-like
78	d1lfra	Alignment	not modelled	10.6	14	Fold: Immunoglobulin-like beta-sandwich Superfamily: Lamin A/C globular tail domain Family: Lamin A/C globular tail domain
79	d1nwpa	Alignment	not modelled	10.4	12	Fold: Cupredoxin-like Superfamily: Cupredoxins Family: Plastocyanin/azurin-like

80	d1mpya1	Alignment	not modelled	10.3	14	Fold: Glyoxalase/Bleomycin resistance protein/Dihydroxybiphenyl dioxygenase Superfamily: Glyoxalase/Bleomycin resistance protein/Dihydroxybiphenyl dioxygenase Family: Extradiol dioxygenases
81	c3gekA	Alignment	not modelled	10.2	10	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: putative thioesterase yhda; PDBTitle: crystal structure of putative thioesterase yhda from lactococcus2 lactis. northeast structural genomics consortium target kr113
82	c2IIIA_	Alignment	not modelled	10.1	11	PDB header: structural protein Chain: A: PDB Molecule: lamin-b2; PDBTitle: solution nmr structure of c-terminal globular domain of human lamin-2 b2, northeast structural genomics consortium target hr8546a
83	c2h47C_	Alignment	not modelled	9.9	3	PDB header: oxidoreductase/electron transport Chain: C: PDB Molecule: azurin; PDBTitle: crystal structure of an electron transfer complex between2 aromatic amine dehydrogenase and azurin from alcaligenes3 faecalis (form 1)
84	d1h6ya_	Alignment	not modelled	9.4	11	Fold: Galactose-binding domain-like Superfamily: Galactose-binding domain-like Family: CBM22
85	d1azca_	Alignment	not modelled	9.4	3	Fold: Cupredoxin-like Superfamily: Cupredoxins Family: Plastocyanin/azurin-like
86	c2r39A_	Alignment	not modelled	9.3	9	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: fixg-related protein; PDBTitle: crystal structure of fixg-related protein from vibrio parahaemolyticus
87	d2j5wa1	Alignment	not modelled	9.2	15	Fold: Cupredoxin-like Superfamily: Cupredoxins Family: Multi domain cupredoxins
88	c2opkC_	Alignment	not modelled	9.2	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
89	c1qpxA_	Alignment	not modelled	9.2	10	PDB header: chaperone Chain: A: PDB Molecule: papd chaperone; PDBTitle: crystal structures of self-capping papd chaperone homodimers
90	d3eipa_	Alignment	not modelled	8.9	13	Fold: FKBP-like Superfamily: Colicin E3 immunity protein Family: Colicin E3 immunity protein
91	d1q38a_	Alignment	not modelled	8.9	25	Fold: Immunoglobulin-like beta-sandwich Superfamily: Fibronectin type III Family: Fibronectin type III
92	c2h7fx_	Alignment	not modelled	8.9	9	PDB header: isomerase/dna Chain: X: PDB Molecule: dna topoisomerase 1; PDBTitle: structure of variola topoisomerase covalently bound to dna
93	d1f53a_	Alignment	not modelled	8.7	33	Fold: gamma-Crystallin-like Superfamily: gamma-Crystallin-like Family: Killer toxin-like protein SKLP
94	d1cc3a_	Alignment	not modelled	8.6	7	Fold: Cupredoxin-like Superfamily: Cupredoxins Family: Plastocyanin/azurin-like
95	c3qhtD_	Alignment	not modelled	8.6	21	PDB header: de novo protein Chain: D: PDB Molecule: monobody ysmb-1; PDBTitle: crystal structure of the monobody ysmb-1 bound to yeast sumo
96	c1cyxA_	Alignment	not modelled	8.6	26	PDB header: electron transport Chain: A: PDB Molecule: cyoa; PDBTitle: quinol oxidase (periplasmic fragment of subunit ii with2 engineered cu-a binding site)(cyoa)
97	d1cyxa_	Alignment	not modelled	8.6	26	Fold: Cupredoxin-like Superfamily: Cupredoxins Family: Periplasmic domain of cytochrome c oxidase subunit II
98	d2ccwa1	Alignment	not modelled	8.5	4	Fold: Cupredoxin-like Superfamily: Cupredoxins Family: Plastocyanin/azurin-like
99	c2rk0B_	Alignment	not modelled	8.3	14	PDB header: oxidoreductase Chain: B: PDB Molecule: glyoxalase/bleomycin resistance protein/dioxygenase domain; PDBTitle: crystal structure of glyoxalase/bleomycin resistance2 protein/dioxygenase domain from frankia sp. ean1pec