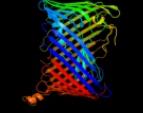
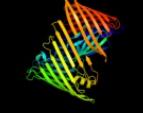
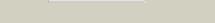
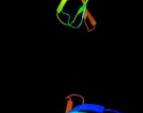
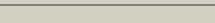
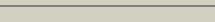
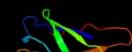
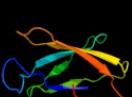
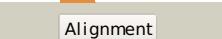
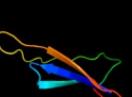
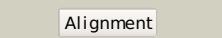
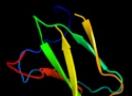
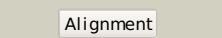


Phyre²

Email	i.a.kelley@imperial.ac.uk
Description	P33341
Date	Thu Jan 5 11:51:41 GMT 2012
Unique Job ID	e19a5c012ebd726a

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c3rfzB_			100.0	31	PDB header: cell adhesion/transport/chaperone Chain: B: PDB Molecule: outer membrane usher protein, type 1 fimbrial synthesis; PDBTitle: crystal structure of the fimd usher bound to its cognate fimc:fimh2 substrate
2	c3ohnA_			100.0	33	PDB header: membrane protein Chain: A: PDB Molecule: outer membrane usher protein fimd; PDBTitle: crystal structure of the fimd translocation domain
3	c2vqiA_			100.0	27	PDB header: transport Chain: A: PDB Molecule: outer membrane usher protein papc; PDBTitle: structure of the p pilus usher (papc) translocation pore
4	d1zdva1			99.9	31	Fold: FimD N-terminal domain-like Superfamily: FimD N-terminal domain-like Family: Usher N-domain
5	d3bwud1			99.9	23	Fold: FimD N-terminal domain-like Superfamily: FimD N-terminal domain-like Family: Usher N-domain
6	c3fcgB_			99.9	39	PDB header: membrane protein, protein transport Chain: B: PDB Molecule: f1 capsule-anchoring protein; PDBTitle: crystal structure analysis of the middle domain of the2 caf1a usher
7	d1zdxa1			99.8	26	Fold: FimD N-terminal domain-like Superfamily: FimD N-terminal domain-like Family: Usher N-domain
8	c3l48B_			99.7	18	PDB header: transport protein Chain: B: PDB Molecule: outer membrane usher protein papc; PDBTitle: crystal structure of the c-terminal domain of the papc usher
9	c2xetB_			99.7	18	PDB header: transport protein Chain: B: PDB Molecule: f1 capsule-anchoring protein; PDBTitle: conserved hydrophobic clusters on the surface of the caf1a usher c-terminal domain are important for f1 antigen assembly
10	c3pe9B_			95.0	16	PDB header: unknown function Chain: B: PDB Molecule: fibronectin(iii)-like module; PDBTitle: structures of clostridium thermocellum cbha fibronectin(iii)-like2 modules
11	c3pdgA_			94.8	14	PDB header: unknown function Chain: A: PDB Molecule: fibronectin(iii)-like module; PDBTitle: structures of clostridium thermocellum cbha fibronectin(iii)-like2 modules

12	c3pe9D			90.5	16	PDB header: unknown function Chain: D: PDB Molecule: fibronectin(iii)-like module; PDBTitle: structures of clostridium thermocellum cbha fibronectin(iii)-like2 modules
13	c1h8lA			90.4	11	PDB header: carboxypeptidase Chain: A: PDB Molecule: carboxypeptidase gp180 residues 503-882; PDBTitle: duck carboxypeptidase d domain ii in complex with gema
14	d1h8la1			90.2	10	Fold: Prealbumin-like Superfamily: Carboxypeptidase regulatory domain-like Family: Carboxypeptidase regulatory domain
15	c2nsmA			89.2	14	PDB header: hydrolase Chain: A: PDB Molecule: carboxypeptidase n catalytic chain; PDBTitle: crystal structure of the human carboxypeptidase n (kininase i)2 catalytic domain
16	c3pe9C			86.9	16	PDB header: unknown function Chain: C: PDB Molecule: fibronectin(iii)-like module; PDBTitle: structures of clostridium thermocellum cbha fibronectin(iii)-like2 modules
17	c3pe9A			86.9	16	PDB header: unknown function Chain: A: PDB Molecule: fibronectin(iii)-like module; PDBTitle: structures of clostridium thermocellum cbha fibronectin(iii)-like2 modules
18	d1w0na			85.5	21	Fold: Galactose-binding domain-like Superfamily: Galactose-binding domain-like Family: Family 36 carbohydrate binding module, CBM36
19	d1uwya1			85.4	7	Fold: Prealbumin-like Superfamily: Carboxypeptidase regulatory domain-like Family: Carboxypeptidase regulatory domain
20	c2x5pA			84.1	22	PDB header: protein binding Chain: A: PDB Molecule: fibronectin binding protein; PDBTitle: crystal structure of the streptococcus pyogenes fibronectin binding2 protein fbab-b
21	c1d2pA		not modelled	82.5	20	PDB header: structural protein Chain: A: PDB Molecule: collagen adhesin; PDBTitle: crystal structure of two b repeat units (b1b2) of the2 collagen binding protein (cna) of staphylococcus aureus
22	c3mn8A		not modelled	82.1	11	PDB header: hydrolase Chain: A: PDB Molecule: lp15968p; PDBTitle: structure of drosophila melanogaster carboxypeptidase d isoform 1b2 short
23	c1uwyA		not modelled	81.8	8	PDB header: hydrolase Chain: A: PDB Molecule: carboxypeptidase m; PDBTitle: crystal structure of human carboxypeptidase m
24	c2vnvC		not modelled	79.4	11	PDB header: sugar-binding protein Chain: C: PDB Molecule: bcla; PDBTitle: crystal structure of bcla lectin from burkholderia2 cenocepacia in complex with alpha-methyl-mannoside at 1.73 angstrom resolution
25	d3pccm		not modelled	64.9	17	Fold: Prealbumin-like Superfamily: Aromatic compound dioxygenase Family: Aromatic compound dioxygenase
26	d2burb1		not modelled	63.6	20	Fold: Prealbumin-like Superfamily: Aromatic compound dioxygenase Family: Aromatic compound dioxygenase
27	c2boiA		not modelled	63.2	13	PDB header: lectin Chain: A: PDB Molecule: cv-iii lectin; PDBTitle: 1.1a structure of chromobacterium violaceum lectin cv1 in2 complex with alpha-methyl-fucoside
28	c2xr4A		not modelled	63.1	16	PDB header: sugar binding protein Chain: A: PDB Molecule: lectin; PDBTitle: c-terminal domain of bc2l-c lectin from burkholderia cenocepacia

29	d1uzva	Alignment	not modelled	54.0	14	Fold: Calcium-mediated lectin Superfamily: Calcium-mediated lectin Family: Calcium-mediated lectin
30	c1u00A	Alignment	not modelled	52.6	18	PDB header: chaperone Chain: A: PDB Molecule: chaperone protein hscα; PDBTitle: hscα substrate binding domain complexed with the iscu2 recognition peptide elppvkihc
31	c3e8vA	Alignment	not modelled	50.7	14	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: possible transglutaminase-family protein; PDBTitle: crystal structure of a possible transglutaminase-family2 protein proteolytic fragment from bacteroides fragilis
32	c3bryB	Alignment	not modelled	50.0	19	PDB header: transport protein Chain: B: PDB Molecule: tbusx; PDBTitle: crystal structure of the ralstonia pickettii toluene2 transporter tbusx
33	c3dpqE	Alignment	not modelled	49.8	21	PDB header: chaperone, peptide binding protein Chain: E: PDB Molecule: chaperone protein dnak; PDBTitle: crystal structure of the substrate binding domain of e.2 coli dnak in complex with a long pyrrhocoricin-derived3 inhibitor peptide (form b)
34	c1bpRA	Alignment	not modelled	49.5	21	PDB header: molecular chaperone Chain: A: PDB Molecule: dnak; PDBTitle: nmr structure of the substrate binding domain of dnak,2 minimized average structure
35	c3b9eA	Alignment	not modelled	49.3	13	PDB header: hydrolase Chain: A: PDB Molecule: chitinase a; PDBTitle: crystal structure of inactive mutant e315m chitinase a from2 vibrio harveyi
36	c2bpbA	Alignment	not modelled	49.0	19	PDB header: oxidoreductase Chain: A: PDB Molecule: sulfite:cytochrome c oxidoreductase subunit a; PDBTitle: sulfite dehydrogenase from starkeya novella
37	d1nkga1	Alignment	not modelled	48.5	7	Fold: Prealbumin-like Superfamily: Starch-binding domain-like Family: Rhamnogalacturonase B, RhgB, middle domain
38	c1ug9A	Alignment	not modelled	48.2	25	PDB header: hydrolase Chain: A: PDB Molecule: glucodextranase; PDBTitle: crystal structure of glucodextranase from arthrobacter globiformis i42
39	c3c12A	Alignment	not modelled	47.1	22	PDB header: biosynthetic protein Chain: A: PDB Molecule: flagellar protein; PDBTitle: crystal structure of flgd from xanthomonas campestris:2 insights into the hook capping essential for flagellar3 assembly
40	c2op6A	Alignment	not modelled	46.4	18	PDB header: peptide binding protein Chain: A: PDB Molecule: heat shock 70 kda protein d; PDBTitle: peptide-binding domain of heat shock 70 kda protein d precursor from2 c.elegans
41	c3n8eA	Alignment	not modelled	45.3	18	PDB header: chaperone Chain: A: PDB Molecule: stress-70 protein, mitochondrial; PDBTitle: substrate binding domain of the human heat shock 70kda protein 92 (mortalin)
42	c3fn9B	Alignment	not modelled	42.9	15	PDB header: hydrolase Chain: B: PDB Molecule: putative beta-galactosidase; PDBTitle: crystal structure of putative beta-galactosidase from bacteroides2 fragilis
43	d1v8ha1	Alignment	not modelled	41.7	21	Fold: Immunoglobulin-like beta-sandwich Superfamily: E set domains Family: SoxZ-like
44	c3cmgA	Alignment	not modelled	40.9	15	PDB header: hydrolase Chain: A: PDB Molecule: putative beta-galactosidase; PDBTitle: crystal structure of putative beta-galactosidase from bacteroides2 fragilis
45	d1edqa1	Alignment	not modelled	39.5	17	Fold: Immunoglobulin-like beta-sandwich Superfamily: E set domains Family: E-set domains of sugar-utilizing enzymes
46	c1nkgA	Alignment	not modelled	37.8	17	PDB header: lyase Chain: A: PDB Molecule: rhamnogalacturonase b; PDBTitle: rhamnogalacturonan lyase from aspergillus aculeatus
47	d1u00a2	Alignment	not modelled	36.8	23	Fold: Heat shock protein 70kD (HSP70), peptide-binding domain Superfamily: Heat shock protein 70kD (HSP70), peptide-binding domain Family: Heat shock protein 70kD (HSP70), peptide-binding domain
48	d2chha1	Alignment	not modelled	34.3	13	Fold: Calcium-mediated lectin Superfamily: Calcium-mediated lectin Family: Calcium-mediated lectin
49	d1dkza2	Alignment	not modelled	33.0	21	Fold: Heat shock protein 70kD (HSP70), peptide-binding domain Superfamily: Heat shock protein 70kD (HSP70), peptide-binding domain Family: Heat shock protein 70kD (HSP70), peptide-binding domain
50	c2a9dB	Alignment	not modelled	32.2	20	PDB header: oxidoreductase Chain: B: PDB Molecule: sulfite oxidase; PDBTitle: crystal structure of recombinant chicken sulfite oxidase with arg a2 residue 161
51	c3dqgC	Alignment	not modelled	32.2	19	PDB header: chaperone Chain: C: PDB Molecule: heat shock 70 kda protein f; PDBTitle: peptide-binding domain of heat shock 70 kda protein f, mitochondrial2 precursor, from caenorhabditis elegans.
52	d2vzsa4	Alignment	not modelled	31.3	19	Fold: Galactose-binding domain-like Superfamily: Galactose-binding domain-like Family: beta-Galactosidase/glucuronidase, N-terminal domain
53	d1yuwa1	Alignment	not modelled	31.2	20	Fold: Heat shock protein 70kD (HSP70), peptide-binding domain Superfamily: Heat shock protein 70kD (HSP70), peptide-binding domain Family: Heat shock protein 70kD (HSP70), peptide-binding domain
54	d1ci3m2	Alignment	not modelled	31.1	10	Fold: Barrel-sandwich hybrid Superfamily: Rudiment single hybrid motif Family: Cytochrome f, small domain

55	d1aoza2		Alignment	not modelled	28.7	18	Fold: Cupredoxin-like Superfamily: Cupredoxins Family: Multidomain cupredoxins
56	c2r32A_		Alignment	not modelled	28.6	29	PDB header: immune system Chain: A: PDB Molecule: gcn4-pii/tumor necrosis factor ligand PDBTitle: crystal structure of human gtrl variant
57	d1e2wa2		Alignment	not modelled	27.3	11	Fold: Barrel-sandwich hybrid Superfamily: Rudiment single hybrid motif Family: Cytochrome f, small domain
58	c2oxgE_		Alignment	not modelled	26.7	25	PDB header: transport protein Chain: E: PDB Molecule: soxz protein; PDBTitle: the soxz complex of paracoccus pantotrophus
59	d2a9da1		Alignment	not modelled	26.2	25	Fold: Immunoglobulin-like beta-sandwich Superfamily: E set domains Family: Molybdenum-containing oxidoreductases-like dimerisation domain
60	c3pddA_		Alignment	not modelled	25.1	16	PDB header: unknown function Chain: A: PDB Molecule: glycoside hydrolase, family 9; PDBTitle: structures of clostridium thermocellum cbha fibronectin(iii)-like2 modules
61	c2ww8A_		Alignment	not modelled	24.7	6	PDB header: cell adhesion Chain: A: PDB Molecule: cell wall surface anchor family protein; PDBTitle: structure of the pilus adhesin (rrga) from streptococcus pneumoniae
62	c3k1dA_		Alignment	not modelled	23.0	15	PDB header: transferase Chain: A: PDB Molecule: 1,4-alpha-glucan-branched enzyme; PDBTitle: crystal structure of glycogen branching enzyme synonym: 1,4-alpha-d-2 glucan:1,4-alpha-d-glucan 6-glucosyl-transferase from mycobacterium tuberculosis h37rv
63	d2dj4a1		Alignment	not modelled	22.0	13	Fold: Immunoglobulin-like beta-sandwich Superfamily: E set domains Family: Filamin repeat (rod domain)
64	d3pcca_		Alignment	not modelled	21.9	11	Fold: Prealbumin-like Superfamily: Aromatic compound dioxygenase Family: Aromatic compound dioxygenase
65	d1o75a2		Alignment	not modelled	21.2	27	Fold: Immunoglobulin-like beta-sandwich Superfamily: Tp47 lipoprotein, middle and C-terminal domains Family: Tp47 lipoprotein, middle and C-terminal domains
66	c3rghA_		Alignment	not modelled	21.2	33	PDB header: cell adhesion Chain: A: PDB Molecule: filamin-a; PDBTitle: structure of filamin a immunoglobulin-like repeat 10 from homo sapiens
67	c21geA_		Alignment	not modelled	21.0	23	PDB header: metal binding protein Chain: A: PDB Molecule: uncharacterized protein; PDBTitle: nmr structure of the calcium-bound form of the protein yp_001302112.12 from parabacteroides distasonis
68	d2je8a4		Alignment	not modelled	21.0	13	Fold: Galactose-binding domain-like Superfamily: Galactose-binding domain-like Family: beta-Galactosidase/glucuronidase, N-terminal domain
69	d1wlha1		Alignment	not modelled	20.2	20	Fold: Immunoglobulin-like beta-sandwich Superfamily: E set domains Family: Filamin repeat (rod domain)
70	d2bp3a1		Alignment	not modelled	20.2	40	Fold: Immunoglobulin-like beta-sandwich Superfamily: E set domains Family: Filamin repeat (rod domain)
71	c3hj8A_		Alignment	not modelled	20.2	12	PDB header: oxidoreductase Chain: A: PDB Molecule: catechol 1,2-dioxygenase; PDBTitle: crystal structure determination of catechol 1,2-dioxygenase from rhodococcus opacus 1cp in complex with 4-chlorocatechol
72	c2yuja_		Alignment	not modelled	19.5	10	PDB header: protein binding Chain: A: PDB Molecule: ubiquitin fusion degradation 1-like; PDBTitle: solution structure of human ubiquitin fusion degradation2 protein 1 homolog ufd1
73	c2l3ba_		Alignment	not modelled	19.1	13	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: conserved protein found in conjugate transposon; PDBTitle: solution nmr structure of the bt_0084 lipoprotein from bacteroides 2 theta iotaomicron, northeast structural genomics consortium target3 btr376
74	d1ogpa1		Alignment	not modelled	18.7	20	Fold: Immunoglobulin-like beta-sandwich Superfamily: E set domains Family: Molybdenum-containing oxidoreductases-like dimerisation domain
75	c2pdtD_		Alignment	not modelled	17.5	20	PDB header: circadian clock protein Chain: D: PDB Molecule: vivid pas protein vvd; PDBTitle: 2.3 angstrom structure of phosphodiesterase treated vivid
76	d2d7oa1		Alignment	not modelled	16.8	27	Fold: Immunoglobulin-like beta-sandwich Superfamily: E set domains Family: Filamin repeat (rod domain)
77	d2e9ia1		Alignment	not modelled	16.7	13	Fold: Immunoglobulin-like beta-sandwich Superfamily: E set domains Family: Filamin repeat (rod domain)
78	d2dmca1		Alignment	not modelled	16.5	14	Fold: Immunoglobulin-like beta-sandwich Superfamily: E set domains Family: Filamin repeat (rod domain)
79	c1zc1A_		Alignment	not modelled	16.4	13	PDB header: protein turnover Chain: A: PDB Molecule: ubiquitin fusion degradation protein 1; PDBTitle: ufd1 exhibits the aaa-atpase fold with two distinct2 ubiquitin interaction sites
80	c2h32D		Alignment	not modelled	16.3	14	PDB header: unknown function Chain: B: PDB Molecule: domain of unknown function with an immunoglobulin-like

80	c5933p_	Alignment	not modelled	16.5	14	PDBTitle: crystal structure of a duf3244 family protein with an immunoglobulin-2 like beta-sandwich fold (bvu_0276) from <i>bacteroides vulgatus</i> atcc3 8482 at 1.70 a resolution PDB header: electron transport Chain: B: PDB Molecule: cytochrome f; PDBTitle: ensemble of twenty structures of the prochlorothrix2 hollandica plastocyanin- cytochrome f complex
81	c2jxmB_	Alignment	not modelled	16.1	12	Fold: Immunoglobulin-like beta-sandwich Superfamily: E set domains Family: E-set domains of sugar-utilizing enzymes
82	d1ulva2	Alignment	not modelled	16.1	33	PDB header: translation Chain: A: PDB Molecule: translation initiation factor if-2; PDBTitle: solution structure of c-terminal domain of mitochondrial2 translational initiationfactor 2
83	c2crvA_	Alignment	not modelled	15.5	15	Fold: Immunoglobulin-like beta-sandwich Superfamily: E set domains Family: Filamin repeat (rod domain)
84	d1qfha1	Alignment	not modelled	15.5	22	Fold: Galactose-binding domain-like Superfamily: Galactose-binding domain-like Family: beta-Galactosidase/glucuronidase, N-terminal domain
85	d1yq2a3	Alignment	not modelled	15.4	18	Fold: Concanavalin A-like lectins/glucanases Superfamily: Concanavalin A-like lectins/glucanases Family: Leech intramolecular trans-sialidase, N-terminal domain
86	d2slia1	Alignment	not modelled	15.4	16	Fold: SH2-like Superfamily: SH2 domain Family: SH2 domain
87	d1uura3	Alignment	not modelled	15.2	26	PDB header: transferase Chain: A: PDB Molecule: aminomethyltransferase; PDBTitle: crystal structure of glycine cleavage system2 aminomethyltransferase t from bartonella henselae
88	c3girA_	Alignment	not modelled	14.6	21	Fold: Immunoglobulin-like beta-sandwich Superfamily: E set domains Family: Filamin repeat (rod domain)
89	d2dic1a1	Alignment	not modelled	14.3	33	PDB header: structural protein Chain: B: PDB Molecule: filamin a; PDBTitle: crystal structure of the filamin a repeat 21 complexed with2 the integrin beta7 cytoplasmic tail peptide
90	c2brqB_	Alignment	not modelled	14.1	27	PDB header: protein binding Chain: A: PDB Molecule: tripartite motif protein 45; PDBTitle: solution structure of the filamin domain from human2 tripartite motif protein 45
91	c2ds4A_	Alignment	not modelled	13.8	27	Fold: Immunoglobulin-like beta-sandwich Superfamily: E set domains Family: Filamin repeat (rod domain)
92	d2j3sa2	Alignment	not modelled	13.6	13	Fold: Immunoglobulin-like beta-sandwich Superfamily: E set domains Family: Filamin repeat (rod domain)
93	d2di8a1	Alignment	not modelled	13.5	20	Fold: Immunoglobulin-like beta-sandwich Superfamily: E set domains Family: Filamin repeat (rod domain)
94	d2w0pa1	Alignment	not modelled	13.4	27	Fold: Immunoglobulin-like beta-sandwich Superfamily: E set domains Family: Filamin repeat (rod domain)
95	d2nn6i1	Alignment	not modelled	13.4	16	Fold: OB-fold Superfamily: Nucleic acid-binding proteins Family: Cold shock DNA-binding domain-like
96	d2diaa1	Alignment	not modelled	13.3	13	Fold: Immunoglobulin-like beta-sandwich Superfamily: E set domains Family: Filamin repeat (rod domain)
97	d2d7pa1	Alignment	not modelled	13.3	27	Fold: Immunoglobulin-like beta-sandwich Superfamily: E set domains Family: Filamin repeat (rod domain)
98	d2dmfa1	Alignment	not modelled	13.2	27	Fold: Immunoglobulin-like beta-sandwich Superfamily: E set domains Family: Filamin repeat (rod domain)
99	c1w2tE_	Alignment	not modelled	13.2	16	PDB header: hydrolase Chain: E: PDB Molecule: beta fructosidase; PDBTitle: beta-fructosidase from thermotoga maritima in complex with2 raffinose