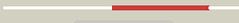
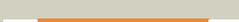
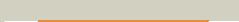
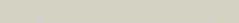
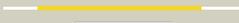
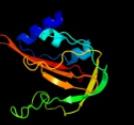
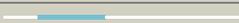
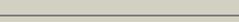
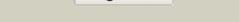
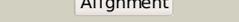
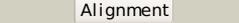
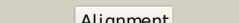


Phyre2

Email	I.a.kelley@imperial.ac.uk
Description	P18196
Date	Thu Jan 5 11:36:43 GMT 2012
Unique Job ID	ba4d00f62aa379ea

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c1hf2A_	 Alignment		100.0	23	PDB header: cell division protein Chain: A: PDB Molecule: septum site-determining protein minc; PDBTitle: crystal structure of the bacterial cell-division inhibitor2 minc from t. maritima
2	d1hf2a1	 Alignment		100.0	27	Fold: Single-stranded right-handed beta-helix Superfamily: Cell-division inhibitor MinC, C-terminal domain Family: Cell-division inhibitor MinC, C-terminal domain
3	c3ghfA_	 Alignment		99.8	83	PDB header: cell cycle Chain: A: PDB Molecule: septum site-determining protein minc; PDBTitle: crystal structure of the septum site-determining protein2 minc from salmonella typhimurium
4	d1hf2a2	 Alignment		98.5	16	Fold: Cell-division inhibitor MinC, N-terminal domain Superfamily: Cell-division inhibitor MinC, N-terminal domain Family: Cell-division inhibitor MinC, N-terminal domain
5	c1tf2A_	 Alignment		90.6	25	PDB header: protein transport Chain: A: PDB Molecule: preprotein translocase seca subunit; PDBTitle: crystal structure of seca:adp in an open conformation from2 bacillus subtilis
6	c1nl3B_	 Alignment		86.7	27	PDB header: protein transport Chain: B: PDB Molecule: preprotein translocase seca 1 subunit; PDBTitle: crystal structure of the seca protein translocation atpase2 from mycobacterium tuberculosis in apo form
7	c3dl8B_	 Alignment		84.1	22	PDB header: protein transport Chain: B: PDB Molecule: protein translocase subunit seca; PDBTitle: structure of the complex of aquifex aeolicus secyeg and2 bacillus subtilis seca
8	c3dinB_	 Alignment		83.0	25	PDB header: membrane protein, protein transport Chain: B: PDB Molecule: protein translocase subunit seca; PDBTitle: crystal structure of the protein-translocation complex formed by the2 secy channel and the seca atpase
9	c3juxA_	 Alignment		82.2	25	PDB header: protein transport Chain: A: PDB Molecule: protein translocase subunit seca; PDBTitle: structure of the translocation atpase seca from thermotoga2 maritima
10	c2fsgA_	 Alignment		81.9	25	PDB header: protein transport Chain: A: PDB Molecule: preprotein translocase seca subunit; PDBTitle: complex seca:atp from escherichia coli
11	d1nkt4	 Alignment		79.0	29	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Tandem AAA-ATPase domain

12	d1mzva_	 Alignment		75.7	15	Fold: PRTase-like Superfamily: PRTase-like Family: Phosphoribosyltransferases (PRTases)
13	c2vdaA_	 Alignment		74.2	26	PDB header: protein transport Chain: A: PDB Molecule: translocase subunit seca; PDBTitle: solution structure of the seca-signal peptide complex
14	c2dy0A_	 Alignment		65.4	13	PDB header: transferase Chain: A: PDB Molecule: adenine phosphoribosyltransferase; PDBTitle: crystal structure of project jw0458 from escherichia coli
15	c2pfuA_	 Alignment		61.4	12	PDB header: transport protein Chain: A: PDB Molecule: biopolymer transport exbd protein; PDBTitle: nmr strcuture determination of the periplasmic domain of exbd from2 e.coli
16	c2ipcB_	 Alignment		53.1	29	PDB header: transport protein Chain: B: PDB Molecule: preprotein translocase seca subunit; PDBTitle: crystal structure of the translocation atpase seca from thermus2 thermophilus reveals a parallel, head-to-head dimer
17	d1zunb1	 Alignment		41.3	18	Fold: Reductase/isomerase/elongation factor common domain Superfamily: Translation proteins Family: Elongation factors
18	c3l7nA_	 Alignment		40.1	8	PDB header: transferase Chain: A: PDB Molecule: putative uncharacterized protein; PDBTitle: crystal structure of smu.1228c
19	d1g2qa_	 Alignment		37.6	13	Fold: PRTase-like Superfamily: PRTase-like Family: Phosphoribosyltransferases (PRTases)
20	d1o57a2	 Alignment		37.1	13	Fold: PRTase-like Superfamily: PRTase-like Family: Phosphoribosyltransferases (PRTases)
21	d1n0ua1	 Alignment	not modelled	36.8	33	Fold: Reductase/isomerase/elongation factor common domain Superfamily: Translation proteins Family: Elongation factors
22	c2jwlB_	 Alignment	not modelled	33.3	6	PDB header: membrane protein Chain: B: PDB Molecule: protein tolR; PDBTitle: solution structure of periplasmic domain of tolR from h.2 influenzae with saxs data
23	c3k4iC_	 Alignment	not modelled	31.0	20	PDB header: structural genomics, unknown function Chain: C: PDB Molecule: uncharacterized protein; PDBTitle: crystal structure of uncharacterized protein pspto_3204 from2 pseudomonas syringae pv. tomato str. dc3000
24	d2bv3a1	 Alignment	not modelled	27.3	21	Fold: Reductase/isomerase/elongation factor common domain Superfamily: Translation proteins Family: Elongation factors
25	d1jnya1	 Alignment	not modelled	26.4	15	Fold: Reductase/isomerase/elongation factor common domain Superfamily: Translation proteins Family: Elongation factors
26	c2i5kB_	 Alignment	not modelled	26.3	19	PDB header: transferase Chain: B: PDB Molecule: utp--glucose-1-phosphate uridylyltransferase; PDBTitle: crystal structure of ugp1p
27	d1o1ya_	 Alignment	not modelled	24.1	10	Fold: Flavodoxin-like Superfamily: Class I glutamine amidotransferase-like Family: Class I glutamine amidotransferases (GAT)
28	c2zwaA_	 Alignment	not modelled	23.9	17	PDB header: transferase Chain: A: PDB Molecule: leucine carboxyl methyltransferase 2; PDBTitle: crystal structure of trna wybutosine synthesizing enzyme2 tyw4
		 Alignment				PDB header: transferase

29	c3cr8C_	Alignment	not modelled	23.9	8	Chain: C: PDB Molecule: sulfate adenyllyltransferase, adenyllylsulfate PDBTitle: hexameric aps kinase from thiobacillus denitrificans
30	d1l1qa_	Alignment	not modelled	22.4	12	Fold: PRTase-like Superfamily: PRTase-like Family: Phosphoribosyltransferases (PRTases)
31	d1qb7a_	Alignment	not modelled	21.9	15	Fold: PRTase-like Superfamily: PRTase-like Family: Phosphoribosyltransferases (PRTases)
32	d2f69a1	Alignment	not modelled	21.4	29	Fold: open-sided beta-meander Superfamily: Histone H3 K4-specific methyltransferase SET7/9 N-terminal domain Family: Histone H3 K4-specific methyltransferase SET7/9 N-terminal domain
33	d1f60a1	Alignment	not modelled	20.0	12	Fold: Reductase/isomerase/elongation factor common domain Superfamily: Translation proteins Family: Elongation factors
34	c2idcA_	Alignment	not modelled	19.9	17	PDB header: replication/chaperone Chain: A: PDB Molecule: anti-silencing protein 1 and histone h3 chimera; PDBTitle: structure of the histone h3-asf1 chaperone interaction
35	d1roca_	Alignment	not modelled	18.8	17	Fold: Immunoglobulin-like beta-sandwich Superfamily: ASF1-like Family: ASF1-like
36	d2icya1	Alignment	not modelled	17.9	24	Fold: Single-stranded left-handed beta-helix Superfamily: Trimeric LpxA-like enzymes Family: GlmU C-terminal domain-like
37	c2i32A_	Alignment	not modelled	17.8	22	PDB header: replication chaperone Chain: A: PDB Molecule: anti-silencing factor 1 paralog a; PDBTitle: structure of a human asf1a-hira complex and insights into2 specificity of histone chaperone complex assembly
38	d2i32a1	Alignment	not modelled	17.8	22	Fold: Immunoglobulin-like beta-sandwich Superfamily: ASF1-like Family: ASF1-like
39	d2c78a1	Alignment	not modelled	16.7	10	Fold: Reductase/isomerase/elongation factor common domain Superfamily: Translation proteins Family: Elongation factors
40	d1v30a_	Alignment	not modelled	16.6	56	Fold: Gamma-glutamyl cyclotransferase-like Superfamily: Gamma-glutamyl cyclotransferase-like Family: Gamma-glutamyl cyclotransferase-like
41	c3es1A_	Alignment	not modelled	16.6	20	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: cupin 2, conserved barrel domain protein; PDBTitle: crystal structure of protein with a cupin-like fold and unknown2 function (yp_001165807.1) from novosphingobium aromaticivorans dsm3 12444 at 1.91 a resolution
42	d1mvfd_	Alignment	not modelled	16.6	22	Fold: Double-split beta-barrel Superfamily: AbrB/MazE/MraZ-like Family: Kis/PemI addiction antidote
43	d2exda1	Alignment	not modelled	16.6	18	Fold: OB-fold Superfamily: NfeD domain-like Family: NfeD domain-like
44	c3agqA_	Alignment	not modelled	16.5	9	PDB header: translation, transferase Chain: A: PDB Molecule: elongation factor ts, elongation factor tu 1, linker, q PDBTitle: structure of viral polymerase form ii
45	c3tr5C_	Alignment	not modelled	16.4	18	PDB header: translation Chain: C: PDB Molecule: peptide chain release factor 3; PDBTitle: structure of a peptide chain release factor 3 (prfc) from coxiella2 burnetii
46	d2cu9a1	Alignment	not modelled	16.1	17	Fold: Immunoglobulin-like beta-sandwich Superfamily: ASF1-like Family: ASF1-like
47	c2eqaA_	Alignment	not modelled	14.7	18	PDB header: rna binding protein Chain: A: PDB Molecule: hypothetical protein st1526; PDBTitle: crystal structure of the hypothetical sua5 protein from2 sulfobolus tokodaii
48	c3k13A_	Alignment	not modelled	14.1	17	PDB header: transferase Chain: A: PDB Molecule: 5-methyltetrahydrofolate-homocysteine methyltransferase; PDBTitle: structure of the pterin-binding domain metr of 5-2 methyltetrahydrofolate-homocysteine methyltransferase from3 bacteroides thetaiotaomicron
49	d1vkba_	Alignment	not modelled	14.0	44	Fold: Gamma-glutamyl cyclotransferase-like Superfamily: Gamma-glutamyl cyclotransferase-like Family: Gamma-glutamyl cyclotransferase-like
50	c2h5eB_	Alignment	not modelled	13.7	16	PDB header: translation Chain: B: PDB Molecule: peptide chain release factor rf-3; PDBTitle: crystal structure of e.coli polypeptide release factor rf3
51	d1q1oa_	Alignment	not modelled	13.5	10	Fold: beta-Grasp (ubiquitin-like) Superfamily: CAD & PB1 domains Family: PB1 domain
52	c2wmkB_	Alignment	not modelled	13.3	14	PDB header: hydrolase Chain: B: PDB Molecule: fucolactin-related protein; PDBTitle: crystal structure of the catalytic module of a family 982 glycoside hydrolase from streptococcus pneumoniae sp3-bs713 (sp3gh98) in complex with the a-lewisy pentasaccharide4 blood group antigen.
53	c2xexA_	Alignment	not modelled	13.1	13	PDB header: translation Chain: A: PDB Molecule: elongation factor g; PDBTitle: crystal structure of staphylococcus aureus elongation factor2 g
						Fold: Double-stranded beta-helix

54	d1dcsa_	Alignment	not modelled	13.0	16	Superfamily: Clavaminic synthase-like Family: Penicillin synthase-like
55	c3mezA_	Alignment	not modelled	12.7	15	PDB header: sugar binding protein Chain: A: PDB Molecule: mannose-specific lectin 3 chain 1; PDBTitle: x-ray structural analysis of a mannose specific lectin from dutch2 crocus (crocus vernus)
56	c2kl8A_	Alignment	not modelled	12.2	23	PDB header: de novo protein Chain: A: PDB Molecule: or15; PDBTitle: solution nmr structure of de novo designed ferredoxin-like2 fold protein, northeast structural genomics consortium3 target or15
57	d1lqoa_	Alignment	not modelled	12.2	21	Fold: Hypothetical protein MTH1880 Superfamily: Hypothetical protein MTH1880 Family: Hypothetical protein MTH1880
58	d1pqsa_	Alignment	not modelled	11.8	8	Fold: beta-Grasp (ubiquitin-like) Superfamily: CAD & PB1 domains Family: PB1 domain
59	c3l83A_	Alignment	not modelled	11.7	15	PDB header: transferase Chain: A: PDB Molecule: glutamine amido transferase; PDBTitle: crystal structure of glutamine amido transferase from methyllobacillus2 flagellatus
60	c3jubA_	Alignment	not modelled	11.3	38	PDB header: transferase Chain: A: PDB Molecule: aig2-like domain-containing protein 1; PDBTitle: human gamma-glutamylamine cyclotransferase
61	d1omwa2	Alignment	not modelled	11.1	15	Fold: PH domain-like barrel Superfamily: PH domain-like Family: Pleckstrin-homology domain (PH domain)
62	c2rdo7_	Alignment	not modelled	10.8	13	PDB header: ribosome Chain: 7: PDB Molecule: elongation factor g; PDBTitle: 50s subunit with ef-g(gdppp) and rrf bound
63	c2k5hA_	Alignment	not modelled	10.5	19	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: conserved protein; PDBTitle: solution nmr structure of protein encoded by mth693 from2 methanobacterium thermoautotrophicum: northeast structural3 genomics consortium target tt824a
64	d1vm6a3	Alignment	not modelled	10.2	21	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: Glyceraldehyde-3-phosphate dehydrogenase-like, N-terminal domain
65	c3uotB_	Alignment	not modelled	10.0	13	PDB header: cell cycle Chain: B: PDB Molecule: mediator of dna damage checkpoint protein 1; PDBTitle: crystal structure of mdc1 fha domain in complex with a phosphorylated2 peptide from the mdc1 n-terminus
66	c3cb4D_	Alignment	not modelled	10.0	14	PDB header: translation Chain: D: PDB Molecule: gtp-binding protein lepa; PDBTitle: the crystal structure of lepa
67	d1xhsa_	Alignment	not modelled	10.0	56	Fold: Gamma-glutamyl cyclotransferase-like Superfamily: Gamma-glutamyl cyclotransferase-like Family: Gamma-glutamyl cyclotransferase-like
68	c2g0qA_	Alignment	not modelled	9.8	44	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: at5g39720.1 protein; PDBTitle: solution structure of at5g39720.1 from arabidopsis thaliana
69	c2vu9A_	Alignment	not modelled	9.6	16	PDB header: hydrolase Chain: A: PDB Molecule: botulinum neurotoxin a heavy chain; PDBTitle: crystal structure of botulinum neurotoxin serotype a2 binding domain in complex with gt1b
70	c2bm0A_	Alignment	not modelled	9.5	15	PDB header: elongation factor Chain: A: PDB Molecule: elongation factor g; PDBTitle: ribosomal elongation factor g (ef-g) fusidic acid resistant2 mutant t84a
71	c1qysA_	Alignment	not modelled	9.4	21	PDB header: de novo protein Chain: A: PDB Molecule: top7; PDBTitle: crystal structure of top7: a computationally designed2 protein with a novel fold
72	d1od5a2	Alignment	not modelled	9.2	21	Fold: Double-stranded beta-helix Superfamily: RmlC-like cupins Family: Germin/Seed storage 7S protein
73	d2cvoa2	Alignment	not modelled	9.1	16	Fold: FwdE/GAPDH domain-like Superfamily: Glyceraldehyde-3-phosphate dehydrogenase-like, C-terminal domain Family: GAPDH-like
74	c3k3sG_	Alignment	not modelled	8.9	17	PDB header: hydrolase Chain: G: PDB Molecule: altronate hydrolase; PDBTitle: crystal structure of altronate hydrolase (fragment 1-84) from shigella2 flexneri.
75	c2q4jB_	Alignment	not modelled	8.9	16	PDB header: transferase Chain: B: PDB Molecule: probable utp-glucose-1-phosphate uridylyltransferase 2; PDBTitle: ensemble refinement of the protein crystal structure of gene product2 from arabidopsis thaliana at3g03250, a putative udp-glucose3 pyrophosphorylase
76	c2jqvA_	Alignment	not modelled	8.8	44	PDB header: structural genomics Chain: A: PDB Molecule: aig2 protein-like; PDBTitle: solution structure at3g28950.1 from arabidopsis thaliana
77	c3cqiD_	Alignment	not modelled	8.8	36	PDB header: unknown function Chain: D: PDB Molecule: propanediol utilization protein pduu; PDBTitle: crystal structure of the pduu shell protein from the pdu2 microcompartment
78	c3mmyE_	Alignment	not modelled	8.8	16	PDB header: nuclear protein Chain: E: PDB Molecule: mrna export factor; PDBTitle: structural and functional analysis of the interaction between the2 nucleoporin nup98 and the mrna export factor rae1
79	d1lip9a_	Alignment	not modelled	8.7	9	Fold: beta-Grasp (ubiquitin-like) Superfamily: CAD & PB1 domains

						Family:PB1 domain
80	c2d5nB_	Alignment	not modelled	8.7	18	PDB header: hydrolase, oxidoreductase Chain: B: PDB Molecule: riboflavin biosynthesis protein ribd; PDBTitle: crystal structure of a bifunctional deaminase and reductase2 involved in riboflavin biosynthesis
81	c2qikA_	Alignment	not modelled	8.7	50	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: upf0131 protein ykqa; PDBTitle: crystal structure of ykqa from bacillus subtilis. northeast2 structural genomics target sr631
82	d1ofda1	Alignment	not modelled	8.7	14	Fold: Single-stranded right-handed beta-helix Superfamily: Alpha subunit of glutamate synthase, C-terminal domain Family: Alpha subunit of glutamate synthase, C-terminal domain
83	c2jvfA_	Alignment	not modelled	8.7	18	PDB header: de novo protein Chain: A: PDB Molecule: de novo protein m7; PDBTitle: solution structure of m7, a computationally-designed2 artificial protein
84	c2glvA_	Alignment	not modelled	8.6	15	PDB header: lyase Chain: A: PDB Molecule: (3r)-hydroxymyristoyl-acyl carrier protein PDBTitle: crystal structure of (3r)-hydroxyacyl-acyl carrier protein2 dehydratase(fabz) mutant(y100a) from helicobacter pylori
85	c3r0eC_	Alignment	not modelled	8.5	36	PDB header: sugar binding protein Chain: C: PDB Molecule: lectin; PDBTitle: structure of remusatia vivipara lectin
86	c2qv3A_	Alignment	not modelled	8.2	57	PDB header: toxin Chain: A: PDB Molecule: vacuolating cytotoxin; PDBTitle: crystal structure of the helicobacter pylori vacuolating toxin p552 domain
87	d2dy1a1	Alignment	not modelled	7.7	16	Fold: Reductase/isomerase/elongation factor common domain Superfamily: Translation proteins Family: Elongation factors
88	c3b8hA_	Alignment	not modelled	7.7	24	PDB header: biosynthetic protein/transferase Chain: A: PDB Molecule: elongation factor 2; PDBTitle: structure of the eef2-exoa(e546a)-nad+ complex
89	c3ia0c_	Alignment	not modelled	7.6	27	PDB header: structural protein Chain: C: PDB Molecule: ethanolamine utilization protein euts; PDBTitle: ethanolamine utilization microcompartment shell subunit,2 euts-g39v mutant
90	c2jw5A_	Alignment	not modelled	7.5	12	PDB header: protein binding Chain: A: PDB Molecule: dna polymerase lambda; PDBTitle: polymerase lambda brct domain
91	d1y13a_	Alignment	not modelled	7.5	19	Fold: T-fold Superfamily: Tetrahydrobiopterin biosynthesis enzymes-like Family: 6-pyruvoyl tetrahydropterin synthase
92	c3jx9B_	Alignment	not modelled	7.4	18	PDB header: isomerase Chain: B: PDB Molecule: putative phosphoheptose isomerase; PDBTitle: crystal structure of putative phosphoheptose isomerase2 (yp_001815198.1) from exiguobacterium sp. 255-15 at 1.95 a resolution
93	c1g2cN_	Alignment	not modelled	7.4	22	PDB header: viral protein Chain: N: PDB Molecule: fusion protein (f); PDBTitle: human respiratory syncytial virus fusion protein core
94	d2gsaa_	Alignment	not modelled	7.4	3	Fold: PLP-dependent transferase-like Superfamily: PLP-dependent transferases Family: GABA-aminotransferase-like
95	c2w18A_	Alignment	not modelled	7.1	30	PDB header: nuclear protein Chain: A: PDB Molecule: partner and localizer of brca2; PDBTitle: crystal structure of the c-terminal wd40 domain of human2 palb2
96	d1dih1	Alignment	not modelled	7.1	20	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: Glyceraldehyde-3-phosphate dehydrogenase-like, N-terminal domain
97	d1d9ea_	Alignment	not modelled	7.0	9	Fold: TIM beta/alpha-barrel Superfamily: Aldolase Family: Class I DAHP synthetase
98	c3mkqA_	Alignment	not modelled	7.0	9	PDB header: transport protein Chain: A: PDB Molecule: coatomer beta'-subunit; PDBTitle: crystal structure of yeast alpha/betaprime-cop subcomplex of the copi2 vesicular coat
99	d1fxza2	Alignment	not modelled	7.0	18	Fold: Double-stranded beta-helix Superfamily: RmlC-like cupins Family: Germin/Seed storage 7S protein