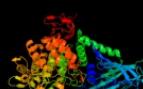
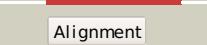
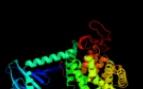
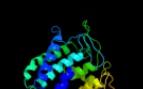


Phyre²

Email	i.a.kelley@imperial.ac.uk
Description	P77154
Date	Thu Jan 5 12:25:42 GMT 2012
Unique Job ID	319f30da6dd9a874

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c1h54B_			100.0	28	PDB header: hydrolase Chain: B; PDB Molecule: maltose phosphorylase; PDBTitle: maltose phosphorylase from lactobacillus brevis
2	c2rdyB_			100.0	14	PDB header: hydrolase Chain: B; PDB Molecule: bh0842 protein; PDBTitle: crystal structure of a putative glycoside hydrolase family2 protein from bacillus halodurans
3	c2eacB_			100.0	15	PDB header: hydrolase Chain: B; PDB Molecule: alpha-fucosidase; PDBTitle: crystal structure of 1,2-a-l-fucosidase from2 bifidobacterium bifidum in complex with3 deoxyfuconojirimycin
4	d1h54a1			100.0	32	Fold: alpha/alpha toroid Superfamily: Six-hairpin glycosidases Family: Glycosyltransferase family 36 C-terminal domain
5	d1h54a2			100.0	23	Fold: Supersandwich Superfamily: Galactose mutarotase-like Family: Glycosyltransferase family 36 N-terminal domain
6	c2cqta_			100.0	14	PDB header: transferase Chain: A; PDB Molecule: cellobiose phosphorylase; PDBTitle: crystal structure of cellvibrio gilvus cellobiose phosphorylase2 crystallized from sodium/potassium phosphate
7	c1v7wA_			100.0	13	PDB header: transferase Chain: A; PDB Molecule: chitobiose phosphorylase; PDBTitle: crystal structure of vibrio proteolyticus chitobiose phosphorylase in2 complex with glcnac
8	d1v7wa1			100.0	13	Fold: alpha/alpha toroid Superfamily: Six-hairpin glycosidases Family: Glycosyltransferase family 36 C-terminal domain
9	c1ug9A_			99.7	16	PDB header: hydrolase Chain: A; PDB Molecule: glucodextranase; PDBTitle: crystal structure of glucodextranase from arthrobacter globiformis i42
10	c2okxB_			99.7	15	PDB header: hydrolase Chain: B; PDB Molecule: rhamnosidase b; PDBTitle: crystal structure of gh78 family rhamnosidase of bacillus sp. gl1 at 2.9 a
11	c3cihA_			99.6	10	PDB header: hydrolase Chain: A; PDB Molecule: putative alpha-rhamnosidase; PDBTitle: crystal structure of a putative alpha-rhamnosidase from2 bacteroides thetaiotaomicron

12	c1lf6A_			99.4	15	PDB header: hydrolase Chain: A: PDB Molecule: glucoamylase; PDBTitle: crystal structure of bacterial glucoamylase
13	c3c67B_			99.1	11	PDB header: hydrolase Chain: B: PDB Molecule: uncharacterized protein ygjk; PDBTitle: escherichia coli k12 ygjk in a complexed with glucose
14	d1lf6a1			98.1	15	Fold: alpha/alpha toroid Superfamily: Six-hairpin glycosidases Family: Bacterial glucoamylase C-terminal domain-like
15	c2ww1B_			97.6	17	PDB header: hydrolase Chain: B: PDB Molecule: putative alpha-1,2-mannosidase; PDBTitle: structure of the family gh92 inverting mannosidase bt39902 from bacteroides thetaiotaomicron vpi-5482 in complex with3 thiomannobioside
16	c2zzrA_			97.5	12	PDB header: hydrolase Chain: A: PDB Molecule: unsaturated glucuronyl hydrolase; PDBTitle: crystal structure of unsaturated glucuronyl hydrolase from2 streptococcus agalactiae
17	c2jg0A_			97.5	15	PDB header: hydrolase Chain: A: PDB Molecule: periplasmic trehalase; PDBTitle: family 37 trehalase from escherichia coli in complex with 1-2 thiatrehazolin
18	d2jg0a1			97.5	15	Fold: alpha/alpha toroid Superfamily: Six-hairpin glycosidases Family: Trehalase-like
19	d1ulva1			97.2	18	Fold: alpha/alpha toroid Superfamily: Six-hairpin glycosidases Family: Bacterial glucoamylase C-terminal domain-like
20	d1ulva4			96.8	14	Fold: Supersandwich Superfamily: Galactose mutarotase-like Family: Bacterial glucoamylase N-terminal domain-like
21	d1lf6a2		not modelled	96.7	12	Fold: Supersandwich Superfamily: Galactose mutarotase-like Family: Bacterial glucoamylase N-terminal domain-like
22	d2d5ja1		not modelled	96.5	17	Fold: alpha/alpha toroid Superfamily: Six-hairpin glycosidases Family: Glycosyl Hydrolase Family 88
23	c2vn4A_		not modelled	95.6	15	PDB header: hydrolase Chain: A: PDB Molecule: glucoamylase; PDBTitle: glycoside hydrolase family 15 glucoamylase from hypocrea2 jecorina
24	c3gspB_		not modelled	94.6	17	PDB header: hydrolase Chain: B: PDB Molecule: putative uncharacterized protein; PDBTitle: analysis of a new family of widely distributed metal-independent alpha2 mannosidases provides unique insight into the processing of n-linked3 glycans, streptococcus pneumoniae sp_2144 non-productive substrate4 complex with alpha-1,6-mannobiose
25	d2fbba1		not modelled	93.1	17	Fold: alpha/alpha toroid Superfamily: Six-hairpin glycosidases Family: Glucosidase
26	c2z07A_		not modelled	93.0	12	PDB header: hydrolase Chain: A: PDB Molecule: putative uncharacterized protein ttba0978; PDBTitle: crystal structure of uncharacterized conserved protein from2 thermus thermophilus hb8
27	c2wvyA_		not modelled	92.5	14	PDB header: hydrolase Chain: A: PDB Molecule: alpha-1,2-mannosidase; PDBTitle: structure of the family gh92 inverting mannosidase bt21992 from bacteroides thetaiotaomicron vpi-5482

28	d1gaia_	Alignment	not modelled	87.4	17	Superfamily: Six-hairpin glycosidases Family: Glucoamylase
29	c2p0vA_	Alignment	not modelled	78.2	19	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: hypothetical protein bt3781; PDBTitle: crystal structure of bt3781 protein from bacteroides2 thetaiaotaomiron, northeast structural genomics target3 btr58
30	d2p0va1	Alignment	not modelled	78.2	19	Fold: alpha/alpha toroid Superfamily: Six-hairpin glycosidases Family: CPF0428-like
31	d2nvpal	Alignment	not modelled	70.2	16	Fold: alpha/alpha toroid Superfamily: Six-hairpin glycosidases Family: CPF0428-like
32	c3gt5A_	Alignment	not modelled	31.3	8	PDB header: isomerase Chain: A: PDB Molecule: n-acetylglucosamine 2-epimerase; PDBTitle: crystal structure of an n-acetylglucosamine 2-epimerase family protein2 from <i>xylella fastidiosa</i>
33	c3d82A_	Alignment	not modelled	22.6	14	PDB header: metal binding protein Chain: A: PDB Molecule: cupin 2, conserved barrel domain protein; PDBTitle: crystal structure of a cupin-2 domain containing protein (sfrl_3543)2 from <i>shewanella frigidimarina</i> ncimb 400 at 2.05 a resolution
34	c2ky8A_	Alignment	not modelled	22.2	35	PDB header: transcription/dna Chain: A: PDB Molecule: methyl-cpg-binding domain protein 2; PDBTitle: solution structure and dynamic analysis of chicken mbd2 methyl binding2 domain bound to a target methylated dna sequence
35	c3nuqA_	Alignment	not modelled	17.2	17	PDB header: hydrolase Chain: A: PDB Molecule: putative nucleotide phosphatase; PDBTitle: structure of a putative nucleotide phosphatase from <i>saccharomyces2 cerevisiae</i>
36	d2pyta1	Alignment	not modelled	16.4	13	Fold: Double-stranded beta-helix Superfamily: RmlC-like cupins Family: EutQ-like
37	c3lwca_	Alignment	not modelled	15.9	17	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: uncharacterized protein; PDBTitle: crystal structure of structural genomics, unknown function2 (yp_766765.1) from <i>rhizobium leguminosarum</i> bv. <i>viciae</i> 3841 at 1.40 a3 resolution
38	d1ig4a_	Alignment	not modelled	15.2	26	Fold: DNA-binding domain Superfamily: DNA-binding domain Family: Methyl-CpG-binding domain, MBD
39	d1fp3a_	Alignment	not modelled	14.9	13	Fold: alpha/alpha toroid Superfamily: Six-hairpin glycosidases Family: N-Acylglucosamine (NAG) epimerase
40	d2e45a1	Alignment	not modelled	14.6	20	Fold: WW domain-like Superfamily: WW domain Family: WW domain
41	c2avpA_	Alignment	not modelled	13.8	14	PDB header: de novo protein Chain: A: PDB Molecule: synthetic consensus tpr protein; PDBTitle: crystal structure of an 8 repeat consensus tpr superhelix
42	c1na3A_	Alignment	not modelled	12.5	15	PDB header: de novo protein Chain: A: PDB Molecule: designed protein ctp2; PDBTitle: design of stable alpha-helical arrays from an idealized tpr2 motif
43	d1bla_	Alignment	not modelled	12.4	24	Fold: beta-Trefoil Superfamily: Cytokine Family: Fibroblast growth factors (FGF)
44	c2gz6B_	Alignment	not modelled	11.7	13	PDB header: isomerase Chain: B: PDB Molecule: n-acetyl-d-glucosamine 2-epimerase; PDBTitle: crystal structure of <i>anabaena</i> sp. ch1 n-acetyl-d-glucosamine 2-2 epimerase at 2.0 a
45	c3fjsC_	Alignment	not modelled	11.1	17	PDB header: biosynthetic protein Chain: C: PDB Molecule: uncharacterized protein with rmlc-like cupin fold; PDBTitle: crystal structure of a putative biosynthetic protein with rmlc-like2 cupin fold (reut_b4087) from <i>ralstonia eutropha</i> jmp134 at 1.90 a3 resolution
46	d1ok0a_	Alignment	not modelled	10.8	40	Fold: alpha-Amylase inhibitor tandemstat Superfamily: alpha-Amylase inhibitor tandemstat Family: alpha-Amylase inhibitor tandemstat
47	d2ysca1	Alignment	not modelled	10.6	33	Fold: WW domain-like Superfamily: WW domain Family: WW domain
48	c2ov2O_	Alignment	not modelled	9.9	75	PDB header: protein binding/transferase Chain: O: PDB Molecule: serine/threonine-protein kinase pak 4; PDBTitle: the crystal structure of the human rac3 in complex with the crib2 domain of human p21-activated kinase 4 (pak4)
49	d1sfua_	Alignment	not modelled	9.3	20	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: Z-DNA binding domain
50	c3ecqA_	Alignment	not modelled	9.2	29	PDB header: hydrolase Chain: A: PDB Molecule: endo-alpha-n-acetylgalactosaminidase; PDBTitle: endo-alpha-n-acetylgalactosaminidase from <i>streptococcus pneumoniae</i> :2 semet structure
51	d1tueb_	Alignment	not modelled	9.0	12	Fold: E2 regulatory, transactivation domain Superfamily: E2 regulatory, transactivation domain Family: E2 regulatory, transactivation domain
52	d3d37a1	Alignment	not modelled	8.5	6	Fold: Phage tail proteins Superfamily: Phage tail proteins Family: Baseplate protein-like
53	c2vt8B_	Alignment	not modelled	8.1	24	PDB header: hydrolase inhibitor Chain: B: PDB Molecule: proteasome inhibitor pi31 subunit; PDBTitle: structure of a conserved dimerisation domain within fbox72 and pi31

54	c1wr4A	Alignment	not modelled	7.8	36	PDB header: ligase Chain: A: PDB Molecule: ubiquitin-protein ligase nedd4-2; PDBTitle: solution structure of the second ww domain of nedd4-2
55	d1qk9a	Alignment	not modelled	7.5	50	Fold: DNA-binding domain Superfamily: DNA-binding domain Family: Methyl-CpG-binding domain, MBD
56	d2fug33	Alignment	not modelled	7.5	14	Fold: beta-Grasp (ubiquitin-like) Superfamily: 2Fe-2S ferredoxin-like Family: 2Fe-2S ferredoxin domains from multidomain proteins
57	d1ub1a	Alignment	not modelled	7.1	32	Fold: DNA-binding domain Superfamily: DNA-binding domain Family: Methyl-CpG-binding domain, MBD
58	c2k85A	Alignment	not modelled	7.0	15	PDB header: protein binding Chain: A: PDB Molecule: glucocorticoid receptor dna-binding factor 1; PDBTitle: p190-a rhogap ff1 domain
59	c2kywA	Alignment	not modelled	7.0	9	PDB header: cell adhesion Chain: A: PDB Molecule: adhesion exoprotein; PDBTitle: solution nmr structure of a domain of adhesion exoprotein from2 pediococcus pentosaceus, northeast structural genomics consortium3 target ptr410
60	c3k7xA	Alignment	not modelled	6.8	14	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: lin0763 protein; PDBTitle: crystal structure of the lin0763 protein from listeria2 innocua. northeast structural genomics consortium target3 lkr23.
61	d1tjca	Alignment	not modelled	6.6	14	Fold: alpha-alpha superhelix Superfamily: TPR-like Family: Tetratricopeptide repeat (TPR)
62	d2ho2a1	Alignment	not modelled	6.6	33	Fold: WW domain-like Superfamily: WW domain Family: WW domain
63	d1kwga1	Alignment	not modelled	6.5	11	Fold: Glycosyl hydrolase domain Superfamily: Glycosyl hydrolase domain Family: alpha-Amylases, C-terminal beta-sheet domain
64	c2odbb	Alignment	not modelled	6.4	63	PDB header: protein binding Chain: B: PDB Molecule: serine/threonine-protein kinase pak 6; PDBTitle: the crystal structure of human cdc42 in complex with the crib domain2 of human p21-activated kinase 6 (pak6)
65	c2zxqA	Alignment	not modelled	6.4	22	PDB header: hydrolase Chain: A: PDB Molecule: endo-alpha-n-acetylgalactosaminidase; PDBTitle: crystal structure of endo-alpha-n-acetylgalactosaminidase2 from bifidobacterium longum (engbf)
66	d2arca	Alignment	not modelled	6.1	3	Fold: Double-stranded beta-helix Superfamily: Regulatory protein AraC Family: Regulatory protein AraC
67	c1e0aB	Alignment	not modelled	5.7	63	PDB header: signalling protein Chain: B: PDB Molecule: serine/threonine-protein kinase pak-alpha; PDBTitle: cdc42 complexed with the gtpase binding domain of p212 activated kinase
68	c3mpbA	Alignment	not modelled	5.6	10	PDB header: isomerase Chain: A: PDB Molecule: sugar isomerase; PDBTitle: z5688 from e. coli o157:h7 bound to fructose
69	c3j08A	Alignment	not modelled	5.6	20	PDB header: hydrolase, metal transport Chain: A: PDB Molecule: copper-exporting p-type atpase a; PDBTitle: high resolution helical reconstruction of the bacterial p-type atpase2 copper transporter copa
70	c2v8kA	Alignment	not modelled	5.6	13	PDB header: lyase Chain: A: PDB Molecule: pectate lyase; PDBTitle: structure of a family 2 pectate lyase in complex with2 trigalacturonic acid
71	d1qqha	Alignment	not modelled	5.4	12	Fold: E2 regulatory, transactivation domain Superfamily: E2 regulatory, transactivation domain Family: E2 regulatory, transactivation domain
72	d1xuba2	Alignment	not modelled	5.2	9	Fold: Diaminopimelate epimerase-like Superfamily: Diaminopimelate epimerase-like Family: PhzC/PhzF-like
73	d2gj4a1	Alignment	not modelled	5.2	26	Fold: UDP-Glycosyltransferase/glycogen phosphorylase Superfamily: UDP-Glycosyltransferase/glycogen phosphorylase Family: Oligosaccharide phosphorylase
74	c2vc8A	Alignment	not modelled	5.2	18	PDB header: protein-binding Chain: A: PDB Molecule: enhancer of mrna-decapping protein 3; PDBTitle: crystal structure of the lsm domain of human edc3 (enhancer2 of decapping 3)
75	d1p9ka	Alignment	not modelled	5.2	12	Fold: Alpha-L RNA-binding motif Superfamily: Alpha-L RNA-binding motif Family: YbcJ-like
76	c2hc8A	Alignment	not modelled	5.1	21	PDB header: transport protein Chain: A: PDB Molecule: cation-transporting atpase, p-type; PDBTitle: structure of the a. fulgidus copa a-domain
77	c2hyzA	Alignment	not modelled	5.1	15	PDB header: de novo protein Chain: A: PDB Molecule: synthetic consensus tpr protein; PDBTitle: crystal structure of an 8 repeat consensus tpr superhelix2 (orthorombic crystal form)
78	d2atia1	Alignment	not modelled	5.1	26	Fold: UDP-Glycosyltransferase/glycogen phosphorylase Superfamily: UDP-Glycosyltransferase/glycogen phosphorylase Family: Oligosaccharide phosphorylase
79	d1ljma	Alignment	not modelled	5.0	19	Fold: Common fold of diphtheria toxin/transcription factors/cytochrome f Superfamily: p53-like transcription factors Family: RUNT domain