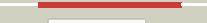
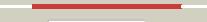


Phyre²

Email	i.a.kelley@imperial.ac.uk
Description	P13482
Date	Thu Jan 5 11:33:37 GMT 2012
Unique Job ID	0dcccd0d7c732942e

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c2jg0A_			100.0	99	PDB header: hydrolase Chain: A; PDB Molecule: periplasmic trehalase; PDBTitle: family 37 trehalase from escherichia coli in complex with 1-2 thiatarehazolin
2	d2jg0a1			100.0	99	Fold: alpha/alpha toroid Superfamily: Six-hairpin glycosidases Family: Trehalase-like
3	c3c67B_			100.0	17	PDB header: hydrolase Chain: B; PDB Molecule: uncharacterized protein ygjk; PDBTitle: escherichia coli k12 ygjk in a complexed with glucose
4	c2z07A_			100.0	21	PDB header: hydrolase Chain: A; PDB Molecule: putative uncharacterized protein ttha0978; PDBTitle: crystal structure of uncharacterized conserved protein from2 thermus thermophilus hb8
5	c2okxB_			99.9	17	PDB header: hydrolase Chain: B; PDB Molecule: rhamnosidase b; PDBTitle: crystal structure of gh78 family rhamnosidase of bacillus sp. gl1 at2 1.9 a
6	c1v7wA_			99.9	17	PDB header: transferase Chain: A; PDB Molecule: chitobiose phosphorylase; PDBTitle: crystal structure of vibrio proteolyticus chitobiose phosphorylase in2 complex with glcnac
7	d1v7wa1			99.9	17	Fold: alpha/alpha toroid Superfamily: Six-hairpin glycosidases Family: Glycosyltransferase family 36 C-terminal domain
8	c3cihA_			99.9	13	PDB header: hydrolase Chain: A; PDB Molecule: putative alpha-rhamnosidase; PDBTitle: crystal structure of a putative alpha-rhamnosidase from2 bacteroides thetaiotaomicron
9	c2cqta_			99.8	14	PDB header: transferase Chain: A; PDB Molecule: celllobiose phosphorylase; PDBTitle: crystal structure of cellvibrio gilvus celllobiose phosphorylase2 crystallized from sodium/potassium phosphate
10	d1lf6a1			99.8	12	Fold: alpha/alpha toroid Superfamily: Six-hairpin glycosidases Family: Bacterial glucoamylase C-terminal domain-like
11	c1lf6A_			99.4	14	PDB header: hydrolase Chain: A; PDB Molecule: glucoamylase; PDBTitle: crystal structure of bacterial glucoamylase

12	d1ulva1		99.3	15	Fold: alpha/alpha toroid Superfamily: Six-hairpin glycosidases Family: Bacterial glucoamylase C-terminal domain-like
13	d2fbaa1		98.5	18	Fold: alpha/alpha toroid Superfamily: Six-hairpin glycosidases Family: Glucoamylase
14	c2vn4A		98.1	17	PDB header: hydrolase Chain: A: PDB Molecule: glucoamylase; PDBTitle: glycoside hydrolase family 15 glucoamylase from hypocrea2 jecorina
15	d1gaia_		98.0	20	Fold: alpha/alpha toroid Superfamily: Six-hairpin glycosidases Family: Glucoamylase
16	c3qspB		97.8	14	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
17	c2ww1B		97.8	13	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
18	c1ug9A		97.7	18	PDB header: hydrolase Chain: A: PDB Molecule: glucodextranase; PDBTitle: crystal structure of glucodextranase from arthrobacter globiformis i42
19	c2eacB		97.7	19	PDB header: hydrolase Chain: B: PDB Molecule: alpha-fucosidase; PDBTitle: crystal structure of 1,2-a-l-fucosidase from2 bifidobacterium bifidum in complex with3 deoxyfuconoijirimycin
20	d2p0va1		97.6	15	Fold: alpha/alpha toroid Superfamily: Six-hairpin glycosidases Family: CPF0428-like
21	c2p0vA	Alignment	not modelled	97.6	15 PDB header: structural genomics, unknown function Chain: A: PDB Molecule: hypothetical protein bt3781; PDBTitle: crystal structure of bt3781 protein from bacteroides2 thetaiotaomicron, northeast structural genomics target3 btr58
22	c2rdyB	Alignment	not modelled	97.5	14 PDB header: hydrolase Chain: B: PDB Molecule: bh0842 protein; PDBTitle: crystal structure of a putative glycoside hydrolase family2 protein from bacillus halodurans
23	d2nvpa1	Alignment	not modelled	97.5	15 Fold: alpha/alpha toroid Superfamily: Six-hairpin glycosidases Family: CPF0428-like
24	d1h54a1	Alignment	not modelled	97.4	12 Fold: alpha/alpha toroid Superfamily: Six-hairpin glycosidases Family: Glycosyltransferase family 36 C-terminal domain
25	c2wvyA	Alignment	not modelled	97.1	16 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
26	c1h54B	Alignment	not modelled	94.7	16 PDB header: hydrolase Chain: B: PDB Molecule: maltose phosphorylase; PDBTitle: maltose phosphorylase from lactobacillus brevis
27	c3gt5A	Alignment	not modelled	89.0	11 PDB header: isomerase Chain: A: PDB Molecule: n-acetylglucosamine 2-epimerase; PDBTitle: crystal structure of an n-acetylglucosamine 2-epimerase family protein2 from xylella fastidiosa
28	c2zzrA	Alignment	not modelled	77.8	13 PDB header: hydrolase Chain: A: PDB Molecule: unsaturated glucuronyl hydrolase; PDBTitle: crystal structure of unsaturated glucuronyl hydrolase from2 streptococcus agalactiae
					Fold: alpha/alpha toroid

29	d2afaal	Alignment	not modelled	76.4	11	Superfamily: Six-hairpin glycosidases Family: N-acylglucosamine (NAG) epimerase
30	c3k7xA	Alignment	not modelled	72.5	18	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: lin0763 protein; PDBTitle: crystal structure of the lin0763 protein from <i>listeria</i> 2 innocua. northeast structural genomics consortium target3 lkr23.
31	c2gz6B	Alignment	not modelled	68.5	11	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-epimerase at 2.0 a
32	c3bhwA	Alignment	not modelled	66.5	11	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: uncharacterized protein; PDBTitle: crystal structure of an uncharacterized protein from <i>magnetospirillum2 magneticum</i>
33	c3ax1A	Alignment	not modelled	53.7	18	PDB header: protein binding Chain: A: PDB Molecule: serrate rna effector molecule; PDBTitle: molecular insights into miRNA processing by <i>arabidopsis</i> serrate
34	c3racA	Alignment	not modelled	52.7	21	PDB header: ligase Chain: A: PDB Molecule: histidine-trna ligase; PDBTitle: crystal structure of histidine--trna ligase subunit from2 <i>alicyclobacillus acidocaldarius</i> subsp. <i>acidocaldarius</i> dsm 446.
35	c2idxA	Alignment	not modelled	51.1	18	PDB header: transferase Chain: A: PDB Molecule: cob(i)yrinic acid a,c-diamide PDBTitle: structure of human atp:cobalamin adenosyltransferase bound2 to atp.
36	c3pg8B	Alignment	not modelled	44.5	18	PDB header: transferase Chain: B: PDB Molecule: phospho-2-dehydro-3-deoxyheptonate aldolase; PDBTitle: truncated form of 3-deoxy-d-arabino-heptulonate 7-phosphate synthase2 from <i>thermotoga maritima</i>
37	d1iwpA	Alignment	not modelled	40.2	18	Fold: TIM beta/alpha-barrel Superfamily: Cobalamin (vitamin B12)-dependent enzymes Family: Diol dehydratase, alpha subunit
38	d1nzpa	Alignment	not modelled	37.7	24	Fold: SAM domain-like Superfamily: DNA polymerase beta, N-terminal domain-like Family: DNA polymerase beta, N-terminal domain-like
39	c2q07A	Alignment	not modelled	36.8	33	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: uncharacterized protein af0587; PDBTitle: crystal structure of af0587, a protein of unknown function
40	d1q79a3	Alignment	not modelled	33.3	10	Fold: Ferrodoxin-like Superfamily: PAP/Archaeal CCA-adding enzyme, C-terminal domain Family: Poly(A) polymerase, PAP, C-terminal domain
41	d1wu7a2	Alignment	not modelled	31.2	35	Fold: Class II aaRS and biotin synthetases Superfamily: Class II aaRS and biotin synthetases Family: Class II aminoacyl-tRNA synthetase (aaRS)-like, catalytic domain
42	d1dq3a2	Alignment	not modelled	30.6	19	Fold: dsRBD-like Superfamily: YcfA/nrd intein domain Family: PI-Pfui intein middle domain
43	c1wy1B	Alignment	not modelled	29.7	40	PDB header: transferase Chain: B: PDB Molecule: hypothetical protein ph0671; PDBTitle: crystal structure of the ph0671 protein from <i>pyrococcus horikoshii</i> ot3
44	d1usya	Alignment	not modelled	28.3	28	Fold: Class II aaRS and biotin synthetases Superfamily: Class II aaRS and biotin synthetases Family: Class II aminoacyl-tRNA synthetase (aaRS)-like, catalytic domain
45	d1uj8a1	Alignment	not modelled	25.9	4	Fold: Another 3-helical bundle Superfamily: IscX-like Family: IscX-like
46	c2cseW	Alignment	not modelled	25.4	21	PDB header: virus Chain: W: PDB Molecule: major core protein lambda 1; PDBTitle: features of reovirus outer-capsid protein mu1 revealed by2 electron and image reconstruction of the virion at 7.0-a resolution
47	c3k1qB	Alignment	not modelled	25.2	29	PDB header: virus Chain: B: PDB Molecule: vp3a, the building block protein of inner shell; PDBTitle: backbone model of an aquareovirus virion by cryo-electron2 microscopy and bioinformatics
48	d1z7ma1	Alignment	not modelled	24.9	26	Fold: Class II aaRS and biotin synthetases Superfamily: Class II aaRS and biotin synthetases Family: Class II aminoacyl-tRNA synthetase (aaRS)-like, catalytic domain
49	c3k1qC	Alignment	not modelled	24.2	29	PDB header: virus Chain: C: PDB Molecule: vp3b, the building block protein of inner shell; PDBTitle: backbone model of an aquareovirus virion by cryo-electron2 microscopy and bioinformatics
50	c1wvtA	Alignment	not modelled	24.1	36	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: hypothetical protein st2180; PDBTitle: crystal structure of uncharacterized protein st2180 from <i>sulfolobus2 tokodaii</i>
51	d1vr6a1	Alignment	not modelled	23.1	18	Fold: TIM beta/alpha-barrel Superfamily: Aldolase Family: Class I DAHP synthetase
52	d2hfha	Alignment	not modelled	22.9	22	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: Forkhead DNA-binding domain
53	d3bpva1	Alignment	not modelled	20.8	13	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: Forkhead DNA-binding domain
54	c3lhra	Alignment	not modelled	20.3	14	PDB header: transcription regulator Chain: A: PDB Molecule: zinc finger protein 24; PDBTitle: crystal structure of the scan domain from human znf24

55	c1z7nB	Alignment	not modelled	20.3	21	PDB header: transferase Chain: B: PDB Molecule: atp phosphoribosyltransferase regulatory subunit; PDBTitle: atp phosphoribosyl transferase (hiszg atp-prtase) from2 lactococcus lactis with bound prpp substrate
56	d1xg7a	Alignment	not modelled	19.8	8	Fold: DNA-glycosylase Superfamily: DNA-glycosylase Family: AgoG-like
57	d1jmsa1	Alignment	not modelled	18.9	14	Fold: SAM domain-like Superfamily: DNA polymerase beta, N-terminal domain-like Family: DNA polymerase beta, N-terminal domain-like
58	d2bcqa1	Alignment	not modelled	18.6	29	Fold: SAM domain-like Superfamily: DNA polymerase beta, N-terminal domain-like Family: DNA polymerase beta, N-terminal domain-like
59	c3t4cD	Alignment	not modelled	18.3	13	PDB header: transferase Chain: D: PDB Molecule: 2-dehydro-3-deoxyphosphooctonate aldolase 1; PDBTitle: crystal structure of 2-dehydro-3-deoxyphosphooctonate aldolase from2 burkholderia ambifaria
60	d2fmpa1	Alignment	not modelled	17.4	27	Fold: SAM domain-like Superfamily: DNA polymerase beta, N-terminal domain-like Family: DNA polymerase beta, N-terminal domain-like
61	c3od1A	Alignment	not modelled	16.5	22	PDB header: transferase Chain: A: PDB Molecule: atp phosphoribosyltransferase regulatory subunit; PDBTitle: the crystal structure of an atp phosphoribosyltransferase regulatory2 subunit/histidyl-tRNA synthetase from bacillus halodurans c
62	d1nc5a	Alignment	not modelled	16.2	10	Fold: alpha/alpha toroid Superfamily: Six-hairpin glycosidases Family: Hypothetical protein YteR
63	d1z3xa1	Alignment	not modelled	15.2	14	Fold: alpha-alpha superhelix Superfamily: ARM repeat Family: GUN4-associated domain
64	c2q17C	Alignment	not modelled	15.0	42	PDB header: unknown function Chain: C: PDB Molecule: formylglycine generating enzyme; PDBTitle: formylglycine generating enzyme from streptomyces coelicolor
65	d1aina	Alignment	not modelled	14.9	9	Fold: Annexin Superfamily: Annexin Family: Annexin
66	d1rubx4	Alignment	not modelled	14.8	71	Fold: Glucocorticoid receptor-like (DNA-binding domain) Superfamily: Glucocorticoid receptor-like (DNA-binding domain) Family: LIM domain
67	c2lmdA	Alignment	not modelled	14.4	83	PDB header: transcription Chain: A: PDB Molecule: prospero homeobox protein 1; PDBTitle: minimal constraints solution nmr structure of prospero homeobox2 protein 1 from homo sapiens, northeast structural genomics consortium3 target hr4660b
68	c3c1IB	Alignment	not modelled	14.3	19	PDB header: oxidoreductase Chain: B: PDB Molecule: putative antioxidant defense protein mrl4105; PDBTitle: crystal structure of an antioxidant defense protein (mrl4105) from2 mesorhizobium loti maff303099 at 2.00 a resolution
69	c2ah6B	Alignment	not modelled	14.1	42	PDB header: transferase Chain: B: PDB Molecule: bh1595, unknown conserved protein; PDBTitle: crystal structure of a putative cobalamin adenosyltransferase (bh1595)2 from bacillus halodurans c-125 at 1.60 a resolution
70	c1woza	Alignment	not modelled	13.8	33	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: 177aa long conserved hypothetical protein (st1454); PDBTitle: crystal structure of uncharacterized protein st1454 from sulfolobus 2 tokodaii
71	d1rtyb	Alignment	not modelled	13.8	33	Fold: Ferritin-like Superfamily: Cobalamin adenosyltransferase-like Family: Cobalamin adenosyltransferase
72	c2yukA	Alignment	not modelled	13.6	22	PDB header: transferase Chain: A: PDB Molecule: myeloid/lymphoid or mixed-lineage leukemia PDBTitle: solution structure of the hmg box of human myeloid/lymphoid2 or mixed-lineage leukemia protein 3 homolog
73	c2c1IA	Alignment	not modelled	13.3	43	PDB header: hydrolase Chain: A: PDB Molecule: restriction endonuclease; PDBTitle: structure of the bfii restriction endonuclease
74	c2nt8A	Alignment	not modelled	13.3	33	PDB header: transferase Chain: A: PDB Molecule: cobalamin adenosyltransferase; PDBTitle: atp bound at the active site of a pd2 type atp:co(i)rrinoid2 adenosyltransferase from lactobacillus reuteri
75	c3llbA	Alignment	not modelled	12.9	21	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: uncharacterized protein; PDBTitle: the crystal structure of the protein pa3983 with unknown2 function from pseudomonas aeruginosa pa01
76	c3co7C	Alignment	not modelled	12.8	26	PDB header: transcription/dna Chain: C: PDB Molecule: forkhead box protein o1; PDBTitle: crystal structure of foxo1 dbd bound to dbe2 dna
77	c2r2vB	Alignment	not modelled	12.6	27	PDB header: de novo protein Chain: B: PDB Molecule: gcn4 leucine zipper; PDBTitle: sequence determinants of the topology of the lac repressor2 tetrameric coiled coil
78	d2a21a1	Alignment	not modelled	12.4	15	Fold: TIM beta/alpha-barrel Superfamily: Aldolase Family: Class I DAHP synthetase

79	d1rtya	Alignment	not modelled	12.4	33	Fold: Ferritin-like Superfamily: Cobalamin adenosyltransferase-like Family: Cobalamin adenosyltransferase
80	c3ha4C	Alignment	not modelled	12.3	19	PDB header: unknown function Chain: C; PDB Molecule: mix1; PDBTitle: crystal structure of the type one membrane protein mix1 from leishmania
81	d1noga	Alignment	not modelled	12.3	50	Fold: Ferritin-like Superfamily: Cobalamin adenosyltransferase-like Family: Cobalamin adenosyltransferase
82	c1nogA	Alignment	not modelled	12.3	50	PDB header: structural genomics, unknown function Chain: A; PDB Molecule: conserved hypothetical protein ta0546; PDBTitle: crystal structure of conserved protein 0546 from thermoplasma2 acidophilum
83	c3lzzB	Alignment	not modelled	12.0	78	PDB header: unknown function Chain: B; PDB Molecule: putative uncharacterized protein; PDBTitle: crystal structures of cupin superfamily bbdut985 from branchiostoma2 belcheri tsingtauense in apo and gdp-bound forms
84	d2zdra2	Alignment	not modelled	11.9	17	Fold: TIM beta/alpha-barrel Superfamily: Aldolase Family: NeuB-like
85	d1fp3a	Alignment	not modelled	11.9	13	Fold: alpha/alpha toroid Superfamily: Six-hairpin glycosidases Family: N-acetylglucosamine (NAG) epimerase
86	c3ke4B	Alignment	not modelled	11.8	42	PDB header: transferase Chain: B; PDB Molecule: hypothetical cytosolic protein; PDBTitle: crystal structure of a pduo-type atp:cob(i)alamin adenosyltransferase2 from bacillus cereus
87	c3sz8D	Alignment	not modelled	11.7	7	PDB header: transferase Chain: D; PDB Molecule: 2-dehydro-3-deoxyphosphooctonate aldolase 2; PDBTitle: crystal structure of 2-dehydro-3-deoxyphosphooctonate aldolase from2 burkholderia pseudomallei
88	c2zhzC	Alignment	not modelled	11.3	43	PDB header: transferase Chain: C; PDB Molecule: atp:cob(i)alamin adenosyltransferase, putative; PDBTitle: crystal structure of a pduo-type atp:cobalamin adenosyltransferase2 from burkholderia thailandensis
89	c3ci1A	Alignment	not modelled	11.0	33	PDB header: transferase Chain: A; PDB Molecule: cobalamin adenosyltransferase pduo-like protein; PDBTitle: structure of the pduo-type atp:co(i)rrinoid2 adenosyltransferase from lactobacillus reuteri complexed3 with four-coordinate cob(ii)alamin and atp
90	c1xrsB	Alignment	not modelled	10.9	15	PDB header: isomerase Chain: B; PDB Molecule: d-lysine 5,6-aminotransferase beta subunit; PDBTitle: crystal structure of lysine 5,6-aminotransferase in complex with plp_2 cobalamin, and 5'-deoxyadenosine
91	c2g2dA	Alignment	not modelled	10.6	50	PDB header: transferase Chain: A; PDB Molecule: atp:cobalamin adenosyltransferase; PDBTitle: crystal structure of a putative pduo-type atp:cobalamin2 adenosyltransferase from mycobacterium tuberculosis
92	d2itka1	Alignment	not modelled	10.5	25	Fold: WW domain-like Superfamily: WW domain Family: WW domain
93	c2xtdB	Alignment	not modelled	10.4	16	PDB header: transcription Chain: B; PDB Molecule: tbl1 f-box-like/wd repeat-containing protein tbl1x; PDBTitle: structure of the tbl1 tetramerisation domain
94	c3iqtA	Alignment	not modelled	10.3	15	PDB header: transferase Chain: A; PDB Molecule: signal transduction histidine-protein kinase bara; PDBTitle: structure of the hpt domain of sensor protein bara from escherichia2 coli cft073.
95	d1fs1b1	Alignment	not modelled	10.2	22	Fold: Skp1 dimerisation domain-like Superfamily: Skp1 dimerisation domain-like Family: Skp1 dimerisation domain-like
96	c1xuzA	Alignment	not modelled	10.2	15	PDB header: biosynthetic protein Chain: A; PDB Molecule: polysialic acid capsule biosynthesis protein siac; PDBTitle: crystal structure analysis of sialic acid synthase (neub)from2 neisseria meningitidis, bound to mn2+, phosphoenolpyruvate, and n-3 acetyl mannosaminitol
97	c2bcuA	Alignment	not modelled	10.0	28	PDB header: transferase, lyase/dna Chain: A; PDB Molecule: dna polymerase lambda; PDBTitle: dna polymerase lambda in complex with a dna duplex2 containing an unpaired damp and a tt mismatch
98	d1o65a	Alignment	not modelled	10.0	6	Fold: PK beta-barrel domain-like Superfamily: PK beta-barrel domain-like Family: MOSC (MOCO sulphurase C-terminal) domain
99	c2xteH	Alignment	not modelled	9.8	16	PDB header: transcription Chain: H; PDB Molecule: f-box-like/wd repeat-containing protein tbl1x; PDBTitle: structure of the tbl1 tetramerisation domain