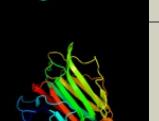


Phyre²

Email	i.a.kelley@imperial.ac.uk
Description	P77713
Date	Wed Jan 25 15:21:12 GMT 2012
Unique Job ID	13c39d9fc79d919b

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c2exia_	Alignment		100.0	57	PDB header: hydrolase Chain: A; PDB Molecule: beta-d-xylosidase; PDBTitle: structure of the family43 beta-xylosidase d15g mutant from geobacillus2 stearothermophilus
2	c1yifC_	Alignment		100.0	54	PDB header: hydrolase Chain: C; PDB Molecule: beta-1,4-xylosidase; PDBTitle: crystal structure of beta-1,4-xylosidase from bacillus2 subtilis, new york structural genomics consortium
3	c1yrzB_	Alignment		100.0	48	PDB header: hydrolase Chain: B; PDB Molecule: xylan beta-1,4-xylosidase; PDBTitle: crystal structure of xylan beta-1,4-xylosidase from bacillus2 halodurans c-125
4	c1yi7C_	Alignment		100.0	54	PDB header: hydrolase Chain: C; PDB Molecule: beta-xylosidase, family 43 glycosyl hydrolase; PDBTitle: beta-d-xylosidase (selenomethionine) xynd from clostridium2 acetobutylicum
5	d2exha2	Alignment		100.0	60	Fold: 5-bladed beta-propeller Superfamily: Arabinanase/levansucrase/invertase Family: alpha-L-arabinanase-like
6	d1yifa2	Alignment		100.0	58	Fold: 5-bladed beta-propeller Superfamily: Arabinanase/levansucrase/invertase Family: alpha-L-arabinanase-like
7	d1y7ba2	Alignment		100.0	57	Fold: 5-bladed beta-propeller Superfamily: Arabinanase/levansucrase/invertase Family: alpha-L-arabinanase-like
8	d1yrra2	Alignment		100.0	54	Fold: 5-bladed beta-propeller Superfamily: Arabinanase/levansucrase/invertase Family: alpha-L-arabinanase-like
9	c3lv4B_	Alignment		100.0	23	PDB header: hydrolase Chain: B; PDB Molecule: glycoside hydrolase xyia; PDBTitle: crystal structure of the glycoside hydrolase, family 43 xyia2 protein from bacillus licheniformis. northeast structural3 genomics consortium target bir14.
10	c3akgA_	Alignment		100.0	17	PDB header: hydrolase Chain: A; PDB Molecule: putative secreted alpha L-arabinofuranosidase ii; PDBTitle: crystal structure of exo-1,5-alpha-L-arabinofuranosidase complexed2 with alpha-1,5-L-arabinofuranobiose
11	c3c7hA_	Alignment		100.0	20	PDB header: hydrolase Chain: A; PDB Molecule: endo-1,4-beta-xylanase; PDBTitle: crystal structure of glycoside hydrolase family 43 arabinoxylan2 arabinofuranohydrolase from bacillus subtilis in complex with axos-4-3 0.5.

12	c3cpnA	Alignment		100.0	18	PDB header: hydrolase Chain: A: PDB Molecule: beta-xylosidase, family 43 glycosyl hydrolase; PDBTitle: crystal structure of beta-xylosidase, family 43 glycosyl2 hydrolase from clostridium acetobutylicum
13	d1gyha	Alignment		100.0	22	Fold: 5-bladed beta-propeller Superfamily: Arabinanase/levansucrase/invertase Family: alpha-L-arabinanase-like
14	c3kstA	Alignment		100.0	23	PDB header: hydrolase Chain: A: PDB Molecule: endo-1,4-beta-xylanase; PDBTitle: crystal structure of endo-1,4-beta-xylanase (np_811807.1)2 from bacteroides thetaotaomicron vpi-5482 at 1.70 a3 resolution
15	d1wl7a1	Alignment		100.0	22	Fold: 5-bladed beta-propeller Superfamily: Arabinanase/levansucrase/invertase Family: alpha-L-arabinanase-like
16	d1uv4a1	Alignment		100.0	21	Fold: 5-bladed beta-propeller Superfamily: Arabinanase/levansucrase/invertase Family: alpha-L-arabinanase-like
17	c3p2nB	Alignment		100.0	18	PDB header: hydrolase Chain: B: PDB Molecule: 3,6-anhydro-alpha-L-galactosidase; PDBTitle: discovery and structural characterization of a new glycoside hydrolase2 family abundant in coastal waters that was annotated as 'hypothetical3 protein'
18	c3qefB	Alignment		100.0	23	PDB header: hydrolase Chain: B: PDB Molecule: beta-xylosidase/alpha-L-arabinofuranosidase, gly43n; PDBTitle: the structure and function of an arabinan-specific alpha-1,2-2 arabinofuranosidase identified from screening the activities of3 bacterial gh43 glycoside hydrolases
19	c3qz4B	Alignment		100.0	23	PDB header: hydrolase Chain: B: PDB Molecule: endo-1,4-beta-xylanase d; PDBTitle: crystal structure of an endo-1,4-beta-xylanase d (bt_3675) from2 bacteroides thetaotaomicron vpi-5482 at 1.74 a resolution
20	d1y7ba1	Alignment		100.0	50	Fold: Concanavalin A-like lectins/glucanases Superfamily: Concanavalin A-like lectins/glucanases Family: Beta-D-xylosidase C-terminal domain-like
21	d2exha1	Alignment	not modelled	100.0	54	Fold: Concanavalin A-like lectins/glucanases Superfamily: Concanavalin A-like lectins/glucanases Family: Beta-D-xylosidase C-terminal domain-like
22	d1yifa1	Alignment	not modelled	100.0	49	Fold: Concanavalin A-like lectins/glucanases Superfamily: Concanavalin A-like lectins/glucanases Family: Beta-D-xylosidase C-terminal domain-like
23	d1yrza1	Alignment	not modelled	100.0	37	Fold: Concanavalin A-like lectins/glucanases Superfamily: Concanavalin A-like lectins/glucanases Family: Beta-D-xylosidase C-terminal domain-like
24	c3nqhA	Alignment	not modelled	100.0	14	PDB header: hydrolase Chain: A: PDB Molecule: glycosyl hydrolase; PDBTitle: crystal structure of a glycosyl hydrolase (bt_2959) from bacteroides2 thetaotaomicron vpi-5482 at 2.11 a resolution PDB header: structural genomics, unknown function
25	c3o12A	Alignment	not modelled	100.0	19	Chain: A: PDB Molecule: uncharacterized protein yjl217w; PDBTitle: the crystal structure of a functionally unknown protein from2 saccharomyces cerevisiae.
26	c1w2tE	Alignment	not modelled	99.9	15	PDB header: hydrolase Chain: E: PDB Molecule: beta fructosidase; PDBTitle: beta-fructosidase from thermotoga maritima in complex with2 raffinose
27	c3mepC	Alignment	not modelled	99.9	18	PDB header: structural genomics, unknown function Chain: C: PDB Molecule: uncharacterized protein eca2234; PDBTitle: crystal structure of eca2234 protein from erwinia2 carotovora, northeast structural genomics consortium target3 ewr44
28	c3pijA	Alignment	not modelled	99.9	15	PDB header: hydrolase Chain: A: PDB Molecule: beta-fructofuranosidase; PDBTitle: beta-fructofuranosidase from bifidobacterium longum-complex with2 fructose
29	d1uypa2	Alignment	not modelled	99.8	16	Fold: 5-bladed beta-propeller Superfamily: Arabinanase/levansucrase/invertase

						Family: Glycosyl hydrolases family 32 N-terminal domain
30	c1y9gA	Alignment	not modelled	99.8	15	PDB header: hydrolase Chain: A: PDB Molecule: exo-inulinase; PDBTitle: crystal structure of exo-inulinase from aspergillus awamori complexed2 with fructose
31	c3kf5A	Alignment	not modelled	99.8	12	PDB header: hydrolase Chain: A: PDB Molecule: invertase; PDBTitle: structure of invertase from schwanniomyces occidentalis
32	d1vkda	Alignment	not modelled	99.8	12	Fold: 5-bladed beta-propeller Superfamily: Arabinanase/levansucrase/invertase Family: TM1225-like predicted glycosylases
33	c2aezA	Alignment	not modelled	99.7	14	PDB header: hydrolase Chain: A: PDB Molecule: fructan 1-exohydrolase iiA; PDBTitle: crystal structure of fructan 1-exohydrolase iiA (e201q) from cichorium2 intybus in complex with 1-kestose
34	c3bykA	Alignment	not modelled	99.7	17	PDB header: transferase Chain: A: PDB Molecule: levansucrase; PDBTitle: crystal structure of b. subtilis levansucrase mutant d247a
35	c3ugfB	Alignment	not modelled	99.7	14	PDB header: transferase Chain: B: PDB Molecule: sucrose:(sucrose/fructan) 6-fructosyltransferase; PDBTitle: crystal structure of a 6-sst/6-sft from pachysandra terminalis
36	c2ac1A	Alignment	not modelled	99.7	12	PDB header: hydrolase Chain: A: PDB Molecule: invertase; PDBTitle: crystal structure of a cell-wall invertase from arabiopsis thaliana
37	d1oyga	Alignment	not modelled	99.7	18	Fold: 5-bladed beta-propeller Superfamily: Arabinanase/levansucrase/invertase Family: Levensucrase
38	c3lemA	Alignment	not modelled	99.6	15	PDB header: hydrolase Chain: A: PDB Molecule: fructosyltransferase; PDBTitle: crystal structure of fructosyltransferase (d191a) from a. japonicus in2 complex with nystose
39	c2yfrA	Alignment	not modelled	99.6	17	PDB header: transferase Chain: A: PDB Molecule: levansucrase; PDBTitle: crystal structure of inulosucrase from lactobacillus2 johnsonii ncc533
40	d1y4wa2	Alignment	not modelled	99.5	18	Fold: 5-bladed beta-propeller Superfamily: Arabinanase/levansucrase/invertase Family: Glycosyl hydrolases family 32 N-terminal domain
41	c3tawA	Alignment	not modelled	99.4	16	PDB header: hydrolase Chain: A: PDB Molecule: hypothetical glycoside hydrolase; PDBTitle: crystal structure of a hypothetical glycoside hydrolase (bdi_3141)2 from parabacteroides distasonis atcc 8503 at 1.70 a resolution
42	c3qc2A	Alignment	not modelled	99.4	17	PDB header: hydrolase Chain: A: PDB Molecule: glycosyl hydrolase; PDBTitle: crystal structure of a glycosyl hydrolase (bacova_03624) from2 bacteroides ovatus at 2.30 a resolution
43	c1w18A	Alignment	not modelled	99.4	16	PDB header: transferase Chain: A: PDB Molecule: levansucrase; PDBTitle: crystal structure of levansucrase from gluconacetobacter2 diazotrophicus
44	c3r67A	Alignment	not modelled	99.3	15	PDB header: hydrolase Chain: A: PDB Molecule: putative glycosidase; PDBTitle: crystal structure of a putative glycosidase (bt_4094) from bacteroides2 thetaiotaomicron vpi-5482 at 2.30 a resolution
45	c2xcyA	Alignment	not modelled	95.9	15	PDB header: hydrolase Chain: A: PDB Molecule: extracellular sialidase/neuraminidase, putative; PDBTitle: crystal structure of aspergillus fumigatus sialidase
46	c3a72A	Alignment	not modelled	95.7	16	PDB header: hydrolase Chain: A: PDB Molecule: exo-arabinanase; PDBTitle: high resolution structure of penicillium chrysogenum alpha-I-2 arabinanase complexed with arabinobiose
47	d2ayha	Alignment	not modelled	94.1	15	Fold: Concanavalin A-like lectins/glucanases Superfamily: Concanavalin A-like lectins/glucanases Family: Glycosyl hydrolases family 16
48	c3i4iA	Alignment	not modelled	93.5	11	PDB header: hydrolase Chain: A: PDB Molecule: 1,3-1,4-beta-glucanase; PDBTitle: crystal structure of a prokaryotic beta-1,3-1,4-glucanase (lichenase)2 derived from a mouse hindgut metagenome
49	d1gbga	Alignment	not modelled	91.4	12	Fold: Concanavalin A-like lectins/glucanases Superfamily: Concanavalin A-like lectins/glucanases Family: Glycosyl hydrolases family 16
50	clupsB	Alignment	not modelled	91.0	17	PDB header: glycosyl hydrolase Chain: B: PDB Molecule: glcnac-alpha-1,4-gal-releasing endo-beta-galactosidase2 from clostridium perfringens
51	c2w5oA	Alignment	not modelled	90.6	13	PDB header: hydrolase Chain: A: PDB Molecule: alpha-l-arabinofuranosidase; PDBTitle: complex structure of the gh93 alpha-l-arabinofuranosidase2 of fusarium graminearum with arabinobiose
52	c3juuA	Alignment	not modelled	89.4	18	PDB header: hydrolase/carbohydrate Chain: A: PDB Molecule: porphyranase b; PDBTitle: crystal structure of porphyranase b (porb) from zobellia2 galactanivorans
53	c1yo8A	Alignment	not modelled	88.2	15	PDB header: cell adhesion Chain: A: PDB Molecule: thrombospondin-2; PDBTitle: structure of the c-terminal domain of human thrombospondin-2
54	c3o5sA	Alignment	not modelled	87.8	12	PDB header: hydrolase Chain: A: PDB Molecule: beta-glucanase; PDBTitle: crystal structure of the endo-beta-1,3-1,4 glucanase from bacillus2 subtilis (strain 168)

55	c3fbyc		Alignment	not modelled	85.1	15	PDB header: cell adhesion Chain: C; PDB Molecule: cartilage oligomeric matrix protein; PDBTitle: the crystal structure of the signature domain of cartilage oligomeric2 matrix protein.
56	c3rq0A		Alignment	not modelled	83.6	12	PDB header: hydrolase Chain: A; PDB Molecule: glycosyl hydrolases family protein 16; PDBTitle: the crystal structure of a glycosyl hydrolases (gh) family protein 162 from mycobacterium smegmatis str. mc2 155
57	d1o4ya		Alignment	not modelled	82.9	14	Fold: Concanavalin A-like lectins/glucanases Superfamily: Concanavalin A-like lectins/glucanases Family: Glycosyl hydrolases family 16
58	c2w38A		Alignment	not modelled	77.1	15	PDB header: transferase Chain: A; PDB Molecule: sialidase; PDBTitle: crystal structure of the pseudaminidase from pseudomonas2 aeruginosa
59	d1w8oa3		Alignment	not modelled	76.4	15	Fold: 6-bladed beta-propeller Superfamily: Sialidases Family: Sialidases (neuraminidases)
60	c3zr6A		Alignment	not modelled	75.8	16	PDB header: hydrolase Chain: A; PDB Molecule: galactocerebrosidase; PDBTitle: structure of galactocerebrosidase from mouse in complex with2 galactose
61	c3dgta		Alignment	not modelled	72.1	23	PDB header: hydrolase Chain: A; PDB Molecule: endo-1,3-beta-glucanase; PDBTitle: the 1.5 a crystal structure of endo-1,3-beta-glucanase from streptomyces sioyaensis
62	dlupsal		Alignment	not modelled	71.7	18	Fold: Concanavalin A-like lectins/glucanases Superfamily: Concanavalin A-like lectins/glucanases Family: Glycosyl hydrolases family 16
63	d1o4za		Alignment	not modelled	67.2	9	Fold: Concanavalin A-like lectins/glucanases Superfamily: Concanavalin A-like lectins/glucanases Family: Glycosyl hydrolases family 16
64	c1o4za		Alignment	not modelled	67.2	9	PDB header: hydrolase Chain: A; PDB Molecule: beta-agarase b; PDBTitle: the three-dimensional structure of beta-agarase b from2 zobellia galactanivorans
65	c2berA		Alignment	not modelled	66.8	16	PDB header: hydrolase Chain: A; PDB Molecule: bacterial sialidase; PDBTitle: y370g active site mutant of the sialidase from2 micromonospora viridifaciens in complex with beta-neu5ac3 (sialic acid).
66	d2b4wa1		Alignment	not modelled	64.6	10	Fold: 5-bladed beta-propeller Superfamily: Arabinanase/levansucrase/invertase Family: LmpF10.1260-like
67	d1y4wa1		Alignment	not modelled	63.1	12	Fold: Concanavalin A-like lectins/glucanases Superfamily: Concanavalin A-like lectins/glucanases Family: Glycosyl hydrolases family 32 C-terminal domain
68	d2ah2a2		Alignment	not modelled	62.8	15	Fold: 6-bladed beta-propeller Superfamily: Sialidases Family: Sialidases (neuraminidases)
69	c2w20B		Alignment	not modelled	59.9	13	PDB header: hydrolase Chain: B; PDB Molecule: sialidase a; PDBTitle: structure of the catalytic domain of the native nana2 sialidase from streptococcus pneumoniae
70	c1lux6A		Alignment	not modelled	55.9	14	PDB header: cell adhesion Chain: A; PDB Molecule: thrombospondin-1; PDBTitle: structure of a thrombospondin c-terminal fragment reveals a2 novel calcium core in the type 3 repeats
71	c3h3IB		Alignment	not modelled	55.0	14	PDB header: hydrolase Chain: B; PDB Molecule: putative sugar hydrolase; PDBTitle: crystal structure of putative sugar hydrolase (yp_001304206.1) from2 parabacteroides distasonis atcc 8503 at 1.59 a resolution
72	c3azyA		Alignment	not modelled	54.7	18	PDB header: hydrolase Chain: A; PDB Molecule: laminarinase; PDBTitle: crystal structure of the laminarinase catalytic domain from thermotoga2 maritima msb8
73	d1fbla1		Alignment	not modelled	50.1	16	Fold: 4-bladed beta-propeller Superfamily: Hemopexin-like domain Family: Hemopexin-like domain
74	c2vk7A		Alignment	not modelled	44.1	11	PDB header: hydrolase Chain: A; PDB Molecule: exo-alpha-sialidase; PDBTitle: the structure of clostridium perfringens nani sialidase and2 its catalytic intermediates
75	c3nmbA		Alignment	not modelled	44.0	12	PDB header: hydrolase Chain: A; PDB Molecule: putative sugar hydrolase; PDBTitle: crystal structure of a putative sugar hydrolase (bacova_03189) from2 bacteroides ovatus at 2.40 a resolution
76	c3ecqA		Alignment	not modelled	42.0	11	PDB header: hydrolase Chain: A; PDB Molecule: endo-alpha-n-acetylgalactosaminidase; PDBTitle: endo-alpha-n-acetylgalactosaminidase from streptococcus pneumoniae:2 semet structure
77	d1dypa		Alignment	not modelled	39.0	13	Fold: Concanavalin A-like lectins/glucanases Superfamily: Concanavalin A-like lectins/glucanases Family: Glycosyl hydrolases family 16
78	d1n1ta2		Alignment	not modelled	36.0	15	Fold: 6-bladed beta-propeller Superfamily: Sialidases Family: Sialidases (neuraminidases)
79	c3u1xA		Alignment	not modelled	35.6	11	PDB header: hydrolase Chain: A; PDB Molecule: putative glycosyl hydrolase; PDBTitle: crystal structure of a putative glycosyl hydrolase (bdi_1869) from2 parabacteroides distasonis atcc 8503 at 1.70 a resolution
80	c1su3A		Alignment	not modelled	35.4	16	PDB header: hydrolase Chain: A; PDB Molecule: interstitial collagenase; PDBTitle: x-ray structure of human proimm-1: new insights into2

						collagenase action
81	d1w0pa3		Alignment	not modelled	35.3	9 Fold: 6-bladed beta-propeller Superfamily: Sialidases Family: Sialidases (neuraminidases)
82	c2vvzA		Alignment	not modelled	34.6	13 PDB header: hydrolase Chain: A: PDB Molecule: sialidase a; PDBTitle: structure of the catalytic domain of streptococcus2 pneumoniae sialidase nana
83	d3sila		Alignment	not modelled	30.5	15 Fold: 6-bladed beta-propeller Superfamily: Sialidases Family: Sialidases (neuraminidases)
84	d1lux6a1		Alignment	not modelled	29.1	17 Fold: Concanavalin A-like lectins/glucanases Superfamily: Concanavalin A-like lectins/glucanases Family: Thrombospondin C-terminal domain
85	d1pexa		Alignment	not modelled	28.1	11 Fold: 4-bladed beta-propeller Superfamily: Hemopexin-like domain Family: Hemopexin-like domain
86	c3oyoB		Alignment	not modelled	23.8	11 PDB header: plant protein Chain: B: PDB Molecule: hemopexin fold protein cp4; PDBTitle: crystal structure of hemopexin fold protein cp4 from cow pea
87	d2a6za1		Alignment	not modelled	23.5	12 Fold: Concanavalin A-like lectins/glucanases Superfamily: Concanavalin A-like lectins/glucanases Family: Lectin leg-like
88	d1gena		Alignment	not modelled	23.1	9 Fold: 4-bladed beta-propeller Superfamily: Hemopexin-like domain Family: Hemopexin-like domain
89	d1su3a2		Alignment	not modelled	20.6	14 PDB header: hydrolase Chain: A: PDB Molecule: 72 kda type iv collagenase; PDBTitle: prommp-2/timp-2 complex
90	c1gxdA		Alignment	not modelled	20.5	10 PDB header: hydrolase Chain: A: PDB Molecule: porphyranase a; PDBTitle: crystal structure of porphyranase a (pora) in complex with2 neo-porphyratetraose
91	c3ilfA		Alignment	not modelled	19.2	13 PDB header: hydrolase/carbohydrate Chain: A: PDB Molecule: porphyranase a; PDBTitle: crystal structure of porphyranase a (pora) in complex with2 neo-porphyratetraose
92	c3c7xA		Alignment	not modelled	17.6	17 PDB header: hydrolase Chain: A: PDB Molecule: matrix metalloproteinase-14; PDBTitle: hemopexin-like domain of matrix metalloproteinase 14
93	c3hbkA		Alignment	not modelled	17.2	14 PDB header: hydrolase Chain: A: PDB Molecule: putative glycosyl hydrolase; PDBTitle: crystal structure of putative glycosyl hydrolase, was domain of2 unknown function (duf1080) (yp_001302580.1) from parabacteroides3 distasonis atcc 8503 at 2.36 a resolution
94	c3eypB		Alignment	not modelled	16.4	18 PDB header: structural genomics, unknown function Chain: B: PDB Molecule: putative alpha-l-fucosidase; PDBTitle: crystal structure of putative alpha-l-fucosidase from bacteroides2 thetaiotaomicron
95	c3lp9C		Alignment	not modelled	16.2	15 PDB header: plant protein Chain: C: PDB Molecule: ls-24; PDBTitle: crystal structure of ls24, a seed albumin from lathyrus2 sativus
96	c2v5dA		Alignment	not modelled	16.2	25 PDB header: hydrolase Chain: A: PDB Molecule: o-glcnacase nagj; PDBTitle: structure of a family 84 glycoside hydrolase and a family2 32 carbohydrate-binding module in tandem from clostridium3 perfringens.
97	d1czsa		Alignment	not modelled	14.5	31 Fold: Galactose-binding domain-like Superfamily: Galactose-binding domain-like Family: Discoidin domain (FA58C, coagulation factor 5/8 C-terminal domain)
98	c2xqxB		Alignment	not modelled	13.8	13 PDB header: sugar binding protein Chain: B: PDB Molecule: endo-beta-n-acetylglucosaminidase d; PDBTitle: structure of the family 32 carbohydrate-binding module from2 streptococcus pneumoniae endod
99	c3jtoE		Alignment	not modelled	13.7	33 PDB header: protein binding Chain: E: PDB Molecule: adapter protein meca 2; PDBTitle: crystal structure of the c-terminal domain of ypbh