

## Recombinant Enzyme Product Specification Sheet

<b>Cat. No.:</b>	PRO-E0104
<b>LOT:</b>	2008-0104
<b>Activity:</b>	β-Glucosidase
<b>Synonyms:</b>	Amygdalase, β-D-glucoside glucohydrolase, cellobiase
<b>Nomenclature:</b>	Glucosidase, GH3
<b>Source organism:</b>	<i>Bacteroides fragilis</i> NCTC 9343
<b>Enzyme Commission No.:</b>	<a href="#">3.2.1.21</a>
<b>Activity:</b>	-
<b>Specific activity:</b>	-
<b>Purity:</b>	-
<b>Form and storage:</b>	-
<b>pH optimum:</b>	-
<b>Temperature optimum:</b>	-
<b>[Protein]:</b>	-
<b>Sequence length:</b>	792 amino acids ( <a href="#">view sequence</a> )
<b>Accession No.:</b>	<a href="#">Q5LH74</a>
<b>Molecular weight:</b>	89482.1 Da (theoretical)
	- (observed by SDS-PAGE)
	- (observed by mass spectrometry)
<b>Biological function:</b>	Hydrolysis of terminal non-reducing β-D-glucose residues with release of β-D-glucose (wide specificity for β-D-glucosides, some examples also hydrolyse one or more of the following: β-D-galactosides, α-L-arabinosides, β-D-xylosides and β-D-fucosides)
<b>Potential application(s):</b>	<a href="#">Biomass conversion</a> , <a href="#">carbohydrate research</a>
<b>Comments:</b>	-
<b>Usage:</b>	-
<b>Assay:</b>	-

**NOTE:** this product is currently under development. If you wish to prioritise the production of this enzyme, please follow [this link](#)

**Primary sequence:**

NTFGKKKDKVTRLHFYDLNKNRMDTYENPSAPVEYRVEHLLSQMTLEEKVQMLTSLGWPMYERVGEDIRLTPQ  
LEKEIGEYHIGSLWGFMRADPWTQRTLHTGLNPSLAARASNRLQSYVIEHSRLGIPLFLAECPHGHMAIGTTVF  
PTSIGQASTWNPELIRQMGRVIAIEASAQGAHIGYGPVLDLARDPRWSRVEETYGEDPYLNGVMGTALVRGFQGE  
TLNDGKSVIATLKHFAASYGWTEGGHNGGTAHIGERELEEAIFPPFREAVGAGALSVMSSYNEIDGNPCTGSRYLL  
TDILKDRWQFKGFVVS DLYAVGGLREHGVAGNDYEAAIKAVNAGVSDLGTVNYAEQLVAAVKRGDVAVATIDKA  
VRRILSLKFQMGLFDDPFVDEKQAVQLVASSEHTGLAREVARQSIVLLKNKDKLLPLKKDIRTLAVIGPNADNVY  
NMLGDYTAPQADGTVVTVLDGIRQKVKSKETRVLYAKGCTVRDSSRTGFKDAIETARNADAVMMGGSSARDFSS  
EYEETGAAKVTINQISDMESGEGYDRATLHLMGRQLELLEEISRLGKPVVLVLIKGRPLLMEGAIQEAEIIVDAW  
YPGMQGNAVADVLFGDYNPAGRLTSLVPRSVGQLPVYYNTRRKGNRSRYIEEPGTPRYPFYGLSYTTFSTYDMD  
KVQVTEGSDDCRVDVTVTIQNQGTADGDEVAQLYFRDDVSSFTTPAKQLRAFSRIHLKAGESREVTFTLKKSLA  
LYMQEGEWVVEPGRFTIMVGGSSEDIACRQAFEINRKYTFKM

**Literature:**

1. [Cerdeno-Tarraga et al. \(2005\) Science 307, 1463-1465](#)