Creative Enzymes®

β-N-Acetylhexosaminidase from Xanthomonas manihotis, Recombinant

Cat. No. NATE-0934

Lot. No. (See product label)

Introduction

Description	This enzyme releases non-reducing terminal β1-2, β1-3, β1-4 and β1-6 linked N-acetylglucosamine from complex carbohydrates. When incubated with oligosaccharides at low concentrations (<50 mU/ml) the enzyme can differentiate between GlcNAcβ1-2Man, GlcNAcβ1-4Man and GlcNAcβ1-6Man linkages. Under such conditions, the enzyme cleaves essentially only β1-2 linked GlcNAc, with two provisos. Firstly, β1-2 GlcNAc is not hydrolyzed if the mannose to which it is substituted has a substitution at C-6. Thus, the enzyme is useful for the analysis of tri-antennary oligosaccharides. Secondly, if the β-linked mannose of the conserved pentasaccharide core is substituted with a "bisecting" GlcNAc then only the β1-2 linked GlcNAc linked to mannose on the α1-3 arm is cleaved. At higher concentrations of the enzyme, β1-4 and β1-6 linked GlcNAc may also be hydrolyzed.
Applications	Biosynthesis of Glycans in Eukaryotes, Glycoprotein Production in Various Expression Systems, Protein Digestion, Removal of N-Linked & O-Linked Glycans from Glycoproteins, Sequencing Glycans
Synonyms	β-N-Acetylhexosaminidase; N-Acetyl-β-D-glucosaminidase, β-N-Acetylglucosaminidase

Product Information

Species	Xanthomonas manihotis
Source	E.coli
Molecular Weight	71000 daltons
Concentration	4,000 units/ml
Unit Definition	One unit is defined as the amount of enzyme required to cleave > 95% of the terminal, non-reducing β-N-Acetylglucosamine from 1 nmol GlcNAcβ1-4GlcNAcβ1-4GlcNAc-7-amino-4-methyl-coumarin (AMC), in 1 hour at 37°C in a total reaction volume of 10 µl.

Storage and Shipping Information

Storage	4°C, Avoid repeated freeze/thaw cycles.