Creative Enzymes®

β-acetylglucosaminidase 73A from Clostridium perfringens, Recombinant

Cat. No. NATE-1289

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.

Synonyms beta-N-acetyl-D-hexosaminide; N-acetylhexosaminohydrolase; β-N-Acetylhexosaminidase; N-Acetyl-β-D-glucosaminidase, β-N-Acetylglucosaminidase

Product Information

Species Clostridium perfringens

Source E. coli

Form 35 mM NaHepes buffer, pH 7.5, 750 mM NaCl, 200 mM imidazol, 3.5 mM CaCl2, 0.02% sodium azide and 25% (v/v) glycerol

Molecular Weight 24.6 kDa

Purity >90% by SDS-PAGE

Concentration 0.25 mg/mL

Optimum pH 8

Optimum temperature 37 °C

Specificity Peptidoglycan

Storage and Shipping Information

Storage This enzyme is shipped at room temperature but should be stored at -20 °C.