Creative Enzymes®

β-Mannosidase from Bacteroides thetaiotaomicron, Recombinant

Cat. No. NATE-1186

Lot. No. (See product label)

Introduction

Description	Beta-mannosidase is an enzyme with system name beta-D-mannoside mannohydrolase. This enzyme catalyses the following chemical reaction:Hydrolysis of terminal, non-reducing beta-D-mannose residues in beta-D-mannosides. This gene encodes a member of the glycosyl hydrolase 2 family. The encoded protein localizes to the lysosome where it is the final exoglycosidase in the pathway for N-linked glycoprotein oligosaccharide catabolism. Mutations in this gene are associated with beta-mannosidosis, a lysosomal storage disease that has a wide spectrum of neurological involvement.
Synonyms	β-mannosidase; mannanase; mannase; β-D-mannosidase; β-mannoside mannohydrolase; exo-β-D-mannanase; EC 3.2.1.25; 9025-43-8

Product Information

Source	Bacteroides thetaiotaomicron VPI-5482
Form	Supplied in 3.2 M ammonium sulphate
EC Number	EC 3.2.1.25
CAS No.	9025-43-8
Molecular Weight	96040.16 Da
Purity	> 95 % as judged by SDS-PAGE
Activity	10.62 U/mg
Concentration	45.27 U/ml
Optimum pH	5.6
Unit Definition	One unit is defined as the amount of enzyme required to release 1μmol of D-mannose per minute from ivory nut mannan (5 mg/mL; freshly treated with 10 % sodium hydroxide and neutralised with acetic acid) in 50 mM sodium phosphate buffer, pH 5.6, containing 1mg/mL BSA, at 37°C, and using the method of Miller (1957) to follow reducing sugar liberated at 575 nm.

Storage and Shipping Information

Storage	Store at 4°C (shipped at room temperature)