Creative Enzymes®

β-Glucosidase from Clostridium thermocellum, Recombinant

Cat. No. NATE-1182

Lot. No. (See product label)

Introduction

Description	Beta-glucosidase is a glucosidase enzyme that acts upon β1->4 bonds linking two glucose or glucose-substituted molecules (i.e., the disaccharide cellobiose). It is one of the cellulases, enzymes involved in the decomposition of cellulose and related polysaccharides; more specifically, an exocellulase with specificity for a variety of beta-D-glycoside substrates. It catalyzes the hydrolysis of terminal non-reducing residues in beta-D-glucosides with release of glucose.
Synonyms	EC 3.2.1.21; gentiobiase; cellobiase; emulsin; elaterase; aryl-beta-glucosidase; beta-D-glucosidase; beta-glucoside glucohydrolase; arbutinase; amygdalinase; p-nitrophenyl beta-glucosidase; primeverosidase; amygdalase; linamarase; salicilinase; beta-1,6-glucosidase

Product Information

Source	Clostridium thermocellum DSM 1237
Form	Supplied in 35 mM HEPES buffer, pH 7.8, containing 750 mM NaCl, 5 mM imidazole, 3.5 mM CaCl2, 0.02 % (w/v) sodium azide and 25 % (v/v) glycerol.
EC Number	EC 3.2.1.21
CAS No.	9001-42-7
Molecular Weight	52700 Da
Purity	> 95 % as judged by SDS-PAGE
Activity	33 U/mg
Concentration	20 U/mL
Optimum pH	6 (stable from 5.5 - 7)
Optimum temperature	60°C (stable up to 65°C)
Unit Definition	One unit is defined as the amount of enzyme required to release 1µmol of p-nitrophenol per minute from p-nitrophenyl-β-Dglucopyranoside (1 mM in the assay) in 50 mM phosphate buffer, pH 6.0, at 60°C.

Storage and Shipping Information

Storage	Store at -20°C (shipped at room temperature)