Creative Enzymes®

β-Glucosidase 1A from Saccharophagus degradans, Recombinant

Cat. No. NATE-1429

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

Species Saccharophagus degradans

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

EC Number EC 3.2.1.21

CAS No. 9001-22-3

Molecular Weight 54.8 kDa

Purity >90% by SDS-PAGE

Concentration 0.25 mg/mL

Optimum pH 5.0–8.0

Optimum temperature 37 °C

Specificity Cellobiose, gentiobiose, sophorose, cellodextrin (DP 2-7), barley β-glucan, pNP-β-glucose and pNP-β-cellobioside to constituent glucose, as well as the β-1,4 linkage of lactose to release galactose and glucose

Storage and Shipping Information

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