Creative Enzymes®

Native Rhizopus sp. Amyloglucosidase

Cat. No. NATE-0076

Lot. No. (See product label)

Introduction

Description	Glucan 1,4-alpha-glucosidase is an enzyme located on the brush border of the small intestine with system name 4-alpha-D-glucan glucohydrolase. This enzyme catalyses the following chemical reaction:Hydrolysis0 of terminal (1->4)-linked alpha-D-glucose residues successively from non-reducing ends of the chains with release of beta-D-glucose. Most forms of the enzyme can rapidly hydrolyse 1,6-alpha-D-glucosidic bonds when the next bond in the sequence is 1,4.
Applications	Amyloglucosidase is used to hydrolyze α-D-glucosides. It may be used in the brewing of beer and in the production of bread and juices. Amyloglucosidase, from Rhizopus sp., has been used to study the cleavage of oligosaccharides during ER-associated degradation of proteins (ERAD). The enzyme has been used in the glycosylation of N-vanillyl-nonanamide to form a water-soluble component with pharmacological applications. The glycogen was estimated in stipe residue of Coprinus cinereus by treating with amyloglucosidase and measuring the amount of glucose produced.
Synonyms	glucoamylase; amyloglucosidase; γ-amylase; lysosomal α-glucosidase; acid maltase; exo-1,4-α-glucosidase; glucose amylase; γ-1,4-glucan glucohydrolase; acid maltase; 1,4-α-D-glucan glucohydrolase; EC 3.2.1.3; 9032-08-0

Product Information

Source	Rhizopus sp.
Form	Lyophilized salt free powder
EC Number	EC 3.2.1.3
CAS No.	9032-08-0
Activity	> 40,000 units/g solid
Buffer	0.03 M sodium Citrate-phosphate buffer, pH 4.5: soluble 5.0 mg/mL
Unit Definition	One unit will liberate 1.0 mg of glucose from starch in 3 min at pH 4.5 at 55°C.

Storage and Shipping Information

Storage	−20°C