

Native Rhizopus sp. Amyloglucosidase

Cat. No. NATE-0076

Lot. No. (See product label)

Introduction

Description Glucan 1,4- α -glucosidase is an enzyme located on the brush border of the small intestine with system name 4- α -D-glucan glucohydrolase. This enzyme catalyses the following chemical reaction: Hydrolysis of terminal (1 \rightarrow 4)-linked α -D-glucose residues successively from non-reducing ends of the chains with release of β -D-glucose. Most forms of the enzyme can rapidly hydrolyse 1,6- α -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