Creative Enzymes®

Native Saccharomyces cerevisiae α-Glucosidase

Cat. No. NATE-0752

Lot. No. (See product label)

Introduction

Description	Alpha-glucosidase is a glucosidase located in the brush border of the small intestine that acts upon 1,4-alpha bonds. This is in contrast to beta-glucosidase. Alpha-glucosidase breaks down starch and disaccharides to glucose. Maltase, a similar enzyme that cleaves maltose, is nearly functionally equivalent.
Applications	For the determination of α-amylase and the synthesis of various 1′-O-sucrose and 1-O-fructose esters. α-glucosidase is used for the determination of α-amylase and the synthesis of various 1′-O-sucrose and 1-O-fructose esters. It was also used in the measurement of glycosidase inhibition.
Synonyms	α-glucosidase; maltase; glucoinvertase; glucosidosucrase; maltase-glucoamylase; α-glucopyranosidase; glucosidoinvertase; α-D-glucosidase; α-glucoside hydrolase; α-1,4-glucosidase; EC 3.2.1.20; 9001-42-7

Product Information

Source	Saccharomyces cerevisiae
Form	lyophilized powder.
EC Number	EC 3.2.1.20
CAS No.	9001-42-7
Molecular Weight	Mr ~63 kDa
Activity	4-8 units/mg; > 10 units/mg protein (using p-nitrophenyl α-D-glucoside as substrate.)
Pathway	Amino acid transport across the plasma membrane, organism-specific biosystem; Galactose metabolism, conserved biosystem; Transmembrane transport of small molecules, organism-specific biosystem; Metabolic pathways, organism-specific biosystem; Starch and sucrose metabolism, conserved biosystem; Transmembrane transport of small molecules, organism-specific biosystem
Function	alpha-1,4-glucosidase activity; cation binding; maltose alpha-glucosidase activity; hydrolase activity; maltose alpha-glucosidase activity
Unit Definition	One unit will liberate 1.0 μmole of D-glucose from p-nitrophenyl α-D-glucoside per min at pH 6.8 at 37°C.

Storage and Shipping Information

Storage	−20°C