

## Native *Saccharomyces cerevisiae* $\alpha$ -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  $\alpha$ -amylase and the synthesis of various 1'-O-sucrose and 1-O-fructose esters.  $\alpha$ -glucosidase is used for the determination of  $\alpha$ -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**  $\alpha$ -glucosidase; maltase; glucoinvertase; glucosidosucrase; maltase-glucoamylase;  $\alpha$ -glucopyranosidase; glucosidoinvertase;  $\alpha$ -D-glucosidase;  $\alpha$ -glucoside hydrolase;  $\alpha$ -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  $\alpha$ -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  $\mu$ mole of D-glucose from p-nitrophenyl  $\alpha$ -D-glucoside per min at pH 6.8 at 37°C.

### Storage and Shipping Information

**Storage** -20°C