

Maltogenic α -amylase 13A from *Lactobacillus gasseri*, Recombinant

Cat. No. NATE-1298

Lot. No. (See product label)

Introduction

Description

Glucan 1,4- α -maltohydrolase (EC 3.2.1.133, maltogenic α -amylase, 1,4- α -D-glucan α -maltohydrolase) is an enzyme with system name 4- α -D-glucan α -maltohydrolase. This enzyme catalyses the following chemical reaction: hydrolysis of (1 \rightarrow 4)- α -D-glucosidic linkages in polysaccharides so as to remove successive α -maltose residues from the non-reducing ends of the chains. This enzyme acts on starch and related polysaccharides and oligosaccharides.

Synonyms

Glucan 1,4- α -maltohydrolase; EC 3.2.1.133; maltogenic α -amylase; 1,4- α -D-glucan α -maltohydrolase; Glucan 1,4- α -maltohydrolase, Maltogenic Amylase, Novamyl 1000BG

Product Information

Species

Lactobacillus gasseri

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 3.2.1.133

CAS No.

160611-47-2

Molecular Weight

55.0 kDa

Purity

>90% by SDS-PAGE

Concentration

0.25 mg/mL

Optimum pH

5

Optimum temperature

55 °C

Specificity

β -Cyclodextrin (β -CD), starch and pullulan, thus producing maltose from β -CD and starch, and panose from pullulan. The enzyme activity is strongly inhibited by Zn²⁺, Fe²⁺, Co²⁺ and EDTA

Storage and Shipping Information

Storage

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