

## Native *Bacillus amyloliquefaciens* $\alpha$ -Amylase

Cat. No. NATE-0741

Lot. No. (See product label)

### Introduction

#### Description

$\alpha$ -Amylase is a protein enzyme EC 3.2.1.1 that hydrolyses alpha bonds of large, alpha-linked polysaccharides, such as starch and glycogen, yielding glucose and maltose. It is the major form of amylase found in Humans and other mammals. It is also present in seeds containing starch as a food reserve, and is secreted by many fungi.

#### Applications

$\alpha$ -Amylase is used to hydrolyze  $\alpha$  bonds of  $\alpha$ -linked polysaccharides, such as starch and glycogen. This product is from *Bacillus amyloliquefaciens* and is supplied as a liquid.  $\alpha$ -Amylase has been used in various plant studies, such as metabolism studies in *Arabidopsis*.  $\alpha$ -Amylase from *Bacillus amyloliquefaciens* has been used to hydrolyze sweetpotato amylopectin to identify cluster structure. The enzyme has been used to hydrolyze sago palm starch to reducing sugars, which are then used for ethanol fermentation by *Saccharomyces cerevisiae* FNCC 3012. The enzyme catalyzes amylolysis of gelatinised waxy maize starch to produce reducing sugars.

#### Synonyms

glycogenase;  $\alpha$ amylase,  $\alpha$ -amylase; 1,4- $\alpha$ -D-glucan glucanohydrolase; EC 3.2.1.1; 9001-19-8; endoamylase; Taka-amylase A

### Product Information

#### Source

*Bacillus amyloliquefaciens*

#### Form

liquid

#### EC Number

EC 3.2.1.1

#### CAS No.

9001-19-8

#### Molecular Weight

55 kDa

#### Activity

> 250 units/g

#### Unit Definition

One unit is the amount of enzyme which dextrinizes 5.26 g of dry starch per hour under standard conditions.