

## Native *Aspergillus oryzae* $\alpha$ -Amylase

Cat. No. NATE-0740

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.  $\alpha$ -Amylase has been used in various plant studies, such as metabolism studies in Arabidopsis. Amylases from *Aspergillus oryzae* are commonly used as baking additives to prevent staling in the baking industry, clarify haze from fruit juices and alcoholic beverages, and to produce glucose and maltose syrup products.

**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** *Aspergillus oryzae*

**Form** powder containing dextrin.

**EC Number** EC 3.2.1.1

**CAS No.** 9001-19-8

**Molecular Weight** Mr ~51 kDa

**Activity** > 150 units/mg protein (biuret); ~1.5 units/mg; ~30 units/mg

**Unit Definition** One unit will liberate 1.0mg of maltose from starch in 3 min at pH 6.9 at 20°C.

### Storage and Shipping Information

**Storage** -20°C