

Native Human α -Amylase

Cat. No. NATE-0743

Lot. No. (See product label)

Introduction

Description

α -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

α -Amylase is used to hydrolyze α bonds of α -linked polysaccharides, such as starch and glycogen. α -Amylase has been used in various plant studies, such as metabolism studies in Arabidopsis. α -Amylase from human saliva has been used to study the development of nutraceuticals, which may aid the treatment of diabetes and obesity.

Synonyms

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

Product Information

Species

Human

Source

Human saliva

Form

Lyophilized powder containing (NH₄)₂SO₄ and sodium Citrate

EC Number

EC 3.2.1.1

CAS No.

9001-19-8

Activity

1,000-3,000 units/mg protein; 300-1,500 units/mg protein

Pathway

Carbohydrate digestion and absorption, organism-specific biosystem; Carbohydrate digestion and absorption, conserved biosystem; Digestion of dietary carbohydrate, organism-specific biosystem; Metabolic pathways, organism-specific biosystem; Metabolism, organism-specific biosystem; Metabolism of carbohydrates, organism-specific biosystem; Salivary secretion, organism-specific biosystem

Unit Definition

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

Storage and Shipping Information

Storage

–20°C