Creative Enzymes®

Native Human α-Amylase

Cat. No. NATE-0744

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 has been used in various plant studies, such as metabolism studies in Arabidopsis. α-Amylase from human pancreas has been used to test interference for enzymatic methods of assaying calcium in serum and urine. α-Amylase, from Creative Enzymes, has been used to get a standard calibration curve during the evaluation of an automated amylase detection system using forensic samples.
Synonyms	glycogenase; αamylase, 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 pancreas
Form	Lyophilized from Tris buffer containing NaCl and CaCl2..
EC Number	EC 3.2.1.1
CAS No.	9001-19-8
Activity	> 100 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; Pancreatic secretion, organism-specific biosystem; 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; Pancreatic secretion, organism-specific biosystem
Function	alpha-amylase activity; calcium ion binding; chloride ion binding; hydrolase activity, acting on glycosyl bonds; alpha-amylase activity; hydrolase activity, acting on glycosyl bonds; metal ion binding
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