Creative Enzymes®

Native Bovine Trypsin Acetylated

Cat. No. NATE-0720

Lot. No. (See product label)

Introduction

Description

Trypsin (EC 3.4.21.4) is a serine protease from the PA clan superfamily, found in the digestive system of many vertebrates, where it hydrolyses proteins. Trypsin is produced in the pancreas as the inactive protease trypsinogen. Trypsin cleaves peptide chains mainly at the carboxyl side of the amino acids lysine or arginine, except when either is followed by proline. It is used for numerous biotechnological processes. The process is commonly referred to as trypsin proteolysis or trypsinisation, and proteins that have been digested/treated with trypsin are said to have been trypsinized.

Applications

Trypsin has been used in a study to assess the ontogeny of the endocrine pancreas in the fetal/newborn baboon. Trypsin digestion and hydrogen/deuterium exchange support the transition between inward-and outward-facing conformations during the catalytic cycle of the bacterial multidrug ATP-binding cassette transporter.

Synonyms

α-trypsin; β-trypsin; cocoonase; parenzyme; parenzymol; tryptar; trypure; pseudotrypsin; tryptase; tripcellim; sperm receptor hydrolase; Alpha-trypsin; Beta-trypsin; EC 3.4.21.4; Trypsin; Acetyltrypsin

Product Information

Species

Bovine

Source

Bovine pancreas

EC Number

EC 3.4.21.4

Activity

> 8,500 BAEE units/mg protein (biuret)

Pathway

Activation of Matrix Metalloproteinases, organism-specific biosystem; Defective GIF causes intrinsic factor deficiency, organism-specific biosystem; Defective CD320 causes methylmalonic aciduria, organism-specific biosystem

Function

calcium ion binding; serine-type endopeptidase activity

Unit Definition

One BAEE unit will produce a ΔA253 of 0.001 per min at pH 7.6 at 25° C using BAEE as substrate. Reaction volume = 3.2 mL (1 cm light path).

Storage and Shipping Information

Storage

−20°C