Native Human Trypsin

Cat. No. NATE-0722

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 similarities between the hepatitis E virus and human astrovirus. Trypsin has also been used in a study to characterize a unique technique for culturing primary adult human epithelial progenitor, or stem, cells.

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

Product Information

Species

Human

Source

Human pancreas

Form

salt-free, lyophilized powder

EC Number

EC 3.4.21.4

CAS No.

9002-07-7

Activity

vial of > 1 ,000 BAEE units

Pathway

Activation of Matrix Metalloproteinases, organism-specific biosystem; Degradation of the extracellular matrix, organism-specific biosystem; Extracellular matrix organization, organism-specific biosystem; Influenza A, organism-specific biosystem; Influenza A, conserved biosystem; Neuroactive ligand-receptor interaction, organism-specific biosystem; Neuroactive ligand-receptor interaction, conserved biosystem; Activation of Matrix Metalloproteinases, organism-specific biosystem; Alpha-defensins, organism-specific biosystem; Defensins, organism-specific biosystem; Degradation of the extracellular matrix, organism-specific biosystem; Extracellular matrix organization, organism-specific biosystem; Immune System, organism-specific biosystem; Influenza A, organism-specific biosystem; Alpha-defensins, organism-specific biosystem; Defensins, organism-specific biosystem; Immune System, organism-specific biosystem; Influenza A, organism-specific biosystem; Influenza A, conserved biosystem; Innate Immune System, organism-specific biosystem; Neuroactive ligand-receptor interaction, organism-specific biosystem

Function

metal ion binding; peptidase activity; serine-type endopeptidase activity; calcium

Function	metal ion binding; peptidase activity; serine-type endopeptidase activity; calcium ion binding; peptidase activity; protein binding; serine-type endopeptidase activity; serine-type peptidase 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	2-8°C