Creative Enzymes®

Trypsin from Porcine, Recombinant

Cat. No. NATE-1148

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 can be used to re-suspend cells adherent to the cell culture dish wall during the process of harvesting cells. Trypsin can also be used to dissociate dissected cells (for example, prior to cell fixing and sorting). Trypsin is commonly used in biological research during proteomics experiments to digest proteins into peptides for mass spectrometry analysis, e.g. in-gel digestion. Trypsin is particularly suited for this, since it has a very well defined specificity, asit hydrolyzes only the peptide bonds in which the carbonyl group is contributed either by an Arg or Lys residue. Trypsin can also be used to dissolve bloodclots in its microbial form and treat inflammation in its pancreatic form. During the industrial production of insulin, trypsin is necessary.
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

Source	Porcine
Appearance	Colorless aqueous solution
EC Number	EC 3.4.21.4
CAS No.	9002-07-7
Molecular Weight	24KDa (Determined by SDS-PAGE)
Purity	>90% (by SDS-PAGE)
Activity	120 Units/mg protein
Buffer	20mM NaAc，pH3.5
Unit Definition	One unit will produce an increase by 0.18 per min at 247nm, at pH8.1, at 25°C, using TAME assubstrate, Reaction volume = 3.0 mL (1 cm light path).

Storage and Shipping Information

Storage	4°C, store at -20°C/-80°C for long-term preservation，Avoid multiple freeze-thaw cycles.