

Methylation modified Trypsin from Porcine, Recombinant

Cat. No. NATE-1893

Lot. No. (See product label)

Introduction

Description

Trypsin specifically hydrolyzes peptide bonds at the carboxyl side of lysine and arginine residues. Recombinant trypsin is free of any other proteases activities, and TPCK is unnecessary and not contained. Unmodified trypsin is subject to auto-proteolysis, generating fragments that can interfere with protein sequencing or HPLC/MS peptides analysis. Sequencing grade modified trypsin is recombinant porcine trypsin modified by reductive methylation, rendering it resistant to proteolytic digestion.

Applications

Protein digests for peptide mapping applications or protein identification by peptide mass fingerprinting or MS/MS spectral matching. It is suitable for digestion reactions in-solution or in-gel.

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; Trypsin, methylation modified; Methylation modified Trypsin

Product Information

Species

Porcine

Source

E. coli

Form

Lyophilized

EC Number

EC 3.4.21.4

CAS No.

9002-07-7

Purity

> 95% by HPLC

Activity

>4500 USP units/mg protein

Unit Definition

One USP unit of trypsin activity will produce a Delta A253 of 0.003 per minute in a reaction volume of 3.0ml at pH7.6 and 25°C, with BAEE as a substrate (1cm light path).

Usage and Packaging

Preparation Instructions

1. Dilute recombinant modified trypsin with 50mM HAc if needed. When used, dilute it with 50mM NH₄HCO₃ or pH7.0-8.0 buffers directly. 1mM CaCl₂ is recommended to be contained in digestion buffer. The ratio to aimed protein is 1:20 to 1:100 (w/w), the optimum pH is pH 7.0-8.0. 2. When using this product, thaw it at room temperature, and mix gently before use. 3. No activity lost when freeze-thaw 5 cycles.

Storage and Shipping Information

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1. Sequencing Grade Modified Recombinant Trypsin lyophilized should be stored under 2°C-8°C in sealed container. It is stable within 24 months. After dissolved, it should be stored under -70°C, It is stable within 24 months. 2. Above 95% activity is remained after 5 times repeated freezing and thawing. 3. Above 90% activity is remained after kept under 4°C or 25°C for 24h. 4. A 0.05 mg/ml solution of sequencing grade modified recombinant trypsin in 50mM NH₄HCO₃ is retained above 95% after a 3 hours incubation at 37 °C . For long-term such as 20hours incubation, 1mM CaCl₂ is recommended to be contained.