

Native Flavobacterium sp. Proline specific endopeptidase

Cat. No. DIA-213

Lot. No. (See product label)

Introduction

Description

Prolyl endopeptidase (PE) also known as prolyl oligopeptidase or post-proline cleaving enzyme is an enzyme that in humans is encoded by the PREP gene.

Applications

This enzyme is useful for the determination of amino acid sequences of peptides and proteins containing proline residues.

Synonyms

EC 3.4.21.26; post-proline cleaving enzyme; proline-specific endopeptidase; post-proline endopeptidase; proline endopeptidase; endoprollylpeptidase; prolyl endopeptidase; prolyl oligopeptidase; PE

Product Information

Source

Flavobacterium sp.

Appearance

White amorphous powder, lyophilized

EC Number

EC 3.4.21.26

CAS No.

72162-84-6

Molecular Weight

approx. 78 kDa

Activity

Gradel 5.0U/mg-solid or more

Contaminants

Leucine aminopeptidase < $1.0 \times 10^{-1}\%$ Trypsin-like activity < $1.0 \times 10^{-1}\%$

Isoelectric point

9.1

pH Stability

5.5-8.5 (30°C, 15hr)

Optimum pH

6.5

Thermal stability

below 40°C (pH 7.0, 10 min)

Optimum temperature

37°C (40°C)

Michaelis Constant

2.5×10^{-5} M (Z-Gly-Pro-MCA), 1.4×10^{-4} M (Z-Gly-Pro-2NNap)

Structure

Monomer

Specificity

Y-Pro(Ala)-X (Y, peptide or N-protected amino acid; X, amino acid, peptide, amide, or ester)

Inhibitors

DFP, 3, 4-dichloroisocoumarin, Z-Gly-Pro-CH₂Cl

Storage and Shipping Information

Stability

Stable at -20°C