

Native *Streptomyces griseus* Aminopeptidase I

Cat. No. NATE-0070

Lot. No. (See product label)

Introduction

Description

Aminopeptidase I from *S. griseus* has a fairly broad specificity, being able to remove the N-terminal residue of most proteins, except where the penultimate residue is an imino acid. It contains two Zn²⁺ binding sites. Aminopeptidase I from *S. griseus* is inhibited by 1,10-phenanthroline and is activated six-fold by Ca²⁺, which also stabilizes it against heat inactivation. This monomeric zinc metalloprotein has an isoelectric point (pI) of 5.4.

Applications

Aminopeptidase I from *Streptomyces griseus* may be used as a reagent for the analysis of protein structure and as a model for studies of proteolytic enzyme activation by calcium ions. It may be used as a reagent in the assay of endoprotease activities with a synthetic substrate in a two-stage assay. The lyophilized powder also contains calcium acetate.

Synonyms

aminopeptidase III; aminopeptidase yscl; leucine aminopeptidase IV; yeast aminopeptidase I; EC 3.4.11.22; 9031-94-1; Aminopeptidase I

Product Information

Source

Streptomyces griseus

Form

lyophilized powder. Contains calcium acetate

EC Number

EC 3.4.11.22

CAS No.

9031-94-1

Activity

> 200 units/mg protein

Isoelectric point

5.4

Unit Definition

One unit will hydrolyze 1.0 µmole of L-leucine-p-nitroanilide to L-leucine and p-nitroaniline per min at pH 8.0, 25°C and 3.0 mM substrate concentration.

Storage and Shipping Information

Storage

–20°C