Creative Enzymes®

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 yscI; 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