Creative Enzymes®

Native Bovine Carboxypeptidase A

Cat. No. NATE-0150

Lot. No. (See product label)

Introduction

Description	Carboxypeptidase as isolated from Bovine pancreas glands is a metalloenzyme that contains 1 g atom of zinc per mole of protein. It catalyzes the hydrolysis of the carboxyl-terminal peptide bond in peptides and proteins. It is primarily specific to aromatic and hydrophobic side chains such as phenylalanine, tryptophan or leucine. The enzyme also exhibits esterase activity. It is inhibited by beta-phenylpropionate and indole acetate.
Applications	Carboxypeptidase A from bovine pancreas has been used in a study to investigate the expression of a soluble and activatable form of bovine procarboxypeptidase A in Escherichia coli. Carboxypeptidase A from bovine pancreas has also been used in a study to investigate the isolation and partial characterization of precursor forms of ostrich carboxypeptidase. The enzyme from Creative Enzymes has been used as a comparison to study the specificity of Metarhizium anisopliae carboxypeptidase A (MeCPA). MeCPA had been genetically engineered to facilitate the removal of polyhistidine tags from the C-termini of recombinant proteins. It has also been used to de-tyrosinate α-tubulin, in vitro, in order to induce high affinity to ethyl-N-phenylcarbamate (EPC) sepharose.
Synonyms	EC 3.4.17.1; CPA1; CPA; carboxypeptidase A1; pancreatic procarboxypeptidase A; 11075-17-5; Carboxypolypeptidase; Peptidyl-L-amino-acid hydrolase; carboxypeptidase A; carboxypolypeptidase; pancreatic carboxypeptidase A; tissue carboxypeptidase A

Product Information

Species	Bovine
Source	Bovine pancreas
Form	aqueous suspension.
EC Number	EC 3.4.17.1
CAS No.	11075-17-5
Molecular Weight	mol wt ~35 kDa
Activity	> 50 units/mg protein
Pathway	Pancreatic secretion, organism-specific biosystem; Protein digestion and absorption, organism-specific biosystem; Protein digestion and absorption, conserved biosystem
Function	metallocarboxypeptidase activity; zinc ion binding
Unit Definition	One unit will hydrolyze 1.0 µmole of hippuryl-L-phenylalanine per min at pH 7.5 at 25°C.

Storage and Shipping Information

Storage	2-8°C