

## 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  $\alpha$ -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

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

### Storage and Shipping Information

**Storage** 2-8°C