Creative Enzymes®

Carboxypeptidase-B rat, Recombinant

Cat. No. NATE-0153

Lot. No. (See product label)

Introduction

Description	Carboxypeptidase B (or peptidyl-L-lysine (-L-arginine) hydrolase) catalyzes the hydrolysis of the basic amino acids, lysine, arginine, and ornithine from the C-terminal position of polypeptides. It has been shown to be a single polypeptide of 34 kDa Da. Trypsin is capable of converting native enzyme to the active enzyme, carboxypeptidase B II in vitro. The optimum pH is found to be 9.0. The enzyme may be used for sequence analysis by successive cleavage of C-terminal basic amino acids. It can also be used as a serum marker for the diagnosis of acute pancreatitis.
Applications	Carboxypeptidase B (EC 3.4.17.2, protaminase, pancreatic carboxypeptidase B, tissue carboxypeptidase B, peptidyl-L-lysine [L-arginine]hydrolase) is a carboxypeptidase that preferentially acts upon basic amino acids, such as arginine and lysine. This serum enzyme is also responsible for rapidly metabolizing the C5a protein into C5a des-Arg, with one less amino acid.
Synonyms	carboxypeptidase B; protaminase; CPB1; pancreatic carboxypeptidase B; tissue carboxypeptidase B; peptidyl-L-lysine [L-arginine]hydrolase; EC 3.4.17.2; 9025-24-5

Product Information

Species	Rat
Source	E. coli
Form	Lyophilized from 20 mM Tris, pH 8.0 + 50 mM NaCl.
EC Number	EC 3.4.17.2
CAS No.	9025-24-5
Activity	50-55 units/mg protein carboxypeptidase B
Pathway	Complement and Coagulation Cascades, organism-specific biosystem; Complement and coagulation cascades, conserved biosystem; Protein digestion and absorption, organism-specific biosystem
Function	carboxypeptidase activity; metallocarboxypeptidase activity; zinc ion binding

Storage and Shipping Information

Storage	−20°C