

Native Pseudomonas sp. Carboxypeptidase G

Cat. No. NATE-0102

Lot. No. (See product label)

Introduction

Description Carboxypeptidase G is a lysosomal, thiol-dependent protease, which progressively cleaves γ -glutamyl pteroyl poly- γ -glutamate yielding pteroyl- α -glutamate (folic acid) and free glutamate. It is considered highly specific for the γ -glutamyl bond, but not for the C-terminal amino acid of the leaving group.¹ Molecular mass of this homodimer is approximately 90 kDa. The enzyme is activated by Zn²⁺ ions.

Applications Carboxypeptidase G from Pseudomonas sp., or γ -Glutamyl hydrolase, has been used in a study to assess the role of the putidaredoxin COOH-terminus in P-450cam (cytochrome m) hydroxylations. Carboxypeptidase G from Pseudomonas sp. has also been used in a study to investigate the effects of nitric oxide on pemetrexed cytotoxicity via NO-cGMP signaling in lung adenocarcinoma cells.

Synonyms γ -Glutamyl hydrolase; EC 3.4.17.11; 9074-87-7; glutamate carboxypeptidase; carboxypeptidase G; carboxypeptidase G1; carboxypeptidase G2; glutamyl carboxypeptidase; N-pteroyl-L-glutamate hydrolase

Product Information

Source Pseudomonas sp.

Form lyophilized powder contains sodium acetate salt.

EC Number EC 3.4.17.11

CAS No. 9074-87-7

Activity > 3 units/mg protein

Composition Protein, ~70% biuret

Unit Definition One unit will hydrolyze 1.0 μ mole of L-glutamic acid from (+)amethopterin per min at pH 7.3 at 30°C.

Storage and Shipping Information

Storage -20°C