Creative Enzymes®

Native Crotalus durissus venom L-Amino Acid Oxidase

Cat. No. NATE-0368

Lot. No. (See product label)

Introduction

Description In enzymology, an L-amino acid oxidase (LAAO) (EC 1.4.3.2) is an enzyme that catalyzes the chemical reaction:an L-amino acid + H2O + O2↔ a 2-oxo acid + NH3 + H2O2. The enzyme was first described in 1944 by A. Zeller and A. Maritz. Not only are LAAOs quite variable in terms of molecular mass, they also vary widely regarding stability. In a similar vein, this enzyme performs in a myriad of biological activities including apoptosis-induction, edema-induction, hemorrhaging, and inhibition or induction of platelet aggregation.

Applications L-amino acid oxidase (LAAO) is used to convert L-amino acids to their corresponding α-keto acids. This product is from Crotalus durissus venom. L-amino acid oxidase, from Creative Enzymes, has been used in leucine aminopeptidase (LAP) activity assays

Synonyms L-amino acid oxidase; LAAO; L-AAO; EC 1.4.3.2; 9000-89-9; ophio-amino-acid oxidase; L-amino-acid:oxygen oxidoreductase (deaminating)

Product Information

Source Crotalus durissus venom

Form ammonium sulfate suspension; Suspension in 3.2 M (NH4)2SO4 pH approx. 6

EC Number EC 1.4.3.2

CAS No. 9000-89-9

Activity 3-8 units/mg protein

Unit Definition One unit will oxidatively deaminate 1.0 µmole of L-phenylalanine per min at pH 6.5 at 37°C. (L-Leucine is deaminated at the same rate at pH 7.8 at 37°C.)

Usage and Packaging

Package Package size based on protein content

Storage and Shipping Information

Storage 2-8°C