Creative Enzymes®

Native Crotalus atrox L-Amino Acid Oxidase

Cat. No. NATE-0367

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 is used to convert L-amino acids to their corresponding α-keto acids. This product is from Crotalus atrox. One unit will oxidatively deaminate 1.0 µmole of L-phenylalanine per min at pH 6.5 at 37°C. 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 atrox (Western Diamondback Rattlesnake)
Form	dried venom
EC Number	EC 1.4.3.2
CAS No.	9000-89-9
Activity	> 0.10 unit/mg solid
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.)

Storage and Shipping Information

Storage	−20°C