

## 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 + H<sub>2</sub>O + O<sub>2</sub> ⇌ a 2-oxo acid + NH<sub>3</sub> + H<sub>2</sub>O<sub>2</sub>. 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