

Native *Arthrobacter* sp. Tyramine Oxidase

Cat. No. DIA-158

Lot. No. (See product label)

Introduction

Description

Amine oxidases (AO) are enzymes that catalyze the oxidation of a wide range of biogenic amines including many neurotransmitters, histamine and xenobiotic amines. There are two classes of amine oxidases: flavin-containing (EC 1.4.3.4) and copper-containing (EC 1.4.3.6). Copper-containing AO act as a disulphide-linked homodimer. They catalyse the oxidation of primary amines to aldehydes, with the subsequent release of ammonia and hydrogen peroxide, which requires one copper ion per subunit and topaquinone as cofactor: $RCH_2NH_2 + H_2O + O_2 \leftrightarrow RCHO + NH_3 + H_2O_2$. The 3 substrates of this enzyme are primary amines (RCH_2NH_2), H_2O , and O_2 , whereas its 3 products are $RCHO$, NH_3 , and H_2O_2 .

Applications

Useful for enzymatic determination of leucine aminopeptidase

Synonyms

Tyramine Oxidase; TOD; EC 1.4.3.6

Product Information

Source

Arthrobacter sp.

Appearance

White to light brown powder

Form

Freeze dried powder

EC Number

EC 1.4.3.6

CAS No.

9001-53-0

Activity

> 3 U/mg

pH Stability

6.0-8.0 (37°C, 60 mins)

Optimum pH

7

Thermal stability

Stable at 45°C and below (pH 7.5, 5 mins)

Storage and Shipping Information

Storage

Store in tightly closed containers, desiccated, protected from light, at -20°C.