

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: $\text{RCH}_2\text{NH}_2 + \text{H}_2\text{O} + \text{O}_2 \leftrightarrow \text{RCHO} + \text{NH}_3 + \text{H}_2\text{O}_2$. 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.