

Native *Arthrobacter* sp. acyl-CoA oxidase

Cat. No. DIA-121

Lot. No. (See product label)

Introduction

Description

In enzymology, an acyl-CoA oxidase (EC 1.3.3.6) is an enzyme that catalyzes the chemical reaction $\text{acyl-CoA} + \text{O}_2 \rightleftharpoons \text{trans-2, 3-dehydroacyl-CoA} + \text{H}_2\text{O}_2$. Thus, the two substrates of this enzyme are acyl-CoA and O_2 , whereas its two products are trans-2, 3-dehydroacyl-CoA and H_2O_2 . This enzyme belongs to the family of oxidoreductases, specifically those acting on the CH-CH group of donor with oxygen as acceptor. This enzyme participates in 3 metabolic pathways: fatty acid metabolism, polyunsaturated fatty acid biosynthesis, and ppar signaling pathway. It employs one cofactor, FAD.

Synonyms

acyl-CoA oxidase; EC 1.3.3.6; fatty acyl-CoA oxidase; acyl coenzyme A oxidase; and fatty acyl-coenzyme A oxidase

Product Information

Source

Arthrobacter sp.

Form

Yellowish Freeze dried powder

EC Number

EC 1.3.3.6

CAS No.

61116-22-1

Activity

> 20 U/mg

Contaminants

Catalase < 1.00%; Glucose oxidase < 0.01%

pH Stability

6.0-7.5 (37°C, 60 mins)

Thermal stability

Stable at 40°C and below (pH 7.0, 10 mins)

Usage and Packaging

Preparation Instructions

Useful for enzymatic determination of fatty acid when coupled with Acyl-CoA synthetase

Storage and Shipping Information

Storage

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