Creative Enzymes®

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 acyl-CoA + O2↔ trans-2, 3-dehydroacyl-CoA + H2O2. Thus, the two substrates of this enzyme are acyl-CoA and O2, whereas its two products are trans-2, 3-dehydroacyl-CoA and H2O2. 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.