

## Acyl-CoA oxidase, Recombinant

Cat. No. DIA-292

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  $\text{O}_2$ , whereas its two products are trans-2, 3-dehydroacyl-CoA and  $\text{H}_2\text{O}_2$ . 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

#### Appearance

Yellow powder, lyophilized

#### EC Number

EC 1.3.3.6

#### CAS No.

61116-22-1

#### Molecular Weight

About 90KDa (SDS-PAGE detection)

#### Purity

90% (SDS-PAGE test)

#### Activity

more than 20u/mg solid

#### Unit Definition

One unit is defined as the amount of enzyme required to catalyze the oxidation of acetyl-CoA to 1  $\mu\text{mol}$  of  $\text{H}_2\text{O}_2$  per minute at pH 7.5 and 37°C.

### Storage and Shipping Information

#### Storage

4°C, store at -20°C for long-term preservation.