Creative Enzymes®

long-chain acyl-CoA dehydrogenase

Cat. No. EXWM-1415

Lot. No. (See product label)

Introduction

Description	Contains FAD as prosthetic group. One of several enzymes that catalyse the first step in fatty acids β-oxidation. The enzyme from pig liver can accept substrates with acyl chain lengths of 6 to at least 16 carbon atoms. The highest activity was found with C12, and the rates with C8 and C16 were 80 and 70%, respectively. The enzyme from rat can accept substrates with C8-C22. It is most active with C14 and C16, and has no activity with C4, C6 or C24. cf. EC 1.3.8.1, short-chain acyl-CoA dehydrogenase, EC 1.3.8.8, medium-chain acyl-CoA dehydrogenase, and EC 1.3.8.9, very-long-chain acyl-CoA dehydrogenase.
Synonyms	palmitoyl-CoA dehydrogenase; palmitoyl-coenzyme A dehydrogenase; long-chain acyl-coenzyme A dehydrogenase; long-chain-acyl-CoA:(acceptor) 2,3-oxidoreductase; ACADL (gene name).

Product Information

Form	Liquid or lyophilized powder
EC Number	EC 1.3.8.8
CAS No.	59536-74-2
Reaction	a long-chain acyl-CoA + electron-transfer flavoprotein = a long-chain trans-2,3-dehydroacyl-CoA + reduced electron-transfer flavoprotein
Notes	This item requires custom production and lead time is between 5-9 weeks. We can custom produce according to your specifications.

Storage and Shipping Information

Storage	Store it at +4 ℃ for short term. For long term storage, store it at -20 ℃~-80 ℃.