Creative Enzymes®

aldehyde oxygenase (deformylating)

Cat. No. EXWM-4937

Lot. No. (See product label)

Introduction

Description	Contains a diiron center. Involved in the biosynthesis of alkanes. The enzyme from the cyanobacterium Nostoc punctiforme PCC 73102 is only active in vitro in the presence of ferredoxin, ferredoxin reductase and NADPH, and produces mostly C15 and C17 alkanes. The enzyme from pea (Pisum sativum) produces alkanes of chain length C18 to C32 and is inhibited by metal-chelating agents. The substrate for this enzyme is formed by EC 1.2.1.80, acyl-[acyl-carrier protein] reductase.
Synonyms	decarbonylase; aldehyde decarbonylase; octadecanal decarbonylase; octadecanal alkane-lyase

Product Information

Form	Liquid or lyophilized powder
EC Number	EC 4.1.99.5
CAS No.	94185-90-7
Reaction	a long-chain aldehyde + O2 + 2 NADPH + 2 H+ = an alkane + formate + H2O + 2 NADP+
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 ℃.