

## 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 + O<sub>2</sub> + 2 NADPH + 2 H<sup>+</sup> = an alkane + formate + H<sub>2</sub>O + 2 NADP<sup>+</sup>

**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 °C for short term. For long term storage, store it at -20 °C~-80 °C.