

## stearoyl-[acyl-carrier-protein] 9-desaturase

Cat. No. EXWM-0982

Lot. No. (See product label)

### Introduction

#### Description

The enzyme is found in the lumen of plastids, where de novo biosynthesis of fatty acids occurs, and acts on freshly synthesized saturated fatty acids that are still linked to acyl-carrier protein. The enzyme determines the position of the double bond by its distance from the carboxylic acid end of the fatty acid. It also acts on palmitoyl-[acyl-carrier-protein].

#### Synonyms

stearyl acyl carrier protein desaturase; stearyl-ACP desaturase; acyl-[acyl-carrier-protein] desaturase; acyl-[acyl-carrier protein],hydrogen-donor:oxygen oxidoreductase

### Product Information

#### Form

Liquid or lyophilized powder

#### EC Number

EC 1.14.19.2

#### CAS No.

37256-86-3

#### Reaction

stearoyl-[acyl-carrier protein] + 2 reduced ferredoxin [iron-sulfur] cluster + O<sub>2</sub> + 2 H<sup>+</sup> = oleoyl-[acyl-carrier protein] + 2 oxidized ferredoxin [iron-sulfur] cluster + 2 H<sub>2</sub>O

#### 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.