

## 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**  $\text{stearoyl-[acyl-carrier protein]} + 2 \text{ reduced ferredoxin [iron-sulfur] cluster} + \text{O}_2 + 2 \text{ H}^+ = \text{oleoyl-[acyl-carrier protein]} + 2 \text{ oxidized ferredoxin [iron-sulfur] cluster} + 2 \text{ H}_2\text{O}$

**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.