

## trans-2-decenoyl-[acyl-carrier protein] isomerase

Cat. No. EXWM-5494

Lot. No. (See product label)

### Introduction

**Description** While the enzyme from *Escherichia coli* is highly specific for the 10-carbon enoyl-ACP, the enzyme from *Streptococcus pneumoniae* can also use the 12-carbon enoyl-ACP as substrate in vitro but not 14- or 16-carbon enoyl-ACPs. ACP can be replaced by either CoA or N-acetylcysteamine thioesters. The cis-3-enoyl product is required to form unsaturated fatty acids, such as palmitoleic acid and cis-vaccenic acid, in dissociated (or type II) fatty-acid biosynthesis.

**Synonyms**  $\beta$ -hydroxydecanoyl thioester dehydrase; trans-2-cis-3-decenoyl-ACP isomerase; trans-2,cis-3-decenoyl-ACP isomerase; trans-2-decenoyl-ACP isomerase; FabM; decenoyl-[acyl-carrier-protein]  $\Delta^2$ -trans- $\Delta^3$ -cis-isomerase

### Product Information

**Form** Liquid or lyophilized powder

**EC Number** EC 5.3.3.14

**CAS No.** 9030-80-2

**Reaction** a trans-dec-2-enoyl-[acyl-carrier protein] = a cis-dec-3-enoyl-[acyl-carrier protein]

**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.