

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

β-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] Δ2-trans-Δ3-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.