

(+)-endo- β -bergamotene synthase [(2Z,6Z)-farnesyl diphosphate cyclizing]

Cat. No. EXWM-5213

Lot. No. (See product label)

Introduction

Description

The enzyme synthesizes a mixture of sesquiterpenoids from (2Z,6Z)-farnesyl diphosphate. Following dephosphorylation of (2Z,6Z)-farnesyl diphosphate, the (2Z,6Z)-farnesyl carbocation is converted to either the (6R)- or the (6S)-bisabolyl cations depending on the stereochemistry of the 6,1 closure. The (6R)-bisabolyl cation will then lead to the formation of (+)- α -santalene (see EC 4.2.3.50), while the (6S)-bisabolyl cation will give rise to (-)-endo- α -bergamotene (see EC 4.2.3.54), as well as (+)-endo- β -bergamotene. Small amounts of (-)-epi- β -santalene are also formed from the (6R)-bisabolyl cation and small amounts of (-)-exo- α -bergamotene are formed from the (6S)-bisabolyl cation.

Synonyms

SBS (ambiguous)

Product Information

Form

Liquid or lyophilized powder

EC Number

EC 4.2.3.53

Reaction

(2Z,6Z)-farnesyl diphosphate = (+)-endo- β -bergamotene + diphosphate

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.