Creative Enzymes®

(+)-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 ℃ for short term. For long term storage, store it at -20 ℃~-80 ℃.