

## (+)-endo- $\beta$ -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 (+)- $\alpha$ -santalene (see EC 4.2.3.50), while the (6S)-bisabolyl cation will give rise to (-)-endo- $\alpha$ -bergamotene (see EC 4.2.3.54), as well as (+)-endo- $\beta$ -bergamotene. Small amounts of (-)-epi- $\beta$ -santalene are also formed from the (6R)-bisabolyl cation and small amounts of (-)-exo- $\alpha$ -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- $\beta$ -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.