

## $\alpha$ -bisabolene synthase

Cat. No. EXWM-5196

Lot. No. (See product label)

### Introduction

**Description** This cytosolic sesquiterpenoid synthase requires a divalent cation cofactor ( $Mg^{2+}$  or, to a lesser extent,  $Mn^{2+}$ ) to neutralize the negative charge of the diphosphate leaving group. While unlikely to encounter geranyl diphosphate (GDP) in vivo as it is localized to plastids, the enzyme can use GDP as a substrate in vitro to produce (+)-(4R)-limonene [cf. EC 4.2.3.20, (R)-limonene synthase]. The enzyme is induced as part of a defense mechanism in the grand fir *Abies grandis* as a response to stem wounding.

**Synonyms** bisabolene synthase

### Product Information

**Form** Liquid or lyophilized powder

**EC Number** EC 4.2.3.38

**Reaction** (2E,6E)-farnesyl diphosphate = (E)- $\alpha$ -bisabolene + 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.