

## (+)- $\alpha$ -pinene synthase

Cat. No. EXWM-5134

Lot. No. (See product label)

### Introduction

#### Description

Cyclase I of *Salvia officinalis* (sage) gives about equal parts (+)- $\alpha$ -pinene and (+)-camphene, whereas cyclase III gives about equal parts of (+)- $\alpha$ -pinene and (+)- $\beta$ -pinene. (3R)-Linalyl diphosphate can also be used by the enzyme in preference to (3S)-linalyl diphosphate. The 4-pro-R-hydrogen of geranyl diphosphate is lost. Requires  $Mg^{2+}$  (preferred to  $Mn^{2+}$ ). With synthase II of *Pinus taeda* (loblolly pine) (+)- $\alpha$ -pinene was the only product. Requires  $Mn^{2+}$  (preferred to  $Mg^{2+}$ ). See also EC 4.2.3.122, (+)- $\beta$ -pinene synthase, and EC 4.2.3.116, (+)-camphene synthase.

#### Synonyms

(+)- $\alpha$ -pinene cyclase; cyclase I

### Product Information

#### Form

Liquid or lyophilized powder

#### EC Number

EC 4.2.3.121

#### Reaction

geranyl diphosphate = (+)- $\alpha$ -pinene + 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.