

## (+)-α-santalene synthase [(2Z,6Z)-farnesyl diphosphate cyclizing]

Cat. No. EXWM-5210 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 (EC 4.2.3.50), while the (6S)-bisabolyl cation will give rise to (+)-endo- $\beta$ -bergamotene (see EC 4.2.3.53) as well as (-)-endo- $\alpha$ -bergamotene (see EC 4.2.3.54). 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.
Product Information	
Form	Liquid or lyophilized powder
EC Number	EC 4.2.3.50
Reaction	$(2Z, 6Z)$ -farnesyl diphosphate = $(+)$ - $\alpha$ -santalene + 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.