Creative Enzymes®

germacradienol synthase

Cat. No. EXWM-5179

Lot. No. (See product label)

Introduction

Description	Requires Mg2+ for activity. H-1si of farnesyl diphosphate is lost in the formation of (1E,4S,5E,7R)-germacra-1(10),5-dien-11-ol. Formation of (-)-germacrene D involves a stereospecific 1,3-hydride shift of H-1si of farnesyl diphosphate. Both products are formed from a common intermediate. Other enzymes produce germacrene D as the sole product using a different mechanism. The enzyme mediates a key step in the biosynthesis of geosmin (see EC 4.1.99.16 geosmin synthase), a widely occurring metabolite of many streptomycetes, bacteria and fungi. Also catalyses the reaction of EC 4.2.3.75, (-)-germacrene D synthase.
Synonyms	germacradienol/germacrene-D synthase; 2-trans,6-trans-farnesyl-diphosphate diphosphate-lyase [(1E,4S,5E,7R)-germacra-1(10),5-dien-11-ol-forming]

Product Information

Form	Liquid or lyophilized powder
EC Number	EC 4.2.3.22
CAS No.	211049-88-6
Reaction	(2E,6E)-farnesyl diphosphate + H2O = (1E,4S,5E,7R)-germacra-1(10),5-dien-11-ol + 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 ℃.