

(E,E)-geranyllinalool synthase (GES), Recombinant Protein

Cat RP00368

Species

Arabidopsis thaliana (Mouse-ear cress)

Full Product Name

Recombinant Arabidopsis thaliana (E,E)-geranyllinalool synthase (GES) , partial

Product Gene Name

GES recombinant protein

Product Synonym Gene Name

GES

Purity

Greater or equal to 85% purity as determined by SDS-PAGE. (lot specific)

Format

Lyophilized or liquid (Format to be determined during the manufacturing process)

Host

E Coli or Yeast or Baculovirus or Mammalian Cell

Molecular Weight

101,895 Da

Storage

Store at -20°C. For long-term storage, store at -20°C or -80°C. Store working aliquots at 4°C for up to one week. Repeated freezing and thawing is not recommended.

Protein Family

(E,E)-geranyllinalool synthase

NCBI Accession

NP_564772.1

NCBI GI

18407028

NCBI GenBank Nucleotide

NM_104793.3

NCBI GeneID

842405

NCBI Official Full Name

terpene synthase 04

NCBI Official Symbol

TPS04

NCBI Official Synonym Symbols

FOR RESEARCH OR FURTHER MANUFACTURING USE ONLY

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F11P17.15; F11P17_15; GERANYLLINALOOL SYNTHASE; GES; terpene synthase 04; TERPENE SYNTHASE 4; TPS4

NCBI Protein Information

terpene synthase 04

NCBI Summary

Encodes a geranyllinalool synthase that produces a precursor to TMTT, a volatile plant defense C16-homoterpene. GES transcript levels rise in response to alamethicin, a fungal peptide mixture that damages membranes. This transcriptional response is blocked in JA biosynthetic and JA signaling mutants, but GES transcript levels still rise in response to alamethicin in mutants with salicylic acid and ethylene biosynthetic and/or signaling defects. GES transcripts also accumulate in response to a larval infestation. This enzyme does not localize to the plastids, and it may be present in the cytosol or endoplasmic reticulum.

UniProt Gene Name

GES

UniProt Synonym Gene Names

LIS; TPS04; AtTPS04

UniProt Protein Name

(E,E)-geranyllinalool synthase

UniProt Synonym Protein Names

Terpenoid synthase 4; AtTPS04

UniProt Primary Accession

Q93YV0

UniProt Secondary Accession

O22733; Q84UU3

UniProt Related Accession

Q93YV0

UniProt Comments

Involved in diterpene (C20) biosynthesis. Catalyzes the conversion of geranylgeranyl diphosphate to (E,E)-geranyllinalool, the precursor of the insect-induced volatile C16-homoterpene TMTT.

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