

Alpha-barbatene synthase (BS), Recombinant Protein

Cat *RP00081*

Species

Arabidopsis thaliana (Mouse-ear cress)

Full Product Name

Recombinant *Arabidopsis thaliana* Alpha-barbatene synthase (BS) , partial

Product Gene Name

BS recombinant protein

Product Synonym Gene Name

BS

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

64,909 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

Alpha-barbatene synthase

NCBI Accession

NP_199276.1

NCBI GI

15241542

NCBI GenBank Nucleotide

NM_123830.3

NCBI GeneID

834491

NCBI Official Full Name

Terpenoid cyclases/Protein prenyltransferases superfamily protein

NCBI Official Symbol

AT5G44630

NCBI Official Synonym Symbols

FOR RESEARCH OR FURTHER MANUFACTURING USE ONLY

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K15C23.7; K15C23_7

NCBI Protein Information

Terpenoid cyclases/Protein prenyltransferases superfamily protein

NCBI Summary

Encodes a sesquiterpene synthase involved in generating all of the group B sesquiterpenes found in the Arabidopsis floral volatile blend. Strongly expressed in intrafloral nectaries.

UniProt Gene Name

BS

UniProt Synonym Gene Names

TPS11; AtBS; AtTPS11

UniProt Protein Name

Alpha-barbatene synthase

UniProt Synonym Protein Names

Beta-chamigrene synthase (EC:4.2.3.78); Terpeneoid synthase 11; AtTPS11; Thujopsene synthase (EC:4.2.3.79)

UniProt Primary Accession

Q4KSH9

UniProt Secondary Accession

Q9LU03; A3KPF7

UniProt Related Accession

Q4KSH9

UniProt Comments

Involved in the biosynthesis of over 15 sesquiterpenes (C15). The major products are (+)-alpha-barbatene (27.3%), (+)-thujopsene (17.8%) and (+)-beta-chamigrene (9.9%). Can use farnesyl diphosphate or geranyl diphosphate as substrates, but not geranylgeranyl diphosphate.

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