

# (S)-beta-macrocarpene synthase (TPS6), Recombinant Protein

Cat RP10432

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## Species

Zea mays (Maize)

## Full Product Name

Recombinant Zea mays (S)-beta-macrocarpene synthase (TPS6), partial

## Product Gene Name

TPS6 recombinant protein

## Product Synonym Gene Name

TPS6

## 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

63,731 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

Probable terpene synthase

## NCBI Accession #

NP\_001105674.1

## NCBI GI #

162458090

## NCBI GenBank Nucleotide #

NM\_001112204.1

## NCBI GeneID

542688

## NCBI Official Full Name

(S)-beta-macrocarpene synthase

## NCBI Official Symbol

tps6

## NCBI Official Synonym Symbols

**FOR RESEARCH OR FURTHER MANUFACTURING USE ONLY**

# (S)-beta-macrocarpene synthase (TPS6), Recombinant Protein

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GRMZM2G127087

## NCBI Protein Information

(S)-beta-macrocarpene synthase

## UniProt Gene Name

TPS6

## UniProt Synonym Gene Names

UMI2

## UniProt Protein Name

(S)-beta-macrocarpene synthase

## UniProt Synonym Protein Names

Terpene synthase 6

## UniProt Primary Accession #

Q5GJ60

## UniProt Secondary Accession #

Q4L0R7

## UniProt Related Accession #

Q5GJ60

## UniProt Comments

Involved in the biosynthesis of the bicyclic sesquiterpene (S)-beta-macrocarpene. Can use both geranyl diphosphate and farnesyl diphosphate as substrate, but not geranylgeranyl diphosphate. Produces mainly (S)-beta-macrocarpene, but also smaller amounts of beta-bisabolene and (E)-beta-farnesene when used with farnesyl diphosphate as substrate. In the presence of geranyl diphosphate, produces the acyclic monoterpenes beta-myrcene and linalool along with minor amounts of the cyclic compounds limonene, alpha-thujene, sabinene and alpha-terpinolene. May be involved in plant defense.

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