

2-isopropylmalate synthase 1, chloroplastic (IPMS1), Recombinant Protein

Cat *RP04794*

Species

Arabidopsis thaliana (Mouse-ear cress)

Full Product Name

Recombinant *Arabidopsis thaliana* 2-isopropylmalate synthase 1, chloroplastic (IPMS1) , partial

Product Gene Name

IPMS1 recombinant protein

Product Synonym Gene Name

IPMS1

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

68,676 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.

NCBI Accession

NP_173285.2

NCBI GI

42562149

NCBI GenBank Nucleotide

NM_101708.3

NCBI GenID

838431

NCBI Official Full Name

methylthioalkylmalate synthase-like 4

NCBI Official Symbol

MAML-4

NCBI Official Synonym Symbols

F15H18.3; F15H18_3; IPMS1; ISOPROPYLMALATE SYNTHASE 1; methylthioalkylmalate synthase-like 4

FOR RESEARCH OR FURTHER MANUFACTURING USE ONLY

2-isopropylmalate synthase 1, chloroplastic (IPMS1), Recombinant Protein

Cat *RP04794*

NCBI Protein Information

methylthioalkylmalate synthase-like 4

NCBI Summary

Encodes an active Arabidopsis isopropylmalate synthase IPMS1. Involved in leucine biosynthesis. Do not participate in the chain elongation of glucosinolates. Expressed constitutively throughout the plant. Loss of IPMS1 can be compensated by a second isopropylmalate synthase gene IPMS2 (At1g74040).

UniProt Gene Name

IPMS1

UniProt Synonym Gene Names

MAML-4

UniProt Protein Name

2-isopropylmalate synthase 1, chloroplastic

UniProt Synonym Protein Names

Methylthioalkylmalate synthase-like 4

UniProt Primary Accession

Q9LPR4

UniProt Related Accession

Q9LPR4

UniProt Comments

Catalyzes the condensation of the acetyl group of acetyl-CoA with 3-methyl-2-oxobutanoate (2-oxoisovalerate) to form 3-carboxy-3-hydroxy-4-methylpentanoate (2-isopropylmalate). Involved in Leu biosynthesis, but do not participate in the chain elongation of glucosinolates.

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