

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 GenelID

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.

FOR RESEARCH OR FURTHER MANUFACTURING USE ONLY