

Monogalactosyldiacylglycerol synthase 2, chloroplastic (MGD2), Recombinant Protein

Cat *RP01812*

Species

Arabidopsis thaliana (Mouse-ear cress)

Full Product Name

Recombinant *Arabidopsis thaliana* Monogalactosyldiacylglycerol synthase 2, chloroplastic (MGD2), partial

Product Gene Name

MGD2 recombinant protein

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

52,727 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

Monogalactosyldiacylglycerol synthase

NCBI Accession

NP_568394.2

NCBI GI

30687800

NCBI GenBank Nucleotide

NM_122048.4

NCBI GeneID

832163

NCBI Official Full Name

monogalactosyldiacylglycerol synthase 2

NCBI Official Symbol

MGD2

NCBI Official Synonym Symbols

ARABIDOPSIS THALIANA MONOGALACTOSYLDIACYLGLYCEROL SYNTHASE 2; ATMGD2; F5O24.300;

FOR RESEARCH OR FURTHER MANUFACTURING USE ONLY

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F5O24_300; monogalactosyldiacylglycerol synthase 2

NCBI Protein Information

monogalactosyldiacylglycerol synthase 2

NCBI Summary

Encodes a type B monogalactosyldiacylglycerol (MGDG) synthase. Strongly induced by phosphate deprivation, and in non-photosynthetic tissues. Does not contribute to galactolipid synthesis under Pi-sufficient conditions but does under Pi starvation.

UniProt Gene Name

MGD2

UniProt Synonym Gene Names

MGDB; AtMGD2

UniProt Protein Name

Monogalactosyldiacylglycerol synthase 2, chloroplastic

UniProt Synonym Protein Names

MGDG synthase type B

UniProt Primary Accession

O82730

UniProt Secondary Accession

Q94JU8; W8Q2S4

UniProt Related Accession

O82730

UniProt Comments

Involved in the synthesis of the major structural component of photosynthetic membranes and in the chloroplast envelope biogenesis. Can use both prokaryotic (18:1/16:0) or eukaryotic (18:2/18:2) 1,2-diacylglycerol species, but operates with some preference for the eukaryotic one.

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