

Digalactosyldiacylglycerol synthase 1, chloroplastic (DGD1), Recombinant Protein

Cat *RP02070*

Species

Arabidopsis thaliana (Mouse-ear cress)

Full Product Name

Recombinant *Arabidopsis thaliana* Digalactosyldiacylglycerol synthase 1, chloroplastic (DGD1) , partial

Product Gene Name

DGD1 recombinant protein

Product Synonym Gene Name

DGD1

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

72,727 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

Digalactosyldiacylglycerol synthase

NCBI Accession

NP_187773.1

NCBI GI

15229824

NCBI GenBank Nucleotide

NM_111999.4

NCBI GeneID

820339

NCBI Official Full Name

UDP-Glycosyltransferase superfamily protein

NCBI Official Symbol

DGD1

FOR RESEARCH OR FURTHER MANUFACTURING USE ONLY

Digalactosyldiacylglycerol synthase 1, chloroplastic (DGD1), Recombinant Protein

Cat *RP02070*

NCBI Official Synonym Symbols

DIGALACTOSYL DIACYLGLYCEROL DEFICIENT 1; DIGALACTOSYLDIACYLGLYCEROL SYNTHASE 1

NCBI Protein Information

UDP-Glycosyltransferase superfamily protein

NCBI Summary

Responsible for the final assembly of galactolipids in photosynthetic membranes. Provides stability to the PS I core complex (e.g. subunits PsaD, PsaE).

UniProt Gene Name

DGD1

UniProt Protein Name

Digalactosyldiacylglycerol synthase 1, chloroplastic

UniProt Primary Accession

Q9S7D1

UniProt Secondary Accession

Q3EB81; W8PUU5

UniProt Related Accession

Q9S7D1

UniProt Comments

Involved in the synthesis of diacylglycerol galactolipids that are specifically found in thylakoid membranes. Specific for alpha-glycosidic linkages (PubMed:10381884, PubMed:14600212). Responsible for the final assembly of galactolipids in photosynthetic membranes. Digalactosyldiacylglycerol (DGDG) provides stability to the photosystem I (PSI) complex, especially to the PsaA, PsaB, PsaC, PsaL and PsaH subunits (PubMed:15961080, PubMed:16854937).

FOR RESEARCH OR FURTHER MANUFACTURING USE ONLY