

Delta (24)-sterol reductase (DIM), Recombinant Protein

Cat *RP00372*

Species

Arabidopsis thaliana (Mouse-ear cress)

Full Product Name

Recombinant *Arabidopsis thaliana* Delta (24)-sterol reductase (DIM) , partial

Product Gene Name

DIM recombinant protein

Product Synonym Gene Name

DIM

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

65,394 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_001319595.1

NCBI GI

1063712578

NCBI GenBank Nucleotide

NM_001338420.1

NCBI GeneID

821519

NCBI Official Full Name

cell elongation protein / DWARF1 / DIMINUTO (DIM)

NCBI Official Symbol

DWF1

NCBI Official Synonym Symbols

CABBAGE 1; CBB1; DIM; DIM1; DIMINUTIA; DIMINUTO 1; DWARF 1; ENHANCED VERY-LOW-FLUENCE RESPONSES 1; EVE1

FOR RESEARCH OR FURTHER MANUFACTURING USE ONLY

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NCBI Protein Information

cell elongation protein / DWARF1 / DIMINUTO (DIM)

NCBI Summary

Involved in the conversion of the early brassinosteroid precursor 24-methylenecholesterol to campesterol. Brassinosteroids affect cellular elongation. Mutants have dwarf phenotype. DWF1 is a Ca²⁺-dependent calmodulin-binding protein.

UniProt Gene Name

DIM

UniProt Synonym Gene Names

CBB1; DWF1; EVE1

UniProt Protein Name

Delta(24)-sterol reductase

UniProt Synonym Protein Names

Cell elongation protein DIMINUTO; Cell elongation protein Dwarf1; Protein CABBAGE1; Protein ENHANCED VERY-LOW-FLUENCE RESPONSE 1

UniProt Primary Accession

Q39085

UniProt Secondary Accession

Q0WWL4; Q38808; Q8RXF4

UniProt Related Accession

Q39085

UniProt Comments

Plays a critical role in the general process of plant cell elongation. Involved in the synthesis of campesterol, an early precursor of brassinolide. Required for the conversion of 24-methylenecholesterol to campesterol and for the conversion of isofucosterol to sitosterol. Necessary for both the isomerization and reduction of 24-methylenecholesterol. Regulate indirectly phytochrome-mediated light responses through the modulation of brassinosteroid biosynthesis.

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