

Protein MOTHER of FT and TF 1 (MFT), Recombinant Protein

Cat RP00390

Size 0.02 mg (E-Coli)/ 0.1 mg (E-Coli)/ 0.02 mg (Yeast)/ 0.1 mg (Yeast)/ 0.02 mg (Baculovirus)/ 0.02 mg (Mammalian-Cell)/ 1

mg (E-Coli)/ 0.1 mg (Baculovirus)/ 1 mg (Yeast)/ 0.1 mg (Mammalian-Cell)/ 1 mg (Baculovirus)/ 0.5 mg (Mammalian-Cell)
Species Arabidopsis thaliana (Mouse-ear cress)

Full Product Name

Recombinant Arabidopsis thaliana Protein MOTHER of FT and TF 1 (MFT)

Product Gene Name

MFT recombinant protein

Product Synonym Gene Name

MFT

Purity

Greater or equal to 85% purity as determined by SDS-PAGE. (lot specific)

Sequence

MAASVDPLVV GRVIGDVLDM FIPTANMSVY FGPKHITNGC EIKPSTAVNP PKVNISGHSD ELYTLVMTDP
DAPSPSEPNM REWWHWIVVD IPGGTNPSRG KEILPYMEPR PPVGIHRYIL VLFRQNSPVG LMVQQPPSRA
NFSTRMFAGH FDLGLPVATV YFNAQKEPAS RRR

Sequence Positions

1-173, Full length protein

Format

Lyophilized or liquid (Format to be determined during the manufacturing process)

Host

E Coli or Yeast or Baculovirus or Mammalian Cell

Molecular Weight

19,134 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

Protein MOTHER of FT and TFL1

NCBI Accession

NP_173250.1

NCBI GI

15220972

NCBI GenBank Nucleotide

NM_101672.4

NCBI GeneID

838390

FOR RESEARCH OR FURTHER MANUFACTURING USE ONLY

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mg (E-Coli)/ 0.1 mg (Baculovirus)/ 1 mg (Yeast)/ 0.1 mg (Mammalian-Cell)/ 1 mg (Baculovirus)/ 0.5 mg (Mammalian-Cell)
NCBI Official Full Name
PEBP (phosphatidylethanolamine-binding protein) family protein

NCBI Official Symbol

E12A11

NCBI Official Synonym Symbols

MFT; MOTHER OF FT AND TFL1; T10F20.11

NCBI Protein Information

PEBP (phosphatidylethanolamine-binding protein) family protein

NCBI Summary

Encodes a member of the FT and TFL1 family of phosphatidylethanolamine-binding proteins. It is expressed in seeds and up-regulated in response to ABA. Loss of function mutants show decreased rate of germination in the presence of ABA. ABA dependent regulation is mediated by both ABI3 and ABI5. ABI5 promotes MFT expression, primarily in the radicle-hypocotyl transition zone and ABI3 suppresses it in the seed.

UniProt Gene Name

MFT

UniProt Protein Name

Protein MOTHER of FT and TFL1

UniProt Primary Accession

Q9XFK7

UniProt Related Accession

Q9XFK7

UniProt Comments

May form complexes with phosphorylated ligands by interfering with kinases and their effectors . Regulates seed germination via the abscisic acid (ABA) and gibberellic acid (GA) signaling pathways. During seed germination, MFT expression is directly repressed by ABI3 or promoted by ABI5 in the ABA signaling pathway. Involved in a negative feedback regulation of ABA signaling. Promotes embryo growth by direct repression of ABI5. In the GA signaling pathway, MFT expression is promoted by the DELLA protein RGL2 during seed germination (PubMed:20551347). May regulate seed germination and fertility through the brassinosteroid (BR) signaling pathway (PubMed:20935478).

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