

# Protein TWIN SISTER of FT (TSF), Recombinant Protein

Cat RP00519

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-  
Arabidopsis thaliana (Mouse-ear cress)  
Cell)

## Full Product Name

Recombinant Arabidopsis thaliana Protein TWIN SISTER of FT (TSF)

## Product Gene Name

TSF recombinant protein

## Product Synonym Gene Name

TSF

## Purity

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

## Sequence

MSLSRRDPLV VGSVVGDVLD PFTRLVSLKV TYGHREVTNG LDLRPSQVLN KPIVEIGGDD FRNFYTLVMV  
DPDVPSPSNP HQREYLHWLV TDIPATTGNA FGNEVVCYES PRPPSGIHRI VLVLFRLGR QTVYAPGWRQ  
QFNTREFAEI YNLGLPVAAS YFNCQRENGC GGRRT

## Sequence Positions

1-175, 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

19,688 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 TWIN SISTER of FT

## NCBI Accession #

NP\_193770.1

## NCBI GI #

15237061

## NCBI GenBank Nucleotide #

NM\_118156.2

## NCBI GeneID

827785

**FOR RESEARCH OR FURTHER MANUFACTURING USE ONLY**

# Protein TWIN SISTER of FT (TSF), Recombinant Protein

Cat RP00519

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)  
PEBP (phosphatidylethanolamine-binding protein) family protein

## NCBI Official Symbol

TSF

## NCBI Official Synonym Symbols

F9F13.20; F9F13\_20; TWIN SISTER OF FT

## NCBI Protein Information

PEBP (phosphatidylethanolamine-binding protein) family protein

## NCBI Summary

Encodes a floral inducer that is a homolog of FT. Plants overexpressing this gene flower earlier than Col. Loss-of-function mutations flower later in short days. TSF and FT play overlapping roles in the promotion of flowering, with FT playing the dominant role. TSF sequences show extensive variation in different accessions and may contribute to quantitative variation in flowering time in these accessions. TSF has a complex pattern of spatial expression; it is expressed mainly in phloem and expression is regulated by daylength and vernalization.

## UniProt Gene Name

TSF

## UniProt Protein Name

Protein TWIN SISTER of FT

## UniProt Synonym Protein Names

TFL1-like protein

## UniProt Primary Accession #

Q9S7R5

## UniProt Related Accession #

Q9S7R5

## UniProt Comments

May form complexes with phosphorylated ligands by interfering with kinases and their effectors.

**FOR RESEARCH OR FURTHER MANUFACTURING USE ONLY**