

CLAVATA3/ESR (CLE)-related protein 44 (CLE44), Recombinant Protein

Cat RP05049

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

Species (Mammalian-Cell)/ 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* CLAVATA3/ESR (CLE)-related protein 44 (CLE44)

Product Gene Name

CLE44 recombinant protein

Product Synonym Gene Name

CLE44

Purity

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

Sequence

MNHHLHESSS KNTMAPSKRF LLQPSTPSSS TMKMRPTAHP RRSGTSSSSA RKRRREFRAE AHEVPSGPNP
ISN

Sequence Positions

40-112, 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

12,522 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_567397.1

NCBI GI

18413947

NCBI GenBank Nucleotide

NM_117389.3

NCBI GenID

826934

NCBI Official Full Name

FOR RESEARCH OR FURTHER MANUFACTURING USE ONLY

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

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

NCBI Official Symbol
CLE44

NCBI Official Synonym Symbols

CLAVATA3/ESR-RELATED 44

NCBI Protein Information

CLAVATA3/ESR-RELATED 44

NCBI Summary

Belongs to a large gene family, called CLE for CLAVATA3/ESR-related, encoding small peptides with conserved carboxyl termini. The C-terminal 12 amino acid sequence of CLE44 is identical to that of a dodeca peptide (TDIF, tracheary element differentiation inhibitory factor) isolated from *Arabidopsis* and functions as a suppressor of plant stem cell differentiation. TDIF sequence is also identical to the C-terminal 12 amino acids of CLE41 (At3g24770). The protein is expressed in the vascular system and is involved in axillary bud formation.

UniProt Gene Name

CLE44

UniProt Synonym Gene Names

TDIF-like protein

UniProt Protein Name

CLAVATA3/ESR (CLE)-related protein 44

UniProt Synonym Protein Names

Tracheary element differentiation inhibitory factor-like protein; TDIF-like protein

UniProt Primary Accession

Q941C5

UniProt Secondary Accession

Q8LFN1

UniProt Related Accession

Q941C5

UniProt Comments

Extracellular signal peptide that regulates cell fate. May act with TDR as a ligand-receptor pair in a signal transduction pathway that represses tracheary element differentiation but promotes the formation of procambial cells adjacent to phloem cells in the veins.

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