

Agamous-like MADS-box protein AGL14 (AGL14), Recombinant Protein

Cat RP04445

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 Agamous-like MADS-box protein AGL14 (AGL14)

Product Gene Name

AGL14 recombinant protein

Product Synonym Gene Name

AGL14

Purity

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

Sequence

MVRGKTEMKR IENATSRQVT FSKRRNGLLK KAFELSVLCD AEVALIIFSP RGKLYEFSSS SSIPKTVRY
QKRIQDLGSN HKRNDNSQQS KDETYGLARK IEHLEISTRK MMGEGLDASS IEELQQLNQ LDRSLMKIRA
KKYQLLREET EKLKEKERNL IAENKMLMEK CEMQGRGIIG RISSSSSTSE LDIDDNEMEV VTDLFIGPPE
TRHFKKFPPS N

Sequence Positions

1-221, 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

25,492 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

Agamous-like MADS-box protein

NCBI Accession

NP_001319907.1

NCBI GI

1063721820

NCBI GenBank Nucleotide

NM_001340739.1

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 GeneID

826795

NCBI Official Full Name

AGAMOUS-like 14

NCBI Official Symbol

AGL14

NCBI Official Synonym Symbols

AGAMOUS-like 14; T26M18.90; T26M18_90; XAANTAL2; XAL2

NCBI Protein Information

AGAMOUS-like 14

NCBI Summary

AGL12, AGL14, and AGL17 are all preferentially expressed in root tissues and therefore represent the only characterized MADS box genes expressed in roots.

UniProt Gene Name

AGL14

UniProt Protein Name

Agamous-like MADS-box protein AGL14

UniProt Synonym Protein Names

Protein XAANTAL 2

UniProt Primary Accession

Q38838

UniProt Secondary Accession

Q0WKU9; Q9T056

UniProt Related Accession

Q38838

UniProt Comments

Transcriptional activator that regulates root development by controlling meristem size and patterning of the root apical meristem. Regulates auxin transport and gradients in the root meristematic cells via direct regulation of the auxin efflux carrier PIN1 and PIN4 gene expression. Binds specifically to the CArG-box DNA sequences in the promoter regions of PIN1 and PIN4 genes (PubMed:24121311). Involved in the regulation of shoot apical meristem (SAM) cell identities and transitions. Promotes flowering transition and participates in flower meristem maintenance and determinacy. Positively regulates TFL1 and WUS expression. Binds directly to the TFL1 regulatory sequences (PubMed:25636918).

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