

MLO-like protein 7 (MLO7), Recombinant Protein

Cat *RP03258*

Species

Arabidopsis thaliana (Mouse-ear cress)

Full Product Name

Recombinant *Arabidopsis thaliana* MLO-like protein 7 (MLO7) , partial

Product Gene Name

MLO7 recombinant protein

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

62,112 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

MLO-like protein

NCBI Accession

NP_179335.3

NCBI GI

42569102

NCBI GenBank Nucleotide

NM_127298.5

NCBI GeneID

816249

NCBI Official Full Name

Seven transmembrane MLO family protein

NCBI Official Symbol

MLO7

NCBI Official Synonym Symbols

ATMLO7; F5J6.19; F5J6_19; MILDEW RESISTANCE LOCUS O 7; NORTIA; NTA

NCBI Protein Information

FOR RESEARCH OR FURTHER MANUFACTURING USE ONLY

MLO-like protein 7 (MLO7), Recombinant Protein

Cat *RP03258*

Seven transmembrane MLO family protein

NCBI Summary

A member of a large family of seven-transmembrane domain proteins specific to plants, homologs of the barley mildew resistance locus o (MLO) protein. Controls pollen tube reception in synergids. The Arabidopsis genome contains 15 genes encoding MLO proteins, with localization in plasma membrane. Phylogenetic analysis revealed four clades of closely-related AtMLO genes. ATMLO7 belongs to the clade III, with AtMLO5, AtMLO8, AtMLO9, and AtMLO10. The gene is expressed in vegetative organs (RT-PCR experiments) and in pollen grains, as shown by GUS activity patterns. The expression of several phylogenetically closely-related AtMLO genes showed similar or overlapping tissue specificity and analogous responsiveness to external stimuli, suggesting functional redundancy, co-function, or antagonistic function(s).

UniProt Gene Name

MLO7

UniProt Synonym Gene Names

NTA; AtMlo7

UniProt Protein Name

MLO-like protein 7

UniProt Synonym Protein Names

Protein NORTIA

UniProt Primary Accession

O22752

UniProt Secondary Accession

Q94KB6

UniProt Related Accession

O22752

UniProt Comments

May be involved in modulation of pathogen defense and leaf cell death. Activity seems to be regulated by Ca²⁺-dependent calmodulin binding and seems not to require heterotrimeric G proteins . Controls pollen tube reception in the female gametophyte synergids.

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