

Oleosin 18.5 kDa (At4g25140) (OLEO1), Recombinant Protein

Cat RP00033

Species

Arabidopsis thaliana (Mouse-ear cress)

Full Product Name

Recombinant Arabidopsis thaliana Oleosin 18.5 kDa (At4g25140)

Product Synonym Names

Recombinant Oleosin 18.5 kDa (At4g25140); Oleosin 18.5 kDa

Product Gene Name

OLEO1 recombinant protein

Purity

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

Sequence

ADTARGTHHD IIGRDQYPMM GRDRDQYQMS GRGSDYSKSR QIAKAATAVT AGGSLLVLSS LTLVGTVIAL
TVATPLLIVF SPILVPALIT VALLITGFLS SGGFGIAAIT VFSWIYKYAT GEHPQGSDKL DSARMKLGSK
AQDLKDRAQY YGQQHTGGEH DRDRTRGGQH TT

Sequence Positions

2-173

Chromosome Location

Chromosome: 4; NC_003075.7 (12900430..12901577). Location: chromosome: 4

Format

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

Host

E Coli or Yeast or Baculovirus or Mammalian Cell

Molecular Weight

18,569 Da

Storage

Store at -20°C. For extended storage, store at -20 or -80°C.

NCBI Accession

NP_194244.1

NCBI GI

15234945

NCBI GenBank Nucleotide

NM_118646.2

NCBI GeneID

828617

FOR RESEARCH OR FURTHER MANUFACTURING USE ONLY

Oleosin 18.5 kDa (At4g25140) (OLEO1), Recombinant Protein

Cat RP00033

NCBI Official Full Name

oleosin 1

NCBI Official Symbol

OLEO1

NCBI Official Synonym Symbols

F24A6.9; OLE1; OLEO1; oleosin 1; OLEOSIN 1

NCBI Protein Information

oleosin 1

NCBI Summary

Encodes oleosin1, a protein found in oil bodies, involved in seed lipid accumulation. Suppression of OLEO1 (and OLEO2) resulted in an aberrant phenotype of embryo cells that contain unusually large oilbodies that are not normally observed in seeds. Changes in the size of oilbodies caused disruption of storage organelles, altering accumulation of lipids and proteins and causing delay in germination. Functions in freezing tolerance of seeds.

UniProt Protein Name

Oleosin 18.5 kDa

UniProt Entry Name

OLEO1_ARATH

UniProt Primary Accession

P29525

UniProt Related Accession

P29525

UniProt Comments

Function: May have a structural role to stabilize the lipid body during desiccation of the seed by preventing coalescence of the oil. Probably interacts with both lipid and phospholipid moieties of lipid bodies. May also provide recognition signals for specific lipase anchorage in lipolysis during seedling growth. Subcellular location: Lipid droplet. Membrane; Multi-pass membrane protein. Note: Surface of oil bodies. Oleosins exist at a monolayer lipid/water interface. Post-translational modification: Ubiquitinated. Sequence similarities: Belongs to the oleosin family.

FOR RESEARCH OR FURTHER MANUFACTURING USE ONLY