

Lysine-specific histone demethylase 1 homolog 1 (LDL1), Recombinant Protein

Cat *RP01806*

Species

Arabidopsis thaliana (Mouse-ear cress)

Full Product Name

Recombinant *Arabidopsis thaliana* Lysine-specific histone demethylase 1 homolog 1 (LDL1) , partial

Product Gene Name

LDL1 recombinant protein

Product Synonym Gene Name

LDL1

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

93,312 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_176471.1

NCBI GI

15221606

NCBI GenBank Nucleotide

NM_104961.4

NCBI GenID

842582

NCBI Official Full Name

LSD1-like 1

NCBI Official Symbol

LDL1

NCBI Official Synonym Symbols

ARABIDOPSIS LYSINE-SPECIFIC HISTONE DEMETHYLASE; ATLSD1; ATSWP1; F23N19.21; F23N19_21;

FOR RESEARCH OR FURTHER MANUFACTURING USE ONLY

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LSD1; LSD1-like 1; LYSINE-SPECIFIC HISTONE DEMETHYLASE; SWP1

NCBI Protein Information

LSD1-like 1

NCBI Summary

Encodes a homolog of human Lysine-Specific Demethylase1. Involved in H3K4 methylation of target genes including the flowering time loci FLC and FWA. Located in nucleus. Negatively regulates root elongation. Involved in repression of LRP1 via histone deacetylation.

UniProt Gene Name

LDL1

UniProt Protein Name

Lysine-specific histone demethylase 1 homolog 1

UniProt Synonym Protein Names

Flavin-containing amine oxidase domain-containing protein 1; Protein LSD1-LIKE 1

UniProt Primary Accession

Q8VXV7

UniProt Secondary Accession

Q56WM3; Q9SI68

UniProt Related Accession

Q8VXV7

UniProt Comments

Probable histone demethylase that reduces the levels of histone H3 'Lys-4' methylation in chromatin of the floral repressor FLOWERING LOCUS C (FLC) and the sporophytically silenced floral repressor FWA (PubMed:17921315). Seems to act in partial redundancy with FLOWERING LOCUS D (FLD) to repress FLC expression (PubMed:17921315). Required for cytosine methylation of FWA (PubMed:17921315). Controls primary seed dormancy by regulating DOG1 and abscisic acid signaling-related genes (PubMed:25852712).

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