

Probable lysine-specific demethylase JMJ14 (JMJ14), Recombinant Protein

Cat RP04816

Species

Arabidopsis thaliana (Mouse-ear cress)

Full Product Name

Recombinant Arabidopsis thaliana Probable lysine-specific demethylase JMJ14 (JMJ14) , partial

Product Gene Name

JMJ14 recombinant protein

Product Synonym Gene Name

JMJ14

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

101,969 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

Probable lysine-specific demethylase

NCBI Accession

NP_001031681.1

NCBI GI

79325193

NCBI GenBank Nucleotide

NM_001036604.1

NCBI GenID

827788

NCBI Official Full Name

JUMONJI 14

NCBI Official Symbol

JMJ14

FOR RESEARCH OR FURTHER MANUFACTURING USE ONLY

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NCBI Official Synonym Symbols

F9F13.50; F9F13_50; JUMONJI 14; PKDM7B

NCBI Protein Information

JUMONJI 14

NCBI Summary

Encodes a histone H3K4 demethylase repressing floral transition.

UniProt Gene Name

JMJ14

UniProt Synonym Gene Names

JMJ4; PKDM7B

UniProt Protein Name

Probable lysine-specific demethylase JMJ14

UniProt Synonym Protein Names

Jumonji domain-containing protein 14; Jumonji domain-containing protein 4; Lysine-specific histone demethylase JMJ14; Protein JUMONJI 14

UniProt Primary Accession

Q8GUI6

UniProt Secondary Accession

Q9SUN9; F4JUW8

UniProt Related Accession

Q8GUI6

UniProt Comments

Transcriptional repressor (PubMed:25578968). Histone demethylase that demethylates 'Lys-4' (H3K4me) of histone H3 with a higher activity for H3K4me3 and H3K4me2 than H3K4me1. No activity on H3K9me3/2, H3K36me3/2 and H3K27me3/2. Represses FT and TSF expression to inhibit the floral transition. Binds around the transcription start site of the FT locus. Involved in the DRM2-mediated maintenance of DNA methylation, but not required for the de novo DNA methylation. Required for demethylating histone H3K4me3 at the target of RNA silencing. Together with NAC051/NAC052 and NAC050, regulates gene expression and flowering time, probably by the promotion of RNA-mediated gene silencing (PubMed:25578968).

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