

JMJD4 Blocking Peptide (N-term) Synthetic peptide Catalog # BP1030a

Specification

JMJD4 Blocking Peptide (N-term) - Product Information

Primary Accession Other Accession <u>Q9H9V9</u> Q32M74

JMJD4 Blocking Peptide (N-term) - Additional Information

Gene ID 65094

Other Names JmjC domain-containing protein 4, Jumonji domain-containing protein 4, JMJD4

Target/Specificity The synthetic peptide sequence is selected from aa 1-17 of HUMAN JMJD4

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions This product is for research use only. Not for use in diagnostic or therapeutic procedures.

JMJD4 Blocking Peptide (N-term) - Protein Information

Name JMJD4

Function Catalyzes the 2-oxoglutarate and iron-dependent C4-lysyl hydroxylation of ETF1 at 'Lys-63' thereby promoting the translational termination efficiency of ETF1.

Cellular Location Cytoplasm.

JMJD4 Blocking Peptide (N-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

<u>Blocking Peptides</u>

JMJD4 Blocking Peptide (N-term) - Images



JMJD4 Blocking Peptide (N-term) - Background

Covalent modification of histones plays critical role in regulating chromatin structure and transcription. While most covalent histone modifications are reversible, only recently has it been established that methyl groups are subject to enzymatic removal from histones. A family of novel JmjC domain-containing histone demethylation (JHDM) enzymes have been identified that perform this specific function. Histone demethylation by JHDM proteins requires cofactors Fe(II) and alpha-ketoglutarate. Family members include JHDM1 (demethylating histone 3 at lysine 36), and JHDM2A as well as JMJD2CH3K9 (both of which demethylate histone 3 at lysine 9). Contributions of histone demethylase activity to tumor development, decreases in cell proliferation, and hormone-dependent transcriptional activation have been observed.

JMJD4 Blocking Peptide (N-term) - References

Ota, T., et al., Nat. Genet. 36(1):40-45 (2004).