

JMJD4 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP1030a

Product Information

Application WB, E **Primary Accession Q9H9V9 Other Accession** Q32M74 Reactivity Human Host Rabbit Clonality Polyclonal Isotype Rabbit IgG **Clone Names** RB10799 **Calculated MW** 47425 1-30 **Antigen Region**

Additional Information

Gene ID 65094

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

JMJD4

Target/Specificity This JMJD4 antibody is generated from rabbits immunized with a KLH

conjugated synthetic peptide between 1-30 amino acids from the N-terminal

region of human JMJD4.

Dilution WB~~1:1000 E~~Use at an assay dependent concentration.

Format Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide.

This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation

followed by dialysis against PBS.

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

at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions |M|D4 Antibody (N-term) is for research use only and not for use in diagnostic

or therapeutic procedures.

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.

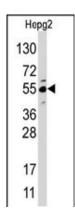
Background

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.

References

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

Images



Western blot analysis of anti-JMJD4 (N-term) Pab in HepG2 cell line lysate. JMJD4 (N-term)(arrow) was detected using the purified Pab.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.