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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
Antigen Region	1-30

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	JMJD4 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.

Cellular Location Cytoplasm.

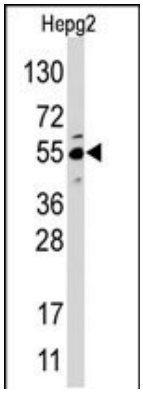
Background

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.

Citations

- High Expression of JMJD4 Is a Potential Diagnostic and Prognostic Marker of Renal Cell Carcinoma

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