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M JMJD3 Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP1022c

Product Information

Application	WB, E
Primary Accession	Q5NCY0
Reactivity	Human, Mouse
Predicted	Rat, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	176355
Antigen Region	954-987

Additional Information

Gene ID	216850
Other Names	Lysine-specific demethylase 6B, 11411-, JmjC domain-containing protein 3, Jumonji domain-containing protein 3, Kdm6b, Jmjd3, Kiaa0346
Target/Specificity	This Mouse JMJD3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 954-987 amino acids from the Central region of mouse JMJD3.
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 JMJD3 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	Kdm6b
Synonyms	Jmjd3, Kiaa0346
Function	Histone demethylase that specifically demethylates 'Lys-27' of histone H3, thereby playing a central role in histone code. Demethylates trimethylated

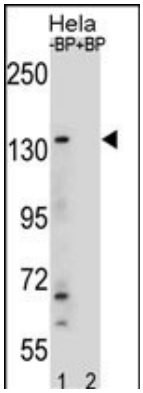
and dimethylated H3 'Lys-27'. Plays a central role in regulation of posterior development, by regulating HOX gene expression. Involved in inflammatory response by participating in macrophage differentiation in case of inflammation by regulating gene expression and macrophage differentiation (PubMed:17825402). Plays a demethylase-independent role in chromatin remodeling to regulate T-box family member-dependent gene expression by acting as a link between T- box factors and the SMARCA4-containing SWI/SNF remodeling complex (PubMed:21095589).

Cellular Location Nucleus.

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.

Images



Western blot analysis of anti-JMJD3 Center Pab (AP1022c) in Hela cell line lysates. JMJD3 Center(arrow) was detected using the purified Pab.

Citations

- Epigenetic reprogramming during wound healing: loss of polycomb-mediated silencing may enable upregulation of repair genes.

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