

KDM5A Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP56474

Product Information

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| Application | WB, IHC-P, IHC-F, IF, ICC, E |
| Primary Accession | P29375 |
| Reactivity | Rat, Pig, Dog, Bovine |
| Host | Rabbit |
| Clonality | Polyclonal |
| Calculated MW | 192095 |
| Physical State | Liquid |
| Immunogen | KLH conjugated synthetic peptide derived from human KDM5A |
| Epitope Specificity | 101-200/1690 |
| Isotype | IgG |
| Purity | affinity purified by Protein A |
| Buffer | 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol. |
| SUBCELLULAR LOCATION | Nucleus > nucleolus. Occupies promoters of genes involved in RNA metabolism and mitochondrial function. |
| SIMILARITY | Belongs to the JARID1 histone demethylase family. Contains 1 ARID domain. Contains 1 JmjC domain. Contains 1 JmjN domain. Contains 3 PHD-type zinc fingers. |
| Important Note | This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications. |
| Background Descriptions | This gene encodes a member of the Jumonji, AT-rich interactive domain 1 (JARID1) histone demethylase protein family. The encoded protein plays a role in gene regulation through the histone code by specifically demethylating lysine 4 of histone H3. The encoded protein interacts with many other proteins, including retinoblastoma protein, and is implicated in the transcriptional regulation of Hox genes and cytokines. This gene may play a role in tumor progression. [provided by RefSeq, Aug 2013] |

Additional Information

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|--------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Gene ID | 5927 |
| Other Names | Lysine-specific demethylase 5A, 1.14.11.67, Histone demethylase JARID1A, Jumonji/ARID domain-containing protein 1A, Retinoblastoma-binding protein 2, RBBP-2, [histone H3]-trimethyl-L-lysine(4) demethylase 5A, KDM5A (HGNC:9886) |
| Dilution | WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,ICC=1:100-500,IF=1:100-500,ELISA=1:5000-10000 |
| Format | 0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce |

Storage Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

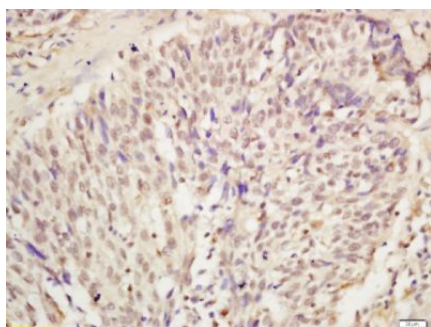
Protein Information

Name KDM5A ([HGNC:9886](#))

Function Histone demethylase that specifically demethylates 'Lys-4' of histone H3, thereby playing a central role in histone code. Does not demethylate histone H3 'Lys-9', H3 'Lys-27', H3 'Lys-36', H3 'Lys-79' or H4 'Lys-20'. Demethylates trimethylated and dimethylated but not monomethylated H3 'Lys-4'. Regulates specific gene transcription through DNA-binding on 5'-CCGCCC-3' motif (PubMed:[18270511](#)). May stimulate transcription mediated by nuclear receptors. Involved in transcriptional regulation of Hox proteins during cell differentiation (PubMed:[19430464](#)). May participate in transcriptional repression of cytokines such as CXCL12. Plays a role in the regulation of the circadian rhythm and in maintaining the normal periodicity of the circadian clock. In a histone demethylase-independent manner, acts as a coactivator of the CLOCK-BMAL1-mediated transcriptional activation of PER1/2 and other clock-controlled genes and increases histone acetylation at PER1/2 promoters by inhibiting the activity of HDAC1 (By similarity). Seems to act as a transcriptional corepressor for some genes such as MT1F and to favor the proliferation of cancer cells (PubMed:[27427228](#)).

Cellular Location Nucleus, nucleolus. Nucleus {ECO:0000250|UniProtKB:Q3UXZ9}
Note=Occupies promoters of genes involved in RNA metabolism and mitochondrial function. {ECO:0000250|UniProtKB:Q3UXZ9}

Images



Tissue/cell: human laryngocarcinoma; 4%
Paraformaldehyde-fixed and paraffin-embedded;
Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;
Incubation: Anti-KDM5A Polyclonal Antibody, Unconjugated(AP56474) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining

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