

KDM5A Antibody

Rabbit mAb Catalog # AP91827

Specification

KDM5A Antibody - Product Information

Application Primary Accession Clonality Other Names JARID1A; Kdm5a; RBBP2; RBP2;	WB, FC, ICC, IP <u>P29375</u> Monoclonal
lsotype	Rabbit IgG
Host	Rabbit
Calculated MW	192095 Da

KDM5A Antibody - Additional Information

Dilution	WB~~1:1000 FC~~1:10~50 ICC~~N/A
Purification	IP~~N/A Affinity-chromatography
Immunogen	A synthesized peptide derived from human KDM5A / Jarid1A / RBBP2
Description	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'.
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

KDM5A Antibody - Protein Information

Name KDM5A (<u>HGNC:9886</u>)

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

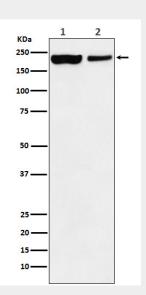
Nucleus, nucleolus. Nucleus {ECO:0000250|UniProtKB:Q3UXZ9} Note=Occupies promoters of genes involved in RNA metabolism and mitochondrial function. {ECO:0000250|UniProtKB:Q3UXZ9}

KDM5A Antibody - Protocols

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

- <u>Western Blot</u>
- <u>Blocking Peptides</u>
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

KDM5A Antibody - Images



Western blot analysis of KDM5A / Jarid1A / RBBP2 expression in (1) HEK293 cell lysate; (2) Mouse spleen lysate.