10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

KDM5A Antibody

Rabbit mAb
Catalog # AP91827

Product Information

Application	WB, IF, FC, ICC, IP
Primary Accession	P29375
Reactivity	Human, Mouse
Clonality	Monoclonal
Other Names	JARID1A; Kdm5a; RBBP2; RBP2;
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	192095

Additional Information

Dilution	WB 1:500~1:2000 ICC/IF 1:100~1:500 IP 1:80 FC 1:200
Purification	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.

Protein Information

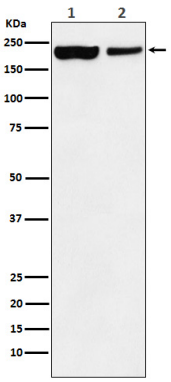
Name	KDM5A (HGNC:9886)
Function	Histone demethylase that specifically demethylates 'Lys-4' of histone H3, thereby playing a central role in histone code. Does not demethylate histone H3 'Lys-9', H3 'Lys-27', H3 'Lys-36', H3 'Lys-79' or H4 'Lys-20'. Demethylates trimethylated and dimethylated but not 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



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

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