

## Anti-KDM5A Monoclonal Antibody

Catalog # ABO14669

#### Specification

## Anti-KDM5A Monoclonal Antibody - Product Information

Application Primary Accession Host Isotype Reactivity Clonality Format **Description** Anti-KDM5A Monoclonal Antibody Tester WB, IF, ICC, IP, FC <u>P29375</u> Rabbit Rabbit IgG Human, Mouse Monoclonal Liquid

Anti-KDM5A Monoclonal Antibody . Tested in WB, ICC/IF, IP, Flow Cytometry applications. This antibody reacts with Human, Mouse.

## Anti-KDM5A Monoclonal Antibody - Additional Information

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 (<a href="http://www.genenames.org/cgi-bin/gene\_symbol\_report?hgnc\_id=9886" target="\_blank">HGNC:9886</a>)

Application Details WB 1:500-1:2000<br>ICC/IF 1:100-1:500<br>IP 1:80<br>FC 1:200

**Contents** Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

Immunogen A synthesized peptide derived from human KDM5A/Jarid1A/RBBP2

Purification Affinity-chromatography

Storage

Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

#### Anti-KDM5A Monoclonal Antibody - 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:<a href="http://www.uniprot.org/citations/18270511" target="\_blank">18270511</a>). May stimulate transcription mediated by nuclear receptors. Involved in transcriptional regulation of Hox proteins during cell differentiation (PubMed:<a href="http://www.uniprot.org/citations/19430464" target="\_blank">19430464</a>). 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:<a href="http://www.uniprot.org/citations/27427228" target=" blank">27427228</a>

#### **Cellular Location**

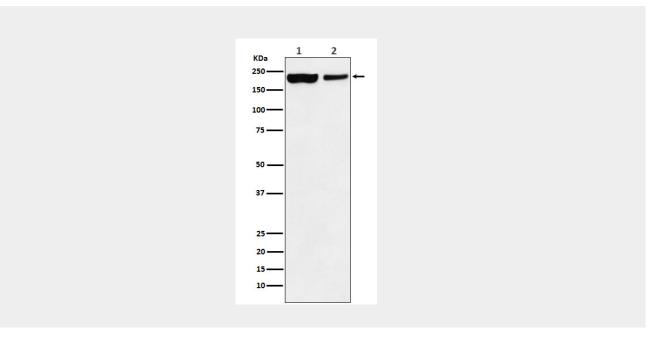
Nucleus, nucleolus. Nucleus {ECO:0000250|UniProtKB:Q3UXZ9} Note=Occupies promoters of genes involved in RNA metabolism and mitochondrial function. {ECO:0000250|UniProtKB:Q3UXZ9}

# Anti-KDM5A Monoclonal 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>

#### Anti-KDM5A Monoclonal Antibody - Images





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