

### **KDM5B** Antibody

Purified Mouse Monoclonal Antibody Catalog # AO2094a

## Specification

## **KDM5B Antibody - Product Information**

Application Primary Accession Reactivity Host Clonality Isotype Calculated MW **Description**  WB, FC, E <u>O9UGL1</u> Human Mouse Monoclonal IgG1 175.6kDa KDa

KDM5B (lysine (K)-specific demethylase 5B) is a protein-coding gene. Diseases associated with KDM5B include retinoblastoma. GO annotations related to this gene include oxidoreductase activity, acting on paired donors, with incorporation or reduction of molecular oxygen, 2-oxoglutarate as one donor, and incorporation of one atom each of oxygen into both donors and sequence-specific DNA binding transcription factor activity. An important paralog of this gene is KDM5C.

Immunogen Purified recombinant fragment of human KDM5B (AA: 231-319) expressed in E. Coli.

**Formulation** Purified antibody in PBS with 0.05% sodium azide

## **KDM5B** Antibody - Additional Information

Gene ID 10765

**Other Names** 

Lysine-specific demethylase 5B, 1.14.11.-, Cancer/testis antigen 31, CT31, Histone demethylase JARID1B, Jumonji/ARID domain-containing protein 1B, PLU-1, Retinoblastoma-binding protein 2 homolog 1, RBP2-H1, KDM5B, JARID1B, PLU1, RBBP2H1

Dilution WB~~1/500 - 1/2000 FC~~1/200 - 1/400 E~~1/10000

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

### Precautions

KDM5B Antibody is for research use only and not for use in diagnostic or therapeutic procedures.



# **KDM5B Antibody - Protein Information**

### Name KDM5B

Synonyms JARID1B, PLU1, RBBP2H1

### Function

Histone demethylase that demethylates 'Lys-4' of histone H3, thereby playing a central role in histone code (PubMed:<a href="http://www.uniprot.org/citations/24952722" target="\_blank">24952722</a>, PubMed:<a href="http://www.uniprot.org/citations/27214403" target="\_blank">27214403</a>, PubMed:<a href="http://www.uniprot.org/citations/28262558" target="\_blank">28262558</a>). Does not demethylate histone H3 'Lys-9' or H3 'Lys-27'. Demethylates trimethylated, dimethylated and monomethylated H3 'Lys-4'. Acts as a transcriptional corepressor for FOXG1B and PAX9. Favors the proliferation of breast cancer cells by repressing tumor suppressor genes such as BRCA1 and HOXA5 (PubMed:<a href="http://www.uniprot.org/citations/24952722" target="\_blank">24952722</a>). In contrast, may act as a tumor suppressor for melanoma. Represses the CLOCK-BMAL1 heterodimer-mediated transcriptional activation of the core clock component PER2 (By similarity).

### **Cellular Location**

Nucleus {ECO:0000255|PROSITE-ProRule:PRU00355, ECO:0000255|PROSITE-ProRule:PRU00537, ECO:0000269|PubMed:10336460, ECO:0000269|PubMed:12237901}

**Tissue Location** 

Ubiquitously expressed, with highest levels in testis. Down-regulated in melanoma and glioblastoma. Up-regulated in breast cancer (at protein level).

### **KDM5B 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>