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KDM5B Antibody

Purified Mouse Monoclonal Antibody
Catalog # AO2094a

Product Information

Application	WB, FC, E
Primary Accession	Q9UGL1
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Clone Names	7H3D7
Isotype	IgG1
Calculated MW	175658
Description	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

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.

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:24952722, PubMed:27214403, PubMed:28262558). 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:24952722). 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).

References

1.Cancer Cell. 2014 Jun 16;25(6):762-77.2.Int J Oncol. 2013 Apr;42(4):1212-8.

Images