

# KDM4A Antibody

Purified Mouse Monoclonal Antibody Catalog # AO2161a

## **Product Information**

Application Primary Accession Reactivity Host Clonality Clone Names Isotype Calculated MW Description	WB, FC, ICC, E O75164 Human Mouse Monoclonal 6E10G4 IgG1 120662 This gene is a member of the Jumonji domain 2 (JMJD2) family and encodes a protein containing a JmjN domain, a JmjC domain, a JD2H domain, two TUDOR domains, and two PHD-type zinc fingers. This nuclear protein functions as a trimethylation-specific demethylase, converting specific trimethylated histone residues to the dimethylated form, and as a transcriptional repressor.
Immunogen	Purified recombinant fragment of human KDM4A (AA: 932-1057) expressed in E. Coli.
Formulation	Purified antibody in PBS with 0.05% sodium azide

## **Additional Information**

Gene ID	9682
Other Names	Lysine-specific demethylase 4A, 1.14.11, JmjC domain-containing histone demethylation protein 3A, Jumonji domain-containing protein 2A, KDM4A, JHDM3A, JMJD2, JMJD2A, KIAA0677
Dilution	WB~~1/500 - 1/2000 FC~~1:10~50 ICC~~N/A 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	KDM4A Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

#### **Protein Information**

Name	KDM4A
Synonyms	JHDM3A, JMJD2, JMJD2A, KIAA0677

Function	Histone demethylase that specifically demethylates 'Lys-9' and 'Lys-36' residues of histone H3, thereby playing a central role in histone code (PubMed: <u>26741168</u> , PubMed: <u>21768309</u> ). Does not demethylate histone H3 'Lys-4', H3 'Lys-27' nor H4 'Lys-20'. Demethylates trimethylated H3 'Lys-9' and H3 'Lys-36' residue, while it has no activity on mono- and dimethylated residues. Demethylation of Lys residue generates formaldehyde and succinate. Participates in transcriptional repression of ASCL2 and E2F-responsive promoters via the recruitment of histone deacetylases and NCOR1, respectively.
Cellular Location	Nucleus {ECO:0000255 PROSITE-ProRule:PRU00537, ECO:0000269 PubMed:15927959, ECO:0000269 PubMed:16024779}
Tissue Location	Ubiquitous

#### References

1.Asian Pac J Cancer Prev. 2014;15(7):3051-6.2.J Cell Biochem. 2012 Apr;113(4):1368-76.

# Images

