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

KDM4A Antibody
Purified Mouse Monoclonal Antibody
Catalog # AO2161a

Specification

KDM4A Antibody - Product Information

Application	**E, WB, IF**
Primary Accession	O75164
Reactivity	**Human**
Host	**Mouse**
Clonality	**Monoclonal**
Isotype	**IgG1**
Calculated MW	**120.6kDa KDa**

Description
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

KDM4A Antibody - 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
E~~1/10000
WB~~1/500 - 1/2000
IF~~1/200 - 1/1000

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.

KDM4A Antibody - Protein Information

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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:26741168). 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..

KDM4A Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture