

KDM4A Antibody
Purified Mouse Monoclonal Antibody
Catalog # AO1440a

Specification

KDM4A Antibody - Product Information

Application	WB, IHC, IF
Primary Accession	O75164
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1
Calculated MW	120kDa 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 expressed in E. Coli.

Formulation

Ascitic fluid containing 0.03% 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

WB~~1/500 - 1/2000

IHC~~1/200 - 1/1000

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

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, PubMed:21768309). 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 Cytometry](#)
- [Cell Culture](#)

KDM4A Antibody - Images

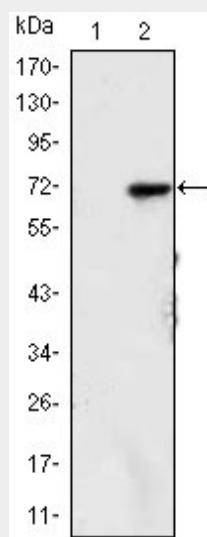


Figure 1: Western blot analysis using KDM4A mAb against HEK293 (1) and KDM4A(AA: 500-705)-hlgGfc transfected HEK293 (2) cell lysate.

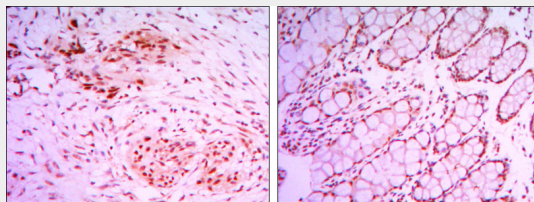


Figure 2: Immunohistochemical analysis of paraffin-embedded colon cancer tissues (left) and human larynx cancer tissues (right) using KDM4A mouse mAb with DAB staining.

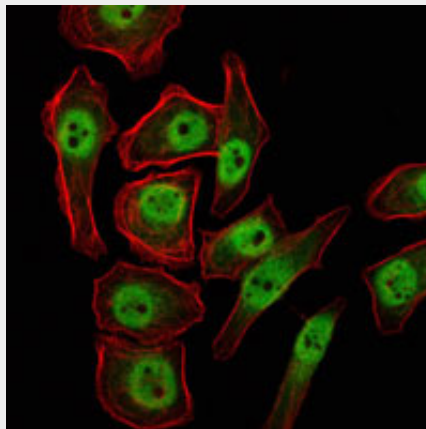


Figure 3: Immunofluorescence analysis of NTERA-2 cells using KDM4A mouse mAb (green). Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.

KDM4A Antibody - References

1. Genome Res. 2004 Sep;14(9):1711-8. 2. Nat Methods. 2005 Aug;2(8):591-8. 3. Cell. 2006 May 19;125(4):691-702.