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Mouse Monoclonal Antibody to KDM3A
Purified Mouse Monoclonal Antibody
Catalog # AO2425a

Specification

Mouse Monoclonal Antibody to KDM3A - Product Information

Application	**WB, FC, ICC, E**
Primary Accession	Q9Y4C1
Reactivity	**Human**
Host	**Mouse**
Clonality	**Monoclonal**
Isotype	**Mouse IgG1**
Calculated MW	**147kDa KDa**

Description
This gene encodes a zinc finger protein that contains a jumonji domain and may play a role in hormone-dependent transcriptional activation. Alternative splicing results in multiple transcript variants.;

Immunogen
Purified recombinant fragment of human KDM3A (AA: 311-445) expressed in E. Coli.

Formulation
Purified antibody in PBS with 0.05% sodium azide

Application Note
ELISA: 1/10000; WB: 1/500 - 1/2000; ICC: 1/50 - 1/250; FCM: 1/200 - 1/400

Mouse Monoclonal Antibody to KDM3A - Additional Information

Gene ID 55818

Other Names
TSGA; JMJD1; JHDM2A; JHMD2A; JMJD1A

Dilution
WB~~1:1000
FC~~1:10~50
ICC~~N/A
E~~N/A

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
Mouse Monoclonal Antibody to KDM3A is for research use only and not for use in diagnostic or therapeutic procedures.

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Mouse Monoclonal Antibody to KDM3A - Protein Information

Name KDM3A

Synonyms JHDM2A, JMJD1, JMJD1A, KIAA0742, TSGA

Function
Histone demethylase that specifically demethylates 'Lys-9' of histone H3, thereby playing a central role in histone code. Preferentially demethylates mono- and dimethylated H3 'Lys-9' residue, with a preference for dimethylated residue, while it has weak or no activity on trimethylated H3 'Lys-9'. Demethylation of Lys residue generates formaldehyde and succinate. Involved in hormone-dependent transcriptional activation, by participating in recruitment to androgen-receptor target genes, resulting in H3 'Lys-9' demethylation and transcriptional activation. Involved in spermatogenesis by regulating expression of target genes such as PRM1 and TNP1 which are required for packaging and condensation of sperm chromatin. Involved in obesity resistance through regulation of metabolic genes such as PPARA and UCP1.

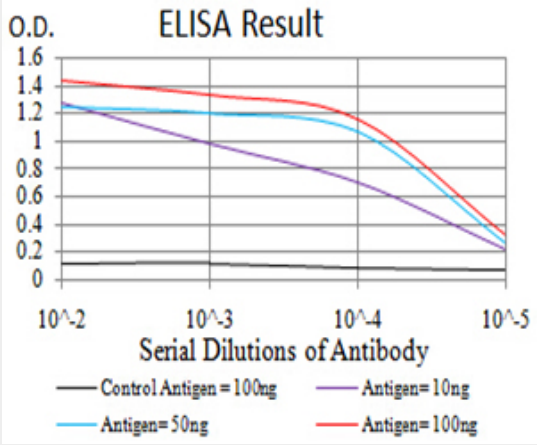
Cellular Location
Cytoplasm. Nucleus. Note=Nuclear in round spermatids. When spermatids start to elongate, localizes to the cytoplasm where it forms distinct foci which disappear in mature spermatozoa (By similarity).

Mouse Monoclonal Antibody to KDM3A - 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

Mouse Monoclonal Antibody to KDM3A - Images



Black line: Control Antigen (100 ng);Purple line: Antigen (10ng); Blue line: Antigen (50 ng); Red line:Antigen (100 ng)

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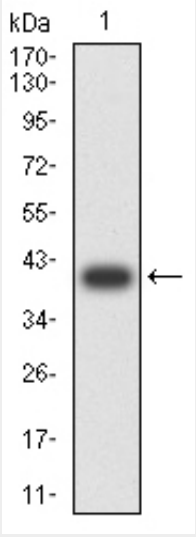
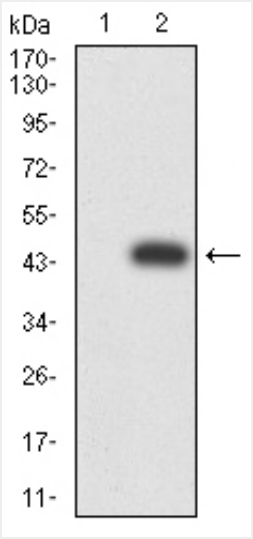
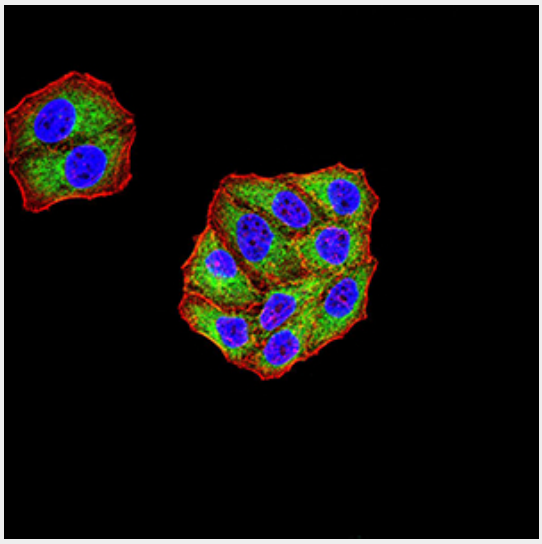


Western blot analysis using KDM3A mAb against human KDM3A (AA: 311-445) recombinant protein. (Expected MW is 40.3 kDa)



Western blot analysis using KDM3A mAb against HEK293 (1) and KDM3A (AA: 311-445)-hIgGFc transfected HEK293 (2) cell lysate.



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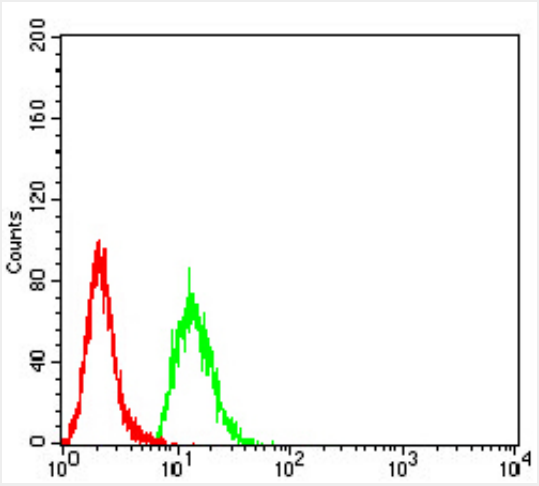
Immunofluorescence analysis of Hela cells using KDM3A mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor- 555 phalloidin. Secondary antibody from Fisher



Flow cytometric analysis of Hela cells using KDM3A mouse mAb (green) and negative control (red).

Mouse Monoclonal Antibody to KDM3A - References

1.PLoS Biol. 2014 Dec 23;12(12):e1002026. ; 2.Oncotarget. 2014 Apr 15;5(7):1793-804.;