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

Mouse Monoclonal Antibody to KDM3A

Purified Mouse Monoclonal Antibody
Catalog # AO2426a

Product Information

Application	WB, FC, E
Primary Accession	Q9Y4C1
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Clone Names	2D6H3
Isotype	Mouse IgG1
Calculated MW	147341
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; FCM: 1/200 - 1/400

Additional Information

Gene ID	55818
Other Names	TSGA; JMJD1; JHDM2A; JHMD2A; JMJD1A
Dilution	WB~~1:1000 FC~~1:10~50 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.

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.

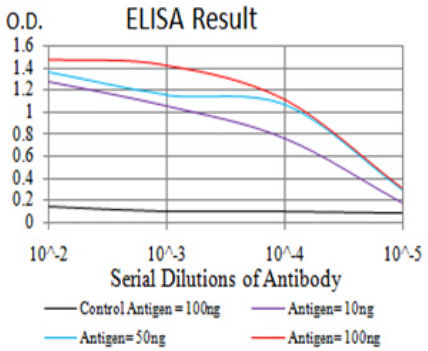
Cellular Location

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).

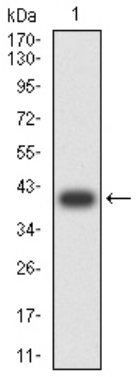
References

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

Images

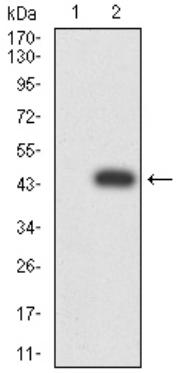


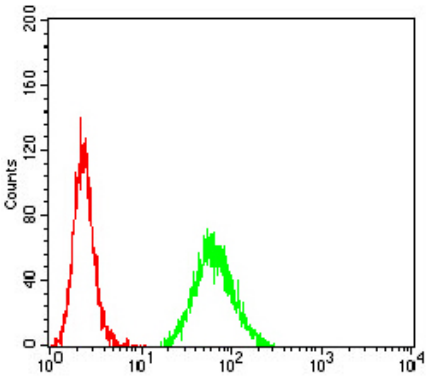
Black line: Control Antigen (100 ng);Purple line: Antigen (10ng); Blue line: Antigen (50 ng); Red line:Antigen (100 ng)



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.





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