

## JMJD2A Monoclonal Antibody

<b>Catalog No :</b>	YM0389
<b>Reactivity :</b>	Human
<b>Applications :</b>	WB;IHC;IF;ELISA
<b>Target :</b>	JMJD2A
<b>Gene Name :</b>	KDM4A
<b>Protein Name :</b>	Lysine-specific demethylase 4A
<b>Human Gene Id :</b>	9682
<b>Human Swiss Prot No :</b>	O75164
<b>Mouse Swiss Prot No :</b>	Q8BW72
<b>Immunogen :</b>	Purified recombinant fragment of human JMJD2A expressed in E. Coli.
<b>Specificity :</b>	JMJD2A Monoclonal Antibody detects endogenous levels of JMJD2A protein.
<b>Formulation :</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source :</b>	Monoclonal, Mouse
<b>Dilution :</b>	WB 1:500 - 1:2000. IHC 1:200 - 1:1000. IF 1:200 - 1:1000. ELISA: 1:10000. Not yet tested in other applications.
<b>Purification :</b>	Affinity purification
<b>Storage Stability :</b>	-15°C to -25°C/1 year(Do not lower than -25°C)
<b>Molecularweight :</b>	121kD
<b>P References :</b>	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.

## Background :

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. [provided by RefSeq, Apr 2009],

## Function :

cofactor: Binds 1 Fe(2+) ion per subunit., domain: The 2 Tudor domains recognize and bind methylated histone H3 'Lys-4' residue. Double Tudor domain has an interdigitated structure and the unusual fold is required for its ability to bind methylated histone tails. Trimethylated H3 'Lys-4' is bound in a cage of 3 aromatic residues, 2 of which are from the Tudor domain 2, while the binding specificity is determined by side-chain interactions involving residues from the Tudor domain 1. The Tudor domains are able to bind trimethylated histone H3 'Lys-4', trimethylated histone H3 'Lys-9', di- and trimethylated H4 'Lys-20'. , function: Histone demethylase that specifically demethylates 'Lys-9' and 'Lys-36' residues of histone H3, thereby playing a central role in histone code. Does not demethylate histone H3 'Lys-4', H3 'Lys-27' nor H4 'Lys-20'. Demethylates trimethylated H3 'Lys-9' and H3 'Lys-36' r

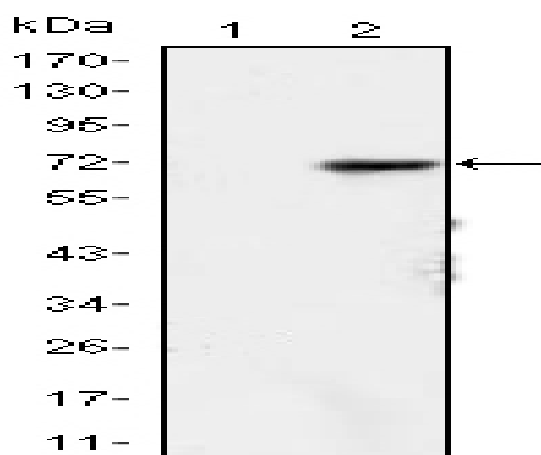
## Subcellular Location :

Nucleus .

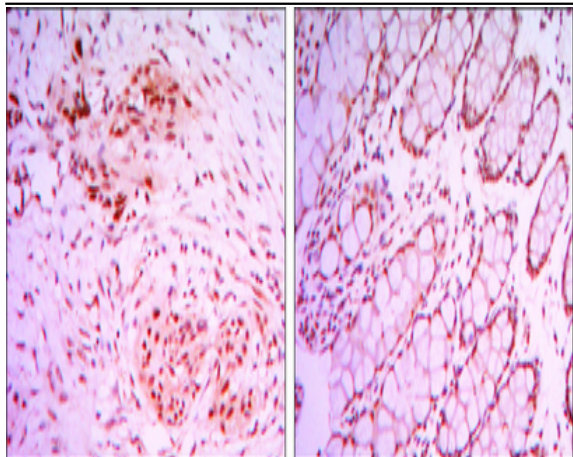
## Expression :

Ubiquitous.

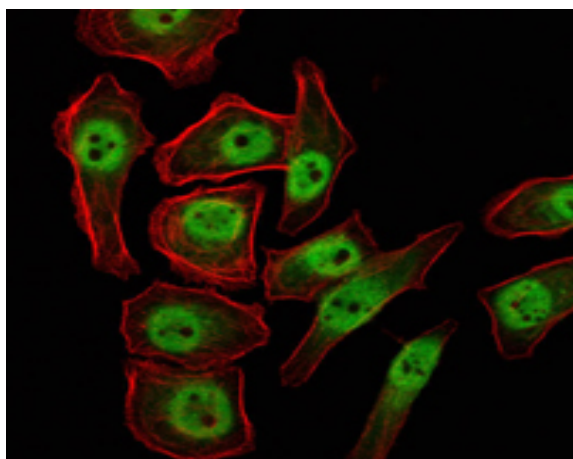
## Products Images



Western Blot analysis using JMJD2A Monoclonal Antibody against HEK293 (1) and JMJD2A-hlgGfc transfected HEK293 (2) cell lysate.



Immunohistochemistry analysis of paraffin-embedded colon cancer tissues (left) and human larynx cancer tissues (right) with DAB staining using JMJD2A Monoclonal Antibody.



Immunofluorescence analysis of NTERA-2 cells using JMJD2A Monoclonal Antibody (green). Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.