

JMJD2A Monoclonal Antibody

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

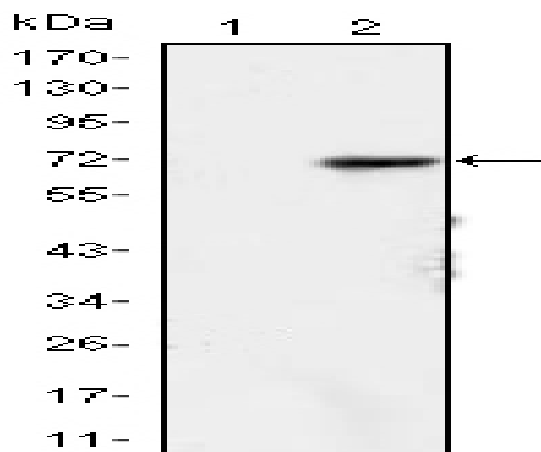
Background : This gene is a member of the Jumonji domain 2 (JMJD2) family and encodes a protein containing a JmjN domain, a JmjC domain, a JD2H domain, two TUDOR domains, and two PHD-type zinc fingers. This nuclear protein functions as a trimethylation-specific demethylase, converting specific trimethylated 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

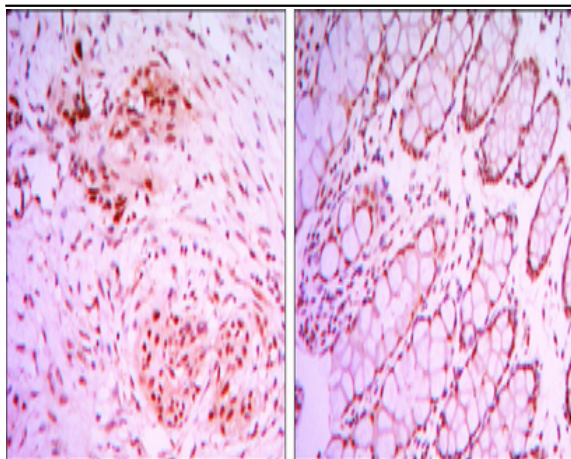
Subcellular Location : Nucleus .

Expression : Ubiquitous.

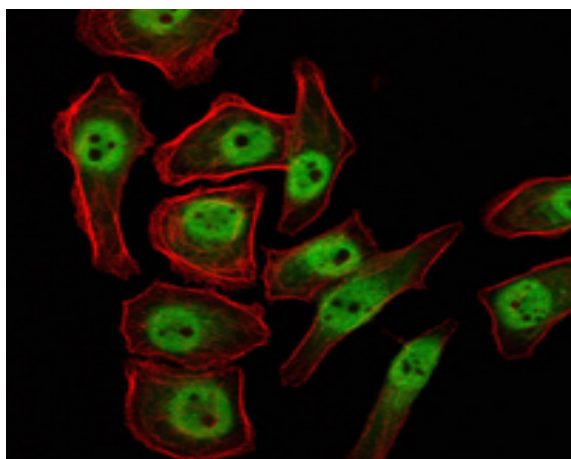
Products Images



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.