



Rabbit Anti-JMJD2A antibody

SL8046R

Product Name:	JMJD2A
Chinese Name:	组蛋白去甲基化酶JMJD2A抗体
Alias:	JMJ2A; JmjC domain containing histone demethylation protein 3A; JmjC domain-containing histone demethylation protein 3A; JMJD2; jumonji C domain containing histone demethylase 3A; Jumonji domain containing 2; Jumonji domain containing 2A; Jumonji domain containing protein 2A; Jumonji domain-containing protein 2A; KDM4A; KDM2A_HUMAN; KIAA0677; Lysine-specific demethylase 4A.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Dog,Cow,Horse,Sheep,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	121kDa
Cellular localization:	The nucleus
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human JMJD2A:75-155/1064
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	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' 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.

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' residue, while it has no activity on mono- and dimethylated residues.

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Isoform 2: Crucial for muscle differentiation, promotes transcriptional activation of the Myog gene by directing the removal of repressive chromatin marks at its promoter.

Lacks the N-terminal demethylase domain.

Subunit:

Interacts with histone deacetylase proteins HDAC1, HDAC2 and HDAC3. Interacts with RB and NCOR1. Interacts with HTLV-1 Tax protein.

Subcellular Location:

Nucleus.

Tissue Specificity:

Ubiquitous.

Post-translational modifications:

Ubiquitinated by RNF8 and RNF168 following DNA damage, leading to its degradation. Degradation promotes accessibility of H4K20me2 mark for DNA repair protein TP53BP1, which is then recruited.

Similarity:

Belongs to the JHDM3 histone demethylase family.

Contains 1 JmjC domain.

Contains 1 JmjN domain.

Contains 2 PHD-type zinc fingers.

Contains 2 Tudor domains.

SWISS:

O75164

Gene ID:

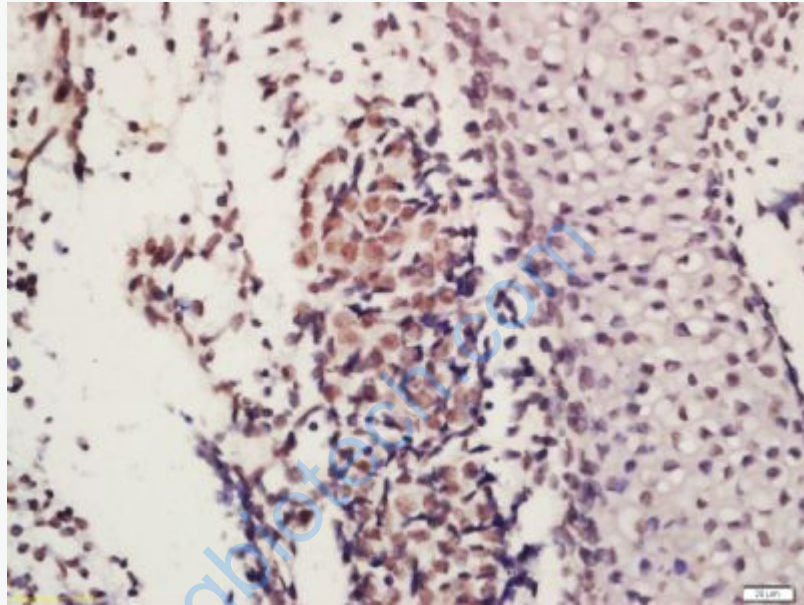
9682

Database links:

UniProtKB/Swiss-Prot: O75164.2

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.



Picture:

Tissue/cell: mouse embryo tissue; 4% Paraformaldehyde-fixed and paraffin-embedded;

Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;

Incubation: Anti-JMJD2A Polyclonal Antibody, Unconjugated(SL8046R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining