

Anti-KDM1/LSD1 KDM1A Rabbit Monoclonal Antibody
Catalog # ABO13971**Specification****Anti-KDM1/LSD1 KDM1A Rabbit Monoclonal Antibody - Product Information**

Application	WB, IHC, IF, ICC, IP
Primary Accession	O60341
Host	Rabbit
Isotype	Rabbit IgG
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Format	Liquid

Description

Anti-KDM1/LSD1 KDM1A Rabbit Monoclonal Antibody . Tested in WB, IHC, ICC/IF, IP applications. This antibody reacts with Human, Mouse, Rat.

Anti-KDM1/LSD1 KDM1A Rabbit Monoclonal Antibody - Additional Information

Gene ID 23028

Other Names

Lysine-specific histone demethylase 1A, 1.14.99.66, BRAF35-HDAC complex protein BHC110, Flavin-containing amine oxidase domain-containing protein 2, [histone H3]-dimethyl-L-lysine(4) FAD-dependent demethylase 1A, KDM1A (http://www.genenames.org/cgi-bin/gene_symbol_report?hgnc_id=29079)
target="_blank">HGNC:29079)

Calculated MW

92903 MW KDa

Application Details

WB 1:1000-1:2000
IHC 1:50-1:200
ICC/IF 1:50-1:200
IP 1:30

Subcellular Localization

Nucleus.

Tissue Specificity

Ubiquitously expressed..

Contents

Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

Immunogen

A synthesized peptide derived from human KDM1 / LSD1

Purification

Affinity-chromatography

Storage

Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.**Anti-KDM1/LSD1 KDM1A Rabbit Monoclonal Antibody - Protein Information**Name KDM1A ([HGNC:29079](#))**Function**

Histone demethylase that can demethylate both 'Lys-4' (H3K4me) and 'Lys-9' (H3K9me) of histone H3, thereby acting as a coactivator or a corepressor, depending on the context (PubMed: [15620353](http://www.uniprot.org/citations/15620353), PubMed: [15811342](http://www.uniprot.org/citations/15811342), PubMed: [16079794](http://www.uniprot.org/citations/16079794), PubMed: [16079795](http://www.uniprot.org/citations/16079795), PubMed: [16140033](http://www.uniprot.org/citations/16140033), PubMed: [16223729](http://www.uniprot.org/citations/16223729), PubMed: [27292636](http://www.uniprot.org/citations/27292636)). Acts by oxidizing the substrate by FAD to generate the corresponding imine that is subsequently hydrolyzed (PubMed: [15620353](http://www.uniprot.org/citations/15620353), PubMed: [15811342](http://www.uniprot.org/citations/15811342), PubMed: [16079794](http://www.uniprot.org/citations/16079794), PubMed: [21300290](http://www.uniprot.org/citations/21300290), PubMed: [21300290](http://www.uniprot.org/citations/21300290)). Acts as a corepressor by mediating demethylation of H3K4me, a specific tag for epigenetic transcriptional activation. Demethylates both mono- (H3K4me1) and di-methylated (H3K4me2) H3K4me (PubMed: [15620353](http://www.uniprot.org/citations/15620353), PubMed: [20389281](http://www.uniprot.org/citations/20389281), PubMed: [21300290](http://www.uniprot.org/citations/21300290), PubMed: [23721412](http://www.uniprot.org/citations/23721412), PubMed: [23721412](http://www.uniprot.org/citations/23721412)). May play a role in the repression of neuronal genes. Alone, it is unable to demethylate H3K4me on nucleosomes and requires the presence of RCOR1/CoREST to achieve such activity (PubMed: [16079794](http://www.uniprot.org/citations/16079794), PubMed: [16140033](http://www.uniprot.org/citations/16140033), PubMed: [16885027](http://www.uniprot.org/citations/16885027), PubMed: [21300290](http://www.uniprot.org/citations/21300290), PubMed: [23721412](http://www.uniprot.org/citations/23721412), PubMed: [23721412](http://www.uniprot.org/citations/23721412)). Also acts as a coactivator of androgen receptor (AR)-dependent transcription, by being recruited to AR target genes and mediating demethylation of H3K9me, a specific tag for epigenetic transcriptional repression. The presence of PRKCB in AR-containing complexes, which mediates phosphorylation of 'Thr-6' of histone H3 (H3T6ph), a specific tag that prevents demethylation H3K4me, prevents H3K4me demethylase activity of KDM1A (PubMed: [16079795](http://www.uniprot.org/citations/16079795)). Demethylates di-methylated 'Lys-370' of p53/TP53 which prevents interaction of p53/TP53 with TP53BP1 and represses p53/TP53-mediated transcriptional activation. Demethylates and stabilizes the DNA methylase DNMT1 (PubMed: [29691401](http://www.uniprot.org/citations/29691401)). Demethylates methylated 'Lys-42' and methylated 'Lys-117' of SOX2 (PubMed: [29358331](http://www.uniprot.org/citations/29358331)). Required for gastrulation during embryogenesis. Component of a RCOR/GFI/KDM1A/HDAC complex that suppresses, via histone deacetylase (HDAC) recruitment, a number of genes implicated in multilineage blood cell development (PubMed: [16079794](http://www.uniprot.org/citations/16079794), PubMed: [16140033](http://www.uniprot.org/citations/16140033)). Facilitates epithelial-to-mesenchymal transition by acting as an effector of SNAI1-mediated transcription repression of epithelial markers E-cadherin/CDH1, CDN7 and KRT8 (PubMed: [20562920](http://www.uniprot.org/citations/20562920), PubMed: [20562920](http://www.uniprot.org/citations/20562920)).

<http://www.uniprot.org/citations/27292636> target="_blank">27292636). Required for the maintenance of the silenced state of the SNAI1 target genes E-cadherin/CDH1 and CDN7 (PubMed:20389281).

Cellular Location

Nucleus. Chromosome. Note=Associates with chromatin

Tissue Location

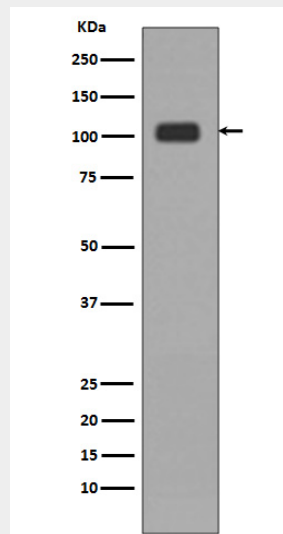
Ubiquitously expressed.

Anti-KDM1/LSD1 KDM1A Rabbit Monoclonal Antibody - Protocols

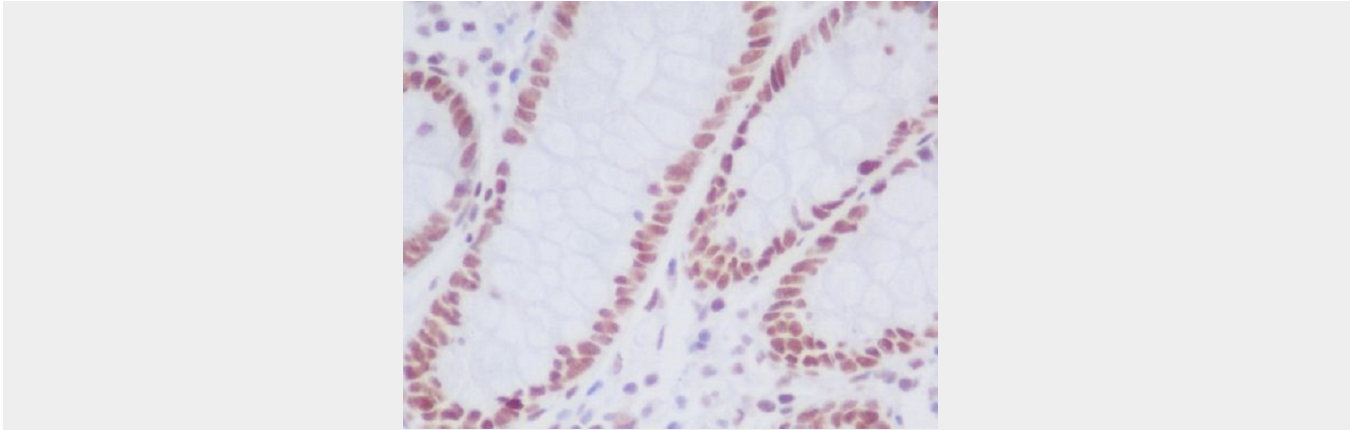
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-KDM1/LSD1 KDM1A Rabbit Monoclonal Antibody - Images



Western blot analysis of KDM1/LSD1 expression in HeLa cell lysate



Immunohistochemical analysis of paraffin-embedded human colon, using KDM1/LSD1 Antibody.