

KDM1/LSD1 Antibody
Purified Mouse Monoclonal Antibody (Mab)
Catalog # AP53268**Specification**

KDM1/LSD1 Antibody - Product Information

Application	IP, WB, ICC
Primary Accession	O60341
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1
Calculated MW	110 KDa

KDM1/LSD1 Antibody - Additional Information**Gene ID** 23028**Other Names**

Amine oxidase (flavin containing) domain 2; AOF2; BHC110; BRAF35 HDAC complex protein BHC110; BRAF35-HDAC complex protein BHC110; FAD binding protein BRAF35 HDAC complex, 110 kDa subunit; Flavin-containing amine oxidase domain-containing protein 2; KDM1; KDM1; Kdm1a; KDM1A_HUMAN; LSD 1; LSD1; Lysine (K) specific demethylase 1; Lysine (K) specific demethylase 1A; Lysine specific histone demethylase 1; Lysine specific histone demethylase 1A; Lysine-specific histone demethylase 1A.

Dilution

IP~~1:500
WB~~1:1000
ICC~~1:100

Format

Purified mouse monoclonal in PBS(pH 7.4) containing with 0.09% (W/V) sodium azide and 50% glycerol.

Storage

Store at -20 °C. Stable for 12 months from date of receipt

KDM1/LSD1 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: [16079794](http://www.uniprot.org/citations/16079794)).

<http://www.uniprot.org/citations/16079795> target="_blank">16079795, PubMed:16140033, PubMed:16223729, PubMed:27292636). Acts by oxidizing the substrate by FAD to generate the corresponding imine that is subsequently hydrolyzed (PubMed:15620353, PubMed:15811342, PubMed:16079794, PubMed: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, PubMed:20389281, PubMed:21300290, PubMed: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, PubMed:16140033, PubMed:16885027, PubMed:21300290, PubMed: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). 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). Demethylates methylated 'Lys-42' and methylated 'Lys-117' of SOX2 (PubMed: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, PubMed: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, PubMed: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.

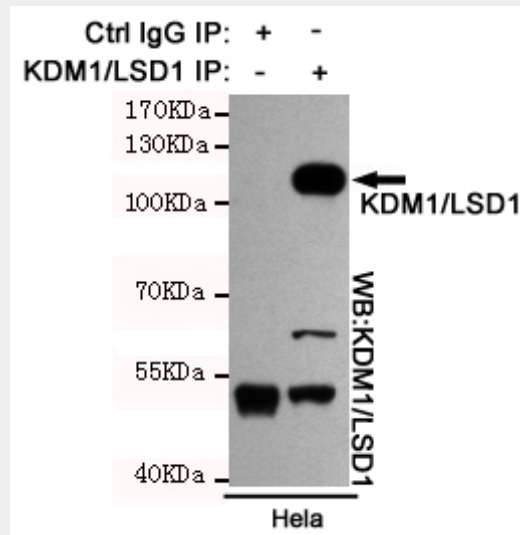
KDM1/LSD1 Antibody - Protocols

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

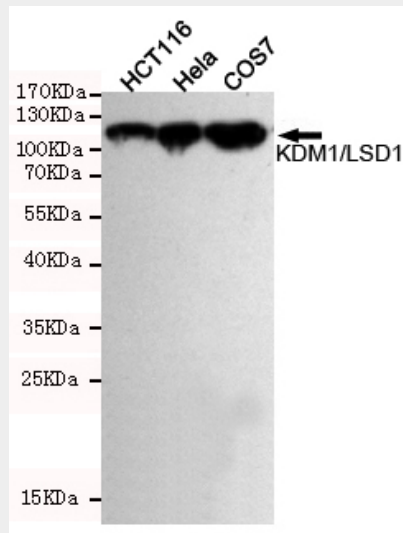
- [Western Blot](#)

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

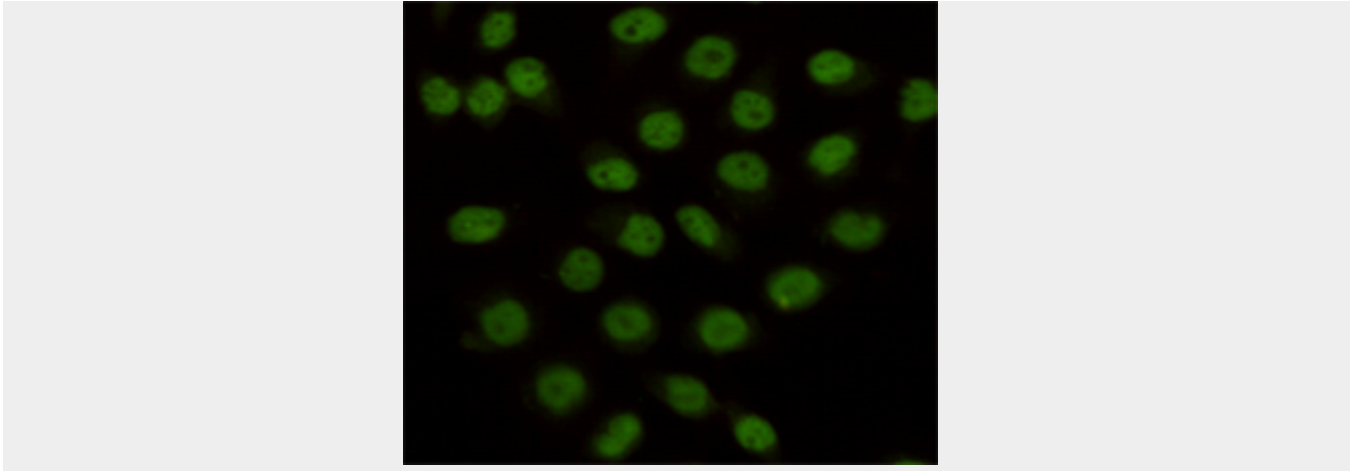
KDM1/LSD1 Antibody - Images



Immunoprecipitation analysis of HeLa cell lysates using KDM1/LSD1 mouse mAb.



Western blot detection of KDM1/LSD1 in HeLa, HCT116 and COS7 cell lysates using KDM1/LSD1 mouse mAb (1:1000 diluted). Predicted band size: 110KDa. Observed band size: 110KDa.



Immunocytochemistry staining of HeLa cells fixed with 4% Paraformaldehyde and using anti-KDM1/LSD1 mouse mAb (dilution 1:100).

KDM1/LSD1 Antibody - Background

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KDM1/LSD1 Antibody - References

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Bechtel S., et al. BMC Genomics 8:399-399(2007).
Hakimi M.-A., et al. Proc. Natl. Acad. Sci. U.S.A. 99:7420-7425(2002).
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