10320 Camino Santa Fe, Suite G
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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;KDM 1;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, PubMed:15811342, PubMed:16140033, PubMed:<a

href="http://www.uniprot.org/citations/16079794" target="_blank">16079794, PubMed:16079795, PubMed:16223729). 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:16140033, PubMed:16079794, 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. Effector of SNAI1-mediated transcription repression of E-cadherin/CDH1, CDN7 and KRT8. Required for the maintenance of the silenced state of the SNAI1 target genes E-cadherin/CDH1 and CDN7 (PubMed:20389281).

Cellular Location
Nucleus

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

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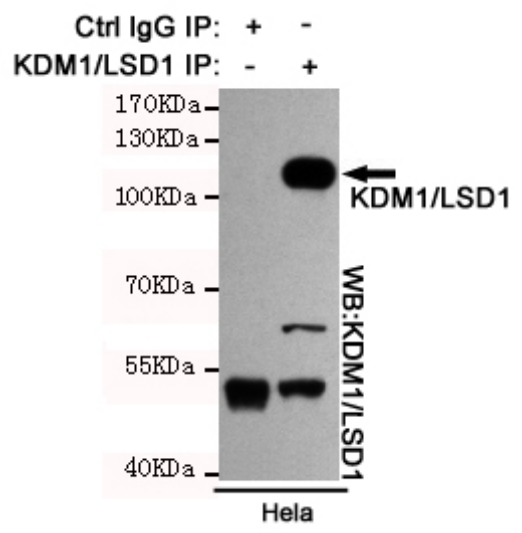
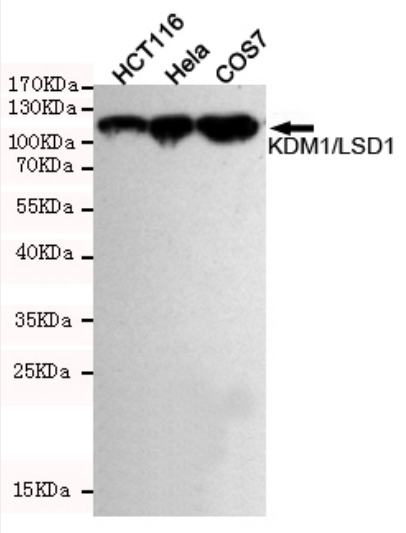
- Flow Cytomety
- Cell Culture

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.

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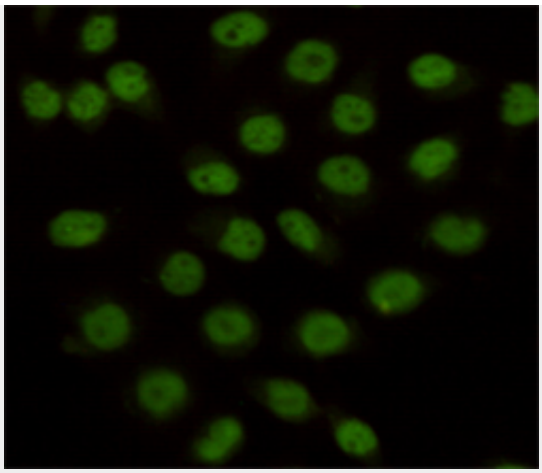

Immunocytochemistry staining of HeLa cells fixed with 4% Paraformaldehyde and using anti-KDM1/LSD1 mouse mAb (dilution 1:100).

KDM1/LSD1 Antibody - Background

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KDM1/LSD1 Antibody - References

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