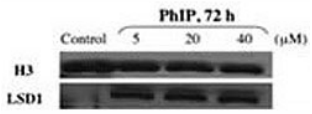
LSD1 Antibody (F41980)

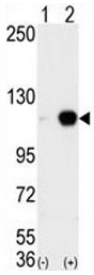
Catalog No.	Formulation	Size
F41980-0.4ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.4 ml
F41980-0.08ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.08 ml

Bulk quote request

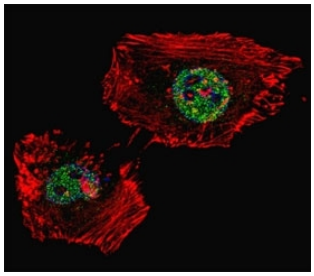
Availability	1-3 business days
Species Reactivity	Human
Predicted Reactivity	Mouse
Format	Purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Purity	Purified
UniProt	O60341
Applications	Western Blot : 1:1000 IHC (Paraffin) : 1:50-1:100 Immunofluorescence : 1:10-1:50
Limitations	This LSD1 antibody is available for research use only.



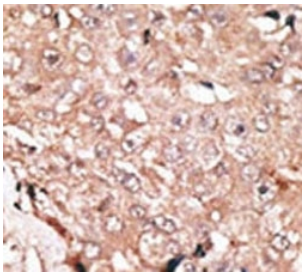
Western blot testing of LSD1 antibody and nuclear extracts of control and PhIP-treated HMEC cells. Nuclear LSD1 protein levels increased in carcinogen-treated HMEC compared with control HMEC.



Western blot analysis of LSD1 antibody and 293 cell lysate either nontransfected (Lane 1) or transiently transfected with the AOF2 gene (2). Expected molecular weight ~110kDa.



Fluorescent confocal image of HeLa cell stained with LSD1 antibody. LSD1 immunoreactivity is localized to the nucleus.



IHC analysis of FFPE human hepatocarcinoma stained with the LSD1 antibody

Description

Histone demethylase that demethylates both 'Lys-4' (H3K4me) and 'Lys-9' (H3K9me) of histone H3, thereby acting as a coactivator or a corepressor, depending on the context. Acts by oxidizing the substrate by FAD to generate the corresponding imine that is subsequently hydrolyzed. 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. 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. Also acts as a coactivator of androgen receptor (ANDR)-dependent transcription, by being recruited to ANDR target genes and mediating demethylation of H3K9me, a specific tag for epigenetic transcriptional repression. The presence of PRKCB in ANDR-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. 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. 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. [UniProt]

Explore our LSD1 Antibody / Epigenetic Regulation Marker page for additional validation data and research applications involving chromatin remodeling, histone demethylation, and transcription-associated epigenetic regulation.

Application Notes

Titration of the LSD1 antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

A portion of amino acids 819-852 from the human protein was used as the immunogen for this LSD1 antibody.

Storage

Aliquot the LSD1 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

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