# LSD1 Antibody (F41978)

Catalog No.	Formulation	Size
F41978-0.4ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.4 ml
F41978-0.08ML	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, Mouse
Format	Purified
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.

250 1 2	Western blot analysis of LSD1 antibody and 293 cell lysate either nontransfected (Lane 1) or transiently transfected with the AOF2/LSD1 gene (2). Expected molecular weight ~110kDa.
130	
••	
95	
72	
55 36 (-) (+)	

116 95_ <b>→</b>	Western blot analysis of LSD1 antibody and mouse brain tissue lysate.
50	
37	
25-	



IHC analysis of FFPE human breast carcinoma tissue stained with the LSD1 antibody



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

#### **Description**

LSD1 is a histone demethylase that specifically demethylates 'Lys-4' of histone H3, a specific tag for epigenetic transcriptional activation, thereby acting as a corepressor. LSD1 contains a SWIRM domain, a FAD-binding motif, and an amine oxidase domain. This protein is a component of several histone deacetylase complexes, though it silences genes by functioning as a histone demethylase. It acts by oxidizing the substrate by FAD to generate the corresponding imine that is subsequently hydrolyzed. LSD1 demethylates both mono- and tri-methylted 'Lys-4' of histone H3. This protein may play a role in the repression of neuronal genes. Alone, it is unable to demethylate H3 'Lys-4' on nucleosomes and requires the presence of RCOR1/CoREST to achieve such activity. It may also demethylate 'Lys-9' of histone H3, a specific tag for epigenetic transcriptional repression, thereby leading to derepression of androgen receptor target genes.

## **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 108-142 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.

Ordering:Phone:858.663.9055 | Fax:1.267.821.0800 | Email:info@nsjbio.com

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