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Datasheet for 600-401-CN4

LSD1 Antibody

Overview

Description:	Anti-LSD1 (RABBIT) Antibody - 600-401-CN4
Item No.:	600-401-CN4
Size:	100 µg
Applications:	ELISA, IF, IHC, WB
Reactivity:	Human, Mouse, Rat
Host Species:	Rabbit

Product Details

Background:	Histone modifications mediate changes in gene expression by altering chromatin structure or by serving as a platform to recruit other proteins. LSD1 is a recently discovered amine oxidase that catalyzes the lysine-specific demethylation of histone proteins via an FAD-dependent oxidative reaction. Methylation on histone H3-K9 is thought to play an important role in heterochromatin formation, while methylation on arginine and some lysine residues (such as H3-K4) is associated with active transcription. LSD1 associates with various proteins, including HDAC1/2, CoREST, and BHC80, that act to regulate LSD1 activity in vivo, and in a histone H3-K4-specific methylase complex that is involved in transcriptional regulation. Experiments have shown that CoREST, a SANT domain-containing corepressor acts to enhance LSD1 activity, while BHC80, a PHD domain-containing protein, inhibits CoREST/LSD1 activity in vitro. LSD1-mediated histone demethylation thus may have significant effects on gene expression.
Synonyms:	LSD1 Antibody, AOF2, KDM1, LSD1, BHC110, AOF2, KIAA0601, Lysine-specific histone demethylase 1A, BRAF35-HDAC complex protein BHC110
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	KDM1A
Reactivity:	Human, Mouse, Rat

Immunogen Type:	Conjugated Peptide
Immunogen:	Anti-LSD1 antibody was prepared from whole rabbit serum produced by repeated immunizations with a 16 amino acid synthetic peptide from near the internal region of human LSD1.
Purity/Specificity:	Anti-LSD1 Antibody was affinity purified from monospecific antiserum by immunoaffinity chromatography. Cross reactivity with LSD1 from other sources has not been determined.
Relevant Links:	• UniProtKB - O60341 • GeneID - 23028 • NCBI - NP_001009999

Application Details

Tested Applications:	ELISA, IF, IHC, WB
Application Note:	Anti-LSD1 Antibody has been tested for use in ELISA, Western Blotting, Immunohistochemistry and Immunofluorescence. Specific conditions for reactivity should be optimized by the end user. Expect a band at approximately 93 kDa in Western Blots of specific cell lysates and tissues.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:10,000 - 1:20,000
IF:	20 µg/mL
IHC:	2 µg/mL
WB:	1-2 µg/mL

Formulation

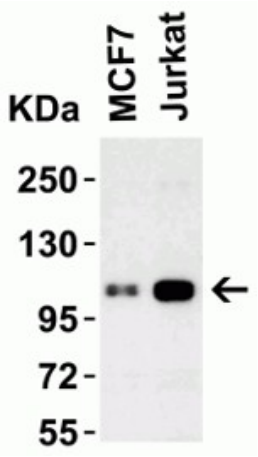
Physical State:	Liquid (sterile filtered)
Concentration:	1 mg/mL by UV absorbance at 280 nm
Buffer:	0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2
Preservative:	0.02% (w/v) Sodium Azide
Stabilizer:	None

Shipping & Handling

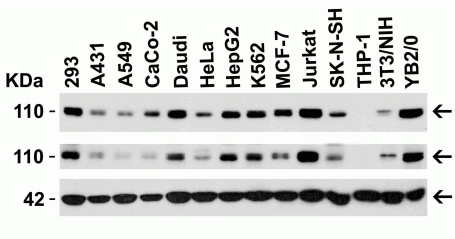
Shipping Condition:	Dry Ice

Storage Condition:	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Expiration:	Expiration date is one (1) year from date of receipt.

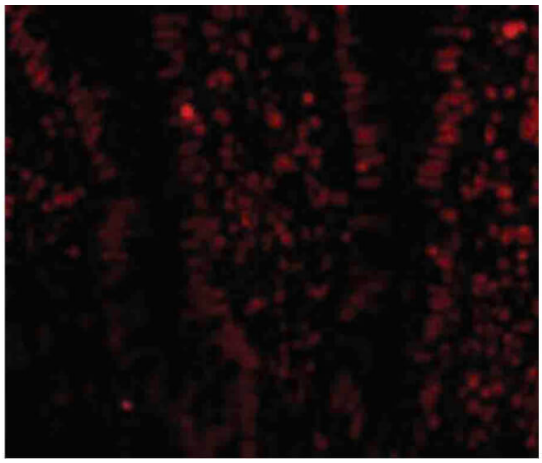
Images



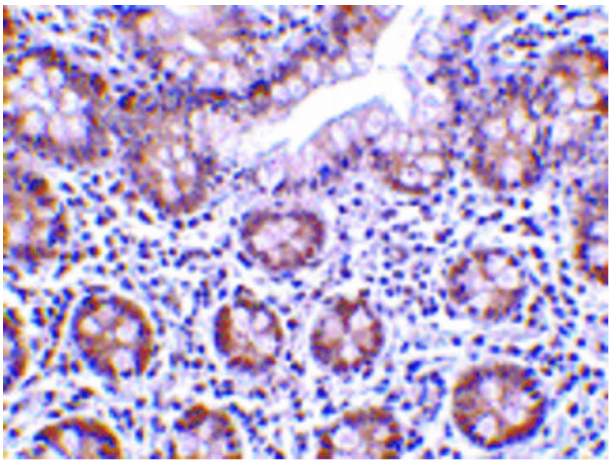
Western Blot
Western Blot Validation. Loading: 15 µg of human cell line lysates per lane. Antibodies: LSD1 (1 µg/mL), 1h incubation at RT in 5% NFDM/TBST. Secondary: Goat anti-rabbit IgG HRP conjugate at 1:10000 dilution.



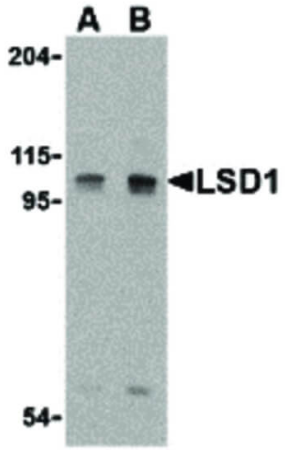
Western Blot
Western Blot of LSD1. Loading: 15 µg of lysates per lane. Antibodies: LSD1 p/n 600-401-CN3 (0.2 µg/mL), LSD1 p/n 600-401-CN4 (1 µg/mL), beta-actin (1 µg/mL), 1h incubation at RT in 5% NFDM/TBST. Secondary: Goat anti-rabbit IgG HRP conjugate at 1:10000 dilution.



Immunofluorescence Microscopy
Immunofluorescence Microscopy of LSD1 antibody. Cell Type: Human small intestine cells. Fixation: 0.5% PFA. Antigen retrieval: not required. Primary antibody: LSD1 antibody at 20 µg/mL for 1 h at RT. Secondary antibody: Fluorescein rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: LSD1 is nuclear. Staining: LSD1 as red fluorescent signal.



Immunohistochemistry
Immunohistochemistry of LSD1 antibody. Tissue: human small intestine tissue. Fixation: formalin fixed paraffin embedded. Antigen retrieval: not required. Primary antibody: LSD1 antibody at 20 µg/mL for 1 h at RT. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: LSD1 is nuclear. Staining: LSD1 is stained with toluidine blue.



Western Blot
Western Blot of LSD1 antibody in P815 cell lysate. Lane A: LSD1 antibody at 1 µg/mL. Lane B: LSD1 antibody at 2 µg/mL. Load: 35 µg per lane. Primary antibody: LSD1 antibody at designated concentrations for overnight at 4°C. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: 93 kDa, 98 kDa for LSD1. Other band(s): LSD1 splice variants and isoforms.

Disclaimer

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