

LSD1 / AOF2 (NT) antibody (pAb)

Rabbit Anti-Human/Mouse/Rat Lysine Specific Histone Demethylase 1

Instruction Manual

Catalog Number	PK-AB718-3761
Synonyms	LSD1 Antibody: Lysine-specific histone demethylase, amine oxidase flavin containing domain protein 2, AOF2
Description	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.
Quantity	100 µg
Source / Host	Rabbit
Immunogen	LSD1 antibody was raised against a 17 amino acid peptide from near the amino terminus of human LSD1.
Purification Method	Affinity chromatography purified via peptide column.
Clone / IgG Subtype	Polyclonal antibody
Species Reactivity	Human, Mouse, Rat
Specificity	
Formulation	Antibody is supplied in PBS containing 0.02% sodium azide.
Reconstitution	During shipment, small volumes of antibody will occasionally become entrapped in the seal of the product vial. For products with volumes of 200 µl or less, we recommend gently tapping the vial on a hard surface or briefly centrifuging the vial in a tabletop centrifuge to dislodge any liquid in the container's cap.
Storage & Stability	Antibody can be stored at 4°C for three months and at -20°C for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
Applications	E, WB I Note: Antibody might be suitable for other applications not tested so far. Optimal concentrations for each application have to be determined individually. Application have to be determined individually.
Images	LSD1 antibody can be used for the detection of LSD1 by Western blot at 1 - 2 µg/mL. Available upon request.
References	Shi Y, Lan F, Matson C, et al. Histone demethylation mediated by the nuclear amine oxidase homolog LSD1. <i>Cell</i> 2004; 119:941-53. Kouzarides T. Histone methylation in transcriptional control. <i>Curr. Opin. Genet. Dev.</i> 2002; 12:198-209. Shi YJ, Matson C, Lan F, et al. Regulation of LSD1 histone demethylase activity by its associated factors. <i>Mol. Cell</i> 2005; 19:857-64. Nakamura T, Mori T, Tada S, et al. ALL-1 is a histone methyltransferase that assembles a supercomplex of proteins involved in transcriptional regulation. <i>Mol. Cell</i> 2002; 10:1119-28.
Images	Available upon request.
Related Products	LSD1 Peptide, Cat. No. PK-AB718-3761P P815 Cell Lysate, Cat. No. PK-AB718-1286

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