

# LSD2 / AOF1 Antibody

Rabbit mAb Catalog # AP91524

## **Specification**

# LSD2 / AOF1 Antibody - Product Information

Application WB, FC, ICC, IP

Primary Accession
Reactivity
Rat

Clonality Monoclonal

**Other Names** 

AOF1; KDM1B; LSD2; Lysine-specific histone demethylase 1B; Lysine-specific histone demethylase

2;

Isotype Rabbit IgG
Host Rabbit
Calculated MW 92098 Da

# LSD2 / AOF1 Antibody - Additional Information

Purification Affinity-chromatography

Immunogen A synthesized peptide derived from human

LSD2 / AOF1

Description Histone demethylase that demethylates

'Lys-4' of histone H3, a specific tag for epigenetic transcriptional activation, thereby acting as a corepressor. Required for de novo DNA methylation of a subset of imprinted genes during oogenesis. Acts by oxidizing the substrate by FAD to generate

the corresponding imine that is

subsequently hydrolyzed.

Storage Condition and Buffer Rabbit IgG in phosphate buffered saline ,

pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid

freeze / thaw cycle.

### LSD2 / AOF1 Antibody - Protein Information

# Name KDM1B (HGNC:21577)

# **Function**

Histone demethylase that demethylates 'Lys-4' of histone H3, a specific tag for epigenetic transcriptional activation, thereby acting as a corepressor. Required for de novo DNA methylation of a subset of imprinted genes during oogenesis. Acts by oxidizing the substrate by FAD to generate the corresponding imine that is subsequently hydrolyzed. Demethylates both mono- and di-methylated 'Lys-4' of histone H3. Has no effect on tri-methylated 'Lys-4', mono-, di- or tri-methylated 'Lys-9', mono-, di- or tri-methylated 'Lys-27', mono-, di- or tri-methylated 'Lys-36' of



histone H3, or on mono-, di- or tri-methylated 'Lys-20' of histone H4. Alone, it is unable to demethylate H3K4me on nucleosomes and requires the presence of GLYR1 to achieve such activity, they form a multifunctional enzyme complex that modifies transcribed chromatin and facilitates Pol II transcription through nucleosomes (PubMed:<a href="http://www.uniprot.org/citations/30970244" target="blank">30970244</a>).

#### **Cellular Location**

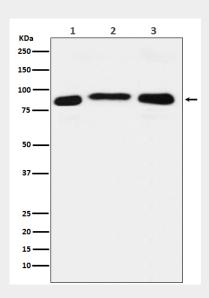
Nucleus. Chromosome. Note=Found in actively RNAPollI- transcribed gene bodies.

## LSD2 / AOF1 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

## LSD2 / AOF1 Antibody - Images



Western blot analysis of LSD2 / AOF1 expression in (1) HeLa cell lysate; (2) RAW264.7 cell lysate; (3) PC12 cell lysate.