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LSD2 / AOF1 Antibody

Rabbit mAb
Catalog # AP91524

Product Information

Application	WB, IF, FC, ICC, IP
Primary Accession	Q8NB78
Reactivity	Rat, Human, Mouse
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

Additional Information

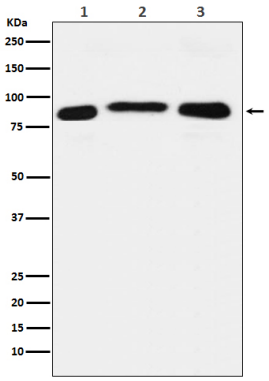
Dilution	WB 1:500~1:2000 ICC/IF 1:50~1:200 IP 1:60 FC 1:50
Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human LSD2 / AOF1
Description	Histone demethylase that demethylates 'Lys-4' of histone H3, a specific tag for epigenetic transcriptional activation, thereby acting 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.

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:30970244).

Cellular Location	Nucleus. Chromosome. Note=Found in actively RNAPolII- transcribed gene bodies.

Images



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