10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

LSD2 / AOF1 Rabbit pAb

Catalog # AP97693

Product Information

Application	IHC-P, IHC-F, IF, E
Primary Accession	Q8NB78
Other Accession	Q8NB78
Reactivity	Mouse
Predicted	Rat, Pig, Human, Rabbit, Dog, Horse, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	92098
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human LSD2 / AOF1
Epitope Specificity	51-150/822
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the flavin monoamine oxidase family. Contains 1 CW-type zinc finger. Contains 1 SWIRM domain.
SUBUNIT	Does not form a complex with RCOR1/CoREST (By similarity).
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	Flavin-dependent histone demethylases, such as KDM1B, regulate histone lysine methylation, an epigenetic mark that regulates gene expression and chromatin function (Karytinos et al., 2009 [PubMed 19407342]).[supplied by OMIM, Oct 2009]

Additional Information

Gene ID	221656
Other Names	AOF1; C6orf193; LSD2; KDM1B_HUMAN; KDM1B; Flavin-containing amine oxidase domain-containing protein 1; Lysine-specific histone demethylase 1B; 1.14.99.66; lysine demethylase 1B; amine oxidase, flavin containing 1; chromosome 6 open reading frame 193; amine oxidase (flavin containing) domain 1; lysine (K)-specific demethylase 1B
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,ICC/IF=1:100-500,IF=1:100-500,ELISA=1:5000-10000
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

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.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.