

AOF1 Antibody
Purified Mouse Monoclonal Antibody
Catalog # AO2105a**Specification****AOF1 Antibody - Product Information**

Application	E, WB, IF, IHC, FC
Primary Accession	Q8NB78
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1
Calculated MW	92kDa KDa

Description

Flavin-dependent histone demethylases, such as KDM1B, regulate histone lysine methylation, an epigenetic mark that regulates gene expression and chromatin function.

Immunogen

Purified recombinant fragment of human AOF1 (AA: 6-129) expressed in E. Coli.

Formulation

Purified antibody in PBS with 0.05% sodium azide

AOF1 Antibody - Additional Information

Gene ID 221656

Other Names

Lysine-specific histone demethylase 1B, 1.-.-., Flavin-containing amine oxidase domain-containing protein 1, Lysine-specific histone demethylase 2, KDM1B, AOF1, C6orf193, LSD2

Dilution

E~~1/10000
WB~~1/500 - 1/2000
IF~~1/200 - 1/1000
IHC~~1/200 - 1/1000
FC~~1/200 - 1/400

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

AOF1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

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:30970244).

Cellular Location

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

AOF1 Antibody - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)