

**AOF1 Antibody (Center) Blocking Peptide**  
**Synthetic peptide**  
**Catalog # BP4744c****Specification**

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**AOF1 Antibody (Center) Blocking Peptide - Product Information**Primary Accession [Q8NB78](#)**AOF1 Antibody (Center) Blocking Peptide - 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

**Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

**AOF1 Antibody (Center) Blocking Peptide - 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 RNAPolIII- transcribed gene bodies.

## **AOF1 Antibody (Center) Blocking Peptide - Protocols**

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

- [Blocking Peptides](#)

## **AOF1 Antibody (Center) Blocking Peptide - Images**

## **AOF1 Antibody (Center) Blocking Peptide - Background**

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

## **AOF1 Antibody (Center) Blocking Peptide - References**

Ciccone, D.N., et al. Nature 461(7262):415-418(2009) Karytinis, A., et al. J. Biol. Chem. 284(26):17775-17782(2009) Mungall, A.J., et al. Nature 425(6960):805-811(2003)