

AOF1 Antibody (Center) Blocking Peptide

Synthetic peptide
Catalog # BP4744c

Specification

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: [30970244](http://www.uniprot.org/citations/30970244)).

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

Ciccione, 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)