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Mouse JMJD3 Antibody (Center) Blocking Peptide

Synthetic peptide
Catalog # BP1022c

Specification

Mouse JMJD3 Antibody (Center) Blocking Peptide - Product Information

Primary Accession Q5NCY0

Mouse JMJD3 Antibody (Center) Blocking Peptide - Additional Information

Gene ID 216850

Other Names
Lysine-specific demethylase 6B, 11411-, JmjC domain-containing protein 3, Jumonji domain-containing protein 3, Kdm6b, Jmjd3, Kiaa0346

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP1022c was selected from the Center region of human Mouse JMJD3. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

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.

Mouse JMJD3 Antibody (Center) Blocking Peptide - Protein Information

Name Kdm6b

Synonyms Jmjd3, Kiaa0346

Function
Histone demethylase that specifically demethylates 'Lys-27' of histone H3, thereby playing a central role in histone code. Demethylates trimethylated and dimethylated H3 'Lys-27'. Plays a central role in regulation of posterior development, by regulating HOX gene expression. Involved in inflammatory response by participating in macrophage differentiation in case of inflammation by regulating gene expression and macrophage differentiation (PubMed:17825402). Plays a demethylase-independent role in chromatin remodeling to regulate T-box family member-dependent gene expression by acting as a link between T- box factors and the SMARCA4-containing SWI/SNF remodeling complex (PubMed:<a

href="http://www.uniprot.org/citations/21095589" target="_blank">21095589).

Cellular Location
Nucleus.

Mouse JMJD3 Antibody (Center) Blocking Peptide - Protocols

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

- Blocking Peptides

Mouse JMJD3 Antibody (Center) Blocking Peptide - Images

Mouse JMJD3 Antibody (Center) Blocking Peptide - Background

Covalent modification of histones plays critical role in regulating chromatin structure and transcription. While most covalent histone modifications are reversible, only recently has it been established that methyl groups are subject to enzymatic removal from histones. A family of novel JmjC domain-containing histone demethylation (JHDM) enzymes have been identified that perform this specific function. Histone demethylation by JHDM proteins requires cofactors Fe(II) and alpha-ketoglutarate. Family members include JHDM1 (demethylating histone 3 at lysine 36), and JHDM2A as well as JMJD2CH3K9 (both of which demethylate histone 3 at lysine 9). Contributions of histone demethylase activity to tumor development, decreases in cell proliferation, and hormone-dependent transcriptional activation have been observed.