

**JMJD3 Antibody (N-term) Blocking Peptide**  
**Synthetic peptide**  
**Catalog # BP1022a****Specification**

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**JMJD3 Antibody (N-term) Blocking Peptide - Product Information**Primary Accession [O15054](#)**JMJD3 Antibody (N-term) Blocking Peptide - Additional Information**

Gene ID 23135

**Other Names**

Lysine-specific demethylase 6B, 11411-, JmjC domain-containing protein 3, Jumonji domain-containing protein 3, Lysine demethylase 6B, KDM6B, JMJD3, KIAA0346

**Target/Specificity**

The synthetic peptide sequence used to generate the antibody [AP1022a](/product/products/AP1022a) was selected from the N-term region of human 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.

**JMJD3 Antibody (N-term) 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 (PubMed: [17825402](http://www.uniprot.org/citations/17825402), PubMed: [17851529](http://www.uniprot.org/citations/17851529), PubMed: [17713478](http://www.uniprot.org/citations/17713478), PubMed: [18003914](http://www.uniprot.org/citations/18003914)). Demethylates trimethylated and dimethylated H3 'Lys-27' (PubMed: [17825402](http://www.uniprot.org/citations/17825402), PubMed: [17851529](http://www.uniprot.org/citations/17851529), PubMed: [17713478](http://www.uniprot.org/citations/17713478)).

PubMed:<a href="http://www.uniprot.org/citations/18003914" target="\_blank">18003914</a>). Plays a central role in regulation of posterior development, by regulating HOX gene expression (PubMed:<a href="http://www.uniprot.org/citations/17851529" target="\_blank">17851529</a>). Involved in inflammatory response by participating in macrophage differentiation in case of inflammation by regulating gene expression and macrophage differentiation (PubMed:<a href="http://www.uniprot.org/citations/17825402" target="\_blank">17825402</a>). 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 (By similarity).

#### **Cellular Location**

Nucleus.

### **JMJD3 Antibody (N-term) Blocking Peptide - Protocols**

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

- [Blocking Peptides](#)

### **JMJD3 Antibody (N-term) Blocking Peptide - Images**

### **JMJD3 Antibody (N-term) 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.