

**JMJD2A Antibody (N-term) Blocking Peptide**  
**Synthetic peptide**  
**Catalog # BP1046a****Specification**

---

**JMJD2A Antibody (N-term) Blocking Peptide - Product Information**

Primary Accession [O75164](#)  
Other Accession [NP\\_055478](#)

**JMJD2A Antibody (N-term) Blocking Peptide - Additional Information**

**Gene ID** 9682

**Other Names**

Lysine-specific demethylase 4A, 11411-, JmjC domain-containing histone demethylation protein 3A, Jumonji domain-containing protein 2A, KDM4A, JHDM3A, JMJD2, JMJD2A, KIAA0677

**Target/Specificity**

The synthetic peptide sequence used to generate the antibody [AP1046a](/products/AP1046a) was selected from the N-term region of human JMJD2A. 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.

**JMJD2A Antibody (N-term) Blocking Peptide - Protein Information**

**Name** KDM4A

**Synonyms** JHDM3A, JMJD2, JMJD2A, KIAA0677

**Function**

Histone demethylase that specifically demethylates 'Lys-9' and 'Lys-36' residues of histone H3, thereby playing a central role in histone code (PubMed: [26741168](http://www.uniprot.org/citations/26741168)). Does not demethylate histone H3 'Lys- 4', H3 'Lys-27' nor H4 'Lys-20'. Demethylates trimethylated H3 'Lys-9' and H3 'Lys-36' residue, while it has no activity on mono- and dimethylated residues. Demethylation of Lys residue generates formaldehyde and succinate. Participates in transcriptional repression of ASCL2 and E2F-responsive promoters via the recruitment of histone deacetylases and NCOR1, respectively.

**Cellular Location**

Nucleus {ECO:0000255|PROSITE-ProRule:PRU00537, ECO:0000269|PubMed:15927959, ECO:0000269|PubMed:16024779}

**Tissue Location**

Ubiquitous..

**JMJD2A Antibody (N-term) Blocking Peptide - Protocols**

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

- [Blocking Peptides](#)

**JMJD2A Antibody (N-term) Blocking Peptide - Images****JMJD2A Antibody (N-term) Blocking Peptide - Background**

JMJD2A is a member of the Jumonji domain 2 (JMJD2) family and a protein containing a JmjN domain, a JmjC domain, a JD2H domain, two TUDOR domains, and two PHD-type zinc fingers. This protein functions as a trimethylation-specific demethylase, converting specific trimethylated histone residues to the dimethylated form, and as a transcriptional repressor.

**JMJD2A Antibody (N-term) Blocking Peptide - References**

Gray S.G., Iglesias A.H.J. Biol. Chem. 280:28507-28518(2005)Zhang D., Yoon H.-G.Mol. Cell. Biol. 25:6404-6414(2005)Whetstine J.R., Nottke A.Cell 125:467-481(2006)