

# JHDM2a Antibody (N-term) Blocking Peptide

Synthetic peptide Catalog # BP1193a

## **Specification**

## JHDM2a Antibody (N-term) Blocking Peptide - Product Information

Primary Accession O9Y4C1
Other Accession NP\_060903

## JHDM2a Antibody (N-term) Blocking Peptide - Additional Information

#### **Gene ID** 55818

### **Other Names**

Lysine-specific demethylase 3A, 11411-, JmjC domain-containing histone demethylation protein 2A, Jumonji domain-containing protein 1A, KDM3A, JHDM2A, JMJD1, JMJD1A, KIAA0742, TSGA

### Target/Specificity

The synthetic peptide sequence used to generate the antibody <a href=/products/AP1193a>AP1193a</a> was selected from the N-term region of human JHDM2a. 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.

# JHDM2a Antibody (N-term) Blocking Peptide - Protein Information

### Name KDM3A

Synonyms JHDM2A, JMJD1, JMJD1A, KIAA0742, TSGA

#### **Function**

Histone demethylase that specifically demethylates 'Lys-9' of histone H3, thereby playing a central role in histone code. Preferentially demethylates mono- and dimethylated H3 'Lys-9' residue, with a preference for dimethylated residue, while it has weak or no activity on trimethylated H3 'Lys-9'. Demethylation of Lys residue generates formaldehyde and succinate. Involved in hormone-dependent transcriptional activation, by participating in recruitment to androgen-receptor target genes, resulting in H3 'Lys-9' demethylation and transcriptional activation. Involved in spermatogenesis by regulating expression of target genes such as PRM1 and TNP1 which are required for packaging and condensation of sperm chromatin. Involved in



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obesity resistance through regulation of metabolic genes such as PPARA and UCP1.

#### **Cellular Location**

Cytoplasm. Nucleus. Note=Nuclear in round spermatids. When spermatids start to elongate, localizes to the cytoplasm where it forms distinct foci which disappear in mature spermatozoa (By similarity).

## JHDM2a Antibody (N-term) Blocking Peptide - Protocols

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

## Blocking Peptides

JHDM2a Antibody (N-term) Blocking Peptide - Images

## JHDM2a Antibody (N-term) Blocking Peptide - Background

JHDM2a is a zinc finger protein that contains a jumonji domain. It is a histone demethylase that specifically demethylates 'Lys-9' of histone H3, thereby playing a central role in histone code. This protein preferentially demethylates mono- and dimethylated H3 'Lys-9' residue, with a preference for dimethylated residue, while it has weak or no activity on trimethylated H3 'Lys-9'. Demethylation of Lys residue generates formaldehyde and succinate. It is involved in hormone-dependent transcriptional activation, by participating in recruitment to androgen-receptor target genes, resulting in H3 'Lys-9' demethylation and transcriptional activation.

## JHDM2a Antibody (N-term) Blocking Peptide - References

Wellmann, S., Biochem. Biophys. Res. Commun. 372 (4), 892-897 (2008) Yamane, K., Cell 125 (3), 483-495 (2006)