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JHDM2a Antibody (N-term) Blocking Peptide

Synthetic peptide
Catalog # BP1193a

Specification

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

Primary Accession	Q9Y4C1
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 AP1193a 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

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)