

**JHDM2a Antibody (N-term)**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP1193a**

**Specification**

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**JHDM2a Antibody (N-term) - Product Information**

Application	IHC-P, WB,E
Primary Accession	<a href="#">O9Y4C1</a>
Other Accession	<a href="#">NP_060903</a>
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	147341
Antigen Region	50-79

**JHDM2a Antibody (N-term) - 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**

This JHDM2a antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 50-79 amino acids from the N-terminal region of human JHDM2a.

**Dilution**

IHC-P~~1:10~50

WB~~1:1000

E~~Use at an assay dependent concentration.

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

JHDM2a Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

**JHDM2a Antibody (N-term) - 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**

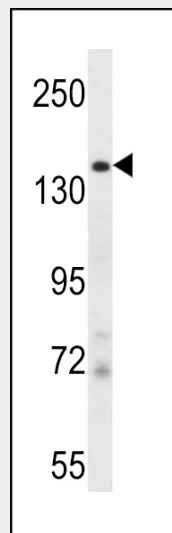
Cytoplasm. Nucleus. Note=Nuclear in round spermatids. When spermatids start to elongate, localizes to the cytoplasm where it forms distinct foci which disappear in mature spermatozoa (By similarity).

#### **JHDM2a Antibody (N-term) - Protocols**

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

#### **JHDM2a Antibody (N-term) - Images**



JHDM2a Antibody (N-term) (Cat.#AP1193a) western blot analysis in mouse testis tissue lysates (35ug/lane). This demonstrates the JHDM2a antibody detected the JHDM2a protein (arrow).



JHDM2a Antibody (N-term) (Cat. #AP1193a) immunohistochemistry analysis in formalin fixed and paraffin embedded human testis tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of JHDM2a Antibody (N-term) for immunohistochemistry. Clinical relevance has not been evaluated.

#### **JHDM2a Antibody (N-term) - 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) - References**

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