

## JMJD1A Antibody

Rabbit Polyclonal Antibody Catalog # ABV10215

### **Specification**

## JMJD1A Antibody - Product Information

Application
Primary Accession
Reactivity
Host
Clonality

Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Calculated MW 147341

## JMJD1A Antibody - Additional Information

**Gene ID 55818** 

Positive Control Application & Usage Mouse 3T3 cell lysate The antibody can be used for Western blot analysis (1-4  $\mu$ g/ml). However, the optimal conditions should be determined individually. Blocking peptide is available separately.

**Other Names** 

Lysine-specific demethylase 3A

Target/Specificity JMJD1A

**Antibody Form** Liquid

**Appearance** Colorless liquid

## **Formulation**

 $100 \mu g$  (0.5 mg/ml) affinity purified rabbit anti-JMJD1A polyclonal antibody in phosphate buffered saline (PBS), pH 7.2, containing 30% glycerol, 0.5% BSA, 5 mM EDTA and 0.01% thimerosal.

WB

09Y4C1

Human, Mouse, Rat

#### Handling

The antibody solution should be gently mixed before use.

Reconstitution & Storage -20 °C

**Background Descriptions** 

### **Precautions**



JMJD1A Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

## JMJD1A Antibody - 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).

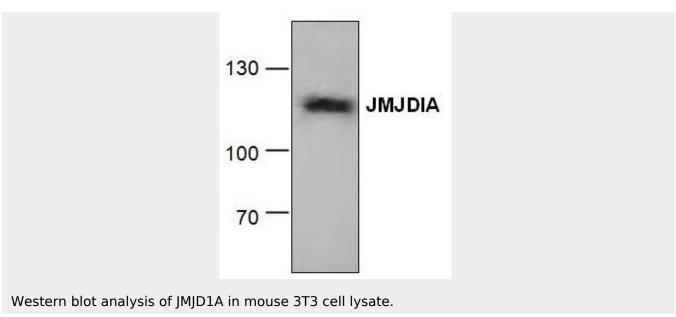
### JMJD1A Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

### **IMJD1A Antibody - Images**





# JMJD1A Antibody - Background

JMJD1A (Jumonji domain containing 1A), belongs to the JHDM2 histone demethylase family. Histone demethylase specifically demethylates 'Lys-9' of histone H3, thus play a central role in histone code. JMJD1A is involved in spermatogenesis by regulating expression of target genes such as PRM1 and TMP1 that are required for proper packaging and condensation of sperm chromatin.