

**JMJD2C Antibody (C-term)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP11444b**

**Specification**

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**JMJD2C Antibody (C-term) - Product Information**

Application	<b>WB, FC,E</b>
Primary Accession	<a href="#">O9H3R0</a>
Other Accession	<a href="#">O8VCD7</a> , <a href="#">NP_001140167.1</a> , <a href="#">NP_001140166.1</a> , <a href="#">NP_001140168.1</a>
Reactivity	<b>Human, Mouse</b>
Host	<b>Rabbit</b>
Clonality	<b>Polyclonal</b>
Isotype	<b>Rabbit IgG</b>
Antigen Region	<b>1023-1056</b>

**JMJD2C Antibody (C-term) - Additional Information**

**Gene ID** 23081

**Other Names**

Lysine-specific demethylase 4C, 11411-, Gene amplified in squamous cell carcinoma 1 protein, GASC-1 protein, JmjC domain-containing histone demethylation protein 3C, Jumonji domain-containing protein 2C, KDM4C, GASC1, JHDM3C, JMJD2C, KIAA0780

**Target/Specificity**

This JMJD2C antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1023-1056 amino acids from the C-terminal region of human JMJD2C.

**Dilution**

WB~~1:2000  
FC~~1:25

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

**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**

JMJD2C Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

**JMJD2C Antibody (C-term) - Protein Information**

**Name** KDM4C

**Synonyms** GASC1, JHDM3C, JMJD2C, KIAA0780

**Function** Histone demethylase that specifically demethylates 'Lys-9' and 'Lys-36' residues of histone H3, thereby playing a central role in histone code. 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.

**Cellular Location**

Nucleus {ECO:0000255|PROSITE-ProRule:PRU00537}.

**Tissue Location**

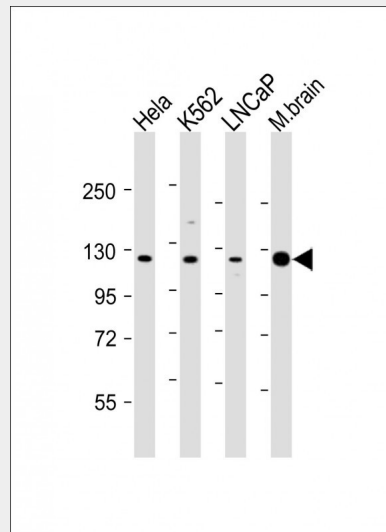
Overexpressed in several esophageal squamous cell carcinomas (ESCs).

**JMJD2C Antibody (C-term) - Protocols**

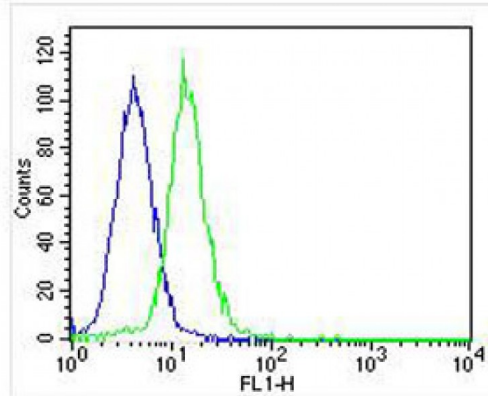
Provided below are standard protocols that you may find useful for product applications.

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

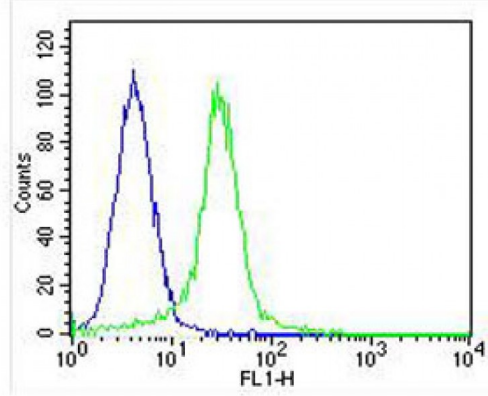
**JMJD2C Antibody (C-term) - Images**



All lanes : Anti-JMJD2C Antibody (C-term) at 1:2000 dilution Lane 1: HeLa whole cell lysates Lane 2: K562 whole cell lysates Lane 3: LNCaP whole cell lysates Lane 4: mouse brain lysates Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 120 kDa Blocking/Dilution buffer: 5% NFD/MBST.



Overlay histogram showing HeLa cells stained with AP11444b (green line). The cells were fixed with 2% paraformaldehyde (10 min) and then permeabilized with 90% methanol for 10 min. The cells were then incubated in 2% bovine serum albumin to block non-specific protein-protein interactions followed by the antibody (AP11444b, 1:25 dilution) for 60 min at 37°C. The secondary antibody used was Goat-Anti-Rabbit IgG, DyLight® 488 Conjugated Highly Cross-Adsorbed(NA168821) at 1/400 dilution for 40 min at 37°C. Isotype control antibody (blue line) was mouse IgG1 (1µg/1x10<sup>6</sup> cells) used under the same conditions. Acquisition of >10, 000 events was performed.



Overlay histogram showing HeLa cells stained with AP11444b (green line). The cells were fixed with 2% paraformaldehyde (10 min) and then permeabilized with 90% methanol for 10 min. The cells were then incubated in 2% bovine serum albumin to block non-specific protein-protein interactions followed by the antibody (AP11444b, 1:25 dilution) for 60 min at 37°C. The secondary antibody used was Goat-Anti-Rabbit IgG, DyLight® 488 Conjugated Highly Cross-Adsorbed(OH191631) at 1/400 dilution for 40 min at 37°C. Isotype control antibody (blue line) was rabbit IgG (1µg/1x10<sup>6</sup> cells) used under the same conditions. Acquisition of >10, 000 events was performed.

**JMJD2C Antibody (C-term) - Background**

This gene is a member of the Jumonji domain 2 (JMJD2) family and encodes a protein with one JmjC domain, one JmjN domain, two PHD-type zinc fingers, and two Tudor domains. This nuclear protein functions as a trimethylation-specific demethylase, converting specific trimethylated histone residues to the dimethylated form. Chromosomal aberrations and increased transcriptional expression of this gene are associated with esophageal squamous cell carcinoma. Alternative splicing results in

multiple transcript variants.

### **JMJD2C Antibody (C-term) - References**

Rose, J.E., et al. Mol. Med. 16 (7-8), 247-253 (2010) :  
Suikki, H.E., et al. Prostate 70(8):889-898(2010)  
Kantojarvi, K., et al. Psychiatr. Genet. 20(3):102-108(2010)  
Liu, G., et al. Oncogene 28(50):4491-4500(2009)  
Canova, C., et al. Cancer Res. 69(7):2956-2965(2009)

### **JMJD2C Antibody (C-term) - Citations**

- [Exosomal circPABPC1 promotes colorectal cancer liver metastases by regulating HMGA2 in the nucleus and BMP4/ADAM19 in the cytoplasm.](#)