

## Product datasheet

# Anti-KDM4D / JMJD2D antibody [EPR25241-24] ab289667

Recombinant RabMAb

6 Images

### Overview

<b>Product name</b>	Anti-KDM4D / JMJD2D antibody [EPR25241-24]
<b>Description</b>	Rabbit monoclonal [EPR25241-24] to KDM4D / JMJD2D
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> Flow Cyt (Intra), ICC/IF, WB, IP <b>Unsuitable for:</b> ChIP or IHC-P
<b>Species reactivity</b>	<b>Reacts with:</b> Human
<b>Immunogen</b>	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
<b>Positive control</b>	WB: Human testis tissue lysate; HeLa whole cell lysate. ICC/IF: HeLa cells. IP: HeLa whole cell lysate.
<b>General notes</b>	This product is a recombinant monoclonal antibody, which offers several advantages including: <ul style="list-style-type: none"> <li>- High batch-to-batch consistency and reproducibility</li> <li>- Improved sensitivity and specificity</li> <li>- Long-term security of supply</li> <li>- Animal-free production</li> </ul> For more information <a href="#">see here</a> . Our RabMAb <sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAb<sup>®</sup> patents</a> .

### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
<b>Storage buffer</b>	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal

Clone number                      EPR25241-24

Isotype                                IgG

## Applications

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**The Abpromise guarantee**            Our **Abpromise guarantee** covers the use of ab289667 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Flow Cyt (Intra)		1/500.
ICC/IF		1/500.
WB		1/1000. Detects a band of approximately 60 kDa (predicted molecular weight: 58 kDa).
IP		1/30.

**Application notes**                      Is unsuitable for ChIP or IHC-P.

## Target

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**Function**                                Histone demethylase that specifically demethylates 'Lys-9' of histone H3, thereby playing a central role in histone code. Does not demethylate histone H3 'Lys-4', H3 'Lys-27', H3 'Lys-36' nor H4 'Lys-20'. Demethylates both di- and trimethylated H3 'Lys-9' residue, while it has no activity on monomethylated residues. Demethylation of Lys residue generates formaldehyde and succinate.

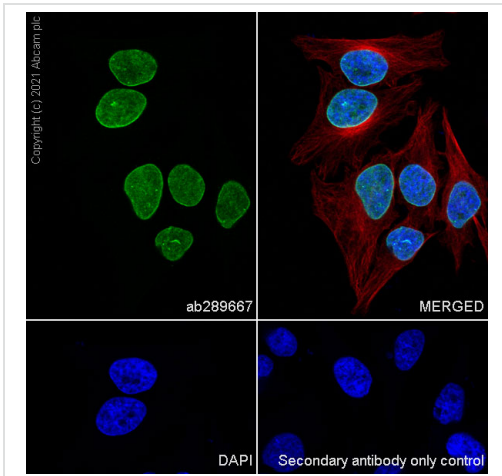
**Sequence similarities**                Belongs to the JHDM3 histone demethylase family.  
Contains 1 JmjC domain.  
Contains 1 JmjN domain.

**Cellular localization**                Nucleus.

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## Images

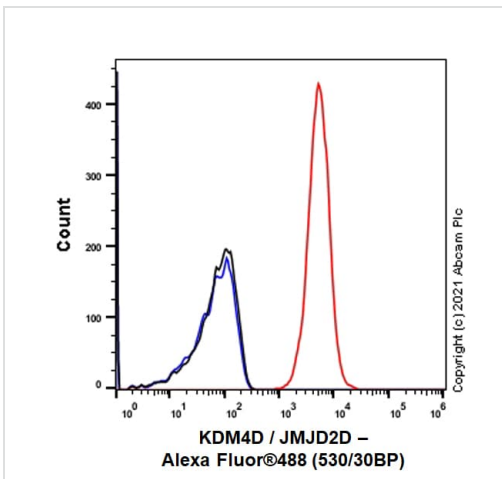
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Immunocytochemistry/ Immunofluorescence - Anti-KDM4D / JMJD2D antibody [EPR25241-24] (ab289667)

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized HeLa cells labeling KDM4D / JMJD2D with ab289667 at 1/500 dilution, followed by **ab150081** Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed secondary antibody at 1/1000 dilution (Green). Confocal image showing nuclear staining in HeLa cell line. The nuclear counterstain is DAPI (Blue). Tubulin is labeled using **ab195889** Anti-alpha Tubulin mouse monoclonal antibody - Microtubule Marker (Alexa Fluor® 594) at 1/200 dilution (Red).

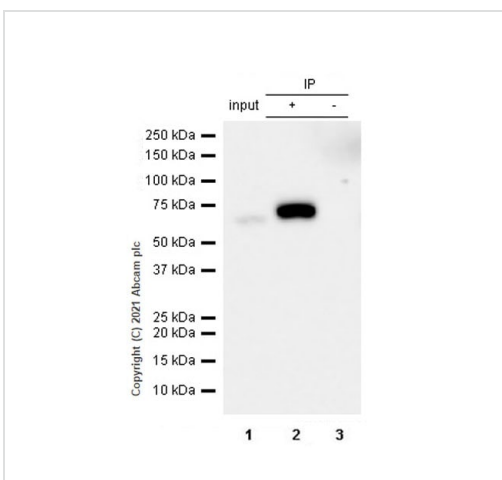
Secondary antibody only control: Used PBS instead of primary antibody, followed by **ab150081** Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed secondary antibody at 1/1000 dilution.



Flow Cytometry (Intracellular) - Anti-KDM4D / JMJD2D antibody [EPR25241-24] (ab289667)

Flow cytometric analysis of 4% paraformaldehyde-fixed, 90% methanol-permeabilized HeLa (human cervix adenocarcinoma epithelial cell line) cells labeling KDM4D / JMJD2D with ab289667 at 1/500 dilution (Red) compared with a Rabbit monoclonal IgG (**ab172730**) isotype control (Black) and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (Blue).

Goat Anti-Rabbit IgG (Alexa Fluor® 488, **ab150081**) at 1/2000 dilution was used as the secondary antibody.



Immunoprecipitation - Anti-KDM4D / JMJD2D antibody [EPR25241-24] (ab289667)

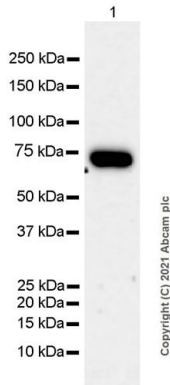
KDM4D / JMJD2D was immunoprecipitated from HeLa (human cervix adenocarcinoma epithelial cell) whole cell lysate with ab289667 at 1/30 dilution (2µg in 0.35mg lysates). Western blot was performed from the immunoprecipitate using ab289667 at 1/1000 dilution. VeriBlot for IP secondary antibody(HRP) (**ab131366**), was used as secondary antibody at 1/5000 dilution.

Lane 1: HeLa whole cell lysate 10 µg (Input).

Lane 2: ab289667 IP in HeLa whole cell lysate.

Lane 3: Rabbit monoclonal IgG (**ab172730**) instead of ab289667 in HeLa whole cell lysate.

**Blocking and dilution buffer and concentration:** 5% NFDm/TBST.



Western blot - Anti-KDM4D / JMJD2D antibody [EPR25241-24] (ab289667)

Anti-KDM4D / JMJD2D antibody [EPR25241-24] (ab289667) at 1/1000 dilution + HeLa (human cervix adenocarcinoma epithelial cell) whole cell lysate at 20 µg

**Secondary**

Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/100000 dilution

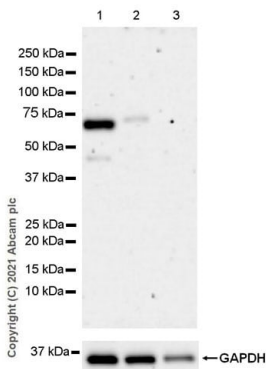
**Predicted band size:** 58 kDa

**Observed band size:** 60 kDa

**Exposure time:** 3 minutes

Lysates were made freshly and used in the WB test immediately to minimize protein degradation.

**Blocking and dilution buffer:** 5% NFDm/TBST.



Western blot - Anti-KDM4D / JMJD2D antibody [EPR25241-24] (ab289667)

**All lanes :** Anti-KDM4D / JMJD2D antibody [EPR25241-24] (ab289667) at 1/1000 dilution

**Lane 1 :** Human testis tissue lysate

**Lane 2 :** Human ovary tissue lysate

**Lane 3 :** Human spleen tissue lysate

Lysates/proteins at 20 µg per lane.

**Secondary**

**All lanes :** Goat Anti-Rabbit IgG (HRP) with minimal cross-reactivity with human IgG (Merck DC03L) at 1/2000 dilution

**Predicted band size:** 58 kDa

**Observed band size:** 60 kDa

**Exposure time:** 3 minutes

5% NFDm/TBST was used as a dilution and blocking buffer.

**Low expression:** ovary, spleen (PMID: 21293030).

## Why choose a recombinant antibody?



**Research with confidence**  
Consistent and reproducible results



**Long-term and scalable supply**  
Recombinant technology



**Success from the first experiment**  
Confirmed specificity



**Ethical standards compliant**  
Animal-free production

Anti-KDM4D / JMJD2D antibody [EPR25241-24]  
(ab289667)

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

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