

# Anti-KDM3A / JHDM2A Antibody [PSH01-77]

## HA721729



<b>Product Type:</b>	Recombinant Rabbit monoclonal IgG, primary antibodies
<b>Species reactivity:</b>	Human, Mouse
<b>Applications:</b>	WB, IHC-P
<b>Molecular Wt:</b>	Predicted band size: 147 kDa
<b>Clone number:</b>	PSH01-77

**Description:** KDM3A is a 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.

**Immunogen:** Recombinant protein within human KDM3A aa 1-400 / 1,321.

**Positive control:** HCT116 cell lysate, Hela cell lysate, MCF7 cell lysate, Ramos cell lysate, Jurkat cell lysate, NIH/3T3 cell lysate, human testis tissue, mouse testis tissue.

**Subcellular location:** Cytoplasm, Nucleus

**Database links:** SwissProt: Q9Y4C1 Human | Q6PCM1 Mouse

**Recommended Dilutions:**

<b>WB</b>	1:1,000
<b>IHC-P</b>	1:200-1:1,000

**Storage Buffer:** PBS (pH7.4), 0.1% BSA, 40% Glycerol. Preservative: 0.05% Sodium Azide.

**Storage Instruction:** Shipped at 4°C. Store at +4°C short term (1-2 weeks). It is recommended to aliquot into single-use upon delivery. Store at -20°C long term.

**Purity:** Protein A affinity purified.

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Orders:0086-571-88062880

Technical:0086-571-89986345

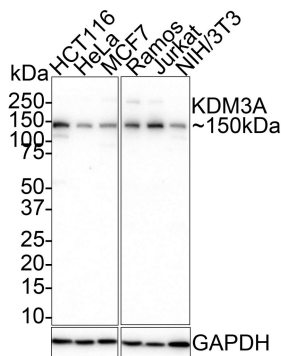
Service mail:support@huabio.cn

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## Images

**Fig1:** Western blot analysis of KDM3A / JHDM2A on different lysates with Rabbit anti-KDM3A / JHDM2A antibody (HA721729) at 1/1,000 dilution.

Lane 1: HCT116 cell lysate  
 Lane 2: Hela cell lysate  
 Lane 3: MCF7 cell lysate  
 Lane 4: Ramos cell lysate  
 Lane 5: Jurkat cell lysate  
 Lane 6: NIH/3T3 cell lysate



Lysates/proteins at 30 µg/Lane.

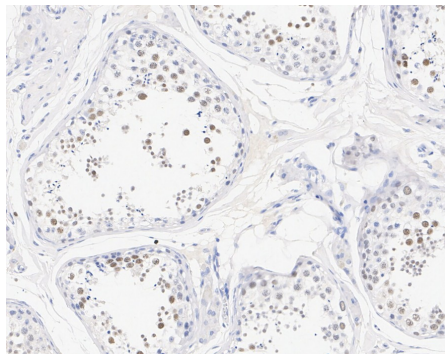
Predicted band size: 147 kDa  
 Observed band size: 150 kDa

Exposure time: 2 minutes 50 seconds;

4-20% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDM/TBST for 1 hour at room temperature. The primary antibody (HA721729) at 1/1,000 dilution was used in 5% NFDM/TBST at 4°C overnight. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1/50,000 dilution was used for 1 hour at room temperature.

**Fig2:** Immunohistochemical analysis of paraffin-embedded human testis tissue with Rabbit anti-KDM3A / JHDM2A antibody (HA721729) at 1/200 dilution.



The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0) (high pressure) for 2 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH<sub>2</sub>O and PBS, and then probed with the primary antibody (HA721729) at 1/200 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

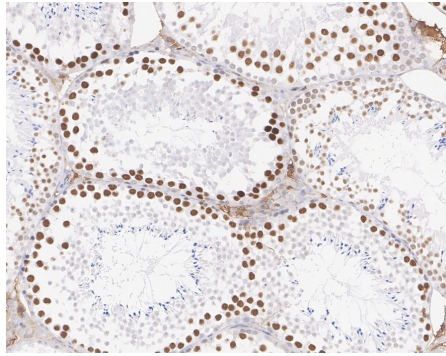
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**Fig3:** Immunohistochemical analysis of paraffin-embedded mouse testis tissue with Rabbit anti-KDM3A / JHDM2A antibody (HA721729) at 1/1,000 dilution.

The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0) (high pressure) for 2 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH<sub>2</sub>O and PBS, and then probed with the primary antibody (HA721729) at 1/1,000 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

**Note:** All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".

### Background References

1. Yoo J, Jeon YH, Cho HY, et al. Advances in Histone Demethylase KDM3A as a Cancer Therapeutic Target. *Cancers (Basel)*. 2020 Apr 28;12(5):1098.
2. Qian X, Li X, Shi Z, et al. KDM3A Senses Oxygen Availability to Regulate PGC-1 $\alpha$ -Mediated Mitochondrial Biogenesis. *Mol Cell*. 2019 Dec 19;76(6):885-895.

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