

Product datasheet

Anti-KDM5A / Jarid1A / RBBP2 antibody [EPR18651] ab194286

KO VALIDATED Recombinant RabMAB

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Overview

Product name	Anti-KDM5A / Jarid1A / RBBP2 antibody [EPR18651]
Description	Rabbit monoclonal [EPR18651] to KDM5A / Jarid1A / RBBP2
Host species	Rabbit
Tested applications	Suitable for: ICC/IF, IP, WB, Flow Cyt (Intra)
Species reactivity	Reacts with: Mouse, Human
Immunogen	Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: HeLa, LCC, HEK-293 and NIH/3T3 whole cell lysates; mouse testis lysate. ICC/IF: HeLa cells. IP: HeLa whole cell lysate. Flow Cyt (intra): NIH/3T3 cell lysate
General notes	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none">- High batch-to-batch consistency and reproducibility- Improved sensitivity and specificity- Long-term security of supply- Animal-free production <p>For more information see here.</p> <p>Our RabMAB[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAB[®] patents.</p>

Properties

Form	Liquid
Storage instructions	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.
Storage buffer	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: 59% PBS, 0.05% BSA, 40% Glycerol (glycerin, glycerine)
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR18651

Isotype

IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab194286 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
ICC/IF		1/2000.
IP		1/100.
WB		1/5000. Detects a band of approximately 192 kDa (predicted molecular weight: 192 kDa).
Flow Cyt (Intra)		1/1500.

Target

Function

Histone demethylase that specifically demethylates 'Lys-4' of histone H3, thereby playing a central role in histone code. Does not demethylate histone H3 'Lys-9', H3 'Lys-27', H3 'Lys-36', H3 'Lys-79' or H4 'Lys-20'. Demethylates trimethylated and dimethylated but not monomethylated H3 'Lys-4'. May stimulate transcription mediated by nuclear receptors. May be involved in transcriptional regulation of Hox proteins during cell differentiation. May participate in transcriptional repression of cytokines such as CXCL12.

Sequence similarities

Belongs to the JARID1 histone demethylase family.
Contains 1 ARID domain.
Contains 1 JmjC domain.
Contains 1 JmjN domain.
Contains 3 PHD-type zinc fingers.

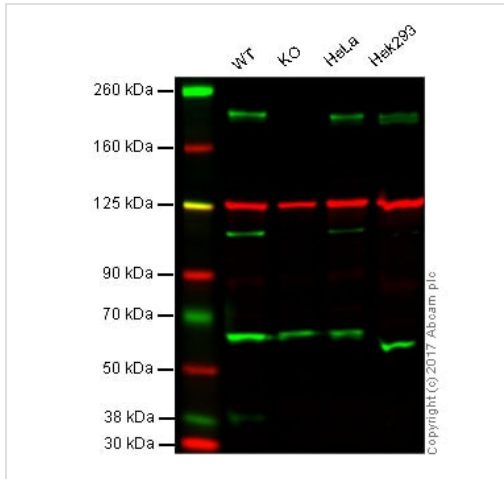
Domain

The GSGFP motif is required for the interaction with SUZ12.

Cellular localization

Nucleus > nucleolus. Occupies promoters of genes involved in RNA metabolism and mitochondrial function.

Images



Western blot - Anti-KDM5A / Jarid1A / RBBP2 antibody [EPR18651] (ab194286)

Lane 1: Wild-type HAP1 whole cell lysate (20 µg)

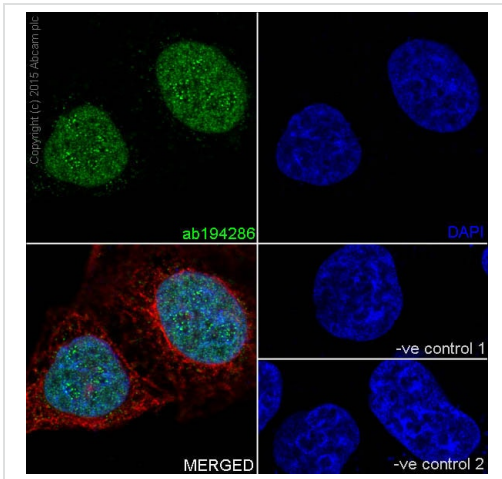
Lane 2: KDM5A knockout HAP1 whole cell lysate (20 µg)

Lane 3: HeLa whole cell lysate (20 µg)

Lane 4: HEK293 whole cell lysate (20 µg)

Lanes 1 - 4: Merged signal (red and green). Green - ab194286 observed at 240 kDa. Red - loading control, **ab18058**, observed at 130 kDa.

ab194286 was shown to specifically recognize KDM5A in wild-type HAP1 cells along with additional cross-reactive bands. No band was observed when KDM5A knockout samples were examined. Wild-type and KDM5A knockout samples were subjected to SDS-PAGE. Ab194286 and **ab18058** (Mouse anti Vinculin loading control) were incubated overnight at 4°C at 1/2500 dilution and 1/10000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed (**ab216773**) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed (**ab216776**) secondary antibodies at 1/20000 dilution for 1 hour at room temperature before imaging.



Immunocytochemistry/ Immunofluorescence - Anti-KDM5A / Jarid1A / RBBP2 antibody [EPR18651] (ab194286)

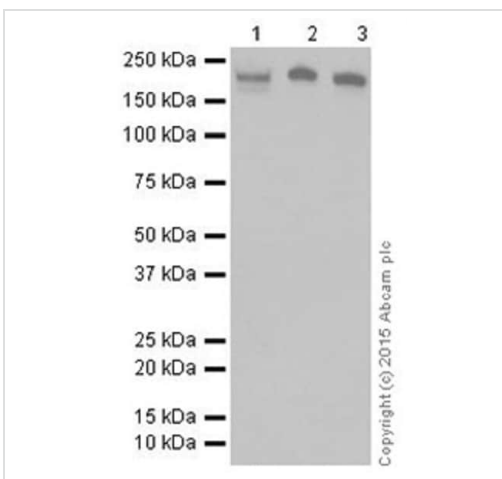
Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized HeLa (Human epithelial cells from cervix adenocarcinoma) cells labeling KDM5A / Jarid1A / RBBP2 with ab194286 at 1/2000 dilution, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (**ab150077**) secondary antibody at 1/1000 dilution (green). Confocal image showing nuclear staining on HeLa cell line. The nuclear counter stain is DAPI (blue).

Tubulin is detected with Anti-alpha Tubulin mouse MAb (**ab7291**) at 1/1000 dilution, followed by Goat Anti-Mouse IgG H&L (Alexa Fluor® 594) (**ab150120**) secondary antibody at 1/1000 dilution (red).

The negative controls are as follows:

-ve control 1: ab194286 at 1/2000 dilution, followed by Goat Anti-Mouse IgG H&L (Alexa Fluor® 594) (**ab150120**) secondary at 1/1000 dilution.

-ve control 2: Anti-alpha Tubulin mouse MAb (**ab7291**) at 1/1000 dilution followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (**ab150077**) secondary at 1/1000 dilution.



Western blot - Anti-KDM5A / Jarid1A / RBBP2 antibody [EPR18651] (ab194286)

All lanes : Anti-KDM5A / Jarid1A / RBBP2 antibody [EPR18651] (ab194286) at 1/5000 dilution

Lane 1 : LLC (Mouse lung carcinoma) whole cell lysate

Lane 2 : Mouse testis lysate

Lane 3 : HEK-293 (Human epithelial cells from embryonic kidney) whole cell lysate

Lysates/proteins at 20 µg per lane.

Secondary

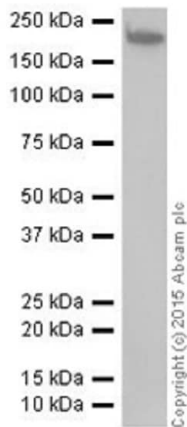
All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/100000 dilution

Predicted band size: 192 kDa

Observed band size: 192 kDa

Exposure time: 30 seconds

Blocking/Dilution buffer: 5% NFDm/TBST.



Western blot - Anti-KDM5A / Jarid1A / RBBP2 antibody [EPR18651] (ab194286)

Anti-KDM5A / Jarid1A / RBBP2 antibody [EPR18651] (ab194286) at 1/5000 dilution + HeLa (Human epithelial cells from cervix adenocarcinoma) whole cell lysate at 20 μ g

Secondary

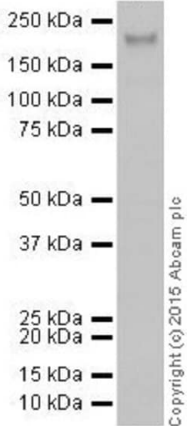
Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/100000 dilution

Predicted band size: 192 kDa

Observed band size: 192 kDa

Exposure time: 10 seconds

Blocking/Dilution buffer: 5% NFDm/TBST.



Western blot - Anti-KDM5A / Jarid1A / RBBP2 antibody [EPR18651] (ab194286)

Anti-KDM5A / Jarid1A / RBBP2 antibody [EPR18651] (ab194286) at 1/1000 dilution + NIH/3T3 (Mouse embryonic fibroblast cells) whole cell lysate at 10 μ g

Secondary

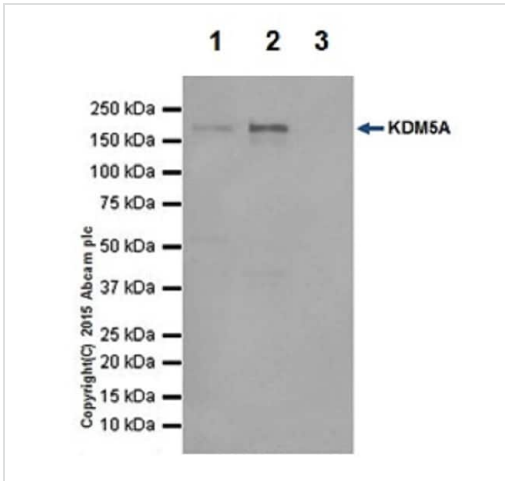
Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/100000 dilution

Predicted band size: 192 kDa

Observed band size: 192 kDa

Exposure time: 10 seconds

Blocking/Dilution buffer: 5% NFDm/TBST.



Immunoprecipitation - Anti-KDM5A / Jarid1A / RBBP2 antibody [EPR18651] (ab194286)

KDM5A / Jarid1A / RBBP2 was immunoprecipitated from 1mg of HeLa (Human epithelial cells from cervix adenocarcinoma) whole cell lysate with ab194286 at 1/100 dilution. Western blot was performed from the immunoprecipitate using ab194286 at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) (**ab131366**), was used for detection at 1/10000 dilution.

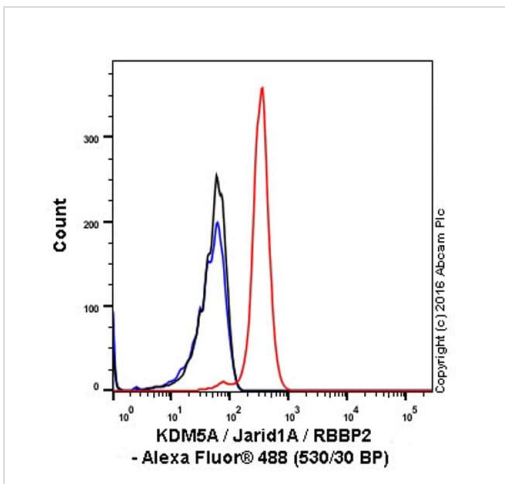
Lane 1: HeLa whole cell lysate 10ug (Input).

Lane 2: ab194286 IP in HeLa whole cell lysate.

Lane 3: Rabbit monoclonal IgG (**ab172730**) instead of ab194286 in HeLa whole cell lysate.

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





Exposure time: 5 seconds.



Flow Cytometry (Intracellular) - Anti-KDM5A / Jarid1A / RBBP2 antibody [EPR18651] (ab194286)

Intracellular Flow Cytometry analysis of NIH/3T3 (mouse embryo) cells labelling KDM5A / Jarid1A / RBBP2 (red) with purified ab194286 at dilution of 1/1500. The secondary antibody used was Alexa Fluor® 488 goat-anti-rabbit IgG (1/2000). Cells were fixed with 4% paraformaldehyde and permeabilised with 90% methanol. Isotype control antibody used was Rabbit Monoclonal IgG (black). The blue line shows cells without incubation with primary antibody and secondary antibody.

Why choose a recombinant antibody?

 <p>Research with confidence Consistent and reproducible results</p>	 <p>Long-term and scalable supply Recombinant technology</p>
 <p>Success from the first experiment Confirmed specificity</p>	 <p>Ethical standards compliant Animal-free production</p>

Anti-KDM5A / Jarid1A / RBBP2 antibody [EPR18651] (ab194286)

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