abcam

Product datasheet

Anti-KDM5A / Jarid1A / RBBP2 antibody [EPR18651] -BSA and Azide free ab251183





8 Images

Overview

Product name Anti-KDM5A / Jarid1A / RBBP2 antibody [EPR18651] - BSA and Azide free

Description Rabbit monoclonal [EPR18651] to KDM5A / Jarid1A / RBBP2 - BSA and Azide free

Host species Rabbit

Tested applications Suitable for: WB, IP, Flow Cyt (Intra), ICC/IF

Species reactivity Reacts with: Mouse, Human

Immunogen Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.

General notes ab251183 is the carrier-free version of ab194286.

> Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.

This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cellbased assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar[®] is a trademark of Fluidigm Canada Inc.

This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free production

For more information see here.

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**® **patents**.

Properties

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Form Liquid

Storage instructions Shipped at 4°C. Store at +4°C. Do Not Freeze.

Storage buffer pH: 7.2

Constituent: PBS

Carrier free Yes

Purity Protein A purified

Clonality Monoclonal
Clone number EPR18651

Isotype IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab251183 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
WB		Use at an assay dependent concentration. Detects a band of approximately 192 kDa (predicted molecular weight: 192 kDa).
IP		Use at an assay dependent concentration.
Flow Cyt (Intra)		Use at an assay dependent concentration.
ICC/IF		Use at an assay dependent concentration.

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 similaritiesBelongs to the JARID1 histone demethylase family.

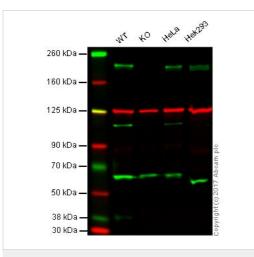
Contains 1 ARID domain.
Contains 1 JmjC domain.
Contains 1 JmjN domain.
Contains 3 PHD-type zinc fingers.

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] - BSA and Azide free (ab251183)

This data was developed using **ab194286**, the same antibody clone in a different buffer formulation.

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 - <u>ab194286</u> observed at 240 kDa. Red - loading control, <u>ab18058</u>, 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.

ab 194286 DAPI

-ve control 1

MERGED

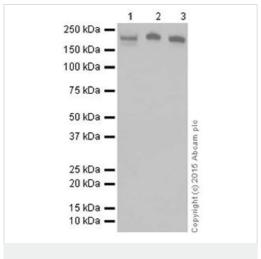
Immunocytochemistry/ Immunofluorescence - Anti-KDM5A / Jarid1A / RBBP2 antibody [EPR18651] -BSA and Azide free (ab251183)

This data was developed using <u>ab194286</u>, the same antibody clone in a different buffer formulation.

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 lgG 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 lgG H&L (Alexa Fluor 594) (ab150120) secondary antibody at 1/1000 dilution (red). The negative controls are as follows:

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

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



Western blot - Anti-KDM5A / Jarid1A / RBBP2 antibody [EPR18651] - BSA and Azide free (ab251183)

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 lgG H&L (HRP) (<u>ab97051</u>) at 1/100000 dilution

Predicted band size: 192 kDa **Observed band size:** 192 kDa

Exposure time: 30 seconds

This data was developed using <u>ab194286</u>, the same antibody clone in a different buffer formulation.

Blocking and dilution buffer: 5% NFDM/TBST.

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

Secondary

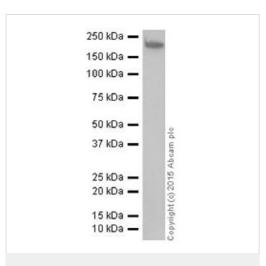
Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/100000 dilution

Predicted band size: 192 kDa **Observed band size:** 192 kDa

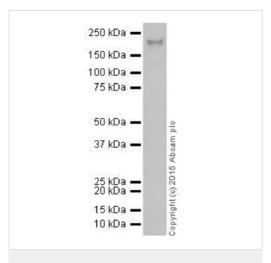
Exposure time: 10 seconds

This data was developed using <u>ab194286</u>, the same antibody clone in a different buffer formulation.

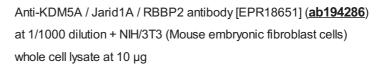
Blocking and dilution buffer: 5% NFDM/TBST.



Western blot - Anti-KDM5A / Jarid1A / RBBP2 antibody [EPR18651] - BSA and Azide free (ab251183)



Western blot - Anti-KDM5A / Jarid1A / RBBP2 antibody [EPR18651] - BSA and Azide free (ab251183)



Secondary

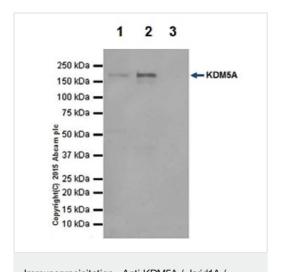
Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/100000 dilution

Predicted band size: 192 kDa **Observed band size:** 192 kDa

Exposure time: 10 seconds

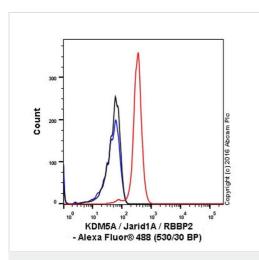
This data was developed using <u>ab194286</u>, the same antibody clone in a different buffer formulation.

Blocking and dilution buffer: 5% NFDM/TBST.



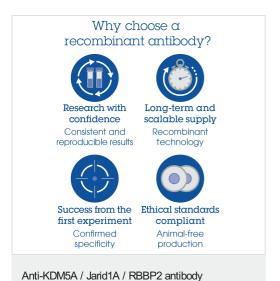
Immunoprecipitation - Anti-KDM5A / Jarid1A / RBBP2 antibody [EPR18651] - BSA and Azide free (ab251183)

This data was developed using <u>ab194286</u>, the same antibody clone in a different buffer formulation.KDM5A / Jarid1A / RBBP2 was immunoprecipitated from 1mg of HeLa (Human epithelial cells from cervix adenocarcinoma) whole cell lysate with <u>ab194286</u> at 1/100 dilution. Western blot was performed from the immunoprecipitate using <u>ab194286</u> at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) (<u>ab131366</u>), was used for detection at 1/10000 dilution. Lane 1: HeLa whole cell lysate 10ug (Input). Lane 2: <u>ab194286</u> IP in HeLa whole cell lysate. Lane 3: Rabbit monoclonal IgG (<u>ab172730</u>) instead of <u>ab194286</u> 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] - BSA and Azide free (ab251183) This data was developed using <u>ab194286</u>, the same antibody clone in a different buffer formulation.

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.



[EPR18651] - BSA and Azide free (ab251183)

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