abcam

ab272695

Anti-KDM3A / JHDM2A antibody [EPR18875-106] - BSA and Azide free

Recombinant | RabMAb | KO Validated

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Carrier free	Yes
Clone number	EPR18875-106
Purification technique	Affinity purification Protein A
Concentration	0.998 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IP

Tested

Species	Human
Dilution info	-

Notes	-

Expected

Species	Mouse, Rat
Dilution info	Use at an assay dependent concentration.
Notes	-

ChIP

Not recommended

Species	Human, Mouse, Rat
Dilution info	-
Notes	-

WB

Tested

Species	Mouse, Rat, Human
Dilution info	-
Notes	-

IHC-P

Tested

Species	Rat, Mouse, Human
Dilution info	-
Notes	-

ICC/IF

Tested

Species	Human
Dilution info	-

Notes	-

Expected

Species	Mouse, Rat
Dilution info	Use at an assay dependent concentration.
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	-
Notes	-

Expected

Species	Mouse, Rat
Dilution info	Use at an assay dependent concentration.
Notes	-

Target data

See full target information KDM3A

Function 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.

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	+4°C
Storage information	Do Not Freeze

Notes

ab272695 is the carrier-free version of ab243641.

Patented technology

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

What are the advantages of a recombinant monoclonal antibody?

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 batch production

For more information, read more on recombinant antibodies.

Conjugation ready

Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based 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.

Compatibility

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.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

We do not recommend this combination. It is not covered by our product promise.

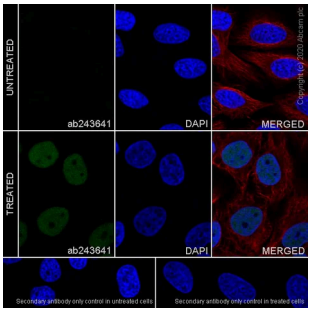
We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

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7 product images

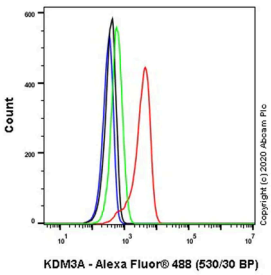


Immunocytochemistry/ Immunofluorescence - Anti-KDM3A / JHDM2A antibody [EPR18875-106] - BSA and Azide free (ab272695)

KDM3A / JHDM2A Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-KDM3A / JHDM2A antibody

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized HeLa cells labelling KDM3A / JHDM2A with ab243641 at 1/100 dilution, followed by ab150077 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) antibody at 1/1000 dilution (Green). Confocal image showing nuclear staining in HeLa cell line treatment with DFO (1mM) for 24h. ab195889 Anti-alpha Tubulin antibody (Alexa Fluor® 594) was used to counterstain tubulin at 1/1000 dilution (Red). The Nuclear counterstain was DAPI (Blue).
Secondary antibody only control: Secondary antibody is ab150077 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) at 1/1000 dilution.

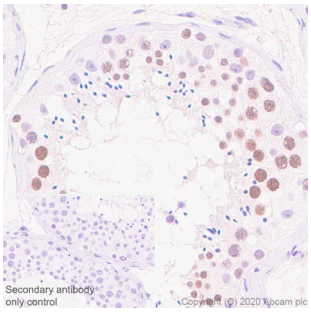
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab243641).



Flow Cytometry (Intracellular) - Anti-KDM3A / JHDM2A antibody [EPR18875-106] - BSA and Azide free (ab272695)

KDM3A / JHDM2A Flow Cytometry (Intracellular) staining using rabbit Anti-KDM3A / JHDM2A antibody

Intracellular flow cytometric analysis of 4% paraformaldehyde fixed, 90% methanol permeabilized HeLa cells treated with 1mM DFO for 24h (Red) / Untreated control (Green) labelling KDM3A / JHDM2A with ab243641 at 1/500 dilution (0.1ug) (Red) / (Green) compared with a Rabbit monoclonal IgG (ab172730) (Black) isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (Blue). A Goat anti rabbit IgG (Alexa Fluor®488, ab150077) at 1/2000 dilution was used as the secondary antibody.
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab243641).

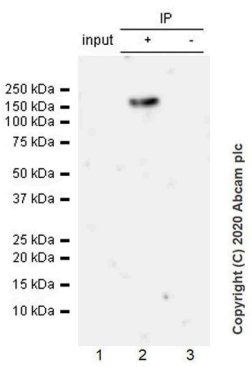


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-KDM3A / JHDM2A antibody [EPR18875-106] - BSA and Azide free (ab272695)

Immunohistochemical analysis of paraffin-embedded Human testis tissue labeling KDM3A / JHDM2A with ab243641 at 1/500 dilution followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101). Nuclear staining on human testis (PMID: 25071150). The section was incubated with ab243641 for 30 mins at room temperature.T he immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin. Secondary antibody only control: Secondary antibody is a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101).

Heat mediated antigen retrieval with Citrate buffer (pH 6.0, epitope retrieval solution 1) for 20 mins.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab243641).



Immunoprecipitation - Anti-KDM3A / JHDM2A antibody [EPR18875-106] - BSA and Azide free (ab272695)

KDM3A / JHDM2A was immunoprecipitated from 0.35 mg Ramos (human Burkitt's lymphoma B lymphocyte), whole cell lysate with ab243641 at 1/30 dilution (2ug in 0.35mg lysates). Western blot was performed on the immunoprecipitate using ab243641 at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP)(ab131366) was used at 1/5000 dilution.
Lane 1: Ramos (human Burkitt's lymphoma B lymphocyte), whole cell lysate 10 ug

Lane 2: ab243641 IP in Ramos whole cell lysate

Lane 3: Rabbit monoclonal IgG (ab172730) instead of ab243641 in Ramos whole cell lysate

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

Exposure time: 3 minutes.

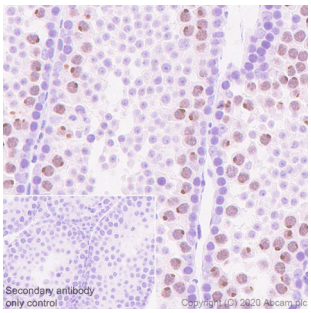
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab243641).

All lanes:

Immunoprecipitation - Anti-KDM3A / JHDM2A antibody [EPR18875-106] (ab243641)

Predicted band size: 147 kDa

Observed band size: 147 kDa



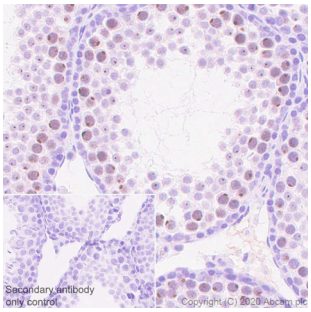
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-KDM3A / JHDM2A antibody [EPR18875-106] - BSA and Azide free (ab272695)

KDM3A / JHDM2A Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-KDM3A / JHDM2A antibody

Immunohistochemical analysis of paraffin-embedded Mouse testis tissue labeling KDM3A / JHDM2A with ab243641 at 1/500 dilution followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101). Positive staining on mouse testis (PMID: 17943087). The section was incubated with ab243641 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin. Secondary antibody only control: Secondary antibody is a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101).

Heat mediated antigen retrieval with Citrate buffer (pH 6.0, epitope retrieval solution 1) for 20 mins.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab243641).



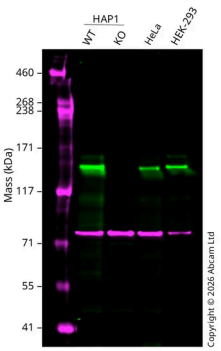
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-KDM3A / JHDM2A antibody [EPR18875-106] - BSA and Azide free (ab272695)

KDM3A / JHDM2A Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-KDM3A / JHDM2A antibody

Immunohistochemical analysis of paraffin-embedded Rat testis tissue labeling KDM3A / JHDM2A with ab243641 at 1/500 dilution followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101). Positive staining on rat testis (PMID: 17943087). The section was incubated with ab243641 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin.
Secondary antibody only control: Secondary antibody is a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101).

Heat mediated antigen retrieval with Citrate buffer (pH 6.0, epitope retrieval solution 1) for 20 mins.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab243641).



Western blot - Anti-KDM3A / JHDM2A antibody [EPR18875-106] - BSA and Azide free (ab272695)

KDM3A / JHDM2A Western blot staining using rabbit Anti-KDM3A / JHDM2A antibody

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab243641).

Western blot: Anti-KDM3A / JHDM2A antibody [EPR18875-106] ab243641 staining at 1/1000 dilution, shown in green; Mouse anti-CANX ab238078 loading control staining at 1/20000 dilution, shown in magenta. A band was observed at 147 kDa in Wild-type HAP1 cell lysates with no signal observed at this size in KDM3A knockout HAP1 cell line. To generate this image, samples were run on an SDS-PAGE gel then transferred onto a nitrocellulose membrane. Membranes were blocked in 3% Milk in TBS-0.1 % Tween® 20 (TBS-T) before incubation with primary antibodies overnight at 4 °C. Blots were washed four times in TBS-T, incubated with secondary antibodies for 1 h at room temperature, washed again four times then imaged. Secondary antibodies used were Goat anti-Rabbit 800CW and Goat anti-Mouse 680RD at 1/20,000 dilution.
All lanes:
Western blot - Anti-KDM3A / JHDM2A antibody [EPR18875-106] (ab243641) at 1/1000 dilution

Lane 1:
Wild-type HAP1 cell lysates at 20 µg

Lane 2:
KDM3A knockout HAP1 cell lysates at 20 µg

Lane 3:
HeLa cell lysates at 20 µg

Lane 4:
HEK-293 cell lysates at 20 µg

Secondary

All lanes:
Goat anti-Rabbit 800CW & Goat anti-Mouse 680RD at 1/20000 dilution

Performed under reducing conditions.

Predicted band size: 147 kDa

Observed band size: 147 kDa

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.