abcam

ab275402

Anti-KDM6A / UTX antibody [EPR23203-211] - BSA and Azide free

Recombinant | RabMAb | KO Validated

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Carrier free	Yes
Clone number	EPR23203-211
Purification technique	Affinity purification Protein A
Concentration	1.029 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

ICC/IF

Not recommended

Species	Mouse, Human, Rat
Dilution info	-

Notes	-

IP

Not recommended

Species	Mouse, Human, Rat
Dilution info	-
Notes	-

ChIP

Not recommended

Species	Human, Mouse, Rat
Dilution info	-
Notes	-

WB

Tested

Species	Human, Mouse
Dilution info	-
Notes	-

Not recommended

Species	Rat
Dilution info	-
Notes	-

IHC-P

Not recommended

Species	Mouse, Human, Rat
Dilution info	-

Notes	-

Flow Cyt (Intra)

Tested

Species	Mouse, Human
Dilution info	-
Notes	-

Not recommended

Species	Rat
Dilution info	-
Notes	-

Target data

See full target information KDM6A

Function	Histone demethylase that specifically demethylates 'Lys-27' of histone H3, thereby playing a central role in histone code (PubMed:17713478, PubMed:17761849, PubMed:17851529). Demethylates trimethylated and dimethylated but not monomethylated H3 'Lys-27' (PubMed:17713478, PubMed:17761849, PubMed:17851529). Plays a central role in regulation of posterior development, by regulating HOX gene expression (PubMed:17851529). Demethylation of 'Lys-27' of histone H3 is concomitant with methylation of 'Lys-4' of histone H3, and regulates the recruitment of the PRC1 complex and monoubiquitination of histone H2A (PubMed:17761849). Plays a demethylase-independent role in chromatin remodeling to regulate T-box family member-dependent gene expression (By similarity).

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	+4°C

Notes

ab275402 is the carrier-free version of ab253183.

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

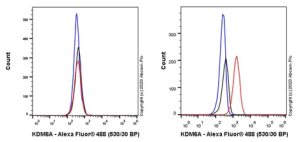
We do not recommend this combination. It is not covered by our product promise.

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.

5 product images



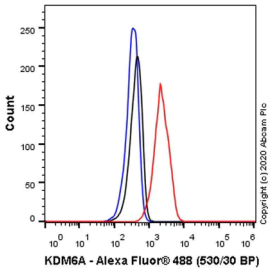
Flow Cytometry (Intracellular) - Anti-KDM6A / UTX antibody [EPR23203-211] - BSA and Azide free (ab275402)

KDM6A / UTX Flow Cytometry (Intracellular) staining using rabbit Anti-KDM6A / UTX antibody

This data was developed using ab253183, the same antibody clone in a different buffer formulation.
Intracellular flow cytometric analysis of 4% paraformaldehyde fixed, 90% methanol permeabilized THP-1 (Human monocytic leukemia monocyte), (Left panel) / HAP1 (Human chronic myelogenous leukemia near-haploid cell line), (Right panel) cells labelling KDM6A / UTX with ab253183 at 1/50 dilution (1µg) (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).

A Goat anti rabbit IgG (Alexa Fluor®488, ab150077) at 1/2000 dilution was used as the secondary antibody.

Negative control:THP-1.

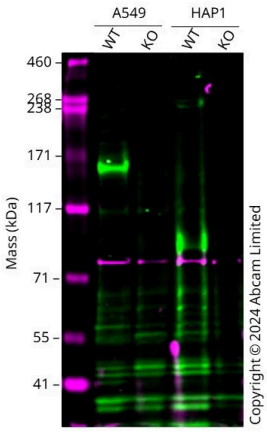


Flow Cytometry (Intracellular) - Anti-KDM6A / UTX antibody [EPR23203-211] - BSA and Azide free (ab275402)

KDM6A / UTX Flow Cytometry (Intracellular) staining using rabbit Anti-KDM6A / UTX antibody

This data was developed using ab253183, the same antibody clone in a different buffer formulation.
Intracellular flow cytometric analysis of 4% paraformaldehyde fixed, 90% methanol permeabilized F9 (Mouse embryonal carcinoma epithelial cell) cells labelling KDM6A / UTX with ab253183 at 1/500 dilution (0.1µg) (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).

A Goat anti rabbit IgG (Alexa Fluor®488, ab150077) at 1/2000 dilution was used as the secondary antibody.



Western blot - Anti-KDM6A / UTX antibody [EPR23203-211] - BSA and Azide free (ab275402)

KDM6A / UTX Western blot staining using rabbit Anti-KDM6A / UTX antibody

This data was developed using the same antibody clone in a different buffer formulation (ab253183).

Western blot: Anti-KDM6A antibody [EPR23203-211] (ab253183) staining at 1/1000 dilution, shown in green; Mouse anti-CANX [CANX/1543] (ab238078) loading control staining at 1/20000 dilution, shown in magenta. In Western blot, ab253183 was shown to bind specifically to KDM6A. A band was observed at 150-160 kDa in wild-type A549 cell lysates with no signal observed at this size in KDM6A knockout cell line. To generate this image, wild-type and KDM6A knockout A549 cell lysates were analysed. First, 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 IgG H&L 800CW and Goat anti-Mouse IgG H&L 680RD at 1/20000 dilution.

All lanes:
Western blot - Anti-KDM6A / UTX antibody [EPR23203-211] (ab253183) at 1/1000 dilution

Lane 1:
Wild-type A549 cell lysate at 7 µg

Lane 2:
KDM6A knockout A549 cell lysate at 7 µg

Lane 3:
Wild-type HAP1 cell lysate at 7 µg

Lane 4:
KDM6A knockout HAP1 cell lysate at 7 µg

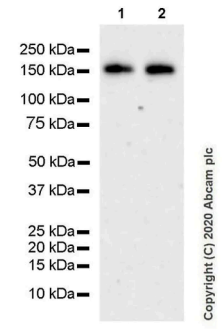
Secondary

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

Performed under reducing conditions.

Predicted band size: 154 kDa

Observed band size: 150 kDa, 160 kDa



Western blot - Anti-KDM6A / UTX antibody [EPR23203-211] - BSA and Azide free (ab275402)

KDM6A / UTX Western blot staining using rabbit Anti-KDM6A / UTX antibody

Blocking and diluting buffer and concentration: 5% NFDM/TBST.
Fresh lysates were used in this WB.

All lanes:
Western blot - Anti-KDM6A / UTX antibody [EPR23203-211] (ab253183) at 1/1000 dilution

Lane 1:
HEK-293T (human embryonic kidney epithelial cell), whole cell lysate at 20 µg

Lane 2:
NIH/3T3 (mouse embryonic fibroblast), whole cell lysate at 20 µg

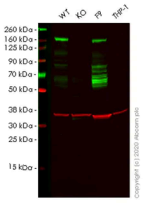
Secondary

All lanes:
Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ab97051) at 1/100000 dilution

Predicted band size: 154 kDa

Observed band size: 160 kDa

Exposure time: 3min



Western blot - Anti-KDM6A / UTX antibody [EPR23203-211] - BSA and Azide free (ab275402)

This data was developed using ab253183, the same antibody clone in a different buffer formulation.
Blocking and diluting buffer and concentration: Intercept® (TBS) Blocking Buffer diluted with an equal volume of 0.1% TBS.

Lanes 1-4: Merged signal (red and green). Green - ab253183 observed at 160 kDa. Red - loading control ab8245 (Mouse monoclonal [6C5] to GAPDH) observed at 36 kDa.

ab253183 Anti-KDM6A antibody [EPR23203-211] was shown to react with KDM6A in HAP1 wild-type cells in Western blot. Loss of signal was observed when KDM6A knockout sample was used. Wild-type and KDM6A knockout samples were subjected to SDS-PAGE.

ab253183 and Anti-GAPDH antibody [6C5] - Loading Control (ab8245) were incubated at room temperature for 2. 5 hours at 1/1000 dilution and 1 in 20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed (ab216773) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed (ab216776) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.

Negative control: THP-1 (PMID: 19330029).

The expression profile and molecular weight observed is consistent with what has been described in the literature (PMID: 19330029).

The the bands between 50kDa and 150kDa are caused by degradation based on the result of fresh lysates.

All lanes:
Western blot - Anti-KDM6A / UTX antibody [EPR23203-211] (ab253183) at 1/1000 dilution

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

Lane 2:
KDM6A knockout HAP1 whole cell lysate at 20 µg

Lane 3:
F9 (mouse embryonal carcinoma epithelial cell), whole cell lysate at 20 µg

Lane 4:
THP-1 (human monocytic leukemia monocyte), whole cell lysate at 20 µg

Secondary

All lanes:

Goat Anti-Rabbit IgG H&L (IRDye® 800CW) (ab216773) and Goat Anti-Mouse IgG H&L (IRDye® 680RD) (ab216776) at 1/20000 dilution

Predicted band size: 154 kDa

Observed band size: 160 kDa

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