


Product datasheet

Anti-KDM6A / UTX antibody ab36938

KO VALIDATED

★★★★☆ 4 Abreviews 33 References 5 Images

Overview

Product name	Anti-KDM6A / UTX antibody
Description	Rabbit polyclonal to KDM6A / UTX
Host species	Rabbit
Specificity	Replenishment batches of our polyclonal antibody, ab36938 are tested in WB. Previous batches were additionally validated in ChIP and ICC/IF. These applications are still expected to work and are covered by our Abpromise guarantee. You may also be interested in our alternative recombinant antibody, ab253183 .
Tested applications	Suitable for: ChIP, WB, ICC/IF
Species reactivity	Reacts with: Mouse, Rat, Human Predicted to work with: Xenopus laevis 
Immunogen	Synthetic peptide corresponding to Human KDM6A/ UTX aa 400-500 conjugated to keyhole limpet haemocyanin. (Peptide available as ab36937)
Positive control	WB: HeLa and HAP1 cell lysates; Whole NIH3T3 cell lysate (no shRNA and Control shRNA) ICC: MCF7 cells.
General notes	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As</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 or -80°C. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.40

Preservative: 0.02% Sodium azide
Constituent: PBS

Batches of this product that have a concentration < 1mg/ml may have BSA added as a stabilising agent. If you would like information about the formulation of a specific lot, please contact our scientific support team who will be happy to help.

Purity Immunogen affinity purified
Clonality Polyclonal
Isotype IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab36938 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
ChIP		Use at an assay dependent concentration. PubMed: 26306033
WB	★ ★ ★ ★ ☆ (3)	Use a concentration of 1 µg/ml. Predicted molecular weight: 154 kDa.
ICC/IF		Use a concentration of 1 µg/ml.

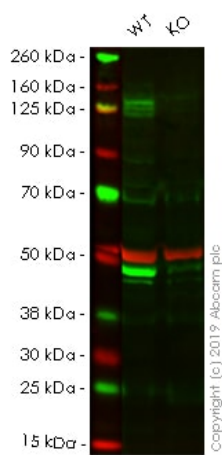
Target

Function Histone demethylase that specifically demethylates 'Lys-27' of histone H3, thereby playing a central role in histone code. Demethylates trimethylated and dimethylated but not monomethylated H3 'Lys-27'. Plays a central role in regulation of posterior development, by regulating HOX gene expression. 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.

Sequence similarities Belongs to the UTX family.
Contains 1 JmjC domain.
Contains 8 TPR repeats.

Cellular localization Nucleus.

Images



Western blot - Anti-KDM6A / UTX antibody (ab36938)

All lanes : Anti-KDM6A / UTX antibody (ab36938) at 1/1000 dilution

Lane 1 : Wild-type HeLa cell lysate

Lane 2 : KDM6A knockout HeLa cell lysate

Lysates/proteins at 20 µg per lane.

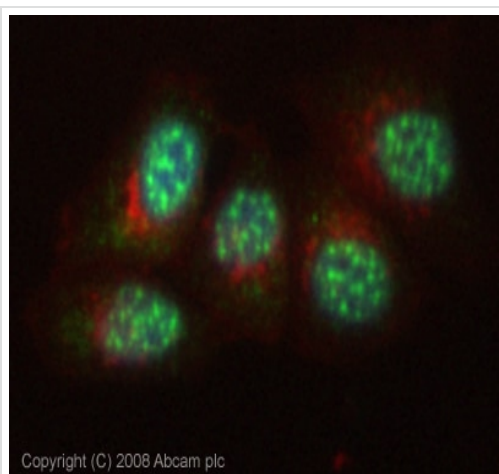
Performed under reducing conditions.

Predicted band size: 154 kDa

Observed band size: 154 -157 kDa

Lanes 1- 2: Merged signal (red and green). Green - ab36938 observed at 154 -157 kDa. Red - Anti-GAPDH antibody [6C5] - Loading Control ([ab8245](#)) observed at 37 kDa.

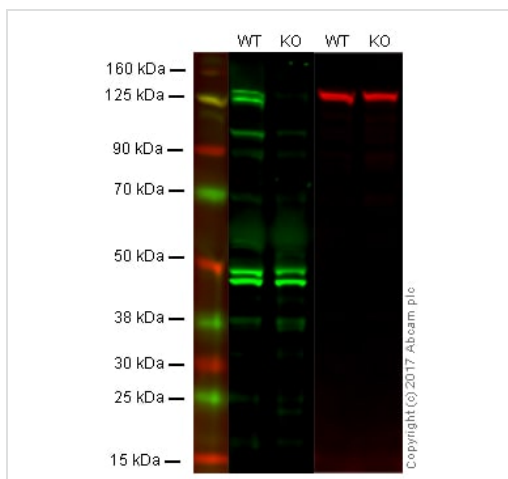
ab36938 was shown to react with KDM6A / UTX in wild-type HeLa cells in western blot. Loss of signal was observed when knockout cell line [ab265110](#) (knockout cell lysate [ab257214](#)) was used. Wild-type HeLa and KDM6A knockout HeLa cell lysates were subjected to SDS-PAGE. Membrane was blocked for 1 hour at room temperature in 0.1% TBST with 3% non-fat dried milk. ab36938 and Anti-GAPDH antibody [6C5] - Loading Control ([ab8245](#)) overnight at 4°C at a 1 in 1000 Dilution and a 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.



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Immunocytochemistry/ Immunofluorescence - Anti-KDM6A / UTX antibody (ab36938)

ICC/IF image of ab36938 stained MCF7 cells. The cells were 4% PFA fixed (10 min), permeabilised in 0.1% PBS-Tween (20 min) and incubated with the antibody (ab36938, 1 µg/ml) for 1h at room temperature. 1%BSA / 10% normal goat serum / 0.3M glycine was used to block non-specific protein-protein interactions. The secondary antibody (green) was Alexa Fluor® 488 goat anti-rabbit IgG (H+L) used at a 1/1000 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red). DAPI was used to stain the cell nuclei (blue). This antibody also gave a positive IF result in HeLa cells fixed in 4% PFA at 1 µg/ml and HeLa and MCF7 100% methanol fixed cells at 1 µg/ml. However, this Fast-Track antibody is not yet fully characterised. This image represents inconclusive preliminary data.



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Western blot - Anti-KDM6A / UTX antibody (ab36938)

Lanes 1-2 : Anti-KDM6A / UTX antibody (ab36938) at 0.7 µg/ml

Lanes 3-4 : Anti-Vinculin antibody [SPM227] (**ab18058**) at 1/20000 dilution

Lanes 1 & 3 : Wild-type HAP1 whole cell lysate

Lanes 2 & 4 : KDM6A knockout HAP1 whole cell lysate

Lysates/proteins at 20 µg per lane.

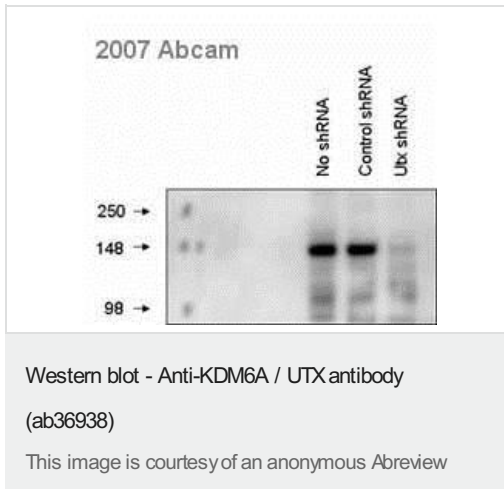
Predicted band size: 154 kDa

Lanes 1 - 2: Green - ab36938 observed at 154 kDa.

Lanes 3 - 4: Red - loading control, **ab18058**, observed at 130 kDa.

ab36938 was shown to recognize KDM6A in wild-type HAP1 cells as signal was lost at the expected MW in KDM6A knockout cells. Additional cross-reactive bands were observed in the wild-type and knockout cells. Wild-type and KDM6A knockout samples were subjected to SDS-PAGE. Ab36938 and **ab18058** (Mouse anti-Vinculin loading control) were incubated overnight at 4°C at 0.7 µg/ml and 1/20000 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.



All lanes : Anti-KDM6A / UTX antibody (ab36938) at 1 µg/ml

Lane 1 : Whole NIH3T3 cell lysate (no shRNA)

Lane 2 : Whole NIH3T3 cell lysate (Control shRNA)

Lane 3 : Whole NIH3T3 cell lysate (Utx shRNA)

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : HRP-conjugated Goat anti-Rabbit polyclonal

Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 154 kDa

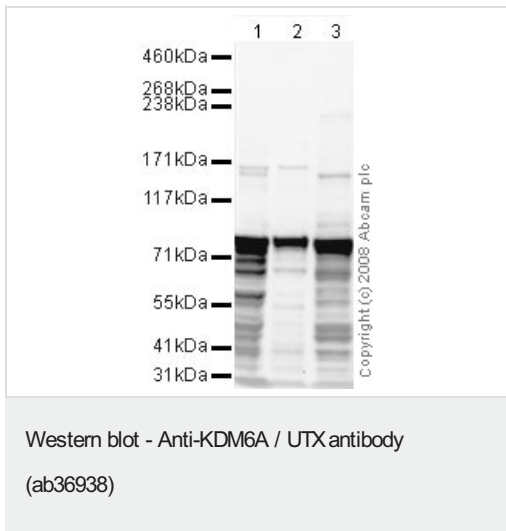
Observed band size: 148 kDa

Exposure time: 10 seconds

Lane 3 is NIH3T3 cells transduced with lentivirus expressing shRNA for mouse Utx.

5% milk was used as the blocking agent (incubated for 1 hour at 25°C).

ab36938 was diluted with TBS+0.1% Tween 20 and incubated for 1 hour at 25°C.



All lanes : Anti-KDM6A / UTX antibody (ab36938) at 1 µg/ml

Lane 1 : Testis (Rat) Tissue Lysate - normal tissue ([ab29388](#))

Lane 2 : Testis (Mouse) Tissue Lysate

Lane 3 : Liver (Rat) Tissue Lysate

Lysates/proteins at 10 µg per lane.

Secondary

All lanes : Goat polyclonal to Rabbit IgG -H&L- Pre Adsorbed (HRP)

at 1/3000 dilution

Performed under reducing conditions.

Predicted band size: 154 kDa

Observed band size: 154,157 kDa

Additional bands at: 80 kDa. We are unsure as to the identity of these extra bands.

This Fast-Track antibody is not yet fully characterised. This image represents inconclusive preliminary data.

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