abcam

Product datasheet

Anti-KDM1/LSD1 antibody - Nuclear Marker ab17721



★★★★★ 25 Abreviews 214 References 6 图像

概述

产品名称 Anti-KDM1/LSD1抗体-核Marker

描述 兔多克隆抗体to KDM1/LSD1 -核Marker

宿主 Rabbit

特异性 Replenishment batches of our polyclonal antibody, ab17721 are tested in WB. Previous batches

were additionally validated in ICC/IF. This application is still expected to work and is covered by our Abpromise guarantee. You may also be interested in our alternative recombinant antibody,

ab129195.

经测试应用 适用于: ICC/IF, WB

种属反应性 与反应: Mouse, Rat, Human

预测可用于: Pig 🕰

免疫原 Synthetic peptide conjugated to KLH derived from within residues 800 to the C-terminus of

Human LSD1. 参阅Abcam的专有抗源政策 (Peptide available as ab17763.)

阳性对照 ICC/IF: HeLa, 293T, c2c12 cells. WB: Jurkat, HCT 116, NIH/3T3, C2C12, Mouse skeletal muscle,

C6, HeLa.

常规说明

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.

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

性能

形式 Liquid

存放说明 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.

存储溶液 pH: 7.40

Preservative: 0.02% Sodium azide

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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.

纯**度** Immunogen affinity purified

 克隆
 多克隆

 同种型
 IgG

应用

The Abpromise quarantee Abpromise™承诺保证使用ab17721于以下的经测试应用

"应用说明"部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
ICC/IF	★★★★★ (4)	Use a concentration of 1 µg/ml.
WB	★★★★ ★ <u>(12)</u>	Use a concentration of 1 µg/ml. Detects a band of approximately 105 kDa (predicted molecular weight: 93 kDa).

靶标

功能

Histone demethylase that demethylates both 'Lys-4' (H3K4me) and 'Lys-9' (H3K9me) of histone H3, thereby acting as a coactivator or a corepressor, depending on the context. Acts by oxidizing the substrate by FAD to generate the corresponding imine that is subsequently hydrolyzed. Acts as a corepressor by mediating demethylation of H3K4me, a specific tag for epigenetic transcriptional activation. Demethylates both mono- (H3K4me1) and di-methylated (H3K4me2) H3K4me. May play a role in the repression of neuronal genes. Alone, it is unable to demethylate H3K4me on nucleosomes and requires the presence of RCOR1/CoREST to achieve such activity. Also acts as a coactivator of androgen receptor (ANDR)-dependent transcription, by being recruited to ANDR target genes and mediating demethylation of H3K9me, a specific tag for epigenetic transcriptional repression. The presence of PRKCB in ANDR-containing complexes, which mediates phosphorylation of 'Thr-6' of histone H3 (H3T6ph), a specific tag that prevents demethylation H3K4me, prevents H3K4me demethylase activity of KDM1A. Demethylates dimethylated 'Lys-370' of p53/TP53 which prevents interaction of p53/TP53 with TP53BP1 and represses p53/TP53-mediated transcriptional activation. Demethylates and stabilizes the DNA methylase DNMT1. Required for gastrulation during embryogenesis.

组织特异性 Ubiquitously expressed.

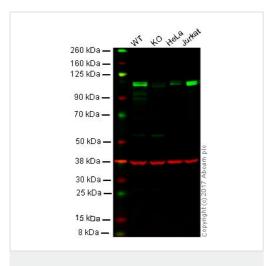
序列相似性 Belongs to the flavin monoamine oxidase family.

Contains 1 SWIRM domain.

结**构域** The SWIRM domain may act as an anchor site for a histone tail.

细胞定位 Nucleus.

图片



Western blot - Anti-KDM1/LSD1 antibody - Nuclear Marker (ab17721)

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

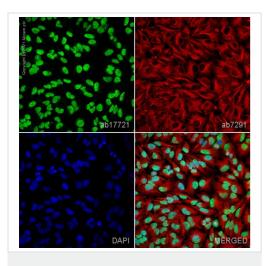
Lane 2: KDM1 / LSD1 knockout HAP1 whole cell lysate (20 µg)

Lane 3: HeLa whole cell lysate (20 µg)

Lane 4: Jurkat whole cell lysate (20 µg)

Lanes 1 - 4: Merged signal (red and green). Green - ab17721 observed at 110 kDa. Red - loading control, **ab8245**, observed at 37 kDa.

ab17721 was shown to specifically react with KDMI/LSD1 in wild-type HAP1 cells. No band was observed when KDMI/LSD1 knockout samples were examined.

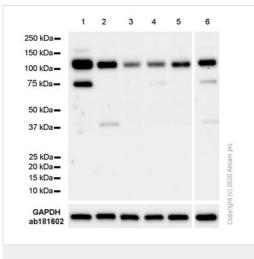


Immunocytochemistry/ Immunofluorescence - Anti-KDM1/LSD1 antibody - Nuclear Marker (ab17721)

ab17721 staining KDM1 / LSD1 in HeLa cells. The cells were fixed with 100% methanol (5 min), permeabilized with 0.1% PBS-Triton X-100 for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1% PBS-Tween for 1h. The cells were then incubated overnight at 4°C with ab17721 at 1µg/ml and ab7291, Mouse monoclonal [DM1A] to alpha Tubulin - Loading Control. Cells were then incubated with ab150081, Goat polyclonal Secondary Antibody to Rabbit IgG - H&L (Alexa Fluor[®] 488), preadsorbed at 1/1000 dilution (shown in green) and ab150120, Goat polyclonal Secondary Antibody to Mouse IgG - H&L (Alexa Fluor[®] 594), pre-adsorbed at 1/1000 dilution (shown in pseudocolour red). Nuclear DNA was labelled with DAPI (shown in blue).

Also suitable in cells fixed with 4% paraformaldehyde (10 min).

Image was acquired with a high-content analyser (Operetta CLS, Perkin Elmer) and a maximum intensity projection of confocal sections is shown.



Western blot - Anti-KDM1/LSD1 antibody - Nuclear Marker (ab17721)

All lanes:

Lane 1 : Jurkat (Human T cell leukemia T lymphocyte) whole cell lysates at 20 µg

Lane 2: HCT 116 (Human colorectal carcinoma epithelial cell) whole cell lysates at 20 µg

Lane 3 : NIH/3T3 (Mouse embryonic fibroblast) whole cell lysates at $20 \ \mu g$

Lane 4: C2C12 (Mouse myoblasts myoblast) whole cell lysates

Lane 5: Mouse skeletal muscle lysates at 20 µg

Lane 6 : C6 (Rat glial tumor glial cell) whole cell lysates at 20 μg

Secondary

All lanes : Goat Anti-Rabbit lgG, (H+L), Peroxidase conjugated (ab97051) at 1/20000 dilution

Predicted band size: 93 kDa

Exposure time: 50 seconds

Observed MW: 110kd

Blocking Buffer & Diluting buffer concentration: 5% NFDM/TBST

All lanes : Anti-KDM1/LSD1 antibody - Nuclear Marker (ab17721) at 1 µg/ml

Lane 1 : HeLa (Human epithelial carcinoma cell line) Whole Cell Lysate

Lane 2: Jurkat whole cell lysate (ab7899)

Lane 3: NIH/3T3 whole cell lysate (ab7179)

Lysates/proteins at 20 µg per lane.

Secondary

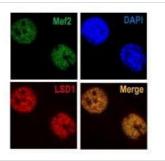
All lanes : Goat polyclonal to Rabbit lgG H&L (HRP) Pre-Adsorbed at 1/10000 dilution

Performed under reducing conditions.

Predicted band size: 93 kDa



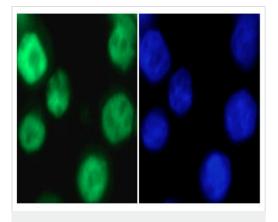
Western blot - Anti-KDM1/LSD1 antibody - Nuclear Marker and ChIP Grade (ab17721)



Immunocytochemistry/ Immunofluorescence - Anti-KDM1/LSD1 antibody - Nuclear Marker and ChIP Grade (ab17721)

Image courtesy of anonymous abreviewer

ab17721 staining LSD1 in the mouse c2c12 cell line by ICC/IF (Immunocytochemistry/immunofluorescence). Cells were fixed with paraformaldehyde, permeabilized with 0.5% Triton X-100 and blocked with 2% BSA for 1 hour at 25°C. Samples were incubated with primary antibody (1/200) for 1 hour at 25°C. A diluted (1/2000) Alexa Fluor® 568-conjugated Goat anti-rabbit IgG polyclonal was used as the secondary antibody.



Human 293T cells fixed in 4% paraformaldehyde were immunostained with ab17721 (1/200) for LSD1 and detected using FITC labelled anti-rabbit (Green). Nuclear DNA is stained blue with DAPI.

Immunocytochemistry/ Immunofluorescence - Anti-KDM1/LSD1 antibody - Nuclear Marker and ChIP Grade (ab17721)

This image is courtesy of Katia Ancelin

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