

Product datasheet

Anti-KDM1/LSD1 antibody - Nuclear Marker ab37165

[11 References](#) [5 Images](#)

Overview

Product name	Anti-KDM1/LSD1 antibody - Nuclear Marker
Description	Rabbit polyclonal to KDM1/LSD1 - Nuclear Marker
Host species	Rabbit
Tested applications	Suitable for: IHC-P, WB
Species reactivity	Reacts with: Mouse, Rat, Human
Immunogen	Synthetic peptide within Human KDM1/LSD1 (N terminal). The exact sequence is proprietary. ab37165 was raised against a peptide corresponding to 17 amino acids near the N terminus of human LSD1.

General notes

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

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Store at -20°C. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.2 Preservative: 0.02% Sodium azide Constituent: PBS
Purity	Immunogen affinity purified
Clonality	Polyclonal
Isotype	IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab37165 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
IHC-P		Use at an assay dependent concentration.
WB		Use a concentration of 1 - 2 µg/ml. Detects a band of approximately 105 kDa (predicted molecular weight: 93 kDa).

Target

Function

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 di-methylated '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.

Tissue specificity

Ubiquitously expressed.

Sequence similarities

Belongs to the flavin monoamine oxidase family.
Contains 1 SWIRM domain.

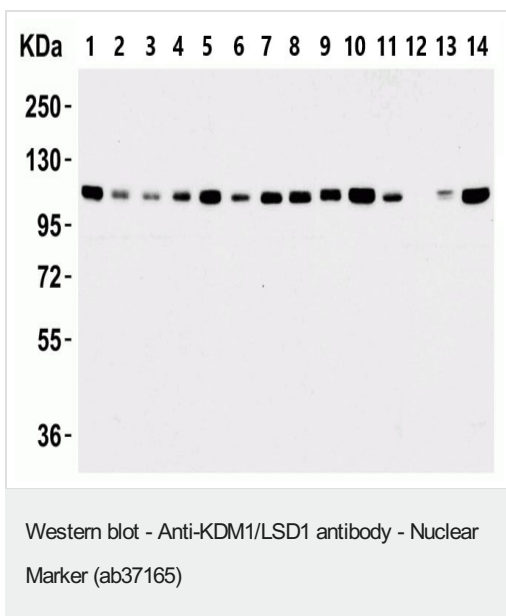
Domain

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

Cellular localization

Nucleus.

Images



All lanes : Anti-KDM1/LSD1 antibody - Nuclear Marker (ab37165) at 0.2 µg/ml

Lane 1 : HEK-293 (human epithelial cell line from embryonic kidney) cell lysate

Lane 2 : A431 (human epidermoid carcinoma cell line) cell lysate

Lane 3 : A549 (human lung carcinoma cell line) cell lysate

Lane 4 : Caco-2 (human colorectal adenocarcinoma cell line) cell lysate

Lane 5 : Daudi (human Burkitt's lymphoma cell line) cell lysate

Lane 6 : HeLa (human epithelial cell line from cervix adenocarcinoma) cell lysate

Lane 7 : HepG2 (human liver hepatocellular carcinoma cell line) cell lysate

Lane 8 : K562 (human chronic myelogenous leukemia cell line from bone marrow) cell lysate

Lane 9 : MCF7 (human breast adenocarcinoma cell line) cell lysate

Lane 10 : Jurkat (human T cell leukemia cell line from peripheral blood) cell lysate

Lane 11 : SK-N-SH (human neuroblastoma cell line) cell lysate

Lane 12 : THP-1 (human monocytic leukemia cell line) cell lysate

Lane 13 : NIH/3T3 (mouse embryo fibroblast cell line) cell lysate

Lane 14 : YB2/O (rat spleen lymphoblast cell line) cell lysate

Lysates/proteins at 15 µg per lane.

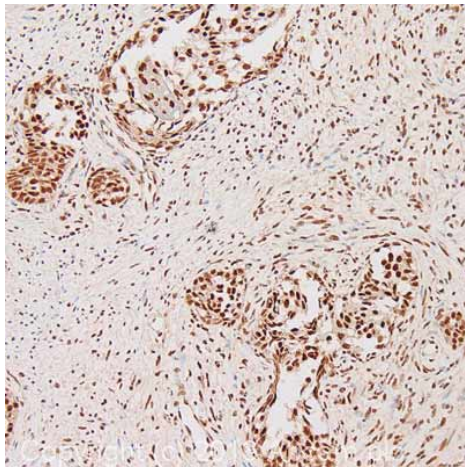
Secondary

All lanes : Goat anti-rabbit IgG (HRP) at 1/10000 dilution

Predicted band size: 93 kDa

Observed band size: 110 kDa

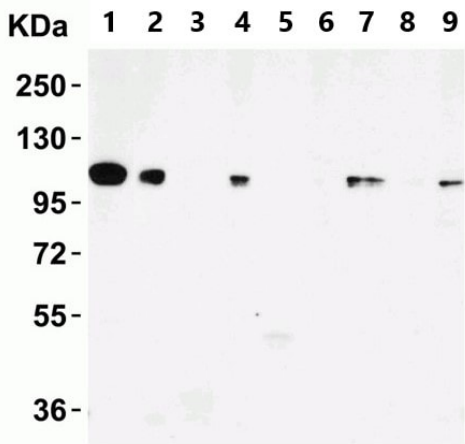
Diluting buffer and concentration: 1 hour at room temperature in 5% NFDN/TBST.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-KDM1/LSD1 antibody - Nuclear Marker (ab37165)

IHC image of KDM1/LSD1 staining in human prostate formalin fixed paraffin embedded tissue section, performed on a Leica Bond system using the standard protocol F. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20 mins. The section was then incubated with ab37165, 1 µg/ml, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.



Western blot - Anti-KDM1/LSD1 antibody - Nuclear Marker (ab37165)

All lanes : Anti-KDM1/LSD1 antibody - Nuclear Marker (ab37165) at 0.2 µg/ml

- Lane 1 :** Mouse Testis tissue lysate
- Lane 2 :** Mouse Spleen tissue lysate
- Lane 3 :** Mouse Kidney tissue lysate
- Lane 4 :** Mouse Colon tissue lysate
- Lane 5 :** Mouse Stomach tissue lysate
- Lane 6 :** Mouse Brain tissue lysate
- Lane 7 :** Mouse Skin tissue lysate
- Lane 8 :** Mouse Skeletal Muscle tissue lysate
- Lane 9 :** Mouse Bladder tissue lysate

Lysates/proteins at 15 µg per lane.

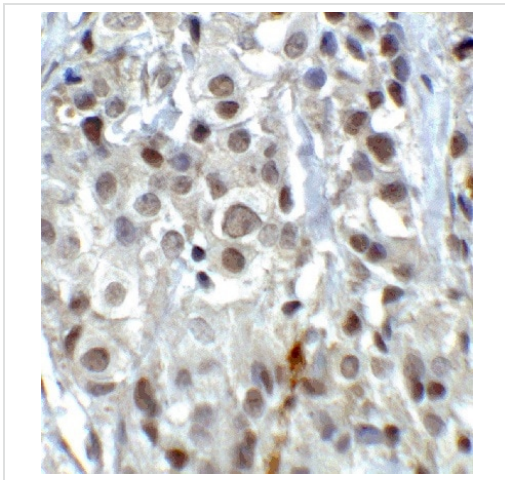
Secondary

All lanes : Goat anti-rabbit IgG (HRP) at 1/10000 dilution

Predicted band size: 93 kDa

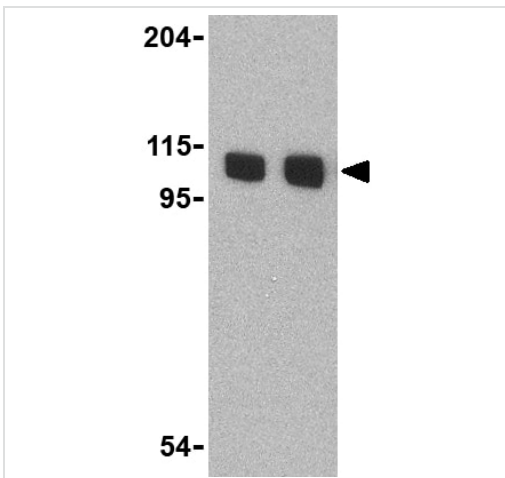
Observed band size: 110 kDa

Diluting buffer and concentration: 1 hour at room temperature in 5% NFDN/TBST.



Immunohistochemistry (Formalin-fixed paraffin embedded sections) of human breast carcinoma tissue labeling KDM1/LSD1 with ab37165 at 2µg/ml.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-KDM1/LSD1 antibody - Nuclear Marker (ab37165)



Lane 1 : Anti-KDM1/LSD1 antibody - Nuclear Marker (ab37165) at 1 µg/ml

Lane 2 : Anti-KDM1/LSD1 antibody - Nuclear Marker (ab37165) at 2 µg/ml

All lanes : Mouse P815 cell lysate

Lysates/proteins at 15 µg per lane.

Predicted band size: 93 kDa

Observed band size: 105 kDa

Western blot - Anti-KDM1/LSD1 antibody - Nuclear Marker (ab37165)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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