

### Anti-KDM1/LSD1 antibody [1B2E5 + 1B2F2] ab31954

敲除 验证

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#### 概述

产品名称	Anti-KDM1/LSD1抗体[1B2E5 + 1B2F2]
描述	小鼠单克隆抗体[1B2E5 + 1B2F2] to KDM1/LSD1
宿主	Mouse
经测试应用	适用于: IHC-P, WB
种属反应性	与反应: Human
免疫原	Recombinant fragment corresponding to Human KDM1/ LSD1.
阳性对照	HeLa and Jurkat cell lysate for Western blot. Human kidney and lung carcinoma tissue for Immunohistochemistry.
常规说明	<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&amp;As</p> <p>Please note that this antibody is an oligoclonal antibody. It is a cocktail of monoclonal antibodies that have been carefully selected. Oligoclonal antibodies have not only the specificity and batch-to-batch consistency of a monoclonal antibody, but also have the advantage of the sensitivity of a polyclonal antibody due to their ability to recognize multiple epitopes on an antigen.</p>

#### 性能

形式	Liquid
存放说明	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
存储溶液	Preservative: 0.05% Sodium azide Constituent: PBS
纯度	Protein G purified
纯化说明	Purified from tissue culture supernatant.
克隆	单克隆

克隆编号 1B2E5 + 1B2F2

同种型 IgG1

## 应用

**The Abpromise guarantee** **Abpromise™** 承诺保证使用ab31954于以下的经测试应用

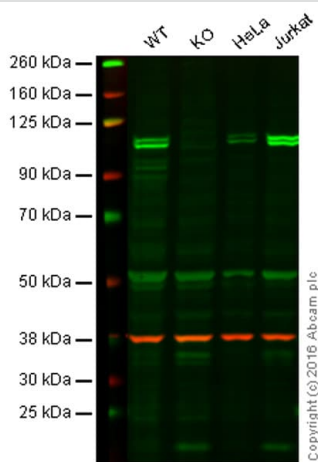
“应用说明”部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
IHC-P		1/500 - 1/2000.
WB		1/500 - 1/2000. Predicted molecular weight: 93 kDa.

## 靶标

<b>功能</b>	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.
<b>组织特异性</b>	Ubiquitously expressed.
<b>序列相似性</b>	Belongs to the flavin monoamine oxidase family. Contains 1 SWIRM domain.
<b>结构域</b>	The SWIRM domain may act as an anchor site for a histone tail.
<b>细胞定位</b>	Nucleus.

## 图片



Western blot - Anti-KDM1/LSD1 antibody [1B2E5 + 1B2F2] (ab31954)

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

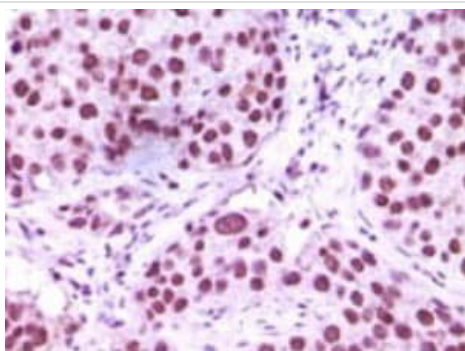
**Lane 2:** KDM1/LSD1 knockout HAP1 cell lysate (20 µg)

**Lane 3:** HeLa cell lysate (20 µg)

**Lane 4:** Jurkat cell lysate (20 µg)

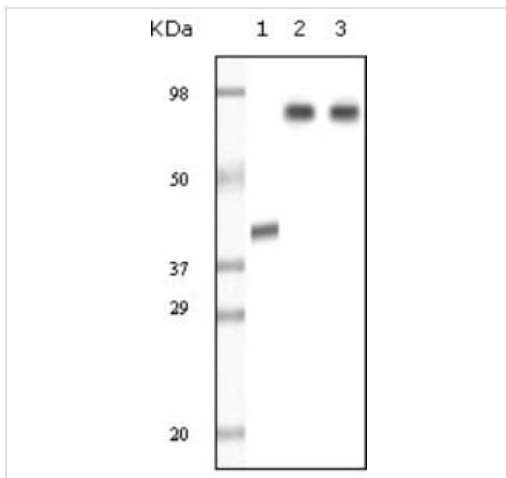
**Lanes 1 - 4:** Merged signal (red and green). Green - ab31954 observed at 110 kDa. Red - loading control, **ab181602**, observed at 37 kDa.

ab31954 was shown to specifically recognize KDM1/LSD1 in wild-type HAP1 cells along with additional cross reactive bands. No bands were observed when KDM1/LSD1 knockout samples were used. Wild-type and KDM1/LSD1 knockout samples were subjected to SDS-PAGE. ab31954 and **ab181602** (loading control to GAPDH) were diluted 1/250 and 1/10,000 respectively and incubated overnight at 4°C. Blots were developed with Goat anti-Mouse IgG H&L (IRDye® 800CW) preadsorbed (**ab216772**) and Goat Anti-Rabbit IgG H&L (IRDye® 680RD) preadsorbed (**ab216777**) secondary antibodies at 1/10,000 dilution for 1hr at room temperature before imaging.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-KDM1/LSD1 antibody [1B2E5 + 1B2F2] (ab31954)

Immunohistochemical analysis of paraffin-embedded human lung carcinoma tissue, showing nuclear localisation using LSD1 antibody (ab31954) dilution 1:500-1:2000 and an HRP-conjugated secondary antibody with DAB staining.



Western blot - Anti-KDM1/LSD1 antibody [1B2E5 + 1B2F2] (ab31954)

**All lanes :** Anti-KDM1/LSD1 antibody [1B2E5 + 1B2F2] (ab31954)

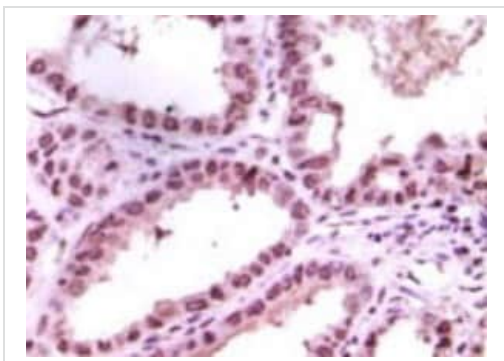
**Lane 1 :** Molecular weight marker

**Lane 2 :** LSD1 recombinant protein (NB: truncated form)

**Lane 3 :** HeLa cell lysate

**Predicted band size:** 93 kDa

Primary antibody dilution range 1:500-1:2000.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-KDM1/LSD1 antibody [1B2E5 + 1B2F2] (ab31954)

Immunohistochemical analysis of paraffin-embedded human kidney carcinoma tissue, showing nuclear localisation using LSD1 antibody (ab31954) dilution 1:500-1:2000 and an HRP-conjugated secondary antibody with DAB staining.

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

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