# abcam

## Product datasheet

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



2 References 画像数 4

#### 製品の概要

製品名 Anti-KDM1/LSD1 antibody [1B2E5 + 1B2F2]

製品の詳細 Mouse monoclonal [1B2E5 + 1B2F2] to KDM1/LSD1

由来種 Mouse

**アプリケーション 適用あり:** IHC-P, WB

種交差性 交差種: Human

免疫原 Recombinant fragment corresponding to Human KDM1/LSD1.

ポジティブ・コントロール HeLa and Jurkat cell lysate for Western blot. Human kidnay and lung carcinoma tissue for

Immunohistochemistry.

特記事項

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

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.

#### 製品の特性

製品の状態 Liquid

保存方法 Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.

パッファー Preservative: 0.05% Sodium azide

Constituent: PBS

精製度 Protein G purified

特記事項(精製) Purified from tissue culture supernatant.

**ポリ/モノ** モノクローナル

1

**クローン名** 1B2E5 + 1B2F2

アイソタイプ lgG1

#### アプリケーション

**The Abpromise guarantee** <u>Abpromise保証は、</u>次のテスト済みアプリケーションにおけるab31954の使用に適用されますアプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
IHC-P		1/500 - 1/2000.
WB		1/500 - 1/2000. Predicted molecular weight: 93 kDa.

#### ターゲット情報

#### 機能

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.

組織特異性 Ubiquitously expressed.

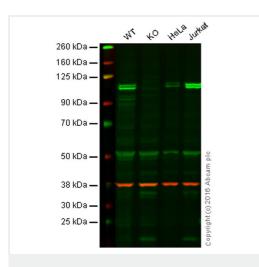
**配列類似性** Belongs to the flavin monoamine oxidase family.

Contains 1 SWIRM domain.

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

細胞内局在 Nucleus.

#### 画像



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



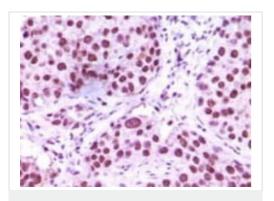
Lane 2: KDM1/LSD1 knockout HAP1 cell lysate (20 µg)

Lane 3: HeLa cell lysate (20 µg)

Lane 4: Jurkat cell lysate (20 µg)

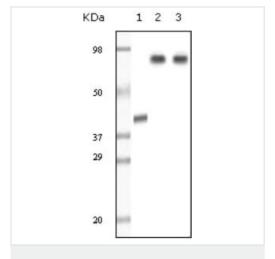
**Lanes 1 - 4:** Merged signal (red and green). Green - ab31954 observed at 110 kDa. Red - loading control, **ab181602**, observed at 37 kDa.

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 <a href="mailto:ab181602">ab181602</a> (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 (<a href="mailto:ab216772">ab216772</a>) and Goat Anti-Rabbit IgG H&L (IRDye® 680RD) preadsorbed (<a href="mailto:ab216777">ab216777</a>) secondary antibodies at 1/10,000 dilution for 1hr at room temperature before imaging.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded 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 paraffinembedded 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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