Datasheet for ABIN7127590

# Recombinant anti-LSD1 antibody

3 Images

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## Overview

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| Quantity: | 100 µL |
| Target: | LSD1 (KDM1A) |
| Reactivity: | Human |
| Host: | Rabbit |
| Antibody Type: | Recombinant Antibody |
| Clonality: | Monoclonal |
| Conjugate: | This LSD1 antibody is un-conjugated |
| Application: | Western Blotting (WB), ELISA, Immunohistochemistry (IHC) |

## Product Details

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| Immunogen: | A synthesized peptide derived from human KDM1 / LSD1 |
| Clone: | 1G7 |
| Isotype: | IgG |
| Cross-Reactivity: | Human |
| Purification: | Affinity-chromatography |

## Target Details

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| Target: | LSD1 (KDM1A) |
| Alternative Name: | KDM1A (KDM1A Products) |
| Background: | Background: Histone demethylase that demethylates both 'Lys-4' (H3K4me) and 'Lys-9' |

## Target Details

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| | (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. Component of a RCOR/GFI/KDM1A/HDAC complex that suppresses, via histone deacetylase (HDAC) recruitment, a number of genes implicated in multilineage blood cell development. Effector of SNAI1-mediated transcription repression of E-cadherin/CDH1, CDN7 and KRT8. Required for the maintenance of the silenced state of the SNAI1 target genes E-cadherin/CDH1 and CDN7.<br>Aliases: Lysine-specific histone demethylase 1A (EC 1.-.-.-) (BRAF35-HDAC complex protein BHC110) (Flavin-containing amine oxidase domain-containing protein 2), KDM1A, AOF2 KDM1 KIAA0601 LSD1 |
| UniProt: | O60341 |
| Pathways: | Regulation of Hormone Metabolic Process, Regulation of Hormone Biosynthetic Process, Negative Regulation of intrinsic apoptotic Signaling, Warburg Effect |

## Application Details

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| Application Notes: | Recommended dilution: WB:1:500-1:5000, IHC:1:50-1:200, |
| Restrictions: | For Research Use only |

## Handling

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| Format: | Liquid |
| Buffer: | Rabbit IgG in phosphate buffered saline, pH 7.4, 150 mM NaCl, 0.02 % sodium azide and 50 % |

## Handling

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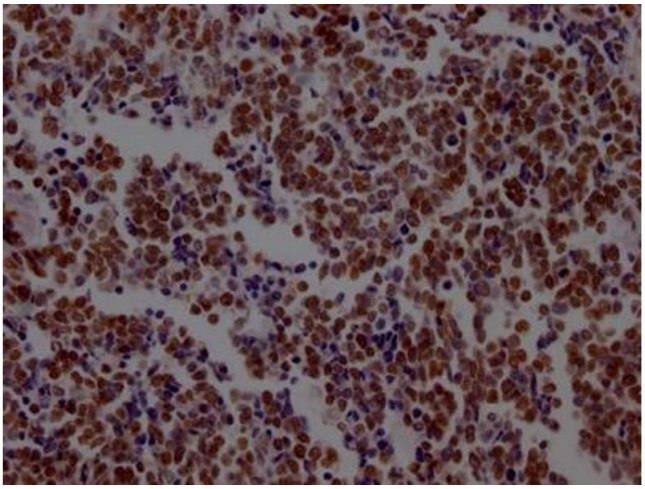
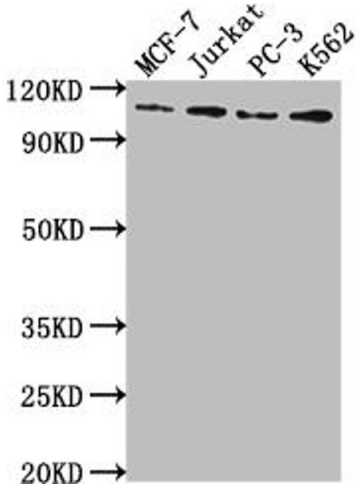
| | glycerol. |
| Preservative: | Sodium azide |
| Precaution of Use: | This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only. |
| Storage: | -20 °C,-80 °C |
| Storage Comment: | Upon receipt, store at -20°C or -80°C. Avoid repeated freeze. |

## Images



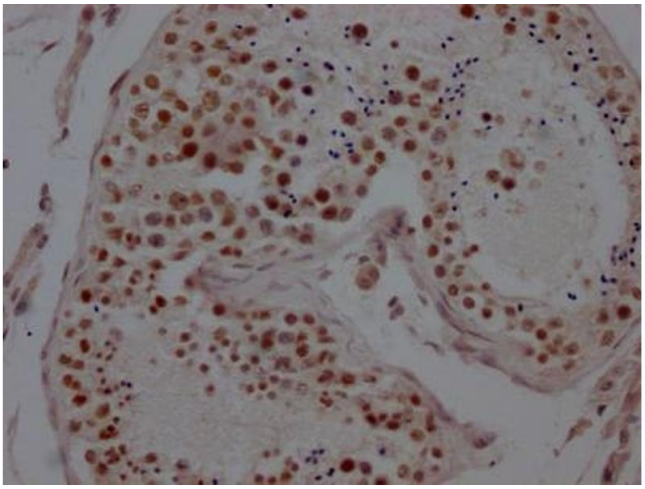
**Immunohistochemistry**

**Image 1.** IHC image of ABIN7127590 diluted at 1:100 and staining in paraffin-embedded human lung cancer performed on a Leica BondTM system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer ( pH 6.0). Section was blocked with 10 % normal goat serum 30 min at RT. Then primary antibody (1 % BSA) was incubated at 4 °C overnight. The primary is detected by a Goat anti-rabbit IgG polymer labeled by HRP and visualized using 0.05 % DAB.




**Western Blotting**

**Image 2.** Western Blot Positive WB detected in: MCF-7 whole cell lysate, Jurkat whole cell lysate, PC-3 whole cell lysate, K562 whole cell lysate All lanes: KDM1A antibody at 1:2000 Secondary Goat polyclonal to rabbit IgG at 1/50000 dilution Predicted band size: 93, 96 kDa Observed band size: 110 kDa



## Immunohistochemistry

**Image 3.** IHC image of ABIN7127590 diluted at 1:100 and staining in paraffin-embedded human testis tissue performed on a Leica BondTM system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer ( pH 6.0). Section was blocked with 10 % normal goat serum 30 min at RT. Then primary antibody (1 % BSA) was incubated at 4 °C overnight. The primary is detected by a Goat anti-rabbit IgG polymer labeled by HRP and visualized using 0.05 % DAB.