# KDM1 Mouse mAb[16L5]

Cat NO. :A20909

## Information:

Applications	Reactivity:	UniProt ID:	MW(kDa)	Host	Isotype	Size
WB,IHC	H,M,R	O60341	110kDa	Mouse	lgG	50ul 100ul,200ul

### **Applications detail:**

Application	Dilution			
WB	1:1000-2000			
ІНС	1:100			
The optimal dilutions should be o	The optimal dilutions should be determined by the end user			

## Conjugate:

UnConjugate

Form:

Liquid

### sensitivity:

Endogenous

## **Purification**:

Protein A purification

#### Specificity:

Antibody is produced by immunizing animals with a synthetic peptide of human KDM1.

#### Storage buffer and conditions:

Antibody store in 10 mM PBS, 0.5mg/ml BSA, 50% glycerol (buffer) .

Shipped at 4°C. Store at-20°C or -80°C.

Products are valid for one natural year of receipt. Avoid repeated freeze / thaw cycles.

#### **Tissue specificity:**

Ubiquitously expressed..

## Subcellular location:

Nucleus.

#### **Function**:

Histone demethylase that can demethylate both 'Lys-4' (H3K4me) and 'Lys-9' (H3K9me) of histone H3, thereby acting as a coactivator or a corepressor, depending on the context (PubMed:15620353, PubMed:15811342, PubMed:16140033, PubMed:16079794, PubMed:16079795, PubMed:16223729). Acts by oxidizing the substrate by FAD to generate the corresponding imine that is subsequently hydrolyzed (PubMed:15620353, PubMed:15811342, PubMed:16079794, PubMed:21300290). Acts as a corepressor by mediating demethylation of H3K4me, a specific tag for epigenetic transcriptional activation. Demethylates both mono- (H3K4me1) and dimethylated (H3K4me2) H3K4me (PubMed:15620353, PubMed:20389281, PubMed:21300290, PubMed:23721412).

Introduction: WB: Western Blot IP: Immunoprecipitation IHC: Immunohistochemistry ChIP: Chromatin Immunoprecipitation ICC/IF: Immunocytochemistry/

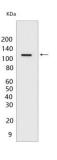
Cross Reactivity: H: human M: mouse R: rat Hm: hamster Mk: monkey Vir: virus MI: mink C: chicken Dm D. melanogaster X: Xenopus Z: zebrafish B: bovine Dg: dog Pg: pig Hr: horse

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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 (PubMed:16140033, PubMed:16079794, PubMed:16885027, PubMed:21300290, PubMed:23721412). Also acts as a coactivator of androgen receptor (AR)-dependent transcription, by being recruited to AR target genes and mediating demethylation of H3K9me, a specific tag for epigenetic transcriptional repression. The presence of PRKCB in AR-containing complexes, which mediates phosphorylation of 'Thr-6' of histone H3 (H3T6ph), a specific tag that prevents demethylated H3K4me, prevents H3K4me demethylase activity of KDM1A (PubMed:16079795). 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 (PubMed:20389281)..

# Validation Data:

## KDM1 Mouse mAb[16L5] Images



Western blot (SDS PAGE) analysis of extracts from HEK-293 cells.Using KDM1 Mouse mAb IgG [16L5] at dilution of 1:1000 incubated at  $4^{\circ}$  over night.

View more information on http://naturebios.com

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 1% w/v Milk, 1X TBST at 4°C overnight.