

### **KDM1B Antibody (N-term)**

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP21020a

## **Specification**

### KDM1B Antibody (N-term) - Product Information

Application WB,E
Primary Accession Q8NB78
Reactivity Human
Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Calculated MW 92098

## KDM1B Antibody (N-term) - Additional Information

### **Gene ID 221656**

#### **Other Names**

Lysine-specific histone demethylase 1B, 1---, Flavin-containing amine oxidase domain-containing protein 1, Lysine-specific histone demethylase 2, KDM1B, AOF1, C6orf193, LSD2

# **Target/Specificity**

This KDM1B antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 38-73 amino acids from the N-terminal region of human KDM1B.

# Dilution

WB~~1:1000

E~~Use at an assay dependent concentration.

### **Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

#### Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

#### **Precautions**

KDM1B Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

## KDM1B Antibody (N-term) - Protein Information

### Name KDM1B (<u>HGNC:21577</u>)

**Function** Histone demethylase that demethylates 'Lys-4' of histone H3, a specific tag for epigenetic transcriptional activation, thereby acting as a corepressor. Required for de novo DNA



methylation of a subset of imprinted genes during oogenesis. Acts by oxidizing the substrate by FAD to generate the corresponding imine that is subsequently hydrolyzed. Demethylates both mono- and di-methylated 'Lys-4' of histone H3. Has no effect on tri-methylated 'Lys-4', mono-, di- or tri-methylated 'Lys-9', mono-, di- or tri-methylated 'Lys-27', mono-, di- or tri-methylated 'Lys-36' of histone H3, or on mono-, di- or tri-methylated 'Lys-20' of histone H4. Alone, it is unable to demethylate H3K4me on nucleosomes and requires the presence of GLYR1 to achieve such activity, they form a multifunctional enzyme complex that modifies transcribed chromatin and facilitates Pol II transcription through nucleosomes (PubMed: 30970244).

### **Cellular Location**

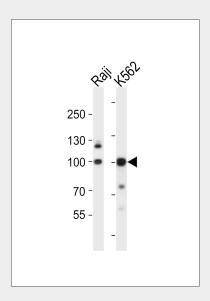
Nucleus. Chromosome. Note=Found in actively RNAPollI- transcribed gene bodies.

## KDM1B Antibody (N-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## KDM1B Antibody (N-term) - Images



Western blot analysis of lysates from Raji, K562 cell line (from left to right), using KDM1B Antibody (N-term)(Cat. #AP21020a). AP21020a was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody. Lysates at 20ug per lane.

## KDM1B Antibody (N-term) - Background

Histone demethylase that demethylates 'Lys-4' of histone H3, a specific tag for epigenetic transcriptional activation, thereby acting as a corepressor. Required for de novo DNA methylation of a subset of imprinted genes during oogenesis. Acts by oxidizing the substrate by FAD to generate





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the corresponding imine that is subsequently hydrolyzed. Demethylates both mono- and di-methylated 'Lys-4' of histone H3. Has no effect on tri- methylated 'Lys-4', mono-, di- or tri-methylated 'Lys-9', mono-, di- or tri-methylated 'Lys-27', mono-, di- or tri-methylated 'Lys- 36' of histone H3, or on mono-, di- or tri-methylated 'Lys-20' of histone H4 (By similarity).

## KDM1B Antibody (N-term) - References

Ota T., et al. Nat. Genet. 36:40-45(2004). Mungall A.J., et al. Nature 425:805-811(2003). Mural R.J., et al. Submitted (JUL-2005) to the EMBL/GenBank/DDBJ databases. Bechtel S., et al. BMC Genomics 8:399-399(2007). Cantin G.T., et al.J. Proteome Res. 7:1346-1351(2008).