

KDM1B polyclonal antibody

Rabbit Polyclonal Antibody Catalog # ABV11381

Specification

KDM1B polyclonal antibody - Product Information

Application E

Primary Accession

Host

Clonality

Isotype

Calculated MW

Q8NB78

Rabbit

Polyclonal

Rabbit IgG

92098

KDM1B polyclonal antibody - Additional Information

Gene ID 221656

Positive Control Application & Usage **Other Names** AOF1, LSD2, C6orf193

Target/Specificity

KDM1B

Antibody Form Liquid

Appearance

Colorless liquid

Formulation

In PBS with 0.05% (W/V) sodium azide.

Handling

The antibody solution should be gently mixed before use.

Reconstitution & Storage -20 °C

Background Descriptions

Precautions

KDM1B polyclonal antibody is for research use only and not for use in diagnostic or therapeutic procedures.

ELISA: Peptides.

ELISA: 1:500.

KDM1B polyclonal antibody - Protein Information



Name KDM1B (HGNC:21577)

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

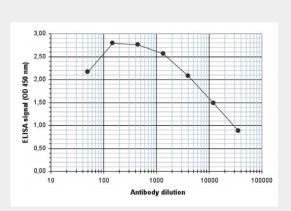
Nucleus. Chromosome. Note=Found in actively RNAPollI- transcribed gene bodies.

KDM1B polyclonal antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

KDM1B polyclonal antibody - Images



To determine the titer, an ELISA was performed using a serial dilution of the antibody. By plotting the absorbance against the antibody dilution (Figure 1), the titer of the antibody was estimated to be 1:12,300.

KDM1B polyclonal antibody - Background

KDM1B is a histone demethylase that demethylates lysine 4 of histone H3, a specific tag for epigenetic transcriptional activation, thereby acting as a corepressor. KDM1B is able to demethylate both mono- and di-methylated lysine 4 of histone H3, but has no effect on tri-methylated lysine 4, mono-, di- or tri-methylated lysine 9, mono-, di- or tri-methylated lysine 27,





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mono-, di- or tri-methylated lysine 36 of histone H3, or on mono-, di- or tri-methylated lysine 20 of histone H4. KDM1B is also required for de novo DNA methylation of a subset of imprinted genes during oogenesis. It acts by oxidizing the substrate by FAD to generate the corresponding imine that is subsequently hydrolyzed.