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KDM1B Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP21020a

Product Information

Application	WB, E
Primary Accession	Q8NB78
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB49895
Calculated MW	92098

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.

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 RNAPolII- transcribed gene bodies.

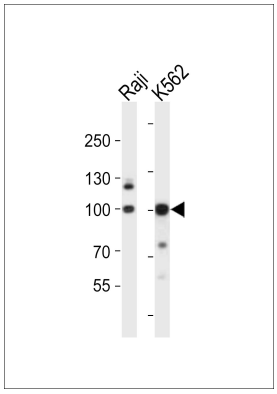
Background

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 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).

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).

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.