

Rabbit anti-human KDM1A Polyclonal Antibody

Catalog Number: R16029P

General Information	
Immunogen	Recombinant protein of human KDM1A
IgG type	IgG
Clonality	Polyclonal
Specificity	human KDM1A
Applications & dilution	WB 1:500 - 1:2000 IHC 1:50 - 1:200 IF 1:50 - 1:200 IP 1:50 - 1:200 ChIP 1:20 - 1:100
Formulation	PBS with 0.02% sodium azide, 50% glycerol, pH7.3.
Purity	≥95% purity by SDS-PAGE
Storage	Store at -20°C. Avoid freeze / thaw cycles.
Abbreviation: ELISA: Enzyme-linked immunosorbent assay; ITA: immunoturbidimetric assay; IP: immunoprecipitation; IHC: immunohistochemistry; IF: immunofluorescence. WB: western blot; FC: flowcytometry	

Background

Lysine-specific demethylase 1 (LSD1; also known as AOF2 and BHC110) is a nuclear amine oxidase homolog that acts as a histone demethylase and transcription cofactor. Gene activation and repression is specifically regulated by the methylation state of distinct histone protein lysine residues. For example, methylation of histone H3 at Lys4 facilitates transcriptional activation by coordinating the recruitment of BPTF, a component of the NURF chromatin remodeling complex, and WDR5, a component of multiple histone methyltransferase complexes. In contrast, methylation of histone H3 at Lys9 facilitates transcriptional repression by recruiting HP1. LSD1 is a component of the CoREST transcriptional co-repressor complex that also contains CoREST, CtBP, HDAC1 and HDAC2. As part of this complex, LSD1 demethylates mono-methyl and di-methyl histone H3 at Lys4 through a FAD-dependent oxidation reaction to facilitate neuronal-specific gene repression in non-neuronal cells. In contrast, LSD1 associates with androgen receptor in human prostate cells to demethylate mono-methyl and di-methyl histone H3 at Lys9 and facilitate androgen receptor-dependent transcriptional activation. Therefore, depending on gene context LSD1 can function as either a transcriptional co-repressor or co-activator. LSD1 activity is inhibited by the amine oxidase inhibitors pargyline, deprenyl, clorgyline and tranlylcypromine.

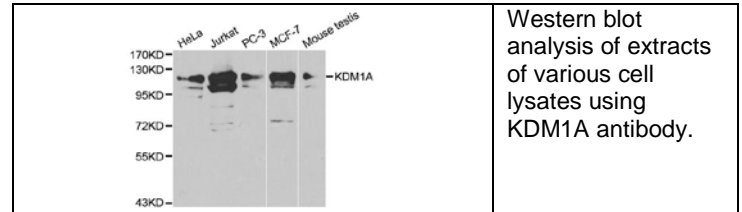
For research use only

Preparation

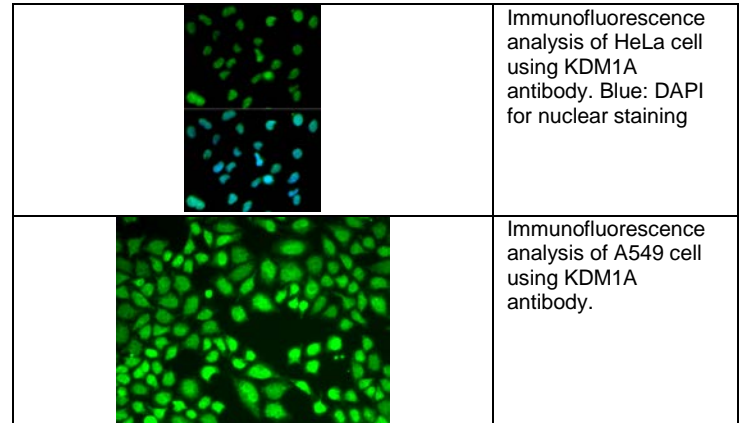
Polyclonal antibody is produced by immunizing rabbit with recombinant protein of human KDM1A and purified using protein A resin.

Applications

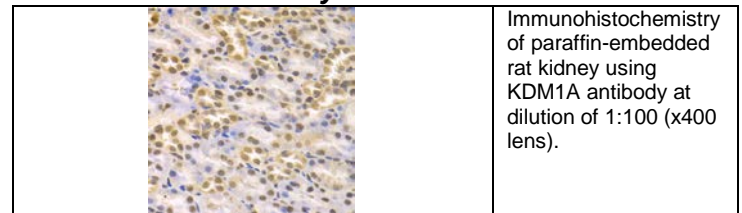
Western blot



Immunofluorescence



Immunohistochemistry



Storage

This antibody is shipped at 4 °C. This product is stable for 12 months from date of receipt when stored at -20 °C to -70 °C. Avoid freeze/thaw cycles.

Hazard/Biohazard

This antibody contains 0.02% sodium azide as preservative. Please handle and dispose the product properly. No known biohazard is associated with this product.