

KDM5B Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP58384

Product Information

Application Primary Accession Reactivity Host Clonality Calculated MW Physical State Immunogen Epitope Specificity Isotype Purity	WB, IHC-P, IHC-F, IF, E Q9UGL1 Rat, Pig, Dog, Bovine Rabbit Polyclonal 175658 Liquid KLH conjugated synthetic peptide derived from human KDM5B/PLU1/Jarid1B 65-165/1544 IgG affinity purified by Protein A
Buffer SUBCELLULAR LOCATION	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol. Nucleus. Ubiquitously expressed, with highest levels in testis. Down-regulated in melanoma and glioblastoma. Up-regulated in breast cancer (at protein level).
SIMILARITY	Belongs to the JARID1 histone demethylase family.Contains 1 ARID domain.Contains 1 JmjC domain.Contains 1 JmjN domain.Contains 3 PHD-type zinc fingers.
SUBUNIT	Interacts with FOXG1B, PAX9, MYC, MYCN and RB1. Interacts with HDAC1, HDAC4, HDAC5 and HDAC7.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	Histone demethylase that demethylates 'Lys-4' of histone H3, thereby playing a central role in histone code. Does not demethylate histone H3 'Lys-9' or H3 'Lys-27'. Demethylates trimethylated, dimethylated and monomethylated H3 'Lys-4'. Acts as a transcriptional corepressor for FOXG1B and PAX9. Favors the proliferation of breast cancer cells by repressing tumor suppressor genes such as BRCA1 and HOXA5. In contrast, may act as a tumor suppressor for melanoma.

Additional Information

Gene ID	10765
Other Names	Lysine-specific demethylase 5B, 1.14.11.67, KDM5B, JARID1B, PLU1, RBBP2H1
Target/Specificity	Ubiquitously expressed, with highest levels in testis. Down-regulated in melanoma and glioblastoma. Up-regulated in breast cancer (at protein level).
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500,Flow-Cyt=3ug /test,ELISA=1:5000-10000

Storage

0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Name	KDM5B
Synonyms	JARID1B, PLU1, RBBP2H1
Function	Histone demethylase that demethylates 'Lys-4' of histone H3, thereby playing a central role in histone code (PubMed: <u>24952722</u> , PubMed: <u>27214403</u> , PubMed: <u>28262558</u>). Does not demethylate histone H3 'Lys-9' or H3 'Lys-27'. Demethylates trimethylated, dimethylated and monomethylated H3 'Lys-4'. Acts as a transcriptional corepressor for FOXG1B and PAX9. Favors the proliferation of breast cancer cells by repressing tumor suppressor genes such as BRCA1 and HOXA5 (PubMed: <u>24952722</u>). In contrast, may act as a tumor suppressor for melanoma. Represses the CLOCK-BMAL1 heterodimer-mediated transcriptional activation of the core clock component PER2 (By similarity).
Cellular Location	Nucleus {ECO:0000255 PROSITE-ProRule:PRU00355, ECO:0000255 PROSITE-ProRule:PRU00537, ECO:0000269 PubMed:10336460, ECO:0000269 PubMed:12237901}
Tissue Location	Ubiquitously expressed, with highest levels in testis. Down-regulated in melanoma and glioblastoma. Up-regulated in breast cancer (at protein level).

Images





Tissue/cell: rat brain tissue; 4% Paraformaldehyde-fixed and paraffin-embedded;

Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;

Incubation: Anti-KDM5B/PLU1/Jarid1B Polyclonal Antibody, Unconjugated(AP58384) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining

Tissue/cell: Human glioma tissue; 4%

Paraformaldehyde-fixed and paraffin-embedded; Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;

Incubation: Anti-KDM5B Polyclonal Antibody, Unconjugated(AP58384) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



100

 $10^{1.8}$ 10^3 10^4 10^5

10⁶

APC-H

107 108

Tissue/cell: rat testis tissue; 4% Paraformaldehyde-fixed and paraffin-embedded;

Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;

Incubation: Anti-KDM5B Polyclonal Antibody, Unconjugated(AP58384) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining

Blank control:A431.

Primary Antibody (green line): Rabbit Anti-KDM5B antibody (AP58384)

Dilution: 3 µg /10^6 cells;

Isotype Control Antibody (orange line): Rabbit IgG . Secondary Antibody : Goat anti-rabbit IgG-AF647 Dilution: 3 μg /test.

Protocol

The cells were fixed with 4% PFA (10min at room temperature)and then permeabilized with 90% ice-cold methanol for 20 min at-20°C. The cells were then incubated in 5%BSA to block non-specific protein-protein interactions for 30 min at at room temperature .Cells stained with Primary Antibody for 30 min at room temperature. The secondary antibody used for 40 min at room temperature. Acquisition of 20,000 events was performed.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.