

Anti-KDM5B Picoband Antibody

Catalog # ABO11691

Specification

Anti-KDM5B Picoband Antibody - Product Information

ApplicationWBPrimary AccessionO9UGL1HostRabbitReactivityHuman, Mouse, RatClonalityPolyclonalFormatLyophilizedDescriptionRabbit IgG polyclonal antibody for Lysine-specific demethylase 5B(KDM5B) detection. Tested withWB in Human;Mouse;Rat.Human;Mouse;Rat.

Reconstitution Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-KDM5B Picoband Antibody - Additional Information

Gene ID 10765

Other Names Lysine-specific demethylase 5B, 1.14.11.-, Cancer/testis antigen 31, CT31, Histone demethylase JARID1B, Jumonji/ARID domain-containing protein 1B, PLU-1, Retinoblastoma-binding protein 2 homolog 1, RBP2-H1, KDM5B, JARID1B, PLU1, RBBP2H1

Calculated MW 175658 MW KDa

Application Details Western blot, 0.1-0.5 μg/ml, Human, Mouse, Rat

Subcellular Localization Nucleus .

Tissue Specificity Ubiquitously expressed, with highest levels in testis. Down-regulated in melanoma and glioblastoma. Up-regulated in breast cancer (at protein level). .

Protein Name Lysine-specific demethylase 5B

Contents Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

Immunogen

A synthetic peptide corresponding to a sequence in the middle region of human KDM5B (641-685aa DVLDVVVASTVQKDMAIMIEDEKALRETVRKLGVIDSERMDFE LL), identical to the related



mouse and rat sequences.

Purification Immunogen affinity purified.

Cross Reactivity No cross reactivity with other proteins.

Storage

At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time.Avoid repeated freezing and thawing.

Anti-KDM5B Picoband Antibody - Protein Information

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:24952722, PubMed:24952722, PubMed:28262558). 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:24952722). 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).

Anti-KDM5B Picoband Antibody - Protocols

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

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

Anti-KDM5B Picoband Antibody - Images



Western blot analysis of KDM5B expression in rat testis extract (lane 1), mouse testis extract (lane 2) and HEPG2 whole cell lysates (lane 3). KDM5B at 175KD was detected using rabbit anti-KDM5B Antigen Affinity purified polyclonal antibody (Catalog # ABO11691) at 0.5 ??g/mL. The blot was developed using chemiluminescence (ECL) method .

Anti-KDM5B Picoband Antibody - Background

Lysine-specific demethylase 5B, also known as histone demethylase JARID1B, is a demethylase enzyme that in humans is encoded by the KDM5B gene. This gene encodes a lysine-specific histone demethylase that belongs to the jumonji/ARID domain-containing family of histone demethylases. The encoded protein is capable of demethylating tri-, di- and monomethylated lysine 4 of histone H3. This protein plays a role in the transcriptional repression or certain tumor suppressor genes and is upregulated in certain cancer cells. This protein may also play a role in genome stability and DNA repair. Alternate splicing results n multiple transcript variants.