10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

KD-Validated Anti-Lysine demethylase 1B Rabbit Monoclonal Antibody

Rabbit monoclonal antibody
Catalog # AGI1557

Specification

KD-Validated Anti-Lysine demethylase 1B Rabbit Monoclonal Antibody - Product Information

Application	**WB, FC, ICC**
Primary Accession	Q8NB78
Reactivity	**Rat, Human**
Clonality	**Monoclonal**
Isotype	**Rabbit IgG**
Calculated MW	**Predicted, 92 kDa , observed, 75 kDa KDa**
Gene Name	**KDM1B**
Aliases	**KDM1B; Lysine Demethylase 1B; LSD2; AOF1; Flavin-Containing Amine Oxidase Domain-Containing Protein 1; Lysine-Specific Histone Demethylase 1B; Lysine-Specific Histone Demethylase; Lysine (K)-Specific Demethylase 1B; DJ298J15.2; BA204B7.3; FLJ34109; FLJ33898; FLJ43328; C6orf193; Amine Oxidase (Flavin Containing) Domain 1; Chromosome 6 Open Reading Frame 193; Amine Oxidase, Flavin Containing 1; EC 1.14.99.66; C6ORF193**
Immunogen	**A synthesized peptide derived from human LSD2 / AOF1**

KD-Validated Anti-Lysine demethylase 1B Rabbit Monoclonal Antibody - Additional Information

Gene ID	**221656**

Other Names
Lysine-specific histone demethylase 2, 1.14.99.66, Flavin-containing amine oxidase domain-containing protein 1, Lysine-specific histone demethylase 1B, KDM1B (HGNC:21577)

KD-Validated Anti-Lysine demethylase 1B Rabbit Monoclonal 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).

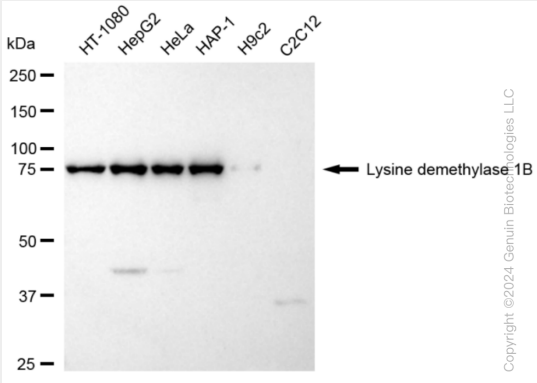
Cellular Location
Nucleus. Chromosome. Note=Found in actively RNAPolII- transcribed gene bodies.

KD-Validated Anti-Lysine demethylase 1B Rabbit Monoclonal Antibody - Protocols

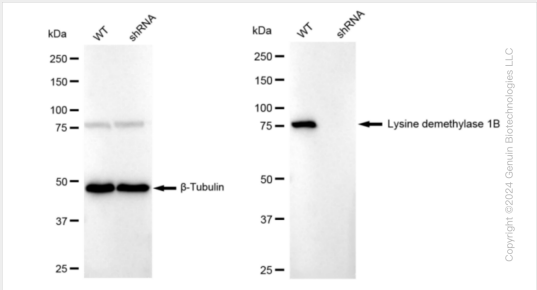
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

KD-Validated Anti-Lysine demethylase 1B Rabbit Monoclonal Antibody - Images



Western blotting analysis using anti-Lysine demethylase 1B antibody (Cat#AGI1557). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-Lysine demethylase 1B antibody (Cat#AGI1557, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



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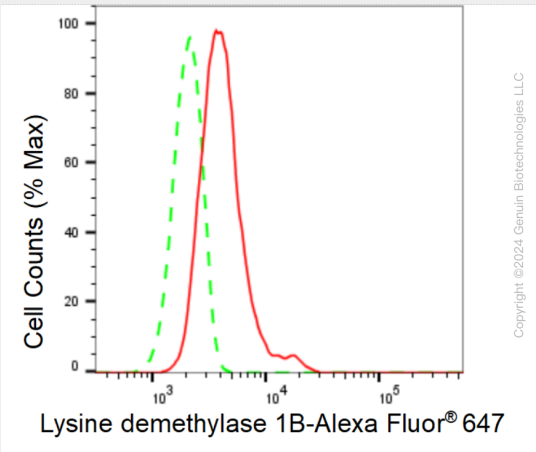
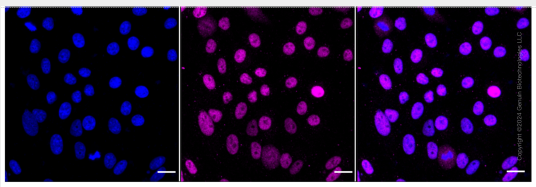
Western blotting analysis using anti-Lysine demethylase 1B antibody (Cat#AGI1557). Lysine demethylase 1B expression in wild type (WT) and Lysine demethylase 1B shRNA knockdown (KD) HeLa cells with 30 µg of total cell lysates. β-Tubulin serves as a loading control. The blot was incubated with anti-Lysine demethylase 1B antibody (Cat#AGI1557, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Flow cytometric analysis of Lysine demethylase 1B expression in HepG2 cells using Lysine demethylase 1B antibody (Cat#AGI1557, 1:2,000). Green, isotype control; red, Lysine demethylase 1B.



Immunocytochemical staining of HepG2 cells with anti-Lysine demethylase 1B antibody (Cat#AGI1557, 1:1,000). Nuclei were stained blue with DAPI; Lysine demethylase 1B was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar: 20 µm.