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KD-Validated Anti-KDM2A Rabbit Monoclonal Antibody

Rabbit monoclonal Antibody
Catalog # AGI2203

Specification

KD-Validated Anti-KDM2A Rabbit Monoclonal Antibody - Product Information

Application	**WB, FC**
Primary Accession	Q9Y2K7
Reactivity	**Rat, Human, Mouse**
Clonality	**Monoclonal**
Isotype	**Rabbit IgG**
Calculated MW	**Predicted, 133 kDa, observed, 133 kDa KDa**
Gene Name	**KDM2A**
Aliases	**KDM2A; Lysine Demethylase 2A; JHDM1A; FBL11; CXXC8; FBL7; F-Box And Leucine-Rich Repeat Protein 11; KIAA1004; LILINA; FBXL11; JmjC Domain-Containing Histone Demethylation Protein 1A; Jumonji C Domain-Containing Histone Demethylase 1A; [Histone-H3]-Lysine-36 Demethylase 1A; Lysine (K)-Specific Demethylase 2A; CXXC-Type Zinc Finger Protein 8; Lysine-Specific Demethylase 2A; F-Box/LRR-Repeat Protein 11; DKFZP434M1735; EC 1.14.11.27; FLJ00115; F-Box Protein Lilina; F-Box Protein FBL11; F-Box Protein FBL7**
Immunogen	**A synthesized peptide derived from human FBXL11**

KD-Validated Anti-KDM2A Rabbit Monoclonal Antibody - Additional Information

Gene ID	**22992**

Other Names
Lysine-specific demethylase 2A, 1.14.11.27, CXXC-type zinc finger protein 8, F-box and leucine-rich repeat protein 11, F-box protein FBL7, F-box protein Lilina, F-box/LRR-repeat protein 11, JmjC domain-containing histone demethylation protein 1A, [Histone-H3]-lysine-36 demethylase 1A, KDM2A

KD-Validated Anti-KDM2A Rabbit Monoclonal Antibody - Protein Information

Name KDM2A

Function
Histone demethylase that specifically demethylates 'Lys-36' of histone H3, thereby playing a central role in histone code. Preferentially demethylates dimethylated H3 'Lys-36' residue while it has weak or no activity for mono- and tri-methylated H3 'Lys-36'. May also recognize and bind to

some phosphorylated proteins and promote their ubiquitination and degradation. Required to maintain the heterochromatic state. Associates with centromeres and represses transcription of small non-coding RNAs that are encoded by the clusters of satellite repeats at the centromere. Required to sustain centromeric integrity and genomic stability, particularly during mitosis. Regulates circadian gene expression by repressing the transcriptional activator activity of CLOCK-BMAL1 heterodimer and RORA in a catalytically- independent manner (PubMed:26037310).

Cellular Location
Nucleus, nucleoplasm. Chromosome Note=Punctate expression throughout the nucleoplasm and enriched in the perinucleolar region (PubMed:19001877, PubMed:20417597). Specifically nucleates at CpG islands where it's presence results in chromatin depleted in H3K36me2 (PubMed:19001877, PubMed:20417597)

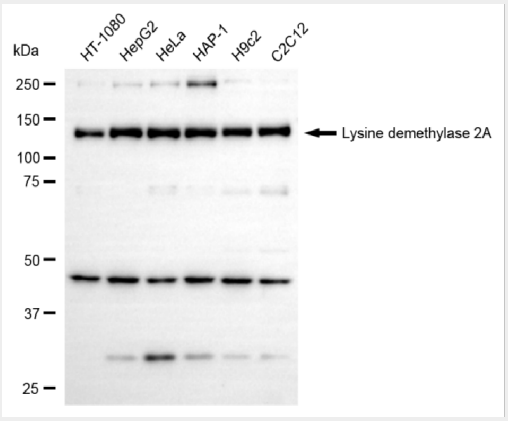
Tissue Location
Widely expressed, with highest levels in brain, testis and ovary, followed by lung.

KD-Validated Anti-KDM2A 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-KDM2A Rabbit Monoclonal Antibody - Images



Western blotting analysis using anti-lysine demethylase 2A antibody (Cat#AGI2203). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-lysine demethylase 2A antibody (Cat#AGI2203, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.

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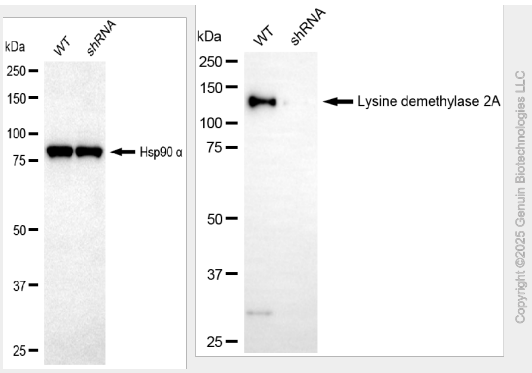
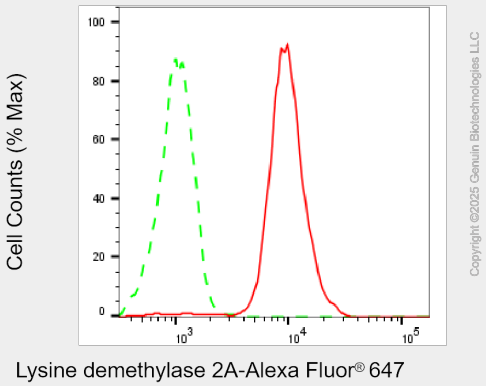


Western blotting analysis using anti-lysine demethylase 2A antibody (Cat#AGI2203). lysine demethylase 2A expression in wild-type (WT) and lysine demethylase 2A (KDM2A) shRNA knockdown (KD) HeLa cells with 20 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with anti-lysine demethylase 2A antibody (Cat#AGI2203, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Flow cytometric analysis of Lysine demethylase 2A expression in C2C12 cells using anti-Lysine demethylase 2A antibody (Cat#AGI2203, 1:2,000). Green, isotype control; red, Lysine demethylase 2A.