# [KD Validated] Anti-HDAC9 Rabbit mAb

Purified Recombinant Rabbit Monoclonal Antibody

Catalog # R021861

## Product Information

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|---|---|
| Application | WB, FC, IF (Cell)/ICC |
| Reactivity | Human, Mouse, Rat |
| Dilution | WB 1:4000~1:20,000; FC 1:200~1:2,000; IF 1:100~1:1,000 |
| Host | Rabbit |
| Clonality | Monoclonal |
| Clone No. | 78P50B87 |
| Isotype | IgG |
| Label | Unconjugated |
| Immunogen | A synthesized peptide derived from human HDAC9 |
| Format | Affinity purified monoclonal antibody supplied in PBS with 0.02% sodium azide and 50% glycerol, pH 7.3. |
| Storage | Shipped on wet ice. Store at -20°C. Stable for 12 months from date of receipt. Aliquoting is unnecessary for -20°C storage. |
| Precautions | [KD Validated] Anti-HDAC9 Rabbit mAb [78P50B87] is for research use only and not for use in diagnostic or therapeutic procedures. |

## Protein Information

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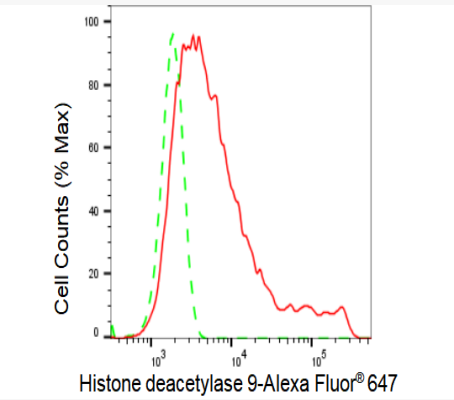
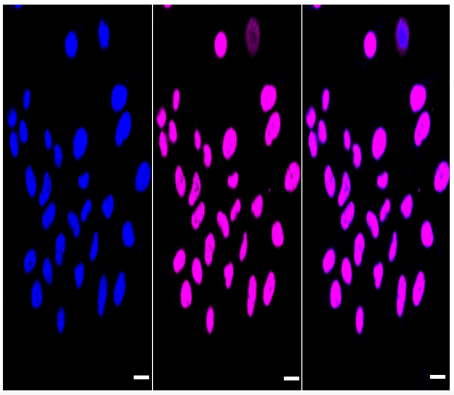
|---|---|
| Synonyms | HDAC9; Histone Deacetylase 9; HDAC7B; MITR; HD7; KIAA0744; HDAC; Histone Deacetylase 7B; EC 3.5.1.98; HDAC; HD7b; HDRP; HD9; MEF-2 Interacting Transcription Repressor (MITR) Protein; MEF2-Interacting Transcription Repressor MITR; Histone Deacetylase 4/5-Related Protein; Histone Deacetylase-Related Protein; HDAC9FL; ARCND4; HDAC9B. |
| Calculated MW | Calculated MW: 111 kDa, Observed MW: 160 kDa |
| Uniprot ID | Q9UKV0 |
| Gene ID | 9734 |
| Background | Histones play a critical role in transcriptional regulation, cell cycle progression, and developmental events. Histone acetylation/deacetylation alters chromosome structure and affects transcription factor access to DNA. The protein encoded by this gene has sequence homology to members of the histone deacetylase family. This gene is orthologous to the Xenopus and mouse MITR genes. The MITR protein lacks the histone deacetylase catalytic domain. It represses MEF2 activity through recruitment of multicomponent corepressor complexes that include CtBP and HDACs. This encoded protein may play a role in hematopoiesis. Multiple alternatively spliced transcripts have been described for this gene but the full-length nature of some of them has not been determined. [provided by RefSeq, Jul 2008] |
| Cellular Location | Nucleus. |
| Tissue Location | Broadly expressed, with highest levels in brain, heart, muscle and testis. Isoform 3 is present in human bladder carcinoma cells (at protein level). |

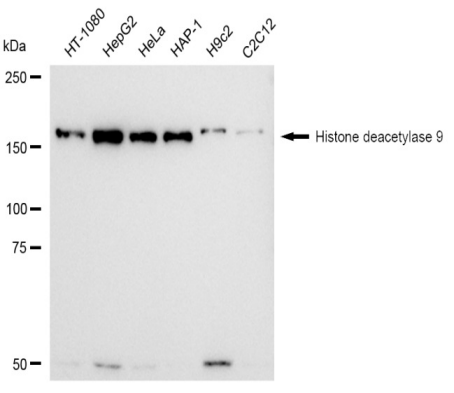
## Validation Images



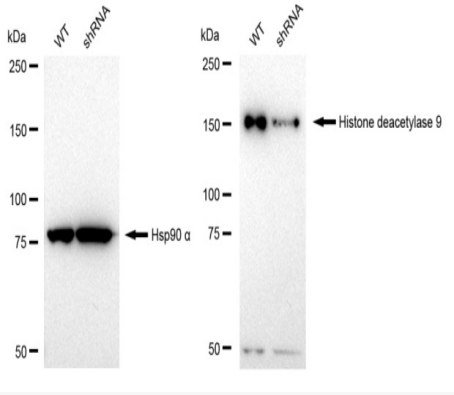

Flow cytometric analysis of Histone deacetylase 9 expression in HepG2 cells using Histone deacetylase 9 antibody (R021861, 1:2,000). Green, isotype control; red, Histone deacetylase 9.



Immunocytochemical staining of HepG2 cells with Histone deacetylase 9 antibody (R021861, 1:1,000). Nuclei were stained blue with DAPI; Histone deacetylase 9 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: High. Scale bar: 20 µm.




Western blotting analysis using Histone deacetylase 9 antibody (R021861). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with Histone deacetylase 9 antibody (R021861, 1:20,000) and HRP-conjugated goat anti-rabbit secondary antibody (1:20,000) respectively. Image was developed using ECL Substrate Kit.




Western blotting analysis using Histone deacetylase 9 antibody (R021861). Histone deacetylase 9 expression in wild type (WT) and histone deacetylase 9 shRNA knockdown (KD) HeLa cells with 30 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with Histone deacetylase 9 antibody (R021861, 1:20,000) and HRP-conjugated goat anti-rabbit secondary antibody (1:20,000) respectively. Image was developed using ECL Substrate Kit.