

**Product Name: KD-Validated Histone Deacetylase 6 Recombinant Rabbit Monoclonal Antibody**

**Catalog #: KVA01048**

For research use only.

## Summary

|                     |                                                                             |
|---------------------|-----------------------------------------------------------------------------|
| <b>Description</b>  | KO&KD-Validated antibody                                                    |
| <b>Host</b>         | Rabbit                                                                      |
| <b>Application</b>  | WB,FCM,ICC                                                                  |
| <b>Reactivity</b>   | Human                                                                       |
| <b>Conjugation</b>  | Unconjugated                                                                |
| <b>Modification</b> | Unmodified                                                                  |
| <b>Isotype</b>      | Rabbit IgG                                                                  |
| <b>Clonality</b>    | Rabbit mAb                                                                  |
| <b>Form</b>         | Liquid                                                                      |
| <b>Storage</b>      | Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles. |
| <b>Shipping</b>     | Ice bags                                                                    |
| <b>Buffer</b>       | Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.   |
| <b>Purification</b> | Affinity purification                                                       |

## Application

|                         |                                                         |
|-------------------------|---------------------------------------------------------|
| <b>Dilution Ratio</b>   | WB 1:4000-1:20,000; FC 1:200-1:2,000; ICC 1:100-1:1,000 |
| <b>Molecular Weight</b> | Calculated MW: 131.4kDa                                 |

## Antigen Information

|                          |                                                                                                                                           |
|--------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Gene Name</b>         | HDAC6<br>HDAC6; Histone Deacetylase 6; HD6; KIAA0901; PPP1R90; JM21; Protein Phosphatase 1,                                               |
| <b>Alternative Names</b> | Regulatory Subunit 90; Tubulin-Lysine Deacetylase HDAC6; Alpha-Tubulin Deacetylase HDAC6; EC 3.5.1.98; FLJ16239; EC 3.5.1.-; CPBHM; KDAC6 |
| <b>Gene ID</b>           | 10013.0                                                                                                                                   |
| <b>SwissProt ID</b>      | Q9UBN7                                                                                                                                    |
| <b>Immunogen</b>         | A synthesized peptide derived from human HDAC6                                                                                            |

## Background

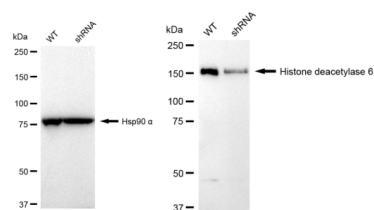
Histones play a critical role in transcriptional regulation, cell cycle progression, and developmental events. Histone

acetylation/deacetylation alters chromosome structure and affects transcription factor access to DNA. The protein encoded by this gene belongs to class II of the histone deacetylase/acuc/apha family. It contains an internal duplication of two catalytic domains which appear to function independently of each other. This protein possesses histone deacetylase activity and represses transcription. [provided by RefSeq, Jul 2008]

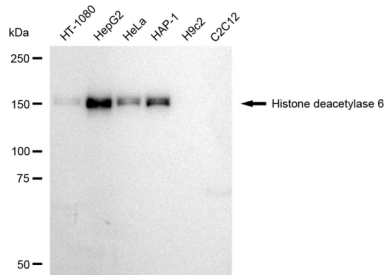
## Research Area

Epigenetics and Nuclear Signaling, Stem Cells

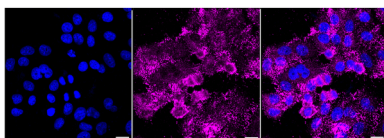
## Image Data



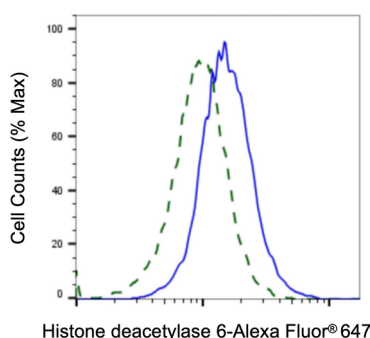
Western blotting analysis using Histone deacetylase 6 antibody (KVA01048). Histone deacetylase 6 expression in wild type (WT) and Histone deacetylase 6 shRNA knockdown (KD) HT-1080 cells with 30 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with Histone deacetylase 6 antibody (KVA01048, 1:20,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



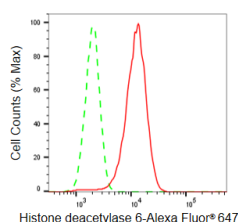
Western blotting analysis using Histone deacetylase 6 antibody (KVA01048). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with Histone deacetylase 6 antibody (KVA01048, 1:20,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



Immunocytochemical staining of HepG2 cells with Histone deacetylase 6 antibody (KVA01048, 1:1,000). Nuclei were stained blue with DAPI; Histone deacetylase 6 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.



Validation of histone deacetylase 6 knockdown using flow cytometry. Wild-type(WT, Blue) and knockdown(KD, Green) HT-1080 cells were stained with histone deacetylase 6 antibody (KVA01048, 1:2,000) and analyzed using BD flow cytometer.



Flow cytometric analysis of Histone deacetylase 6 expression in HepG2 cells using Histone deacetylase 6 antibody (KVA01048, 1:2,000). Green, isotype control; red, Histone deacetylase 6.

