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**Product Name: KD-Validated Histone H3 (Acetyl K27) Recombinant Rabbit Monoclonal Antibody****Catalog #: KVA01231**

For research use only.

**Summary**

|                     |                                                                             |
|---------------------|-----------------------------------------------------------------------------|
| <b>Description</b>  | KO&KD-Validated antibody                                                    |
| <b>Host</b>         | Rabbit                                                                      |
| <b>Application</b>  | WB,FCM,ICC,IHC-P                                                            |
| <b>Reactivity</b>   | Human,Mouse,Rat                                                             |
| <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 1:1,000-1:5,000; FC 1:200-1:2,000; ICC 1:100-1:1,000; IHC-P 1:100-1:200 |
| <b>Molecular Weight</b> | Predicted, 15 kDa, observed, 17 kDa                                        |

**Antigen Information**

|                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
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| <b>Gene Name</b>         | H3C1<br>H3C1; H3 Clustered Histone 1; HIST1H3A; H3/A; H3FA; Histone Cluster 1 H3 Family Member A; H3 Histone Family, Member A; Histone Cluster 1, H3a; Histone 1, H3a; Histone H3.1; Histone H3/A; H3FC HIST1H3C; Histone H3/B; Histone H3/C; Histone H3/D; Histone H3/F; Histone H3/H; Histone H3/I; Histone; H3/J; Histone H3/K; Histone H3/L; HIST1H3B; HIST1H3D; HIST1H3E; HIST1H3F; HIST1H3G; HIST1H3H; HIST1H3I; HIST1H3J; H3C10; H3C11; H3C12; H3C2; H3C3; H3C4; H3C6; H3C7; H3C8; H3FL; H3FB; H3FD; H3FI; H3FH; H3FK; H3FF; H3FJ |
| <b>Alternative Names</b> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Gene ID</b>           | 8350, 3020,8290,440093,653604                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>SwissProt ID</b>      | P68431, P84243,Q16695, Q6NXT2, Q71DI3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |

## Immunogen

A synthesized peptide derived from human Histone H3 (acetyl K27)

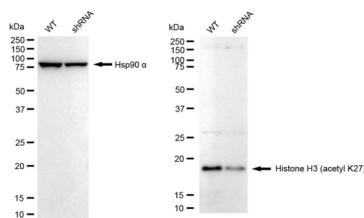
## Background

Histones are basic nuclear proteins that are responsible for the nucleosome structure of the chromosomal fiber in eukaryotes. This structure consists of approximately 146 bp of DNA wrapped around a nucleosome, an octamer composed of pairs of each of the four core histones (H2A, H2B, H3, and H4). The chromatin fiber is further compacted through the interaction of a linker histone, H1, with the DNA between the nucleosomes to form higher order chromatin structures. This gene is intronless and encodes a replication-dependent histone that is a member of the histone H3 family. Transcripts from this gene lack polyA tails; instead, they contain a palindromic termination element. This gene is found in the large histone gene cluster on chromosome 6p22-p21.3. [provided by RefSeq, Aug 2015]

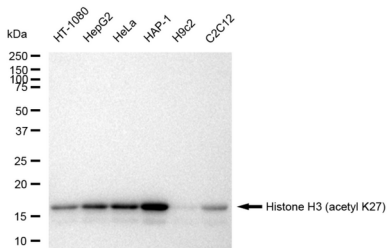
## Research Area

Epigenetics and Nuclear Signaling

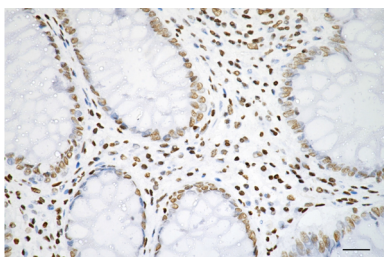
## Image Data



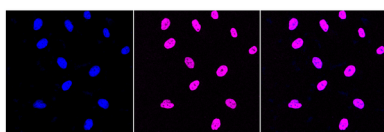
Western blotting analysis using Histone H3 (acetyl K27) antibody (KVA01231). Histone H3 (acetyl K27) expression in wild type (WT) and Histone H3 (acetyl K27) shRNA knockdown (KD) HeLa cells with 30 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with Histone H3 (acetyl K27) antibody (KVA01231, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



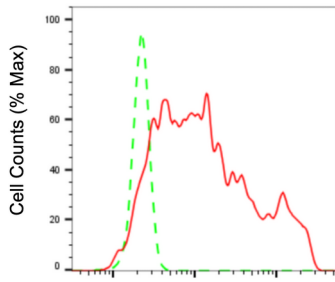
Western blotting analysis using Histone H3 (acetyl K27) antibody (KVA01231). Total cell lysates (5 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with Histone H3 (acetyl K27) antibody (KVA01231, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



Immunohistochemistry was performed on paraffin-embedded human sigmoid colon carcinoma using histone H3 (acetyl K27) antibody (KVA01231, 1:200). Antigen retrieval was done in sodium citrate buffer (pH 6.0). DAB was used for detection, with hematoxylin counterstaining. Images were acquired using a Nikon Ci-L Plus microscope (40× objective). Scale bar, 25 µm.



Immunocytochemical staining of HeLa cells with Histone H3 (acetyl K27) antibody (KVA01231, 1:1,000). Nuclei were stained blue with DAPI; Histone H3 (acetyl K27) 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.



Histone H3 (acetyl K27)-Alexa Fluor® 647

Flow cytometric analysis of Histone H3 (acetyl K27) expression in HeLa cells using Histone H3 (acetyl K27) antibody (KVA01231, 1:2,000). Green, isotype control; red, Histone H3 (acetyl K27).