

For Research Use Only

# Acetyl-Histone H3 (Lys27) Recombinant antibody



Catalog Number: 82902-1-RR

## Basic Information

<b>Catalog Number:</b> 82902-1-RR	<b>GenBank Accession Number:</b> BC066245	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 100ul , Concentration: 1000 µg/ml by Nanodrop;	<b>GeneID (NCBI):</b> 8350	<b>CloneNo.:</b> 1M16
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> P68431	<b>Recommended Dilutions:</b> WB 1:2000-1:19600
<b>Isotype:</b> IgG	<b>Full Name:</b> histone cluster 1, H3a	
	<b>Observed MW:</b> 15 kDa	

## Applications

**Tested Applications:**  
WB, ELISA, Dot Blot

**Species Specificity:**  
Human, mouse, rat

### Positive Controls:

**WB :** HeLa cells, HEK-293 cells, Jurkat cells, NIH/3T3 cells, HSC-T6 cells, mouse kidney tissue

## Background Information

Histones are small, highly basic proteins that consist of a globular domain with unstructured N- and C-terminal tails protruding from the main structure. Histone H3 is one of the five main histones that are responsible for the nucleosome structure of the chromosomal fiber in eukaryotes. Two molecules of each of the four core histones (H2A, H2B, H3, and H4) form an octamer, around which approximately 146 bp of DNA is wrapped in repeating units, called nucleosomes. In addition to their role in DNA compartmentalization, histones also play crucial roles in various biologic processes, including gene expression and regulation, DNA repair, chromatin condensation, cell cycle progression, chromosome segregation, and apoptosis. The ability of histones to regulate chromatin dynamics primarily originates from various posttranslational modifications carried out by histone-modifying enzymes. Acetyl-Histone H3 (Lys27) is enhancer specific mark and plays positive role in gene expression.

## Storage

**Storage:**  
Store at -20°C. Stable for one year after shipment.

**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

**Aliquoting is unnecessary for -20°C storage**

**\*\*\* 20ul sizes contain 0.1% BSA**

For technical support and original validation data for this product please contact:

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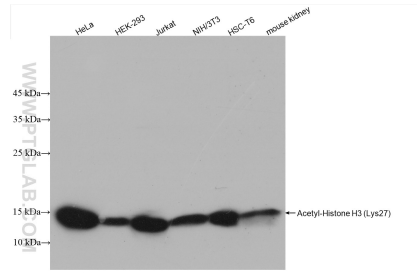
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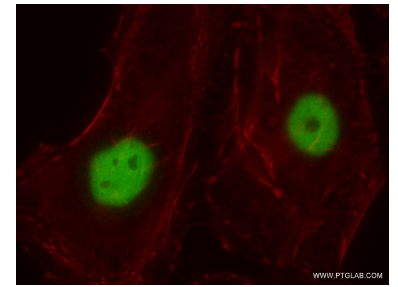
## Selected Validation Data



Dot blot analysis was used to confirm the specificity of Acetyl-Histone H3 (Lys27) antibody. Acetylated peptides were spotted onto NC and probed with antibody at 1  $\mu\text{g}/\text{mL}$ . The amount of peptide ( $\mu\text{g}/\text{mL}$ ) spotted is indicated next to each row. Column 1: H3K27ac. Column 2: Unmodified H3K27. Column 3: H3K9ac. Column 4: H3K14ac. Column 5: H3K18ac. Column 6: H3K23ac. Column 7: H3K36ac. Column 8: H4K5ac. Column 9: H4K8ac. Column 10: H4K12ac.



Various cell lysates were subjected to SDS PAGE followed by western blot with 82902-1-RR Acetyl-Histone H3 (Lys27) antibody at dilution of 1:9800 incubated at room temperature for 1.5 hours.



Immunofluorescent analysis of (4% PFA) fixed HeLa cells using Acetyl-Histone H3 (Lys27) antibody (82902-1-RR, Clone: 1M16) at dilution of 1:400 and CoraLite® 488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-Phalloidin (red).