

# Acetyl-Histone H3 (Lys27)

## Recombinant antibody, PBS Only

Catalog Number: 82902-1-PBS

### Basic Information

Catalog Number:	82902-1-PBS	GenBank Accession Number:	BC066245	Purification Method:	Protein A purification
Size:	1mg/ml	GeneID (NCBI):	8350	CloneNo.:	1M16
Source:	Rabbit	UNIPROT ID:	P68431		
Isotype:	IgG	Full Name:	histone cluster 1, H3a		

### Applications

**Tested Applications:**  
WB, IHC, IF/ICC, Dot Blot, Indirect ELISA

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

### Background Information

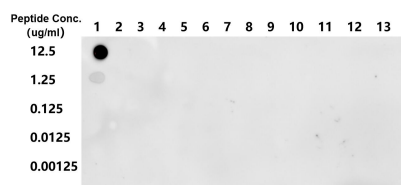
Histones are small, highly basic proteins that consist of a globular domain with unstructured N- and C-terminal tails protruding from the main structure. Histone H3 is one of the five main histones that are responsible for the nucleosome structure of the chromosomal fiber in eukaryotes. Two molecules 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

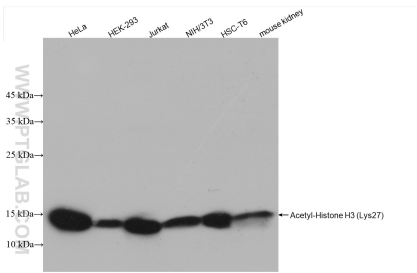
**Storage:**  
Store at -80°C.  
**The product is shipped with ice packs. Upon receipt, store it immediately at -80°C**

**Storage Buffer:**  
PBS Only

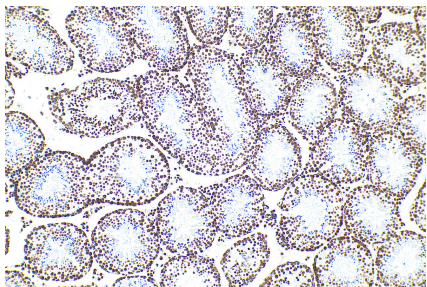
## Selected Validation Data



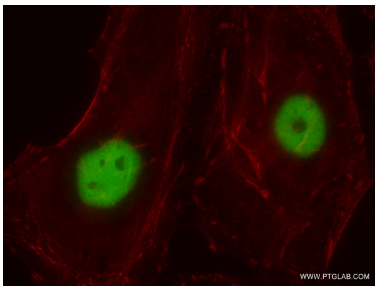
Dot blot analysis was used to confirm the specificity of Acetyl-Histone H3 (Lys27) antibody. Acetylated peptides were spotted onto NC and probed with antibody at 1  $\mu$ g/ml. The amount of peptide ( $\mu$ g/ml) spotted is indicated next to each row. Column 1: H3K27ac. Column 2: Unmodified H3K27. Column 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. This data was developed using the same antibody clone with 82902-1-PBS in a different storage buffer formulation.



Immunohistochemical analysis of paraffin-embedded mouse testis tissue slide using 82902-1-RR (Acetyl-Histone H3 (Lys27) antibody) at dilution of 1:2000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 82902-1-PBS in a different storage buffer formulation.



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). This data was developed using the same antibody clone with 82902-1-PBS in a different storage buffer formulation.