

# Acetyl-Histone H3-K9 Rabbit mAb

Catalog No.: A21107 **Recombinant** **2 Publications**

## Basic Information

### Observed MW

17kDa

### Calculated MW

15kDa

### Category

Primary antibody

### Applications

WB, DB, IHC-P, IF/ICC, IP, ELISA, ChIP, ChIP-seq, CUT&Tag

### Cross-Reactivity

Human, Mouse, Rat, Other (Wide Range Predicted)

### CloneNo number

ARC50576

## Recommended Dilutions

<b>WB</b>	1:500 - 1:1000
<b>DB</b>	1:500 - 1:1000
<b>IHC-P</b>	1:100 - 1:500
<b>IF/ICC</b>	1:50 - 1:200
<b>IP</b>	0.5µg-4µg antibody for 200µg-400µg extracts of whole cells
<b>ELISA</b>	Recommended starting concentration is 1 µg/mL. Please optimize the concentration based on your specific assay requirements.
<b>ChIP</b>	5µg antibody for 5µg-10µg of Chromatin
<b>ChIP-seq</b>	1:50 - 1:100
<b>CUT&amp;Tag</b>	10 <sup>5</sup> cells /1 µg

## 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.

## Immunogen Information

### Gene ID

8290/8350

### Swiss Prot

Q16695/P68431

### Immunogen

A synthetic acetylated peptide around K9 of human Histone H3 (NP\_003520.1).

### Synonyms

H3/A; H3C2; H3C3; H3C4; H3C6; H3C7; H3C8; H3FA; H3C10; H3C11; H3C12; HIST1H3A; Acetyl-Histone H3-K9

## Product Information

### Source

Rabbit

### Isotype

IgG

### Purification

Affinity purification

### Storage

Store at -20°C. Avoid freeze / thaw cycles.

Buffer: PBS with 0.05% proclin300, 0.05% BSA, 50% glycerol, pH7.3.

## Contact

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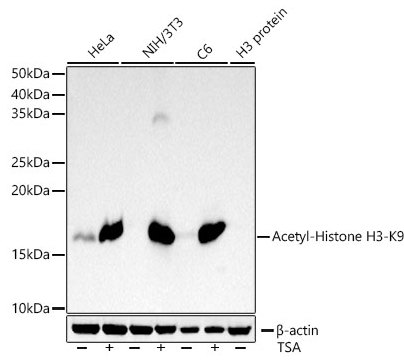
 | 400-999-6126

 | [cn.market@abclonal.com.cn](mailto:cn.market@abclonal.com.cn)

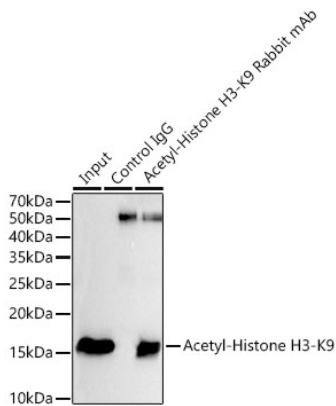
 | [www.abclonal.com.cn](http://www.abclonal.com.cn)

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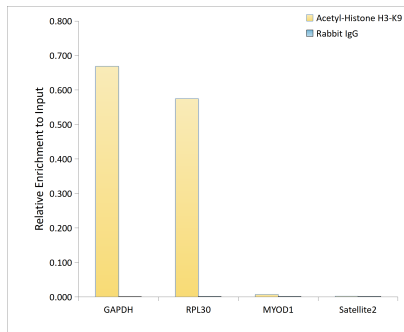
## Validation Data



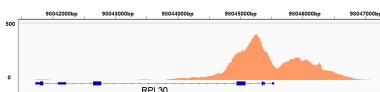
Western blot analysis of various lysates using Acetyl-Histone H3-K9 Rabbit mAb (A21107) at 1:1000 dilution. HeLa and NIH/3T3 and C6 cells were treated by TSA (1 μM) at 37°C for 18 hours. Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution. Lysates/proteins: 25 μg per lane. Blocking buffer: 3% nonfat dry milk in TBST. Detection: ECL Basic Kit (RM00020). Exposure time: 10s.



Immunoprecipitation analysis of 600 μg extracts of NIH/3T3 cells using 5 μg Acetyl-Histone H3-K9 antibody (A21107). Western blot was performed from the immunoprecipitate using Acetyl-Histone H3-K9 antibody (A21107) at a dilution of 1:1000.

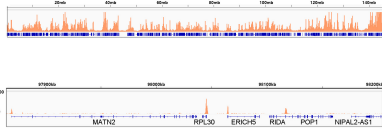


Chromatin immunoprecipitation analysis of extracts of HeLa cells, using Acetyl-Histone H3-K9 Rabbit mAb (A21107) and rabbit IgG. The amount of immunoprecipitated DNA was checked by quantitative PCR. Histogram was constructed by the ratios of the immunoprecipitated DNA to the input.

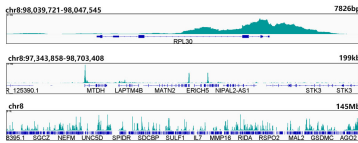


Chromatin immunoprecipitations were performed with cross-linked chromatin from 293F cells and Acetyl-Histone H3-K9 (A21107). The ChIP sequencing results indicate the enrichment pattern of Acetyl-Histone H3-K9 in selected genomic region and representative gene loci (RPL30), as shown in figure.

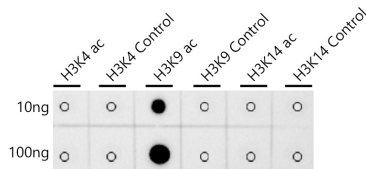
## Validation Data



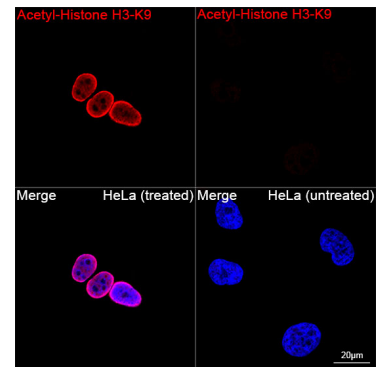
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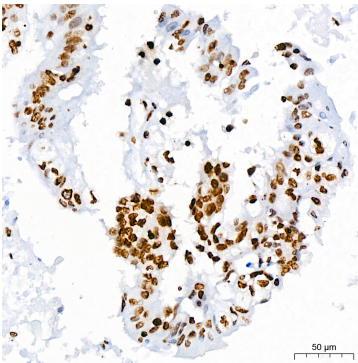
CUT&Tag was performed using the CUT&Tag Assay Kit (pAG-Tn5) for Illumina(RK20265) from  $10^5$  K562 cells with 1  $\mu$ g Acetyl-Histone H3-K9 Rabbit mAb antibody (A21107), along with a Goat Anti-Rabbit IgG(H+L). The CUT&Tag results indicate the enrichment pattern of Acetyl-Histone H3-K9 in representative gene loci (RPL30), as shown in figure.



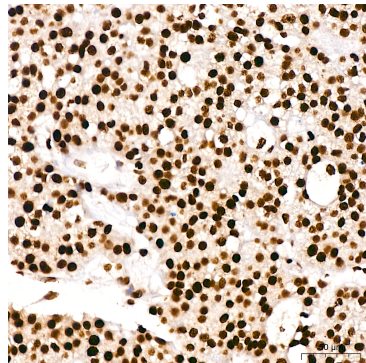
Dot-blot analysis of all sorts of peptides using Acetyl-Histone H3-K9 antibody (A21107) at 1:1000 dilution.



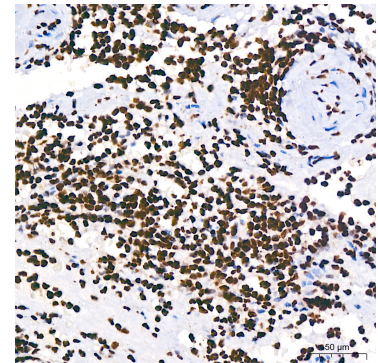
Confocal imaging of HeLa TSA and HeLa cells using Acetyl-Histone H3-K9 Rabbit mAb (A21107, dilution 1:200) followed by a further incubation with Cy3 Goat Anti-Rabbit IgG (H+L) (AS007, dilution 1:500)(Red). DAPI was used for nuclear staining (Blue). Objective: 100x.



Immunohistochemistry analysis of paraffin-embedded Human colon carcinoma using Acetyl-Histone H3-K9 Rabbit mAb (A21107) at dilution of 1:200 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate Bufferr (pH 6.0) prior to IHC staining.



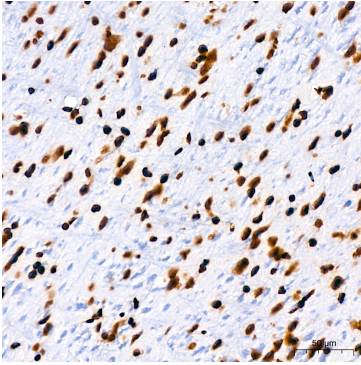
Immunohistochemistry analysis of paraffin-embedded Human liver using Acetyl-Histone H3-K9 Rabbit mAb (A21107) at dilution of 1:200 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate Bufferr (pH 6.0) prior to IHC staining.



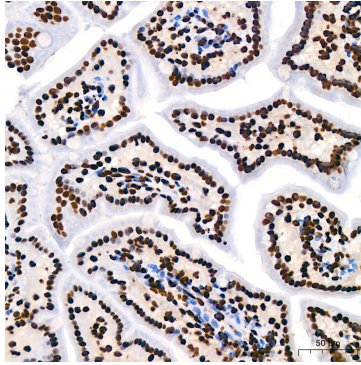
Immunohistochemistry analysis of paraffin-embedded Human spleen using Acetyl-Histone H3-K9 Rabbit mAb (A21107) at dilution of 1:200 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate Bufferr (pH 6.0) prior to IHC staining.

## Validation Data

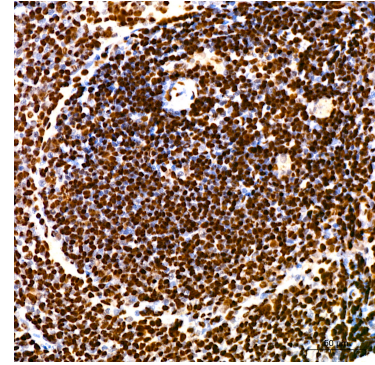
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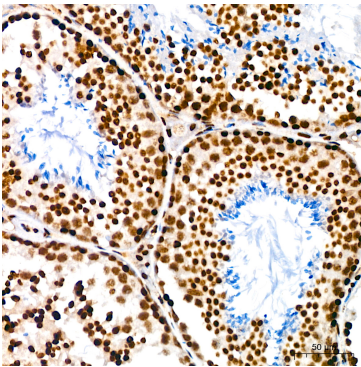
Immunohistochemistry analysis of paraffin-embedded Mouse brain using Acetyl-Histone H3-K9 Rabbit mAb (A21107) at dilution of 1:200 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate Bufferr (pH 6.0) prior to IHC staining.



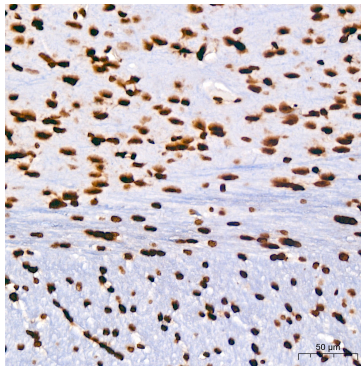
Immunohistochemistry analysis of paraffin-embedded Mouse intestin using Acetyl-Histone H3-K9 Rabbit mAb (A21107) at dilution of 1:200 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate Bufferr (pH 6.0) prior to IHC staining.



Immunohistochemistry analysis of paraffin-embedded Mouse spleen using Acetyl-Histone H3-K9 Rabbit mAb (A21107) at dilution of 1:200 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate Bufferr (pH 6.0) prior to IHC staining.



Immunohistochemistry analysis of paraffin-embedded Mouse testis using Acetyl-Histone H3-K9 Rabbit mAb (A21107) at dilution of 1:200 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate Bufferr (pH 6.0) prior to IHC staining.



Immunohistochemistry analysis of paraffin-embedded Rat brain using Acetyl-Histone H3-K9 Rabbit mAb (A21107) at dilution of 1:200 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate Bufferr (pH 6.0) prior to IHC staining.