

A22054

Leader in Biomolecular Solutions for Life Science



# Acetyl-Histone H3-K4/K9/K14/K18/K23/K27 Rabbit mAb

Catalog No.: A22054 **Recombinant**

## Basic Information

### Observed MW

17kDa

### Calculated MW

16kDa

### Category

Polyclonal Antibody

### Applications

WB, IHC-P, IP, ChIP, ChIP-seq, ELISA, CUT&Tag

### Cross-Reactivity

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

### CloneNo number

ARC53902

## Recommended Dilutions

**WB** 1:2000 - 1:20000

**IHC-P** 1:50 - 1:200

**IP** 0.5µg-4µg antibody for 200µg-400µg extracts of whole cells

**ChIP** 5µg antibody for 5µg-10µg of Chromatin

**ChIP-seq** 1:20 - 1:100

**CUT&Tag** 10<sup>5</sup> cells /1 µg

## Contact

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

## 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 K4 & K27 of human Histone (NP\_003520.1).

### Synonyms

H3/A; H3C2; H3C3; H3C4; H3C6; H3C7; H3C8; H3FA; H3C10; H3C11; H3C12; HIST1H3A; Acetyl-Histone H3-K4/K9/K14/K18/K23/K27

## Product Information

### Source

Rabbit

### Isotype

IgG

### Purification

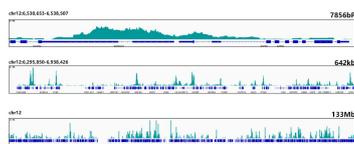
Affinity purification

### Storage

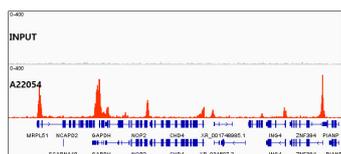
Store at -20°C. Avoid freeze / thaw cycles.

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

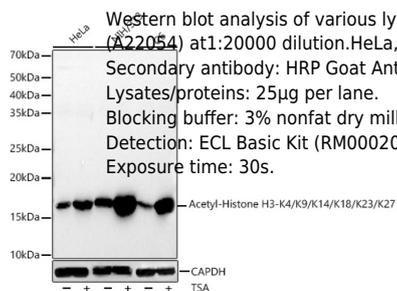
## Validation Data



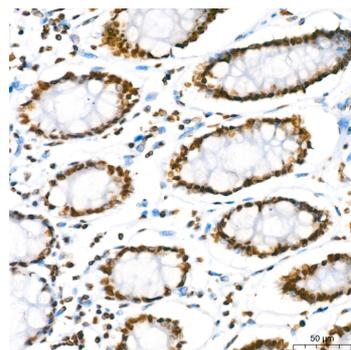
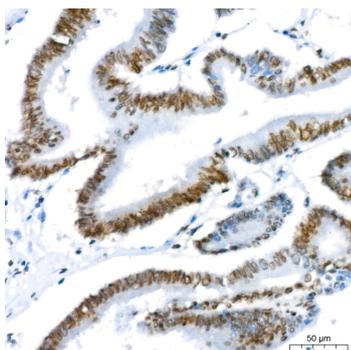
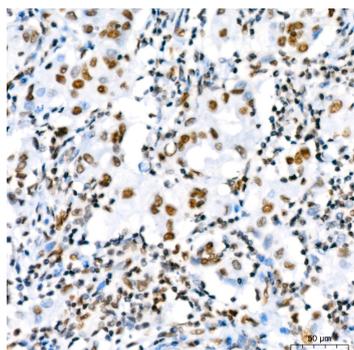
CUT&Tag was performed using the CUT&Tag Assay Kit (pAG-Tn5) for Illumina(RK20265) from  $10^6$  K562 cells with 1  $\mu$ g Acetyl-Histone H3-K4/K9/K14/K18/K23/K27 antibody (A22054), along with a Goat Anti-Rabbit IgG(H+L). The CUT&Tag results indicate the enrichment pattern of Acetyl-Histone H3-K4/K9/K14/K18/K23/K27 in representative gene loci (RPL30), as shown in figure.



Chromatin immunoprecipitations were performed with cross-linked chromatin from HeLa cells and Acetyl-Histone H3-K4/K9/K14/K18/K23/K27 Rabbit mAb (A22054). The ChIP sequencing results indicate the enrichment pattern of Acetyl-Histone H3-K4/K9/K14/K18/K23/K27 in selected genomic region and representative gene loci (GAPDH), as shown in figure.

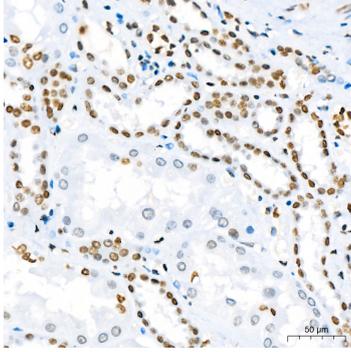


Western blot analysis of various lysates, using Acetyl-Histone H3-K4/K9/K14/K18/K23/K27 Rabbit mAb (A22054) at 1:20000 dilution. HeLa, NIH/3T3 and C6 cells were treated by TSA (1  $\mu$ M) at 37°C for 18 hours.  
 Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.  
 Lysates/proteins: 25  $\mu$ g per lane.  
 Blocking buffer: 3% nonfat dry milk in TBST.  
 Detection: ECL Basic Kit (RM00020).  
 Exposure time: 30s.

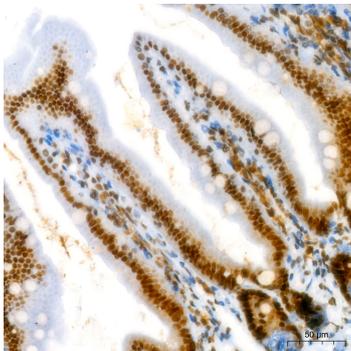


## Validation Data

Immunohistochemistry analysis of Acetyl-Histone H3-K4/K9/K14/K18/K23/K27 in paraffin-embedded human breast cancer using Acetyl-Histone H3-K4/K9/K14/K18/K23/K27 Rabbit mAb (A22054) at dilution of 1:200 (40x lens). Perform high pressure antigen retrieval with 10 mM citrate buffer pH 6.0 before commencing with IHC staining protocol.

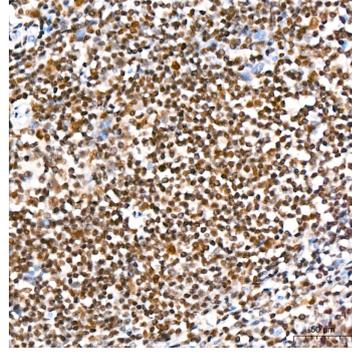


Immunohistochemistry analysis of Acetyl-Histone H3-K4/K9/K14/K18/K23/K27 in paraffin-embedded human kidney using Acetyl-Histone H3-K4/K9/K14/K18/K23/K27 Rabbit mAb (A22054) at dilution of 1:200 (40x lens). Perform high pressure antigen retrieval with 10 mM citrate buffer pH 6.0 before commencing with IHC staining protocol.

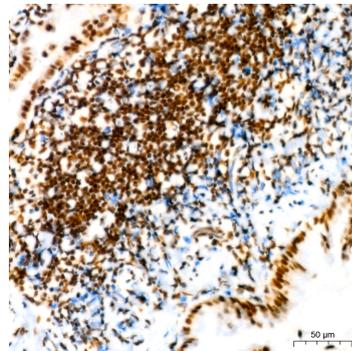


Immunohistochemistry analysis of Acetyl-Histone H3-K4/K9/K14/K18/K23/K27 in paraffin-embedded mouse intestine using Acetyl-Histone H3-K4/K9/K14/K18/K23/K27 Rabbit mAb (A22054) at dilution of 1:200 (40x lens). Perform high pressure antigen retrieval with 10 mM citrate buffer pH 6.0 before commencing with IHC staining protocol.

Immunohistochemistry analysis of Acetyl-Histone H3-K4/K9/K14/K18/K23/K27 in paraffin-embedded human colon carcinoma using Acetyl-Histone H3-K4/K9/K14/K18/K23/K27 Rabbit mAb (A22054) at dilution of 1:200 (40x lens). Perform high pressure antigen retrieval with 10 mM citrate buffer pH 6.0 before commencing with IHC staining protocol.

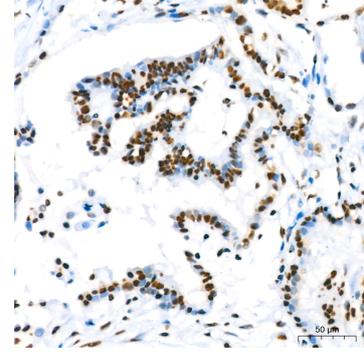


Immunohistochemistry analysis of Acetyl-Histone H3-K4/K9/K14/K18/K23/K27 in paraffin-embedded human spleen using Acetyl-Histone H3-K4/K9/K14/K18/K23/K27 Rabbit mAb (A22054) at dilution of 1:200 (40x lens). Perform high pressure antigen retrieval with 10 mM citrate buffer pH 6.0 before commencing with IHC staining protocol.



Immunohistochemistry analysis of Acetyl-Histone H3-K4/K9/K14/K18/K23/K27 in paraffin-embedded rat lung using Acetyl-Histone H3-K4/K9/K14/K18/K23/K27 Rabbit mAb (A22054) at dilution of 1:200 (40x lens). Perform high pressure antigen retrieval with 10 mM citrate buffer pH 6.0 before commencing with IHC staining protocol.

Immunohistochemistry analysis of Acetyl-Histone H3-K4/K9/K14/K18/K23/K27 in paraffin-embedded human colon using Acetyl-Histone H3-K4/K9/K14/K18/K23/K27 Rabbit mAb (A22054) at dilution of 1:200 (40x lens). Perform high pressure antigen retrieval with 10 mM citrate buffer pH 6.0 before commencing with IHC staining protocol.

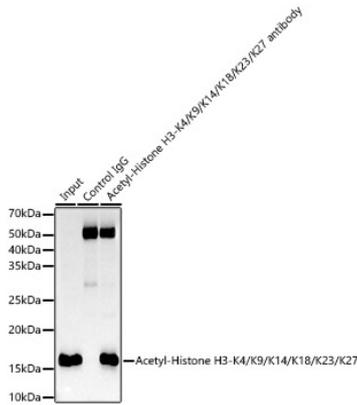


Immunohistochemistry analysis of Acetyl-Histone H3-K4/K9/K14/K18/K23/K27 in paraffin-embedded human thyroid cancer using Acetyl-Histone H3-K4/K9/K14/K18/K23/K27 Rabbit mAb (A22054) at dilution of 1:200 (40x lens). Perform high pressure antigen retrieval with 10 mM citrate buffer pH 6.0 before commencing with IHC staining protocol.

## Validation Data

---

Immunoprecipitation analysis of 600 µg extracts of NIH/3T3 cells using 5 µg Acetyl-Histone H3-K4/K9/K14/K18/K23/K27 antibody (A22054). Western blot was performed from the immunoprecipitate using Acetyl-Histone H3-K4/K9/K14/K18/K23/K27 antibody (A22054) at a dilution of 1:10000.



Chromatin immunoprecipitation analysis of extracts of HeLa cells, using Acetyl-Histone H3-K4/K9/K14/K18/K23/K27 antibody (A22054) 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.