

ABclonal

# Acetyl-Histone H3-K4 Rabbit mAb

Catalog No.: A24341 Recombinant

### **Basic Information**

### **Observed MW**

17kDa

### **Calculated MW**

15kDa

### Category

SMab Recombinant Monoclonal Antibody

### **Applications**

WB,IHC-P,IP,ChIP,ELISA,DB

### **Cross-Reactivity**

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

### CloneNo number

ARC62519

## Background

Histones are basic nuclear proteins that are responsible for the nucleosome structure of the chromosomal fiber in eukaryotes. Nucleosomes consist of approximately 146 bp of DNA wrapped around a histone 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 replicationdependent 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 located separately from the other H3 genes that are in the histone gene cluster on chromosome 6p22-p21.3.

### **Recommended Dilutions**

WB 1:500 - 1:1000 1:2000 - 1:5000 DB 1:50 - 1:200 IHC-P

ĪΡ 0.5µg-4µg antibody for

200µg-400µg extracts of whole cells

Recommended starting **ELISA** 

> concentration is 1 µg/mL. Please optimize the concentration based on your specific assay requirements.

5µg antibody for **ChIP** 

5μg-10μg of Chromatin

### Contact

•	www.abclonal.com
	www.abcionai.com

### **Immunogen Information**

Gene ID	Swiss Prot
8290/8350	Q16695/P68431

### **Immunogen**

Synthetic peptide. This information is considered to be commercially sensitive.

### **Synonyms**

H3t; H3.4; H3/g; H3FT; H3C16; HIST3H3; Acetyl-Histone H3-K4

### **Product Information**

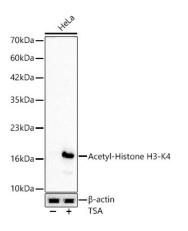
Source	Isotype	Purification
Rabbit	IgG	Affinity purification

### Storage

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

Buffer: PBS containing 50% glycerol and 0.05% BSA, preserved with proclin300 or sodium azide (as specified on the Certificate of Analysis), pH 7.3.

### **Validation Data**



Western blot analysis of lysates from HeLa cells, using Acetyl-Histone H3-K4 Rabbit mAb (A24341) at 1:1000 dilution. HeLa cells were treated with TSA (1 uM) at  $37^{\circ}$ C for 18 bours

hours.

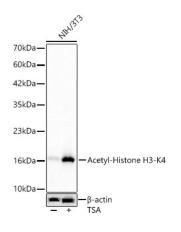
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.

Lysates/proteins: 25µg per lane.

Blocking buffer: 3% nonfat dry milk in TBST.

Detection: ECL Basic Kit (RM00020).

Exposure time: 20s.



Western blot analysis of lysates from NIH/3T3 cells, using Acetyl-Histone H3-K4 Rabbit mAb (A24341) at 1:1000 dilution. NIH/3T3 cells were treated with TSA (1 uM) at  $37^{\circ}$ C for 18 hours.

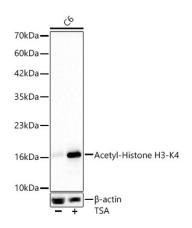
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.

Lysates/proteins: 25µg per lane.

Blocking buffer: 3% nonfat dry milk in TBST.

Detection: ECL Basic Kit (RM00020).

Exposure time: 20s.



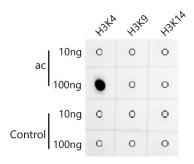
Western blot analysis of lysates from C6 cells, using Acetyl-Histone H3-K4 Rabbit mAb (A24341) at 1:1000 dilution. C6 cells were treated with TSA (1 uM) at 37°C for 18 hours. Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000

Lysates/proteins: 25µg per lane.

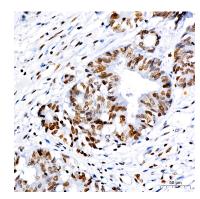
Blocking buffer: 3% nonfat dry milk in TBST.

Detection: ECL Basic Kit (RM00020).

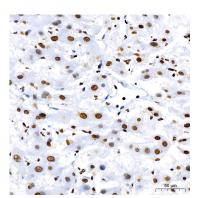
Exposure time: 20s.



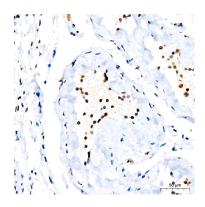
Dot-blot analysis of all sorts of peptides using Acetyl-Histone H3-K4 Rabbit mAb (A24341) at 1:1000 dilution.



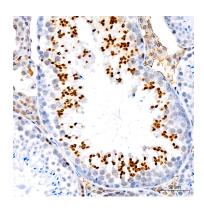
Immunohistochemistry analysis of paraffin-embedded Human colon carcinoma using Acetyl-Histone H3-K4 Rabbit mAb (A24341) at dilution of 1:200 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate buffer (pH 6.0) prior to IHC staining.



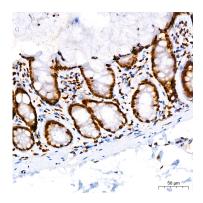
Immunohistochemistry analysis of paraffin-embedded Human liver using Acetyl-Histone H3-K4 Rabbit mAb (A24341) at dilution of 1:200 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate buffer (pH 6.0) prior to IHC staining.



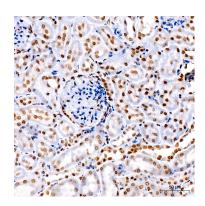
Immunohistochemistry analysis of paraffin-embedded Human testis using Acetyl-Histone H3-K4 Rabbit mAb (A24341) at dilution of 1:200 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate buffer (pH 6.0) prior to IHC staining.



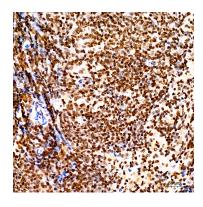
Immunohistochemistry analysis of paraffin-embedded Mouse testis using Acetyl-Histone H3-K4 Rabbit mAb (A24341) at dilution of 1:200 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate buffer (pH 6.0) prior to IHC staining.



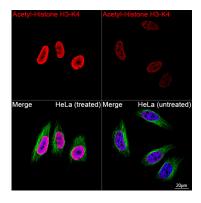
Immunohistochemistry analysis of paraffin-embedded Rat colon using Acetyl-Histone H3-K4 Rabbit mAb (A24341) at dilution of 1:200 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate buffer (pH 6.0) prior to IHC staining.



Immunohistochemistry analysis of paraffin-embedded Rat kidney using Acetyl-Histone H3-K4 Rabbit mAb (A24341) at dilution of 1:200 (40x lens). High pressure antigen retrieval



Immunohistochemistry analysis of paraffin-embedded Rat spleen using Acetyl-Histone H3-K4 Rabbit mAb (A24341) at dilution of 1:200 (40x lens). High pressure antigen retrieval

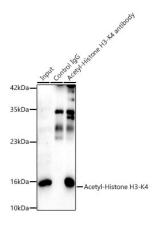


Confocal imaging of HeLa cells (treated with TSA) and HeLa cells (untreated) using Acetyl-Histone H3-K4 Rabbit mAb (A24341, dilution 1:200) followed by a further

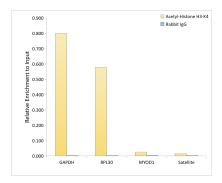
performed with 0.01M Citrate buffer (pH 6.0) prior to IHC staining.

performed with 0.01M Citrate buffer (pH 6.0) prior to IHC staining.

incubation with Cy3 Goat Anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). The cells were counterstained with  $\alpha$ -Tubulin Mouse mAb (AC012, dilution 1:400) followed by incubation with ABflo® 488-conjugated Goat Anti-Mouse IgG (H+L) Ab (AS076, dilution 1:500) (Green). DAPI was used for nuclear staining (Blue). Objective: 100x.



Immunoprecipitation analysis of 600ug extracts of HeLa TSA cells using 5ug Acetyl-Histone H3-K4 Rabbit mAb (A24341). Western blot was performed from the immunoprecipitate using Acetyl-Histone H3-K4 Rabbit mAb at a dilition of 1:1000.



Chromatin immunoprecipitation analysis of extracts of HeLa cells, using Acetyl-Histone H3-K4 Rabbit mAb antibody (A24341) 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.