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## Histone H3K4ac (Acetyl H3K4) Polyclonal Antibody

(Catalog # A73685)

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### Background

Core component of nucleosome. Nucleosomes wrap and compact DNA into chromatin, limiting DNA accessibility to the cellular machineries which require DNA as a template. Histones thereby play a central role in transcription regulation, DNA repair, DNA replication and chromosomal stability. DNA accessibility is regulated via a complex set of post-translational modifications of histones, also called histone code, and nucleosome remodeling.

### Description

Histone H3K4ac (Acetyl H3K4) Polyclonal Antibody. Unconjugated. Raised in: Rabbit.

### Formulation

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

### Specificity

Human, Mouse, Rat, Broad Range

### Isotype

IgG

### Uniprot ID

Q16695/P68431

### Purification

Affinity Purified

### Immunogen

A synthetic acetylated peptide around K4 of human Histone H3 (NP\_003484.1).

### Storage

Shipped at 4°C. Store at -20°C. Avoid multiple freeze / thaw cycles.

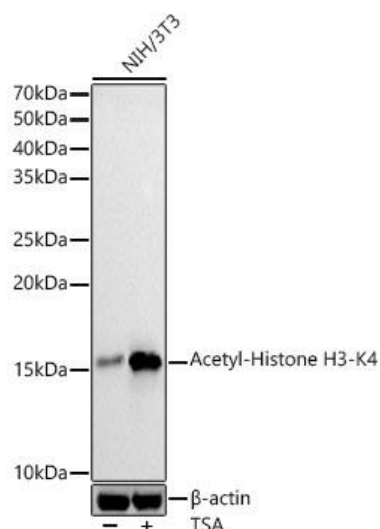
### Alternative Names

H3.4; H3/g; H3FT; H3t; HIST3H3; Histone H3; HIST1H3A

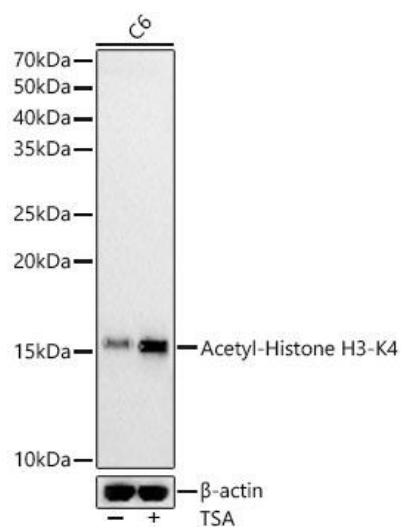
### Application

WB, IF/ICC, ChIP, ELISA; Recommended dilution: WB 1:500 - 1:1000, IF/ICC 1:50 - 1:100, ChIP 5µg antibody for 5µg-10µg of Chromatin, ELISA - recommended starting concentration is 1 µg/mL. Please optimize the concentration based on your specific assay requirements.

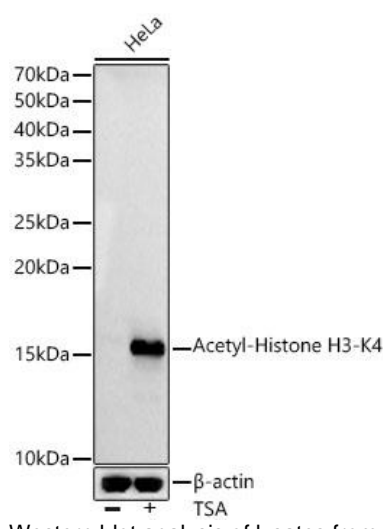
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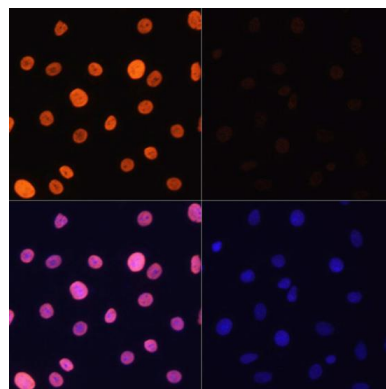
Western blot analysis of lysates from NIH/3T3 cells using Histone H3K4ac (Acetyl H3K4) Polyclonal Antibody at 1:400 dilution. NIH/3T3 cells were treated by TSA (1  $\mu$ M) at 37°C for 18 hours. Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) at 1:10000 dilution. Lysates/proteins: 25  $\mu$ g per lane. Blocking buffer: 3% nonfat dry milk in TBST. Exposure time: 60s.



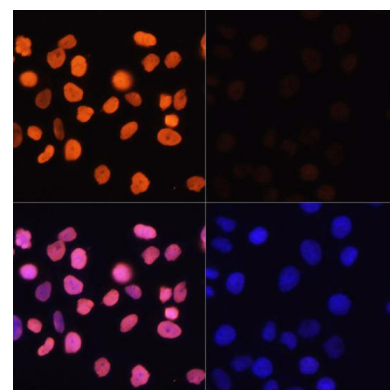
Western blot analysis of lysates from C6 cells using Histone H3K4ac (Acetyl H3K4) Polyclonal Antibody at 1:400 dilution. C6 cells were treated by TSA (1  $\mu$ M) at 37°C for 18 hours. Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) at 1:10000 dilution. Lysates/proteins: 25  $\mu$ g per lane. Blocking buffer: 3% nonfat dry milk in TBST. Exposure time: 60s.



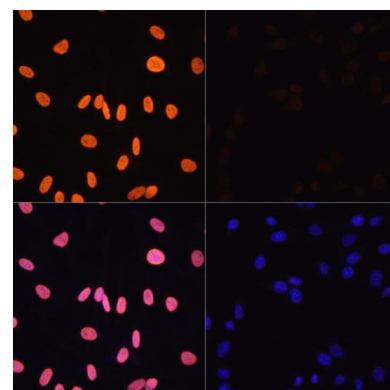
Western blot analysis of lysates from HeLa cells using Histone H3K4ac (Acetyl H3K4) Polyclonal Antibody at 1:400 dilution. HeLa cells were treated by TSA (1  $\mu$ M) at 37°C for 18 hours. Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) at 1:10000 dilution. Lysates/proteins: 25  $\mu$ g per lane. Blocking buffer: 3% nonfat dry milk in TBST. Exposure time: 60s.



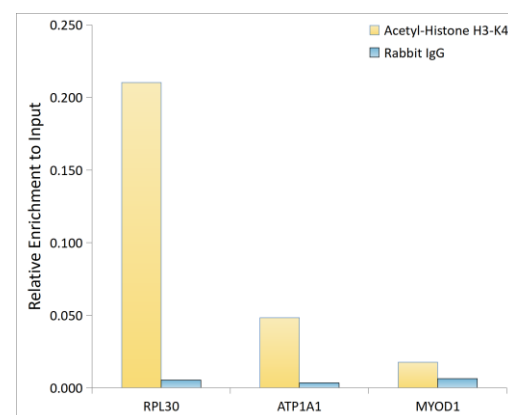
Immunofluorescence analysis of C6 cells using Histone H3K4ac (Acetyl H3K4) Polyclonal Antibody at dilution of 1:100. C6 cells were treated by TSA (1  $\mu$ M) at 37°C for 18 hours. Blue: DAPI for nuclear staining.



Immunofluorescence analysis of HeLa cells using Histone H3K4ac (Acetyl H3K4) Polyclonal Antibody at dilution of 1:100. HeLa cells were treated by TSA (1  $\mu$ M) at 37°C for 18 hours. Blue: DAPI for nuclear staining.



Immunofluorescence analysis of NIH/3T3 cells using Histone H3K4ac (Acetyl H3K4) Polyclonal Antibody at dilution of 1:100. NIH/3T3 cells were treated by TSA (1  $\mu$ M) at 37°C for 18 hours. Blue: DAPI for nuclear staining.



Chromatin immunoprecipitation analysis of extracts of HeLa cells, using Histone H3K4ac (Acetyl H3K4) Polyclonal Antibody 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.