

Histone H3K9ac (Acetyl H3K9) Polyclonal Antibody

(Catalog # A-4022)

Background

Histone H3- along with H2A, H2B and H4- is involved in the structure of chromatin in eukaryotic cells. Histone H3 can undergo several different types of epigenetic modifications that influence cellular processes. These modifications including acetylation, phosphorylation, methylation, ubiquitination, and ADP-ribosylation occur on the N-terminal tail domains of histone H3, which results in remodeling of the nucleosome structure into an open conformation more accessible to transcription complexes. In most species, histone H3 is primarily acetylated at lysine 9, 14, 18, and 23.

Description

Histone H3K9ac (Acetyl H3K9) Polyclonal Antibody. Unconjugated. Raised in: Rabbit.

Formulation:

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

Specificity

Broad Range, Human, Mouse, Rat

Isotype

IgG

Uniprot ID

Q16695

Purification

Affinity Purified

Immunogen

A synthetic acetylated peptide around K9 of human Histone H3 (NP_003520.1).

Storage

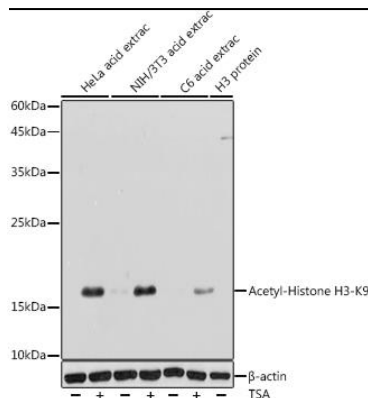
Shipped at 4°C. Store at -20°C. Avoid multiple freeze/thaw cycles.

Alternative Names

H3K9ac antibody, H3K9a antibody

Application

WB, IHC, IF, IP, ChIP, ChIPseq; Recommended dilution: WB 1:500 - 1:2000, IHC 1:50 - 1:200, IF 1:50 - 1:200, IP 1:50 - 1:200, ChIP 1:20 - 1:100, ChIPseq 1:20 - 1:50

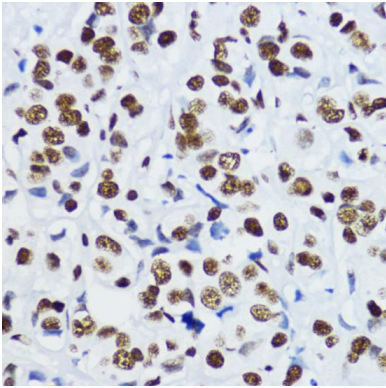


Western blot analysis of extracts of various cell lines, using Acetyl-Histone H3-K9 antibody at 1:1000 dilution.

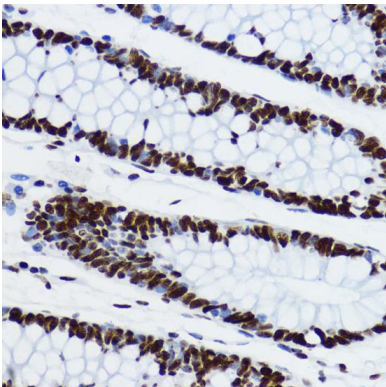
HeLa acid extract and NIH/3T3 acid extract and C6 acid extract were treated by TSA (1 uM) at 37°C for 18 hours. Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) at 1:10000 dilution.

Lysates/proteins: 25ug per lane.

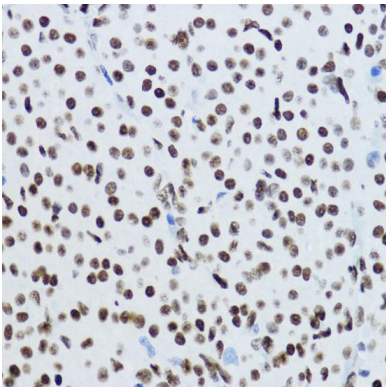
Blocking buffer: 3% nonfat dry milk in TBST.



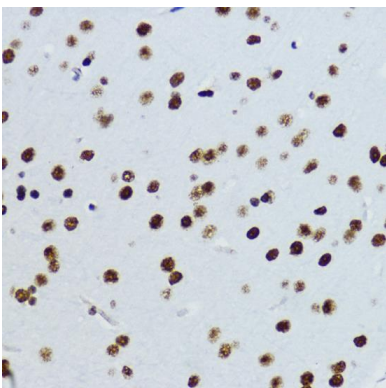
IHC of paraffin-embedded human mammary cancer using Acetyl-Histone H3-K9 antibody at dilution of 1:200 (40x lens).



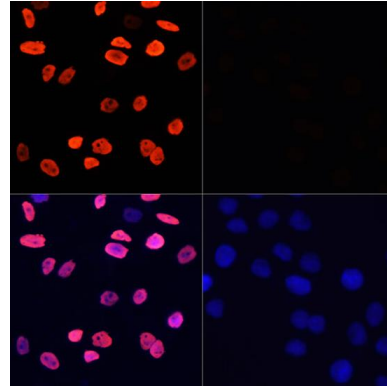
IHC of paraffin-embedded human colon using Acetyl-Histone H3-K9 antibody at dilution of 1:200 (40x lens).



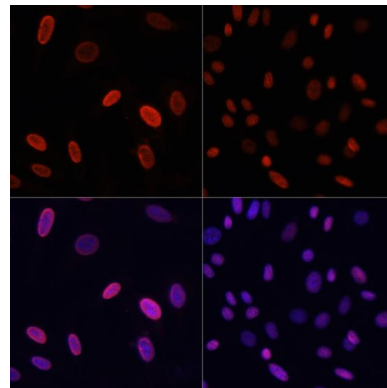
IHC of paraffin-embedded rat ovary using Acetyl-Histone H3-K9 antibody at dilution of 1:200 (40x lens).



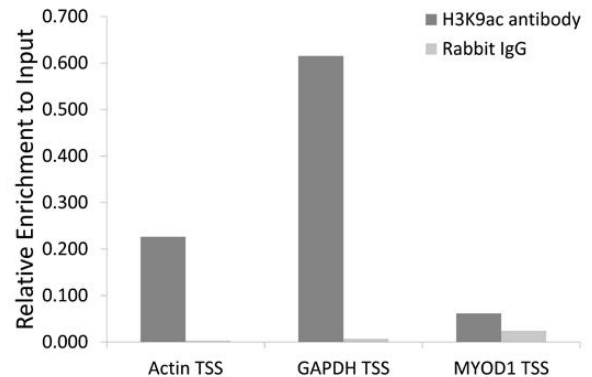
IHC of paraffin-embedded mouse brain using Acetyl-Histone H3-K9 antibody at dilution of 1:200 (40x lens).



IF analysis of HeLa cells using Acetyl-Histone H3-K9 antibody at dilution of 1:100 (40x lens). HeLa cells were treated by TSA (1 μ M) at 37 degrees Celsius for 18 hours (left). Blue: DAPI for nuclear staining.



IF analysis of NIH/3T3 cells using Acetyl-Histone H3-K9 antibody at dilution of 1:100 (40x lens). NIH/3T3 cells were treated by TSA (1 μ M) at 37 degrees Celsius for 18 hours (left). Blue: DAPI for nuclear staining.



Chromatin immunoprecipitation analysis of extracts of 293 cell line, using H3K9ac 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.