

Acetyl-Histone H3-K9 Rabbit mAb

Catalog No.: A21107 **Recombinant** **7 Publications**

Basic Information

Observed MW

17 kDa

Calculated MW

15 kDa

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

WB	1:30000 - 1:150000
DB	1:500 - 1:1000
IHC-P	1:1000 - 1:4000
IF/ICC	1:1000 - 1:6000
IP	0.5µg-4µg antibody for 200µg-400µg extracts of whole cells
ELISA	Recommended starting concentration is 1 µg/mL. Please optimize the concentration based on your specific assay requirements.
ChIP	5µg antibody for 5µg-10µg of Chromatin
ChIP-seq	1:50 - 1:100
CUT&Tag	10 ⁵ 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

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

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

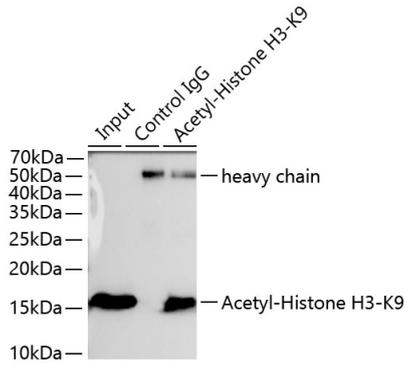
Contact

 | 400-999-6126

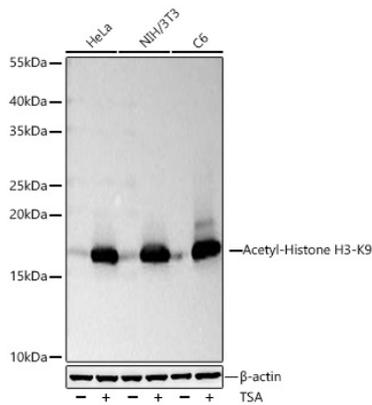
 | cn.market@abclonal.com.cn

 | www.abclonal.com.cn

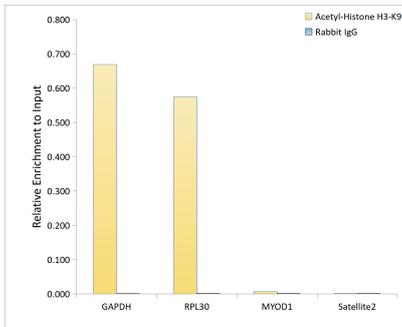
Validation Data



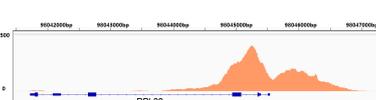
Immunoprecipitation analysis of 600 µg extracts of NIH/3T3 cells using 5 µg Acetyl-Histone H3-K9 antibody (A21107). Western blot was performed from the immunoprecipitate using Acetyl-Histone H3-K9 antibody (A21107) at a dilution of 1:1000.



Western blot analysis of various lysates using Acetyl-Histone H3-K9 Rabbit mAb (A21107) at 1:30000 dilution incubated at room temperature for 1.5 hours. HeLa, NIH/3T3 and C6 cells were treated with 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: 30 µg per lane. Blocking buffer: 3% nonfat dry milk in TBST. Detection: ECL Basic Kit (RM00020). Exposure time: 1 s.

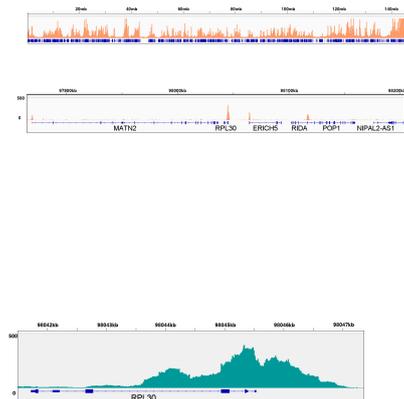


Chromatin immunoprecipitation analysis of extracts of HeLa cells, using Acetyl-Histone H3-K9 Rabbit mAb (A21107) and rabbit IgG. The amount of immunoprecipitated DNA was checked by quantitative PCR. Histogram was constructed by the ratios of the immunoprecipitated DNA to the input.

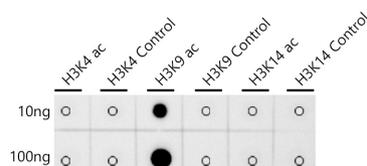
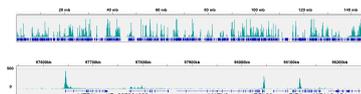


Chromatin immunoprecipitation was performed with 15 µg of cross-linked chromatin from 293F cells using 5 µg of Acetyl-Histone H3-K9 Rabbit mAb (A21107). DNA libraries were prepared using Scale ssDNA-seq Lib Prep Kit for Illumina V2 (RK20228). The ChIP sequencing results indicate the enrichment pattern of Acetyl-Histone H3-K9 in the representative genomic region surrounding RPL30 gene.

Validation Data



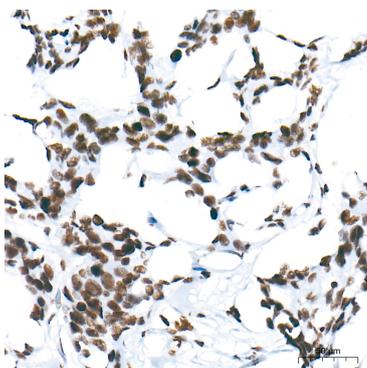
Chromatin immunoprecipitation was performed with 15 μ g of cross-linked chromatin from 293F cells using 5 μ g of Acetyl-Histone H3-K9 Rabbit mAb (A21107). DNA libraries were prepared using Scale ssDNA-seq Lib Prep Kit for Illumina V2 (RK20228). The ChIP sequencing results indicate the enrichment pattern of Acetyl-Histone H3-K9 across chromosome 4 (upper panel) and the genomic region encompassing RPL30, a representative gene enriched in Acetyl-Histone H3-K9 (lower panel).



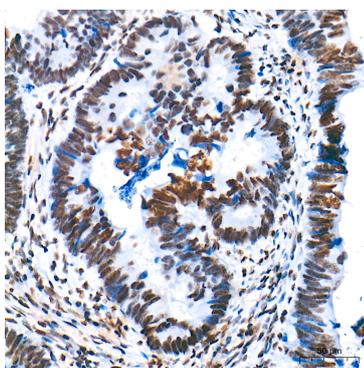
CUT&Tag was performed using the CUT&Tag Assay Kit (pAG-Tn5) for Illumina (RK20265) from 10^5 K-562 cells with 1 μ g of Acetyl-Histone H3-K9 Rabbit mAb (A21107), followed by incubation with Goat Anti-Rabbit IgG(H+L)(AS070). The CUT&Tag results denote the enrichment pattern of Acetyl-Histone H3-K9 around RPL30 gene.

CUT&Tag was performed using the CUT&Tag Assay Kit (pAG-Tn5) for Illumina (RK20265) from 10^5 K-562 with 1 μ g of Acetyl-Histone H3-K9 Rabbit mAb (A21107), followed by incubation with Goat Anti-Rabbit IgG(H+L)(AS070). The CUT&Tag results denote the enrichment pattern of Acetyl-Histone H3-K9 Rabbit across chromosome 8 (upper panel) and the genomic region encompassing RPL30, a representative gene enriched in Acetyl-Histone H3-K9 Rabbit (lower panel).

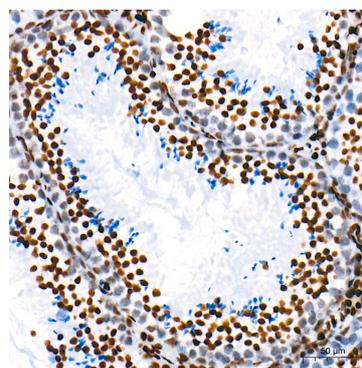
Dot-blot analysis of all sorts of peptides using Acetyl-Histone H3-K9 antibody (A21107) at 1:1000 dilution.



Immunohistochemistry analysis of paraffin-embedded Human breast cancer tissue using Acetyl-Histone H3-K9 Rabbit mAb (A21107) at a dilution of 1:2000 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.

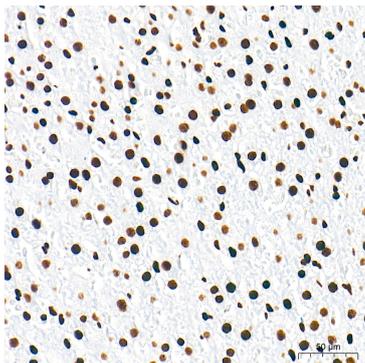


Immunohistochemistry analysis of paraffin-embedded Human colon carcinoma tissue using Acetyl-Histone H3-K9 Rabbit mAb (A21107) at a dilution of 1:2000 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.

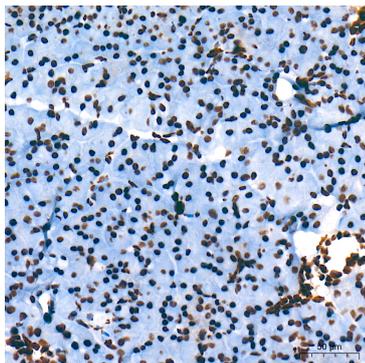


Immunohistochemistry analysis of paraffin-embedded Mouse testis tissue using Acetyl-Histone H3-K9 Rabbit mAb (A21107) at a dilution of 1:2000 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.

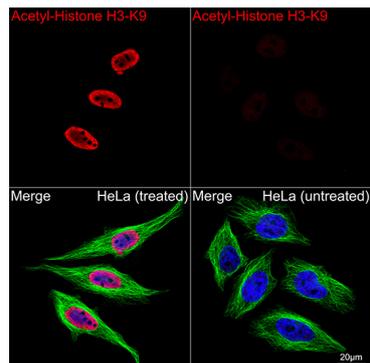
Validation Data



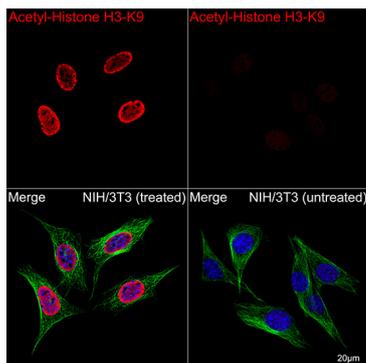
Immunohistochemistry analysis of paraffin-embedded Rat liver tissue using Acetyl-Histone H3-K9 Rabbit mAb (A21107) at a dilution of 1:2000 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.



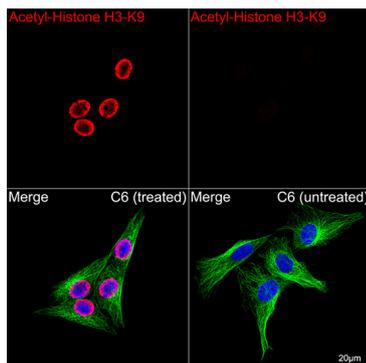
Immunohistochemistry analysis of paraffin-embedded Rat pancreas tissue using Acetyl-Histone H3-K9 Rabbit mAb (A21107) at a dilution of 1:2000 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.



Confocal imaging of HeLa cells (treated with TSA) and HeLa cells (untreated) using Acetyl-Histone H3-K9 Rabbit mAb (A21107, dilution 1:4800) followed by a further incubation with Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). The cells were counterstained with α -Tubulin Mouse mAb (AC012, dilution 1:400) followed by incubation with ABflo® 488-conjugated Goat Anti-Mouse IgG (H+L) (AS076, dilution 1:500) (Green). DAPI was used for nuclear staining (Blue). Objective: 100x.



Confocal imaging of NIH/3T3 cells (treated with TSA) and NIH/3T3 cells (untreated) using Acetyl-Histone H3-K9 Rabbit mAb (A21107, dilution 1:4800) followed by a further incubation with Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). The cells were counterstained with α -Tubulin Mouse mAb (AC012, dilution 1:400) followed by incubation with ABflo® 488-conjugated Goat Anti-Mouse IgG (H+L) (AS076, dilution 1:500) (Green). DAPI was used for nuclear staining (Blue). Objective: 100x.



Confocal imaging of C6 cells (treated with TSA) and C6 cells (untreated) using Acetyl-Histone H3-K9 Rabbit mAb (A21107, dilution 1:4800) followed by a further incubation with Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). The cells were counterstained with α -Tubulin Mouse mAb (AC012, dilution 1:400) followed by incubation with ABflo® 488-conjugated Goat Anti-Mouse IgG (H+L) (AS076, dilution 1:500) (Green). DAPI was used for nuclear staining (Blue). Objective: 100x.