

A21107

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Acetyl-Histone H3-K9 Rabbit mAb

Catalog No.: A21107

Recombinant

5 Publications

Basic Information

Observed MW

17kDa

Calculated MW

15kDa

Category

SMab Recombinant Monoclonal Antibody

Applications

WB,IHC-P,IF/ICC,IP,ChIP,ChIP-seq,ELISA,DB,CUT&Tag

Cross-Reactivity

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

CloneNo number

ARC50576

Recommended Dilutions

WB 1:500 - 1:1000

DB 1:500 - 1:1000

IHC-P 1:100 - 1:500

IF/ICC 1:50 - 1:200

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

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.

CUT&Tag

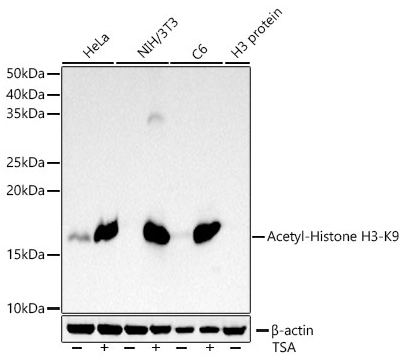
10⁵ cells /1 µg

Contact

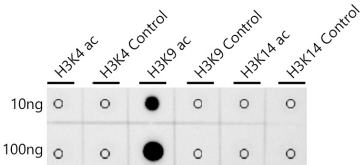


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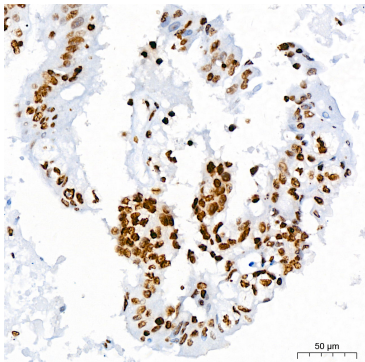
Validation Data



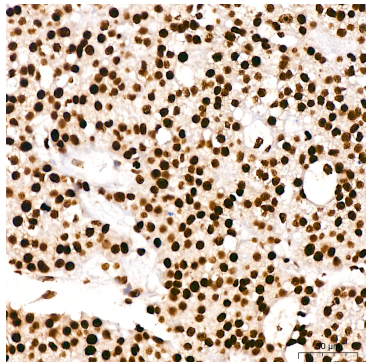
Western blot analysis of various lysates using Acetyl-Histone H3-K9 Rabbit mAb (A21107) at 1:1000 dilution. HeLa and NIH/3T3 and C6 cells were treated with TSA (1 uM) at 37°C for 18 hours.
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.
Lysates/proteins: 25µg per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
Detection: ECL Basic Kit (RM00020).
Exposure time: 10s.



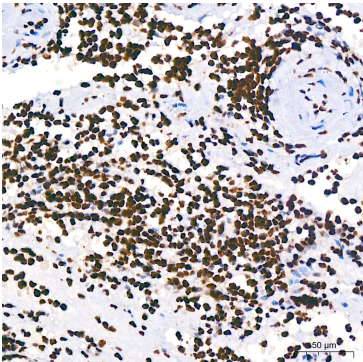
Dot-blot analysis of all sorts of peptides using Acetyl-Histone H3-K9 antibody (A21107) at 1:1000 dilution.



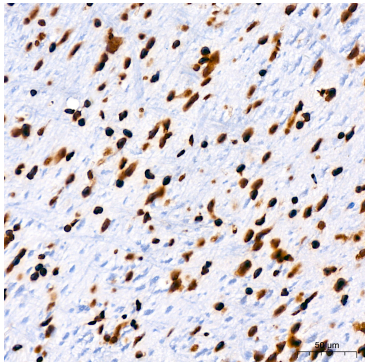
Immunohistochemistry analysis of paraffin-embedded Human colon carcinoma using Acetyl-Histone H3-K9 Rabbit mAb (A21107) at dilution of 1:200 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate buffer (pH 6.0) prior to IHC staining.



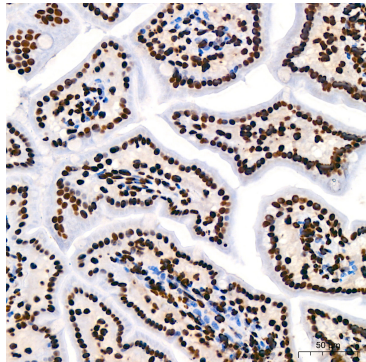
Immunohistochemistry analysis of paraffin-embedded Human liver using Acetyl-Histone H3-K9 Rabbit mAb (A21107) at dilution of 1:200 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate buffer (pH 6.0) prior to IHC staining.



Immunohistochemistry analysis of paraffin-embedded Human spleen using Acetyl-Histone H3-K9 Rabbit mAb (A21107) at dilution of 1:200 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate buffer (pH 6.0) prior to IHC staining.

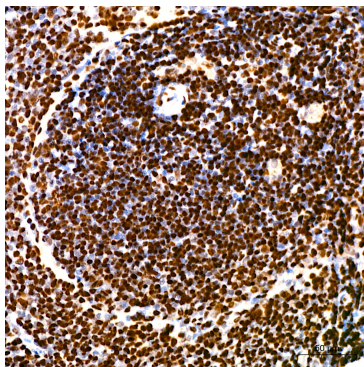


Immunohistochemistry analysis of paraffin-embedded Mouse brain using Acetyl-Histone H3-K9 Rabbit mAb (A21107) at dilution of 1:200 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate buffer (pH 6.0) prior to IHC staining.

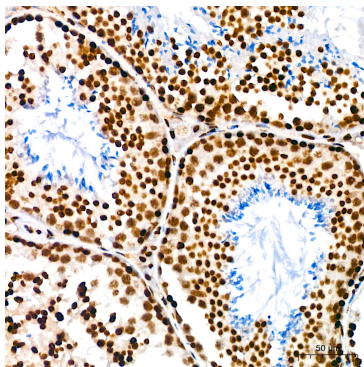


Immunohistochemistry analysis of paraffin-embedded Mouse intestine using Acetyl-Histone H3-K9 Rabbit mAb (A21107) at dilution of 1:200 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate buffer (pH 6.0) prior to IHC staining.

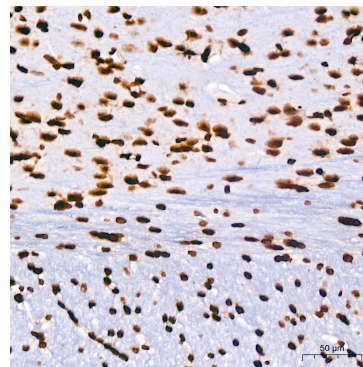
Validation Data



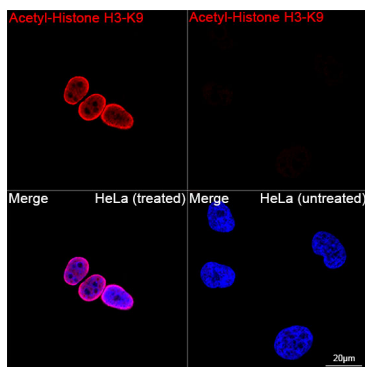
Immunohistochemistry analysis of paraffin-embedded Mouse spleen using Acetyl-Histone H3-K9 Rabbit mAb (A21107) at dilution of 1:200 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate buffer (pH 6.0) prior to IHC staining.



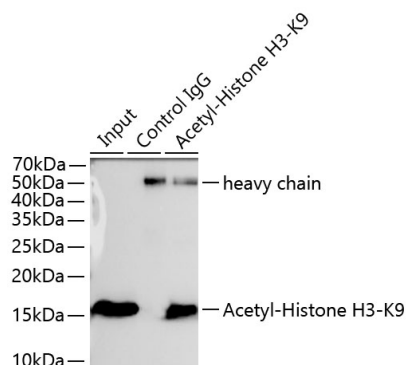
Immunohistochemistry analysis of paraffin-embedded Mouse testis using Acetyl-Histone H3-K9 Rabbit mAb (A21107) at dilution of 1:200 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate buffer (pH 6.0) prior to IHC staining.



Immunohistochemistry analysis of paraffin-embedded Rat brain using Acetyl-Histone H3-K9 Rabbit mAb (A21107) at dilution of 1:200 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate buffer (pH 6.0) prior to IHC staining.

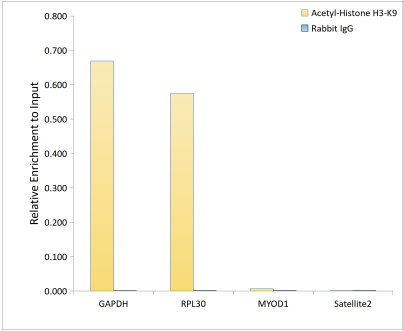


Confocal imaging of HeLa TSA and HeLa cells using Acetyl-Histone H3-K9 Rabbit mAb (A21107, dilution 1:200) followed by a further incubation with Cy3 Goat Anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). DAPI was used for nuclear staining (Blue). Objective: 100x.

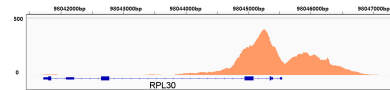


Immunoprecipitation analysis of 600 µg extracts of NIH/3T3 cells using 5 µg Acetyl-Histone H3-K9 antibody (A21107). Western blot was performed from the immunoprecipitate using Acetyl-Histone H3-K9 antibody (A21107) at a dilution of 1:1000.

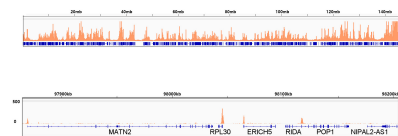
Validation Data



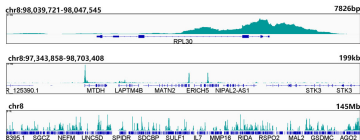
Chromatin immunoprecipitation analysis of extracts of HeLa cells, using Acetyl-Histone H3-K9 Rabbit mAb (A21107) and rabbit IgG. The amount of immunoprecipitated DNA was checked by quantitative PCR. Histogram was constructed by the ratios of the immunoprecipitated DNA to the input.



Chromatin immunoprecipitations were performed with cross-linked chromatin from 293F cells and Acetyl-Histone H3-K9 (A21107). The ChIP sequencing results indicate the enrichment pattern of Acetyl-Histone H3-K9 in selected genomic region and representative gene loci (RPL30), as shown in figure.



Chromatin immunoprecipitations were performed with cross-linked chromatin from 293F cells and Acetyl-Histone H3-K9 (A21107). The ChIP sequencing results indicate the enrichment pattern of Acetyl-Histone H3-K9 in selected genomic region and representative gene loci (RPL30), as shown in figure.



CUT&Tag was performed using the CUT&Tag Assay Kit (pAG-Tn5) for Illumina(RK20265) from 10⁵ K562 cells with 1 µg Acetyl-Histone H3-K9 Rabbit mAb antibody (A21107), along with a Goat Anti-Rabbit IgG(H+L). The CUT&Tag results indicate the enrichment pattern of Acetyl-Histone H3-K9 in representative gene loci (RPL30), as shown in figure.