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Acetyl-Histone H3-K9 Rabbit mAb

Catalog No.: A21107 Recombinant 1 Publications

Basic Information

Observed MW
17kDa

Calculated MW
15kDa

Category
Primary antibody

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

Cross-Reactivity
Human, Mouse, Rat, Other (Wide Range Predicted)

CloneNo number
ARC50576

Recommended Dilutions

DB	1:500 - 1:1000
WB	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
ChIP	5μg antibody for 5μg-10μg of Chromatin
CUT&Tag	10^5 cells /1 μg
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
A synthetic acetylated peptide around K9 of human Histone H3 (NP_003520.1).

Synonyms
H3/A; H3C2; H3C3; H3C4; H3C6; H3C7; H3C8; H3FA; H3C10; H3C11; H3C12; HIST1H3A; Acetyl-Histone H3-K9

Product Information

Source
Rabbit

Isotype
IgG

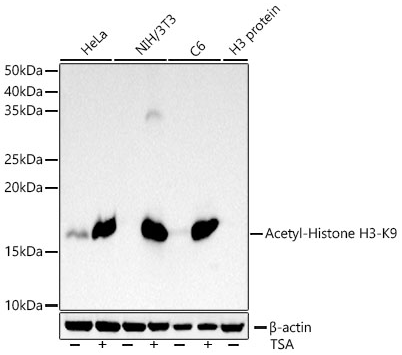
Purification
Affinity purification

Storage
Store at -20℃. Avoid freeze / thaw cycles.
Buffer: PBS with 0.05% proclin300,0.05% BSA,50% glycerol,pH7.3.

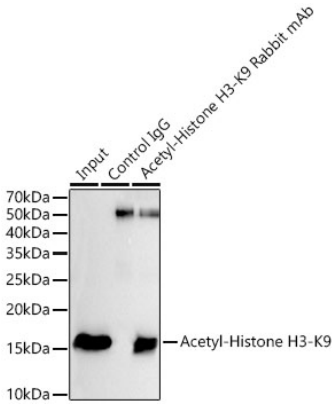
Contact

www.abclonal.com

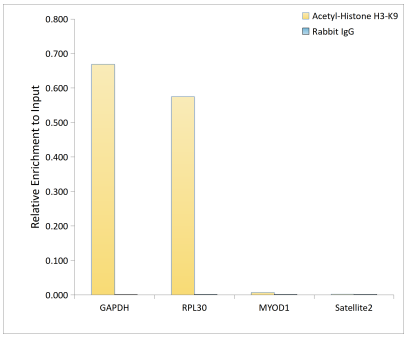
Validation Data



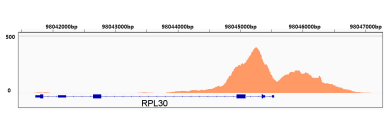
Western blot analysis of various lysates using Acetyl-Histone H3-K9 Rabbit mAb (A21107) at1:1000 dilution.HeLa and NIH/3T3 and C6 cells were treated by TSA (1 uM) at 37℃ for 18 hours.
Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (AS014) at1:10000 dilution.
Lysates/proteins: 25μg per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
Detection: ECL Basic Kit (RM00020).
Exposure time: 10s.



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.

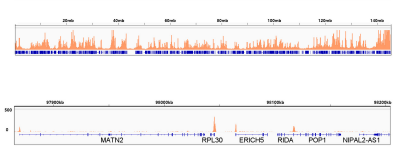


Chromatin immunoprecipitation analysis of extracts of HeLa cells, using Acetyl-Histone H3-K9 Rabbit mAb (A21107) and rabbit IgG.The amount of immunoprecipitated DNA was checked by quantitative PCR. Histogram was constructed by the ratios of the immunoprecipitated DNA to the input.

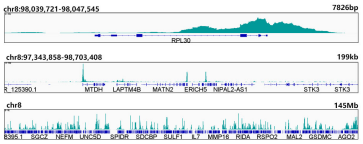


Chromatin immunoprecipitations were performed with cross-linked chromatin from 293F cells and Acetyl-Histone H3-K9 (A21107). The ChIP sequencing results indicate the enrichment pattern of Acetyl-Histone H3-K9 in selected genomic region and representative gene loci (RPL30), as shown in figure.

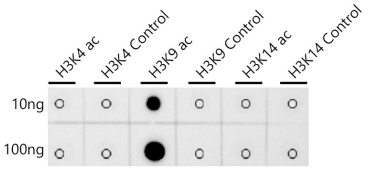
Validation Data



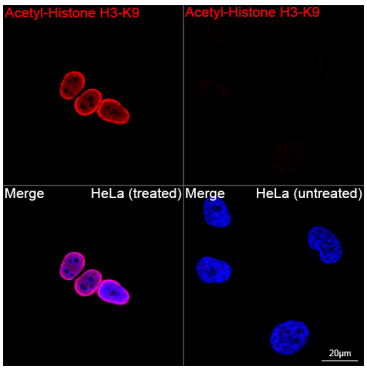
Chromatin immunoprecipitations were performed with cross-linked chromatin from 293F cells and Acetyl-Histone H3-K9 (A21107). The ChIP sequencing results indicate the enrichment pattern of Acetyl-Histone H3-K9 in selected genomic region and representative gene loci (RPL30), as shown in figure.



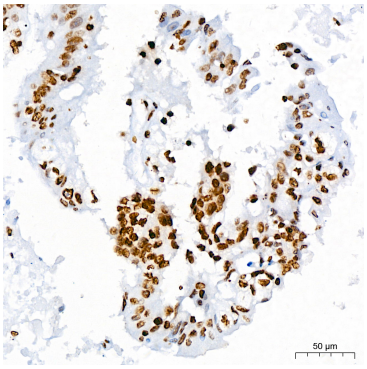
CUT&Tag was performed using the CUT&Tag Assay Kit (pAG-Tn5) for Illumina(RK20265) from 10^5 K562 cells with 1 µg Acetyl-Histone H3-K9 Rabbit mAb antibody (A21107), along with a Goat Anti-Rabbit IgG(H+L). The CUT&Tag results indicate the enrichment pattern of Acetyl-Histone H3-K9 in representative gene loci (RPL30), as shown in figure.



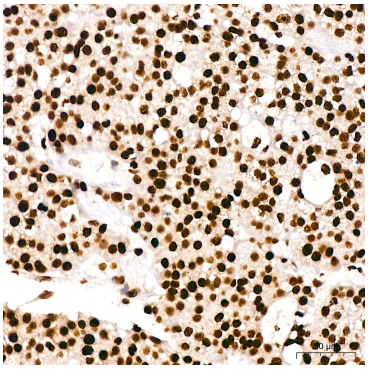
Dot-blot analysis of all sorts of peptides using Acetyl-Histone H3-K9 antibody (A21107) at 1:1000 dilution.



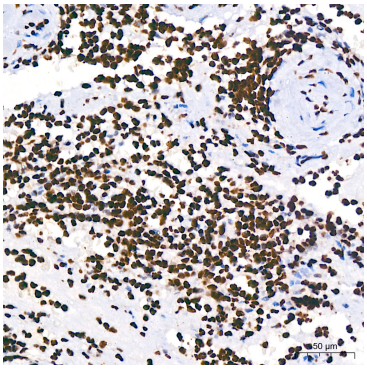
Confocal imaging of HeLa TSA and HeLa cells using Acetyl-Histone H3-K9 Rabbit mAb (A21107,dilution 1:200) followed by a further incubation with Cy3 Goat Anti-Rabbit IgG (H+L) (AS007,dilution 1:500)(Red).DAPI was used for nuclear staining (Blue). Objective: 100x.



Immunohistochemistry analysis of Acetyl-Histone H3-K9 in paraffin-embedded human colon carcinoma using Acetyl-Histone H3-K9 Rabbit mAb (A21107) at dilution of 1:200 (40x lens).Perform high pressure antigen retrieval with 10 mM citrate buffer pH 6.0 before commencing with IHC staining protocol.

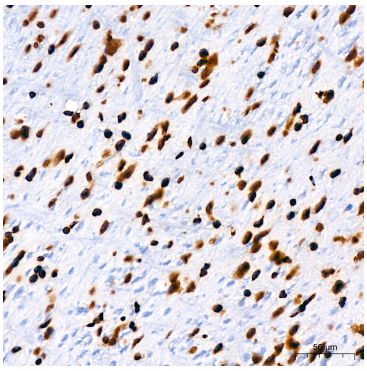


Immunohistochemistry analysis of Acetyl-Histone H3-K9 in paraffin-embedded human liver using Acetyl-Histone H3-K9 Rabbit mAb (A21107) at dilution of 1:200 (40x lens).Perform high pressure antigen retrieval with 10 mM citrate buffer pH 6.0 before commencing with IHC staining protocol.

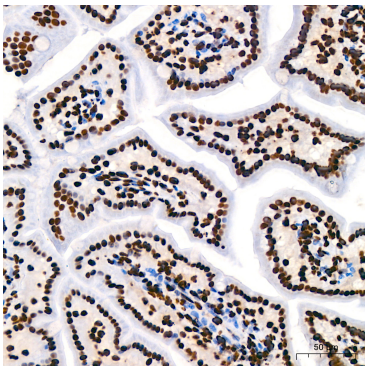


Immunohistochemistry analysis of Acetyl-Histone H3-K9 in paraffin-embedded human spleen using Acetyl-Histone H3-K9 Rabbit mAb (A21107) at dilution of 1:200 (40x lens).Perform high pressure antigen retrieval with 10 mM citrate buffer pH 6.0 before commencing with IHC staining protocol.

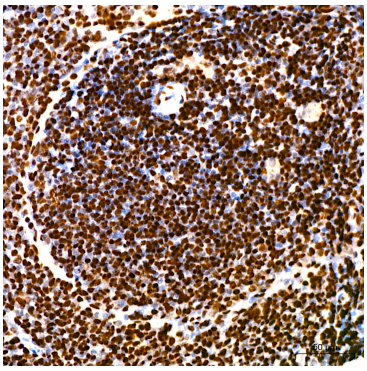
Validation Data



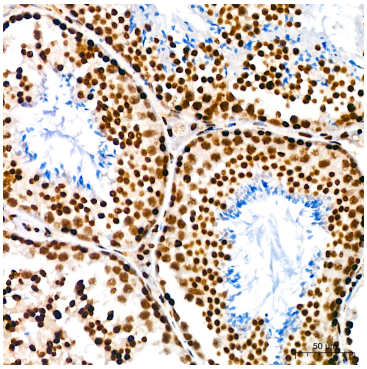
Immunohistochemistry analysis of Acetyl-Histone H3-K9 in paraffin-embedded mouse brain using Acetyl-Histone H3-K9 Rabbit mAb (A21107) at dilution of 1:200 (40x lens).Perform high pressure antigen retrieval with 10 mM citrate buffer pH 6.0 before commencing with IHC staining protocol.



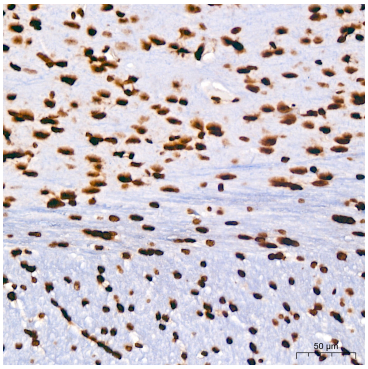
Immunohistochemistry analysis of Acetyl-Histone H3-K9 in paraffin-embedded mouse intestin using Acetyl-Histone H3-K9 Rabbit mAb (A21107) at dilution of 1:200 (40x lens).Perform high pressure antigen retrieval with 10 mM citrate buffer pH 6.0 before commencing with IHC staining protocol.



Immunohistochemistry analysis of Acetyl-Histone H3-K9 in paraffin-embedded mouse spleen using Acetyl-Histone H3-K9 Rabbit mAb (A21107) at dilution of 1:200 (40x lens).Perform high pressure antigen retrieval with 10 mM citrate buffer pH 6.0 before commencing with IHC staining protocol.



Immunohistochemistry analysis of Acetyl-Histone H3-K9 in paraffin-embedded mouse testis using Acetyl-Histone H3-K9 Rabbit mAb (A21107) at dilution of 1:200 (40x lens).Perform high pressure antigen retrieval with 10 mM citrate buffer pH 6.0 before commencing with IHC staining protocol.



Immunohistochemistry analysis of Acetyl-Histone H3-K9 in paraffin-embedded rat brain using Acetyl-Histone H3-K9 Rabbit mAb (A21107) at dilution of 1:200 (40x lens).Perform high pressure antigen retrieval with 10 mM citrate buffer pH 6.0 before commencing with IHC staining protocol.