A22054

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Acetyl-Histone H3-K27 Rabbit mAb

Catalog No.: A22054 Recombinant 1 Publications

Basic Information

Observed MW
17kDa

Calculated MW
16kDa

Category
Monoclonal Antibody

Applications
WB,IHC-P,IP,ChIP,ChIP-seq,ELISA,CUT&Tag

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

Clone number
ARC53902

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.

Recommended Dilutions

WB	1:2000 - 1:20000
IHC-P	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	1:20 - 1:100
CUT&Tag	10^5 cells /1 μg

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-K4/K9/K14/K18/K23/K27

Product Information

Source
Rabbit

Isotype
IgG

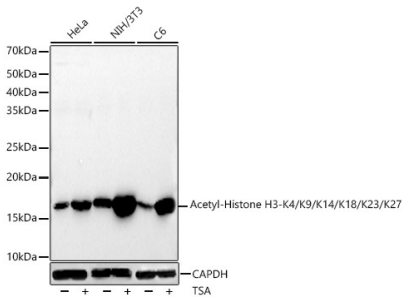
Purification
Affinity purification

Storage
Store at -20℃

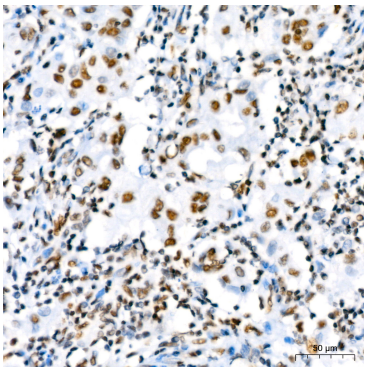
Contact

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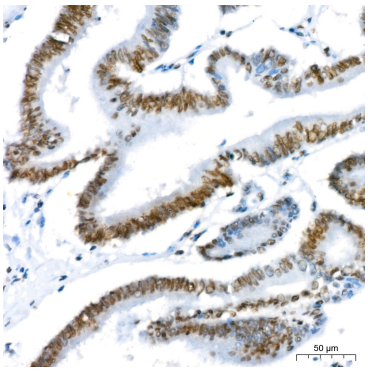
Validation Data



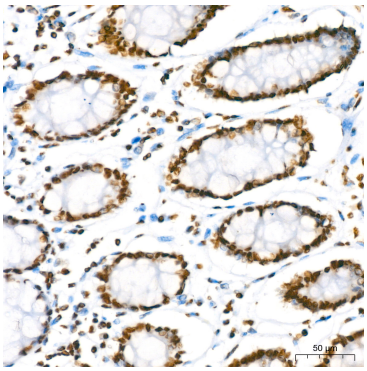
Western blot analysis of various lysates, using Acetyl-Histone H3-K4/K9/K14/K18/K23/K27 Rabbit mAb (A22054) at1:20000 dilution. HeLa,NIH/3T3 and C6 cells were treated with TSA (1 uM) at 37℃ for 18 hours.
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.
Lysates/proteins: 25µg per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
Detection: ECL Basic Kit (RM00020).
Exposure time: 30s.



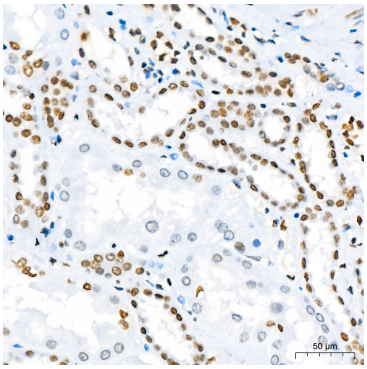
Immunohistochemistry analysis of paraffin-embedded Human breast cancer using Acetyl-Histone H3-K27 Rabbit mAb (A22054) at dilution of 1:200 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate buffer (pH 6.0) prior to IHC staining.



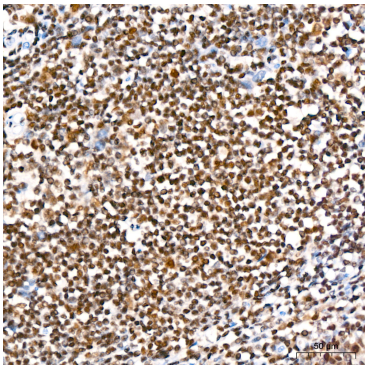
Immunohistochemistry analysis of paraffin-embedded Human colon carcinoma using Acetyl-Histone H3-K27 Rabbit mAb (A22054) at dilution of 1:200 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate buffer (pH 6.0) prior to IHC staining.



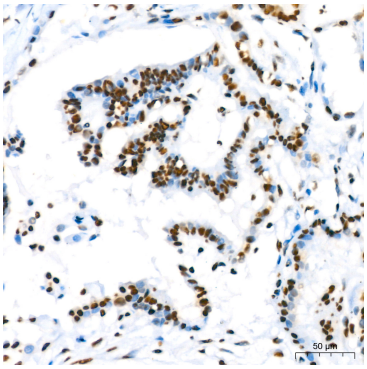
Immunohistochemistry analysis of paraffin-embedded Human colon using Acetyl-Histone H3-K27 Rabbit mAb (A22054) at dilution of 1:200 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate buffer (pH 6.0) prior to IHC staining.



Immunohistochemistry analysis of paraffin-embedded Human kidney using Acetyl-Histone H3-K27 Rabbit mAb (A22054) at dilution of 1:200 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate buffer (pH 6.0) prior to IHC staining.

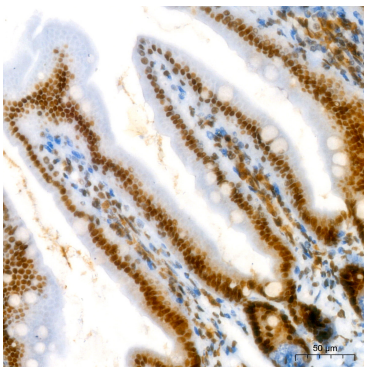


Immunohistochemistry analysis of paraffin-embedded Human spleen using Acetyl-Histone H3-K27 Rabbit mAb (A22054) at dilution of 1:200 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate buffer (pH 6.0) prior to IHC staining.

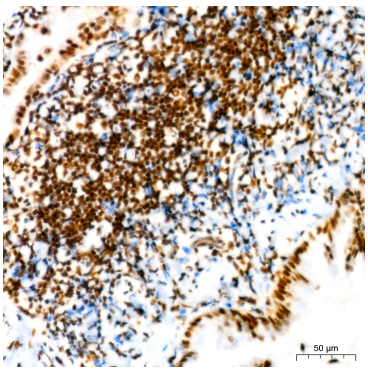


Immunohistochemistry analysis of paraffin-embedded Human thyroid cancer using Acetyl-Histone H3-K27 Rabbit mAb (A22054) at dilution of 1:200 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate buffer (pH 6.0) prior to IHC staining.

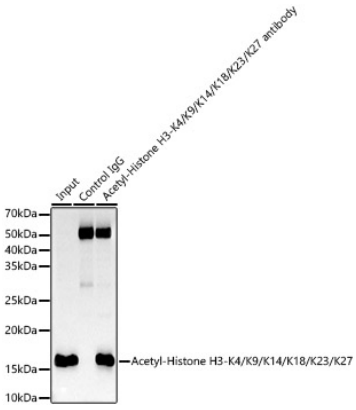
Validation Data



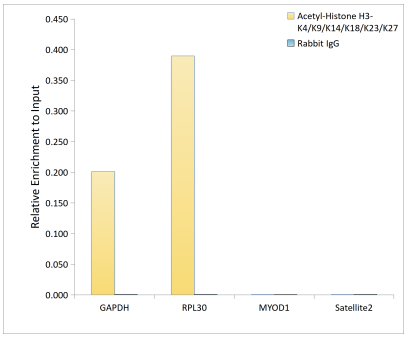
Immunohistochemistry analysis of paraffin-embedded Mouse intestin using Acetyl-Histone H3-K27 Rabbit mAb (A22054) at dilution of 1:200 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate buffer (pH 6.0) prior to IHC staining.



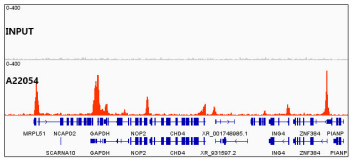
Immunohistochemistry analysis of paraffin-embedded Rat lung using Acetyl-Histone H3-K27 Rabbit mAb (A22054) at dilution of 1:200 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate buffer (pH 6.0) prior to IHC staining.



Immunoprecipitation analysis of 600 µg extracts of NIH/3T3 cells using 5 µg Acetyl-Histone H3-K4/K9/K14/K18/K23/K27 antibody (A22054). Western blot was performed from the immunoprecipitate using Acetyl-Histone H3-K4/K9/K14/K18/K23/K27 antibody (A22054) at a dilution of 1:10000.

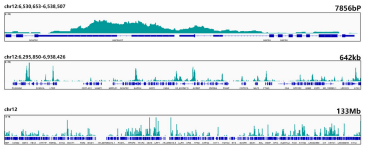


Chromatin immunoprecipitation analysis of extracts of HeLa cells, using Acetyl-Histone H3-K4/K9/K14/K18/K23/K27 antibody (A22054) and rabbit IgG.The amount of immunoprecipitated DNA was checked by quantitative PCR. Histogram was constructed by the ratios of the immunoprecipitated DNA to the input.



Chromatin immunoprecipitations were performed with cross-linked chromatin from HeLa cells and Acetyl-Histone H3-K4/K9/K14/K18/K23/K27 Rabbit mAb (A22054). The ChIP sequencing results indicate the enrichment pattern of Acetyl-Histone H3-K4/K9/K14/K18/K23/K27 in selected genomic region and representative gene loci (GAPDH), as shown in figure.

Validation Data



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-K4/K9/K14/K18/K23/K27 antibody (A22054), along with a Goat Anti-Rabbit IgG(H+L). The CUT&Tag results indicate the enrichment pattern of Acetyl-Histone H3-K4/K9/K14/K18/K23/K27 in representative gene loci (RPL30), as shown in figure.

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