

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

SMab Recombinant Monoclonal
Antibody

Applications

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

Cross-Reactivity

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

CloneNo number

ARC53902

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** 10⁵ 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-K4/K9/K14/K18/K23/K27

Product Information

Source

Rabbit

Isotype

IgG

Purification

Affinity purification

Storage

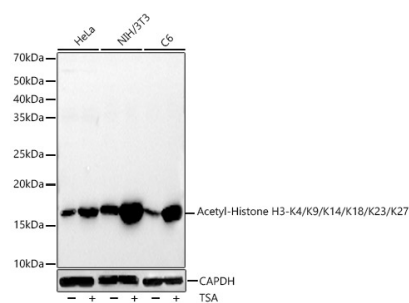
Store at -20°C. Avoid freeze / thaw cycles.

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

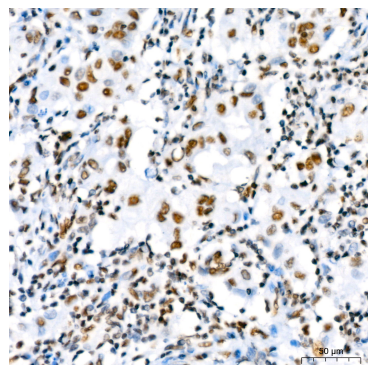
Contact

 www.abclonal.com

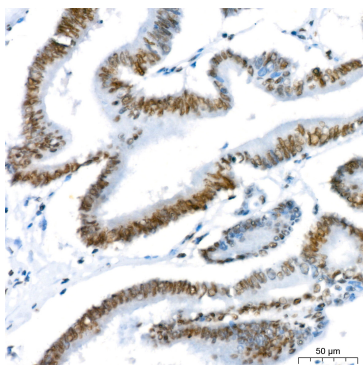
Validation Data



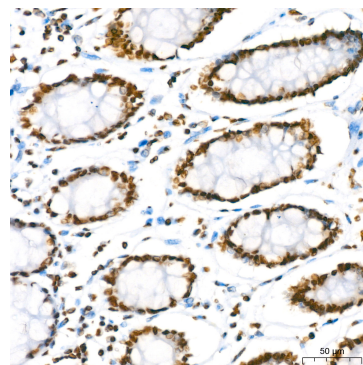
Western blot analysis of various lysates, using Acetyl-Histone H3-K4/K9/K14/K18/K23/K27 Rabbit mAb (A22054) at 1:20000 dilution. HeLa, NIH/3T3 and C6 cells were treated with TSA (1 uM) at 37°C for 18 hours. Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution. Lysates/proteins: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



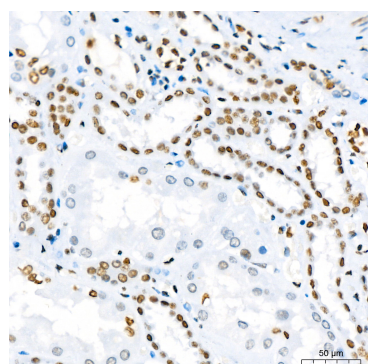
Immunohistochemistry analysis of paraffin-embedded Human breast cancer using Acetyl-Histone H3-K27 Rabbit mAb (A22054) at dilution of 1:200 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate buffer (pH 6.0) prior to IHC staining.



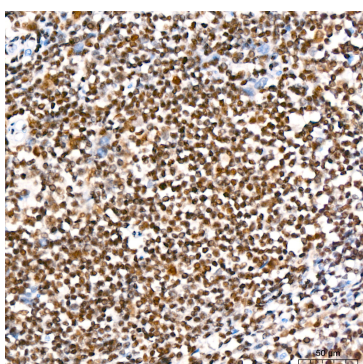
Immunohistochemistry analysis of paraffin-embedded Human colon carcinoma using Acetyl-Histone H3-K27 Rabbit mAb (A22054) at dilution of 1:200 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate buffer (pH 6.0) prior to IHC staining.



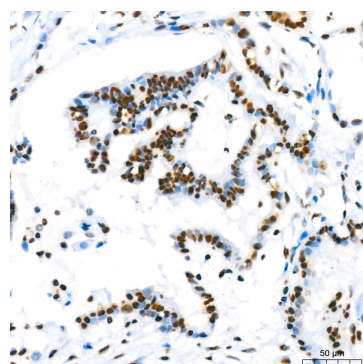
Immunohistochemistry analysis of paraffin-embedded Human colon using Acetyl-Histone H3-K27 Rabbit mAb (A22054) at dilution of 1:200 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate buffer (pH 6.0) prior to IHC staining.



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.



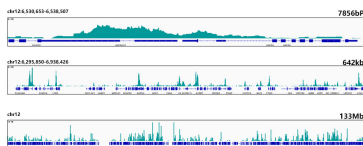
Immunohistochemistry analysis of paraffin-embedded Human thyroid cancer using Acetyl-Histone H3-K27 Rabbit mAb (A22054) at dilution of 1:200 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate buffer (pH 6.0) prior to IHC staining.

Bar chart showing Relative Enrichment to Input for Acetyl-Histone H3-K4/K9/K14/K18/K23/K27 (yellow) and Rabbit IgG (blue) across GAPDH, RPL30, MYOD1, and Satellite2. The y-axis ranges from 0.000 to 0.450. RPL30 shows the highest enrichment for the histone antibody, while MYOD1 and Satellite2 show no enrichment for either antibody.

Target	Acetyl-Histone H3-K4/K9/K14/K18/K23/K27	Rabbit IgG
GAPDH	~0.20	~0.00
RPL30	~0.39	~0.00
MYOD1	~0.00	~0.00
Satellite2	~0.00	~0.00

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Validation Data



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-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.