

A22565

Leader in Biomolecular Solutions for Life Science



Acetyl-Histone H3-K56 Rabbit mAb

Catalog No.: A22565

Recombinant

1 Publications

Basic Information

Observed MW

17kDa

Calculated MW

16kDa

Category

SMab Recombinant Monoclonal Antibody

Applications

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

Cross-Reactivity

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

CloneNo number

ARC55111

Recommended Dilutions

WB 1:5000 - 1:20000**DB** 1:2000 - 1:10000**IHC-P** 1:1000 - 1:5000**IF/ICC** 1:50 - 1:200**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 - 1:200**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. Nucleosomes consist of approximately 146 bp of DNA wrapped around a histone 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 located separately from the other H3 genes that are in the 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

H3.4; H3/g; H3FT; H3t; HIST3H3; Histone H3; HIST1H3A; Acetyl-Histone H3-K56

Product Information

Source

Rabbit

Isotype

IgG

Purification


Affinity purification

Storage

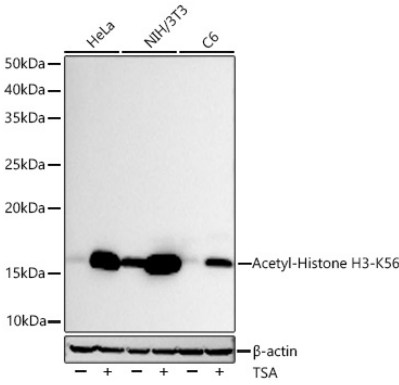
Store at -20°C. Avoid freeze / thaw cycles.

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.

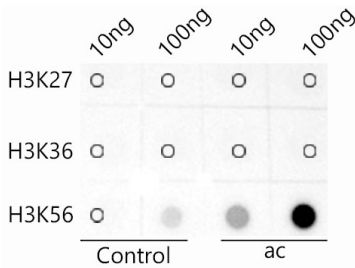
Contact

 www.abclonal.com

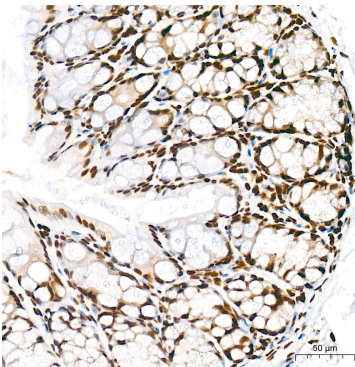
Validation Data



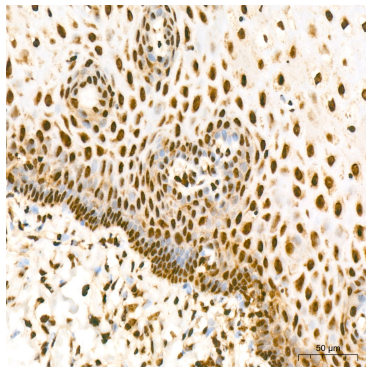
Western blot analysis of various lysates using Acetyl-Histone H3-K56 Rabbit mAb (A22565) at 1:10000 dilution incubated overnight at 4°C. HeLa cells ,NIH/3T3 cells and C6 cells were treated by TSA (1 μ M) at 37°C for 18 hours.
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.
Lysates/proteins: 30 μ g per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
Detection: ECL Basic Kit (RM00020).
Exposure time: 60s.



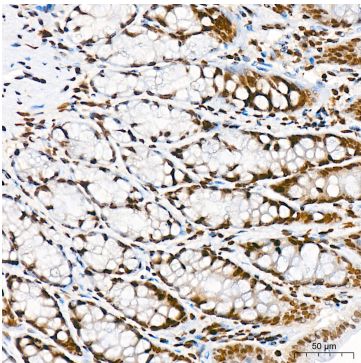
Dot-blot analysis of all sorts of peptides using Acetyl-Histone H3-K56 antibody (A22565) at 1:10000 dilution.



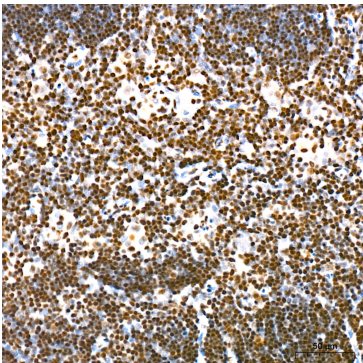
Immunohistochemistry analysis of paraffin-embedded Mouse colon tissue using Acetyl-Histone H3-K56 Rabbit mAb (A22565) at a dilution of 1:2000 (40x lens). High pressure antigen retrieval was performed with 0.01 M citrate buffer (pH 6.0) prior to IHC staining.



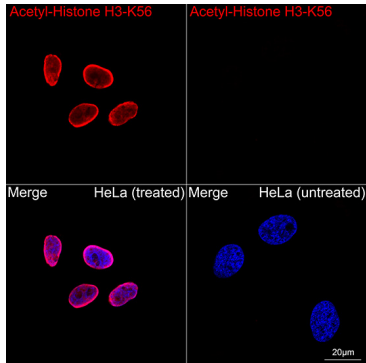
Immunohistochemistry analysis of paraffin-embedded Human esophagus tissue using Acetyl-Histone H3-K56 Rabbit mAb (A22565) at a dilution of 1:2000 (40x lens). High pressure antigen retrieval was performed with 0.01 M citrate buffer (pH 6.0) prior to IHC staining.



Immunohistochemistry analysis of paraffin-embedded Rat colon tissue using Acetyl-Histone H3-K56 Rabbit mAb (A22565) at a dilution of 1:2000 (40x lens). High pressure antigen retrieval was performed with 0.01 M citrate buffer (pH 6.0) prior to IHC staining.

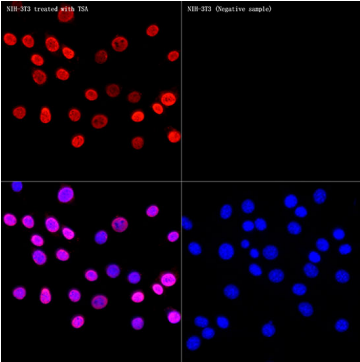


Immunohistochemistry analysis of paraffin-embedded Mouse spleen tissue using Acetyl-Histone H3-K56 Rabbit mAb (A22565) at a dilution of 1:2000 (40x lens). High pressure antigen retrieval was performed with 0.01 M citrate buffer (pH 6.0) prior to IHC staining.

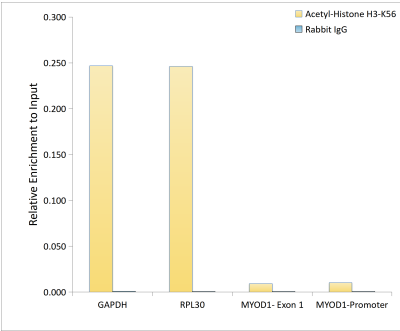


Confocal imaging of HeLa cells (treated with TSA) and HeLa cells (untreated) using Acetyl-Histone H3-K56 Rabbit mAb (A22565, dilution 1:200) followed by a further incubation with Cy3 Goat Anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). DAPI was used for nuclear staining (Blue). Objective: 100x.

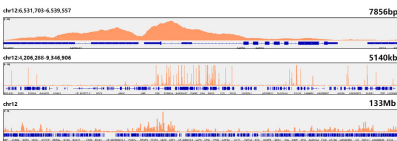
Validation Data



Immunofluorescence analysis of NIH-3T3 treated with TSA and NIH-3T3 cells using Acetyl-Histone H3-K56 Rabbit mAb (A22565) at dilution of 1:50 (40x lens). Secondary antibody: Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.

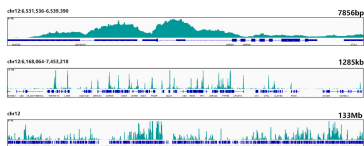


Chromatin immunoprecipitation analysis of extracts of NIH/3T3 cells, using Acetyl-Histone H3-K56 antibody (A22565) and rabbit IgG. The amount of immunoprecipitated DNA was checked by quantitative PCR. Histogram was constructed by the ratios of the immunoprecipitated DNA to the input.



Chromatin immunoprecipitations were performed with cross-linked chromatin from HeLa cells and Acetyl-Histone H3-K56 mAb (A22565). The ChIP sequencing results indicate the enrichment pattern of Acetyl-Histone H3-K56 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 μ g Acetyl-Histone H3-K56 (A22565), along with a Goat Anti-Rabbit IgG(H+L). The CUT&Tag results indicate the enrichment pattern of Acetyl-Histone H3-K56 in representative gene loci (GAPDH), as shown in figure.