# Acetyl-Histone H3-K56 Rabbit mAb

Catalog No.: A22565 Recombinant



## **Basic Information**

#### **Observed MW**

17kDa

### **Calculated MW**

16kDa

### Category

Primary antibody

### **Applications**

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

### **Cross-Reactivity**

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

### CloneNo number

ARC55111

**DR** 

## **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.

## **Recommended Dilutions**

1:2000 - 1:10000

νь	1.2000 - 1.10000
WB	1:2000 - 1:8000
IHC-P	1:1000 - 1:5000
IF/ICC	1:50 - 1:200
ChIP	5μg antibody for 5μg-10μg of Chromatin
ChIP-seq	1:50 - 1:200
CUT&Tag	10⁵ cells /1 μg

### **Contact**

<b>a</b>	400-999-6126
$\bowtie$	cn.market@abclonal.com.cn
•	www.abclonal.com.cn

## **Immunogen Information**

Gene ID	Swiss Prot
8290/8350	Q16695/P68431

### **Immunogen**

A synthetic acetylated peptide around K56 of human Histone H3 (NP\_003520.1).

### Synonyms

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

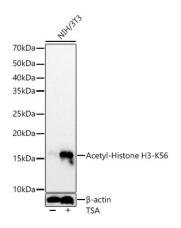
### **Product Information**

Source	Isotype	Purification
Rabbit	IgG	Affinity purification

### Storage

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

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



Western blot analysis of lysates from NIH/3T3 cells, using Acetyl-Histone H3-K56 Rabbit mAb (A22565) at 1:7000 dilution. NIH/3T3 cells were treated by TSA (1 uM) at 37°C for 18 hours.

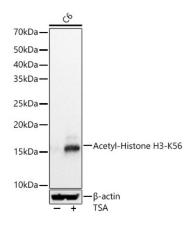
Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.

Lysates/proteins: 25µg per lane.

Blocking buffer: 3% nonfat dry milk in TBST.

Detection: ECL Basic Kit (RM00020).

Exposure time: 0.5s.



Western blot analysis of lysates from C6 cells, using Acetyl-Histone H3-K56 Rabbit mAb (A22565) at 1.7000 dilution.C6 cells were treated by TSA (1 uM) at  $37^{\circ}$ C for 18 hours.

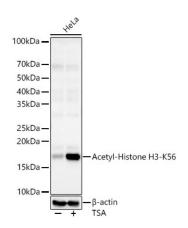
Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.

Lysates/proteins: 25µg per lane.

Blocking buffer: 3% nonfat dry milk in TBST.

Detection: ECL Basic Kit (RM00020).

Exposure time: 0.5s.



Western blot analysis of lysates from Hela cells, using Acetyl-Histone H3-K56 Rabbit mAb (A22565) at 1.7000 dilution.Hela cells were treated by TSA (1 uM) at  $37^{\circ}$ C for 18 hours.

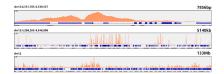
Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.

Lysates/proteins: 25µg per lane.

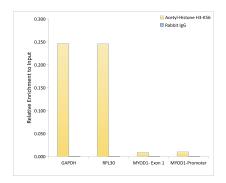
Blocking buffer: 3% nonfat dry milk in TBST.

Detection: ECL Basic Kit (RM00020).

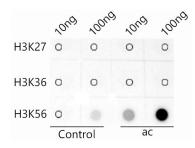
Exposure time: 90s.



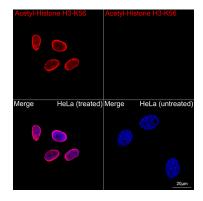
Chromatin immunoprecipitations were performed with cross-linked chromatin from HeLa cells and Acetyl-Histone H3-K56 mAb (A22565). The ChIP sequencing results indicate the enrichment pattern of Acetyl-Histone H3-K56 in selected genomic region and representative gene loci (GAPDH), as shown in figure.



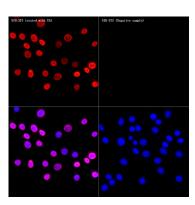
Chromatin immunoprecipitation analysis of extracts of NIH/3T3 cells, using Acetyl-Histone H3-K56 antibody (A22565) and rabbit IgG.The amount of immunoprecipitated DNA was checked by quantitative PCR. Histogram was constructed by the ratios of the immunoprecipitated DNA to the input.



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

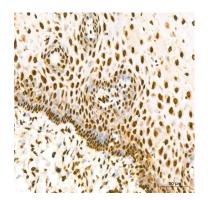


Confocal imaging of HeLa cells (treated with TSA) and HeLa cells (untreated) using Acetyl-Histone H3-K56 Rabbit mAb (A22565, dilution 1:200) followed by a further incubation with Cy3 Goat Anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). DAPI was used for nuclear staining (Blue). Objective: 100x.



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 Goat Anti-Rabbit IgG (H+L) (AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.

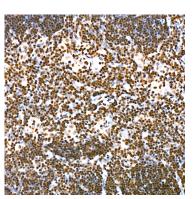
### **Validation Data**



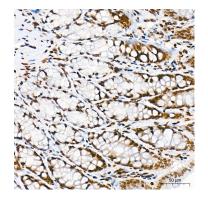
Immunohistochemistry analysis of Acetyl-Histone H3-K56 in paraffin-embedded human esophagus tissue using Acetyl-Histone H3-K56 Rabbit mAb (A22565) at a dilution of 1:2000 (40x lens). High pressure antigen retrieval was performed with 0.01 M citrate buffer (pH 6.0) prior to IHC staining.



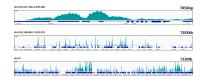
Immunohistochemistry analysis of Acetyl-Histone H3-K56 in paraffin-embedded mouse colon tissue using Acetyl-Histone H3-K56 Rabbit mAb (A22565) at a dilution of 1:2000 (40x lens). High pressure antigen retrieval was performed with 0.01 M citrate buffer (pH 6.0) prior to IHC staining.



Immunohistochemistry analysis of Acetyl-Histone H3-K56 in 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.



Immunohistochemistry analysis of Acetyl-Histone H3-K56 in 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.



CUT&Tag was performed using the CUT&Tag Assay Kit (pAG-Tn5) for Illumina(RK20265) from  $10^5$  K562 cells with  $1\mu g$  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.