

A16199

Leader in Biomolecular Solutions for Life Science



# TriMethyl-Histone H3-K27 Mouse mAb

Catalog No.: A16199

14 Publications

## Basic Information

### Observed MW

17kDa

### Calculated MW

16kDa

### Category

Monoclonal Antibody

### Applications

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

### Cross-Reactivity

Human, Mouse, Rat

### CloneNo number

AMC0015

## Recommended Dilutions

**WB** 1:1000 - 1:4000

**IHC-P** 1:50 - 1:200

**IF/ICC** 1:50 - 1:200

**DB** 1:500 - 1:2000

**ChIP** 5µg antibody for  
5µg-10µg of Chromatin

**CUT&Tag** 10<sup>5</sup> cells /1 µg

**ELISA** Recommended starting  
concentration is 1  
µg/mL. Please optimize  
the concentration  
based on your specific  
assay requirements.

## Contact

 [www.abclonal.com](http://www.abclonal.com)

## 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**  
8350

**Swiss Prot**  
P68431

### Immunogen

Synthetic peptide. This information is considered to be commercially sensitive.

### Synonyms

H3t; H3.4; H3/g; H3FT; H3C16; HIST3H3; TriMethyl-Histone H3-K27

## Product Information

**Source**  
Mouse

**Isotype**  
IgG1,kappa

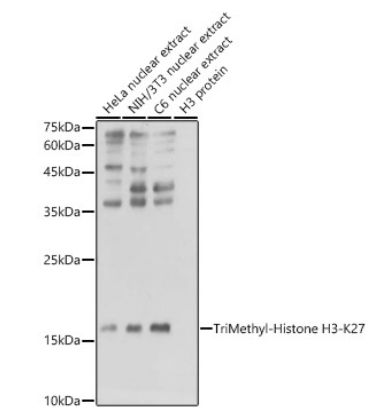
**Purification**  
Affinity purification

### Storage

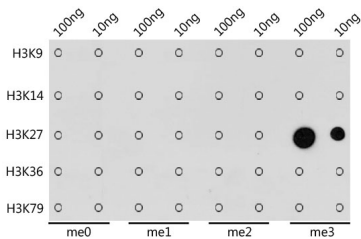
Store at -20°C. Avoid freeze / thaw cycles.

Buffer: PBS containing 50% glycerol, preserved with proclin300 or sodium azide (as specified on the Certificate of Analysis), pH 7.3.

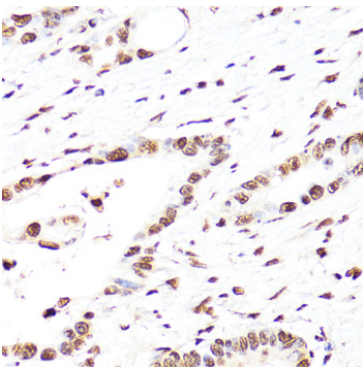
Validation Data



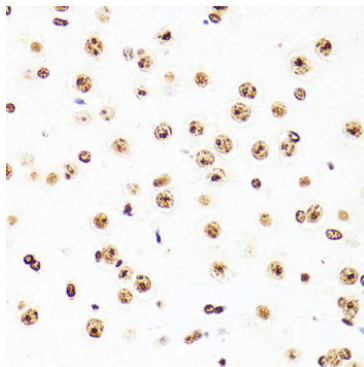
Western blot analysis of various lysates using TriMethyl-Histone H3-K27 Mouse mAb (A16199) at 1:1000 dilution.  
Secondary antibody: HRP-conjugated Goat anti-Mouse IgG (H+L) (AS003) at 1:10000 dilution.  
Lysates/proteins: 25µg per lane.  
Blocking buffer: 3% nonfat dry milk in TBST.  
Detection: ECL Basic Kit (RM00020).  
Exposure time: 5s.



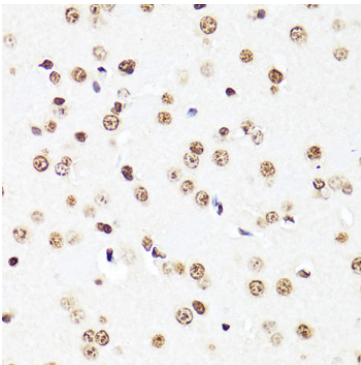
Dot-blot analysis of all sorts of methylation peptides using TriMethyl-Histone H3-K27 antibody (A16199) at 1:1000 dilution.



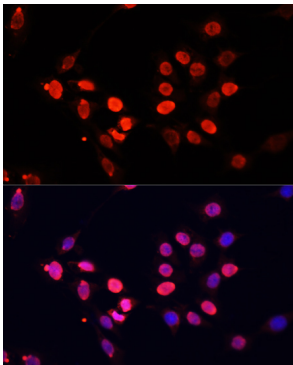
Immunohistochemistry analysis of paraffin-embedded Human colon carcinoma using TriMethyl-Histone H3-K27 Mouse mAb (A16199) at dilution of 1:25 (40x lens). Microwave antigen retrieval performed with 0.01M PBS Buffer (pH 7.2) prior to IHC staining.



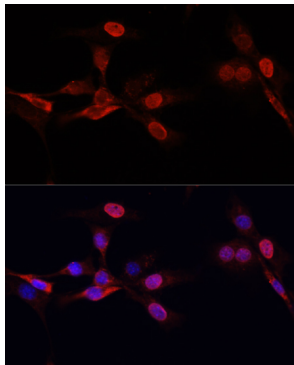
Immunohistochemistry analysis of paraffin-embedded Mouse brain using TriMethyl-Histone H3-K27 Mouse mAb (A16199) at dilution of 1:25 (40x lens). Microwave antigen retrieval performed with 0.01M PBS Buffer (pH 7.2) prior to IHC staining.



Immunohistochemistry analysis of paraffin-embedded Rat brain using TriMethyl-Histone H3-K27 Mouse mAb (A16199) at dilution of 1:25 (40x lens). Microwave antigen retrieval performed with 0.01M PBS Buffer (pH 7.2) prior to IHC staining.

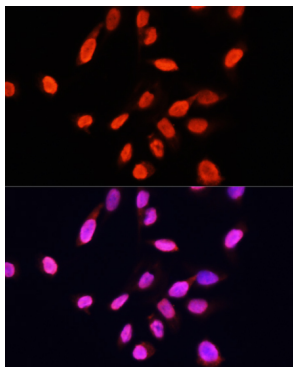


Immunofluorescence analysis of C6 cells using TriMethyl-Histone H3-K27 Mouse mAb (A16199) at dilution of 1:25. Blue: DAPI for nuclear staining.

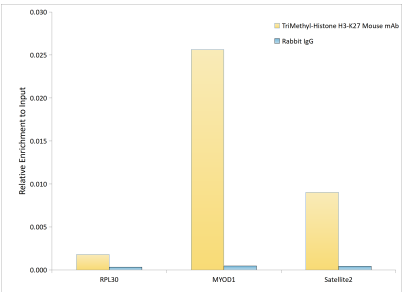


Immunofluorescence analysis of NIH/3T3 cells using TriMethyl-Histone H3-K27 Mouse mAb (A16199) at dilution of 1:25. Blue: DAPI for nuclear staining.

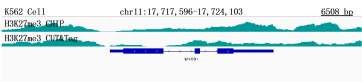
## Validation Data



Immunofluorescence analysis of U-2OS cells using TriMethyl-Histone H3-K27 Mouse mAb (A16199) at dilution of 1:25. Blue: DAPI for nuclear staining.



Chromatin immunoprecipitation analysis of extracts of HeLa; cells, using TriMethyl-Histone H3-K27 Mouse mAb antibody (A16199) 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.



CUT&Tag was performed using the CUT&Tag Assay Kit (pAG-Tn5) for Illumina(RK20265) from 10<sup>5</sup> K562 cells with 1 µg TriMethyl-Histone H3-K27 Mouse mAb antibody (A16199), along with a Goat Anti-Mouse IgG (H+L). The CUT&Tag results indicate the enrichment pattern of TriMethyl-Histone H3-K27 in representative gene loci (MYO01), as shown in figure.