## Basic Information

## Observed MW

17kDa

## Calculated MW

16kDa

## Category

Primary antibody

## Applications

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

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

## CloneNo number

ARC54167

| Recommended Dilutions |  |
| :--- | ---: |
| WB | $1: 10000-1: 160000$ |
| IHC-P | $1: 500-1: 1000$ |
| IF/ICC | $1: 500-1: 1000$ |
| ChIP | $5 \mu \mathrm{~g}$ antibody for |
|  | $5 \mu \mathrm{~g}-10 \mu \mathrm{~g}$ of Chromatin |
| CUT\&Tag | $10^{5}$ cells $/ 1 \mu \mathrm{~g}$ |

CUT\&Tag
$10^{5}$ cells $/ 1 \mu \mathrm{~g}$

## Contact

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## 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 ( H 2 A , $\mathrm{H} 2 \mathrm{~B}, \mathrm{H} 3$, and H 4 ). The chromatin fiber is further compacted through the interaction of a linker histone, H 1 , 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<br>8290/8350

Swiss Prot
Q16695/P68431

## Immunogen

A synthetic trimethylated peptide around K27 of human Histone H3 (NP_003520.1).

## Synonyms

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

## Product Information

| Source | Isotype | Purification |
| :--- | :--- | :--- |
| Rabbit | $\operatorname{lgG}$ | Affinity purification |

## Storage

Store at $-20^{\circ} \mathrm{C}$. Avoid freeze / thaw cycles.
Buffer: PBS with $0.05 \%$ proclin300,0.05\% BSA,50\% glycerol,pH7.3.




CUT\&Tag was performed using the CUT\&Tag Assay Kit (pAG-Tn5) for Illumina(RK20265) from $10^{5} \mathrm{~K} 562$ cells with $1 \mu \mathrm{~g}$ TriMethylHistone H3-K27 Rabbit mAb(A22396), along with a Goat Anti-Rabbit $\operatorname{lgG}(\mathrm{H}+\mathrm{L})$. The CUT\&Tag results indicate the enrichment pattern of H3K27Me3 in representative gene loci (MYT1), as shown in figure.

Western blot analysis of various lysates, using TriMethyl-Histone H3-K27 Rabbit mAb (A22396) at 1:140000 dilution.
Secondary antibody: HRP Goat Anti-Rabbit $\operatorname{lgG}(H+L)$ (AS014) at 1:10000 dilution.
Lysates/proteins: $25 \mu \mathrm{~g}$ per lane.
Blocking buffer: 3\% nonfat dry milk in TBST.
Detection: ECL Basic Kit (RM00020).
Exposure time: 90s.

Chromatin immunoprecipitation analysis of extracts of HeLa cells, using TriMethyl-Histone H3-K27 antibody (A22396) 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.


Immunofluorescence analysis of HeLa cells using TriMethyl-Histone H3-K27 Rabbit mAb (A22396) at dilution of 1:600 (40x lens). Secondary antibody: Cy3 Goat Anti-Rabbit $\operatorname{lgG}(\mathrm{H}+\mathrm{L})(\mathrm{ASO07})$ at 1:500 dilution. Blue: DAPI for nuclear staining.


Immunohistochemistry analysis of TriMethylHistone H3-K27 in paraffin-embedded Human liver using TriMethyl-Histone H3-K27 Rabbit mAb (A22396) at dilution of 1:1000 (40x lens).Perform high pressure antigen retrieval with 10 mM citrate buffer pH 6.0 before commencing with IHC staining protocol.


Immunohistochemistry analysis of TriMethylHistone H3-K27 in paraffin-embedded Human spleen using TriMethyl-Histone H3-K27 Rabbit mAb (A22396) at dilution of 1:1000 (40x lens).Perform high pressure antigen retrieval with 10 mM citrate buffer pH 6.0 before commencing with IHC staining protocol.

