

A22398

Leader in Biomolecular Solutions for Life Science



TriMethyl-Histone H3-K27 Rabbit mAb

Catalog No.: A22398

Recombinant

Basic Information

Observed MW

17kDa

Calculated MW

16kDa

Category

SMab Recombinant Monoclonal Antibody

Applications

WB,IHC-P,IF/ICC,ChIP,ELISA

Cross-Reactivity

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

CloneNo number

ARC54163

Recommended Dilutions

WB 1:2000 - 1:10000

IHC-P 1:100 - 1:500

IF/ICC 1:100 - 1:500

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

Contact



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

8290/8350

Swiss Prot

Q16695/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

Rabbit

Isotype

IgG

Purification

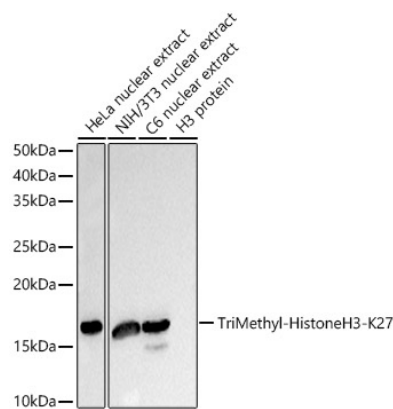
Affinity purification

Storage

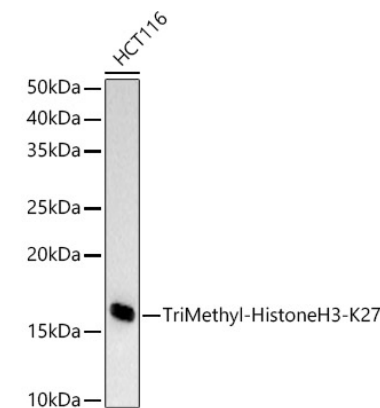
Store at -20°C. Avoid freeze / thaw cycles.

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

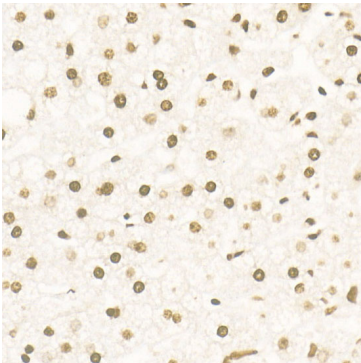
Validation Data



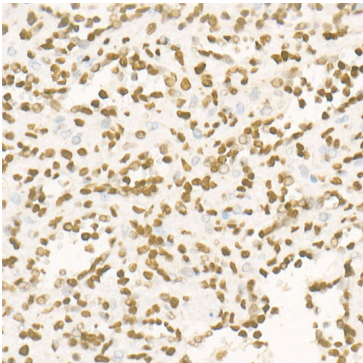
Western blot analysis of various lysates, using TriMethyl-Histone H3-K27 Rabbit mAb (A22398) at 1:10000 dilution.
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.
Lysates/proteins: 25µg per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
Detection: ECL Basic Kit (RM00020).
Exposure time: 1s.



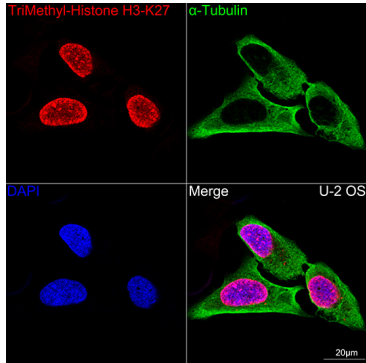
Western blot analysis of lysates from HCT116 cells, using TriMethyl-Histone H3-K27 Rabbit mAb (A22398) at 1:10000 dilution.
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.
Lysates/proteins: 25µg per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
Detection: ECL Basic Kit (RM00020).
Exposure time: 1s.



Immunohistochemistry analysis of paraffin-embedded Human liver using TriMethyl-Histone H3-K27 Rabbit mAb (A22398) at dilution of 1:400 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate buffer (pH 6.0) prior to IHC staining.

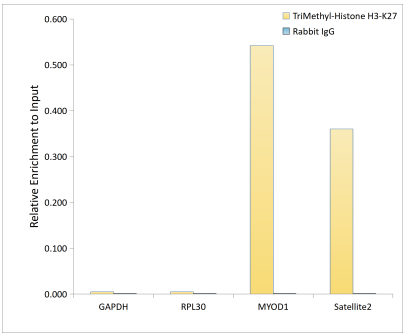


Immunohistochemistry analysis of paraffin-embedded Human spleen using TriMethyl-Histone H3-K27 Rabbit mAb (A22398) at dilution of 1:400 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate buffer (pH 6.0) prior to IHC staining.

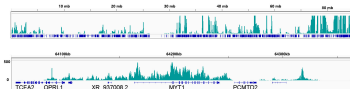
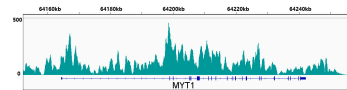


Confocal imaging of U-2 OS cells using TriMethyl-Histone H3-K27 Rabbit mAb (A22398,dilution 1:400)(Red). The cells were counterstained with α-Tubulin Mouse mAb (AC012,dilution 1:400) (Green). DAPI was used for nuclear staining (blue). Objective: 60x.

Validation Data



Chromatin immunoprecipitation analysis of extracts of HeLa cells, using TriMethyl-Histone H3-K27 antibody (A22398) 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 10⁵ HeLa with 1 µg of TriMethyl-Histone H3-K27 Rabbit mAb (A22398), followed by incubation with Goat Anti-Rabbit IgG(H+L)(AS070). The results denote the enrichment pattern of TriMethyl-Histone H3-K27 around MYT1 gene.

CUT&Tag was performed using the CUT&Tag Assay Kit (pAG-Tn5) for Illumina (RK20265) from 10⁵ HeLa with 1 µg of TriMethyl-Histone H3-K27 Rabbit mAb (A22398), followed by incubation with Goat Anti-Rabbit IgG(H+L)(AS070). The CUT&Tag results denote the enrichment pattern of TriMethyl-Histone H3-K27 across chromosome 20 (upper panel) and the genomic region encompassing MYT1, a representative gene enriched in TriMethyl-Histone H3-K27 (lower panel).