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TriMethyl-Histone H3-K27 Rabbit mAb

Catalog No.: A22006 Recombinant

Basic Information

Observed MW

17kDa

Calculated MW

16kDa

Category

SMab Recombinant Monoclonal Antibody

Applications

WB,IHC-

P,IF/ICC,IP,ChIP,ELISA,DB,CUT&Tag

Cross-Reactivity

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

Recommended Dilutions

CloneNo number

ARC54169

WB

DB

ChIP

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 replicationdependent 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	Swiss Prot
8290/8350	Q16695/P68431

Immunogen

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

Synonyms

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

IHC-P 1:500 - 1:3000

IF/ICC 1:500 - 1:1000

0.5µg-4µg antibody for ΙP

200µg-400µg extracts

of whole cells

1:10000 - 1:40000

1:2000 - 1:20000

ELISA Recommended starting concentration is 1

µg/mL. Please optimize the concentration based on your specific assay requirements.

5µg antibody for

5μg-10μg of Chromatin

CUT&Tag 105 cells /1 µg

Product Information

Source **Isotype Purification** Rabbit Affinity purification IgG

Storage

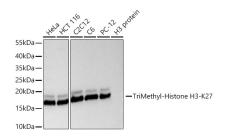
Store at -20°C. Avoid freeze / thaw cycles.

Buffer: PBS with 0.09% Sodium azide, 0.05% BSA, 50% glycerol, pH7.3.

Contact



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Western blot analysis of various lysates using TriMethyl-Histone H3-K27 Rabbit mAb (A22006) at 1:11000 dilution incubated overnight at 4°C.

Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000

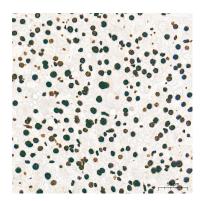
dilution.

Lysates/proteins: 25 µg per lane.

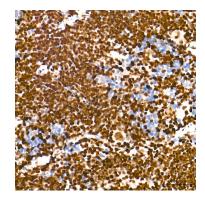
Blocking buffer: 3% nonfat dry milk in TBST.

Detection: ECL Basic Kit (RM00020). Negative control (NC): H3 protein

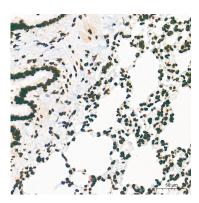
Exposure time: 30s.



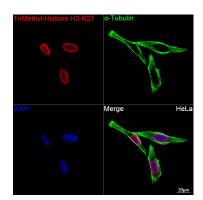
Immunohistochemistry analysis of paraffin-embedded Human liver tissue using TriMethyl-Histone H3-K27 Rabbit mAb (A22006) at a dilution of 1:700 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.



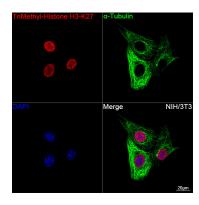
Immunohistochemistry analysis of paraffin-embedded Mouse spleen tissue using TriMethyl-Histone H3-K27 Rabbit mAb (A22006) at a dilution of 1:700 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.



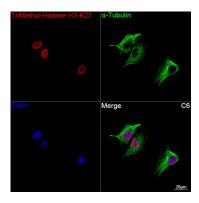
Immunohistochemistry analysis of paraffin-embedded Rat lung tissue using TriMethyl-Histone H3-K27 Rabbit mAb (A22006) at a dilution of 1:700 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.



Confocal imaging of HeLa cells using TriMethyl-Histone H3-K27 Rabbit mAb (A22006, dilution 1:200) followed by a further incubation with Cy3 Goat Anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). The cells were counterstained with $\alpha\text{-}$ Tubulin Mouse mAb (AC012, dilution 1:400) followed by incubation with ABflo® 488-conjugated Goat Anti-Mouse IgG (H+L) Ab (AS076, dilution 1:500) (Green). DAPI was used for nuclear staining (Blue). Objective: 100x.

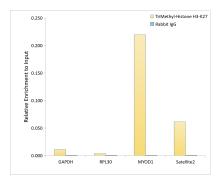


Confocal imaging of NIH/3T3 cells using TriMethyl-Histone H3-K27 Rabbit mAb (A22006, dilution 1:200) followed by a further incubation with Cy3 Goat Anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). The cells were counterstained with α -Tubulin Mouse mAb (AC012, dilution 1:400) followed by incubation with ABflo® 488-conjugated Goat Anti-Mouse IgG (H+L) Ab (AS076, dilution 1:500) (Green). DAPI was used for nuclear staining (Blue). Objective: 100x.

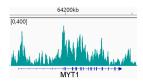


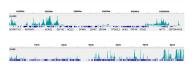
Confocal imaging of C6 cells using TriMethyl-Histone H3-K27 Rabbit mAb (A22006, dilution 1:200) followed by a further incubation with Cy3 Goat Anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). The cells were counterstained with $\alpha\text{-}$ Tubulin Mouse mAb (AC012, dilution 1:400) followed by incubation with ABflo® 488-conjugated Goat Anti-Mouse IgG (H+L) Ab (AS076, dilution 1:500) (Green). DAPI was used for nuclear staining (Blue). Objective: 100x.

Validation Data



Chromatin immunoprecipitation analysis of extracts of HeLa cells, using TriMethyl-Histone H3-K27 antibody (A22006) 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) forIllumina (RK20265) from 10⁵ Hela cells with 1µg Tri-Methyl-Histone H3-K27 Rabbit mAb(A22006), along with a Goat Anti-Rabbit IgG(H+L). The CUT&Tag results indicate the enrichment pattern of H3K27me3 in representative gene loci(MYT1).

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