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DiMethyl-Histone H3-K79 Rabbit mAb

Catalog No.: A22086 Recombinant

Basic Information

Observed MW
17 kDa

Calculated MW
15 kDa

Category
Primary antibody

Applications
WB,IP,IF/ICC,IF-P,IHC-P,DB,ChIP,ChIP-seq,ELISA

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

CloneNo number
ARC54084

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

WB	1:30000 - 1:120000
IP	0.5μg-4μg antibody for 200μg-400μg extracts of whole cells
IF/ICC	1:200 - 1:400
IF-P	1:50 - 1:200
IHC-P	1:2000 - 1:10000
DB	1:2000 - 1:20000
ChIP	5μg antibody for 5μg-10μg of Chromatin
ChIP-seq	1:50 - 1:200
ELISA	Recommended starting concentration is 1 μg/mL. Please optimize the concentration based on your specific assay requirements.

Immunogen Information

Gene ID
8290/8350

Swiss Prot
Q16695/P68431

Immunogen
A synthetic dimethylated peptide around K79 of human Histone H3-K79 (NP_003520.1).

Synonyms
H3t; H3.4; H3/g; H3FT; H3C16; HIST3H3; DiMethyl-Histone H3-K79

Product Information

Source
Rabbit

Isotype
IgG

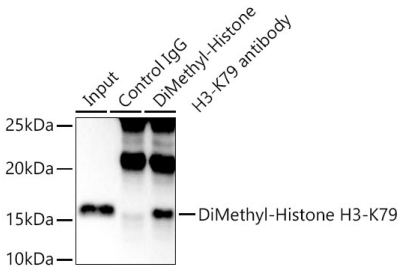
Purification
Affinity purification

Storage
Store at -20℃

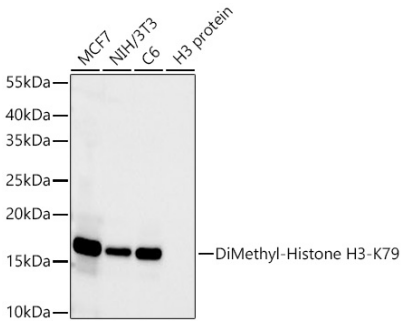
Contact

☎	400-999-6126
✉	cn.market@abclonal.com.cn
🌐	www.abclonal.com.cn

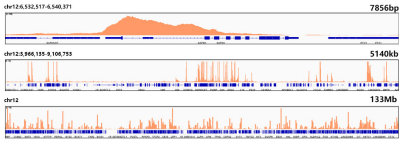
Validation Data



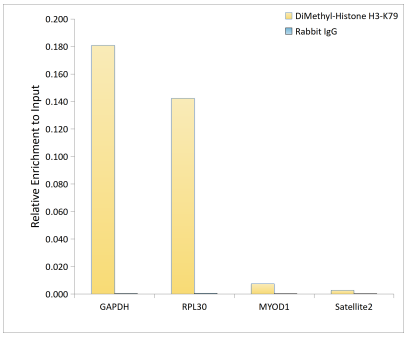
Immunoprecipitation analysis of 300 µg extracts of 293F cells using 3 µg DiMethyl-Histone H3-K79 antibody (A22086). Western blot was performed from the immunoprecipitate using DiMethyl-Histone H3-K79 antibody (A22086) at a dilution of 1:20000.



Western blot analysis of various lysates using DiMethyl-Histone H3-K79 Rabbit mAb (A22086) at 1:65000 dilution incubated overnight at 4℃.
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: 90s.

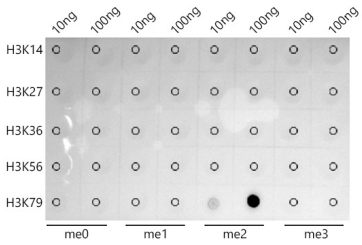


Chromatin immunoprecipitations were performed with cross-linked chromatin from 293T cells and DiMethyl-Histone H3-K79 Rabbit mAb (A22086). The ChIP sequencing results indicate the enrichment pattern of DiMethyl-Histone H3-K79 in selected genomic region and representative gene loci (GAPDH), as shown in figure.

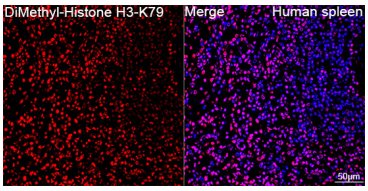


Chromatin immunoprecipitation analysis of extracts of HeLa cells, using DiMethyl-Histone H3-K79 Rabbit mAb antibody (A22086) and rabbit IgG.The amount of immunoprecipitated DNA was checked by quantitative PCR. Histogram was constructed by the ratios of the immunoprecipitated DNA to the input.

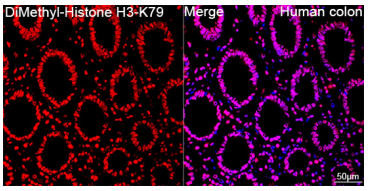
Validation Data



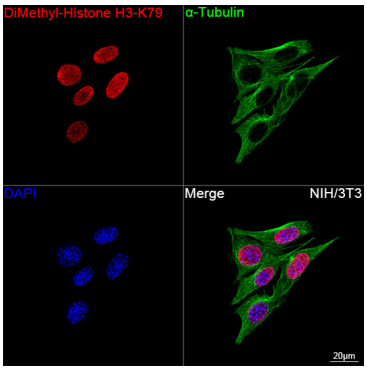
Dot-blot analysis of all sorts of peptides using DiMethyl-Histone H3-K79 antibody (A22086) at 1:20000 dilution.



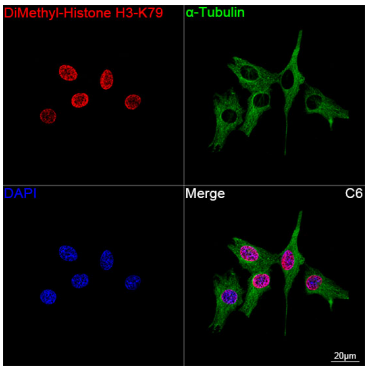
Confocal imaging of paraffin-embedded Human spleen tissue using DiMethyl-Histone H3-K79 Rabbit mAb (A22086, dilution 1:200) followed by a further incubation with Cy3 Goat Anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). DAPI was used for nuclear staining (Blue). Objective: 40x. Perform high pressure antigen retrieval with 0.01 M citrate buffer (pH 6.0) prior to IF staining.



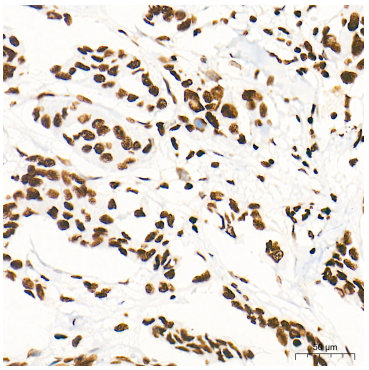
Confocal imaging of paraffin-embedded Human colon tissue using DiMethyl-Histone H3-K79 Rabbit mAb (A22086, dilution 1:200) followed by a further incubation with Cy3 Goat Anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). DAPI was used for nuclear staining (Blue). Objective: 40x. Perform high pressure antigen retrieval with 0.01 M citrate buffer (pH 6.0) prior to IF staining.



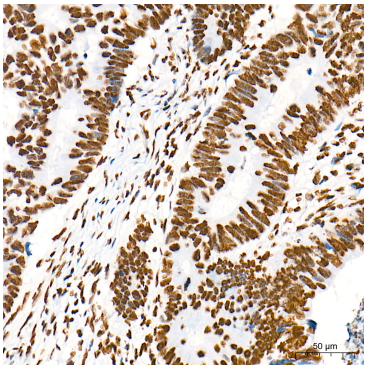
Confocal imaging of NIH/3T3 cells using DiMethyl-Histone H3-K79 Rabbit mAb (A22086, dilution 1:200) followed by a further incubation with Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). The cells were counterstained with α-Tubulin Mouse mAb (AC012, dilution 1:400) followed by 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.



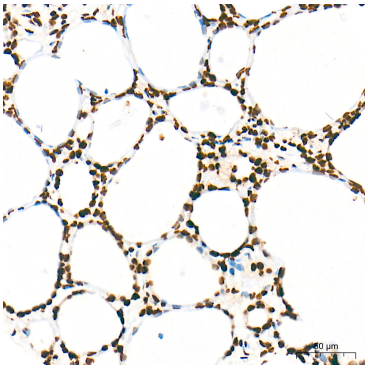
Confocal imaging of C6 cells using DiMethyl-Histone H3-K79 Rabbit mAb (A22086, dilution 1:200) followed by a further incubation with Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). The cells were counterstained with α-Tubulin Mouse mAb (AC012, dilution 1:400) followed by incubation 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.



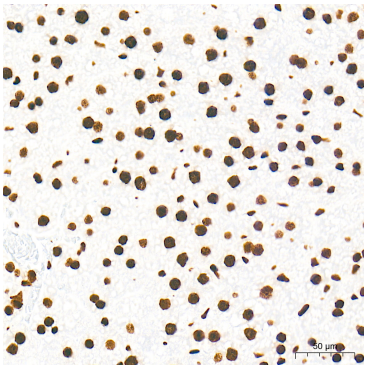
Immunohistochemistry analysis of paraffin-embedded Human breast cancer tissue using DiMethyl-Histone H3-K79 Rabbit mAb (A22086) at a dilution of 1:4000 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.



Immunohistochemistry analysis of paraffin-embedded Human colon carcinoma tissue using DiMethyl-Histone H3-K79 Rabbit mAb



Immunohistochemistry analysis of paraffin-embedded Human thyroid tissue using DiMethyl-Histone H3-K79 Rabbit mAb



Immunohistochemistry analysis of paraffin-embedded Mouse liver tissue using DiMethyl-Histone H3-K79 Rabbit mAb (A22086) at a

Validation Data

(A22086) at a dilution of 1:4000 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.

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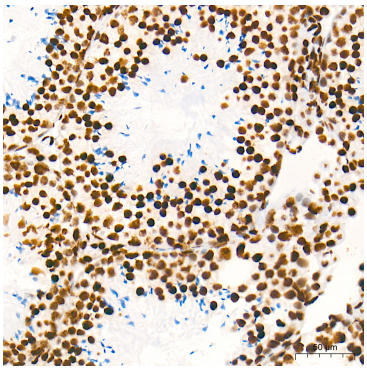
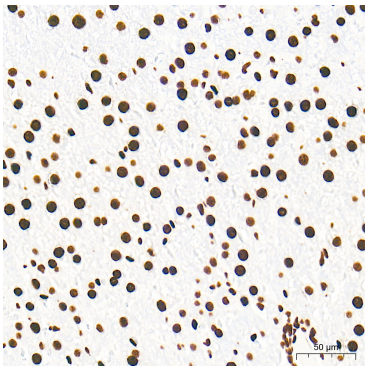


Immunohistochemistry analysis of paraffin-embedded Mouse testis tissue using DiMethyl-Histone H3-K79 Rabbit mAb (A22086) at a dilution of 1:4000 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.



Immunohistochemistry analysis of paraffin-embedded Rat liver tissue using DiMethyl-Histone H3-K79 Rabbit mAb (A22086) at a dilution of 1:4000 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.