Leader in Biomolecular Solutions for Life Science

www.abclonal.com

TriMethyl-Histone H3-K4 Rabbit mAb

Catalog No.: A22146 Recombinant 15 Publications

Basic Information

Observed MW
17 kDa

Calculated MW
15 kDa

Category
Primary antibody

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

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

CloneNo number
ARC55095

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	1:1000- 1:10000
DB	1:10000 - 1:60000
IP	0.5μg-4μg antibody for 400μg-600μg extracts of whole cells
IHC-P	1:2000 - 1:8000
IF/ICC	1:50 - 1:200
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
ChIP-seq	1:50 - 1:200
CUT&Tag	10^5 cells /1 μg

Immunogen Information

Gene ID
8290/8350

Swiss Prot
Q16695/P68431

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

Synonyms
H3.4; H3/g; H3FT; H3t; HIST3H3; Histone H3; HIST1H3A; TriMethyl-Histone H3-K4

Product Information

Source
Rabbit

Isotype
IgG

Purification
Affinity purification

Storage
Store at -20℃. Avoid freeze / thaw cycles.
Buffer: PBS containing 50% glycerol and 0.05% BSA, preserved with proclin300 or sodium azide (as specified on the Certificate of Analysis), pH 7.3.

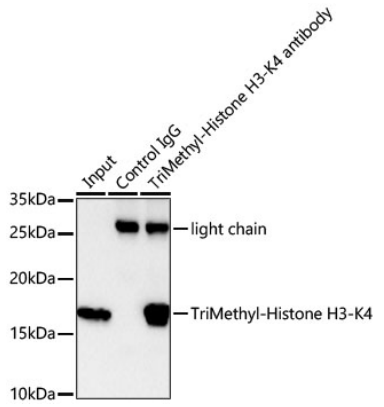
Contact

400-999-6126

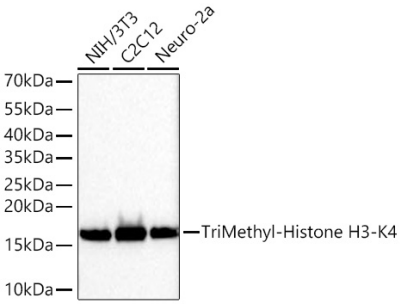
cn.market@abclonal.com.cn

www.abclonal.com.cn

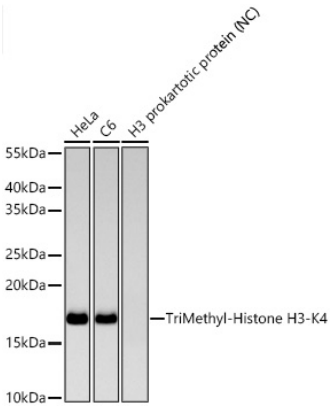
Validation Data



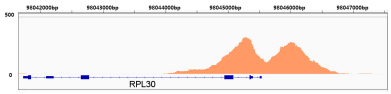
Immunoprecipitation of TriMethyl-Histone H3-K4 from 600 µg extracts of HeLa cells was performed using 1 µg of TriMethyl-Histone H3-K4 Rabbit mAb (A22146). Rabbit IgG isotype control (AC005) was used to precipitate the Control IgG sample. IP samples were eluted with 1x reducing Laemmli Buffer. The Input lane represents 10% of the total input. Western blot analysis of immunoprecipitates was conducted using TriMethyl-Histone H3-K4 Rabbit mAb (A22146) at a dilution of 1:2000.



Western blot analysis of various lysates using TriMethyl-Histone H3-K4 Rabbit mAb (A22146) at 1:6000 dilution incubated at room temperature for 1.5 hours.
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).
Exposure time: 30s.

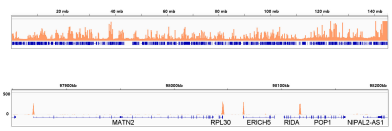


Western blot analysis of various lysates using TriMethyl-Histone H3-K4 Rabbit mAb (A22146)at 1:5000 dilution incubated overnight at 4℃.
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.
Lysates/proteins: 25 µg per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
Detection: ECL Basic Kit (RM00020).
Negative control (NC): H3 prokaryotic protein
Exposure time: 45s.

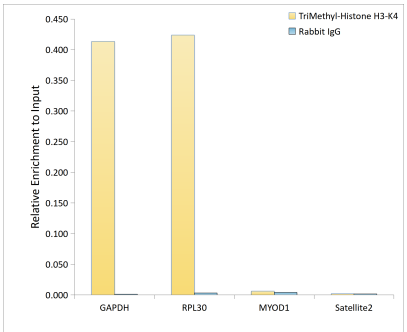


Chromatin immunoprecipitation was performed with 10 µg of cross-linked chromatin from 293T using 5 µg of TriMethyl-Histone H3-K4 Rabbit mAb (A22146). DNA libraries were prepared using Scale ssDNA-seq Lib Prep Kit for Illumina V2 (RK20228). The ChIP sequencing results indicate the enrichment pattern of TriMethyl-Histone H3-K4 in the representative genomic region surrounding RPL30 gene.

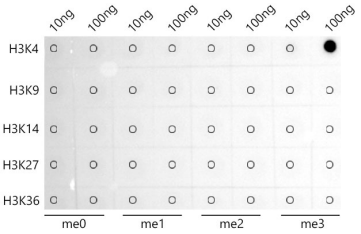
Validation Data



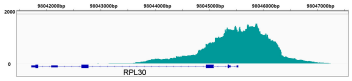
Chromatin immunoprecipitation was performed with 10 µg of cross-linked chromatin from 293T using 5 µg of TriMethyl-Histone H3-K4 Rabbit mAb (A22146). DNA libraries were prepared using Scale ssDNA-seq Lib Prep Kit for Illumina V2 (RK20228). The ChIP sequencing results indicate the enrichment pattern of TriMethyl-Histone H3-K4 across chromosome 8 (upper panel) and the genomic region encompassing RPL30, a representative gene enriched in TriMethyl-Histone H3-K4 (lower panel).



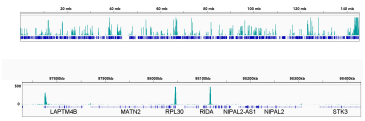
Chromatin immunoprecipitation analysis of extracts of HeLa cells, using TriMethyl-Histone H3-K4 antibody (A22146) and rabbit IgG.The amount of immunoprecipitated DNA was checked by quantitative PCR. Histogram was constructed by the ratios of the immunoprecipitated DNA to the input.



Dot-blot analysis of all sorts of peptides using TriMethyl-Histone H3-K4 antibody (A22146) at 1:50000 dilution.

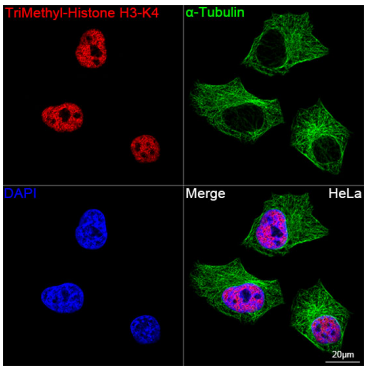


CUT&Tag was performed using the CUT&Tag Assay Kit (pAG-Tn5) for Illumina (RK20265) from 10^5 K-562 cells with 1 µg of TriMethyl-Histone H3-K4 Rabbit mAb (A22146), followed by incubation with Goat Anti-Rabbit IgG(H+L)(AS070). The CUT&Tag results denote the enrichment pattern of TriMethyl-Histone H3-K4 around RPL30 gene.

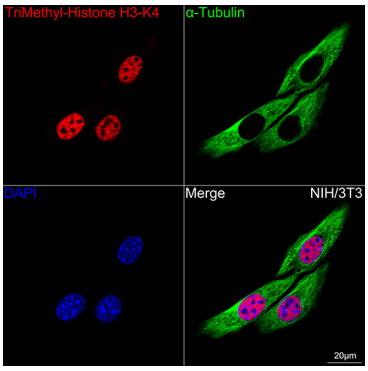


CUT&Tag was performed using the CUT&Tag Assay Kit (pAG-Tn5) for Illumina (RK20265) from 10^5 K-562 cells with 1 µg of TriMethyl-Histone H3-K4 Rabbit mAb (A22146), followed by incubation with Goat Anti-Rabbit IgG (H+L)(AS070). The CUT&Tag results denote the enrichment pattern of TriMethyl-Histone H3-K4 across chromosome 8 (upper panel) and the genomic region encompassing RPL30, a representative gene enriched in TriMethyl-Histone H3-K4 (lower panel).

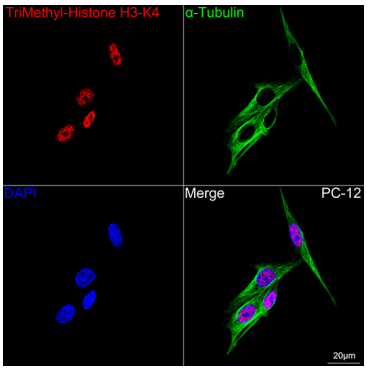
Validation Data



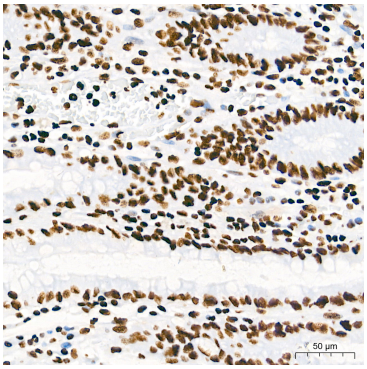
Confocal imaging of HeLa cells using TriMethyl-Histone H3-K4 Rabbit mAb (A22146, dilution 1:200) followed by a further incubation with Cy3 Goat Anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). The cells were counterstained with α-Tubulin Mouse mAb (AC012, dilution 1:400) followed by incubation with ABflo® 488-conjugated Goat Anti-Mouse IgG (H+L) Ab (AS076, dilution 1:500) (Green). DAPI was used for nuclear staining (Blue). Objective: 100x.



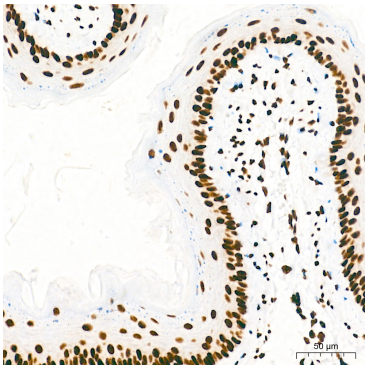
Confocal imaging of NIH/3T3 cells using TriMethyl-Histone H3-K4 Rabbit mAb (A22146, dilution 1:200) followed by a further incubation with Cy3 Goat Anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). The cells were counterstained with α-Tubulin Mouse mAb (AC012, dilution 1:400) followed by incubation 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.



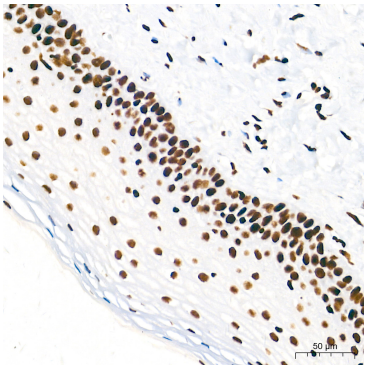
Confocal imaging of PC-12 cells using TriMethyl-Histone H3-K4 Rabbit mAb (A22146, dilution 1:200) followed by a further incubation with Cy3 Goat Anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). The cells were counterstained with α-Tubulin Mouse mAb (AC012, dilution 1:400) followed by incubation with ABflo® 488-conjugated Goat Anti-Mouse IgG (H+L) Ab (AS076, dilution 1:500) (Green). DAPI was used for nuclear staining (Blue). Objective: 100x.



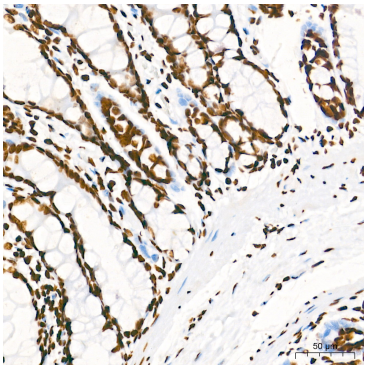
Immunohistochemistry analysis of paraffin-embedded Human colon tissue using TriMethyl-Histone H3-K4 Rabbit mAb (A22146) at a dilution of 1:5000 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.



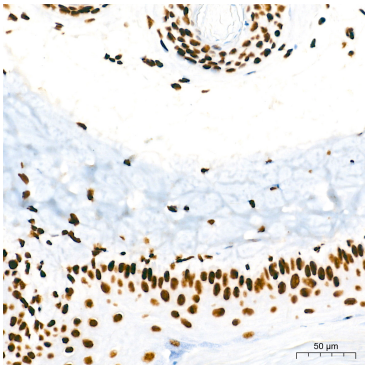
Immunohistochemistry analysis of paraffin-embedded Mouse esophagus tissue using TriMethyl-Histone H3-K4 Rabbit mAb (A22146) at a dilution of 1:5000 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.



Immunohistochemistry analysis of paraffin-embedded Human cervix tissue using TriMethyl-Histone H3-K4 Rabbit mAb (A22146) at a dilution of 1:5000 (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 colon tissue using TriMethyl-Histone H3-K4 Rabbit mAb (A22146) at a dilution of 1:5000 (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 skin tissue using TriMethyl-Histone H3-K4 Rabbit mAb (A22146) at a dilution of 1:5000 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.