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Acetyl-Histone H3-K4 Rabbit mAb

Catalog No.: A24340

Recombinant | 1 Publications

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Basic Information

Observed MW
17 kDa

Calculated MW
15 kDa

Category
Monoclonal Antibodies

Applications
WB, IP, IF/ICC, DB, ChIP, CUT&Tag, ELISA

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

Clone No.
ARC62521

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 - 1:2000
IP	2μg-6μg antibody for 400μg-600μg extracts of whole cells
IF/ICC	1:50 - 1:200
DB	1:2000 - 1:5000
ChIP	5μg antibody for 5μg-10μg of Chromatin
CUT&Tag	10^5 cells /1 μg
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
Synthetic peptide. This information is considered to be commercially sensitive.

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

Contact

400-999-6126

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Product Information

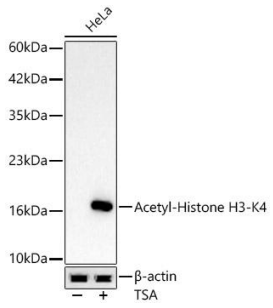
Source
Rabbit

Isotype
IgG

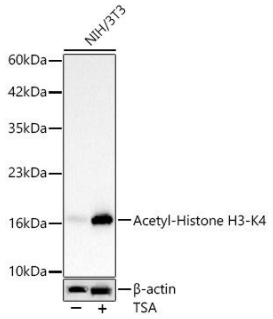
Purity
Affinity purification

Storage
Store at -20℃

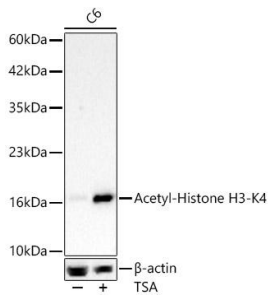
Validation Data



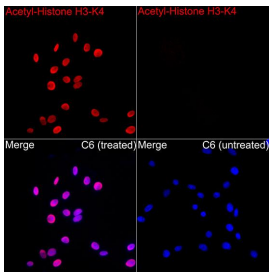
Western blot analysis of lysates from HeLa cells, using Acetyl-Histone H3-K4 Rabbit mAb (A24340) at 1:1000 dilution. HeLa cells were treated with TSA (1 uM) at 37℃ for 18 hours.
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1: 10000 dilution.
Lysates/proteins: 25µg per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
Detection: ECL Basic Kit (RM00020).
Exposure time: 30s.



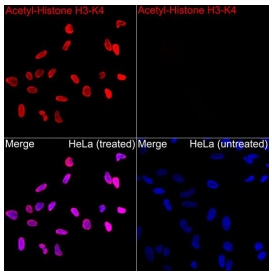
Western blot analysis of lysates from NIH/3T3 cells, using Acetyl-Histone H3-K4 Rabbit mAb (A24340) at 1:1000 dilution. NIH/3T3 cells were treated with TSA (1 uM) at 37℃ for 18 hours.
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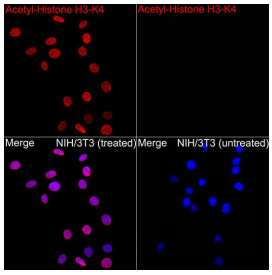
Western blot analysis of lysates from C6 cells,using Acetyl-Histone H3-K4 Rabbit mAb (A24340) at 1:1000 dilution. C6 cells were treated with TSA (1 uM) at 37℃ for 18 hours.
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1: 10000 dilution.
Lysates/proteins: 25µg per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
Detection: ECL Basic Kit (RM00020).
Exposure time: 30s.



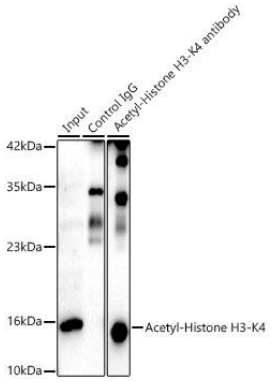
Immunofluorescence analysis of C6 TSA and C6 cells using Acetyl-Histone H3-K4 Rabbit mAb (A24340) at dilution of 1:100 (40x lens). Secondary antibody: Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.



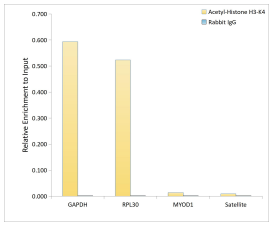
Immunofluorescence analysis of HeLa TSA and HeLa cells using Acetyl-Histone H3-K4 Rabbit mAb (A24340) at dilution of 1:100 (40x lens). Secondary antibody: Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.



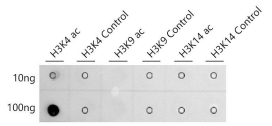
Immunofluorescence analysis of NIH-3T3 TSA and NIH-3T3 cells using Acetyl-Histone H3-K4 Rabbit mAb (A24340) at dilution of 1:100 (40x lens). Secondary antibody: Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.



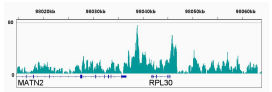
Immunoprecipitation analysis of 600ug extracts of HeLa TSA cells using 5ug Acetyl-Histone H3-K4 Rabbit mAb (A24340). Western blot was performed from the immunoprecipitate using Acetyl-Histone H3-K4 Rabbit mAb (A24340) at a dilition of 1:1000.



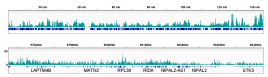
Chromatin immunoprecipitation analysis of extracts of HeLa cells, using Acetyl-Histone H3-K4 Rabbit mAb antibody (A24340) and rabbit IgG.The amount of immunoprecipitated DNA was checked by quantitative PCR. Histogram was constructed by the ratios of the immunoprecipitated DNA to the input.



Dot-blot analysis of all sorts of peptides using Acetyl-Histone H3-K4 Rabbit mAb (A24340) at 1:3000 dilution.



CUT&Tag was performed using the CUT&Tag Assay Kit（pAG-Tn5）V3 for Illumina (RK21513) from 10^5 HeLa cells treated with TSA(18h,1uM) with 1 μg of Acetyl-Histone H3-K4 Rabbit mAb (A24340), followed by incubation with Goat Anti-Rabbit IgG(H+L)(AS070). The results denote the enrichment pattern of Acetyl-Histone H3-K4 around RPL30 gene.



CUT&Tag was performed using the CUT&Tag Assay Kit（pAG-Tn5）V3 for Illumina (RK21513) from 10^5 HeLa cells treated with TSA(18h,1uM) with 1 μg of Acetyl-Histone H3-K4 Rabbit mAb (A24340), followed by incubation with Goat Anti-Rabbit IgG(H+L)(AS070). The CUT&Tag results denote the enrichment pattern of Acetyl-Histone H3-K4 across chromosome 8 (upper panel) and the genomic region encompassing RPL30, a representative gene enriched in Acetyl-Histone H3-K4 (lower panel).