

Phospho-Histone H3-S10 Rabbit mAb

Catalog No.: AP1625 **Recombinant**

Basic Information

Observed MW

17 kDa

Calculated MW

15 kDa

Category

Primary antibody

Applications

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

Cross-Reactivity

Human, Mouse, Rat

CloneNo number

ARC79390

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 - 1:20000

IP 0.5 µg - 4 µg antibody for
400 µg - 600 µg extracts
of whole cells

IF/ICC 1:1000 - 1:5000

IHC-P 1:500 - 1:2000

ChIP 1 µg antibody for 10 µg -
15 µg of Chromatin

ELISA Recommended starting concentration is 1 µg/mL. Please optimize the concentration based on your specific assay requirements. For high-ratio antibody dilutions ($\geq 1:10000$) a sequential dilution method is strongly recommended to ensure measurement accuracy.

Immunogen Information

Gene ID

8290/8350

Swiss Prot

Q16695/P68431

Immunogen

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

Synonyms

H3/A; H3C2; H3C3; H3C4; H3C6; H3C7; H3C8; H3FA; H3C10; H3C11; H3C12; HIST1H3A; H3t; H3.4; H3/g; H3FT; H3C16; HIST3H3

Product Information

Source

Rabbit

Isotype

IgG

Purification

Affinity purification

Storage

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

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

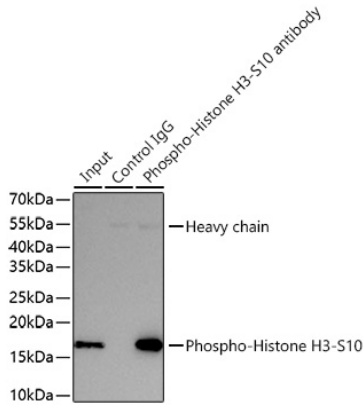
Contact

 | 400-999-6126

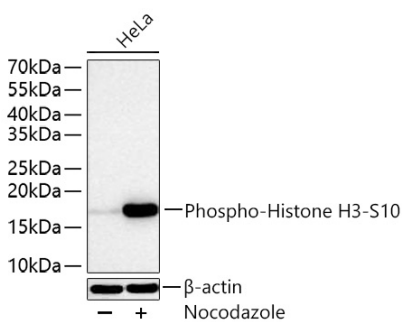
 | cn.market@abclonal.com.cn

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Validation Data



Immunoprecipitation of Phospho-Histone H3-S10 from 600 μ g extracts of HeLa cells treated with Nocodazole (100 ng/mL, 17 h) was performed using 1.5 μ g of Phospho-Histone H3-S10 Rabbit mAb (AP1625). Rabbit Control IgG (AC005) was used to precipitate the Control IgG sample. IP samples were eluted with 1x Laemmli Buffer. The Input lane represents 10% of the total input. Western blot analysis of immunoprecipitates was conducted using Phospho-Histone H3-S10 Rabbit mAb (AP1625) at a dilution of 1:10000.



Western blot analysis of lysates from HeLa cells using Phospho-Histone H3-S10 Rabbit mAb (AP1625) at 1:6000 dilution incubated overnight at 4°C. HeLa cells were treated with Nocodazole (100 ng/mL) at 37°C for 17 hours.

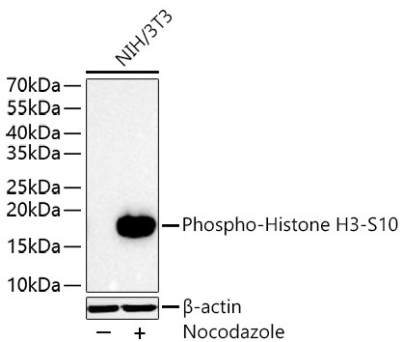
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.

Lysates/proteins: 30 μ g per lane.

Blocking buffer: 3% nonfat dry milk in TBST.

Detection: ECL Basic Kit (RM00020).

Exposure time: 1 s.



Western blot analysis of lysates from NIH/3T3 cells using Phospho-Histone H3-S10 Rabbit mAb (AP1625) at 1:6000 dilution incubated overnight at 4°C. NIH/3T3 cells were treated with Nocodazole (100 ng/mL) at 37°C for 18 hours.

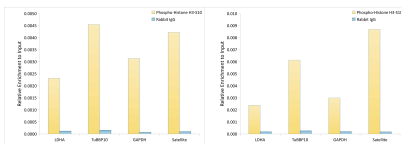
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.

Lysates/proteins: 30 μ g per lane.

Blocking buffer: 3% nonfat dry milk in TBST.

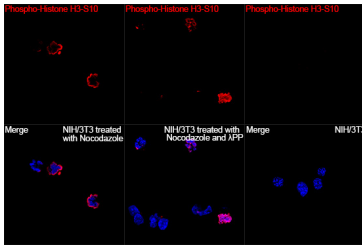
Detection: ECL Basic Kit (RM00020).

Exposure time: 1 s.

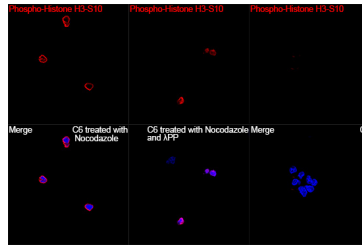


Chromatin immunoprecipitation was performed with 15 μ g of cross-linked chromatin from HeLa cells (left) and HeLa cells were treated with Nocodazole (100 ng/mL, 17 h) (right), using 1 μ g of Phospho-Histone H3-S10 Rabbit mAb (AP1625) and Rabbit IgG isotype control (AC042). The enrichment of immunoprecipitated DNA at different genomic loci was examined by quantitative PCR. The histogram compares the ratio of the immunoprecipitated DNA to the input at given loci.

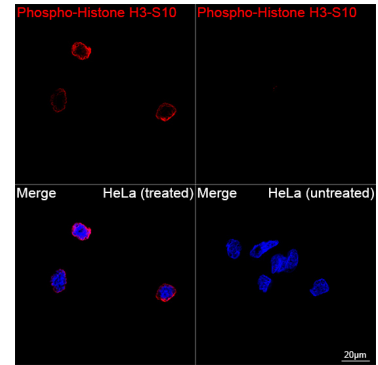
Validation Data



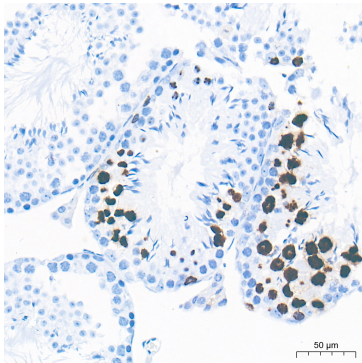
Confocal imaging of NIH/3T3 cells treated with Nocodazole, NIH/3T3 cells treated with Nocodazole and λ pp, and untreated NIH/3T3 cells using Phospho-Histone H3-S10 Rabbit mAb (AP1625, dilution 1:1000) followed by a further incubation with Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). DAPI was used for nuclear staining (Blue). Objective: 100x.



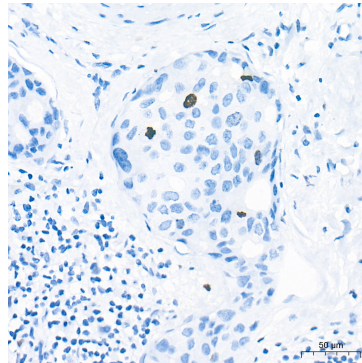
Confocal imaging of C6 cells treated with Nocodazole, C6 cells treated with Nocodazole and λ pp, and untreated C6 cells using Phospho-Histone H3-S10 Rabbit mAb (AP1625, dilution 1:1000) followed by a further incubation with Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). DAPI was used for nuclear staining (Blue). Objective: 100x.



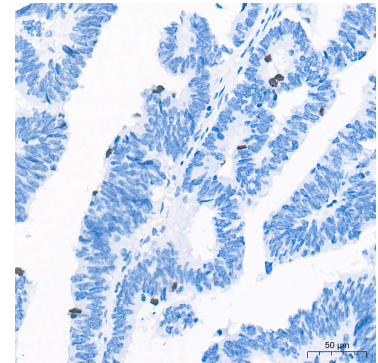
Confocal imaging of HeLa cells (treated with Nocodazole) and HeLa cells (untreated) using Phospho-Histone H3-S10 Rabbit mAb (AP1625, dilution 1:1000) followed by a further incubation with Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). DAPI was used for nuclear staining (Blue). Objective: 100x.



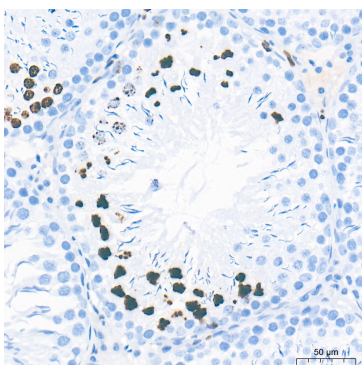
Immunohistochemistry analysis of paraffin-embedded Mouse testis tissue using Phospho-Histone H3-S10 Rabbit mAb (AP1625) at a dilution of 1:2000 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.



Immunohistochemistry analysis of paraffin-embedded Human breast cancer tissue using Phospho-Histone H3-S10 Rabbit mAb (AP1625) at a dilution of 1:2000 (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 Phospho-Histone H3-S10 Rabbit mAb (AP1625) at a dilution of 1:2000 (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 testis tissue using Phospho-Histone H3-S10 Rabbit mAb (AP1625) at a dilution of 1:2000 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.