Anti-Histone H3 (acetyl K18) Antibody [A7B6]

HA600091

Product Type:	Mouse monoclonal IgG1, primary antibodies
Species reactivity:	Human
Applications:	WB, IF-Cell
Molecular Wt:	Predicted band size: 15 kDa
Clone number:	A7B6

Description: Histones are basic nuclear proteins that are responsible for the nucleosome structure of the chromosomal fiber in eukaryotes. Two molecules of each of the four core histones (H2A, H2B, H3, and H4) form an octamer, around which approximately 146 bp of DNA is wrapped in repeating units, called nucleosomes. The linker histone, H1, interacts with linker DNA between nucleosomes and functions in the compaction of chromatin into higher order 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 but instead contain a palindromic termination element. This gene is found in the small histone gene cluster on chromosome 6p22-p21.3.

Immunogen: Synthetic peptide within Human Histone H3 aa 1-50 / 136.

Positive control: Hela treated with TSA cell lysate, Hela, TSA treated Hela.

Subcellular location: Nucleus, Chromosome.

Database links: SwissProt: P68431 Human | P84243 Human | Q16695 Human | Q6NXT2 Human | Q71DI3 Human

Recommended Dilutions:

WB	1:2,000
IF-Cell	1:200

Storage Buffer: PBS (pH7.4), 0.05% BSA, 40% Glycerol. Preservative: 0.05% SodiumAzide.

Storage Instruction: Store at +4℃ after thawing. Aliquot store at -20℃. Avoid repeated freeze / thaw cycles.

Purity: Protein G affinity purified.

Images

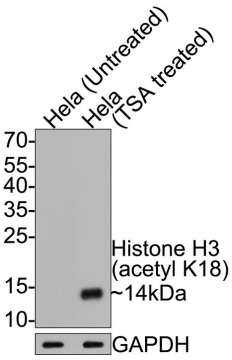

Fig1: Western blot analysis of Histone H3 (acetyl K18) on different lysates with Mouse anti-Histone H3 (acetyl K18) antibody (HA600091) at 1/2,000 dilution.

Lane 1: Hela cell lysate
Lane 2: Hela treated with TSA cell lysate

Lysates/proteins at 10 µg/Lane.

Predicted band size: 15 kDa
Observed band size: 14 kDa

Exposure time: 30 seconds;

15% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDM/TBST for 1 hour at room temperature. The primary antibody (HA600091) at 1/2,000 dilution was used in 5% NFDM/TBST at room temperature for 2 hours. Goat Anti-Mouse IgG - HRP Secondary Antibody (HA1006) at 1:100,000 dilution was used for 1 hour at room temperature.

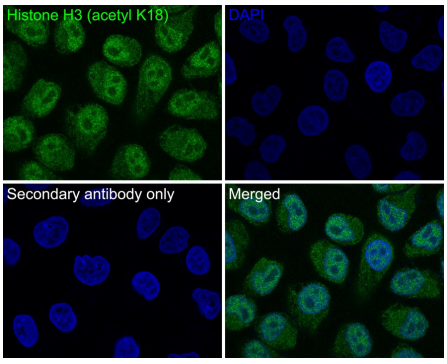

Fig2: Immunocytochemistry analysis of Hela cells labeling Histone H3 (acetyl K18) with Mouse anti-Histone H3 (acetyl K18) antibody (HA600091) at 1/200 dilution.

Cells were fixed in 4% paraformaldehyde for 30 minutes, permeabilized with 0.1% Triton X-100 in PBS for 15 minutes, and then blocked with 2% BSA for 30 minutes at room temperature. Cells were then incubated with Mouse anti-Histone H3 (acetyl K18) antibody (HA600091) at 1/200 dilution in 2% BSA overnight at 4 ℃. Goat Anti-Mouse IgG H&L (iFluor™ 488, HA1125) was used as the secondary antibody at 1/1,000 dilution. PBS instead of the primary antibody was used as the secondary antibody only control. Nuclear DNA was labelled in blue with DAPI.

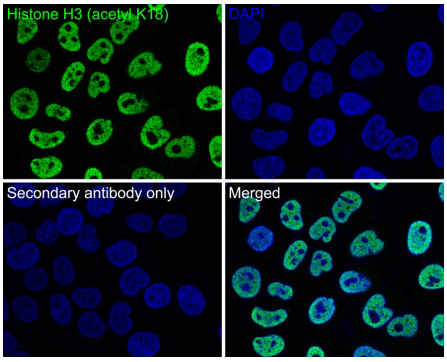

Fig3: Immunocytochemistry analysis of TSA treated Hela cells labeling Histone H3 (acetyl K18) with Mouse anti-Histone H3 (acetyl K18) antibody (HA600091) at 1/200 dilution.

Cells were fixed in 4% paraformaldehyde for 30 minutes, permeabilized with 0.1% Triton X-100 in PBS for 15 minutes, and then blocked with 2% BSA for 30 minutes at room temperature. Cells were then incubated with Mouse anti-Histone H3 (acetyl K18) antibody (HA600091) at 1/200 dilution in 2% BSA overnight at 4 ℃. Goat Anti-Mouse IgG H&L (iFluor™ 488, HA1125) was used as the secondary antibody at 1/1,000 dilution. PBS instead of the primary antibody was used as the secondary antibody only control. Nuclear DNA was labelled in blue with DAPI.

Background References

1. Benard A et al. Nuclear expression of histone deacetylases and their histone modifications predicts clinical outcome in colorectal cancer. Histopathology 66:270-82 (2015).
2. Zhang J et al. SOX4 inhibits GBM cell growth and induces G0/G1 cell cycle arrest through Akt-p53 axis. BMC Neurol 14:207 (2014).