Anti-Acetylated-Lysine Antibody [PSH10-04]

HA723173

Product Type:	Recombinant Rabbit multiclonal IgG, primary antibodies
Species reactivity:	Species independent
Applications:	WB, IHC-P, ChIP, IF-Tissue
Clone number:	PSH10-04

Description: Acetylation of lysine, like phosphorylation of serine, threonine or tyrosine, is an important reversible modification controlling protein activity. The conserved amino-terminal domains of the four core histones (H2A, H2B, H3, and H4) contain lysines that are acetylated by histone acetyltransferases (HATs) and deacetylated by histone deacetylases (HDACs) . Signaling resulting in acetylation/deacetylation of histones, transcription factors, and other proteins affects a diverse array of cellular processes including chromatin structure and gene activity, cell growth, differentiation, and apoptosis. Recent proteomic surveys suggest that acetylation of lysine residues may be a widespread and important form of post-translational protein modification that affects thousands of proteins involved in control of cell cycle and metabolism, longevity, actin polymerization, and nuclear transport.

Immunogen: Synthetic Acetylated lysine-containing peptide.

Positive control: HeLa cell lysate, HeLa treated with 1μM TSA for 18 hours cell lysate, NIH/3T3 cell lysate, NIH/3T3 treated with 400nM TSA for 18 hours cell lysate, C6 cell lysate, C6 treated with 1μM TSA for 18 hours cell lysate, human breast cancer tissue, human colon cancer tissue, mouse liver tissue, rat liver tissue.

Recommended Dilutions:

WB	1:2,000
IHC-P	1:100,000
ChIP	Use 5 μg for 25 μg of chromatin.
IF-Tissue	1:20,000

Storage Buffer: PBS (pH7.4), 0.1% BSA, 40% Glycerol. Preservative: 0.05% Sodium Azide.

Storage Instruction: Shipped at 4℃. Store at +4℃ short term (1-2 weeks). It is recommended to aliquot into single-use upon delivery. Store at -20℃ long term.

Purity: Protein A affinity purified.

Images

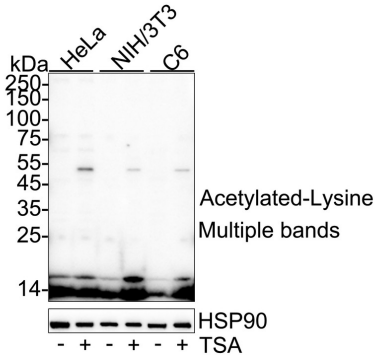

Fig1: Western blot analysis of Acetylated-Lysine on different lysates with Rabbit anti-Acetylated-Lysine antibody (HA723173) at 1/2,000 dilution.

Lane 1: HeLa cell lysate
Lane 2: HeLa treated with 1μM TSA for 18 hours cell lysate
Lane 3: NIH/3T3 cell lysate
Lane 4: NIH/3T3 treated with 400nM TSA for 18 hours cell lysate
Lane 5: C6 cell lysate
Lane 6: C6 treated with 1μM TSA for 18 hours cell lysate

Lysates/proteins at 20 μg/Lane.

Observed band size: Mutiple bands

Exposure time: 59 seconds; ECL: K1801;

4-20% 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 (HA723173) at 1/2,000 dilution was used in 5% NFDM/TBST at 4℃ overnight. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1/50,000 dilution was used for 1 hour at room temperature.

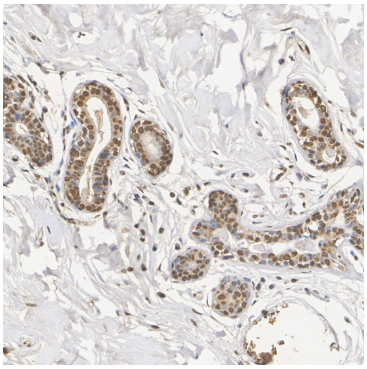

Fig2: Immunohistochemical analysis of paraffin-embedded human breast cancer tissue with Rabbit anti-Acetylated-Lysine antibody (HA723173) at 1/100,000 dilution.

The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0) (high pressure) for 2 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (HA723173) at 1/100,000 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

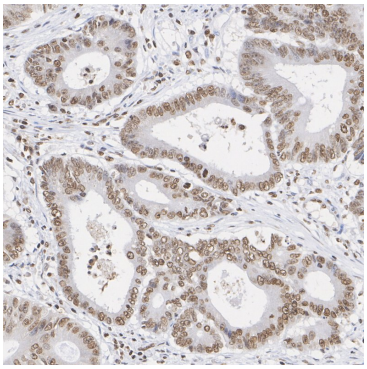

Fig3: Immunohistochemical analysis of paraffin-embedded human colon cancer tissue with Rabbit anti-Acetylated-Lysine antibody (HA723173) at 1/100,000 dilution.

The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0) (high pressure) for 2 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (HA723173) at 1/100,000 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

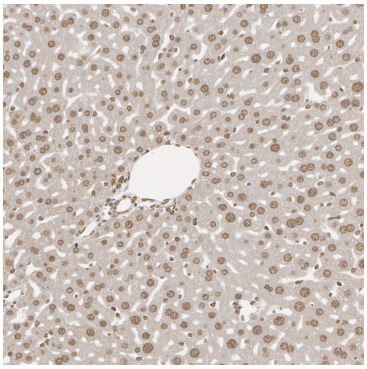

Fig4: Immunohistochemical analysis of paraffin-embedded mouse liver tissue with Rabbit anti-Acetylated-Lysine antibody (HA723173) at 1/100,000 dilution.

The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0) (high pressure) for 2 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (HA723173) at 1/100,000 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

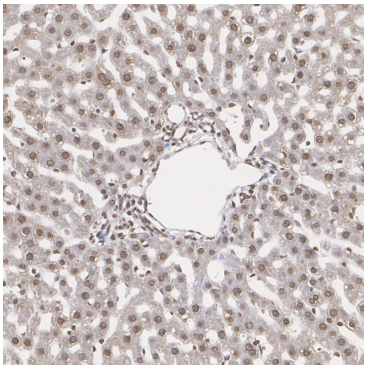

Fig5: Immunohistochemical analysis of paraffin-embedded rat liver tissue with Rabbit anti-Acetylated-Lysine antibody (HA723173) at 1/100,000 dilution.

The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0) (high pressure) for 2 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (HA723173) at 1/100,000 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

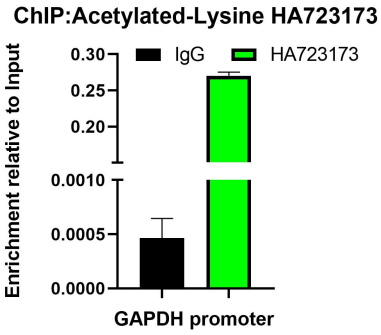

Fig6: Chromatin immunoprecipitations were performed with cross-linked chromatin from HeLa cells with Acetylated-Lysine (HA723173) or Normal Rabbit IgG according to the ChIP protocol. The enriched DNA was quantified by real-time PCR using indicated primers. The amount of immunoprecipitated DNA in each sample is represented as signal relative to the total amount of input chromatin, which is equivalent to one.