

Anti-Lactyl-Histone H3 (K18) Antibody [PSH26-77]

HA724642



Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human, Mouse
Applications:	WB, IP, Dot Blot
Molecular Wt:	Predicted band size: 15 kDa
Clone number:	PSH26-77

Description: Eukaryotic histones are basic and water soluble nuclear proteins that form hetero-octameric nucleosome particles by wrapping 146 base pairs of DNA in a left-handed super-helical turn sequentially to form chromosomal fibers. Two molecules of each of the four core histones (H2A, H2B, H3 and H4) form the octamer, which is comprised of two H2A-H2B dimers and two H3-H4 dimers, forming two nearly symmetrical halves by tertiary structure. Histones are subject to posttranslational modification by enzymes primarily on their N-terminal tails, but also in their globular domains.

Immunogen: Synthetic Lactyl-peptide corresponding to residues surrounding Lys18 of human Histone H3.

Positive control: HeLa (Human cervical adenocarcinoma cell) cell lysate, HeLa treated with 100mM Lactate sodium for 24 hours cell lysate, HT-29 (Human colorectal adenocarcinoma cell) cell lysate, HT-29 treated with 100mM Lactate sodium for 24 hours cell lysate, NIH/3T3 (Mouse fibroblast) cell lysate, NIH/3T3 treated with 100mM Lactate sodium for 24 hours cell lysate.

Subcellular location: Nucleus.

Database links: SwissProt: P68431 Human | P68433 Mouse

Recommended Dilutions:

WB	1:5,000
IP	1-2µg/sample
Dot Blot	1:5,000

Storage Buffer: 1*PBS (pH7.4), 0.1% BSA, 40% Glycerol, 0.2% Proclean 950.

Storage Instruction: Shipped at 4℃. Store at +4℃ short term (1-2 weeks). Store at -20℃ long term.

Purity: Protein A affinity purified.

Hangzhou Huaan Biotechnology Co., Ltd.

Orders:0086-571-88062880

Technical:0086-571-89986345

Service mail:support@huabio.cn

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Applications:WB=Western blot IHC-P=Immunohistochemistry (paraffin) IF-Cell=Immunofluorescence (Cell) IF-Tissue=Immunofluorescence (Tissue) FC=Flow cytometry IP=Immunoprecipitation

Images

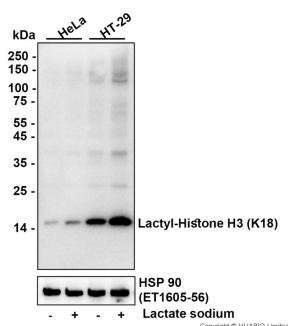


Fig1: Western blot analysis of Lactyl-Histone H3 (K18) on different lysates with Rabbit anti-Lactyl-Histone H3 (K18) antibody (HA724642) at 1/5,000 dilution.

Lane 1: HeLa (Human cervical adenocarcinoma cell) cell lysate
Lane 2: HeLa treated with 100mM Lactate sodium for 24 hours cell lysate

Lane 3: HT-29 (Human colorectal adenocarcinoma cell) cell lysate

Lane 4: HT-29 treated with 100mM Lactate sodium for 24 hours cell lysate

Lysates/proteins at 20 µg/Lane.

Exposure time: 3 minutes; ECL: K1801

Blocking: 5% NFDM/TBST, 1 hour at room temperature

Primary antibody: HA724642, 1/5,000 in primary antibody dilution buffer (K1803), overnight at 4 °C

Secondary antibody: Goat anti-Rabbit IgG-HRP (HA1001), 1/50,000 in 5% NFDM/TBST, 1 hour at room temperature

Predicted band size: 15 kDa

Observed band size: 15 kDa

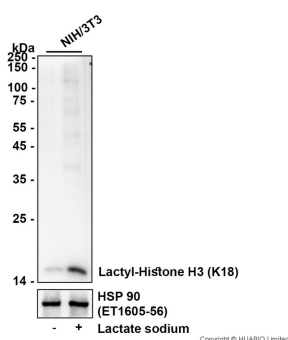


Fig2: Western blot analysis of Lactyl-Histone H3 (K18) on different lysates with Rabbit anti-Lactyl-Histone H3 (K18) antibody (HA724642) at 1/5,000 dilution.

Lane 1: NIH/3T3 (Mouse fibroblast) cell lysate

Lane 2: NIH/3T3 treated with 100mM Lactate sodium for 24 hours cell lysate

Lysates/proteins at 15 µg/Lane.

Exposure time: 42 seconds; ECL: K1801

Blocking: 5% NFDM/TBST, 1 hour at room temperature

Primary antibody: HA724642, 1/5,000 in primary antibody dilution buffer (K1803), overnight at 4 °C

Secondary antibody: Goat anti-Rabbit IgG-HRP (HA1001), 1/50,000 in 5% NFDM/TBST, 1 hour at room temperature

Predicted band size: 15 kDa

Observed band size: 15 kDa

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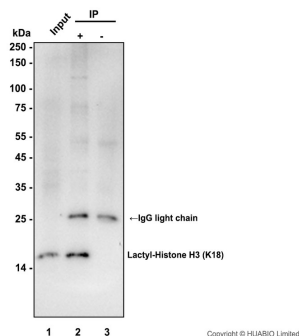
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Fig3: Immunoprecipitation (IP)

Lactyl-Histone H3 (K18) was immunoprecipitated in 0.2 mg HeLa (Human cervix adenocarcinoma epithelial cell) treated with 100mM Lactate sodium for 24 hours cell lysate with HA724642 at 2 µg/10 µl beads. Western blot was performed from the immunoprecipitate using HA724642 at 1/5,000 dilution. Anti-Rabbit IgG for IP, AlpSdAbs® VHH(HRP) (025-100-005) at 1/5,000 dilution was used for 1 hour at room temperature.



Lane 1: HeLa treated with 100mM Lactate sodium for 24 hours cell lysate (input)

Lane 2: HA724642 IP in HeLa treated with 100mM Lactate sodium for 24 hours cell lysate

Lane 3: Rabbit IgG instead of HA724642 in HeLa treated with 100mM Lactate sodium for 24 hours cell lysate

Exposure time: 3 minutes

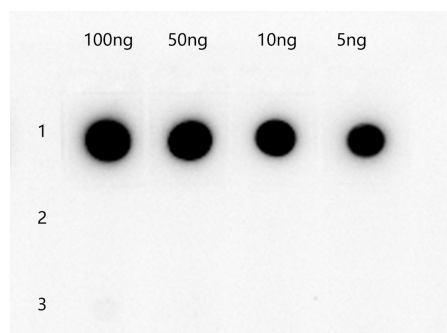
Blocking: 5% NFDM/TBST, 1 hour at room temperature

Primary dilution: HA724642, 1/5,000 in primary antibody dilution buffer (K1803), 2 hours at room temperature

Predicted band size: 15 kDa

Observed band size: 15 kDa

Fig4: Dot blot analysis of Lactyl-Histone H3 (K18) on different peptides with Rabbit anti-Lactyl-Histone H3 (K18) antibody (HA724642) at 1/5,000 dilution.



Lane 1: Lactyl-Histone H3 (Lys18)

Lane 2: Acetyl-Histone H3 (Lys18)

Lane 3: Unmodified Histone H3

Proteins loading: 100ng, 50ng, 10ng, 5ng;

Exposure time: 20 seconds; ECL: K1801

Blocking: 5% NFDM/TBST, 1 hour at room temperature

Primary antibody: HA724642, 1/5,000 in primary antibody dilution buffer (K1803), overnight at 4 °C

Secondary antibody: Goat anti-Rabbit IgG-HRP (HA1001), 1/50,000 in 5% NFDM/TBST, 1 hour at room temperature

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Note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".

Background References

1. Caeiro LD et al. Histone H3 mutations and their impact on genome stability maintenance. Biochem Soc Trans. 2024 Oct
2. Young D et al. The role of histone H3 lysine demethylases in glioblastoma. Cancer Metastasis Rev. 2023 Jun

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