Anti-KAT3B / p300 Antibody [PSH15-30] - BSA and Azide free

HA751552

Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human, Mouse, Rat
Applications:	WB, IHC-P, IF-Cell, FC, IP
Molecular Wt:	Predicted band size: 264 kDa
Clone number:	PSH15-30

Description: Histone acetyltransferase p300 also known as p300 HAT or E1A-associated protein p300 (where E1A = adenovirus early region 1A) also known as EP300 or p300 is an enzyme that, in humans, is encoded by the EP300 gene. It functions as histone acetyltransferase that regulates transcription of genes via chromatin remodeling by allowing histone proteins to wrap DNA less tightly. This enzyme plays an essential role in regulating cell growth and division, prompting cells to mature and assume specialized functions (differentiate), and preventing the growth of cancerous tumors. The p300 protein appears to be critical for normal development before and after birth.

Immunogen: Recombinant protein within human KAT3B / p300 aa 51-350.

Positive control: 293T cell lysate, HeLa cell lysate, human squamous cell lung carcinoma tissue, human colon tissue, mouse colon tissue, rat colon tissue, 293T.

Subcellular location: Cytoplasm, Nucleus, Chromosome.

Database links: SwissProt: Q09472 Human | B2RWS6 Mouse
Entrez Gene: 170915 Rat

Recommended Dilutions:

WB	1:5,000
IHC-P	1:200-1:1,000
IF-Cell	1:100
FC	1:1,000
IP	1-2μg/sample

Storage Buffer: 1*PBS (pH7.4).

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

Purity: Protein A affinity purified.

Images

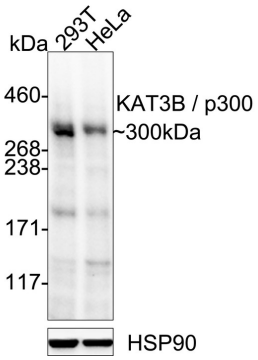

Fig1: Western blot analysis of KAT3B / p300 on different lysates with Rabbit anti-KAT3B / p300 antibody (HA751552) at 1/5,000 dilution.

Lane 1: 293T cell lysate
Lane 2: HeLa cell lysate

Lysates/proteins at 20 µg/Lane.

Predicted band size: 264 kDa
Observed band size: 300 kDa

Exposure time: 3 minutes; 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 (HA751552) at 1/5,000 dilution was used in primary antibody dilution (K1803) at 4℃ overnight. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1/50,000 dilution was used for 1 hour at room temperature.

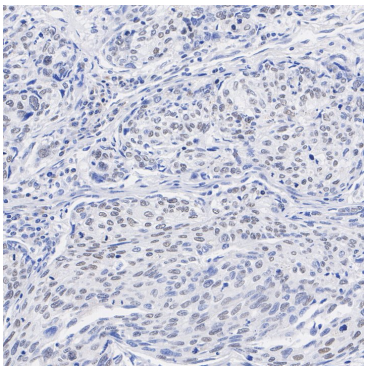

Fig2: Immunohistochemical analysis of paraffin-embedded human squamous cell lung carcinoma tissue with Rabbit anti-KAT3B / p300 antibody (HA751552) at 1/200 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 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 (HA751552) at 1/200 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.

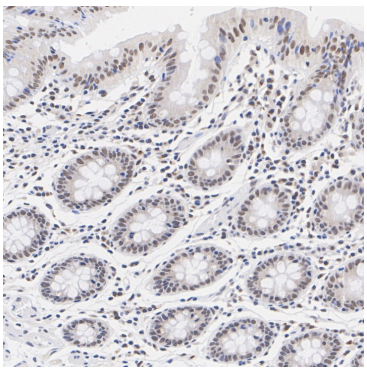

Fig3: Immunohistochemical analysis of paraffin-embedded human colon tissue with Rabbit anti-KAT3B / p300 antibody (HA751552) at 1/200 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 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 (HA751552) at 1/200 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.

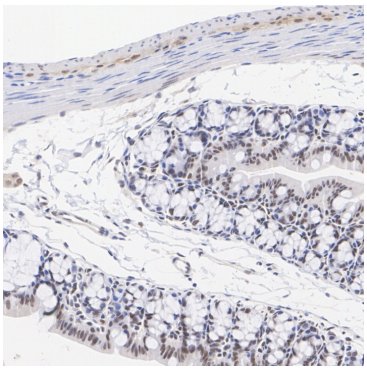

Fig4: Immunohistochemical analysis of paraffin-embedded mouse colon tissue with Rabbit anti-KAT3B / p300 antibody (HA751552) at 1/1,000 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 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 (HA751552) at 1/1,000 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.

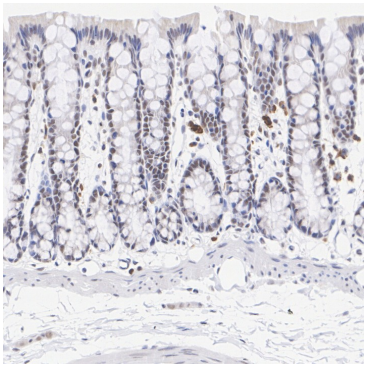

Fig5: Immunohistochemical analysis of paraffin-embedded rat colon tissue with Rabbit anti-KAT3B / p300 antibody (HA751552) at 1/1,000 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 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 (HA751552) at 1/1,000 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.

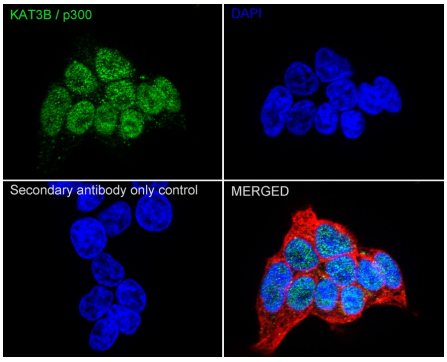

Fig6: Immunocytochemistry analysis of 293T cells labeling KAT3B / p300 with Rabbit anti-KAT3B / p300 antibody (HA751552) at 1/100 dilution.

Cells were fixed in 4% paraformaldehyde for 15 minutes at room temperature, permeabilized with 0.1% Triton X-100 in PBS for 15 minutes at room temperature, then blocked with 1% BSA in 10% negative goat serum for 1 hour at room temperature. Cells were then incubated with Rabbit anti-KAT3B / p300 antibody (HA751552) at 1/100 dilution in 1% BSA in PBST overnight at 4 ℃. Goat Anti-Rabbit IgG H&L (iFluor™ 488, HA1121) 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.

Beta tubulin (HA601187, red) was stained at 1/100 dilution overnight at +4℃. Goat Anti-Mouse IgG H&L (iFluor™ 594, HA1126) was used as the secondary antibody at 1/1,000 dilution.

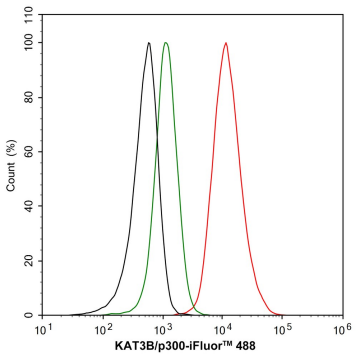

Fig7: Flow cytometric analysis of 293T cells labeling KAT3B / p300.

Cells were fixed and permeabilized. Then stained with the primary antibody (HA751552, 1/1,000) (red) compared with Rabbit IgG Isotype Control (green). After incubation of the primary antibody at +4℃ for an hour, the cells were stained with a iFluor™ 488 conjugate-Goat anti-Rabbit IgG Secondary antibody (HA1121) at 1/1,000 dilution for 30 minutes at +4℃. Unlabelled sample was used as a control (cells without incubation with primary antibody; black).

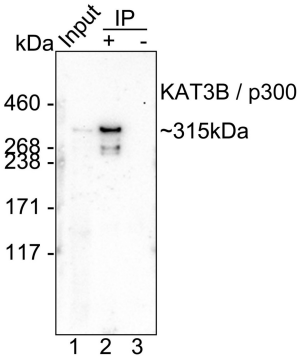

Fig8: KAT3B / p300 was immunoprecipitated from 0.2 mg 293T cell lysate with HA751552 at 2 µg/10 µl beads. Western blot was performed from the immunoprecipitate using HA751552 at 1/5,000 dilution. HRP Conjugated Anti-Rabbit IgG for IP Nano-secondary antibody at 1/5,000 dilution was used for 1 hour at room temperature.

Lane 1: 293T cell lysate (input)
Lane 2: HA751552 IP in 293T cell lysate
Lane 3: Rabbit IgG instead of HA751552 in 293T cell lysate

Blocking/Dilution buffer: primary antibody dilution (K1803)
Exposure time: 3 minutes; ECL: K1802

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

Background References

1. Nicosia L et al. Therapeutic targeting of EP300/CBP by bromodomain inhibition in hematologic malignancies. Cancer Cell. 2023 Dec
2. Durbin AD et al. EP300 Selectively Controls the Enhancer Landscape of MYCN-Amplified Neuroblastoma. Cancer Discov. 2022 Mar