

Anti-KAT3B/p300/EP300 Antibody Picoband®

Catalog Number: A00117

About EP300

E1A binding protein p300 also known as EP300 or p300 is a protein that in humans is encoded by the EP300 gene. The EP300 gene is located on the long (q) arm of the human chromosome 22 at position 13.2. This protein regulates the activity of many genes in tissues throughout the body. It 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 EP300 protein appears to be critical for normal development before and after birth. It carries out its function by activating transcription. In addition, the protein functions as histone acetyltransferase that regulates transcription via chromatin remodeling, and is important in the processes of cell proliferation and differentiation. EP300 also mediates cAMP-gene regulation by binding specifically to phosphorylated CREB protein.

Overview

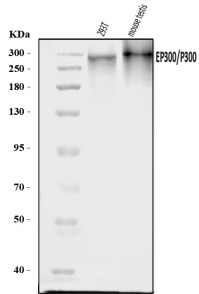
Product Name	Anti-KAT3B/p300/EP300 Antibody Picoband®
Reactive Species	Human, Mouse
Description	Boster Bio Anti-KAT3B/p300/EP300 Antibody Picoband® catalog # A00117. Tested in Flow Cytometry, IF, IHC, ICC, WB applications. This antibody reacts with Human, Mouse. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Application	Flow Cytometry, IF, IHC, ICC, WB
Clonality	Polyclonal
Formulation	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na ₂ HPO ₄ .
Storage Instructions	At -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freezing and thawing.
Host	Rabbit
Uniprot ID	Q09472

Technical Details

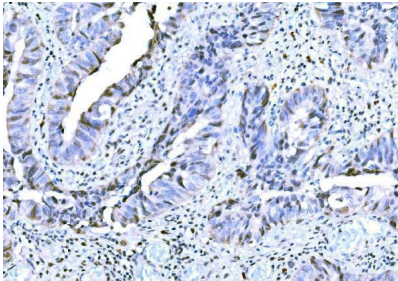
Immunogen	A synthetic peptide corresponding to a sequence in the middle region of human KAT3B/p300/EP300, which shares 76.5% amino acid (aa) sequence identity with mouse EP300.
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (SV0002-1) for IHC(P) and ICC.
Cross Reactivity	No cross-reactivity with other proteins.
Isotype	Rabbit IgG

Form	Lyophilized
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.
Purification	Immunogen affinity purified.
Suggested Dilutions	Western blot, 0.25-0.5 ug/ml, Human, Mouse Immunohistochemistry(Paraffin-embedded Section), 2-5 ug/ml, Human Immunocytochemistry/Immunofluorescence, 5 ug/ml, Human Flow Cytometry (Fixed), 1-3 ug/1x10 ⁶ cells, Human

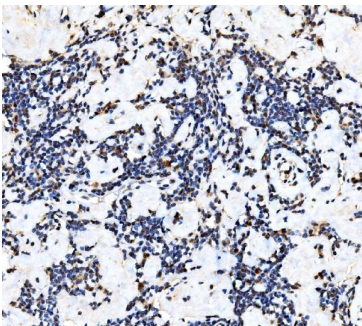
Anti-KAT3B/p300/EP300 Antibody Picoband® (A00117) Images



Western blot analysis of KAT3B/P300/EP300 using anti-KAT3B/P300/EP300 antibody (A00117). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions. Lane 1: human 293T whole cell lysates, Lane 2: mouse testis tissue lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-KAT3B/P300/EP300 antigen affinity purified polyclonal antibody (Catalog # A00117) at 0.5 ug/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for KAT3B/P300/EP300 at approximately 264-300 kDa. The expected band size for KAT3B/P300/EP300 is at 264 kDa.

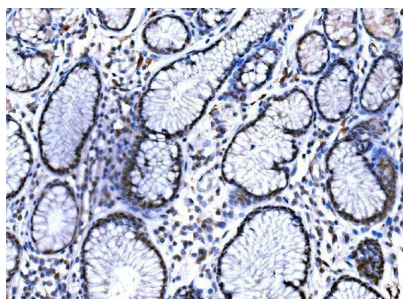


IHC analysis of KAT3B/P300/EP300 using anti-KAT3B/P300/EP300 antibody (A00117). KAT3B/P300/EP300 was detected in a paraffin-embedded section of differentiated adenocarcinoma of the human rectum tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-KAT3B/P300/EP300 Antibody (A00117) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB as the chromogen.

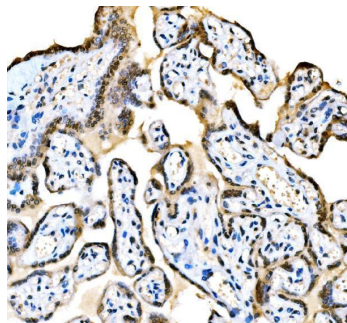


IHC analysis of KAT3B/P300/EP300 using anti-KAT3B/P300/EP300 antibody (A00117). KAT3B/P300/EP300 was detected in a paraffin-embedded section of human classic Hodgkin's lymphoma tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-KAT3B/P300/EP300 Antibody (A00117) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB as the chromogen.

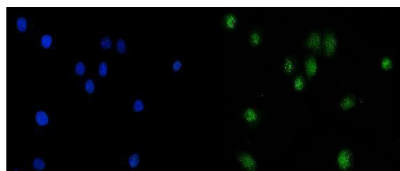
IHC analysis of KAT3B/P300/EP300 using anti-KAT3B/P300/EP300 antibody (A00117). KAT3B/P300/EP300 was detected in a paraffin-embedded section of human



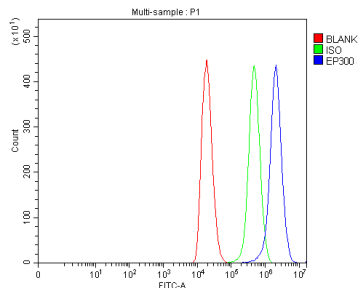
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IHC analysis of KAT3B/P300/EP300 using anti-KAT3B/P300/EP300 antibody (A00117). KAT3B/P300/EP300 was detected in a paraffin-embedded section of human placenta tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-KAT3B/P300/EP300 Antibody (A00117) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB as the chromogen.



IF analysis of KAT3B/P300/EP300 using anti-KAT3B/P300/EP300 antibody (A00117). KAT3B/P300/EP300 was detected in an immunocytochemical section of SiHa cells. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent (AR0022) for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 5 ug/mL rabbit anti-KAT3B/P300/EP300 Antibody (A00117) overnight at 4°C. DyLight®488 Conjugated Goat Anti-Rabbit IgG (BA1127) was used as secondary antibody at 1:100 dilution and incubated for 30 minutes at 37°C. The section was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.



Flow Cytometry analysis of 293T cells using anti-KAT3B/P300/EP300 antibody (A00117). Overlay histogram showing 293T cells stained with A00117 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-KAT3B/P300/EP300 Antibody (A00117, 1 ug/1x10⁶ cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127, 5-10 ug/1x10⁶ cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG (1 ug/1x10⁶) used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.

1. PubMed ID: 10.1007/s11655-011-0693-3, Effect of artemisinin combined with glucocorticoid on the expressions of glucocorticoid receptor alpha mRNA, glucocorticoid receptor beta mRNA and P300/CBP protein in lupus nephritis mice

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Anti-KAT3B/p300/EP300 Antibody

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