

Anti-KAT3B/p300/EP300 Antibody Picoband™

Catalog Number: PB9178

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, Rat
Description	Boster Bio Anti-KAT3B/p300/EP300 Antibody Picoband™ catalog # PB9178. Tested in IHC, WB applications. This antibody reacts with Human, Mouse, Rat.
Application	IHC, WB
Clonality	Polyclonal
Formulation	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg NaN ₃ .
Storage Instructions	Store 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 freeze-thaw cycles.
Host	Rabbit
Uniprot ID	Q09472

Technical Details

Immunogen	E.coli-derived human KAT3B recombinant protein (Position: L2065-H2414). Human KAT3B shares 94% amino acid (aa) sequence identity with mouse KAT3B.
Predicted Reactive Species	Hamster
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).
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	Dilute the sample so that the expected range of concentrations fall within the detection range of this kit. If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples. Some PubMed article(s) citing the expression level of this target are as follows: Boster Bio's internal QC testing used: Immunohistochemistry (Paraffin-embedded Section), 0.5-1ug/ml, Human, Mouse, Rat, By Heat Western blot, 0.1-0.5ug/ml, Human

Anti-KAT3B/p300/EP300 Antibody Picoband™ (PB9178) Images



Figure 1. Western blot analysis of KAT3B/p300 using anti-KAT3B/p300 antibody (PB9178).

Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours.

lane 1: recombinant human kat3b/p300 protein 0.5ng.

After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA 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 antigen affinity purified polyclonal antibody (Catalog # PB9178) 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 1:10000 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 at approximately 50KD. The expected band size for KAT3B/p300 is at 50KD.

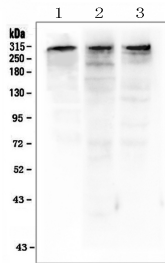


Figure 2. Western blot analysis of KAT3B/p300 using anti-KAT3B/p300 antibody (PB9178).

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 50ug of sample under reducing conditions.

Lane 1: human COLO-320 whole cell lysates,

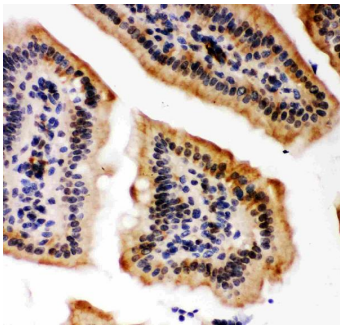
Lane 2: rat PC-12 whole cell lysates,

Lane 3: mouse NIH3T3 whole cell lysates.

After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA 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 antigen affinity purified polyclonal antibody (Catalog # PB9178) 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 1:10000 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 at approximately 300KD. The expected band size for KAT3B/p300 is at 264KD.

Figure 3. IHC analysis of KAT3B/p300 using anti-KAT3B/p300 antibody (PB9178).

KAT3B/p300 was detected in paraffin-embedded section of mouse intestine tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-KAT3B/p300 Antibody (PB9178) 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.

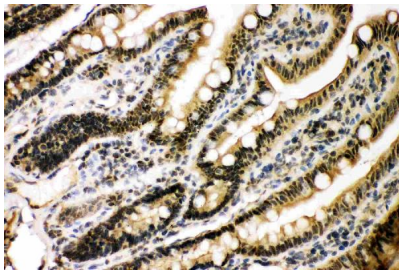


Figure 4. IHC analysis of KAT3B/p300 using anti-KAT3B/p300 antibody (PB9178).

KAT3B/p300 was detected in paraffin-embedded section of rat intestine tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-KAT3B/p300 Antibody (PB9178) 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.

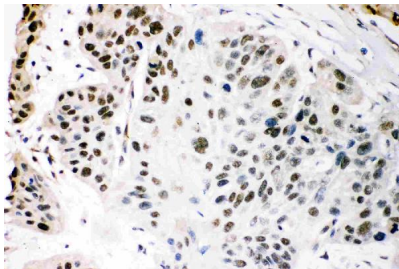


Figure 5. IHC analysis of KAT3B/p300 using anti-KAT3B/p300 antibody (PB9178).

KAT3B/p300 was detected in paraffin-embedded section of human oesophagus squama cancer tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-KAT3B/p300 Antibody (PB9178) 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.

1 Publications Citing This Product

1. PubMed ID: 10.1016/j.scib.2021.01.027, MAFG-AS1/MAFG positive feedback loop contributes to cisplatin resistance in bladder urothelial carcinoma through antagonistic ferroptosis

Visit bosterbio.com/anti-kat3b-p300-picoband-trade-antibody-pb9178-boster.html to see all 1 publications.

Submit a product review to Biocompare.com

Submit a review of this product to Biocompare.com to receive a \$20 Amazon.com giftcard! Your reviews help your fellow scientists make the right decisions. Thank you for your contribution.

