

## Basic Information

Product Name	Anti-EP300 Antibody	
Gene Name	EP300	
Source	Rabbit	
Isotype	IgG	
Species Reactivity	human, mouse, rat	
Tested Application	WB, IHC	
Contents	500 ug/ml antibody with PBS , 0.02% NaN3 , 1 mg BSA and 50% glycerol.	
Immunogen	E.coli-derived human KAT3B recombinant protein (Position: L2065-H2414). Human KAT3B shares 94% amino acid (aa) sequence identity with mouse KAT3B.	
concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	264-300KD	
Dilution Ratios	Western blot(WB): 1:500-2000 Immunohistochemistry in paraffin section (IHC): 1:50-400 (Boiling the paraffin sections in 10mM citrate buffer,pH6.0,or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user.	

## Storage

12 months from date of receipt, -20°C as supplied. 6 months 2 to 8°C after reconstitution. Avoid repeated freezing and thawing.

## Background Information

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.

## Selected Validation Data

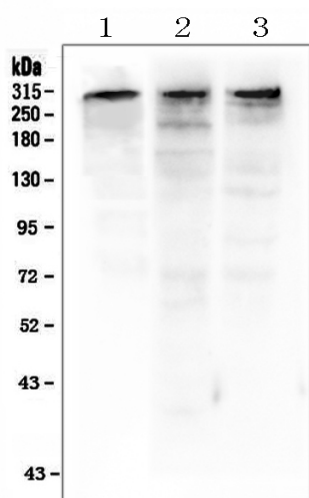


Figure 1. Western blot analysis of KAT3B/p300 using anti-KAT3B/p300 antibody (PB9178). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane 1: human 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 µg/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.

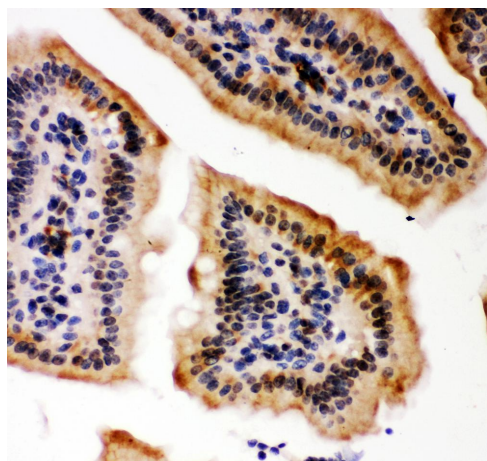


Figure 2. IHC analysis of KAT3B/p300 using anti-KAT3B/p300 antibody (PB9178). KAT3B/p300 was detected in paraffin-embedded section of mouse intestine tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1µg/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.