Rabbit Anti-Nicotinic Acetylcholine Receptor alpha 5/CHRNA5

(100 μg/vial, Lyophilized)

Catalog Number: BPAB2672

FOR RESEARCH USE ONLY

Product Name	Anti-Nicotinic Acetylcholine Receptor alpha 5/CHRNA5 Antibody
Reactive Species	Human, Mouse, Rat
Description	Rabbit IgG polyclonal antibody for CHRNA5 detection. subunit alpha-5(CHRNA5) detection. Tested with WB, IHC-P, IHC-F, ICC, FCM in Human;Mouse;Rat.
Application	Flow Cytometry, IHC, ICC, WB
Clonality	Polyclonal
Formulation	Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na_2HPO_4, 0.05mg NaN_3.
Storage Instructions	At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.
Host	Rabbit
Uniprot ID	P30532
Immunogen	A synthetic peptide corresponding to a sequence of human CHRNA5.
Cross Reactivity	No cross reactivity with other proteins.
Form	Lyophilized
Concentration	Western blot, 0.1-0.5μg/ml, Human, Rat Immunohistochemistry (Frozen Section), 0.5-1μg/ml, Human Immunocytochemistry, 0.5-1μg/ml, Human Flow Cytometry, 1-3μg/1x10^6 cells, Human

Figure 1. Western blot analysis of CHRNA5 using anti-CHRNA5 antibody.
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: rat skeletal muscle tissue lysates,
lane 2: HEPG2 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-CHRNA5 antigen affinity purified polyclonal antibody 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. A specific band was detected for CHRNA5 at approximately 53KD. The expected band size for CHRNA5 is at 53KD.

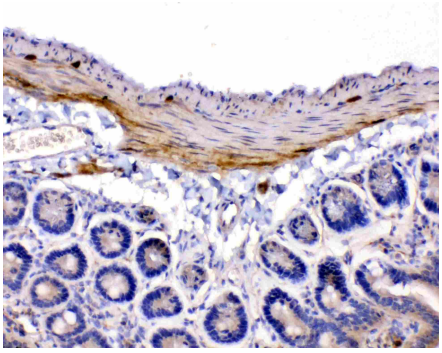

Figure 2. IHC analysis of CHRNA5 using anti-CHRNA5 antibody.
CHRNA5 was detected in paraffin-embedded section of mouse intestine tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1µg/ml antibody 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) with DAB as the chromogen.

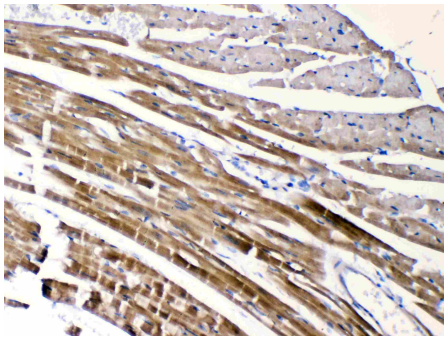

Figure 3. IHC analysis of CHRNA5 using anti-CHRNA5 antibody.
CHRNA5 was detected in paraffin-embedded section of mouse cardiac muscle tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1µg/ml rabbit anti-CHRNA5 Antibody 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-B iotin-Complex (SABC) with DAB as the chromogen.

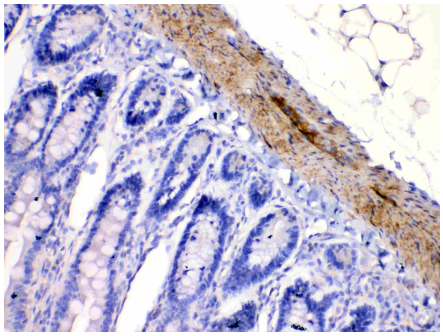

Figure 4. IHC analysis of CHRNA5 using anti-CHRNA5 antibody.
CHRNA5 was detected in paraffin-embedded section of rat intestine tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1µg/ml antibody 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) with DAB as the chromogen.

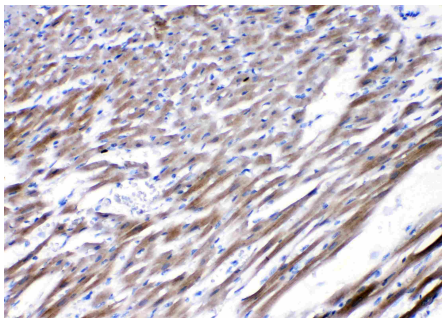

Figure 5. IHC analysis of CHRNA5 using anti-CHRNA5 antibody.
CHRNA5 was detected in paraffin-embedded section of rat cardiac muscle tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1µg/ml antibody 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 Strepavidin-Biotin-Complex (SABC) with DAB as the chromogen.

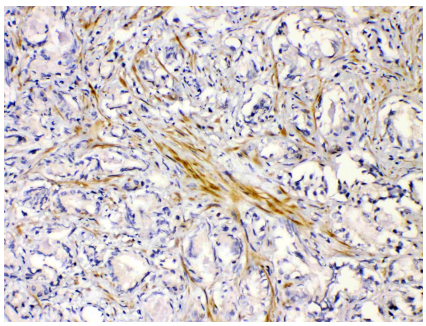

Figure 6. IHC analysis of CHRNA5 using anti-CHRNA5 antibody. CHRNA5 was detected in paraffin-embedded section of human prostatic cancer tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1µg/ml antibody 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) with DAB as the chromogen.

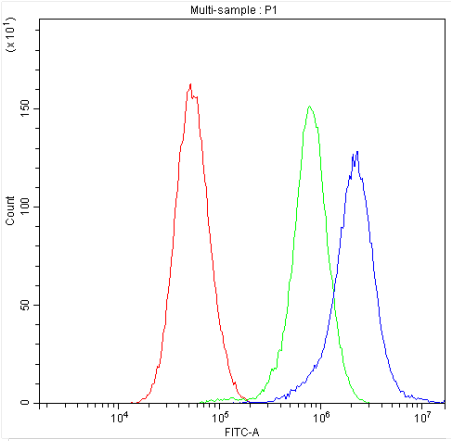

Figure 7. Flow Cytometry analysis of U251 cells using anti-CHRNA5 antibody. Overlay histogram showing U251 cells stained with the antibody (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-CHRNA5 antibody (1µg/1x10⁶ cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (5-10µg/1x10⁶ cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG (1µg/1x10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.

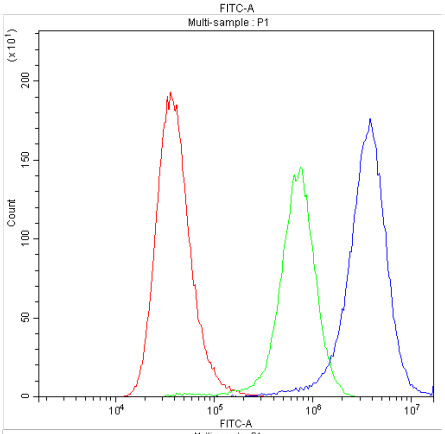

Figure 8. Flow Cytometry analysis of A549 cells using anti-CHRNA5 antibody. Overlay histogram showing A549 cells stained with the antibody (Blue line).The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti CHRNA5 Antibody (1µg/1x10⁶ cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (5-10µg/1x10⁶ cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG (1µg/1x10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.

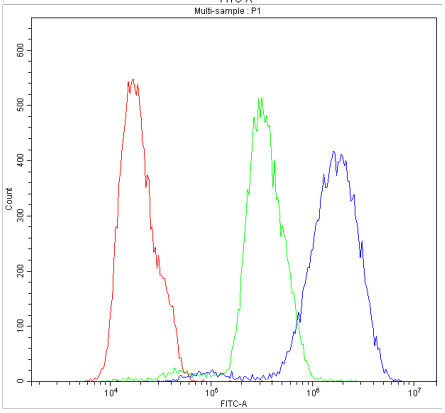

Figure 9. Flow Cytometry analysis of MCF-7 cells using anti-CHRNA5 antibody. Overlay histogram showing MCF-7 cells stained with the antibody (Blue line).The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-CHRNA5 Antibody (1µg/1x10⁶ cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (5-10µg/1x10⁶ cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG (1µg/1x10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.