

Anti-TRPC6 Antibody Picoband®

Catalog Number: PA1754

About TRPC6

Transient receptor potential cation channel, subfamily C, member 6, also known as TRPC6, is a human gene encoding a protein of the same name. The protein encoded by this gene forms a receptor-activated calcium channel in the cell membrane. The channel is activated by diacylglycerol and is thought to be under the control of a phosphatidylinositol second messenger system. Activation of this channel occurs independently of protein kinase C and is not triggered by low levels of intracellular calcium. Defects in this gene are a cause of focal segmental glomerulosclerosis 2 (FSGS2).

Overview

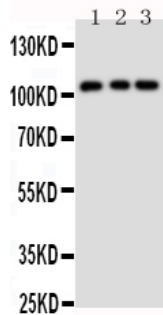
Product Name	Anti-TRPC6 Antibody Picoband®
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-TRPC6 Antibody catalog # PA1754. Tested in IHC, WB applications. This antibody reacts with Human, Mouse, Rat. The brand Picoband indicates this is a premium antibody that guarantees superior quality, 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	IHC, WB
Clonality	Polyclonal
Formulation	Each vial contains antibody formulated with stabilizing components, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg Thimerosal, 0.05mg NaN ₃ . *This antibody is supplied in a stabilized formulation. Compatibility with conjugation reactions depends on the chemistry of the conjugation method used. For conjugation methods that are not compatible with the stabilizing components present in this formulation, a carrier-free antibody format is required.
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	Q9Y210

Technical Details

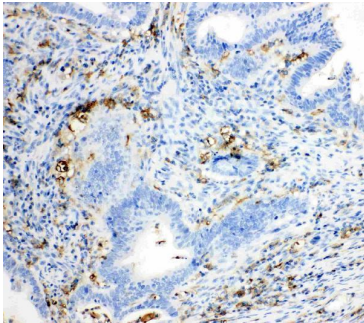
Immunogen	A synthetic peptide corresponding to a sequence in the middle region of human TRPC6, different from the related rat and mouse sequences by three amino acids.
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot, and HRP 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	Immunohistochemistry (Paraffin-embedded Section), 0.5-1ug/ml, Human, Rat, Mouse Western blot, 0.1-0.5ug/ml, Human, Mouse, Rat

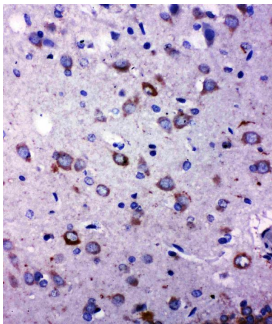
Anti-TRPC6 Antibody Picoband® (PA1754) Images



Western blot analysis of TRPC6 using anti-TRPC6 antibody (PA1754). 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 Lung Tissue Lysate Lane 2: 293T Cell Lysate Lane 3: 293T Cell Lysate 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-TRPC6 antigen affinity purified polyclonal antibody (Catalog # PA1754) 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 TRPC6 at approximately 106-120KD. The expected band size for TRPC6 is at 106KD.

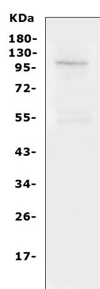


IHC analysis of TRPC6 using anti-TRPC6 antibody (PA1754). TRPC6 was detected in paraffin-embedded section of human intestinal cancer tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-TRPC6 Antibody (PA1754) 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.



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3 Publications Citing This Product

1. PubMed ID: 32844288, Wang Y,Liu L,Tao H,Wen L,Qin S.TRPC6 participates in the development of blood pressure variability increase in sino-aortic denervated rats. Heart Vessels. 2020 Dec;35(12):1755-1765.doi: 10.1007/s00380-020-01682-1.Epub 2020 Aug 25.PMID: 32844288.
2. PubMed ID: 27472391, TRPC1/TRPC3 channels mediate lysophosphatidylcholine-induced apoptosis in cultured human coronary artery smooth muscles cells
3. PubMed ID: 20307499, Sun Yh, Li Yq, Feng Sl, Li Bx, Pan Zw, Xu Cq, Li Tt, Yang Bf. Biochem Biophys Res Commun. 2010 Apr 16;394(4):955-61. Doi: 10.1016/J.Bbrc.2010.03.096. Epub 2010 Mar 20. Calcium-Sensing Receptor Activation Contributed To Apoptosis Stimulates Trpc6 C...

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Anti-TRPC6 Antibody

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