

Anti-PKC alpha/PRKCA Antibody Picoband®

Catalog Number: PB9318

About PRKCA

Protein kinase C (PKC) is the major phorbol ester receptor. Activation of PKC by calcium ions and the second messenger diacylglycerol is thought to play a central role in the induction of cellular responses to a variety of ligand-receptor systems and in the regulation of cellular responsiveness to external stimuli. Three of these, termed alpha, beta and gamma, are highly homologous. PRKCA1 is mapped to 17q22-q23.2. PRKCA1 regulates cardiac contractility and propensity toward heart failure.

Overview

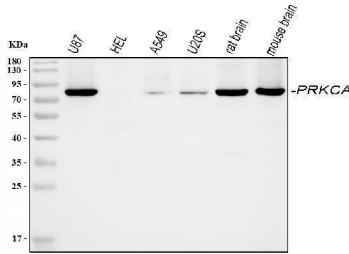
Product Name	Anti-PKC alpha/PRKCA Antibody Picoband®
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-PKC alpha/PRKCA Antibody Picoband® catalog # PB9318. Tested in IHC, WB applications. This antibody reacts with Human, Mouse, Rat. The brand Picoband indicates this is a premium antibody 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, 0.9 mg NaCl, 0.2 mg Na ₂ HPO ₄ , and 0.05 mg 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	P17252

Technical Details

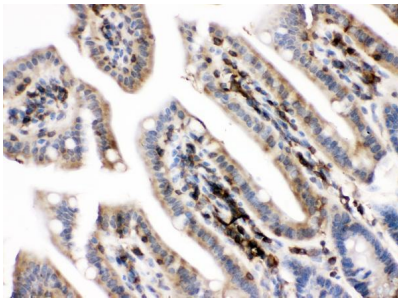
Immunogen	E.coli-derived human PKC alpha recombinant protein (Position: M153-L342). Human PKC alpha shares 97% and 99% amino acid (aa) sequence identity with mouse and rat PKC alpha, respectively.
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) 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	Western blot, 0.1-0.5ug/ml, Human, Mouse, Rat Immunohistochemistry (Paraffin-embedded Section), 0.5-1ug/ml, Human, Mouse, Rat

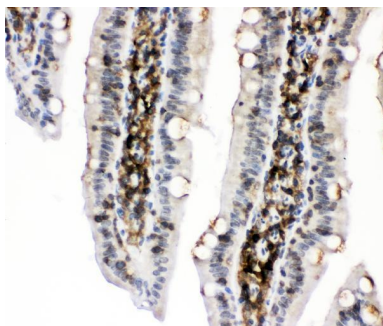
Anti-PKC alpha/PRKCA Antibody Picoband® (PB9318) Images



Western blot analysis of PKC alpha using anti-PKC alpha antibody (PB9318). 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 U87 whole cell lysates, Lane 2: human HEL whole cell lysates, Lane 3: human A549 whole cell lysates, Lane 4: human U20S whole cell lysates, Lane 5: rat brain tissue lysates, Lane 6: mouse brain 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-PKC alpha antigen affinity purified polyclonal antibody (Catalog # PB9318) 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 PKC alpha at approximately 77 kDa. The expected band size for PKC alpha is at 80 kDa.

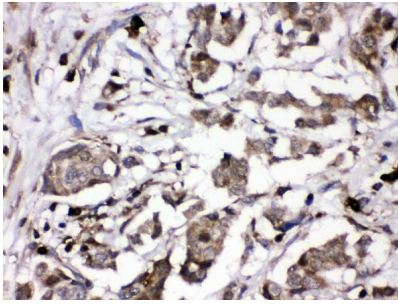


IHC analysis of PKC alpha using anti-PKC alpha antibody (PB9318). PKC alpha was detected in paraffin-embedded section of mouse intestine tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-PKC alpha Antibody (PB9318) 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.

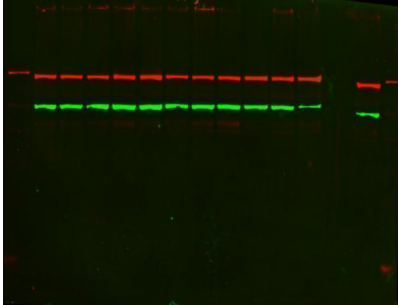


IHC analysis of PKC alpha using anti-PKC alpha antibody (PB9318). PKC alpha was detected in paraffin-embedded section of rat intestine tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-PKC alpha Antibody (PB9318) 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 PKC alpha using anti-PKC alpha antibody (PB9318). PKC alpha was detected in paraffin-embedded section of human mammary 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-PKC alpha Antibody (PB9318) 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.



Western blot analysis of PKC alpha/PRKCA using anti-PKC alpha/PRKCA Antibody (PB9318). 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. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 2.5% BSA on 1X-TBST 1.5 hour at RT. The membrane was incubated with rabbit anti-PKC alpha/PRKCA Antibody (PB9318) at 1:1000 (in 0.5% BSA containing 1X-TBST) and overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a donkey anti-rabbit Ig-Cy5 secondary antibody at a dilution of 1:1000 (in 0.5% BSA containing 1X-TBST) at 25°C for 2 h. The signal is developed using an CyDye. A specific band was detected for PKC alpha/PRKCA at approximately 76 kDa. The expected band size for PKC alpha/PRKCA is at 76 kDa.

8 Publications Citing This Product

1. PubMed ID: 26176219, Molecular Mechanism of the Cell Death Induced by the Histone Deacetylase Pan Inhibitor LBH589 (Panobinostat) in Wilms Tumor Cells
2. PubMed ID: 26279755, Different localization and expression of protein kinase C-beta in kidney cortex of diabetic nephropathy mice and its role in telmisartan treatment
3. PubMed ID: 25646356, Sun D, Li X, Ma M, Liu J, Xu Y, Ye L, Hou H, Wang C, Li X, Jiang Y. Jpn J Clin Oncol. 2015 May;45(5):464-73. Doi: 10.1093/Jjco/Hyv009. Epub 2015 Feb 2. The Predictive Value And Potential Mechanisms Of Mirna-328 And Mirna-378 For Brain Metastases I...

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