

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.
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	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.
Predicted Reactive Species	Bovine
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	<p>Dilute the sample so that the expected range of concentrations fall within the detection range of this kit.</p> <p>If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples.</p> <p>Some PubMed article(s) citing the expression level of this target are as follows:</p> <p>Boster Bio's internal QC testing used:</p> <p>Western blot, 0.1-0.5ug/ml, Human, Mouse, Rat</p> <p>Immunohistochemistry (Paraffin-embedded Section), 0.5-1ug/ml, Human, Mouse, Rat, By Heat</p>

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

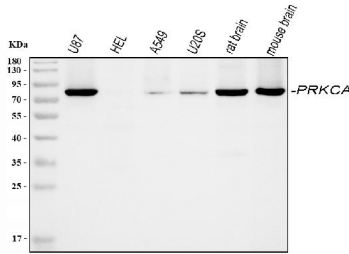


Figure 1. Western blot analysis of PKC alpha using anti-PKC alpha antibody (PB9318). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

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.

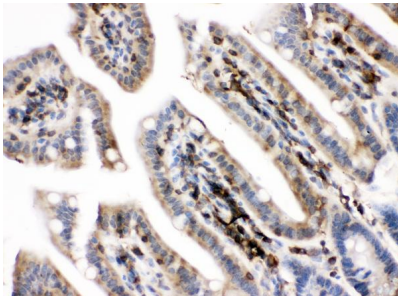


Figure 2. IHC analysis of PKC alpha using anti-PKC alpha antibody (PB9318).

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.

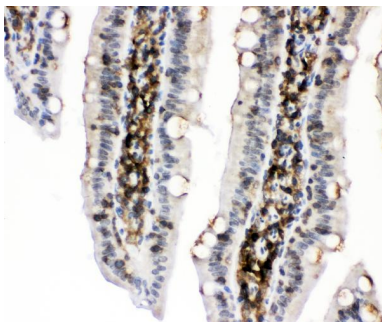


Figure 3. IHC analysis of PKC alpha using anti-PKC alpha antibody (PB9318).

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.

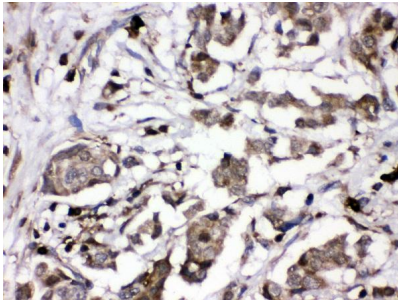


Figure 4. IHC analysis of PKC alpha using anti-PKC alpha antibody (PB9318).

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.

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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