

Anti-PKC Eta Picoband Antibody
Catalog # ABO12243**Specification**

Anti-PKC Eta Picoband Antibody - Product Information

Application	WB
Primary Accession	P24723
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Format	Lyophilized

Description

Rabbit IgG polyclonal antibody for Protein kinase C eta type (PRKCH) detection. Tested with WB in Human.

Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-PKC Eta Picoband Antibody - Additional Information

Gene ID 5583

Other Names

Protein kinase C eta type, 2.7.11.13, PKC-L, nPKC-eta, PRKCH, PKCL, PRKCL

Calculated MW

77828 MW KDa

Application Details

Western blot, 0.1-0.5 µg/ml, Human

Subcellular Localization

Cytoplasm .

Tissue Specificity

Most abundant in lung, less in heart and skin. .

Protein Name

Protein kinase C eta type

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na₂HPO₄, 0.05mg Na₃.

Immunogen

E.coli-derived human PKC eta recombinant protein (Position: R30-D389). Human PKC eta shares 96.7% and 96.1% amino acid (aa) sequence identity with mouse and rat PKC eta, respectively.

Purification

Immunogen affinity purified.

Cross Reactivity

No cross reactivity with other proteins

Storage

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.

Sequence Similarities

Belongs to the protein kinase superfamily. AGC Ser/Thr protein kinase family. PKC subfamily.

Anti-PKC Eta Picoband Antibody - Protein Information

Name PRKCH

Synonyms PKCL, PRKCL

Function

Calcium-independent, phospholipid- and diacylglycerol (DAG)- dependent serine/threonine-protein kinase that is involved in the regulation of cell differentiation in keratinocytes and pre-B cell receptor, mediates regulation of epithelial tight junction integrity and foam cell formation, and is required for glioblastoma proliferation and apoptosis prevention in MCF-7 cells. In keratinocytes, binds and activates the tyrosine kinase FYN, which in turn blocks epidermal growth factor receptor (EGFR) signaling and leads to keratinocyte growth arrest and differentiation. Associates with the cyclin CCNE1- CDK2-CDKN1B complex and inhibits CDK2 kinase activity, leading to RB1 dephosphorylation and thereby G1 arrest in keratinocytes. In association with RALA activates actin depolymerization, which is necessary for keratinocyte differentiation. In the pre-B cell receptor signaling, functions downstream of BLNK by up-regulating IRF4, which in turn activates L chain gene rearrangement. Regulates epithelial tight junctions (TJs) by phosphorylating occludin (OCLN) on threonine residues, which is necessary for the assembly and maintenance of TJs. In association with PLD2 and via TLR4 signaling, is involved in lipopolysaccharide (LPS)-induced RGS2 down-regulation and foam cell formation. Upon PMA stimulation, mediates glioblastoma cell proliferation by activating the mTOR pathway, the PI3K/AKT pathway and the ERK1-dependent phosphorylation of ELK1. Involved in the protection of glioblastoma cells from irradiation-induced apoptosis by preventing caspase-9 activation. In camptothecin-treated MCF-7 cells, regulates NF-kappa-B upstream signaling by activating IKBKB, and confers protection against DNA damage-induced apoptosis. Promotes oncogenic functions of ATF2 in the nucleus while blocking its apoptotic function at mitochondria. Phosphorylates ATF2 which promotes its nuclear retention and transcriptional activity and negatively regulates its mitochondrial localization.

Cellular Location

Cytoplasm.

Tissue Location

Most abundant in lung, less in heart and skin.

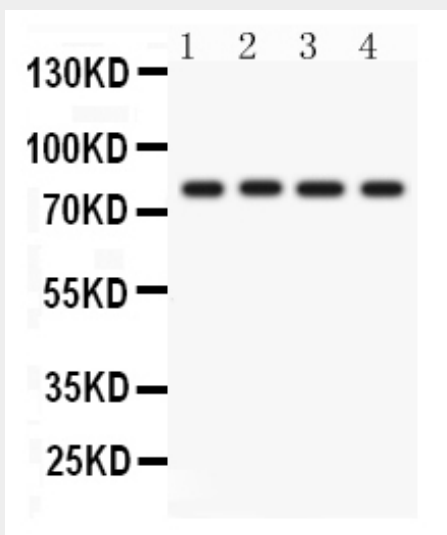
Anti-PKC Eta Picoband Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)

- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-PKC Eta Picoband Antibody - Images



Anti- PKC eta Picoband antibody, ABO12243, Western blotting All lanes: Anti PKC eta (ABO12243) at 0.5ug/ml Lane 1: A431 Whole Cell Lysate at 40ug Lane 2: A549 Whole Cell Lysate at 40ug Lane 3: HELA Whole Cell Lysate at 40ug Lane 4: SKOV Whole Cell Lysate at 40ug Predicted bind size: 78KD Observed bind size: 78KD

Anti-PKC Eta Picoband Antibody - Background

PRKCH is also known as PKC eta. Protein kinase C (PKC) is a family of serine- and threonine-specific protein kinases that can be activated by calcium and the second messenger diacylglycerol. PKC family members phosphorylate a wide variety of protein targets and are known to be involved in diverse cellular signaling pathways. Also, PKC family members serve as major receptors for phorbol esters, a class of tumor promoters. Each member of the PKC family has a specific expression profile and is believed to play a distinct role in cells. The protein encoded by this gene is one of the PKC family members. It is a calcium-independent and phospholipids-dependent protein kinase. And it is predominantly expressed in epithelial tissues and has been shown to reside specifically in the cell nucleus. This protein kinase can regulate keratinocyte differentiation by activating the MAP kinase MAPK13 (p38delta)-activated protein kinase cascade that targets CCAAT/enhancer-binding protein alpha (CEBPA). It is also found to mediate the transcription activation of the transglutaminase 1 (TGM1) gene.