

## PKC eta Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP7020a

## **Specification**

# PKC eta Antibody (N-term) - Product Information

Application
Primary Accession
Reactivity
Host
Clonality
Isotype
Antigen Region

WB, IHC-P,E
P24723
Human
Rabbit
Polyclonal
Rabbit IgG
Antigen Region

210-239

# PKC eta Antibody (N-term) - Additional Information

## **Gene ID 5583**

#### **Other Names**

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

## Target/Specificity

This PKC eta antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 210-239 amino acids from the N-terminal region of human PKC eta.

## **Dilution**

WB~~1:1000 IHC-P~~N/A

E~~Use at an assay dependent concentration.

## **Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

#### Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

#### **Precautions**

PKC eta Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

# PKC eta Antibody (N-term) - 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.

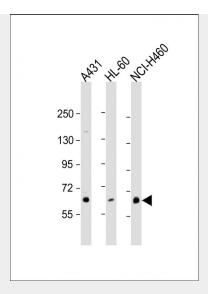
## PKC eta Antibody (N-term) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# PKC eta Antibody (N-term) - Images





All lanes : Anti-PKC eta Antibody (N-term) at 1:1000 dilution Lane 1: A431 whole cell lysate Lane 2: HL-60 whole cell lysate Lane 3: NCI-H460 whole cell lysate Lysates/proteins at 20  $\mu$ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 78 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

# PKC eta Antibody (N-term) - Background

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. PKC family members also 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. PKC eta is one of the PKC family members. This protein is most abundant in lung, less in heart and skin.

# PKC eta Antibody (N-term) - References

Palmer, R.H., et al., FEBS Lett. 356(1):5-8 (1994). Bacher, N., et al., Mol. Cell. Biol. 11(1):126-133 (1991). Bacher, N., et al., Mol. Cell. Biol. 12 (3), 1404 (1992).