

## **Mouse Prkch Antibody (Center)**

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP14631C

## **Specification**

## Mouse Prkch Antibody (Center) - Product Information

**Application** IHC-P, WB,E Primary Accession P23298 Other Accession Q64617 Reactivity Mouse Predicted Rat Host Rabbit Clonality **Polyclonal** Isotype Rabbit IgG Calculated MW 77919 Antigen Region 314-341

# Mouse Prkch Antibody (Center) - Additional Information

#### **Gene ID** 18755

#### **Other Names**

Protein kinase C eta type, PKC-L, nPKC-eta, Prkch, Pkch

#### Target/Specificity

This Mouse Prkch antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 314-341 amino acids from the Central region of mouse Prkch.

### **Dilution**

IHC-P~~1:10~50 WB~~1:1000

E~~Use at an assay dependent concentration.

### **Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

## **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**

Mouse Prkch Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

## Mouse Prkch Antibody (Center) - Protein Information

## Name Prkch



## **Synonyms** Pkch

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. Note=Associates with cell membrane during keratinocytes differentiation

#### **Tissue Location**

Predominantly expressed in lung and skin.

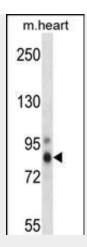
## **Mouse Prkch Antibody (Center) - Protocols**

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

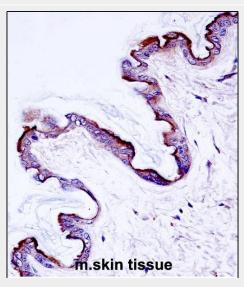
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# Mouse Prkch Antibody (Center) - Images





Mouse Prkch Antibody (Center) (Cat. #AP14631c) western blot analysis in mouse heart tissue lysates (35ug/lane). This demonstrates the Prkch antibody detected the Prkch protein (arrow).



Mouse Prkch Antibody (Center) (AP14631c)immunohistochemistry analysis in formalin fixed and paraffin embedded mouse skin tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of Mouse Prkch Antibody (Center) for immunohistochemistry. Clinical relevance has not been evaluated.

## Mouse Prkch Antibody (Center) - Background

This is calcium-independent, phospholipid-dependent, serine-and threonine-specific enzyme. PKC is activated by diacylglycerol which in turn phosphorylates a range of cellular proteins. PKC also serves as the receptor for phorbol esters, a class of tumor promoters.