

PKC θ Polyclonal Antibody

Catalog No: YT3767

Reactivity: Human; Mouse; Rat

Applications: WB;IHC;IF;ELISA

Target: PKC θ

Fields: >>NF-kappa B signaling pathway;>>Autophagy - animal;>>Vascular smooth

muscle contraction;>>Th1 and Th2 cell differentiation;>>Th17 cell

differentiation;>>T cell receptor signaling pathway;>>Inflammatory mediator regulation of TRP channels;>>Adipocytokine signaling pathway;>>Insulin resistance;>>Shigellosis;>>PD-L1 expression and PD-1 checkpoint pathway in

cancer

Gene Name: PRKCQ

Protein Name: Protein kinase C theta type

Q04759

Q02111

Human Gene ld: 5588

Human Swiss Prot

No:

Mouse Gene ld: 18761

Mouse Swiss Prot

No:

Rat Swiss Prot No: Q9WTQ0

Immunogen: The antiserum was produced against synthesized peptide derived from human

PKC thet. AA range:504-553

Specificity: PKC θ Polyclonal Antibody detects endogenous levels of PKC θ protein.

Formulation : Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source : Polyclonal, Rabbit, lgG

1/3



Dilution : WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:20000.. IF 1:50-200

Purification: The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band: 78kD

Cell Pathway: Regulation_Microtubule; Regulation of Actin Dynamics; Stem cell pathway;

Insulin Receptor; NF_kappaB; B Cell Receptor; AMPK

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. The protein encoded by this gene is one of the PKC family members. It is a calcium-independent and phospholipid-dependent protein kinase. This kinase is important for T-cell activation. It is required for the activation of the transcription factors NF-kappaB and AP-1, and may link the T

cell receptor (TCR) signaling complex to the activation of the transcription factors.

[provided by RefSeq, Jul 2008],

Function: catalytic activity:ATP + a protein = ADP + a

phosphoprotein.,cofactor:Magnesium.,domain:The C1 domain, containing the phorbol ester/DAG-type region 1 (C1A) and 2 (C1B), is the diacylglycerol sensor and the C2 domain is a non-calcium binding domain.,enzyme regulation:Three specific sites; Thr-538 (activation loop of the kinase domain), Ser-676 (turn motif)

and Ser-695 (hydrophobic region), need to be phosphorylated for its full activation.,function: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., function: This is a calcium-

independent, phospholipid-dependent, serine- and threonine-specific enzyme. Essential for T-cell receptor (TCR)-mediated T-cell activation, but is dispensable during TCR-dependent thymocyte development. Links the TCR signaling complex

to the activ

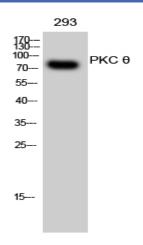
Subcellular Location:

Cytoplasm. Cell membrane; Peripheral membrane protein. In resting T-cells, mostly localized in cytoplasm. In response to TCR stimulation, associates with

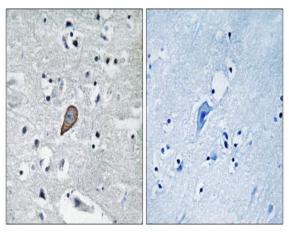
lipid rafts and then localizes in the immunological synapse.

Expression : Expressed in skeletal muscle, T-cells, megakaryoblastic cells and platelets.

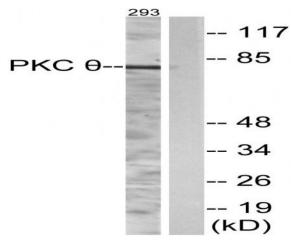
Products Images



Western Blot analysis of 293 cells using PKC θ Polyclonal Antibody



Immunohistochemistry analysis of paraffin-embedded human brain carcinoma tissue, using PKC thet Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of lysates from 293 cells, using PKC thet Antibody. The lane on the right is blocked with the synthesized peptide.