

PKC δ (phospho Tyr52) Polyclonal Antibody

Catalog No: YP0908

Reactivity: Human; Mouse; Rat

Applications: WB;IHC;IF;ELISA

Target: PKC δ

Fields: >>Chemokine signaling pathway;>>Autophagy - animal;>>Vascular smooth

muscle contraction;>>NOD-like receptor signaling pathway;>>C-type lectin

receptor signaling pathway;>>Fc gamma R-mediated

phagocytosis;>>Neurotrophin signaling pathway;>>Inflammatory mediator regulation of TRP channels;>>GnRH signaling pathway;>>Estrogen signaling pathway;>>Type II diabetes mellitus;>>Insulin resistance;>>AGE-RAGE signaling pathway in diabetic complications;>>Prion disease;>>Shigellosis;>>Chemical

carcinogenesis - reactive oxygen species;>>Diabetic cardiomyopathy

Gene Name: PRKCD

Protein Name: Protein kinase C delta type

Q05655

P28867

Human Gene Id: 5580

Human Swiss Prot

No:

Mouse Gene Id: 18753

Mouse Swiss Prot

No:

Rat Gene Id: 170538

Rat Swiss Prot No: P09215

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

PKC delta around the phosphorylation site of Tyr52. AA range:18-67

Specificity: Phospho-PKC δ (Y52) Polyclonal Antibody detects endogenous levels of PKC δ

protein only when phosphorylated at Y52.



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

Source: Polyclonal, Rabbit, IgG

Dilution: WB 1:500 - 1:2000. IHC 1:100 - 1:300. IF 1:200 - 1:1000. ELISA: 1:40000. Not

yet tested in other applications.

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: 77kD

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

Insulin Receptor; 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 distinct roles in cells. The protein encoded by this gene is one of the PKC family members. Studies both in human and mice demonstrate that this kinase is involved in B cell signaling and in the regulation of growth, apoptosis, and differentiation of a variety of cell types. Alternatively spliced

transcript variants encoding the same protein have been observed. [provided by

RefSeq, Jul 2008],

Function: catalytic activity:ATP + a protein = ADP + a phosphoprotein.,domain:The C1

domain, containing the phorbol ester/DAG-type region 1 (C1A) and 2 (C1B), is the diacylglycerol sensor.,domain:The C2 domain is a non-calcium binding domain. It binds proteins containing phosphotyrosine in a sequence-specific manner.,enzyme regulation:Three specific sites; Thr-507 (activation loop of the kinase domain), Ser-645 (turn motif) and Ser-664 (hydrophobic region), need to be phosphorylated for its full activation.,function: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. May play a role in antigen-dependent control of B-cell function. Phosphorylates MUC1

in the C-terminal and regulates the i

Subcellular Cytoplasm . Cytoplasm , perinuclear region . Nucleus . Cell membrane ;

Peripheral membrane protein . Mitochondrion . Endomembrane system .

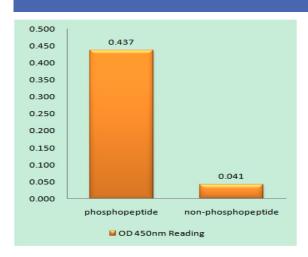


Location:

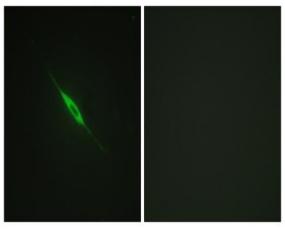
Translocates to the mitochondria upon apoptotic stimulation. Upon activation, translocates to the plasma membrane followed by partial location to the endolysosomes (PubMed:17303575).

Expression: Epithelium, Hippocampus, Liver, Platelet, Skin,

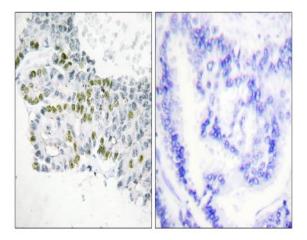
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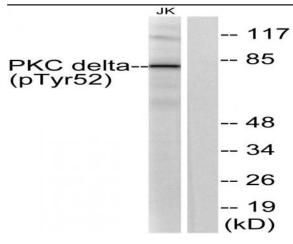
Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using PKC delta (Phospho-Tyr52) Antibody



Immunofluorescence analysis of NIH/3T3 cells, using PKC delta (Phospho-Tyr52) Antibody. The picture on the right is blocked with the phospho peptide.



Immunohistochemistry analysis of paraffin-embedded human lung carcinoma, using PKC delta (Phospho-Tyr52) Antibody. The picture on the right is blocked with the phospho peptide.



Western blot analysis of lysates from Jurkat cells treated with starved 24h, using PKC delta (Phospho-Tyr52) Antibody. The lane on the right is blocked with the phospho peptide.