

## PKC δ (phospho Tyr64) Polyclonal Antibody

Catalog No: YP0433

**Reactivity:** Human; Mouse; Rat

**Applications:** WB;IHC

**Target:** PKC  $\delta$ 

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

PKCD around the phosphorylation site of Tyr64. AA range:30-79

**Specificity:** Phospho-PKC δ (Y64) Polyclonal Antibody detects endogenous levels of PKC δ

protein only when phosphorylated at Y64.



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

Source : Polyclonal, Rabbit,IgG

**Dilution:** WB 1:500-2000;IHC 1:50-300

**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 Location:

Cytoplasm . Cytoplasm, perinuclear region . Nucleus . Cell membrane ; Peripheral membrane protein . Mitochondrion . Endomembrane system . Translocates to the mitochondria upon apoptotic stimulation. Upon activation,

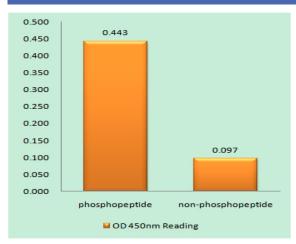
2/3



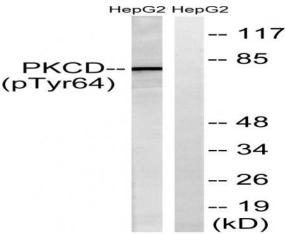
translocates to the plasma membrane followed by partial location to the endolysosomes (PubMed:17303575).

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

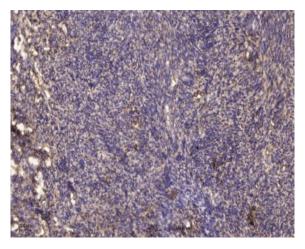
## **Products Images**



Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using PKCD (Phospho-Tyr64) Antibody



Western blot analysis of lysates from HepG2 cells treated with PMA 125ng/ml 30', using PKCD (Phospho-Tyr64) Antibody. The lane on the right is blocked with the phospho peptide.



Immunohistochemical analysis of paraffin-embedded human uterus. 1, Antibody was diluted at 1:200(4° overnight). 2, Tris-EDTA,pH9.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 45min).