PKC δ (phospho Tyr313) Polyclonal Antibody

Catalog No :	YP0704
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
Human Gene Id :	5580
Human Swiss Prot No :	Q05655
Mouse Gene Id :	18753
Mouse Swiss Prot No :	P28867
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 Tyr313. AA range:279-328
Specificity :	Phospho-PKC δ (Y313) Polyclonal Antibody detects endogenous levels of PKC δ protein only when phosphorylated at Y313.

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: 1:10000. 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 : 78kD

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],

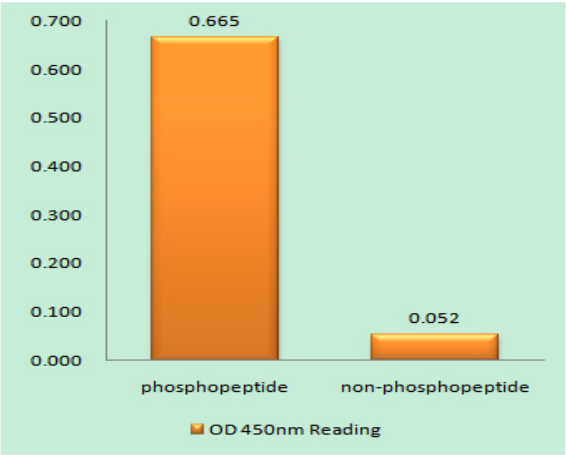
Function : catalytic activity:ATP + a protein = ADP + a phosphoprotein.,domain:The C1 domain, containing the phorbol ester/DAG-type region 1 (C1A) and 2 (C1B), is the diacylglycerol sensor.,domain:The C2 domain is a non-calcium binding domain. It binds proteins containing phosphotyrosine in a sequence-specific 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 .

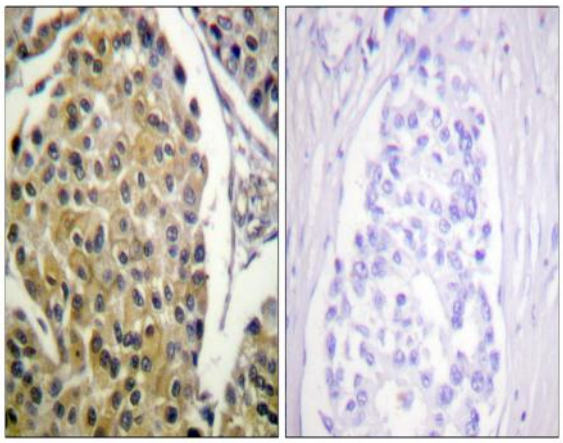
Location : Translocates to the mitochondria upon apoptotic stimulation. Upon activation, translocates to the plasma membrane followed by partial location to the endolysosomes (PubMed:17303575). .

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

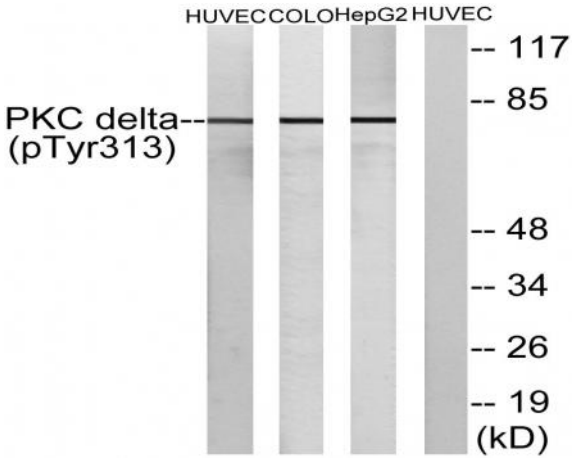
Products Images



Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using PKC delta (Phospho-Tyr313) Antibody



Immunohistochemistry analysis of paraffin-embedded human breast carcinoma, using PKC delta (Phospho-Tyr313) Antibody. The picture on the right is blocked with the phospho peptide.



Western blot analysis of lysates from HepG2 cells, COLO205 cells and HUVEC cells, using PKC delta (Phospho-Tyr313) Antibody. The lane on the right is blocked with the phospho peptide.