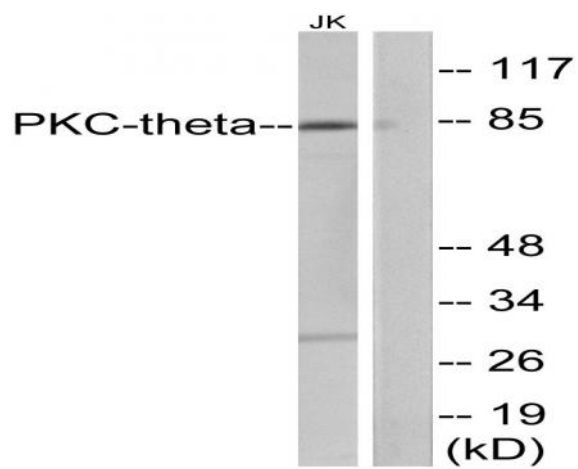


PKC θ Polyclonal Antibody

Catalog No :	YT3768
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
Human Gene Id :	5588
Human Swiss Prot No :	Q04759
Mouse Gene Id :	18761
Mouse Swiss Prot No :	Q02111
Rat Swiss Prot No :	Q9WTQ0
Immunogen :	The antiserum was produced against synthesized peptide derived from human PKC thet. AA range:643-692
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,IgG

Dilution :	WB 1:500 - 1:2000. IHC 1:100 - 1:300. IF 1:200 - 1:1000. ELISA: 1:20000. 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 :	82kD
Cell Pathway :	Regulation_Microtubule; Regulation of Actin Dynamics; Stem cell pathway; Insulin Receptor; NF_kappaB; B Cell Receptor; AMPK
Background :	<p>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],</p>
Function :	<p>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</p>
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 lysates from Jurkat cells, treated with PMA 200nM 30', using PKC theta Antibody. The lane on the right is blocked with the synthesized peptide.