

**PKC  $\theta$  (phospho Ser695) Polyclonal Antibody**

<b>Catalog No :</b>	YP0719
<b>Reactivity :</b>	Human;Rat;Mouse;
<b>Applications :</b>	WB;IHC;IF;ELISA
<b>Target :</b>	PKC $\theta$
<b>Fields :</b>	>>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
<b>Gene Name :</b>	PRKCQ
<b>Protein Name :</b>	Protein kinase C theta type
<b>Human Gene Id :</b>	5588
<b>Human Swiss Prot No :</b>	Q04759
<b>Mouse Swiss Prot No :</b>	Q02111
<b>Immunogen :</b>	The antiserum was produced against synthesized peptide derived from human PKC $\theta$ around the phosphorylation site of Ser695. AA range:657-706
<b>Specificity :</b>	Phospho-PKC $\theta$ (S695) Polyclonal Antibody detects endogenous levels of PKC $\theta$ protein only when phosphorylated at S695.
<b>Formulation :</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source :</b>	Polyclonal, Rabbit,IgG
<b>Dilution :</b>	WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:5000.. IF 1:50-200
<b>Purification :</b>	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 :** 85kD**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],

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**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

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**Subcellular Location :**

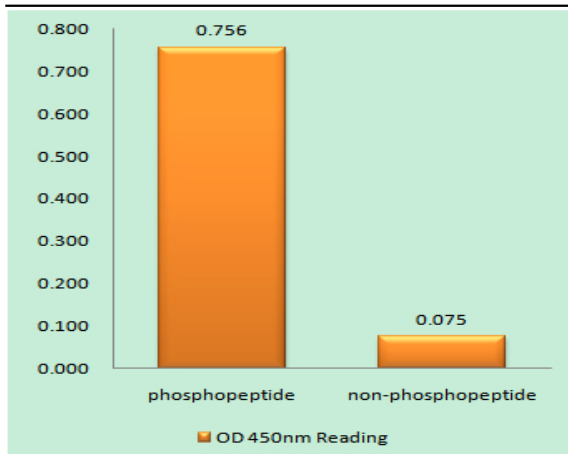
Cytoplasm. Cell membrane; Peripheral membrane protein. In resting T-cells, mostly localized in cytoplasm. In response to TCR stimulation, associates with lipid rafts and then localizes in the immunological synapse.

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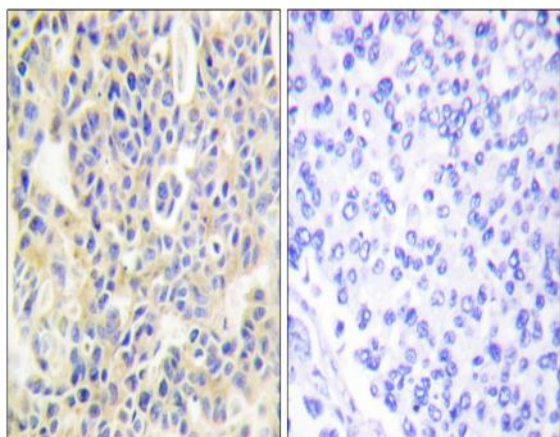
**Expression :** Expressed in skeletal muscle, T-cells, megakaryoblastic cells and platelets.

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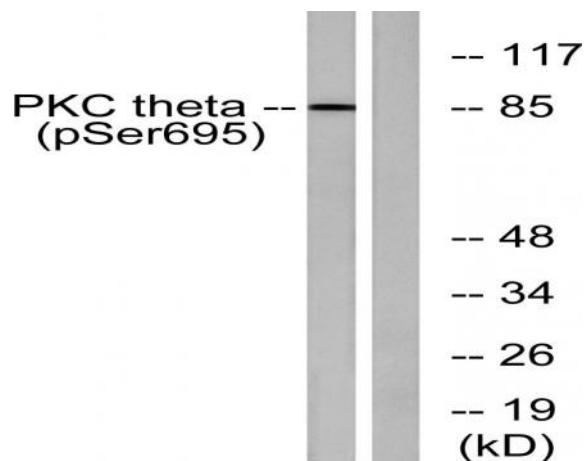
**Products Images**



Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using PKC thet (Phospho-Ser695) Antibody



Immunohistochemistry analysis of paraffin-embedded human breast carcinoma, using PKC thet (Phospho-Ser695) Antibody. The picture on the right is blocked with the phospho peptide.



Western blot analysis of lysates from Jurkat cells treated with EGF 200ng/ml 15', using PKC thet (Phospho-Ser695) Antibody. The lane on the right is blocked with the phospho peptide.