Best Tools for immunology Research

PKC θ (phospho Thr538) Polyclonal Antibody

Catalog No :	YP0705
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 around the phosphorylation site of Thr538. AA range:504-553
Specificity :	Phospho-PKC θ (T538) Polyclonal Antibody detects endogenous levels of PKC θ protein only when phosphorylated at T538.
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. ELISA: 1:5000.. IF 1:50-200

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 : 81kD

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],

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

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.

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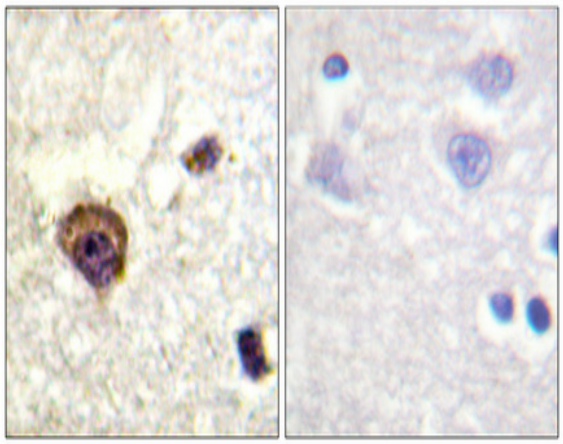
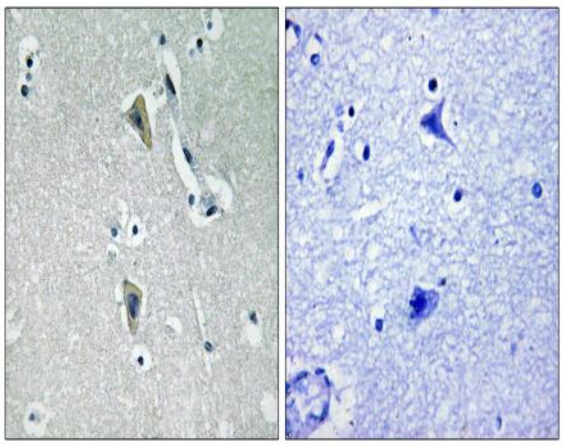
Sort :	12765
No2 :	9377T
No4 :	1
Host :	Rabbit
Modifications :	Phospho

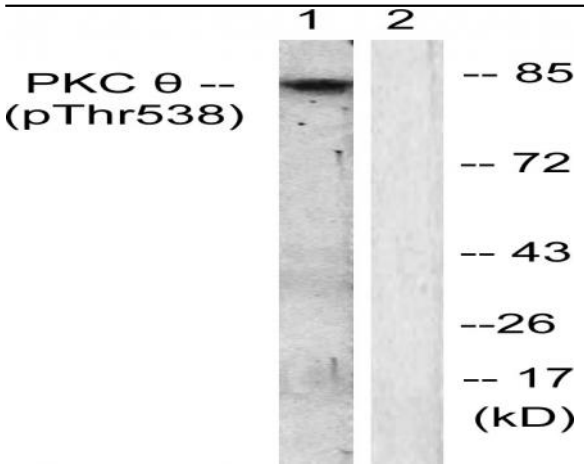
Products Images



Immunohistochemical analysis of paraffin-embedded Human brain. Antibody was diluted at 1:100(4° overnight). High-pressure and temperature Tris-EDTA,pH8.0 was used for antigen retrieval. Negetive contrl (right) obtaned from antibody was pre-absorbed by immunogen peptide.



Immunohistochemistry analysis of paraffin-embedded human brain, using PKC thet (Phospho-Thr538) Antibody. The picture on the right is blocked with the phospho peptide.



Western blot analysis of lysates from Jurkat cells, using PKC thet (Phospho-Thr538) Antibody. The lane on the right is blocked with the phospho peptide.