

## PKC θ (phospho Thr538) Polyclonal Antibody

| Catalog No :             | YP0705  |
|--------------------------|---|
| Reactivity :             | Human;Mouse;Rat   |
| Applications :           | WB;IHC;IF;ELISA   |
| Target :                 | PKC 0   |
| Fields :                 | >>NF-kappa B signaling pathway;>>Autophagy - animal;>>Vascular smooth<br>muscle contraction;>>Th1 and Th2 cell differentiation;>>Th17 cell<br>differentiation;>>T cell receptor signaling pathway;>>Inflammatory mediator<br>regulation of TRP channels;>>Adipocytokine signaling pathway;>>Insulin<br>resistance;>>Shigellosis;>>PD-L1 expression and PD-1 checkpoint pathway in<br>cancer |
| Gene Name :              | PRKCQ   |
| Protein Name :           | Protein kinase C theta type   |
| Human Gene Id :          | 5588  |
| Human Swiss Prot<br>No : | Q04759  |
| Mouse Gene Id :          | 18761   |
| Mouse Swiss Prot<br>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 $\theta$ (T538) Polyclonal Antibody detects endogenous levels of PKC $\theta$ 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  |



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|------------------------------------|--|
| 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  |
| Concontration                      |  |
| 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;<br>Insulin Receptor; NF_kappaB; B Cell Receptor; AMPK                                 |
|                                    |  |
| Background :                       | Protein kinase C (PKC) is a family of serine- and threonine-specific protein   |
| 3                                  | 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<br>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                        | Cytoplasm. Cell membrane; Peripheral membrane protein. In resting T-cells,   |
| Location :                         | 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.   |
| -                                  |  |

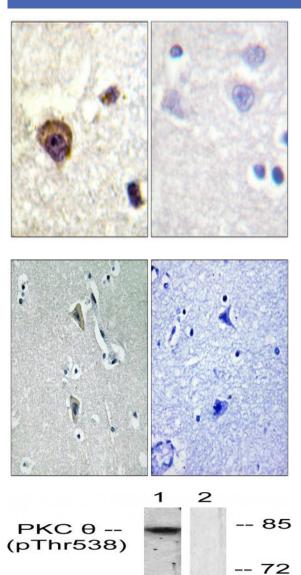


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--26 -- 17 (kD)

## **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.

