

## PKC θ (phospho Ser676) Polyclonal Antibody

Catalog No: YP0231

**Reactivity:** Human; Mouse; Rat

**Applications:** WB;IHC;IF;ELISA

**Target:** PKC  $\theta$ 

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

Q04759

Q02111

Human Gene Id: 5588

**Human Swiss Prot** 

No:

Mouse Gene ld: 18761

**Mouse Swiss Prot** 

No:

Rat Swiss Prot No: Q9WTQ0

**Immunogen:** The antiserum was produced against synthesized peptide derived from human

PKC thet around the phosphorylation site of Ser676. AA range:643-692

**Specificity:** Phospho-PKC θ (S676) Polyclonal Antibody detects endogenous levels of PKC

θ protein only when phosphorylated at S676.

**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, IF 1:200 - 1:1000, ELISA: 1:5000, 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:** 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.

Tag: orthogonal

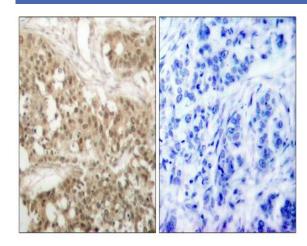
**Sort :** 12763

**No4:** 1

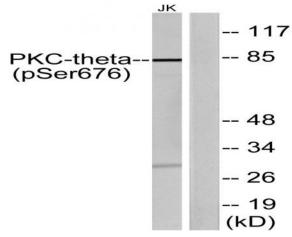
Host: Rabbit

Modifications: Phospho

## **Products Images**



Immunohistochemistry analysis of paraffin-embedded human breast carcinoma, using PKC thet (Phospho-Ser676) Antibody. The picture on the right is blocked with the phospho peptide.



Western blot analysis of lysates from Jurkat cells treated with PMA 200nM 30', using PKC thet (Phospho-Ser676) Antibody. The lane on the right is blocked with the phospho peptide.