# PKC θ (Phospho Thr538) Rabbit pAb

CatalogNo: YP0705

## Key Features

| Host Species | Reactivity | Applications |
|---|---|---|
| • Rabbit | • Human,Mouse,Rat | • WB,IHC,IF,ELISA |

| MW | Isotype |
|---|---|
| • 81kD (Observed) | • IgG |

## Storage

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|---|---|
| **Storage*** | -15°C to -25°C/1 year (Do not lower than -25°C) |
| **Formulation** | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide. |

## Recommended Dilution Ratios

**WB 1:500-1:2000**
**IHC 1:100-1:300**
**ELISA 1:5000**
**IF 1:50-200**

## Basic Information

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|---|---|
| **Clonality** | Polyclonal |

## Immunogen Information

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|---|---|
| **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.The name of modified sites may be influenced by many factors, such as species (the modified site was not originally found in human samples) and the change of protein sequence (the previous protein sequence is incomplete, and the protein sequence may be prolonged with the development of protein sequencing technology). When naming, we will use the "numbers" in historical reference to keep the sites consistent with the reports. The antibody binds to the following modification sequence (lowercase letters are modification sites):TNtFC |

## Target Information

**Gene name** PRKCQ

**Protein Name** Protein kinase C theta type

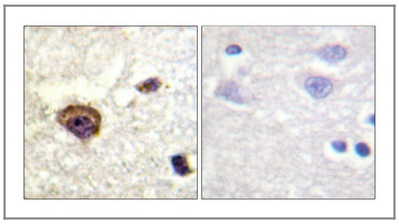
| Organism | Gene ID | UniProt ID |
|---|---|---|
| Human | 5588; | Q04759; |
| Mouse | 18761; | Q02111; |
| Rat | | Q9WTQ0; |

**Cellular Localization** 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.

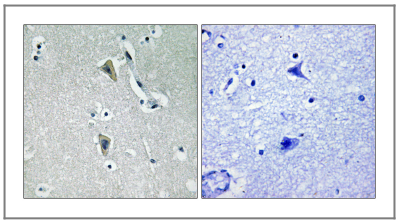
**Tissue specificity** Expressed in skeletal muscle , T-cells , megakaryoblastic cells and platelets.

**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 activation of NF-kappa-B in mature T lymphocytes. Required for interleukin-2 (IL2) production. ,PTM:Autophosphorylation at Thr-219 is required for targeting to the TCR and cellular function of PKC upon antigen receptor ligation. ,similarity:Belongs to the protein kinase superfamily. ,similarity:Belongs to the protein kinase superfamily. AGC Ser/Thr protein kinase family. PKC subfamily. ,similarity:Contains 1 AGC-kinase C-terminal domain. ,similarity:Contains 1 C2 domain. ,similarity:Contains 1 protein kinase domain. ,similarity:Contains 2 phorbol-ester/DAG-type zinc fingers. ,subunit:Interacts with TXNL2/PICOT. ,tissue specificity:Skeletal muscle , megakaryoblastic cells and platelets. ,

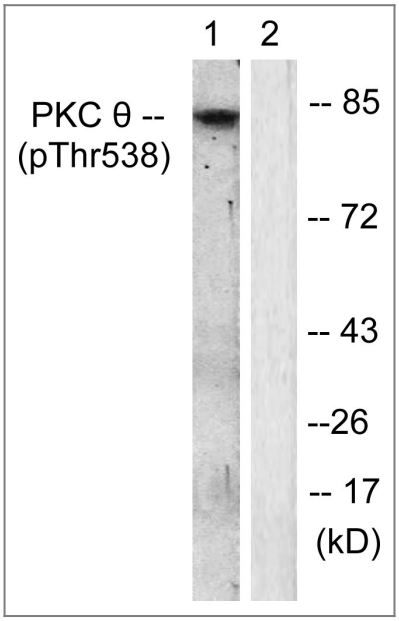
## Validation Data



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.

## Contact information


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|---|---|
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**PKC θ (Phospho Thr538) Rabbit pAb**

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