

**Product Name: PKC  $\epsilon$  (phospho Ser729) Rabbit Polyclonal Antibody**  
**Catalog #: APRab05263**

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## Summary

<b>Production Name</b>	PKC $\epsilon$ (phospho Ser729) Rabbit Polyclonal Antibody
<b>Description</b>	Rabbit Polyclonal Antibody
<b>Host</b>	Rabbit
<b>Application</b>	WB,ELISA
<b>Reactivity</b>	Human,Mouse,Rat

## Performance

<b>Conjugation</b>	Unconjugated
<b>Modification</b>	Phospho Antibody
<b>Isotype</b>	IgG
<b>Clonality</b>	Polyclonal
<b>Form</b>	Liquid
<b>Storage</b>	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
<b>Buffer</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
<b>Purification</b>	Affinity purification

## Immunogen

<b>Gene Name</b>	PRKCE
<b>Alternative Names</b>	PRKCE; PKCE; Protein kinase C epsilon type; nPKC-epsilon
<b>Gene ID</b>	5581.0
<b>SwissProt ID</b>	Q02156.The antiserum was produced against synthesized peptide derived from human PKC epsilon around the phosphorylation site of Ser729. AA range:688-737

## Application

<b>Dilution Ratio</b>	WB 1:500-2000 ELISA 2000-20000
<b>Molecular Weight</b>	83kD

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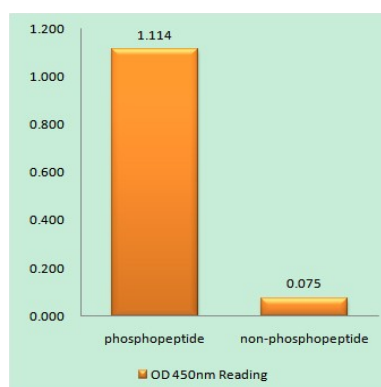
## Background

protein kinase C epsilon (PRKCE) Homo sapiens 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 in cells. The protein encoded by this gene is one of the PKC family members. This kinase has been shown to be involved in many different cellular functions, such as neuron channel activation, apoptosis, cardioprotection from ischemia, heat shock response, as well as insulin exocytosis. Knockout studies in mice suggest that this kinase is important for lipopolysaccharide (LPS)-mediated signaling in activated macrocatalytic activity:ATP + a protein = ADP + a phosphoprotein.,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-566 (activation loop of the kinase domain), Thr-710 (turn motif) and Ser-729 (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 calcium-independent, phospholipid-dependent, serine- and threonine-specific enzyme.,PTM:Phosphorylation on Thr-566 by PDPK1 triggers autophosphorylation on Ser-729.,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:Forms a ternary complex with TRIM63 and GN2BL1.,

## Research Area

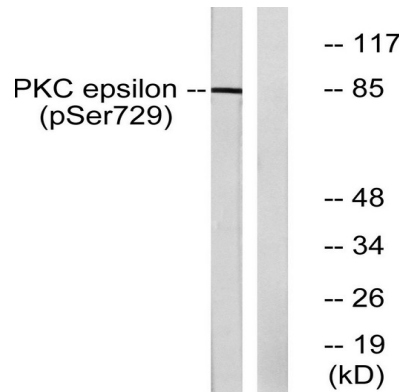
Regulation\_Microtubule; Regulation of Actin Dynamics; Stem cell pathway; Insulin Receptor; B Cell Receptor; AMPK

## Image Data



Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using PKC epsilon (Phospho-Ser729) Antibody

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Western blot analysis of lysates from HeLa cells treated with PMA 125ng/ml 30', using PKC epsilon (Phospho-Ser729) Antibody. The lane on the right is blocked with the phospho peptide.

### Note

For research use only.