

Product name:	PKC ε (phospho Ser729) Rabbit Polyclonal Antibody
Cat number:	ABN05263
Conjugate:	Unconjugated
Size:	100μL
Clone:	Polyclonal
Concentration:	1mg/ml
Host:	Rabbit
Isotype:	IgG
Immunogen:	The antiserum was produced against synthesized peptide derived from human PKC epsilon around the phosphorylation site of Ser729. AA range:688-737
Reactivity:	Human,Mouse,Rat
Applications:	WB 1:500-1:2000,IHC 1:50-1:300,ELISA 1:2000-1:20000
Molecular Weight:	83kDa
Purification:	Affinity purification
Form:	Liquid
Buffer:	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Storage:	Store at 4°C short term. Aliquot and store at -20°C for 12 months. Avoid freeze/thaw cycles.

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.,