
Product Name: PKC ϵ Rabbit Polyclonal Antibody**Catalog #: APRab16203**

For research use only.

Summary

Description	Rabbit polyclonal Antibody
Host	Rabbit
Application	WB,IHC,ELISA
Reactivity	Human,Mouse,Rat
Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Concentration	1mg/ml
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:500-1:2000,IHC 1:50-1:300,ELISA 1:2000-1:20000
Molecular Weight	83kDa

Antigen Information

Gene Name	PRKCE
Alternative Names	PRKCE; PKCE; Protein kinase C epsilon type; nPKC-epsilon
Gene ID	5581.0
SwissProt ID	Q02156
Immunogen	The antiserum was produced against synthesized peptide derived from human PKC epsilon. AA range:688-737

Background

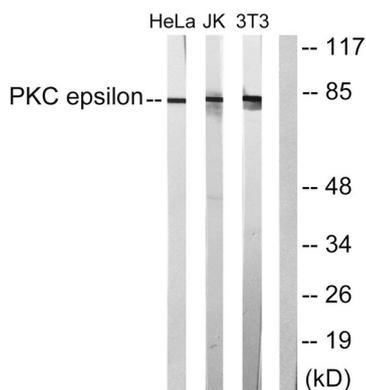
protein kinase C epsilon(PRKCE) Homo sapiens Protein kinase C (PKC) is a family of serine- and threonine-specific protein

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.,

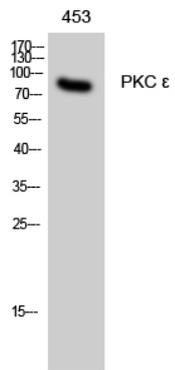
Research Area

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

Image Data



Western blot analysis of lysates from HeLa, Jurkat, and 3T3 cells, treated with PMA 125ng/ml 30', using PKC epsilon Antibody. The lane on the right is blocked with the synthesized peptide.



Western Blot analysis of 453 cells using PKC ϵ Polyclonal Antibody diluted at 1 : 500