

Product Name: PKC β (phospho Ser661) Rabbit Polyclonal Antibody**Catalog #: APRab05257**

For research use only.

Summary

Description	Rabbit polyclonal Antibody
Host	Rabbit
Application	WB,IHC,ICC/IF,ELISA
Reactivity	Human,Mouse,Rat
Conjugation	Unconjugated
Modification	Phosphorylated
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 1:100-1:300,ICC/IF 1:50-1:200,ELISA 1:10000-1:20000
Molecular Weight	77kDa

Antigen Information

Gene Name	PRKCB
Alternative Names	PRKCB; PKCB; PRKCB1; Protein kinase C beta type; PKC-B; PKC-beta
Gene ID	5579.0
SwissProt ID	P05771
Immunogen	The antiserum was produced against synthesized peptide derived from human PKCB around the phosphorylation site of Ser661. AA range:622-671

Background

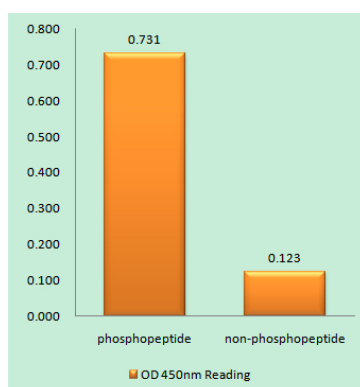
Protein kinase C (PKC) is a family of serine- and threonine-specific protein kinases that can be activated by calcium and second

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 protein kinase has been reported to be involved in many different cellular functions, such as B cell activation, apoptosis induction, endothelial cell proliferation, and intestinal sugar absorption. Studies in mice also suggest that this kinase may also regulate neuronal functions and correlate fear-induced conflict behavior after stress. catalytic activity:ATP + a protein = ADP + a phosphoprotein., cofactor: Binds 3 calcium ions per subunit. The ions are bound to the C2 domain., function: This is a calcium-activated, phospholipid-dependent, serine- and threonine-specific enzyme. 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. May be considered as a novel component of the NF-kappa-B signaling axis responsible for the survival and activation of B-cells after BCR cross-linking., PTM: Phosphorylation on Thr-500 of isoform beta-I, within the activation loop, renders it competent to autophosphorylate. Subsequent autophosphorylation of Thr-642 maintains catalytic competence, and autophosphorylation on Ser-661 appears to release the kinase into the cytosol. Similarly, isoform beta-II is autophosphorylated on 'Thr-640' and 'Ser-659', subsequent to phosphorylation on Thr-500. Autophosphorylated on other sites i.e. in the N-terminal and hinge regions have no effect on PKC activity., 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 PDK1 (By similarity). Interacts in vitro with PRKCBP1.,

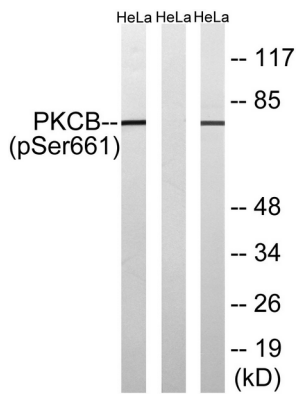
Research Area

Regulation_Microtubule; Regulation of Actin Dynamics; Stem cell pathway; Insulin Receptor; ErbB/HER; MAPK_ERK_Growth; MAPK_G_Protein; WNT; WNT-T CELL; β -Catenin; B Cell Receptor; NF_kappaB; mTOR; AMPK

Image Data



Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right) , using PKCB (Phospho-Ser661) Antibody



Western blot analysis of lysates from HeLa cells treated with heat shock, using PKCB (Phospho-Ser661) Antibody. The lane on the right is blocked with the phospho peptide.