



PKC δ Rabbit mAb

Catalog No	YP-rAb-17733
Isotype	IgG
Reactivity	Human,Mouse,Rat
Applications	WB,IHC,IF,ELISA
Gene Name	PRKCD
Protein Name	Protein kinase C delta type
Purification Process	Protein A
Specificity	Endogenous
Formulation	PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA
Source	Monoclonal, Rabbit,IgG
Dilution	IHC 1:500-1:2000; WB 1:2000-1:10000; IF 1:200-1:1000; ELISA 1:5000-1:20000; Note: For IHC, we suggest antigen retrieval with TE buffer pH 9.0
Concentration	0.5 mg/ml
Purity	$\geq 90\%$
Storage Stability	-15° C to -25° C/1 year(Do not lower than -25° C)
Synonyms	PRKCD ; Protein kinase C delta type ; Tyrosine-protein kinase PRKCD ; nPKC-delta
Observed Band	78kD
Calculated Molecular Weight	78kD
Cell Pathway	Cytoplasm, Nucleus
Tissue Specificity	Epithelium,Hippocampus,Liver,Platelet,Skin,
Function	Catalytic 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.,Domain:The C2 domain is a non-calcium binding domain. It binds proteins containing phosphotyrosine in a sequence-specific manner.,enzyme regulation:Three specific sites; Thr-507 (activation loop of the kinase domain), Ser-645 (turn motif) and Ser-664 (hydrophobic region), need to be phosphorylated for its full activation.,Function:This is calcium-independent, 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 play a role in antigen-dependent control of B-cell function. Phosphorylates MUC1 in the C-terminal and regulates the interaction between MUC1 and





beta-catenin.,PTM:Phosphorylated on Thr-507, within the activation loop. Autophosphorylated and/or phosphorylated. Although the Thr-507 phosphorylation occurs it is not a prerequisite for enzymatic 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, RAD9A, CDCP1 and MUC1.,

Background

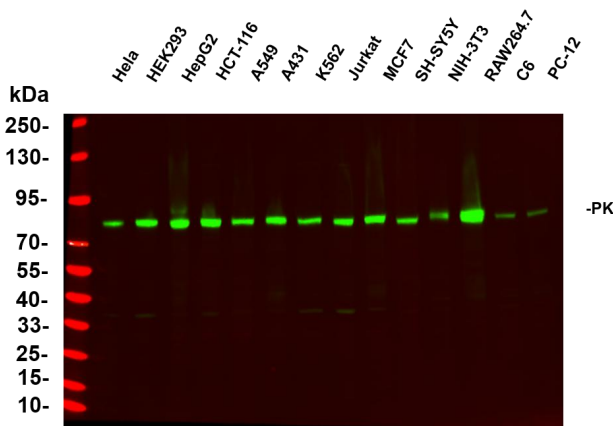
Protein kinase C (PKC) is a family of serine- and threonine-specific protein kinases that can be activated by calcium and the second messenger diacylglycerol. PKC family members phosphorylate a wide variety of protein targets and are known to be involved in diverse cellular signaling pathways. PKC family 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 distinct roles in cells. The protein encoded by this gene is one of the PKC family members. Studies both in human and mice demonstrate that this kinase is involved in B cell signaling and in the regulation of growth, apoptosis, and differentiation of a variety of cell types. Alternatively spliced transcript variants encoding the same protein have been observed. [provided by RefSeq, Jul 2008],

matters needing attention

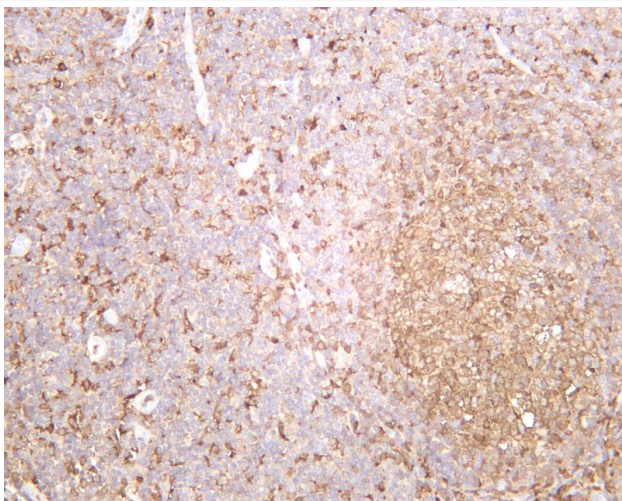
Avoid repeated freezing and thawing!

Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

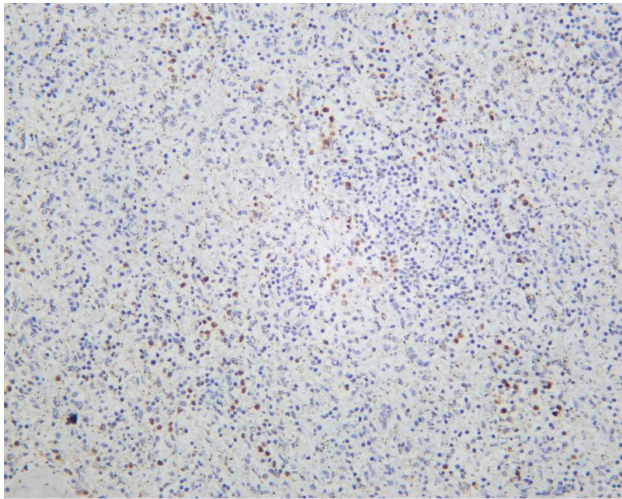


Various whole cell lysates were separated by 4-20% SDS-PAGE, and the primary antibody was used at 4~C, over night with a 1:5000 dilution . The Dylight 800-conjugated Goat anti-Rabbit antibody

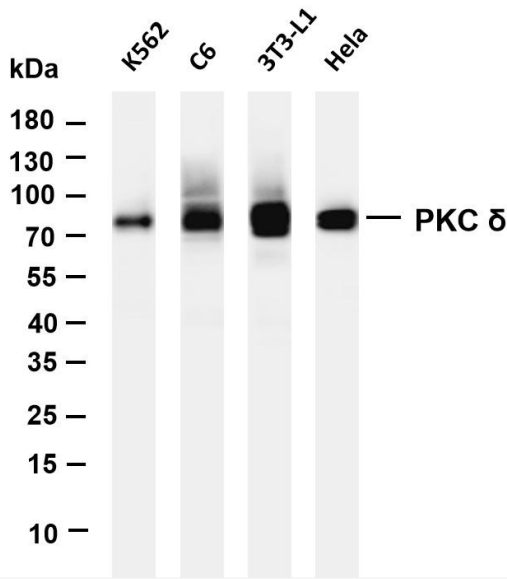


Human tonsil was stained with anti-PKC δ rabbit antibody

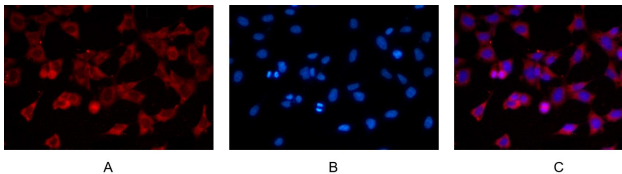




Human spleen was stained with anti-PKC δ rabbit antibody



Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-PKC δ antibody. The HRP-conjugated Goat anti-Rabbit IgG(H + L) antibody was used to detect the antibody. Lane 1: K562 Lane 2: C6 Lane 3: 3T3-L1 Lane 4: HeLa
Predicted band size: 78kDa Observed band size: 78kDa



Immunofluorescence analysis of HEK293. Picture A: PKC δ antibody (red). Picture B: DAPI (blue). Picture C: Merge of A+B

