

PKC Polyclonal Antibody

Catalog No :	YT3752
Reactivity :	Human;Mouse;Rat
Applications :	WB;IHC;IF;ELISA
Target :	PKC
Fields :	>>EGFR tyrosine kinase inhibitor resistance;>>MAPK signaling pathway;>>ErbB signaling pathway;>>Ras signaling pathway;>>Rap1 signaling pathway;>>Calcium signaling pathway;>>HIF-1 signaling pathway;>>Phosphatidylinositol signaling system;>>Sphingolipid signaling pathway;>>Phospholipase D signaling pathway;>>mTOR signaling pathway;>>PI3K-Akt signaling pathway;>>Adrenergic signaling in cardiomyocytes;>>Vascular smooth muscle contraction;>>Wnt signaling pathway;>>Axon guidance;>>VEGF signaling pathway;>>Focal adhesion;>>Gap junction;>>Neutrophil extracellular trap formation;>>Natural killer cell mediated cytotoxicity;>>Fc epsilon RI signaling pathway;>>Fc gamma R-mediated phagocytosis;>>Leukocyte transendothelial migration;>>Circadian entrainment;>>Long-term potentiation;>>Retrograde endocannabinoid signaling;>>Glutamatergic synapse;>>Cholinergic synapse;>>Serotonergic synapse;>>GABAergic synapse;>>Dopaminergic synapse;>>Long-term depression;>>Inflammatory mediator regulation of TRP channe
Gene Name :	PRKCA/PRKCB/PRKCD/PRKCE/PRKCG/PRKCH/PRKCQ/PRKCZ
Protein Name :	Protein kinase C alpha type/Protein kinase C beta type/Protein kinase C delta type/Protein kinase C epsilon type/Protein kinase C gamma type/Protein kinase C eta type/Protein kinase C theta type/Prote
Human Gene Id :	5578/5579/5580/5581/5582/5583/5588/5590
Human Swiss Prot No :	P17252/P05771/Q05655/Q02156/P05129/P24723/Q04759/Q05513
Mouse Gene Id :	18750/18751/18753/18754
Rat Gene Id :	25023/170538/29340
Rat Swiss Prot No :	P05696/P68403/P09215/P09216

Immunogen :	The antiserum was produced against synthesized peptide derived from human PKC. AA range:623-672
Specificity :	PKC Polyclonal Antibody detects endogenous levels of PKC protein.
Formulation :	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source :	Polyclonal, Rabbit,IgG
Dilution :	WB 1:500 - 1:2000. IHC 1:100 - 1:300. IF 1:200 - 1:1000. ELISA: 1:5000. Not yet tested in other applications.
Purification :	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Concentration :	1 mg/ml
Storage Stability :	-15°C to -25°C/1 year(Do not lower than -25°C)
Observed Band :	67-83kD(α 76 δ / β 77 γ 78, θ/ϵ 83 , ζ 67 η)
Cell Pathway :	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; PI3K/Akt; mTOR; AMPK
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 a distinct role in cells. The protein encoded by this gene is one of the PKC family members. This kinase has been reported to play roles in many different cellular processes, such as cell adhesion, cell transformation, cell cycle checkpoint, and cell volume control. Knockout studies in mice suggest that this kinase may be a fundamental regulator of cardiac contractility and Ca(2+) handling in myocytes. [provided by RefSeq, Jul 2
Function :	catalytic activity:ATP + a protein = ADP + a phosphoprotein.,cofactor:Binds 3 calcium ions per subunit. The ions are bound to the C2 domain.,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 a calcium-activated, phospholipid-dependent, serine- and threonine-specific enzyme. May play a role in cell motility by phosphorylating CSPG4.,similarity:Belongs to the protein kinase superfamily.,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 ADAP1/CENTA1, CSPG4 and PRKCABP. Binds to SDPR

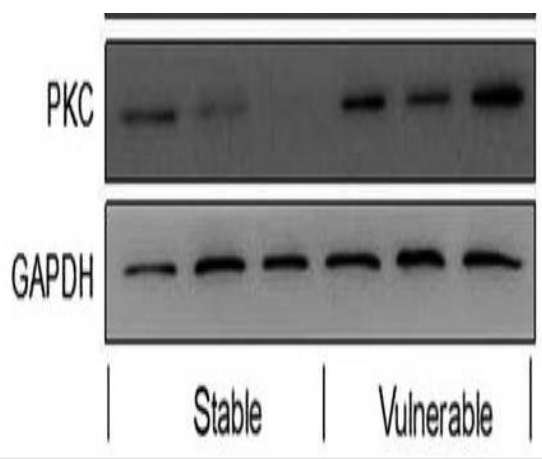
Subcellular Location :

Cytoplasm . Cell membrane ; Peripheral membrane protein . Mitochondrion membrane ; Peripheral membrane protein . Nucleus .

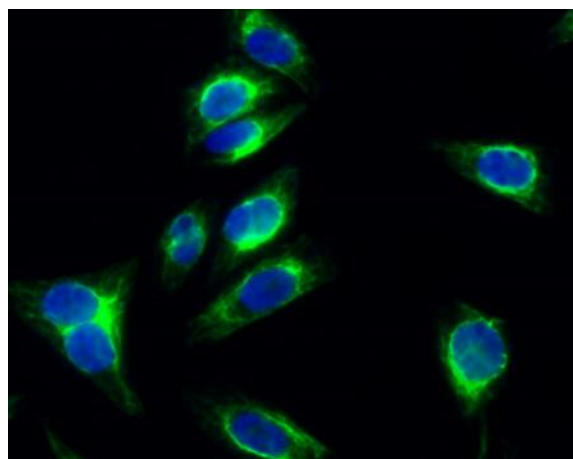
Expression :

Blood,Brain,Epithelium,Lung,Platelet,

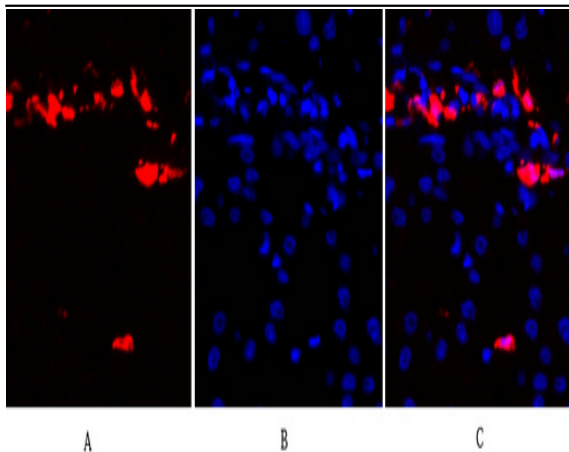
Products Images



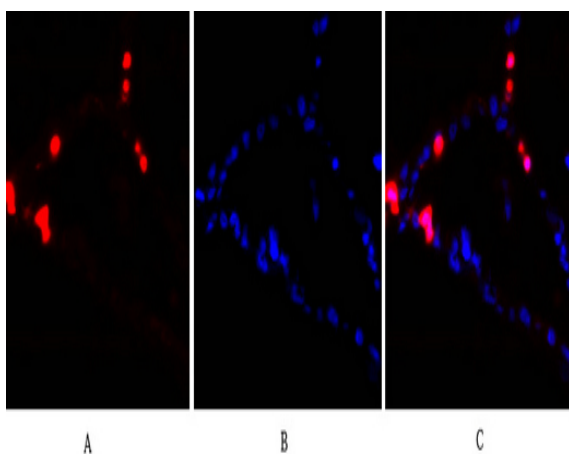
Guo, Zhou-Ying, et al. "Specific matrix metalloproteinases and calcification factors are associated with the vulnerability of human carotid plaque." *Experimental and therapeutic medicine* 16.3 (2018): 2071-2079.



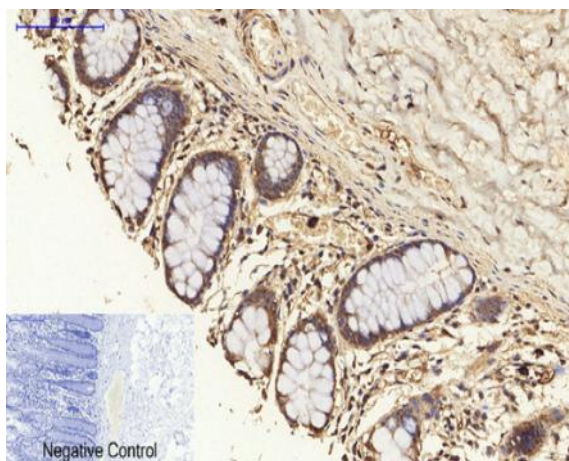
Immunofluorescence analysis of HeLa cell. 1,PKC Polyclonal Antibody(green) was diluted at 1:200(4° overnight). 2, Goat Anti Rabbit Alexa Fluor 488 Catalog:RS3211 was diluted at 1:1000(room temperature, 50min). 3 DAPI(blue) 10min.



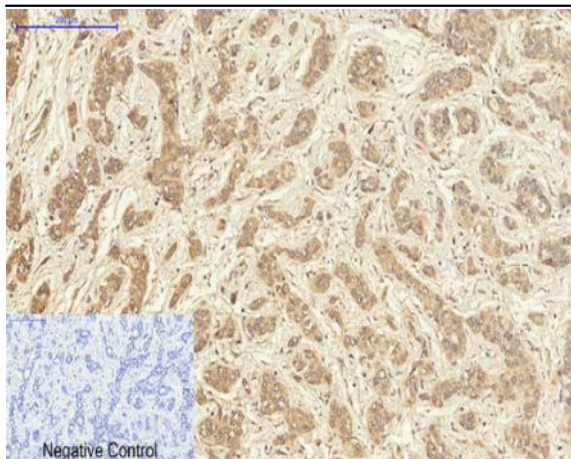
Immunofluorescence analysis of human-liver tissue. 1,PKC Polyclonal Antibody(red) was diluted at 1:200(4 °C,overnight). 2, Cy3 labeled Secondary antibody was diluted at 1:300(room temperature, 50min).3, Picture B: DAPI(blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B



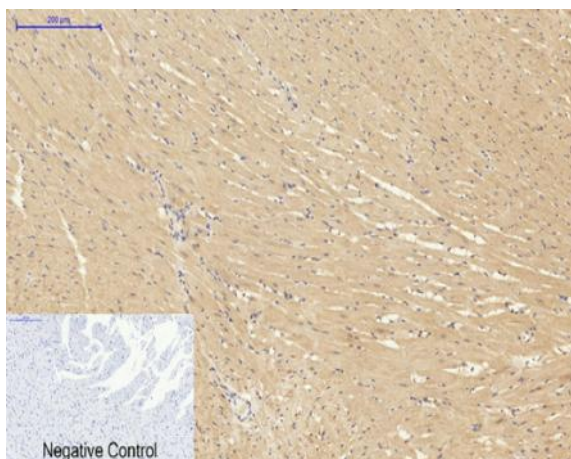
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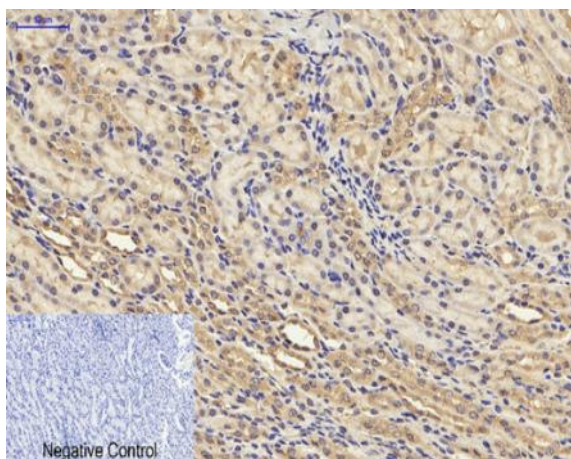
Immunohistochemical analysis of paraffin-embedded Human-colon tissue. 1,PKC Polyclonal Antibody was diluted at 1:200(4 °C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98 °C,20min). 3,Secondary antibody was diluted at 1:200(room temperature, 30min). Negative control was used by secondary antibody only.



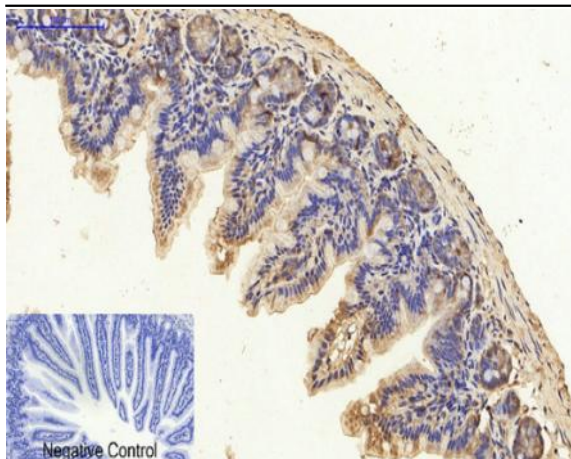
Immunohistochemical analysis of paraffin-embedded Human-liver-cancer tissue. 1,PKC Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room temperature, 30min). Negative control was used by secondary antibody only.



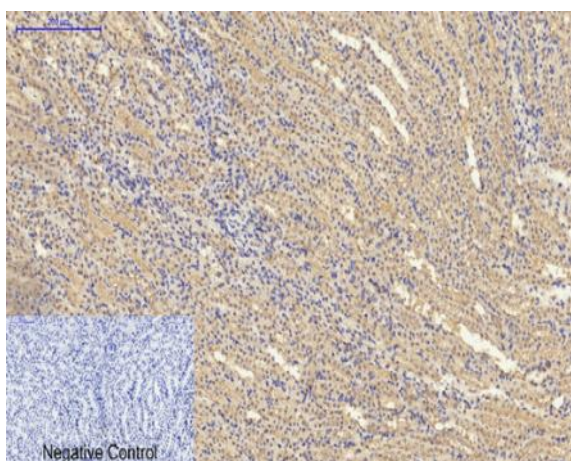
Immunohistochemical analysis of paraffin-embedded Rat-heart tissue. 1,PKC Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room temperature, 30min). Negative control was used by secondary antibody only.



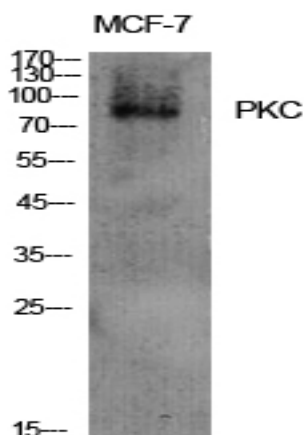
Immunohistochemical analysis of paraffin-embedded Rat-kidney tissue. 1,PKC Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room temperature, 30min). Negative control was used by secondary antibody only.



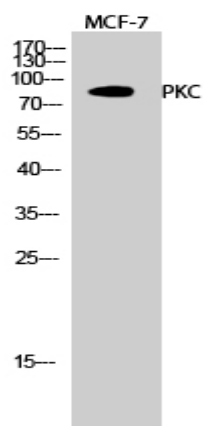
Immunohistochemical analysis of paraffin-embedded Mouse-colon tissue. 1,PKC Polyclonal Antibody was diluted at 1:200(4 °C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98 °C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.



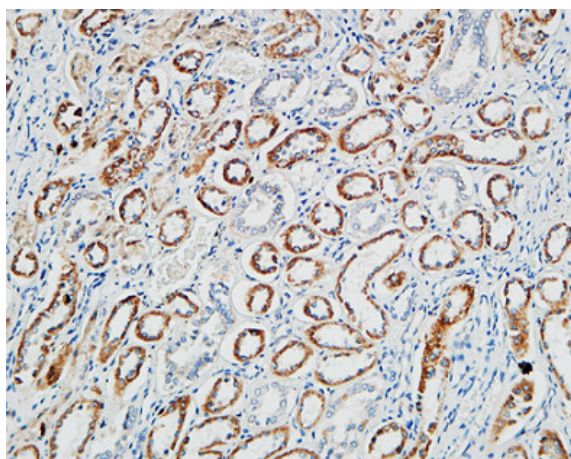
Immunohistochemical analysis of paraffin-embedded Mouse-kidney tissue. 1,PKC Polyclonal Antibody was diluted at 1:200(4 °C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98 °C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.



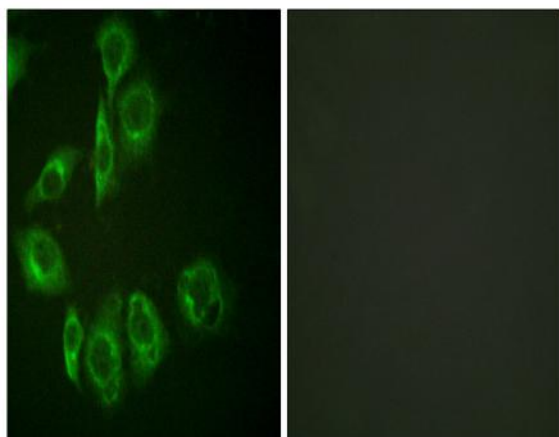
Western Blot analysis of various cells using PKC Polyclonal Antibody diluted at 1:2000



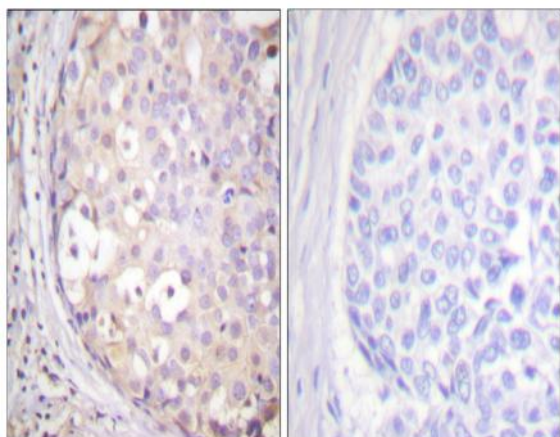
Western Blot analysis of MCF-7 cells using PKC Polyclonal Antibody diluted at 1:2000



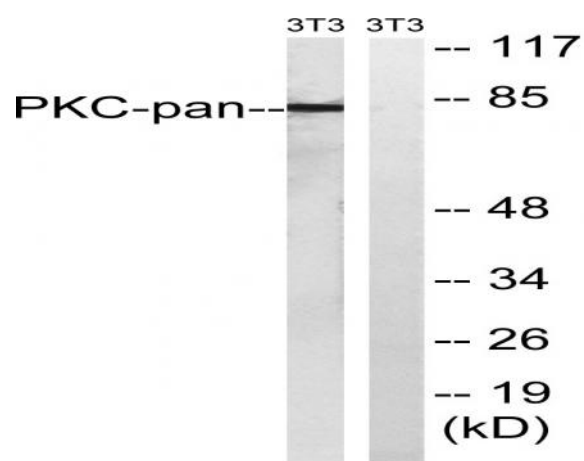
Immunohistochemical analysis of paraffin-embedded Human Right kidney. 1, Antibody was diluted at 1:100(4° overnight). 2, High-pressure and temperature EDTA, pH8.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 30min).



Immunofluorescence analysis of HUVEC cells, using PKC-pan Antibody. The picture on the right is blocked with the synthesized peptide.



Immunohistochemistry analysis of paraffin-embedded human breast carcinoma tissue, using PKC-pan Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of lysates from NIH/3T3 cells, treated with PMA 250ng/ml 15', using PKC-pan Antibody. The lane on the right is blocked with the synthesized peptide.