

Product Name: PKC γ Rabbit Polyclonal Antibody**Catalog #: APRab16201**

For research use only.

Summary

Description	Rabbit polyclonal Antibody
Host	Rabbit
Application	WB,IHC,ICC/IF,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 1:100-1:300,ICC/IF 1:50-1:200,ELISA 1:10000-1:20000
Molecular Weight	78kDa

Antigen Information

Gene Name	PRKCG
Alternative Names	PRKCG; PKCG; Protein kinase C gamma type; PKC-gamma
Gene ID	5582.0
SwissProt ID	P05129
Immunogen	The antiserum was produced against synthesized peptide derived from the Internal region of human PRKCG. AA range:521-570

Background

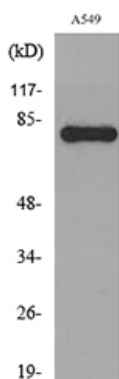
Protein kinase C (PKC) is a family of serine- and threonine-specific protein kinases that can be activated by calcium and second

messenger diacylglycerol. PKC family members phosphorylate a wide variety of protein targets and are known to be involved in diverse cellular signaling pathways. PKC 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. This protein kinase is expressed solely in the brain and spinal cord and its localization is restricted to neurons. It has been demonstrated that several neuronal functions, including long term potentiation (LTP) and long term depression (LTD), specifically require this kinase. Knockout studies in mice also suggest that this kinase may be involved in neurocatalytic activity:ATP + a protein = ADP + a phosphoprotein.,cofactor:Binds 3 calcium ions per subunit. The ions are bound to the C2 domain.,disease:Defects in PRKCG are the cause of spinocerebellar ataxia type 14 (SCA14) [MIM:605361]. Spinocerebellar ataxia is a clinically and genetically heterogeneous group of cerebellar disorders. Patients show progressive incoordination of gait and often poor coordination of hands, speech and eye movements, due to degeneration of the cerebellum with variable involvement of the brainstem and spinal cord. SCA14 is an autosomal dominant cerebellar ataxia (ADCA).,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.,online information:Retina International's Scientific Newsletter,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 CDCP1.,

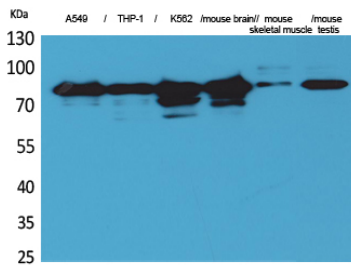
Research Area

MAPK_ERK_Growth;MAPK_G_Protein;ErbB_HER;Calcium;Phosphatidylinositol signaling system;Vascular smooth muscle contraction;WNT;WNT-T CELLVEGF;Focal adhesion;Tight junction;Gap junction;Natural killer cell mediated cytotoxicity;Fc gamma R-mediated phagocytosis;Leukocyte transendothelial migration;Long-term potentiation;Long-term depression;Melanogenesis;Aldosterone-regulated sodium reabsorption;Vibrio cholerae infection;Pathways in cancer;Glioma;Non-small cell lung cancer;

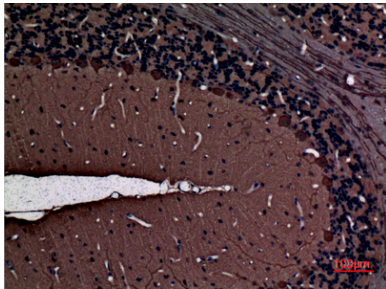
Image Data



Western blot analysis of lysate from A549 cells, using PRKCG Antibody.



Western Blot analysis of A549, THP-1, K562, mouse brain, mouse skeletal muscle, mouse testis cells using PKC γ Polyclonal Antibody.. Secondary antibody was diluted at 1:20000



Immunohistochemical analysis of paraffin-embedded rat-brain, antibody was diluted at 1:100