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|--------------------------|--------------------------------------------------------------------------------------------------------------------------|
| <b>Product name:</b>     | PKC $\gamma$ Rabbit Polyclonal Antibody                                                                                  |
| <b>Cat number:</b>       | ABN16201                                                                                                                 |
| <b>Conjugate:</b>        | Unconjugated                                                                                                             |
| <b>Size:</b>             | 100 $\mu$ L                                                                                                              |
| <b>Clone:</b>            | Polyclonal                                                                                                               |
| <b>Concentration:</b>    | 1mg/ml                                                                                                                   |
| <b>Host:</b>             | Rabbit                                                                                                                   |
| <b>Isotype:</b>          | IgG                                                                                                                      |
| <b>Immunogen:</b>        | The antiserum was produced against synthesized peptide derived from the Internal region of human PRKCG. AA range:521-570 |
| <b>Reactivity:</b>       | Human,Mouse,Rat                                                                                                          |
| <b>Applications:</b>     | WB 1:500-1:2000,IHC 1:100-1:300,ICC/IF 1:50-1:200,ELISA 1:10000-1:20000                                                  |
| <b>Molecular Weight:</b> | 78kDa                                                                                                                    |
| <b>Purification:</b>     | Affinity purification                                                                                                    |
| <b>Form:</b>             | Liquid                                                                                                                   |
| <b>Buffer:</b>           | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.                                       |
| <b>Storage:</b>          | Store at 4°C short term. Aliquot and store at -20°C for 12 months. Avoid freeze/thaw cycles.                             |

**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.,