

# Anti-PKC $(\alpha,\beta,\gamma)$ Antibody

Catalog # AN1905

#### **Product Information**

Application WB, ICC
Primary Accession P05129
Host Mouse

**Clonality** Mouse Monoclonal

IsotypeIgG2aClone NamesM499Calculated MW78448

#### **Additional Information**

Gene ID 5582

Other Names PKCalpha, PKCbeta, PKCgamma

**Dilution** WB~~1:1000 ICC~~N/A

**Storage** Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store

at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions** Anti-PKC  $(\alpha, \beta, y)$  Antibody is for research use only and not for use in diagnostic

or therapeutic procedures.

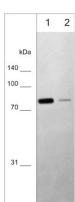
Shipping Blue Ice

## **Background**

The Protein Kinase C (PKC) family of homologous serine/threonine protein kinases is involved in a number of processes such as growth, differentiation, and cytokine secretion. At least eleven isozymes have been described. PKC consists of a single polypeptide chain containing four conserved regions (C) and five variable regions (V). The N-terminal half interacts with PKC activators Ca2+, phospholipid, diacylglycerol, or phorbol ester, while the C-terminal half contains the catalytic domain. The conventional PKC subfamily ( $\alpha$ ,  $\beta$ 1,  $\beta$ II, and  $\gamma$ ) is regulated by both Ca2+ and diacylglycerol. The PKC pathway represents a major signal transduction system that is activated following ligand-stimulation of transmembrane receptors by hormones, neurotransmitters and growth factors. The phosphorylation of multiple sites in conventional PKCs regulates their activity. In mast cells, FceRI stimulation leads to phosphorylation of tyrosine 658 and 662 of PKC $\alpha$  and PKC $\beta$ I respectively. This phosphorylation requires autophosphorylation of serine 657 and 661 in these respective kinases.

### **Images**

Western blot analysis of PKC isoforms in adult mouse brain lysate. The blot was probed with mouse monoclonal anti-PKC ( $\alpha$ , $\beta$ , $\gamma$ ) clone M499 at 1:250 (lane 1) and 1:1000



(lane 2).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.