

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

Catalog # AN1905

### Specification

# Anti-PKC (α,β,γ) Antibody - Product Information

### Anti-PKC (α,β,γ) Antibody - Additional Information

Gene ID Other Names PKCalpha, PKCbeta, PKCgamma 5582

Dilution WB~~1:1000

#### 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 ( $\alpha$ , $\beta$ , $\gamma$ ) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Shipping Blue Ice

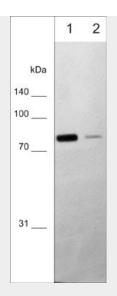
## Anti-PKC ( $\alpha$ , $\beta$ , $\gamma$ ) Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Anti-PKC (α,β,γ) Antibody - 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).

# Anti-PKC (α,β,γ) Antibody - 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.