## BACKGROUND

Members of the protein kinase C (PKC) family play a key regulatory role in a variety of cellular functions, including cell growth and differentiation, gene expression, hormone secretion and membrane function. PKCs were originally identified as serine/threonine protein kinases whose activity was dependent on calcium and phospholipids. Diacylglycerols (DAG) and tumor promoting phorbol esters bind to and activate PKC. PKCs can be subdivided into at least two major classes, including conventional (c) PKC isoforms ( $\alpha, \beta \mathrm{l}, \beta \mathrm{\beta l}$ and $\gamma$ ) and novel (n) PKC isoforms ( $\delta, \varepsilon, \zeta, \eta, \theta, \lambda / \iota, \mu$ and $v$ ). Patterns of expression for each PKC isoform differ among tissues and PKC family members exhibit clear differences in their cofactor dependencies. For instance, the kinase activities of PKC $\delta$ and $\varepsilon$ are independent of $\mathrm{Ca}^{2}+$. On the other hand, most of the other PKC members possess phorbol ester-binding activities and kinase activities.

## CHROMOSOMAL LOCATION

Genetic locus: PRKCG (human) mapping to 19q13.42; Prkcg (mouse) mapping to 7 A1.

## SOURCE

PKC $\gamma(\mathrm{H}-60)$ is a rabbit polyclonal antibody raised against amino acids 292-345 mapping within an internal region of PKC $\gamma$ of human origin.

## PRODUCT

Each vial contains $200 \mu \mathrm{glg}$ in 1.0 ml of PBS with $<0.1 \%$ sodium azide and $0.1 \%$ gelatin.

## STORAGE

Store at $4^{\circ} \mathrm{C}$, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## APPLICATIONS

PKC $\gamma(\mathrm{H}-60)$ is recommended for detection of PKC $\gamma$ of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:1001:1000), immunoprecipitation [ $1-2 \mu \mathrm{~g}$ per $100-500 \mu \mathrm{~g}$ of total protein ( 1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:301:3000).
PKC $\gamma(\mathrm{H}-60)$ is also recommended for detection of PKC $\gamma$ in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for PKC $\gamma$ siRNA (h): sc-36248, PKC $\gamma$ siRNA (m): sc-36249, PKC $\gamma$ shRNA Plasmid (h): sc-36248-SH, PKC $\gamma$ shRNA Plasmid (m): sc-36249-SH, PKC $\gamma$ shRNA (h) Lentiviral Particles: sc-36248-V and PKC $\gamma$ shRNA (m) Lentiviral Particles: sc-36249-V.

Molecular Weight of PKC $\gamma$ : 76 kDa .
Positive Controls: HeLa whole cell lysate: sc-2200, A-431 whole cell lysate: sc-2201 or mouse brain extract: sc-2253.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz MarkerTM compatible goat antirabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 ( 0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz ${ }^{\text {™ }}$ Mounting Medium: sc-24941.

## DATA



PKC $\gamma(\mathrm{H}-60)$ : sc-98952. Western blot analysis of PKC $\gamma$ expression in Jurkat (A), MOLT-4 (B) and U-87 MG (C) whole cell lysates and mouse cerebellum (D) and rat brain (E) tissue extracts


PKC $\gamma$ (H-60): sc-98952. Western blot analysis of PKC $\gamma$ expression in HeLa (A) and A431 (B) whole cell lysates and mouse brain tissue extract (C).

## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

Try PKC $\boldsymbol{\gamma}$ (C-4): sc-166385 or PKC (A-3): sc-17769, our highly recommended monoclonal alternatives to PKC $\gamma$ (H-60). Also, for AC, HRP, FITC, PE, Alexa Fluor ${ }^{\circledR}$ 488 and Alexa Fluor ${ }^{\circledR} 647$ conjugates, see PKC $\boldsymbol{\gamma}$ (C-4): sc-166385.

