**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 (α, β, γ, δ, ε, ζ, η, θ and ι). Patterns of expression for each PKC isoform differs among tissues and PKC family members exhibit clear differences in their cofactor dependencies. For instance, the kinase activities of nPKC δ and ε are independent of Ca2+. On the other hand, nPKC δ and ε, as well as all of the cPKC 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 γ (C-19) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping at the C-terminus of PKC γ of mouse origin.

**PRODUCT**

Each vial contains 200 µg IgG in 1.0 ml of PBS with <0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-211 P, (100 µg peptide in 0.5 ml PBS containing <0.1% sodium azide and 0.2% BSA).

**APPLICATIONS**

PKC γ (C-19) is recommended for detection of PKC γ of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg 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 1:30-1:3000).

PKC γ (C-19) is also recommended for detection of PKC γ in additional species, including equine, bovine and porcine.

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

Molecular Weight of PKC γ: 80 kDa.

Positive Controls: PKC γ (h): 293T Lysate: sc-116200.

**STORAGE**

Store at 4°C. **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

**RESEARCH USE**

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

**DATA**

PKC γ (C-19): sc-211. Western blot analysis of PKC γ expression in non-transfected: sc-117792 (A) and human PKC γ transfected: sc-116200; (B) 293T whole cell lysates.

PKC γ (C-19): sc-211. Immunofluorescence staining of methanol-fixed 3611-RF cells showing cytoplasmic staining (A). Immunofluorescence staining of normal mouse intestine frozen section showing cytoplasmic staining (B).

**SELECT PRODUCT CITATIONS**


**Try PKC γ (C-4): sc-166385 or PKC (A-3): sc-17769, our highly recommended monoclonal alternatives to PKC γ (C-19). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see PKC γ (C-4): sc-166385.**