

PKC ν (C-15): sc-33409

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 I, β II and γ) and novel (n) PKC isoforms (δ , ϵ , ζ , η and θ). 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 Ca^{2+} . On the other hand, nPKC δ and ϵ , as well as all of the cPKC members, possess phorbol ester-binding activities and kinase activities.

REFERENCES

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3. Nabha, S.M., et al. 2005. Upregulation of PKC δ contributes to antiestrogen resistance in mammary tumor cells. *Oncogene* 24: 3166-3176.
4. Kolkova, K., et al. 2005. Distinct roles of PKC isoforms in NCAM-mediated neurite outgrowth. *J. Neurochem.* 92: 886-894.
5. Khundmiri, S.J., et al. 2005. PTH-mediated regulation of Na^+ - K^+ -ATPase requires ERK-dependent translocation of PKC α . *J. Biol. Chem.* 280: 8705-8713.
6. Patel, N.A., et al. 2005. Molecular and genetic studies imply Akt-mediated signaling promotes PKC β II alternative splicing via phosphorylation of SRp40. *J. Biol. Chem.* 280: 14302-14309.
7. Berg, D.T., et al. 2005. Smad6s regulates plasminogen activator inhibitor-1 through a PKC- β dependent up-regulation of TGF- β . *J. Biol. Chem.* 280: 14943-14947.
8. Singh, A.J., et al. 2005. The carboxyl terminus of VEGFR-2 is required for PKC-mediated downregulation. *Mol. Biol. Cell* 16: 2106-2118.
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CHROMOSOMAL LOCATION

Genetic locus: PRKCN (human) mapping to 2p22.2; Prkcn (mouse) mapping to 17 E3.

SOURCE

PKC ν (C-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of PKC ν of human origin.

RESEARCH USE

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

PRODUCT

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

Blocking peptide available for competition studies, sc-33409 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

PKC ν (C-15) is recommended for detection of PKC ν of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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 ν (C-15) is also recommended for detection of PKC ν in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for PKC ν siRNA (h): sc-44789, PKC ν siRNA (m): sc-44790, PKC ν shRNA Plasmid (h): sc-44789-SH, PKC ν shRNA Plasmid (m): sc-44790-SH, PKC ν shRNA (h) Lentiviral Particles: sc-44789-V and PKC ν shRNA (m) Lentiviral Particles: sc-44790-V.

Molecular Weight of PKC ν : 100 kDa.

Positive Controls: Ramos cell lysate: sc-2216 or HeLa whole cell lysate: sc-2200.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

SELECT PRODUCT CITATIONS

1. Von Brandenstein, M., et al. 2011. Protein kinase C α regulates nuclear pri-microRNA 15a release as part of endothelin signaling. *Biochim. Biophys. Acta* 1813: 1793-1802.

STORAGE

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


 MONOS
Satisfaction
Guaranteed

Try **PKC ν (C-1): sc-376024** or **PKC (A-3): sc-17769**, our highly recommended monoclonal alternatives to PKC ν (C-15).