

PKC λ/ι (N-20): sc-727

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 many different isoforms (α , β I, β II, γ , δ , ϵ , ζ , η , λ , ν , μ , ι , and θ). 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 δ and ϵ are independent of Ca^{2+} . On the other hand, most of the other PKC members possess phorbol ester-binding activities and kinase activities.

CHROMOSOMAL LOCATION

Genetic locus: PRKCI (human) mapping to 3q26.2; Prkci (mouse) mapping to 3 A3.

SOURCE

PKC λ/ι (N-20) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping at the N-terminus of PKC λ/ι of human origin.

PRODUCT

Each vial contains 100 μg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

PKC λ/ι (N-20) is available conjugated to agarose (sc-727 AC), 500 $\mu\text{g}/0.25$ ml agarose in 1 ml, for IP.

Blocking peptide available for competition studies, sc-727 P, (100 μg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

PKC λ/ι (N-20) is recommended for detection of PKC λ/ι of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunoprecipitation [1-2 μg per 100-500 μg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:25, dilution range 1:25-1:250) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

PKC λ/ι (N-20) is also recommended for detection of PKC λ/ι in additional species, including canine.

Suitable for use as control antibody for PKC λ/ι siRNA (h): sc-36257, PKC λ/ι siRNA (m): sc-36258, PKC λ/ι shRNA Plasmid (h): sc-36257-SH, PKC λ/ι shRNA Plasmid (m): sc-36258-SH, PKC λ/ι shRNA (h) Lentiviral Particles: sc-36257-V and PKC λ/ι shRNA (m) Lentiviral Particles: sc-36258-V.

Molecular Weight of PKC λ/ι : 68 kDa.

Positive Controls: A-431 whole cell lysate: sc-2201, A549 cell lysate: sc-2413 or H4 cell lysate: sc-2408.

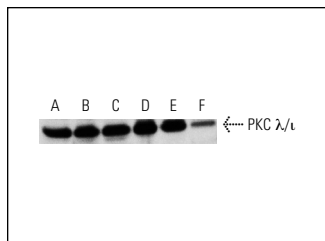
RESEARCH USE

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

STORAGE

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

DATA



PKC λ/ι (N-20): sc-727. Western blot analysis of PKC λ/ι long form expression in NCI-H1688 (A), A549 (B), SHP-77 (C), A-431 (D), SK-N-MC (E) and H4 (F) whole cell lysates.

SELECT PRODUCT CITATIONS

- Das, M., et al. 1997. Selected isozymes of PKC contribute to the augmented growth of fetal and neonatal bovine PA adventitial fibroblasts. *Am. J. Physiol.* 273: L1216-L1284.
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- Acevedo-Duncan, M., et al. 2002. Human glioma PKC- ι and PKC- β II phosphorylate cyclin-dependent kinase activating kinase during the cell cycle. *Cell Prolif.* 35: 23-36.
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- Ma, H.T., et al. 2006. Protein kinase C β and δ isoenzymes mediate cholesterol accumulation in PMA-activated macrophages. *Biochem. Biophys. Res. Commun.* 349: 214-220.


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