PKC λ/ι (E-7): sc-376344

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, δ, ε, ζ, η, θ, λ/ι, μ and ν). 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 Ca²⁺. On the other hand, most of the other PKC members possess phorbol ester-binding activities and kinase activities.

REFERENCES


CHROMOSOMAL LOCATION

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

SOURCE

PKC λ/ι (E-7) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 191-229 within an internal region of PKC λ/ι of human origin.

PRODUCT

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

PKC λ/ι (E-7) is available conjugated to agarose (sc-376344 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-364186 HRP), 200 µg/ml, for WB, IHC/IP and ELISA; to either phycocerythrin (sc-376344 PE), fluorescein (sc-376344 FITC), Alexa Fluor® 488 (sc-376344 AF488), Alexa Fluor® 546 (sc-376344 AF546), Alexa Fluor® 594 (sc-376344 AF594) or Alexa Fluor® 647 (sc-376344 AF647), 200 µg/ml, for WB (RGB), IF, IHC/IP and FCM; and to either Alexa Fluor® 680 (sc-376344 AF680) or Alexa Fluor® 790 (sc-376344 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-376344 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

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APPLICATIONS

PKC λ/ι (E-7) is recommended for detection of PKC λ/ι of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Molecular Weight of PKC λ/ι: 68 kDa.

Positive Controls: SK-N-MC cell lysate: sc-2410, c4 whole cell lysate: sc-364186 or KRNK whole cell lysate: sc-2214.

DATA

PKC λ/ι (E-7) is a Western blot analysis of PKC λ/ι expression in SK-N-MC (A), c4 (B) and KRNK (C) whole cell lysates.

SELECT PRODUCT CITATIONS


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.

PROTOCOLS

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