

PKC (MC5): sc-80

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 , θ , λ /i, 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 Ca^{2+} . On the other hand, most of the other PKC members possess phorbol ester-binding activities and kinase activities.

SOURCE

PKC (MC5) is a mouse monoclonal antibody epitope mapping within the hinge region (residues 292-317) of protein kinase C.

PRODUCT

Each vial contains 200 μg IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

PKC (MC5) is available conjugated to agarose (sc-80 AC), 500 μg /0.25 ml agarose in 1 ml, for IP; to HRP (sc-80 HRP), 200 μg /ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-80 PE), fluorescein (sc-80 FITC), Alexa Fluor[®] 488 (sc-80 AF488), Alexa Fluor[®] 546 (sc-80 AF546), Alexa Fluor[®] 594 (sc-80 AF594) or Alexa Fluor[®] 647 (sc-80 AF647), 200 μg /ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-80 AF680) or Alexa Fluor[®] 790 (sc-80 AF790), 200 μg /ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

PKC (MC5) is recommended for detection of PKC α , PKC β and 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 immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500).

PKC (MC5) is also recommended for detection of PKC α , PKC β and PKC γ in additional species, including bovine.

Suitable for use as control antibody for PKC siRNA (h): sc-29449, PKC shRNA Plasmid (h): sc-29449-SH and PKC shRNA (h) Lentiviral Particles: sc-29449-V.

Molecular Weight of PKC: 80 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204, SUP-T1 whole cell lysate: sc-364796 or C6 whole cell lysate: sc-364373.

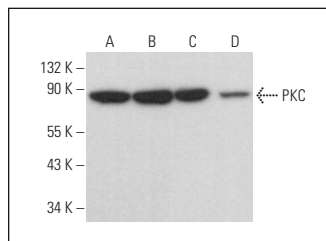
RESEARCH USE

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

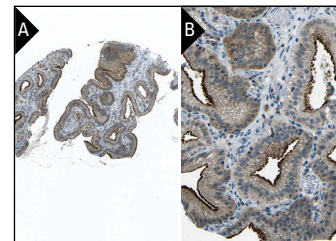
STORAGE

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

DATA



PKC (MC5): sc-80. Western blot analysis of PKC expression in Jurkat (A), SUP-T1 (B), Caki-1 (C) and C6 (D) whole cell lysates.



PKC (MC5): sc-80. Immunoperoxidase staining of formalin fixed, paraffin-embedded human gall bladder tissue showing membrane and cytoplasmic staining of glandular cells at low (A) and high (B) magnification. Kindly provided by The Swedish Human Protein Atlas (HPA) program.

SELECT PRODUCT CITATIONS

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PROTOCOLS

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