

PKC γ (h): 293T Lysate: sc-116200

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 , θ , ι , λ , 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.

REFERENCES

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3. Kikkawa, U., Takai, Y., Tanaka, Y., Miyake, R. and Nishizuka, Y. 1983. Protein kinase C as a possible receptor of tumor-promoting phorbol esters. *J. Biol. Chem.* 258: 11442-11445.
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CHROMOSOMAL LOCATION

Genetic locus: PRKCG (human) mapping to 19q13.42.

PRODUCT

PKC γ (h): 293T Lysate represents a lysate of human PKC γ transfected 293T cells and is provided as 100 μ g protein in 200 μ l SDS-PAGE buffer.

RESEARCH USE

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

APPLICATIONS

PKC γ (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive PKC γ antibodies. Recommended use: 10-20 μ l per lane.

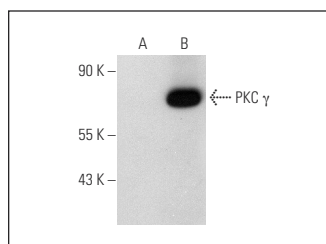
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

PKC γ (C-4): sc-166385 is recommended as a positive control antibody for Western Blot analysis of enhanced human PKC γ expression in PKC γ transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

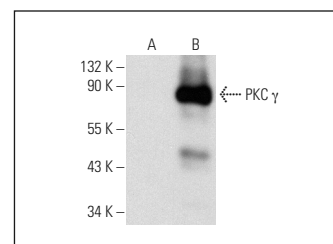
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker[™] Molecular Weight Standards: sc-2035, UltraCruz[®] Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



PKC γ (C-4): sc-166385. Western blot analysis of PKC γ expression in non-transfected: sc-117752 (A) and human PKC γ transfected: sc-116200 (B) 293T whole cell lysates.



PKC γ (D-4): sc-166451. Western blot analysis of PKC γ expression in non-transfected: sc-117752 (A) and human PKC γ transfected: sc-116200 (B) 293T whole cell lysates.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

PROTOCOLS

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