

p-PKC ϵ (Ser 729): sc-12355

BACKGROUND

Protein kinase C (PKC) family members influence a variety of cellular functions, including cell growth, cell differentiation, hormone secretion and membrane function. PKC isoforms are calcium and phospholipid-dependent serine/threonine protein kinases. Diacylglycerols (DAG) and tumor promoting phorbol esters bind to and activate PKC. The activity and intracellular localization of protein kinase C (PKC) family members are controlled by phosphorylation at three highly conserved sites in the catalytic kinase domain. In the case of PKC ϵ , these are Thr 566 in the activation loop, Thr 710 in the turn motif and Ser 729 in the C-terminal hydrophobic motif. The phosphorylation status of Ser 729 can undergo regulation by a FRAP-sensitive phosphatase.

CHROMOSOMAL LOCATION

Genetic locus: PRKCE (human) mapping to 2p21; Prkce (mouse) mapping to 17 E4.

SOURCE

p-PKC ϵ (Ser 729) is available as either goat (sc-12355) or rabbit (sc-12355-R) polyclonal affinity purified antibody raised against a short amino acid sequence containing Ser 729 phosphorylated PKC ϵ of human origin.

PRODUCT

Each vial contains either 100 μ g (sc-12355) or 200 μ g (sc-12355-R) IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-12355 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

p-PKC ϵ (Ser 729) is recommended for detection of Ser 729 phosphorylated PKC ϵ of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], 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).

p-PKC ϵ (Ser 729) is also recommended for detection of correspondingly phosphorylated PKC ϵ in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for PKC ϵ siRNA (h): sc-36251, PKC ϵ siRNA (m): sc-36250, PKC ϵ shRNA Plasmid (h): sc-36251-SH, PKC ϵ shRNA Plasmid (m): sc-36250-SH, PKC ϵ shRNA (h) Lentiviral Particles: sc-36251-V and PKC ϵ shRNA (m) Lentiviral Particles: sc-36250-V.

Molecular Weight of p-PKC ϵ : 90 kDa.

Positive Controls: HeLa + PMA cell lysate: sc-2258 or rat heart extract: sc-2393.

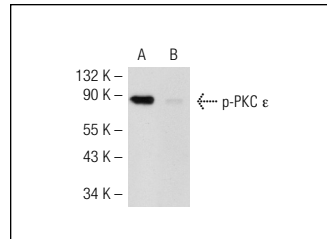
STORAGE

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

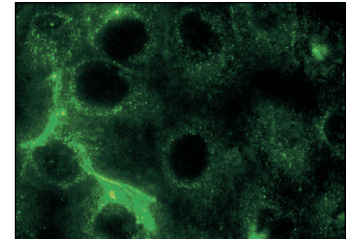
RESEARCH USE

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

DATA



p-PKC ϵ (Ser 729)-R: sc-12355-R. Western blot analysis of PKC ϵ phosphorylation in untreated (A) and lambda protein phosphatase treated (B) rat heart tissue extract.



p-PKC ϵ (Ser 729)-R: sc-12355-R. Immunofluorescence staining of methanol-fixed PMA-treated HeLa cells showing cytoplasmic localization.

SELECT PRODUCT CITATIONS

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