SANTA CRUZ BIOTECHNOLOGY, INC.

PRK2 (C-18): sc-6979

SANTA CRUZ BIOTECHNOLOGY
The Power to Question

BACKGROUND

Rho, the Ras-related small GTPase, is responsible for the regulation of actin-based cytoskeletal structures including stress fibers, focal adhesions and the contractile ring apparatus. Rho proteins function as molecular switches that are able to turn cytokinesis on and off. Although little is known about signaling downstream of Rho, a host of putative Rho effector proteins have been described, including rhophilin, rhotekin, citron and the serine/threonine kinase, protein kinase N. Several related Rho-binding proteins have been identified, including the serine/threonine kinases PRK2 (PKC-related kinase 2, also designated PAK-2).

REFERENCES

1. Kitagawa, M., et al. 1995. Purification and characterization of a fatty acid-activated protein kinase (PKN) from rat testis. Biochem. J. 310: 657-664.
2. Watanabe, G., et al. 1996. Protein kinase N (PKN) and PKN-related protein rhophilin as targets of small GTPase Rho. Science 271: 645-648.

CHROMOSOMAL LOCATION

Genetic locus: PKN2 (human) mapping to 1p22.2; Pkn2 (mouse) mapping to 3 H1.

SOURCE

PRK2 (C-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of PRK2 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-6979 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

PRK2 (C-18) is recommended for detection of PRK2 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 solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

PRK2 (C-18) is also recommended for detection of PRK2 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for PRK2 siRNA (h): sc-39219, PRK2 siRNA (m): sc-39220, PRK2 shRNA Plasmid (h): sc-39219-SH, PRK2 shRNA Plasmid (m): sc-39220-SH, PRK2 shRNA (h) Lentiviral Particles: sc-39219-V and PRK2 shRNA (m) Lentiviral Particles: sc-39220-V.

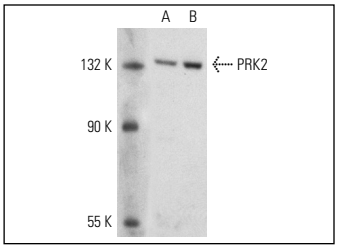
Molecular Weight of PRK2: 130 kDa.

Positive Controls: MIA PaCa-2 cell lysate: sc-2285, HeLa whole cell lysate: sc-2200 or HeLa + Calyculin A cell lysate: sc-2271.

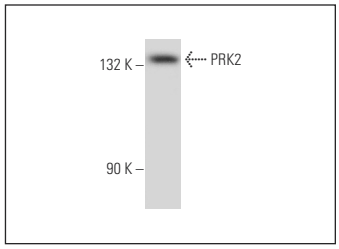
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



PRK2 (C-18): sc-6979. Western blot analysis of PRK2 expression in untreated (**A**) and Calyculin A treated (**B**) HeLa whole cell lysates.



PRK2 (C-18): sc-6979. Western blot analysis of PRK2 expression in MIA PaCa-2 whole cell lysate.

SELECT PRODUCT CITATIONS

1. O'Sullivan, A.G., et al. 2015. Protein kinase C-related kinase 1 and 2 play an essential role in thromboxane-mediated neoplastic responses in prostate cancer. Oncotarget 6: 26437-26456.

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 or our catalog for detailed protocols and support products.