

# PRK2 (H-80): sc-28774

## 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 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

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2. Kitagawa, M., Mukai, H., Shibata, H. and Ono, Y. 1995. Purification and characterization of a fatty acid-activated protein kinase (PKN) from rat testis. *Biochem. J.* 310: 657-664.
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5. Kitagawa, M., Shibata, H., Toshimori, M., Mukai, H. and Ono, Y. 1996. The role of the unique motifs in the amino-terminal region of PKN on its enzymatic activity. *Biochem. Biophys. Res. Commun.* 220: 963-968.
6. Watanabe, G., Saito, Y., Madaule, P., Ishizaki, T., Fujisawa, K., Morii, N., Mukai, H., Ono, Y., Kakizuka, A. and Narumiya, S. 1996. Protein kinase N (PKN) and PKN-related protein rhotekin 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 (H-80) is a rabbit polyclonal antibody raised against amino acids 71-150 mapping near the N-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.

## RESEARCH USE

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

## APPLICATIONS

PRK2 (H-80) 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 (H-80) 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.

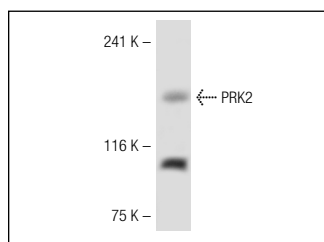
Molecular Weight of PRK2: 130 kDa.

Positive Controls: COLO320 DM cell lysate: sc-2226, K-562 whole cell lysate: sc-2203 or HeLa whole cell lysate: sc-2200.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## DATA



PRK2 (H-80): sc-28774. Western blot analysis of PRK2 expression in K-562 whole cell lysate.

## STORAGE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.