

Rhotekin (N-17): sc-6220

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. Two additional Rho-activated serine/threonine kinases have been described, designated Rock-1 and Rock-2 (also referred to as Roka) for Rho-associated coil-containing protein kinase. Rock-1 and Rock-2 share a structural similarity with myotonic dystrophy kinase.

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. Leung, T., et al. 1995. A novel serine/threonine kinase binding the Ras-related RhoA GTPase which translocates the kinase to peripheral membranes. *J. Biol. Chem.* 270: 29051-29054.

CHROMOSOMAL LOCATION

Genetic locus: RTKN (human) mapping to 2p13.1; Rtkn (mouse) mapping to 6 C3.

SOURCE

Rhotekin (N-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of Rhotekin of mouse 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-6220 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Rhotekin (N-17) is recommended for detection of rhotekin 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).

Rhotekin (N-17) is also recommended for detection of rhotekin in additional species, including equine and canine.

Suitable for use as control antibody for Rhotekin siRNA (h): sc-39223, Rhotekin siRNA (m): sc-39224, Rhotekin shRNA Plasmid (h): sc-39223-SH, Rhotekin shRNA Plasmid (m): sc-39224-SH, Rhotekin shRNA (h) Lentiviral Particles: sc-39223-V and Rhotekin shRNA (m) Lentiviral Particles: sc-39224-V.

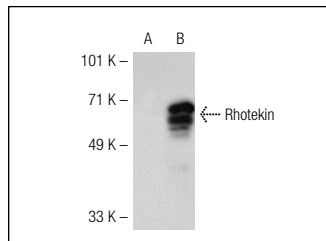
Molecular Weight of Rhotekin: 62 kDa.

Positive Controls: Rhotekin (h): 293T Lysate: sc-112761, Rhotekin (m2): 293T Lysate: sc-123129 or Jurkat whole cell lysate: sc-2204.

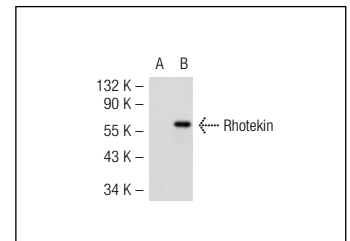
RECOMMENDED SECONDARY REAGENTS

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



Rhotekin (N-17): sc-6220. Western blot analysis of Rhotekin expression in non-transfected: sc-117752 (A) and human Rhotekin transfected: sc-112761 (B) 293T whole cell lysates.



Rhotekin (N-17): sc-6220. Western blot analysis of Rhotekin expression in non-transfected: sc-117752 (A) and mouse Rhotekin transfected: sc-123129 (B) 293T whole cell lysates.

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.

MONOS
Satisfaction
Guaranteed

Try **Rhotekin (B-4): sc-393833** or **Rhotekin (AA-18): sc-100426**, our highly recommended monoclonal alternatives to Rhotekin (N-17).