**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 miphilin, Rhoetkin, 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 coi-containing protein kinase). Rock-1 and Rock-2 share a structural similarity with myotonic dystrophy kinase.

**CHROMOSOMAL LOCATION**

Genetic locus: ROCK1 (human) mapping to 18q11.1; Rock1 (mouse) mapping to 18 A1.

**SOURCE**

Rock-1 (H-85) is a rabbit polyclonal antibody raised against amino acids 755-840 mapping within an internal region of Rock-1 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.

**APPLICATIONS**

Rock-1 (H-85) is recommended for detection of Rock-1 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Rock-1 (H-85) is also recommended for detection of Rock-1 in additional species, including equine, canine, bovine and porcine.


Molecular Weight of Rock-1: 160 kDa.

Positive Controls: KNRK whole cell lysate: sc-2214, Caki-1 cell lysate: sc-2224 or mouse liver extract: sc-2256.

**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**

**SELECT PRODUCT CITATIONS**