

# Nischarin (H-300): sc-98980

## BACKGROUND

Integrins play important roles in key cellular functions, including cytoskeletal organization, growth, survival, motility and gene expression regulation. Nischarin is a novel intracellular protein, that binds to the cytoplasmic domain of Integrin  $\alpha 5/\beta 1$  and interacts with various members of the Pak family of kinases. Nischarin binding to Pak1 inhibits the ability of Pak1 to phosphorylate substrates. When bound, this complex localizes to membrane ruffles which are involved in cell motility. Nischarin also acts as an antagonist of Rac function on cell movement and alters actin filament organization. These functions give Nischarin a possible role in cell migration regulation. Nischarin is a primarily cytoplasmic protein primarily expressed in kidney and brain.

## CHROMOSOMAL LOCATION

Genetic locus: NISCH (human) mapping to 3p21.1; Nisch (mouse) mapping to 14 B.

## SOURCE

Nischarin (H-300) is a rabbit polyclonal antibody raised against amino acids 1212-1504 mapping at the C-terminus of Nischarin of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## STORAGE

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

## APPLICATIONS

Nischarin (H-300) is recommended for detection of Nischarin of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ 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).

Nischarin (H-300) is also recommended for detection of Nischarin in additional species, including equine.

Suitable for use as control antibody for Nischarin siRNA (h): sc-61201, Nischarin siRNA (m): sc-61202, Nischarin siRNA (r): sc-108099, Nischarin shRNA Plasmid (h): sc-61201-SH, Nischarin shRNA Plasmid (m): sc-61202-SH, Nischarin shRNA Plasmid (r): sc-108099-SH, Nischarin shRNA (h) Lentiviral Particles: sc-61201-V, Nischarin shRNA (m) Lentiviral Particles: sc-61202-V and Nischarin shRNA (r) Lentiviral Particles: sc-108099-V.

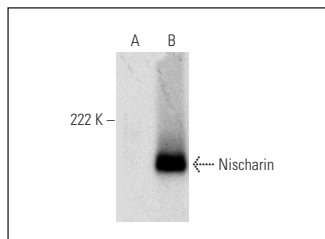
Molecular Weight of Nischarin: 190 kDa.

Positive Controls: PC-12 cell lysate: sc-2250 or Nischarin (h): 293T Lysate: sc-116146.

## 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



Nischarin (H-300): sc-98980. Western blot analysis of Nischarin expression in non-transfected: sc-117752 (A) and human Nischarin transfected: sc-116146 (B) 293T whole cell lysates.

## RESEARCH USE

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

## PROTOCOLS

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



Try **Nischarin (F-3): sc-374408** or **Nischarin (B-3): sc-365364**, our highly recommended monoclonal alternatives to Nischarin (H-300).