

Rho D (N-18): sc-27879

BACKGROUND

Upon activation, the small GTPase Rho D contributes to rearrangement of the actin cytoskeleton and cell surface and also governs endosome motility and distribution. The effects of Rho D antagonize those of its family member, Rho A, by disassembling actin stress fibers normally enhanced by Rho A. Additionally, Rho D disengages focal adhesions, resulting in retardation of cell migration. Accordingly, transfection of a constitutively active form of Rho D (designated Rho D G26V) reverses the invasive phenotype of G-protein alpha(olf) induced cells, implying the possibility of a therapeutic use for activated Rho D in counteracting tumor metastasis.

REFERENCES

1. Paradis, G., Bazin, R., Lemieux, R. 1986. Protective effect of the membrane skeleton on the immunologic reactivity of the human red cell Rho(D) antigen. *J. Immunol.* 137: 240-244.
2. Ruiz-Argüelles, G.J., Apreza-Molina, M.G., Pérez-Romano, B., Ruiz-Argüelles, A. 1993. The infusion of anti-RhO-D opsonized erythrocytes may be useful in the treatment of patients, splenectomized or not, with chronic, refractory autoimmune thrombocytopenic purpura—a prospective study. *Am. J. Hematol.* 43: 72-73.

CHROMOSOMAL LOCATION

Genetic locus: RHOD (human) mapping to 11q13.2.

SOURCE

Rho D (N-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of Rho D 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-27879 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

Rho D (N-18) is recommended for detection of Rho D of 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).

Suitable for use as control antibody for Rho D siRNA (h): sc-60032, Rho D shRNA Plasmid (h): sc-60032-SH and Rho D shRNA (h) Lentiviral Particles: sc-60032-V.

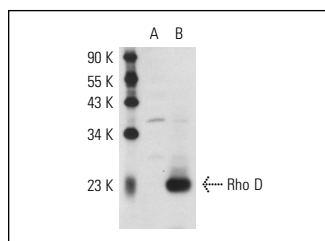
Molecular Weight of Rho D: 23 kDa.

Positive Controls: Rho D (h): 293 Lysate: sc-110628.

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



Rho D (N-18): sc-27879. Western blot analysis of Rho D expression in non-transfected: sc-110760 (A) and human Rho D transfected: sc-110628 (B) 293 whole cell lysates.

SELECT PRODUCT CITATIONS

1. Macías-Sánchez, K., et al. 2011. Rho1 and other GTP-binding proteins are associated with vesicles carrying glucose oxidase activity from *Fusarium oxysporum f. sp. lycopersici*. *Antonie Van Leeuwenhoek* 99: 671-680.

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 or our catalog for detailed protocols and support products.


 MONOS
Satisfaction
Guaranteed

Try **Rho D (H-6): sc-365241** or **Rho D (H-1): sc-376340**, our highly recommended monoclonal alternatives to Rho D (N-18).