

Rho C (G-12): sc-26481

BACKGROUND

The Ras p21 family of guanine nucleotide proteins has been widely studied in view of its apparent role in signal transduction pathways and high frequency of mutations in human malignancies. It is now clear, however, that the Ras proteins (H-, K- and N-Ras p21) are members of a much larger superfamily of related proteins. Six members of this family, Rap 1A, Rap 1B, Rap 2, R-Ras, Ral A and Ral B, exhibit approximately 50% amino acid homology to Ras. The five mammalian Rho proteins (Rho A, B, C, 7 and 8) are approximately 30% homologous to Ras and are expressed in a wide range of cell types. Both Ras p21 and Rho p21, as well as other members of the Ras superfamily, contain a carboxy terminal CAAX sequence (C, cysteine; A, aliphatic amino acid; X, any amino acid) which in the case of Ras has been shown to be essential for correct localization and function.

CHROMOSOMAL LOCATION

Genetic locus: RHOC (human) mapping to 1p13.2; Rhoc (mouse) mapping to 3 F2.2.

SOURCE

Rho C (G-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of Rho C 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.

Rho C (G-12) is available conjugated to agarose (sc-26481 AC), 500 µg/0.25 ml agarose in 1 ml, for IP.

Blocking peptide available for competition studies, sc-26481 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

Rho C (G-12) is recommended for detection of Rho C 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).

Rho C (G-12) is also recommended for detection of Rho C in additional species, including equine, canine, bovine, porcine and avian.

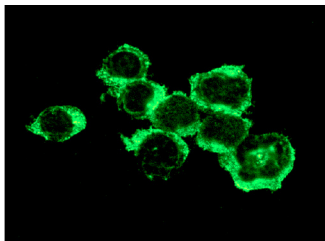
Suitable for use as control antibody for Rho C siRNA (h): sc-41887, Rho C siRNA (m): sc-41888, Rho C shRNA Plasmid (h): sc-41887-SH, Rho C shRNA Plasmid (m): sc-41888-SH, Rho C shRNA (h) Lentiviral Particles: sc-41887-V and Rho C shRNA (m) Lentiviral Particles: sc-41888-V

Molecular Weight of Rho C: 24 kDa.

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 C (G-12): sc-26481. Immunofluorescence staining of methanol-fixed Jurkat cells showing membrane localization.

SELECT PRODUCT CITATIONS

- Kabuyama, Y., et al. 2009. A mediator of Rho-dependent invasion moonlights as a methionine salvage enzyme. *Mol. Cell Proteomics* 8: 2308-2320.
- Boone, B., et al. 2009. The role of Rho C in growth and metastatic capacity of melanoma. *J. Cutan. Pathol.* 36: 629-636.
- Srivastava, S., et al. 2010. Notch1 regulates the functional contribution of Rho C to cervical carcinoma progression. *Br. J. Cancer* 102: 196-205.
- Macias-Sanchez, 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.
- Tsai, I.J., et al. 2015. Inhibition of Rho-associated kinase relieves C5a-induced proteinuria in murine nephrotic syndrome. *Cell. Mol. Life Sci.* 72: 3157-3171.

RESEARCH USE

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



Try **Rho C (C-10): sc-393090** or **Rho C (37): sc-130339**, our highly recommended monoclonal alternatives to Rho C (G-12). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **Rho C (C-10): sc-393090**.