

Rho C (K-12): sc-26480

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 (K-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.

Blocking peptide available for competition studies, sc-26480 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

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

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.

Positive Controls: Rho C (m): 293T Lysate: sc-123119 or Rho C (h): 293T Lysate: sc-116465.

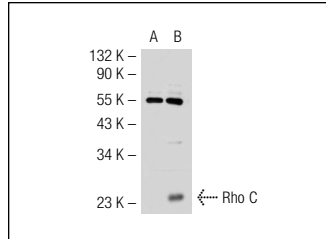
STORAGE

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

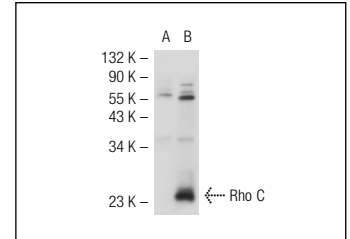
RESEARCH USE

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

DATA



Rho C (K-12): sc-26480. Western blot analysis of Rho C expression in non-transfected: sc-117752 (A) and human Rho C transfected: sc-116465 (B) 293T whole cell lysates.



Rho C (K-12): sc-26480. Western blot analysis of Rho C expression in non-transfected: sc-117752 (A) and mouse Rho C transfected: sc-123119 (B) 293T whole cell lysates.

SELECT PRODUCT CITATIONS

- Carothers, A.M., et al. 2006. Deficient E-cadherin adhesion in C57BL/6J-Min/+ mice is associated with increased tyrosine kinase activity and RhoA-dependent actomyosin contractility. *Exp. Cell Res.* 312: 387-400.
- Montero, J.A., et al. 2007. Role of Rho C in digit morphogenesis during limb development. *Dev. Biol.* 303: 325-335.
- Ho, T.T., et al. 2008. RhoA-GDP regulates Rho B protein stability: potential involvement of RhoGDI α . *J. Biol. Chem.* 283: 21588-21598.
- Turner, S.J., et al. 2008. Effects of lovastatin on Rho isoform expression, activity, and association with guanine nucleotide dissociation inhibitors. *Biochem. Pharmacol.* 75: 405-413.
- Boulter, E., et al. 2010. Regulation of Rho GTPase crosstalk, degradation and activity by RhoGDI1. *Nat. Cell Biol.* 12: 477-483.
- Sabatel, C., et al. 2011. MicroRNA-21 exhibits antiangiogenic function by targeting Rho B expression in endothelial cells. *PLoS ONE* 6: e16979.
- Jin, H., et al. 2012. Delivery of microRNA-10b with polylysine nanoparticles for inhibition of breast cancer cell wound healing. *Breast Cancer* 6: 9-19.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.



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