Rho G (m): 293T Lysate: sc-127464



The Power to Question

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. 6 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 5 mammalian Rho proteins (Rho A, B, C, G, 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.

REFERENCES

- 1. Madaule, P. and Axel, R. 1985. A novel Ras-related gene family. Cell 41: 31-40
- 2. Barbacid, M. 1987. Ras genes. Annu. Rev. Biochem. 56: 779-827.
- 3. Yeramian, P., Chardin, P., Madaule, P. and Tavitian, A. 1987. Nucelotide sequence of human Rho cDNA clone 12. Nucleic Acids Res. 15: 189.
- 4. Chardin, P. 1988. The Ras superfamily proteins. Biochimie 70: 865-868.
- 5. Olofsson, B., Chardin, P., Toudrot, N., Zahraoni, A. and Tavitian, A. 1988. Expression of the Ras-related Ral A Rho 12 and Rab genes in adult mouse tissues. Oncogene 3: 231-234.
- 6. Morris, J.D.M., Price, P., Lloyd, A.C., Self, A.J., Marshall, C.J. and Hall, A. 1989. Scrape-loading of Swiss 3T3 cells with Ras protein rapidly activates protein kinase C in the absence of phospholinositide hydrolysis. Oncogene 4: 27-31.
- Garrett, M.D., Self, A.J., Van Oers, C. and Hall, A. 1989. Identification of distinct cytoplasmic targets for Ras/R-Ras and Rho regulatory proteins. J. Biol. Chem. 264: 10-13.
- 8. Adamson, P., Marshall, C.J., Hall, A. and Tilbrook, P.A. 1992. Posttranslational modifications of p21 Rho proteins. J. Biol. Chem. 267: 20033-20038.

CHROMOSOMAL LOCATION

Genetic locus: Rhog (mouse) mapping to 7 E3.

PRODUCT

Rho G (m): 293T Lysate represents a lysate of mouse Rho G transfected 293T cells and is provided as $100 \mu g$ protein in $200 \mu l$ SDS-PAGE buffer.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

PROTOCOLS

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

APPLICATIONS

Rho G (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive Rho G antibodies. Recommended use: 10-20 µl per lane.

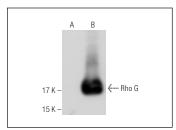
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

Rho G (1F3 B3 E5): sc-80015 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse Rho G expression in Rho G transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-lgG κ BP-HRP: sc-516102 or m-lgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz MarkerTM Molecular Weight Standards: sc-2035, UltraCruz[®] Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



Rho G (1F3 B3 E5): sc-80015. Western blot analysis of Rho G expression in non-transfected: sc-117752 (A) and mouse Rho G transfected: sc-127464 (B) 293T

RESEARCH USE

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

Santa Cruz Biotechnology, Inc. 1.800.457.3801 831.457.3801 Fax 831.457.3801 Europe +00800 4573 8000 49 6221 4503 0 www.scbt.com