

Rho 8 (h2): 293T Lysate: sc-174034

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.

REFERENCES

1. Madaule, P. and Axel, R. 1985. A novel Ras-related gene family. *Cell* 41: 31-40.
2. Yeramian, P., Chardin, P., Madaule, P. and Tavitian, A. 1987. Nucleotide sequence of human Rho cDNA clone 12. *Nucleic Acids Res.* 15: 1869.
3. Barbacid, M.I. 1987. Ras genes. *Annu. Rev. Biochem.* 56: 779-827.
4. Olofsson, B., Chardin, P., Toudrot, N., Zahraoui, 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.
5. Chardin, P. 1988. The Ras superfamily proteins. *Biochimie* 70: 865-868.
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 phospholipinolytic hydrolysis. *Oncogene* 4: 27-31.
7. 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: ARHE (human) mapping to 2q23.3.

PRODUCT

Rho 8 (h2): 293T Lysate represents a lysate of human Rho 8 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

Rho 8 (h2): 293T Lysate is suitable as a Western Blotting positive control for human reactive Rho 8 antibodies. Recommended use: 10-20 µl per lane.

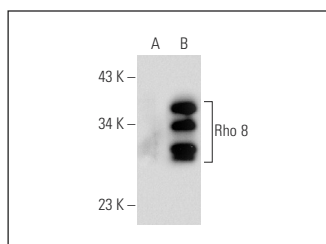
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

Rho 8 (clone 4): sc-53874 is recommended as a positive control antibody for Western Blot analysis of enhanced human Rho 8 expression in Rho 8 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-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



Rho 8 (clone 4): sc-53874. Western blot analysis of Rho 8 expression in non-transfected: sc-117752 (A) and human Rho 8 transfected: sc-174034 (B) 293T whole cell lysates.

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.

RESEARCH USE

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

PROTOCOLS

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