Rap 2C (m): 293T Lysate: sc-122970



The Power to Question

BACKGROUND

Ras oncogenes encode GTP-binding proteins that are capable of transforming immortalized cells in culture. Two Ras-related human genes, designated RAP1A and RAP1B, encode 95% homologous proteins (namely Rap 1A and Rap 1B) that share a similar C-terminal Cys-Ali-Ali-Xaa sequence with Ras proteins and are ubiquitously expressed in mammalian tissues. The putative "effector" domain of Ras proteins, whose integrity is required for cell transformation as well as interaction with the putative effector protein GAP, is conserved in both Rap 1 proteins. Rap 1A is thought to interfere with Ras effector function by binding to Ras GAP in a GTP-dependent manner without affecting Rap 1A GTPase activity. The Rap 2 proteins, designated Rap 2A, Rap 2B and Rap 2C, share similarity with Rap 1A and may be involved in gene regulation relating to cell growth, differentiation and apoptosis.

REFERENCES

- Pizon, V., Chardin, P., Lerosey, I., Olofsson, B. and Tavitian, A. 1988. Human cDNAs Rap 1 and Rap 2 homologous to the *Drosophila* gene Dras3 encode proteins closely related to Ras in the "effector" region. Oncogene 3: 201-204.
- Pizon, V., Lerosey, I., Chardin, P. and Tavitian, A. 1988. Nucleotide sequence of a human cDNA encoding a Ras-related protein (Rap 1B). Nucl. Acids Res. 16: 7719.
- Culine, S., Olofsson, B., Gosselin, S., Honore, N. and Tavitian, A. 1989. Expression of the Ras-related Rap genes in human tumors. Int. J. Cancer 44: 990-994.
- Kitayama, H., Sugimoto, Y., Matsuzaki, T., Ikawa, Y. and Noda, M. 1989. A Ras-related gene with transformation suppressor activity. Cell 56: 77-84.
- Kim, S., Mozoguchi, A., Kikuchi, A. and Takai, Y. 1990. Tissue and subcellular distributions of the SMG21/Rap 1/Krev-1 proteins which are partly distinct from those of c-Ras p21s. Mol. Cell. Biol. 10: 2645-2652.
- Frech, M., John, J., Pizon, V., Chardin, P., Tavitian, A., Clark, R., McCormick, F. and Wittinghofer, A. 1990. Inhibition of GTPase activating protein stimulation of Ras p21 GTPase by the Krev-1 gene product. Science 249: 169-171.
- 7. Beranger, F., Tavitian, A. and de Gunzburg, J. 1991. Post-translational processing and subcellular localization of the Ras-related Rap 2 protein. Oncogene 6: 1835-1842.
- Jimenez, B., Pizon, V., Lerosey, I., Beranger, F., Tavitian, A. and de Gunzburg, J. 1991. Effects of the Ras-related Rap 2 protein on cellular proliferation. Int. J. Cancer 49: 471-479.

CHROMOSOMAL LOCATION

Genetic locus: Rap2c (mouse) mapping to X A5.

PRODUCT

Rap 2C (m): 293T Lysate represents a lysate of mouse Rap 2C transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

STORAGE

Store at -20 $^{\circ}$ C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

APPLICATIONS

Rap 2C (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive Rap 2C antibodies. Recommended use: 10-20 μ l per lane.

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

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.

Santa Cruz Biotechnology, Inc. 1.800.457.3801 831.457.3800 fax 831.457.3801 **Europe** +00800 4573 8000 49 6221 4503 0 **www.scbt.com**