

ARHGAP29 (m): 293T Lysate: sc-118533

BACKGROUND

GTPase-activating proteins (GAPs) accelerate the intrinsic rate of GTP hydrolysis of Ras-related proteins, resulting in down regulation of their active form. ARHGAP29 (Rho GTPase activating protein 29), also known as PARG1, is a 1,261 amino acid protein that is widely expressed and contains a phorbol-ester/DAG-type zinc finger and a Rho-GAP domain. There is high expression of ARHGAP29 in skeletal muscle and heart, intermediate expression in placenta, liver and pancreas, and weak expression in brain, lung and kidney. As a GTPase activator, ARHGAP29 converts Rho-type GTPases to an inactive GDP-bound state and has strong activity toward Rho A, and weaker activity toward Rac 1 and Cdc42. Also considered a specific effector of Rap 2A to regulate Rho, ARHGAP29 is strongly down-regulated in mantle-cell lymphomas and up-regulated in migrating glioma cells. ARHGAP29 exists as two alternatively spliced isoforms.

REFERENCES

1. Saras, J., et al. 1997. A novel GTPase-activating protein for Rho interacts with a PDZ domain of the protein-tyrosine phosphatase PTPL1. *J. Biol. Chem.* 272: 24333-24338.
2. Bassères, D.S., et al. 2002. ARHGAP10, a novel human gene coding for a potentially cytoskeletal Rho-GTPase activating protein. *Biochem. Biophys. Res. Commun.* 294: 579-585.
3. Myagmar, B.E., et al. 2005. PARG1, a protein-tyrosine phosphatase-associated RhoGAP, as a putative Rap2 effector. *Biochem. Biophys. Res. Commun.* 329: 1046-1052.
4. Meyer-Ficca, M.L., et al. 2005. Poly(ADP-ribose) polymerases: managing genome stability. *Int. J. Biochem. Cell Biol.* 37: 920-926.
5. Online Mendelian Inheritance in Man, OMIM™. 2006. Johns Hopkins University, Baltimore, MD. MIM Number: 610496. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
6. Ripperger, T., et al. 2007. Promoter methylation of PARG1, a novel candidate tumor suppressor gene in mantle-cell lymphomas. *Haematologica* 92: 460-468.
7. Schraders, M., et al. 2008. Integrated genomic and expression profiling in mantle cell lymphoma: identification of gene-dosage regulated candidate genes. *Br. J. Haematol.* 143: 210-221.
8. Yi, C.H., et al. 2009. Cancer-related transcriptional targets of the circadian gene NPAS2 identified by genome-wide ChIP-on-chip analysis. *Cancer Lett.* 284: 149-156.
9. Daino, K., et al. 2009. Gene expression profiling of α -radiation-induced rat osteosarcomas: identification of dysregulated genes involved in radiation-induced tumorigenesis of bone. *Int. J. Cancer* 125: 612-620.

CHROMOSOMAL LOCATION

Genetic locus: Arhgap29 (mouse) mapping to 3 G1.

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.

PRODUCT

ARHGAP29 (m): 293T Lysate represents a lysate of mouse ARHGAP29 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

ARHGAP29 (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive ARHGAP29 antibodies. Recommended use: 10-20 µl per lane.

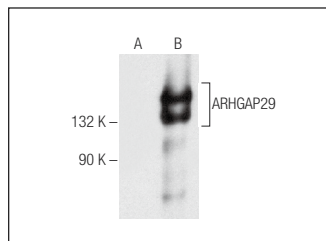
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

ARHGAP29 (H-2): sc-377022 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse ARHGAP29 expression in ARHGAP29 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



ARHGAP29 (H-2): sc-377022. Western blot analysis of ARHGAP29 expression in non-transfected: sc-117752 (A) and mouse ARHGAP29 transfected: sc-118533 (B) 293T whole cell lysates.

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.