SANTA CRUZ BIOTECHNOLOGY, INC.

ARHGAP17 (F-18): sc-160145

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The Power to Question

BACKGROUND

GTPase-activating proteins (GAPs) accelerate the intrinsic rate of GTP hydrolysis of Ras-related proteins, resulting in downregulation of their active form. ARHGAP17 (Rho GTPase activating protein 17), also known as RICH1, WBP15, MST066, MST110, NADRIN, PP4534, RICH1B, MSTP038, MSTP066 or MSTP110, is a peripheral membrane protein that is ubiquitously expressed with higher expression in heart and placenta. ARHGAP17 is involved in the maintenance of tight junction by regulating the activity of Cdc42, thereby playing a central role in apical polarity of epithelial cells. Containina a BAR domain and a Rho-GAP domain, ARHGAP17 acts as a GTPase activator for the Cdc42 GTPase by converting it to an inactive GDP-bound state. ARHGAP17 may also participates in the Ca^{2+}-dependent regulation of exocytosis by catalyzing GTPase activity of Rho family proteins and by inducing the reorganization of the cortical actin filaments. ARHGAP17 exists as seven alternative splice variants.

REFERENCES

1. Harada, A., et al. 2000. Nadrin, a novel neuron-specific GTPase-activating protein involved in regulated exocytosis. J. Biol. Chem. 275: 36885-36891.
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3. Reczek, D. and Bretscher, A. 2001. Identification of EPI64, a TBC/RabGAP domain-containing microvillar protein that binds to the first PDZ domain of EBP50 and E3KARP. J. Cell Biol. 153: 191-206.
4. Furuta, B., et al. 2002. Identification and functional characterization of nadrin variants, a novel family of GTPase activating protein for Rho GTPases. J. Neurochem. 82: 1018-1028.
5. Katoh, Y. and Katoh, M. 2004. Identification and characterization of ARHGAP27 gene in silico. Int. J. Mol. Med. 14: 943-947.
6. Katoh, M. and Katoh, M. 2004. Characterization of human ARHGAP10 gene *in silico*. Int. J. Oncol. 25: 1201-1206.
7. Peter, B.J., et al. 2004. BAR domains as sensors of membrane curvature: the amphiphysin BAR structure. Science 303: 495-499.

CHROMOSOMAL LOCATION

Genetic locus: ARHGAP17 (human) mapping to 16p12.1; Arhgap17 (mouse) mapping to 7 F3.

SOURCE

ARHGAP17 (F-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of ARHGAP17 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-160145 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

ARHGAP17 (F-18) is recommended for detection of ARHGAP17 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); non cross-reactive with other ARHGAP family members.

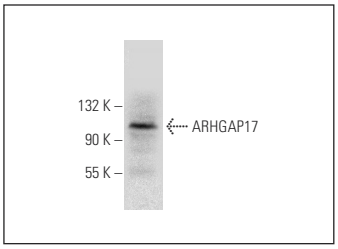
ARHGAP17 (F-18) is also recommended for detection of ARHGAP17 in additional species, including equine and canine.

Suitable for use as control antibody for ARHGAP17 siRNA (h): sc-93486, ARHGAP17 siRNA (m): sc-141204, ARHGAP17 shRNA Plasmid (h): sc-93486-SH, ARHGAP17 shRNA Plasmid (m): sc-141204-SH, ARHGAP17 shRNA (h) Lentiviral Particles: sc-93486-V and ARHGAP17 shRNA (m) Lentiviral Particles: sc-141204-V.

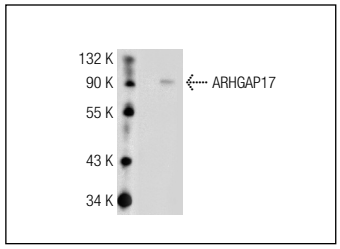
Molecular Weight of ARHGAP17: 95 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, T24 cell lysate: sc-2292 or mouse placenta extract: sc-364247.

DATA



ARHGAP17 (F-18): sc-160145. Western blot analysis of ARHGAP17 expression in HeLa whole cell lysate.



ARHGAP17 (F-18): sc-160145. Western blot analysis of ARHGAP17 expression in T24 whole cell lysate.

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.

PROTOCOLS

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