SANTA CRUZ BIOTECHNOLOGY, INC.

ARHGAP22 (C-15): sc-249959

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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 down regulation of their active form. ARHGAP22 (Rho GTPase activating protein 22), also known as RHOGAP2, is a 698 amino acid protein that localizes to the cytoplasm, and contains one Rho-GAP domain and one PH domain. ARHGAP22 functions as a GTPase-activating protein for Rac 1 converting it to an inactive GDP-bound state and, through its interaction with ZNF161 (VEZF1), is thought to be useful in transcription regulation. Multiple isoforms of ARHGAP22 exist due to alternative splicing events.

REFERENCES

1. Katoh, M. and Katoh, M. 2004. Identification and characterization of ARHGAP24 and ARHGAP25 genes in silico. Int. J. Mol. Med. 14: 333-338.
2. Su, Z.J., Hahn, C.N., Goodall, G.J., Reck, N.M., Leske, A.F., Davy, A., Kremmidiotis, G., Vadas, M.A. and Gamble, J.R. 2004. A vascular cell-restricted RhoGAP, p73RhoGAP, is a key regulator of angiogenesis. Proc. Natl. Acad. Sci. USA 101: 12212-12217.
3. Lavelin, I. and Geiger, B. 2005. Characterization of a novel GTPase-activating protein associated with focal adhesions and the actin cytoskeleton. J. Biol. Chem. 280: 7178-7185.
4. Ohta, Y., Hartwig, J.H. and Stossel, T.P. 2006. FilGAP, a Rho- and ROCK-regulated GAP for Rac binds filamin A to control actin remodelling. Nat. Cell Biol. 8: 803-814.
5. Online Mendelian Inheritance in Man, OMIM™. 2006. Johns Hopkins University, Baltimore, MD. MIM Number: 610585. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/

CHROMOSOMAL LOCATION

Genetic locus: ARHGAP22 (human) mapping to 10q11.22; Arhgap22 (mouse) mapping to 14 B.

SOURCE

ARHGAP22 (C-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of ARHGAP22 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-249959 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

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.

APPLICATIONS

ARHGAP22 (C-15) is recommended for detection of ARHGAP22 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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.

ARHGAP22 (C-15) is also recommended for detection of ARHGAP22 in additional species, including porcine.

Suitable for use as control antibody for ARHGAP22 siRNA (h): sc-90662, ARHGAP22 siRNA (m): sc-141209, ARHGAP22 shRNA Plasmid (h): sc-90662-SH, ARHGAP22 shRNA Plasmid (m): sc-141209-SH, ARHGAP22 shRNA (h) Lentiviral Particles: sc-90662-V and ARHGAP22 shRNA (m) Lentiviral Particles: sc-141209-V.

Molecular Weight of ARHGAP22: 77 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

PROTOCOLS

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