

ARHGAP4 (H-90): sc-98337

BACKGROUND

ARHGAP4 (Rho GTPase activating protein 4), also known as RGC1 (Rho-GAP hematopoietic protein C1), C1, p115 or RhoGAP4, is a cytoplasmic protein belonging to the Rho GTPase activating protein family. ARHGAP4 contains one Rho-GAP domain, one FCH (Fps/Fes/Fer/CIP4 homology) domain and one SH3 (Src homology 3) domain. Highest expression levels of ARHGAP4 are found in hematopoietic cells; however, it can also be found in lung, placenta and some fetal tissues. ARHGAP4 localizes to the leading edge in migrating cells, axons and growth cones and is believed to participate as an inhibitor of cell motility and axon outgrowth through its regulation of cytoskeletal dynamics. In addition, ARHGAP4 is capable of inhibiting the activity Rho GTPases, such as Cdc42 and Rac 1, that function to promote cell motility and axon outgrowth.

REFERENCES

1. Tribioli, C., et al. 1996. An X chromosome-linked gene encoding a protein with characteristics of a RhoGAP predominantly expressed in hematopoietic cells. *Proc. Natl. Acad. Sci. USA* 93: 695-699.
2. Schöneberg, T., et al. 1999. Compound deletion of the RhoGAP C1 and V2 vasopressin receptor genes in a patient with nephrogenic diabetes insipidus. *Hum. Mutat.* 14: 163-174.
3. Foletta, V.C., et al. 2002. Cloning of rat ARHGAP4/C1, a RhoGAP family member expressed in the nervous system that colocalizes with the Golgi complex and microtubules. *Brain Res. Mol. Brain Res.* 107: 65-79.
4. Christerson, L.B., et al. 2002. p115 Rho GTPase activating protein interacts with MEK1. *J. Cell. Physiol.* 192: 200-208.
5. Demura, M., et al. 2002. Two novel types of contiguous gene deletion of the AVPR2 and ARHGAP4 genes in unrelated Japanese kindreds with nephrogenic diabetes insipidus. *Hum. Mutat.* 19: 23-29.
6. Katoh, M. and Katoh, M. 2003. FNBP2 gene on human chromosome 1q32.1 encodes ARHGAP family protein with FCH, FBH, RhoGAP and SH3 domains. *Int. J. Mol. Med.* 11: 791-797.

CHROMOSOMAL LOCATION

Genetic locus: ARHGAP4 (human) mapping to Xq28; Arhgap4 (mouse) mapping to X A7.3.

SOURCE

ARHGAP4 (H-90) is a rabbit polyclonal antibody raised against amino acids 101-190 mapping near the N-terminus of ARHGAP4 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.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

ARHGAP4 (H-90) is recommended for detection of ARHGAP4 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).

ARHGAP4 (H-90) is also recommended for detection of ARHGAP4 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for ARHGAP4 siRNA (h): sc-91158, ARHGAP4 siRNA (m): sc-141217, ARHGAP4 shRNA Plasmid (h): sc-91158-SH, ARHGAP4 shRNA Plasmid (m): sc-141217-SH, ARHGAP4 shRNA (h) Lentiviral Particles: sc-91158-V and ARHGAP4 shRNA (m) Lentiviral Particles: sc-141217-V.

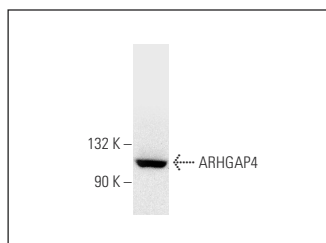
Molecular Weight of ARHGAP4: 115 kDa.

Positive Controls: K-562 whole cell lysate: sc-2203.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



ARHGAP4 (H-90): sc-98337. Western blot analysis of ARHGAP4 expression in K-562 whole cell lysate.

RESEARCH USE

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

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Try **ARHGAP4 (G-6): sc-376251**, our highly recommended monoclonal alternative to ARHGAP4 (H-90).