SANTA CRUZ BIOTECHNOLOGY, INC.

ARHGAP4 (G-6): sc-376251

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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.

CHROMOSOMAL LOCATION

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

SOURCE

ARHGAP4 (G-6) is a mouse monoclonal antibody raised against amino acids 101-190 mapping near the N-terminus of ARHGAP4 of human origin.

PRODUCT

Each vial contains 200 µg IgG_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

ARHGAP4 (G-6) is available conjugated to agarose (sc-376251 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-376251 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-376251 PE), fluorescein (sc-376251 FITC), Alexa Fluor® 488 (sc-376251 AF488), Alexa Fluor® 546 (sc-376251 AF546), Alexa Fluor® 594 (sc-376251 AF594) or Alexa Fluor® 647 (sc-376251 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-376251 AF680) or Alexa Fluor® 790 (sc-376251 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

ARHGAP4 (G-6) is recommended for detection of ARHGAP4 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

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.

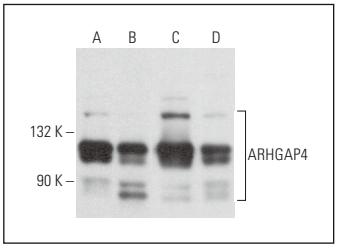
Molecular Weight of ARHGAP4: 115 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204, NCI-H929 whole cell lysate: sc-364786 or HL-60 whole cell lysate: sc-2209.

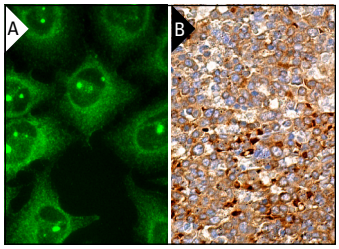
RECOMMENDED SUPPORT REAGENTS

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. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA



ARHGAP4 (G-6): sc-376251. Western blot analysis of ARHGAP4 expression in Jurkat (**A**), HL-60 (**B**), NCI-H929 (**C**) and SUP-T1 (**D**) whole cell lysates.



ARHGAP4 (G-6): sc-376251. Immunofluorescence staining of methanol-fixed HeLa cells showing nucleolar and cytoplasmic localization (**A**). Immunoperoxidase staining of formalin fixed, paraffin-embedded human spleen tissue showing cytoplasmic staining of cells in white and red pulps (**B**).

SELECT PRODUCT CITATIONS

1. Rodríguez-Urgellés, E., et al. 2022. Postnatal Foxp2 regulates early psychiatric-like phenotypes and associated molecular alterations in the R6/1 transgenic mouse model of Huntington's disease. Neurobiol. Dis. 173: 105854.
2. Naderi, J., et al. 2024. An activity-specificity trade-off encoded in human transcription factors. Nat. Cell Biol. 26: 1309-1321.

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 for detailed protocols and support products.