**BACKGROUND**

GTPase-activating proteins (GAPs) accelerate the intrinsic rate of GTP hydrolysis of Ras-related proteins, resulting in downregulation of their active form. ARHGAP1 (Rho GTPase activating protein 1), also known as CDC42GAP or Rho GAP1, is a 439 amino acid protein that localizes to the cytoplasm and contains one Rho GAP domain and one CRAL-TRIO domain. Expressed ubiquitously, ARHGAP1 exists in a complex with several other proteins, including elf4A1 and Exportin 7, and functions as a GTPase activator for Rho, Rac and Cdc42 proteins, effectively converting them to an inactive GDP-bound state. The gene encoding ARHGAP1 maps to human chromosome 11, which houses over 1,400 genes and comprises nearly 4% of the human genome. Jervell and Lange-Nielsen syndrome, Jacobsen syndrome, Niemann-Pick disease, hereditary angioedema and Smith-Lemli-Opitz syndrome are associated with defects in genes that maps to chromosome 11.

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: ARHGAP1 (human) mapping to 11p11.2; Arhgap1 (mouse) mapping to 2 E1.

**SOURCE**

ARHGAP1 (A-9) is a mouse monoclonal antibody raised against amino acids 1-76 mapping at the N-terminus of ARHGAP1 of human origin.

**PRODUCT**

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

**APPLICATIONS**

ARHGAP1 (A-9) is recommended for detection of ARHGAP1 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for ARHGAP1 siRNA (h): sc-96477, ARHGAP1 shRNA (m): sc-141199, ARHGAP1 shRNA Plasmid (h): sc-96477-SH, ARHGAP1 shRNA Plasmid (m): sc-141199-SH, ARHGAP1 shRNA (h) Lentiviral Particles: sc-96477-V and ARHGAP1 shRNA (m) Lentiviral Particles: sc-141199-V.

Molecular Weight of ARHGAP1: 50 kDa.

Positive Controls: ARHGAP1 (h): 293T Lysate: sc-172064, PC-12 cell lysate: sc-2250 or RAW 264.7 whole cell lysate: sc-2211.

**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: 1:100,000-1:100,000), 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-2043 (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: 1:100-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

**DATA**

**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.