

ARHGAP10 (D-16): sc-160139

BACKGROUND

GTPase-activating proteins (GAPs) accelerate the intrinsic rate of GTP hydrolysis of Ras-related proteins, resulting in down regulation of their active form. ARHGAP10 (Rho GTPase activating protein 10), also known as GRAF2, PSGAP or PS-GAP, is a 786 amino acid cytoplasmic cytoskeletal Rho-GTPase activating protein that is expressed at high levels in heart and skeletal muscle. ARHGAP10 regulates caspase-activated γ PAK by inhibiting the protein kinase activity and localization of γ PAK from the nucleus to the perinuclear region. The GAP domain of ARHGAP10 has GAP activity for small GTPases Rho A and Cdc42. ARHGAP10 converts these small GTPases to an inactive GDP-bound state. ARHGAP10 is essential for PTKB2 regulation of cytoskeletal organization via Rho family GTPases.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: ARHGAP10 (human) mapping to 4q31.23; Arhgap10 (mouse) mapping to 8 C1.

SOURCE

ARHGAP10 (D-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of ARHGAP10 of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-160139 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

ARHGAP10 (D-16) is recommended for detection of ARHGAP10 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.

ARHGAP10 (D-16) is also recommended for detection of ARHGAP10 in additional species, including equine, canine, bovine and avian.

Suitable for use as control antibody for ARHGAP10 siRNA (h): sc-89197, ARHGAP10 siRNA (m): sc-141200, ARHGAP10 shRNA Plasmid (h): sc-89197-SH, ARHGAP10 shRNA Plasmid (m): sc-141200-SH, ARHGAP10 shRNA (h) Lentiviral Particles: sc-89197-V and ARHGAP10 shRNA (m) Lentiviral Particles: sc-141200-V.

Molecular Weight of ARHGAP10: 89 kDa.

Positive Controls: HISM cell lysate: sc-2229.

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.

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.