SANTA CRUZ BIOTECHNOLOGY, INC.

ARHGAP30 (C-17): sc-138134

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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 downregulation of their active form. ARHGAP30 (Rho GTPase activating protein 30), also known as Rho-type GTPase-activating protein 30, is a 1,101 amino acid protein that contains one Rho-GAP domain and exists as 4 alternatively spliced isoforms. Con-served in chimpanzee, canine, bovine, mouse and rat, ARHGAP30 is among the most neurite-enriched GAPs, which also includes ARHGAP21, FNBP2 and Bcr). One of four single-nucleotide polymorphisms (SNPs) at the USF-1 gene locus, rs2774279, which is located in the promoter area of the USF-1 gene, which is in turn located within its flanking gene ARHGAP30, is linked to low-density lipoprotein cholesterol levels, incident type 2 diabetes mellitus and increased cardiovascular risk.

REFERENCES

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4. Ong, K.L., et al. 2008. Association of F11 receptor gene polymorphisms with central obesity and blood pressure. J. Intern. Med. 263: 322-332.
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7. Wu, S., et al. 2010. Upstream transcription factor 1 influences plasma lipid and metabolic traits in mice. Hum. Mol. Genet. 19: 597-608.
8. Tseng, L.H., et al. 2010. Genome-based expression profiling study of Hunner's ulcer type interstitial cystitis: an array of 40-gene model. Int. Urogynecol. J. Pelvic Floor Dysfunct. 21: 911-918.

CHROMOSOMAL LOCATION

Genetic locus: ARHGAP30 (human) mapping to 1q23.3.

SOURCE

ARHGAP30 (C-17) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping near the C-terminus of ARHGAP30 of human origin.

STORAGE

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

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-138134 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

ARHGAP30 (C-17) is recommended for detection of ARHGAP30 isoforms 1, 2 and 3 of human origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunofluorescence (starting dilution 1:25, dilution range 1:25-1:250) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with other ARHGAP family members or ARHGAP30 isoform 4.

ARHGAP30 (C-17) is also recommended for detection of ARHGAP30 isoforms 1, 2 and 3 in additional species, including porcine.

Suitable for use as control antibody for ARHGAP30 siRNA (h): sc-78766, ARHGAP30 shRNA Plasmid (h): sc-78766-SH and ARHGAP30 shRNA (h) Lentiviral Particles: sc-78766-V.

Molecular Weight of ARHGAP30 isoforms 1-4: 119/96/101/28 kDa.

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) 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.

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.