

ARHGEF5L (C-19): sc-249965

BACKGROUND

Rho GTPases, which play fundamental roles in numerous cellular processes, are initiated by external stimuli that signal through G protein-coupled receptors. ARHGEF5L (Rho guanine nucleotide exchange factor (GEF) 5-like), also known as ARHGEF35 (Rho guanine nucleotide exchange factor (GEF) 35) or CTAGE4, is a 484 amino acid phosphoprotein that is encoded by a gene that maps to human chromosome 7q35. Chromosome 7 is approximately 158 million bases long, encodes over 1,000 genes and makes up approximately 5% of the human genome. Deletion of a portion of the q arm of chromosome 7 is associated with Williams-Beuren syndrome, a condition characterized by mild mental retardation, unusual friendliness with strangers and an elfin appearance. Deletions of portions of the q arm of chromosome 7 are also linked to myeloid disorders, including acute myelogenous leukemia and myelodysplasia.

REFERENCES

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2. Liang, H., et al. 1998. Molecular anatomy of chromosome 7q deletions in myeloid neoplasms: evidence for multiple critical loci. *Proc. Natl. Acad. Sci. USA* 95: 3781-3785.
3. Hillier, L.W., et al. 2003. The DNA sequence of human chromosome 7. *Nature* 424: 157-164.
4. Eckert, M.A., et al. 2006. The neurobiology of Williams syndrome: cascading influences of visual system impairment? *Cell. Mol. Life Sci.* 63: 1867-1875.
5. Osborne, L.R., et al. 2006. Williams-Beuren syndrome diagnosis using fluorescence *in situ* hybridization. *Methods Mol. Med.* 126: 113-128.
6. Brezinová, J., et al. 2007. Structural aberrations of chromosome 7 revealed by a combination of molecular cytogenetic techniques in myeloid malignancies. *Cancer Genet. Cytogenet.* 173: 10-16.
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CHROMOSOMAL LOCATION

Genetic locus: ARHGEF35 (human) mapping to 7q35.

SOURCE

ARHGEF5L (C-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of ARHGEF5L 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-249965 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

ARHGEF5L (C-19) is recommended for detection of ARHGEF5L of 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); may cross-react with ARHGEF5.

Suitable for use as control antibody for ARHGEF5L siRNA (h): sc-89584, ARHGEF5L shRNA Plasmid (h): sc-89584-SH and ARHGEF5L shRNA (h) Lentiviral Particles: sc-89584-V.

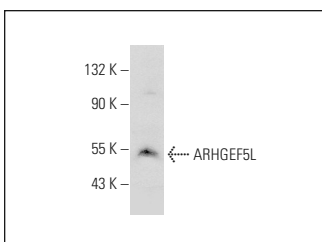
Molecular Weight of ARHGEF5L: 53 kDa.

Positive Controls: human heart extract: sc-363763.

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.

DATA



ARHGEF5L (C-19): sc-249965. Western blot analysis of ARHGEF5L expression in human heart tissue extract.

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.