

# ARHGAP6 (T-13): sc-167121

## BACKGROUND

ARHGAP6 (Rho GTPase activating protein 6), also known as RHOGAP6 or RHOGAPX-1, is a widely expressed cytoplasmic protein that functions as a GTPase-activating protein specific for RhoA and as a cytoskeletal protein promoting actin remodeling. ARHGAP6 contains three SH3 binding domains and a Rho GAP domain. In the cell, ARHGAP6 colocalizes with actin filaments and, via its N-terminus, recruits F-actin. The gene encoding ARHGAP6 is located on the X chromosome in the region that is deleted in patients with microphthalmia with linear skin defects (MLS), an X-linked dominant male-lethal syndrome. MLS is characterized by aplastic skin, agenesis of the corpus callosum and microphthalmia (a condition in which eyes fail to enlarge due to a malformation of the choroid fissure). Despite its absence in MLS patients, ARHGAP6 does not appear to participate in the pathogenesis of the disease.

## REFERENCES

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5. Kutsche, K., et al. 2002. Microphthalmia with linear skin defects syndrome (MLS): a male with a mosaic paracentric inversion of Xp. *Cytogenet. Genome Res.* 99: 297-302.
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7. Ochocka, A.M., et al. 2003. Expression in *Escherichia coli* of human ARHGAP6 gene and purification of His-tagged recombinant protein. *Acta Biochim. Pol.* 50: 239-247.
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## CHROMOSOMAL LOCATION

Genetic locus: ARHGAP6 (human) mapping to Xp22.2; Arhgap6 (mouse) mapping to X F5.

## SOURCE

ARHGAP6 (T-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of ARHGAP6 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 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-167121 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

ARHGAP6 (T-13) is recommended for detection of ARHGAP6 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.

Suitable for use as control antibody for ARHGAP6 siRNA (h): sc-91170, ARHGAP6 siRNA (m): sc-141218, ARHGAP6 shRNA Plasmid (h): sc-91170-SH, ARHGAP6 shRNA Plasmid (m): sc-141218-SH, ARHGAP6 shRNA (h) Lentiviral Particles: sc-91170-V and ARHGAP6 shRNA (m) Lentiviral Particles: sc-141218-V.

Molecular Weight of ARHGAP6: 106 kDa.

## 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<sup>™</sup> compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> 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<sup>™</sup> 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](http://www.scbt.com) or our catalog for detailed protocols and support products.