

# ARHGAP42 (K-19): sc-246858

## BACKGROUND

GTPase-activating proteins (GAPs) accelerate the intrinsic rate of GTP hydrolysis of Ras-related proteins, resulting in downregulation of their active form. ARHGAP42 (Rho GTPase activating protein 42), also known as Rho GTPase-activating protein 10-like or GRAF3, is an 874 amino acid coiled-coil protein that contains one BAR domain, one PH domain, one Rho-GAP domain and one SH3 domain. Conserved in chimpanzee, canine, bovine, mouse, rat, chicken and zebrafish, ARHGAP42 participates in GTPase activator functions, SH3 domain binding and cytoskeletal adaptor activity. ARHGAP42 is encoded by a gene that maps to human chromosome 11q22.1. With approximately 135 million base pairs and 1,400 genes, chromosome 11 makes up 4% of human genomic DNA. Jervell and Lange-Nielsen syndrome, Jacobsen syndrome, Niemann-Pick disease, hereditary angioedema and Smith-Lemli-Opitz syndrome are all associated with defects in chromosome 11.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: ARHGAP42 (human) mapping to 11q22.1; Arhgap42 (mouse) mapping to 9 A1.

## SOURCE

ARHGAP42 (K-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of ARHGAP42 of human origin.

## 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-246858 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

ARHGAP42 (K-19) is recommended for detection of ARHGAP42 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).

ARHGAP42 (K-19) is also recommended for detection of ARHGAP42 in additional species, including canine, bovine and porcine.

Suitable for use as control antibody for ARHGAP42 siRNA (h): sc-96391, ARHGAP42 siRNA (m): sc-140504, ARHGAP42 shRNA Plasmid (h): sc-96391-SH, ARHGAP42 shRNA Plasmid (m): sc-140504-SH, ARHGAP42 shRNA (h) Lentiviral Particles: sc-96391-V and ARHGAP42 shRNA (m) Lentiviral Particles: sc-140504-V.

Molecular Weight of ARHGAP42: 99 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™ 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](http://www.scbt.com) or our catalog for detailed protocols and support products.