

# RAPGEFL1 (V-13): sc-169111

## BACKGROUND

The Ras superfamily of GTPases can be subdivided into the Ras, Rho/Rac, Sar, Rab, Arf, Rap and Ran subfamilies, all of which control multiple aspects of cell function, including cytoskeletal rearrangement, nuclear signaling and cell growth. The Ras superfamily of GTPases function as regulated switches that toggle between a biologically active GTP-bound and an inactive GDP-bound form. This activation is catalyzed by guanine nucleotide exchange factors (GEFs). RAPGEFL1 (rap guanine nucleotide exchange factor (GEF)-like 1), also known as Link-GEF1, is a 456 amino acid Rap GEF that may function to activate various Rap proteins. Additionally, RAPGEFL1 is thought to play a role in growth-factor signaling cascades and may be involved in neurite formation and growth.

## REFERENCES

1. Kawasaki, H., et al. 1998. A Rap guanine nucleotide exchange factor enriched highly in the basal ganglia. *Proc. Natl. Acad. Sci. USA* 95: 13278-13283.
2. Ebinu, J.O., et al. 1998. RasGRP, a Ras guanyl nucleotide- releasing protein with calcium- and diacylglycerol-binding motifs. *Science* 280: 1082-1086.
3. Reid, A.G., et al. 2005. SmartCapture and the frontiers of FISH technology: report of the Digital Scientific UK SmartCapture User's Meeting, Peterhouse College Cambridge, UK, 2nd September 2005. *Chromosome Res.* 13: 835-838.
4. Gribble, S.M., et al. 2007. Ultra-high resolution array painting facilitates breakpoint sequencing. *J. Med. Genet.* 44: 51-58.
5. Gielen, S.C., et al. 2007. Genomic and nongenomic effects of estrogen signaling in human endometrial cells: involvement of the growth factor receptor signaling downstream AKT pathway. *Reprod. Sci.* 14: 646-654.

## CHROMOSOMAL LOCATION

Genetic locus: RAPGEFL1 (human) mapping to 17q21.1; Rapgef1 (mouse) mapping to 11 D.

## SOURCE

RAPGEFL1 (V-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of RAPGEFL1 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-169111 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## STORAGE

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

## APPLICATIONS

RAPGEFL1 (V-13) is recommended for detection of RAPGEFL1 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).

RAPGEFL1 (V-13) is also recommended for detection of RAPGEFL1 in additional species, including canine, bovine and porcine.

Suitable for use as control antibody for RAPGEFL1 siRNA (h): sc-93968, RAPGEFL1 siRNA (m): sc-152704, RAPGEFL1 shRNA Plasmid (h): sc-93968-SH, RAPGEFL1 shRNA Plasmid (m): sc-152704-SH, RAPGEFL1 shRNA (h) Lentiviral Particles: sc-93968-V and RAPGEFL1 shRNA (m) Lentiviral Particles: sc-152704-V.

Molecular Weight of RAPGEFL1: 57 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.

## 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.