

RGS18 (H-80): sc-99134

BACKGROUND

The regulators of G protein signaling (RGS) proteins inhibit heterotrimeric G protein signaling. RGS proteins work by functioning as GTPase-activating proteins (which increase the GTPase activity of G protein α subunits) thereby driving G proteins into their inactive GDP-bound form. RGS18 is a 234 amino acid peptide expressed mainly in megakaryocyte cells, but also in hematopoietic progenitor and myeloerythroid lineage cells. RGS18 expression is upregulated during megakaryocyte differentiation and may play an important role in the mediation of megakaryocyte chemotaxis. Structurally, RGS18 contains phosphorylation sites for casein kinase II, protein kinase C and protein kinase A. RGS18 specifically binds to two α subunits of the G protein, $G_{\alpha i}$ and $G_{\alpha q}$.

REFERENCES

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2. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 607190. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
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5. Aldenhoven, J., Chen, Y. and Moran, C. 2006. Assignment of UCK2, ATF3 and RGS18 from human chromosome 1 to porcine chromosomes 4, 9 and 10 with somatic and radiation hybrid panels. *Cytogenet. Genome Res.* 112: 341F.

CHROMOSOMAL LOCATION

Genetic locus: RGS18 (human) mapping to 1q31.2; Rgs18 (mouse) mapping to 1 F.

SOURCE

RGS18 (H-80) is a rabbit polyclonal antibody raised against amino acids 1-80 mapping at the N-terminus of RGS18 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.

STORAGE

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

APPLICATIONS

RGS18 (H-80) is recommended for detection of RGS18 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], 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).

RGS18 (H-80) is also recommended for detection of RGS18 in additional species, including equine and canine.

Suitable for use as control antibody for RGS18 siRNA (h): sc-61468, RGS18 siRNA (m): sc-61469, RGS18 shRNA Plasmid (h): sc-61468-SH, RGS18 shRNA Plasmid (m): sc-61469-SH, RGS18 shRNA (h) Lentiviral Particles: sc-61468-V and RGS18 shRNA (m) Lentiviral Particles: sc-61469-V.

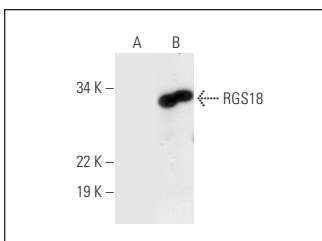
Molecular Weight of RGS18: 26 kDa.

Positive Controls: human RGS18 transfected HEK293T whole cell lysate.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA



RGS18 (H-80): sc-99134. Western blot analysis of RGS18 expression in non-transfected (A) and human RGS18 transfected (B) HEK293T whole cell lysates.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

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Try **RGS18 (F-5): sc-390908**, our highly recommended monoclonal alternative to RGS18 (H-80).