

RGS17 (Q-20): sc-48285

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. The human gene that encodes RGS17 (regulator of G protein signaling 17, RGS17) contains 4 exons, spans more than 33 kb and maps to chromosome 6q25.2; the mouse *Rgs17* gene maps to chromosome 10 as determined by interspecific backcross mapping. RGS17 is a member of the RZ/A protein family. RZ/A proteins have a simple structure that consists of a conserved amino-terminal cysteine string motif, RGS box and short carboxyl-terminal, which confer GAP activity and the ability to undergo covalent modification and associate with other proteins at their amino-termini.

REFERENCES

1. Sierra, D.A., et al. 2002. Evolution of the regulators of G protein signaling multigene family in mouse and human. *Genomics* 79: 177-185.
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/>
3. Mao, H., et al. 2004. RGS17/RGSZ2, a novel regulator of $G_{i/o}$, G_z and G_q signaling. *J. Biol. Chem.* 279: 26314-26322.
4. Garzón, J., et al. 2005. The RGSZ2 protein exists in a complex with μ -opioid receptors and regulates the desensitizing capacity of G_z proteins. *Neuropsychopharmacology* 30: 1632-1648.
5. Nunn, C., et al. 2006. RGS17/RGSZ2 and the RZ/A family of regulators of G protein signaling. *Semin. Cell Dev. Biol.* 17: 390-399.

CHROMOSOMAL LOCATION

Genetic locus: RGS17 (human) mapping to 6q25.2; *Rgs17* (mouse) mapping to 10 A1.

SOURCE

RGS17 (Q-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of RGS17 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-48285 P, (100 μ g 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.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

APPLICATIONS

RGS17 (Q-20) is recommended for detection of RGS17 of mouse 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).

RGS17 (Q-20) is also recommended for detection of RGS17 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for RGS17 siRNA (h): sc-61466, RGS17 siRNA (m): sc-61467, RGS17 shRNA Plasmid (h): sc-61466-SH, RGS17 shRNA Plasmid (m): sc-61467-SH, RGS17 shRNA (h) Lentiviral Particles: sc-61466-V and RGS17 shRNA (m) Lentiviral Particles: sc-61467-V.

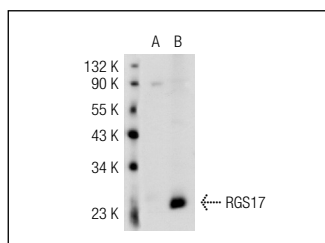
Molecular Weight of RGS17: 24 kDa.

Positive Controls: RGS17 (h): 293T Lysate: sc-113106.

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



RGS17 (Q-20): sc-48285. Western blot analysis of RGS17 expression in non-transfected: sc-117752 (A) and human RGS17 transfected: sc-113106 (B) 293T whole cell lysates.

RESEARCH USE

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