RGS17 (H-40): sc-99133

SANTA CRUZ®
BIOTECHNOLOGY

The Power to Question

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, RGSZ2) contains four exons, spans more than 33 kb and maps to chromosome 6q25.2; the mouse RGS17 gene maps to chromosome 10 A1 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 N-terminal cysteine string motif, RGS box and short C-terminal, which confer GAP activity and the ability to undergo covalent modification and associate with other proteins at their N-termini.

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/

3. Mao, H., Zhao, Q., Daigle, M., Ghahremani, M.H., Chidiac, P. and Albert, P.R. 2004. RGS17/RGSZ2, a novel regulator of $G_{i/o}$, G_z and G_q signaling. J. Biol. Chem. 279: 26314-26322.

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5. Nunn, C., Mao, H., Chidiac, P. and Albert, P.R. 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 (H-40) is a rabbit polyclonal antibody raised against amino acids 55-94 mapping within an internal region of RGS17 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.

STORAGE

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

APPLICATIONS

RGS17 (H-40) is recommended for detection of RGS17 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg 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 (H-40) 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.

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.

RESEARCH USE

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

PROTOCOLS

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