**BACKGROUND**

Heterotrimeric G proteins function to relay information from cell surface receptors to intracellular effectors. In mammals, G protein α, β, and γ polypeptides are encoded by at least 16, 4, and 7 genes, respectively. Most interest in G proteins has been focused on their α subunits, since these proteins bind and hydrolyze GTP and most obviously regulate the activity of the best studied effectors. Several Gα GTP-ase activating proteins (GAPs) have been identified and are designated RGS1 (regulator of G proteinsignaling), RGS2, RGS4, RGS7, RGS9, RGS10 and GAIP (Gα-interacting protein). Each of these proteins has been shown to deactivate specific Gα isoforms by increasing the rate at which they convert GTP to GDP. RGS1, RGS4 and GAIP bind tightly to and exhibit GAP activity towards Gαi, Gαo, and Gαt, but not Gαs.

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: RGS1 (human) mapping to 1q31.2; Rgs1 (mouse) mapping to 1F.

**SOURCE**

RGS1 (N-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of RGS1 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-6210 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

**APPLICATIONS**

RGS1 (N-19) is recommended for detection of RGS1 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).

RGS1 (N-19) is also recommended for detection of RGS1 in additional species, including canine and bovine.

Suitable for use as control antibody for RGS1 siRNA (b): sc-36408, RGS1 siRNA (m): sc-36409, RGS1 shRNA Plasmid (b): sc-36408-SH, RGS1 shRNA Plasmid (m): sc-36409-SH, RGS1 shRNA (b) Lentiviral Particles: sc-36408-V and RGS1 shRNA (m) Lentiviral Particles: sc-36409-V.

Molecular Weight of RGS1: 20 kDa.

Positive Controls: BJAB whole cell lysate: sc-2207 or rat intestine extract.

**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.

**SELECT PRODUCT CITATIONS**


**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.