# RGS6 (E-20): sc-9712

SANTA CRUZ®

BIOTECHNOLOGY

*The Power to Question*

## BACKGROUND

Heterotrimeric G proteins function to relay information from cell surface receptors to various intracellular effectors. G proteins comprise $\alpha$, $\beta$ and $\gamma$ subunits, and following activation the $\alpha$ subunit binds GTP and dissociates from the $\beta\gamma$ complex. A large group of proteins have been identified as GTPase-activating proteins (GAPs), including the RGS (regulator of G protein signaling) family, which serve to deactivate specific $G_\alpha$ isoforms by increasing the rate at which they convert GTP to GDP. A subfamily of RGS proteins expressed in the central nervous system contain, in addition to the highly conserved RGS domain, a characteristic GGL domain, or G protein $\gamma$ subunit-like domain, which mediates binding to $G_\beta$ 5 subunits. This subfamily, which includes RGS6, RGS7, RGS9 and RGS11, associates with $G_\beta$ 5 to form active GAP complexes that are predominantly localized to the cytosol. RGS/$\beta$5 complexes preferentially target $G_{\alpha\,0}$ subunit for hydrolysis and inhibit $G_\beta$1g2-mediated activation of phospholipase C.

## REFERENCES

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## SOURCE

RGS6 (E-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of RGS6 of human origin.

## STORAGE

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

## 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-9712 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

RGS6 (E-20) is recommended for detection of RGS6 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

Suitable for use as control antibody for RGS6 siRNA (h): sc-40665, RGS6 shRNA Plasmid (h): sc-40665-SH and RGS6 shRNA (h) Lentiviral Particles: sc-40665-V.

## 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 or our catalog for detailed protocols and support products.