

RGS20 (H-180): sc-99135

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. RGS20 is a protein expressed exclusively in brain, with highest levels in the caudate nucleus and temporal lobe. RGS20 belongs to the RZ subfamily because it is highly selective for the α_z subunit on G proteins. However, if protein kinase C phosphorylates the α_z subunit, the G protein is much less susceptible to RGS20 action. RGS20 directly interacts with the microtubule-destabilizing protein SCG10 (superior cervical ganglia, neural specific 10) and blocks its ability to induce microtubule disassembly.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: RGS20 (human) mapping to 8q11.23.

SOURCE

RGS20 (H-180) is a rabbit polyclonal antibody raised against amino acids 1-180 mapping at the N-terminus of RGS20 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

RGS20 (H-180) is recommended for detection of RGS20 isoform 6 of 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).

Suitable for use as control antibody for RGS20 siRNA (h): sc-61470, RGS20 shRNA Plasmid (h): sc-61470-SH and RGS20 shRNA (h) Lentiviral Particles: sc-61470-V.

Molecular Weight of RGS20: 44 kDa.

Positive Controls: SK-N-SH cell lysate: sc-2410, IMR-32 cell lysate: sc-2409 or HeLa whole cell lysate: sc-2200.

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.