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. Four GαGTPase-activating proteins (GAPs) have been identified and are designated RGS1 (regulator of G protein signaling), RGS4, RGS10 and GAIP (Gα-interacting protein). Each of these proteins has been shown to deac-
tivate 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. RGS10 increases the GTP hydrolytic activity of several members of the Gαi subfamily including Gαi-3, Gαz, and Gαo.

CHROMOSOMAL LOCATION

Genetic locus: RGS4 (human) mapping to 1q23.3; Rgs4 (mouse) mapping to 1H3.

SOURCE

RGS4 (C-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of RGS4 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-6203 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

RGS4 (C-17) is recommended for detection of RGS4 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation (starting dilution 1:50, dilution range 1:50-1:500), 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).

RGS4 (C-17) is also recommended for detection of RGS4 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for RGS4 siRNA (h): sc-40663, RGS4 siRNA (m): sc-40664, RGS4 shRNA Plasmid (h): sc-40663-SH, RGS4 shRNA Plasmid (m): sc-40664-SH, RGS4 shRNA (h) Lentiviral Particles: sc-40663-V and RGS4 shRNA (m) Lentiviral Particles: sc-40664-V.


Positive Controls: EOC 20 whole cell lysate: sc-364187, SK-N-SH cell lysate: sc-2410 or SK-N-MC cell lysate: sc-2237.

STORAGE

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

RESEARCH USE

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

DATA

SELECT PRODUCT CITATIONS


sitization of GABA receptor-activated GIRK currents in HEK-293T cells. Pflugers Arch. 450: 61-73.


PROTOCOLS

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