RGS2 (BC-43): sc-100761

BACKGROUND
Heterotrimeric G proteins function to relay information from cell surface receptors to intracellular effectors. In mammals, G protein α, β, and γ subunits 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 subtypes have been identified and are designated RGS1, RGS2, RGS4, RGS7, RGS9, RGS10 and GAIP (GαiGTPase-activating protein). Each of these proteins has been shown to deactivate specific Gα, by increasing the rate at which they convert GTP to GDP. RGS2 has been shown to be an inhibitor of Gα in vivo and is a novel GTPase-activating protein for heterotrimeric G-protein α subunits. Nature 357: 563-569.

REFERENCES
3. von Weizsacker, E., Strathmann, M.P. and Gautam, N. 1991. Diversity of G protein α subunits, since these proteins bind and hydrolyze GTP and most obviously regulate the activity of the best studied effectors. Several Gα subtypes have been identified and are designated RGS1, RGS2, RGS4, RGS7, RGS9, RGS10 and GAIP (GαiGTPase-activating protein). Each of these proteins has been shown to deactivate specific Gα, by increasing the rate at which they convert GTP to GDP. RGS2 has been shown to be an inhibitor of Gα in vivo and is a novel GTPase-activating protein for heterotrimeric G-protein α subunits. Nature 357: 563-569.

SOURCE
RGS2 (BC-43) is a mouse monoclonal antibody raised against recombinant RGS2 of human origin.

PRODUCT
Each vial contains 100 µg IgG2a in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

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

APPLICATIONS
RGS2 (BC-43) is recommended for detection of RGS2 of mouse 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), immunohistochemistry (including paraffin-embedded sections) (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 RGS2 siRNA (h): sc-40659, RGS2 siRNA (m): sc-40660, RGS2 shRNA Plasmid (h): sc-40659-SH, RGS2 shRNA Plasmid (m): sc-40660-SH, RGS2 shRNA (h) Lentiviral Particles: sc-40659-V and RGS2 shRNA (m) Lentiviral Particles: sc-40660-V.

Molecular Weight of RGS2: 32 kDa.

Positive Controls: RGS2 (m): 293T Lysate: sc-123104, mouse brain extract: sc-2253 or IMR-32 nuclear extract: sc-2148.

RECOMMENDED SECONDARY REAGENTS

DATA

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