

RGS16 (N-17): sc-23857

BACKGROUND

Regulators of G protein signaling (RGS proteins) are a family of highly diverse, multifunctional signaling proteins that share a conserved 120 amino acid domain (RGS domain). RGS domains bind directly to activated G_{α} subunits and act as GTPase-activating proteins (GAPs) to attenuate and/or modulate hormone and neurotransmitter receptor-initiated signaling by both G_{α} -GTP and $G_{\beta\gamma}$. RGS proteins shorten the lifetime of the activated G protein. RGS16 is expressed at high levels in retina. Overexpression of RGS16 inhibits G protein-coupled mitogenic signal transduction and activation of the mitogen-activated protein kinase (MAPK) signaling cascade. Rgs16 enhances the rate of GTP-hydrolysis by transducin, suggesting that Rgs16 may play a role in regulating the kinetics of signaling in the phototransduction cascade. The gene which encodes RGS16 maps to human chromosome 1q25.3.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: RGS16 (human) mapping to 1q25.3; Rgs16 (mouse) mapping to 1 G3.

SOURCE

RGS16 (N-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of RGS16 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.

Blocking peptide available for competition studies, sc-23857 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

RGS16 (N-17) is recommended for detection of RGS16 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).

RGS16 (N-17) is also recommended for detection of RGS16 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for RGS16 siRNA (h): sc-37161, RGS16 siRNA (m): sc-37162, RGS16 shRNA Plasmid (h): sc-37161-SH, RGS16 shRNA Plasmid (m): sc-37162-SH, RGS16 shRNA (h) Lentiviral Particles: sc-37161-V and RGS16 shRNA (m) Lentiviral Particles: sc-37162-V.

Molecular Weight of RGS16: 23 kDa.

Positive Controls: Y79 cell lysate: sc-2240.

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.