SANTA CRUZ BIOTECHNOLOGY, INC.

RGS21 (C-14): sc-163284



The Power to Question

BACKGROUND

The regulators of G protein signaling (RGS) proteins inhibit heterotrimeric G protein signaling. RGS proteins work by functioning as GTPase-activators (which increase the GTPase activity of G protein α -subunits) thereby driving G proteins into their inactive GDP-bound form. RGS21 (regulator of G-protein signaling 21) is a 152 amino acid protein that is ubiquitously expressed and contains one RGS domain. The gene encoding RGS21 maps to human chromosome 1q31.2 and mouse chromosome 1 F. Human chromosome 1 spans 260 million base pairs, contains over 3,000 genes, comprises nearly 8% of the human genome and houses a large number of disease-associated genes, including those that are involved in familial adenomatous polyposis, Stickler syndrome, Parkinson's disease, Gaucher disease, schizophrenia and Usher syndrome.

REFERENCES

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- 4. Li, X., et al. 2005. Isolation and expression pattern of RGS21 gene, a novel RGS member. Acta Biochim. Pol. 52: 943-946.
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- Balcárková, J., et al. 2009. Gain of chromosome arm 1q in patients in relapse and progression of multiple myeloma. Cancer Genet. Cytogenet. 192: 68-72.
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CHROMOSOMAL LOCATION

Genetic locus: RGS21 (human) mapping to 1q31.2; Rgs21 (mouse) mapping to 1 F.

SOURCE

RGS21 (C-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of RGS21 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 lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-163284 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

RGS21 (C-14) is recommended for detection of RGS21 of mouse 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); non cross-reactive with other RGS family members.

RGS21 (C-14) is also recommended for detection of RGS21 in additional species, including equine and canine.

Suitable for use as control antibody for RGS21 siRNA (h): sc-88065, RGS21 siRNA (m): sc-152840, RGS21 shRNA Plasmid (h): sc-88065-SH, RGS21 shRNA Plasmid (m): sc-152840-SH, RGS21 shRNA (h) Lentiviral Particles: sc-88065-V and RGS21 shRNA (m) Lentiviral Particles: sc-152840-V.

Molecular Weight of RGS21: 18 kDa.

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) Immunofluo-rescence: 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.