

G_βL (G-19): sc-70280

BACKGROUND

Heterotrimeric G proteins function to relay information from cell surface receptors to intracellular effectors. Each of a very broad range of receptors specifically detects an extracellular stimulus (i.e. a photon, pheromone, odorant, hormone or neurotransmitter), while the effectors (e.g. adenylyl cyclase), which act to generate one or more intracellular messengers, are less numerous. In mammals, G protein α , β and γ polypeptides are encoded by at least 16, 4 and 7 genes, respectively. G_βL (G protein β subunit-like), also known as LST8, POP3 or WAT1, is a 326 amino acid protein that localizes to the cytoplasm and contains 7 WD repeats. Expressed in a variety of tissues with highest expression in heart, kidney and skeletal muscle, G_βL functions as a component of the TORC1 and TORC2 complex and plays an important role in cell growth response to environmental stimuli. Four isoforms of G_βL exist due to alternative splicing events.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: GBL (human) mapping to 16p13.3; Gbl (mouse) mapping to 17 A3.3.

SOURCE

G_βL (G-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of G_βL 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-70280 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

G_βL (G-19) is recommended for detection of G_βL 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).

G_βL (G-19) is also recommended for detection of G_βL in additional species, including canine, bovine, porcine and avian.

Suitable for use as control antibody for G_βL siRNA (h): sc-75072, G_βL siRNA (m): sc-75073, G_βL shRNA Plasmid (h): sc-75072-SH, G_βL shRNA Plasmid (m): sc-75073-SH, G_βL shRNA (h) Lentiviral Particles: sc-75072-V and G_βL shRNA (m) Lentiviral Particles: sc-75073-V.

Molecular Weight of G_βL: 36 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) 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.

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.

PROTOCOLS

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