

G β ₃ (N-19): sc-25019

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. 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. Evidence, however, has established an important regulatory role for the $\beta\gamma$ subunits. The G protein β subunits are important regulators of G protein α subunits as well as of certain signal transduction receptors and effectors. In mammals, there are five different members of the β subunit family

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: GNB3 (human) mapping to 12p13; Gnb3 (mouse) mapping to 6 F2.

SOURCE

G β ₃ (N-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of G β ₃ 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-25019 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

G β ₃ (N-19) is recommended for detection of transducin β ₃ of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], 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).

Suitable for use as control antibody for G β ₃ siRNA (h): sc-41766, G β ₃ siRNA (m): sc-41767, G β ₃ shRNA Plasmid (h): sc-41766-SH, G β ₃ shRNA Plasmid (m): sc-41767-SH, G β ₃ shRNA (h) Lentiviral Particles: sc-41766-V and G β ₃ shRNA (m) Lentiviral Particles: sc-41767-V.

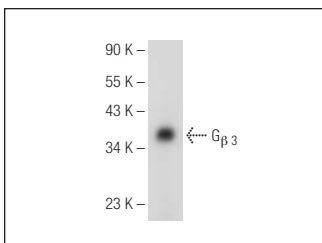
Molecular Weight of G β ₃: 36 kDa.

Positive Controls: Y79 cell lysate: sc-2240 or Y79 nuclear extract: sc-2126.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA



G β ₃ (N-19): sc-25019. Western blot analysis of G β ₃ expression in Y79 whole cell lysate.

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.