

G β 1 (S-13): sc-25016

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. Each subunit of the G protein complex is encoded by a member of one of three corresponding gene families (α , β , γ). In mammals, there are five different members of the β -subunit family. The β subunits of the G proteins are important regulators of G protein subunits as well as of certain signal transduction receptors and effectors. In contrast to G β 1-4, which are at least 83% homologous, G β 5 is only 50% homologous to the other β subunits. Human G β 5 is expressed at high levels in brain, pancreas, kidney, and heart.

CHROMOSOMAL LOCATION

Genetic locus: GNB1 (human) mapping to 1p36.33; Gnb1 (mouse) mapping to 4 E2.

SOURCE

G β 1 (S-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of G β 1 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-25016 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

G β 1 (S-13) is recommended for detection of G β 1 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).

G β 1 (S-13) is also recommended for detection of G β 1 in additional species, including equine, canine and bovine.

Suitable for use as control antibody for G β 1 siRNA (h): sc-41762, G β 1 siRNA (m): sc-41763, G β 1 shRNA Plasmid (h): sc-41762-SH, G β 1 shRNA Plasmid (m): sc-41763-SH, G β 1 shRNA (h) Lentiviral Particles: sc-41762-V and G β 1 shRNA (m) Lentiviral Particles: sc-41763-V.

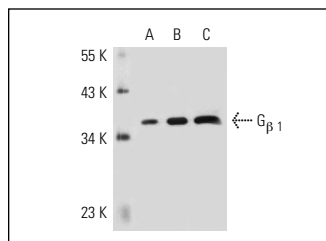
Molecular Weight of G β 1: 36 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, G β 1 (h): 293 Lysate: sc-110894 or Jurkat whole cell lysate: sc-2204.

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 1 (S-13): sc-25016. Western blot analysis of G β 1 expression in non-transfected 293: sc-110760 (A), human G β 1 transfected 293: sc-110894 (B) and HeLa (C) whole cell lysates.

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.

MONOS
Satisfaction
Guaranteed

Try G β 1 (3): **sc-136307**, our highly recommended monoclonal alternative to G β 1 (S-13).