G$_\beta$L (211CT7.1.1): sc-517335

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BIOTECHNOLOGY

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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., adenyl 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 α subunits as well as of certain signal transduction receptors and effectors. In contrast to G$_{\beta\,1\text{-}4}$, which are at least 83% homologous, G$_{\beta\,5}$ is only 50% homologous to the other β subunits. Human G$_{\beta\,5}$ is expressed at high levels in brain, pancreas, kidney, and heart.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: MLST8 (human) mapping to 16p13.3; Mlst8 (mouse) mapping to 17 A3.3.

SOURCE

G$_\beta$L (211CT7.1.1) is a mouse monoclonal antibody raised against a recombinant protein corresponding to G$_\beta$L of human origin.

PRODUCT

Each vial contains 50 µl ascites containing IgG$_1$ kappa light chain with < 0.1% sodium azide.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

APPLICATIONS

G$_\beta$L (211CT7.1.1) is recommended for detection of G$_\beta$L of mouse, rat and human origin by Western Blotting (starting dilution: to be determined by researcher, dilution range 1:100-1:5000).

Suitable for use as control antibody for G$_\beta$L siRNA (h): sc-75072, G$_\beta$L siRNA (m): sc-75073, G$_\beta$L shRNA Plasmid (h): sc-75072-SH, G$_\beta$L shRNA Plasmid (m): sc-75073-SH, G$_\beta$L shRNA (h) Lentiviral Particles: sc-75072-V and G$_\beta$L shRNA (m) Lentiviral Particles: sc-75073-V.

Molecular Weight of G$_\beta$L: 36 kDa.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048.

STORAGE

For immediate and continuous use, store at 4° C for up to one month. For sporadic use, freeze in working aliquots in order to avoid repeated freeze/thaw cycles. If turbidity is evident upon prolonged storage, clarify solution by centrifugation.

PROTOCOLS

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