

G β 5: sc-4229 WB

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. Both a long and a short form have been described for G β 5, which is also known as transducin β 5.

REFERENCES

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STORAGE

Store at -20° C. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PROTOCOLS

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

CHROMOSOMAL LOCATION

Genetic locus: GNB5 (human) mapping to 15q21.2; Gnb5 (mouse) mapping to 9 D.

SOURCE

G β 5 is expressed in *E. coli* as a 41 kDa protein mapping at amino acids 1-375 of G β 5 of rat origin.

PRODUCT

G β 5 is purified from bacterial lysates (>98%) by column chromatography; supplied as 1.0 μ g in 0.1 ml SDS-PAGE loading buffer.

APPLICATIONS

G β 5 is suitable as a Western blotting control for sc-14942, sc-14945 and sc-25025.

RESEARCH USE

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