SANTA CRUZ BIOTECHNOLOGY, INC.

$G_{\beta\ 3}$: sc-4228 WB

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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. 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

$G_{\beta\ 3}$ is expressed in *E. coli* as a 40 kDa protein mapping at amino acids 1-363 of $G_{\beta\ 3}$ of human origin.

RESEARCH USE

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

PRODUCT

$G_{\beta\ 3}$ is purified from bacterial lysates (>98%) by column chromatography; supplied as 1.0 µg in 0.1 ml SDS-PAGE loading buffer.

APPLICATIONS

$G_{\beta\ 3}$ is suitable as a Western blotting control for sc-381.

STORAGE

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