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# G $\beta$ <sub>5</sub> (m): 293T Lysate: sc-120363

## 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 ( $\alpha$ ,  $\beta$ ,  $\gamma$ ). In mammals, there are five different members of the  $\beta$ -subunit family. The  $\beta$  subunits of the G proteins are important regulators of G protein  $\alpha$  subunits as well as of certain signal transduction receptors and effectors. In contrast to G $\beta$ <sub>1-4</sub>, which are at least 83% homologous, G $\beta$ <sub>5</sub> is only 50% homologous to the other  $\beta$  subunits. Human G $\beta$ <sub>5</sub> is expressed at high levels in brain, pancreas, kidney, and heart.

## REFERENCES

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7. Hurowitz, E.H., Melnyk, J.M., Chen, Y.J., Kouros-Mehr, H., Simon, M.I. and Shizuya, H. 2000. Genomic characterization of the human hetero-trimeric G protein  $\alpha$ ,  $\beta$  and  $\gamma$  subunit genes. *DNA Res.* 7: 111-120.

## CHROMOSOMAL LOCATION

Genetic locus: Gnb5 (mouse) mapping to 9 D.

## PRODUCT

G $\beta$ <sub>5</sub> (m): 293T Lysate represents a lysate of mouse G $\beta$ <sub>5</sub> transfected 293T cells and is provided as 100  $\mu$ g protein in 200  $\mu$ l SDS-PAGE buffer.

## STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

## APPLICATIONS

G $\beta$ <sub>5</sub> (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive G $\beta$ <sub>5</sub> antibodies. Recommended use: 10-20  $\mu$ l per lane.

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.