SANTA CRUZ BIOTECHNOLOGY, INC.

RGS17 (h): 293 Lysate: sc-113106

BACKGROUND

The regulators of G protein signaling (RGS) proteins inhibit heterotrimeric G protein signaling. RGS proteins work by functioning as GTPase-activating proteins (which increase the GTPase activity of G protein α subunits) thereby driving G proteins into their inactive GDP-bound form. The human gene that encodes RGS17 (regulator of G protein signaling 17), RGS17, contains 4 exons, spans more than 33 kb and maps to chromosome 6q25.3; the mouse Rgs17 gene maps to chromosome 10 as determined by interspecific backcross mapping. RGS17 is a member of the RZ/A protein family. RZ/A proteins have a simple structure that consists of a conserved amino-terminal cysteine string motif, RGS box and short carboxyl-terminal, which confer GAP activity and the ability to undergo covalent modification and associate with other proteins (at their amino-termini).

REFERENCES

1. Sierra, D.A., Gilbert, D.J., Householder, D., Grishin, N.V., Yu, K., Ukidwe, P., Barker, S.A., He, W., Wensel, T.G., Otero, G., Brown, G., Copeland, N.G., Jenkins, N.A. and Wilkie, T.M. 2002. Evolution of the regulators of G-protein signaling multigene family in mouse and human. Genomics 79: 177-185.
2. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 607191. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
3. Mao, H., Zhao, Q., Daigle, M., Ghahremani, M.H., Chidiac, P. and Albert, P.R. 2004. RGS17/RGSZ2, a novel regulator of $G_{i/o}$, G_z, and G_q signaling. J. Biol. Chem. 279: 26314-26322.
4. Garzón, J., Rodríguez-Muñoz, M., López-Fando, A. and Sánchez-Blázquez, P. 2005. The RGSZ2 protein exists in a complex with μ-opioid receptors and regulates the desensitizing capacity of G_z proteins. Neuropsychopharmacology 30: 1632-1648.
5. Nunn, C., Mao, H., Chidiac, P. and Albert, P.R. 2006. RGS17/RGSZ2 and the RZ/A family of regulators of G-protein signaling. Semin. Cell Dev. Biol. 17: 390-399.

CHROMOSOMAL LOCATION

Genetic locus: RGS17 (human) mapping to 6q25.3.

PRODUCT

RGS17 (h): 293 Lysate represents a lysate of human RGS17 transfected 293 cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

RGS17 (h): 293 Lysate is suitable as a Western Blotting positive control for human reactive RGS17 antibodies. Recommended use: 10-20 µl per lane.

Control 293 Lysate: sc-110760 is available as a Western Blotting negative control lysate derived from non-tranfected 293 cells.

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.

RESEARCH USE

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

PROTOCOLS

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