



IGSF11 (h3): 293T Lysate: sc-114446

BACKGROUND

IGSF11 (immunoglobulin superfamily, member 11) is also known as BTIGSF (brain and testis-specific immunoglobulin superfamily protein) or VSIG3 (V-set and immunoglobulin domain-containing protein 3) and is a 431 amino acid protein that is expressed as three isoforms. IGSF11 is highly expressed in testis and ovary and is also expressed in brain, kidney and skeletal muscle, localized to the cellular membrane as a single-pass membrane protein. IGSF11 is an immunoglobulin with V-type and C2-type domains that function in molecular recognition. When IGSF11 is in the trans position, it plays an important role in cell-cell adhesion via both homophilic and heterophilic interactions with other molecules. These cell-cell interactions are also thought to be important for neuronal cell interactions, such as neuron-neuron or neuron-glia interactions, which are important for the development and function of the central nervous system. In addition, IGSF11 might also be involved in interactions between Sertoli cells and spermatocytes, which are important associations during spermatogenesis. The IGSF11 gene is commonly upregulated in gastric cancer and IGSF11 is highly expressed in many types of human tumors, indicating that it may be useful as a target for immunotherapy.

REFERENCES

1. Suzu, S., Hayashi, Y., Harumi, T., Nomaguchi, K., Yamada, M., Hayasawa, H. and Motoyoshi, K. 2002. Molecular cloning of a novel immunoglobulin superfamily gene preferentially expressed by brain and testis. *Biochem. Biophys. Res. Commun.* 296: 1215-1221.
2. Katoh, M. and Katoh, M. 2003. IGSF11 gene, frequently up-regulated in intestinal-type gastric cancer, encodes adhesion molecule homologous to CXADR, FLJ22415 and ESAM. *Int. J. Oncol.* 23: 525-531.
3. Raschperger, E., Engstrom, U., Pettersson, R.F. and Fuxe, J. 2004. CLMP, a novel member of the CTX family and a new component of epithelial tight junctions. *J. Biol. Chem.* 279: 796-804.
4. Watanabe, T., Suda, T., Tsunoda, T., Uchida, N., Ura, K., Kato, T., Hasegawa, S., Satoh, S., Ohgi, S., Tahara, H., Furukawa, Y. and Nakamura, Y. 2005. Identification of immunoglobulin superfamily 11 (IGSF11) as a novel target for cancer immunotherapy of gastrointestinal and hepatocellular carcinomas. *Cancer Sci.* 96: 498-506.
5. Harada, H., Suzu, S., Hayashi, Y. and Okada, S. 2005. BT-IgSF, a novel immunoglobulin superfamily protein, functions as a cell adhesion molecule. *J. Cell. Physiol.* 204: 919-926.
6. Online Mendelian Inheritance in Man, OMIM™. 2005. Johns Hopkins University, Baltimore, MD. MIM Number: 608351. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>

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.

PROTOCOLS

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

CHROMOSOMAL LOCATION

Genetic locus: IGSF11 (human) mapping to 3q13.32.

PRODUCT

IGSF11 (h3): 293T Lysate represents a lysate of human IGSF11 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

IGSF11 (h3): 293T Lysate is suitable as a Western Blotting positive control for human reactive IGSF11 antibodies. Recommended use: 10-20 µl 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.