

USHBP1 (h): 293T Lysate: sc-114174

BACKGROUND

USHBP1 (Usher syndrome 1C binding protein 1), also known as MCC2 or AIEBP (autoimmune enteropathy (AIE)-75 binding protein protein), is a 703 amino acid member of the MCC family. USHBP1 has highest expression in heart, and moderate to low expression in skeletal muscle, kidney, liver, small intestine, placenta and lung. USHBP1 is a novel homologue of MCC (mutated in colon cancer) tumor suppressor and its C-terminus interacts with the first PDZ domain of USH1C (Usher syndrome type 1C). MCC is a coiled-coil protein that negatively regulates cell cycle progression during the G1 to S transition via NF κ B signaling pathway. The gene encoding USHBP1 is located on human chromosome 19, which consists of over 63 million bases, houses approximately 1,400 genes and is recognized for having the greatest gene density of the human chromosomes.

REFERENCES

1. Kobayashi, I., Imamura, K., Kubota, M., Ishikawa, S., Yamada, M., Tonoki, H., Okano, M., Storch, W.B., Moriuchi, T., Sakiyama, Y. and Kobayashi, K. 1999. Identification of an autoimmune enteropathy-related 75-kilodalton antigen. *Gastroenterology* 117: 823-830.
2. Wang, M., Lu, R. and Fang, D. 1999. The possible role of loss of heterozygosity at APC, MCC and DCC genetic loci in esophageal carcinoma. *Zhonghua Zhong Liu Za Zhi* 21: 16-18.
3. Ishikawa, S., Kobayashi, I., Hamada, J., Tada, M., Hirai, A., Furuuchi, K., Takahashi, Y., Ba, Y. and Moriuchi, T. 2001. Interaction of MCC2, a novel homologue of MCC tumor suppressor, with PDZ-domain Protein AIE-75. *Gene* 267: 101-110.
4. Sikdar, N., Paul, R.R., Panda, C.K., Banerjee, S.K. and Roy, B. 2003. Loss of heterozygosity at APC and MCC genes of oral cancer and leukoplakia tissues from Indian tobacco chewers. *J. Oral Pathol. Med.* 32: 450-454.
5. Hirai, A., Tada, M., Furuuchi, K., Ishikawa, S., Makiyama, K., Hamada, J., Okada, F., Kobayashi, I., Fukuda, H. and Moriuchi, T. 2004. Expression of AIE-75 PDZ-domain protein induces G₂/M cell cycle arrest in human colorectal adenocarcinoma SW480 cells. *Cancer Lett.* 211: 209-218.
6. Grimwood, J., Gordon, L.A., Olsen, A., Terry, A., Schmutz, J., Lamerdin, J., Hellsten, U., Goodstein, D., Couronne, O., Tran-Gyamfi, M., Aerts, A., Altherr, M., Ashworth, L., Bajorek, E., Black, S., Branscomb, E., Caenepeel, S., Carrano, A., et al. 2004. The DNA sequence and biology of human chromosome 19. *Nature* 428: 529-535.
7. Online Mendelian Inheritance in Man, OMIM™. 2008. Johns Hopkins University, Baltimore, MD. MIM Number: 611810. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>

CHROMOSOMAL LOCATION

Genetic locus: USHBP1 (human) mapping to 19p13.11.

PRODUCT

USHBP1 (h): 293T Lysate represents a lysate of human USHBP1 transfected 293T cells and is provided as 100 μ g protein in 200 μ l SDS-PAGE buffer.

APPLICATIONS

USHBP1 (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive USHBP1 antibodies. Recommended use: 10-20 μ l per lane.

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