



NaBC1 (h2): 293T Lysate: sc-373076

BACKGROUND

NaBC1 (novel amplified in breast cancer 1) is a protein found amplified in most breast carcinoma forms. It is expressed primarily as a cytoplasmic, detergent-stable homodimer that has a tendency to interact with DYNLL1 (PIN) and DYNLL2. Breast tumor lines that exhibit 20q13.2 gene amplification express much higher levels of the protein as compared to the levels found in other breast cancer lines that do not overexpress the NaBC1 mRNA. However, this upregulation does not affect growth rate or anchoring abilities of a cell, indicating the oncogenic properties of NaBC1 differ from that of other oncogenes.

REFERENCES

- Collins, C., Rommens, J.M., Kowbel, D., Godfrey, T., Tanner, M., Hwang, S.I., Polikoff, D., Nonet, G., Cochran, J., Myambo, K., Jay, K.E., Froula, J., Cloutier, T., Kuo, W.L., Yaswen, P., Dairkee, S., Giovanola, J., et al. 1998. Positional cloning of ZNF217 and NABC1: genes amplified at 20q13.2 and overexpressed in breast carcinoma. *Proc. Natl. Acad. Sci. USA* 95: 8703-8708.
- Correa, R.G., de Carvalho, A.F., Pinheiro, N.A., Simpson, A.J. and de Souza, S.J. 2000. NABC1 (BCAS1): alternative splicing and downregulation in colorectal tumors. *Genomics* 65: 299-302.
- Ishimoto, T., Ninomiya, K., Miyaji, K., Uyeda, A., Kasai, M. and Taguchi, T. 2002. Cloning and characterization of a novel synaptosome-enriched mRNA that encodes 31 kDa protein. *Biochim. Biophys. Acta* 1579: 189-195.
- Zhao, C., Yasui, K., Lee, C.J., Kurioka, H., Hosokawa, Y., Oka, T. and Inazawa, J. 2003. Elevated expression levels of NCOA.TOP1, and TFAP2C in breast tumors as predictors of poor prognosis. *Cancer* 98: 18-23.
- Beardsley, D.I., Kowbel, D., Lataxes, T.A., Mannino, J.M., Xin, H., Kim, W.J., Collins, C. and Brown, K.D. 2003. Characterization of the novel amplified in breast cancer-1 (NABC1) gene product. *Exp. Cell Res.* 290: 402-413.
- Aust, D.E., Muders, M., Köhler, A., Schmidt, M., Diebold, J., Müller, C., Löhns, U., Waldman, F.M. and Baretton, G.B. 2004. Prognostic relevance of 20q13 gains in sporadic colorectal cancers: a FISH analysis. *Scand. J. Gastroenterol.* 39: 766-772.
- van Dekken, H., Vissers, K., Tilanus, H.W., Kuo, W.L., Tanke, H.J., Rosenberg, C., Ijszenga, M. and Szuhai, K. 2006. Genomic array and expression analysis of frequent high-level amplifications in adenocarcinomas of the gastro-esophageal junction. *Cancer Genet. Cytogenet.* 166: 157-162.
- Loukopoulos, P., Shibata, T., Katoh, H., Kokubu, A., Sakamoto, M., Yamazaki, K., Kosuge, T., Kanai, Y., Hosoda, F., Imoto, I., Ohki, M., Inazawa, J. and Hirohashi, S. 2007. Genome-wide array-based comparative genomic hybridization analysis of pancreatic adenocarcinoma: identification of genetic indicators that predict patient outcome. *Cancer Sci.* 98: 392-400.
- Johnson, N., Speirs, V., Curtin, N.J. and Hall, A.G. 2008. A comparative study of genome-wide SNP, CGH microarray and protein expression analysis to explore genotypic and phenotypic mechanisms of acquired antiestrogen resistance in breast cancer. *Breast Cancer Res. Treat.* 111: 55-63.

CHROMOSOMAL LOCATION

Genetic locus: BCAS1 (human) mapping to 20q13.2.

PRODUCT

NaBC1 (h2): 293T Lysate represents a lysate of human NaBC1 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

NaBC1 (h2): 293T Lysate is suitable as a Western Blotting positive control for human reactive NaBC1 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.

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.