# BCAS2 (h2): 293T Lysate: sc-172935



The Power to Question

## **BACKGROUND**

BCAS2 (breast carcinoma amplified sequence 2), also designated DAM1 (DNA amplified in mammary carcinoma 1 protein) or spliceosome-associated SPF 27, is a ubiquitously expressed nuclear protein that was originally identified as being overexpressed in various breast cancer cell lines. BCAS2 is now known to be a component of the spliceosome, participating in the removal of introns from mRNA precursors. BCAS2 specifically interacts (in a ligand-independent manner) with TR $\beta$  (thyroid hormone receptor  $\beta$ ), ER $\alpha$  (estrogen receptor  $\alpha$ ), ER $\beta$ , PR (progesterone receptor) and PPAR $\gamma$  (peroxisome proliferator-activated receptor  $\gamma$ ). BCAS2 functions as an ER co-activator and is capable of enhancing ER-mediated transcription. This suggests that BCAS2 is involved in the development of breast cancer.

## **REFERENCES**

- Nagasaki, K., Maass, N., Manabe, T., Hanzawa, H., Tsukada, T., Kikuchi, K. and Yamaguchi, K. 1999. Identification of a novel gene, DAM1, amplified at chromosome 1p13.3-21 region in human breast cancer cell lines. Cancer Lett. 140: 219-226.
- 2. Maass, N., Rösel, F., Schem, C., Hitomi, J., Jonat, W. and Nagasaki, K. 2002. Amplification of the BCAS2 gene at chromosome 1p13.3-21 in human primary breast cancer. Cancer Lett. 185: 219-223.
- Lee, S., Ha, S., Chung, M., Kim, Y. and Choi, Y. 2002. Mouse Dam1 regulates pro-apoptotic activity of Blk in mammary epithelial cells. Cancer Lett. 188: 121-126
- Qi, C., Zhu, Y.T., Chang, J., Yeldandi, A.V., Rao, M.S. and Zhu, Y.J. 2005. Potentiation of estrogen receptor transcriptional activity by breast cancer amplified sequence 2. Biochem. Biophys. Res. Commun. 328: 393-398.
- Worsham, M.J., Pals, G., Schouten, J.P., Miller, F., Tiwari, N., van Spaendonk, R. and Wolman, S.R. 2006. High-resolution mapping of molecular events associated with immortalization, transformation, and progression to breast cancer in the MCF10 model. Breast Cancer Res. Treat. 96: 177-186.

#### CHROMOSOMAL LOCATION

Genetic locus: BCAS2 (human) mapping to 1p13.2.

## **PRODUCT**

BCAS2 (h2): 293T Lysate represents a lysate of human BCAS2 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

## **APPLICATIONS**

BCAS2 (h2): 293T Lysate is suitable as a Western Blotting positive control for human reactive BCAS2 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.

Santa Cruz Biotechnology, Inc. 1.800.457.3801 831.457.3801 Fax 831.457.3801 Europe +00800 4573 8000 49 6221 4503 0 www.scbt.com