# SSBP2 (m): 293T Lysate: sc-123790



The Power to Question

## **BACKGROUND**

The single-stranded DNA-binding proteins (SSBs) are essential for DNA function in prokaryotic and eukaryotic cells, as well as in mitochondria, bacteria and viruses. SSBP2 (single-stranded DNA binding protein 2), also known as SSDP2, is a 361 amino acid protein that localizes to the nucleus and contains one LisH domain. Expressed ubiquitously, SSBP2 is thought to induce growth arrest in cancer cells and may, therefore, function as a potent tumor suppressor. The gene encoding SSBP2 maps to human chromosome 5, which contains 181 million base pairs and comprises nearly 6% of the human genome. Defects in chromosome 5-associated genes are related to the pathogenesis of Cockayne syndrome, familial adenomatous polyposis and Treacher Collins syndrome.

## **REFERENCES**

- Bayarsaihan, D., Soto, R.J. and Lukens, L.N. 1998. Cloning and characterization of a novel sequence-specific single-stranded-DNA-binding protein. Biochem. J. 331: 447-452.
- 2. Castro, P., Liang, H., Liang, J.C. and Nagarajan, L. 2002. A novel, evolutionarily conserved gene family with putative sequence-specific single-stranded DNA-binding activity. Genomics 80: 78-85.
- 3. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 607389. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
- Liang, H., Samanta, S. and Nagarajan, L. 2005. SSBP2, a candidate tumor suppressor gene, induces growth arrest and differentiation of myeloid leukemia cells. Oncogene 24: 2625-2634.
- Xu, Z., Meng, X., Cai, Y., Liang, H., Nagarajan, L. and Brandt, S.J. 2007. Single-stranded DNA-binding proteins regulate the abundance of LIM domain and LIM domain-binding proteins. Genes Dev. 21: 942-955.
- 6. Liu, J.W., Nagpal, J.K., Sun, W., Lee, J., Kim, M.S., Ostrow, K.L., Zhou, S., Jeronimo, C., Henrique, R., Van Criekinge, W., Moon, C.S., Califano, J.A., Trink, B. and Sidransky, D. 2008. ssDNA-binding protein 2 is frequently hypermethylated and suppresses cell growth in human prostate cancer. Clin. Cancer Res. 14: 3754-3760.

## **CHROMOSOMAL LOCATION**

Genetic locus: Ssbp2 (mouse) mapping to 13 C3.

#### **PRODUCT**

SSBP2 (m): 293T Lysate represents a lysate of mouse SSBP2 transfected 293T cells and is provided as 100  $\mu$ g protein in 200  $\mu$ l SDS-PAGE buffer.

## **APPLICATIONS**

SSBP2 (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive SSBP2 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.

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