

# LAPSER1 (F-11): sc-365462

## BACKGROUND

LAPSER1, also called Leucine zipper putative tumor suppressor 2, is a member of the LZTS family. Due to its deletion in multiple cancers, including prostate tumors, LAPSER1 is purported to be a tumor suppressor. In cancer cell lines, the overexpression of LAPSER1 can lead to growth inhibition and colony-forming efficiency. LAPSER1 is highly expressed in testis and prostate, but can be detected at lower levels in spleen, thymus, uterus, small intestine and colon. LAPSER1 colocalizes with  $\gamma$ -Tubulin, MKLP-1 and p80 katanin. LAPSER1 is involved in cytokinesis. The disruption of LAPSER1, which is accompanied by the mislocalization of p80 katanin, results in malformation of the central spindle. This is a potential impetus for carcinogenesis.

## REFERENCES

1. Cabeza-Arvelaiz, Y., Thompson, T.C., Sepulveda, J.L. and Chinault, A.C. 2001. LAPSER1: a novel candidate tumor suppressor gene from 10q24.3. *Oncogene* 20: 6707-6717.
2. Teufel, A., Weinmann, A., Galle, P.R. and Lohse, A.W. 2005. In silico characterization of LZTS3, a potential tumor suppressor. *Oncol. Rep.* 14: 547-551.
3. Thyssen, G., Li, T.H., Lehmann, L., Zhuo, M., Sharma, M. and Sun, Z. 2006. LZTS2 is a novel  $\beta$ -catenin-interacting protein and regulates the nuclear export of  $\beta$ -catenin. *Mol. Cell. Biol.* 26: 8857-8867.
4. Sudo, H. and Maru, Y. 2007. LAPSER1 is a putative cytokinetic tumor suppressor that shows the same centrosome and midbody subcellular localization pattern as p80 katanin. *FASEB J.* 21: 2086-2100.
5. Iida, M., Anna, C.H., Gaskin, N.D., Walker, N.J. and Devereux, T.R. 2007. The putative tumor suppressor Tsc-22 is downregulated early in chemically induced hepatocarcinogenesis and may be a suppressor of Gadd45b. *Toxicol. Sci.* 99: 43-50.

## CHROMOSOMAL LOCATION

Genetic locus: LZTS2 (human) mapping to 10q24.31; Lzts2 (mouse) mapping to 19 C3.

## SOURCE

LAPSER1 (F-11) is a mouse monoclonal antibody raised against amino acids 459-556 mapping near the C-terminus of LAPSER1 of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG<sub>1</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## STORAGE

Store at 4° C, **\*\*DO NOT FREEZE\*\***. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.

## APPLICATIONS

LAPSER1 (F-11) is recommended for detection of LAPSER1 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for LAPSER1 siRNA (h): sc-62541, LAPSER1 siRNA (m): sc-62542, LAPSER1 shRNA Plasmid (h): sc-62541-SH, LAPSER1 shRNA Plasmid (m): sc-62542-SH, LAPSER1 shRNA (h) Lentiviral Particles: sc-62541-V and LAPSER1 shRNA (m) Lentiviral Particles: sc-62542-V.

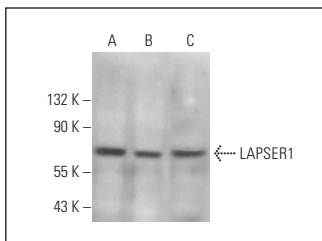
Molecular Weight of LAPSER1: 73 kDa.

Positive Controls: LAPSER1 (h): 293T Lysate: sc-116591, SK-N-SH cell lysate: sc-2410 or HeLa whole cell lysate: sc-2200.

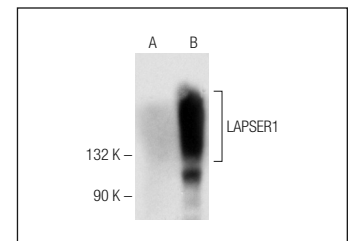
## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG $\kappa$  BP-HRP: sc-516102 or m-IgG $\kappa$  BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgG $\kappa$  BP-FITC: sc-516140 or m-IgG $\kappa$  BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

## DATA



LAPSER1 (F-11): sc-365462. Western blot analysis of LAPSER1 expression in SK-N-SH (A), HeLa (B) and C6 (C) whole cell lysates.



LAPSER1 (F-11): sc-365462. Western blot analysis of LAPSER1 expression in non-transfected SK-N-SH (A) and human LAPSER1 transfected SK-N-SH (B) whole cell lysates.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.