

# LAPSER1 (C-19): sc-67668

## 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 co-localizes 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

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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 (C-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of LAPSER1 of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-67668 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## STORAGE

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

## APPLICATIONS

LAPSER1 (C-19) is recommended for detection of LAPSER1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

LAPSER1 (C-19) is also recommended for detection of LAPSER1 in additional species, including equine, canine and bovine.

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.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## RESEARCH USE

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

## PROTOCOLS

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