

TSLC1 (G-19): sc-34545

BACKGROUND

Homologous to the poliovirus receptor (PVR/CD155), the Nectin immunoglobulin superfamily comprises four known isoforms, Nectin 1, 2, 3 and 4 (also designated TSLC1). TSLC1 is encoded by a tumor-suppressor gene in human non-small-cell lung cancer mapping to chromosome 11q23.2. The TSLC1 protein is a N-linked membrane glycoprotein that co-localizes with the Actin filament-binding protein, afadin, at cadherin-based adherens junctions in MDCKII epithelial cells. TSLC1 also interacts with the tumor-suppressor gene product DAL-1 (for differentially expressed in adenocarcinoma of the lung protein 1) to target Actin rearrangement and cellular motility. TSLC1 may also form homodimers that function in homophilic, intracellular adhesion. TSLC1 expression is reduced or absent in a number of characterized cancer cell lines including A549. In prostate and breast cancer, as well as in pancreatic ductal adenocarcinoma, the TSLC1 promoter is commonly silenced by hypermethylation. Unlike other Nectins, which are more widely expressed, TSLC1 is mainly expressed in the placenta.

REFERENCES

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4. Fukuhara, H., et al. 2002. Promoter methylation of TSLC1 and tumor suppression by its gene product in human prostate cancer. *Jpn. J. Cancer Res.* 93: 605-609.
5. Jansen, M., et al. 2002. Aberrant methylation of the 5' CpG island of TSLC1 is common in pancreatic ductal adenocarcinoma and is first manifest in high-grade PanINs. *Cancer Biol. Ther.* 1: 293-296.
6. Masuda, M., et al. 2002. The tumor suppressor protein TSLC1 is involved in cell-cell adhesion. *J. Biol. Chem.* 277: 31014-31019.
7. Mizoguchi, A., et al. 2002. Nectin: an adhesion molecule involved in formation of synapses. *J. Cell. Biol.* 156: 555-565.
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CHROMOSOMAL LOCATION

Genetic locus: IGSF4 (human) mapping to 11q23.2; Igsf4 (mouse) mapping to 9 B-C.

SOURCE

TSLC1 (G-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of TSLC1 of human origin.

RESEARCH USE

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

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-34545 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

TSLC1 (G-19) is recommended for detection of TSLC1 (tumor suppressor in lung cancer 1, also designated Nectin 4) of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1–2 µg per 100–500 µg 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 TSLC1 siRNA (h): sc-37518 and TSLC1 siRNA (m): sc-37519.

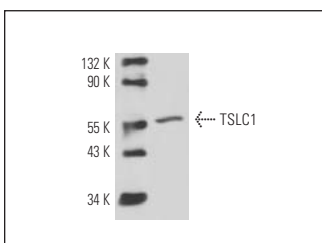
Molecular Weight of TSLC1: 75 kDa.

Positive Controls: rat lung extract: sc-2396 or mouse lung extract: sc-2390.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA



TSLC1 (G-19): sc-34545. Western blot analysis of TSLC1 expression in rat lung tissue extract.

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 or our catalog for detailed protocols and support products.