

DLC-1 (C-14): sc-28434

BACKGROUND

Loss of expression of deleted in liver cancer 1 (DLC-1) protein correlates strongly with cancerous phenotype in a large number of human tissues, such as breast, liver, colon and prostate, and generally occurs due to genomic deletion or aberrant promotor methylation. The gene encoding DLC-1 maps to human chromosome 8p22, a region presumed to harbor tumor suppressor genes based on its frequent mutation in a large number of cancers. DLC-1 localizes to the cytoplasm and restored expression leads to caspase-3 mediated apoptosis, and inhibition of cell growth and invasiveness.

REFERENCES

1. Yuan, B.Z., et al. 1998. Cloning, characterization, and chromosomal localization of a gene frequently deleted in human liver cancer (DLC-1) homologous to rat RhoGAP. *Cancer Res.* 58: 2196-2199.
2. Park, S.W., et al. 2003. DNA variants of DLC-1, a candidate tumor suppressor gene in human hepatocellular carcinoma. *Int. J. Oncol.* 23: 133-137.
3. Yuan, B.Z., et al. 2003. DLC-1 gene inhibits human breast cancer cell growth and *in vivo* tumorigenicity. *Oncogene* 22: 445-450.
4. Zhou, X., et al. 2004. Restoration of DLC-1 gene expression induces apoptosis and inhibits both cell growth and tumorigenicity in human hepatocellular carcinoma cells. *Oncogene* 23: 1308-1313.
5. Yuan, B.Z., et al. 2004. DLC-1 operates as a tumor suppressor gene in human non-small cell lung carcinomas. *Oncogene* 23: 1405-1411.
6. Syed, V., et al. 2005. Identification of ATF-3, caveolin-1, DLC-1, and NM23-H2 as putative antitumorigenic, progesterone-regulated genes for ovarian cancer cells by gene profiling. *Oncogene* 24: 1774-1787.

CHROMOSOMAL LOCATION

Genetic locus: DLC1 (human) mapping to 8p22; Dlc1 (mouse) mapping to 8 A4.

SOURCE

DLC-1 (C-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of DLC-1 of human origin.

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-28434 P, (100 µg 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.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

APPLICATIONS

DLC-1 (C-14) is recommended for detection of DLC-1 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).

DLC-1 (C-14) is also recommended for detection of DLC-1 in additional species, including bovine.

Suitable for use as control antibody for DLC-1 siRNA (h): sc-43725, DLC-1 siRNA (m): sc-72134, DLC-1 shRNA Plasmid (h): sc-43725-SH, DLC-1 shRNA Plasmid (m): sc-72134-SH, DLC-1 shRNA (h) Lentiviral Particles: sc-43725-V and DLC-1 shRNA (m) Lentiviral Particles: sc-72134-V.

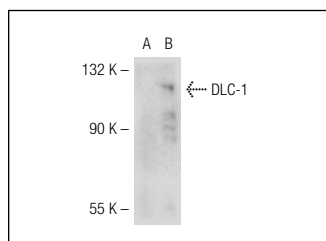
Molecular Weight of DLC-1: 123 kDa.

Positive Controls: DLC-1 (h): 293T Lysate: sc-116333.

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



DLC-1 (C-14): sc-28434. Western blot analysis of DLC-1 expression in non-transfected: sc-117752 (A) and human DLC-1 transfected: sc-116333 (B) 293T whole cell lysates.

RESEARCH USE

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



Try **DLC-1 (C-12): sc-271915**, our highly recommended monoclonal alternative to DLC-1 (C-14).