



SZABO SCANDIC

Part of Europa Biosite

Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten!
See the following pages for more information!



Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

mail@szabo-scandic.com

www.szabo-scandic.com

[linkedin.com/company/szaboscandic](https://www.linkedin.com/company/szaboscandic) 

DLC-1 shRNA (h) Lentiviral Particles: sc-43725-V

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 promoter 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. 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.
5. 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.
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.

PRODUCT

DLC-1 shRNA (h) Lentiviral Particles is a pool of concentrated, transduction-ready viral particles containing 2 target-specific constructs that encode 19-25 nt (plus hairpin) shRNA designed to knock down gene expression. Each vial contains 200 μ l frozen stock containing 1.0×10^6 infectious units of virus (IFU) in Dulbecco's Modified Eagle's Medium with 25 mM HEPES pH 7.3. Suitable for 10-20 transductions. Also see DLC-1 siRNA (h): sc-43725 and DLC-1 shRNA Plasmid (h): sc-43725-SH as alternate gene silencing products.

STORAGE

Store lentiviral particles at -80° C. Stable for at least one year from the date of shipment. Once thawed, particles can be stored at 4° C for up to one week. Avoid repeated freeze thaw cycles.

PROTOCOLS

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

APPLICATIONS

DLC-1 shRNA (h) Lentiviral Particles is recommended for the inhibition of DLC-1 expression in human cells.

SUPPORT REAGENTS

Control shRNA Lentiviral Particles: sc-108080. Available as 200 μ l frozen viral stock containing 1.0×10^6 infectious units of virus (IFU); contains an shRNA construct encoding a scrambled sequence that will not lead to the specific degradation of any known cellular mRNA.

GENE EXPRESSION MONITORING

DLC-1 (C-12): sc-271915 is recommended as a control antibody for monitoring of DLC-1 gene expression knockdown by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) or immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-mouse IgG-HRP: sc-2005 (dilution range: 1:2000-1:32,000) or Cruz Marker™ compatible goat anti-mouse IgG-HRP: sc-2031 (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 goat anti-mouse IgG-FITC: sc-2010 (dilution range: 1:100-1:400) or goat anti-mouse IgG-TR: sc-2781 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

RT-PCR REAGENTS

Semi-quantitative RT-PCR may be performed to monitor DLC-1 gene expression knockdown using RT-PCR Primer: DLC-1 (h)-PR: sc-43725-PR (20 μ l, 449 bp). Annealing temperature for the primers should be $55-60^\circ$ C and the extension temperature should be $68-72^\circ$ C.

BIOSAFETY

Lentiviral particles can be employed in standard Biosafety Level 2 tissue culture facilities (and should be treated with the same level of caution as with any other potentially infectious reagent). Lentiviral particles are replication-incompetent and are designed to self-inactivate after transduction and integration of shRNA constructs into genomic DNA of target cells.

RESEARCH USE

The purchase of this product conveys to the buyer the nontransferable right to use the purchased amount of the product and all replicates and derivatives for research purposes conducted by the buyer in his laboratory only (whether the buyer is an academic or for-profit entity). The buyer cannot sell or otherwise transfer (a) this product (b) its components or (c) materials made using this product or its components to a third party, or otherwise use this product or its components or materials made using this product or its components for Commercial Purposes.