

DLEC1 (h): 293T Lysate: sc-372310

BACKGROUND

Many tumor suppressor genes are thought to reside on chromosome 3p because one copy of this region is frequently found to be deleted in several carcinomas. The gene encoding DLEC1 (deleted in lung and esophageal cancer protein 1), a 1,755 amino acid cytoplasmic protein, is located within a chromosomal region that is subject to aberrations in many cancer cell lines and primary cancers. Reduced invasiveness and suppression of cell growth occurs when DLEC1 cDNA is introduced into a variety of cancer cell lines, suggesting that defects in the transcription of DLEC1 is a cause of lung, esophageal, and renal cancers. Evidence also suggests that methylation of the DLEC1 promoter may be associated with a poor prognosis in non-small cell lung carcinoma and nasopharyngeal carcinoma. With highest expression in kidney and prostate, there are three isoforms of DLEC1 that exist as a result of alternative splicing events.

REFERENCES

- Daigo, Y., et al. 1999. Molecular cloning of a candidate tumor suppressor gene, DLC1, from chromosome 3p21.3. *Cancer Res.* 59: 1966-1972.
- Peng, H., et al. 2002. Study of DLC1 gene expression in nasopharyngeal carcinoma. *Zhonghua Er Bi Yan Hou Ke Za Zhi* 37: 454-457.
- 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.
- Kwong, J., et al. 2006. Candidate tumor-suppressor gene DLEC1 is frequently downregulated by promoter hypermethylation and histone hypoacetylation in human epithelial ovarian cancer. *Neoplasia* 8: 268-278.
- Kwong, J., et al. 2007. Epigenetic inactivation of the deleted in lung and esophageal cancer 1 gene in nasopharyngeal carcinoma. *Genes Chromosomes Cancer* 46: 171-180.
- Online Mendelian Inheritance in Man, OMIM™. 2007. Johns Hopkins University, Baltimore, MD. MIM Number: 604050. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
- Ayadi, W., et al. 2008. Aberrant methylation of p16, DLEC1, BLU and E-cadherin gene promoters in nasopharyngeal carcinoma biopsies from Tunisian patients. *Anticancer Res.* 28: 2161-2167.
- Seng, T.J., et al. 2008. DLEC1 and MLH1 promoter methylation are associated with poor prognosis in non-small cell lung carcinoma. *Br. J. Cancer* 99: 375-382.
- Qiu, G.H., et al. 2008. The tumor suppressor gene DLEC1 is frequently silenced by DNA methylation in hepatocellular carcinoma and induces G₁ arrest in cell cycle. *J. Hepatol.* 48: 433-441.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

PROTOCOLS

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

CHROMOSOMAL LOCATION

Genetic locus: DLEC1 (human) mapping to 3p22.2.

PRODUCT

DLEC1 (h): 293T Lysate represents a lysate of human DLEC1 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

DLEC1 (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive DLEC1 antibodies. Recommended use: 10-20 µl per lane.

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

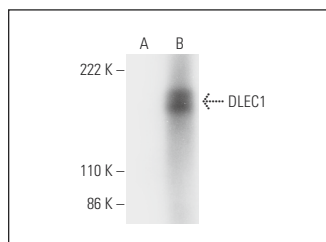
DLEC1 (C-1): sc-390903 is recommended as a positive control antibody for Western Blot analysis of enhanced human DLEC1 expression in DLEC1 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

RECOMMENDED SUPPORT REAGENTS

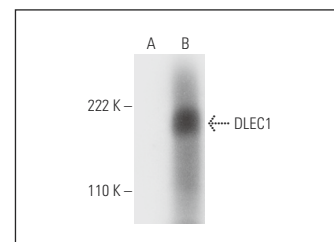
To ensure optimal results, the following support reagents are recommended:

1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ 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.

DATA



DLEC1 (C-1): sc-390903. Western blot analysis of DLEC1 expression in non-transfected: sc-117752 (A) and human DLEC1 transfected: sc-372310 (B) 293T whole cell lysates.



DLEC1 (D-11): sc-393183. Western blot analysis of DLEC1 expression in non-transfected: sc-117752 (A) and human DLEC1 transfected: sc-372310 (B) 293T whole cell lysates.

RESEARCH USE

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