# SANTA CRUZ BIOTECHNOLOGY, INC.

# DLEC1 (F-16): sc-99867



# BACKGROUND

Many tumor supressor 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 the 3p22.2 chromosomal segment, one of the 3 regions that is subject to chromosomal abberations 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, DLC-1, from chromosome 3p21.3. Cancer Res. 59: 1966-1972.
- 2. Peng, H., et al. 2002. Study of DLC-1 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.
- 4. 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.
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### CHROMOSOMAL LOCATION

Genetic locus: DLEC1 (human) mapping to 3p22.2; Dlec1 (mouse) mapping to 9 F3.

# SOURCE

DLEC1 (F-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of DLEC1 of human origin.

# PRODUCT

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

Blocking peptide available for competition studies, sc-99867 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

# **STORAGE**

Store at 4° C, \*\*D0 NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

#### APPLICATIONS

DLEC1 (F-16) is recommended for detection of DLEC1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g 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 DLEC1 siRNA (h): sc-77908, DLEC1 siRNA (m): sc-143053, DLEC1 shRNA Plasmid (h): sc-77908-SH, DLEC1 shRNA Plasmid (m): sc-143053-SH, DLEC1 shRNA (h) Lentiviral Particles: sc-77908-V and DLEC1 shRNA (m) Lentiviral Particles: sc-143053-V.

Molecular Weight of DLEC1: 196 kDa.

Positive Controls: DLEC1 (h): 293T Lysate: sc-372310.

# **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



DLEC1 (F-16): sc-99867. 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.

