SANTA CRUZ BIOTECHNOLOGY, INC.

DCC (m): 293T Lysate: sc-375146

BACKGROUND

DCC (deleted in colorectal cancer) was first identified as a candidate tumor suppressor gene based on its absence or reduced expression in the majority of colorectal cancers. Loss of DCC expression was subsequently observed in cancers of the breast, endometrium, brain, pancreas and prostate, as well as in leukemias, neuroblastomas and male germ cell cancers. DCC is a 1,447 amino acid transmembrane protein with highest expression in developing brain and neural tube and is suspected to play a role in mediating directional migration in the developing nervous system. Netrin-1, a chemoattractant for commissural axons in the spinal cord, has been identified as a ligand for DCC.

REFERENCES

1. Vogelstein, B., et al. 1989. Allelotype of colorectal carcinomas. Science 244: 207-211.
2. Fearon, E.R., et al. 1990. Identification of a chromosome 18q gene that is altered in colorectal cancers. Science 247: 49-56.
3. Hedrick, L., et al. 1994. The DCC gene product in cellular differentiation and colorectal tumorigenesis. Genes Dev. 8: 1174-1183.
4. Reale, M.A., et al. 1994. Expression and alternative splicing of the deleted in colorectal cancer (DCC) gene in normal and malignant tissues. Cancer Res. 54: 4493-4501.
5. Cooper, H.M., et al. 1995. Cloning of the mouse homologue of the deleted in colorectal cancer gene (mDCC) and its expression in the developing mouse embryo. Oncogene 11: 2243-2254.
6. Keino-Masu, K., et al. 1996. Deleted in colorectal cancer (DCC) encodes a netrin receptor. Cell 87: 175-185.
7. Inokuchi, K., et al. 1996. DCC protein expression in hematopoietic cell populations and its relation to leukemogenesis. J. Clin. Invest. 97: 852-857.
8. Reyes-Mugica, M., et al. 1997. Loss of DCC expression and glioma progression. Cancer Res. 57: 382-386.
9. Rodrigues, S., et al. 2007. Opposing roles of netrin-1 and the dependence receptor DCC in cancer cell invasion, tumor growth and metastasis. Oncogene 26: 5615-5625.

CHROMOSOMAL LOCATION

Genetic locus: Dcc (mouse) mapping to 18 E2.

PRODUCT

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

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.

APPLICATIONS

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

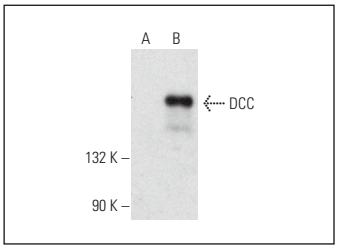
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

DCC (A-1): sc-515834 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse DCC expression in DCC 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



DCC (A-1): sc-515834. Western blot analysis of DCC expression in non-transfected: sc-117752 (**A**) and mouse DCC transfected: sc-375146 (**B**) 293T whole cell lysates.

RESEARCH USE

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