

DCC (A-20): sc-6535

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.

CHROMOSOMAL LOCATION

Genetic locus: DCC (human) mapping to 18q21.2; Dcc (mouse) mapping to 18 E2.

SOURCE

DCC (A-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of DCC 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-6535 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as agarose conjugate for immunoprecipitation, sc-6535 AC, 500 µg/0.25 ml agarose in 1 ml.

APPLICATIONS

DCC (A-20) is recommended for detection of DCC 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).

DCC (A-20) is also recommended for detection of DCC in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for DCC siRNA (h): sc-35183, DCC siRNA (m): sc-35184, DCC shRNA Plasmid (h): sc-35183-SH, DCC shRNA Plasmid (m): sc-35184-SH, DCC shRNA (h) Lentiviral Particles: sc-35183-V and DCC shRNA (m) Lentiviral Particles: sc-35184-V.

Molecular Weight of DCC: 190 kDa.

Positive Controls: IMR-32 cell lysate: sc-2409, U-87 MG cell lysate: sc-2411 or SW480 cell lysate: sc-2219.

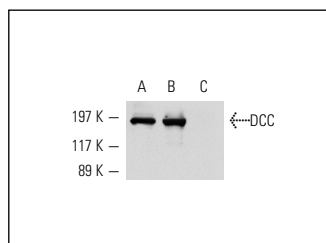
STORAGE

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

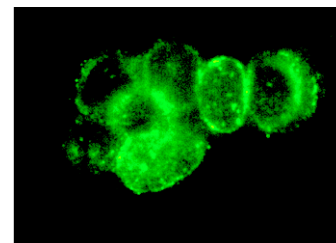
RESEARCH USE

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

DATA



DCC (A-20): sc-6535. Western blot analysis of DCC expression in IMR-32 (A), U-87 MG (B) and SW480 (C) whole cell lysates.



DCC (A-20): sc-6535. Immunofluorescence staining of methanol-fixed IMR-32 cells showing membrane staining.

SELECT PRODUCT CITATIONS

1. Dalvin, S., et al. 2003. Expression of Netrin-1 and its two receptors DCC and UNC5H2 in the developing mouse lung. *Gene Expr. Patterns* 3: 279-283.
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3. Inaki, K., et al. 2004. Laminar organization of the developing lateral olfactory tract revealed by differential expression of cell recognition molecules. *J. Comp. Neurol.* 479: 243-256.
4. Ratcliffe, E.M., et al. 2006. Netrin/DCC-mediated attraction of vagal sensory axons to the fetal mouse gut. *J. Comp. Neurol.* 498: 567-580.
5. Howell, D.M., et al. 2007. Molecular guidance cues necessary for axon pathfinding from the ventral cochlear nucleus. *J. Comp. Neurol.* 504: 533-549.
6. Tsuchiya, A., et al. 2007. Expression of Netrin-1 and its receptors DCC and neogenin in rat brain after ischemia. *Brain Res.* 1159: 1-7.
7. Kuns-Hashimoto, R., et al. 2008. Selective binding of RGMc/hemojuvelin, a key protein in systemic iron metabolism, to BMP-2 and neogenin. *Am. J. Physiol., Cell Physiol.* 294: C994-C1003.
8. Wu, T.W., et al. 2008. Netrin-1 attenuates ischemic stroke-induced apoptosis. *Neuroscience* 156: 475-482.
9. Moore, S.W., et al. 2008. Rho inhibition recruits DCC to the neuronal plasma membrane and enhances axon chemoattraction to Netrin 1. *Development* 135: 2855-2864.
10. Liu, N., et al. 2011. Effects of treadmill exercise on the expression of netrin-1 and its receptors in rat brain after cerebral ischemia. *Neuroscience* 194: 349-358.
11. Ju, X.D., et al. 2014. Both Myosin-10 isoforms are required for radial neuronal migration in the developing cerebral cortex. *Cereb. Cortex* 24: 1259-1268.