Datasheet for ABIN967443

# anti-DCC antibody

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## Overview

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|---|---|
| Quantity: | 0.1 mg |
| Target: | DCC |
| Reactivity: | Human |
| Host: | Mouse |
| Clonality: | Monoclonal |
| Conjugate: | This DCC antibody is un-conjugated |
| Application: | Western Blotting (WB), Immunohistochemistry (Formalin-fixed Sections) (IHC (f)) |

## Product Details

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| Brand: | BD Pharmingen™ |
| Immunogen: | Recombinant Human DCC |
| Clone: | G97-449 |
| Isotype: | IgG1 |
| Characteristics: | 1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.<br>2. Please refer to us for technical protocols.<br>3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing. |
| Purification: | The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography. |

## Target Details

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| Target: | DCC |
| Alternative Name: | DCC (DCC Products) |
| Background: | One of the most common regions of allelic loss in colorectal tumors is chromosome 18, which is lost in more than 70% of carcinomas, and in almost 50% of late adenomas. This region of loss has been mapped to chromosome 18q and a gene called Deleted in Colorectal Cancer (DCC). DCC encodes an ~185 kDa glycoprotein with significant homology to the neural cell adhesion molecule and other related cell surface glycoproteins. The predicted amino acid sequence of DCC cDNA consists of a 1448 amino acid (aa) long transmembrane phosphoprotein. The extracellular domain consists of 1098 amino acids and has 42% sequence homology to cell adhesion proteins of the neural cell adhesion molecule (N-CAM) family. DCC mRNA is found to be expressed in normal colonic mucosa, but its expression is reduced or absent in the majority of colorectal carcinomas. The loss of heterozygosity and subsequent alteration of DCC expression has also been observed in tumors of non-colorectal origin. Clone G97-449 recognizes human DCC. A truncated recombinant protein containing the intracellular domain of the human DCC was used as immunogen. |
| Molecular Weight: | 175-190 kDa |
| Pathways: | Regulation of Cell Size |

## Application Details

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| Application Notes: | Applications include western blot analysis (0.5 - 2.0 µg/ml). IMR-32 cells are suggested as a positive control. Other applications not routinely tested include flow cytometric analysis (titrate between 0.06-1.0 µg/one million cells). The antibody has also been published for immunohistochemistry of formalin-fixed, paraffin-embedded tissue sections. By western blot, DCC-specific antibodies typically identify protein species with molecular weights of approximately 175-190 kDa. Doublets in this range have been reported in brain. Several smaller immunoreactive species, representing degradation products, cross-reactive species, or DCC forms arising from alternative splicing of DCC mRNA or in vivo processing of the DCC protein may also be identified. |
| Comment: | Related Products: ABIN967389 |
| Restrictions: | For Research Use only |

## Handling

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| Format: | Liquid |

## Handling

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| Concentration: | 0.5 mg/mL |
| Buffer: | Aqueous buffered solution containing ≤0.09 % sodium azide. |
| Preservative: | Sodium azide |
| Precaution of Use: | This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only. |
| Storage: | 4 °C |
| Storage Comment: | Store undiluted at 4°C. |

## Publications

Product cited in:

Huang, Chu, Hwang, Tsaur: "Coexpression of high-voltage-activated ion channels Kv3.4 and Cav1.2 in pioneer axons during pathfinding in the developing rat forebrain." in: **The Journal of comparative neurology**, Vol. 520, Issue 16, pp. 3650-72, (2012) (PubMed).

Shibata, Reale, Lavin, Silverman, Fearon, Steele, Jessup, Loda, Summerhayes: "The DCC protein and prognosis in colorectal cancer." in: **The New England journal of medicine**, Vol. 335, Issue 23, pp. 1727-32, (1996) (PubMed).

Reale, Hu, Zafar, Getzenberg, Levine, Fearon: "Expression and alternative splicing of the deleted in colorectal cancer (DCC) gene in normal and malignant tissues." in: **Cancer research**, Vol. 54, Issue 16, pp. 4493-501, (1994) (PubMed).

Fearon, Cho, Nigro, Kern, Simons, Ruppert, Hamilton, Preisinger, Thomas, Kinzler: "Identification of a chromosome 18q gene that is altered in colorectal cancers." in: **Science (New York, N.Y.)**, Vol. 247, Issue 4938, pp. 49-56, (1990) (PubMed).

Vogelstein, Fearon, Hamilton, Kern, Preisinger, Leppert, Nakamura, White, Smits, Bos: "Genetic alterations during colorectal-tumor development." in: **The New England journal of medicine**, Vol. 319, Issue 9, pp. 525-32, (1988) (PubMed).

There are more publications referencing this product on: Product page


**Western Blotting**

**Image 1.** Western blot analysis of human DCC protein in 293 human embryonic kidney cells stably transfected with an expression vector containing full length DCC cDNA. Lane 1, clone G97-449 (ABIN967443), which recognizes an epitope in the intracellular domain of DCC. Lane 2, clone G92-13 (ABIN967442), which recognizes an epitope in the extracellular domain of DCC. Lane 3, a mouse IgG1 isotype control.

**Image 2.**



**Western Blotting**

**Image 3.**