

Anti-DCC Antibody

Catalog # ABO11214

Specification

Anti-DCC Antibody - Product Information

ApplicationWB, IHC-PPrimary AccessionP43146HostRabbitReactivityHuman, Mouse, RatClonalityPolyclonalFormatLyophilizedDescriptionPCC(DCC) detection. Tested with WB, IHC-P inHuman; Mouse; Rat.Human; Mouse; Rat.

Reconstitution Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-DCC Antibody - Additional Information

Gene ID 1630

Other Names Netrin receptor DCC, Colorectal cancer suppressor, Immunoglobulin superfamily DCC subclass member 1, Tumor suppressor protein DCC, DCC, IGDCC1

Calculated MW 158457 MW KDa

Application Details Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, Mouse, Rat, By Heat
blot, 0.1-0.5 µg/ml, Human, Mouse, Rat
blot, 0.1-0.5 µg/ml, Human, Mouse, Rat
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Subcellular Localization Membrane; Single-pass type I membrane protein.

Tissue Specificity

Found in axons of the central and peripheral nervous system and in differentiated cell types of the intestine. Not expressed in colorectal tumor cells that lost their capacity to differentiate into mucus producing cells.

Protein Name Netrin receptor DCC

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.

Immunogen

A synthetic peptide corresponding to a sequence at the N-terminus of human DCC(162-178aa



EVIGEPMPTIHWQKNQQ), identical to the related mouse sequence, and different from the related rat sequence by one amino acid.

Purification Immunogen affinity purified.

Cross Reactivity No cross reactivity with other proteins

Storage

At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time.Avoid repeated freezing and thawing.

Sequence Similarities Belongs to the immunoglobulin superfamily. DCC family.

Anti-DCC Antibody - Protein Information

Name DCC

Synonyms IGDCC1

Function

Receptor for netrin required for axon guidance. Mediates axon attraction of neuronal growth cones in the developing nervous system upon ligand binding. Its association with UNC5 proteins may trigger signaling for axon repulsion. It also acts as a dependence receptor required for apoptosis induction when not associated with netrin ligand. Implicated as a tumor suppressor gene.

Cellular Location

Membrane; Single-pass type I membrane protein.

Tissue Location

Found in axons of the central and peripheral nervous system and in differentiated cell types of the intestine. Not expressed in colorectal tumor cells that lost their capacity to differentiate into mucus producing cells.

Anti-DCC Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Anti-DCC Antibody - Images



	1	2	3	4	5	6	7
250KD -			_	_		-	-
130KD -	-	-					
100KD -							
70KD -							
55KD -							
35KD-							
25KD-							

Anti-DCC antibody, ABO11214, Western blottingLane 1: Rat Brain Tissue LysateLane 2: Mouse Brain Tissue LysateLane 3: U87 Cell LysateLane 4: SW620 Cell LysateLane 5: COLO320 Cell LysateLane 6: 293T Cell LysateLane 7: HELA Cell Lysate



Anti-DCC antibody, ABO11214, IHC(P)IHC(P): Human Intestinal Cancer Tissue

Anti-DCC Antibody - Background

DCC(Deleted IN Colorectal Carcinoma) also known as CRC18 or CRCR1. The DCC gene encodes a functional receptor for netrin and mediates axon outgrowth and the steering response. Heterozygous loss-of-function mutations in DCC can result in congenital mirror movements. Alterations in DCC occur frequently in colorectal cancer. Studying a YAC contig containing the entire DCC coding region, they showed that the DCC gene spans approximately 1.4 Mb. Vogelstein(1995) stated that the precise location of the DCC gene was though to be 18q21.3. DCC is a receptor or a component of a receptor that mediates the effects of netrin-1 on commissural axons, and they complement genetic evidence for interactions between DCC and netrin homologs in C. DCC protein could be detected in varying abundance in all specimens of normal colonic mucosa analyzed as well as in all specimens of adenomatous polyps, colorectal carcinoma and colorectal liver metastases. DCC may function as a tumor-suppressor protein by inducing apoptosis in settings in which ligand is unavailable(for example, during metastasis or tumor growth beyond local blood supply) through functional caspase cascades by a mechanism that requires cleavage of DCC at asp1290. Stein et al.(2001) concluded that DCC plays a central role in netrin signaling of axon growth and guidance independent of A2B receptor activation.