

#### **DCC Antibody (Center)**

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP12334c

### **Specification**

## **DCC Antibody (Center) - Product Information**

Application WB, IHC-P,E Primary Accession P43146

Other Accession <u>063155</u>, <u>P70211</u>, <u>NP 005206.2</u>

Reactivity
Predicted
Rat
Host
Clonality
Isotype
Calculated MW
Antigen Region

Mouse
Rat
Rabbit
Rabbit
Rabbit
Polyclonal
Rabbit IgG
643-670

# **DCC Antibody (Center) - 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

## Target/Specificity

This DCC antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 643-670 amino acids from the Central region of human DCC.

#### **Dilution**

WB~~1:1000 IHC-P~~1:10~50

#### **Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

### **Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

#### **Precautions**

DCC Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

### **DCC Antibody (Center) - 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**

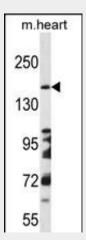
Found in axons of the central and peripheral nervous system and in differentiated cell types of the intestine. Not expressed in colorectal tumor cells that lost their capacity to differentiate into mucus producing cells.

## **DCC Antibody (Center) - Protocols**

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

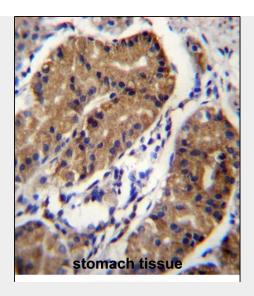
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

# DCC Antibody (Center) - Images



DCC Antibody (Center) (Cat. #AP12334c) western blot analysis in mouse heart tissue lysates (35ug/lane). This demonstrates the DCC antibody detected the DCC protein (arrow).





DCC Antibody (Center) (Cat. #AP12334c)immunohistochemistry analysis in formalin fixed and paraffin embedded human stomach tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of DCC Antibody (Center) for immunohistochemistry. Clinical relevance has not been evaluated.

# DCC Antibody (Center) - Background

This gene encodes a netrin 1 receptor. The transmembrane protein is a member of the immunoglobulin superfamily of cell adhesion molecules, and mediates axon guidance of neuronal growth cones towards sources of netrin 1 ligand. The cytoplasmic tail interacts with the tyrosine kinases Src and focal adhesion kinase (FAK, also known as PTK2) to mediate axon attraction. The protein partially localizes to lipid rafts, and induces apoptosis in the absence of ligand. The protein functions as a tumor suppressor, and is frequently mutated or downregulated in colorectal cancer and esophageal carcinoma.

# **DCC Antibody (Center) - References**

Shimada, M., et al. Hum. Genet. 128(4):433-441(2010) Rose, J.E., et al. Mol. Med. 16 (7-8), 247-253 (2010): Srour, M., et al. Science 328 (5978), 592 (2010): Docherty, S.J., et al. BMC Genet. 11, 61 (2010): Li, W., et al. Nat. Neurosci. 7(11):1213-1221(2004)