

Anti-Netrin 1 Antibody
Catalog # ABO10977**Specification**

Anti-Netrin 1 Antibody - Product Information

Application	WB
Primary Accession	O95631
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized

Description

Rabbit IgG polyclonal antibody for Netrin-1 (NTN1) detection. Tested with WB in Human; Mouse; Rat.

Reconstitution

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

Anti-Netrin 1 Antibody - Additional Information

Gene ID 9423

Other Names

Netrin-1, Epididymis tissue protein Li 131P, NTN1, NTN1L

Calculated MW

67748 MW KDa

Application Details

Western blot, 0.1-0.5 µg/ml, Human, Rat, Mouse

Subcellular Localization

Secreted, extracellular space, extracellular matrix .

Tissue Specificity

Widely expressed in normal adult tissues with highest levels in heart, small intestine, colon, liver and prostate. Reduced expression in brain tumors and neuroblastomas. Expressed in epididymis (at protein level). .

Protein Name

Netrin-1

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 Netrin 1 (32-51aa AGQAAQPDPCSDENGHPRRC), identical to the related rat and mouse sequences.

Purification

Immunogen affinity purified.

Cross Reactivity

No cross reactivity with other proteins

Storage

At -20°C for one year. After reconstitution, 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

Contains 3 laminin EGF-like domains.

Anti-Netrin 1 Antibody - Protein Information

Name NTN1

Synonyms NTN1L

Function

Netrins control guidance of CNS commissural axons and peripheral motor axons. Its association with either DCC or some UNC5 receptors will lead to axon attraction or repulsion, respectively. Binding to UNC5C might cause dissociation of UNC5C from polymerized TUBB3 in microtubules and thereby lead to increased microtubule dynamics and axon repulsion (PubMed:[28483977](http://www.uniprot.org/citations/28483977)). Involved in dorsal root ganglion axon projection towards the spinal cord (PubMed:[28483977](http://www.uniprot.org/citations/28483977)). It also serves as a survival factor via its association with its receptors which prevent the initiation of apoptosis. Involved in tumorigenesis by regulating apoptosis (PubMed:[15343335](http://www.uniprot.org/citations/15343335)).

Cellular Location

Secreted. Cytoplasm. Note=Mainly secreted

Tissue Location

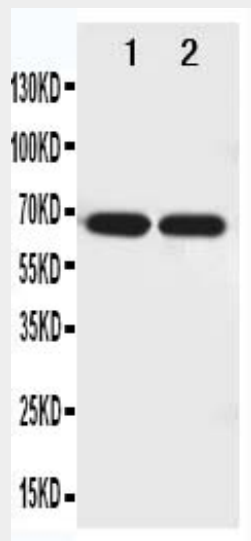
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Anti-Netrin 1 Antibody - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-Netrin 1 Antibody - Images



Anti-Netrin 1 antibody, ABO10977, Western blotting Lane 1: U87 Cell Lysate Lane 2: COLO320 Cell Lysate

Anti-Netrin 1 Antibody - Background

Netrin-1 (NTN1), also known as NTN1L, is a diffusible protein made by floor plate cells. Netrin-1 is found in the floor plate and neuroepithelial cells of the ventral region of the spinal cord, as well as other locations in the nervous system including the somatic mesoderm, pancreas and cardiac muscle. The human NTN1 gene is mapped to chromosome 17p13-p12 by FISH. Netrin-1 can attract spinal commissural axons and repel trochlear axons in vitro. And netrin-1 expression confers a selective advantage for tumor cell survival. The binding of netrin-1 to DCC appears to depend on the presence of a coreceptor or accessory proteins. Adenosine A2b receptor is actually a netrin-1 receptor and induces cAMP accumulation on binding netrin-1, and that netrin-1-dependent outgrowth of dorsal spinal cord axons directly involves A2b. Netrin-1 can promote intestinal tumor development, probably by regulating cell survival. Thus, a netrin-1 receptor or receptors function as conditional tumor suppressors. Expression of Unc5b triggered endothelial cell repulsion in response to netrin-1 in vitro, whereas a truncated Unc5b lacking the intracellular signaling domain failed to induce repulsion.