

Netrin 1. Rabbit Antigen Immunoaffinity Purified Polyclonal
Netrin 1, NTN1

BACKGROUND

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. It also serve as a survival factor via its association with its receptors which prevent the initiation of apoptosis. Involved in colorectal tumorigenesis by regulating apoptosis.

Netrin 1's main receptor is DCC (deleted in colorectal cancer- a putative tumor suppressor gene whose expression is lost in numerous cancers). DCC belongs to the so-called family of dependence receptors. These receptors induce apoptosis when their ligand is absent, thus conferring a state of cellular dependence on Netrin 1 availability. The DCC/netrin-1 duo regulates neuron survival during nervous system development. The mechanism(s) by which Netrin 1/ DCC triggers cell death are still unknown. The localization of DCC to lipid rafts appears to be a prerequisite for its proapoptotic activity.

ORDERING INFORMATION

CATALOG NUMBER

X1870P

SIZE

25 µg

FORM

Unconjugated

HOST/CLONE

Rabbit

FORMULATION

Provided as ligand affinity purified antibody in phosphate buffered saline with 0.08% sodium azide

CONCENTRATION

Lot specific

ISOTYPE

IgG

APPLICATIONS

Western Blot

SPECIES REACTIVITY

Human, Mouse, Rat, Cow, Macaque, Cat

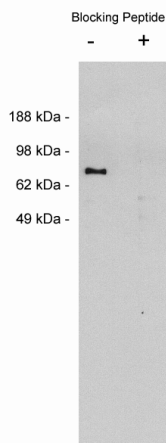
ACCESSION NUMBER

Human NP_004813

IMMUNOGEN

Synthetic peptide derived from the human Netrin 1 protein

Western blot using Exalpha's X1870P, rabbit polyclonal at 0.05 ug/ml on MDCKII cell extract (10 ug/lane). Blots were developed with goat anti-rabbit Ig (1:75k) and Pierce's Supersignal West Femto system.



POSITIVE CONTROL/TISSUE EXPRESSION

Antibody tested on MDCKII cell lysates.

COMMENTS

Antibody can be used for Western blotting (0.05-0.5 µg/ml). Optimal concentration should be evaluated by serial dilutions.

PURIFICATION

Antigen Immunoaffinity Purification

SHIP CONDITIONS

Ship at ambient temperature, freeze upon arrival

STORAGE CUSTOMER

Product should be stored at -20°C. Aliquot to avoid freeze/thaw cycles

STABILITY

Products are stable for one year from purchase when stored properly

REFERENCES

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2. Shekarabi, M., et al. 'Deleted in colorectal cancer binding netrin-1 mediates cell substrate adhesion and recruits Cdc42, Rac1, Pak1, and N-WASP into an intracellular signaling complex that promotes growth cone expansion.' J. Neurosci. 2005, 25, 3132-3141
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4. Furne C, et al. 'The dependence receptor DCC requires lipid raft localization for cell death signaling.' Proc Natl Acad Sci U S A. 2006 Mar 14;103(11):4128-33. Epub 2006 Mar 6.
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6. Nakamura F, Takei K, Goshima Y. 'Signaling mechanism connecting axon guidance molecules and growth cone cytoskeleton.' Tanpakushitsu Kakusan Koso. 2006 May;51(6 Suppl):733-41.
7. Chang C, et al. 'MIG-10/lamellipodin and AGE-1/PI3K promote axon guidance and outgrowth in response to slit and netrin.' Curr Biol. 2006 May 9;16(9):854-62. Epub 2006 Apr 20.
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8. Xie Y, et al. 'DCC-dependent phospholipase C signaling in netrin-1-induced neurite elongation.' J Biol Chem. 2006 Feb 3;281(5):2605-11. Epub 2005 Nov 30.

PRODUCT SPECIFIC REFERENCES