

netrin-2 (H-50): sc-20787

BACKGROUND

Netrin proteins are a family of laminin-related secreted proteins that provide guidance signals for axonal growth and cell migration during development. netrin-1, which is the mammalian homolog of UNC-6 from *C. elegans*, is largely expressed in the developing nervous system and in mesodermal tissues. Netrin-1 is expressed by the floor plate as either a cell associated protein or in a diffusible form, and it binds to several surface receptor components, including deleted in colorectal cancer (DCC) and neogenin. During embryonic development, netrin-1 diffuses through the neuronal epithelium, where it forms a chemoattractant gradient that directs axonal migration to the ventral midline of the spinal cord. Netrin-2 and the corresponding mouse homolog netrin-3 are expressed primarily in the lower two-thirds of the spinal cord, and, like netrin-1, they can either attract or repel commissural axons at a distance. Netrin signaling is dependent on the concentration of calcium outside the cell and the level of PKA activity. In axonal cells, a reduction in PKA activity converts the responsiveness of the axons to the netrin proteins, as the cells are repelled, rather than attracted, by the netrin gradient.

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CHROMOSOMAL LOCATION

Genetic locus: NTN3 (human) mapping to 16p13.3; Ntn3 (mouse) mapping to 17 A3.3.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

SOURCE

netrin-2 (H-50) is a rabbit polyclonal antibody raised against amino acids 467-526 mapping near the C-terminus of netrin-2 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

netrin-2 (H-50) is recommended for detection of netrin-2 of human origin and netrin-3 of mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

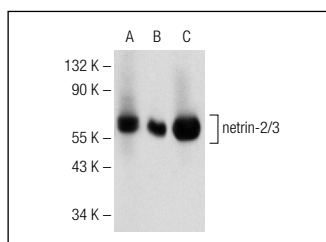
netrin-2 (H-50) is also recommended for detection of netrin-2 in additional species, including canine, bovine and porcine.

Suitable for use as control antibody for netrin-2 siRNA (h): sc-42046, netrin-3 siRNA (m): sc-42049, netrin-2 shRNA Plasmid (h): sc-42046-SH, netrin-3 shRNA Plasmid (m): sc-42049-SH, netrin-2 shRNA (h) Lentiviral Particles: sc-42046-V and netrin-3 shRNA (m) Lentiviral Particles: sc-42049-V.

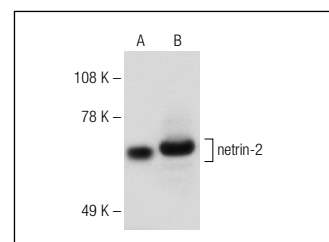
Molecular Weight of netrin-2: 61 kDa.

Positive Controls: mouse embryo tissue extract, human platelet tissue extract or mouse lymph node tissue extract.

DATA



netrin-2 (H-50): sc-20787. Western blot analysis of netrin-2/3 expression in mouse embryo (A), human platelet (B) and mouse lymph node (C) tissue extracts.



netrin-2 (H-50): sc-20787. Western blot analysis of netrin-2 expression in HEK293 (A) and Y79 (B) whole cell lysates.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.