SANTA CRUZ BIOTECHNOLOGY, INC.

netrin-4 (C-15): sc-46194

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Netrin proteins are a family of laminin-related secreted proteins that provide guidance signals for axonal growth and cell migration during development. 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. Netrin-4 is related to the Laminin β chains, and is therefore also designated β-netrin. It is present in the basement membranes of the vasculature, lateral olfactory tract, kidney and ovary. In humans, the gene encoding for the netrin-4 protein is localized to chromosome 12q22. High levels of netrin-4 mRNA have also been detected in many cells and tissues, including cerebral cortex, hippocampus, amygdaloid nuclei and Purkinje cells. Netrin-4 is important in neural, kidney and vascular development.

CHROMOSOMAL LOCATION

Genetic locus: NTN4 (human) mapping to 12q22; Ntn4 (mouse) mapping to 10 C2.

SOURCE

netrin-4 (C-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of netrin-4 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.

Blocking peptide available for competition studies, sc-46194 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

netrin-4 (C-15) is recommended for detection of netrin-4 of mouse, rat and human 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-4 (C-15) is also recommended for detection of netrin-4 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for netrin-4 siRNA (h): sc-44504, netrin-4 siRNA (m): sc-44505, netrin-4 shRNA Plasmid (h): sc-44504-SH, netrin-4 shRNA Plasmid (m): sc-44505-SH, netrin-4 shRNA (h) Lentiviral Particles: sc-44504-V and netrin-4 shRNA (m) Lentiviral Particles: sc-44505-V.

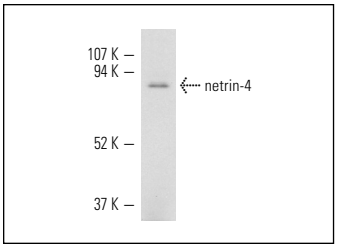
Molecular Weight of netrin-4: 70 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, IMR-32 cell lysate: sc-2409 or mouse brain extract: sc-2253.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



netrin-4 (C-15): sc-46194. Western blot analysis of netrin-4 expression in mouse brain tissue extract.

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.