

# Neuritin (N-19): sc-6870

## BACKGROUND

Neurotrophins function to regulate naturally occurring cell death of neurons during development. The prototype neurotrophin is nerve growth factor (NGF). NGF is a soluble peptide that promotes the survival of, and neurite outgrowth from, sympathetic ganglia. Three additional structurally homologous neurotrophic factors have been identified. These include brain-derived neurotrophic factor (BDNF), neurotrophin-3 (NT-3), and neurotrophin-4 (NT-4, also designated NT-5). Neuritin is a glycosylphosphatidylinositol-anchored protein that is induced by neural activity as well as by BDNF and NT-3. Neuritin modulates neurite growth extracellularly and is present in development and in the adult nervous system, indicating its involvement in neuronal plasticity. In addition to BDNF induction of neuritin, it has been shown that both neuritin and BDNF are induced by light stimulation of the visual cortex. Neuritin appears to be located downstream of BDNF and may mediate some of the effects of BDNF.

## CHROMOSOMAL LOCATION

Genetic locus: NRN1 (human) mapping to 6p25.1; Nrn1 (mouse) mapping to 13 A3.3.

## SOURCE

Neuritin (N-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of Neuritin 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-6870 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## STORAGE

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

## APPLICATIONS

Neuritin (N-19) is recommended for detection of neuritin 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).

Neuritin (N-19) is also recommended for detection of neuritin in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for Neuritin siRNA (h): sc-42064, Neuritin siRNA (m): sc-42065, Neuritin shRNA Plasmid (h): sc-42064-SH, Neuritin shRNA Plasmid (m): sc-42065-SH, Neuritin shRNA (h) Lentiviral Particles: sc-42064-V and Neuritin shRNA (m) Lentiviral Particles: sc-42065-V.

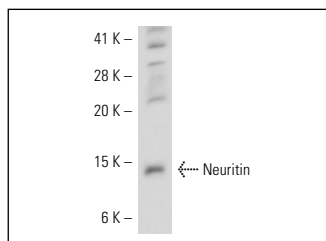
Molecular Weight of Neuritin: 15 kDa.

Positive Controls: Daudi cell lysate: sc-2415.

## 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



Neuritin (N-19): sc-6870. Western blot analysis of Neuritin expression in Daudi whole cell lysate.

## SELECT PRODUCT CITATIONS

- Di Giovanni, S., et al. 2005. Neuronal plasticity after spinal cord injury: identification of a gene cluster driving neurite outgrowth. *FASEB J.* 19: 153-154.

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.



Try **Neuritin (B-9): sc-365538**, our highly recommended monoclonal alternative to Neuritin (N-19).