neuroligin 1 (L-20): sc-14082



The Power to Question

BACKGROUND

Neuroligins are a family of plasma membrane proteins that possess an N-terminal hydrophobic domain, a large esterase homology domain, a single transmembrane region, a short cytoplasmic domain, and an EF-hand binding domain. Members of the neuroligin family include Neuroligin 1, Neuroligin 2 and Neuroligin 3. Neuroligins are expressed in excitatory neuronal synaptic clefts. Neuroligins play a role in the formation and remodeling of CNS synapses by binding to β -neurexins, a family of neuronal cell surface proteins. Neurexin 1β binds to the EF-hand domain of Neuroligin 1 and requires calcium ion. Neuroligins also bind to PSD-95, which may recruit ion channels and neurotransmitter receptors to the synapses.

CHROMOSOMAL LOCATION

Genetic locus: NLGN1 (human) mapping to 3q26.31; Nlgn1 (mouse) mapping to 3 A3.

SOURCE

neuroligin 1 (L-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of neuroligin 1 of rat origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-14082 P, (100 μ g 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

neuroligin 1 (L-20) is recommended for detection of neuroligin 1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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).

neuroligin 1 (L-20) is also recommended for detection of neuroligin 1 in additional species, including equine, canine and porcine.

Suitable for use as control antibody for neuroligin 1 siRNA (h): sc-42083, neuroligin 1 siRNA (m): sc-42084, neuroligin 1 shRNA Plasmid (h): sc-42083-SH, neuroligin 1 shRNA Plasmid (m): sc-42084-SH, neuroligin 1 shRNA (h) Lentiviral Particles: sc-42083-V, neuroligin 1 shRNA (m) Lentiviral Particles: sc-42084-V and .

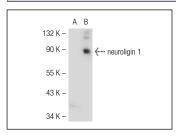
Molecular Weight of neuroligin 1: 101 kDa.

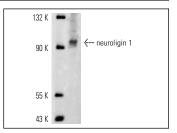
Positive Controls: rat cerebellum extract: sc-2398, HeLa whole cell lysate: sc-2200 or neuroligin 1 (h): 293T Lysate: sc-115314.

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





neuroligin 1 (L-20): sc-14082. Western blot analysis of neuroligin 1 expression in non-transfected: sc-117752 (A) and human neuroligin 1 transfected: sc-115314 (B) 293T whole cell lysates.

neuroligin 1 (L-20): sc-14082. Western blot analysis of neuroligin 1 expression in rat cerebellum tissue extract.

RESEARCH USE

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

PROTOCOLS

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



Try **neuroligin 1 (A-4): sc-365110** or **neuroligin 1 (F-5): sc-365111**, our highly recommended monoclonal aternatives to neuroligin 1 (L-20).

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