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.

REFERENCES


CHROMOSOMAL LOCATION

Genetic locus: NLGN2 (human) mapping to 17p13.1; Nlgn2 (mouse) mapping to 11 B3.

SOURCE

neuroligin 2 (R-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of neuroligin 2 of rat 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-14089 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.

RESEARCH USE

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

PROT O COLS

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

APPLICATIONS

neuroligin 2 (R-16) is recommended for detection of neuroligin 2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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 2 (R-16) is also recommended for detection of neuroligin 2 in additional species, including canine.

Suitable for use as control antibody for neuroligin 2 siRNA (h): sc-42085, neuroligin 2 siRNA (m): sc-42086, neuroligin 2 shRNA Plasmid (h): sc-42085-SH, neuroligin 2 shRNA Plasmid (m): sc-42086-SH, neuroligin 2 shRNA (h) Lentiviral Particles: sc-42085-V and neuroligin 2 shRNA (m) Lentiviral Particles: sc-42086-V.

Molecular Weight of neuroligin 2: 93 kDa.

Positive Controls: EOC 20 whole cell lysate: sc-364187.

DATA

neuroligin 2 (R-16): sc-14089. Western blot analysis of neuroligin 2 expression in EOC 20 whole cell lysate.

SELECT PRODUCT CITATIONS