Rat Neurexophilin-1/NXPH-1 Alexa Fluor® 350-conjugated Antibody

Antigen Affinity-purified Polyclonal Goat IgG
Catalog Number: AF4208U
100 µg

DESCRIPTION

Species Reactivity	Rat
Specificity	Detects rat Neurexophilin-1/NXPH-1 in direct ELISAs and Western blots.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant rat Neurexophilin-1/NXPH-1 Ala22-Gly271 Accession # Q63366
Conjugate	Alexa Fluor 350 Excitation Wavelength: 346 nm Emission Wavelength: 442 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: *Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.*

Western Blot	Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

Neurexophilin-1 (NXPH-1) is one of at least four vertebrate neuropeptide-like secreted glycoproteins in the neurexophilin family (1, 2). The 29 kDa, 271 amino acid (aa) NXPH-1 sequence contains a 22 aa signal peptide, a 94 aa propeptide that is cleaved at a basic motif, and a 115 aa mature protein that contains three potential N-glycosylation sites in the N-terminal portion and six conserved cysteines in the C-terminal portion (1). Mature rat NXPH-1 shares 99%, 99%, 99%, 96% and 84% aa identity with mouse, human, bovine, opossum and zebrafish NXPH-1, respectively. NXPH-1 is expressed selectively in subpopulations of neurons within the cerebral cortex, cerebellum and olfactory bulb that are thought likely to be inhibitory interneurons (2, 3). NXPH-3 is the neurexophilin most similar to NXPH-1, sharing 69% aa identity within the mature region. Expression of NXPH-1 and NXPH-3 does not appear to coincide, but both are tightly bound extracellular ligands of α-neurexins, synaptic transmembrane molecules that are essential for calcium-triggered neurotransmitter release (1, 4, 5). Genetic deletion of NXPH-1 and/or NXPH-3 produces no anatomical effect, although mice lacking NXPH-3 show defects in motor coordination (4, 6). Of the other known neurexophilins, NXPH-2 is not expressed in rodents, and NXPH-4 does not bind α-neurexins (1, 4).

PRODUCT SPECIFIC NOTICES

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