Human/Mouse/Rat Neurexophilin-3/NXPH-3 Alexa Fluor® 700-conjugated Antibody

Antigen Affinity-purified Polyclonal Goat IgG
Catalog Number: AF5098N
100 µg

DESCRIPTION

Species Reactivity	Human/Mouse/Rat
Specificity	Detects human, mouse, and rat Neurexophilin-3/NXPH-3 in direct ELISAs and Western blots. In direct ELISAs, less than 5% cross-reactivity with recombinant human Neurexophilin-1/NXPH1 and recombinant rat Neurexophilin-1/NXPH1 is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant rat Neurexophilin-3/NXPH-3 Gln23-Gly252 Accession # AAI66603
Conjugate	Alexa Fluor 700 Excitation Wavelength: 675-700 nm Emission Wavelength: 723 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-3 (NXPH-3) is a neuropeptide-like secreted glycoprotein in the neurexophilin family (1, 2). The 252 amino acid (aa) NXPH-3 precursor contains a 22 aa signal peptide, plus a 230 aa proprecursor that is likely cleaved at a basic motif, producing a 76 aa propeptide and a 154 aa mature protein (1). Mature rat NXPH-3 shares 99%, 95% and 92% aa identity with mouse, human and bovine NXPH-3, respectively. It contains motifs that are conserved among all neurexophilins, including three potential N-glycosylation sites in the N-terminal portion and six cysteines in the C-terminal portion (1). NXPH-3 is expressed selectively in subplate-derived neurons in the cortex, granule cells in the vestibulocerebellum, and Cajal-Retzius cells during development (3). NXPH-1 is the neurexophilin most similar to NXPH-3, sharing 69% aa identity within the mature region. Expression of NXPH-1 and NXPH-3 does not appear to overlap, with NXPH-1 expression occurring mainly by cells that resemble inhibitory interneurons (2-4). Both are tightly bound extracellular ligands of α-neurexins, synaptic transmembrane molecules that are essential for calcium-triggered neurotransmitter release (1, 5, 6). Genetic deletion of NXPH-1 and/or NXPH-3 produces no anatomical effect, although mice lacking NXPH-3 show specific defects in motor coordination (3, 4). Of the other known neurexophilins, NXPH-2 is not expressed in rodents, and NXPH-4 does not bind α-neurexins (1, 5).

PRODUCT SPECIFIC NOTICES

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