

#### DESCRIPTION

<b>Species Reactivity</b>	Human/Mouse
<b>Specificity</b>	Detects human and mouse Neurexin 3/NRXN3 in Western blots.
<b>Source</b>	Polyclonal Sheep IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	Mouse myeloma cell line NS0-derived recombinant human Neurexin 3/NRXN3 Ser35-Thr357 Accession # NP_620426
<b>Conjugate</b>	Alexa Fluor 750 Excitation Wavelength: 749 nm Emission Wavelength: 775 nm
<b>Formulation</b>	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.

<b>Western Blot</b>	Optimal dilution of this antibody should be experimentally determined.
<b>Immunohistochemistry</b>	Optimal dilution of this antibody should be experimentally determined.

#### PREPARATION AND STORAGE

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

#### BACKGROUND

The alpha and beta forms of Neurexins 1-3 are transmembrane neuronal glycoproteins which are transcribed from each of three NRXN genes that utilize alternate promoters. Like other Neurexins, the extracellular domain (ECD) of Neurexin 3α contains six LNS domains interspersed with three EGF-like domains, while that of Neurexin 3β contains only the sixth LNS domain and no EGF-like domains (1-3). Mature human Neurexin 3β is a 70 kDa glycosylated protein with a 528 amino acid (aa) ECD and a 56 aa cytoplasmic domain that contains a motif for binding PDZ scaffolding proteins (3-5). Within comparable regions of the ECD, human Neurexin 3β shares 99% aa sequence identity with mouse and rat Neurexin 3β. It shares 65% aa sequence identity with comparable regions of the ECD of human Neurexin 1β and 2β. Alternative splicing of human Neurexin 3β generates multiple isoforms. There are potentially soluble and secreted variants and some which contain a fibronectin type III-like domain (4, 6). Neurexin 3β is widely expressed in the brain where it binds the postsynaptic Neuroligins 1, 2, and 3 (6-9). Neurexin 3β may also be expressed in non-nervous tissues with a potentially cardiac-specific isoform (10). Human Neurexin 3β polymorphisms which affect the splicing pattern are associated with susceptibility to alcohol dependence (6). The Neurexin 3β genetic locus has been linked to opioid and nicotine addiction, and Neurexin 3β gene expression is up-regulated after short term exposure of mice to cocaine (11-13).

#### PRODUCT SPECIFIC NOTICES

This product is provided under an agreement between Life Technologies Corporation and R&D Systems, Inc, and the manufacture, use, sale or import of this product is subject to one or more US patents and corresponding non-US equivalents, owned by Life Technologies Corporation and its affiliates. The purchase of this product conveys to the buyer the non-transferable right to use the purchased amount of the product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). The sale of this product is expressly conditioned on the buyer not using the product or its components (1) in manufacturing; (2) to provide a service, information, or data to an unaffiliated third party for payment; (3) for therapeutic, diagnostic or prophylactic purposes; (4) to resell, sell, or otherwise transfer this product or its components to any third party, or for any other commercial purpose. Life Technologies Corporation will not assert a claim against the buyer of the infringement of the above patents based on the manufacture, use or sale of a commercial product developed in research by the buyer in which this product or its components was employed, provided that neither this product nor any of its components was used in the manufacture of such product. For information on purchasing a license to this product for purposes other than research, contact Life Technologies Corporation, Cell Analysis Business Unit, Business Development, 29851 Willow Creek Road, Eugene, OR 97402, Tel: (541) 465-8300. Fax: (541) 335-0354.