

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Neuroligin 3/NLGN3 in direct ELISAs and Western blots. In direct ELISAs, 100% cross-reactivity with recombinant human (rh) Neuroligin 3v2 and recombinant rat (rr) Neuroligin 3v4 is observed. No cross-reactivity with rhNeuroligin 2, rhNeuroli
Source	Monoclonal Mouse IgG _{2B} Clone # 566205
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant human Neuroligin 3/NLGN3 Gln38-Ser709 Accession # NP_061850
Conjugate	Alexa Fluor 647 Excitation Wavelength: 650 nm Emission Wavelength: 668 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

NLGN3 (Neuroligin 3; also gliotactin homolog) is a 110-114 kDa member of the type-B carboxyesterase/lipase family of proteins. It is a neuronal transmembrane protein that forms Ca⁺⁺-dependent intercellular junctions with short β-neurexin isoforms. This seems to contribute to both glutamatergic and GABAergic synapse formation. Mutations in NLGN3 are associated with a reduction in protein expression and the occurrence of autism. Mature human NLGN3 is an 811 amino acid (aa) type I transmembrane protein. It contains a 672 aa extracellular domain (ECD) (aa 38-709), plus a 118 aa cytoplasmic region. The ECD possesses a nonfunctional carboxyesterase domain (aa 41-625). Multiple splice variants exist. There is a deletion of aa 153-172 that may also be accompanied by an alternative start site at Met118, and a deletion of aa 153-192 that may also be accompanied by a five Lys substitution for aa 554-848. Over aa 39-709, human NLGN3 shares 99% aa identity with mouse NLGN3.

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