

## DESCRIPTION

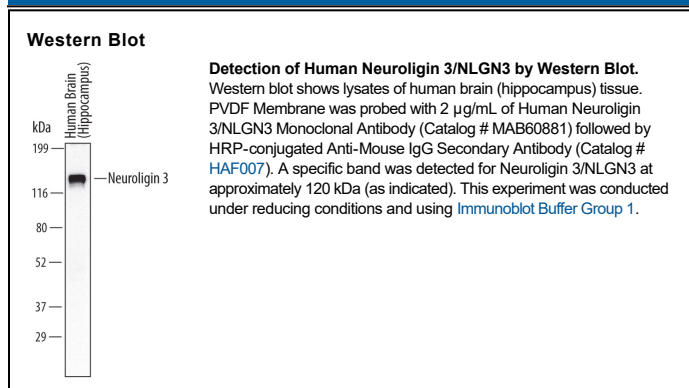
<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human Neuroligin 3/NLGN3 in direct ELISAs and Western blots. In direct ELISAs, 100% cross-reactivity with recombinant human (rh) Neuroligin 3v2 and recombinant rat (rr) Neuroligin 3v4 is observed. No cross-reactivity with rhNeuroligin 2, rhNeuroligin 4, rrNeuroligin 1, 1v2, or 2v2 is observed.
<b>Source</b>	Monoclonal Mouse IgG <sub>2B</sub> Clone # 566205
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	Mouse myeloma cell line NS0-derived recombinant human Neuroligin 3/NLGN3 Gln38-Ser709 Accession # NP_061850
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

## 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>Recommended Concentration</b>	<b>Sample</b>
<b>Western Blot</b>	2 µg/mL	See Below

## DATA



## PREPARATION AND STORAGE

<b>Reconstitution</b>	Sterile PBS to a final concentration of 0.5 mg/mL.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>● 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>● 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>● 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

## 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<sup>++</sup>-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.