

#### DESCRIPTION

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|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|
| <b>Species Reactivity</b>                                                                                                                                                                               | Human/Rat                                                                                                               |
| <b>Specificity</b>                                                                                                                                                                                      | Detects recombinant rat Neuroligin 1/NLGN1 in direct ELISAs. Detects human and rat Neuroligin 1/NLGN1 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 rat Neuroligin 1/NLGN1<br>Gln46-Leu696<br>Accession # Q62765            |
| <b>Conjugate</b>                                                                                                                                                                                        | Alexa Fluor 405<br>Excitation Wavelength: 405 nm<br>Emission Wavelength: 421 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

Neuroligin 1 (neurexin ligand 1; also NL1) is a 116 kDa member of the type-B carboxyesterase/lipase family of proteins. It is postsynaptically expressed on neurons and initiates excitatory presynapse maturation through binding to a select isoform of  $\beta$ -neurexin. Mature rat NL1 is 798 amino acids (aa) in length. It is expressed as a type I transmembrane glycoprotein that contains a 652 aa extracellular domain (ECD) (aa 46-697) and a 125 aa cytoplasmic tail. The ECD possesses a nonfunctional esterase homology domain (aa 54-612). Rat NL1 has at least three alternate splice forms. One shows a deletion of aa 165-184 plus aa 298-306, while the remaining two show deletions of either aa 165-184, or aa 298-306, respectively. Rat ECD shares 97% and 93% aa identity with mouse and human NL1 CED, respectively.

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