



## ***Biotinylated Anti-rat Neuroligin 1 Antibody***

### **ORDERING INFORMATION**

**Catalog Number:** BAF4340

**Lot Number:** ZUO01

**Size:** 50 µg

**Formulation:** 0.2 µm filtered solution in PBS with BSA

**Storage:** -20° C

**Reconstitution:** sterile 0.1% BSA in TBS

**Specificity:** rat Neuroligin 1  
extracellular domain

**Immunogen:** NS0-derived rrNeuroligin 1  
isoform 4 extracellular domain

**Ig Type:** sheep IgG

**Application:** Western blot

### ***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.

### ***Preparation***

Produced in sheep immunized with purified, NS0-derived, recombinant rat Neuroligin 1 isoform 4 extracellular domain (rrNeuroligin 1; aa 46 - 696; Accession # Q62765). Rat Neuroligin 1 specific IgG was purified by rat Neuroligin 1 affinity chromatography and then biotinylated.

### ***Formulation***

Lyophilized from a 0.2 µm filtered solution in phosphate-buffered saline (PBS) containing 50 µg of bovine serum albumin (BSA) per 1 µg of antibody.

### ***Reconstitution***

Reconstitute with sterile Tris-buffered saline pH 7.3 (20 mM Trizma base, 150 mM NaCl) containing 0.1% BSA. If 1 mL of buffer is used, the antibody concentration will be 50 µg/mL.

### ***Storage***

Lyophilized samples are stable for twelve months from date of receipt when stored at -20° C to -70° C. Upon reconstitution, the antibody can be stored at 2° - 8° C for 1 month without detectable loss of activity. Reconstituted antibody can also be aliquotted and stored frozen at -20° C to -70° C **in a manual defrost freezer** for six months without detectable loss of activity. **Avoid repeated freeze-thaw cycles.**

### ***Specificity***

This antibody has been selected for use as a detection antibody in rat Neuroligin 1 Western blots.

### ***Application***

**Western blot** - This antibody can be used at 0.1 - 0.2 µg/mL with the appropriate secondary reagents to detect rat Neuroligin 1. The detection limit for rrNeuroligin 1 is approximately 1 ng/lane under non-reducing and reducing conditions.

**Optimal dilutions should be determined by each laboratory for each application.**