

## DESCRIPTION

<b>Species Reactivity</b>	Rat
<b>Specificity</b>	Detects rat Neurexin 1 $\beta$ in Western blots. In Western blots, approximately 25% cross-reactivity with recombinant rat Neurexin 1 $\alpha$ is observed.
<b>Source</b>	Polyclonal Sheep IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	Mouse myeloma cell line NS0-derived recombinant rat Neurexin 1 $\beta$ isoform 1 Ala47-Thr392 Accession # Q63373
<b>Formulation</b>	Lyophilized from a 0.2 $\mu$ m filtered solution in PBS with BSA as a carrier protein. See Certificate of Analysis for details.

## 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>	0.1 $\mu$ g/mL	Recombinant Rat Neurexin 1 $\beta$ /NXRN1b

## PREPARATION AND STORAGE

<b>Reconstitution</b>	Reconstitute at 0.2 mg/mL in sterile PBS.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
<b>Stability &amp; Storage</b>	<p><b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b></p> <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

Neurexin 1 beta is an 80 kDa member of the Neurexin family of proteins. It is expressed on neuronal presynaptic membranes and contributes to synapse formation through binding to postsynaptic neuroligins. An alternate start site in the Neurexin 1 gene generate an  $\alpha$ - (long) and  $\beta$ - (short) isoform. Mature rat Neurexin 1 $\beta$  is a type I transmembrane glycoprotein that is 468 amino acids (aa) in length. It has a 346 aa extracellular region (aa 47-392) that contains one laminin-like G domain (aa 91-264). Within the G domain, the presence or absence of a splice site (aa 201-230) materially impacts neuroligin binding. Over aa 47-392, rat Neurexin 1 $\beta$  is 100% and 98% aa identical to mouse and human Neurexin 1 $\beta$ , respectively.