

## DESCRIPTION

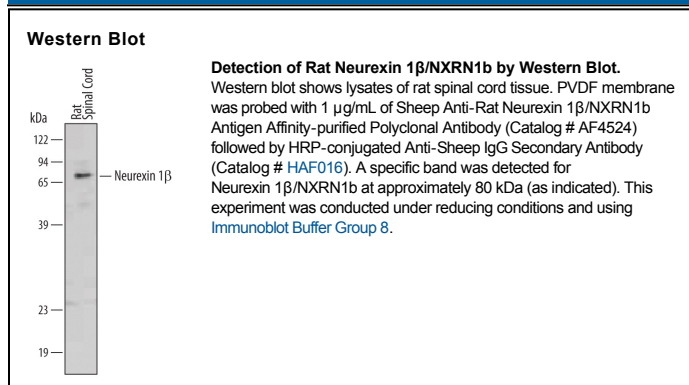
<b>Species Reactivity</b>	Rat
<b>Specificity</b>	Detects rat Neurexin 1 $\beta$ /NXRN1b in direct ELISAs and Western blots. In direct ELISAs, approximately 25% cross-reactivity with recombinant rat Neurexin 1 $\alpha$ is observed.
<b>Source</b>	Polyclonal Sheep IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	Mouse myeloma cell line NS0-derived recombinant rat Neurexin 1 $\beta$ /NXRN1b Ala47-Thr392 Accession # Q63373
<b>Formulation</b>	Lyophilized from a 0.2 $\mu$ m filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 $\mu$ m 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.

	Recommended Concentration	Sample
<b>Western Blot</b>	1 $\mu$ g/mL	See Below

## DATA



## 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. *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

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.