

## DESCRIPTION

<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human Neuronal Pentraxin R/NPTXR in direct ELISAs and Western blots. In direct ELISAs, less than 5% cross-reactivity with recombinant human (rh) NPTX2 and rhNPTX1 is observed.
<b>Source</b>	Polyclonal Sheep IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	Mouse myeloma cell line NS0-derived recombinant human Pentraxin R/NPTXR Ala24-Lys499 Accession # O95502
<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.

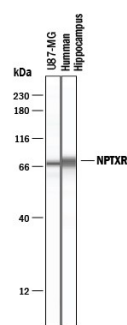
## APPLICATIONS

**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.

	Recommended Concentration	Sample
<b>Western Blot</b>	0.1 µg/mL	Recombinant Human Neuronal Pentraxin R/NPTXR
<b>Immunohistochemistry</b>	5-15 µg/mL	Immersion fixed paraffin-embedded sections of Hippocampus
<b>Simple Western</b>	20 µg/mL	See Below

## DATA

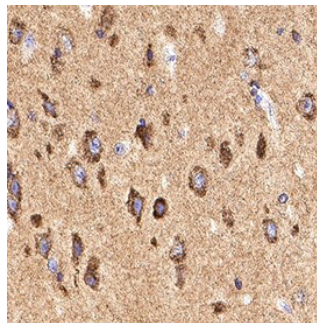
### Simple Western



**Detection of Human Neuronal Pentraxin R/NPTXR by Simple Western™.** Simple Western lane view shows lysates of U-87 MG human glioblastoma/astrocytoma cell line and human hippocampus tissue, loaded at 0.2 mg/mL. A specific band was detected for Neuronal Pentraxin R/NPTXR at approximately 66 kDa (as indicated) using 20 µg/mL of Sheep Anti-Human Neuronal Pentraxin R/NPTXR Antigen Affinity-purified Polyclonal Antibody (Catalog # AF4414) followed by 1:50 dilution of HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). This experiment was conducted under reducing conditions and using the 12-230 kDa separation system.



### Immunohistochemistry



**Detection of Neuronal Pentraxin R/NPTXR in Hippocampus.** Neuronal Pentraxin R/NPTXR was detected in immersion fixed paraffin-embedded sections of Hippocampus using Sheep Anti-Human Neuronal Pentraxin R/NPTXR Antigen Affinity-purified Polyclonal Antibody (Catalog # AF4414) at 10 µg/mL for 1 hour at room temperature followed by incubation with the Anti-Sheep IgG VisUCyte™ HRP Polymer Antibody (Catalog # VC006). Before incubation with the primary antibody, tissue was subjected to heat-induced epitope retrieval using VisUCyte Antigen Retrieval Reagent-Basic (Catalog # VCTS021). Tissue was stained using DAB (brown) and counterstained with hematoxylin (blue). Specific staining was localized to cytoplasm in neurons. View our protocol for IHC Staining with VisUCyte HRP Polymer Detection Reagents.

## 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>	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <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**

NPTXR (Neuronal Pentraxin Receptor; also NPR) is a 65 kDa, type II transmembrane glycoprotein that binds Neuronal Pentraxins 1 and 2. It is expressed on cerebellar Purkinje and granule cells, and hippocampal neurons of the CA1, CA3 and dentate gyrus regions. Human NPTXR is 499 amino acids (aa) in length. It contains a two aa cytoplasmic tail, a 21 aa transmembrane segment, and a 476 aa extracellular region with one Pentraxin domain (aa 295-499). One alternate start site exists at Met12, and a 55 kDa soluble form (possibly beginning at Gln56) may be generated by proteolytic cleavage. Over aa 24-499, human NPTXR is 87% aa identical to mouse NPTXR.