

**DESCRIPTION**

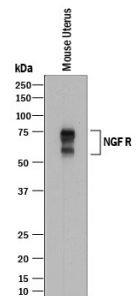
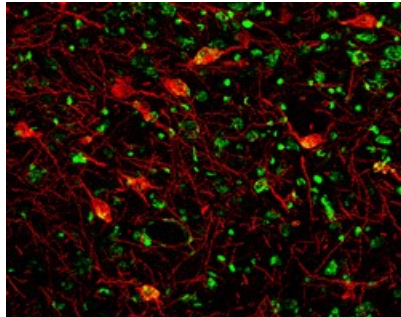
<b>Species Reactivity</b>	Mouse
<b>Specificity</b>	Detects mouse NGF R/TNFRSF16 in direct ELISAs and Western blots. In direct ELISAs and Western blots, approximately 5% cross-reactivity with recombinant human NGF R/TNFRSF16 is observed.
<b>Source</b>	Polyclonal Goat IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	Mouse myeloma cell line NS0-derived recombinant mouse NGF R/TNFRSF16 Gly20-Asn243 Accession # Q9Z0W1
<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.

	<b>Recommended Concentration</b>	<b>Sample</b>
<b>Western Blot</b>	2 µg/mL	See Below
<b>Immunohistochemistry</b>	5-15 µg/mL	See Below

**DATA**

<p><b>Western Blot</b></p>  <p><b>Detection of Mouse NGF R/TNFRSF16 by Western Blot.</b> Western blot shows lysates of mouse uterus tissue. PVDF membrane was probed with 2 µg/mL of Goat Anti-Mouse NGF R/TNFRSF16 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF1157) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF017). Specific bands were detected for NGF R/TNFRSF16 at approximately 60-75 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.</p>	<p><b>Immunohistochemistry</b></p>  <p><b>NGF R/TNFRSF16 in Mouse Brain.</b> NGF R/TNFRSF16 was detected in perfusion fixed frozen sections of mouse brain (cortex) using 7 µg/mL Goat Anti-Mouse NGF R/TNFRSF16 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF1157) overnight at 4 °C. Tissue was stained (red) and counterstained (green). View our protocol for <a href="#">Fluorescent IHC Staining of Frozen Tissue Sections</a>.</p>
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**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**

The low affinity nerve growth factor receptor (NGF R), also named p75 neurotrophin receptor, is a type I transmembrane protein that belongs to the tumor necrosis factor receptor family and has been designated TNFRSF16. NGF R cDNA encodes a 427 amino acid (aa) residue precursor protein with a 28 aa residue signal peptide, a 222 aa residue extracellular domain, a 22 aa residue transmembrane domain and a 155 aa residue intracellular domain. The extracellular region contains four cysteine-rich domains and binds NGF, BDNF, NT-3, and NT-4 approximately equally with low affinity. The cytoplasmic region of the receptor contains a subtype 2 death domain.

NGF R expression has been shown to occur widely during development and in the adult. Expression has been detected in both neuronal and non-neuronal cells. NGF R was originally reported to function as a positive regulator of TrkA activity. NGF R has also been shown to signal by itself. Depending on its cellular environment, NGF R has now been shown to regulate cell migration, gene expression and to mediate apoptosis. Recombinant NGF R Fc chimera binds NGF with high affinity and is a potent NGF antagonist. Naturally occurring truncated NGF R containing the extracellular domain and lacking the transmembrane or intracellular domain has been detected *in vivo* in urine, plasma, and in the amniotic fluid of humans and rats (1-3).

**References:**

1. Barker, P.A. and R.A. Murphy (1992) *Molecular and Cellular Biochemistry* **110**:1.
2. Bamji, A.X. *et al.* (1998) *J. Cell Biol.* **140**:911.
3. Feinstein, E. *et al.* (1995) *Trends Biochem. Sci.* **20**:342.