

#### 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>Conjugate</b>	Alexa Fluor 350 Excitation Wavelength: 346 nm Emission Wavelength: 442 nm
<b>Formulation</b>	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide  *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

#### 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>Western Blot</b>	Optimal dilution of this antibody should be experimentally determined.
<b>Immunohistochemistry</b>	Optimal dilution of this antibody should be experimentally determined.

#### PREPARATION AND STORAGE

<b>Shipping</b>	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
<b>Stability &amp; Storage</b>	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

#### 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).

#### PRODUCT SPECIFIC NOTICES

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