

**DESCRIPTION**

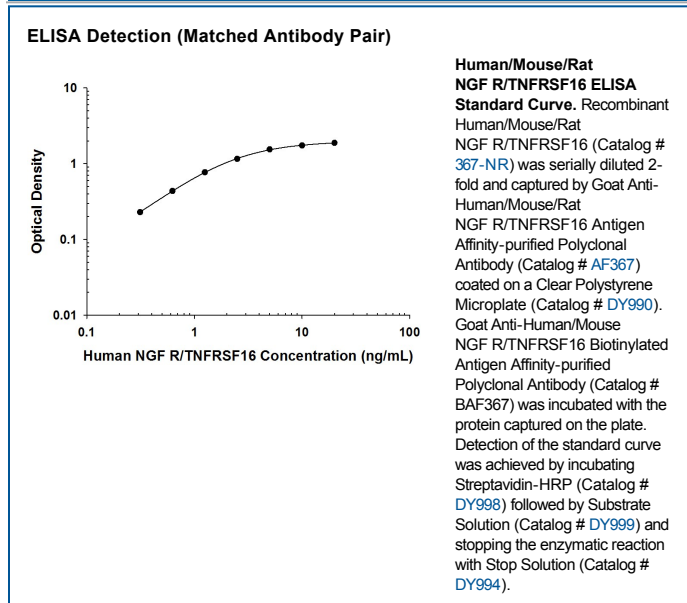
<b>Species Reactivity</b>	Human/Mouse
<b>Specificity</b>	Detects human and mouse NGF R/TNFRSF16 in Western blots.
<b>Source</b>	Polyclonal Goat IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	<i>S. frugiperda</i> insect ovarian cell line Sf 21-derived recombinant human NGF R/TNFRSF16 Lys29-Asn250 Accession # P08138
<b>Formulation</b>	Lyophilized from a 0.2 µm 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 µg/mL	Recombinant Human NGF R/TNFRSF16 Fc Chimera (Catalog # <a href="#">367-NR</a> )
<b>Human NGF R Sandwich Immunoassay</b>		<b>Reagent</b>
<b>ELISA Capture</b>	0.2-0.8 µg/mL	Human NGF R/TNFRSF16 Antibody (Catalog # <a href="#">AF367</a> )
<b>ELISA Detection</b>	0.1-0.4 µg/mL	Human/Mouse NGF R/TNFRSF16 Biotinylated Antibody (Catalog # <a href="#">BAF367</a> )
<b>Standard</b>		Recombinant Human NGF R/TNFRSF16 Fc Chimera (Catalog # <a href="#">367-NR</a> )

**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.
<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

p75 neurotrophin receptor, also named low affinity NGF receptor (NGF R), is a type I transmembrane protein that belongs to the tumor necrosis factor receptor family. 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 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 amniotic fluid of humans and rats.

#### 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.