

DESCRIPTION

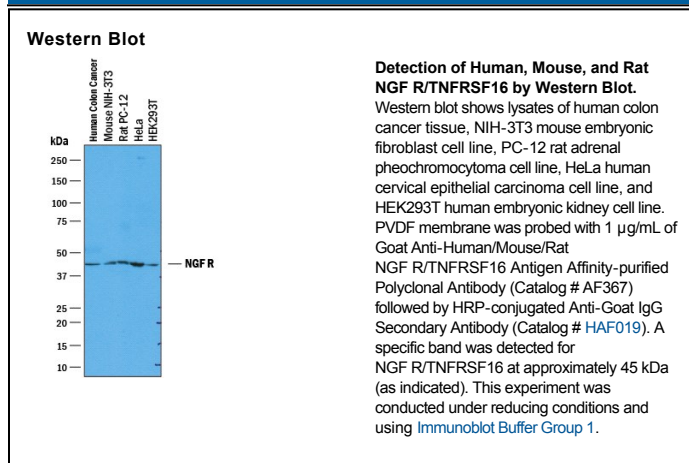
| | |
|---------------------------|--|
| Species Reactivity | Human/Mouse/Rat |
| Specificity | Detects human, mouse, and rat NGF R/TNFRSF16 in Western blots. In direct ELISAs, approximately 50% cross-reactivity with recombinant mouse NGFR is observed and less than 1% cross-reactivity with recombinant human (rh) HVEM, rhOPG, and rhTNFR-1 is observed. |
| Source | Polyclonal Goat IgG |
| Purification | Antigen Affinity-purified |
| Immunogen | <i>S. frugiperda</i> insect ovarian cell line Sf 21-derived recombinant human NGF R/TNFRSF16 Lys29-Asn250 Accession # P08138 |
| Formulation | Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied 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 |
|---------------------|---------------------------|-----------|
| Western Blot | 1 µg/mL | See Below |

DATA



PREPARATION AND STORAGE

| | |
|--------------------------------|--|
| Reconstitution | Reconstitute at 0.2 mg/mL in sterile PBS. |
| Shipping | 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 |
| Stability & Storage | Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution. |

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.