Mouse NGF R/TNFRSF16 Antibody

Antigen Affinity-purified Polyclonal Goat IgG
Catalog Number: AF1157

DESCRIPTION

Species Reactivity	Mouse
Specificity	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.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse NGF R/TNFRSF16 Gly20-Asn243 Accession # Q9Z0W1
Formulation	Lyophilized from a 0.2 μm filtered solution in PBS with Trehalose. See Certificate of Analysis for details.

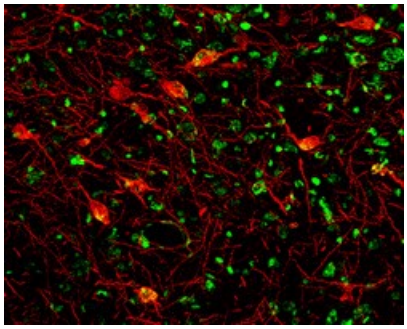
APPLICATIONS

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.*

	Recommended Concentration	Sample
Western Blot	0.1 µg/mL	Recombinant Mouse NGF R/TNFRSF16 Fc Chimera (Catalog # 1157-NR)
Immunohistochemistry	5-15 µg/mL	See Below

DATA

Immunohistochemistry



NGF R/TNFRSF16 in Mouse Brain. 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 Fluorescent IHC Staining of Frozen Tissue Sections.

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.
Stability & Storage	**Use a manual defrost freezer and avoid repeated freeze-thaw cycles.** ● 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

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.