

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human NGFR/TNFRSF16 in direct ELISAs.
Source	Monoclonal Mouse IgG ₁ Clone # 1029664
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>Spodoptera frugiperda</i> , Sf 21 (baculovirus)-derived human NGFR/TNFRSF16 protein 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 either lyophilized or as a 0.2 µm filtered solution in PBS.

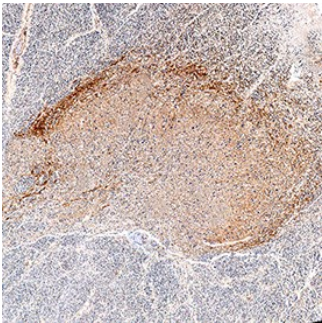
APPLICATIONS

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.

	Recommended Concentration	Sample
Immunohistochemistry	5-25 µg/mL	Immersion fixed paraffin-embedded sections of human spinal cord tissue

DATA

Immunohistochemistry



NGFR/TNFRSF16 in Human Spinal Cord Tissue. NGFR/TNFRSF16 was detected in immersion fixed paraffin-embedded sections of human spinal cord tissue using Mouse Anti-Human NGFR/TNFRSF16 Monoclonal Antibody (Catalog # MAB3671) at 5 µg/mL for 1 hour at room temperature followed by incubation with the Anti-Mouse IgG VisUCyte™ HRP Polymer Antibody (Catalog # VC001). Before incubation with the primary antibody, tissue was subjected to heat-induced epitope retrieval using Antigen Retrieval Reagent-Basic (Catalog # CTS013). Tissue was stained using DAB (brown) and counterstained with hematoxylin (blue). Specific staining was localized to dorsal horn. Staining was performed using IHC Staining with VisUCyte HRP Polymer Detection Reagents protocol.

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 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.