



## Mouse monoclonal antibody to human NGFR/p75NTR [8J2]: IgG

**Catalogue No.:** M-1818-20

**Description:** For a limited time we offer to our past NGFR/p75NTR clone MLR2 (M-009-100) customers 20 µg of our new clone 8J2 for testing free of charge.  
Offer excludes shipping and handling. Limit of 1 vial per customer. Enquire today (sales@biosensis.com).

p75NTR (CD271) was originally discovered as a low affinity nerve growth factor receptor (NGFR). Later it was found that it was the receptor for all neurotrophins, including NGF, BDNF, NT3 and NT4/5. It mediates signals of neurotrophins for neuronal survival, apoptosis, neurite outgrowth and synaptic plasticity. Recently, it has been revealed that p75NTR not only acts as the receptor for neurotrophins but also the receptor for many other pathological ligands such as prions, rabies virus and amyloid beta. p75NTR also acts as a co-receptor for NOGO which mediates inhibitory signals of myelin associated protein. p75NTR is highly expressed in a number of non-neuronal and neuronal cells including motor neurons during development and also in damaged neurons. Recent research proposes the extracellular domain of p75NTR as a biomarker for monitoring the progression of motor neuron disease (MND), also known as Amyotrophic Lateral Sclerosis (ALS) or Lou Gehrig's Disease. SUBUNIT: Homodimer; disulfide-linked. Interacts with p75NTR-associated cell death executor. Interacts with NGFRAP1/BEX3.

**Related products:** M-1818-100, Mouse monoclonal antibody to human NGFR/p75NTR [8J2]: IgG (100 µg)  
M-1819-50-FT, Mouse monoclonal antibody to human NGFR/p75NTR [8J2] - FITC

**Batch No.:** See product label.

**Unit size:** 20 µg

**Antigen:** Recombinant extracellular domain (amino acids 29-250) of human NGFR/p75NTR protein with N-terminal His-tag.

**Antigen Location:** Extracellular domain (ECD) of human NGFR/p75NTR

**Antibody Type:** Mouse monoclonal

**Isotype:** IgG2a

**Clone:** 8J2

**Other Names:** Low-affinity nerve growth factor receptor; NGF receptor; Gp80-LNGFR; p75 ICD; Low affinity neurotrophin receptor p75NTR

**Accession:** P08138 TNR16\_HUMAN

**Produced in:** Mouse

**Purity:** Protein A purified IgG

**Applications:** Flow Cytometry: 5-20 µg/mL.

Western Blotting: 0.5-2.0 µg/mL, non-reducing conditions only (no DTT or beta-mercaptoethanol).

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Immunoprecipitation: lysate dependent. 10 ug per 200-500 ug total protein.

Immunopanning: 1-5 ug/mL.

Immunocytochemistry: 1-5 ug/mL. Staining is strongest in non-fixed cells, light fixation is tolerable.

Immunohistochemistry: fresh, acetone fixed sections only, epitope is fixation sensitive. Not suitable in formalin-fixed, paraffin (FFPE) embedded tissues.

Biosensis recommends optimal dilutions/concentrations should be determined by the end user.

**Specificity:** This antibody is specific for NGFR/p75NTR as demonstrated by western blotting and immunoprecipitation. The antibody recognizes extracellular p75NTR under non-reducing conditions.

**Species Against:** Antibody recognizes NGFR/p75NTR from human, mouse and rat. Other species not tested as yet.

**Cross-reactivity:** This antibody reacts with human, mouse and rat. Cross-reactivity with other species not tested but expected.

**Form:** Lyophilised from a solution containing PBS buffer pH 7.2-7.6 with 3% trehalose, without preservatives.

**Reconstitution:** Spin vial briefly before opening. Reconstitute in 20 µL sterile water. Centrifuge to remove any insoluble material. Final buffer contains no preservatives.

**Storage:** Store lyophilised antibody at 2-8°C. After reconstitution divide into aliquots and store at -20°C for long-term storage. Store at 2-8°C short-term (up to 4 weeks) with an appropriate antibacterial agent. Avoid repetitive freeze/thaw cycles.

**Expiry Date:** 12 months after purchase if unopened.

**General References:** Matusica D et al. (2008). Characterisation and use of the NSC-34 cell liner for study of neurotrophin receptor trafficking. *J. Neurosci. Res.* 86(3) pp. 553-65.

Huh CY et al. (2008). Chronic exposure to nerve growth factor increases acetylcholine and glutamate release from cholinergic neurons of the rat medial septum and diagonal band of Boca via mechanisms mediated by p75NTR. *J. Neurosci.* 28(6) pp. 1404-9.

Lagares A et al. (2007). Primary sensory neuron addition in the adult rat trigeminal ganglion: evidence for neural crest glio-neuronal precursor maturation. *J. Neurosci.* 27(30) pp. 7939-53.

DiStefano & Johnson (1988). Identification of a truncated form of the nerve growth factor receptor.

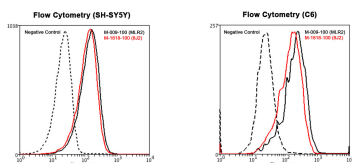
*Proc Natl Acad Sci U S A.* 1988 Jan;85(1):270-4.

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## Mouse monoclonal antibody to human NGFR/p75NTR [8J2]: IgG



Analysis of p75NTR expression in human SH-SY5Y and rat C6 cell lines by Flow Cytometry. Blocking: 200 ug/mL sheep IgG, 30 minutes on ice; Primary antibody: Mouse monoclonal antibodies to p75NTR cat # M-1818-20, clone 8J2 (red) and M-009-100, clone MLR2 (black), ~2 µg per 10<sup>6</sup> cells, for 60 minutes on ice, Secondary antibody: Goat anti-mouse-PE (1:100 dilution), 20 minutes in dark on ice. Negative control: Non-specific Control IgG, clone X63 (cat # M-1249-200, black dashed). Data and results were generated using Orflo Moxiflow<sup>TM</sup> instrument and protocols.

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