



Mouse monoclonal antibody to human NGFR/p75NTR [8J2] - ATTO 488

Catalogue No.:	M-1821-50-AT
Description:	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 M-1819-50-FT, Mouse monoclonal antibody to human NGFR/p75NTR [8J2] - FITC
Batch No.:	See product label.
Unit size:	50 ug
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 was labelled with ATTO 488 and free dye removed by gel filtration.
Applications:	Immunocytochemistry: 1-5 ug/mL. Light fixation only, or unfixed works best. Epitope is sensitive to fixation. Flow Cytometry: 5-20 ug/mL. Biosensis recommends optimal dilutions/concentrations should be determined by the end user.
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.
Conjugate:	

FOR RESEARCH USE ONLY

Mouse monoclonal antibody to human NGFR/p75NTR [8J2] - ATTO 488

Atto488. Typical Fluorophore/Protein (F/P) - ratio is 3-10.

Form: Liquid antibody (1 mg/mL) in PBS, pH 7.2-7.6, without preservative.

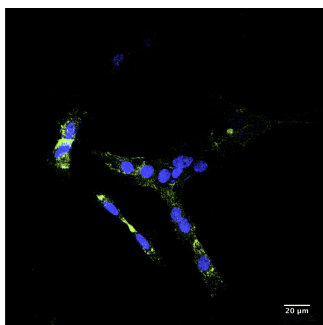
Storage: Liquid antibody is shipped cold. Upon arrival, spin vial briefly, divide into aliquots and store at -20C for long-term storage. Store at 2-8C short-term (up to 4 weeks) with an appropriate antibacterial agent. Avoid repetitive freeze/thaw cycles.

Expiry Date: 4 months after purchase if unopened.

General References: Matusica D, Fenech MP, Rogers ML, Rush RA. (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, Danik M, Manseau F, Trudeau LE, Williams S. (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 bu p75NTR. *J. Neurosci.* 28(6) pp. 1404-9.

Lagares A, Li HY, Zhou XF, Avendano C. (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.



Trafficking of internalized NGFR/p75 receptor with p75 antibody clone 8J2, conjugated with ATTO 488 (M-1821-50-AT, green). Human SH-SY5Y cells were incubated for 1 hour with 2 ug/mL 8J2-ATTO 488 at 37C, fixed (4% formaldehyde), and cell nuclei stained with Hoechst dye (blue). Confocal images (40x magnification) demonstrate typical vesicle-like, punctuate perinuclear staining of internalized receptor/antibody.

FOR RESEARCH USE ONLY