



## Mouse monoclonal antibody to human p75NTR [MLR2] - ATTO 488

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| <b>Catalogue No.:</b>    | M-028-50-AT   |
| <b>Description:</b>      | p75NTR was originally discovered as a low affinity nerve growth factor receptor. Later it was found that it was the receptor for all neurotrophins. It mediates signals of neurotrophins for neuronal survival, apoptosis, neurite outgrowth and synaptic plasticity. Recently, it has been revealed that p75NTR is 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. <b>FUNCTION:</b> Low affinity receptor which can bind to NGF, BDNF, NT-3, and NT-4. Can mediate cell survival as well as cell death of neural cells. <b>SUBUNIT:</b> Homodimer; disulfide-linked. Interacts with p75NTR-associated cell death executor. |
| <b>Batch No.:</b>        | See product label   |
| <b>Unit size:</b>        | 50 µg   |
| <b>Antigen:</b>          | Human recombinant p75.  |
| <b>Other Names:</b>      | Low-affinity nerve growth factor receptor; NGF receptor; Gp80-LNGFR; p75 ICD; Low affinity neurotrophin receptor p75NTR   |
| <b>Accession:</b>        | TNR16_HUMAN   |
| <b>Produced in:</b>      | P75 knock-out mouse.  |
| <b>Purity:</b>           | Immunoglobulin (IgG2A) was purified using Protein G column (Amersham Pharmacia), polished with Sephacryl 200HR (Amersham Pharmacia) in PBS. The IgG was then conjugated to ATTO 488 (ATTO TEC) and purified via gel filtration using a G25 fine grain gel in 10 mMTris/50mM NaCl solution.  |
| <b>Applications:</b>     | Immunohistochemistry, immunofluorescence, WB using native p75NTR, flow cytometry (Anti NGF receptor p75 is CD271), Anti-NGF receptor p75 dynamics, retrograde transport studies, study of intracellular trafficking (see IHC image attached). Suggested working dilutions: For immunohistochemistry, a concentration of 1-2 µg/ml is recommended. For FACS, the recommended concentration is 20 µg/ml and for 1 site ELISA, at least 1 in 5000 dilution is recommended. This antibody does not block Neurotrophin binding. Biosensis recommends optimal dilutions/concentrations should be determined by the end user.  |
| <b>Specificity:</b>      | Specificity was demonstrated by immunohistochemistry and FACS analysis. Immunohistochemical staining of motor neurons in spinal cord following lesion of sciatic nerve and in cholinergic neurons of the basal forebrain corresponding to published literature.   |
| <b>Cross-reactivity:</b> | Reacts with human, mouse and rat. Other species have not yet been tested but it is expected that this antibody will be useful for the study of p75 in primates and other species.   |
| <b>Form:</b>             | Liquid, 50 µg. Centrifuge to remove any insoluble material. No preservatives added.   |
| <b>Storage:</b>          | The antibody conjugate can be stored at 4°C for up to 4 months with the addition of appropriate   |

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antibacterial agent.

**Specific References:** 1. Wiese S, Herrmann T, Drepper C, Jablonka S, Funk N, Klausmeyer A, Rogers ML, Rush RA & Sendtner M (2009) Isolation and enrichment of embryonic mouse motoneurons from the lumbar spinal cord of individual mouse embryos. Nat Protoc. 2010;5(1):31-8.

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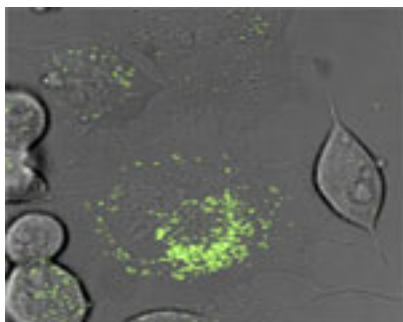
**References:**

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Live confocal imaging of intracellular trafficking of p75NTR using ATTO 488 labelled mouse monoclonal antibody to human p75NTR [MLR2], catalogue number M-028-50-AT in NSC34 mouse motor neuron cell line.

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