

Mouse monoclonal antibody to rat p75NTR [MC192] - ATTO 488

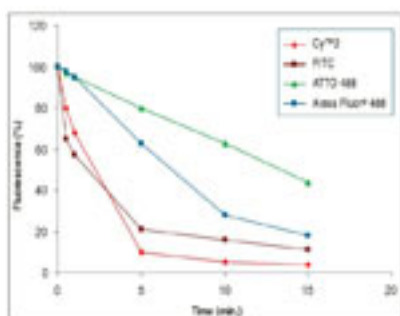
Catalogue No.:	M-026-50-AT
Description:	<p>Monoclonal antibody MC192 against the rat low affinity nerve growth factor receptor (p75NTR) is derived from the fusion of Sp2/0-Ag 14 myeloma cells with mouse immune splenocytes. MC192 monoclonal antibody was originally generated by Chandlers et al. p75NTR 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 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. MC192 has a potential use as the ligand for gene delivery into p75NTR-expressing rat cells via a receptor-mediated mechanism. FUNCTION: 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. SUBUNIT: Homodimer; disulfide-linked. Interacts with p75NTR-associated cell death executor. Interacts with NGFRAP1/BEX3. Interacts with TRAF2, TRAF4, TRAF6, PTPN13 and RANBP9. Interacts through TRAF6 with SQSTM1 which bridges NGFR to NTRK1 (By similarity).</p>
Batch No.:	See product label
Unit size:	50 ug (1 mg/mL)
Antigen:	N-octyl glucoside solubilized proteins from isolated PC12 cell plasma membranes were used as the immunogen (see Chandler et al. 1984).
Antigen Location:	ECD of rat NGFR.
Isotype:	IgG1
Clone:	MC192
Other Names:	Low-affinity nerve growth factor receptor; NGF receptor; Gp80-LNGFR; p75 ICD; Low affinity neurotrophin receptor p75NTR
Accession:	TNR16_RAT
Produced in:	Mouse
Purity:	Protein G purified IgG was labelled with ATTO 488 and free dye removed by gel filtration.
Applications:	IF: live or lightly fixed cells or tissues (acetone or 4% PFA): 2-5ug/mL. Not suitable for western blots; not suitable for IH on formalin fixed tissues. FACS (20ug/mL) is recommended, unfixed cells.
Specificity:	MC192 recognizes the extracellular domain of the neurotrophin receptor p75NTR in rat and does not react with human or mouse NGFR.
Species Against:	Rat
Antibody Against:	n-octoglucoside stabilized proteins containing p75 receptor, which were isolated from plasma

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membranes of PC-12 cells (Chandler et al., 1984).

- Cross-reactivity:** Reacts with rat. Does not react with mouse or human NGFR
- Conjugate:** 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.
- Specific References:** Davies A. et al (2010) The alpha2delta subunits of voltage-gated calcium channels form GPI-anchored proteins, a post translational modification essential for function Proc Natl Acad Sci U S A. Jan 26;107(4):1654-9
- References:** Chandler, C. E. et al (1984) J Biol Chem 259, 6882-6889
Lagares A et al (2007) J of neurosci 27(30), 7939-7953



Photostability of ATTO 488 compared to common dyes in water. Excitation at 488nm with 1W Argon-Ion Laser.

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