

Mouse monoclonal antibody to human p75NTR [ME20.4] - ATTO 488

Catalogue No.:	M-027-50-AT
Description:	Nerve growth factor receptor (NGFR) is also referred to as p75(NTR) due to its molecular mass and its ability to bind at low affinity not only NGF (see 162030), but also other neurotrophins, including brain-derived neurotrophic factor (BDNF; 113505), neurotrophin-3 (NTF3; 162660), and neurotrophin-4/5 (NTF5; 162662). At the time of its discovery, NGFR was considered a unique type of protein. Subsequently, however, a large superfamily of tumor necrosis factor receptors were found to share the overall structure of NGFR (4 extracellular ligand-binding, cysteine-rich repeats, or CRs, and signaling through association with, or disassociation from, cytoplasmic interactors). The identification of this superfamily helped elucidate some of the biologic functions of NGFR, including its ultimate involvement in the nuclear factor kappa-B (NFKB; see 164011) and apoptosis pathways. As a monomer, NGFR binds NGF with low affinity. Higher affinity binding is achieved by association with higher molecular mass, low-affinity neurotrophin receptors, namely the tropomyosin receptor kinases, TRKA (NTRK1; 191315), TRKB (NTRK2; 600456), and TRKC (NTRK3; 191316). TRKA, TRKB, and TRKC are specific for or 'preferred by' NGF, NTF5 and BDNF, and NTF3, respectively (Ip et al., 1993). NTF3 also binds to TRKA and TRKB, but with significantly lower affinity
Batch No.:	See product label
Unit size:	50 µg
Antigen:	The p75NTR antibody was derived from immunization of mice with human WM245 melanoma cells.
Clone:	ME20.4
Other Names:	Low-affinity nerve growth factor receptor; NGF receptor; Gp80-LNGFR; p75 ICD; Low affinity neurotrophin receptor p75NTR
Accession:	TNR16_HUMAN
Produced in:	Mouse
Purity:	Protein G purified IgG was labelled with ATTO 488 and free dye removed by gel filtration.
Applications:	This antibody is recommended for use in immunohistochemistry, immunofluorescence, flow cytometry and NGF receptor p75 dynamics. For immunohistochemistry a concentration of 2 µg/mL is recommended. Not appropriate for Western Blots. For FACS a concentration of 20 µg/mL is recommended and for 1 site ELISA at least a 1 in 5000 dilution. Biosensis recommends optimal dilutions/concentrations should be determined by the end user.
Specificity:	This antibody recognises p75NTR (low affinity neurotrophin receptor)
Cross-reactivity:	Reacts with human, cat, dog, pig, rabbit and sheep. Does not react with rat or mouse.
Form:	Liquid (1 mg/mL) in PBS, pH 7.2-7.6 without preservatives.
Storage:	Aliquot antibody and store frozen at -20C to -80C. For short-term storage, the antibody conjugate can be stored at 2-8C for up to 4 months with the addition of appropriate antibacterial agent, or for up to 1 week without the addition of a preservative.

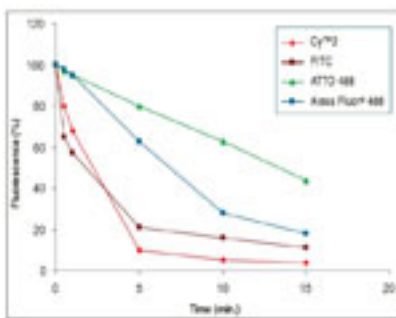
FOR RESEARCH USE ONLY

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Expiry Date: Four months after purchase

References:

1. Walker BR et al. (2007) Behav Brain Res 176:109-20
2. Ross A.H. et al. (1984) Characterization of nerve growth factor receptor in neural crest tumors using monoclonal antibodies. Proc Natl Acad Sci U S A. 1984 Nov;81(21):6681-5. ORIGINAL PAPER



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

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