



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

Catalogue No.:	M-017-100-FT
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. NTF3 also binds to TRKA and TRKB, but with significantly lower affinity.
Related products:	M-1763-100-FT, Non-specific Control IgG, clone X63 (Monoclonal) - FITC
Batch No.:	See product label
Unit size:	100 ug
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:	Immunoglobulin (IgG1) was purified using Protein G column (Amersham Pharmacia), polished with Sephacryl 200HR (Amersham Pharmacia) in PBS. The antibody was then conjugated to Fluorescein isomer 1 (FITC, Sigma). A minimum fluorescein: protein ratio of 3:1 is guaranteed. The conjugate was purified via gel filtration using a G25 fine grain gel in PBS, pH 7.2-7.6.
Applications:	This antibody is recommended for use in immunohistochemistry, immunofluorescence, flow cytometry and NGF receptor p75 dynamics. For immunohistochemistry a concentration of 2 ug/mL is recommended. Not appropriate for Western Blots. For FACS a concentration of 20 ug/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.

FOR RESEARCH USE ONLY



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- Form:** Liquid antibody at 1 mg/mL. Buffer contains PBS, pH 7.2-7.6, without preservative.
- Storage:** The antibody conjugate can be stored at 2-8C for up to 4 months with the addition of appropriate antibacterial agent.
- 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

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