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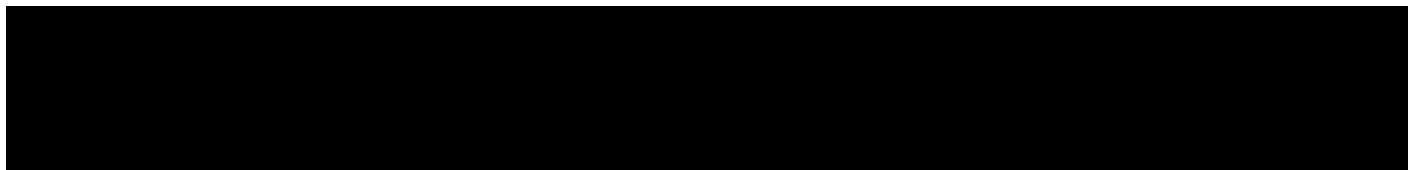
Antibodies to Neurotrophin Receptors family members

Anti-P75 NTR antibodies (P75NTR-100P and P75-101AP)

The pan-neurotrophin receptor p75NTR belongs to a large family of receptors, which includes tumor necrosis factor receptors (TNF), Fas and approximately 25 other members. The p75NTR is the first receptor to be cloned and have shown significant advancement in its understanding of signaling pathways. In the last several years considerable advancement have been made regarding the signaling pathways activated by p75NTR and its potential biological functions. It is now known that P75NTR has surprisingly diverse effects, ranging from cell death to regulation of axon elongation. This diversity in its physiological effects can be explained by the complex formation of p75NTR with other receptors and multiple signaling molecules that interact with the intracellular domain of p75NTR (1). Neuronal survival, differentiation and myelination also involves p75NTR signaling via Trk receptor kinases. Identification of new ligands, cytosolic interacting partners, receptor cleavage products and coreceptors for the p75NTR led to greater understanding of p75NTR signaling (2).

Nerve growth factor (NGF) is synthesized by various structural and inflammatory cells and activates Tropomyosin-receptor kinase A (TrkA) and the p75NTR receptor, both belong to the "death receptor" family. One of the several diverse effects of p75NTR signaling is neuronal apoptosis that requires interaction of neurotrophin receptor interacting factor (NRIF) with c-Jun-N-terminal kinase (JNK) and p53 activation (3). The p75NTR has been characterized as a tumor suppressor in human prostate cancer. Administration of the p75NTR gene into subcutaneous PC-3 xenografts suppressed in a dose-dependent manner the growth of tumors (4). P75NTR has multiple functional domains including a NTRF and a C-terminal Death domain.

The Anti-p75NTR-selective antibodies were generated using unique peptides from near N-terminal portion of the p75NTR protein. The p75NTR-selective antibodies were affinity purified against immobilized antigen based affinity chromatography and are represented as pure IgG fractions stabilized in antibody stabilization buffer. The polyclonal antibodies strongly label a 76 kDa in PC-P75NTR samples. The P75NTR antibodies can be conjugated as HRP or alkaline conjugates for IHC, Confocal, WB analyses at nominal price. *FabGennix Inc.* will also conjugate antibodies with fluorescent probes upon request at extra charge. *FabGennix Inc.* also provides antibodies against other diagnostic/neomarkers, the list of these antibodies can be obtained at www.FabGennix.com under Antibodies to diagnostic markers. Limited quantities of antigens are also available. Please enquire for their availability before ordering.



R = rat; M = mouse; H = human; C = chicken; monk = monkey ; * not all variants are labeled equally

Immunogen: Synthetic peptides (for P75NTR-101AP was selected from the N-terminal end of the protein that is unique to P-75NTR only. The peptide was post-translationally modified to achieve high antigenicity.

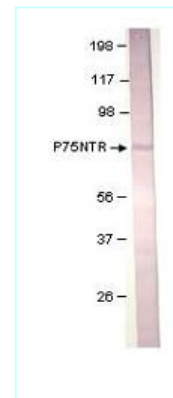
Concentration: P75NTR-101AP = 0.50-0.95 mg/ml of antibody stabilization buffer

Applications: Antibody p75NTR-101AP is ideal for IMM and WB, IHC and confocal assays were not standardized. The dilutions for this antibody is for reference only, investigators are expected to determine the optimal conditions for specific assay in his/her laboratory. Other applications have not been tested. Suggested Dilutions: Western blotting: > 1:500; Immunoprecipitation & i.p pull-down assays: 1> 1:200; IHC and confocal applications, n.d.

Protocols: Standard protocol for various applications (WB, IMM, IHC) of this antibody is provided with the product specification sheet, however, *FabGennix Inc.* strongly recommends investigators to optimize conditions for use of this antibody in their laboratories.

References:

1. Yamashita T, Fujitani M, Hata K, Mimura F, Yamagishi S. Diverse functions of the p75 neurotrophin receptor. *Anat Sci Int.* 2005 Mar;80(1):37-41. Related Articles, Links
2. Nykjaer A, Willnow TE, Petersen CM. p75(NTR) -- live or let die. *Curr Opin Neurobiol.* 2005 Feb;15(1):49-57. Related Articles, Links
3. Linggi MS, Burke TL, Williams BB, Harrington A, Kraemer R, Hempstead BL, Yoon SO, Carter BD. Neurotrophin Receptor Interacting Factor (NRIF) Is an Essential Mediator of Apoptotic Signaling by p75 Neurotrophin Receptor. *J Biol Chem.* 2005 Apr 8;280(14):13801-8. Epub 2005 Jan 24.
4. Allen J, Khwaja F, Djakiew D. Gene therapy of prostate xenograft tumors with a p75NTR lipoplex. *Anticancer Res.* 2004 Sep-Oct;24(5A):2997-3003.



Western blot of P75NTR antibody (P75NTR-101AP) with PC-P75NTR. Antibody dilution 1:750 in DilUbuffer. MMW are on left.

* For users who may require large amounts of P75NTR-101AP, FTIC-P75NTR, P-P75NTR or PC-P75NTR, please enquire about bulk material discounts.

This Product is for Research Use Only and is NOT intended for use in humans or clinical diagnosis.

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