



NGF-Receptor (p75) / CD271 (Soft Tissue Tumor Marker) Antibody - With BSA and Azide

Mouse Monoclonal Antibody [Clone NTR/912] Catalog # AH12012

Product Information

Application IHC, IF, FC **Primary Accession** P08138

Other Accession 4804, 415768, 681726

Reactivity Human
Host Mouse
Clonality Monoclonal

Isotype Mouse / IgG1, kappa

Clone Names NTR/912 Calculated MW 45183

Additional Information

Gene ID 4804

Other Names Tumor necrosis factor receptor superfamily member 16, Gp80-LNGFR, Low

affinity neurotrophin receptor p75NTR, Low-affinity nerve growth factor

receptor, NGF receptor, p75 ICD, CD271, NGFR, TNFRSF16

Application Note IHC~~1:100~500 IF~~1:50~200 FC~~1:10~50

Storage Store at 2 to 8°C.Antibody is stable for 24 months.

Precautions NGF-Receptor (p75) / CD271 (Soft Tissue Tumor Marker) Antibody - With BSA

and Azide is for research use only and not for use in diagnostic or therapeutic

procedures.

Protein Information

Name NGFR

Synonyms TNFRSF16

Function Low affinity receptor which can bind to NGF, BDNF, NTF3, and NTF4. Forms a

heterodimeric receptor with SORCS2 that binds the precursor forms of NGF, BDNF and NTF3 with high affinity, and has much lower affinity for mature NGF and BDNF (PubMed: 24908487). Plays an important role in differentiation and survival of specific neuronal populations during development (By similarity). Can mediate cell survival as well as cell death of neural cells. Plays

a role in the inactivation of RHOA (PubMed: <u>26646181</u>). Plays a role in the regulation of the translocation of GLUT4 to the cell surface in adipocytes and

skeletal muscle cells in response to insulin, probably by regulating RAB31 activity, and thereby contributes to the regulation of insulin- dependent glucose uptake (By similarity). Necessary for the circadian oscillation of the clock genes BMAL1, PER1, PER2 and NR1D1 in the suprachiasmatic nucleus (SCmgetaN) of the brain and in liver and of the genes involved in glucose and lipid metabolism in the liver (PubMed:23785138). Together with BFAR negatively regulates NF-kappa-B and JNK-related signaling pathways (PubMed:22566094).

Cellular Location

Cell membrane; Single-pass type I membrane protein. Cytoplasm. Perikaryon {ECO:0000250|UniProtKB:Q9Z0W1}. Cell projection, growth cone {ECO:0000250|UniProtKB:Q9Z0W1}. Cell projection, dendritic spine {ECO:0000250|UniProtKB:Q9Z0W1}

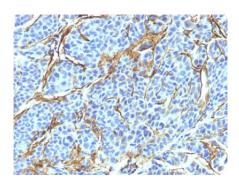
Background

It recognizes a glycoprotein of 75kDa, identified as low affinity Nerve Growth Factor (NGF) Receptor (p75NGFR) or Neurotrophin Receptor (p75NTR). NGFR is expressed in various neural crest cells and their tumors such as melanocytes, melanomas, neuroblastomas, pheochromocytomas and neurofibromas. Reportedly, anti-NGFR is a reliable marker for desmoplastic and neurotropic melanomas. NGFR is expressed in mature non-neural cells such as perivascular cells, dental pulp cells, lymphoidal follicular dendritic cells, basal epithelium of oral mucosa and hair follicles, prostate basal cells, and myoepithelial cells. Anti-NGFR stains the myoepithelial cells of breast ducts and intra-lobular fibroblasts of breast ducts.

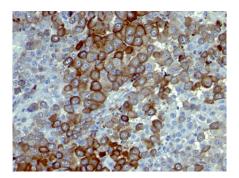
References

Soland, T.M., et al. 2008. Nerve growth factor receptor (p75NTR) and pattern of invasion predict poor prognosis in oral squamous cell carcinoma. Histopathology 53: 62-72. | Wang, W., et al. 2009. Patterns of expression and function of the p75NGFR protein in pancreatic cancer cells and tumours. Eur. J. Surg. Oncol. 35: 826-832. |

Images



Formalin-fixed, paraffin-embedded human Melanoma stained with NGFR Monoclonal Antibody (NTR/912).



Formalin-fixed, paraffin-embedded human Melanoma stained with NGFR Monoclonal Antibody (NTR/912).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.