

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

Mouse Monoclonal Antibody [Clone NGFR5 + NTR/912] Catalog # AH12015

Product Information

Application Primary Accession	IHC, IF, FC <u>P08138</u>
Other Accession	<u>4804, 415768, 681726</u>
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	Mouse / IgG's
Clone Names	NGFR5 + 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: <u>24908487</u>). 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: <u>23785138</u>). Together with BFAR negatively regulates NF-kappa-B and JNK-related signaling pathways (PubMed: <u>22566094</u>).
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 (NGFR5 + NTR/912).

Formalin-fixed, paraffin-embedded human Melanoma stained with NGFR Monoclonal Antibody (NGFR5 + NTR/912). Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.