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

Mouse Monoclonal Antibody [Clone SPM299 ]
Catalog # AH12009

## Product Information

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| **Application** | IHC, IF, FC |
| **Primary Accession** | P08138 |
| **Other Accession** | 4804, 415768, 681726 |
| **Reactivity** | Human, Rabbit, Monkey, Baboon, Cat |
| **Host** | Mouse |
| **Clonality** | Monoclonal |
| **Isotype** | Mouse / IgG1, kappa |
| **Clone Names** | SPM299 |
| **Calculated MW** | 45183 |

## Additional Information

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| **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

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| **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:26646181). Plays a role in the regulation of the translocation of GLUT4 to the cell surface in adipocytes and |

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| | 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} |

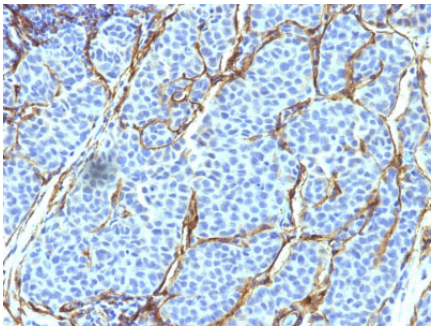
## Background

It recognizes a glycoprotein of 75kDa, identified as low affinity Nerve Growth Factor (NGF) Receptor (p75NGFR) or Neurotrophin Receptor (p75NTR). Its epitope spans in aa 1-160 of extracellular domain of NGFR/NTR. NGF-receptor contains an extracellular domain containing four 40-amino acid repeats with 6 cysteine residues at conserved positions followed by a serine/threonine-rich region, a single transmembrane domain, and a 155-amino acid cytoplasmic domain. The cysteine-rich region contains the nerve growth factor binding domain. NGF is important for the development, differentiation, and survival of variety of neuronal and non-neuronal cells. Its action is mediated by binding two distinct receptors, the high affinity p140 and low affinity p75.

## References

Marano N, et. al. Journal of Neurochemistry, 1987, 48:225-32. |

## Images



Formalin-fixed, paraffin-embedded human Melanoma stained with NGFR Monoclonal Antibody (SPM299).

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