

NGFR Antibody (Clone # 8G3G10)

Mouse Monoclonal Antibody Catalog # ABV11327

Specification

NGFR Antibody (Clone # 8G3G10) - Product Information

Application	WB, IF, FC
Primary Accession	<u>P08138</u>
Host	Mouse
Clonality	Monoclonal
lsotype	Mouse IgG1

NGFR Antibody (Clone # 8G3G10) - Additional Information

Gene ID 4804

Positive Control

Application & Usage

Western blot: mouse heart tissue lysate, IF: SY5Y cells, FACS: human brain tissue. WB: 1:500 - 1:2000, IHC: 1:50 - 1:100, IF: 1:100.

Other Names CD271; p75NTR; TNFRSF16; p75(NTR); Gp80-LNGFR; NGFR

Target/Specificity NGFR

Antibody Form Liquid

Appearance Colorless liquid

Formulation This antibody is purified through a protein G column, followed by dialysis against PBS.

Handling The antibody solution should be gently mixed before use.

Reconstitution & Storage -20 °C

Background Descriptions

Precautions NGFR Antibody (Clone # 8G3G10) is for research use only and not for use in diagnostic or therapeutic procedures.

NGFR Antibody (Clone # 8G3G10) - 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: 26646181). 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}

NGFR Antibody (Clone # 8G3G10) - Protocols

Provided below are standard protocols that you may find useful for product applications.

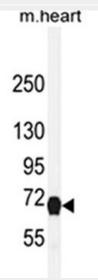
- <u>Western Blot</u>
- <u>Blocking Peptides</u>
- <u>Dot Blot</u>
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

NGFR Antibody (Clone # 8G3G10) - Images





NGFR Antibody immunohistochemistry analysis in formalin fixed and paraffin embedded human brain tissue followed by peroxidase conjugation of the secondary antibody and DAB staining.



Western blot analysis of NGFR Antibody in mouse heart tissue lysates (35 μ g/lane). NGFR (arrow) was detected using the purified MAb (1:1000).

NGFR Antibody (Clone # 8G3G10) - Background

NGFR, a 75 kd glycoprotein (also known as P-75NTR), is the first of neurotrophin receptors to be isolated and is a member of the tumor necrosis factor (TNF) receptor family. It is expressed not only in sympathetic and sensory neurons, but also in various neural crest cell or tumor derivatives such as melanocytes, melanomas, neuroblastomas, pheochromocytomas, neurofibromas, and neurotized nevi (type C melanocytes). NGFR has been shown to be a reliable marker for desmoplastic and neurotropic melanoma by several groups. It is now apparent that expression of NGFR is ubiquitous and not limited to the nervous system, being expressed in mature nonneural cells such as perivascular cells, follicular dendritic cells, basal epithelium of oral mucosa and hair follicles, prostate basal cells and myoepithelial cells. Studies in prostate and urothelial cancer suggest that NGFR may act as a tumour suppressor, negatively regulating cell growth and proliferation. Anti-NGFR labels the myoepithelial cells of breast ducts and intralobular fibroblasts of breast ducts and thus aides in the diagnosis of malignancy in the breast.