

NGFR / CD271 Antibody (clone NGFR5)

Mouse Monoclonal Antibody Catalog # ALS16262

Specification

NGFR / CD271 Antibody (clone NGFR5) - Product Information

Application Primary Accession Reactivity Host Clonality Calculated MW IHC <u>P08138</u> Human, Rabbit, Cat Mouse Monoclonal 45kDa KDa

NGFR / CD271 Antibody (clone NGFR5) - 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

Target/Specificity Monoclonal antibody NGFR5 (originally C34C) recognizes CD271/NGFR, a 75 kD transmembrane glycoprotein of the TNFR superfamily. The epitope is localized within amino acids 1 - 160.

Reconstitution & Storage Store at 2-8°C. Do not freeze.

Precautions

NGFR / CD271 Antibody (clone NGFR5) is for research use only and not for use in diagnostic or therapeutic procedures.

NGFR / CD271 Antibody (clone NGFR5) - 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).

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

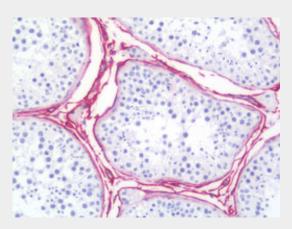
Volume 50 μl

NGFR / CD271 Antibody (clone NGFR5) - Protocols

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

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

NGFR / CD271 Antibody (clone NGFR5) - Images



Anti-NGFR / CD271 / p75 antibody IHC staining of human testis.

NGFR / CD271 Antibody (clone NGFR5) - Background

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). Low affinity receptor which can bind to NGF, BDNF, NT-3, and NT-4. Can mediate cell survival as well as cell death of neural cells. Necessary for the circadian oscillation of the clock genes ARNTL/BMAL1, PER1, PER2 and NR1D1 in the suprachiasmatic nucleus (SCN) of the brain and in liver and of the genes



involved in glucose and lipid metabolism in the liver.

NGFR / CD271 Antibody (clone NGFR5) - References

Johnson D., et al.Cell 47:545-554(1986). Ota T., et al.Nat. Genet. 36:40-45(2004). Zody M.C., et al.Nature 440:1045-1049(2006). Mural R.J., et al.Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases. Sehgal A., et al.Mol. Cell. Biol. 8:3160-3167(1988).