

## CD271 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP12542b

# **Specification**

## CD271 Antibody (C-term) - Product Information

Application IHC-P, WB,E

Primary Accession <u>P08138</u>

Other Accession <u>P07174</u>, <u>Q9Z0W1</u>, <u>NP\_002498.1</u>

Reactivity
Predicted
Mouse, Rat
Host
Clonality
Polyclonal
Isotype
Calculated MW
Antigen Region
Human
Mouse, Rat
Rabbit
Rabbit
Polyclonal
Rabbit IgG
353-380

# CD271 Antibody (C-term) - 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

This CD271 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 353-380 amino acids from the C-terminal region of human CD271.

## **Dilution**

IHC-P~~1:10~50 WB~~1:1000

E~~Use at an assay dependent concentration.

### **Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

### **Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

#### **Precautions**

CD271 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

## CD271 Antibody (C-term) - 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**

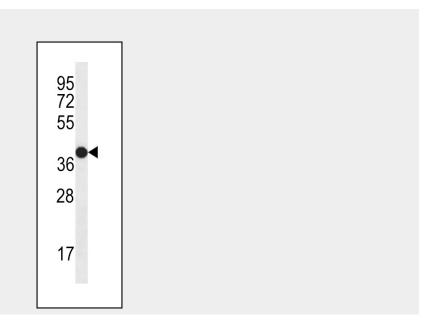
Cell membrane; Single-pass type I membrane protein. Cytoplasm. Perikaryon {ECO:0000250|UniProtKB:Q9Z0W1}. Cell projection, growth cone {ECO:0000250|UniProtKB:Q9Z0W1}. Cell projection, dendritic spine {ECO:0000250|UniProtKB:Q9Z0W1}

### CD271 Antibody (C-term) - Protocols

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

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

## CD271 Antibody (C-term) - Images





CD271 Antibody (C-term) (Cat. #AP12542b) western blot analysis in MDA-MB435 cell line lysates (35ug/lane). This demonstrates the CD271 antibody detected the CD271 protein (arrow).



CD271 Antibody (C-term) (Cat. #AP12542b)immunohistochemistry analysis in formalin fixed and paraffin embedded human brain tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of CD271 Antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.

## CD271 Antibody (C-term) - Background

Nerve growth factor 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.

## CD271 Antibody (C-term) - References

Boiko, A.D., et al. Nature 466(7302):133-137(2010) Ceni, C., et al. J. Cell. Sci. 123 (PT 13), 2299-2307 (2010) : Schuurhof, A., et al. Pediatr. Pulmonol. 45(6):608-613(2010) Bosker, F.J., et al. Mol. Psychiatry (2010) In press : Sornelli, F., et al. Mol. Vis. 16, 1439-1447 (2010) :