

NGFR/p75NTR Rabbit pAb

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Catalog # AP52093

Product Information

Primary Accession	P08138
Reactivity	Mouse
Predicted	Rat, Pig, Dog, Human, Horse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	45183
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human NGFR
Epitope Specificity	301-400/427
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Membrane; Single-pass type I membrane protein.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	The low affinity NGFR (Nerve growth factor receptor) is a 75kDa membrane-spanning glycoprotein lacking intrinsic tyrosine kinase activity. p75NGFR interacts with TrkA, the high affinity NGF receptor and potentiates TrkA signaling at low NGF concentrations. The p75 receptor binds nerve growth factor, brain-derived neurotrophic factor, neurotrophin-3 and neurotrophin-4 with varying specificities. The p75NGFR plays an important role in neurotrophic factor signaling and has been shown to modulate the susceptibility of selective cellular populations to programmed cell death. It is expressed on many neuronal cells types including many embryonic forms and the receptor can be used to isolate neuronal progenitor cells. NGF is important for the development, differentiation and survival of a variety of neuronal and non-neuronal cells. Its action is mediated by binding to two distinct receptors, the high affinity p140 and low affinity p75. p75NGFR binds neurotrophins including brain-derived neurotrophic factor (BDNF), neurotrophin-3 (NT-3), NT-4/5, and NT-6. p75NGFR belongs to the TNF-R superfamily and is reported to mediate NGF-induced apoptosis.

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, Low-affinity nerve growth factor receptor p75NGFR, Low-affinity nerve growth factor receptor p75NGR, p75 ICD, CD271, NGFR, TNFRSF16

Dilution	Flow-Cyt=1 µg/Test
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

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}

Background

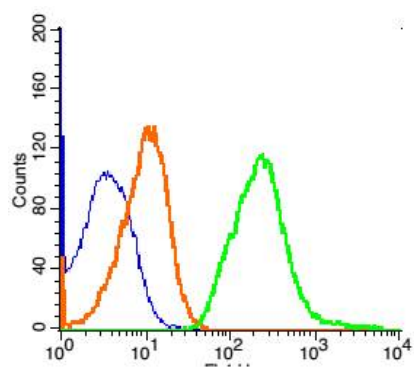
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References

Radeke M.J.,et al.Nature 325:593-597(1987).
Metsis M.,et al.Gene 121:247-254(1992).
Bibel M.,et al.EMBO J. 18:616-622(1999).
Kong H.,et al.J. Neurosci. 21:176-185(2001).
Frankowski H.,et al.NeuroMolecular Med. 1:153-170(2002).

Images

Blank control: (mo)nephrocyte(blue)
Isotype Control Antibody: Rabbit IgG -AF647(orange);
Primary Antibody Dilution: 5 µl in 100 µL1X PBS
containing 0.5% BSA(green).



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