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NGFR

Catalog # PVGS1284

Product Information

Primary Accession P08138
Species Human

Sequence Lys29-Asn250

Purity > 95% as analyzed by SDS-PAGE

Endotoxin Level

Biological Activity ED₅₀ **Expression System** HEK 293

Formulation Lyophilized after extensive dialysis against PBS.

Reconstitution It is recommended that this vial be briefly centrifuged prior to opening to

bring the contents to the bottom. Reconstitute the lyophilized powder in

ddH₂O or PBS up to 100 □g/ml.

Storage & Stability Upon receiving, this product remains stable for up to 6 months at lower than

-70°C. Upon reconstitution, the product should be stable for up to 1 week at 4°C or up to 3 months at -20°C. For long term storage it is recommended that a carrier protein (example 0.1% BSA) be added. Avoid repeated freeze-thaw

cycles.

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

Target Background NGF Receptor, also known as Gp80-LNGFR, p75 ICD, CD271 and TNFRSF16, is

a type I transmembrane protein belonging to the TNF receptor family. It is expressed by both neuronal and non-neuronal cells. Signaling through NGF Receptor has been shown to regulate gene expression, cell migration and death. A truncated NGF Receptor containing only the extracellular domain has been detected in plasma, amniotic fluid and urine, and acts as a potent NGF

antagonist.

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}

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