Recombinant Protein Technical Manual

Recombinant Mouse NGFR/CD271 Protein (Fc Tag)(Active)

RPES3417

Product Data:

Product SKU: RPES3417

Size: 50µg

Species: Mouse

Expression host: HEK293 Cells

Uniprot: Q9Z0W1

Protein Information:

Molecular Mass:	50.6 kDa
AP Molecular Mass:	70-80 kDa
Tag:	C-Fc
Bio-activity:	Measured by its ability to inhibit NGF-dependent proliferation of TF human erythroleukemic cells. The ED50 for this effect is typically 0.5-3 µg/mL in the presence of 2 ng/mL Recombinant mouse NGF.
Purity:	> 90 % as determined by SDS-PAGE
Endotoxin:	< 1.0 EU per µg of the protein as determined by the LAL method.
Storage:	Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ for 3 months.
Shipping:	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation:	Lyophilized from sterile PBS, pH 7.4
Reconstitution:	Please refer to the printed manual for detailed information.
Application:	
Synonyms:	LNGFR;p75;p75NGFR;p75NTR;RP23-67E18.6;Tnfrsf16

Immunogen Information:

Sequence: Met 1-Asn 243

Background:

Nerve growth factor receptors (NGFRs) belong to a large growth factor receptor family. NGFR includes two types of receptors: high-affinity nerve growth factor receptor and low-affinity nerve growth factor receptor. High-affinity nerve growth factor receptor is also referred as Trk familywhose members are bound by some neurotrophins with high affinity. Nerve growth factor binds with TrkA after being released from target cells, the NGF / TrkA complex is subsequently trafficked back to the cell body. The Low-affinity nerve growth factor receptor also named p75 which binds with all kinds of neurotrophins with low affinity. All the four kinds of neurotrophins, including Nerve growth factor, Brain derived neurotrophic factor, Neurotrophin-3, and Neurotrophin-4 bind to the p75. Studies have proved that NGFR acts as a molecular signal swith that determines cell death or survival by three steps. First, pro-nerve growth factor (prNGF) triggers cell apoptosis by its high affinity binding to p75NTR, while NGF induces neuronal survival with low-affinity binding. Second, p75NTR mediates cell death by combining with co-receptor sortilin, whereas it promotes neuronal survival through combination with proNGF. Third, release of the intracellular domain chopper or cleavage short p75 NTR can independently initiate neuronal apoptosis.