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Ngfr

Recombinant Mouse NGF Receptor / CD271 (His Tag)

Catalog No.CRM716A-HisQuantity:50 μg

CRM716B-His 100 μg

Alternate Names: Tumor necrosis factor receptor superfamily member 16, Low affinity neurotrophin

receptor p75NTR1, Low-affinity nerve growth factor receptor, NGF receptor, CD271

Description: 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 family whose 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 switch 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.

UniProt ID: Q9Z0W1

Protein Construction: A DNA sequence encoding the extracellular domain of mouse NGFR (Met 1-Asn 243),

without the propeptide, was fused with a C-terminal polyhistidine tag.

Source: HEK293 Cells

Formulation: Lyophilized from sterile PBS, pH 7.4

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants

before lyophilization.

Molecular Weight: The secreted rmNGFR consists of 233 aa with a predicted MW of 25 kDa and migrates at

~50-55 kDa in SDS-PAGE under reducing conditions.

Purity: > 90 % as determined by SDS-PAGE.

Endotoxin Level: < 1.0 EU per μg of the protein as determined by the LAL method

Biological Activity: Testing in progress

Predicted N-terminal: Lys 22

Reconstitution: Centrifuge vial prior to opening. Add sterile distilled water to a concentration of 0.1

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mg/mL and gently pipette the solution up and down the sides of the vial. **DO NOT VORTEX**. Allow several minutes for complete reconstitution.

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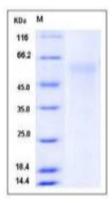
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Storage & Stability:

Stable for up to 1 year from date of receipt at -20°C to -80°C After reconstitution, store working aliquots at -20°C to -80°C. **Avoid repeated freeze-thaw cycles.**

SDS-PAGE



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