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### **NGFR**

# Recombinant Human Nerve Growth Factor Receptor / CD271 (His Tag)

**Catalog No.** CRH698A-His **Quantity**: 50 μg

CRH698B-His 100 μg CRH698C-His 1.0 mg

Alternate 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

**Description:** Nerve growth factor receptors belong to a large growth factor receptor family made of 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. 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.

UniProt ID: P08138

Protein Construction: A DNA sequence encoding the human NGFR extracellular domain (Met 1-Asn 250) was

fused with a polyhistidine tag at the C-terminus.

Source: HEK293 Cells

**Formulation:** Lyophilized from sterile PBS, pH 7.4

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

E-mail: info@cellsciences.com

www.cellsciences.com

Website:

before lyophilization.

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

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Phone: 978-572-1070

Fax: 978-992-0298

~45-60 kDa in SDS-PAGE under reducing conditions due to glycosylation.

**Purity:** > 95 % as determined by SDS-PAGE.

**Endotoxin Level:**  $< 1.0 \text{ EU per } \mu g$  of the protein as determined by the LAL method

**Biological Activity:** Testing in progress

Predicted N-terminal: Lys 29

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

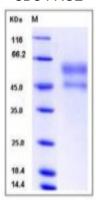
mg/mL and gently pipette the solution up and down the sides of the vial. **DO NOT VORTEX**. Allow several minutes for complete reconstitution.

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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Fax: 978-992-0298

Toll Free: 888-769-1246 E-mail: info@cellsciences.com
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