

NGFR Protein, Rabbit (HEK293, hFc)

Cat. No.:	HY-P74700
Synonyms:	NGFR; Gp80-LNGFR; p75 ICD; CD271; TNFRSF16
Species:	Rabbit
Source:	HEK293
Accession:	XP_008269543 (M1-D242)
Gene ID:	100349095
Molecular Weight:	Approximately 50.1 kDa

PROPERTIES

Appearance	Lyophilized powder.
Formulation	Lyophilized from a 0.2 μ m filtered solution of PBS, pH 7.4. Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization.
Endotoxin Level	<1 EU/ μ g, determined by LAL method.
Reconstitution	It is not recommended to reconstitute to a concentration less than 100 μ g/mL in ddH ₂ O.
Storage & Stability	Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.
Shipping	Room temperature in continental US; may vary elsewhere.

DESCRIPTION

Background	<p>Nerve Growth Factor Receptor (NGFR) is expressed not only in nervous tissue, but also in non-neuronal normal and cancer cells, such as perivascular cells, dental pulp cells, lymphoidal follicular dendritic cells, basal epithelium of oral mucosa and hair follicles, prostate basal cells and myoepithelial cells^[1].</p> <p>Human NGFR shares 92.45% aa sequence identity with mouse NGFR protein and 92.42% aa sequence identity with rat NGFR protein.</p> <p>Nerve Growth Factor Receptor (NGFR) is a type-I transmembrane protein, a typical structure of the TNFR superfamily and devoid of intrinsic catalytic activity. NGFR signaling involves activation of NF-κB (Rel/NF-κB transcription factors) and the phosphorylation of the transcription factor c-Jun kinase (JNK), as well as increased production of ceramide, leading to gene transcription or programmed cell death^[2].</p> <p>NGFR induces p53-dependent apoptosis and cell growth arrest as well as suppressed tumor growth^[3]. The low-affinity nerve growth factor receptor (NGFR) p75NGFR induces apoptosis in the absence of nerve growth factor (NGF) binding but enhances neural survival when bound by NGF. NGFR enhances beta-amyloid peptide toxicity^[4]. NGFR signal can induce the subsequent downregulation of melanoma antigens and eventually suppress CTL activation^[5].</p>
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REFERENCES

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- [5]. Furuta J, et al. CD271 on melanoma cell is an IFN- γ -inducible immunosuppressive factor that mediates downregulation of melanoma antigens. *J Invest Dermatol.* 2014 May;134(5):1369-1377.
- [6]. Chung MK, et al. CD271 Confers an Invasive and Metastatic Phenotype of Head and Neck Squamous Cell Carcinoma through the Upregulation of Slug. *Clin Cancer Res.* 2018 Feb 1;24(3):674-683.
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