Rabbit NGFR / TNFRSF16 / P75 Protein (ECD, His Tag)

Catalog Number: 65160-T08H

General Information

Gene Name Synonym:
NGFR

Protein Construction:
A DNA sequence encoding the rabbit NGFR (XP_008269543.1) (Met1-Asp242) was expressed with a polyhistidine tag at the C-terminus.

Source: Rabbit

Expression Host: HEK293 Cells

QC Testing

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

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

Stability:
Samples are stable for up to twelve months from date of receipt at -70 ℃.

Predicted N terminal: Lys 22

Molecular Mass:
The recombinant rabbit NGFR consists of 232 amino acids and predicts a molecular mass of 24.8 kDa.

Formulation:
Lyophilized from sterile PBS, pH 7.4.

Protein 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, 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.

References


Usage Guide

Storage:
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:
Detailed reconstitution instructions are sent along with the products.