

RP01792S

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Recombinant Human Beta-nerve growth factor/NGFB Protein

Catalog No.: RP01792S

Recombinant

Sequence Information

Species	Gene ID	Swiss Prot
<i>E. coli</i>	4803	P01138

Tags

No-tag

Synonyms

NGF; NGFB; Beta-nerve growth factor;
Beta-NGF

Product Information

Source

Centrifuge the vial before opening. Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water. Avoid vortex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stabilizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize freeze-thaw cycles.

Purification

>95% by SDS-PAGE & HPLC.

Endotoxin

< 0.1 EU/μg of the protein by LAL method.

Formulation

Lyophilized from 0.22 μm filtered solution in PBS (pH 7.4).

Reconstitution

Centrifuge the vial before opening.

Background

NGF is a well-characterized neurotropic protein that plays a critical role in the development of sympathetic and some sensory neurons in the peripheral nervous system. In addition, NGF can also act in the central nervous system as a trophic factor for basal forebrain cholinergic neurons. NGF has also been shown to have biological effects on non-neuronal tissues. NGF is mitogenic for a factor-dependent human erythroleukemic cell line, TF-1. NGF has been found to increase the number of mast cells in neonatal rats and to induce histamine release from peritoneal mast cells. NGF will enhance histamine release and strongly modulate the formation of lipid mediators by basophils in response to various stimuli. NGF will also induce the growth and differentiation of human B lymphocytes as well as suppress apoptosis of murine peritoneal neutrophils. These results, taken together, suggest that NGF is a pleiotropic cytokine which, in addition to its neurotropic activities, may have an important role in the regulation of the immune system.

Basic Information

Description

Recombinant Human Beta-nerve growth factor/NGFB Protein is produced by *E. coli* cells expression system. The target protein is expressed with sequence (Ser122-Ala241) of Human Beta-nerve growth factor/NGFB (Accession #P01138) fused with No-Tag.

Bio-Activity

Measured in a cell proliferation assay using TF-1 Human erythroleukemic cells. The ED50 for this effect is 0.58-2.35 ng/mL, corresponding to a specific activity of 4.25×10⁵~1.70×10⁶ units/mg.

Shipping

Lyophilized proteins are shipped at ambient temperature.
Liquid proteins are shipped at frozen temperature with dry ice.
Upon receipt, store it immediately at the temperature recommended below.

Operational Notes

For your safety and health, please wear a lab coat and disposable gloves for handling.

Storage

Store at -20°C
Avoid repeated freeze/thaw cycles.

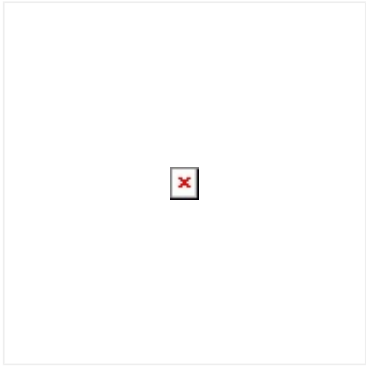
Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water. Avoid vortex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stabilizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.

Contact

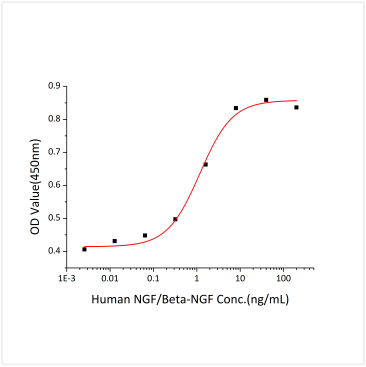


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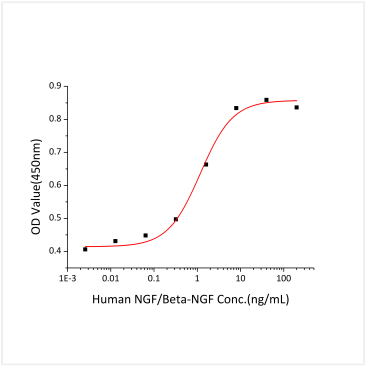
Validation Data



Recombinant Human Beta-nerve growth factor/NGFB Protein was determined by RP-HPLC.



Recombinant Human Beta-nerve growth factor/NGFB Protein was determined by SDS-PAGE under reducing conditions with Coomassie Blue.



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