

# Human Beta-NGF, His Tag, E. coli

**Catalog Number** LDG129PHE

**Package**  $5 \mu g / 20 \mu g / 100 \mu g / Customized package$ 

For full product information, images and publications, please visit our website.



## **Specifications**

**Species of Origin** 

Human

**Affinity Tag** 

His Tag (C-term)

**Purity** 

>98% as determined by SDS-PAGE analysis.

**Activity** 

Measure by its ability to induce TF-1 cells proliferation. The ED<sub>50</sub> for this effect is <0.7 ng/mL. The specific activity of recombinant human beta-NGF is  $> 1 \times 10^6$  IU/mg.

**Form** 

Lyophilized

**Expression System** 

Escherichia coli

**Storage Buffer** 

Lyophilized from a 0.2 µm filtered solution containing 20 mM sodium citrate and 0.2 M NaCl, pH 4.5.

Molecular weight

The protein has a calculated MW of 14.43 kDa. The protein migrates as 11 kDa under reducing condition (SDS-PAGE analysis).

**Endotoxin Level** 

<0.1 EU per 1  $\mu g$  of the protein by the LAL method.

**Background** 



#### **Background**

Nerve Growth Factors (NGF) is critical for the development and maintenance of the sympathetic and sensory neuron systems. NGF has been demonstrated as a complex that consists of three polypeptides named  $\alpha$ ,  $\beta$  and  $\gamma$  subunits. Among then,  $\beta$  subunit, which known as beta-NGF is a 26.9 kDa protein containing 241 residues that involve in neuronal survival and differentiation. Besides, beta-NGF also acts as a ligand to TRKA receptor, which indispensable for the differentiation and development of pain and temperature sensing neurons.

**Uniprot ID** 

#P01138

#### **Synonyms**

Nerve Growth Factors-Beta, Beta-NGF

**Sequence Note** 

Ser122-Ala241

### Instruction

#### Reconstitution

It is recommended to reconstitute the lyophilized protein in sterile  $H_2O$  to a concentration not less than 200  $\mu$ g/mL and incubate the stock solution for at least 20 min to ensure sufficient redissolved.

## **Stability & Storage**

This product is stable after storage at:

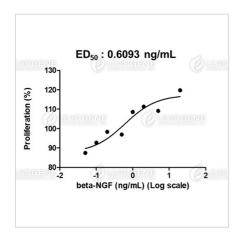
- -20°C for 12 months in lyophilized state from date of receipt.
- -20°C or -80°C for 1 month under sterile conditions after reconstitution.

Avoid repeated freeze/thaw cycles.

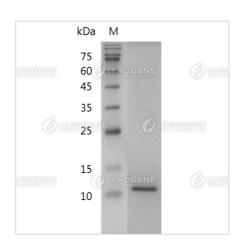
#### **Shipping**

The product is shipped with polar packs. Upon receipt, store it immediately at -20°C or lower for long term storage.

### **Image**



Human Beta-NGF, His Tag, E. coli (LDG129PHE) induced TF-1 cell proliferation, with the ED50 at 0.6093 ng/mL.



SDS-PAGE analysis of recombinant human beta-NGF.

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