

## **Product datasheet for TP728149L**

## OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

## Recombinant beta-NGF (Nerve growth factor-beta), Human

**Product data:** 

**Product Type:** Recombinant Proteins

**Description:** Recombinant beta-NGF (Nerve growth factor-beta), Human

Species: Human
Expression Host: E. coli

**Expression cDNA Clone** 

or AA Sequence:

MSSSHPIFHRGEFSVCDSVSVWVGDKTTATDIKGKEVMVLGEVNINNSVFKQYFFETKCRDPNPVDSGCR GIDSKHWNSYCTTTHTFVKALTMDGKQAAWRFIRIDTACVCVLSRKAVRRA with polyhistidine tag at

the C-terminus.

Tag: His Tag (C-term)

Predicted MW: The protein has a calculated MW of 14.43 kDa. The protein migrates as 11 kDa under

reducing condition (SDS-PAGE analysis).

**Purity:** >98% as determined by SDS-PAGE.

Buffer: The protein was lyophilized from a 0.2 µm filtered solution containing 20 mM sodium citrate,

0.2 M NaCl, pH 3.5.

**Bioactivity:** 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.

**Endotoxin:** <0.1 EU per 1 μg of the protein by the LAL method.

**Reconstitution Method:** Centrifuge at 3000 rpm for 5 mins before opening. It is recommended to reconstitute the

lyophilized protein in sterile  $H_2O$  to a concentration not less than 100  $\mu$ g/mL and incubate the stock solution at room temperature for at least 20 mins to ensure sufficient re-dissolved.

Do Not Vortex! Vigorous shaking may impair the biological activity of the protein.

**Applications:** Cell culture

Storage: Lyophilized protein should be stored at -20°C for 1 year. Upon reconstitution, store at 2°C to

8°C for up to 1 week. Further dilute in a buffer containing a carrier protein or stabilizer (e.g. 0.1% BSA, 10%FBS, 5%HSA or 5% trehalose solution), protein aliquots should be stored at -

20°C or -80°C for 3-6 months. Avoid repeated freeze/thaw cycles.

UniProt ID: P01138

**Synonyms:** β-Nerve Growth Factor, NGF-β







**Summary:** 

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.