

## Recombinant Mouse $\beta$ -NGF / Beta-Nerve Growth Factor, Animal Free & Carrier Free

Cat #: C-CYP290

Size: 5 $\mu$ g, 20 $\mu$ g, 100 $\mu$ g, 500 $\mu$ g, 1mg

Shipping: Blue Ice

### Product Overview

Nerve growth factor (NGF) is a neurotrophic factor and neuropeptide primarily involved in the regulation of growth, maintenance, proliferation, and survival of certain target neurons. NGF- $\beta$  acts through its receptor  $\beta$ -NGFR and is involved in the development and maintenance of the sensory and sympathetic nervous systems. NGF- $\beta$  also is also involved in the growth, differentiation, and survival of B lymphocytes. Human, mouse and rat proteins show cross-reactivity.

### Product Information

**Source:** *Escherichia Coli*.

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

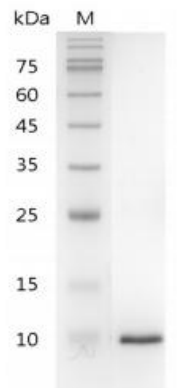
**Biological Activity:** Measure by its ability to induce TF-1 cells proliferation. The ED<sub>50</sub> for this effect is <1 ng/mL. The specific activity of recombinant mouse beta-NGF is >1 x 10<sup>6</sup> IU/mg.

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

**Amino acid sequence:**

MSSTHPVFHMGFEFSVCDSDSVVWVGDKTTATDIKGKEVTVLAEVNINNSVFRQYFFETKCRASNPVESGCRGIDSKHWNSYCTTTHTFVKA  
LTTDEKQAAWRFRIRIDTACVCLSRKATRRG with polyhistidine tag at the C-terminus.

**Formulation:** Lyophilized from a sterile filtered aqueous solution in 20 mM sodium citrate, 0.2 M NaCl, pH 4.5.



SDS-PAGE analysis of recombinant mouse beta-NGF

## Usage Method

1. Before opening, it is recommended to centrifuge at 3000-3500 rpm for 5 minutes.
2. Reconstitute to a concentration of 0.1-1.0 mg/mL in sterile distilled H<sub>2</sub>O. Allow the solution to sit at room temperature for at least 20 minutes to ensure complete dissolution. Avoid vigorous vortexing.
3. The reconstituted solution can be stored at 2-8°C for up to 1 week.
4. For long-term storage, it is recommended to further dilute the solution with a carrier protein (such as 0.1% BSA, 10% FBS, or 5% HSA) to a concentration of no less than 10 µg/mL and aliquot for storage at -20°C to -80°C for 3 to 6 months. If serum-free experiments are required, a 5% trehalose solution can be used as a carrier instead. Avoid repeated freeze-thaw cycles.

## Storage

Physical Appearance	Storage	Stability
Lyophilized powder	-20°C to -80°C	1 year
Reconstitution (initial)	2°C to 8°C	Less than 1 week
Reconstitution (after dilution)	-20°C to -80°C	3 to 6 months

## Note

The reagent is only used in the field of scientific research, not suitable for clinical diagnosis or other purposes.