

## 32-7050: Recombinant Human beta-Nerve Growth Factor/ beta-NGF (Ser122-Ala241, E. coli)

**Gene :** NGF  
**Gene ID :** 4803  
**Uniprot ID :** P01138

### Description

Source: E.coli.  
MW :13.4kD.

Recombinant Human beta-Nerve Growth Factor is produced by our E.coli expression system and the target gene encoding Ser122-Ala241 is expressed. Human beta-Nerve Growth Factor ( beta-NGF) was initially isolated in the mouse submandibular gland. It is composed of three non-covalently linked subunits  $\alpha$ ,  $\beta$ , and  $\gamma$ ; it exhibits all the biological activities ascribed to NGF. It is structurally related to BDNF, NT-3 and NT-4 and belongs to the cysteine-knot family of growth factors that assume stable dimeric structures. B-NGF is a neurotrophic factor that signals through its receptor beta-NGF, and plays a crucial role in the development and preservation of the sensory and sympathetic nervous systems. B-NGF also acts as a growth and differentiation factor for B lymphocytes and enhances B-cell survival. These results suggest that beta-NGF is a pleiotropic cytokine, which in addition to its neurotropic activities may have an important role in the regulation of the immune system. Human beta-NGF shares 90% sequence similarity with mouse protein and shows cross-species reactivity.

### Product Info

**Amount :** 10  $\mu$ g / 50  $\mu$ g  
**Content :** Lyophilized from a 0.2  $\mu$ m filtered solution of 20mM PB, 250mM NaCl, pH 7.0.  
**Storage condition :** Lyophilized protein should be stored at -20°C, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7°C for 2-7 days. Aliquots of reconstituted samples are stable at -20°C for 3 months.  
**Amino Acid :** SSSHPIFHRGEFSVCDSDSVSVWVGDKTTATDIKGKEVMVLGEVNINNSVFKQYFFETKCRDPNPVDS  
GCRGIDSKHWNSYCTTTHTFVKALTMGKQAAWRFIRIDTACVCVLSRKAVRRA

### Application Note

Always centrifuge tubes before opening. Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100  $\mu$ g/ml. Dissolve the lyophilized protein in ddH<sub>2</sub>O. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.

**Endotoxin :** Less than 0.1 ng/ $\mu$ g (1 IEU/ $\mu$ g) as determined by LAL test.

**Biological Activity :** ED50 is less than 1.0 ng/ml. Specific Activity is greater than  $1 \times 10^6$  IU/mg.