

## Recombinant Human $\beta$ -NGF/NGFB Protein (aa 122-23, Human Cells)

**Catalog Number:** PKSH033270

**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

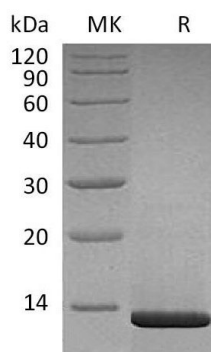
### Description

<b>Species</b>	Human
<b>Source</b>	HEK293 Cells-derived Human $\beta$ -NGF/NGFB protein Ser122-Arg239
<b>Mol_Mass</b>	13.3 kDa
<b>Accession</b>	P01138
<b>Bio-activity</b>	Measured in a cell proliferation assay using TF-1 human erythroleukemic cells. The ED50 for this effect is 0.04-0.4 ng/ml.

### Properties

<b>Purity</b>	> 95 % as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	< 1.0 EU per $\mu$ g of the protein as determined by the LAL method.
<b>Storage</b>	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80 °C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
<b>Shipping</b>	This product is provided as lyophilized powder which is shipped with ice packs.
<b>Formulation</b>	Lyophilized from a 0.2 $\mu$ m filtered solution of 20mM PB, 250mM NaCl, pH 7.0. Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization.
	Please refer to the specific buffer information in the printed manual.
<b>Reconstitution</b>	Please refer to the printed manual for detailed information.

### Data



> 95 % as determined by reducing SDS-PAGE.

### Background

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.

### For Research Use Only