## Recombinant Human β-NGF/NGFB Protein (aa 122-23, Human Cells)

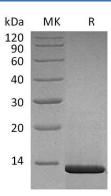
Note: Centrifuge before opening to ensure complete recovery of vial contents.

Catalog Number: PKSH033270



Description	
Species	Human
Mol_Mass	13.3 kDa
Accession	P01138
Bio-activity	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	
Purity	> 95 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per µg of the protein as determined by the LAL method.
Storage	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 $< -20^{\circ}$ C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from a 0.2 µm 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.
Reconstitution	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.

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