

Recombinant Human β -NGF/NGFB Protein

Catalog No. PKSH033269

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

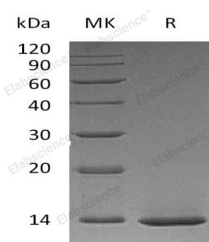
Description

Synonyms	Beta-Nerve Growth Factor;Beta-NGF;NGF;NGFB
Species	Human
Expression Host	E.coli
Sequence	Ser122-Ala241
Accession	P01138
Calculated Molecular Weight	14.4 kDa
Observed molecular weight	11 kDa
Tag	C-His

Properties

Purity	> 98 % as determined by reducing SDS-PAGE.
Endotoxin	< 0.1 EU per μ g 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°C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from sterile 20 mM sodium citrate, 0.2 M NaCl, pH 3.5. Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 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



> 98 % as determined by reducing SDS-PAGE.

Background

Human β -Nerve Growth Factor (β -NGF) was initially isolated in the mouse submandibular gland. It is composed of three non-covalently linked subunits α ; β ; and γ ; 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.

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B-NGF is a neurotrophic factor that signals through its receptor β -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 β -NGF is a pleiotropic cytokine; which in addition to its neurotrophic activities may have an important role in the regulation of the immune system. Human β -NGF shares 90% sequence similarity with mouse protein and shows cross-species reactivity.