

Recombinant Human β -NGF

Catalog No: CI51

Description	Recombinant Human beta-Nerve Growth Factor is produced by our Mammalian expression system and the target gene encoding Ser122-Arg239 is expressed.
Source	Human Cells
Alternative name	Beta-Nerve Growth Factor; Beta-NGF; NGF; NGFB
Accession No.	P01138
Formulation	Lyophilized from a 0.2 μ m filtered solution of 20mM PB, 250mM NaCl, pH 7.0.
Reconstitution	<p>Always centrifuge tubes before opening. Do not mix by vortex or pipetting.</p> <p>It is not recommended to reconstitute to a concentration less than 100μg/ml.</p> <p>Dissolve the lyophilized protein in distilled water.</p> <p>Please aliquot the reconstituted solution to minimize freeze-thaw cycles.</p>
Quality Control	<p>Purity: Greater than 90% as determined by reducing SDS-PAGE.</p> <p>Endotoxin: Less than 0.1 ng/μg (1 IEU/μg) as determined by LAL test.</p>
Shipping	<p>The product is shipped at ambient temperature.</p> <p>Upon receipt, store it immediately at the temperature listed below.</p>
Storage	<p>Lyophilized protein should be stored at < -20°C, though stable at room temperature for 3 weeks.</p> <p>Reconstituted protein solution can be stored at 4-7°C for 2-7 days.</p> <p>Aliquots of reconstituted samples are stable at < -20°C for 3 months.</p>
Amino Acid Sequence	SSSHPIFHRGEFSVCDSSVSVWVGDKTTATDIKGKEVMVLGEVNINNSVFKQYFFETKCRDPNPVDSGC RGIDSKHWNSYCTTT HTFVKALTM DGKQAAWRFIRIDTACVCVLSRKAVR

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. 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 neurotropic 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.

