



Product Datasheet

Product Name	Beta Nerve Growth Factor Mouse Recombinant
Cata No	CB501315
Source	<i>Escherichia Coli.</i>
Synonyms	Beta Polypeptide, NGF, NGFB, HSN5, Beta-NGF, MGC161426, MGC161428.

Description

NGF-beta has nerve growth stimulating activity and the complex is involved in the regulation of growth and the differentiation of sympathetic and certain sensory neurons. Mutations in this gene have been associated with hereditary sensory and autonomic neuropathy, type 5 (HSAN5), and dysregulation of this gene's expression is associated with allergic rhinitis. Nerve Growth Factor was the 1st protein found from the family of neurotrophic factors that influence the growth and differentiation of sympathetic and sensory neurons. NGF consists of 3 different subunits: alpha, beta, and gamma. The beta subunit is accountable for its growth stimulating activity. The synthesis of NGF in astrocytes is enhanced by a range of cytokines such as IL1, TNF-a, PDGF & TGF-b.

Recombinant Mouse b-NGF produced in E.Coli is a noncovalently disulfide-linked homodimer, non-glycosylated, polypeptide chain containing 2 identical chains of 120 amino acids each and having a molecular mass of 13,471 Dalton each. The Recombinant Mouse-beta-NGF is purified by advanced biology purification technology.

Physical Appearance

Sterile Filtered White lyophilized (freeze-dried) powder.

Biological Activity

The Mouse b-NGF activity was measured in a cell proliferation assay using a factor-dependent human

erythroleukemic cell line, TF-1, the ED₅₀ for this effect is 0.2 ng/ml.

Purity

Greater than 98% as determined by:

(a) Analysis by RP-HPLC.

(b) Analysis by SDS-PAGE .

Formulation

The Recombinant Mouse b-NGF was lyophilized without additives.

Reconstitution

It is recommended to reconstitute the lyophilized Murine NGF-beta in sterile 18MΩ-cm H₂O not less than 100µg/ml, which can then be further diluted to other aqueous solutions.

Stability

Lyophilized Mouse Beta-NGF although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution Murine NGF-Beta should be stored at 4°C between 2-7 days and for future use below -18°C.

Please prevent freeze-thaw cycles.

Sequence

MSSTHPVFHM GEFSVCDSVS VVVGDKTTAT
DIKGKEVTVL AEVNINNSVF RQYFFETKCR
ASNPVESGCR GIDSKHWNSY CTTTHTFVKA
LTTDEKQAAW RFIRIDTACV CVLSRKATRR G

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