



Product Datasheet

Product Name	Beta Nerve Growth Factor Human Recombinant
Cata No	CB501313
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-beta Human Recombinant produced in E.Coli is a non-covalently disulfide-linked homodimer, non-glycosylated, polypeptide chain containing 2 identical 121 amino acids with a molecular weight of two 13.6 kDa polypeptide monomers.

The NGF-b is purified by proprietary chromatographic techniques.

Physical Appearance

Sterile Filtered White lyophilized (freeze-dried) powder.

Biological Activity

The ED50, calculated by its ability to stimulate chick E9 DRG neurite outgrowth was found to be < 1.0 ng/ml, corresponding to a specific activity of > 1 x 10⁶ units/mg.

Purity

Greater than 95.0% as determined by:

(a) Analysis by RP-HPLC.

(b) Analysis by SDS-PAGE.

Formulation

The beta-NGF protein was lyophilized from a 0.2µm filtered solution containing no additives or preservatives.

Reconstitution

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

Stability

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

For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).

Please prevent freeze-thaw cycles.

Sequence

MSSSHPIFHRG EFSVCDSVSV WVGDKTTATD
IKGKEVMVLG EVNINNSVFK QYFFETKCRD
PNPVDGCRG IDSKHWNSYC TTTHTFVKAL
TMDGKQAAWR FIRIDTACVC VLSRKAVRRA