

β-Nerve Growth Factor

Human, Recombinant (NGF-β)

Expressed in *E. coli*

Cat. No. CRP0853

Lot. No. (See product label)

PRODUCT INFORMATION

Description: Nerve Growth Factor is the first of a series of neurotrophic factors that were found to influence the growth and differentiation of sympathetic and sensory neurons. It is comprised of alpha, beta, and gamma subunits. The beta subunit is responsible for its growth stimulating activity. The synthesis of NGF in astrocytes is enhanced by various other cytokines: IL-1, TNF-alpha, PDGF and TGF-beta. Human recombinant nerve growth factor is expressed in *E. coli*.

M. W. : 13,267.1 Da

Recombinant: Expressed in *E. coli*

Purity: ≥95% as determined by SDS-PAGE.

Activity: The activity assay was measured in culture using the PC-12 cell line.

PI: 8.81 by Isoelectricfocusing

Concentration: 0.5mg/ml by BCA

Component: rh-Nerve Growth Factor-β, NaAc 30 mM, pH 5.5

Endotoxin: less than 10EU/mg as determined by LAL method

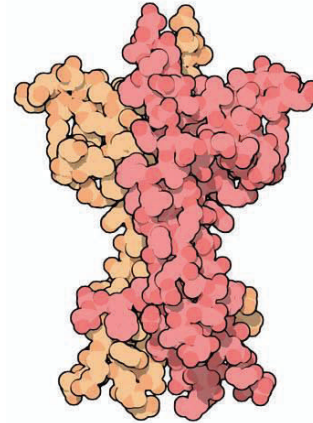
Storage buffer: Liquid. In PBS Buffer.

Storage: At 4°C for 6 months and -80°C for 2 years

REFERENCES

- Counts S, Mufson E. The role of nerve growth factor receptors in cholinergic basal forebrain degeneration in prodromal Alzheimer disease. *J Neuropathol Exp Neurol* 2005; 64 (4): 263–272.
- Hempstead B. Dissecting the diverse actions of pro- and mature neurotrophins. *Curr Alzheimer Res.* 2006; 3 (1): 19–24.

FOR RESEARCH USE ONLY



[PDB](#) rendering based on 1bet.

Available structures: [1bet](#), [1btg](#), [1sq1](#), [1www](#), [2ifg](#)

GENE INFORMATION

Gene Name: [NGF](#)

Synonyms: Beta-NGF; HSN5; MGC161426; MGC161428; NGFB; Beta-nerve growth factor precursor; beta-nerve growth factor; nerve growth factor, beta polypeptide; nerve growth factor, beta subunit, NGF_HUMAN.

Background: This gene is a member of the NGF-beta family and encodes a secreted protein which homodimerizes and is incorporated into a larger complex. This protein 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.

mRNA Refseq: [NM_002506](#)

Protein Refseq: [NP_002497](#)

MIM: [162030](#)

GeneID: [4803](#)

Uniprot ID: P01138

Chromosome Location: 1p13.1

Pathway: Apoptosis, MAPK signaling pathway, Signalling by NGF

Function: growth factor activity, nerve growth factor receptor binding, receptor signaling protein activity

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