

Active Recombinant Human Nerve Growth Factor (beta polypeptide)

Cat. No. NGF-573H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Human NGF-beta is a noncovalently disulfide-linked homodimer, consisting of 121 amino acids with a molecular weight of two 13.6 kDa polypeptide monomers.
Species	Human
Source	E.coli
Description	Human NGF-beta is a neurotrophic factor related to BDNF, NT-3 and NT-4. Human NGF-beta acts as a neurotrophic factor through its receptor beta-NGFR, and is involved in the development and sustaining the sensory and sympathetic nervous systems. H-NGFbeta also is also involved in the growth and differentiation of B lymphocytes and B-cell survival.
Form	Human NGF-beta is lyophilized with no additives.
Purity	Purity Greater than 97% as determined by: Analysis by RP-HPLC. Reducing and non-reducing SDS-PAGE.
Bio-activity	Biological activity is determined by the ability to stimulate neurite growth in chick E9 DRG cells. The ED50 is < 1.0 ng/ml.
Physical Appearance	Sterile Filtered white lyophilized (freeze-dried) powder.
Solubility	Centrifuge vial before opening. When reconstituting the product, gently pipet and

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

wash down the sides of the vial to ensure full recovery of the protein into solution. It is recommended to reconstitute the lyophilized product with sterile water at a concentration of 0.1 mg/ml, which can be further diluted into other aqueous solutions.

Purity Greater than 97% as determined by

Analysis by RP-HPLC. Reducing and non-reducing SDS-PAGE.

Protein Content determined by

Analysis by RP-HPLC calibrated against a known standard. Quantitation on SDS-PAGE against a known standard.

Endotoxin Level

Endotoxin level as measured by LAL is <0.01ng/ug or <0.1EU/ug.

Amino acid sequence

MSSSHPIFHRG EFSVCDSVSV WVGDKTTATD IKGKEVMVLG EVNINNSVFK
QYFFETKCRD PNPVDSGCRG IDSKHWNSYC TTTHTFVKAL TMDGKQAAWR
FIRIDTACVC VLSRKAVRR

Storage

Lyophilized product is very stable at -20 degrees. Reconstituted material should be aliquoted and frozen at -20. It is recommended to add a carrier protein (0.1% HSA or BSA) for long term storage.

Pathways

Apoptosis, MAPK signaling pathway, Signalling by NGF

GENE INFORMATION

Gene Name

NGF nerve growth factor (beta polypeptide) [Homo sapiens]

Official Symbol

NGF

Synonyms

NGF; nerve growth factor (beta polypeptide); NGFB; HSAN5; Beta-NGF;

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

MGC161426; MGC161428; Beta-nerve growth factor; nerve growth factor, beta subunit; nerve growth factor, beta polypeptide; beta-nerve growth factor; OTTHUMP00000013653

Gene ID 4803

mRNA Refseq NM_002506

Protein Refseq NP_002497

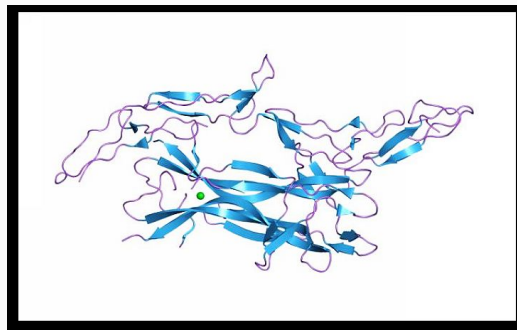
MIM 162030

UniProt ID P01138

Chromosome Location 1p13.1

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

Rendering of NGF from PDB 1SG1.



 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA