CELL APPLICATIONS, INC.

RECOMBINANT PROTEINS
Human Nerve Growth Factor beta

SIZE	CAT. NO.
20 ug	RP1038-20
100 ug	RP1038-100
1000 ug	RP1038-1000

BACKGROUND

Nerve Growth Factor (NGF-β) is a neurotrophic factor related to BDNF, NT-3 and NT-4. NGF-β acts through its receptor β-NGFR, and is involved in the development and maintenance of the sensory and sympathetic nervous systems. NGF-β also is also involved in the growth, differentiation and survival of B lymphocytes. Human, mouse and rat proteins show cross-reactivity.

Recombinant human NGF-β is a non-covalently linked homodimer, consisting of two 121 amino acids, with a total molecular weight of 27.2 kDa.

Alternative Names:
β-NGF

Amino Acid Sequence:
MSSSHPIFHRG EFSVCDSVSV WVGDKTTATD IKGKEVMVLG
EVNINNSVFK QYFFETKCRD PNPVDSGCRG IDSKHWNSYC
TTTHTFVKAL TMDGKQAAWR FIRIDTACVC VLSRKAVRRA

TECHNICAL INFORMATION

Source: *E.coli*

Physical Appearance:
Sterile Filtered white lyophilized (freeze-dried) powder.

Formulation:
Recombinant human NGF-β is lyophilized with no additives.

Stability:
Lyophilized product is very stable at -20°C. Reconstituted material should be aliquoted and frozen at -20°C. It is recommended that a carrier protein (0.1% HSA or BSA) is added for long term storage.

Reconstitution:
Centrifuge vial before opening. When reconstituting the product, gently pipet and 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.

Protein Content and Purity determined by:

- UV spectroscopy at 280 nm
- RP-HPLC calibrated against a known standard
- Quantitation against a known standard via reducing and non-reducing SDS-PAGE gels.

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

Biological Activity:
The activity is determined by the ability to stimulate neurite growth in chick E9 DRG cells and is less than 1.0 ng/mL.