

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 mouse NGF- β is a non-glycosylated, non-covalently linked homodimer, containing two 120 amino acid proteins and having a molecular mass of 13.5 kDa each.

Alternative Names:
beta-NGF

Amino Acid Sequence:
MSSTHPVFHM GEFSVCDSVS VWGDKTTAT DIKGKEVTVL
AEVNIINNSVF RQYFFETKCR ASNPVESGCR GIDSKHWNSY
CTTHTFVKA LTTDEKQAAW RFIRIDTACV CVLSRKATRR G

TECHNICAL INFORMATION

Source: *E.coli*

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

Formulation:
Recombinant mouse 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 as determined by the proliferation of TF-1 cells and is typically less than 1 ng/ml.

Products are for research use only. They are not intended for human, animal, or diagnostic applications.

