

# Neurotrophin-3, mouse recombinant (rmNT-3)

Catalog No: 97303 Lot No: XXXXX Source: *E. coli* 

Synonyms: Neurotrophic factor, Nerve growth factor-2, NGF-2, HDNF, NT-3, Neurotrophin-3, Ntf3, Ntf-3, Al316846,

AI835689, Nt3

#### **Background**

NT3 a member of the neurotrophin family, that controls survival and differentiation of mammalian neurons. This protein is closely related to both nerve growth factor and brain-derived neurotrophic factor. It may be involved in the maintenance of the adult nervous system, and may affect development of neurons in the embryo when it is expressed in human placenta. NTF3-deficient mice generated by gene targeting display severe movement defects of the limbs. The mature peptide of this protein is identical in all mammals examined including human, pig, rat and mouse.

### Description

Neurotrophin-3 mouse recombinant produced in *E. coli* is a single, non-glycosylated polypeptide chain containing 119 amino acids and having a molecular mass of 13.6 kDa. NT-3 is purified by proprietary chromatographic techniques.

#### **Physical Appearance**

Sterile filtered white lyophilized (freeze-dried) powder.

#### **Formulation**

Lyophilized from 0.02% TFA.

## Solubility

It is recommended to reconstitute the lyophilized NT-3 in sterile 18 M $\Omega$ -cm H $_2$ O not less than 100  $\mu$ g/ml, which can then be further diluted to other aqueous solutions.

## Stability

Lyophilized NGF2, although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution NGF-2 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.

# **Purity**

Greater than 97.0% as determined by (a) Analysis by RP-HPLC, (b) Analysis by SDS-PAGE.

# **Amino Acid Sequence**

YAEHKSHRGE YSVCDSESLW VTDKSSAIDI RGHQVTVLGE IKTGNSPVKQ YFYETRCKEA RPVKNGCRGI DDKHWNSQCK TSQTYVRALT SENNKLVGWR WIRIDTSCVC ALSRKIGRT

#### **Activity**

The activity, as determined by the dose-dependent proliferation of BaF3 cells transfected with the TrkB receptor, is typically in the range of 1-10 ng/ml, corresponding to a specific activity of 100,000 - 1,000,000 units/mg.





# Usage

This product is offered by Biomol for research purposes only. Not for diagnostic purposes or human use. It may not be resold or used to manufacture commercial products without written approval of Biomol GmbH.