

Neurotrophin-3, human recombinant (rHuNT-3)

Catalog No: 87368
Lot No: XXXXX
Source: E. coli

Synonyms: Neurotrophic factor, Nerve growth factor-2, NGF-2, HDNF, NT-3

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 human recombinant produced in *E. coli* is a non-glycosylated and non-covalently linked homodimer, containing 2x119 amino acid chains, having a total Mw of 27.2 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 Ω -cm H $_2$ O not less than 100 μ 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 ED50 as determined by the dose-dependant proliferation of C6 cells is $3.6 - 5.4 \,\mu\text{g/ml}$.





Usage

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