



*Recombinant Human NT-3*  
(Neurotrophin-3)

*Catalog Number: 100-99*  
*Accession Number: P20783*

*Specifications and Uses:*

**Alternate Names:** Neurotrophin 3, Nerve growth factor 2 (NGF-2), HGNF, NT3

**Description:**

Neurotrophin-3 (NT-3) is an important member of the nerve growth factor (NGF) family of proteins behind BDNF and NGF. It is thought to promote the survival or differentiation of existing and new neurons in the central nervous system and synapses. These functions are thought to be communicated by TrkC, a receptor tyrosine kinase thought induce NT-3-specific signaling. In addition, NT-3 is thought to also bind TrkB and low affinity nerve growth factor receptor (LNGFR). Recombinant human NT-3 is a non-glycosylated, non-covalently linked homodimer, containing two 119 amino acid chains, with a total molecular weight of 27.2 kDa.

**Source:** *E.coli*

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

**Formulation and Stability:**

Recombinant human NT-3 is lyophilized from 0.02% TFA.

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 (typically ≥ 97%) determined by:**

HPLC, Reducing and Non-reducing SDS-PAGE, UV spectroscopy at 280 nm

**Endotoxin Level:**

Measured by kinetic LAL analysis and is typically ≤ 1 EU/μg protein.

**Biological Activity:**

The activity is determined by the dose-dependent proliferation of C6 cells and is typically in the range of 1-5 μg/mL.

**AA Sequence:**

YAEHKSHRGE YSVCDSSESLW VTDKSSAIDI RGHQVTVLGE IKTGNSPVKQ YFYETRCKEA RPVKNGCRGI  
DDKHWSNQCK TSQTYVRALT SENNKLVGWR WIRIDTSCVC ALSRKIGRT

**THIS PRODUCT IS FOR RESEARCH USE ONLY AND IS NOT FOR USE IN HUMANS!**

Gentaur Molecular Products  
Voortstraat 49  
1910 Kampenhout, Belgium