



Recombinant Mouse NT-3
(Neurotrophin-3)

Catalog Number: 200-21
Accession Number: P20181

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 to induce NT-3-specific signaling. In addition, NT-3 is thought to also bind TrkB and low affinity nerve growth factor receptor (LNGFR). Recombinant mouse NT-3 is a non-glycosylated protein, containing 119 amino acids, with a molecular weight of 13.6 kDa.

Source: *E.coli*

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

Formulation and Stability:

Recombinant mouse 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, determined by the dose-dependent proliferation of BaF3 cells transfected with the TrkB receptor, is typically in the range of 1-10 ng/mL.

AA Sequence:

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

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

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