

**Product:** **Recombinant Mouse Neurotrophin-3 / NT-3**  
**Cat #: 300-340P**  
 Powder

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). Alternate names: Neurotophin 3, Nerve growth factor 2 (NGF-2), HGNF, NT3
MW	Non-glycosylated protein, non-covalently linked homodimer, containing two 119 amino acid chains, with a total molecular weight of 27.2 kDa.
Physical Appearance	Sterile filtered white lyophilized (freeze-dried) powder.
Source	<i>E. coli</i>
Formulation	Recombinant mouse NT-3 is lyophilized with no additives.
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.
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.
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.
Endotoxin Level	Measured by kinetic LAL analysis and is typically $\leq 1$ EU/ $\mu$ g protein.
AA Sequence	YAEHKSHRGE YSVCDSLESLW VTDKSSAIDI RGHQVTVLGE IKTGNPDKQ YFYETRCKEA RPKVNGCRGI DDKHWNSQCK TSQTYVRALT SENNKLVGWR WIRIDTSCVC ALSRKIGRT

Purity greater than 97% determined by HPLC, Reducing and Non-reducing SDS-PAGE, UV spectroscopy at 280 nm.

Protein content determined by HPLC, Reducing and Non-reducing SDS-PAGE, UV spectroscopy at 280 nm.

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