

Recombinant Human CNTF

(Ciliary Neurotrophic Factor)

Catalog Number: 100-59
Accession Number: P26441

Specifications and Uses:

Alternate Names: None

Description:

Ciliary Neurotrophic Factor (CNTF) is a neurotrophic factor that promotes the survival of various neuronal cell types and may play an important role in the injury response in the nervous system. CNTF, like FGF acidic, FGF basic, and PD-ECGF (platelet-derived endothelial cell growth factor), does not possess a signal sequence that would allow secretion of the factor by classical secretion pathways (endoplasmatic reticulum/Golgi system), but the mechanism underlying the release of CNTF is unknown. Recombinant human CNTF is a non-glycosylated protein, contains 199 amino acids, with a molecular weight of 22.7 kDa.

Source: E.coli

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

Formulation and Stability:

Recombinant human CNTF is lyophilized from 10 mM Na₂PO₄, pH 7.5.

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 $\geq 98\%$) determined by:

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

Endotoxin Level:

Measured by kinetic LAL analysis and is typically $\leq 1 \text{ EU/µg}$ protein.

Biological Activity:

The activity is determined by the dose-dependent stimulation of TF-1 cells and is typically 0.1-0.6 ng/mL.

AA Sequence:

MAFTEHSPLT PHRRDLCSRS IWLARKLRSD LTALTESYVK HQGLNKNINL DSADGMPVAS TDQWSELTEA ERLQENLQAY RTFHVLLARL LEDQQVHFTP TEGDFHQAIH TLLLQVAAFA YQIEELMILL EYKIPRNEAD GMPINVGDGG LFEKKLWGLK VLQELSQWTV RSIHDLRFIS SHQTGIPARG SHYIANNKKM

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

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