

# **Synonym**

CNTF,HCNTF,Ciliary neurotrophic factor

#### Source

Human CNTF Protein, premium grade(CNF-H5114) is expressed from E. coli cells. It contains AA Ala 2 - Met 200 (Accession # P26441-1).

Predicted N-terminus: Met

It is produced under our rigorous quality control system that incorporates a comprehensive set of tests including sterility and endotoxin tests. Product performance is carefully validated and tested for compatibility for cell culture use or any other applications in the early preclinical stage. When ready to transition into later clinical phases, we also offer a custom GMP protein service that tailors to your needs. We will work with you to customize and develop a GMP-grade product in accordance with your requests that also meets the requirements for raw and ancillary materials use in cell manufacturing of cell-based therapies.

#### **Molecular Characterization**

# CNTF(Ala 2 - Met 200) P26441-1

This protein carries no "tag".

The protein has a calculated MW of 22.9 kDa. The protein migrates as 26-27 kDa when calibrated against <u>Star Ribbon Pre-stained Protein Marker</u> under reducing (R) condition (SDS-PAGE).

## **Endotoxin**

Less than 0.1 EU per µg by the LAL method.

# **Sterility**

Negative

# Mycoplasma

Negative.

## **Purity**

>90% as determined by SDS-PAGE.

>90% as determined by SEC-MALS.

#### **Formulation**

Lyophilized from  $0.22 \mu m$  filtered solution in 50 mM Tris, 150 mM NaCl, pH8.0 with trehalose as protectant.

Contact us for customized product form or formulation.

### Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

# Storage

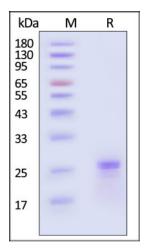
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

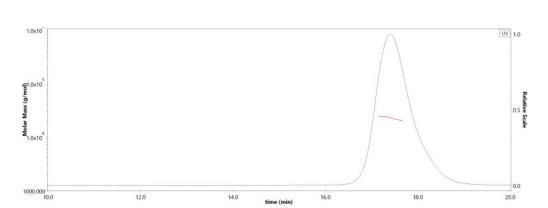
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

# **SDS-PAGE**



Human CNTF Protein, premium grade on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90% (With <u>Star Ribbon Pre-stained Protein Marker</u>).

## **SEC-MALS**



The purity of Human CNTF Protein, premium grade (Cat. No. CNF-H5114) is more than 90% and the molecular weight of this protein is around 17-27 kDa verified by SEC-MALS.

Report



# **Human CNTF Protein, premium grade**

Catalog # CNF-H5114



# Background

Ciliary Neurotrophic Factor (CNTF) is a polypeptide hormone and neurotrophic factor whose actions have mainly been studied in the nervous system where it promotes neurotransmitter synthesis and neurite outgrowth in certain neural populations including astrocytes. It is a hypothalamic neuropeptide that is a potent survival factor for neurons and oligodendrocytes and may be relevant in reducing tissue destruction during inflammatory attacks. A mutation in this gene, which results in aberrant splicing, leads to ciliary neurotrophic factor deficiency, but this phenotype is not causally related to neurologic disease. In addition to the predominant monocistronic transcript originating from this locus, the gene is also cotranscribed with the upstream ZFP91 gene. Cotranscription from the two loci results in a transcript that contains a complete coding region for the zinc finger protein but lacks a complete coding region for ciliary neurotrophic factor.

**Clinical and Translational Updates** 

