

# Recombinant human CNTF protein

Catalog Number: ATGP3316

## PRODUCT INFORMATION

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### Expression system

E.coli

### Domain

1-200aa

### UniProt No.

P26441

### NCBI Accession No.

NP\_000605

### Alternative Names

Ciliary neurotrophic factor

## PRODUCT SPECIFICATION

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### Molecular Weight

22.9 kDa (200aa) confirmed by MALDI-TOF

### Concentration

1mg/ml (determined by Bradford assay)

### Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 1mM DTT, 10% glycerol

### Purity

> 90% by SDS-PAGE

### Endotoxin level

< 1 EU per 1ug of protein (determined by LAL method)

### Biological Activity

Measured in a cell proliferation assay using TF-1 human erythroleukemic cells. The ED50 range  $\leq$ 500ng/ml.

### Tag

Non-Tagged

### Application

SDS-PAGE, Bioactivity

### Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

## BACKGROUND

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### Description

CNTF (Ciliary neurotrophic factor) is a polypeptide hormone whose actions appear to be restricted to the nervous

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system where it promotes neurotransmitter synthesis and neurite outgrowth in certain neuronal populations. This protein is a potent survival factor for neurons and oligodendrocytes and may be relevant in reducing tissue destruction during inflammatory attacks. CNTF protein is structurally related to leukemia inhibitory factor (LIF), interleukin-6 (IL-6), interleukin-11 (IL-11) and oncostatin M (OSM). It is localized in the cell nucleus subsequent to receptor binding. Recombinant human CNTF protein was expressed in *E. coli* and purified by using conventional chromatography techniques.

## Amino acid Sequence

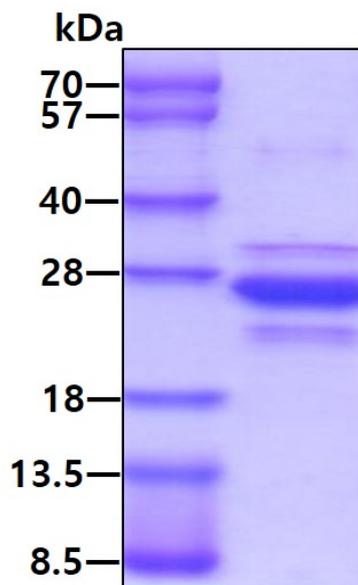
MAFTEHSPLT PHRRDLCSRS IWLARKIRSD LTALTESYVK HQGLNKNINL DSADGMPVAS TDQWSELTEA ERLQENLQAY  
RTFHVLLARL LEDQQVHFTP TEGDFHQAIH TLLQVAAFA YQIEELMILL EYKIPRNEAD GMPINVDGG LFEKLLWGLK  
VLQELSQWTV RSIHDLRFIS SHQTGIPARG SHYIANNKKM

## General References

Sendther M., et al. (1994) *J Neurobiol.* 25(11):1436-53.  
Robert F., et al. (2007) *J Biol Chem.* 282(46):33421-33434.

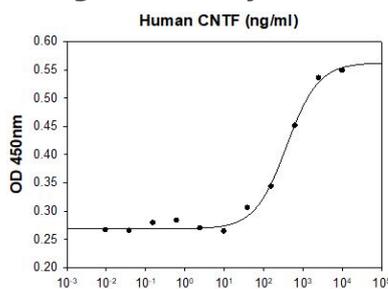
## DATA

### SDS-PAGE



3µg by SDS-PAGE under reducing condition and visualized by coomassie blue stain.

### Biological Activity



Human CNTF stimulates cell proliferation of the TF-1 human erythroleukemic cells. The ED50 range  $\leq 500$  ng/ml.