

Recombinant human CNTF protein

Catalog Number: ATGP3455

PRODUCT INFORMATION

Expression system

E.coli

Domain

1-200aa

UniProt No.

P26441

NCBI Accession No.

NP_000605

Alternative Names

Ciliary neurotrophic factor

PRODUCT SPECIFICATION

Molecular Weight

25 kDa (220aa) confirmed by MALDI-TOF

Concentration

1mg/ml (determined by Bradford assay)

Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.5) containing 1mM DTT, 30% glycerol, 0.2M NaCl

Purity

> 95% 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 cell. The ED50 range $\leq$ 1ug/ml.

Tag

His-Tag

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

Description

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

Recombinant human CNTF protein

Catalog Number: ATGP3455

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, fused to His-tag at N-terminus, was expressed in E. coli and purified by using conventional chromatography techniques.

Amino acid Sequence

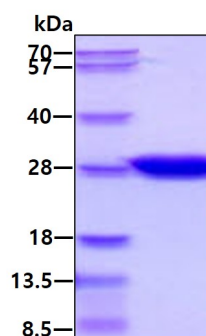
<MGSSHHHHHH SSGLVPRGSH> MAFTEHSPLT PHRRDLCSRS IWLARKIRSD LTALTESYVK HQGLNKNINL
DSADGMPVAS TDQWSELTEA ERLQENLQAY RTFHVLLARL LEDQQVHFTP TEGDFHQAIH TLLQVAAFA YQIEELMILL
EYKIPRNEAD GMPINVGDDG LFEKKLWGLK VLQELSQWTV RSIHDLRFIS SHQTGIPARG SHYIANNKKM

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



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

Biological Activity

Human CNTF in a cell proliferation assay using TF-1 human erythroleukemic cell. The ED50 range $\leq 1\mu\text{g/ml}$.

