Recombinant human CNTF protein

Catalog Number: ATGP3316

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
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 ≤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

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

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

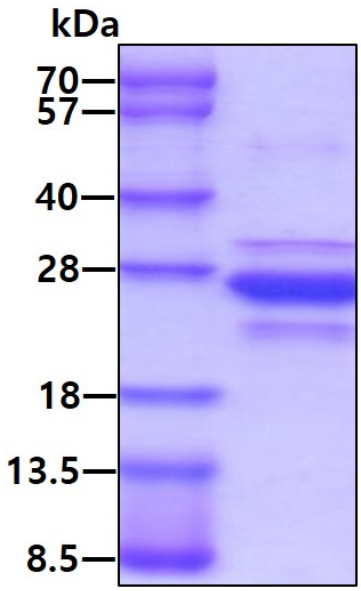
MAFTEHSPLT PHRRDLCSRS IWLARKIRSD LTALTESYVK HQGLNKNINL DSADGMPVAS TDQWSELTEA ERLQENLQAY RTFHVLLARL LEDQQVHFTP TEGDFHQAIH TLLLQVAAFA YQIEELMILL EYKIPRNEAD GMPINVGDGG LFEKKLWGLK VLQELSQWTV RSIHDLRFIS SHQTGIPARG SHYIANNKKM

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.

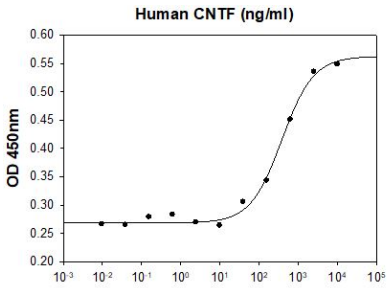
DATA

SDS-PAGE



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

Biological Activity



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