

Recombinant Rat CNTF Protein

Catalog No.: RP01671

Sequence Information

Species **Gene ID**
Rat 25707

Swiss Prot **Tags**
P20294 C-6His

Synonyms
CNTF

Product Information

Source **Purification**
E. coli ≥ 95 % as
 determined by
 SDS-PAGE.

Calculated MW **Observed MW**
23.69 kDa 25–30 kDa

Endotoxin
< 1 EU/μg of the protein by LAL
method.

Formulation
Lyophilized from a 0.22 μm filtered
solution of PBS, pH 7.4.

Reconstitution
Centrifuge the vial before opening.
Reconstitute to a concentration of
0.1–0.5 mg/mL in sterile distilled
water. Avoid vortex or vigorously
pipetting the protein. For long
term storage, it is recommended
to add a carrier protein or stabilizer
(e.g. 0.1% BSA, 5% HSA, 10% FBS
or 5% Trehalose), and aliquot the
reconstituted protein solution to
minimize free-thaw cycles.

Background

Ciliary neurotrophic factor (CNTF) is a member of the cytokine family. It is a polypeptide hormone that has functions in promoting neurotransmitter synthesis and neurite outgrowth in certain neuronal populations. Its actions appear to be restricted to the nervous system. Ciliary neurotrophic factor (CNTF) has biological effects through the activation of a multi-subunit receptor complex, consisting of an extracellular CNTF binding subunit (CNTFα) and two transmembrane signal transduction proteins: glycoprotein gp130 and LIF receptor. CNTF is considered as a potent survival factor of neurons and oligodendrocytes and may be relevant in reducing tissue destruction during inflammatory attacks. CNTF also is a survival factor for neurons of the peripheral sensory sympathetic and ciliary ganglia. It has been reported that CNTF could be an agent that has therapeutic potential and possibly induces differentiation of large multipolar ganglionic phenotype in a subset of progenitors.

Basic Information

Description

Recombinant Rat CNTF Protein is produced by *E. coli* expression system. The target protein is expressed with sequence (Met1–Met200) of rat CNTF (Accession #NP_037298.1) fused with and a 6×His tag at the C-terminus.

Activity

Measured in a cell proliferation assay using TF-1 human erythroleukemic cells. The ED₅₀ for this effect is 14.08–56.34 ng/mL.

Shipping

Lyophilized proteins are shipped at ambient temperature.
Liquid proteins are shipped at frozen temperature with dry ice.
Upon receipt, store it immediately at the temperature recommended below.

Storage

Store at –20°C

Operational Notes

For your safety and health, please wear a lab coat and disposable gloves for handling.

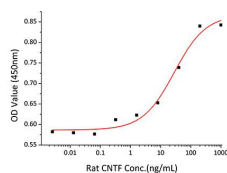
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☎ | 400-999-6126

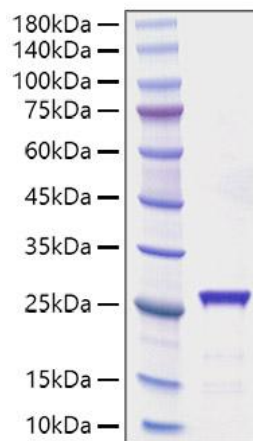
✉ | cn.market@abclonal.com.cn

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Validation Data



Recombinant Rat CNTF stimulates cell proliferation of the TF-1 human erythroleukemic cells. The ED_{50} for this effect is 14.08–56.34 ng/mL, corresponding to a specific activity of $6.25 \times 10^4 \sim 0.25 \times 10^6$ units/mg.



Recombinant Rat CNTF Protein was determined by SDS-PAGE under reducing conditions with Coomassie Blue.