

Recombinant Rat CNTF Protein

Catalog No.: RP01671 **Recombinant**

Sequence Information

Species Rat **Gene ID** 25707 **Swiss Prot** P20294

Tags

C-6His

Synonyms

CNTF

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 (CNTF α) 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.

Product Information

Source *E. coli*

Purification
 $\geq 95\%$ as determined by SDS-PAGE.

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

Endotoxin

< 1 EU/ μ g of the protein by LAL method.

Formulation

Lyophilized from a 0.22 μ m 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 freeze/thaw cycles.

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 6xHis tag at the C-terminus.

Bio-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

The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.

Storage

Store at -20°C. Store the lyophilized protein at -20°C to -80 °C up to 1 year from the date of receipt.

After reconstitution, the protein solution is stable at -20°C for 3 months, at 2-8°C for up to 1 week.

Avoid repeated freeze/thaw cycles.

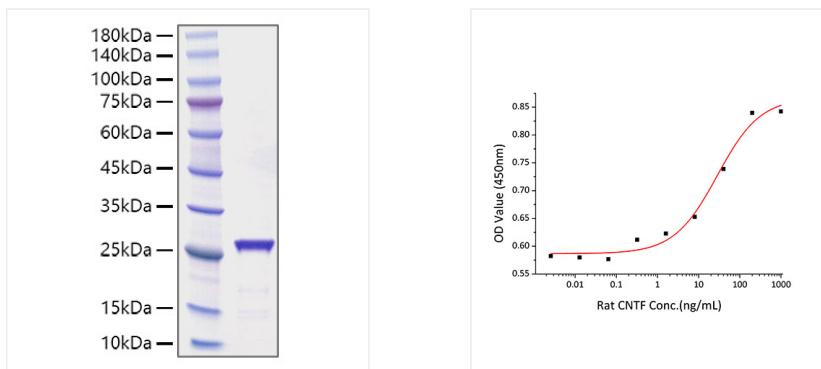
Operational Notes

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

Contact

	400-999-6126
	cn.market@abclonal.com.cn
	www.abclonal.com.cn

Validation Data



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

Recombinant Rat CNTF stimulates cell proliferation of the TF-1 human erythroleukemic cells. The ED₅₀ 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.