

Catalog No.: RP01671 **Recombinant**

Species	Gene ID	Swiss Prot
Rat	25707	P20294

C-6His

CNTF

Source	Purification
<i>E. coli</i>	≥ 95 % as determined by SDS-PAGE.

Calculated MW	Observed MW
23.69 kDa	25-30 kDa


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

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

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.

 | 400-999-6126

 | cn.market@abclonal.com.cn

 | www.abclonal.com.cn

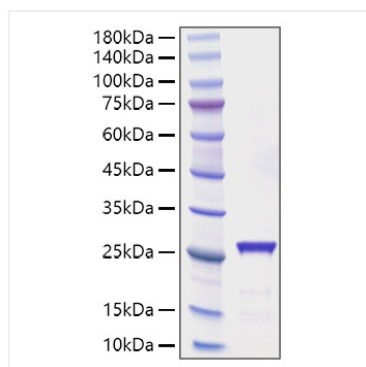
Ciliary neurotrophic factor (CNTF) is a member of the cytokine family. It is a polypeptide hormone that has functions in promoting neurotransmitter synthesis and neurite outgrowth in certain neuronal populations. Its actions appear to be restricted to the nervous system. Ciliary neurotrophic factor (CNTF) 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.

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.

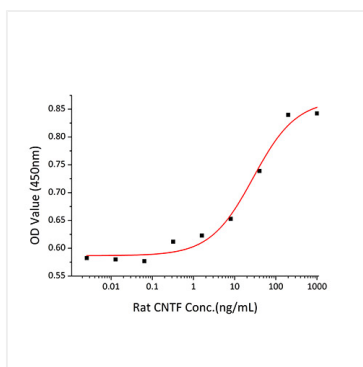
Measured in a cell proliferation assay using TF-1 human erythroleukemic cells. The ED₅₀ for this effect is 14.08-56.34 ng/mL.

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.

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 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.