Cntf
Recombinant Mouse Ciliary Neurotrophic Factor (His Tag)

Catalog No.	CRM754A-His	**Quantity:**	20 µg
	CRM754B-His		100 µg
	CRM754C-His		1.0 mg

Alternate Names: Ciliary neurotrophic factor, CNTF

Description: Ciliary neurotrophic factor (CNTF) is a member of the cytokine family. It is a polypeptide hormone that have functions in promoting neurotransmitter synthesis and neurite outgrowth in certain neuronal populations. It's actions appear to be restricted to the nervous system. CNTF has biological effects through the activation of a multi- subunit receptor complex, consisting of an extracelluar CNTF binding subunit (CNTFα) and two transmembrane signal transduction proteins: glycoprotein gp13 and LIF receptor. CNTF is considered as a potent survival factor of neurons and oligodendrocyteands 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.

UniProt ID: P51642

Accession Number: NP_740756.1

Protein Construction: A DNA sequence encoding the mouse CNTF (Ala2-Met198) was expressed with a polyhistidine tag at the N-terminus.

Source: E. coli

Formulation: Lyophilized from sterile PBS, pH 7.4.
Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization.

Molecular Weight: The rmCNTF consists of 215 aa with a predicted MW of 24.7 kDa and migrates at ~25 kDa in SDS-PAGE under reducing conditions.

Purity: > 95 % as determined by SDS-PAGE.

Biological Activity: 1. In a functional ELISA, immobilized mouse CNTF at 10 µg/ml (100 µl/well) binds biotinylated rat CNTFR-His. The EC50 of biotinylated rat CNTFR-His is 5-12 ng/ml.
2. In a cell proliferation assay using TF-1 human erythroleukemic cells, the ED50 for this effect is typically 0.1-0.5 µg/mL.

Predicted N-terminal: His

Reconstitution: **Centrifuge vial prior to opening.** Add sterile distilled water to a concentration of 0.1 mg/mL and gently pipette the solution up and down the sides of the vial.
DO NOT VORTEX. Allow several minutes for complete reconstitution.

Storage & Stability: Stable for up to 1 year from date of receipt at -20°C to -80°C
After reconstitution, store working aliquots at -20°C to -80°C.
Avoid repeated freeze-thaw cycles.

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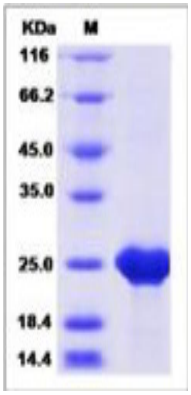
SDS-PAGE



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