

CNTF

Recombinant Human Ciliary Neurotrophic Factor

Catalog No.	CRC400A	Quantity:	5 µg
	CRC400B		20 µg
	CRC400C		1.0 mg

Alternate Names: CNTF

Description: Ciliary Neurotrophic Factor (CNTF) 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. The protein is a potent survival factor for neurons and oligodendrocytes and may be relevant in reducing tissue destruction during inflammatory attacks. CNTF has also been shown to prevent the degeneration of motor axons after axotomy. CNTF is highly conserved across species and exhibits cross-species activity.

Recombinant Human CNTF is a single non-glycosylated polypeptide chain containing 200 amino acids.

Gene ID: 1270

UniProtKB: P26441

Source: *E. coli*

Molecular Weight: Monomer, 22.9 kDa (200 aa)

Formulation: Lyophilized from a sterile-filtered solution containing 10 mM sodium phosphate, pH 7.5

Purity: >95% by reducing and non-reducing SDS-PAGE

Endotoxin Level: 0.06 EU/µg

Biological Activity: The protein has full biological activity when compared to the standard. The ED₅₀, as determined by the dose-dependent stimulation of TF-1 cells, 30.6 ng/mL.

Specific Activity: 3.3 x 10⁴ units/mg

Amino Acid Sequence: MAFTEHSPLT PHRRDLCSRS IWLARKLRSD LTALTESYVK HQGLNKNINL
DSADGMPVAS TDQWSELTEA ERLQENLQAY RTFHVLLARL LEDQQVHFTP
TEGDFHQAIH TLLLQVAAFA YQIEELMILL EYKIPRNEAD GMPINVDGG
LFEKKLWGLK VLQELSQWTV RSIHDLRFIS SHQTGIPARG SHYIANNKKM

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

Storage & Stability: **Upon receipt**, store desiccated at -20 °C for up to one year. **Upon reconstitution**, the preparation is stable for up to one month at 2-8 °C. **For long term storage** reconstitute in working aliquots containing 0.1% BSA and store at -80 °C. **Avoid repeated freeze-thaw cycles**

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