

32-1113: rCNTF Recombinant Protein

Alternative Name : HCNTF,CNTF,Ciliary Neurotrophic Factor.

Description

Source : Escherichia Coli. CNTF Recombinant Rat produced in E.Coli is a single, non-glycosylated polypeptide chain containing 200 amino acids and having a molecular mass of 22834 Dalton. The CNTF is purified by proprietary chromatographic techniques. 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. A mutation in this gene, which results in aberrant splicing, leads to ciliary neurotrophic factor deficiency, but this phenotype is not causally related to neurologic disease. In addition to the predominant monocistronic transcript originating from this locus, the gene is also co-transcribed with the upstream ZFP91 gene. Co-transcription from the two loci results in a transcript that contains a complete coding region for the zinc finger protein but lacks a complete coding region for ciliary neurotrophic factor. CNTF is a survival factor for various neuronal cell types. Seems to prevent the degeneration of motor axons after axotomy.

Product Info

Amount :	25 µg
Purification :	Greater than 99.0% as determined by:(a) Analysis by Gel Filtration.(b) Analysis by SDS-PAGE.
Content :	Lyophilized from a concentrated (1mg/ml) solution in water containing 0.025% NaHCO ₃ .
Storage condition :	Lyophilized CNTF although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution CNTF should be stored at 4°C between 2-7 days and for future use below -18°C. Please prevent freeze-thaw cycles.
Amino Acid :	AFAEQTPLTL HRRDLSSRSIWLARKIRSDLTALMESYVKHQGLNKNINLDSVDGVPVASTDRWSEMTEAERLQENLQAYRTFQ GMLTKLLEDQRVHFTPTGDFHQAIHTLMLQVSAFAYQLEELMVLEQKIPENEADGMPATVGDGGLFEKKLW GLKVLQELSQWTVRSIHDLRVISSHQMGISALESHYGAKDKQM.

Application Note

It is recommended to reconstitute the lyophilized CNTF in sterile water or 0.4% NaHCO₃ adjusted to pH 8-9, not less than 100 µg/ml, which can then be further diluted to other aqueous solutions, preferably in presence of carrier protein. Fully biologically active by its ability to phosphorylate STAT3 in several cells lines.

