

CNTF Human, His Active

Ciliary Neurotrophic Factor Human Recombinant, His Tag Active
NTR0015

Product Overview

Name CNTF Human, His Active

Description

Ciliary Neurotrophic Factor Human Recombinant, His Tag Active

Accession (Primary) [P26441](#)

Synonyms

HCNTF, CNTF, Ciliary Neurotrophic Factor.

Introduction

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.

Source

Escherichia Coli.

Physical Appearance

Sterile Filtered White lyophilized (freeze-dried) powder.

Formulation

Lyophilized from a 0.2 µm filtered concentrated solution in PBS, pH 7.4.

Stability

Lyophilized Ciliary Neurotrophic Factor 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.

Purity

Greater than 97.0% as determined by: (a) Analysis by RP-HPLC. (b) Analysis by SDS-PAGE.

Amino acid sequence

MAFAEQSPLT LHRDLCSRS IWLARKIRSD LTALMESYVK HQGLNKNISL DSVDGVPVAS TDRWSEMTA
ERLQENLQAY RTFQGMLTKL LEDQRVHFTP TEGDFHQAIH TLTLQVSAFA YQLEELMALL EQKVPEKEAD
GMPVTIGDGG LFEKKLWGLK VLQELSQWTV RSIHDLRVIS SHHMGISAHE SHYGAKQM

Biological Activity

Fully biologically active when compared to standard. The ED50 as determined by the dose-dependant stimulation of TF-1 cells is less than 35ng/ml, corresponding to a Specific Activity of 3.0×10^4 IU/mg.

Solubility

It is recommended to reconstitute the lyophilized CNTF in sterile 18M-cm H₂O not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.

Precautions

CNTF Human, His Active is for research use only and not for use in diagnostic or therapeutic procedures.

Target Information: ([P26441](#))