

Product Data Sheet

Product Name: CNTF Rat
 Cat. No.: GP20138
 Batch No.: 1

Product Data

Purity	>98%	Source	Es
Physical Appearance	solid	Shipping Condition	SI

Synonyms HCNTF; CNTF; Ciliary Neurotrophic Factor.

Amino Acid AFAEQTPLTL

Sequence HRRDLSSRSIWLARKIRSDLTALMESYVKHQGLNKNINLDSVDGVPVASTDRWSEMTEAERLQENLQAYRTFQGMLTKLLEDQRVHFTPTGDFHQAIH

Solubility It is recommended to reconstitute the lyophilized CNTF in sterile water or 0.4% NaHCO₃ adjusted to pH 8-9, not less than 100µg/ml

Formulation Lyophilized from a concentrated (1mg/ml) solution in water containing 0.025% NaHCO₃.

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.

Biological Activity

Fully biologically active by its ability to phosphorylate STAT3 in several cells lines.

Stability

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.

Background

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.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA