

## RayBiotech, Inc.

3607 Parkway Lane suite 100 Norcross, GA 30092 Tel: 770-729-2992, 1-888-494-8555

Fax: 770-206-2393

Website: www.raybiotech.com Email: info@raybiotech.com

# Certificate of Analysis and Data Sheet

# Recombinant Human Ciliary Neurotrophic Factor, Histagged

| (   |  | 27        | \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\  | $\sim >$ |
|-----|--|-----------|---|----------|
| <   | Catalog No.                            | $\approx$ | Source                                  | $\sim$   |
| <   | 228-10262                              | <u></u>   | Escherichia coli.                       | ~ %      |
| _ < | `````````````````````````````````````` | $\gtrsim$ | >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>> | \$\$\    |

#### **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. It seems to prevent the degeneration of motor axons after axotomy.

## Description

Ciliary Neurotrophic Factor Recombinant Human produced in E. coli is a single, non-glycosylated polypeptide chain containing 220 amino acids and having a molecular mass of 25 kDa. The CNTF protein is fused to His Tag at N-terminus. The CNTF is purified by proprietary chromatographic techniques.

# Physical Appearance

Sterile Filtered colorless clear solution at a concentration of 1mg/ml.

#### **Formulation**

CNTF His tag protein solution contains 20mM Tris buffer pH-8 and 1mM DTT.

#### Stability

CNTF his tag fusion protein although stable  $4^{\circ}$ C for 1 week, should be stored desiccated below -18°C. Please prevent freeze-thaw cycles.

The products are furnished for LABORATORY RESEARCH USE ONLY.

Not for diagnostic or therapeutic use.



# RayBiotech, Inc.

3607 Parkway Lane suite 100 Norcross, GA 30092

Tel: 770-729-2992, 1-888-494-8555

Fax: 770-206-2393

Website: www.raybiotech.com Email: info@raybiotech.com

#### **Purity**

Greater than 95.0% as determined by

- (a) Analysis by RP-HPLC.
- (b) Analysis by SDS-PAGE.

### Amino acid sequence

MGSSHHHHHH SSGLVPRGSH MAFTEHSPLT PHRRDLCSRS IWLARKIRSDLTALTESYVK HQGLNKNINL DSADGMPVAS TDQWSELTEA ERLQENLQAY RTFHVLLARL LEDQQVHFTP TEGDFHQAIH TLLLQVAAFA YQIEELMILL EYKIPRNEAD GMPINVGDGG LFEKKLWGLK VLQELSQWTV RSIHDLRFIS SHQTGIPARG SHYIANNKKM.