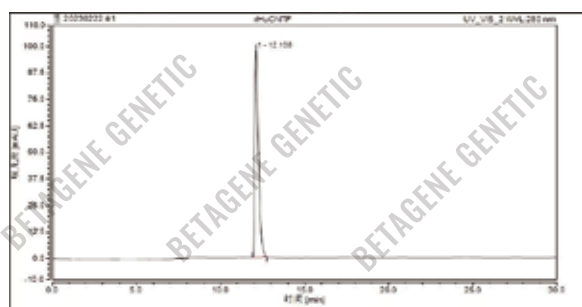


RECOMBINANT HUMAN CNTF TAG-FREE GMP

Physical Appearance	Sterile Filtered White lyophilized (freeze-dried) powder.
Gene ID	1270
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. It was initially identified as a trophic factor for embryonic chick ciliary parasympathetic neurons in culture. The protein is also a potent survival factor for neurons and oligodendrocytes and may be relevant in reducing tissue destruction during inflammatory attacks. In addition, CNTF is useful for treatment of motor neuron disease, and it could reduce food intake without causing hunger or stress.
Catalog Number	GE13.1/GE13.2
Unit Size	50µg/100µg
Source	E. coli
Molecular Weight	Approximately 22.9 kDa, a single non-glycosylated polypeptide chain containing 200 amino acids
AA Sequence	MAFTEHSPLTPHRRDLCSRSIWLARKIRSDLTALTESYVKHQGLNKNINLDSADGMPVASTDQWSELTEAERLQENLQAYRTFHVLLARLLEDQQVH FTPTEGDFHQAIHTLLQVAAFAYQIEELMILLEYKIPRNEADGMPINVDGGLFEKKLWGLKVLQELSQWTVRSIHDLRFISSHTGIPARGSHYIANN KKM
Purity (HPLC)	> 97%
Purity (SDS-PAGE)	> 97%
Biological Activity	Measured in a cell proliferation assay using TF-1 human erythroleukemic cells. The ED ₅₀ for this effect is 0.03-0.15 µg/mL, corresponding to a specific activity of ≥ 6.7 × 10 ³ Units/mg.
Host Cell DNA Residue	< 0.02 ng/µg of protein tested by DNA Fluorescent Staining method.
Host Cell Protein Residue	< 0.5 ng/µg of protein tested by ELISA.
Formulation	Lyophilized from a 0.2µm filtered concentrated solution in PBS, pH 7.4.
Sterility	Negative
Endotoxin	< 0.01EU/µg as determined by LAL gel-clot method.
Mycoplasma	Negative
Reconstitution	Before use this product, please read the direction below carefully. 1. This vial must be briefly centrifuged prior to opening to bring the contents to the bottom. 2. Reconstitute in a sterile aqueous buffer to an appropriate concentration. 3. Stock solutions should be apportioned into working aliquots and stored at ≤ -20 °C. Further dilutions should be made in appropriate buffered solutions.
Stability & Storage	For long term storage, the product should be stored ≤ -20 °C. Please avoid repeated freeze-thaw cycles after reconstitution. 1. At least 24 months from date of receipt, ≤ -20 °C as supplied; 2. 1 month, 2 to 8 °C under sterile conditions after reconstitution; 3. 3 months, -20 to -70 °C under sterile conditions after reconstitution.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended.



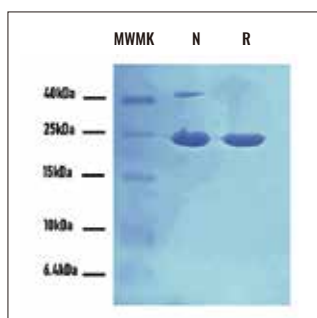
DATA



Purity of Recombinant Human CNTF

HPLC

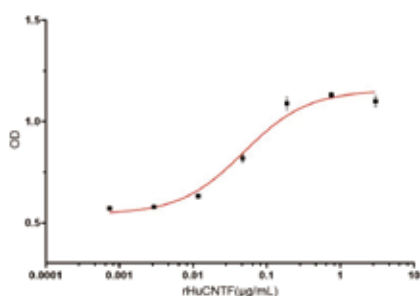
HPLC analysis of Recombinant Human CNTF. The major peak corresponds to the calculated purity of > 97%.



Purity of Recombinant Human CNTF

SDS-PAGE

5 µg/lane of Recombinant Human CNTF was resolved with SDS-PAGE under reducing (R) and non-reducing (NR) conditions and visualized by Coomassie® Blue staining, showing R band at 23kDa.



Bioactivity of Recombinant Human CNTF

The bioactivity of recombinant Human CNTF is measured in a cell proliferation assay using TF-1 human erythroleukemic cells. The ED₅₀ for this effect is 0.03-0.15 µg/mL, corresponding to a specific activity of $\geq 6.7 \times 10^3$ Units/mg.

CONTENTS

Product	Cat. No.	Amount	Storage	Shelf life
Recombinant Human CNTF (GMP-Grade)	GE13.1 GE13.2	50µg 100µg	≤-20°C	24 months

LIMITED WARRANTY

BETAGENE™ Genetic and/or its affiliate(s) warrant their products as set forth in the BETAGENE Genetic' General Terms and Conditions of Sale. If you have any questions, please contact our staff at SALES@betagene.com.

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