

# PRODUCT DATA SHEET



Bioworld Technology, Inc.

## Recombinant CNTF, Human(HEK 293-expressed)

Catalog Number: BK0300-50µg

Source: HEK 293

Quantity: 50µg

### Description:

Ciliary neurotrophic factor (CNTF) is a polypeptide initially purified from chick embryo ocular tissue and identified as a trophic factor for embryonic chick ciliary parasympathetic neurons in culture. Subsequent studies have demonstrated that CNTF is a survival factor for additional neuronal cell types including: dorsal root ganglion sensory neurons, sympathetic ganglion neurons, embryonic motor neurons, major pelvic ganglion neurons and hippocampal neurons. CNTF has also been shown to prevent the degeneration of motor axons after axotomy. The gene for human CNTF has been localized to the proximal region of the long arm of chromosome 11. CNTF is highly conserved across species and exhibits cross-species activities. Human and rat CNTF share approximately 83% homology in their protein sequence. CNTF is structurally related to IL-6, IL-11, LIF and OSM. All of these four helix bundle cytokines share gp130 as a signal-transducing subunit in their receptor complexes.

### Molecular Weight:

22~28 kDa, observed by reducing SDS-PAGE.

### Purity:

> 95% as analyzed by SDS-PAGE.

### Biological Activity:

ED50 < 0.20 µg/ml, measured in a cell proliferation assay using TF-1 cells.

### Physical Appearance:

Sterile Filtered White lyophilized (freeze-dried) powder.

### Formulation:

Lyophilized after extensive dialysis against PBS.

### AA Sequence:

MAFTEHSPLTPHRRDLCSRSIWLARKIRSDL-  
TALTESYVKHQGLNKNINLDSADG-  
MPVASTDQWSEL-  
TEAERLQENLQAYRTFHVLLAR-  
LLEDQVHFTPTEGDFHQAIHTLLLQVAFA-  
YQIEELMILLEYKIPRNEADGMPINVGDG-  
GLFEKKLWGLKVLQELSQWTVRSIHDLRFISSHQ  
TGIPARGSHYIANNKKM

### Endotoxin:

< 0.2 EU/µg, determined by LAL method.

### Reconstitution:

Reconstituted in ddH2O or PBS at 100 µg/ml.

### Storage:

Lyophilized recombinant Human Ciliary Neurotrophic Factor (CNTF) remains stable up to 6 months at -80 °C from date of receipt. Upon reconstitution, Human Ciliary Neurotrophic Factor (CNTF) should be stable up to 1 week at 4 °C or up to 2 months at -20 °C.

### Usage:

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