

## Ciliary Neurotrophic Factor (CNTF), Human

**Cat.no.** PK0116

**Product size:** 10ug 50ug 1mg

**Source:** HEK 293

**Species:** Human

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

**Molecular Weight:** 22~28 kDa, observed by reducing SDS-PAGE.

**Formulation:** Lyophilized after extensive dialysis against PBS.

**Reconstitution:** Reconstituted in ddH<sub>2</sub>O at 100 µg/mL.

**Purity:** > 95% as analyzed by SDS-PAGE and HPLC.

**Endotoxin Level:** < 0.2 EU/µg, determined by LAL method.

**Storage:** Lyophilized recombinant Human Ciliary Neurotrophic Factor (CNTF) remains stable up to 6 months at lower than -70°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.

**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.

**Amino Acid Sequence:**

00001 MAFTEHSPLT PHRRDLCRSR IWLARKIRSD LTALTESYVK  
00041 HQGLNKNINL DSADGMPVAS TDQWSELTEA ERLQENLQAY  
00081 RTFHVLLARL LEDQQVHFTP TEGDFHQAIH TLLLQVAafa  
00121 YQIEELMILL EYKIPRNEAD GMPINVGDDG LFEKKLWGLK  
00161 VLQELSQWTV RSIHDLRFIS SHQTGIPARG SHYIANNKMM

**Synonyms:** Ciliary neurotrophic factor

**Note:** For research use only, not for use in diagnostic procedure.