

Rev04
Update: Mar,01,2022

DATASHEET

CNTF, Human(HEK 293-expressed)

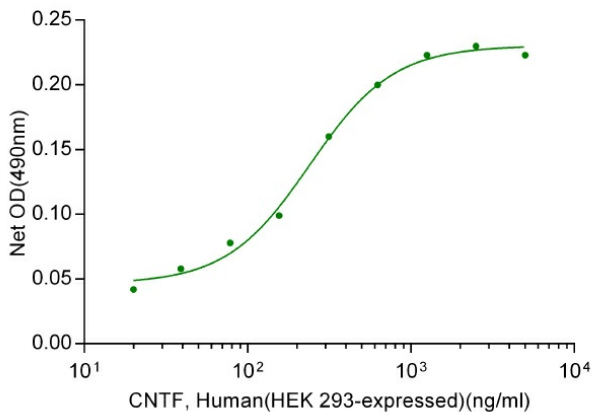
Cat. No.: Z03071

Product Introduction

Species	Human
Protein Construction	CNTF (Met1-Met200) Accession # P26441-1
Purity	> 95% as analyzed by SDS-PAGE
Endotoxin Level	< 0.2 EU/μg of protein by gel clotting method
Biological Activity	ED ₅₀ < 0.2 μg/ml, measured in a cell proliferation assay using TF-1 cells.
Expression System	HEK 293
Apparent Molecular Weight	22~28 kDa, on SDS-PAGE under reducing conditions.
Formulation	Lyophilized after extensive dialysis against PBS.
Reconstitution	It is recommended that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute the lyophilized powder in ddH ₂ O or PBS up to 100 μg/ml.
Storage & Stability	Upon receiving, this product remains stable for up to 6 months at lower than -70°C. Upon reconstitution, the product should be stable for up to 1 week at 4°C or up to 3 months at -20°C. For long term storage it is recommended that a carrier protein (example 0.1% BSA) be added. Avoid repeated freeze-thaw cycles.

Examples

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



Background

Target Background : 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.

Synonyms : Ciliary Neurotrophic Factor

For laboratory research use only. Direct human use, including taking orally and injection and clinical use are forbidden.