Rev03
Update: Dec,14,2021

DATASHEET

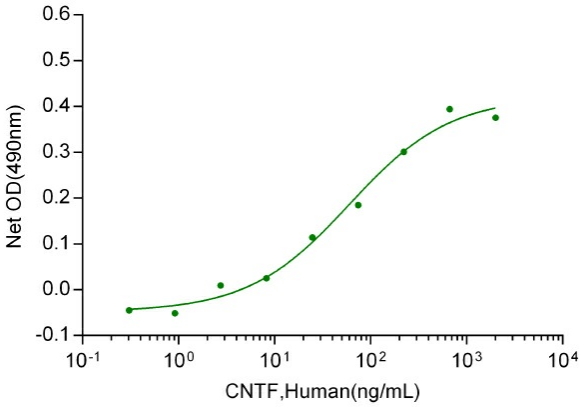
CNTF, Human

Cat. No.: Z03139

Product Introduction

Species	Human
Protein Construction	CNTF (Ala2-Met200) Accession # P26441-1
Purity	> 95% as analyzed by SDS-PAGE > 95% as analyzed by HPLC
Endotoxin Level	< 0.2 EU/μg of protein by gel clotting method
Biological Activity	ED_{50} < 200.0 ng/ml, measured cell proliferation assay using TF-1 cells, corresponding to a specific activity of > 5.0×10^3 units/mg.
Expression System	E. coli
Apparent Molecular Weight	~22.8 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_2O 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



ED_{50}< 200 ng/ml, measured cell proliferation assay using TF-1 cells, corresponding to a specific activity of > 5×10^{3} units/mg.

Background

Target Background : Ciliary Neurotrophic Factor (CNTF) is a cytokine belonging to the Interleukin 6 (IL-6) family, which also includes IL-6, Oncostatin M, Leukemia Inhibitory Factor (LIF), and Cardiotrophin-1. Structurally, CNTF resembles a four-helix bundle composition, similar to the other members of the IL-6 family. The receptor for CNTF is composed of three parts: a gp130-like subunit common in the IL-6 receptor family, a LIF Receptor β subunit, and a CNTF specific α receptor subunit. Upon binding to the CNTF, the β subunit of the CNTF receptor will undergo tyrosine phosphorylation, and activate the intracellular JAK/STAT pathway. The main function of CNTF in vivo is to promote the differentiation and survival of a variety of neurons and glial cells, including sympathetic precursor cells and spinal motor neurons.

Synonyms : Ciliary Neurotrophic Factor

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