

Recombinant Human CNTF protein(His Tag)

Catalog Number: PKSH034176

Note: Centrifuge before opening to ensure complete recovery of vial contents.

Description

Species	Human
Source	E.coli-derived Human CNTF protein Met 1-Met 200, with an C-terminal His
Calculated MW	23.7 kDa
Observed MW	25 kDa
Accession	P26441
Bio-activity	Measure by its ability to induce proliferation in TF-1 cells. The ED ₅₀ for this effect is <0.15 µg/mL.

Properties

Purity	> 98 % as determined by reducing SDS-PAGE.
Endotoxin	< 0.01 EU per µg of the protein as determined by the LAL method.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80 °C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from sterile PBS, pH 7.4. Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Background

Ciliary neurotrophic factor(CNTF) is a member of the cytokine family. It is a polypeptide hormone that have functions in promoting neurotransmitter synthesis and neurite outgrowth in certain neuronal populations. It's actions appear to be restricted to the nervous system. Ciliary neurotrophic factor(CNTF) has biological effects through the activation of a multi-subunit receptor complex, consisting of an extracellular CNTF binding subunit(CNTFα) and two transmembrane signal transduction proteins: glycoprotein gp130 and LIF receptor. CNTF is considered as a potent survival factor of neurons and oligodendrocytes and may be relevant in reducing tissue destruction during inflammatory attacks. CNTF is also a survival factor for neurons of the peripheral sensory sympathetic, and ciliary ganglia. It has been reported that CNTF could be an agent that has therapeutic potential and possibly induces differentiation of large multipolar ganglionic phenotype in a subset of progenitors.