Recombinant Rat CNTF

Cat No:HR2R2246

For research use only

Overview

Quantity	100 ?g
Gene Symbol	CNTF
Gene ID	25707
Accession	P20294
Alternative Name	CNTF Recombinant Rat Ciliary Neurotrophic Factor (CNTF)
Species	Rat
Source	E. coli
Description	CNTF is found predominantly in peripheral nerve tissues. The main source appears to be myelin-associated Schwann cells in peripheral nerves and astrocytes in the central nervous system. CNTF is present at very high concentrations within intraocular tissues that contain the same muscle cells innervated by ciliary ganglionic neurons in vivo. CNTF receptors are expressed exclusively in the nervous system and skeletal muscle. The alpha subunit of the receptor is anchored to the cell membrane by a glycosyl-phosphatidylinositol linkage. The other receptor subunit, known as gp130, is also a component of receptors for LIF, Oncostatin M, IL-6 and IL-11, and seems to be involved also in signaling for CT-1. CNTF induces the expression of genes encoding hepatic acute phase proteins such as Haptoglobin, Alpha-1-antichymotrypsin, Alpha-2-Macroglobulin and Beta-fibrinogen in human hepatoma cells (HepG2) and in primary rat hepatocytes with a time course and dose-response comparable with that of IL-6.
Functions	The ED(50) was determined by the dose-dependent proliferation of human TF1 cells was found to be in the range of 2-10 ng/ml.
Formulation	Recombinant Rat Ciliary Neurotrophic Factor was lyophilized from a 0.2 ?m filtered PBS pH 7.5.
Solubility	A quick spin of the vial followed by reconstitution in distilled water to a concentration not less than 0.1 mg/mL. This solution can then be diluted into other buffers.
Appearance	Lyophilized Powder
Molecular Weight	22
Purity	>95% as determined by SDS-PAGE
Concentration	< 1.0 EU/?g of recombinant protein as determined by the LAL method.
Shipping Condition	Ambient Temperature

Storage Condition	The lyophilized protein is stable for at least one year from date of receipt at -70?C. Upon reconstitution, this cytokine can be stored in working aliquots at 2? - 8?C for one month, or at -20?C for six months, with a carrier protein without detectable loss of activity. Avoid repeated freeze/thaw cycles.