

Recombinant Rat Ciliary Neurotrophic Factor (Rat CNTF)

Product Information

Product Name	Cat#	Size
Recombinant Rat Ciliary Neurotrophic Factor (Rat CNTF)	92125ES08	5 µg
	92125ES60	100 µg
	92125ES76	500 µg

Product Description

Ciliary neurotrophic factor (CNTF) is one of a small number of proteins with neurotrophic activities distinct from nerve growth factor (NGF). The cDNA for human CNTF encodes a 200 amino acid residue polypeptide that lacks a signal sequence. Recombinant human CNTF containing 200 amino acids and it shares 82% and 83% a.a. sequence identity with mouse and rat CNTF. The protein is a potent survival factor for neurons and oligodendrocytes and may be relevant in reducing tissue destruction during inflammatory attacks. In addition, CNTF is useful for treatment of motor neuron disease and it could reduce food intake without causing hunger or stress. CNTF is structurally related to IL-6, IL-11, LIF and OSM. Among factors belonging to the CNTF family, CNTF, leukemia inhibitory factor, cardiotrophin-1, and oncostatin M induced a strong promyelinating effect.

Product Properties

Synonyms	ciliary neurotrophic factor, CNTF, HCNTF
Accession	P20294
GeneID	25707
Source	E.coli-derived rat CNTF, Ala2-Met200.
Molecular Weight	Approximately 22.7 kDa.
AA Sequence	AFAEQTPLTL HRRDLCSRSI WLARKIRSDL TALMESYVKH QGLNKNINLD SVDGVPVAST DRWSEMTEAE RLQENLQAYR TFQGMLTKLL EDQRVHFTPT EGDHFQAIHT LMLQVSAFAY QLEELMVILLE QKIPENEADG MPATVGDGGL FEKKLWGLKV LQELSQWTVR SIHDLRVISS HQMGISALES HYGAKDKQM
Tag	None
Physical Appearance	Sterile Filtered White lyophilized (freeze-dried) powder.
Purity	>95% by SDS-PAGE and HPLC analyses.
Biological Activity	The ED ₅₀ as determined by a cell proliferation assay using human TF-1 cells is less than 30 ng/mL, corresponding to a specific activity of > 3.3 × 10 ⁴ IU/mg. Fully biologically active when compared to standard.
Endotoxin	< 1.0 EU per 1µg of the protein by the LAL method.
Formulation	Lyophilized from a 0.2 µm filtered concentrated solution in 2 × PBS, pH 7.4, 2% trehalose. We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom.
Reconstitution	Reconstitute in sterile distilled water or aqueous buffer containing 0.1% BSA to a concentration of 0.1 mg/mL. Stock solutions should be apportioned into working aliquots and stored at ≤ -20°C. Further dilutions should be made in appropriate buffered solutions.

Shipping and Storage

The products are shipped with ice pack and can be stored at -20°C to -80°C for 1 year.

Recommend to aliquot the protein into smaller quantities when first used and avoid repeated freeze-thaw cycles.

Cautions

1. Avoid repeated freeze-thaw cycles.
2. For your safety and health, please wear lab coats and disposable gloves for operation.
3. For research use only!