

# Recombinant Rat CNTF

<b>CATALOG #:</b>	4019-20	20 µg
	4019-100	100 µg
	4019-1000	1 mg
<b>SYNONYMS:</b>	HCNTF, CNTF, Ciliary Neurotrophic Factor Natriuretic	
<b>SOURCE:</b>	<i>E. coli</i>	
<b>PURITY:</b>	> 99 % by SDS-PAGE and Gel Filtration	
<b>FORM:</b>	Lyophilized from 0.025 % NaHCO <sub>3</sub>	

**RECONSTITUTION:**

Centrifuge the vial prior to opening. Reconstitute in sterile ddH<sub>2</sub>O or 0.4 % NaHCO<sub>3</sub> adjusted to pH 8-9 to a concentration ≥ 100 µg/ml. This solution can then be diluted into other aqueous buffer, preferably in the presence of carrier protein.

**STORAGE CONDITIONS:**

The lyophilized protein is best-stored desiccated at -20°C. The reconstituted CNTF should be stored at 4°C for 2-7 days and as working aliquots at -20°C for future use. Avoid freeze/thaw cycles.

**DESCRIPTION:**

CNTF is a polypeptide hormone whose actions appear to be restricted to the nervous system where it promotes neurotransmitter synthesis and neurite outgrowth in certain neuronal populations. The protein is a potent survival factor for neurons and oligodendrocytes and may be relevant in reducing tissue destruction during inflammatory attacks. A mutation in this gene, which results in aberrant splicing, leads to ciliary neurotrophic factor deficiency, but this phenotype is not causally related to neurologic disease. CNTF is a survival factor for various neuronal cell types and seems to prevent the degeneration of motor axons after axotomy. CNTF Recombinant Rat produced in *E.Coli* is a single, non-glycosylated polypeptide chain containing 200 amino acids and having a molecular mass of 22834 Dalton. The CNTF is purified by proprietary chromatographic techniques.

**AMINO ACID SEQUENCE:**

AFAEQPTLTLHRRDLSSRSIWLARKIRSDLTALMESYVKHQGLNKNINLDSVDGVPVASTDRW  
SEMTEAERLQENLQAYRTFQGMMLTKLLEDQRVHFTPTGEDFHQAIHTLMLQVSAFAYQLEEL  
MVLLEQKIPENADGMPATVGDGGLFEKLLWGLKVLQELSQWTVRSIHDLRVISSHQMGISAL  
ESHYGAQDKQM

**BIOLOGICAL ACTIVITY:**

Fully biologically active by its ability to phosphorylate STAT3 in several cells lines.

**FOR RESEARCH USE ONLY! Not to be used in humans.**

**RELATED PRODUCTS:**

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- Nuclear Apoptosis Kits & Reagents
- Apoptosis Inducers and Set
- Apoptosis siRNA Vectors

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- Nuclear/Cytosol Fractionation Kit
- Membrane Protein Extraction Kit
- Cytosol/Particulate Rapid Separation Kit
- Mammalian Cell Extraction Kit
- FractionPREP Fractionation System

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