

PRODUCT DATA SHEET



Bioworld Technology, Inc.

Recombinant CNTF, Rat

Catalog Number: BK0019-1mg

Source: Escherichia coli.

Quantity: 1mg

Description:

Ciliary Neurotrophic Factor (CNTF) is a polypeptide hormone which acts within the nervous system where it promotes neurotransmitter synthesis and neurite outgrowth in certain neuronal populations. CNTF is a potent survival factor for neurons and oligodendrocytes and may play a role in reducing tissue damage during increased inflammation. A mutation in this gene, which results in aberrant splicing, leads to ciliary neurotrophic factor deficiency, however this phenotype is not causally related to neurologic disease. Recombinant Rat Ciliary Neurotrophic Factor (CNTF) produced in E. coli is a single, non-glycosylated polypeptide chain of 199 amino acids and a molecular mass of 22.9 kDa. It has been purified by chromatographic techniques.

Molecular Weight:

22.9 kDa, observed by reducing SDS-PAGE

Purity:

> 95% as analyzed by SDS-PAGE.

Biological Activity:

ED50 < 30ng/ml, measured by its ability to induce alkaline phosphatase production by TF-1 Cells.

Physical Appearance:

Sterile Filtered White lyophilized (freeze-dried) powder.

Formulation:

Lyophilized after extensive dialysis against 50mM Tris, pH 8.0.

AA Sequence:

AFAEQTPLTLHRRDLCSRSIWLARKIRSDL-
TALMESYVKHQGLNKNINLD
SVDGVPVASTDRWSEMTE-
AERLQENLQAYRTFQGMCLKLLEDQRVHFTPT
EGDFHQAIHTLMLQVSAFA-
YQLEELMVLLEQKIPENEADGMPATVGDGGL
FEKKLWGLKVLQELSQWTVRSIHDLRVISSHQM
GISALESHYGAKDKQM

Endotoxin:

< 0.2 EU/μg, determined by LAL method.

Reconstitution:

Reconstituted in ddH₂O at 100 μg/ml.

Storage:

Lyophilized recombinant Rat CNTF remains stable up to 6 months at -80 °C from date of receipt. Upon reconstitution, rCNTF should be stable up to 1 week at 4 °C or up to 3 months at -20 °C.

Usage:

This material is offered by USA Bioworld biotech for research, laboratory or further evaluation purposes. For research use only.