

TECHNICAL DATA SHEET

# Recombinant Human CNTF (Carrier-free)

Catalog Number: 21-7028

## RPx-Pro™ Recombinant Protein

### PRODUCT INFORMATION

#### CONTENTS

Recombinant Human CNTF (Carrier-free)

#### DESCRIPTION

Ciliary neurotrophic factor (CNTF) is a nerve growth factor that functions as a survival factor for various neuronal cell types. CNTF also promotes neurotransmitter synthesis and neurite outgrowth in certain populations of neurons.

#### MOLECULAR MASS

Recombinant human CNTF is synthesized as a 199 amino acid polypeptide (22.8 kDa) lacking a hydrophobic N-terminal signal for secretion.

#### AMINO ACID SEQUENCE

AFTEHSPLTP HRRDLCSRSI WLARKIRSDL TALTQSYVKH QGLNKNINLD SADGMPVAST DQWSQLTQAQ RLQQNLQAYR  
TFHVLLARLL QDQQVHFTPT QGDFHQAIHT LLLQVAAFAY QIQQLMILLQ YKIPRNQADG MPINVGDGGL FQKKLWGLKV  
LQQLSQWTVR SIHDLRFISS HQTGIPARGS HYIANNKKM

#### SOURCE

E. coli

#### APPLICATIONS

Bioassay

#### PURITY

98 %

#### STORAGE

-20°C

#### PROTEIN CONTENT

Content Verified by UV Spectroscopy and/or SDS-PAGE

#### ENDOTOXIN LEVEL

Endotoxin level is <0.1 ng/μg of protein (<1 EU/μg).

#### AUTHENTICITY

Verified by N-terminal and Mass Spectrometry analyses (when applicable).

#### CROSS REACTIVITY

Hamster, Mouse, Rat

#### BIOACTIVITY

Determined by its ability to stimulate proliferation of human TF-1 cells using an ED<sub>50</sub> concentration range of 50-150 ng/ml.

#### RESEARCH AREAS

Angiogenesis/Cardiovascular; Apoptosis; Bone, Skeletal, Cartilage; Diabetes / Weight Regulation; Neurobiology; Wound Healing; Inflammation; Stem Cells & Differentiation

#### RECONSTITUTION

See Certificate of Analysis (COA) for lot specific reconstitution information.

#### REFERENCES

Vergara C, Ramirez B. 2004. Brain Res Brain Res Rev. 47(1-3): 161-173. Rhee KD, Nusinowitz S, Chao K, Yu F, Bok D, Yang XJ. 2013. Proc Natl Acad Sci U S A. 110(47): E4520-4529.

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