

TECHNICAL DATA SHEET

# Recombinant Human beta-NGF (Carrier-free)

Catalog Number: 21-7007

**RPx-Pro™ Recombinant Protein**

PRODUCT INFORMATION

**CONTENTS**

Recombinant Human beta-NGF (Carrier-free)

**DESCRIPTION**

Beta-NGF (Nerve Growth Factor) is a neurotrophic factor that is involved in the development of sympathetic and some sensory neurons in the peripheral nervous system. Beta-NGF also plays a role in the maintenance of neurons in the adult central nervous system. In addition to these roles in the nervous system, beta-NGF is also implicated in regulation of immune system cells.

**MOLECULAR MASS**

The functional form of human beta-NGF is a noncovalently disulfide-linked homodimer, of two 13.5 kDa polypeptide monomers (240 total amino acid residues). The three disulfide bonds are required for biological activity.

**AMINO ACID SEQUENCE**

SSSHPIFHRG EFSVCDSVSV WVGDKTTATD IKGKEVMVLG EVNINNSVFK QYFFETKCRD PNPVDSGCRG IDSKHWNSYC  
TTTHTFVKAL TMDGKQAAWR FIRIDTACVC VLSRKAVRRA

**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**

Chicken, Hamster, Mouse, Rat

**BIOACTIVITY**

Determined by its ability to stimulate chick E9 DRG neurite outgrowth. The ED<sub>50</sub> is ≤ 1.0 ng/ml, corresponding to a specific activity of ≥ 1 x 10<sup>6</sup> units/mg.

**RESEARCH AREAS**

Angiogenesis/Cardiovascular; Chemotaxis; Diabetes / Weight Regulation; Neurobiology; Wound Healing; Inflammation; Stem Cells & Differentiation

**RECONSTITUTION**

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

**REFERENCES**

Varon S, Hagg T, Manthorpe M. 1991. Adv Exp Med Biol. 296: 267-276. Micera A, Puxeddu I, Aloe L and Levi-Schaffer F. 2003. Cytokine Growth Factor Rev. 14(5): 369-374.

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