

TECHNICAL DATA SHEET

# Recombinant Human Neurturin (Carrier-free)

Catalog Number: 21-7118

**RPx-Pro™ Recombinant Protein**

PRODUCT INFORMATION

**CONTENTS**

Recombinant Human Neurturin (Carrier-free)

**DESCRIPTION**

Neurturin (NTN) is a secreted protein belonging to the family of neurotrophic factors that includes GDNF, persephin (PSP) and artemin, all distantly related to the TGF-beta superfamily. Similar to GDNF, neurturin is a secreted protein that exhibits strong trophic activity on dopaminergic neurons. It also promotes the development and survival of sympathetic and sensory neurons. Neurturin signals through the receptor tyrosine kinase (RET)/GFR-alpha 2 receptor complex, although it can also bind GFR-alpha 1 at higher concentrations.

**MOLECULAR MASS**

Recombinant Human Neurturin is a disulfide-linked homodimer consisting of two 102 amino acid monomers of 11.8 kDa each.

**AMINO ACID SEQUENCE**

ARLGARPCGL RELEVRVSEL GLGYASDETV LFRYCAGACE AAARVYDLGL RRLRQRRRLR RERVRAQPCC RPTAYEDEVS  
FLDAHSRYHT VHELARECA CV

**SOURCE**

E. coli

**APPLICATIONS**

Bioassay

**PURITY**

98 %

**STORAGE**

-20°C

**PROTEIN CONTENT**

Verified by UV Spectroscopy and/or SDS-PAGE gel.

**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**

Mouse, Rat

**BIOACTIVITY**

100 ng/ml of recombinant human neurturin will support the survival of 65% of sympathetic neurons from newborn rat.

**RESEARCH AREAS**

Neurobiology, TGF-beta Superfamily

**RECONSTITUTION**

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

**REFERENCES**

Kotzbauer PT, Lampe PA, Heuckeroth RO, Golden JP, Creedon DJ, Johnson EM Jr and Milbrandt J. 1996. Nature. 384(6608): 467-470. Takahashi and M. 2001. Cytokine and Growth Factor Rev. 12(4): 361-373. Yoong LF, Wan G and Too HP. 2006. J Neurochem. 98(4): 1149-1158.

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