

#### **TECHNICAL DATA SHEET**

# **Recombinant Mouse Neuropoietin (Carrier-free)**

Catalog Number: 21-7116

RPx-Pro<sup>™</sup> Recombinant Protein

PRODUCT INFORMATION

#### **CONTENTS**

Recombinant Mouse Neuropoietin (Carrier-free)

# **DESCRIPTION**

Neuropoietin, also known as Cardiotrophin-2, is a secreted protein belonging to the IL-6 family of cytokines. It signals through a CNTF receptor complex consisting of CNTFR alpha, LIFR and gp130, resulting in the activation of the STAT3 pathway. Neuropoietin plays an important role in development of the nervous system. It has also been reported to sustain survival of motor neurons and affect adipogenesis and fat cell function. It is selectively expressed only during embryonic life, detected primarily in neuroepithelia and later in retina.

# **MOLECULAR MASS**

Recombinant Mouse Neuropoietin consists of 183 amino acids, generating a protein with a molecular weight of 19.8 kDa.

#### **AMINO ACID SEQUENCE**

MAPISPSEPI GQAYSLALYM QKNTSALLQT YLQHQGSPFS DPGFSAPELQ LSTLPSAAVS FKTWHAMEDA ERLSRAQGAF LALTQHLQLV GDDQSYLNPG SPILLAQLGA ARLRAQGLLG NMAAIMTALG LPIPPEEDTL GFVPFGASAF ERKCRGYIVT REYGHWTDRA VRDLALLKAK YSA

SOURCE APPLICATIONS PURITY STORAGE
E. coli Bioassay 98 % -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**

### **BIOACTIVITY**

The dose-dependent stimulation of human TF-1 cell proliferation was used to determine an ED<sub>50</sub> of 0.5-0.8 µg/ml.

# **RESEARCH AREAS**

Neurobiology

# **RECONSTITUTION**

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

#### **REFERENCES**

Derouet D, Rousseau F, Alfonsi F, Froger J, Hermann J, Barbier F, Perret D, Diveu C, Guillet C, Preisser L, et al. 2004. Proc Natl Acad Sci. 101(14): 4827 -4832. Rousseau F, Chevalier S, Guillet C, Ravon E, Diveu C, Froger J, Barbier F, Grimaud L and Gascan H. 2008. J Biol Chem. 283(44): 30341-30350. White UA and Stephens JM. 2010. Biochem Biophys Res Commun. 395(1): 48-50.

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