

TECHNICAL DATA SHEET

Recombinant Human MANF (Carrier-free)

Catalog Number: 21-7111

RPx-Pro™ Recombinant Protein

PRODUCT INFORMATION

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Recombinant Human MANF (Carrier-free)

DESCRIPTION

Mesencephalic astrocyte-derived neurotrophic factor (MANF), also known as ARMET or ARP, is a secreted protein belonging to the ARMET family. It is localized to the Golgi apparatus and the endoplasmic reticulum (ER), and has been reported to play a role in modulating myocardial damage from ER stress and has been called a cardiomyokine. MANF, like its structural homolog CDFN, has been described as a survival factor for midbrain dopaminergic neurons in vitro and in vivo.

MOLECULAR MASS

Recombinant Human MANF comprises 8 cysteine residues and consists of 158 amino acids. It has a molecular weight of approximately 18.1 kDa.

AMINO ACID SEQUENCE

LRPGDCEVCI SYLGRFYQDL KDRDVTFSPA TIENELIKFC REARGKENRL CYYIGATDDA ATKIINEVSK PLAHHIPVEK ICEKLVKKKDS QICELKYDKQ IDLSTVDLKK LRVKELKKIL DDWGETCKGC AEKSDYIRKI NELMPKYAPK AASARTDL

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

BIOACTIVITY

The expected ED₅₀ for this effect is 15-25 µg/ml, based on its ability to stimulate the proliferation of rat C6 cells.

RESEARCH AREAS

Neurobiology

RECONSTITUTION

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

REFERENCES

Shridhar V, Rivard S, Shridhar R, Mullins C, Bostick L, Sakr W, Grignon D, Miller OJ and Smith DI. 1996. *Oncogene*. 12: 1931-1939. Petrova PS, Raibekas A, Pevsner J, Vigo N, Anafi M and Moore MK. 2003. *J Mol Neurosci*. 20: 173-187. Tdimalla A, Belmont PJ, Thuerauf DJ, Glassy MS, Martindale JJ, Gude N, Sussman MA and Glembotski CC. 2008. *Circ Res*. 103(11): 1249-1250. Glembotski CC. 2011. *J Mol Cell Cardiol*. 51(4): 512-517. Lindholm P, Peränen J, Andressoo JO, Kalkkinen N, Kokaia Z, Lindvall O, Timmusk T and Saarma M. 2008. *Mol Cell Neurosci*. 39(3): 356-71. Lindholm P and Saarma M. 2010. *Dev Neurobiol*. 70(5): 360-371.

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