

TECHNICAL DATA SHEET

# Recombinant Mouse GDNF (Carrier-free)

Catalog Number: 21-8505

**RPx-Pro™ Recombinant Protein**

PRODUCT INFORMATION

**CONTENTS**

Recombinant Mouse GDNF (Carrier-free)

**DESCRIPTION**

Glial Cell derived Neurotrophic Factor (GDNF) is a highly conserved neurotrophic factor. It is a novel member of the TGF-beta superfamily that has been shown to promote survival of various neuronal subpopulations in both the central as well as the peripheral nervous systems at different stages of development. Upregulated expression of GDNF was observed in various cancer cell lines and correlates with malignant cancer progression, suggesting a role of GDNF in carcinogenesis. The mature form of GDNF is a secreted protein that exists as a disulfide-linked homodimeric glycoprotein.

**MOLECULAR MASS**

Recombinant mouse GDNF has a calculated molecular weight of 30.4 kDa.

**AMINO ACID SEQUENCE**

MSPDKQAAAL PRRERNRQAA AASPENSRGK GRRGQRGKNR GCVLTAIHLN VTDLGLGYET KEELIFRYCS GSCESAETMY DKILKNLSRS RRLTSDKVGQ ACCRPVAFDD DLSFLDDNLV YHILRKHS AK RCGCI

**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**

Rat

**BIOACTIVITY**

The ED<sub>50</sub> of ≤ 0.2 ng/ml corresponds to a specific activity of ≥ 5 x 10<sup>6</sup> units/mg, based on a proliferation assay using rat C6 cells.

**RESEARCH AREAS**

Angiogenesis & Cardiovascular, Differentiation, Neurobiology, Stem Cells, TGF-beta Superfamily

**RECONSTITUTION**

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

**REFERENCES**

Gash DM, Zhang Z, Ovadia A, Cass WA, Yi A, Simmerman L, Russell D, Martin D, Lapchak PA, Collins F, Hoffer BJ and Gorhardt GA. 1996. Nature 380: 252-255. Anitha M, Gondha C, Sutliff R, Parsadanian A, Mwangi S, Sitaraman SV and Srinivasan S. 2006. J. Clin. Invest. 116(2): 344-356. Sariola H and Saarma M. 2003. J. Cell Sci. 116: 3855-62.

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