

TECHNICAL DATA SHEET

Recombinant Human FGF-18 (Carrier-Free)

Catalog Number: 21-9029

RPx-Pro™ Recombinant Protein
PRODUCT INFORMATION

CONTENTS

Recombinant Human FGF-18 (Carrier-Free)

DESCRIPTION

FGF-18 is a heparin binding growth factor that belongs to the FGF family. Proteins of this family play a central role during prenatal development, postnatal growth and regeneration of a variety of tissues, by promoting cellular proliferation and differentiation. FGF-18 is an essential regulator of long bone and calvarial development. FGF-18 signals through FGFR 1c, 2c, 3c, and 4.

MOLECULAR MASS

Recombinant Human FGF-18 derived from E.coli is a 20.1 kDa protein consisting of 173 amino acid residues, resulting from C-terminal truncation of the full length protein.

AMINO ACID SEQUENCE

AEENVDFRI HVENQTRARD DVSRKQLRLY QLYSRTSGKH IQVLGRRISA RGEDGDKYAQ LLVETDTFGS QVRIKGGKETE FYLCMNRKGGK LVGKPDGTSK ECVFIEKMLE NNYTALMSAK YSGWYVGFTK KGRPRKGPKT RENQQDVHFM KRYPKGQPEL QKPFKYTTVT KRSR

SOURCE

E.coli

APPLICATIONS

Bioassay

PURITY

95 %

STORAGE

-20°C

PROTEIN CONTENT

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

ENDOTOXIN LEVEL

Endotoxin level is <0.1 ng/µg of protein (<1EU/µg).

AUTHENTICITY

Verified by N-terminal and Mass Spectrometry analyses (when applicable).

CROSS REACTIVITY

Human, Mouse, Rat

BIOACTIVITY

The ED50 as determined by the dose-dependent stimulation of thymidine uptake by BaF3 cells expressing FGF-receptors is ≤ 0.5 ng/ml, corresponding to a specific activity of ≥ 2 x 10⁶ units/mg.

RESEARCH AREAS

Proliferation, Stem Cells & Differentiation, Angiogenesis/Cardiovascular, FGF Superfamily

RECONSTITUTION

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

REFERENCES

Reinhold, M.I. FGF18 represses noggin expression and is induced by calcineurin. 2004. The Journal of Biological Chemistry; 279(37):38209-19. Davidson, D. Fibroblast growth factor (FGF) 18 signals through FGF receptor 3 to promote chondrogenesis. 2005. The Journal of Biological Chemistry; 280(21):20509-15.

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