

TECHNICAL DATA SHEET

Recombinant Mouse FGF-23 (Carrier-Free)

Catalog Number: 21-9210

RPx-Pro™ Recombinant Protein

PRODUCT INFORMATION

CONTENTS

Recombinant Mouse FGF-23 (Carrier-Free)

DESCRIPTION

The FGF family plays a central role during prenatal development, postnatal growth, and the regeneration of a variety of tissues, by promoting cellular proliferation and differentiation. FGF-23, FGF-21 and FGF-19 constitute an atypical FGF subfamily whose ligands act as circulating hormones and require the participation of a Klotho protein as a co-receptor for their signaling. FGF-23 is a bone-derived hormone that acts in the kidney to regulate phosphate homeostasis and vitamin D metabolism.

MOLECULAR MASS

Recombinant Mouse FGF-23 is a 25.5 kDa globular protein containing 228 amino acid residues.

AMINO ACID SEQUENCE

MYPDTSPLLG SNWGLSLTHLY TATARTSYHL QIHRDGHVDG TPHQTIYSAL MITSSEDAGSV VITGAMTRRF LCMDLHGNI F GSLHFSPENC KFRQWTLENG YDVYLSQKHH YLVS LGRAKR IFQPGTNPPP FSQFLARRNE VPLLHFYTVR PRRHTRSAED PPERDPLNVL KPRPRATPVP VSCSRELPSA EEGGPAASDP LGVLRGRGRGD ARGGAGGADR CRPFPRFV

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

Mouse, Rat

BIOACTIVITY

Determined by its ability to stimulate the proliferation of Mouse NIH-3T3 cells. The expected ED50 for this effect is 0.3-0.5 ug/ml, in the presence of Mouse Klotho and heparin.

RESEARCH AREAS

Proliferation, Stem Cells & Differentiation, Angiogenesis/Cardiovascular, Bone, Skeletal, Cartilage, FGF Superfamily

RECONSTITUTION

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

REFERENCES

Sun, Y. Elevated serum 1,25(OH)₂-vitamin D₃ level attenuates renal tubulointerstitial fibrosis induced by unilateral ureteral obstruction in kl/kl mice. 2014. Scientific Reports; 4:6563. Jimbo, R. Fibroblast growth factor 23 accelerates phosphate-induced vascular calcification in the absence of Klotho deficiency. 2014. Kidney International; 85(5):1103-11.

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