TECHNICAL DATA SHEET

Recombinant Mouse FGF-23 (Carrier-Free)

Catalog Number: 21-9210

RPx-Pro™ Recombinant Protein

PRODUCT INFORMATION

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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 SNWGSLTHLY TATARTSYHL QIHRDGHVDG TPHQTIYSAL MITSEDAGSV VITGAMTRRF LCMDLHGNIF GSLHFSPENC KFRQWTLENG YDVYLSQKHH YLVSLGRAKR IFQPGTNPPP FSQFLARRNE VPLLHFYTVR PRRHTRSAED PPERDPLNVL KPRPRATPVP VSCSRELPSA EEGGPAASDP LGVLRRGRGD ARGGAGGADR CRPFPRFV

SOURCE	APPLICATIONS	PURITY	STORAGE
E. coli	Bioassay	95 %	-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.