

TECHNICAL DATA SHEET

Recombinant Human BMP-7 (Carrier-free)

Catalog Number: 21-7005

RPx-Pro™ Recombinant Protein

PRODUCT INFORMATION

CONTENTS

Recombinant Human BMP-7 (Carrier-free)

DESCRIPTION

Bone Morphogenetic Proteins (BMPs) belong to the TGF-beta superfamily of proteins. BMPs elicit their effects by signaling through serine/threonine kinase receptors and play key roles in the development of nearly all organs and tissues by inducing the growth of bone and cartilage. Additionally, BMP-7 play a role in calcium regulation and bone homeostasis

MOLECULAR MASS

Recombinant human BMP-7 is a 28.8 kDa homodimeric glycoprotein consisting of two 117 amino acid subunits, which correspond to amino acid residues 315 to 431 of the full-length BMP-7 precursor.

AMINO ACID SEQUENCE

MANVAENSSS DQRQACKKHE LYVSFRDLGW QDWIIAPEGY AAYYCEGECA FPLNSYMNAT NHAIVQTLVH FINPETVPKP
CCAPTQLNAI SVLYFDDSSN VILKKYRNMV VRACGCH

SOURCE

CHO cells

APPLICATIONS

Bioassay

PURITY

98 %

STORAGE

-20°C

PROTEIN CONTENT

Content Verified by UV Spectroscopy and/or SDS-PAGE

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

Mouse

BIOACTIVITY

Determined by its ability to induce alkaline phosphatase production by ATDC-5 cells. The expected ED₅₀ for this effect is 0.02 -0.04 µg/ml.

RESEARCH AREAS

Angiogenesis/Cardiovascular; Apoptosis; Bone, Skeletal, Cartilage; Proliferation; TGF-beta Superfamily; Stem Cells & Differentiation

RECONSTITUTION

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

REFERENCES

Hogan BL. 1996. Genes Dev. 10: 1580-1594. Groeneveld EH and Burger EH. 2000. Eur J Endocrinol. 142(1): 9-21. Chen D, Zhao M and Mundy GR. 2004. Growth Factors. 22(4): 233-241.

Citations are provided as a resource for additional applications that have not been validated by Tonbo Biosciences. Please choose the appropriate format for each application and consult Materials and Methods sections for additional details about the use of any product in these publications.

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