

TECHNICAL DATA SHEET

Recombinant Human BMP-4 (HeLa) (Carrier-Free)

Catalog Number: 21-9064

RPx-Pro™ Recombinant Protein
PRODUCT INFORMATION

CONTENTS

Recombinant Human BMP-4 (HeLa) (Carrier-Free)

DESCRIPTION

Bone morphogenetic proteins (BMPs) constitute a subfamily within the TGF-Beta superfamily of structurally related signaling proteins. Members of this superfamily are widely distributed throughout the body, and are involved in diverse physiological processes during both pre- and postnatal life. Like BMP-7, BMP-4 is involved in the development and maintenance of bone and cartilage. Reduced expression of BMP-4 is associated with a number of bone diseases, including the heritable disorder Fibrodysplasia Ossificans Progressiva.

MOLECULAR MASS

Recombinant Human BMP-4, expressed in HeLa cells, is a 25.6 kDa homodimeric glycoprotein.

AMINO ACID SEQUENCE

HHSQRARKKN KNCRRHSLYV DFSDVGWNDW IVAPPGYQAF YCHGDCPFPL ADHLNSTNHA IVQLTVNSVN SSIPKACCVP TELSAISMLY LDEYDKVVLK NYQEMVVEGC GCR

SOURCE

HeLa Cells

APPLICATIONS

Bioassay

PURITY

97 %

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, Mouse + Rat, Pig, Rat

BIOACTIVITY

Determined by its ability to induce alkaline phosphatase production by ATDC-5 cells.

RESEARCH AREAS

Proliferation, Angiogenesis/Cardiovascular, Bones, Skeletal, Cartilage, Stem Cells & Differentiation, TGF-Beta superfamily, Apoptosis

RECONSTITUTION

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

REFERENCES

Hoben, G.M. Fibrochondrogenesis of hESCs: Growth factor combinations and co-cultures. 2008. Stem Cells and Development. Wang, A. Bone morphogenetic protein receptor in the osteogenic differentiation of rat bone marrow stromal cells. 2010. Yonsei Medical Journal; 51(5):740-5.

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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