

**TECHNICAL DATA SHEET**

# Recombinant Human BMP-2 (Carrier-free)

Catalog Number: 21-8507

**RPx-Pro™ Recombinant Protein**

**PRODUCT INFORMATION**

**CONTENTS**

Recombinant Human BMP-2 (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. BMP-2 plays a role in the development of bone and cartilage and is also involved in cardiac cell differentiation.

**MOLECULAR MASS**

Recombinant human BMP-2 is a 26.0 kDa homodimeric protein consisting of two 115 amino acid polypeptide chains.

**AMINO ACID SEQUENCE**

MQAKHKQRKR LKSSCKRHPL YVDFSDVGWN DWIVAPPGYH AFYCHGECPF PLADHLNSTN HAIVQTLVNS VNSKIPKACC  
VPTELSAISM LYLDENEKVV LKNYQDMVVE GCGCR

**SOURCE**

E. coli

**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**

Cow, Dog, Monkey, Mouse, Rabbit, Rat

**BIOACTIVITY**

Determined by its ability to induce alkaline phosphatase production by ATDC-5 cells. The expected ED<sub>50</sub> for this effect is 0.5 -1.0 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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