

**TECHNICAL DATA SHEET**

# Recombinant Human BMP-5 (Carrier-free)

Catalog Number: 21-7003

**RPx-Pro™ Recombinant Protein**

**PRODUCT INFORMATION**

**CONTENTS**

Recombinant Human BMP-5 (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-5 is expressed in the nervous system throughout development and also plays a role in the formation of new bone tissue in response to injury.

**MOLECULAR MASS**

Recombinant human BMP-5 is a 15.6 kDa homodimeric disulfide-linked protein consisting of two identical 138 amino acid chains.

**AMINO ACID SEQUENCE**

AANKRKNQNR NKSSSHQDSS RMSSVGDYNT SEQKQACKKH ELYVSRDLG WQDWIIAPEG YAAFYCDGEC SFPLNAHMNA  
TNHAIVQTLV HLMFPDHVPK PCCAPTKLNA ISVLYFDDSS NVILKRYRNM VVRSCGCH

**SOURCE**

CHO cells

**APPLICATIONS**

Bioassay

**PURITY**

95 %

**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**

**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**

Bone, Skeletal, Cartilage; Neurobiology; TGF-beta Superfamily

**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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