

# Bone Morphogenetic Protein-7, His Tag, human recombinant (rHuBMP-7-His)

Catalog No: 97231 Lot No: XXXXX Source: *E. coli* 

Synonyms: Osteogenic Protein 1, OP-1, BMP-7, Bone morphogenetic protein 7, BMP7, OP1

#### **Background**

The bone morphogenetic proteins (BMPs) are a family of secreted signaling molecules that can induce ectopic bone growth. Many BMPs are part of the transforming growth factor-beta (TGFB) superfamily. BMPs were originally identified by an ability of demineralized bone extract to induce endochondral osteogenesis in vivo in an extraskeletal site. Based on its expression early in embryogenesis, the BMP encoded by this gene has a proposed role in early development. In addition, the fact that this BMP is closely related to BMP5 and BMP7 has lead to speculation of possible bone inductive activity.

# Description

BMP7 human recombinant produced in *E. coli* is a monomeric, non-glycosylated, polypeptide chain containing 148 amino acids (293-431) and having a molecular mass of 16.8 kDa. BMP-7 is fused to 8 amino acid His Tag at C-terminus and purified by proprietary chromatographic techniques.

### **Physical Appearance**

Sterile filtered colorless solution.

#### **Formulation**

The BMP-7 protein solution contains 10 mM sodium citrate pH 3.5 and 10% glycerol.

## Stability

Store at 4°C if entire vial will be used within 2-4 weeks. Store frozen at -20°C for longer periods of time. Please avoid freeze thaw cycles.

# Purity

Greater than 95.0% as determined by SDS-PAGE.

# **Amino Acid Sequence**

MSTGSKQRSQ NRSKTPKNQE ALRMANVAEN SSSDQRQACK KHELYVSFRD LGWQDWIIAP EGYAAYYCEG ECAFPLNSYM NATNHAIVQT LVHFINPETV PKPCCAPTQL NAISVLYFDD SSNVILKKYR NMVVRACGCH LEHHHHHH

## Usage

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