## **PRODUCT INFORMATION**

Expression system E.coli

**Domain** 264-402aa

**UniProt No.** P34820

NCBI Accession No. NP\_001711

Alternative Names Bone morphogenetic protein 8B, BMP8, OP2, Osteogenic protein 2

# **PRODUCT SPECIFICATION**

Molecular Weight 18.1 kDa (162aa)

**Concentration** 1mg/ml (determined by Bradford assay)

### Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 0.4M urea, 10% glycerol

Purity

> 90% by SDS-PAGE

**Tag** His-Tag

Application SDS-PAGE, Denatured

### **Storage Condition**

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

### BACKGROUND

### Description

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 led to speculation of possible bone inductive activity. Recombinant human BMP8B protein, fused to His-tag at N-



terminus, was expressed in E. coli.

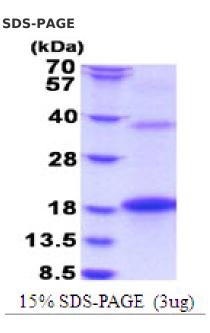
#### **Amino acid Sequence**

MGSSHHHHHH SSGLVPRGSH MGSAVRPLRR RQPKKSNELP QANRLPGIFD DVHGSHGRQV CRRHELYVSF QDLGWLDWVI APQGYSAYYC EGECSFPLDS CMNATNHAIL QSLVHLMMPD AVPKACCAPT KLSATSVLYY DSSNNVILRK HRNMVVKACG CH

#### **General References**

Oezkaynak E., et al. (1992) J. Biol. Chem. 267:25220-25227 Gregory S.G., et al. (2006) Nature. 441:315-321

### DATA



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.