# **PRODUCT INFORMATION**

**Expression system** E.coli

**Domain** 283-396aa

**UniProt No.** P12643

NCBI Accession No. NP\_001191

Alternative Names Bone morphogenetic protein 2, BMP-2A

## **PRODUCT SPECIFICATION**

Molecular Weight 13.0 kDa (115aa)

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

Formulation Liquid in. 10mM Sodium acetate (pH 3.5)

**Purity** > 90% by SDS-PAGE

**Endotoxin level** < 1 EU per 1ug of protein (determined by LAL method)

Tag Non-Tagged

Application SDS-PAGE

### **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

BMP-2 (Bone morphogenetic protein 2) is multi-functional growth factor that belongs to the transforming growth factor beta (TGF beta) superfamily. It plays an important role in embryonic dorsal-ventral patterning, organogenesis, limb bud formation, and bone formation and regeneration. BMP-2 also promotes the maintenance and repair of colonic epithelium, suppresses neuronal dopamine synthesis and release, induces



apoptosis in medulloblastoma cells, and is required for cardiac contractility. Recombinant human BMP2 was expressed in E. coli and purified by conventional chromatography techniques.

#### **Amino acid Sequence**

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

### **General References**

Chen D., et al. (2004). Growth factors. 22(4):233-41 Schliephake H., et al. (2005). Clin Oral Implants Res. 17(6):666-72

## DATA

#### **SDS-PAGE**



15% SDS-PAGE (3ug) Lane1 : reducing conditions Lane2 : non-reducing conditions 3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.