



## Bone Morphogenetic protein-7, HEK, human recombinant (rHuBMP-7-HEK)

**Catalog No:** 97422  
**Lot No:** XXXXX  
**Source:** HEK293  
**Synonyms:** Osteogenic Protein 1, BMP-7

### 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 extraskelatal 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

BMP-7 human recombinant produced in HEK cells is a glycosylated disulfide-linked homodimer, having a molecular weight range of 30-38 kDa due to glycosylation. BMP7 is purified by proprietary chromatographic techniques.

### Physical Appearance

Sterile filtered white lyophilized (freeze-dried) powder.

### Formulation

BMP7 was lyophilized from 1 mg/ml in 1xPBS.

### Solubility

It is recommended to reconstitute the lyophilized BMP-7 in sterile water not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.

### Stability

Lyophilized BMP7, although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution BMP-7 should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

### Purity

Greater than 95.0% as determined by SDS-PAGE.

### Activity

The specific activity was determined by the dose dependent induction of alkaline phosphatase production in the ATDC-5 cell line (mouse chondrogenic cell line) and is typically 50 - 250 ng/ml.

### Usage

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