

## 32-1090: BMP 7 HEK Recombinant Protein

**Alternative Name :** Osteogenic Protein 1,BMP-7.

### Description

Source : HEK. BMP-7 Human Recombinant produced in HEK cells is a glycosylated disulfide-linked homodimer, having a molecular weight range of 30-38kDa due to glycosylation. The BMP7 corresponds to amino acid residues 315 to 431 of the full-length BMP-7 precursor and is purified by proprietary chromatographic techniques. 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.

### Product Info

<b>Amount :</b>	5 µg
<b>Purification :</b>	Greater than 95% as observed by SDS-PAGE.
<b>Content :</b>	The BMP7 was lyophilized from 1mg/ml in 1xPBS.
<b>Storage condition :</b>	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.

### Application Note

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. 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 50-250ng/ml.