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# Product Datasheet

**Product Name** Recombinant Human Bone Morphogenetic Protein-6

Cata No CB500343

Source Escherichia Coli.

**Synonyms** VGR, VGR1, BMP-6.

## **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 lead to speculation of possible bone inductive activity.

Bone Morphogenetic Protein-6 Human Recombinant produced in E.Coli is a homodimeric, non-glycosylated, Polypeptide chain containing 142 amino acids and having a molecular mass of 15 kDa. 3 additional amino acids were added from the N-terminal Ala-Pro-Thr to increase bacterial expression.

The BMP-6 is purified by proprietary chromatographic techniques.

# **Physical Appearance**

Sterile Filtered White lyophilized (freeze-dried) powder.

# **Purity**

Greater than 95.0% as determined by:

- (a) Analysis by RP-HPLC.
- (b) Analysis by SDS-PAGE.

#### **Formulation**

The protein was lyophilized from a concentrated (1mg/ml) sterile solution containing no additives.

#### **Stability**

Lyophilized BMP 6 although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution Bone Morphogenetic Protein 6 should be stored at 4℃ between 2-7 days and for future use below -18℃.

Please prevent freeze-thaw cycles.

### Sequence

The sequence of the first ten N-terminal amino acids was determined and was found to be Met-Ala-Pro-Thr-Ser-Ala-Ser-Ser-Arg-Arg.