



Genemed Synthesis, Inc.  
6203 Wood Lake Center Dr., Bldg. 2, San Antonio, TX 78244, USA  
**Toll free** (800) 344-5337; **Phone:** (210) 745-5988; **Fax** (210) 745-5992  
**Email:** [info@genemedsyn.com](mailto:info@genemedsyn.com), **Website:** [www.genemedsyn.com](http://www.genemedsyn.com)

---

Product Data Sheet

---

<b>Cat #</b> SB-012-10	Recombinant Human Bone Morphogenetic Protein -2 (BMP2)	<b>Size:</b> 10 ug
<b>Cat #</b> SB-012-50	Recombinant Human Bone Morphogenetic Protein -2 (BMP2)	<b>Size:</b> 50 ug

---

**Background:**

Belongs to the Bone-growth regulatory factors that are members of the transforming growth factor-beta (TGF-beta) superfamily of proteins. They are synthesized as large precursor molecules which are cleaved by proteolytic enzymes. The active form can consist of a dimer of two identical proteins or a heterodimer of two related bone morphogenetic proteins.

**Description:**

Recombinant Human Bone Morphogenetic protein-2 produced in *E. coli* is a homodimeric, non-glycosylated, Polypeptide chain containing 115 amino acids and having a molecular mass of 26018 Dalton.

**Quality Control:**

**Biological activity:** BMP-2 is fully biologically active when compared to standard. The ED50 as determined by the cytolysis of MC3T3-E1 cells is less than 50 ng/ml, corresponding to a specific activity of  $2.0 \times 10^4$  IU/mg

**Purity:** Greater than 95% as determined by

- (a) Analysis by SEC-HPLC.
- (b) Analysis by reducing and non-reducing SDS-PAGE Silver Stained gel.

**Amino-Acid Sequence:** The sequence of the first five N-terminal amino acids was determined and was found to be Met-Gln-Ala-Lys-His.

**Endotoxin:** Less than 0.1 ng/ $\mu$ g (IEU/ $\mu$ g) of Bone Morphogenetic protein-2.

**Formulation:** BMP2 was lyophilized from a concentrated (1mg/ml) sterile solution containing 10mM sodium citrate pH=3.5.

**Storage:** Lyophilized BMP2 although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution BMP2 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 avoid freeze-thaw cycles.**

**Reconstitution:** It is recommended to reconstitute the lyophilized rHuBMP2 in sterile 20mM Acetic acid not less than 100 $\mu$ g/ml, which can then be further diluted to other aqueous solutions

**Usage:**

This item is for LABORATORY RESEARCH USE ONLY. The product may not be used as drugs, agricultural or pesticidal products, food additives or household chemicals. If supplied in powder then reconstitute it in 100 ul water for 1 mg/ml stock and store in liquid at 4°C for ~1 week or aliquots in suitable size and store at -20°C for long term storage..

Rev. 80225F