

Human Bone Morphogenetic Protein-7 (BMP-7)

ORDERING INFORMATION

Catalog No: rAP-0056; Size: 2 μ g; 10 μ g Storage: <- 20° C

Synonyms:

Osteogenic Protein 1, OP-1, BMP-7.

Introduction:

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.

Description:

Bone Morphogenetic Protein-7 Human Recombinant produced in E.Coli is a monomeric, non-glycosylated, polypeptide chain containing 139 amino acids and having a molecular mass of 15679.97 Dalton. The BMP-7 is purified by proprietary chromatographic techniques.

Source: Escherichia Coli.

Physical Appearance:

Sterile Filtered White lyophilized (freeze-dried) powder.

Formulation:

BMP-7 was lyophilized from a concentrated (1mg/ml) sterile solution containing 10mM sodium citrate pH=3.5.

Solubility:

It is recommended to reconstitute the lyophilized Bone Morphogenetic Protein-7 in sterile 20mM AcOH (acetic Acid) not less than 100µg/ml, which can then be further diluted to other aqueous solutions.

Stability:

Lyophilized BMP-7 although stable at room temperature for 3 weeks, should be stored desiccated below - 18°C. Upon reconstitution BMP 7 Human 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).

Purity:

Greater than 95.0% as determined by: (a) Analysis by RP-HPLC. (b) Analysis by SDS-PAGE.

Please prevent freeze-thaw cycles.

Amino acid sequence:

The sequence of the first five N-terminal amino acids was determined and was found to be Ser-Thr-Gly-Ser-Lys.

Contact & Ordering Information: Angio-Proteomie, 11 Park Drive, Suite 12, Boston, MA 02215, USA. Fax: (480) 247-4337, angioproteomie@gmail.com



Applications:

- 1. Molecular standard (Western, ELISA) in studying secreted BMP-7.
- 2. Preparing antibodies for BMP-7 monomer.
- 3. Molecule standard in detecting secreted BMP-7 in reduced SDS-PAGE.

Usage:

Angio-Proteomie's products are furnished for LABORATORY RESEARCH USE ONLY. The product may not be used as drugs, agricultural or pesticidal products, food additives or household chemicals.