



PRODUCT DATA SHEET

Product: Recombinant Human Bone Morphogenetic Protein-7 (BMP-7)

Cat. No.: BP-016 (10 µg)

Background:

BMP-7 (osteogenic protein 1) 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 BMP-7 produced in *E. coli* is a monomeric, non-glycosylated, polypeptide chain containing 139 amino acids and having a molecular mass of 15,679.97 Daltons. N-terminal sequence was determined to be Ser-Thr-Gly-Ser-Lys.

Format:

Sterile filtered white lyophilized powder from concentrated (1 mg/mL) sterile solution containing 10 mM sodium citrate, pH=3.5. Purified by proprietary chromatographic techniques.

Storage:

Lyophilized BMP-7 is stable for at least 3 weeks at room temperature. We recommend storing desiccated below -20°C. Upon reconstitution, BMP-7 can be stored at 4°C for up to a week. For long term storage it is recommended a carrier protein (0.1% HSA or BSA) be added to the solution and the solution stored at -20°C or below. Avoid freeze-thaw cycles.

Reconstitution:

Reconstitute lyophilized BMP-7 in sterile 20 mM AcOH (acetic acid) at not less than 100 µg/mL, which can then be further diluted to other aqueous solutions.

The optimal dilution for a specific application should be determined by the researcher.

Purity:

>95% as determined by RP-HPLC and SDS-PAGE.

Limitations:

For *in vitro* research use only. Not for use in diagnostics or in humans.

Warranty:

No warranties, expressed or implied, are made regarding the use of this product. KAMIYA BIOMEDICAL COMPANY is not liable for any damage, personal injury, or economic loss caused by this product.