

Recombinant Human BMP-12/GDF-7

CATALOG #: 4572-20 20 μg

4572-100 100 μg 4572-1000 1 mg

LOT #: _____

SOURCE: E. coli

PURITY: >98% by SDS-PAGE and HPLC analyses

Endotoxin level is <0.1 ng per µg of BMP-12

FORM: Sterile filtered and lyophilized with no additives

RECONSTITUTION:

Centrifuge the vial prior to opening. Reconstitute to a concentration of 0.1-1.0 mg/ml in water containing BSA (50 μ g BSA per 1 μ g of protein). This solution can then be diluted into other aqueous buffers and stored at 4°C for 1 week or –20°C for future use.

STORAGE CONDITIONS:

The lyophilized protein is best-stored desiccated below 0°C. Reconstituted BMP-12 should be stored in working aliquots at -20°C.

DESCRIPTION:

BMPs (bone morphogenetic proteins) belong to the TGF- β superfamily of structurally related signaling proteins. As implied by their name, BMPs promote and regulate bone development, growth, remodeling and repair, in both prenatal development and postnatal growth of eye, heart, kidney, skin, and other tissues. BMP-12 is highly conserved across species. BMP-12 regulates chondrogenesis, bone morphogenesis, and neuron differentiation. Recombinant human BMP-12 is a 27 kDa disulfide-linked homodimer containing two 122 amino acid polypeptide chains.

BIOLOGICAL ACTIVITY:

The protein is biologically active as determined by its ability to induce alkaline phosphatase production by ADTC5 mouse chondrogenic cells. The ED₅₀ for this effect is typically $0.2 - 2.5 \,\mu \text{g/ml}$.

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