
Product Data Sheet

Product Name: BMP 4 Human, HEK

Cat. No.: GP20103

Batch No.: 1

Product Data

Purity >98% Source HEK.

Physical Appearance solid Shipping Condition Shipped at Room temp.

Synonyms BMP4; ZYME; BMP2B; BMP2B1.

Amino Acid Sequence SPKHHSQRARKKNKNCRRHSLYVDFSDVGWNDWIVAPPGYQAFYCHGDCPFPLADHLNST

Solubility It is recommended to reconstitute the lyophilized BMP-4 in sterile 4mM HCl containing 0.1% endotoxin-free recombinant HSA.

Formulation The BMP-4 was lyophilized from 1.07mg/ml in 2xPBS+6% ethanol.

Introduction

The protein encoded by this gene is a member of the bone morphogenetic protein family which is part of the transforming growth factor-beta superfamily. The superfamily includes large families of growth and differentiation factors. Bone morphogenetic proteins were originally identified by an ability of demineralized bone extract to induce endochondral osteogenesis in vivo in an extraskeletal site. This particular family member plays an important role in the onset of endochondral bone formation in humans, and a reduction in expression has been associated with a variety of bone diseases, including the heritable disorder Fibrodysplasia Ossificans Progressiva. Alternative splicing in the 5' untranslated region of this gene has been described and three variants are described, all encoding an identical protein.

Biological Activity

The specific activity was determined by the dose dependent induction of alkaline phosphatase production in the ATDC-5 cell line (Mouse chondrogenic cell line) and is typically 2.9ng/ml corresponding to a Specific Activity of 220,750.55IU/mg.

Stability

Lyophilized BMP4 although stable at room temperature for 3 weeks, should be stored desiccated below -18°C . Upon reconstitution BMP-4 should be stored at 4°C between 2-7

Caution: Product has not been fully validated for medical applications. For research use only.

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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 prevent freeze-thaw cycles.

Background

BMP-4 Human Recombinant produced in HEK cells is a glycosylated disulfide linked homodimer, having a total molecular weight of 34kDa. The BMP-4 is purified by proprietary chromatographic techniques.

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