

Datasheet

Bone Morphogenic Protein 4

Human Recombinant, active

Product	Description	Catalogue-No.	Size
BMP-4 active	Bone Morphogenic protein 4, active	P-3610004	10 µg

Product description

Synonyms: BMP4, ZYME, BMP2B, BMP2B1

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. 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.

Solubility and storage conditions

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

Composition

Greater than 95% as observed by SDS-PAGE.

Amino acid sequence:

SPKHHSQRARKKNKNCRRHSLYVDFSDVGWNDWIVAPPGYQAFYCHGDCPFPLADHLNSTNHAIVQ
TLVNSVNSSIPKACCVPTLSAISMLYLDEYDKVVLKKNYQEMVVEGCGCR.

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.

Technical support

For technical support, questions or remarks please contact your local PAN-Biotech partner or the technical department of PAN-Biotech via email (info@pan-biotech.com) or phone +49-8543-601630.

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