FT - 1I0581

BMP-4 Human Recombinant, Active

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.

Product Description

Catalogue Number 110580; 110581

Description 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.

Source HEK.

Physical appearence Sterile Filtered White lyophilized (freeze-dried) powder.

Formulation The BMP-4 was lyophilized from 1mg/ml in 2xPBS+6% EtOH.

Solubility It is recommended to reconstitute the lyophilized BMP-4 in sterile 2xPBS+6% EtOH.

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 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.

Purity Greater than 95% as observeed by SDS-PAGE.

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 9.42ng/ml

corresponding to a Specific Activity of 106,157IU/mg.

For in vitro research use only.