

## 32-6313: BMP4 Human, CHO

**Application :** Functional Assay  
**Alternative Name :** BMP4, ZYME, BMP2B, BMP2B1.

### Description

Source: CHO cells.

Sterile Filtered White lyophilized (freeze-dried) powder.

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.

Bone Morphogenetic protein-4 Active Human Recombinant produced in CHO cells is a glycosylated homodimer chain containing 2x116 amino acids and having a total molecular mass of 26.2kDa. BMP4 is purified by proprietary chromatographic techniques.

### Product Info

<b>Amount :</b>	2 µg / 10 µg
<b>Purification :</b>	Greater than 95.0% as determined by SDS-PAGE. The protein was lyophilized from a sterile (0.2µm) filtered solution containing 0.1% Trifluoroacetic Acid (TFA).
<b>Content :</b>	It is recommended to reconstitute the lyophilized BMP4 in sterile 18M Omega -cm H2O not less than 100µg/ml, which can then be further diluted to other aqueous solutions.
<b>Storage condition :</b>	Lyophilized BMP4 although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution BMP4 should be stored at 4°C between 2-7 days and for future use below -18°C. Please prevent freeze-thaw cycles.
<b>Amino Acid :</b>	SPKHHSQRAR KKNKNCRRHS LYVDFSDVGW NDWIVAPPGY QAFYCHGDCP FPLADHLNST NHAI VQT LVN SVNSSIPKAC CVPTLSAIS MLYLDEYDKV VLKNYQEMVV ECGGCR.

### Application Note

The ED50, as calculated by Alkaline phosphatase activity induced in ATDC-5 cells is 15ng/ml corresponding to a specific activity which is  $6.7 \times 10^4$  units/mg.