

Product information

BMP- 4, 293-408 aa

Human, Recombinant, *E.coli*

Cat. No. IBBMP0904

Full name: Bone morphogenetic protein 4

NCBI Accession No.: NP_001193

Synonyms: BMP-2B, DVR4

Description: Bone morphogenetic protein 4 (BMP-4) is a member of the bone morphogenetic protein family which belongs to the TGF- β superfamily. This protein is a vital regulatory molecule that functions throughout bone and cartilage development, specifically tooth development, limb formation, bone induction, and fracture repair. In human embryonic development, BMP- 4 is required for the early differentiation of the embryo and establishing of a dorsal-ventral axis. And it is overexpressed in patients with fibrodysplasia ossificans progressiva. Recombinant BMP-4 was expressed as insoluble protein aggregate in *E.coli* and purified by conventional chromatography, after refolding of the isolated inclusion bodies in a renaturation buffer.

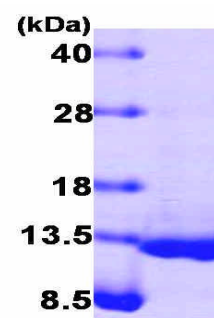
Form: Liquid. In 10mM Sodium citrate buffer (pH 3.5), 10% glycerol

Molecular Weight: 13.2 kDa (117 aa), confirmed by MALDI-TOF

Purity: > 95% by SDS - PAGE

Concentration: 0.5 mg/ml (determined by Bradford assay)

Endotoxin Level: < 1.0 EU per 1 μ g of protein (determined by LAL method)



15% SDS-PAGE (3 μ g)

Sequences of amino acids:

MSPKHHSQRA RKKNKNCRRH SLYVDFSDVG WNDWIVAPPG YQAFYCHGDC PFPLADHLNS TNHAIVQTLV NSVNSSIPKA CCVPTLSA I
SMLYLDEYDK VVLKNYQEMV VEGCGCR

General references:

Moon BS., *et al.* (2009) *Exp Mol Med.* **41**(2):116-25.

Li BC., *et al.* (2009) *J Trauma.* **66**(2):450-6

Storage: Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.

For research use only. This product is not intended or approved for human, diagnostics or veterinary use.



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