

Bone Morphogenetic Protein-4 Human Recombinant

Catalogue Number	IY-361
Synonyms	BMP4, ZYME, BMP2B, BMP2B1.
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.
Patent Rights	The sale and/or commercial use of Recombinant Adiponectin is prohibited in the United States of America (U.S.A).
Description	Bone Morphogenetic Protein-4 Human Recombinant produced in E.Coli is a monomeric, non-glycosylated, Polypeptide chain containing 116 amino acids and having a molecular mass of 13kDa. The BMP-4 is purified by proprietary chromatographic techniques.
Source	Escherichia Coli.
Physical Appearance	Sterile Filtered White lyophilized (freeze-dried) powder.
Formulation	BMP-4 was lyophilized from a 0.2µm filtered concentrated (1mg/ml) solution in 20mM Na ₂ CO ₃ buffer, pH 9.0.
Solubility	It is recommended to reconstitute the lyophilized Bone Morphogenetic Protein-4 in sterile 18M-cm H ₂ O not less than 100µg/ml, which can then be further diluted to other aqueous solutions.
Stability	Lyophilized Bone Morphogenetic Protein-4 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. 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 95.0% as determined by: (a) Analysis by RP-HPLC. (b) Analysis by SDS-PAGE.
Amino acid sequence	SPKHHSQRAR KKNKNCRRHS LYVDFSDVGW NDWIVAPPGY QAFYCHGDGP FPLADHLNST NHAIVQTLVN SVNSSIPKAC CVPTLSAIS MLYLDEYDKV VLKQNYQEMVV EGCGCR.
Usage	Products are furnished for LABORATORY RESEARCH USE ONLY. The product may not be used as drugs, agricultural or pesticidal products, food additives or household chemicals.