Recombinant Human BMP-3 beta (GDF10)

Cat No:HR2R1199

For research use only

Overview

Quantity	1.0 ?g
Gene Symbol	GDF10
Gene ID	2662
Accession	P55107
Alternative Name	BMP-3B, BMP3, BIP, Growth/differentiation factor 10, GDF-10 Recombinant Human Bone Morphogenetic Protein 3B (GDF10)
Species	Human
Source	E. coli
Description	BMPs are proteins that act to induce the differentiation of mesenchymal-type cells into chondrocytes and osteoblasts before initiating bone formation. They promote the differentiation of cartilage-forming cells and bone-forming cells near sites of fractures but also at ectopic locations. Some of the proteins induce the synthesis of alkaline phosphatase and collagen in osteoblasts. Some BMPs act directly on osteoblasts and promote their maturation while at the same time suppressing myogenous differentiation. Other BMPs promote the conversion of typical fibroblasts into chondrocytes and are capable also of inducing the expression of an osteoblast phenotype in non-osteogenic cell types. Intracellular signaling following engagement of receptors for some BMP proteins has been shown to involve the action of SMAD proteins. BMP3 is a glycoprotein that is identical with osteogenin. Human and rat mature proteins are 98% identical.
Functions	Not available.
Formulation	Recombinant BMP-3b was lyophilized from a 0.2 ?m filtered 1.0 mg/mL 10 mM sodium citrate (pH 3.5) containing 10% glycerol.
Solubility	A quick spin of the vial followed by reconstitution in distilled water to a concentration not less than 0.1 mg/mL. This solution can then be diluted into other buffers.
Appearance	Lyophilized Powder
Molecular Weight	13
Purity	>95% as determined by SDS-PAGE
Concentration	<1.0 EU/?g of recombinant protein as determined by the LAL method.
Shipping Condition	Ambient Temperature
Storage Condition	Upon reconstitution, this cytokine can be stored in working aliquots at 2? - 8?C for one month, or at -20?C for six months. Avoid repeated freeze/thaw cycle.