

BMP7

Recombinant Human Bone Morphogenetic Protein-7

Catalog No.	CRB104A CRB104B CRB104C	Quantity:	2 µg 10 µg 1.0 mg
Alternate Names:	Osteogenic Protein 1, OP-1		
Description:	Recombinant Human BMP-7 is a monomeric, non-glycosylated, polypeptide chain containing 139 amino acids.		
GeneID:	655		
Source:	<i>E. coli</i>		
Molecular Weight:	15.6 kDa		
Formulation:	Lyophilized from a sterile filtered solution in 20 mM Na ₂ CO ₃ , pH 9.0.		
Purity:	>95.0% as determined by RP-HPLC and SDS-PAGE		
Endotoxin Level:	<0.1 ng/µg of protein		
Reconstitution:	Centrifuge vial prior to opening. Add sterile distilled water or aqueous buffer to a concentration of 0.1-1.0 mg/mL. Further dilutions should be made in appropriate buffered solutions.		
Storage & Stability:	Stable at 2-8°C, but best kept desiccated -20°C. Upon reconstitution, stable for up to 1 week at 2-8°C. For longer term, store in working aliquots below -20°C. Avoid repeated freeze/thaw cycles.		
Background:	Human BMP-7 is one of at least 15 structurally and functionally related BMPs, which are members of the transforming growth factor β (TGF-β) superfamily. BMPs were originally identified as protein regulators of cartilage and bone formation. However, they have since been shown to be involved in embryogenesis and morphogenesis of various tissues and organs. BMPs have also been shown to regulate the growth, differentiation, chemotaxis and apoptosis of various cell types, including mesenchymal cells, epithelial cells, hematopoietic cells and neuronal cells. BMP-7 is synthesized as large precursor molecules which are cleaved by proteolytic enzymes. The active form can consist of a dimer of two identical proteins or a heterodimer of two related bone morphogenetic proteins.		
Applications:	<ol style="list-style-type: none"> 1. Molecular standard (Western Blot, ELISA) in studying secreted BMP-7 2. Preparing antibodies for BMP-7 monomer. 3. Molecular standard in detecting secreted BMP-7 in reduced SDS-PAGE. 		

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