

BMP5

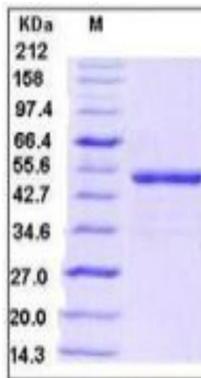
Recombinant Human BMP-5 (Fc Tag)

Catalog No.	CRH415A-Fc CRH415B-Fc	Quantity:	10 µg 20 µg
Alternate Names:	Bone morphogenetic protein 5, BMP-5		
Description:	<p>Bone Morphogenetic Protein 5 (BMP-5) is a member of the structurally and functionally related bone morphogenetic proteins (BMPs) which constitute a novel subfamily of the transforming growth factor β (TGF-β) superfamily. In agreement with a possible role in the control of cell death, BMP-5 exhibited a regulated pattern of expression in the interdigital tissue. Transcripts of BMP-5 and BMP-5 protein were abundant within the cytoplasm of the fragmenting apoptotic interdigital cells in a way suggesting that delivery of BMPs into the tissue is potentiated during apoptosis. BMP-5 is a member of the 6A subgroup of BMPs, other members of which have been shown to stimulate dendritic growth in central and peripheral neurons. The signaling pathway that mediates the dendrite-promoting activity of BMP-5 may involve binding to BMPR-IA and activation of Smad-1, and relative levels of BMP antagonists such as noggin and follistatin may modulate BMP-5 signaling. Since BMP-5 is expressed at relatively high levels not only in the developing but also the adult nervous system, these findings suggest the possibility that BMP-5 regulates dendritic morphology not only in the developing, but also the adult nervous system. BMP-5 may play important roles not only in myocardial differentiation, but also in the formation and maintenance of endocardial cushion tissue.</p>		
UniProt ID:	P22003		
Accession Number:	NP_066551.1		
Protein Construction:	A DNA sequence encoding the carboxy-terminal domain (Gln 324-His 454) (the mature chain) of human BMP5 was expressed with the fused Fc region of human IgG1 at the N-terminus.		
Source:	HEK293 Cells		
Formulation:	Lyophilized from sterile PBS, pH 7.4 Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization.		
Molecular Weight:	The recombinant human Fc/BMP5 is a disulfide-linked homodimeric protein. The reduced monomer consists of 367 amino acids and has a predicted molecular mass of 41.5 kDa. As a result of glycosylation, the apparent molecular mass of rhFc/BMP5 monomer is approximately 50-55 kDa in SDS-PAGE under reducing conditions.		
Purity:	> 95 % as determined by SDS-PAGE.		
Endotoxin Level:	< 1.0 EU per µg of the protein as determined by the LAL method		
Biological Activity:	Testing in progress		
Predicted N-terminal:	Glu 20		

Reconstitution: **Centrifuge vial prior to opening.** Add sterile distilled water to a concentration of 0.1 mg/mL and gently pipette the solution up and down the sides of the vial. **DO NOT VORTEX.** Allow several minutes for complete reconstitution.

Storage & Stability: Stable for up to 1 year from date of receipt at -20°C to -80°C. After reconstitution, store working aliquots at -20°C to -80°C. **Avoid repeated freeze-thaw cycles.**

SDS-PAGE



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